

THE ORIGIN AND DEVELOPMENT OF CHICAGO-O'HARE INTERNATIONAL AIRPORT

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THE ORIGIN AND DEVELOPMENT
OF CHICAGO-O'HARE INTERNATIONAL AIRPORT

A DISSERTATION
SUBMITTED TO THE GRADUATE COUNCIL
IN PARTIAL FULFILLMENT OF THE REQUIREMENTS
for the degree

DOCTOR OF PHILOSOPHY

by

RICHARD P. DOHERTY

25340

BALL STATE UNIVERSITY

MUNCIE, INDIANA

AUGUST, 1970

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BALL STATE UNIVERSITY

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ABSTRACT

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RICHARD P. DOHERTY
Ph.D.
Ball State University, 1970

Advisor: Dr. Dwight W. Hoover

This dissertation is an historic study of Chicago-O'Hare International Airport which, measured by passenger traffic or cargo volume, is the most important airport in the world. No such study has been done on any airfield, and it was felt that such an investigation would contribute to the increasingly important field of urban history as well as give insights into the problems of airport development.

Research proved to have many more problems than were expected. Records were scattered and few in number. Although Chicago had planned to construct a major airport to supplement Midway (Municipal) Field even before World War II, the pursuit of this goal was weak until the election of Richard J. Daley as mayor of the City of Chicago and the development of commercial jet airplanes in the mid-1950s. This meant that newspaper sources used were concentrated in certain time periods.

One facet of the story of O'Hare Field was the important role played by the federal government which not only acquired land and built the original airfield for the Douglas Aircraft plant in 1942, but also has provided millions of dollars for expansion of the airport as well as supplying safety devices and air traffic controllers. In 1970, there was still a military reservation at O'Hare Field. The history of O'Hare has provided an illustration of the continuing involvement of the federal government in airport growth.

Other aspects of the development of the airport were the relatively weak role played by the State of Illinois in building O'Hare and the compla-

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gency of the suburban villages of the area until they felt their interests were threatened. When the latter occurred, the suburbs reacted with great excitement and activity. This happened when Chicago annexed O'Hare Field as part of the city and when a zoning ordinance was proposed by the city for the O'Hare area. Although the suburbs have received immense economic benefits from the airport, the noise from jet aircraft has overshadowed everything else and caused constant friction between local residents and airport officials.

The relationship between the commercial airlines, which guaranteed revenue bonds to develop O'Hare Field, and the City of Chicago was another important finding in this study. The air carriers' status at the airfield evolved from that of welcomed users to uneasy tenants to a form of partnership in decisions concerned with Chicago-O'Hare International Airport. This was demonstrated in the compromises made to obtain agreement in the design of the present terminal area. Still another aspect of this work was the City of Chicago. The construction and operation of O'Hare has belied the unfortunate reputation of the city. No scandal has been involved with the airport either in land acquisition and construction or in operation of the facilities. Professional specialists have been relied on to provide engineering, consultant, and operational needs, and the results have been beneficial.

The growth of technology and its side-effects -- noise, greatly increased passenger traffic, air congestion, and the continued need for more and improved airport facilities -- gives a perspective from which to judge future airport needs. A disturbing factor, however, is that past air commerce experts made poor predictions, and these do not inspire confidence in those who would continue such tasks.

PREFACE

Chicago-O'Hare International Airport is one of the world's great airports by any gauge. Its history, untold except for brief summaries in newspaper articles, appeared to be a worthy choice for doctoral research. As with most studies of this type, there seemed to be a time when progress was extremely slow. George Scullin, author of International Airport, the Story of Kennedy Airport and U.S. Commercial Aviation, was asked for advice. He humorously replied: "Who's O'Hare? I've heard of Chicago. . . . Except for Arthur Hailey's Airport, it's a ghastly but all too real myth. . . . So there's my general advice . . . choose another topic [which] gives you a far wider and more attractive choice."¹

At times this advice had some appeal, but so did the statement of Mr. A. A. Rothengass, Jr., Assistant to the Commissioner, Chicago Department of Aviation: "O'Hare Field is the most important link in the entire air transportation system and industry . . . a model of planning for

¹Letter, Scullin to Richard Doherty, Dec. 7, 1969.

other communities."¹ Chicago-O'Hare International Airport or O'Hare Field was planned to be a major airfield unlike Chicago Midway Airport and others which just grew.² O'Hare Field is the great center for transfer traffic in the United States, and the Rhein-Main im Aufwind of November 25, 1969 said that it was the model for the new airport in Frankfurt, Germany.

There are numerous histories concerning ships, railroads, and even individuals in aviation such as Charles A. Lindbergh or Donald Douglas. But airport history is a subject untouched until Scullin's recent and almost unknown work. Chicago-O'Hare International Field, by some measurements the world's most important airport, has had no historical study done about it. Mr. Rothengass of the Chicago Department of Aviation and Mr. J. E. Wenzel, Director of the Department of Aeronautics for the State of Illinois, both expressed surprise that so little material was in their files concerning O'Hare Field. A memorandum to Mr.

¹Letter, A. A. Rothengass, Jr. to Dr. Everett W. Ferrill, Chairman, History Department, Ball State University, Muncie, Indiana, Aug. 29, 1969. Most of the letters have been to the author, Doherty, and it may be assumed that such was the case unless otherwise indicated.

²Eugene Carl Kirchherr, "Airport Land Use in the Chicago Metropolitan Area: A Study of the Historical Development, Characteristics, and Special Problems of a Land Use Type within a Metropolitan Area" (unpublished Ph.D. dissertation, Northwestern University, 1959), p. 268. Hereafter this work is referred to as "Airport Land Use."

Wenzel from Marvin Taylor of the Illinois Department of Aeronautics stated: "The Department's files regarding the general history of O'Hare International Airport, Chicago, Illinois are almost nonexistent. . . ." ¹

Materials seemed to be lacking; the records that did exist were scattered through city, state, and federal agencies. Many persons of importance to O'Hare Field have died, including Mayors Edward Kelly and Martin Kennelly, the first two airport managers, Mr. Francis Callahan and Mr. Ralph Heinze, and particularly the person most responsible for the field's development during the first ten years of its possession by the City of Chicago, Mr. Ralph H. Burke, engineer and airport consultant.

At the time of the dedication of O'Hare's International Terminal, President John F. Kennedy declared that the field was more than money; it was time saved, a pump in the stream of commerce; it was an important part of the transportation system so vital to the strength of the nation; and that it was significant for bringing the peoples of the world together. ² Mr. Curtis Barkes, Executive Vice President

¹Memorandum to Wenzel from Taylor, Jan. 6, 1970. Letter, Wenzel to Doherty, Jan. 7, 1970. Interview, Rothen-gass, Aug. 13, 1969. All interviews were by Doherty and obtained in Chicago or in one of the suburbs of Chicago unless otherwise indicated.

²John F. Kennedy, "Draft Remarks Luncheon Conrad-Hilton Hotel on March 23, 1963," Chicago, 1963. (Mimeographed.) Hereafter this speech is referred to as "Draft Remarks."

of United Airlines, wrote this about the role of O'Hare Field in the future: "Like most commercial ventures, an airport must continue to grow as the needs of commerce expand. O'Hare has grown and will continue to grow. . . ." ¹ George Scullin said of air commerce: "It is a multi-billion [dollar] industry growing on its own unguided momentum, and no one can stop it, and no one knows what to do with it." ² It is hoped that this study may help in understanding not only O'Hare Field, but also some of the problems of air commerce.

Chicago-O'Hare International Airport has aspects which seem paradoxical. A tremendous amount of planning and effort went into its development, yet because of accelerating change, much more needs to be done. It is a symbol of transportation's progress where the chief complaint concerns walking distances. The airport has attracted people to live by the field, and land prices have climbed to thousands of dollars per acre, yet the airport makes for uncomfortable living. The airport is extremely well known but little is understood of its operation and history. The writer lived near O'Hare Field for almost ten years and knew only of the acrid fuel smell, the whine and thunder of jet engines, and the milling of crowds. It

¹Letter, Barkes to Doherty, Feb. 24, 1970.

²Letter, Dec. 7, 1969.

is one airfield, but because of the way it developed, O'Hare really has been a number of fields.

The writer began the study with the not uncommon assumption that corruption existed with the involvement of Chicago in such a huge undertaking; the only question was the extent of the wrongdoing. The reluctant co-operation of such persons as Mayor Richard J. Daley, former Commissioner of Public Works George L. DeMent, Commissioner of Aviation William Downes, and Airport Manager J. Patrick Dunne, did little to dispel the assumption, although their reluctance should be attributed to an extremely busy work schedule, lack of historic materials concerning O'Hare Field, and a possible fear of writers because of distortions in the past. A plaque in the Sun-Times and Daily News Building in Chicago quotes a statement by the late owner of the two newspapers, Marshall Field IV: "Our newspapers have one duty above and beyond all others: To find and portray the truth."¹ The findings of this study indicate that the "truth" is as difficult for journalists to determine as it is for historians. Another is that Chicago-O'Hare International Airport has not been a "political football."² This does not mean that grave differences of opinion have not

¹M. W. Newman, Chicago Daily News, Dec. 17, 1966.

²Interview, Mr. Robert Sampson, Vice President for Property of United Airlines and Chairman, Chicago Airlines TOP Committee, Jan. 6, 1970.

existed. Richard Mack stated that there were pros and cons with most aspects of traffic control.¹ This could as well be applied to the majority of problems concerned with O'Hare Field.

Colonel John Corey, Administrative Assistant to Mayor Daley, predicted that nothing startling would be found from an investigation of the airport--the contribution would be some new knowledge and some light on what was known. He said that O'Hare is a model "of sorts," and some of the things which occurred in Chicago might be applied elsewhere.² Colonel Cory was correct. The theme which emerged was not corruption but rapid change beyond expectations--anticipated needs not keeping up with the pace of technology. The effort to satisfy needs has made O'Hare the "air crossroads of the world."³

Much aid and co-operation was given by numerous individuals and organizations without which this dissertation would have had much less than whatever merit it has. Some of these persons and groups deserve special mention. The Chicago Sun-Times and Miss Connie Wilkie of its library staff were very helpful in supplying information. Paddock Publications of Arlington Heights, Illinois and Mrs. Dorothy

¹Interview, Mr. Richard Mack, Assistant Training Officer, Air Traffic Controllers, O'Hare Field, Feb. 17, 1970.

²Interview, Colonel Corey, Aug., 1969.

³Phrase attributed by Mrs. Veronica "Ronnie" Allman of the Chicago Department of Aviation to Walter Wright. Interview, Aug. 11, 1969.

Meyer, newspaper librarian, gave valuable assistance. Mary Johnson and Herman Goldbeck of the National Archives cooperated fully as did the staff of the Federal Aviation Administration in Washington, D.C. Personnel of the Municipal Reference Library, the Department of Aviation, and the Historical Museum in Chicago also aided in the search for information. Very useful letters were received from John C. Buckwalter, D. H. Burrell, F. W. Conant, C. E. Humphrey, and W. C. Sargent concerning the Douglas C-54 plant; from Joseph Baker, Curtis Barkes, A. J. Brough, Arnold W. Thompson, and George C. Van Nostrand, airline officials who were connected with the development of O'Hare Field; from John Byrne, a local historian of the O'Hare area, and from Charles O. Landrum, the airport consultant for Chicago.

Extremely valuable letters and interviews were obtained from Colonel John B. W. Corey and George L. DeMent, officials of the City of Chicago; J. L. Donoghue, president of Ralph Burke, Incorporated; Raymond W. Hazekamp, an engineer and airport consultant; Matthew L. Rockwell, executive director of the Northeastern Illinois Planning Commission; Robert G. Sampson, chairman of the Chicago Top Airline Committee, and Wayne Thomis, aviation editor of the Chicago Tribune. Mr. Carter H. Manny, Jr. of C. F. Murphy Associates, who directed the huge expansion program that took place at O'Hare Field from 1959-1962 merits particular thanks. Mr. Manny not only supplied information, but his sincerity,

knowledge, intelligence, and unassuming manner persuaded the author to adopt a viewpoint that often corresponded to the project manager's.

Appreciation must also be expressed to Dr. Dwight W. Hoover, chairman of the doctoral committee, whose questions and suggestions concerning both content and organization were invaluable. Dr. Robert S. Huston, a committee member, was especially helpful in making the dissertation readable. The author's wife Teresa supplied encouragement, criticism, and typing skills, and uncomplainingly endured two years in a small apartment with five children to make this dissertation possible.

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INTRODUCTION

An observer at Chicago-O'Hare International Airport might find it difficult to imagine that the area was once a wilderness, but it was. General Winfield Scott marched 5,000 troops from Fort Dearborn through the O'Hare area in 1833 to meet Blackhawk's Sauk and Fox tribe which had gone on the warpath.¹ The territory was opened for settlement after the Blackhawk War. Chief Che-Che-Pinqua or Alexander Robinson was important in persuading the Pottawatomies, who had not participated in the war, to agree to move west of the Mississippi River, but it was not until 1836 that all of the Indians had gone. The first white settlers of the area were the Curtis and Sherman families from New England. They settled along what is now Higgins Road, the approximate northern boundary of Chicago-O'Hare International Airport. Edward Higgins purchased land, the southwest quarter of Section 33, Maine Township, Cook County, at a public auction in

¹Charles Hufnagel, First Annual Bensenville Day, September 15, 1951 (Arlington Heights, Illinois: Paddock Publications, 1951), p. 1. See also Bessie Pierce, A History of Chicago, Vol. 1 (New York: A. A. Knopf, 1957), p. 37.

Springfield, Illinois, in 1842. This quarter section by O'Hare Field cost him \$480.¹

Transportation exerted a powerful impact on Chicago in the mid-nineteenth century. In 1835, the Illinois-Michigan Canal was begun creating the first Chicago land boom. In 1843, the year the canal was completed, Chicago's population was 7,590. Chicago was connected with Galena on the Mississippi River by railroad in 1848 and by 1853, Chicago had 60,000 residents. Two events in transportation brought on tremendous growth to the city after 1855. In that year the Soo Locks opened for business, and the Illinois Central Railroad was completed.²

Transportation developments transformed Chicago, but not all such events in Illinois were momentous or concerned with water and rail. In 1840, a farmer who lived near Danville, Illinois built an ornithopter or wing-flapping machine. His name was Hugh Newell, and his attempt at flight began and ended near a tall haystack. Though he cranked his "Flying Carr" with vigor as he leaped into space, the experiment failed, and from this

¹Letter, John Byrne, local historian of Des Plaines, Illinois, to Doherty, Dec. 17, 1960. See also Pierce, pp. 42 and 102.

²Graham Foundation for Advanced Studies in the Fine Arts and the Northeastern Illinois Planning Commission, O'Hare Airport - A Design Potential Study (Champaign: College of Fine and Applied Arts, University of Illinois, 1965). See also Pierce, Vol. 2, Chapter 2 for the effect of transportation on Chicago and Randall Parrish, Historic Illinois (Chicago: A. C. McClung and Co., 1906), 433-434.

time on he was known as "Crazy Hugh" to some of his neighbors.¹ The first successful flight in the state took place in a balloon launched from a vacant lot at the corner of Randolph and Peoria Streets in Chicago. The flight was made by Silas M. Brooks as part of the festivities connected with July 4, 1855. Brooks, a Connecticut resident, ascended nearly a mile in the balloon, "Eclipse." He returned safely, but the flight was not totally successful. An accident occurred, and the "Eclipse," valued at \$800, drifted away and was lost.²

Glenn Curtiss performed the first recorded flights by airplane in Illinois. He made three short flights from the Hawthorne Race Track during October, 1909.³ The Chicago area had the "Gordon Bennett World Championship Areoplane Race" at Clearing, Illinois in 1912. It was sponsored by the Aero Club of Illinois, and the winner averaged 105 miles per hour over the 124-mile course.⁴ The Aero Club of Illinois had been organized in 1910 with Octave Chanute as its first president. It operated Cicero Field which for a time was the only permanent landing field

¹Howard L. Scamehorn, Balloons to Jets: 1855-1955, A Century of Aeronautics in Illinois (Chicago: Henry Regnery Co., 1957), pp. 40-41.

²Ibid., pp. 5-6.

³Ibid., p. 50.

⁴Ibid., p. 68.

in the state.¹ Scamehorn called it "one of the most elaborate airports in operation between 1911 and 1915," for it had a turf landing field, sheet metal and wooden hangars, and facilities for service and maintenance of aircraft. Cicero Field was even enclosed by a six foot high board fence with barbed wire on the top to insure privacy.² Other airports, unimpressive by present standards but important in their time in the Chicago area, were Ashburn Field which was founded in 1915; Checkerboard Field in Maywood, established in 1919; the Grant Park Air Mail Field, also begun in 1919, and the Hines Field in Maywood which was started on the grounds of a federal hospital in 1921 to help provide airmail service.³

The Aero Club of America clamored for airmail service during World War I as necessary to train pilots for national defense, and in 1918 service between Chicago and New York was begun with Ashburn Field as Chicago's terminal.⁴ Ashburn Field was too wet part of the year and lost the airmail service to Maywood Field. The Chicago Association of Commerce then advanced the idea of a city airport under the Bureau of Parks, Playgrounds, and Bathing Beaches

¹Ibid., pp. 53 and 67.

²Ibid., pp. 69-70.

³Kirchherr, "Airport Land Use," p. 15.

⁴Scamehorn, Balloons to Jets, pp. 102 and 105.

which might have land for such an undertaking. As a result Chicago Municipal Airport, now known as Midway, came into being. It officially opened May 8, 1926, but was not formally dedicated until the facilities were completed, December 13, 1928.¹ Municipal Airport was Chicago's first "real" airport and "quickly became the most important single airport in America. . . ."²

Soon after Municipal was dedicated, there were articles in the newspapers calling for airport expansion. One such article was entitled "Airport, Like Auto, Is Ahead of Its Ground Facilities."³ Alderman John J. Coughlin (1st Ward) declared, "Chicago is destined to become the air center of the United States, and adequate facilities should be provided without delay." The alderman proposed using the roof of the new post office at Harrison and Canal Streets as the needed central airport and firmly stated his opposition to a lake front airport.⁴ The need for facilities did result in Municipal's expansion. Merrill C. Meigs, chairman of the Chicago Aero Commission, presided and Mayor Anton Cermak participated in a ceremony dedicating

¹Ibid., pp. 172-173. See also Tribune, Oct. 18, 1924 and Peter Reich, Herald-American, Jan. 30, 1962.

²William E. Downes, Jr., Department of Aviation Annual Report, 1966 (Chicago: n.p., 1962), p. 8.

³Scrutator, Chicago Tribune, Apr. 16, 1929.

⁴Tribune, Jan. 1, 1929.

\$450,000 of improvements there in November of 1931.¹ The expansion must have been put to good use, because just six months before, Walter Wright, superintendent of the Municipal Airport, had reported that a survey

shows Chicago now the leading air center of the world. Berlin, Paris, and London . . . now lag behind. More air mail, express and passengers leave and enter the Chicago gateway than that of any other city in the world.²

The idea of an airport in or by Lake Michigan to serve Chicago is not new. In 1927 Evanston, Wilmette, and Winnetka talked of filling in parts of the Lake for airports.³ The Chicago Aero Commission, supported by representatives of the American Legion and the Chicago Association of Commerce, urged the new City Council to begin an island airport in 1929.⁴ Alderman John Massen (48th Ward) was "dismayed" by the anticipated cost of \$10 to \$15 million for such an airport and suggested the dumping of heavier refuse materials by Chicago sanitary collectors to obtain three new airports and save millions of dollars for the City.⁵ Alderman Massen and others continued to urge that a large island airport be built off Grant Park in 1930

¹Chicago Herald-Examiner, Nov. 12, 1931, p. 7.

²Chicago Daily News, May 19, 1931.

³Ibid., July 21, 1927.

⁴Clipping marked Tribune or Daily News, Apr. 6, 1929.

⁵David Retroff, Daily News, May 14, 1929.

which would be connected by subway to the mainland.¹ Mayor Cermak appointed an "Aero Commision" in early May of 1931 with Merrill C. Meigs as chairman. The Commission was "very interested" in a lake front airport which was felt by the majority to be important to the plans for the World's Fair of 1933.² A public hearing was held, and the newspapers reported that aeronautical leaders were unanimous for the need of an airport in Lake Michigan off Montrose Avenue to help care for the expected World's Fair crowds. They also favored building an airport off Grant Park. A weather fore-caster, C. A. Daniel, discounted atmospheric conditions of the Lake as a peril to flying.³ At the hearing, John C. Bowers of the Central Uptown Business Men's Association urged Chicago to "wake up." Bowers claimed that the auto industry had wanted to locate in Chicago, but had received a "cold shoulder" and so went to Detroit. He hoped that aviation would not be treated the same way.⁴

Mayor Cermak was slain while riding in a car with Franklin D. Roosevelt in Florida. There was no airport in Lake Michigan for the World's Fair. But the idea for a

¹ Ibid., Apr. 12, 1930.

² Robert Wood, Tribune, May 19, 1931.

³ Herald-Examiner, June 19, 1931. See also Rotroff, Apr. 12, 1930.

⁴ Wood, June 19, 1931. See also Chicago Post, June 9, 1931.

field to supplement Municipal Airport did not die with the mayor or from the failure to achieve a field. Mayor Edward J. Kelly applied to the Public Works Administration on February 10, 1934 for a grant of \$8,600,000 to build an airport in the Lake.¹ The plan was endorsed by the Department of Commerce, the War Department, the Navy Department, the Post Office Department, the United States Corps of Engineers in Chicago, the Chicago City Council, the Chicago Aero Commission, the Illinois Aeronautics Commission, the Governor of Illinois, the Chicago Plan Commission, both Illinois senators, James H. Lewis and William H. Dieterich, United Airlines and North American Aviation, many congressmen, and Chicago newspapers which included the Tribune, Daily News, Daily Times, and the Evening American.² Hearings in Washington in August and early September of 1934 recommended that Municipal Airport be improved. An airport in Lake Michigan was opposed for safety reasons because of greater weather disturbances there and as being ruinous to the lakeshore.³

Larger, heavier planes came into use during the 1930's such as the Douglas DC-2's and DC-3's and the Boeing

¹"Report of Committee Appointed by the Secretary of the Interior on Air Terminals in Chicago," Washington, D.C., June, 1935, p. 5. (Mimeographed)

²Ibid., pp. 68-69.

³Ibid., p. 216.

147-D's and 247's which made the improvement of Chicago air facilities a necessity. The Chicago Belt Line Railroad bordering the northern edge of Municipal Airport was relocated in 1934 which enabled the lengthening of runways and construction of other facilities. This was done by the Works Progress Administration and the Civil Works Administration through a \$10 million federal grant.¹ This expansion took Municipal to its present size, about one mile square. Some authorities considered such a size in the late 1930's as assuring the "safe operation of the largest aircraft in operation now or proposed for the immediate future."² Though many aviation experts would have considered Municipal to have adequate size then, anticipated traffic volume led others to search elsewhere for Chicago's airport needs, a search which ended northwest of Chicago near a peaceful hamlet called "Orchard Place" which was to become a sacrifice to the progress of transportation.

Orchard Place was a village that used to stand on the northeast corner of what is now Chicago-O'Hare International Airport. The Scott family, among the last New England pioneers, came to Orchard Place from Vermont to

¹Scamehorn, Balloons to Jets, pp. 174 and 181.

²American Society of Planning Officials and the American Municipal Association, The Airport Dilemma (Chicago: Public Administration Service, 1938), p. 32.

farm in the late 1840's. This was a time when many German immigrants were coming into the area and buying out the older Yankee families who moved to the towns or further west. The Wisconsin Central Railroad crossed through in 1887. Part of the Scott family farm was an orchard, and Elvin Scott agreed to donate an acre or so for a depot if one would be constructed. The depot was built, and the railroad called it Orchard Place. The small village grew from that beginning. Soon, it had a combination general store and post office, another general store-tavern, two lumber yards, two dance halls, one saloon, a cobbler, a blacksmith, and about one dozen homes. In 1910 the township went dry by local option to put the saloon and dance halls out of business. About this time, the local economy changed from dairying to truck farming. In the 1920's Higgins Road became one of the first paved roads in the area and brought trucks and autos. Subdivisions arrived in the mid-1930's, and in 1936 the forty-five year old post office was closed. Death came slowly, but in 1957 the Northwest Tollway engulfed Orchard Place; a few homes were moved, the rest destroyed.¹ The name still lives in two ways. Its elementary school was relocated in Des Plaines, Illinois and is known as Orchard Place School.

¹Letters from Byrne, Dec. 17, 1969 and Jan. 18, 1970. Interview Mr. John Burmeister by Mrs. Wanda Poor, Dec. 10, 1969.

On government records, weather reports and baggage tickets, O'Hare Field is still listed as "Ord" for Orchard. The background of the O'Hare region is not much different from that of many other places of lesser importance; the region was one where an unsuccessful attempt at town building was located.

CHAPTER I

THE DOUGLAS PLANT

Over 1,000 acres of land including paved runways were part of a Chicago area World War II defense plant built by the government to produce Douglas C-54 "Skymaster" cargo planes. This land and runways, located in an area neither industrially nor residentially developed, drew enthusiasts for a large airport to the tract known as O'Hare Field.

The Modern Military Records Division of the National Archives in Washington, D.C. has a great number of letters and telegrams from the period of 1940-1941 to the Army Air Force and other government agencies about the building of an air base or defense plant in the Chicago area. The Chicago Association of Commerce was particularly well represented with correspondence from Oscar G. Mayer, E. P. Querl, and A. H. Mellinger of that organization, although civic minded citizens of Elgin, Harvey, Joliet, Maywood, Waukegan, St. Charles, and Aurora also sought air fields for their locales. Until Pearl Harbor, the standard reply was that given by Major General George H. Brett to

Senator C. Wayland Brooks of Illinois who sent geological survey maps from the Chicago Association of Commerce. General Brett wrote this about an air base, the "Air Corps does not contemplate the establishment . . . at the present time."¹ The next month, December, 1941, Chicago's prospects changed.

After the war broke out, the federal government began searching for sites to build cargo planes. The West Coast was considered vulnerable to Japanese attack, and it also had a shortage of labor. The Japanese quickly overran the chief source of natural rubber for the United States, the East Indies, and synthetic rubber had not yet been perfected. Rail connections became exceedingly important not only for the transport of goods, but also for the transport of workers.² The abundance of rail transportation gave Chicago an advantage over its rival in the competition between cities to obtain factories from the War Production Board because of the stimulus they would give to the local economy. As far as aircraft plants were concerned, the chief of the aircraft section of the Office of Production Management, the group which would make the final decision for such plants, was Merrill C. Meigs. Mr.

¹Letter, Maj. Gen. George H. Brett to Senator C. Wayland Brooks, Nov. 6, 1941, National Archives, Washington, D.C., Record Group 18, Central Decimal Files (Bulky), Box 834, File Number 686, Chicago, Illinois.

²James Hoge, Chicago Sun-Times, Jan. 1, 1962.

Meigs had been the publisher of the Chicago Herald-Examiner, chairman of the Chicago Aero Commission, and was to have Chicago's small island airport named after him while he was still alive.¹ It was another advantage for Chicago to have Mr. Meigs in the Office of Production Management.

E. Paul Querl, director of industrial and aviation development for the Chicago Association of Commerce, was active in his quest for a war plant. Leverett S. Lyon of the Association had suggested three possible sites to Washington for large plane assembly plants in 1940. They included Ford Airport near Lansing, Illinois; Rubinkam Airport near Harvey; and a site near St. Charles, Illinois. Such assembly plants required runways to test and move the big planes.² Querl's choice, however, was one of about 1,430 acres seventeen miles to the northwest of Chicago's business district. Three railroads served the area, and the nearest community was called Orchard Place. Querl made a presentation to the government and "cornered" Air Force officials at Wright Field in Dayton, Ohio. He emphasized the importance of rail transportation with the

¹Interview, Mr. Wayne Thomis, Aviation Editor of the Chicago Tribune, Aug. 12, 1969. Thomis piloted Mr. Meigs on various trips for many years after World War II, and they often used to discuss how O'Hare Field came into being because of the war. Charles A. Lindbergh was also a member of the Meigs' committee which gave final approval to the Orchard Place site.

²Telegram, Lyon to Donald M. Nelson, National Defense Advisory Commission, Dec. 12, 1940, National Archives file.

tire shortage as well as Chicago's available labor supply. The City would have a factory for building large cargo planes.¹

The Douglas Aircraft Company had a plant under construction in Oklahoma City in early 1942 for producing its largest plane, the four-engined C-54 "Skymaster." There was a desperate need for military transports, so in the spring of 1942 the decision was made to produce the smaller, two-motored C-47 at Oklahoma City and to build a Chicago area plant for the C-54's. The C-47 was a proven plane which was being built at Long Beach, California. Tooling for the plane could be quickly duplicated and production begun in Oklahoma City. The C-54 was being "tooled up" in Santa Monica, California and by the time a new plant was built, some of the "bugs" would be corrected. Mr. John C. Buckwalter, assistant manager of the Douglas plant, later believed that the plant was located in Chicago because the Air Force decided it had a "good potential labor supply there," so Douglas cooperated with the recommendation.²

Special orders dated April 22, 1941 were issued in the name of Major General H. H. Arnold to send three men from the Army Air Force Headquarters in Washington to Chicago as a "Board of Officers" and site selection committee

¹Robert M. Lewin, Daily News, Dec. 23, 1954. See also James Hoge, Sun-Times, Jan. 22, 1962.

²Letter, John C. Buckwalter to Doherty, Feb. 23, 1970. Douglas would have had veto power against Chicago if there had been reasons for this.

for the Douglas plant. The three officers, Major Marlboro K. Downes, Major Albert J. Wehrell, and Second Lieutenant Harold B. Neely, convened the Board in Chicago on April 23, 1942. The Board Report stated that the Board was "advised" by members of the United States Army Corps of Engineers from the Chicago District including Colonel Charles Keller, Captain E. S. Thompson, and Lieutenant M. L. Rockwell. It was "assisted" also by personnel from Douglas Aircraft including Mr. Carl Cover, F. W. Conant, J. C. Buckwalter, and Mr. Ben Howard. Others who assisted were Ora W. Young and H. E. Horner of the Chicago Region of the Civil Aeronautics Authority; Robert Kingery of the Chicago Regional Planning Association; and F. J. Ashley, L. S. Lyon, and E. P. Querl of the Chicago Association of Commerce.¹

Actually most of the work was done by three civil engineers with the Chicago Corps of Engineers. The three were Captain E. S. Thompson, Lieutenant M. L. Rockwell, and Mr. Ray W. Hazekamp, a civilian advisor to the Corps. This group reported to the executive officer of the Chicago District Corps of Engineers, Major C. E. Humphrey.²

¹U.S. Army Corps of Engineers, Chicago District Office, Chicago Site Planning Section, "Board Report: Aircraft Assembly Plant in the Vicinity of Chicago, Illinois," Chicago, Apr., 1942, pp. 1-2. (Mimeographed.) Hereafter this report is referred to as "Board Report."

²Letter, C. E. Humphrey, Executive Director of the Chicago Housing Authority, to Doherty, Dec. 2, 1969.

Lieutenant Rockwell had worked in the summer for the Chicago Regional Planning Association which had done studies on possible sites for air fields, before he was in the Army. When the Chicago Corps of Engineers was asked for such site suggestions, it sought out Robert Kingery and the Chicago Regional Planning Association.¹ The Chicago Association of Commerce also had worked on proposed sites, and an aerial survey was made of the area within a forty mile radius of Chicago.² The only airport with paved runways within this area surveyed was Municipal Airport, but its traffic was too congested and the area near it too built up for consideration for the Douglas plant.³

Sites inspected physically by automobile were the Ford site at Lansing, Illinois; Rubinkam at Harvey; Orchard Place; St. Charles Airport; Aurora Airport; Joliet Airport; a site near Elgin; and two sites south and west of Chicago Municipal Airport. The sites far away lacked utilities and railroad facilities. Several of the closer sites were too near to Chicago Municipal Airport.⁴ The Chief of Engineers

¹Interview, Ray W. Hazekamp, civil engineers and airport consultant, Jan. 6, 1970. Letter, Matthew L. Rockwell, Executive Director Northeastern Illinois Planning Commission, to Doherty, Sept. 25, 1969.

²Letter, Buckwalter. See also "Rush Program Readies O'Hare for Jet Age," Excavating Engineer, Nov., 1960, p. 21 for the civic organizations.

³U.S. Army Corps of Engineers, "Board Report," p. 2.

⁴Ibid., pp. 2-3.

in Washington informed the Chicago Office to choose one of three sites--Ford site at Lansing; Rubinkam Airport near Harvey; or Orchard Place.¹ These three locations were studied thoroughly. Estimates of construction time and cost were made. The wind was clocked for speed and direction; possible obstructions to clear zones for aircraft operations were charted; borings were made for soil samplings; drainage was studied; and other tests made. It was felt by some of those doing the studies that their work would determine the location of a future major airport.² The Rubinkam site was the worst of the three. Its drainage was poor, and its potential expansion quite limited.³ The Board Report mentioned poor drainage, lack of housing facilities, interference with existing air routes and lack of simultaneous highway and railroad transportation for both the Rubinkam and Ford-Lansing sites.⁴ Captain Sauers of the Cook County Forest Preserve believed that if the water table were lowered at the Ford-Lansing site, it would ruin the forest preserve. Congressman Adolph J. Sabath, a Democrat who served consecutive terms in the House of Representatives from 1907 until his death in 1952,

¹Letter, Humphrey, Dec. 8, 1969.

²Interview, M. L. Rockwell, Oct. 24, 1969.

³Interview, Hazekamp, Jan. 6, 1969.

⁴U.S. Army Corps of Engineers, "Board Report," p. 3.

wanted the new plant and air field to be in his district in the Lansing area as much as Ralph Edwin Church, unsuccessful Republican candidate for United States senator in Illinois in 1940, desired it for his own congressional district at Orchard Place.¹

Ray Hazekamp felt that an important element in the final decision was the different types of labor found in the two areas. The Douglas company, which would have to train its workers, preferred the more "suburban" type found in the northwest. If this were true, it is ironic that the tails and wings of the planes assembled at Orchard Place were made by the Pullman Company in the southern part of Chicago.² C. E. Humphrey wrote that the Orchard Place site was selected, because the City of Chicago would extend water lines to Orchard Place at cost, and the Douglas Corporation's review of the labor market indicated that the northwest suburbs would "draw the best qualified factory personnel."³ John C. Buckwalter of the Douglas team stated that the Park Ridge or Orchard Place site was selected because it was remote from established industrial development

¹Interview, Hazekamp. Eighty-fifth Congress, 2d Session, House Document No. 442, Biographical Directory of the American Congress 1774-1961 - The Continental Congress of the United States (Washington, D.C.: U.S. Government Printing Office, 1961), pp. 1555 and 692.

²Interview, Ray W. Hazekamp, Jan. 6, 1970.

³Letter, Humphrey, Dec. 2, 1969.

and close to the relatively untapped labor supply of northern Chicago and its suburbs; also the land costs were reasonable and there was plenty of open space for future expansion into an international airport for Chicago.¹ James S. Farra, another Douglas plant executive, stated this concerning site selection:

The people directly responsible were John Weaver, Plant Manager, the U.S. Army Engineering Corps, who built the plant and Ted Conant. The rest of us had little to say about it. There were two sights [sic] offered, one on the south side of Chicago and the present one. John Weaver held out for the present sight [sic] and finally prevailed. . . . John Weaver felt that the north side location was more suitable for an airfield.²

John Weaver is deceased, but F. W. "Ted" Conant, who headed the Douglas selection committee gave his recollections of what took place. The Douglas "team" with representatives of Chicago industrialists, the Air Force, and the U.S. Corps of Engineers spent a "week or two" examining various sites from the ground and air. Only three were seriously considered. The Ford-Lansing site was too small, had doubtful soil structure, and was on the wrong side of the city for postwar use. Orchard Place's only disadvantage was a railroad too close on the west, so the site which is now O'Hare Field won.³

¹Letter, Buckwalter, Feb. 23, 1970.

²James S. Farra as quoted in letter from Charles R. Chappell, Public Relations Dept., McDonnell Douglas Corp., to Doherty, Feb. 20, 1970.

³Letter, F. W. Conant to Doherty, Jan. 28, 1970.

The Board Report was more positive concerning Orchard Place, for it stated that the latter was most desirable because of the housing and personnel facilities available there; it was far enough from Municipal Airport, so it would not interfere with regular air routes; it was the logical area for an alternate Chicago airport; ground conditions were favorable to a landing field and plant; drainage was good; two railroads were available and another was near; highway transportation was good; there was fine commuter service one-and-a-half miles to the south; there were no flying hazards close-by; and Chicago would supply water and sewage facilities.¹

Mr. Ray W. Hazekamp, a consulting engineer to the U.S. Corps of Engineers, related how Robert Kingery, Captain Thompson, Lieutenant Rockwell, John Weaver, himself, and three others (probably F. W. Conant of Douglas and two members of the Chicago Association of Commerce) met in Kingery's office of the Chicago Regional Planning Association and decided which site would be chosen. Telephone calls made by them to Washington had been monitored, and before final approval was given, Lieutenant Rockwell and Mr. Hazekamp were "sweated" by a full colonel from Washington who asked them questions until 3:00 A.M. one night. Hazekamp felt that this was done because Representative

¹U.S. Army Corps of Engineers, "Board Report," pp. 4-5.

Sabath had to be satisfied that the best site had been chosen; that Orchard Place was the best of the sites examined, but that it also had problems. Hazekamp had built airfields as early as 1930 and was with the Civil Aeronautics Administration during the 1930's. Orchard Place had drainage problems and subsoil borings showed some difficulties; highways and railroads did limit expansion. He would have favored a field further to the west with more open space rather than just examining sites presented by the Chicago Regional Planning Association.¹ The war was going on, however, and a plant was needed quickly. For years the chief complaint about O'Hare Field was that it was too far from the city. Little has been done in the United States even now for fast commuter service to airports, so it would have been most unlikely that an airport further west would have been considered.

Merrill Meigs' department of airplane production for the War Production Board approved the Orchard Place site in June of 1942. A local newspaper carried the following headline on its front page: "\$20 million war plant for Bensenville area" and "Army to buy 1300 acres for Douglas Aircraft and airport." Public hearings were scheduled in the Park Ridge City Hall for June 18, 1942, concerning intended rezoning of Orchard Place from farm

¹Interview, Hazekamp.

land to industrial. Judge William J. Campbell signed an order condemning property for government use. The newspapers reported that when the war ended, the tract would revert to farm land.¹ The following week, the Chicago Association of Commerce announced that approval for the site was definite and that the plant probably would continue operation after the war and be an economic boon to the area.² Such encouragement was needed. James S. Farra affirmed, "There were strenuous objections by many groups to the north side location, which up until that time was principally suburban residential. . . ." ³ Ray Hazekamp told of being at a meeting in Park Ridge where objections to the plant became quite heated. The patriotism of the audience was called upon to accept the plant as Park Ridge's contribution to the war effort.⁴

The Air Force acquired approximately 1,460 acres with only about sixty individually owned parcels of land to be purchased. By July of 1942, the area was being cleared of fences and buildings, and construction with the Austin

¹Cook County Herald, June 6, 1942, p. 1. See Also James Hoge, Sun-Times, Jan. 22, 1962, p. 51.

²Cook County Herald, June 12, 1942.

³Letter in which Farra quoted from Chappell, to Boherty, Feb. 20, 1970.

⁴Interview, Hazekamp.

Company being the prime contractor. The Douglas Company gave the Corps of Engineers Douglas' facility requirements.¹

Colonel John Corey, Administrative Assistant to Mayor Daley, made the statement that in his experience important decisions are often predetermined by the actions of subordinates.² Matthew L. Rockwell, Executive Director of the Northeastern Illinois Planning Commission in 1942 was only a lieutenant. Ray W. Hazekamp, his civilian colleague, recalled the difficulty that Mr. Rockwell had in gaining promotion to first lieutenant even though he was giving valuable engineering service. The commanding officer of the Chicago Corps of Engineers, Colonel Keller, had been an English teacher at West Point in the prewar years. He did not like the way Second Lieutenant Rockwell, a graduate of the Massachusetts Institute of Technology in civil engineering, wrote reports.³ Regardless of this, Rockwell and Hazekamp not only played key roles in the selection of the site, but they also prepared a "practical building, runway, and highway development for the field."⁴

¹Letter, Buckwalter, Feb. 23, 1970. See also Letter, Humphrey to Doherty.

²Interview, Corey, Aug. of 1969.

³Interview, Hazekamp.

⁴Letter C. E. Humphrey to Jury of Fellows, American Institute of Architects, Oct. 13, 1967. Also Hazekamp interview and letter, Matthew L. Rockwell to Doherty, Sept. 25, 1969.

The Corps of Engineers gave runway and plant location and requirements to the architects-engineers of the Austin Company who did the construction. The location of the four runways was particularly important, because, lengthened and improved many times, they are still in use north of the O'Hare Field terminal; the larger, newer runways to the south of the terminal parallel those to the north.¹

The main runway ran in a northwest-southeast direction. The Chicago area Civil Aeronautics Administration Office wanted it that way to parallel Municipal Airport's main traffic pattern for safety reasons during instrument flight conditions. The runways were expensive--lacking reinforcing rods to save steel, they were made thicker than was then customary.² There were four runways of 5,500 feet each; all were 150 feet wide and had a base of stone 15 inches thick covered by a seven to ten inch layer of concrete. The last paving was completed on August 1, 1943.³ The first plane to land at the new field arrived in the early spring of 1943. It was a C-54 from the Douglas plant in Santa Monica, California bringing parts for the first Chicago C-54. The latter was scheduled to "fly in July"

¹See drawings of runways in the Appendix.

²Interview, Hazekamp.

³Report to Civil Aeronautics Administration (Form ACA 29A), Aug. 5, 1943.

of 1943. The weather was "marginal," and there were no landing aids or tower. James S. Farra used a portable transmitter on the runway to give advice to Captain C. Pratt, the pilot, and his co-pilot Captain P. W. Herbert in an operation which was "quite tricky."¹

The newspapers of the time contained little about what was happening at Old Orchard. In the fall it was reported that DuPage County had loaned its grader for the third time for work at the Douglas plant; that the county was preparing to build workers' homes with the aid of the federal and state governments.² The former assistant manager of the Douglas plant wrote, "As far as I know, there is no written record on highlights of the project."³

The Chief of Engineers in Washington, D.C. chose the Austin Company as the architect, engineer, and construction manager. It prepared the design plans and specifications for the buildings. Major William A. Bonnet was the area engineer supervising the project for the Corps of Engineers. The Austin Company's work was directed by Albert S. Low, vice president and chief engineer of the company, and Harold A. Anderson, chief designer

¹Letter, Chappell to Doherty.

²Roselle Register, Oct. 30, 1942, p. 1.

³Letter, Buckwalter, Feb. 23, 1970.

and project manager.¹ Mr. Anderson became the President and General Manager of the Austin Company;² Major Bonnet, the civilian Director of the United States Atomic Energy Commission for the Pacific Area.³

The first operation was to grade the site and install drain lines. The lines, as with other concrete, were unreinforced to conserve metal. Then an underground heating tunnel was built from where the power house would be to encircle the area and connect the buildings. The first building was begun on June 30th, the main factory building on August 24, 1942. In November the first section of the factory was turned over to Douglas for operation. The war made completion urgent. The Austin Company's construction crew reached 8,500 men. Work was continued twenty-four hours a day for seven days a week through a severe winter to finish the original contract by April 30, 1943.⁴ The personnel and administration buildings plus the cafeteria were rushed to completion. Douglas personnel "occupied a decrepit old Fleischmann pickle factory on

¹Letter, Humphrey to Doherty, Dec. 2, 1969. See also "Aircraft Plant Has 150-foot Timber Trusses," Engineering News-Record, October 21, 1943, p. 118.

²Letter, D. H. Burrell, Advertising Manager, Austin Company, to Doherty, Dec. 12, 1969.

³Letter, William A. Bonnet to Doherty, Dec. 16, 1969.

⁴" . . . 150-foot Timber Trusses," pp. 114-115.

Weed Street near Halstead" while waiting for building use.¹ The war stopped for no one; work and training had to continue.

The main factory building covered about forty-three acres. The critical shortage of steel made it necessary to use wood and non-strategic materials as much as possible. As the plant was desired just for the duration of the war, short-lived materials were considered detrimental only because of higher maintenance costs, but they proved to be very expensive.² When completed, the two million square feet building was the "largest all-timber plant in the world. . . ."³

The giant building was designed for efficient straight-line production. A height clearance of thirty-five feet was provided in the final assembly area, and there was at least a twenty-five foot clearance throughout the building. Steel monorails were used for the movement of twenty-eight crane hoists, each of which weighed five tons. The hoists allowed heavy parts to be transported over eighty-five per cent of the floor area. Steel was not employed for the 150-foot trusses which spanned the ceiling to support the roof and the crane hoists.

¹Letter, Buckwalter.

²Ibid.

³Letter, D. H. Burrell to Doherty, Dec. 12, 1969.

Timber was the substitute for steel, but there was a shortage of good structural timber, so wet, green, uncurved material had to be used.¹ Laminated timber columns supported the large ceiling trusses. Trusses and columns were constructed on the site from one inch boards of varying lengths; all timber used was fabricated, and the shop which did the job handled 31,750,000 board feet of lumber. Uncertainties about the quality of the wood led to overdesigning for stress. The engineers estimated that the building weighed twice as much as it would have weighed made of steel, cost ten per cent more, but saved 20,000 tons of steels and 30,000 tons of other critical materials.² Cafeteria railings, manhole covers, and gratings were made of wood; the fluorescent lighting system saved 132 tons of steel through the use of pressed wood reflectors. Efficient installation of copper wiring was said to have reduced copper requirements by one-third. Within ten months after construction had begun, the main factory building was ready for operation. Besides the plant, there was an administration building, boiler house, garage, cafeteria, health center, paint shop, and hangar, plus a paved service area of 1,300,000 square feet, an airfield, and a parking area for 6,800 cars.³ The work was completed ahead of schedule

¹Ibid. See also ". . . 150-foot Timber Trusses," pp. 116-117.

²". . . 150-foot Timber Trusses," pp. 115-118.

³Ibid., pp. 114 and 116.

meeting "all requirements, including the strict use of non-critical materials."¹ The cost was \$40.5 million.²

The Roselle Register reported on the front page of its July 23, 1943 issue that the first plane would fly and the plant would be dedicated on July 30, 1943. Twenty-five thousand persons were expected to attend. The main speaker was Major General Harold L. George, Commanding General, Air Transport Command, Army Air Force who spoke on "The Role of Air Transportation in War and Peace."³ General George declared:

Geography smiled generously on Chicago, for one need only to study the map of the world to see that it sits at the crossroads of many of the great air routes. How important will be the position which this great city will take in the air transportation of the future depends upon the vision of its people, on their ability to see what lies just over the horizon . . . When that time arrives (victory and peace) the airplane will become a great vehicle of peace. Great airlines will carry commerce to all parts of the world. A new era, that of world air transportation, will thrust itself into our peacetime economy.⁴

Governor of Illinois Dwight Green, Mayor Edward Kelly of Chicago, Holman D. Pettibone, President of the

¹Letter, Humphrey.

²Surplus Property Administration, Aircraft Plants and Facilities--Report of the Surplus Property Administration to the Congress, January 14, 1946 (Washington: U.S. Government Printing Office, 1946), p. 43.

³Chicago Douglas Airview News (Dedication Souvenir Edition, First Flight), Vol. 1, No. 9 (July 30, 1943), 5.

⁴Ibid., Vol. 1, No. 10 (Aug. 3, 1943), 1.
Roselle Register, Aug. 6, 1943, p. 1.

Chicago Chamber of Commerce, John Weaver, Douglas plant manager, and A. E. Raymond, vice president in charge of engineering for the Douglas Company were there.¹ R. W. Hazekamp recalled how Mayor Kelly sat next to Colonel Charles Keller of the U.S. Corps of Engineers on the speaker's platform. The colonel was small, about five feet four inches in height, while Mayor Kelly was a large man well over six feet tall. They made an unusual contrast, but to make matters worse, the mayor's garter broke and dangled from his pants leg. Attempts to hide it by crossing and recrossing his legs proved futile, even as the speaker told of the vision of the people.²

Following General George's speech, "Miss C-54," a nineteen year old brunette riveter named Jennie Giangreco who had been elected by popular ballot, christened the first plane "Chicago" and pulled the switch to start the motors for its initial flight. Douglas' chief test pilot Win Sargent flew the plane for twenty-five minutes, and it was reported that there was a tremendous ovation from the 50,000 spectators each time he passed over the crowd. After the C-54 "Skymaster" was landed, a dance began which lasted until very late in the

¹"It Flew in July," Douglas Airview, Sept., 1943.

²Interview, Hazekamp.

evening.¹

Matters were not always so happy. Early Tuesday morning, July 18, 1944, almost a year later, fire completely destroyed the Administration Building. Firemen came from nine suburbs and Chicago to fight the blaze. The holocaust was visible for many miles.² The wooden buildings had been spaced several hundred feet apart for fire protection, but the heat was so intense that the windows of the assembly plant cracked and melted from the heat. All engineering and control records were lost as well as purchasing and material records, and most of the controller's records. A man working on the payroll lists carried them from the building; no one missed check.³

It was reported that full production continued and not a schedule was missed because of the fire. In early August, the cornerstone for a new building was laid, and by the end of October, the clerks were moved back into the Administration Building from the cafeteria or wherever space had been found for them.⁴ Duplicate basic drawings

¹Roselle Register, Aug. 6, 1943, p. 1. Chicago Douglas Airview News, Vol. 1, No. 10 (Aug. 3, 1943), p. 1. "It Flew in July," Douglas Airview, Sept., 1943.

²Patricia Lapp, "Out of the Ashes," Douglas Airview, Dec., 1944. Roselle Register, July 28, 1944, p. 1.

³Letter, Buckwalter.

⁴Lapp. See also Roselle Register, July 28, 1944.

were reproduced at the Santa Monica plant, but drawing changes as well as production releases and purchases had to be reconstructed from memory. Some items were overlooked, and a few months later production slowdowns occurred which cost the Armed Forces many planes they had expected to receive.¹ Newspapers reported the cause of the fire was undetermined.

Mr. William A. Bonnet worked with the Austin Company on the "Chicago Aircraft Assembly Plant" as the officer from the U.S. Army Corps of Engineers from the time of the clearing of orchards until the late summer of 1943. A picture of the plant hangs on the wall of his Hawaiian office of the United States Atomic Energy Commission. Nostalgically, he recalled flying a commercial jet plane into O'Hare Field and seeing the original assembly plant still standing.² It stands no longer.

The mammoth building, called T-6, had two million square feet of space and covered forty-three acres. It had cost the government \$16.5 million to build T-6 in 1943.³ The old, wooden hangar, which had cost \$1 million to build during wartime, burned to the ground in 1958. The fire was

¹Letter, Buckwalter.

²Letter, William A. Bonnet to Doherty, Dec. 16, 1969.

³Vernon A. Justice, Jr., "CONAC . . . Undertakes Largest Peacetime Demolition Project," Air Force Civil Engineer, May, 1966, p. 14.

spectacular enough to cause a traffic jam for three miles on Mannheim Road.¹ It was feared that if T-6 caught fire, it might have created a fire storm that would have endangered the whole military complex at O'Hare Field as well as civilian hangars and that some burning embers would have carried outside the airport area. There was an AvGas tank farm for fuel only 500 feet from T-6.² It seemed to have more potential than Mrs. O'Leary's cow.

When the Continental Air Command took charge of the base in 1959, deterioration had already begun. Dry rot spread more quickly after the roof began to leak. The Air Force tried to interest other governmental agencies, including the City of Chicago, in the building. None would take it, even on a rent-free basis, as roof repairs alone would have cost almost \$2 million. The huge building also had to be heated to keep the sprinkler system from freezing and insure fire protection. Six thousand tons of coal per year at an average cost of nearly \$14,000 per month was spent for heat. The Air Force considered installing anti-freeze in the piping systems, but this could not be done because of the location of the fifty-eight sprinkler riser valves. Even if T-6 were not in use, \$75,000 per year would have been spent to keep the plant under constant security surveillance and to insure against illegal

¹Sun-Times, Aug. 9, 1958.

²Justice, p. 14.

entry. Demolition of the building was the only real solution to the problem of expenditure, the largest peacetime demolition project ever undertaken by the Continental Air Command.¹

The assistance of the Chicago District, U.S. Army Corps of Engineers was sought. In May, 1965, the Corps completed a demolition proposal. Eleven bids ranging from \$237,700 to \$635,000 were received from private contractors. The contract was awarded May 26th, and the work began of dismantling the building through the summer of 1965. The demolition phase was not finished until March, 1966, and the "clean-up" phase took three months more. The small mountains of debris were a fire hazard. The debris could not be burned in either Cook or DuPage County, so the contractor hired a fleet of semi-trailer trucks to haul it to McHenry County for disposal, a seventy mile round trip. The "enterprising contractor" barged bricks from the plant all the way to Texas for their value. About 150 tons of hardware and bolts were salvaged along with miles of copper tubing. Parts of the huge timber trusses were sold to lake-front cottage owners for the construction of docks and piers. Most of the material, however, was not salvageable.²

The situation had changed radically since Mr. A. J. Brough had picked up planes from the Douglas factory to

¹Ibid., pp. 14-15.

²Ibid., pp. 15-16.

deliver them to the military. He wrote "it was then called Orchard Place. It was a God-forsaken spot, . . . we had to bribe the taxicab drivers to take us out there."¹ The plant had served its purpose, though, in delivering 655 large cargo planes to the Armed Forces during the period from August, 1943 to October, 1945.² Some had hoped that more might have been done with it after World War II. The Chicago Plan Commission began in 1943 to plan for its retention as an airplane plant.³ In 1944 a news article stated that "Air Lines Buy 93 Sky Giants for Peace Use--Fastest in World Carry 56 Persons." United, American, and Pan American Airlines had signed contracts to buy postwar "super-transport." Eastern Airlines also was planning to order Douglas DC-4's and DC-6's, the commercial version of the C-54. Donald W. Douglas, president of Douglas Aircraft said the planes might be built at the Old Orchard plant.⁴

The labor supply, one of the chief attractions of Chicago for Douglas, was good through 1942 and 1943. "There

¹Letter, A. J. Brough, former executive of Trans World Airlines, Vice President of Properties and Concessions for Hertz, dated Jan. 19, 1970.

²John A. Casey, Chicago Aviation and Airports--The First Forty Years, 1926-1966 (Chicago Department of Aviation, n.p., 1968), p. 12.

³Chicago Plan Commission, Proceedings of the Chicago Plan Commission of the City of Chicago, Vol. 2, Jan. 21, 1943 to Nov. 15, 1945, p. 173.

⁴Charles Gotthart, Tribune, Sept. 12, 1944.

had been no airplane industry up to that time in the area," so a major undertaking was to train the new employees. About 400 supervisory personnel were transferred from other Douglas plants to proceed with this while the plant was being completed. By 1944 the labor supply was "tight" and turnover increased, so the training program was continued to the end of the war. The work force was built up to 17,300 employees, but never reached the 21,000 required for the production schedule.¹ Even after the second atomic bomb had been dropped, large advertisements for the Douglas Company ran in the local newspapers which said, "Do you want to serve your country? Do you want to prepare for the future? No Cutback Here . . . Labor Priority higher than any other Chicago war plants."² On August 14, 1945, the Douglas plant employed 17,000 workers. Despite such an advertisement, by August 22nd, 10,500 had been laid off; by September 1, 1945, only a skeleton crew remained. No plans were announced for any peacetime use of the plant.³ James S. Farra stated that the advertisements had had good intentions. The management of the Chicago plant hoped that it would continue to manufacture the commercial

¹Letter, Buckwalter, Feb. 23, 1970.

²Arlington Heights Herald, Aug. 10, 1945, p. 12.
See also Roselle Register, Aug. 10, 1945.

³Tribune, Aug. 22, 1945, p. 7.

DC-4, but it lost out to the factory in Santa Monica, California.¹

What had happened to the Old Orchard plant of the Douglas Corporation was not atypical. "To disperse the industry for security purposes and to tap new sources of labor, many of the larger airframe plants were located in the nonindustrial areas, particularly in inland locations."² Ninety per cent of wartime aircraft facilities expansion was financed by the federal government with eighty-two per cent of such government financed expansion under the sponsorship of the Army Air Forces.³ Companies involved with the aircraft industry had the greatest wartime expansion of any companies. In dollar terms, it was the world's largest manufacturing industry by 1944.⁴ All of the aircraft corporations worked on a cost-plus-fixed-fee type of contract. The net working capital of Douglas went from \$13.3 million in 1940 to \$56.7 million in 1944. When the war ended, "the aircraft industry itself, even on the most favorable terms, could absorb only a fraction of the space

¹Farra quoted in Chappell letter to Doherty, Feb. 20, 1970.

²Surplus Property Administration, p. 14.

³Ibid., pp. 1 and 7.

⁴Ibid., p. 9. G. R. Simonson, "The Demand for Aircraft and the Aircraft Industry, 1907-1958," Journal of Economic History, XX, No. 3 (Sept. 1960), 377.

which has been provided for its wartime use."¹ The Army and Navy cancelled 18,167 contracts with the aircraft industry by the end of 1945.² There would be a surplus air field available in the Chicago area when the war ended.

¹Surplus Property Administration, pp. 20-21.

²Simonson, p. 377.

CHAPTER II

CHOOSING THE SITE

Even before the United States became involved in World War II, projected growth of commercial air travel indicated that Chicago Municipal Airport would not be adequate to handle the traffic expected by 1945, and another large airport would be needed.¹ In fact three "air terminals" were suggested, Municipal on the west side of Chicago, a central airport close to the downtown area, and a third one of at least a mile square or more on the northwest side in the vicinity where the Douglas plant was to be built. An alternate plan at that time was to erect an airport on the bottom of Lake Michigan with dikes to hold back the water "as a less expensive type of construction than a completed island made by fill over submerged land."²

¹Special Committee Representing the Chicago Association of Commerce, the Chicago Plan Commission, and the Chicago Regional Planning Association, "Airport Program for Chicago and the Region of Chicago," Chicago, Nov., 1941, p. 4. (Mimeographed.)

²Ibid., p. 6. See also William E. Downes, Jr., Department of Aviation Annual Report, 1966 (Chicago: n.p., 1967) which indicated that air traffic control considerations had caused a search for an airport site in the area of O'Hare Field during prewar times.

The military and federal aviation authorities also approved of another large airport for Chicago. Senator Scott W. Lucas wrote to the Army Air Force suggesting Lockport, Illinois (about forty miles from Chicago, near Joliet) as a place for an airfield. Colonel J. C. Shively of the Army Air Force replied that such a facility was not vitally needed but he continued:

It has long been felt by this Headquarters and the Civil Aeronautics Administration that an additional airport located close enough to downtown Chicago to permit its use as a municipal airfield would be highly desirable both from the military and civilian standpoint to relieve congestion at the present municipal airport [sic]. . . . The site at Lockport can hardly qualify . . . due to the time involved to travel.¹

During World War II, Chicago did not forget its need for another airport. City Engineer Ralph H. Burke, the Executive Director of the Postwar Economic Advisory Council of Chicago, wrote that the city had "a civic responsibility to insure that its airport facilities will continue to make it the center of air travel," and he went on to make this statement of policy which has been retained by Chicago to the present time:

Primary responsibility for commercial flying, however, rests with private enterprise. Operating costs of an airport, interest charges, and amortization of capital expenditure must come in the main from tariffs charged by the commercial airlines. . . . The choice of a site, the solution of legal problems, the application of zoning laws, the acquisition of the site, the incidental and coordinated improvements in highways and other

¹Letter, Colonel J. C. Shively to Senator Scott W. Lucas, Jan. 11, 1943.

facilities are all within the province of local government . . . augmented and aided . . . by the State and National Governments. The purchase, construction and operation of the airport . . . must be self-liquidating except for that portion ascribable to public benefit. Private enterprise should bear the ultimate responsibility for all phases of the airport beyond that portion satisfying the public requirements.

Burke estimated that Municipal Airport's capacity would be exceeded within five years after World War II ended and declared it "absolutely essential to the economic future of Chicago" that preparation be made for a new "super" airport, legislation enacted, the site chosen, rail and highway facilities planned, and construction begun on such an airport before Municipal was saturated by air traffic.¹

Mr. Burke also explained why the airlines would favor an airport such as he proposed. In doing so, he unknowingly gave important reasons why it later would be so difficult to persuade the airlines to transfer their operations from Municipal or Midway to O'Hare Field in spite of overcrowding; and after the transfer was made, to get the airlines to move part of their traffic back to Midway.

Burke said the airlines would approve of a "super" airport for these reasons:

- (a) To avoid transfer of passengers and cargo . . .
- (b) To avoid confusion in scheduled arrivals and departures . . .

¹Ralph H. Burke, Executive Director of the Postwar Economic Advisory Council of Chicago, "Report of Commercial Airport Requirements for Chicago," Chicago, Mar. 1944, pp. 1-2. (Mimeographed.)

- (c) To provide radial air routes, not crossing each other . . .
- (d) To centralize control [meaning planes landing and taking off]
- (e) To centralize repairs and services to equipment.¹

The Tribune was the leading advocate for a new, larger airport among the Chicago newspapers. On April 5, 1944, for example, the Tribune contained an article by Frank Sturdy, "Plan to Make Chicago Aerial Hub of World," telling why a new airport was mandatory as well as another story entitled "8 Airlines Plan Loop Terminal After War Ends." Subsequent editions related New York City's plans for Idlewild (now John F. Kennedy International Airport) Field and what was being done in Chicago.²

Five locations were under consideration by the airlines and the Chicago Plan Commission for an airport to meet the needs of postwar commercial air travel. They included the expansion of Chicago Municipal Airport; the Clearing site close to Municipal; the Douglas-Old Orchard location; a site at Lake Calumet, and an island to be built in Lake Michigan two miles offshore from 39th Street.³ The island in Lake Michigan could become the airport close to the downtown section of Chicago which had long been desired. The Clearing site was an industrial district formed by the

¹Ibid., pp. 3-4.

²See Frank Sturdy, Tribune, Apr. 6-8, 1944.

³Ibid., Apr. 7, 1944, pp. 1-2.

Clearing Corporation in about 1910. It was only four blocks south of Municipal Airport, but incapable of being connected to it because of a large railroad yard. The Lake Calumet site was located in a shallow lake, capable of being filled, in the southeast part of Chicago.¹ The Tribune insisted that the Lake Michigan site was superior to the others in every way except the cost of constructions. The Chicago Plan Commission estimated the expense of building a large lakeport to be from \$105 to \$150 million including the express causeway to it. At the same time a prediction from the airlines foretold trouble for the continued use of Municipal or Midway:

Air line engineers virtually agree that all scheduled carriers, domestic, and foreign, should operate from one airport on the theory that every plane will have passengers, mail, or cargo to connect with another. Operations scattered among several airports would mean loss of time in transferring from one to the other.²

The Chicago Plan Commission adopted the goal of "ultimately developing an airport which will make Chicago the center of aviation" at its meeting of April 25, 1944.³ At the July 26th meeting, the Commission received the report of the Airline Technical Committee, representing

¹Tribune, Sept. 25, 1945. See also General Airport Company, Comprehensive Study Relating to Aeronautical Facilities for Metropolitan Area of Chicago Projected to 1970, Vol. I (Stamford, Conn.: May, 1946), p. 75.

²Ibid., Apr. 8, 1944.

³Chicago Plan Commission, Proceedings, II, 222.

eight airlines serving Chicago, on its choice for a future terminal when Municipal Airport reached capacity. The Technical Committee chose the Douglas-Old Orchard site.¹ However, there would be many difficulties to overcome before Chicago both approved and possessed the site.

Congressman William A. Rowan (2nd District) requested the Secretary of War and the Army Engineers to give permission for filling in part of Lake Calumet for an airport. This had been recommended by Ralph Burke and the Chicago Economic Advisory Council. Alderman John J. Grealis (44th Ward), chairman of the City Council's Committee on Aviation, Alderman Joseph S. Gillespie (29th Ward) of the Chicago Plan Advisory Board, and Alderman Nicholas J. Bohling of the 7th Ward which bordered Lake Calumet, indicated support for this action.²

The Tribune quickly gave reasons why the Douglas site should be selected. The Lake Calumet region had industrial smoke from mills and factories which would be a hazard to flight operation and also would be difficult to control; an airport in Lake Michigan would cost between \$125 and \$150 million and would be too expensive; the Clearing site was far from downtown Chicago; Municipal Airport would cost \$50 million to expand to the proper size. The

¹Ibid., p. 234. See also Sturdy, Tribune, Aug. 3, 1944.

²Chicago Sun, July 31, 1944.

Douglas site, though furthest from Chicago, was free from other physical disadvantages, had concrete runways, and could be acquired, expanded, and improved for about \$25 million.¹ The Chicago Corporation Counsel's office believed that if the state did not purchase the Douglas site, there were no legal barriers to a purchase by the city. Chicago, in his opinion, possessed authority to buy property "within or without its corporate limits."² The Douglas site was in an area under the jurisdiction of the Cook County Board.³

Alderman William J. Cowley's 41st Ward was closest to the Douglas site. On September 8, 1944 he proposed to the City Council the acquisition of the site even as the plant was producing C-54 planes. His proposal was referred to the Committee on Aviation and Recreation.⁴ Later in the month Alderman Cowley sponsored a resolution which said that a Congressional subcommittee had stated that Municipal Airport would soon need expansion and modernization; that the Army owned an ideal airport which was nearby and capable of expansion; and that engineers of the major airlines had selected "Douglas Airport as the most practical site for

¹Sturdy, Aug. 3, 1944.

²Tribune, Aug. 22, 1944.

³Sturdy, Aug. 3, 1944.

⁴Mayor Edward J. Kelly, Journal of the Proceedings of the City Council for the Council Year 1944-1945, April 12, 1944 - March 20, 1945 (Chicago: n.p., 1945), p. 2215.

Chicago's postwar air terminal." Cowley's resolution recommended that the rights to operate "Douglas Airport" be leased or purchased. His proposal again was referred to the Council's Committee on Aviation and Recreation.¹

The West Central Association, a Chicago businessman's group, also came out for the selection of Douglas Airport as necessary to meet Chicago's postwar economic needs and added a new consideration:

Accessibility to the proposed Douglas Airport would depend upon completion of the Northwest Route of the Expressway Development Program. The West Central Association and all other associations should use all possible methods to speed this Northwest Route as amended to serve primarily the Douglas Field.²

More action than simply passing resolutions for an airport was occurring in Chicago in 1944. Mayor Edward J. Kelly applied to the Civil Aeronautics Board requesting that the city be named a "port of entry" for international air routes.³ He stated that Chicago was closer to Europe, Russia, Asia, and Africa than New York City--that Chicago was "the logical air center of the world." The mayor also announced that he was heading a delegation to Washington, D.C. to see what help might be obtained from the federal

¹Ibid., pp. 2285-86.

²Kenneth Curtis, Chairman of the Airport Committee of the West Central Association, "Consideration of the Chicago Airport," Chicago, Oct. 19, 1944. (Mimeographed.)

³Chicago Daily News, Oct. 19, 1944.

government for an airport. The delegation consisted of Merrill G. Meigs, chairman of the Chicago Aero Commission, Ralph H. Burke, director of the Postwar Economic Advisory Council, Oscar Hewitt, Commissioner of Public Works, Daniel H. Burnham, Jr., president of the Chicago Regional Planning Association, Holman D. Pettibone, president of the Chicago Association of Commerce, and James S. Knowlson of the Economic Advisory Council.¹

Governor of Illinois Dwight Green, a Republican, was not adverse to making political capital from the efforts of the Democrats in Chicago to solve their airport problems. The Tribune reported that:

Governor Green, disturbed by the prospect that Illinois and Chicago will be outstripped in the race for air supremacy because the Kelly administration can't get started, has announced a program of big airports, state financed where necessary, to serve the big cities including Chicago.

The Governor had further claimed, according to the Tribune, that "We have the resources to make Illinois the world center of air transportation and we are determined that we shall not miss that goal by any want of energy, planning, and funds." But however willing Governor Green was to use state funds, he was hampered legally. The Airport Authority Act of May, 1943 was declared unconstitutional by the Illinois

¹Tribune, Oct. 20, 1944. These men all were leaders in the effort to obtain a major airport for the Chicago area.

Supreme Court on March 21, 1944. Airports were said to have "no public purpose." Chicago was exempted from the original act because its population was over 500,000, but the state program was "in knots."¹ It appeared that no public money, state or municipal, could be used to support airports.

By November, 1944 Pan American, Transcontinental and Western, and American Airlines had applied to the Civil Aeronautics Administration to fly direct daily flights from Chicago to Europe and Asia by great circle routes, and the International Civil Aviation Conference was meeting in New York City to establish rules to govern such flights. One of the American delegates, Mayor Fiorello LaGuardia of New York City, drew a round of laughter from reporters when he stated that there was no rivalry between New York and Chicago to become terminals for transoceanic flight.² The International Civil Aviation Conference went on continuously for thirty-seven days. At the end of that time it did create a world aviation organization and secure partial freedom of flight for international aircraft.³

In the meantime in Illinois a conference of 150 aviation planners met in the Stevens Hotel in Chicago on

¹Frank Hughes, Tribune, Oct. 24, 1944.

²Ibid., Nov. 16, 1944.

³Ibid., Dec. 6, 1944.

December 19, 1944 to consider what the state needed to do for airport construction.¹ The Tribune had made a survey of airline companies and planning bodies concerned with Chicago's airport facilities. The results of the survey led the newspaper to suggest to the Illinois Aviation Conference that it give consideration to Douglas Airport and the need of an expressway and railroad shuttle service to connect Douglas with downtown Chicago.² The conference was a one-day affair called by Benjamin Regan, chairman of the Illinois Aeronautics Commission. It emphasized the need for a state aid program so that Illinois could be part of a federal system of assistance to airports. Merrill Meigs spoke as did Governor Green. The governor said that he was going to request the General Assembly of Illinois, which was to convene soon, to establish a Department of Aeronautics to replace the Illinois Aeronautics Commission. All of those present did not agree on exactly what was needed. Some of the experts, for example, decried what they termed "fallacies," such as the need for 10,000 foot runways.³

Not long after the Chicago conference, Mayor Kelly announced that he was seeking a \$20 million airport bond

¹Arthur Evans, Tribune, Dec. 14, 1944.

²Ibid., Dec. 18, 1944.

³Ibid., Dec. 19, 1944.

issue to construct a "post-war super air terminal." There were five possible sites for the airport, and the relative merits of each had been a subject of much discussion throughout 1944.¹ In June, 1945 citizens of Chicago approved a \$15 million bond issue for airport expansion. Some aid had been promised by the state, and city officials anticipated federal grants. They believed that landing fees and service charges from the airlines would pay eventually for the airport.² But still no site had been selected. The Tribune continued its campaign for the selection of Douglas.³ Andrew Rebori, Jr. of the new Illinois Department of Aeronautics was reported as saying that Chicago would not only need the Douglas Airport, but other airfields, too. The Chicago Association of Commerce's aviation committee approved a resolution urging action to obtain an adequate airport, and the Tribune reported that Douglas was "advocated by aviators and civic leaders" as well as by the engineers of the airlines.⁴

August 22, 1945 is an important date in the history of Chicago-O'Hare International Airport, for it was then that Mayor Edward Kelly appointed an Airport Selection

¹Sturdy, Jan. 19, 1945.

²Robert Howard, Tribune, Oct. 30, 1945.

³See Sturdy, Mar. 13, 1945.

⁴Tribune, Aug. 3, 1945.

Board. Originally it consisted of seventeen men headed by Merrill C. Meigs, who was no longer with the federal government for he recently had been appointed to be the chairman of the Chicago Aero Commission. The Board included Ralph H. Burke, city engineer, Robert Kingery of the Chicago Regional Planning Commission, William A. Patterson, president of United Airlines, Oscar E. Hewitt, commissioner of public works, two labor leaders, a trucking official, two bankers, a Negro insurance executive, a Republican national committeeman, and five Chicago aldermen.¹ An editorial in the same issue of the Tribune that had reported the appointment of the Selection Board also urged Chicago to get busy and obtain Douglas Airport "the best available site for additional airport facilities."²

Mayor Kelly instructed the Airport Selection Board to choose "the best airport--the safest, the most convenient, and with the most capacity of any airport on this continent."³ All of these qualities might have been found in a very expensive lakeport, but cost was a critical factor during all phases of the development of O'Hare Field. The qualities Mayor Kelly sought were not universally found

¹"Kelly Names 17 to Select Site of New Airport," Tribune, Aug. 22, 1945, p. 15.

²Editorial, Tribune, Aug. 22, 1945, p. 12.

³Kirchherr, "Airport Land Use," p. 47.

in any of the land locations.

Ten sites were examined for their physical characteristics, accessibility, size and capacity for expansion, zoning, and land costs. Five were quickly eliminated leaving for further consideration: Municipal Airport, the north end of Lake Calumet, Clearing (southwest of Municipal), a Lake Michigan site, and Douglas Airport.¹ At a meeting of the Airport Selection Board in mid-September, 1945 the airline officials were reported to have concurred unanimously that the estimated cost of a Lake Michigan site ruled it out; that the Lake Calumet site would be hampered by industrial smoke and obstructions and was far from the north-side residential district; that the Clearing industrial district was too close to Municipal Airport and would limit the latter's use; and that the enlargement of Municipal Airport would be too costly inasmuch as the area around it was quite built up. Harold M. Bixby, vice president of United Airlines, declared that Douglas Airport would allow comparatively easy expansion so vitally needed in the future.²

But final determination on the Douglas site had still not been made. The Selection Board meeting during the following week was reported in the Tribune in an article

¹Ralph H. Burke, Master Plan of Chicago Orchard (Douglas) Airport (Chicago: n.p., January, 1948), pp. 4-5. See also Kirchherr, p. 49.

²Tribune, Sept. 18, 1945.

entitled "Surprise Drive for Airport at Clearing Begins-- City Aides Astound Lines Favoring Douglas." The expansion of Municipal Airport and the Lake Calumet site were eliminated by the Board from further consideration. The chairman, Merrill Meigs, moved that a lakeport be given further consideration, and Alderman Arthur Lindell (9th Ward) and Commissioner of Public Works Oscar E. Hewitt, both from Chicago's southside, came out in favor of the Clearing industrial district one mile southwest of Municipal Airport but separated from it by much industrial development. The Clearing district contained 2,700 acres. Commissioner Hewitt said he opposed the Douglas site, because expansion would require moving a railroad at a cost of \$2.7 million. Ralph Burke, an engineer and superintendent of the Chicago Park District, stated that the cost would hardly be prohibitive when the total expense of development would be \$30 million. William Patterson, president of United Airlines, stated that the commercial carriers opposed Clearing in order to be able to retain Municipal Airport. Mr. John Casey, the superintendent of Municipal Airport, was asked by Merrill Meigs if he would like operating Municipal with a field at Clearing. Casey replied that a plane could not take off at one field if the other had a landing taking place. Meigs said it would be hazardous. H. Everett Kincaid, director of the Chicago Plan Commission added that an airport was needed to the north or northwest of Chicago,

because the most growth was taking place there.¹

Commissioner Hewitt said he was opposed to Douglas, because he was following Mayor Kelly's desire to have an airport capable of expansion. He declared that the Clearing site easily could be expanded to 6,000 acres, which was larger than the 5,100 acres of New York's Idlewild Field, but Hewitt stated that such expansion at Douglas would require moving a railroad right of way. He admitted that Municipal Airport would be injured by an airfield at Clearing, but said that only \$2.6 million of city funds had been expended at Municipal. Most of the money for its development had come from federal funds as a relief project during the depression, and Chicago had gotten its "money's worth." Concerning the recommendation of the airlines in favor of Douglas, Hewitt declared that the airlines had been wrong before. Mayor Kelly was quoted as saying, "I'm not going to interfere . . . the airport site selection committee of 23 members [originally there were seventeen] will be able to iron it out."²

Not long after this, Mayor Kelly was reported to have decided that the Clearing site would be too close to Municipal Airport to be practical; he was for retention of Municipal. Ralph H. Burke, park district engineer, a member

¹Tribune, Sept. 25, 1945.

²George Tagge, Tribune, Sept. 26, 1945.

of the Airport Selection Board, and a close friend of the mayor, made a sketch of a 3,945 acre airport at the Douglas site which could be used without moving railroad tracks. E. P. Lott, head of the airlines technical committee, an engineering group, stated that the Burke plan was "an excellent solution of the Douglas problem." Alderman Cowley (41st Ward), in behalf of business men on the northwest side, urged adoption of the Douglas site.¹ Finally an unanimous decision to select Douglas was made by the Board on October 30, 1945 after Ralph Burke had reported that an island airport would cost from \$80 to \$120 million, depending on the design. Chairman Meigs said that the new Chicago airport would be superior to New York's Idlewild, then under construction, in every way for less than half the cost and that the Board had considered only sites which could be developed to have better facilities than Idlewild. The Burke sketch had been elaborated to provide for a 5,235 acre airport without relocating railroad tracks. It called for twelve tangential runways emanating like the spokes of a giant pinwheel from a central terminal and administration area. The cost was estimated to be \$40 million including \$5 million for land. The airline engineers favored the tangential design, but David L. Behncke, president of the

¹Robert Howard, "Engineer Voids Rail Peril at Douglas Site," Tribune, Oct. 2, 1945.

Air Lines Pilots Association (ALPA), told the Board that he was for runways which were parallel.¹

The conclusion of the Board is unanimous that the Douglas site, enlarged to approximately 5,230 acres, is properly located, is of sufficient size, and is capable of being improved with runways, terminal buildings and all needed accompanying facilities so that it will serve with safety, all of the anticipated scheduled air line traffic, domestic and foreign, for as far into the future as can be foreseen.²

But the selection was predicated "upon the early construction of the Northwest Express Highway. . . ." ³ The Board report was submitted and adopted by the Chicago City Council in early November of 1945.

It would be very easy to praise the Airport Selection Committee for remarkable foresight and for acting in a highly practical manner. Certainly the Board is most responsible for the selection of Chicago-O'Hare International Airport by Chicago.⁴ As so often happens when gazing into the future and as Mr. Arthur Lindell, a member of the Airport Selection Board, admitted, none of the group "had any real vision of the tremendously rapid development of aviation." Lindell wrote that Douglas Airport had the best

¹Howard, Oct. 30, 1945. See also William R. Miner, Chicago Sun, Oct. 30, 1945.

²Kelly, "Report of Chicago Airport Selection Board," Journal of the Proceedings, Nov. 8, 1945, p. 4398. See also Burke, Master Plan, p. 5.

³Kirchherr, "Airport Land Use," p. 48.

⁴James Hoge, Chicago Sun-Times, Jan. 22, 1962, p. 51.

possibilities for rapid expansion, and that the federal government offered the site to Chicago.¹ Wayne Thomis, aviation editor of the Tribune, stated that there was no political opposition to a new airport. The pressure for it was economic, and much of this came from the commercial air carriers.²

The State of Illinois hired the General Airport Company of Stamford, Connecticut to do a study comparing the various sites under consideration by the Airport Selection Board and to project the aviation needs of Chicago to the year 1970. This report, printed in May, 1946, agreed with the Selection Board concerning the undesirability of the Lake Calumet, Clearing, and Lake Michigan sites as well as the expansion of Municipal Airport. The Douglas Airport was preferred by the General Airport Company study which recommended that it be put into commercial operation as soon as possible.³ One would think that the question was definitely settled. Time has done this, but Alderman Nicholas Bohling still feels that the expansion of Municipal Airport should have been done and that Municipal's development would have saved the taxpayers much money.⁴

¹Letter, Arthur Lindell, Budget Director of the City of Chicago and former member of Mayor Kelly's Airport Selection Board, to Doherty, Aug. 1969.

²Interview, Thomis, Aug. 12, 1969.

³General Airport Company, Comprehensive Study, p.81.

⁴Interview with Alderman Bohling, Aug. 12, 1969. Actually much of the development of O'Hare Field has come from fees guaranteed by the airlines.

Alderman John Hoellen, who proposed the name "O'Hare" to the City Council, felt that Mayor Kelly was a protege of Colonel Robert McCormick, owner and editor of the Chicago Tribune and may have been for the Douglas site because of this. He also stated that Mayor Kelly and Ralph Burke were close friends, and there had been a rumor that they favored the Douglas site because of opportunities for money from land acquisition.¹ This rumor would not conform to the fact that Mr. Burke had originally been for filling shallow Lake Calumet for an airport. If this had been done, the land cost would have been very slight.² A site selection group in 1944 had chosen Lake Calumet, and Burke not only favored it but wrote the recommendation.³

The United States Army knew that Chicago was "actively interested" in obtaining Government Assembly Plant No. 8, the Douglas factory at Old Orchard, for a municipal airport, but had removed it from the category of surplus property for use as a storage center.⁴ In November, after Douglas had been chosen by the Selection Board, Mayor Kelly made a trip to Washington to attempt to have the

¹Telephone conversation, Alderman Hoellen to Doherty, Aug. 4, 1969.

²General Airport Company, Comprehensive Study, p. 75.

³Interview, Bohling. See Burke, "Report of Commercial Airport Requirements for Chicago," p. 15.

⁴Surplus Property Administration, Aircraft Plants, p. 43.

airfield again declared surplus. An agreement was reached with the War Department that the Army Air Force shops and hangars would be retained by the military if Chicago took the field. The Surplus Property Administration told the mayor that the city's claim would be granted when the Army Air Force released the property. Senator Brooks of Illinois and Governor Green used their influence in an attempt to speed acquisition by Chicago.¹ On January 21, 1946, in "Form SPB-5, Declaration of Surplus" for the Orchard Place Airport," the mayor's efforts were rewarded, and the Douglas site was declared to be surplus property by the Air Force.²

The majority of government holdings at "Orchard Place Airport" were deeded by the War Assets Corporation to Chicago on March 21, 1946. The transaction was recorded on March 22nd in the Cook County Office of the Recorder of Deeds, Book 40999, pages 58 to 64.³ The city received 1,080.60 acres and one small hangar at no cost. The Air Force retained the assembly plant and buildings plus 281.24 acres of land for military use.⁴ H. Everett Kincaid of the

¹Tribune, Dec. 21, 1945.

²Letter, William F. McKenna, Counsel in Washington, War Assets Corporation to Lee Walker, Chicago Regional Counsel, War Assets Corporation, Jan. 21, 1946, National Archives files.

³Letter, Colonel Capers A. Holmes, Chief, Air Force Real Estate Agency, Headquarters U.S. Air Force, Washington, to Doherty, Aug. 19, 1969. See also City of Chicago, O'Hare Field Chicago International Airport Use Agreement, Oct. 28, 1955.

⁴Burke, Master Plan, p. 6. Casey, p. 12.

Chicago Plan Commission called the action "another forward step toward the realization of a major project."¹ A military airport northwest of O'Hare Field had been sought by Arlington Heights, Illinois. It had been in and out of the surplus category several times, and finally was disapproved for release to Arlington Heights which wanted the field. The reaction there was quite different from that of the Chicago officials: "Uncle Sam is making Chicago a present of Douglas airport, but the village of Arlington Heights is to be thrown out in the cold."²

After much effort, deliberation, and haggling, Chicago finally had the nucleus of what might become an important world airport. The question that remained was just how this would come about. Regardless of the answer, the site for a new airport had been selected and the next decisions would revolve around the best way of putting the airport into operation.

¹Chicago Plan Commission, Proceedings of the Chicago Plan Commission of the City of Chicago, Vol. 3, Jan. 17, 1946 to Dec. 21, 1949, pp. 9-10.

²Cook County Herald, Dec. 13, 1946, p. 1.

CHAPTER III

PROBLEMS AT CHICAGO ORCHARD

The early beginnings at Chicago-O'Hare International Airport gave little hint that someday it would be the busiest field in the world. For years its troubles were so numerous that Chicagoans suspected it might never become a fully developed air terminal.

On July 11, 1946, the Chicago City Council authorized the expenditure of funds for a topographical survey of what was then called Chicago Orchard (Douglas) Airport. It also approved a resolution by Mayor Kelly to lease restaurant space to Marshall Field and Company.¹ Hangars were purchased from the Air Force in September.² Although conditions were yet rather primitive, Chicago Orchard was one of only three airports in the region in 1946 which were capable of landing heavy, four-engined planes. The other two airfields were Municipal and Glenview Naval Station.³

¹Kelly, Journal of the Proceedings, July 11, 1946, pp. 6015 and 5997.

²Ibid., Sept. 5, 1946, p. 6151.

³Tribune, Sept. 13, 1946.

Chicago Orchard officially opened to commercial flight on October 23, 1946. Mayor Edward J. Kelly was there for ceremonies as the first commercial cargo plane landed.¹

The airfield lacked a terminal and navigational aids, so it was used chiefly by military planes. By December 9, 1946 only one transport plane, a chartered flight for Northwestern University football fans, had landed since the "opening" in October.² Because of such inauspicious beginnings and the difficulties that followed, former senator Paul H. Douglas later claimed that Mayor Kelly had taken a big risk at O'Hare, carried through on a large scale, and had his judgment vindicated.³ The person most responsible for carrying out the mayor's plans for Chicago Orchard, now O'Hare Field, was Ralph H. Burke.

Mr. Burke had been with the Sanitary District of Chicago as an engineer from 1906-1920.⁴ Mayor Edward Kelly worked in the Sanitary District during this time, finally becoming chief engineer of the Sanitary District.⁵ The two

¹Chicago Sun, Oct. 23, 1946. See also Wayne Thomis, Tribune, Oct. 16, 1946.

²William R. Miner, Sun, Dec. 9, 1946.

³Letter, Paul H. Douglas to Doherty, Dec. 8, 1969.

⁴Letter, Martha Burke Campbell, daughter of Ralph Burke, to Doherty, Sept. 16, 1969. See also Who's Who in Chicago and Illinois, 9th ed. (Chicago: A. N. Marquis Co., 1950), p. 94.

⁵"The Kelly-Nash Political Machine," Fortune, XIV (Aug., 1936), 117.

became close friends.¹ The Journal of the Proceedings of October 8, 1946 reported that the city was negotiating with Ralph Burke for terms concerning "preparing plans, specifications, supervision of contracts and construction and negotiating with parties affected in carrying forward the Douglas Airport project. . . ." The meeting of October 24th of the City Council discussed hiring Mr. Burke for consultant service on airport matters at a salary ranging from \$24,000 to \$35,000 per year.² The Council on November 26, 1946, gave its unanimous approval to the contract with Burke who was to be a consultant until both Northerly Island (Meigs Field) and Chicago Orchard airports were completed.³ According to the Chicago Sun, Burke received "virtually unlimited authority in construction of Chicago Orchard (Douglas)." Mr. Burke's consulting fee was ten per cent of the engineering costs with a monthly minimum of \$2,000 and a yearly maximum of \$35,000.⁴ Besides the fee for consulting, Mr. Burke's firm was entitled to receive up to six per cent of the total cost for engineering work. Six months after the contract had been unanimously approved, Alderman

¹Interviews with Wayne Thomis, Alderman John J. Hoellen, and Alderman Nicholas Bohling in Aug., 1969. These men agreed that Mr. Burke and Mayor Kelly were good friends.

²Kelly, Journal of the Proceedings, Oct., 1946, pp. 6377 and 6470.

³Ibid., Nov. 26, 1946, pp. 6639-41.

⁴John Pickering, Sun, May 24, 1947.

Frank Keenan (49th Ward) challenged its legality. Alderman Keenan believed the contract was contrary to state law which said that such a document could be made only for work for which money had been appropriated. A special Finance Committee meeting was held to discuss the issue.¹ Alderman Keenan declared, "this is probably the worst contract the city ever entered into."² There was a rumor that Burke may have wanted a large airport with tangential runways, because his firm would be compensated on a basis of percentage of total cost.³ A colleague of Burke felt that he had been unjustly criticized, especially by the Chicago Daily News.⁴ For example, an editorial in that newspaper in 1960 commenting on the poor customs facilities then at O'Hare Field concluded that "Chicagoans who remember the lush fees paid year after year to political engineers whose plans have all been revised or reversed are entitled to even a sourer view."⁵ After study, the original contract for consulting services was changed to a fixed \$30,000 per year.⁶ It is obvious

¹Charles R. Cleveland, Daily News, May 29, 1947. Pickering, June 14, 1947. A six per cent engineering fee is not excessive.

²Pickering, June 14, 1947.

³Interview, Hazekamp.

⁴Interview, Mr. Edward Purcell, Treasurer of Ralph H. Burke, Inc., Oct. 22, 1969.

⁵Editorial, Daily News, May 19, 1960.

⁶Sun, Dec. 11, 1947.

that public complaints against Burke's contract effected only a relatively insignificant change in the arrangements.

Mr. J. L. Donoghue, president of Ralph H. Burke, Incorporated, related that one of the reasons Edward Kelly was elected mayor was because of his promise of a subway. Burke was the City of Chicago's chief engineer for subways and superhighways, and was responsible for the construction of it. He was a person who moved back and forth between departments on loan to complete a particular job. Kelly wanted someone he could trust who also knew engineering. Burke was in his early sixties and near retirement age in 1946, so he resigned as chief engineer of the Chicago Park District to engage in private practice as consultant to Chicago to direct the engineering and construction of Chicago Orchard and Northerly Island airports.¹

The study by the General Airport Company had recommended that Douglas (Chicago Orchard) Airport be put into operation as soon as possible by putting up a temporary terminal and by installing an Instrument Landing System (ILS) and a Ground Control Approach (GGA) System.² Burke also wanted to put the field into operation in the immediate

¹Interview, Donoghue, Jan. 5, 1970. Also see Who's Who in Chicago and Illinois, p. 94; interview, Purcell, and letter, Martha Burke Campbell. The Chicago subway runs in a north-south direction to 13th Street south of the Chicago River. It extends under the river and to the north of it.

²General Airport Company, Comprehensive Study, p. 81.

future, but he had to give much consideration to the future. It was obvious to him that most airfields then in operation were becoming outmoded as larger, faster planes required ever longer runways, and that few fields had sufficient acreage for expansion. He believed that all the land needed for the future should be acquired initially.¹ The Burke group of engineers-architects did not neglect the design for the terminal and runways either.

Many different plans and variations of design were considered before the "split finger" plan was selected for the terminal. The idea was to have a compact pentagon shaped terminal with "split fingers," "Y's" (which they resemble), or concourses projecting from the terminal. The central area would be accessible to all the airlines, space would be conserved, and long walking distances eliminated.² Visitors and passengers would be segregated at the terminal entrance, and escalators used to speed traffic in the building.³

Originally the plan had called for the generally

¹Burke, Master Plan, p. 8. See Cook County Herald, Dec. 13, 1946.

²Burke, Master Plan, pp. 9-10. The "split finger" or "Y" is still in use. It was an original idea of Burke's; his terminal was changed to be able to handle greater volumes of traffic. See the Appendix for the "Y" design.

³Ibid., p. 11. See Appendix for illustrations of of the tangential design.

used parallel runways, but that concept was discarded in favor of a tangential design.¹ The latter design, which provided for runway spokes going out from a terminal hub, had been approved by the Civil Aeronautics Administration (C.A.A.) for Idlewild Field in New York in early 1945.² There was a report in 1945 also that a tangential system with twenty runways was being considered for a new Chicago airport.³ The "Report of the Chicago Airport Selection Board" spoke of room for either runways which were parallel or a system of twelve tangential runways, two capable of being extended to 17,000 feet.⁴

In May 1946, the Civil Aeronautics Administration received Chicago's Plan No. 32 which called for twelve tangential runways, ten of which were to be 6,150 to 7,700 feet in length. In September the federal agency suggested eight runways of 8,000 feet each.⁵ The Civil Aeronautics Administration's "tentative thinking" caused consternation

¹Ibid., pp. 6-7.

²Scullin, International Airport, pp. 50-51.

³John Jenkins, Daily News, Sept. 27, 1945. See also "Chicago Airport," Business Week, Nov. 3, 1945, p. 36.

⁴Kelly, Journal of the Proceedings, Nov. 8, 1945, p. 4398.

⁵Lane W. Wilcox, Superintendent of Airports Branch, report to Assistant Administrator for Airports, Civil Aeronautics Administration, Nov. 18, 1946, Federal Aviation Administration, Washington, D.C., Correspondence File "Chicago." See also "Chicago's Douglas Airport Planned for Safe Flying," The American City, Vol. 61 (Feb. 1946), 90.

in Chicago. The reduction of runways from twelve to eight would reduce capacity by one-third, and the lengthening of runways to 8,000 feet required more land and the relocation of railroad tracks.¹ Commissioner of Public Works Oscar Hewitt had sought advice from Washington only concerning runway lengths and widths as well as the opinion of the C.A.A. concerning the merits of the tangential as opposed to the parallel system of runway design.² He had not expected the significant changes in plans that the C.A.A. proposed.

The General Airport Company's study, released in 1946, opposed the tangential system because it created a dangerous converging of runways.³ The Airlines Pilots' Association opposed them for safety reasons.⁴ David I. Behnke, president of the Airlines Pilots' Association, had submitted parallel runway layouts to the Chicago officials.⁵ A consultant for the pilots came to ARKON Associates and Mr. Raymond Hazekamp for a design to outdo the tangential system.

¹Tribune, Sept. 17, 1946, p. 1.

²Letter, Commissioner of Public Works Oscar Hewitt to Theodore P. Wright, Administrator, C.A.A., July 12, 1946.

³General Airport Company, Comprehensive Study, p. 83.

⁴"New Chicago Field," Business Week, Apr. 6, 1946, p. 43. The pilots also fought the tangential system for Idlewild Field. See Scullin, International Airport, p. 76.

⁵Letter, Hewitt to Wright, July 12, 1946, F.A.A. file.

Hazekamp, a friend of Mr. Burke's, drew up a plan called "modified tangential" in order to be tactful.¹ The Hazekamp plan was given to Mr. Burke, Commissioner Hewitt, Lane Wilcox--the Chicago Regional Director of Civil Aeronautics Administration--and to Robert Kingery, an important city planner.²

By early 1947 the federal aviation authorities had not ruled on its construction. Wayne Thomis of the Tribune reported that the question over length was stalling work. The Civil Aeronautics Administration had "recommended" an 8,000 foot length for runways, but the airlines, "federally certified air carriers," felt that 6,000 feet would be sufficient length.³ Mayor Kelly corresponded with Theodore P. Wright, C.A.A. Administrator, declaring that uncontrolled design which required ever longer runways made for neither safe operation nor equity to the public agencies providing airports; that standardization of runway lengths should be ordered by the federal government to make for an efficient national system of airports.⁴ Ralph H. Burke, the airport

¹Interview, Hazekamp. See Earnest L. Heitkamp, Herald-American, Sept. 24, 1946, p. 3. The plan had runways in a "V" pattern from the terminal area.

²George A. Scheuer, Chicago Aviation News, October 15, 1946, p. 1.

³Wayne Thomis, Tribune, Feb. 9, 1947.

⁴Letter, Kelly to Wright, Feb. 25, 1947, Federal Aviation Administration, Washington, D.C., Correspondence File "Chicago."

consultant, favored a standardized length of 7,000 feet; Harold Crary, a vice president of United Airlines, considered the 7,000 foot runways "ample" for any airplanes, even the giant Boeing Stratocruiser.¹ On November 4, 1947 the Civil Aeronautics Administration issued a directive giving 7,000 feet length, 200 feet width, and a pavement strength of 100,000 pounds for dual wheels as minimal requirements for runways to serve international flight.² The C.A.A. wrote Mr. Burke concerning the runway design:

The latest plans indicating a pattern of ten runways, each with a clear paved length of 7,000 feet arranged tangentially around a central terminal, seemed to be conceived as an acceptable solution of the problem. The Civil Aeronautics Administration, therefore, will approve a final plan substantially in accordance with said preliminary studies, plans, and estimates.³

Burke's Master Plan of Chicago Orchard (Douglas) Airport was printed in January, 1948 after approval by the State of Illinois Department of Aeronautics as well as by the C.A.A. It proposed to build the airport over a period of years with the first stage to include total land purchase; diversion of the Chicago and Northwestern Railroad track to the west; near completion of utility and drainage systems; the development of part of the central terminal to include thirty gate positions to handle planes; and the

¹Tribune, May 2, 1947.

²Burke, Master Plan, p. 26.

³Ibid., p. 16.

construction of three new 6,000 foot runways to parallel the three that already existed.¹ The first stage was to be completed by 1951 at an expenditure of \$37 million. The second stage was to add \$21 million to the cost of construction for a total of \$58 million to be spent by 1954 when stage two would be required. The second stage would add fifteen gate positions by fingers or extensions from the terminal. Three Douglas plant runways were to be removed and five new 7,000 foot runways added, as well as two of 8,400 feet, called "international express length" by the C.A.A. At the completion of stage two, there would then be a total of ten runways.² Stage three would provide for the lengthening of the eight 7,000 foot runways to 8,400 feet and would add fifteen more gate positions to the terminal for a total of sixty gates. The price would be \$7 million for the third stage of development (to bring the total cost to \$65 million) and be required by 1958.³ The final stage called for full development of terminal facilities to give ninety gate positions able to handle 360 plane movements (landings and takeoffs) per hour. The ultimate stage would add \$20 million to the cost for a completed outlay of \$75 million.⁴

¹Ibid., pp. 14-15. See also Thomis, Jan. 2, 1948.

²Burke, Master Plan, p. 31.

³Ibid. See Herald-American, Feb. 2, 1948.

⁴Burke, Master Plan, p. 31.

The Chicago Plan Commission passed a resolution to recommend adoption of Burke's Master Plan on December 18, 1947.¹ H. Everett Kincaid wrote to the City Council stating that the Plan Commission felt that Ralph Burke's project work fulfilled the requirements for a major Chicago airport, and the Commission recommended that the entire site be acquired and construction begun. The proposal was referred to the Committee on Aviation and Recreation.² February 6, 1948 the Chicago Aero Commission passed a resolution that it was "imperative that favorable and immediate action be taken" concerning the new airport. The chairman of the organization wrote to the City Council about this, and his letter was read into the minutes of the Council meeting of March 15, 1948.³

In 1947 Edward Kelly had been replaced as mayor by a fellow Irish-Democrat, Martin H. Kennelly. On September 24, 1948 Mayor Kennelly announced that federal and state authorities had agreed to a new plan by Ralph H. Burke, the city airport consultant.⁴ Originally the cost would have been \$75 million. Kennelly had cut this to \$37 million by

¹Chicago Plan Commission, Proceedings, Vol. 3, p. 83.

²Mayor Martin H. Kennelly, Journal of the Proceedings, Dec. 22, 1947, p. 1544.

³Ibid., Mar. 14, 1948, p. 2061.

⁴Herald-American, Sept. 25, 1948.

reducing runway lengths, the size of the terminal, and other facilities. The first phase expenditure was to be \$10,675,000.¹ Of the latter amount, Illinois was contributing \$1,800,000 and the federal government would give \$4,375,000. Chicago would supply the difference with money from the bond fund authorized in 1945.²

Facilities were not built as rapidly as many had expected, but the goal remained to have the world's largest airport. The Tribune commented editorially: "city officials have been foresighted, energetic, and capable of making large plans for aviation developments. . . . Adequate air facilities in Chicago are a matter of national interest." The city anticipated having sixty movements (landings and takeoffs) per hour by October, 1949 at Chicago Orchard Airport.³

Burke announced that work would begin in the spring of 1949 on the first stage; this would include underground work, grading, drainage, and paving needed around the first "finger" or extension of the terminal building. When stage one was completed in 1951, it was planned to have three or four tangential runways finished with the capacity to handle 120 planes per hour.⁴ The approximately \$10.7 million to be

¹Sun-Times, Sept. 25, 1948.

²Daily News, Sept. 25, 1948.

³Editorial, Tribune, Nov. 16, 1948.

⁴Thomis, Dec. 3, 1948, p. 20. See also Daily News, Nov. 10, 1948.

spent on the initial construction was divided almost equally, about \$3.6 million apiece for land purchase, railroad track relocation, and construction.¹ When finally completed, the airport was to have ten 7,800 foot tangential runways, a terminal with five fingers and a control tower attached to it, and the ability to provide for 360 plane movements per hour.²

Traffic projections had spurred the City of Chicago to activity in pushing for an airport of huge capacity. Mayor Kelly had thought there would be 100 per cent increase in the number of air passengers every year for ten years from 1945 onward.³ After World War II, many persons had envisioned a flying public, cars with attachable wings, and numerous helicopters, but the postwar boom did not materialize as expected.⁴ In the late 1940's, traffic estimates became "suddenly conservative."⁵ Ralph Burke believed that Chicago had more potential growth for air traffic than any

¹Sun-Times, Sept. 25, 1948.

²Thomis, Dec. 3, 1948.

³Mayor Edward J. Kelly, Statement on Behalf of the City of Chicago to the Civil Aeronautics Administration on Proposed Airport Rules and Regulations under the Federal Airport Act (Washington: n.p., Oct. 28, 1946), p. 2.

⁴Scullin, International Airport, pp. 106 and 92.

⁵Ibid., p. 112.

city in the United States. In 1948 he estimated there would be about twelve million passengers using air facilities in Chicago by the late 1950's.¹ His estimates were accurate, but in 1948 they were received with skepticism by both airline and city officials.² Like Burke, the Tribune continued its campaign for expansion of O'Hare and warned of the need for a new airport.³

In 1949 Chicago became the first city ever to average more than one thousand plane movements per day. This was twice as much traffic as New York City.⁴ But the operations were taking place at Midway Airport, not Chicago Orchard; the latter had only 136,399 movements (landings and takeoffs) in 1949, and 86,804 of the operations were by military aircraft.⁵

There were many problems in building Chicago-O'Hare International Airport into one of the world's important transportation facilities, but probably the most difficult and enduring was the problem of money. In 1937 Mayor Kelly

¹Burke, Master Plan, pp. 21 and 3.

²Malcolm Wise, Sun-Times, Nov. 13, 1960.

³Editorial, Tribune, Sept. 23, 1948.

⁴Sun-Times, Oct. 25, 1949. See also Tribune, Oct. 25, 1949.

⁵Oscar E. Hewitt, Commissioner of Public Works, Seventy-Fourth Annual Report of the Department of Public Works - City - for the Year Ending December 31, 1949 (Chicago: Fred J. Ringley, 1950), pp. 316-17.

strongly favored a resolution by the U.S. Conference of Mayors that all airports be taken over by the federal government. Chicago had been losing \$80,000 to \$100,000 per year on its airports.¹ Large city airports were notorious money-losers. LaGuardia Field, operating at full capacity after World War II, was still losing at the rate of \$1 million per year.² New York City, lacking funds for the completion of Idlewild, persuaded the Port of New York Authority, because of its assets, experience, and success in handling transportation, to lease and operate both Idlewild and LaGuardia airports. This was done on June 1, 1947; the airports with all improvements will revert to New York City around the turn of the century.³

When Mayor Kelly had gone to Washington in November of 1945 to try and obtain Douglas Airport from the government, Business Week jibed, "Good Democrat Kelly expects that the Administration will sell the existing Douglas site to the city for a song."⁴ An assistant engineer, William E. Downes, Jr., later to be Chicago's commissioner of aviation, was the liaison between the city and the federal government,

¹Daily News, Nov. 22, 1937.

²Scullin, International Airport, p. 71.

³Ibid., pp. 73-74 and 61.

⁴"Chicago Airport," Business Week, Nov. 3, 1945, p. 36.

and the city received the property without cost in 1946.¹ The federal government realized the difficulties for a city in building and maintaining an airfield.

The State of Illinois attempted to give aid to airport development also. The Illinois Aeronautics Act of 1945 established the Department of Aeronautics, and the Municipal Airport Authorities Act of 1945 allowed public airport authorities to be established and to issue bonds for the operation of an airport.² For that same year the Illinois legislature enacted bills appropriating \$250,000 for the new state Department of Aeronautics, \$3 million for aviation development, and \$9.7 million for public improvements which might include airports.³ The Department of Aeronautics would act as the agent for the local government in dealings with the Civil Aeronautics Administration. State and national plans for airport development would be easily co-ordinated.⁴ Before receiving any federal funds, the city would have to obtain approval from both the Civil Aeronautics Administration and the state Department of Aeronautics, for the latter disbursed all federal moneys

¹Hewitt, 71st Annual Report . . . Public Works.

²California Legislature, Senate, Fact Finding Committee on Transportation and Public Utilities, The Role of Commercial Air Carriers in California Aviation and Transportation - Airport Development in Illinois, Michigan and Wisconsin - June, 1964, Oakland, California (Sacramento, 1964), p. 250.

³Roy Gibbons, Tribune, July 16, 1945.

⁴Scamehorn, Balloons to Jets, p. 186.

under a law called the "State Channeling Act."¹

May 13, 1946 President Harry S. Truman signed Public Law 377, the Federal Airport Act of 1946, to help develop public airports. It authorized \$500 million to be spent over the period 1946 to 1958.² The Civil Aeronautics Administration would administer the funds. Grants would be given on a matching basis for construction and improvement of airports. No more than \$75 million was authorized to be spent in any one year, and the demand for aid was always much greater than the amount of money appropriated.³

Ralph Burke believed that the Federal Airport Act recognized federal responsibility for a national airport system as a military necessity for national defense.⁴ Mayor Kelly not only felt Washington's support for aviation was a defense measure but also a federal function and that the national government "could advance the whole cost."⁵ He reasoned that most users of the Chicago airports were not local taxpayers; that the Air Force had reserved the right

¹California Legislature, pp. 245-46.

²Commission on Intergovernmental Relations, Federal Aid to Airports (Washington: U.S. Gov't Printing Office, 1945), pp. 9-10. See also Tribune, May 14, 1946.

³U.S. Congress, Senate, Committee on Commerce, Aviation Subcommittee, The National Airport System (Washington: U.S. Gov't Printing Office, 1968), p. 2. See also Scamehorn, Balloons to Jets, p. 186.

⁴Burke, Master Plan, p. 1.

⁵Kelly, Statement on Behalf, pp. 6 and 12.

to use twenty-five per cent of the capacity of Orchard Place Airport; that such federal functions as postal service would make use of the airport; that the national government had given more than \$2.5 billion of aid for waterways and 155 million acres of land to help railroads. This aid had greatly improved transportation and had been beneficial for the country. Air transportation deserved similar help.¹ In early 1948 when a \$75 million airport was still being planned, it was proposed to obtain \$17 million of this amount from the federal government; \$14 million from the State of Illinois; \$14 million from a municipal bond issue; and most of the remaining \$30 million to complete the airport from fees and rentals from the airlines, parking charges, restaurants, a movie theatre, a hotel, and various concessions to please the customers and lighten the burden of cost.² The problem of finance was not solved so easily.

Chicago was the first city to file for funds from the Civil Aeronautics Administration under the National Airport Act.³ Its project was approved, but Mayor Kelly wanted a definite United States government commitment or

¹Ibid., pp. 3-4 and 7.

²Thomis, Tribune, Jan. 2, 1948. See also Phillip Warden, Tribune, Jan. 15, 1947.

³Burke, Master Plan, p. 17.

there would be "indefinite delay" the mayor told the government.¹ T. P. Wright, Administrator of the C.A.A., replied:

Our approval of a project . . . assures our interest in the completion of such a project. While no legal commitment is possible, this action indicates our desire and expectation to provide further grants to such airport project as funds are made available.²

The Civil Aeronautics Administration was a branch of the Department of Commerce. In May, 1947 Secretary of Commerce Averell Harriman was attacked editorially for proposing to cut airport moneys to Illinois from nearly \$3 million to slightly over \$1 million for the next fiscal year. His action was called "blackmail," an attempt to get Illinois people to oppose cuts in his department.³ This money, for land acquisition, was reduced from an originally proposed \$2,868,750 to \$1,788,750 by Congress.⁴ Civil Aeronautics Administrator T. P. Wright "recommended that congress [sic] continue to appropriate federal aid for the development of the Chicago Orchard [Douglas] super-airport on the city's northwest side,"⁵ and by September, 1948 the Tribune was praising the federal government for having granted \$1,775,000

¹Chicago Sun, Mar. 12, 1947.

²Letter, T. P. Wright to Mayor Kelly, Mar. 28, 1947, F.A.A. file.

³Editorial, Tribune, May 12, 1947.

⁴Tribune, June 24, 1947.

⁵Ibid., Feb. 11, 1948.

for land acquisition and railroad relocation.¹ This is ironic because this sum, \$1,775,000, nearly the full amount appropriated for that fiscal year, was the reduced amount about which the Tribune had complained.

Governor Dwight H. Green had promised full support for the Chicago airport in December, 1947. In January, 1948 State Director of Aeronautics Robert Dewey wrote that the Department of Aeronautics had approved the Burke Master Plan, and the state would match city expenditures, expected to be about \$14 million. However, this sum would be subject to future appropriations by the General Assembly. This promise and the similar one from Wright of the C.A.A. were called "moral commitments" by Ralph Burke.²

Funds did not come as readily as they had been anticipated in 1948, and the program was greatly reduced by Mayor Kennelly. In September the city was seeking \$1,800,000 from the State of Illinois for building part of the proposed terminal. The Tribune felt "confident that state officials will see the necessity for carrying out their promise to help in the airport financing and that the blame for further delays cannot be placed against them."³

¹Editorial, Tribune, Sept. 23, 1948.

²Tribune, Jan. 17, 1948, p. 7. Herald-American, Jan. 19, 1948. See also Chicago Times, Jan. 18, 1948.

³Editorial, Tribune, Sept. 23, 1948.

The state did agree to furnish the money, but the grant could not be used for the terminal. It had to be spent for work on the field itself and spent before the end of September, 1949.¹ Governor Green had been told that \$14 million would be needed for state aid to airports. He had recommended a bill for \$4.5 million.² In 1948 Adlai Stevenson was elected as governor. Robert Dewey, head of the Illinois Department of Aeronautics, stated that he would ask the governor-elect to recommend an appropriation of \$9 million for airport construction for the two years beginning July 1, 1949. Chicago was to receive over one-half of this amount.³ In June, 1949, however, Mr. Dewey had to tell Chicago that state money could be used only for runway expansion in the future. There would be no funds for buildings or land purchases.⁴

There were also attempts to obtain financial guarantees from the airlines in the period 1946-1949 which had only partial success. As early as 1930 air-transport operators were in fear of being financially ruined because of attempts "to establish landing fees, collect local gas taxes, and make other charges" for the right to use municipally owned

¹Thomis, Tribune, Dec. 3, 1948. See also Tribune, Nov. 10, 1948.

²Malcolm Wise, Sun-Times, Nov. 13, 1960.

³Sun-Times, Dec. 8, 1948.

⁴Wise, Nov. 13, 1960.

airports.¹ During World War II, the Report of Commercial Airport Requirements for Chicago declared that "operating costs of an airport, interest charges, and amortization of capital expenditure must come in the main from tariffs charged by commercial airlines. . . ." ² Immediately after the war, it was reported that city officials felt that landing fees and service charges from the airlines would eventually pay for the proposed new airport.³ The airlines had worked and planned with the city and approved developments from the time Chicago had acquired the Douglas site.⁴ Physical features had been generally agreed upon, but there were great differences concerning methods of financing the program and the type of formalized agreements to be made between Chicago and the air carriers. The airlines felt that they could not guarantee any specific revenue other than that covered in leases and agreements. Chicago held the airport to be a public utility which must pay its own way.⁵

¹David Rotroff, Daily News, Mar. 22, 1930.

²Burke, "Report of Commercial Airport," p. 1.

³Robert Howard, Tribune, Oct. 10, 1945.

⁴Edmund Stohr, "Facts Regarding Airlines' Use of O'Hare and Midway--Proposed Statement of Chicago Airlines Top Committee to Press," Chicago, July 31, 1953. (Mimeographed.)

⁵United Air Lines, Corporate and Legal History of United Air Lines, Inc. and Its Subsidiaries, 1946-1955, Vol. 2 (Elk Grove Township, Illinois: United Air Lines, Inc., 1965), pp. 700-1.

In 1946 the airlines declared that they would not come to Chicago Orchard (Douglas) Airport unless the landing fees were the same as those charged at Midway Field.¹ The air transportation industry had financial problems of its own in the immediate postwar period. During this time, aviation was ". . . distinguished by low revenues, high training costs, and enormous outlays to buy the new equipment that would incorporate all the great advances made during the war."²

On December 30, 1947 the management heads of the airlines met with newly elected Mayor Kennelly. The mayor stated that Chicago could not give hidden assistance to the commercial carriers any longer. They must pay a "just proportion" of costs. The airline leaders indicated their companies would pay a "reasonable" share of the total costs of the airport, but made no actual commitments. They agreed to appoint a permanent committee to work on specific proposals.³ This was the beginning of the Chicago Airlines Top Committee. It was composed of executives, one from each of the domestic commercial airlines operating in Chicago, and its purpose was to decide the position and policy of the air carriers on various issues concerned with their operation

¹Wise, Nov, 13, 1960.

²Scullin, International Airport, p. 217.

³Thomis, Tribune, Jan. 2, 1948.

at the Chicago airports.¹

Not long after the mayor's meeting with the executives of the airlines, it was reported that Commissioner of Public Works Oscar E. Hewitt "hits ceiling on airport costs." Hewitt asserted that Chicago taxpayers were at the "end of the line" in subsidizing airport operations. From 1939 through 1947 Chicago had lost \$726,375.68 or an average of more than \$80,000 per year on airport operations which, Commissioner Hewitt declared, primarily benefitted private aviation.² He vowed that airport operation must pay for itself. Airport revenue bonds had been authorized by a referendum under Mayor Kelly, but before any such bonds would be issued, "we must have definite and substantial commitment from the air lines and others that will use the airport," said Commissioner Hewitt.³

The commercial airlines had lost over \$20 million in 1947, and in 1948 they had fewer revenue air passengers than in 1947. But their safety record was greatly improved, and air coach fares were becoming competitive with railroad fares. Although safety and economy added to speed and comfort promised a brighter future, nevertheless in late 1948

¹See United Air Lines, Corporate and Legal History, p. 701. Interview, Robert Sampson, chairman of the Top Committee, Jan. 6, 1970.

²Thomas Drennan, Chicago Times, Jan. 16, 1948.

³Tribune, Jan. 17, 1948.

the airlines had to be cautious about long-range financial commitments.¹ The Chicago Airlines Top Committee sent a resolution to the city on March 8, 1949 which expressed a desire to use Chicago Orchard Airport, but said the lines could not guarantee any specific amount of revenue other than what was in leases and agreements.² They would not transfer traffic to Chicago Orchard until they had a satisfactory contract.³ The city did not want to overcommit itself financially either and halted construction at the airfield to force the airlines to agree to pay for the operation of existing facilities there. The air carriers agreed to guarantee \$60,000 annually to Chicago to help maintain "Orchard Place Airport" during the construction period.⁴

As with most matters concerning Chicago-O'Hare International Airport, the name also had evolutionary difficulties. A letter from W. O. Sargent of Douglas Aircraft to the Army Air Force in 1943 requested that the field be called "Douglas Field" and not "Chicago Army Air Base." A notation on the letter quoted the Air Force Naming Board as saying "Pending official action of naming board, airport

¹Scullin, International Airport, p. 105.

²Stohr, "Facts Regarding . . .," p. 53.

³See Sun-Times, Oct. 20, 1951.

⁴Kennelly, Journal of the Proceedings, Apr. 22, 1949, pp. 4058-59.

shall be designated as 'Orchard Place Airport' Park Ridge, Ill."¹ In city documents the field was called Chicago Orchard Airport. Ralph H. Burke preferred the name Douglas Field, as it was easier to say "Douglas tower" than "Chicago Orchard tower." Benjamin Regan of Governor Green's advisory commission thought it would be helpful to have Chicago in the name. Lane Wilcox, regional head of the C.A.A. commented, "It would be a good thing to get an airport out there before worrying about a title."² A sidewalk poll found many persons wishing to honor Captain Colin Kelly by naming the airfield for him. Other designations suggested included Roosevelt, Fort Dearborn, Green, Chicago-World, and Edward Kelly Airport.³

Colonel Robert McCormick, editor and publisher of the Chicago Tribune, first suggested the name "O'Hare" on the Mutual Broadcasting System's Chicago Theatre of the Air radio program. Edward H. "Butch" O'Hare had been the navy's first air ace of World War II and was a Congressional Medal of Honor winner.⁴ Colonel McCormick spoke of the fleeting gratitude shown to one who had given his life for the United States. The colonel said there was a temporary airfield on

¹Letter, W. O. Sargent to Army Air Force, Dec. 3, 1943, National Archives file.

²Tribune, Mar. 4, 1947.

³Clayton Kirkpatrick, Tribune, Dec. 18, 1946.

⁴Ibid., Sept. 18, 1949.

Abemama Island in the Gilberts and a destroyer named for O'Hare, "but so far as I know, no civic institution, no flying field, no memorial preserves the memory of Edward Henry O'Hare."¹ The Naval Airmen of America soon sent a resolution to the City Council suggesting the name "O'Hare" for Northerly Island Airport (Meigs Field), and later the American Legion made the same proposal for Northerly Island.² The Tribune backed the name O'Hare editorially for Chicago Orchard Airport, and petitions from naval veterans continued to arrive.³ President Truman was attempting at the time to unify the armed forces. The Navy opposed unification. Naming the airport "O'Hare" would not only honor a deserving hero, argued some naval interests, but also might help the Navy preserve its identity.⁴ Alderman John Hoellen (47th Ward), a naval officer in World War II, proposed the name "O'Hare Field" for Chicago Orchard Airport in June 11, 1948.⁵ In 1949 the name "Chicago International Airport" was suggested, and the two names were incorporated in the ordinance naming the airport on June 22,

¹Tribune, Jan. 16, 1962.

²Kennelly, Journal of the Proceedings, June 11, 1947, p. 350 and Dec. 22, 1947, p. 1544.

³Tribune, Jan. 16, 1962.

⁴Interview, Alderman John Hoellen, Aug. 1969.

⁵Kennelly, Journal, June 11, 1948, p. 2496.

1949. The name became O'Hare Field, Chicago International Airport.¹ Mayor Kennelly signed the ordinance on June 28, 1949.²

Who was "Butch" O'Hare? Edward Henry O'Hare was born March 13, 1914 in St. Louis, Missouri to Edward J. and Selma O'Hare. He was the oldest of three children and the only boy. O'Hare went to a military prep school and in 1933 entered the United States Naval Academy at Annapolis. He was graduated from the Naval Academy as an ensign on June 3, 1937 and was assigned to the battleship USS New Mexico. Two years later, June, 1939, he transferred to the Naval Air Station, Pensacola, Florida for flight training. He qualified as a pilot in May, 1940 and was assigned to the carrier USS Saratoga.³

Butch O'Hare won the Congressional Medal of Honor on his first combat mission which was near Rabaul in the Pacific on February 20, 1942. His carrier, the Lexington, was alerted to an attack from nine Japanese twin-engined

¹Ibid., June 22, 1949, pp. 4422-23.

²Tribune, Jan. 16, 1962. The New York City Council had voted to name its new airport after an aviation hero, Major General Alexander E. Anderson, but Mayor LaGuardia refused to confirm the action, so the field remained "Municipal Airport at Idlewild" (John F. Kennedy International Airport). See Scullin, International Airport, p. 57.

³Letter, Captain W. S. Busik, Bureau of Naval Personnel, Washington, D.C., to Doherty, Jan. 6, 1970. See also letter, Rita O'Hare Lytle, widow of Edward H. "Butch" O'Hare, to Doherty, Feb. 1, 1970.

heavy bombers, "Bettys." Only Lieutenant O'Hare and another pilot were able to take off in their Grumman Wildcat fighters to protect the Lexington, but the guns of the other aircraft jammed, and the fighting took place out of the protective range of the antiaircraft guns of the carrier. O'Hare, alone, fought nine heavy bombers at close range. The Japanese planes had a total of sixty-three guns and cannon, but he shot down five and severely damaged a sixth bomber. The citation from President Franklin D. Roosevelt stated: "As a result of his gallant action, one of the most daring, if not the most daring single action in the history of combat aviation, he undoubtedly saved his carrier from serious damage."¹

O'Hare was promoted to lieutenant commander on April 8, 1942 and on April 21st received the Congressional Medal of Honor at the White House. In September, 1942 he was assigned to command an air group on the carrier Enterprise. He earned the Distinguished Flying Cross for action at Marcus Island on August 31, 1943. The commendation read:

In the face of tremendous anti-aircraft fire Lieutenant Commander O'Hare repeatedly led his squadron in persistent and vigorous strafing raids against hostile establishments on the island. Pressing home his individual attacks with grim determination and courageous disregard for his own personal safety, he contributed materially to the superb combat efficiency which enabled his squadron to destroy all grounded aircraft and to demolish a

¹Letter, Captain Busik. See also Lloyd Wendt, Sunday Tribune Graphic [sic] Magazine, September 18, 1949.

high percentage of defensive installations.¹

About one month later, October 5, 1943 at Wake Island, his actions merited the Gold Star in lieu of the Second Distinguished Flying Cross. The record said:

Sighting three hostile fighters south of the island, Lieutenant Commander O'Hare overtook the planes and singlehandedly destroyed one while his unit accounted for the other two, pursuing the stricken planes down to the runway on Wake Island where, in the face of terrific Japanese anti-aircraft fire, two twin-engined bombers and a fourth fighter were destroyed on the ground. Continuing his daring tactics, Lieutenant Commander O'Hare intercepted a third hostile bomber, closing for the attack and leaving the enemy a crippled and vulnerable target for final destruction by another plane of his unit. . . .²

"Butch" O'Hare earned his last medal, the Navy Cross, the second highest award a Navy man can receive, on November 26, 1943. His carrier was in the vicinity of the Gilbert Islands when it received a warning of a night attack by a large force of torpedo bombers. Until this time, fighters had never been used for night operations from carriers by the United States, but O'Hare led his three-plane group up to save the carrier. He helped shoot down two torpedo bombers and to disperse the attack. O'Hare and his plane, last seen near Tarawa Atoll, did not return from the sortie. A year later, November 27, 1944, Butch O'Hare was officially declared dead.³ He left a widow and a three-month

¹Letter, Busik.

²Ibid.

³Ibid.

old baby girl. His wife subsequently married a friend of O'Hare's from the Naval Academy, and O'Hare's daughter lives in Virginia with four children of her own.¹

Someone who knew him but who did not wish to be mentioned in the bibliography said he was likeable, considerate, and somewhat shy. O'Hare did not enjoy the adulation and fame he attracted, and he was uncomfortable when he received the key to the city in St. Louis. He returned to combat at his own request and was loved by his men. President Kennedy called O'Hare a "light-hearted, popular warrior."² O'Hare's wingman, Ensign Alex Vracin learned so well that he became the ranking ace in the Navy. He attributed his success to his commander whose watchword was to "anticipate" the enemy. Vracin also credited O'Hare with bringing the era of around-the-clock carrier operations by pioneering night flight.³

It would be difficult to find anyone more deserving of having an airfield named in his honor than "Butch" O'Hare, yet few know his story. One Chicago leader thought O'Hare dove his plane down the smoke stack of a Japanese battleship. Some employees at the airport, when asked if

¹Letter, Gil Dietz, Editor, Muscatine Journal, to Doherty, Jan., 1970.

²Kennedy, "Draft Remarks," p. 2.

³Captain G. F. Rogers, Chicago Sunday Tribune Magazine, undated in the files of Paddock Publications, Arlington Heights, Illinois.

they knew what O'Hare had done, remarked that they had passed his plaque many times. They had not read it, but thought his pilot's helmet was rather odd looking. "Butch" O'Hare's bones rest in the Pacific. His fantastic deeds are almost forgotten.

Edward H. O'Hare, Jr. was a remarkable, talented, courageous individual. So was Edward J. O'Hare, Sr., and his death was just as violent, perhaps even more mysterious, and it occurred in Chicago. "Eddie" O'Hare, Sr. had been a St. Louis lawyer for Owen P. Smith, the man who invented and patented the mechanical rabbit used in dog racing. They formed the International Greyhound Racing Association and through Smith's invention controlled dog racing as it spread across the country in the late 1920's. Smith died in 1927, and O'Hare, Sr. was counsel for the widow. Ed O'Hare moved to Chicago and became the business manager for Hawthorne track, owned by Al Capone, until it closed in 1930. In 1932 O'Hare, Sr. opened Sportman's Park. He was its president; the secretary-treasurer was Johnny Patton who in his younger days had been the "boy mayor of Burnham" and an associate of Capone's.¹ Capone went to prison in 1933, and it was alleged that O'Hare gained control over

¹Clem Lane, "R.I.P. to Ed O'Hare Who Grew Too Smart for Mob," Daily News, May 20, 1943. See also Ovid Demaris, Captive City (New York: Lytle Stuart, 1969), p. 185.

the Chicago tracks as well as Capone holdings in Florida and Massachusetts. On November 8, 1939 at 3:30 P.M. Edward J. O'Hare was driving his car in front of 2601 West Ogden Avenue near Rockwell Street. Another car passed him and two shotgun blasts were fired into his head and neck. O'Hare died instantly, and his car crashed into a telephone pole as the other vehicle sped off. A loaded, unfired pistol was found next to his body.¹ The owner of Sportman's Park was only forty-seven years old at the time of his death.

There were many theories for the cause of the murder. He had been divorced for eight years, and there was a love affair theory. A note to "Margy, oh Margy" was found in his pocket. Some thought the murder could have been planned by a woman from Boston who felt that she had been cheated of money from the dog racing business.² Frank Nitti, Paul Ricca, and Louie Campagna, executive committee of the syndicate, did it, some believed, so O'Hare would not tell Capone how they had cheated him while Capone was in prison. O'Hare had grown too powerful, others thought, and had to be "eliminated." There were those with the opinion that O'Hare wanted out of the rackets. He had mailed himself a check for \$100,000 shortly before he was killed, and it was reported that he had a yacht ready for a long

¹Tribune, Nov. 10, 1939.

²Herald-American, Nov. 9, 1939.

cruise. Possibly O'Hare had held out on Capone's share of the profits from the Chicago tracks some speculated. Still others believed that he had furnished much of the evidence for Capone's conviction or that O'Hare was working for the Federal Bureau of Investigation.¹ Had he lived, O'Hare said he was going to Washington to "confer with a government man." During the last ten days of the racing season at Sportman's Park the old Capone mob "had been out in force." These last ten days of his life O'Hare became fearful, a quality strange to him, and began carrying a gun and taking the elevated train to work rather than one of his two cars.² A Tribune story claimed that "Eddie J. O'Hare" knew for two years that Capone was threatening to kill him. Reputedly two convicts freed from Alcatraz Prison had told this to a friend of O'Hare's who relayed the information to him.³ Leslie A. Shumway, a bookie joint accountant, was the star government witness in the trial that sent Capone to prison for income tax evasion. He testified on October 8, 1931 that Capone was the owner of the Hawthorne Smokeshop and the Subway, gambling joints in Cicero. Shumway began working for O'Hare at Sportman's

¹Lane, Daily News, May 20, 1943. See also Daily News, Nov. 9, 1939.

²Tribune, Nov. 10, 1939.

³Ibid., Nov. 13, 1939.

Park in 1932, and in 1937 was made chief accountant over a staff of nineteen at the Park.¹ O'Hare was said to have given Frank J. Wilson of the Internal Revenue Department key information to help convict Capone. It also was alleged that he helped imprison William R. Skidmore, a go-between who bribed politicians for gamblers, as well as dozens of other criminals. "The best stool pigeon the government ever had" one source called him."² The following note was found in O'Hare's pocket:

Mr. Woltz [George Woltz of the Federal Bureau of Investigation] phoned and wants to know if you or Mr. Beckman [Henry Beckman, O'Hare's body guard] know anything about Clyde Nemerich [a Kansas City bank robber and counterfeiter]. He said you are to call Mr. Bennet [another agent for the F.B.I.].³

The note was signed "Toni." Antoinette Cavaretta was his private secretary who later married Frank "the Enforcer" Nitti.⁴

Edward O'Hare, Sr. did not like to associate with mobsters. His instructions to the police at Sportman's Park were to "give them the bum's rush." The gangsters were "troublemakers and deadbeats" and bad for business.⁵ Wayne Thomis of the Tribune believed that the mob was

¹Daily News, Nov. 20, 1939.

²Lane, Daily News, May 20, 1943.

³Tribune, Nov. 9, 1939.

⁴Lane, Daily News. See also Tribune, Nov. 13, 1939.

⁵Ibid.

trying to take over a racing publication business and telegraph network which Thomis thought O'Hare had developed. The latter refused to go along with either threats or bribery and so he was slain.¹

Although he had been convicted of only one crime, removing liquor from a bonded warehouse during prohibition, this conviction was reversed.² Edward J. O'Hare, Sr. was mentioned frequently in the Kefauver Report, usually not too favorably. For example, Senator Kefauver believed that the mobster Jake Guzik and O'Hare were associated in the Hawthorne Race Track.³ Virgil W. Peterson, Operating Director of the Chicago Crime Commission, told the committee that O'Hare had been investigated in connection with the St. Valentine's Day Massacre in 1929. A vendor of guns had "testified that he had sold a machine gun to Edward J. O'Hare, who was then manager of the Hawthorne Kennel Club and who actually became the czar of dog racing for the Capone

¹Letter, Thomis to Doherty, Dec. 5, 1969. The Federal Bureau of Investigation was requested to give information concerning its relationship with Edward O'Hare, Sr. Director J. Edgar Hoover replied in a letter dated November 21, 1969 that Justice Department regulations did not permit giving out data, but that one might wish to refer to the "hearings before a Special Committee to Investigate Organized Crime in Interstate Commerce," the Kefauver Report.

²Tribune, Nov. 13, 1939.

³U.S. Senate, 81st Congress, 2d session and 82nd Congress, 2d session, Investigation of Organized Crime in Interstate Commerce (Washington: U.S. Gov't Printing Office, 1950-1), Part 1, p. 652.

syndicate."¹ Ralph "Bottles" Capone stated that he had often seen his brother Al and O'Hare together.² O'Hare's partner in the Hawthorne track, Johnny Patton, indicated that "Irey," a treasury man, in his book, had called O'Hare an undercover agent for the government. Senator Kefauver was not ready to accept the statement as fact, and an examination of the book failed to turn up the supposed statement.³

After he was killed, police found the following poem in the elder O'Hare's apartment. They believed it had been written by him:

The clock of life is wound but once,
And no man has the power,
To tell just when the hands will stop,
At late or early hour.

Now is the only time you own,
Live, love, toil with a will,
Place no faith in time,
For the clock may then be still.⁴

"Butch" O'Hare was his father's son and the father was a part of Chicago's history. Both were daring, likeable, intelligent, and fascinating. It has been already stated that Butch O'Hare merited the honor of having O'Hare

¹Ibid., Part 2, p. 130.

²Ibid., Part 5, p. 1232.

³Ibid., Part 1, pp. 619, 624-25. See Elmer Lincoln Irey, The Tax Dodgers (Garden City, New York: Garden City Publishing Co., 1948).

⁴Herald-American, Nov. 9, 1939.

Field named for him. However, it is possible that Eddie O'Hare, Sr. was an undercover agent for the government. If this were so, he may have been braver and more heroic than his son.

The airport was dedicated and given the name O'Hare Field, Chicago International Airport in ceremonies held on September 19, 1949. Selma O'Hare was guest of honor and unveiled the plaque honoring her son. Governor Adlai Stevenson was the main speaker and remarked: "This airport will equip Chicago, the United States, and the western hemisphere with an airport that matches our geographic and strategic importance." Other guests included Rear Admiral Daniel V. Gallery, Mayor Kennelly, and Commissioner of Public Works Hewitt. 200,000 spectators saw an air show that included precision flying, skywriting, and the maneuvers of many military jet planes.¹

Butch's mother, Mrs. Selma O'Hare, died in St. Louis in 1958. She was sixty-eight years old.² The airfield named for her son was still a far distant second in the handling of traffic in the Chicago area, for Midway Field was the busiest in the world. A week after her death, the name of the airport was changed to Chicago-O'Hare

¹Tribune, Sept. 19, 1949. See also Roman Pucinski, Sun-Times, Set. 19, 1949.

²Sun-Times, Nov. 29, 1958.

International Airport to make it easier to identify as a Chicago installation,¹ but to most it was "O'Hare Field."

From 1946 until the dedication in 1949 of O'Hare Field - Chicago International Airport, nothing seemed to be accomplished very easily. There were complaints against Mr. Burke, the airport consultant, problems of getting commercial planes to use the airfield, and difficulties with runway design and the Master Plan as funds were reduced. The federal and state governments did not contribute as much financial aid as Chicago expected and desired. With money problems of their own the commercial airlines were reluctant to contribute monetary help for construction of an airport they were not using. One would think that naming the facility would be a simple matter, but even the naming of the field took much time and effort.

¹Kennelly, Journal of the Proceedings, Dec. 8, 1958, pp. 8618-19. See also Sun-Times, Dec. 9, 1958, p. 3.

CHAPTER IV

LAND, NEIGHBORS, AND ACCESS

The difficulties in constructing Chicago-O'Hare International Airport were complex. The financial problems were constant as were other troubles such as the interpersonal relationships involved in purchasing land, keeping peace with military and suburban neighbors, and attempting to meet the need for a good traffic connection to downtown Chicago.

In April 1946, shortly after the Douglas (Chicago Orchard) Field with its 1,080 acres had been acquired from the Army, Chicago officials announced that they intended to purchase 1,900 farms and 2,300 individual lots to expand the airport. The city expected "surveying, appraising and condemnation" to be completed by 1947.¹ At that time officials were talking of a developed airport having 5,232 acres.² These plans were not realized soon, but on February 10, 1947, the City Council authorized purchases to make

¹"New Chicago Field," Business Week, Apr. 6, 1946, p. 43.

²See "Chicago's Douglas . . .," American City, LXI (Feb., 1946), 90.

the airfield include 3,280 acres.¹ A year later the Council passed an ordinance which approved expansion to nearly 7,000 acres.² This action was necessary for federal and state certification of the project.³ This ordinance established the approximate boundaries of the airfield that have been retained. These are: York Road on the west, Touhy Road on the north, the Minneapolis, St. Paul, and Sault Sainte Marie (Soo) Railroad tracks on the east, and the Chicago, Milwaukee, St. Paul, and Pacific Railroad tracks as the boundary south of the airport.⁴

The city had verbal agreements with the Chicago and Northwestern Railroad and the Chicago, Milwaukee, St. Paul and Pacific Railroad to relocate their tracks; the tracks ran north and south through the middle of the airfield and would be removed to border the western edge and York Road. This relocation of the Chicago and Northwestern tracks required the acquisition of 800 to 900 parcels of land.⁵

Removal of railroad tracks had delayed expansion at Municipal (Midway) Airport for many years. Such work was

¹Tribune, Feb. 11, 1947.

²Kelly, Journal of the Proceedings, Feb. 10, 1948, pp. 1888-92.

³Daily News, Feb. 9, 1948.

⁴Kelly, Journal. See also Tribune, Feb. 5, 1948.

⁵Mel Sokol, Journal of Commerce, Mar. 30, 1948.

done relatively quickly at O'Hare Field (Douglas, Chicago Orchard). The city also saved \$3,170,451 that the Northwestern Railroad had demanded as compensation for moving to a new right of way.¹ There was the possibility of railroad competition in the area. The tracks of both the Northwestern Railroad and the Milwaukee Road had to be moved, and the Soo Line bordered the airport on the east. In the early 1950's it was planned to develop light industries between the tangential runways. Ralph Burke told the two railroads being moved that whichever demanded the least compensation for extra ton miles to be traveled would be recommended to receive exclusive rights to haul into the airport's proposed industrial park. After Burke's action, neither line wished any such compensation.² Railroad track relocation was completed in 1952.³

Most of the land expansion for Chicago-O'Hare International Airport took place in the late 1940's and early 1950's. Wesley Luehring, a real estate dealer from Itasca,

¹Editorial, Tribune, Mar. 14, 1950. The usual procedure when there is track relocation is to purchase new land with a right-of-way for the railroad, to build trackage or give funds for this, and to award compensation for any additional ton miles which must be traveled in perpetuity.

²Interview, J.L. Donoghue. See Kennelly, Journal of the Proceedings, June 14, 1950, pp. 6384-91 and Kennelly, Journal, Mar. 2, 1951, pp. 7892-900. See also Mel Sokol, Commerce, LII (Oct., 1955), 20.

³Casey, Chicago Aviation.

Illinois, was hired by Chicago as an appraiser for land condemnation. There were four other appraisers including persons from Des Plaines and Elmhurst. Mayor Kennelly wanted men who worked in the area and knew property values there. To avoid trouble and to speed acquisition, the city offered the owners of the land more money than was usually the case in land condemnation--about ninety per cent of the property's value. As a result, Luehring said there were approximately two dozen law suits, a very low number in an acquisition involving thousands of acres.¹ Mr. A. J. Brough had piloted C-54's out of Douglas Airport during World War II. In reminiscing about those days Brough stated, "Now, when I fly over the airport and look at the developments, I cannot help but draw a comparison and wish I had bought some of that real estate."² Many others undoubtedly have felt the same way. However, the federal government had purchased over 1,000 acres at an average price of \$450 per acre.³ The City of Chicago purchased more than 5,000 acres at an average price of \$1,000 per acre. Since O'Hare Field became a major airport, there

¹Interview, Mr. Wesley Luehring, Aug. 9, 1969. Luehring stated that Judge Denis Normoyle heard these cases, and they were tried by assistant corporation counsels, Francis S. Lorenz and John Meliphany, of the city. Attorney William Redmond who represented some of the persons fighting acquisition in court agreed with Luehring although he believed there had been many more than two dozen law suits. Interview, Redmond, Aug., 1969.

²Letter, Brough, Jan. 19, 1970.

³Don Heine, Bensenville Register, Mar. 28, 1963.

has been an phenomenal increase in the price of nearby land.¹

Early in 1950, assistant corporation counsel Francis Lorenz announced that the city had obtained 1,800 acres of the 5,400 acres scheduled for condemnation.² Proceedings were moving ahead to obtain more land.³ By the end of the year, Chicago had one hundred homes, which it had acquired, for sale at "bargain rates." A two-story brick house with a garage was available for \$2,000 while a two-story frame house with a barn, three-car garage, and chicken coop was to be sold for \$1,800. But the homes had to be moved from the airfield within sixty days after purchase at the buyer's expense.⁴ Ninety per cent of the property sought for the airport had been acquired by the spring of 1951 at a cost of approximately \$8 million.⁵ The moving necessitated by the land acquisition spawned some interesting incidents. One such occurred in 1951 when the Willard Clauser farm

¹James Hoge, Sun-Times, Jan. 22, 1962. See Chicago's American, Sept. 29, 1965 for a story about developers requesting over \$300,000 per acre for some land sought by the airport.

²Sun-Times, Jan. 25, 1950.

³Tribune, Jan. 28, 1950. See Tribune, Mar. 7, 1950; the Roselle Register, May 19, 1950; and Kennelly, Journal, July 12, 1950, pp. 6516-26.

⁴Sun-Times, Nov. 26, 1950. See also Kennelly, Journal, May 25, 1950, p. 6254.

⁵Roselle Register, Mar. 9, 1951, p. 1. See Kennelly, Journal, Jan. 24, 1951, pp. 7754-60.

home was to be transported from O'Hare Field. The movers found bones five feet under the kitchen. A story was told that the previous owner, a Fred Kolze, had been murdered and buried in 1913. The bones under the kitchen, however, were found to be those of an animal.¹

St. John's Evangelical and Reformed Church celebrated its 100th anniversary on October 9, 1949. It had been founded by immigrants from the Westphalia area of Germany who had settled in Illinois in the early 1840's. Descendants of these original families owned much of the land which became O'Hare Field. About a dozen families of St. John's parish had been displaced in 1942 when the Douglas plant was built. A decade later the church as well as two-thirds of its parishioners, most of whom were small truck farmers, were forced to move by the big expansion of the airfield.²

The fourteen acres belonging to St. John's Church were taken, but the buildings were given to the parish. These included a three-story parsonage, the church, and a parish house. The church was placed on wheels and was to be moved on December 18, 1951, but a snow storm prevented

¹"Mystery of the Bones," Bensenville Register, Nov. 9, 1951, p. 1.

²Interview, Reverend E. Bergstraesser, former pastor of St. John's Evangelical and Reformed Church, Aug. 8, 1969. See also Roselle Register, Oct. 7, 1949.

the journey to a new site on Route 83, between Bensenville and Wood Dale, a few miles to the west. The Reverend Bergstraesser recalled Christmas services in 1951; the church was waiting to be moved, and there were automobiles parked underneath it. The move, which took three weeks, was finally completed in February, 1952. St. John's, however, retained its cemetery on airport property and continued to bury parishioners there throughout the decade of the 1960's.¹

A cemetery belonging to the defunct Evangelical Zion Society of Leyden, however, was moved in 1951 to allow extension of a runway. The persons buried in this cemetery were members of the families of old German settlers. There were a few headstones dating back to the 1820's, and the last burial there had been in 1926.² Two other cemeteries, St. John's and Rest Haven, were preserved and fenced off, because of the great difficulty involved in moving a cemetery. Under common law the permission of all of the families of the deceased needed to be obtained.³

It is always a hardship to move one's home but doubly so if it is not by one's own choice. There was dissatisfaction among some of the persons forced to move in

¹Interview, Reverend Bergstraesser.

²Sun-Times, Dec. 11, 1951.

³Roselle Register, Mar. 9, 1951. Interview, Mr. Rothengass.

the late 1940's and early 1950's because they considered that they had not received enough money for their property. Mrs. Herman Dohe's family had been forced to sell land to the federal government in 1942 and felt there had been equitable treatment. Mrs. John Burmeister's cousins, the Herman Kolce family, had been moved in 1942 also and were not dissatisfied, but Mrs. Burmeister did not believe that her father-in-law had been treated fairly later in the 1940's. Herbert Dierking fought the seizure of his property in 1950. He lost and received about \$500 an acre for land that had no buildings on it. Mrs. Lorraine Brewer's family tried to oppose condemnation proceedings in 1950, but there was not much that could be done. Elmer Landmeier was of the opinion that the price he received for his land in the late 1940's was not as much as it was worth, but the property had been condemned, so he had to take what was offered.¹

William and Fred Harbecke asked for \$488,000 for two dairy farms containing 301 acres. The City of Chicago offered \$208,000 for their properties, so the Harbecke brothers legally fought the condemnation. The Circuit Court jury awarded them \$117,833 in February, 1950.² They

¹Interviews, Mrs. Herman Dohe, Mrs. John Burmeister, Herbert Dierking, Mrs. Lorraine Brewer, and Elmer Landmeier, Aug., 1969.

²Sun-Times, Feb. 11, 1950. See also Sun-Times, Dec. 10, 1952.

appealed their case to the Illinois Supreme Court, and nearly three years after the original court proceedings, a new trial was ordered because Judge Denis Normoyle had not allowed the introduction of "evidence showing that land nearby was going at even higher prices" than the city had offered. Francis Lorenz, assistant corporation counsel, advised a settlement at the original offer of \$208,000.¹ A settlement was made, but Fred Harbecke believed the amount was "not near fair," and the persons who forced him out were "not quite civilized."²

Mr. Ernest Reher had his home and business on the northeast corner of Irving Park and York Road in Bensenville, Illinois. His land was desired for relocation of the Chicago and Northwestern Railroad tracks. He was offered a price "which anyone would pay." As business was good on the corner, he did not wish to leave. Ralph Burke and an attorney named Ray Kelly of Oak Park spoke to him. They told Mr. Reher if the case went to court, the judge and jury would be Chicago citizens, and he would receive little sympathy. A bid was made \$6,000 higher than that

¹Ibid., Dec. 10, 1952.

²Interview, Mr. Harbecke, Aug., 1969. Judge Normoyle was anxious to complete the land acquisition cases. In 1951 as the Korean War was underway, the judge was reported "mindful of the needs of war" and urged Chicago to hasten condemnation cases. Judge Normoyle promised that such suits would receive priority in his court. See Sun-Times, Feb. 20, 1951.

originally proposed and the property was sold.¹

The airport annexed eleven acres of land belonging to the father of Kenneth Blaesing for a "fair and equitable price." Mr. Blaesing knew the farmers near his father's place, and thought that most were satisfied when they had sold. He believed resentment might have come from considering how much land appreciated in value since it was taken.² Attorney William Redmond of Bensenville considered that Chicago had done a "good job" for such a large annexation; that the offer of ninety per cent of appraised value was "not bad" for such proceedings; and that there had been only a "handful of cases" taken to court. Much of the property, however, was original land grant holdings of the German families in the area, a factor that was given little consideration by the authorities.³

Over 1,000 acres had been obtained at no cost from the federal government. Chicago had purchased approximately 4,000 acres of land for expansion by the end of 1952 at a cost of \$5,579,000. The original amount of land desired, 6,882 acres, had been reduced to 6,393. In 1953, 1,298 acres of land were still to be obtained at an estimated

¹Interview, Mr. Reher, Aug., 1969.

²Interview, Mr. Blaesing, Aug., 1969.

³Interview, Mr. Redmond.

cost of \$1,957,576.¹

In 1953 an eighteen-hole golf course called "Twin Orchards" possessed 163 acres adjacent to the southeast side of what is now the terminal area. The owners asked for \$1,047,300. A settlement finally was made for \$375,000, the price the club would pay for a new location fifteen miles to the northwest. This was \$25,000 below the appraised value determined by the Chicago Real Estate Board, but the club retained the right to remove trees, sod, and anything else that could be salvaged.²

Buildings taken by the city were bulldozed, if construction was taking place, moved to another site, or left standing. Some buildings were rented cheaply, as squatters were likely to move into vacant buildings. A family of fifteen had moved into a chicken coop using a portable heater for warmth. A fire occurred killing a four-year old girl.³ The following week bulldozers came to level other shacks which had been occupied by squatters. Families were evacuated with the aid of the Leyden township welfare officer.⁴

¹Ralph H. Burke, O'Hare Field Chicago International Airport Progress Report and Description Stage I - Plan C (Chicago: n.p., May, 1953), pp. 3-4. See also Casey, Chicago Aviation.

²Daily News, Mar. 26, 1953. See also Sun-Times, Mar. 27, 1953.

³Sun-Times, Nov. 30, 1954.

⁴Daily News, Dec. 6, 1954. Many poor, Spanish-speaking families still live in the area near O'Hare Field.

Not all developments of the early 1950's were so unpleasant as the forced movement of families. The City of Chicago Bureau of Aviation Report for 1953 indicated that the state Department of Conservation had released 500 pheasants for public hunting at O'Hare Field. Nine hundred state permits were issued by Chicago for the fifteen-day pheasant hunting season in Illinois. In 1954, 2,000 permits were sold to hunt 600 pheasants, and in 1955 3,000 hunting licenses were issued for use on the west side of O'Hare Airport.¹ The 3,000 hunters in 1955 did not kill all of the birds, because after the season, airline mechanics complained that there were many pheasants at the fuel dump and that they had become a nuisance.²

The master plan for the airport in 1954 was a pre-jet plan, as the airport developers thought they had enough land for generations.³ A report on land purchase made to the federal government in 1955 declared "all parcels of land were purchased at or below the appraised value for each parcel" indicating that Mr. Burke and the Corporation Counsel's office had handled the acquisition of land very well from

¹See Bureau of Aviation Reports; 1953, p. 7; 1954, p. 10; 1955, p. 12.

²Sun-Times, Jan. 12, 1956.

³June Markey, Peacock Publications, Oct., 1968, Chicago Historical Association "O'Hare" File.

the viewpoint of the city.¹ Two railroads had been relocated and a golf course, three cemeteries, and many farms absorbed to build the field.² At the time, some criticized Ralph Burke for excess spending in purchasing too much land.³ Twenty years later, after the price of land had increased sharply and there was obviously a need for more airport facilities, the City of Chicago was unhappy that it did not acquire twice as much land as was obtained in the early 1950's.⁴

What effect did the expansion and development of the airport have on the suburbs that surrounded it in the late 1940's and early 1950's? Before the Great Depression of 1929, the realty values in Chicago suburbs were reported to be "booming" because of the airplane. It was predicted that soon there would be large commuter planes taking suburbanites to the Chicago business district.⁵ The impact of

¹Minutes of C.A.A. Third Region, Regional Grant Review Committee, Meeting No. KC-267, Sept. 26, 1955, F.A.A. file.

²Leigh White, "Chicago's Airport of the Future," Saturday Evening Post, CCXXX (Sept. 28, 1957), 136.

³Interview, Donoghue.

⁴Interview, Colonel Corey. In an interview, Mr. James Wrzesien and Otto Stark of C. F. Murphy Associates, architects-engineers of Chicago-O'Hare International Airport, stated that land in the area of O'Hare was selling for more than \$2 per square foot.

⁵J. C. Royale, Daily News, Feb. 5, 1929.

the economic crash that came made such a report seem unreal.

When Chicago acquired Douglas Airport in 1946, Des Plaines and Park Ridge to the north and east of it were known as higher income suburbs. Towns to the south, Franklin Park, and Bensenville, were called railroad towns and contained more modest residences. Elk Grove Village, northwest of O'Hare Field, did not exist in 1946.¹

The president of the Village of Schiller Park stated that there was no real concern about airport development in the late 1940's. No one realized the effect the jet noise and air pollution would have on the surrounding area, he said.² J. Patrick Dunne, manager of O'Hare Field, acknowledged: "I know of no organization or group of persons that opposed the establishment of O'Hare Field."³ The transfer of the Army Air Force property to Chicago was not even mentioned in the local newspapers.

Some attention was given to the airfield in 1947. The Roselle Register headlined "New Airport Will Back Into Bensenville -- Part of Village To Be Absorbed." Ralph Burke had told the village board of Bensenville, which adjoined the airport to the south and west, of the projected

¹Herman O. Walther, A Study of the Impact of Airports on the Market Value of Real Estate in the Adjacent Areas (Chicago: n.p., 1960), p. 29.

²Letter, Edward E. Bluthardt to Doherty, Aug. 11, 1969.

³Letter, Dunne to Doherty, Aug. 27, 1969.

expansion by the field to more than 6,300 acres. The Chicago and Northwestern Railroad tracks were going to be relocated through the eastern part of the village.¹ By the following year this seemed certain to happen, and the Roselle Register reported on its front page that "Bensenville Citizens Protest Move to Route Rail Road Through Town." A petition was circulated which stated that Chicago, which was located in Cook County, had no right to condemn property in DuPage County where Bensenville was located.² At the same time the village passed a smoke abatement ordinance to oppose the railroad.³ The attorney for Bensenville, William Redmond, was also a member of the state legislature and said he would go to the General Assembly for help if Chicago would not change its plans.⁴

A petition from 300 property owners of Bensenville opposed to the railroad extension was presented to Mayor Kennelly and the City Council.⁵ Fortunately for the village, the number of proposed runways was lessened from ten to six in 1950, because of a new type of caster gear which

¹Sept. 5, 1947, p. 1.

²Nov. 5, 1948. See also interview, Mr. Herb Dierking, former village clerk of Bensenville, Aug., 1969.

³Ordinance No. 387 adopted Nov. 4, 1948. See Village of Bensenville, Illinois, Village Board Minutes, Book No. 6, Nov. 18, 1948 (Bensenville, Illinois: n.p., 1952), p. 292.

⁴Ibid., Dec. 16, 1948, pp. 297-98.

⁵Roselle Register, Jan. 7, 1949.

reduced the danger of crosswinds. This eliminated the need to divert the railroad through Bensenville which saved Chicago more than \$1 million.¹ There was also a 700 acre reduction in the amount of land needed.²

A fear of domination by Chicago has usually existed in its suburban neighbors. In 1952 the Chicago Plan Commission proposed the consolidation of authority among the five counties of the Chicago area to handle such things as airports, highways, railroads, and sewer and water facilities to bring greater efficiency for less expense in solving such needs. "Keep Chicago in Chicago North DuPage Heads Say" and "DuPage Leaders Oppose Plan for 'Greater Chicago' Rule" the Bensenville Register reported.³ The proponents of the "Greater Chicago Plan" at a meeting in Oak Park, Illinois in February, 1953 left in a "huff" because of opposition from the suburbs who feared domination by Chicago.⁴ More conflict was to come.

In 1942 Chicago secured an easement to bring a water supply to the Douglas plant. Hazekamp felt this water right

¹Ralph H. Burke, O'Hare Field Chicago International Airport Master Plan and First Stage Development (Chicago: n.p., Nov., 1950). See also Editorial, Daily News, Dec. 11, 1950. The reason for reduction is more fully explained in Chapter V.

²Kennelly, Journal, Jan. 24, 1951, p. 7811. See also Roselle Register, Mar. 9, 1951.

³Nov. 28, 1952.

⁴Mount Prospect Herald, Feb. 19, 1953.

extending from the city had given Chicago a claim which helped it obtain the airfield as surplus in 1946 as well as serve as a basis for annexation in 1956.¹ State law was not clear concerning the powers of a city in an airport outside the city limits.² Mayor Richard J. Daley, elected in April, 1955, proposed in February, 1956 to annex five miles of Higgins Road (Route 72) to make O'Hare Field contiguous to and part of Chicago. Wichita Falls, Texas had annexed miles of roadway in 1944 to connect with its airport. Miami and Detroit had secured their airports by similar annexations. The addition of this area would simplify the problem of providing city services such as police and fire protection.³

The northern half of Higgins Road as it passed through Park Ridge was part of that particular suburb. In March, 1956 the Park Ridge council voted 12-0 to annex the southern half of the highway and stop Chicago's plan to incorporate O'Hare. Herbert R. Stoffels, city attorney for Park Ridge, stated that Chicago was "building a fence around us."⁴ Not only Park Ridge, but Bensenville, Franklin Park,

¹Interview, Hazekamp, Jan. 7, 1970.

²Tribune, Feb. 25, 1956. See Kennelly, Journal, May 23, 1947, p. 181.

³Herald-American, Feb. 27, 1956. See also Sun-Times, Feb. 25, 1956. Illinois law allowed a city to own land outside its boundaries, but such noncontiguous property could not be incorporated as part of the city.

⁴Editorial, Daily News, Mar. 9, 1956. See Tribune, Mar. 8, 1956.

Rosemont, Schiller Park, and Des Plaines also opposed the "O'Hare corridor" to make the airport part of Chicago.¹ Mayor Daley invited officials of the six northwest suburbs to his office to discuss the "corridor." The suburbs suggested such expansion would be unnecessary if a municipal airport authority were established to operate the airfield in place of Chicago. Mayor Daley did not consider giving up control over O'Hare, but he offered to put into writing the promise that: "the City of Chicago is not interested in annexing one foot of property in the vicinity of the airport--we're not interested in obstructing the growth or expansion of any community in that vicinity."²

On March 28, 1956, by a 48-0 vote the City Council annexed O'Hare Field connecting it to Chicago via portions of East River Road and Higgins Road.³ Mayor Daley stated that Des Plaines, Rosemont, and Park Ridge had waived any claims to county land that might have halted annexation. However, the Sun-Times expressed the view that the Chicago Council had taken "hasty action" to forestall the suburbs from blocking the incorporation of O'Hare.⁴ The fears of

¹Sun-Times, Mar. 12, 1956.

²Ibid., Mar. 13, 1956.

³Richard J. Daley, Journal of the Proceedings, Mar. 28, 1956, pp. 2358-59. See also Daley, Journal, May 9, 1956, p. 2507.

⁴Sun-Times, Mar. 29, 1956.

the suburbs subsided for the time being, waiting to be raised again by some action of Chicago.

There were benefits to the suburbs by the mid-1950's from Chicago-O'Hare Field. Employment at the airport was growing, and Ralph Burke predicted a great upsurge of hiring in the area because of O'Hare.¹ The airport was called the "beginning of a tremendous economic shot in the arm for nearby suburban communities and for business conditions in general throughout Chicago's North West side."² It can not be proven that the airfield caused a great increase in property values, but they did advance so much that Chicago Commissioner of Aviation William E. Downes, Jr., testified to a committee of the United States House of Representatives in 1962 that further acquisition of unimproved land within five miles of the airport would cost \$50,000 per acre based on statements by real estate negotiators.³

There was another neighbor besides the suburbs with whom the city officials had to deal in the attempts to expand O'Hare Field. This very important neighbor was the Air Force. Not only had the United States Army Air Force

¹Sokol, Commerce, p. 22.

²Chicago North Side News, Aug. 19, 1955.

³Statement of Federal Aviation Agency before the Subcommittee for Transportation and Aeronautics and the Subcommittee for Regulatory Agencies, House Committee on Interstate and Foreign Commerce, July 17, 1962 (Washington: U.S. Gov't Printing, 1962), p. 3. Herman O. Walther's, A Study of the Impact of Airports on the Market Value of Real Estate in the Adjacent Areas showed that airfields had not decreased property values. Such lands increased in worth as did other suburban properties.

built Douglas Field, but the 9th Tow Target Squad was assigned there when the runways were completed.¹ The Air Force was a potentially threatening neighbor, because it might seize and retain an airfield. During World War II, 429 civilian airports had been taken over for national defense, and not all of them were returned.² Former Secretary of the Air Force Thomas Finletter told the Conference of Mayors in 1953 that: "The Air Force has been the first to recognize . . . strain when both . . . military . . . and expanding civil aviation . . . [use the] nationwide airport structure which is not increasing in proportion to the combined needs."³

After World War II the Air National Guard had obtained airfields in many states as part of the defense program. The Army Air Force and the Air National Guard wanted a permanent part of O'Hare Field.⁴ When the property was turned over to the city, a quitclaim deed of March 21, 1946, Section B(1) retained at least one quarter of the capacity of the airfield for use by the federal government.⁵

¹Report, Form ACA 29 A to Civil Aeronautics Administration, Aug. 5, 1943, National Archives files.

²United States Conference of Mayors, The Need for an Expanded National Airport Program (Washington: n.p., 1935), p. 5. See Hazekamp, interview.

³United States Conference of Mayors, p. 12.

⁴Interview, Hazekamp. The states would have precedence over cities in obtaining surplus airports for the Air National Guard.

⁵United Air Lines, Corporate and Legal History, p. 700.

Use for national defense was also a good reason for Chicago to seek federal funds to develop the airport.¹ Six months before the Korean War began, Ralph Burke, the airport consultant, Joseph K. McLaughlin, director of the Illinois Department of Aeronautics, N. D. Boratynski, chairman of the Commercial Air Lines Technical Committee, and Earl Heist of the Civil Aeronautics Administration, the foremost experts on aviation at a dinner of the Western Society of Engineers, were in agreement. O'Hare Field was vital to the country if war came.² War came in June of 1950 and with it a great expansion of military activity at the airport.

The 2471st Air Force Reserve Training Center had been at Chicago-Orchard Airport. It was activated on August 10, 1950 and was sent to the Far East as a Troop Carrier Wing where it transported troops and military supplies in the Korean conflict. After twenty-two months, the unit was inactivated at Brady Field, Japan, but was reactivated five days later at O'Hare Field as an Air Force Reserve training unit.³ The 437th Troop Carrier Wing reserve unit

¹Letter, Mayor Kelly to T. P. Wright, Administrator, C.A.A., Feb. 25, 1947, F.A.A. files.

²Tribune, Jan. 17, 1950. See also Herald-American, Jan. 17, 1950.

³Letter, Gerald E. Hasselwander, Historical Research Branch, Headquarters, Aerospace Studies Institute, Maxwell Air Force Base, Alabama, to Doherty, Dec. 19, 1969. See Tribune, July 23, 1950.

was stationed at O'Hare Field from June 27, 1949, until August 14, 1950 when it was ordered to active service in the Korean War. Like the 2471st, it came back to Chicago as a reserve unit on June 5, 1952 and remained at O'Hare Field until it was deactivated November 16, 1957.¹ The 62nd Fighter Interceptor Squadron, equipped with F-86A jet fighters, was organized at O'Hare Field in late 1950 as part of the Continental Air Command. On January 1, 1951, it was transferred to the Air Defense Command, but it remained at O'Hare Field until August 1, 1959, when it was moved to K. I. Sawyer Air Force Base in Michigan.² The airport was useful to the United States Air Force during the emergency of the Korean War.

Ralph Burke had been anxious to obtain federal funds for Chicago to expand airport facilities and meet both military and civilian needs.³ The Air Force chose to improve its 280 acre military reservation instead. In the spring of 1951, \$5,703,000 was authorized for facilities at O'Hare for jet fighters. About \$3 million of this amount was to

¹Letter, Hasselwander. Interview, John P. Henebry, former commanding general of the 437th Troop Carrier Wing, Jan. 12, 1970.

²Letter, Richard F. McMullen, Office of Command History, Headquarters, Aerospace Defense Command, Ent Air Force Base, Colorado, to Doherty, Dec. 23, 1969. O'Hare's use was never restricted by the quantity of military traffic; the problem was one of the incompatibility of joint commercial-military use of the field because of training programs, fighter alerts, and so on. Letter, J. L. Donoghue, Apr. 24, 1970.

³Letter, Burke, to D. W. Rentzel, Administrator, C.A.A., Aug. 9, 1950, F.A.A. files.

go for extension of a runway and relocation of Bryn Mawr Avenue. The remaining funds were for approach lights, taxiways, jet hangars and aprons, a barracks for 1,000 men, a dispensary, high intensity lights and underground fuel storage tanks.¹ Although the entire facilities were not completed until 1952, by the fall of 1951, jet interceptors were ready to take off within a ninety second alert.²

The City Council aviation committee complained that Chicago was losing money at O'Hare, because the Air Force was allowed to use one-fourth of the operational capacity of the field without paying landing fees.³ A newspaper article warned that the Air Force, in expanding operations at O'Hare Field, using it as the training base for units in Korea, and as headquarters for a jet fighter squadron was planning to disregard civilian interests and take over the field.⁴ In April, 1952 it was made public that the Douglas

¹Tribune, Mar. 22, 1951. See also Oscar Hewitt, Seventy-Sixth Annual Report - Department of Public Works - Chicago - 1951 (Chicago: Fred J. Ringley, 1952), p. 351. The runway was not on the Air Force reservation; neither was Bryn Mawr Avenue. See map in Appendix for location of military area.

²Hewitt, Seventy-Seventh Annual Report - 1952, p. 280. See also Sun-Times, Mar. 9, 1951.

³Sun-Times, Jan. 15, 1952. The term "military" includes not only the Air Force but also the Air Force Reserve and the Air National Guard.

⁴Editorial, Tribune, Jan. 25, 1952. Ray Hazekamp, an airport consultant for the U.S. Army Corps of Engineers in Chicago, said a take-over of O'Hare was sought by the military. J. L. Donoghue, Mr. Burke's assistant at this time, stated "to the best of my knowledge the Air Force never planned to take over O'Hare Field." Letter, Apr. 24, 1970.

Aircraft Company would return to its old facilities, still owned by the federal government, to build jet fighters for the Navy. The planes would be test flown from O'Hare.¹

Early in July, 1952, Mayor Kennelly was quoted as grumbling, "there are rumors on the street that it [O'Hare Field] is going to be turned into the air academy of the west," and that Chicago objected.² Two weeks after the mayor's statement, the Air Force made a request for storage facilities for ammunition. At first the commercial airlines declared they would not land passengers next to an ammunition dump. The Tribune believed that commercial flight was an important element in national defense but if the Air Force desired O'Hare, Chicago should allow the field to go to the Air Force and develop an airport in Lake Michigan.³ A week after the Air Force request, the city and airlines agreed to a munitions storage space if the explosives were housed in "safe materials at a safe distance from the field proper."⁴

Mr. Ray Ireland, a spokesman for the airlines, insisted that military and commercial use of O'Hare Field were incompatible. There had been poor results in cities that

¹Daily News, Apr. 2, 1952.

²Tribune, July 1, 1952.

³Editorial, July 12, 1952.

⁴Sun-Times, July 19, 1952. See Tribune, July 30, 1952.

had such joint operations. Brigadier General Frank Allen of the Illinois Air National Guard agreed with Ireland as did Air Force Colonel Fred T. Crimmins, commanding officer of the fighter unit at O'Hare. Commissioner of Public Works Hewitt proclaimed that Chicago should spend no more money at O'Hare until it knew for certain to what purpose the field would be put.¹

On August 6th the Air Force asked for 495 acres for an ammunition dump. A week after the request, Hewitt announced that a Chicago engineering firm had drawn up plans in 1951 for a huge reserve training camp to be constructed on the Air Force reservation at O'Hare Field.² This was the rumor to which Mayor Kennelly had alluded.

The airlines were disturbed to learn of the Air Force's plans to use the field for training purposes. The commercial carriers felt that it was unsafe to have their planes in an area where all of the pilots were not skilled and experienced. By the agreement of 1946 the federal government could take control of the airport during a national emergency, but the airfield must revert back to Chicago when the crisis was gone. For this reason the Air Force was considering the outright purchase of O'Hare.³

¹Thomis, Tribune, Aug. 7, 1952. See also Sun-Times, Aug. 13, 1952.

²Tribune, Aug. 14, 1952.

³Ibid., Aug. 22, 1952.

The federal government had taken the municipal airport of Wichita for use as an Air Force training base in the early 1950's, and it was rumored that this was about to happen in Chicago. Mayor Kennelly insisted the city would oppose such a move, but he asked Ralph Burke, "Where else would you go?" if O'Hare were lost. Burke replied that there were two sites in Lake Michigan which might be filled.¹ The airport consultant, however, stated that the loss of O'Hare would be a "great disaster."²

The Air Force was determined to retain O'Hare Field and sought congressional approval for such action. The Korean conflict was in full swing, and there was need for a large base for tactical squadrons. The Air Force had no time to construct another field and, counting the initial cost of \$36 million to construct the Douglas plant and airport, had an investment of \$43 million at O'Hare Field.³ Mayor Kennelly, Ralph Burke, Commissioner Hewitt, and Alderman John E. Egan went to Washington to plead Chicago's case. The mayor spoke to President Truman concerning military use of the airfield.⁴

¹Ibid., Aug. 23, 1952. See also Thomis, Aug. 28, 1952 which favored an island airport.

²Sun-Times, Aug. 28, 1952.

³Thomis, Aug. 28, 1952.

⁴Sun-Times, Sept. 23, 1952. See also Sun-Times, July 13, 1952.

The Chicago officials must have obtained some commitments, for when Alderman Nicholas Bohling (7th Ward) insisted that no more funds be spent at O'Hare Field, Alderman Egan (13th Ward) said it was necessary to proceed with construction because of the crowded conditions at Chicago Midway Airport, and even if the federal government did take O'Hare Field, the city would have its investment returned.¹

Chicago was not alone in its efforts to retain the airport. Senator Paul Douglas, Illinois Democrat, pledged his full efforts to save O'Hare from seizure.² Even the suburb of Bensenville supported Chicago with the following resolution:

WHEREAS, the Government of the United States is considering expansion of military aviation activities at O'Hare Field, which expansion would deny to metropolitan Chicago the full use of O'Hare Field for urgently needed civilian air use; and which would, in the judgment of the Chicago Plan Commission undermine the residential desirability of Northwest Chicago; and . . .
 WHEREAS, Military aviation activity at O'Hare Field would seriously impair the livability of residential districts within several miles flight range of the field; and . . . therefore BE IT RESOLVED: By the President and the Board of Trustees of the Village of Bensenville, that the United States government relocate all military aviation activities away from O'Hare Field, and that O'Hare Field be designated as a civilian establishment; and furthermore that the Plan Commission heartily endorse the effort of the Honorable Martin H. Kennelly, Mayor of the City of

¹Ibid., Oct. 8, 1952.

²Tribune, Oct. 16, 1952.

Chicago; . . . and Ralph H. Burke, Airport Consultant; to achieve this objective.¹

An Airport Use Panel of the federal government's Air Co-ordinating Committee was established to determine who should control the field. It consisted of representatives of the Navy and the Air Force as well as civilian members from the airlines and the Civilian Aeronautics Administration. Chicago requested the Air Force to withdraw from O'Hare. The panel could not reach agreement, as its military and civilian members divided equally.²

Some weeks later, a compromise was reached which favored Chicago. Air Force Secretary Thomas Finletter and Commerce Undersecretary John G. Scott agreed that the Air Force reserve and national guard units would be withdrawn as soon as possible. Only the city defense squadrons would remain, and O'Hare would become a civilian airport.³ A new airport would be built in the Chicago area for training

¹Village of Bensenville, Illinois, "Resolution in re O'Hare Field," Village Board Minutes, Resolution No. 28, Book No. 7, Nov. 6, 1952 (Bensenville, Ill: n.p., 1952), p.284.

²Sun-Times, Oct. 15, 1952. See Philip Warden, Tribune, Aug. 16, 1952 and Daily News, Apr. 2, 1952. There had been a plan for Douglas Aircraft to build and test jet fighters for the Navy at O'Hare, but the Navy had no interest in combining operations with the Air Force either at Glenview Naval Air Station or O'Hare Field. Letter, J. L. Donoghue, Apr. 24, 1970.

³Carleton Kent, Sun-Times, Dec. 6, 1952. See also Warden, Tribune, Dec. 6, 1952; Sun-Times, Dec. 26, 1952.

the reserve and national guard pilots.¹

Mayor Kennelly received editorial praise for having dealt so effectively with Air Force Secretary Finletter and Undersecretary of Commerce Scott.² The "Doolittle Report" was released in mid-1952, about the time the military reserve units were returning to O'Hare from Korea. This report was of immense value to Chicago's cause. President Truman had appointed a special airport commission under Lieutenant General James H. Doolittle to study the problems of airports in the United States (there had been some serious accidents in New York) and make recommendations. The report recommended more federal funds for the development of civilian aviation, the separation of military and civilian flying, the avoidance by the Air Force of training over congested areas, and the placement of airports for commercial aviation closer to the cities being served.³ It contained effective arguments for a limitation of the military at O'Hare Field.⁴

¹Warden, Dec. 6, 1952. Thomis, Dec. 7, 1952, p. 7.

²Tribune, Dec. 9, 1952. See Hewitt, Seventy-Seventh Annual Report - 1952. p. 280.

³See U.S. Air Coordinating Committee, Airport Safety; An Air Coordinating Committee Review on Policies and Action in the Fields Covered by the Doolittle Airport Commission, May 16, 1952 (Washington: U.S. Gov't Printing Office, July, 1954). See also Tribune, Sept. 4, 1952; Warden, Tribune, Aug. 16, 1952; and Daily News, Apr. 2, 1952.

⁴See Ralph H. Burke, O'Hare Field, Chicago International Airport, Plan "C" Development (Chicago: n.p., Oct., 1954), p. 4.

Ralph Burke reported the events of 1952 as follows:

The Air Forces, relying upon a rather strained interpretation of the rights reserved by the Federal Government in its original grant of land to the City, announced plans to house an extensive training program for the Air Force Reserves and the National Guard at O'Hare Field, . . . such a use of the field by the Air Forces would defeat the purposes of the Grant . . . as a major commercial airport. Such a use would also violate the terms of the Grant by far exceeding the rights reserved by the Government.¹

The military was seeking funds to construct a new field in the Chicago area, and a study was being made by the City of Chicago concerning the cost of the military reservation at O'Hare including release of federal rights to use the airport.² Although Senator Everett M. Dirksen and the entire Illinois Congressional delegation favored the appropriation of \$4.7 million to the Air Force to construct a base near Chicago for training pilots, the appropriation was disapproved.³ Military forces remained at O'Hare, although the Fifth Army did transfer all of its light aviation operations from there to Fort Sheridan, Illinois where a new 2,400 foot runway had been constructed.⁴

In February, 1954, it was announced that the Air

¹Burke, Progress Report, pp. 10-11.

²Ibid., p. 11, See also Palatine Enterprise, Jan. 1, 1953, p. 5.

³Sun-Times, July 31, 1953.

⁴Ibid., Sept. 10, 1953. See also "Update," Business Week, Aug. 8, 1953, p. 125.

Force had purchased 20 acres of a 600 acre forest preserve for use as a depot for storing rockets. No humans lived closer than 2,100 feet to the storage dump.¹ Unwanted publicity came to the Air Force within the month concerning rockets. An F-86D jet fighter was being disarmed at O'Hare, and a rocket accidentally fired. It flew three-fourths of a mile, narrowly missed a school bus being loaded, and exploded as it hit the foundation of St. Patrick's Academy, a school for girls with 365 students operated by the Sisters of Mercy in Des Plaines. The blast made a hole one foot deep and two feet wide in the foundation and shattered the windows of the school for three stories.² The commanding officer at the O'Hare base, Colonel C. F. LaClare called it a "freak accident," one that would "not happen again in twenty years."³

The high volume of the traffic at O'Hare Field was still based upon military operations in mid-1954. At that time it was the home base for the 501st Air Base Squadron with eleven aircraft; the 2471st Reserve Training Center with nineteen C-46's; two jet interceptor squadrons with fifty-one F-86 fighters plus auxiliary planes, a special

¹Tribune, Feb. 3, 1954, p. 16.

²Sun-Times, Feb. 19, 1954. See also Sun-Times, Feb. 20, 1954.

³Ibid., Feb. 19, 1954.

mission squadron with five C-47's, and a Fighter Bomber Wing was being considered for assignment to the O'Hare base.¹ The Air Force emphasized that there was no training at the field by the national guard; that all of the pilots assigned to the airport were experienced veterans of World War II.²

The Air Transport Association, a group representing the commercial airlines, wrote to the Civil Aeronautics Administration requesting that the military air units at O'Hare Field be limited in their operations effective October 25, 1954. The answer received from the C.A.A. stated that the government had the right to use the field from Section B(1) of the quitclaim deed of March 21, 1946, and the Air Force could not be limited to less than twenty-five per cent of the capacity of the airport.³

The newly appointed Commissioner of Public Works, George L. DeMent, wrote to the C.A.A. concerning the Air National Guard of Illinois' right to use O'Hare. He was told that the federal military forces could not be limited

¹United Air Lines, Corporate and Legal History, pp. 701-2. The Fighter Bomber Wing was not assigned. Donoghue estimated that the Air Force had only about eighteen interceptors and the National Guard and Air Force Reserve a total of about forty planes between them. Letter, Apr. 24, 1970.

²Sun-Times, Aug. 20, 1954.

³Letter, F. B. Lee, Administrator, C.A.A. to Milton W. Arnold of the Air Transport Association, Aug. 17, 1954, F.A.A. files.

to less than twenty-five per cent of O'Hare's capacity, but that the Air National Guard units were not entitled to use the field under the agreement unless they were federalized.¹

The city was attempting to persuade the commercial airlines to transfer regularly scheduled flights to O'Hare, and the airlines were using the presence of military units as a reason not to change from Midway Airport.² Ralph Burke wrote in October, 1954, that joint use by military and commercial planes was no serious handicap to operation at the field.³

A Tribune editorial of April 13, 1955, stated that the Air Force had promised to get out of O'Hare Field in December, 1952, but was still there. In mid-1955 a butcher named Joseph Balaja discovered definitely that the Air Force was still at O'Hare Field. Mr. Balaja, looking for Illinois Route 83, drove his car through a break in the fence at the airport and roared down the runway next to the O'Hare Air Force reservation. The air police halted him, and he was booked for trespassing on the runway.⁴

¹Letter, F. B. Lee to DeMent, Dec. 20, 1954, F.A.A. files.

²Editorial, Tribune, Apr. 13, 1955. See also Illinois Legislative Council, Airport Agencies in Metropolitan Areas, Publication 120, Research Report (Springfield: n.p., Sept., 1954), p. 6.

³Burke, Plan "C" Development, p. 4.

⁴Sun-Times, Aug. 15, 1955.

The Air Force, however was attempting to leave O'Hare in 1955. It had requested \$15 million from Congress for a new base at Kansasville, Wisconsin,¹ and Congress had approved the appropriation.² The new base could not be built quickly, and the Air Force was having problems at other municipal airports too. Senator Margaret Chase Smith (Republican of Maine) was a member of a Senate subcommittee which was studying reports that Chicago and seventeen other cities that had taken over military airports were attempting to halt the Air Force's use of their fields. Senator Smith said that among cities there was a "growing trend of getting what money they can" from the federal government and "then pushing the Air Force off the field."³ Chicago was telling the Air Force "to get out--to get the air force reserve out," and she was "quite concerned" over this treatment.⁴

The Tribune replied that Senator Smith should not be so "concerned" over the demand that the Air Force do what it had agreed to do in a document signed on December 5, 1952, and approved by President Truman. O'Hare Field

¹Robert Hatch, "Fences in the Sky," Chicago, II (Dec. 1955), 41. See also Sokol, Commerce, p. 22.

²Editorial, Tribune, June 12, 1956.

³Sun-Times, June 7, 1956.

⁴Philip Warden, Tribune, June 7, 1956.

was city property, and Chicago had spent \$22 million to develop it as a commercial airport. The Air Force had received \$16.6 million in funds in 1955 for the Richard I. Bong Base at Kansasville, Wisconsin, but the Tribune stated that the Air Force had no intention of honoring its agreement as national guard and reserve units were still at O'Hare.¹

Land acquisition and the relationship between Chicago and the northwest suburbs had caused problems for O'Hare Field's development to 1956. Much more serious was the threat that the airport might be taken over by the military in 1952. Another difficulty of the early 1950's was that of having efficient transportation facilities to connect O'Hare Field with downtown Chicago. Improved air technology shrunk the time between cities, but travel between the airport and the city has probably lengthened.²

In fact:

The selection of the Douglas site is predicated upon and has included consideration of the early construction of the Northwest Express Highway as called for in the plans of the City, the County and the State as the principal access to the new airport from the central business district.³

¹Editorial, June 12, 1956.

²John E. Peterson, Airports for Jets (Chicago: American Society of Planning Officials, 1959), pp. 2-3.

³Kelly, Journal, Nov. 8, 1945, p. 4398.

On October 30, 1945, engineers of Chicago, Cook County, and the State of Illinois agreed to cooperate in construction and finance of the "northwest super-highway" to handle traffic between Chicago and the Douglas Airport. Governor Green promised his full support to the project. Federal grants-in-aid were anticipated to pay nearly half of the estimated \$50 million cost and it was hoped that the expressway would be completed in 1950.¹ The transportation committee of the City Club sent Mayor Kelly a letter requesting that the "Soo Line," the railroad on the eastern boundary of O'Hare Field, be used to give passenger service to the Chicago business district via the Chicago and Northwestern Railroad.²

In early 1946 the expressway was not yet fully designed, but estimated costs were up to \$75 million, and the airlines had refused to transfer traffic from Municipal (Midway) Airport until there was a fast route from O'Hare to downtown Chicago.³ City, county, and state officials entered into a formal agreement in 1947 to develop a super-highway system including the Northwest (Kennedy) Expressway.

¹Robert Howard, Tribune, Oct. 31, 1945.

²Tribune, 1945. Undated files of the Chicago Plan Commission.

³"Chicago's Douglas Airport Planned for Safe Flying," The American City, LXI (Feb., 1946), 90. See also "New Chicago Field," Business Week, Apr. 6, 1946, p. 43. See Kelly, Journal, Feb. 28, 1946, p. 5300.

The three agencies of government agreed to share equally any costs not paid by the federal government which would pay the major share.¹

The Chicago Aero Commission sent a resolution to the City Council urging speed in construction of the super-highway to Chicago Orchard Airport.² The Council requested city officials with jurisdiction to do what they could to hasten the expressway's construction.³ Ray Ireland, vice president of United Airlines and chairman of the TOP Airlines' Committee, declared that the carriers wished to have a connection from O'Hare to downtown Chicago that required only as much time as was needed to travel from Midway to downtown--thirty-five minutes. Ireland was told that the Congress (Eisenhower) Expressway from Chicago to Elmhurst, seven miles south of the airport, would be finished in 1953.⁴ The problem was finance. Chicago did not have the money to complete the Northwest Expressway as soon as it would have wished.⁵

In 1953 the Congress (Eisenhower) Expressway was

¹George L. DeMent, Chicago Public Works Annual Report, 1960 (Chicago: n.p., 1961), p. 13.

²Kennelly, Journal, June 3, 1949, p. 4256.

³Ibid., June 22, 1949, pp. 4424-25.

⁴Tribune, Jan. 28, 1950.

⁵Scullin, International Airport, p. 61.

completed and the claim was made that one could travel from O'Hare to the Loop in the same time it took to get there from Midway Airport--forty minutes.¹ Completion of the Northwest (Kennedy) Expressway was still being urged in 1955.² A study in that year was made to determine the time that was required to travel the twenty-one and one-half miles from downtown Chicago to O'Hare Field. In nonrush hours the trip took forty-five minutes; at other times an hour and fifteen minutes was needed.³

Cook County was short of funds for highway construction in 1954 and so had agreed to turn over part of the expressway to the state toll highway system. In February, 1956, it was discovered that the toll commission had not provided for a median strip for rapid transit tracks to O'Hare.⁴ The law forbade the tollway to combine with a competing form of transportation, so it could not have the rapid transit strip.⁵ In April, Austin L. Wyman, chairman of the Illinois State Toll Highway Commission, appealed to Chicago and Cook County to make the seven mile stretch of

¹Sun-Times, Aug. 3, 1953, p. 8.

²Editorial, Herald-American, Jan. 14, 1955.

³Hal Faust, Tribune, Oct. 23, 1955. See Sokol, Commerce, p. 22.

⁴Sun-Times, May 24, 1956, p. 3.

⁵Editorial, Herald-American, Feb. 29, 1956.

toll road to O'Hare a free expressway as had been planned originally. Governor William Stratton had announced a possible program in March 1956, for the toll commission to build the seven miles of highway and resell it to the city as an expressway for \$30-\$40 million. Residents of the northwest side of Chicago were protesting against a toll road in the city.¹ In May, Toll Commissioner Wyman said that the seven mile section from O'Hare to Edens Expressway would be made into a "toll road without rapid transit tracks in the median strip." Mayor Daley was reported to be "shocked" by this plan.² A week later a verbal agreement was reached between Toll Commissioner Austin Wyman, County board president Daniel Ryan, and Mayor Daley for a toll-free road to O'Hare Field with a median strip for mass transportation. The bondholders of the tollway would have to be polled. Two-thirds of the bondholders were needed to approve the release of the section of highway. The Sun-Times reported that the toll commission was willing to give up the

¹Tribune, Apr. 21, 1956. See Sun-Times, Mar. 3, 1956.

²Fletcher Wilson, Sun-Times, May 16, 1956. Former Commissioner of Public Works, George L. DeMent stated in an interview on Oct. 24, 1969, that Mayor Daley was very much opposed to any tollway in the city, and that the tollway could not have obtained federal funds. The freeway was able to obtain ninety per cent of the cost of construction from the federal government.

road as traffic engineers had said that it would operate at a loss.¹

Two-thirds of the tollway bondholders gave their approval, and in August, 1956, city, county, and state officials signed an agreement to construct the seven miles from O'Hare Field to the Northwest Expressway as a free road with a median strip for mass transit tracks. Thirty documents were signed.² The expressway was not finally completed until November 5, 1960 at a total cost of \$300 million.³

The first half of the decade of the 1950's witnessed many problems which threatened the expansion of Chicago-O'Hare International Airport. Although difficulties concerning land acquisition, relationships with the suburbs and the military, and construction of the Northwest Expressway certainly were not removed by 1956, they were well on the way to solution.

¹Sun-Times, May 24, 1956, p. 3. See also Tribune, May 24, 1956. Mr. George DeMent, chairman of the Chicago Transit Authority, credited Mayor Daley with negotiating skill as "the Toll Commission was reluctant to release it [the seven mile of highway] from their system, because of the great amount of traffic on this stretch of the Expressway." Letter, DeMent to Doherty, Mar. 9, 1970.

²Sun-Times, Aug. 18, 1956. p. 15.

³See DeMent, Chicago Public Works Annual Report, p. 12 and William E. Downes, Jr., Department of Aviation 1965 Annual Report (Chicago: n.p., 1966), p. 2.

CHAPTER V

END OF THE BURKE ERA

Ralph H. Burke began as airport consultant for Chicago in 1946. His major problem in the late 1940's was a shortage of funds to carry on construction. This difficulty continued and existed at the time of his death in 1956. A major dilemma of the 1950's for Burke was getting the commercial airlines to transfer scheduled traffic to O'Hare Field. Because of the direction Burke and his private engineering firm gave to the whole program, the following quotation seems absurd:

As the aviation program had developed in Chicago, problems of airport planning and design know no departmental limits. The city council is directly concerned as are various other public and private agencies, such as the Chicago Plan Commission, Chicago Association of Commerce and Industry, and the airlines. On occasion, consultants from private engineering firms are retained for specific projects.¹

Mr. Ed Purcell, treasurer of Ralph H. Burke, Incorporated, stated proudly, "You've got to remember that this [O'Hare Field] was strictly a Burke project until Mayor Daley came

¹Illinois Legislative Council, Airport Agencies, pp. 6-7.

in."¹ The story of expansion at O'Hare and negotiation with the airlines during the first half of the 1950's is largely a narration of the efforts of Ralph Burke. His ideas left an indelible mark on Chicago-O'Hare International Airport and they would be even more significant but for changes brought about by the election of Richard J. Daley as mayor and the coming of jet powered commercial aircraft.

The General Airport Company study in 1946 had recommended that there be a gradual transfer of traffic to Douglas Airport commensurate with the facilities there.² However, a vicious circle existed; a shortage of flights at O'Hare meant a lack of revenue for the airport. Monetary deficiency resulted in inadequate facilities so that the airlines did not want to transfer traffic there. In January, 1950 the airlines informed the city that they were ready to move to O'Hare Field with scheduled flights by 1951, but they would not transfer any operations from Midway Airport until a total of \$33 million worth of improvements had been made at the northwest airfield. These improvements would include the addition of two or three new

¹Interview, Purcell. Former Commissioner of Public Works George L. DeMent, Wayne Thomis of the Chicago Tribune, Alderman Nicholas Bohling, and Ray Hazekamp agreed that airport consultant Ralph Burke and his engineering firm controlled the planning and development for O'Hare Field until Mayor Daley was elected in April, 1955.

²General Airport Company, Comprehensive Study, p. 81.

runways, the movement of two railroad tracks to the outside perimeter of the airport, the acquisition of 7,000 acres of land, and the construction of two split-finger ("Y") extensions with at least twenty-four loading stations for planes from the terminal. When O'Hare had these minimum requirements, the airfield would be considered suitable to supplement Midway. After this was done, the airlines promised to make up any deficit in operating costs to the sum of \$60,000 per year until the airport was ready as a major terminal. Ralph Burke stated that to accomplish the \$33 million of work, \$22 million needed to be spent in 1950; that \$18 million of the latter amount would come from airport bonds backed by the City of Chicago plus federal aid, and the other \$4 million would be available from revenue bonds guaranteed by income from O'Hare Field.¹ Burke wrote that the responsibilities of the city, state, and federal government to develop the facilities were all recognized, and these groups were contributing to the cost of construction. "It remains only for the commercial users to undertake such agreements as to use and tariffs as will support additional bond issues to complete the financing of the project."²

The Civil Aeronautics Administration allocated an extra

¹Tribune, Jan. 28, 1950. See also Sun-Times, Jan. 28, 1950; Burke, Master Plan (1950); Tribune, Mar. 1, 1950.

²Master Plan (1950), foreward.

\$500,000 for O'Hare in February, 1950. These funds were available because other cities had not done the paper work required to receive this aid. This brought federal funds used for O'Hare to \$6,125,000, but these federal funds had to be matched by a like amount from the city or the state.¹

Burke believed that it also might be possible to obtain the needed funds for expansion from combined city, state, and federal sources. The state originally had announced that it would match Chicago's contribution, but had not done so. Burke considered it unlikely that the state would match Chicago's financial contribution, however, and federal monies were being reduced on domestic programs due to defense and foreign aid spending. More than \$10 million to complete Stage I of the 1950 Master Plan demanded by the airlines, would have to come from revenue bonds, Burke thought. In order for such bonds to be marketable, he was of the opinion that the airlines and the city needed to make an agreement that would guarantee firm financial backing to the bonds; that such a contract would be mutually advantageous.²

In 1950 O'Hare Field had the same runways, though

¹Tribune, Feb. 8, 1950.

²See Burke, Master Plan (1950); see also Tribune, Apr. 5, 1950; Sun-Times, May 2, 1950.

improved, that had been built for the Douglas Airport.¹ The Master Plan of 1948 had been modified in 1950 also. The central terminal with tangential runways was retained as was the need for assemblage of land, but the number of runways was reduced from ten to six. This was possible because a new type of caster gear, a tricycle gear with a steerable nose wheel, that allowed a plane to land despite crosswinds had reduced the number of runways required. With fewer runways, the Chicago and Northwestern Railroad could be routed east of Bensenville. This change saved homes that otherwise would have been condemned and cut expenses by \$2.5 million to the city. The need for four fewer runways was estimated to save another \$15 million.² Construction was begun on the new passenger terminal in 1950, and the first concrete taxiways and aprons were completed in that year also.³

O'Hare Field was continually having financial difficulties. Income for the first eight months of 1950 was lower than it had been in 1949.⁴ By the end of the year the total

¹Tribune, July 23, 1950. See also Report Form ACA-29A (8-48) of the C.A.A., Nov. 16, 1949, F.A.A. files.

²Burke, Master Plan (1950). See also Editorial, Daily News, Dec. 11, 1950; letter, George W. Vest, C.A.A. Regional Administrator to the Administrator, C.A.A., Nov. 22, 1950; and Hewitt, Seventy-Fifth Annual Report - 1950, p. 340.

³Hewitt, Seventy-Fifth Annual Report.

⁴Tribune, Sept. 21, 1950.

annual revenue of \$42,049 was nearly \$1,000 more than it had been in 1949, but operational maintenance expense had risen considerably. About \$18,000 had been lost operating the airport in 1949; in 1950 the deficit climbed to approximately \$43,000. It had cost twice as much to operate O'Hare as there had been income received from it.¹ There had been 100,913 plane movements in 1950, but 94,682 were non-scheduled, and most of these had been military planes.²

The consultant, Ralph Burke, had notified Joseph K. McLaughlin, state Director of Aeronautics, that \$1,170,000 would be needed from the Illinois legislature for the 1951-1953 biennium. McLaughlin announced that he was requesting \$325,000 for O'Hare.³ Burke wired McLaughlin that more than \$1 million was needed. The Director of Aeronautics replied that the figures he had given were only "preliminary estimates" and should not have been made public.⁴ The Civil Aeronautics Administration was asked for funds by Burke. L. C. Elliott of the C.A.A. was not very encouraging when he replied that:

I regret that I am unable to give any more accurate or complete information concerning the availability of

¹Hewitt, Seventy-Fifth Annual Report.

²Tribune, Jan. 4, 1951.

³Herald-American, Dec. 27, 1950.

⁴Tribune, Dec. 28, 1950.

funds for Chicago. However, I know that you realize the budgetary processes of the Federal Government and understand the impossibility of forecasting appropriations.¹

Apparently the airlines were not in full agreement concerning the development of O'Hare Field in 1951. William A. Patterson, president of United Airlines, thought it was essential to proceed with construction at O'Hare in order to be able to meet traffic increases of the future. C. R. Smith, chairman of the board of American Airlines, stated that he would be satisfied to "make Midway do."² A few days later, however, a news article declared "Major Carriers Agreed On O'Hare As No. 1 Airport--Fail to Reach Accord on Fees to City."³ The Chicago Airlines Top Committee reaffirmed its previous position: The transfer of operations to O'Hare would depend on a satisfactory contract with the city.⁴ The airlines agreed that Midway's capacity to handle aircraft was nearly saturated, but they were reluctant to shift schedules to O'Hare.⁵

Alderman John Egan of the aviation committee of the City Council stated that "stalling" by the airlines was

¹Letter, Elliot to Burke, Feb. 14, 1951, F.A.A. files.

²Thomis, Tribune, Oct. 17, 1951.

³Ibid., Oct. 20, 1951.

⁴Sun-Times, Oct. 20, 1951.

⁵Ibid., Nov. 13, 1960.

delaying construction at the airport. The "stalling" was in refusing to say to what degree the field would be used by the commercial airlines. A firm commitment was necessary, Egan believed, so that revenue bonds could be issued.¹ In mid-1952 the Top Committee, representing fourteen scheduled air carriers, wrote Mayor Kennelly to say that they were ready to negotiate an agreement to transfer a sizeable percentage of their Chicago traffic to O'Hare Field.² For the first time the city gave the airlines estimates of landing fees for O'Hare. These would have been about 16.5¢ per 1,000 pounds if half of the Chicago traffic were transferred to the northwest airport; such charges would have been about the same as those levied at New York and Los Angeles airports.³

Construction was going slowly, but it was advancing. A federal grant of \$1.8 million was announced by the Civil Aeronautics Administration in April, 1952. This made possible the use of \$1.17 million of state funds.⁴ The C.A.A. office of defense requirement also gave O'Hare procurement priorities on metals needed for expansion.⁵

¹Tribune, Mar. 14, 1952.

²Thomis, July 31, 1952.

³Tribune, Aug. 6, 1952. The airlines were not prepared to transfer half of their traffic and costs were much higher if this were not done.

⁴Sun-Times, Apr. 3, 1952.

⁵Tribune, Apr. 3, 1952. The priorities were not tied to any military requirements for use of the airport.

Under the direction of Ralph Burke the terminal was designed to look like a six pointed star with one of the points missing. Each of the existing points would have a "split finger" Y concourse extending from it, and each Y would be able to service from eleven to twenty-two planes at a time. Eventually seventy-six gates were planned to handle 2,000 daily operations. Tunnels under the fingers would lead to a central service area with a boiler plant and water reservoir. Each plane position would have an underground service pit with air conditioning ducts, sewers, fuel lines, hot and cold water lines, and electric starter cables.¹ In 1952 Finger "B", one of the five split fingers of the terminal, was partially built. Passengers would be able to board and leave their planes from the second-story of the finger or concourse when it was completed. The first level of the extension was for baggage and cargo; escalators were planned to aid the flow of traffic between each level.²

Everything at O'Hare did not expand in 1952, for there were nearly 10,000 less operations of aircraft than

¹"Modern Air Terminal to Serve Chicago," Aviation Week, June 23, 1952, p. 75. See also White, Saturday Evening Post, p. 136; "Chicago's O'Hare Field Terminal Designed for Faster Aircraft Loading," The American City, July, 1952, p. 21. Appendix contains sketch of terminal design. It is included with the sketch of the tangential runway system.

²"Chicago's O'Hare . . .," The American City, p. 21.

had occurred in 1951 and almost 20,000 fewer passengers.¹ Conflicts with the Air Force had helped to make 1952 a difficult year for Ralph Burke and Chicago planners. It is not known how much of the decrease in traffic occurred because military operations by the Air Force, Air National Guard, and the Air Force Reserve at O'Hare frightened away commercial flight, but 1952 was the first full year for jet fighters there. The quantity of military use of the airport was not a problem; it was the incompatibility of operations, especially with the jet fighters. When an alert was given, the interceptors would hasten from the alert hangar and take-off towards the northwest, the same direction most landings were coming from. This obviously created an unsafe condition.²

1953 was the fiftieth year of powered flight. There was a ceremony commemorating the occasion at the formal acceptance of Finger "B" which made up only five per cent of the total capacity of the ultimate terminal.³ An inspection of the airport's facilities by M. B. Westphal of Eastern

¹Virgil E. Gunlock, Seventy-Seventh Annual Report - Department of Public Works - 1952 (Chicago: Champlin Shealy Co., 1953), p. 282.

²Letter, J. L. Donoghue, former assistant to Ralph Burke, to Doherty, April 24, 1970. See also Sun-Times, Mar. 9, 1951; Tribune, Mar. 22, 1951.

³Francis E. Callahan, Manager of Airports, Bureau of Aviation Annual Report for the Year Ending December 31, 1953 (Chicago: n.p., 1954), p. 5.

Air Lines caused the cancellation of the "Span of Flight" show which had been scheduled for July 4-5, 1953. The program was switched to Indianapolis Municipal Airport, as O'Hare was said to be "too inconvenient" for the public.¹

Ralph Burke desired facilities to "allow at least fifty per cent of the Chicago Air Traffic to be accommodated at O'Hare Field" in order to "support an economical and practical operation by the scheduled airlines."² By October, 1955, he wished to have Stage I, Plan "C" completed. This meant the acquisition of as much land as possible within the airport boundaries, the relocation of the two railroads, a partial terminal with facilities, a new runway, and a fueling system with a tank farm for fuel storage.³ In 1953 nothing had been done about the tank farm or the runway. The estimated total cost for Stage I, Plan "C" was \$37 million including interest charges of \$2 million during construction. Ralph Burke and city officials thought that revenue bonds based on anticipated airport income could be sold to complete the first stage and that legislation which was being proposed for the Illinois General Assembly would clarify the "rights of the City as to revenue financing

¹Sun-Times, June 24, 1953. The "inconvenience" was due more to the difficulty of access to O'Hare from the city than the lack of facilities.

²Burke, Progress Report (May, 1953), p. 2.

³Ibid., pp. 2-3.

and as to operating agreements with the air lines."¹ Such legislation ran into difficulties.

The City Council had the authority to issue revenue bonds supported by the income from a project. There was no limitation of debt and revenue bonds did not require a referendum, however, obstacles to such an issue did exist. These included the short duration of the issue and the lack of precise city powers. Chicago made an attempt in 1953 through Illinois House Bill 877 to have bonds which could be more easily sold to raise money for the completion of O'Hare Field. House Bill 877 would have extended the length of revenue bonds from thirty to forty years; it would have given Chicago the right to "purchase" airports as well as "establish and maintain" them; it also would have given Chicago the power to refund revenue bonds. However, Governor William G. Stratton vetoed the bill.² In his veto message of July 17, 1953, the governor declared that he was following the wishes of the airlines; and that it was not wise to issue bonds without the assurance of revenue.³ The Sun-Times believed the veto had come because of a clause allowing

¹Ibid., p. 10.

²Illinois Legislative Council, Airport Agencies, p. 7.

³Governor Stratton, "Veto Message of House Bill 877, July 17, 1953," Springfield, 1953. (Mimeographed.) The governor believed that without the support of the airlines, financial backing was in jeopardy for a bond issue.

forty-year contracts at the airport without advertising for the lowest bidder.¹ Commissioner of Public Works Gunlock declared the reason the airlines had lobbied against the bill and the governor had vetoed it was because the bill would have allowed bonds to be guaranteed by the income from all the airports of Chicago. Gunlock claimed that the airlines feared that Midway's fees would be raised.² He also stated that lack of funds would continue to hinder O'Hare's development unless a court suit could nullify the contract for very low landing fees, 4¢ per 1,000 pounds, at Midway Airport; or unless a safety survey were made by the Civil Aeronautics Administration the results of which would force excessive scheduled flights from Midway to O'Hare Field. There was another legal possibility for getting more funds for the development of O'Hare. Studies were being undertaken to determine if revenue bonds could be based on the income from all of the Chicago airports.³

The airlines had hundreds of consultations with Ralph Burke and his engineers to determine the position of runways, the layout of loading ramps, and so on at O'Hare. Many city officials considered that there was a tacit

¹July 18, 1953.

²Sun-Times, Aug. 3, 1953, p. 8. See also Malcolm Wise, Sun-Times, Nov. 13, 1960. The contract for landing fees at Midway ran from 1942 to 1963.

³Herald-American, July 22, 1953, p. 15.

agreement that the commercial carriers would make a financial commitment. On July 2, 1953, the airlines asked to leave the plans for the field unchanged, as they were too concerned over monetary aspects of the program to propose anything more. The lines were worried about high landing costs at O'Hare; they indicated a willingness to pay "advance rents" for the loading gates and stated that when the gates were complete, the carriers would transfer thirty per cent of their scheduled flights from Midway to O'Hare.¹ It was hoped that this amount of traffic could be using O'Hare by July 1, 1954. The Top Committee agreed that higher fees were in order if the facilities were commensurate to Midway. Chicago promised to speed work on the Congress Street (Eisenhower) Expressway as well as the Northwest (Kennedy) Expressway.² Ray W. Ireland, chairman of the Chicago Airlines Top Committee, was concerned about transportation to downtown Chicago. In August, 1953 it was apparent that the Northwest Expressway would not meet the target date of completion in 1955. Fees were very high at O'Hare--about \$950 per month per scheduled flight compared to about \$500 per month per flight at the next highest airport, Idlewild in New York.³ Non-scheduled aircraft were paying about \$7.50

¹Thomis, July 3, 1953.

²Tribune, Aug. 6, 1953.

³Sun-Times, Aug. 3, 1953, p. 8.

per landing of a Douglas DC-3 at O'Hare. The same plane could land at Midway for approximately \$1.00 under a contract which did not expire until 1964. The large property investment of the airlines at Midway also made them reluctant to transfer. Commissioner Virgil E. Gunlock affirmed that the "main thing is to get the scheduled airlines out to O'Hare" and then funds could be raised for the field's expansion.¹ O'Hare could not be self-supporting, as city policy specified, or provide needed facilities unless there was much more landing-fee money available through a great increase in the use of the airport.²

The Bureau of Aviation Annual Report showed that many conferences with representatives of the airlines were held in 1953. Indications by the end of the year were that thirty per cent of commercial operations at Midway would be transferred to O'Hare in the summer of 1954.³ Burke stated agreements with the airlines for regular scheduled flight to take place at O'Hare were nearly concluded.⁴ Commercial air carriers had been a welcome addition to O'Hare in 1953. Civilian flight surpassed military operations for the first time due to increases in freight-carrying planes, private flights,

¹Thomas Drennan, Sun-Times, Sept. 6, 1953.

²Letter, Donoghue, Apr. 24, 1970.

³Callahan, Bureau of Aviation Annual Report, 1953, p. 7.

⁴Progress Report (1953), p. 11.

and the use of the field by corporation-owned aircraft.¹ Not only were there 20,000 more plane operations in 1953 than there had been in 1952, but even the number of visitors to the airport showed a tremendous increase. In 1952 there had been 33,165 visitors; this soared to 288,010 in 1953.² Prospects for development appeared good at the end of 1953.

Stage I, Plan "C" called for a new runway, as soon as funds were available, to parallel the existing north-west by southeast landing strip which was the longest at O'Hare, 7,350 feet. The new runway, a tangential runway to the terminal, would be 8,000 feet in length, 200 feet wide, and capable of supporting the largest planes. From studies at O'Hare the Civil Aeronautics Administration was establishing standards for the length and strength of runways.³ The four Douglas runways, the only ones which existed in 1953, all intersected; this meant that only one could be used at any one time. The fact that the runways intersected limited the field for safety reasons to fifteen plane movements or operations per hour during poor weather when instrument flight rules were in effect (IFR). During visual flight

¹Sun-Times, Mar. 15, 1953.

²Callahan, Annual Report, 1953, p. 5.

³Burke, Progress Report (1953), pp. 5-6. Interviews with DeMent and Hazekamp indicated that these standards did not last long with the advent of the large jet engined carriers.

rules (VFR), forty planes per hour could be moved on these runways. The new northwest-southeast runway was in the direction most often used at O'Hare and would double the capacity of the field. This meant that loading positions, the fueling system, and terminal facilities would have to be increased also.¹ These improvements, of course, would require large outlays of money. It was said that there was a "virtual withdrawal" by the federal government from support for the Illinois airport program beginning in 1953.² This is only partially correct.

The Federal Airport Act of 1946 had included the expenditure of \$500 million for airport construction over a seven-year period. Only one-half of this amount was ever appropriated, and nothing at all was available in 1954.³ However, a federal grant of \$1,665,000 was given to Chicago for the new runway for use in 1955 because of the impending shift in traffic.⁴ By the end of 1954 an ample apron area had been constructed as well as taxiways to the

¹Burke, Progress Report (1953), pp. 4-5. See also Ralph Heinze, airport manager, report to Civil Aeronautics Administration, Oct. 29, 1953, F.A.A. files.

²Scamehorn, Balloons to Jets, p. 189.

³U.S. Congress, Senate, Committee on Commerce, Maintenance of An Adequate Airport System, Hearings before the Aviation Subcommittee of the Committee on Commerce, Senate, 90th Cong., 1st sess., 1968, p. 65.

⁴Tribune, Oct. 5, 1954, p. 18.

area, a gasoline storage area with a capacity for 800,000 gallons of fuel; concrete fingers from the terminal area with sixteen loading positions were ready, and the new control tower was eighty per cent completed. The railroad tracks had been relocated, and a new steel hangar costing \$500,000 was being built. The number of flights had risen to 117,461 in 1954 from 90,940 in 1953.¹

Though progress had been made by 1954, many problems remained. Mayor Kennelly had delegated the authority to negotiate with the airlines to Virgil Gunlock's successor as commissioner of public works, George L. DeMent. Commissioner DeMent told the air carriers that there would be no more Chicago tax money used to construct O'Hare Field.² The City Council passed an ordinance establishing a landing fee of 20¢ per 1,000 pounds for O'Hare. Most other airports had fees of 10¢ to 16¢ per 1,000 pounds, and the airline companies feared that other municipal airfields would raise their rates to match those of O'Hare.³ The problems hindering regular scheduled flight at the field in 1954 also were believed to be from lack of electronic and radar equipment and the fact that the control tower had not been completed

¹DeMent, Public Works Annual Report, 1954, pp. 28-29. See also Callahan, Bureau of Aviation Report, 1953, p. 5 and Herald-American, Oct. 21, 1954.

²Interview, DeMent, Oct. 24, 1969.

³Sun-Times, Aug. 15, 1954.

as well as the failure of the city and the airlines to agree on fees.¹ The difficulties with the military were not solved by 1954 either.

Several factors have held the extensive development work contemplated for O'Hare Field in abeyance. These include the necessity for resolving problems relative to objections against joint military-civil use and a federal recapture clause, working agreements with the airlines regarding their use of the field, and difficulties encountered by the Air Force in obtaining Congressional approval for establishing a separate facility.²

Francis E. Callahan's Bureau of Aviation Report, 1954 related that conferences had been held with the Chicago Airlines Top Committee throughout 1954 concerning the movement of thirty per cent of Chicago air traffic to O'Hare. At the end of the year, however, Wayne Thomis reported that a transfer of only ten per cent of the traffic was being considered, although the major air carriers, especially United and American Airlines, were said to be positive that some traffic must be diverted in 1955. Thomis also declared "the air lines have postponed or changed dates for actual transfer of traffic to O'Hare 14 times in the last two and a half years" and that the city and the carriers were far apart on fees, the major obstacle to the transfer. The

¹Ibid. See also Sun-Times, Sept. 7, 1954. J. L. Donoghue, assistant at the time to Mr. Burke, stated that the control tower of the Air Force could be used, so lack of a control tower presented no difficulties.

²Illinois Legislative Council, Airport Agencies, p.6.

lines wished a sliding scale of fees based on the amount of scheduled traffic. The city felt that such an arrangement would not bring sufficient revenue to pay off bonds to build the airport.¹ No settlement was made and the relatively high fee of 20¢ per 1,000 pounds for landing continued. Despite the differences, the spring of 1955, when the control tower was to be completed, became a target date for transfer of traffic.²

In the fall of 1954, the federal government had informed Chicago that it would receive a grant of \$1,665,000 for the new 8,000 foot northwest by southeast runway.³ The Air Lines Pilots Association wrote letters to Chicago aldermen demanding that the runway be made of concrete rather than asphalt; the pilots maintained that concrete was safer.⁴ On May 10, 1955 an editorial in the Daily News recommended the asphalt runway. The cost for asphalt was said to be \$1.3 million; the use of concrete would require over \$2 million for the runway. The Daily News stated that the asphalt could be painted for visibility and given a rough surface to make it less slippery; that it was easier to smooth and repair than concrete. How much influence the

¹Tribune, Dec. 12, 1954.

²Sun-Times, Dec. 19, 1954, p. 40.

³Tribune, Oct. 5, 1954, p. 18.

⁴Ibid., May 4, 1955.

Daily News had on the City Council is unknown, but doubtless the ideas it presented and the opportunity to save \$700,000 were important. The Council voted to change from a concrete to an asphalt runway.¹ The Civil Aeronautics Administration had been asked to participate in an underground drainage system, but it felt that such a system was not necessary.² However, drainage under the runway, 14R-32L, was poor and the runway itself needed repairs within a few years after completion. In 1958, the Daily News pointed out that asphalt had been more expensive than concrete because of renovation.³ In fact Paul Gapp declared that the Air Line Pilots Association had pleaded for concrete in 1955, but Ralph Burke would not listen to the pilots; and because of Burke's attitude, a concrete top had to be added which made the cost almost \$1 million more than it should have been.⁴

Something more important than the beginning of construction on the major runway seemed to be happening in

¹Sun-Times, May 13, 1955. On Sept. 26, 1957, Mr. F. D. Bellamy, C.A.A. district engineer, stated that the C.A.A. had no preference for either concrete or asphalt. See Carter H. Manny, Jr., "Daily Log, August 1957 to September 1959," unpublished diary, Chicago, 1959, p. 12. Hereafter this work is referred to as "Log."

²Letter, J. L. Donoghue, Apr. 24, 1970.

³Paul Gapp, Daily News, Aug. 20, 1958. See also Daily News, Sept. 8, 1958.

⁴Ibid., Apr. 23, 1960.

1955. It appeared that the city and the airlines were reaching a settlement of their differences concerning an agreement for the use of O'Hare Field. In February, 1955, a report was made to the Airlines' Negotiation Committee which stated that projected traffic increases made it necessary to find a settlement over O'Hare. It said that soon the air carriers either would need the facilities of another airport in Chicago besides Midway or have to refuse passengers. However, the report suggested that an agreement could be reached under which the airlines would pay for the cost of operating the airport at a figure much lower than that proposed by Chicago.¹ Flights to O'Hare would not only allow more facilities and thus aid all the carriers, but they would also reduce the number of planes in the airspace of Midway Airport. The lines felt that the cost of operation to them should be lowered by the percentage of use given at O'Hare to the Air Force.² The city should pay all costs of the terminal and concession areas and receive all revenues from them; the charges to the commercial airlines should be "reasonable" with a judicial review process if the parties did not agree to terms.³

¹Edmund Stohr, "Minutes of February 1, 1955 Meeting of Chicago Airlines Top Committee," Chicago, 1955, p. 7. (Mimeographed.)

²Ibid., p. 9.

³Ibid., pp. 7-8.

Chicago also was making preparations to bring about a transfer of traffic by the airlines in the first half of 1955 but in a more forceful, non-negotiated way than what the airlines had discussed. Alderman John Egan believed that Chicago had the power to limit the number of flights to Midway for safety reasons. Public Works Commissioner DeMent had written to Ross Risley, chairman of the Civil Aeronautics Board, twice prior to May, 1955 requesting permission to reject increases of traffic to Midway.¹ Mr. Risley did not reply until the latter half of May; he then stated that cities could not be authorized to control interstate commerce.²

The limitation of the use of Midway would be one way to force the airlines to transfer to O'Hare Field. There was also editorial pressure to influence public opinion. The Tribune stated that the Chicago Airlines Top Committee was unreasonable to ask for a twenty-five year agreement but to admit that the airlines would only support the "year to year" expenses of operation.³ Another editorial of the Tribune was entitled "Start Using O'Hare" and accused the airlines of using one pretext or another to delay transfer of operations to O'Hare.⁴ The Daily News claimed that

¹Tribune, May 4, 1955.

²Sun-Times, May 20, 1955.

³Apr. 13, 1955, p. 12,

⁴May 4, 1955, p. 16.

fees were the major factor for the lack of operations at O'Hare--that Midway's fees were too low, and therefore, the airlines were in no hurry to move from Midway.¹

In May 1955, the interim facilities for O'Hare were nearly completed. The control tower would soon be ready and surveillance radar was scheduled to be operative by September. On May 3, 1955, R. W. Ireland, chairman of the Top Committee, sent a memorandum to the member carriers of the organization. He claimed that:

Almost from the beginning of these negotiations, the City has insisted that the carriers guarantee the payment of any revenue bonds which the City, in its discretion, might issue for airport purposes. The airlines, of course, have firmly opposed such a provision. It is believed that this problem may now have been resolved by a provision which would include in the airport costs the payment of such bonds and related charges only if, prior to issue, the carriers expressly approve such issue. . . .²

It appeared from the attitude of the memorandum that agreement with the city might soon be possible.

Another reason to believe that a settlement was in the offing was the fact that a new mayor who was very determined to complete and use O'Hare Field had been elected in April, 1955. The new mayor, Richard J. Daley, sent telegrams to the ranking officials of each airline requesting a meeting in Chicago.³ Mayor Daley met with the chief officials of

¹Editorial, May 10, 1955.

²United Air Lines, Corporate and Legal History, pp. 703-4.

³Editorial, Tribune, May 13, 1955.

eleven major airlines and got them to agree to the principle that the airport had to be self-supporting.¹

Mr. A. R. Thompson, chairman of the Chicago Airlines Negotiating Committee, a subcommittee of the Top Committee, sent Commissioner George L. DeMent on May 20th a proposal for compromise: the airlines would not seek a reduction of costs for themselves because of usage of the field by the Air Force of more than twenty-five per cent capacity; minimum landing fees would total \$480,000 by June 30, 1957 in order to insure that Chicago would not have to operate O'Hare at a loss during the time of proposed transfer of traffic; the airlines would sign two contracts, one for landing fees and a lease for terminal space, as the city desired; in the landing fee proposal, the commercial carriers would waive any ceiling of costs to be assumed thus accepting the concept developed by Ralph Burke that the airlines pay a flexible landing fee reflecting the expense of O'Hare's operation. The City of Chicago was asked to make concessions to protect the airlines from excessive outlays. Chicago should agree that depreciation on state and federal grants was not a city cost to be repaid by the airlines; the city should agree that the carriers should not pay more than interest and depreciation on revenue bond financed items unless the airlines approved the revenue

¹Sun-Times, May 14, 1955.

bond issue; Chicago should agree that the rate to determine the airlines' fixed fee should be based on the landing weight of aircraft; and the "City should agree that the landing fee agreement will be for a term ending December 31, 1960, with right of airlines to renew for two successive five-year periods." Commissioner DeMent answered that the terms were acceptable but that "the landing fee agreements would be for a period of five years from the date operations commence at O'Hare" with the right of two five-year renewals of contract. This agreement was confirmed at a meeting with Mayor Daley in his office on May 27, 1955.¹

The contract with the airlines was sixty-seven pages in length and covered the fifteen year period from October 31, 1955 to October 31, 1970. It assured the city it would recover its investment but precluded any hope for a profit for Chicago. The airlines guaranteed fees of at least \$480,000 for the first year and one-half of scheduled operations at O'Hare. After that the fees would vary, determined by operating expense, including interest and depreciation, less revenues to the city from O'Hare.² In submitting

¹United Air Lines, Corporate and Legal History, pp. 704-5. See also Thomis, Tribune, May 28, 1955, p. 2; letter, Donoghue, Apr. 24, 1970.

²Tribune, Oct. 6, 1955. The sum of \$480,000 was based on the assumption that thirty per cent of the Midway traffic would transfer to O'Hare. If this did not occur, the airlines had a contract among themselves penalizing the carriers which transferred the least per cent of operations. See United Air Lines, Corporate and Legal History, p. 708.

the contract to the City Council for approval, Mayor Daley declared that it "will enable Chicago to become the international airport of the world." Commissioner DeMent said the contract was "unique;" that it guaranteed the income "to make O'Hare completely self sufficient." Besides the fifteen year operating contract at O'Hare, the airlines agreed to invest \$1 million in terminal facilities; to rent ticket and operation space; and to construct an air cargo building that would become city property at the end of the contract period.¹

"It is the only contract of its kind . . . where a city has operation costs completely guaranteed on a major airport. There should be no hesitation in the city's acceptance," said the mayor. Alderman Egan, chairman of the aviation subcommittee, added that the airport would be self-supporting with the air carriers even guaranteeing costs such as fire and police protection and pension funds.² The vote in the Council was 46-3 in favor of the contract. The chief objections to it were that the city would not be allowed to profit from concessions and did not get repayment for its large investment in land. Nicholas Bohling, Seymour F. Simon, and Jack I. Sperling were the aldermen

¹Daily News, Oct. 5, 1955.

²Tribune, Oct. 11, 1955.

voting against it.¹

The two basic agreements were signed on October 28, 1955. The Airport Use Agreement fixed flight fees, rates for runway and ramp use, and parking fee rates. In this contract the city also was guaranteed that if total airport revenues from July 1, 1956 to June 30, 1957 were less than \$480,000, the contracting airlines would make up the deficit. The second agreement covered the terminal area including rates for ticket area space, building and concourse (finger) operating space, and pro rata rent for joint airline facilities such as baggage and washroom space.² William A. Patterson, president of United Airlines, credited Mayor Daley with achieving the agreement. Patterson said the mayor "made us feel cheap about some of the things." Mr. A. J. Brough affirmed that "the financing structure of O'Hare is unique and it is probably the outstanding example of a self-sustaining non-profit airport." Brough called the formation of the Chicago Airlines Top Committee one of the "most important events that made the development of O'Hare

¹Sun-Times, Oct. 22, 1955. See also Jay McMullen, Daily News, Oct. 7, 1955; Thomis, Oct. 7, 1955, and interview, Mr. Seymour Simon, Aug. 13, 1969. Simon, the only Democrat of the three dissenting aldermen, considered the contract a subsidization of the airlines and favored a clause forbidding racial or religious discrimination.

²United Air Lines, Corporate and Legal History, pp. 706-7.

³Sun-Times, Oct. 29, 1955.

possible," because it was through the Top Committee that the agreements to finance the airport were resolved.¹

One obstacle seemed to have been overcome, but others remained. Alderman Burmeister (44th Ward) asked Airport Consultant Burke, "Why haven't we built more of the terminal and final runways at O'Hare?" Burke replied, "Lack of money. We expect to continue O'Hare development for years."² Even as Burke spoke of expansion at O'Hare, the airlines were spending more than \$1 million for construction of administration and communication offices, ticket counters, and other facilities to prepare for the beginning of scheduled flight at O'Hare on October 30, 1955. At this time immediate transfer of ten per cent of Midway's traffic was supposed to take place.³ At O'Hare four hundred and fifty acres sat empty, an area two-thirds the size of Midway Field, waiting for hangars to be built. There were but three hangars on the civilian side of the field.⁴

An over-enthusiastic writer proclaimed that O'Hare Field would be one of the busiest and largest commercial airports in the world from its very beginning in October,

¹Letter, Brough to Doherty, Jan. 27, 1970.

²Tribune, Oct. 11, 1955.

³Herald-American, Sept. 5, 1955. See Herald-American, Oct. 11, 1955.

⁴Tribune, Oct. 23, 1955.

1955. At that time the 6,393 acres at O'Hare did make it the largest airfield in the United State, 1,000 acres larger than Idlewild Field in New York.¹ To inaugurate the opening of O'Hare, there was an air show on October 29, 1955. Regular commercial traffic would start on October 30th. William A. Patterson was chairman of the program which included Secretary of Commerce Sinclair Weeks and Governor William Stratton. More than 100,000 persons saw military planes perform acrobatics as part of the opening show.²

The first regularly scheduled flight into O'Hare was American Airlines Flight 715 from Detroit.³ The initial departure was a four-engined propeller-driven Trans World Airlines Constellation enroute to Egypt.⁴ Despite the regular scheduling of flights, O'Hare did not yet have the facilities to become a first class airport. In 1955 the Northwest (Kennedy) Expressway was not completed, and it might take nearly two hours to drive to the Loop (downtown Chicago.) There were poor air connections to other cities from O'Hare, which quickly acquired a reputation among travellers as an

¹Sokol, Commerce, Oct. 1955, p. 20.

²Sun-Times, Oct. 21, 1955.

³Ibid., Oct. 31, 1955. See Sun-Times, Sept. 17, 1955.

⁴Ibid., Oct. 29, 1955.

airport to avoid.¹ Regularly scheduled flights did not make the change at O'Hare that most persons had expected.

American Airlines began with twelve schedule flights per day at O'Hare Field in October, 1955, using Douglas DC-6 and DC-7 aircraft. Mr. J. W. Eaken was in charge of American's staff at O'Hare Field and remembered that the terminal had no heat initially. It was a cold October and November that year, so he brought an electric blanket from home to keep himself warm. Despite the humble beginnings, by 1969 American Airlines had increased its number of daily scheduled flights from twelve to 306, and the DC-6 and DC-7 planes were replaced by an all jet fleet.² What happened with American Airlines was typical for other air carriers also.

In the first two months of operation 60,000 passengers used O'Hare as only four of the airlines transferred as much as ten per cent of their traffic. In contrast about 9,000,000 passengers used Midway Airport in 1955.³ Not many flights moved to O'Hare, because Midway's landing fee was only 4¢ per 1,000 pounds compared to O'Hare's 20¢;

¹Peter Reich, "10 Years Old, O'Hare Continues to Boom," Herald-American, Oct. 31, 1965. See Kirchherr, "Airport Land Use," p. 127, and letter, Donoghue, Apr. 24, 1970.

²Letter, Mr. Arthur Jackson, Director of Public Relations, American Airlines, to Doherty, Dec. 23, 1969.

³Sun-Times, Jan. 9, 1956.

Midway's facilities were superior also.¹ It had been planned to hold Midway's traffic to 6,000,000 passengers per year, shift thirty per cent of the traffic to O'Hare at its opening, and allow the latter to absorb the growth of Chicago's air travel. This did not happen. Some thought the lack of proper restaurant facilities was a reason why the airlines were hesitant to transfer traffic. In mid-1956, Marshall Field Company opened up a \$300,000 restaurant and lounge.² This made little difference; the airlines said that O'Hare was being used to its "capacities;" the city took the view that the carriers had to sell O'Hare and increase the service there.³ Narrow taxiways and the lack of gate positions limited O'Hare's use to ten per cent of Midway's traffic according to the air carriers. The addition of gate positions would entail construction on the terminal. Mayor Daley was not prepared to do this, but he did order the building of a new 2,600 foot taxiway.⁴

J. Patrick Dunne, city airport safety co-ordinator, and John A. Casey, city supervisor of airports, recommended

¹Malcolm Wise, Sun-Times, Nov. 13, 1960. See Tribune, Nov. 22, 1955.

²Editorial, Herald-American, May 10, 1956. See also Preble Staver, "Chicago Traffic Is Shifting to O'Hare," Aviation Week, VXIV (Apr. 2, 1956), 86.

³Thomis, Sept. 7, 1956.

⁴Ibid., Sept. 11, 1956. See also Tribune, Sept. 12, 1956 and Sun-Times, Sept. 12, 1956.

a reduction in the number of daily flights into congested Midway Airport from 920 to 850. Alderman John Egan of the aviation committee held a hearing to discuss safety at Midway, called one of the three most dangerous airports in the United States. One of the exhibits was a letter from the Civil Aeronautics Administration dated June 19, 1956, had stated that "immediate corrective action to relieve the present congestion" at Midway was "mandatory." All of the witnesses at Alderman Egan's hearing agreed, though, that Midway was safe.¹ This result, approval of the large amount of traffic at Midway, did not satisfy many city officials. Alderman Jack I. Sperling accused the airlines of bad faith in not transferring more flights to O'Hare. The secretary of the Top Committee, Spencer LeRoy, stated that the airlines hoped to increase the number of flights at O'Hare in 1957.²

Although traffic did not increase at O'Hare in 1956 a total of \$21.5 million had been spent by Chicago in ten years of expanding the airport. Of this amount, the city had supplied \$10 million, the state \$4.5 million, and the federal government \$7 million.³ In 1956 Ralph Burke had asked for a \$1.3 million grant from the federal

¹Sun-Times, Nov. 28, 1956, p. 32.

²Ibid., Dec. 15, 1956.

³Staver, Aviation Week, p. 86.

government. Chicago received \$432,500 for O'Hare improvements including the resurfacing and extension of the east-west runway, a fire house, an underground reservoir with pumping station, an entrance road, and for work on maintenance shops.¹ The new 8,000 foot northwest by southeast runway (14R-32L) was ninety per cent complete in 1955.² Authorities had hoped to commission it by June, 1956.³ It was opened in September with Mayor Daley participating in the ceremony. It had cost \$1.5 million to build.⁴

As with construction, there was a great improvement in O'Hare's financial status in 1956. The agreement with the airlines brought about the fiscal progress. In 1955, there had been a loss to the city of \$330,280 for operation of the airport, but this was reduced to a loss of only \$61.72 during 1956.⁵

¹United States Department of Commerce, 1956 Federal Aid Airport Program (Washington: U.S. Gov't Printing Office), p. 8. See also Tribune, Feb. 10, 1956; Sun-Times, Feb. 10, 1956.

²DeMent, Public Works Annual Report, 1955, p. 28. The designation 14R-32L means that laid out on a compass course, the one end is at 140 degrees and the opposite end at 320 degrees. See Ridgely Hunt, Chicago Tribune Magazine, Nov. 28, 1968, p. 38.

³Staver, Aviation Week, p. 86.

⁴Sun-Times, Sept. 26, 1956. p. 36. Charles E. Campbell, grandson of Ralph Burke, believed that plans were altered when the large jets were "seen on the horizon" which may have caused part of the delay along with finance and weather. Letter, Campbell to Doherty, Dec. 1969.

⁵William E. Downes, Jr., Director of Airport, Annual Report of the Bureau of Aviation for 1956 (Chicago: n.p., 1957), p. 25.

1956 was also the year of the death of Ralph Burke, the man who probably did more than any other to that time to foster expansion at O'Hare Field.¹ Ralph H. Burke was an unusual man. He was a Methodist, Republican, and northern Irishman when most of his fellow Irish in Chicago were Catholic, Democratic, and from the southern part of Ireland. Burke was born on May 22, 1884, to the family of Edmund W. Burke. His father was a lawyer and wanted his two sons, Webster and Ralph, to enter the legal profession. Webster eventually became dean of the Kent College of Law, but Ralph went into engineering, obtaining a degree from the Massachusetts Institute of Technology in 1906. Ralph, to please his father, interrupted his work with the Chicago Sanitary District to attend the Kent College of Law from 1913-1915, but engineering was his vocation. Before establishing a firm to do consultant work on airports for Chicago in 1946, Burke had been the district engineer of the Illinois Waterway Commission, the chief engineer and general superintendent of the Forschner Contracting Company of Cicero, Illinois, the chief engineer of the department of subways and superhighways of the City of Chicago, the deputy coordinator of

¹The Chicago Tribune would hold that its former editor and owner, Colonel Robert McCormick, did as much or more than anyone during the 1940's and 1950's to make O'Hare Field a great airport. The Tribune did do much to mold opinion for the selection of the site and to push construction there. See Editorial, Tribune, Jan. 16, 1962.

Civilian Defense for Chicago, the chief engineer of the Chicago Park District, and the executive director of the Economic Advisory Council of Chicago.¹

Mr. Ed. Purcell of Ralph H. Burke Associates stated with some justification that O'Hare Field was based upon Burke's original concept.² Burke not only planned and directed construction of the facilities at O'Hare and handled requests for funds from the state and federal government, he also negotiated with the Chicago Airlines Top Committee until Virgil Gunlock became commissioner of public works in the early 1950's and continued to give leadership in the negotiations after that. An editorial in the Tribune in late August, 1956, following Burke's death, told how politicians had "sat at his feet."³ George L. DeMent affirmed that the Burke group had acted as a separate department until he became the commissioner of public works. After Mayor Daley was elected, Mr. Burke and Commissioner DeMent went to the mayor's office and concluded a different arrangement for control over the work on O'Hare. Plans and other materials concerning the airport were brought to the Public Works Department, and the Burke organization no

¹Interview, J. L. Donoghue. See also Who's Who in Chicago and Illinois, p. 94 and letter, Martha Burke Campbell. Ralph H. Burke Incorporated became Ralph H. Associates after Burke's death.

²Interview, Oct. 22, 1969.

³Letter, Donoghue, Apr. 24, 1970.

longer acted alone.¹

J. L. Donoghue, president of Ralph H. Burke Associates, stated that Burke had possessed the complete confidence of Mayors Kelly and Kennelly as well as that of the commissioners of public works, Hewitt and Gunlock. This was not true of Burke's relationship with Mayor Daley and Commissioner DeMent, so it was likely that Burke would have been replaced as the airport consultant had he not died in August, 1956.²

Ralph Burke's secretary for many years, Sylvia A. Vernier, remembered him as a diplomatic person who, when things became tense, could say "just the right thing to break the ice . . . perhaps with a story or joke." She had never been to his office at O'Hare Field but recalled talk concerning it as a "barracks with pot-bellied stoves, rats running around. . . ."³ Charles Campbell, oldest grandson of Burke, took many trips to the West with his grandparents during summer vacations. They always traveled by train, and would inspect airports at Los Angeles, San Francisco, and other major cities. Mr. Burke was very concerned with luggage handling and inspected many conveyor systems.⁴

¹Interview, DeMent, Oct. 24, 1969.

²Interview, Jan. 5, 1970.

³Letter, Mrs. Vernier to Doherty, Dec. 16, 1969.

⁴Letter, Campbell to Doherty, Dec., 1969. J. L. Donoghue said Mrs. Burke was afraid to travel by airplane.

Burke was innovative; his practice as superintendent of Forschner Contracting Company had been to bid a job at no profit and then attempt to develop a technique to improve efficiency. "Never leave well enough alone" was a favorite phrase of his. He had to inspect things first hand, and his assistant, J. L. Donoghue, was sometimes concerned for the older man because of the places to which he might climb to examine construction. The loading ramps, enclosed walkways, or "jetways" for boarding planes were Burke's innovations.¹

Burke's engineers developed his idea for boarding planes from the second floor of the Finger "B" terminal extension by drawing blueprints of possible ways to apply the principle. When this was done, Burke phoned William A. Patterson of United Airlines and invited him out to lunch. Burke, Patterson, and Donoghue were the only persons present, and Mr. Burke did not mention anything about the loading ramp. When the lunch was over, Patterson asked Burke why he had asked Patterson to lunch. Burke's response was "Bill, I thought you had a first-class airline?" Patterson inquired what was wrong with United Airlines. Burke complimented it for having first class pilots, hostesses, and equipment, but said that once the engines of the airplane stopped, the bus companies did a far superior job.

¹Interview, Donoghue.

The motor vehicle lines unloaded their passengers under cover. If the weather were poor, the best that United could offer was an umbrella. Patterson became interested, and United Airlines developed the first prototype of the enclosed loading ramp. Others copied the concept. Burke, when asked why he had not patented the idea, replied that it had been developed with public money and that Noah had had the original plan anyway.¹

When Burke died in mid-1956, O'Hare had a small two-level terminal building that had a Y-finger with sixteen gate positions extending from it. There also were storage tanks capable of holding 800,000 gallons of fuel plus a truck stand system to service the planes. The control tower was complete with surveillance radar. There were five runways with apron areas and taxiways as well as a parking lot for 1,400 cars.² Burke was instrumental in obtaining all of these things and made other contributions too. His plans for high speed taxiway turnoffs were unique. He had provided for the means to obtain rail transportation to the terminal and directed the purchase of most of the land at O'Hare Field. His plans had included an underground fueling system. The terminal is where he had located it, and he was responsible for part of the runway scheme and the

¹Ibid. See also Thomis, Mar. 11, 1958.

²Staver, Aviation Week, p. 87.

roads. Burke had proposed a scheme to handle more traffic than most of the experts thought would occur in so brief a time. J. L. Donoghue asserted that things change rapidly, and a design must be made for a period; that some aspects of the Burke model have been improved upon, but that Ralph Burke made a tremendous contribution to and a lasting impression on Chicago-O'Hare International Airport.¹

Ralph Burke expired from an aneurysm of the heart on August 22, 1956. He was seventy-two years old. This memorial resolution to him was proposed by Alderman John Egan and passed by the City Council on September 10, 1956.

Ralph H. Burke:

contributed in great degree to the development of Chicago's airport and other facilities. He was responsible for the engineering and supervision of construction of O'Hare Field, Chicago International Airport and Meigs Field . . . served as Chief Engineer for the Department of Subways and Superhighways . . . Chicago has lost the services of a man of unusual ability who will be remembered for his outstanding contributions to our city as a consulting engineer in the development of a number of the city's important projects. . . .²

He had wanted his company to survive and provided that his stock be sold to persons working for Ralph H. Burke Associates. Outside control, even by his heirs, was opposed; the rule was established that an employee leaving the company

¹Interview, Donoghue.

²Daley, Journal of the Proceedings, Sept. 10, 1956, p. 3218.

for any reason must offer his stock for sale to the remaining employees. Burke's wishes were carried out and even today the firm is internally controlled. Though less than thirty persons now work for Ralph H. Burke Associates, the company is prospering as engineering-architect specialists on airports, parking structures, and recreational facilities.¹

When Burke died, something was occurring which would force O'Hare Field into the tremendous expansion program which made it the world's most important civilian airport. This "something" was the coming of the commercial jet airplane.

In the early 1950's when much of the planning by Ralph Burke was taking place, the Douglas DC-6 and Lockheed Super-Constellation as well as the Boeing Stratocruiser were all piston-engined planes performing efficiently and effectively and using landing strips of 6,400 feet or less, the length of the longest runway at Midway Airport. BOAC, the British Overseas Airways Corporation, became the first commercial company to adopt jets with its use of the de Havilland Comet on flights from Britain to South Africa. The Comet consumed much fuel, had a range of 1,400 miles, and carried only thirty-six passengers. The jet seemed less likely to replace piston-engined planes when the de Havilland Comets began disintegrating in midair.²

¹Interview, Donoghue.

²Scullin, International Airport, pp. 119 and 137.

The Boeing Corporation was the first American company to develop a jet commercial liner, the Boeing 707, and had its plane accepted by the Air Force as the KC-135, a fuel carrier. Douglas Aircraft feared it might end up as a minor company unless it also developed a jet engined transport. Arthur E. Raymond, Douglas vice president in charge of engineering, and his staff had built many airplanes by computer. They did this for a proposed jet transport and the resulting design, the Douglas DC-8, was very similar to the Boeing 707. The cost of producing the DC-8, however, seemed prohibitive.¹ Douglas decided to take a daring gamble. Rather than building a prototype DC-8 and completely testing it before going into full production, which would have put them years behind, Douglas chose to begin manufacturing the planes and to test fly the first seven aircraft produced. Strange as it may seem, the Boeing Company was pleased that Douglas had committed itself, for this commitment made jets seem to be the plane for the future.²

In the spring of 1955 William A. Patterson, president of United Airlines, predicted that jets would be in passenger service use by 1961.³ On October 14, 1955, Pan American

¹Ibid., pp. 142-44.

²Ibid., pp. 146-47.

³Fletcher Wilson, Sun-Times, Apr. 2, 1955. See also the Chicago South Town Economist, Sept. 18, 1955.

World Airways ordered the first jet fleet, 20 Boeing 707's for delivery at the end of 1958 and 25 Douglas DC-8's to be ready by December, 1959. United Airlines followed Pan American's lead and ordered 30 DC-8's on October 26, 1955.¹ This was just four days before the opening of O'Hare Field to regularly scheduled commercial flight.

George Scullin held that competition forced the airlines to go heavily into debt to purchase fleets of jet aircraft, for they would fly twice as fast with two times the number of passengers of a piston-engined plane. Scullin felt that this made them four times as efficient.² No doubt prestige must have played a part in the decision by the carriers to convert to jet aircraft, but there was great concern about jets among airline leaders in the period from 1955 to 1958. The large military jets were extremely noisy, relatively difficult to maneuver on the ground, and emitted a great amount of fumes. The commercial version did not create the problems that many had anticipated, but in the middle 1950's the different opinions among the airlines as to whether the jet should be acquired at all varied "from

¹Scullin, International Airport, pp. 149-50. See Editorial, Daily News, Oct. 31, 1955.

²Scullin, pp. 148-49.

ultra conservative to conservative."¹

The first half of the decade of the 1950's had been a struggle by Ralph Burke and his colleagues to develop facilities at O'Hare Field. A great effort also had been made by the city to get the commercial airlines to transfer traffic from Midway. By 1956 only partial successes had been achieved in these endeavors. But 1956 was a period of transition for O'Hare Field, the end of the Burke era and the beginning of the age of the jets. The coming of the jets would force a rapid development at O'Hare, an expansion for which the foundation had been prepared by Ralph Burke.

¹Letter, Arnold W. Thompson of Arnold Thompson Associate, Airport Consultants, former architect with American Airlines, to Doherty, Feb. 13, 1970. Mr. Thompson in using the words "ultra conservative" and "conservative" meant that the airline executives were afraid to take a risk in switching to jet planes.

CHAPTER VI

NEGOTIATION AND PLANNING FOR THE JET AGE

In 1957 Midway Airport in Chicago was the busiest commercial airfield in the world, but O'Hare Field was unable to handle large volumes of passenger traffic. However, Midway's runways were not long enough for the jet planes already on order by the airlines and could not be extended to handle them.¹ If jet airliners were to be accommodated, an expansion program involving much negotiation and planning would have to be made for Chicago-O'Hare International Airport. A change in attitude would also have to take place in the minds of the airlines' executives as well as the public, an attitude of acceptance of O'Hare rather than reliance on Midway.

There had been a city investigation of safety conditions at Midway in 1956 which had found the airport was not dangerous, but in early 1957, James T. Pyle, administrator

¹Sun-Times, Aug. 11, 1957. The smaller Boeing 727 passenger jet, developed in the early 1960's, was able to use Midway Airport.

of the Civil Aeronautics Administration, stated that Midway Field was overcrowded; that forty-five airplane movements per hour was a reasonable maximum, but sixty-two movements per hour were scheduled at peak hours there. Pyle proposed that no additional scheduled operations be permitted at Midway and that some flights be transferred to O'Hare Field from Midway.¹ The Tribune suggested that Mayor Daley and the City Council act to stop the overcrowding of Midway by passing an ordinance limiting its use. The newspaper declared that every condition desired by the airlines at O'Hare--more ramp space, a new diagonal taxiway, better lights and communications--had been met. It also claimed that driving time to the Loop was only ten minutes longer from O'Hare than Midway, and the statement by the airlines that the passengers preferred Midway was only an excuse for the commercial carriers to remain where they were.²

The airlines attempted to accede to the desires of Chicago and the C.A.A. United Airlines announced that it would double its operations at O'Hare Field by the end of 1957 to twenty arrivals and twenty departures per day.³

¹Tribune, Feb. 1, 1957. See also Sun-Times, Nov. 28, 1956.

²Editorial, Feb. 7, 1957, p. 16.

³Tribune, Feb. 19, 1957.

United was commended for this by an editorial in the Sun-Times which asserted that O'Hare was handling fewer flights in February, 1957, than it had when it opened in October of 1955. The editorial suggested the City of Chicago by ordinance limit the number of flights there even though the Chicago Airlines Top Committee had told Mayor Daley that the air carriers would increase the number of scheduled operations per day at O'Hare Field from ninety to one hundred and fifty or more daily flights.¹

Aldermen were angry at the failure of O'Hare to develop as had been anticipated and accused the airlines of "stalling, procrastination and dragging their feet." Alderman David L. Hartigan asked Curtis Barkes, chairman of the Top Committee, to explain the "real reason" for the small transfer in traffic to O'Hare. The latter replied: "You get more passengers on planes if you fly them out of Midway. The driving time to O'Hare is longer. The taxi fare to O'Hare is also quite a bit higher." Alderman John Egan gave his opinion that the airlines would "continue dragging their feet" until 1959 when the jets came in. J. Patrick Dunne, city airports safety co-ordinator, accused the airlines of "double talk." He said that congestion at Midway caused passenger delay and missed schedules.²

¹Editorial, Feb. 21, 1957. See also Sun-Times, Feb. 15, 1957.

²Charles Pierce, Sun-Times, Feb. 20, 1957. See also White, Saturday Evening Post, p. 136.

Curtis Barkes, speaking for the airlines, stated that the switch to O'Hare had to await the doubling or tripling of facilities there and that such an expansion must take place to prepare for the delivery of passenger jets in 1959.¹ Merrill C. "Babe" Meigs, a long-time leader in Chicago aviation, blamed the City Council for lack of operations at O'Hare when he declared that:

Everything hinges on the city's failure to provide adequate access to O'Hare by the time it was opened to commercial traffic. It's true that the airlines promised to move a third of their schedules to O'Hare by the end of last year [1956]. But it's also true that the city council promised to complete the Northwest Expressway in the meantime. Mr. Public isn't going to accept O'Hare until the city makes it easy for him to get there.

During the rush hours, it took an hour-and-a-half to go from downtown Chicago to O'Hare Field on congested roads. O'Hare was busiest when the roads were busiest, so the airlines did not wish to transfer traffic there.²

In the spring of 1957, United, Capital, and American Airlines did increase their use of O'Hare Airport, but it still was not busy.³ William E. Downes, city director of

¹Tribune, Feb. 25, 1957.

²White, Saturday Evening Post, p. 136. This was true until the latter part of 1960 when the Northwest (Kennedy) Expressway was completed. See Glenn Garrison, "Jets Spur Shift from Midway to O'Hare," Aviation Week and Space Technology, LXXII (June 20, 1960), 92-93.

³Sun-Times, Apr. 28, 1957.

airports, feared that O'Hare would continue to be underused until the arrival of the 141 jets that the airlines had on order. Fully loaded, the 120-passenger planes would require a runway of about 9,500 feet. The longest runway at Midway Field was only 6,410 feet and could not be lengthened to more than 6,900 feet because of development around the airport. There would have to be a shift to O'Hare.¹

Events were moving towards a climax in 1957. In January of that year, Mayor Daley announced that in June, Chicago would conduct a referendum for a \$6 million bond issue for construction funds for O'Hare.² The referendum, an issue of general obligation bonds backed by the credit of Chicago, passed.³ This was not a great amount of money, but it did give the city some funds with which to work in adding runway and terminal facilities.

Curtis Barkes of United Airlines told the aviation committee of the Chicago Association of Commerce that the capacity of O'Hare Field "must be brought up." He called for a doubling of runways open to jets, a tripling of the

¹Ibid., Aug. 11, 1957, p. 32. See letter, A. J. Brough, Jan. 27, 1970. See also letter, Mr. George C. Van Nostrand, former Top Committee representative and vice president of American Airlines, Jan. 20, 1970.

²Files of Paddock Publications, Arlington Heights, Ill., dated Jan. 24, 1957.

³Interview, Mr. Arthur Green, Comptroller's Office of the City of Chicago, Aug. 21, 1969.

terminal space, a doubling of the number of gate positions, enlargement of the parking area, and an increase in the amount of fuel storage facilities.¹ Commissioner of Public Works George DeMent asserted that \$100 million needed to be spent to develop O'Hare, but that only \$22 million had been disbursed.²

Although both the City of Chicago and the commercial airlines agreed on the need for a huge expansion program at Chicago-O'Hare International Airport, they did not concur on how such development would be financed. Chicago had no Port Authority such as existed in New York City which could collect revenues and tolls from highways and bridges for the initial financing of airport facilities. Chicago concluded it would not ask the taxpayers to pay for building the airport. "The airlines were understandably reluctant to shoulder this responsibility when they did not control the amount to be expended and when it was doubtful whether some airlines could pay their proportionate share of the expenses."³ The fact that the air carriers were committed to the great expense of acquiring jets also made

¹Sun-Times, Mar. 16, 1957.

²Ibid., Mar. 26, 1957.

³Letter, Van Nostrand, Nov. 17, 1969.

them hesitant to assume any further monetary burdens.¹

The relationship between cities and airlines had been different in the 1920's and 1930's. At that time the cities had vied for air service and had offered incentives to attract the airlines by charging low landing fees and terminal rentals. Such arrangements had become standardized. Then cities began to resist the assumption of the financial responsibilities as services for operating an airport became more costly. Air transportation found its role changing from that of an invited guest to one of being a full-paying lodger. The airlines believed that they should pay landing fees and terminal rentals for the use of O'Hare or any airfield. They resisted attempts by the city to have the air carriers financially guarantee the many millions of dollars necessary to develop O'Hare Field. Such an undertaking was not only monetarily risky, but had never been done before in the relationship between cities and the airlines. The seventeen commercial carriers operating in Chicago decided to coordinate their efforts in negotiations with the city. Mr. Richard Grossman, member of a law firm representing United Airlines, was selected to act for the air carriers and proved to be an able coordinator of varying airline views. Kenneth Osterburg, who had done some economic studies for Northwest Airlines,

¹Scullin, International Airport, p. 136.

was retained to aid in the formulation of views on fees and rentals at O'Hare Field.¹

Mayor Daley was determined to have the airport expanded without further delay, but felt that Chicago taxpayers should not finance an operation that primarily benefited the airlines and the traveling public of the entire United States. The city would develop plans in co-operation with the airlines or proceed alone, assume the financing, and then establish fees to defray the costs. The latter action would be risky to both the city and the airlines. It would be better to negotiate. At first the task of negotiation for the city was performed by Mr. DeMent, the commissioner of public works. The form of the lease became clearer as the bargaining proceeded. Areas of agreement and disagreement became more apparent. Positions grew harder until a settlement seemed to be nearly impossible. Negotiations were moved from the office of Commissioner DeMent to the office of Mayor Daley where they remained for about three months with meetings once every ten to fourteen days.²

Mr. George Van Nostrand recalled vividly the decisive meeting in April, 1957, when agreement was reached. There were fifteen to twenty airline officials in the mayor's office at City Hall. Mayor Daley was flanked by

¹Letter, Van Nostrand, Nov. 17, 1969.

²Ibid.

George DeMent, commissioner of public works; William Downes, director of airports; and John Meliphany, legal counsel for the City of Chicago. There had been eight to ten unresolved issues, but these were consolidated. Each side had demands, however, that the other side would not concede, and it appeared to be a hopeless deadlock. "Mayor Daley rose from his chair, glanced around the room and shocked most assembled by stating the City would waive its . . . requested concessions on condition the airlines similarly disposed of their . . . requests." The airlines had a quick ten-minute caucus outside of the mayor's office. "Reconvening, Mr. Grossman announced the airlines' acceptance of this proposal," and the basis for the O'Hare lease was born.¹

The airlines had given in to the demands of Mayor Daley and the city by agreeing to a revenue bond issue to construct jet facilities at O'Hare. This revenue bond issue would be based on the income from the airport and guaranteed by the commercial carriers should airport income be deficient.² The lines had wanted Chicago to pay for half of the cost of expansion for the terminal and runways. This was not done. The city had desired a \$147.5 million bond issue

¹Ibid. See also letter, Robert Sampson, Chairman of the Top Committee, to Doherty, June 5, 1970 which stated that the airlines did not take a "non-negotiable" stand on any of the issues discussed.

²Sun-Times, May 9, 1957. See also Wayne Thomis, June 14, 1957.

but had acceded to the carriers' insistence of one for \$85 million.¹ It finally had happened--necessity and perseverance had enabled city and airline officials to bridge conflicting interests. The decision to build one of the world's great airports was made.

Mayor Richard J. Daley was credited with negotiation of the most favorable contract ever achieved between a city and the airlines.² George Van Nostrand declared that the mayor had held fast to his chief objective--that Chicago taxpayers would not pay for the construction of O'Hare Field.³ Mr. John Duba, former administrative assistant to the mayor, stated that he considered Daley's "personal intervention and forceful stance in negotiations with the airlines as having been critical to the development of the airport."⁴ Mayor Daley was referred to by a non-admirer as "King Richard" because he had demonstrated strong will-power. A different

¹Daily News, Apr. 24, 1957. See also Tribune, Apr. 28, 1957 and Malcolm Wise, Sun-Times, Nov. 13, 1960. Chicago was the first city to insist on lease commitments from the airlines before authorizing the issuance of revenue bonds. It was the first time that the carriers contracted in advance to supplement airport concession revenues with funds sufficient to insure servicing the airport revenue bonds through variable landing fees. Chicago agreed that all revenue from all the airport users would go to defray airport costs. In doing this, the city abandoned any prospects for profit on the operation of O'Hare. Letter, Van Nostrand, May 21, 1970.

²Tribune, Apr. 28, 1957.

³Letter, Van Nostrand, May 21, 1970.

⁴Letter, John Duba to Doherty, Feb. 3, 1970.

person, who also wished to remain anonymous, remembered that the mayor would "not hear" statements from airline personnel with which he did not agree. Carter Manny, a partner in C. F. Murphy Associates (formerly Naess and Murphy) and project manager for the expansion of O'Hare in preparation for the jets, called the mayor determined with obvious intentions for the common good.¹ These qualities were important in achieving a settlement with the air carriers, and Daley does consider the construction of Chicago-Field as one of the major accomplishments of his era as mayor.²

During the month of agreement with the airlines, April, 1957, the city called in Naess and Murphy (C. F. Murphy Associates) Architects and Engineers to study the proposed work at O'Hare. The Naess and Murphy company was told to check the estimates for improvements which had been prepared by Ralph Burke and approved by the airlines and to review the Master Plan for O'Hare.³ Naess and Murphy was an experienced organization. It had designed the Bunker Hill (Grissom) Air Field at Peru, Indiana and the Bell Air Base at Hamilton, Bermuda.⁴ In Chicago, the Prudential

¹Letter, Manny to Doherty, Jan. 29, 1970.

²Tribune, Apr. 19, 1970.

³Manny, "Log," p. 1.

⁴"Rush Program Readies O'Hare for Jet Age," Excavating Engineer, Nov. 1960, p. 25.

Building and the Sun-Times Building were credited to it.¹ Naess and Murphy worked under the control of the Public Works Department, headed by George DeMent, which was responsible for construction by the city. (The Department of Aviation under Commissioner William Downes was in charge of the operation, but not the construction, of the airport.)² Commissioner DeMent agreed in July 1, 1957, to employ the firm, Landrum and Brown of Cincinnati, Ohio, as airport consultants under Naess and Murphy to help prepare a development guide for the program.³

Naess and Murphy said it needed time to study the problem of the terminal area and prepare a design. Work on the runways and utilities would be done first. Questionnaires were sent to the airlines asking for their space requirements and other needs. On August 15, 1957, the firm placed Mr. Stanislaw Z. Gladych, a well-known architect, to work on the terminal design study.⁴ Modifications had to be made on the 1956 Master Plan of Ralph Burke. The Boeing 707 jet airliners would be too large to maneuver

¹Wise, Sun-Times, Nov. 13, 1960.

²Interview, DeMent, Oct. 24, 1969.

³Manny, "Log," p. 1. Landrum and Brown made the first market research type of analysis done in an airport study. Using Chicago census tracts, it found the economic level of the area and translated this information into air traffic potential through 1965; see Manny, p. 46.

⁴Ibid., pp. 1-3.

between the fingers of the Burke terminal; projections of automobile traffic had been too low, and the proposed multi-deck parking lot was inadequate. The Civil Aeronautics Authority eventually disapproved of tangential runways, so O'Hare went to a plan of landing strips parallel to those already built.¹

Originally the designers, Naess and Murphy, proposed a central terminal with mobile lounge buses to transport passengers to the airplanes. Carter Manny supervised a group that conducted studies, conferences, and made sketches of such a plan.² The architects felt a mobile lounge system would solve gate problems and allow for a more simple terminal. The airlines opposed the idea because they felt O'Hare had too much connecting traffic and that the problem of transferring passengers might be great; the bus unit costs were quite high, and there were doubts about the use of these mobile lounges because such a scheme had never been tried in the United States.³

¹Interview, Carter H. Manny, Jr., partner in C. F. Murphy Associates (Naess and Murphy), Jan. 7, 1970.

²Robert H. Cook, "O'Hare Walking Distance Stirs Criticism," Aviation Week and Space Technology, LXXIX (July 15, 1963), 45. See also Thomis, Tribune, Nov. 1, 1959, p. 32 and Thomis, Nov. 8, 1959. See Appendix for picture of this plan.

³Letter, Arnold W. Thompson of Arnold Thompson Associates, Airport Consultants, to Doherty, Feb. 13, 1970. The mobile lounge idea was finally accomplished at Dulles International Airport near Washington. Letter, Manny to Doherty, May 6, 1970.

The second layout suggested by Naess and Murphy was a satellite building system--separate buildings for at least the major airlines surrounding a rectangular parking area.¹ The carriers gave approval to this plan, subject to review, but American Airlines which felt the interchange problem needed a consolidated terminal with a minimum of walking.² George Van Nostrand, the representative for American Airlines on the Top Committee in 1957, explained that the "basic question was whether the design would incorporate a series of terminals for at least each of the major airlines serving Chicago or consist of one terminal accommodating all the airlines." He stated that the majority of carriers ultimately favored one terminal for three reasons. The first was passenger convenience. As Chicago's air traffic had a high percentage of changes to other flights, a series of buildings would mean much busing. Cost was the second factor. A single terminal was less expensive as there would have to be less duplication of facilities. The third reason given by Mr. Van Nostrand in favor of a unitary terminal area was the possibility of radio controlled landings. One terminal building would better conserve space and interfere less with tangential runways which could be used with safety if operations

¹Cook, "O'Hare Walking . . .," p. 45.

²Manny, "Log," p. 25. This was the preferred scheme of Naess and Murphy. Letter, Manny to Doherty, May 6, 1970. See Appendix for picture of this plan.

were radio controlled.¹ The spreading of the terminal area would needlessly take up valuable land under such conditions.

On January 10, 1958, the Daily News printed a story about the Master Plan of 1956 being changed. Paul Gapp of the Daily News called Carter Manny of Naess and Murphy for more information on January 13th. Gapp had seen accurate drawings of the new Master Plan studies but he was not aware of cost estimates on the revisions. He would not identify his source for the plans. The journalist obtained little satisfaction from Manny, but on January 14th the Daily News ran another story about O'Hare with drawings of proposed terminal changes. Other Chicago newspapers sought city officials and Naess and Murphy for whatever information they could obtain. Mayor Daley considered releasing cost estimates to the reporters but was persuaded not to do so. The other newspapers were unhappy, because they were unable to acquire information about the progress of plans

¹Letter, Jan. 20, 1970. Three terminal buildings exist at O'Hare but the concept is that of a unitary terminal. Charles Landrum of Landrum and Brown, Airport Consultants, said that O'Hare is "a major connecting airport facility. Approximately forty-five percent (45%) of the domestic enplaned traffic is connecting in nature. Approximately thirty percent (30%) is connecting traffic between different airlines or interline connecting traffic and approximately fifteen percent (15%) is on-line connecting traffic or connections made on the same airline." Letter to Doherty, Jan. 13, 1970.

for O'Hare.¹ Paul Gapp had correctly stated that Ralph Burke's plan for a multi-level parking lot was going to be dropped and that his projected massive single terminal with its great cross flow of traffic had been replaced by a plan for a series of separate, connected terminals.²

George Van Nostrand of American Airlines visited the Naess and Murphy offices on January 29, 1958 to press for use of the split finger ("Y") concourse extension of Ralph Burke. Richard J. Winn, architect for American Airlines, also supported the split finger concept strongly. Naess and Murphy wished to avoid controversy and decided to present a number of schemes and allow the city to decide as to which it wanted. On February 10, 1958, James Cunningham, one of the bankers, called Carter Manny to say that the mayor was quite concerned about the slowness with which plans and estimates were available. But the latter could not be developed until a terminal design was agreed upon. The architects of Naess and Murphy were developing Dick Winn's (American Airlines) plan variation. It consisted of three terminal units with short connections between them and split fingers projecting outward from the center of terminal. Commissioner DeMent stated that consideration had to be given to American Airlines as one of the important

¹Manny, "Log," pp. 33-34.

²Daily News, Jan. 14, 1958, p. 1.

supporters of the program. DeMent wanted an acceptable plan as soon as possible.¹

Van Nostrand felt strongly in favor of the split finger, and he went to George DeMent on February 14, 1958 in an attempt to obtain an acceptable terminal design. Carter Manny, Stan Gladych, and Walter Metschke of Naess and Murphy were called to DeMent's office. Commissioner of Aviation William Downes and Richard J. Winn were also there in a meeting which lasted until 6:30 P.M. There seemed to be an impasse until Gladych made a sketch on the back of an envelope. He had spread the Burke star-shaped terminal into the form of an "U". United Airlines had indicated that it preferred a straight finger, so Gladych placed a straightconcourse or extension between each of the three "Y's" which projected from the terminal. American Airlines' representatives George Van Nostrand and Dick Winn were satisfied, and the plan for the O'Hare terminal was born.²

¹Manny, "Log," pp. 36 and 39-40.

²Ibid., p. 41. Also interview, Manny and letter, Manny, Mar. 29, 1970. Arnold W. Thompson had stated that Dick Winn, American Airlines' architect, "was the father of the layout of O'Hare as it is today;" he believed he had seen Winn working on a basic finger layout at the latter's room at the Palmer House in Chicago during one of the many Chicago meetings. See Naess and Murphy, Chicago-O'Hare International Airport Engineering Report First Stage Development Program (Chicago: n.p., Nov. 14, 1958), p. 2. See Appendix for sketch made by Gladych as well as designs incorporating the split finger (Y) extension which were not accepted.

Carter Manny announced in a press release that the star shaped terminal of Ralph Burke had been abandoned in favor of a "widened U shape" which could provide more parking area and space for the jets to maneuver. The control towers would be situated in the parking lot inside the "U". Access to the arrival and departure zones would be through concession areas, an arrangement that would stimulate buying.¹ On March 5, 1958, Naess and Murphy were able to begin working on the interior plans for the terminal.² Shortly after the interior design began, there was an account in the newspapers that the Chicago Airlines Top Committee had accepted the plan for O'Hare development but with four qualifications. The reservations were that a study of air traffic by the Civil Aeronautics Administration might modify the plan; that there be a maximum utilization of existing facilities at O'Hare; that there be a mutual agreement on cost between the city and the airlines; and that there be a mutual agreement on "priority and staging of construction." All of the provisos show that holding costs down was important to the airlines.³

The design of the terminal was controlled by the concepts of "concentration, consolidation, and connections."

¹Thomis, Mar. 5, 1958. See also Manny, "Log," p. 45.

²Manny, "Log," p. 45.

³Thomis, Mar. 13, 1958. See also Manny, "Log," pp. 46-47.

The three terminal buildings were to be joined by "inclosed [sic], heated and air conditioned corridors."¹ Debate had arisen over whether the planning done by Burke was accepted because of its innovative nature or because of practical necessity. George Van Nostrand would hold that the one terminal concept of Ralph Burke with modifications was developed at O'Hare and that "Burke's split Y finger for every other concourse provided a feasible design to implement this concept since, with such modifications, it could accomodate the larger aircraft."² Arnold Thompson, airport consultant and former architect for American Airlines, stated that the "Burke plan" was constraining and that Naess and Murphy had favored its removal, but the airlines' financial control prevailed. Much had been invested in roadway systems, underground utilities, and the first terminal structure (Finger "B"), so the air carriers wanted the retention of such facilities to lower expenditures.³ There were, however, many changes made from the previous plan. The three sets of parallel runways is most obvious. The runways were made longer and stronger to serve the jets. Gate spacings were widened, the terminal area enlarged, and the parking lot expanded to four times the size previously provided. Naess

¹Thomis, Sept. 17, 1960.

²Letter, Van Nostrand, Jan. 29, 1970.

³Letter, Thompson, Feb. 13, 1970.

and Murphy also worked to achieve a visual harmony within the terminal as well as between the exterior of the terminal and the service buildings of the airport, such as the telephone exchange, heating plant, and the fire station.¹

The agreement on a terminal layout did not settle all the problems in that area. On April 3, 1958, United Airlines decided that it wanted a split finger ("Y") concourse extension too and proposed to new "Y's" leaving the existing one built by Ralph Burke for use with the international terminal.² Dick Winn told Carter Manny on April 30, 1958, that American Airlines had given United its choice of split fingers at an Airlines Technical Committee meeting. United chose the one nearest the existing facilities, and American took the other split finger. Trans World Airlines chose the straight extension between the concourses of American and United, and Eastern Airlines picked the straight finger by the control tower.³ Trans World Airlines wanted a two-level finger with a basement

¹C. F. Murphy Associates, "O'Hare International Airport," Progressive Architecture, Aug. 1963, pp. 102-3.

²Manny, "Log," p. 54. This was done; see Appendix for picture of terminal layout.

³Ibid., p. 66. These were the largest airlines and had priority. In 1970 they still are in the same locations. Dick Winn was killed in an airplane crash at night near LaGuardia Field in New York on February 3, 1959. Some of his terminal and concourse sketches were sent to his surviving son "Ricky." See Manny, "Log," p. 148 and letter, Van Nostrand, Jan. 20, 1970.

under the concourse. Eastern Airlines favored a one-level finger. The airlines' desire for different types of baggage systems, especially United Airline's plan for an overhead conveyor, also worried the designers, as separate systems would be more costly as well as architecturally difficult to achieve. Manny feared that Naess and Murphy might have to submit a baggage and interior design layout on a yes or no basis to the airlines.¹ Gate positions for loading from the fingers were allocated (both by number and location) with preference to the carriers transporting the largest share of Chicago's air traffic. The smaller airlines wished to have gate positions near the lines with whom they transferred the most traffic. These airlines did not receive much choice as to gates, so there was "horse trading" between the smaller carriers for receiving and departure positions.² At a Technical Committee meeting in early September, 1958, however, the airlines settled most of their differences over a common baggage handling system as well as gate and space assignments by compromising for the welfare of the expansion program.³ They agreed to accept the gates and space allocated to them by the city.

The physical facilities of O'Hare, especially those

¹Manny, "Log," pp. 93 and 104.

²Letter, Thompson, Feb. 13, 1970.

³Manny, "Log," p. 115.

of the terminal, were important, but so also was agreement on the financing for these facilities. Not long after a general design for the terminal had been approved, city officials and representatives for the underwriters of the airport bonds, as well as C. F. Murphy and Carter Manny, met in the mayor's office. It was the morning of March 19, 1958, and the reason for the meeting was the desire of Mayor Daley to speed the program along. The bankers asserted that they needed leases from the airlines and a quitclaim deed from the federal government before the bonds were sold. After everything was ready, the underwriters stated it would take from thirty to sixty days to market the bonds. Delegates of the major airlines joined the group in the afternoon. The lines sought a forty year bond issue, but the bankers asserted that a thirty year issue was much more saleable.¹ The same group, less airline officials, met again on April 17. The underwriters declared that the preliminary estimates of revenues and expenses had to be backed by detailed and supportable facts if the revenue bonds were to be sold. Allocation of airline and concession space needed to be indicated. Carter Manny replied that this could only be done after the airlines gave the architects definite space requirements. The mayor expressed the belief that

¹Ibid., p. 50. The bond issue that was sold in 1959 was for forty years.

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general data was sufficient for the time being, but he wanted a sound document to support the bonds.¹ It would take much study, effort, and negotiation before these problems would be solved.

One of the bankers opposed allowing the airlines to build any temporary facilities at O'Hare Field. Manny answered that the permanent buildings would not be completed before the end of 1960, and the jet operations would need additions to the existing facilities. Mayor Daley said he realized that there was a need for temporary facilities, but he preferred not to approve them until the airlines had agreed to a definite bond issue.² Even before this, in March, 1958, William Downes, Commissioner of Aviation, and Carter Manny, project manager for the O'Hare expansion program, had been fearful that a large program for interim facilities might delay the airlines' acceptance of permanent facilities.³ Why did this nervousness exist?

The reason for uneasiness by Downes and Manny was soaring costs. In April, 1957, the airlines had agreed to support a revenue bond issue of \$85 million for construction at O'Hare Field.⁴ The agreement was a general one, more a

¹Ibid., pp. 58-59.

²Ibid., p. 59.

³Ibid., p. 49.

⁴Daily News, Apr. 24, 1957; Tribune, Apr. 28, 1957.

promise of co-operation, rather than being specific and legal. During 1957, the Boeing 707 passenger jet airplane had proved to be less "tractable" than had been expected and "fully automatic flight control" by electronic means had not been perfected. The plan by Ralph Burke for the simultaneous use of tangential runways had to be abandoned. The runway change affected the placement of other facilities and estimated costs soared to \$128 million by 1958 at a time when the airlines were concerned about paying for \$2 billion of new jets to be delivered.¹ Additionally, the possibility was that \$128 million was a minimum cost; it included new construction, operation of the airport and debt service on revenue bonds.²

At a meeting of the bankers with officials of both the city and the airlines on May 23, 1958, Curtis Barkes read a letter from the Top Committee to the mayor which said the air carriers wished to reduce the expansion program by \$25 million. Wayne Thomis wrote a story on May 29, 1958, insisting that the airlines were going to push for temporary facilities and delay major construction until 1965. One of the bankers expressed the opinion to Carter Manny that the air carriers were attempting to pressure Chicago into issuing \$25 million of general obligation bonds

¹Thomis, Mar. 2, 1958, p. 8.

²Ibid., Mar. 6, 1958, part 4, p. 6.

backed by the credit of the city. Manny was disturbed by events.¹ The whole expansion program was in jeopardy unless the airlines guaranteed a revenue bond issue sufficient to develop an airport at O'Hare that would serve the needs of the jet age.

While settlement with the commercial air carriers was a slow and difficult process, the City of Chicago found the federal government co-operative with efforts to build a major, commercial, jet airport. The government originally had reserved all rights to fissionable materials on public lands deeded away, but Congress passed a bill which cleared Chicago's title to O'Hare by removing any claim the Atomic Energy Commission had to strategic minerals at the airfield.² Commissioners Downes and DeMent traveled to Washington on April 16, 1958 to speak with Air Force officials concerning the recapture clause by which the federal government could take O'Hare Field in time of national emergency as well as the frequency of military flights. An agreement was reached whereby Chicago would pay \$400,000 for relocation of the large alert hangar if the Air Force should ever be forced to move; and, in return, the federal government relinquished the recapture clause and agreed to the limitation of free

¹Manny, "Log," pp. 71-71.

²Thomis, June 14, 1957. See also Daley, Journal of the Proceedings, Jan. 17, 1958, p. 7091 and Sun-Times, Aug. 29, 1957.

military flight at O'Hare to a maximum of forty visual or eight instrument landing movements per hour. The bankers had favored such an accord to give security to the proposed bond issue.¹ The Air Force also had pleased Chicago in 1957 by eliminating the 168th Squadron of the Air National Guard which was stationed at O'Hare and using facilities of the federal government. The Squadron had 200 men and twenty-six F-84 jet fighters. The governor of Illinois, William Stratton, had not been consulted concerning the elimination, and he protested to the Pentagon to no avail. The National Guard unit was deactivated which must have been very humiliating for the governor.²

By mid-1958, therefore, issues with the Air Force had been resolved. The big problem remaining was disagreement between the city and the airlines over costs and financing for O'Hare Field. At a meeting between the bankers and commercial carriers on June 5, 1958, the latter acknowledged that they had spent time with the firm of Naess and Murphy examining plans in an attempt to reduce expense estimates, but had concluded that no significant reduction could be made. The air carriers believed that the annual sum of \$12 million, which they would have to guarantee for the

¹Sun-Times, May 12, 1958. See also Manny, "Log," p. 58.

²Sun-Times, Oct. 23, 1957, p. 56. See also letter, Donoghue, Apr. 24, 1970.

forty year bond issue, was too high. Mayor Daley asked what the lines felt they could pay and was told \$8.5 million per year. The bankers said they would see if the annual charges could be reduced.¹

Representatives of the airlines and city officials met in the office of Naess and Murphy on June 13, 1958, to discuss measures that could lower the cost of the bond issue. George Van Nostrand and Richard Winn of American Airlines presented figures that they had prepared during the previous day. They spoke of deferring the construction of the east-west runway, eliminating new work on the main northwest-southeast runway, reducing the bulk fuel storage system from a capacity of seven days to three days, cutting back on the heating-air conditioning plant, changing the two level concourses to one level, omitting interim facilities, and reducing the size of the parking lot and cargo areas.²

Meetings between the representatives of the airlines had often been "very difficult." Some of the smaller lines did not have sufficient personnel to attend all gatherings of the Chicago Airlines Top and Technical Committees and so participated only at the larger, public meetings. The major domestic carriers, United, American, and Trans World Airlines

¹Manny, "Log," p. 75.

²Ibid., pp. 78-79.

were "very competitive." Delta Airlines was clearly dominant among the regional carriers taking part in the negotiations. Capital was in the throes of bankruptcy and its role was negative. "At times the discussions became quite heated" when the carriers met to decide on policy.¹

Mayor Daley and Alderman Thomas Keane told the airlines that a cut in facilities would have to leave a complete airport. Privately the mayor indicated that he was almost ready to state that the city would deal with each line separately and allow them to build permanent facilities with their resources but Chicago would insist on no temporary facilities. Another meeting was held between the airlines and the underwriters on June 17, 1958. Curtis Barks, chairman of the Top Committee, disclosed that the airlines believed they could support a bond issue of \$100 million, exclusive of financial charges, and that all of the carriers desired two-level concourse extensions. The underwriters in turn suggested that bond coverage payment per year might be reduced to \$1.25 per \$1.00 of issue, which would leave a reserve fund for years of financial difficulty, if leases to the lines were raised to \$11 per square foot per year for terminal building rental. The air carriers resisted the suggestion, however, fearing that if they accepted high

¹Letter, Thompson, Feb. 13, 1970.

terminal rentals at O'Hare Field, other airports might use this as a leverage to raise rents.¹

Three days later, June 20, 1958, the bankers and airlines' representatives met again at the mayor's office. Curtis Barkes of United Airlines, called the "financial guiding light in the whole program" by Arnold Thompson, read a letter from the commercial carriers in which they agreed to an airport revenue bond issue of \$120 million for forty years at 4.75 per cent interest with an annual charge of \$8,987,000. The airlines had accepted the financial responsibility to guarantee the modernization and improvement of Chicago-O'Hare International Airport.²

No sooner was one problem settled concerning the establishment of O'Hare Field, than there often seemed to be another pressing difficulty. In September, 1958, President Dwight D. Eisenhower vetoed a \$100 million bill for aid to city and state airport development saying the federal government should get out of such programs.³ This was discouraging to persons concerned with O'Hare's expansion who believed a new east-west runway was needed, but now its construction would have to be postponed. Lease exhibits to support the bond issue were supposed to be

¹Manny, "Log," pp. 78 and 80.

²Ibid., p. 82. See letter, Thompson, Feb. 13, 1970.

³Sun-Times, Sept. 3, 1958.

ready by October 1, 1958, but were not on schedule. The lawyers were bogged down in accounting details, and even Commissioner DeMent was getting discouraged about the revenue bonds. In September also, the airlines declared that they wanted veto power over any future additions to the bond issue. As a result of this position, it was verbally agreed that if a difference arose concerning the necessity of future additions, Naess and Murphy would make the decision rather than the city or the airlines.¹ Carter Manny, C. F. Murphy, the bankers, and representatives of the airlines met with Mayor Daley on October 3, 1958, in order to placate the underwriters who desired a written statement from the air carriers that the latter would use the airport. The lines feared that if they did this, it would open them to possible contingent liability claims, the danger, because of some unforeseen event, of being financially accountable not only for what one line could reasonably guarantee but also for what others had guaranteed. If some airlines became bankrupt, the solvent lines might have to pay expensive landing fees to retain a high reserve fund. The air carriers were willing to guarantee sufficient revenue so that the bonds would be paid, but they feared that contingent liability might impair their borrowing ability. The attorneys for the city agreed to work out language which would

¹Manny, "Log," pp. 120 and 122.

try to limit contingent liability.¹

On December 29, 1958, the City Council passed the \$120 million Revenue Bond Ordinance by a 40-0 vote. The bonds would be paid chiefly by landing fees. O'Hare Field would be the world's first self-sustaining airport.² Governor Stratton signed a bill into law on February 11, 1959 that exempted the revenue bonds from state control under the Airport Authority Act. This meant that the issue would not be limited to thirty years. Bond holders were freed from the possibility of state interference under the act, and the largest revenue bond issue in Chicago's history became more saleable.³ At the last meeting representatives of the underwriters, the airlines, and the City of Chicago in the mayor's office at City Hall, an old, white-haired, distinguished looking gentleman came in with one of the bankers. The elderly man sat quietly in a corner, listening but saying nothing. The man was Charles Stewart Mott, formerly of the General Motors Corporation, who later subscribed to \$10 million worth of the bonds.⁴

A special meeting of the Chicago City Council was

¹Ibid., p. 127.

²Sun-Times, Dec. 30, 1958. See also Charles F. Murphy, Chicago-O'Hare International Airport, Final Progress Report, March, 1969 (Chicago: n.p., 1969), p. 1.

³Sun-Times, Feb. 12, 1959, p. 4.

⁴Interview, Manny, Jan. 7, 1970.

held in mid-February, 1959, concerning the issuance of the revenue bonds. The sale was approved, and the mayor signed the contract to accept the underwriter's bid of 97.76 per cent of the bond issue.¹ The city received \$117 million from Glore Forgan and Company in a ceremony on the morning of March 2, 1959.² Hard negotiations for two years had resulted in "a splendid job for the community."³ The agreement had been so solid and the program so well planned that the bonds sold at par and were soon 105, five dollars above par value.⁴

Since 1959, however, O'Hare has operated on the basis of airline agreements that are unique in that they guarantee that the airport will in no way be a burden on the taxpayers of Chicago. The agreements provide that landing fees are adjusted twice yearly to bring in varying revenues which, added to rentals and concessions income, are adequate to pay all direct and indirect operating and maintenance expenses of the airport and amortize the revenue bonds issued to finance capital improvements.⁵

Mr. George Van Nostrand, former member of the Top Committee and a person who played an important role in the

¹Casey, Chicago Aviation, p. 22. See also Manny, "Log," p. 151.

²Manny, "Log," p. 156.

³Garrison, Aviation Week, p. 93. See also Thomis, Sept. 17, 1960 who felt the city and the airlines had both "dragged their feet" until 1958.

⁴John Dreiske, Sun-Times, Mar. 19, 1958.

⁵Downes, Department of Aviation Annual Report, 1966, p. 12. See also letter, J. P. Dunne to Doherty, Aug. 27, 1969 and letter, A. J. Brough to Doherty, Jan. 17, 1970.

negotiations leading to the development of O'Hare wrote:

The O'Hare Airport lease indeed expressed a new concept for contractual relations between a city and the airlines. A concept under which an airport, with its airline and concession revenues, is self sufficient. Lacking any history, it became necessary for the airlines to underwrite the bonds through the lease. Relying on the probable growth in traffic, which is possible at a major airport, the airlines made the necessary commitments. It can be said the O'Hare Airport lease was borne [sic] of necessity and negotiated at arms length by constructive-minded city officials and airline representatives.

Van Nostrand continued that the risks taken by the airlines, some of whom had accepted lease term commitments greater than their corporate net worth, were very substantial. The air carriers had hoped that as business increased, unit costs would be greatly lowered.¹ This did happen.

Looking back at the negotiations in which he played such an important role, Curtis Barkes declared:

Those leases, and the bond ordinances which they supported, are unique and have proven to be successful and flexible. The rentals and fees paid by the airlines, and all the other users of O'Hare, cover all the cost and service all of the debt so that no part of the cost falls on the City of Chicago or the taxpayers. Neither does the City, which owns and operates the airport, make a profit on its operation.²

As the letter from Mr. Barkes, an executive vice president of United Airlines, demonstrates, the time came when the commercial carriers were pleased with the leases and revenue bond issue which they had agreed to support.

¹Letter, Nov. 17, 1969.

²Letter, Barkes to Doherty, Feb. 24, 1970.

For them the issue had been largely one of finance, and the traffic generated by the world's busiest commercial airport meant a reduction in landing fees from \$1.29 per 1,000 pounds in 1959 to less than \$.08 per 1,000 pounds in 1960.¹ The airlines did become thankful for the agreement that they had made. This was also true for the City of Chicago. Commissioner of Aviation William E. Downes testified before a congressional committee that he was grateful for the "long-term leases and use agreements entered into by the domestic airlines which back up the revenue bonds that provide the funds for our new jet-age terminal facilities."²

With the necessary financing available, the work that would develop O'Hare into a "jet age" airport could begin. The first construction contract for such expansion was awarded on March 30, 1959. On April 1, 1959, a ground breaking ceremony took place at O'Hare to inaugurate the site grading work under RB-1, the first contract issued under the revenue bond program.³ The coming of commercial jet planes had "forced a redesign of O'Hare Field's terminal facilities. . . . A redevelopment program of great

¹Jay McMullen, Daily News, Jan. 13, 1961.

²Statement of Federal Aviation Agency - July 17, 1962, p. 5.

³Murphy, Final Progress Report, p. 1. See also Manny, "Log," p. 164.

magnitude was inaugurated. . . ." ¹ Peter Reich, a Chicago reporter, summarized this development well. He wrote that the jet age began in 1959 and forced construction at O'Hare. Reich also stated that the expansion was an "unprecedented move," the building of a complete new airport while keeping the old airfield in operation. ²

In its desire to secure the airfield upon which so much time, effort, and funds would be lavished, the City of Chicago reneged on a promise that Mayor Daley had made in 1956. At that time when the city annexed the airport via the "O'Hare corridor," Daley said that Chicago desired no territory other than O'Hare Field and access to it. In March, 1958, the suburb of Schiller Park voted to annex part of a county forest preserve between the airfield and Chicago. The City Council of Chicago responded by voting 43-0 to annex most of what remained of the forest preserve, 900 acres, and secure a firm hold on O'Hare. ³ In January, 1959, the

¹Downes, Department of Aviation Annual Report, 1966, p. 9.

²Herald-American, Oct. 31, 1965.

³Sun-Times, Mar. 25, 1958, p. 3; Sun-Times, Mar. 27, 1958. The suburbs must have been disturbed. On July 16, 1958, Carter Manny proposed to acquire land to the northwest and extend the airport boundary to include such property. Commissioner DeMent stated that such a boundary change was impossible then for political reasons. See Manny, "Log," p. 94. The original 1956 annexation was not a product of a desire by Chicago to expand. In the opinion of the Corporation Counsel, police and fire protection could not be given to O'Hare unless it were within the city limits. There was also the problem of compensation to an employee injured outside Chicago, and many city employees would work at O'Hare. Letter, Donoghue, Apr, 24, 1970.

Illinois Supreme Court held that the Village of Streamwood's annexation of seventy-five miles of roadway in the vicinity of that village was illegal. Streamwood was far to the west of O'Hare Field, but Chicago's connection with its airport depended on a similar annexation which was in jeopardy from the courts. For three miles the "O'Hare corridor" was a roadway only thirty-three feet wide. The city considered exchanging the Higgins Road corridor with the suburb of Rosemont for an access route 185 wide on Foster Avenue between Rosemont and Schiller Park.¹ This was done.

By 1959, the land of O'Hare Field was securely attached to Chicago. The problems of terminal design and revenue bond financing also had been worked out successfully. The construction program to provide for the jets was ready to begin.

¹Tribune, June 11, 1959, part 2, p. 7.

CHAPTER VII

CONSTRUCTION

For years various problems such as land acquisition, the lack of efficient ground transportation to downtown Chicago, and particularly the shortage of sufficient funds for such an immense undertaking, had held up Chicago-O'Hare International Airport's development. However, the technology of the jet and the limitations of Chicago-Midway Airport combined to force agreements between the city and the airlines which brought on full-scale expansion at O'Hare by 1959.

On March 16, 1959, the Chicago City Council authorized the leasing of area on which the air carriers would build temporary facilities to handle the greatly increased passenger traffic from jet operations. The lines were proposing to spend \$2 million for buildings to be used only three years or less. These expenditures included \$600,000 by United Airlines and \$340,000 by American Airlines. Braniff, Continental, Northwest, Delta, and Trans World Airlines also were going to construct temporary facilities.¹

¹Jay McMullen, Daily News, Sept. 30, 1959. See also Manny, "Log," p. 159 and Sun-Times, Dec. 25, 1958.

Contracts were let to low bidders by the city. Naess and Murphy, supervisors of the expansion, set up a separate O'Hare project office in downtown Chicago with seventy-five persons to design and to make working drawings and specifications. Walter Metschke, field engineer for the firm, had an office at the airport to handle the civil engineering and construction contract administration.¹ By mid-1959, the construction on permanent work for the proposed \$120 million expansion to which the carriers had agreed on June 20, 1958, was well underway. This included grading, drainage, and paving work as well as the labor necessary for water and sanitary facilities, hangars, parking, and the substructure of the terminal concourse (extension) buildings, plus the extension of the main runway, 14R-32L.²

Mayor Daley visited the airport in the summer to observe how things were proceeding. Conditions were disorderly, but the Twin Orchard Golf Course, adjacent to the southeast side of the terminal area, was being leased out for playing purposes and so was not yet obliterated by construction. Commissioner DeMent, aware of the mayor's drive to get things done, jokingly said the course was being

¹Letter, Manny, May 22, 1970.

²Wade Franklin, Sun-Times, June 28, 1959; Murphy, Final Progress Report, p. 2. See Chapter VI for agreement to the \$120 million revenue bond program.

saved until last, because he liked to play some golf each day. The mayor responded, "Like h--- you will!"¹ By the end of 1959, contract work worth about \$24 million was underway.² The date set for completion of the project, January 1, 1962, seemed far off.

Progress was being made. Joseph P. Baker, former official of Capital Airlines and president of Avtech, Aviation Consultants, stated that when all of the airlines were convinced of the necessity for the rapid development and activation of O'Hare, work advanced rapidly. At that time, Baker said, the operation of the Chicago Airlines Top and Technical committees with the city and Naess and Murphy "was probably better motivated than in any other of the many situations of this kind in which I have become involved." However, Baker pointed out that "the total situation was one of a continuing evolution stimulated by commercial, social, and political factors."³ There would be difficulties in the construction phase of the development of O'Hare.

The problems that arose were of different types.

¹Interview, DeMent, Oct. 24, 1969. See also Kirchherr, "Airport Land Use," p. 131. The land remained a golf course, gathering income for the city, until construction made it necessary to tear up the area.

²George L. DeMent, Chicago Public Works Annual Report, 1959 (Chicago: n.p., 1960), p. 26.

³Letter, Baker to Doherty, Mar. 5, 1970.

Ten of the eighty concrete caissons to support the hangar of United Airlines had to be replaced by the contractor, because core borings had shown them to be unsuitable.¹ In the spring of 1960, eight of the ten construction jobs were behind schedule as well as work on the water supply and sanitary work. The terminal substructures were behind schedule, a delay blamed on the steel strike in the winter of 1959. The hangar for American Airlines was not being completed as quickly as expected, and the contractor declared that the failure of another contractor to complete an all-weather road on schedule had caused delay on the hanger, for contracts overlapped in the drive to build the airport. Commissioner DeMent stated the heavy rains at the end of 1959 had hurt the construction schedule, especially for the extension of runway 14R-32L. Change orders had boosted costs over the original contract prices. In addition, unforeseen problems forced more expenditures. Test bores to determine the condition of the soil had been made at 600 foot intervals. Test driving a fifty-ton roller over the ground, however, turned up unexpected mushy spots which had to be dug out and replaced by firm earth.² In 1960, unforeseen engineering difficulties and bad weather caused O'Hare Field to be behind schedule. Complicating the work was the fact

¹Daily News, Feb. 12, 1960.

²Paul Gapp, Daily News, Apr. 23, 1960.

that Chicago was "the only city in the country faced with the task of building a giant new airport on top of an old one without disrupting normal operations."¹ This was not an easy job.

O'Hare was "bursting at the seams" with traffic by June of 1960. The jets had begun using the airfield in early 1959. In the fall of that year, United Airlines began the big switch from Midway by transferring half of its flights to O'Hare. At the same time carriers were switching to O'Hare, there also was an increase in jet operations by these airlines in late 1959.² Passengers were using O'Hare in 1960 at a rate that would exceed 5,000,000. This much traffic had not been expected until 1965. The temporary facilities of the airlines already were overcrowded. Criticism of the project came from every side. A visitor to O'Hare in mid-1960 would have seen hundreds of pieces of construction equipment, muddy graded areas, huge holes, half-finished buildings, and swarming workmen.³ O'Hare's traffic, already twice what had been estimated and still growing, caused work on a six-lane roadway, and the parking lot had to be started ahead of schedule to accommodate the

¹Ibid., May 7, 1960.

²Garrison, Aviation Week, June 20, 1960, p. 92.

³Wise, Sun-Times, May 24, 1960. See letter, Manny, May 22, 1970.

crowds.¹ By July, O'Hare was averaging 15,000 passengers per day with each passenger bringing an estimated two-and-a-half companions.² Crowds were so attracted to O'Hare to watch the jets that they caused traffic tie ups and parking lot jams. To alleviate this, officials at O'Hare decided to close the observation deck on Sundays. Many signs were posted at the entrance to the airport telling of this closure, but on October 23rd hundreds of visitors came nevertheless and had to be turned away.³ Despite these difficulties, the Herald-American observed that "even incomplete, O'Hare is a great success, and the city officials who have had a part in speeding up its completion deserve a bow."⁴

Others besides the city officials involved deserved credit too. Naess and Murphy had eighty persons at O'Hare working under Walter Metschke, director of engineering.⁵ Each week there would be a progress meeting involving the superintendents of contracts underway. Each contract had a superintendent who reported to Metschke as well as inspectors who reported to their superintendent. The

¹Herald-American, May 24, 1960.

²Daily News, July 30, 1960, p. 17.

³Tribune, Oct. 24, 1960. See also Daily News, Oct. 24, 1960.

⁴Herald-American, May 26, 1960.

⁵"Rush Program . . .," Excavating Engineer, p. 25.

schedules were very tight and delay on one project could affect many others.¹ For example, a utility tunnel went deep under the basements of the terminal and in a circle around the parking lot. It was large, twelve by twenty feet in places, and contained conduits for chilled water for air conditioning, drinking water, hot water for heat, the electric system, plus some other utilities. It had to go in first. Over it went utilities not included in the tunnel and drainage facilities. Above this went the building foundations and the basement.² A mistake with the utility tunnel could greatly affect the facilities which were above it.

The Metschke team supervised the completion of most of the terminal area substructure and the erection of the bulk fuel storage tanks in 1960. The extension and lighting for runway 14R-32L were finished, and a terminal contract for \$18.4 million, the largest single contract ever made by Chicago, had been awarded in the same year.³ O'Hare

¹Interview, Walter G. Metschke, former construction boss of O'Hare expansion, Chief of Aviation Planning for City of Chicago, Jan. 7, 1970.

²Wise, Sun-Times, Nov. 13, 1960. Underground facilities included 12,850 feet of concrete tunnels and enclosing pipes for heating, cooling, and electrical conduits. There also were twenty-five miles of storm sewers. Sun-Times, Dec. 17, 1961. The terminal tunnel did go in.

³Murphy, Final Progress Report, pp. 2-3.

was described as a "battleground." This was true physically and emotionally. In September, 1960, there were twenty-eight major projects going on simultaneously. Hundreds of acres of land were torn up for the laying of underground facilities and utilities.¹ The installation of electric, gas, and utility lines often halted use of a road. Signs were often lacking as roads were changed. Earth movers passing would cover cars with dust. Construction was going on at night which made driving at that time hazardous.² The public complained.

Walter Metschke, construction boss, said the weather in the fall of 1959 and the spring of 1960 made for "the worst construction season I have seen in twenty-five years." However, Metschke believed soil conditions were even more of a problem. The ground contained many soft spots that borings had failed to show which caused a tremendous problem for the grading work. Because of possible buckling of a runway, taxiway, or building from soft ground, these soft spots had to be removed and replaced. In grading work, 4,000,000 yards of dirt, 1,000,000 more than expected, were moved.³ This called for much auxiliary equipment, including

¹Wade Franklin, Sun-Times, Sept. 4, 1960.

²Thomis, Dec. 12, 1960.

³Wise, Sun-Times, Nov. 13, 1960.

many rollers and discs to aerate excessively wet soil. Not only did pockets of soft and sandy soil have to be replaced, there were also many depressions in clay or rock in which water was trapped. These depressions had to be cleaned and backfilled.¹ Nature seemed to conspire against the efforts to keep work up to schedule. O'Hare was at the headwaters of two creeks flowing into the Des Plaines River. As absorbent earth was replaced by hard surfaces and the rains came, the creeks could not carry the increase. A large pit in the southern part of the airport from which dirt fill had been obtained was made into a storm water reservoir called "Lake O'Hare." This necessitated the reshaping of airport grades to put water into it.²

In late 1960, problems of many types abounded at O'Hare. A popular story told of a passenger who rented a car to drive to downtown Chicago. He returned in about two hours and was asked, "Back so soon?" The traveler roared "---- no! I can't find my way out of this ---- airport!" As had been stated, the interior road pattern was confusing and under constant change to accommodate the giant construction equipment.³ American Airlines' temporary hangar was in the way of ramp paving and terminal concourse extensions, but had to be retained in late 1960 until the new permanent

¹"Rush Program . . .," Excavating Engineer, p. 22.

²Wise, Nov. 13, 1960.

³Paul Gapp, Daily News, Jan. 4, 1961.

hangar was ready. Jet travel had achieved quicker and wider acceptance than had been anticipated, and the thirteen gate positions as well as parking and other facilities were inadequate to meet passenger needs. An article by Malcolm Wise at this time, entitled "Jet Age Chaos," charged that passengers were "being subjected to indignities, discomforts and inconveniences" because city, state, and airline officials were guilty of "procrastination" in preparing an airport for commercial jet planes.¹ Someone else commented that "the only thing wrong with your move to Chicago is that sooner or later your plane may land."² During the period 1960-1961, there were those who doubted that the airport would be completed on schedule.

In 1960 workmen had called Chicago-O'Hare International Airport "Big Dusty" in the summer and "Big Muddy" in the winter time.³ The Monthly Progress Report for January, 1961 asserted that although "extremely cold weather and heavy snows have hampered some work," good progress was being made.⁴ Nine revenue bond contracts had been completed and fourteen others were being worked on by the end

¹Sun-Times, November 13, 1960.

²James Ritch, Tribune Magazine, Dec. 31, 1961, p. 9.

³Wise, Sun-Times, May 29, 1961, p. 33.

⁴Charles F. Murphy, Monthly Progress Report No. 23, January, 1961 (Chicago: n.p., 1961), p. 1.

of 1960.¹ Thirty-eight million dollars worth of expansion work was finished and contracts for additional construction worth \$87.5 million had been issued.² This added up to a sum greater than the \$120 million bond issue guaranteed by the airlines. There were difficulties enough in conducting a program of such proportions so quickly as traffic swarmed at the airfield, and now a financial crisis had arisen which threatened to destroy the harmony between the city and the airlines and halt completion of the project.

Naess and Murphy announced in early October, 1960 that \$35 million more was needed immediately for the planned expansion at O'Hare to take place. Lack of sufficient time to plan meant drainage needs had been underestimated. Utility and fuel systems had to be enlarged. Prices of materials and services were higher than had been estimated. Engineering changes made after the program had begun raised expenses. For example, the terminal was planned to cost \$23.5 million but would cost instead \$32.44 million; estimates for the heating and refrigeration systems had risen from \$4.5 million to \$7.5 million.³ Chief reasons for additional funds were rising costs and the phenomenal growth of commercial

¹Ibid., No. 22, December, 1960, pp. 12-13.

²DeMent, Chicago Public Works Annual Report, 1960, p. 22.

³Tribune, Oct. 7, 1960. See also Wise, Sun-Times, Nov. 11, 1960.

aviation which meant more facilities would be needed sooner than had been anticipated.¹ Another major reason was that in the rush to prepare for the jets, there had not been enough time to develop preliminary drawings in sufficient detail to make estimates as accurate as they might have been.²

The Herald-American showed that it did not understand where the funds were coming from when it printed, "It's going to cost Chicago and the aviation industry an estimated 190 million dollars to handle all of the traffic that will flood O'Hare International airport [sic] by 1965."³ An editorial in the Herald-American on October 8, 1960 stated that:

A committee of air lines representatives will review the builders' recommendations. If they approve it [sic], the city should go along. O'Hare field [sic] is a great and growing asset, and Chicago is justified in spending money to keep it so.

Actually, no Chicago money was to be spent. The new funds would be guaranteed by the airlines. Section 2:16 of the 1958 ordinance which had established the program stated that more securities might be sold to complete the proposed

¹Ray McCarthy, Herald-American, Oct. 7, 1960. See also Malcolm Wise, Sun-Times, Oct. 7, 1960, p. 3.

²Interview, Manny, Jan. 7, 1970. See also Tribune, Oct. 7, 1960.

³McCarthy, Oct. 7, 1960.

expansion. Mayor Daley, aware of the need to obtain more lease commitments from the carriers, avoided mentioning this provision of the revenue bond ordinance and emphasized the "co-operative" effort between the city and carriers.¹ The airlines declared that they were opposed in principle to major expenditures in excess of the bond issue amount, and Curtis Barkes demanded that a consulting engineer-economist for the airlines be placed in the offices of Naess and Murphy. Mayor Daley and Carter Manny agreed to this. "To anyone who has watched the O'Hare program, it has been apparent that more money will be necessary," said the mayor. "It was inherent in the bond issue terms that an open end was left. The city ordinance provided for this."²

Joseph P. Baker, formerly of Capital Airlines, was involved in the negotiations for a second bond issue. He commented:

Due to the unusual nature, tight schedule, and complexity of the established goals . . . the funds for the project were exhausted before the work was 60% complete, at which time the city proposed that the airlines back a second bond issue. This understandably caused great consternation and prompted the airlines as a group to establish a control center to monitor the expenditure of the remaining funds.

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It was probably during this period that the best atmosphere of cooperation existed: each of the groups

¹Tribune, Oct. 7, 1960. See also Wise, Sun-Times, Nov. 11, 1960. Letter, Manny, May 22, 1970.

²Tribune, Oct. 8, 1960.

having assigned experts to the task of completing the project in the required time for the lowest possible expenditure consistent with the functional requirements.¹

The airlines were strongly opposed to any new bond issue at first. Both the Top and Technical committees of the airlines visited Naess and Murphy to examine plans and records and discuss the project. Contracts, rising costs, and the quality of work were studied. The lines had been fearful that they would find signs of "political manipulation" but evidence of anything of the kind "simply could not be found" an airline expert declared. By late October, 1960, the air carriers were ready to admit that "some considerable increases in costs at O'Hare are necessary," but they wanted these costs "pared to the minimum."² Carter Manny suggested that the airlines have engineering experts in the office of Naess and Murphy to consult daily on all aspects of the problems of the program.³ The airlines agreed to do this. Curtis Barkes said that the retention of a firm to check the work of Naess and Murphy did not mean a vote of no confidence in them. However, cost estimates

¹Letter, Baker, Mar. 5, 1970. Curtis Barkes placed Baker, of Capital and then United Airlines, and Charles Duke of Leigh Fisher Associates in a downtown office for the air carriers to help coordinate efforts between the airlines and Naess and Murphy. Letter, Manny, May 22, 1970.

²Thomis, Oct. 25, 1960.

³Ibid., Oct. 26, 1960.

had changed substantially and "it's a matter of determining if we can improve on this different amount."¹ Perkins and Will, a Chicago architectural firm, was engaged to consult for the airlines and to work closely with Naess and Murphy on the expansion program.² Carter Manny, ill with pneumonia during November, feared his firm would be discredited by persons chiefly concerned with economy.³

Commissioner DeMent stated that even with \$35 million added to the \$120 million bond issue, the expense of building O'Hare would still be less than the costs for eight other recently constructed airports in the United States.⁴ A program expanded to \$155 million would amount to an investment of about \$10 per passenger expected in 1965. New York International (Kennedy) Airport was spending twice that amount on a per passenger basis.⁵ Paul Gapp furthered the

¹Jay McMullen, Daily News, Oct. 26, 1960. The charges for using airports to domestic lines rose from \$32 million to \$80 million over the period 1957-1960. During this same period, operating profit declined from \$27 million in 1957 to an estimated \$30 million loss in 1961. The airlines were fighting rising costs. Richard P. Cooke, Wall Street Journal, Jan. 8, 1962.

²Herald-American, Oct. 27, 1960. Tribune, Oct. 27, 1960. The consultants were employed for a limited time, to be sure the program was functioning as it was supposed to be, and then dropped. Letter, Thompson, Feb. 13, 1970.

³Letter, Manny, May 22, 1970.

⁴Tribune, Oct. 7, 1960.

⁵Wise, Sun-Times, Nov. 13, 1960.

acceptance of a new bond issue and complimented the architects when he wrote: "Naess and Murphy has been insisting on the best in equipment and materials. It has fought for fine points in design to satisfy aesthetic as well as functional requirements. Finally, it has urged a speedup in the construction timetable. . . ." Gapp wondered what problems for the future would be created if there were a cutback on funds.¹

Naess and Murphy had "considerable apprehension" over Perkins and Will coming in as a "watchdog." Jack Train of the latter organization "bored in relentlessly." The result of the investigation was that after four months of probing, the recommendation was made for a revenue bond issue of \$35 million to complete the first stage of jet development at O'Hare Field. Some items were reduced or eliminated but other needed work kept the original estimate of \$35 million the same.² In late January, 1961, the City Council finance committee received a letter from Curtis Barks on behalf of the commercial carriers which said that the lines accepted the need for the sale of additional bonds. The letter requested that the bonds be issued in two parts, the first for \$25 million and a second for \$10 million when

¹Daily News, Jan. 4, 1961.

²Letter, Manny, May 22, 1970. See also Wise, Sun-Times, Jan. 17, 1961.

this amount was necessary.¹ At the end of January, a syndicate headed by Glore Forgan and Company made a record premium bid on the \$25 million worth of bonds. The interest rate was 4.75 per cent for forty year bonds, and the underwriters offered to pay \$103.30 for every \$100 worth of bonds.² The City Council approved the sale of \$35 million of revenue bonds on February 1, 1961.³ Mayor Daley received a check from the Glore Forgan group for over \$26 million on February 28, 1961. This included a premium of \$825,000 and accrued interest of \$188,020 on the \$25 million of bonds. The mayor said that it was the first time in years that the city had received a premium on the sale of bonds.⁴ Fourteen airlines had signed lease agreements that underwrote bonds totaling \$149 million, the two original issues. This provided for the expansion "funds to make the airport a truly

¹Tribune, Jan. 27, 1961. See also Murphy, Monthly Progress Report No. 23, Jan. 1961, p. 1.

²Daily News, Feb. 1, 1961.

³Daley, Journal of the Proceedings, Feb. 1, 1961, p. 4355. See also Casey, Chicago Aviation, p. 26.

⁴Sun-Times, Mar. 1, 1961. The underwriters paid the city \$103.30 plus accrued interest for every \$100 worth of bonds. The \$3.30 difference was a premium to the city. The bankers were able to do this because the airport was prospering so that there seemed to be little risk to prospective buyers (also income from the bonds did not have to pay federal income tax). The Glore Forgan group sold the bonds for \$104.50 plus accrued interest due on the bonds. See Glore Forgan and Company, Prospectus - Chicago-O'Hare Revenue Bonds, Series A, 1961 (Chicago: 20th Century Press, Feb. 1, 1961).

international jet port capable of handling millions of passengers and thousands of tons of cargo."¹

By early 1961, the problem of finance seemed to be solved, at least temporarily, but the difficulties of handling immense numbers of passengers while conducting a huge expansion program increased. "O'Hare Field--Masterpiece of Inconvenience" was the title of an article by Peter Reich which judged the terminal to be overcrowded, parking a headache, eating facilities inadequate, and telephones inaccessible. Reich concluded with the thought that someday O'Hare would be the world's finest airport.² Another writer, Tony Weitzel, was more humorous but less optimistic. He had taken a round-the-world cruise and had been involved in two disasters--typhoons in Japan and being at O'Hare Field. The latter "on a typical Sabbath morning, produces a mob scene like the flight of Polish refugees before on-rushing Nazi hordes" and was the worst of his two bad experiences.³ Persons arriving at O'Hare at this time found the parking lot a sea of mud on wet days. There was a ditch for utilities 600 feet long and 25 feet deep in front of the terminal area.⁴ The troubles of expansion in 1961

¹Letter, Barkes, Feb. 24, 1970. See also Tribune Magazine, Mar. 24, 1963.

²Herald-American, Jan. 23, 1961.

³Daily News, July 13, 1961.

⁴Wise, Daily News, May 29, 1961.

were not even confined to the airport. Much gravel was needed for the great amount of concrete work done at O'Hare. The large trucks coming from pits near the Fox River to the west were not only breaking up suburban roads, but the gravel that was dropped by the trucks on the highway had often been thrown up to crack or shatter windshields.¹

By September, 1961, however, the underground utility tunnel was completed as was the north half of the parking lot. The airport entrance road was opened by that time, terminal aprons were done, and work on the terminal building was fifty-two days ahead of schedule.² At the peak of construction in mid-1961, contracts were being completed at the average of \$8 million worth of work per month.³ By the end of autumn, twenty-five contracts were finished and work was proceeding on an equal number of other contracts. Opening ceremonies were scheduled for January 15, 1962 for the new terminal area complex.⁴ Almost ten million passengers had been handled in 1961 with only thirty gate positions

¹Herald-American, Aug. 30, 1961.

²Murphy, Final Progress Report, pp. 4-5.

³Carter H. Manny, Jr., "O'Hare--The Busiest Airport in the World," Airlines, Aug., 1962, p. 14.

⁴Murphy, Final Progress Report, pp. 5-6. There was great sense of accomplishment in beating the target date, January 1, 1961. The terminal was not opened until two weeks after this, because the airlines did not wish to transfer operations during the holiday rush. Letter, Manny, May 22, 1970.

for planes as construction was going on.¹ The new terminal would relieve such congestion.

When the new terminal was dedicated by Mayor Daley in January, 1962, some persons acted as if the expansion program were complete. James Hoge, a reporter, stated:

The rebuilding of O'Hare has been a marvel of construction speed--only 33 months have elapsed since the first spade of dirt was turned. And it has been a marvel of planning and co-operation--with specifications changing weekly and the constant problems of building a new field around an existing one already the busiest in the world.²

Thomas J. Coulter of the Chicago Association of Commerce commented at that time: "We're that last city in having a modern major airfield, but we have the best. We've taken the best ideas from the rest."³

At the time of the opening of the new terminal in January, 1962, thirty-five contracts were finished, but work was continuing on fifteen.⁴ The day after terminal ceremonies, construction began to pave the south half of the parking lot. The other big job was completion of the circular restaurant.⁵ During 1962, the fire station, hangars, reservoir work, and the terminal area heating plant were all

¹Downes, Department of Aviation Annual Report, 1962. See also Daily News, Jan. 15, 1962. p. 28.

²Sun-Times, Jan. 15, 1962. See also Wise, Sun-Times, Aug. 26, 1962.

³Editorial, Sun-Times, Jan. 17, 1962.

⁴Murphy, Final Progress Report, p. 6.

⁵Tribune, Jan. 24, 1962. See also Sun-Times, Feb. 9, 1962.

finished, and the entire parking lot as well as the lower level of the restaurant building were in operation.¹ Ninety-six per cent of the revenue bond expansion, which began in April, 1959, was done by the end of 1962.² (There were seventy-one contracts done under the original Revenue Bond Ordinance of 1959. The last work was not finished until June 11, 1965.³)

The great shift in traffic from Midway to O'Hare Field (the number of passengers increased at the latter airport from 2.1 in 1959, to 5.7 million in 1960, and over 9.6 million passengers in 1961) was brought about not only by the increase in the number of jet airplanes (Peter Deuel reported in the Sun-Times of February 28, 1964 that sixty per cent of operations at O'Hare were still by propeller driven planes) but also by the completion of the Northwest (Kennedy) Expressway.⁴

Some critics had earlier called O'Hare Field "the only airport in the world accessible only by air."⁵ In 1958, Mayor Daley was urging the completion of the expressway,

¹Murphy, Final Progress Report, pp. 7-8.

²Downes, Department of Aviation Annual Report, 1962.

³Murphy, Final Progress Report, p. 1.

⁴See Downes, Department of Aviation Annual Report, 1961, p. 15 for the growth of O'Hare traffic.

⁵White, Saturday Evening Post, p. 136.

and men were working on some sections of the road from sixteen to twenty-four hours per day. Over \$100 million had been spent by that time on the expressway.¹ The County Highway Department was advertising for bids for \$12.37 million of work on the seven miles of expressway adjacent to O'Hare Field in April, 1958.² Construction was long and difficult. On October 17, 1959, Commissioner of Public Works George DeMent was stricken with a heart attack and faced at least two months of rest. The mayor attributed the heart attack to that fact that DeMent had been working extremely hard to complete details on O'Hare Field and the Northwest Expressway.³ The first stretch of highway, four-and-a-half miles of it, was finally opened to traffic on December 15, 1959. This section linked the Kennedy Expressway to the Northwest toll road near O'Hare. Access to the airport and the completion of the expressway to downtown Chicago was not accomplished until the next year.⁴ The entire route was opened on November 5, 1960.⁵ The expressway from downtown Chicago to O'Hare Field had cost about \$300

¹Sun-Times, Mar. 19, 1958.

²Herald-American, Apr. 23, 1958, p. 12.

³Daily News, Oct. 19, 1959.

⁴Tribune, Dec. 6, 1959, p. 48.

⁵DeMent, Chicago Public Works Annual Report, 1960, p. 12.

million.¹ By 1963, it was "already carrying expected 1980 traffic at 8% beyond designed daily normal capacity," and, by this time, rush-hour delays were being experienced on the expressway.²

Other aspects of the expansion program deserve more elaboration than the chronological coverage that has been given. One such project was the lengthening of the northwest-southeast, 14R-32L runway. The longest runway at O'Hare in 1957 was only 8,000 feet.³ On August 30, 1957, Carter Manny journeyed with Charles Landrum, well-known airport consultant, to the Technical Development Center of the Civil Aeronautics Administration in Indianapolis. Chicago officials wished to inaugurate a crash program for runway design and construction in 1958 and had come to the C.A.A. for advice. The latter organization had been conducting a study of Chicago air traffic since 1956. Although the study was only half-complete in mid-1957, the Civil Aeronautics Administration officials had concluded that six tangential runways had only a little more capacity than a double

¹Downes, Department of Aviation, 1965 Annual Report, p. 12.

²Ibid., Annual Report, 1963, p. 10.

³Ralph K. Heinze, Airport Manager, Report to Civil Aeronautics Administration (Form Budget Bureau No. 41-R1577.1), dated Nov. 25, 1957. See also White, Saturday Evening Post, p. 39.

parallel system.¹ Charles Landrum also believed that the minimum runway length should be 10,500 feet to accommodate future aircraft and that the distance between runways should be widened as a safety measure.² When the C.A.A. report was finished in the spring of 1958, it stated that two of the tangential runways should not be built.³ The study recommended two sets of parallel runways ("dual-parallel") straddling the terminal but over 1,000 feet from it and at least 10,500 feet (about two miles) in length to handle mid-summer (time of worst atmosphere conditions) take-offs. Simultaneous operations could be made with such runways, despite the fact that the taxiing distance for the aircraft would be lengthy.⁴

Corrective work was needed for the 8,000 foot north-west-southeast, asphalt runway 14R-32L built by Ralph Burke in 1956. Economy cuts in the revenue bond program had eliminated the proposed new east-west, 9R-27L, runway. The lengthening of the existing 14R-32L seemed to be the only way to obtain a long runway for the jets quickly.⁵ City,

¹Manny, "Log," pp. 3-4. During World War II, it was found that parallel runways were safer than any other type. Scullin, International Airport, pp. 110-11.

²Letter, Charles C. Landrum to Doherty, Jan. 13, 1970.

³Manny, "Log," p. 51.

⁴Tribune, Mar. 3, 1958, p. 14.

⁵Manny, "Log," pp. 89-90.

state, and C.A.A. officials met at O'Hare on July 11, 1958, to discuss the runway. Litchfield, C.A.A. paving expert from Washington, was puzzled by the soil report which incongruously showed good density but poor stability. (Later, this report was corroborated, and the condition was attributed to water.) Mr. Abney of the Illinois Department of Aeronautics desired three-way city, state, federal financing for the work on 14R-32L. If the contract were awarded by September 1, 1958, and construction begun immediately and on a round-the-clock basis, an overlay and lengthening of the runway by 838 feet could be completed within the year. The biggest problem was moving 450,000 cubic yards of earth. Even the concrete, 75,000 cubic yards, was a big item.¹ An emergency state grant of \$1,050,000 for an overlay 14R-32L to support the heavier jet planes was awarded for O'Hare in July.² Bids were opened August 29th. Low bid for this work was a little more than \$3 million.³ The contract had a ninety-day deadline with a \$500 per day penalty for each day over the deadline, because the runway was needed by the end of 1958.⁴

¹Ibid., pp. 92-93.

²Sun-Times, July 23, 1958.

³Manny, "Log," p. 111. See also Downes, Bureau of Aviation Annual Report, 1958, p. 17.

⁴Tribune, Dec. 16, 1958, p. 20.

The runway was lengthened to 8,838 feet, but city officials still pushed to make it 11,600 feet long enabling O'Hare to handle the 300,000 pound planes of overseas carriers. Commissioner of Aviation Downes announced in July of 1959 that the Federal Aviation Administration, which had replaced the Civil Aeronautics Administration, had informed him that the government had allocated \$1,495,000 for the extension of 14R-32L to 11,300 feet. An equal amount was expected from the state, with Chicago paying for 300 feet more to make a runway of 11,600 feet.¹ No contribution was made by the domestic carriers who were not interested in financing runways longer than 9,500 feet, despite the fact that snow, which could cause a loss of traction to jet aircraft, might make more lengthy runways necessary. Snow retarded acceleration and aborted high speed jet takeoffs were dangerous. Longer runways would seem to add a safety factor and the Air Lines Pilots Association had been pleading for 12,000 foot runways as a protective measure as early as 1954.²

In early September, Mayor Daley angrily charged that the state had authorized \$1.4 million for improvements at O'Hare; that such monies appropriated for downstate airports had been released, but that Governor Stratton was

¹Ibid., July 29, 1959, p. 19.

²Herald-American, Oct. 13, 1959. See Manny, "Log," p. 104.

holding up the funds for Chicago's airport.¹ The governor replied that the financing of four Illinois airports had been held up because appropriations had exceeded the general revenue funds available. \$1,415,000 was then released for use in extending the main runway at O'Hare.² Within three weeks of this occurrence, the City Council had authorized the acceptance of \$2,895,000 in state and federal funds, and the city purchasing agent had announced a low bid of \$4.427 million for runway work. The contract specified completion within sixty-two days after it was awarded. It was hoped the project would be completed in December, 1959.³

Mayor Daley signed the contract with A. J. Groves and Sons on October 9, 1959, to build the longest civilian jet airline runway in the world. On Monday, October 12, the construction company began operating day and night shifts to get the job done.⁴ The runway was to be extended from 8,838 feet to 11,600 feet, a distance of 2,762 feet. The first part of the job was to dig a trench twenty-seven feet under the proposed extension so that suitable full and drainage could be provided. The runway was intended to be strong and long-lasting.

¹Tribune, Sept. 10, 1959, p. 8.

²Ibid., Sept. 13, 1959.

³Wise, Sun-Times, Oct. 3, 1959.

⁴Tribune, Oct. 10, 1959, p. 6.

The huge 200 foot (plus) wide trench had a ramp more than 100 yards in length from the bottom of the trench to the end of the concrete runway as a safety precaution should a landing plane undershoop the 14R-32L. Wet weather in October and November slowed progress. The city stopped work on many wet days through its contractual requirement that the soil have a specific moisture content. This voided penalty clauses which might have been assessed for failure to finish the runway by December 15, 1959.¹ Heavy rains and snow prevented completion of 14R-32L in 1959, and a new target date of completion by June 1, 1960, was established. Jet engined airliners could still use the main runway as well as three others at O'Hare, but nonstop flights to Europe would have to await the completion of 14R-32L.²

A. J. Groves and Sons had more than 100 pieces of equipment worth \$5 million in use at O'Hare Field. The machinery was equipped with radios to communicate with the control tower for approval to approach and cross a runway.³ Airplanes were a problem although there was no danger of being hit by them. When the aircraft took off, even more than when they landed, the workers received an uncomfortable demonstration of the tremendous noise and power of the

¹Thomis, Dec. 6, 1959.

²Lucia Lewis, Daily News, Jan. 4, 1960, p. 30.

³Hal Foust, Tribune, June 2, 1960.

commercial jet. The spring of 1960 was damp and cool which forced postponements of target dates. Walter Metschke, construction boss of the project for Naess and Murphy, declared that the soil had to have the proper moisture content for the correct compaction.¹ The contract for the runway required that the contractor remove ninety-five per cent of the subsoil moisture before paving.² Borrow material of the proper kind of soil was kept in borrow pits and would get wet. This earth would then have to be aerated to dry it through the use of disks and rollers.³

Concrete for the 2,762 foot extension was fifteen inches thick. It could be poured only during the day, and the runway was closed while such work was going on. The pouring was done in strips--eight sections each twenty-five feet wide to give an overall width of two hundred feet.⁴

The 11,600 foot runway was finally completed on August 31, 1960.⁵ That night Mayor Daley met a nonstop jet from Frankfort, Germany, the first intercontinental flight to use the new landing strip.⁶ The weather had made

¹Wise, Sun-Times, Aug. 5, 1960, p. 24.

²Ibid., Nov. 13, 1960.

³"Rush Program . . .," Excavating Engineer, p. 22.

⁴"O'Hare's Concrete--Thick and Smooth," Excavating Engineer, Nov. 1960, p. 26. See also Thomis, July 10, 1960, p. 10.

⁵Sun-Times, Aug. 31, 1960. Daily News, Aug. 30, 1960.

⁶Sun-Times, Sept. 1, 1960. Daily News, Aug. 31, 1960.

the runway extension over 215 days late by delaying grading and the pouring of concrete.¹ Mayor Daley, a Democrat blamed the weather and Governor Stratton, a Republican, for the long delay. State funds were needed to obtain matching federal funds, and the Mayor asserted that Governor Stratton's freezing of state funds until September 14, 1959, delayed the project sufficiently to keep it from being completed in 1959.²

Besides longer, stronger runways, the commercial jet airplanes also needed a more efficient fueling system so that the aircraft could move from the loading areas quickly. The fact that they used low-cost kerosene rather than high-octane aviation gasoline was a saving to the airlines, but jets of the early 1960's consumed fuel five times as fast as a piston driven machine,³ to a maximum of more than 2,300 gallons per hour.⁴ A transoceanic aircraft would carry 23,000 gallons of kerosene; the smaller jets needed 10,000 gallons of fuel. This meant that an underground, high pressure, computer-controlled system was desirable to

¹Wise, Sun-Times, Nov. 13, 1960.

²Ibid., Aug. 5, 1960, p. 17.

³Peterson, Airports for Jets, p. 33 and Scullin, International Airport, p. 223.

⁴R. W. Lawinger, "World's Largest Airport Fueling System," Airlanes, Aug. 1962, p. 22.

minimize error and speed fueling.¹

On September 23, 1957, Carter Manny met with representatives of Shell, Phillips, Pure Oil, Standard of Indiana, and the Texas Company to discuss the requirements of the airport. Large quantities of jet fuel would have to be pumped at a greater rate and pressure than before. This meant more friction and a greater chance of explosion. Within the next two days, he also talked to individual fuel consultants seeking a specialist for the operation.² James P. O'Donnell of New York was appointed the following month to design the storage and transportation of the fuel. Questionnaires were sent to the airlines for their needs.

After all the questionnaires were returned, plans were changed. In the desire to keep costs down, the designers reduced the bulk storage tank farm from a capacity for seven days (estimated cost of \$7.2 million) to three days, saving nearly \$2 million. (Satellite tanks in the terminal area would contain another day's supply.)³ The sixteen partially buried storage tanks in the northwest corner of the field were backed up by two other fuel storage

¹Thomis, Mar. 4, 1958.

²Manny, "Log," pp. 9-11.

³Naess and Murphy, Chicago O'Hare International Airport Engineering Report--Fuel Storage and Distribution System, p. 22. See also Peter Reich, Herald-American, Jan. 24, 1961.

areas beyond the airport boundaries. The fuel came to the airport from the oil wells of Louisiana, Texas, and Oklahoma via an underground pipeline from the cracking plants in East Chicago and Whiting, Indiana.¹

The fueling system at O'Hare Field used 250,000 feet of seamless welded pipe ranging from two to twelve inches in diameter. More than 200,000 feet of pipe was underground. It proceeded from the bulk storage area on the airport for more than two miles to the terminal area where there were thirty-nine "satellite" tanks, each of a 50,000 gallon capacity, situated in seven groups in the parking and loading area. The latter tanks were connected to 199 ramp hydrants. At the hydrant, the fuel was filtered for the fifth time on the airport, metered, and fed to the planes at the rate of 600 gallons per minute.² The firm of James P. O'Donnell, which also did the job at Idlewild (Kennedy) Airport, was said by experts to have developed the best airport fuel system ever made in its work at O'Hare Field. Various "panic buttons" existed to halt the flow of fluid should anything go wrong.³

¹Lawinger, "World's Largest Airport Fueling System," p. 22. See also Peter Reich, Herald-American, Jan. 24, 1961.

²Lawinger, "World's Largest Airport Fueling System," p. 22. Interview, Metschke, Jan. 7, 1970. Tribune, Jan. 14, 1962.

³Thomis, Aug. 20, 1961.

The system was controlled by computer with the latter keeping track of the level and kind of fuel in each tank, refilling the tanks as needed, and distributing the correct fuel to the proper planes and recording it.¹ At the on-field, fuel storage area, the tanks had floating tops to eliminate air that could add dirt and moisture to the fuel.² When the \$6 million system went into operation on January 14, 1962, its designers claimed that O'Hare had the "world's purest fluid fuel."³

Chicago-O'Hare International Airport was one of the first major airports to receive aviation fuels directly from commercial pipelines. Many persons found it hard to believe that fuel would be disbursed in such huge quantities as it is used at O'Hare.⁴ The system was intended to provide a maximum of 1,000,300,000 gallons of kerosene and high octane gasoline per year.⁵ Fuel was being distributed at the rate of 40,000,000 gallons per month in November, 1964.⁶ By 1968,

¹Letter, J. P. Dunne to Doherty, Dec. 12, 1969. Scullin, International Airport, p. 238-39.

²Murphy, Chicago O'Hare International Airport, Revenue Bond Improvement Program Progress Report No. 15, May, 1960 (Chicago: n.p., 1960), p. 13.

³Tribune, Jan. 14, 1962.

⁴Letter, A. J. Brough, Jan. 27, 1970.

⁵Thomis, Aug. 20, 1961.

⁶Clay Gowran, Tribune, Dec. 27, 1964.

planes were using over 60,000,000 gallons per month at O'Hare.¹ Walter Metschke, Chief of Aviation Planning for the City of Chicago since 1968, believed consumption would rise to 75,000,000 gallons per month in 1970, double that rate by 1975, and the whole system would have to be expanded.² There were problems and delays with the construction of the fueling system, but it was not so dependent on the weather and the completion of other contracts as were many separate projects at the airfield. Undoubtedly, however, it was a job well done.

The heart of an airport is its terminal area, and one of the most vital parts of the terminal area is the temperature control system. O'Hare's heating and refrigeration plant is located east of the main terminal complex, a small replica of a terminal building. The four storied plant was built at a cost of \$6 million.³ All the heating and cooling for the entire terminal complex is done from this one structure to keep the buildings it serves at seventy degrees in the winter and no warmer than seventy-eight degrees in the summer. Three miles of tunnels, never smaller than twenty feet in width and twelve feet in height, lead from the plant, to the terminal area, around the parking lot

¹Downes, Department of Aviation Annual Report, 1968.
p. 7.

²Interview, Metschke, Jan. 7, 1970.

³Sun-Times, Apr. 20, 1961.

and back to the power plant. For heating, water is raised to 450 degrees in two minutes. It is kept under high pressure so that it stays liquid, and pumped through pipes at the rate of 1,600 gallons per minute. It returns to the plant at 250 degrees temperature and is quickly raised again to 400 degrees.¹ A high temperature water system was used because of its great efficiency in transmitting energy great distances at minimum cost.² The cooling system uses another set of pipes. It pumps out water which is forty-two degrees temperature and returns at fifty-four degrees. The water is recooled in five to ten minutes.³ The hot water system uses about 25,000 gallons through pipes ten to fourteen inches in diameter; the cooling system has 350,000 gallons of water which goes through pipes twenty to twenty-four inches wide. Each system has approximately 20,000 feet of pipe.⁴ Four 50-million British thermal unit generators are used for heating; three 2,000 ton air conditioning machines are employed in cooling the water. This means each cooling unit could melt 2,000 tons of ice per

¹Tribune, Jan. 28, 1962.

²Letter, Manny, Feb. 4, 1970.

³Tribune, Jan. 28, 1962.

⁴Maurice Callahan, "Airport Water Works Requires More 'Systems,'" The American City, LXXIX (March, 1964), 93-94.

day.¹ The last contract on the power plant was awarded in April, 1961, and it was completed during the year.²

The building of the terminal complex, mentioned previously, deserves elaboration. Two new terminal buildings were to be constructed for use at the end of 1961. They were to have four concourses projecting from them; two of these were to be straight-finger extensions and the other two of the split-finger ("Y") design.³ The cover for the new terminal complex was of special solar gray glass made by the Pittsburgh Plate Glass Company. Tests were being conducted on the glass in June, 1959, a year before any terminal construction began. One section of glass three-eighths inches thick failed after four minutes of sustained pressure equivalent to wind of eighty-eight miles per hour. The weather bureau stated that such a wind was reported in 1897, so it was decided to reduce the area of the largest pane from 150 to 134 square feet or less and increase the width to one-half inch thickness. Commissioner DeMent requested further tests involving the prolonged hitting of the glass with a vibrator arm and the heating to 140 degrees

¹Downes, Department of Aviation Annual Report, 1962. See also Daily News, July 21, 1961.

²Sun-Times, Apr. 20, 1961.

³Downes, Annual Report, 1966, p. 13. See Appendix for layout of the terminal area.

temperature.¹ On August 13, 1959, the company was advised that the half-inch glare-reducing gray glass had passed the tests and was acceptable.²

Bids were opened for the four concourse extensions in the spring of 1960, prior to the letting of bids for the main terminal buildings. The existing split-finger "Y" concourse had only nineteen passenger gates. More were needed, and the new concourses would add sixty-two gates to help alleviate the problem of increasing traffic. Each new concourse would be from 1,000 to 1,200 feet in length and two stories in height. Average corridor dimensions were twenty by twenty-two feet with seventy foot width where there were lounges.³ In September 1960, a contract was awarded to the Malan Construction Company for the two passenger terminal structures. Each terminal building was to be 750 by 150 feet in area and two-and-one-half stories high, and would be made of reinforced concrete and have gray glass curtain wall exteriors. A penalty of \$6,500 per day was specified for construction time over 380 days. There

¹Manny, "Log," pp. 182-84.

²Ibid., p. 200. See Wise, Sun-Times, Nov. 13, 1960. Neither Pittsburgh Plate Glass nor Libbey-Owens-Ford Company wanted to make such glass, fearing there would be no market. PPG stated the glass would be rolled if Chicago would guarantee to purchase it. Commissioner DeMent could only promise that the terminal was being designed for such glass. Pittsburgh Plate Glass took a risk and obtained the sale. Letter, Manny, May 22, 1970.

³Tribune, Apr. 1, 1960.

would be a bonus of the same amount for every day less than 380 days. Malan employed 500 workers with two eight-hour shifts for five days per week to beat the contract's deadline and earn the bonus.¹ Malan Construction finished the work on August 29, 1961, fifty-two days ahead of schedule. It had completed the \$18.366 million contract, the largest ever awarded by Chicago, so quickly that it received the biggest bonus ever awarded by the city, \$338,000.²

The project had been enormous. For example, the twin terminals had ten acres of terrazzo floors. There were not enough skilled terrazzo workers in the Chicago area, so men were brought in from Italy and Cuba to install them properly. The terminals also contained one million pounds of aluminum and glass and five million feet of pipe. The company had flown expeditors around the country to obtain materials, paid bonuses to plants for early deliveries, and had much overtime work for its construction crew. Because of this Malan claimed it lost money on the contract in spite of the \$338,000 bonus.³ The head of another construction company admitted that his organization could not have done

¹Ibid., Sept. 15, 1960. See Downes, Department of Aviation Annual Report, 1962.

²Tribune, Aug. 29, 1961. Letter, Manny, Feb. 4, 1960.

³Jay McMullen, Daily News, Aug. 30, 1961.

as well.¹

The terminal buildings were up in August 1961, but the interiors still had to be completed. This was accomplished by the end of the year, and formal inspection and dedication ceremonies were held at 11:00 A.M. on January 15, 1962.² Mayor Daley called the terminal complex "one of the great engineering achievements of our time" and said that the speed in which the complex was constructed was an "engineering and administrative wonder."³ The mayor was asked when he expected to use the new airport. He looked through the windows at the huge mounds of snow and answered, "I wish it was today."⁴

Many compliments have been paid the new terminal. C. F. Murphy Associates (Naess and Murphy) received an award from the American Institute of Architects on April 4, 1963 for the design of the O'Hare terminal and buildings.⁵ Philip Johnson, noted architect and designer, wrote to Carter Manny that he had "stopped over one hour at your airport, and I

¹Letter, Manny, Feb. 4, 1970.

²Tribune, Jan. 15, 1962. See also Daily News, Jan. 15, 1962. Thomis, Dec. 30, 1961.

³Daily News, Jan. 15, 1962, p. 28.

⁴James Hoge, Sun-Times, Jan. 16, 1962.

⁵Downes, Department of Aviation Annual Report, 1963, p. 6. Mr. Naess retired during the period of construction, and the firm became known as C. F. Murphy Associates. See letter, Manny, May 22, 1970.

think it is the best in the world . . . choice of furniture and details excellent."¹ The furnishing of the terminal did reflect considerable effort and originality. The architects had not been satisfied with any of the chairs for the terminal that they could find on the market. They sought an original design. The airlines were somewhat critical, feeling that "off the shelf" furniture would have been more economical, but the O'Hare chair "has turned out to be something of a classic," according to the airport consultant Arnold Thompson. C. F. Murphy Associates drew up plans for an uniform baggage scale. Through the city, the architects insisted that all of the airlines use such a scale at O'Hare. The city and the architects were "much maligned" at the time by a rumor that the connections to Democratic politics of one of the companies that manufactured the scales was the reason for its use. No evidence was ever shown to substantiate the hearsay, and the baggage scale proved itself and became a standard in the airline industry. The architects also insisted on the uniform use of an airline's symbol--that the name or initials of the company have a standard circular background while on display in the O'Hare terminal. There were carriers that objected, feeling that this was an infringement on company policy and that their corporate image

¹Sun-Times, Aug. 26, 1962.

would be hurt, but the symbol became standard with some, for example, Northwest Airlines.¹

However, the new terminal had problems, too. When the old, small terminal was still in use, a front page headline of one of the largest Chicago newspapers read in mid-1960, "Planes, Gripes Fill the Air at O'Hare." The article stated that there were many complaints ranging from the crowded conditions and the leaky roof of the Concourse "B" (split-finger "Y") to frogs in the terminal at night, but the two chief complaints were "too much waiting" and "too much walking."² These criticisms not only remained, but grew worse after the new terminal was completed. Landrum and Brown, airport consultants for the City of Chicago, had analyzed the patterns of connecting traffic and developed flow diagrams that were used in an attempt to minimize walking distances for the new terminal layout. Yet, even though there had been study and analysis, certain connecting patterns remained that required long walking distances.³

The two problems of walking and waiting, common at any major airport are magnified by O'Hare's unique transfer

¹Letter, Arnold Thompson, airport consultant, Feb. 13, 1970. Carter Manny acknowledged this to be true. Letter, Mar. 29, 1970.

²Paul Gapp, Daily News, Aug. 20, 1960.

³Letter, Landrum, Jan. 13, 1970. See Manny, "Log," pp. 139-40.

role. About forty-five per cent of the passengers who land at O'Hare make connections with another plane to fly elsewhere. This per cent of transfers makes the airport "unique," a vital interchange point which, if closed, makes an impact from coast to coast in delaying air traffic.¹ A related factor, which adds to crowded conditions and makes walking more difficult, is the fact that there are as many persons who visit O'Hare Field's terminal as there are passengers.² The humorist Art Buchwald would solve the latter problem by only allowing persons with plane tickets into the airport. His survey showed that seventy per cent of the visitors to an airport did not want to be there, so Buchwald felt that there would be no large public outcry against such action.³

Before the terminals were opened in January, 1962, workers were often seen riding their bicycles down the corridors because of the distance. Immediately after the opening, a newspaper reported that the longest span between transfers for a passenger was 4,200 feet if no wrong turns were taken.⁴ Wayne Thomis stated that O'Hare has the

¹Downes, Statement of Federal Aviation Agency, p. 6. See also letter, Landrum.

²Interview, Colonel Corey, Aug., 1969.

³Sun-Times, June 15, 1969.

⁴Howard James, Tribune, Feb. 5, 1962. Shortly after this "study," another paper indicated that it was theoretically possible to walk 4,720 feet between connecting flights. Daily News, Aug. 25, 1962. Regardless of which is correct, both figures are uncomfortably close to a mile.

reputation as the "quarter-mile" airport because of its walking distances.¹

The builders of O'Hare were aware of the problem from Landrum's study and had considered moving sidewalks for the five concourse fingers, however, such machinery would have cost an estimated \$5,000,000 to install and about \$300,000 per year to maintain. The result was that complaints of walking distances in the terminal mounted with increased traffic.² On June 13, 1966, the Daily News ran an editorial advocating moving sidewalks entitled "O'Hare: No Place for Corns." Looking back, Arnold Thompson expressed the view of traveling distances that had been held by the carriers. He stated that the distance problem now is considered to be:

clearly the most serious flaw in the O'Hare scheme [but] . . . had not yet reared its ugly head as a serious problem [when the terminal was built]. Documents purporting to be standards of Airline Customer Service were quite liberal in discussing thousand foot walking distances as quite acceptable.

Thompson went on to say that O'Hare's concourse was about 1,240 feet, so it seemed suitable. At that time (1961), there was no successful "people moving device." A moving sidewalk at the Dallas airport had killed a little girl

¹Interview, Aug. 12, 1969.

²Robert H. Cook, "O'Hare Walking Distance Stirs Criticism," Aviation Week and Space Technology, LXXIX (July 15, 1963), 45.

when her clothes became caught in the machine; the problems with this device, and the failure to find a substitute meant no answer to the walking problem.¹

Charles Landrum explained that even though there are difficulties, the controlling feature of the planning of the terminal had been "a maximization of simplicity of function." Critics who bewailed about such things as baggage handling and walking distances did not realize that: "O'Hare handles approximately twice as many enplaned passengers as any other airport in the world today. The terminal planning and balance of space, circulation, and passenger facilities are probably the best of any airport in existence."² Arnold Thompson, an airport consultant like Landrum, concluded that among the experts, O'Hare's terminal ranked as one of the most successful. He believed that the problems of parking and long walking distances might be solved with present technology, but said that solutions would be expensive and opposed to the airlines' desire for economy.³

The terminal complex was opened in January, 1962, but formal dedication of the new airport awaited the completion of the circular restaurant situated between the twin

¹Letter, Thompson, Feb. 13, 1970. See Peter Reich, Herald-American, Apr. 23, 1961.

²Letter, Landrum, Jan. 13, 1970.

³Letter, Thompson, Feb. 13, 1970.

terminals. Officials of Marshall Field and Company met with Stan Gladych and Carter Manny of Naess and Murphy and approved a circular restaurant design on April 30, 1958.¹ Nearly a year later, Commissioner Downes informed Manny that Marshall Field was no longer interested in operating the restaurant.² No company had yet agreed to operate the restaurant when bids were requested for the foundation work of the circular restaurant in October, 1960. The Malan Construction Company's low bid of \$1.5 million was higher than the city had expected and was rejected.³ The city extended the time for the work from three months to five months, eliminated much of the tunnel work in the previous contract's specifications, and received a bid considerably lower (\$785,500 by Kenney Construction Company) when the project was readvertised in November. The city was pleased and estimated that \$400,000 had been saved by readvertising.⁴ Two months later, in January 1961, the newspapers noted that Marshall Field had dropped its option to operate eating

¹Manny, "Log," p. 65. Gladych was the chief of architectural design for the O'Hare project. He held a similar position for the work done by C. F. Murphy Associates on the First National Bank of Chicago and for the new F.B.I. Building in Washington. Each of these projects cost more than \$100 million. Letter, Manny, May 22, 1970.

²Ibid., p. 162.

³Sun-Times, Oct. 22, 1960.

⁴Daily News, Nov. 19, 1960.

facilities at O'Hare Field; that it was eliminating all restaurant business not connected with a store of the firm. It was also reported that Carson Pirie Scott and Company was negotiating to take over food service at the airport.¹ On July 19, 1961, the finance committee of the City Council approved a twenty-year lease for Carson's to operate restaurant facilities at O'Hare.² The company agreed to spend \$3.8 million for half the cost of construction for the 200 foot in diameter building. Carson Pirie Scott would also make leasehold improvements and guarantee to Chicago a percentage of its gross receipts at O'Hare or \$350,000, whichever figure were larger.³

In January, 1962, after the new terminal was opened, Malan Construction submitted the low bid of \$3 million to finish the restaurant. The contract had a stipulation for a penalty or bonus of \$1,500 per day for late or early completion. The city purchasing agent said the city was losing at least \$1,632 for every day the restaurant was not operating, so it would be profitable to the airport even if Malan

¹Sun-Times, Jan. 28, 1961. Mr. George DeMent wondered if Marshall Field might have been afraid that such a big investment as had to be made at O'Hare might not pay off. He had recently seen a man from Carson's and inquired how the airport business was doing. The reply was "great!" Interview, Dement, Oct. 24, 1969.

²Herald-American, July 19, 1961.

³Sun-Times, July 20, 1961. See Lou Saxon, Herald-American, Jan. 15, 1962.

collected a bonus as it had on the main terminal buildings.¹ Carson's had begun airport operations with a snack bar in the terminal on January 15, 1962. The circular restaurant building, which contains five restaurants, was opened for business on March 25, 1963. It was located between the two new terminal buildings and made of glass and steel. It had no interior columns, as the roof was suspended by a mile of heavy bridge cable. The gray glass walls had an electronically controlled solar curtain to protect diners from glare.² Besides five restaurants, the circular building also contained two lounges, a food commissary, control kitchens, bake shop, butcher shop, linen room, vegetable room, store room, locker rooms, a maintenance department, and a control office. In the late 1960's, Carson's employed more than 700 persons and was serving 30,000 meals per day. Every week 2.5 tons of hot dogs, 5,000 dozen hot dog buns, 3,500 pounds of hamburger, 1,260 dozen hamburger buns, 2,400 loaves of bread, 2,100 dozen eggs, 1.5 tons of coffee, and 1,500 pounds of butter were being purchased by Carson's for its food operations at the airport.³ Thirsty visitors to

¹Sun-Times, Jan. 31, 1962. See Harold Tucker, Herald-American, Jan. 15, 1962.

²Letter, Mathias E. Kandle, purchasing agent for Carson International, Inc., to Doherty, Dec. 29, 1969. See also Downes, Department of Aviation Annual Report, 1963, p. 5.

³Letter, Kandle, Dec. 29, 1969.

O'Hare also were drinking beer at the rate of 500 barrels a month.¹

With the circular restaurant finished, the new Chicago-O'Hare International Airport was ready to be formally dedicated on March 23, 1963.² The ceremony paid tribute to the construction which had been going vigorously since 1959.³ The airport in early 1963 was the largest, 7,200 acres, and the busiest, having more than 13.5 million passengers for 1962, in the world. A total of \$200 million had been invested in it, including the \$149 million revenue bond fund. Nine thousand persons were employed at the airfield in 1963.⁴

Mayor Daley, Senator Paul Douglas, Governor Otto J. Kerner, two nephews of Edward "Butch" O'Hare, and President John F. Kennedy were present for the brief ceremony.⁵

¹Downes, Department of Aviation Annual Report, 1968, p. 2.

²O'Hare was called the "Nation's Most Dedicated Airport." The ceremony was taking place a year after it had become the world's busiest airfield. Daily News, Mar. 23, 1963.

³Thomis, Tribune Magazine, Mar. 24, 1963. The last structure to be financed by the \$149 million revenue bond fund was the remodeling of the International Terminal concourses. Another dedication and open house was held for this on Oct. 12, 1963. Murphy, Final Progress Report, p. 8. See also Milton Pikorsky, Chicago Public Works, 1962 Annual Report, p. 10.

⁴Dean Gysel, Daily News, Mar. 23, 1963.

⁵Herald-American, Mar. 22, 1963. See also Downes, Department of Aviation Annual Report, 1963, p. 4.

Approximately 250,000 visitors heard President Kennedy declare, "This is an extraordinary airport, an extraordinary city, and an extraordinary country, and it [O'Hare Field] could be classed as one of the wonders of the modern world."¹

At the luncheon for the participants of the dedication ceremony, the president remarked that "no great airport is really ever 'complete,' and I am sure Chicago-O'Hare will never be finished," a statement which has been true. He continued to say that the airport development was "a fine story in Chicago-industry-Washington cooperation for the common good" and that it also was "a tribute to Mayor Daley who kept these interests and resources together, working together, until the job was done."²

The construction of the modern O'Hare Field from 1959-1963 was a job that required much planning and coordination as well as labor and resources. Commissioner DeMent acknowledged that plans were always changing.³ The expansion required the co-operation of city and airline officials, Naess and Murphy, the bankers, the Civil Aeronautics Administration, the Illinois Department of Aeronautics, and the Air

¹Casey, Chicago Aviation, p. 29. The president's route between the airport and downtown Chicago was outlined on a map in the newspapers. 1,300 Chicago police guarded him during his visit. Sun-Times, Mar. 23, 1963.

²Kennedy, "Draft Remarks," pp. 1-2 and 4. See also Sun-Times, Mar. 24, 1963, pp. 3 and 10.

³Interview, Oct. 24, 1969.

Force as well as contractors, construction personnel, and the general public. Colonel Corey stated that no one agency handled the operation.¹ Joseph P. Baker, an airport consultant, declared that he "could name a long list of talented people involved without whose contribution the end result would have been something less than that which obtained. . . ." Baker went on to say, however, that "one of the more important elements contributing to the success of the project was the skill, dedication and hard work of Mr. George DeMent, the Commissioner of Public Works."² A. J. Brough, formerly with Trans World Airlines, concurred that rebuilding and modernizing a new airport while keeping the old one in operation was difficult and required "articulate planning and careful control of the many, many contractors." He also gave much credit to Commissioner DeMent for the job that was accomplished.³

Naess and Murphy (C. F. Murphy Associates) had never designed a major terminal before--few had. Arnold Thompson stated, "It is remarkable that they were able to put together an effective team both in design and into construction." The construction supervisor at the airport was Walter Metschke of whom Thompson wrote: "With his ingenuity and personality

¹Interview, Aug. 1, 1969.

²Letter, Baker to Doherty, Mar. 5, 1970.

³Letter, Brough, Jan. 27, 1970.

he was able to bring together recalcitrant contractors, rather undisciplined airlines and finally the interests of the City of Chicago in . . . a most effective way."¹

Walter Metschke had a difficult position as construction boss. He was responsible to Naess and Murphy and the City of Chicago for sixty-seven contracts at O'Hare ranging from \$1 million to \$18 million. During the peak months of expansion, work was being completed at the rate of \$10 million per month. He had to deal with fifty-four separate contractors and nearly four hundred subcontractors and always wore a suit and tie because of the frequent meetings he was required to attend.²

It would be false to imply that Metschke was an example of sartorial elegance in his job of supervising construction. The one thing that people recalled about his dress was an old straw hat which was worn summer and winter and grew grimmer and more decrepit as the months dragged by. He was remembered as a "real bear of a worker" who was on the job by 6:00 A.M. and did not leave until 7:00 or 8:00 P.M., including Saturdays and Sundays. Three cars were ruined and another almost destroyed by him in the mud and dust of O'Hare.³

¹Letter, Thompson, Feb. 13, 1970.

²Interview, Metschke, Jan. 7, 1970. See also Tribune, Jan. 31, 1962.

³Letter, Manny, May 22, 1970. See also Wise, Sun-Times, Aug. 26, 1962.

Metschke had been the supervisor for the building of the atomic facilities at Oak Ridge, Tennessee, as well as for the construction of the Air Force Academy in Colorado. A rather unassuming person, he did admit of the O'Hare project, "I've worked on nineteen jobs since I got out of Iowa State in 1936. Never was there a job that was done so fast on such a scale with so many problems."¹ He also stated, "As far as I know, there's never been anything like it."²

Another important person for the completion of O'Hare as one of the world's major airports was "Carter Manny, vice president of the Naess and Murphy architectural firm, . . . the individual most responsible for the planning, constructions, and timing at O'Hare."³ According to Arnold Thompson, an architect and airport consultant, Chicago-O'Hare International Airport is architecturally important because of its unity of design and the restraint to keep this unity. Thompson stated that Manny and the architects insisted on the order of design in spite of great problems:

The architects were very diligent in their effort to bring O'Hare about on time and in the budget. They were hampered by tremendous uncertainties in the airlines and the difficulty of securing information. In

¹Wise, Sun-Times, Aug. 26, 1962.

²Tribune, Jan. 31, 1962.

³Thomis, Tribune, Dec. 30, 1961.

addition, there were strong personalities that entered into the picture particularly in matter of design that seemed to affect cost consideration. An example of this would be the entrance road which was rather arbitrarily realigned for aesthetic purposes which caused great chagrin among the carriers. The overall view of O'Hare was that it was a tremendous accomplishment at its time under conditions that were, at best, adverse.

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 In retrospect, the glue of the O'Hare project was Carter Manny of the then Naess and Murphy firm, a person of great integrity and one in which most, if not all, of the participants in the program had great respect. Under pressure from his client, the City of Chicago, to develop "the best" and from the carriers to develop the least expensive, he had to play a role of moderator as well as leader. There is also another pressure that exists in any building project, and that is the pressure of aesthetics or personal pride. . . . Very few lay people seem to realize how terribly vital it is to the success of any program that the design team retain its enthusiasm, its integrity and its feeling of accomplishment. Carter Manny had to play this role under the most adverse circumstances and . . . deserves much¹ of the credit for the success of O'Hare as it is today.

John F. Kennedy was correct when he observed at O'Hare's dedication in 1963 that the building of a great airport is never done, but the most important work in making Chicago-O'Hare International Airport what it is was performed in the latter part of the 1950's and in the early 1960's. The physical needs of grading, utilities, and foundations followed by buildings and paving were accomplished despite the problem of integration of many of the separate projects. The construction of the world's longest runway, a remarkable fueling system, and an outstanding terminal and heating

¹Letter, Thompson, Feb. 13, 1970. Carter Manny would credit Stan Gladych as the "key man" responsible for the O'Hare design. Letter, Manny, May 22, 1970.

plant were especially important. These things did not just happen. They came about because of the willingness of the airlines to assume long-term financial obligations; from the dedication of city officials to the goal of having a great airport; through sustained effort by Naess and Murphy plus many others in planning and organizing, and by the energy and co-operation of thousands of persons who had a part in the building of what is probably the most important airfield in the world.

CHAPTER VIII

TRAFFIC AND SAFETY

1955 was the year of the first regularly scheduled commercial air traffic at O'Hare Field, and it was also an important year for jet engined aircraft. In the summer of that year, Capital Airlines began using British built turbo-prop Viscount aircraft which had jet turbines harnessed to propellers. In addition to the imports, Lockheed Aircraft had orders for 104 airplanes, \$233 million worth, for delivery of its Turboprop Electra in 1958. More important, there were many orders for the propellerless "pure jet" planes. United Airlines made the first order for such jets --thirty Douglas DC-8's for delivery in May, 1959 at a cost of \$175 million. Other carriers followed and by the end of 1955, the Douglas Company had contracts for 110 Dc-8's valued at \$600 million, and the Boeing Company had orders for seventy-two of its Boeing 707 airplanes worth \$380 million. These jets were scheduled for delivery in mid-1959.¹

¹Allen Van Cranebrook, Sun-Times, Jan. 9, 1956. See also Don Wigton, From Jenny to Jet (New York: Bonanza Books, 1963), pp. 59 and 181. These new jets were quite similar. The Boeing 707 and Douglas DC-8 cruised at about 600 miles per hour carrying up to 150 passengers; they were approximately 160 feet in length and 150 feet in width from wing tip to wing tip.

Midway (Municipal) Airport was limited by housing, highways, and railroad tracks and could not expand to accommodate the jet planes.¹ Midway was also overcrowded. Ralph Hottman, chief of the Midway control tower, said in 1957: "Midway was supposed to be saturated when I first came here ten years ago. Since then its operations have more than trebled."² The airfield was called a "little horror" by pilots because of industrial hazards, as smoke, smokestacks and gasoline tanks, in the area.³ A joke told was that a pilot could get a traffic ticket on his final approach.⁴ Congestion by 1957 was so serious that thirty-five planes might be stacked waiting to land while as many aircraft were delayed on the ground, hoping to take-off.⁵ This congestion was reflected in another bit of humor, "If you took time to breathe, you couldn't work in the Midway control tower."⁶

Frank Tinker, an airlines pilot, remarked that in 1959 as in every other year of the 1950's, "this ridiculously

¹Letter, Van Nostrand, Nov. 17, 1969. See also Frank A. Tinker, "Let's Bring Our Planes Down Safely," Popular Mechanics, CXIV (Nov., 1960), 146.

²White, Saturday Evening Post, p. 135.

³Ibid., p. 39.

⁴Tinker, "Let's Bring Our Planes . . .," p. 246.

⁵White, Saturday Evening Post, p. 135.

⁶"King Is Dead," Newsweek, July 16, 1962, p. 68.

small, poorly placed conglomeration of obscure runways led this nation's airports in almost every category of civil air operations. . . ." ¹ Midway had shown a steady increase in passengers beginning with 15,498 in 1928 to peak at 10,040,353 in 1959. ² The Civil Aeronautics Administration had declared Midway safe, but urged that more of Chicago's air traffic be scheduled for O'Hare. As evidence it cited the fact that there had not been a fatal accident to a passenger at Midway since the late 1930's. J. P. "Pat" Dunne, the safety co-ordinator of the Bureau of Aviation declared, "Our only trouble is that we can no longer handle passengers with any reasonable degree of comfort." This was called a "memorable example of understatement." ³

October 26, 1958 had witnessed the first scheduled American commercial flight of a pure jet. A Boeing 707 flew from New York to Paris, and the pilot who had previously flown only propeller driven airplanes commented, "It was like getting out of a Model T and stepping into an air-conditioned Rolls Royce." ⁴ One observer felt that "Midway's

¹Tinker, "Let's Bring Our Planes. . .," p. 114.

²Downes, Department of Aviation Report, 1961, p. 9.

³White, Saturday Evening Post, p. 135. On September 1, 1961 a Trans World Airlines Lockheed Constellation took off from Midway with a twenty-five cent bolt missing in the tail steering assembly. It crashed at Clarendon Hills, Illinois, killing all seventy-eight persons on board. This was the worst airplane accident on record in or near Chicago. Daily News, Dec. 28, 1968, p. 5.

⁴Joe Cappo, Daily News, Oct. 25, 1968, p. 3.

fate was sealed" at the time a Boeing 707 of American Airlines made the first scheduled pure jet flight into O'Hare Field in March of 1959, because four-engined jet planes could not use Midway Field with its 6,000 foot runways.¹ This flight began regular jet use of O'Hare.

1959 was the first year of the expansion of facilities at O'Hare to allow it to become a major airport. In October of that year, United Airlines completed a temporary terminal costing \$500,000 at O'Hare enabling United to become the first major airline to shift the bulk of its operations, sixty per cent of its scheduled flights, to O'Hare.² United had a week-long jet fair at O'Hare to introduce the Douglas DC-8 Jet Mainliner into service. Two years had been spent preparing the fair which included a full scale mock up of the DC-8 cabin, weather displays, and exhibits of the baggage handling and reservations systems. United led the way.³

The traffic volume amounted to sixty jet flights

¹Downes, Department of Aviation Annual Report, 1967, p. 5. See also Naess and Murphy, Chicago-O'Hare International Airport Engineering Report First Stage Development Program (Chicago: n.p., Nov. 14, 1958), p. 3; "'World's Busiest' Turns to Ghost Airport," Business Week, Mar. 1962, p. 86; Wade Franklin, Sun-Times, Jan. 5, 1960 and Sun-Times, Feb. 16, 1959.

²Sun-Times, Oct. 19, 1959, p. 22. See also Tribune, Oct. 19, 1959.

³Daily News, Oct. 20, 1959, p. 18.

per day at O'Hare in 1959, but by June 1960, the number was up to one hundred and twenty.¹ The first generation of four-engined jets, the Boeing 707, the Convair 880 and 990, and the Douglas DC-8 proved themselves and "caused the air industry to come of age." The great public acceptance of these planes and the low seat-mile costs "led to record traffic revenues and profits."² In 1960, a "second generation" of jets, the Boeing 720 and 727, was ordered.³ The great increase of traffic forced down landing fees per 1,000 pounds from \$1.285 in July, 1958 to \$.655, \$.255, and finally \$.075 in mid-1960. None had foreseen such tremendous growth for O'Hare.⁴ Commissioner William E. Downes stated that the airlines originally had thought of using jet aircraft only for long flights such as from Chicago to California, but they had been accepted so readily that there was a big market for them on relatively short flights such as from Chicago to Detroit or St. Louis.⁵

¹Walther, A Study of the Impact of Airports. . . , p. 28.

²Downes, Department of Aviation, 1964 Annual Report, p. 12. See also Scullin, International Airport, p. 297.

³Wigton, Jenny to Jet, p. 59.

⁴Wade Franklin, Sun-Times, Sept. 4, 1960. See also Peter Reich, Herald-American, Oct. 25, 1960; Jay McMullen, Daily News, Jan. 13, 1961; and Sun-Times, Nov. 5, 1960.

⁵Peter Reich, Herald-American, Apr. 23, 1961.

In January 1961, newspapers proclaimed, "This is the year O'Hare International airport [sic] becomes Chicago's No. 1 airport. . . . O'Hare's growth has been meteoric."¹ By mid-year a newspaper article would be headlined, "Midway: Jet Age Ghost" with the subheading "Once Bustling 'Hub of Nation' Dazed by Passenger Fall-Off."² Within another six months, by January, 1962, six airlines had left Midway. Other carriers were cutting back there because they were acquiring jets, O'Hare's landing fees were now low, and it would be a duplication of expense to carry a full staff at both airports.³ Consequently, there was a business depression in the Midway area in January, 1962. Some property owners who had complained of noise were loudly complaining of silence and desired flights of any type. Others disagreed and said they would be opposed to jet flights when the new, smaller jets came into use.⁴ All agreed that the shift in flights to O'Hare had injured

¹Ibid., Jan. 24, 1961. See William Halls, Bensenville Register, June 7, 1962.

²Sun-Times, June 18, 1961, p. 61. See Appendix for figures comparing the yearly passenger traffic of Midway with that of O'Hare Field.

³James Hoge, Sun-Times, Dec. 24, 1961. In an interview on Oct. 24, 1969, former Commissioner DeMent gave a similar judgment. At this time, Midway's landing fees were still among the lowest in the nation, even lower than at O'Hare.

⁴Thomas Buck, Tribune, Jan. 11, 1962. See also "World's Busiest. . .," Business Week, Mar. 3, 1962, p. 87.

business.

An aviation writer observed that "aviation expansion has been consistently underestimated, with the result that expensive airports have frequently been abandoned because they were too small for further development."¹ Chicago did not want to abandon Midway Field. The experts had predicted that Midway would handle forty per cent of the Chicago air traffic after O'Hare was expanded. The completion of the Northwest (Kennedy) Expressway had given the latter airfield fast connections to downtown Chicago. Neither the passengers who were transferring flights nor the airlines interested in efficiency desired split operations. Commissioner Downes believed that soon there might be no scheduled operations at Midway and that something had to be done to revive the airport.²

During the spring of 1962, the City of Chicago requested the Civil Aeronautics Board to deny the airlines the right to transfer any more service from Midway and to rescind some of the approval which had been already given. City Corporation Counsel John C. Meliphany also asked that the C.A.B. investigate the distribution of scheduled flights in Chicago.³ The Daily News felt that the passenger convenience

¹Peterson, Airports for Jets, p. 68.

²Buck, Tribune, Jan. 11, 1962. See also Wise, Sun-Times, Aug. 26, 1962 and Sun-Times, Dec. 30, 1961.

³Sun-Times, May 2, 1962.

of centralized facilities at O'Hare was more important to the city than the use of Midway. It suggested attracting private planes to Midway to preserve it.¹ The city was going to try to persuade the airlines that costs from the stacking problem, the circling of planes in a given area while waiting their turns to land, would be greatly reduced if the anticipated small jets, the Caravelle and Boeing 727, were used at Midway.² Another argument which appeared was that it was unfair that the three million living in the southern half of the metropolitan area of Chicago lacked convenient air service. In addition, Mayor Daley tried to hold a meeting with officials of the airlines to discuss the revival of Midway.³ The mayor was unable to persuade the carriers to remain, however, and all scheduled flights had left Midway by July 9, 1962.⁴ And at that time there

¹Editorial, May 3, 1962.

²Malcolm Wise, Sun-Times, June 14, 1962. See also Daily News, June 14, 1962.

³Wise, June 15, 1962. Landrum and Brown and Airborne Instruments Laboratory, Chicago-O'Hare International Airport Analysis of Capacity and Master Plan, Vol. IV (Cincinnati: n.p., 1962) had the basic assumption that Midway Field would remain busy.

⁴Downes, Department of Aviation Annual Report, 1962. See also Annual Report, 1966, p. 9. In early 1963 Landrum and Brown's study mentioned in footnote 4 had to be revised taking into account the lack of traffic at Midway. See Landrum and Brown and Airborne Instruments Laboratory, Chicago-O'Hare International Airport Supplementary Analysis of Capacity and Master Plan. Vol. 4-S (Cincinnati: n.p., Feb., 1963), p. 3.

were seven citizens' groups, claiming to represent 180,000 of the approximately 200,000 persons living in the Midway area, that were opposed to the use of Midway by the smaller jet liners being developed.¹

From 1959, Midway's peak year, to 1962, passenger traffic declined as follows: 10,040,353 (1959), 6,981,667 (1960), 3,565,561 (1961), 659,549 passengers in 1962. During these years, Midway went from first to ninety-seventh in the nation in the number of total aircraft operations.² Reflecting decline was the incident in 1962 when an American Airlines pilot in a new jet Convair 990 bound for O'Hare Field asked the Midway control tower for permission to circle the airport. He was told, "Bring her in at about 1,000 feet so we can take a look at her. We've never seen a jet."³

The rise in air traffic at O'Hare was as dramatic as the fall in operations at Midway Field. In 1962, O'Hare became the world's busiest commercial airport with the largest number of embarked passengers as well as total operations.⁴ By March 1963, President Kennedy was able to say that if all landings and take-offs at O'Hare were spaced evenly, there

¹"King Is Dead," Newsweek, p. 68.

²Downes, Department of Aviation Annual Report, 1962.

³"King Is Dead," Newsweek, pp. 66 and 68.

⁴Daily News, Mar. 28, 1963. See also Downes, Department of Aviation Annual Report, 1962, and Sun-Times, Mar. 29, 1964.

would be an aircraft movement every seventy-five seconds, twenty-four hours per day.¹ Delays were getting to be such a problem that a nation-wide investigation of them was going to be undertaken.²

In July 1963, Sanitary District Trustee John Egan asked the airlines to move back to Midway where the surrounding area had been hard hit by the unemployment, decreased home values, and lack of business.³ The city hoped that the congestion at O'Hare Field would bring a rebirth of operations to Midway, especially since the three-engined Boeing 727 would be in operation in 1964 and could use the older airfield and also because the Southwest (Stevenson) Expressway, which went near Midway and was connected to it, was scheduled to open soon.⁴ O'Hare Airport was averaging an operation every forty second, and United Airlines planned to return to Midway with scheduled operations using the

¹Kennedy, "Draft Remarks," p. 1.

²New York Times, Dec. 30, 1963.

³Tribune, July 13, 1963.

⁴Downes, Department of Aviation Annual Report, 1963, p. 15. Sixty per cent of O'Hare's operations in 1963 were propeller driven planes which could have used Midway. Peter Deuel, Sun-Times, Feb. 28, 1964. The last piston engined commercial aircraft did not leave O'Hare until Feb. 1, 1969. Jerome Watson, Sun-Times, Dec. 6, 1968.

Boeing 727.¹ The Department of Aviation reported United's return this way:

The outstanding event of the year was the return of fixed-wing scheduled airline traffic to Chicago Midway Airport by United Air Lines, on July 5, 1964, after two years absence. In celebration, a mammoth airshow and exhibition was staged at the airport on the 4th of July.²

The celebrations were premature. It turned out that United's flights only amounted to ten per day, and other airlines did not follow this lead. American and Trans World Airlines, next largest airlines to United, were opposed to returning to Midway. They wanted it to be used by private planes as O'Hare was developed for commercial flight.³ Midway could handle the twin and tri-jet transports of the middle and late 1960's just as she could have accommodated the many propeller driven aircraft of the early part of the decade. But Chicago is a great transfer place, and passengers going elsewhere desired a centralization of facilities.⁴

¹Editorial, Daily News, Mar. 2, 1964. See Appendix for a comparison of the traffic of Midway Airport and O'Hare Field.

²Downes, 1964 Annual Report, p.3. See also 1967 Annual Report, p. 5.

³Jay McMullen, Daily News, Nov. 13, 1964. See also "King Is Dead," Newsweek, p. 68; McMullen, Nov. 14, 1964. In the files of the Federal Aviation Administration in Washington, correspondence folder 7, Aug. 5, 1964, is mentioned a study done for the airlines by R. Dixon Speas Associates in May, 1964. It is entitled Airport Capacities and Traffic Demand--Airline Services in Chicago. No use for Midway was projected in this report.

⁴C. Owsley Shepherd, Chicago Today, May 22, 1969, p. 18.

Nor did the airlines wish a duplication of facilities.

Glenn Garrison, a writer on aviation, in 1960 had predicted 6,800,000 passengers using O'Hare Field by 1965.¹ Ralph Burke's prediction in 1955 was 8,000,000 passengers for 1965.² Both forecasts were low as Chicago-O'Hare International Airport served 21,000,000 passengers in 1965.³ During 1965, American Airlines flew from O'Hare Field to the following locations in the time given: Indianapolis in twenty-one minutes; Washington, D.C. in one hour and eleven minutes; and New York City in one hour and eight minutes. Nothing could compare to the speed and comfort of jet air travel, and the record breaking increases of passengers proved it.⁴

On September 9, 1966, Chicago-O'Hare became the first airport to ever handle more than 2,000 operations in one day.⁵ By mid-1967, O'Hare was approaching what had

¹Garrison, Aviation Week, p. 93.

²Sun-Times, Oct. 21, 1955.

³Tribune, Jan. 20, 1966. The Appendix has the yearly traffic for O'Hare.

⁴Seymour Kurtz (Ed.), The New York Times Encyclopedia Almanac 1970 (New York: New York Times, 1969), pp. 688-89. See also Scullin, International Airport, p. 297 and Peter Reich, Herald-American, Apr. 23, 1961.

⁵Tribune, Oct. 1, 1966. Walter Metschke, chief of aviation planning for Chicago, stated that the peak hours of operation have leveled off from about 9:00 a.m. to 9:00 p.m. since 1966. Interview, Jan. 7, 1970.

been its estimated capability a few years before, 500,000 total operations per year. Commissioner Downes said operations were increasing at the rate of 1,500 per month.¹ A peak day in 1967 saw more than 100,000 passengers use O'Hare. The very worst hours for traffic were from 5:00 to 8:00 p.m.² An F.A.A. Information bulletin put out by the Federal Aviation Administration and dated September 22, 1967, reported that the figure of 60,000 operations for a single month was recorded for the first time. Controllers at the O'Hare tower had handled 60,462 takeoffs and landings in August, an average of one every forty-four seconds. O'Hare Field was continually establishing air traffic records, but it was also suffering from congestion. The Chicago Department of Aviation proposed to relieve this congestion by expanding facilities at O'Hare. Work would include a new northeast to southwest runway, a multi-level parking building for 12,000 automobiles, more gate positions, reconstruction of the main runway, and a new, 280 acre air cargo area. The cost of such proposed expansion would be \$280 million. City officials hoped that a new major airport would be built, by funds from revenue bonds, and Midway Field reactivated to ease the pressure of traffic from O'Hare.³

¹Jay McMullen, Daily News, June 3, 1967.

²"Can Airports Cope with the Jet Age?" Business Week, July 22, 1967, pp. 63-64.

³Downes, Annual Report, 1967, pp. 9-10.

In the summer of 1967, it looked as if the city's desires for a reactivated Midway were to be fulfilled. Because of a shortage of gate positions at O'Hare, ten domestic carriers agreed to contribute more than \$3 million for a rehabilitation of Midway which would cost over \$10 million.¹ The program included the addition of two runways which were 6,104 and 6,250 feet in length.² Although United Airlines had lost \$650,000 in its operation at Midway in 1966, W. A. Patterson, president of United, declared the financial loss was not in vain, because "Chicago is going to need a second airport, and unless we in the airline industry do something the city may be forced to abandon it [Midway]."³ The airlines had done something, and Midway was renovated in 1967, but an article written near the end of 1968 proclaimed "Crowds Jam O'Hare Airport, but Midway is Vacant." The new parking lot was less than one-third full. The refurbished terminal contained a dozen passengers and two ticket agents.⁴

Although Midway was in distress in the 1960's,

¹"Midway Readied for Early Airline Returns," Aviation Week and Space Technology, LXXXVII (Sept. 11, 1967), p. 39. See also Frank Sullivan, Sun-Times, July 19, 1967, p. 13.

²Downes, Department of Aviation Annual Report, 1967, pp 4 and 6.

³Editorial, Daily News, Mar. 25, 1967.

⁴Michael Kilian, Tribune, Dec. 1, 1968.

O'Hare continued to boom. In the Christmas rush of 1968, more than 125,000 passengers passed through in one day--another record--with seemingly little difficulty.¹ Also in 1968, about 2,000,000 passengers flew between Chicago and New York. Planes from Midway could have carried a large percentage of this traffic, but did not.²

Many studies have been made of the air commerce market's future trends. Most have underestimated the traffic growth by a great deal.³ A study done in 1946 estimated that Douglas (O'Hare) Field would be handling 15,800,000 passengers by 1970.⁴ An estimate in 1955 stated that "O'Hare eventually may handle 16,900,000 passenger movements a year. . . ."⁵ In 1954, Ralph Burke had projected 22,400,000 passengers for O'Hare by 1975.⁶ This must have been considered high because two years later, Aviation Week contained an article with a traffic estimate of 16,500,000 by 1975.⁷ George DeMent recalled that Landrum

¹Tribune, Dec. 21, 1968.

²Joe Cappel, Daily News, Nov. 11, 1968, p. 45. See also Michael Kilian, Tribune, Dec. 1, 1968.

³Peterson, Airports for Jets, pp. 10-11.

⁴General Airport Company, Comprehensive Study, p. 77.

⁵Chicago North Side News, Aug. 19, 1955. See also Stewart Ramsey, Sun-Times, June 19, 1956, p. 50.

⁶Burke, Plan "C" Development, p. 2. Times, June 19, 1956, p. 50.

⁷Staver, "Chicago Traffic. . .," p. 86.

and Brown, airport consultants, had predicted 22,000,000 passengers for 1970, and everyone concerned with O'Hare considered the estimate far too high.¹ In 1959 when the major expansion began at O'Hare, officials had believed that the ultimate capacity of the airport would be 30,000,000 passengers and 550,000 plane movements per year. However, O'Hare handled 32,000,000 passengers and over 650,000 aircraft movements in 1969.² Part of this was because of O'Hare's facilities and part because commercial air traffic in the United States had been increasing at an annual rate of fifteen per cent.³ In 1964, a newspaper report declared that because Aviation Commissioner Downes had seen so many estimates fall far short of actual increases, he knew "better than anyone else that predictions about air traffic have a way of coming true well ahead of schedule."⁴ This statement remains appropriate. The result of unpredicted air growth and schedule peaking has been congestion according to an

¹Interview, DeMent, Oct. 24, 1969. See Naess and Murphy, First Stage Development, p. 19. Landrum and Brown had revised their estimate upward from 18,000,000 for 1970.

²Tribune, Mar. 15, 1970, sect. 5B, p. 1. See Downes, Annual Report, 1968, p. 6 and Robert L. Dishon, Daily News, Jan. 18, 1969, p. 10. 30,124,534 passengers used O'Hare in 1968.

³Kingsley Wood, Sun-Times, Aug. 4, 1968. See also interview, Manny, Jan. 7, 1970.

⁴Herald-American, Feb. 13, 1964, p. 3.

executive officer of the Airport Operators Council, International.¹

The city has held to the goal of using Midway Field to relieve traffic at O'Hare. In May 1969, the latter airport had only sixty-six scheduled flights per day, although it was capable of handling five hundred. Commissioner Downes declared that seventy-two per cent of O'Hare's flights were for seven hundred and fifty miles or less. Planes with this range could be accommodated at Midway. The commissioner blamed Midway's lack of traffic on the large carriers who he believed were "reluctant to disturb the status quo at O'Hare. . . ." ² He also believed that many of the small feeder lines wished to use Midway, but their passengers were dependent on obtaining connections with the big airlines.³ The commissioner was not the only one who was interested in shifting some operations to Midway, as the traffic at O'Hare has been tremendous, and the resultant congestion cause many delays in 1969. Runways were saturated; gate space was inadequate; holding areas were

¹U.S., Congress, Maintenance of an Adequate Airport System, p. 63.

²C. Owsley Shepherd, Chicago Today, May 22, 1969, p. 18.

³Michael Kilian, Tribune, Dec. 1, 1968.

insufficient, and cargo space was lacking.¹ Because of the "seriously overcrowded conditions and resultant confusion" at O'Hare, the Air Line Employees Association urged the federal government to promote the full use of Midway Airport.²

In spite of the press at O'Hare and the modernization program at Midway (which ultimately cost \$14 million), there seemed no hurry to use the latter airport. Only United, Northwest, and American Airlines had flights at Midway in 1968 and 1969. Commissioner Downes and the city has been pressuring United, American, and Trans World Airlines to transfer some of their New York flights from O'Hare. Mayor Daley felt that more needed to be done, and so he called together the top executives of the fifteen major commercial airlines in Chicago, did "some table pounding." and told the line officials he expected a quick increase from forty to two hundred and twenty daily flights at Midway. The Boeing 727 tri-jet as well as the two-engined Boeing 737 and Douglas DC-9, all able to carry more than one hundred passengers, could use the older airport. On two separate occasions, the mayor said that it

¹U.S. Federal Aviation Administration, A Suggested Action Program for the Relief of Airfield Congestion at Selected Airports, (Springfield, Va.: U.S. Clearinghouse, 1969), p. 28.

²Letter, Victor J. Herbert, president, Air Line Employees Association International, to John A. Volpe, Secretary of Transportation, Jan. 24, 1969. The C.A.B. approved an increase in the number of daily scheduled flights at Midway from 38 to 83 by Sept. 15, 1970. Sun-Times, July 28, 1970, p. 5.

was a "disgrace" for Midway to be so little used.¹ Later, the mayor went so far as to state that the city might have no need of a third airport for ten to fifteen years, as Midway could handle 436 flights per day to relieve O'Hare. A spokesman for the Professional Air Traffic Controllers Association, John Germata, responded that no more flights should be transferred to Midway; that, in fact, serious consideration should be given to the closing of Midway because of conflict between the traffic there and that of O'Hare. An official of the Federal Aviation Administration answered the latter statement by saying that Midway could handle 400 flights per day safely.²

It will soon be discovered how much traffic both O'Hare and Midway are capable of handling. In 1968, a new estimate projected 60 million passengers for Chicago by 1975.³ This figure was supposed to reach 80 million passengers by 1980. Despite this doubling of traffic by 1975 and tripling by 1980 of the 1970 levels, the city and carriers have still not reached agreement on a cooperative plan to meet the needs of airports in Chicago.⁴ The needs

¹Tribune, Mar. 15, 1970, sect. 5B, p. 8.

²Ottawa (Illinois) Daily Times, Feb. 13, 1970.

³Department of Development and Planning for the City of Chicago, O'Hare Development Area (Chicago: n.p., Dec., 1968), p. 8.

⁴Thomis, Tribune, Mar. 15, 1970, sect. 5B, p. 2. See also Daily News, June 20, 1969, p. 39 for the expected increase of air traffic and Downes, Department of Aviation Annual Report, 1968, pp. 16 and 18.

must be met soon. "The ultimate capability of O'Hare to handle the forecast traffic demand without intolerable delay, will be reached in the early 1970's."¹ ". . . if no improvements are made to increase the capacity of O'Hare airport [sic], delays in 1975 are estimated to reach . . . 24 years of aircraft delay per year."²

Most persons might find it difficult to believe such projected figures for traffic. They have not been used to thinking of commercial air travel as the immense business it is. Here is what Wayne Thomis, aviation editor of the Chicago Tribune, says:

Commercial aviation, which has virtually taken over all but short distance travel from rail, automotive, and ship lines, is the biggest type of big business. Auditors estimate conservatively that commercial air lines derive 1.3 billion dollars of revenue annually from Chicago alone.³

Obviously, with such huge amounts of air traffic, there would be problems of safety and control. Scullin claimed

¹ Airborne Instruments Laboratory, (Supplement to Analysis of Capacity and Staging of Runway Construction at Chicago O'Hare Airport. Report No. 8914-1, April, 1962) Report No. 2742-1, (Deer Park, N. Y.: n.p., Jan. 1963), p. 32.

² F.A.A., A Suggested Action Program. . . , p. 28. Twenty-four years of aircraft delay per year means that if all of the delay time of all of the airplanes for one year were totaled, it would amount to twenty-four years of delay.

³ Thomis, Mar. 15, 1970. In 1970, however, air passenger traffic growth was averaging about six per cent per year rather than twenty-one per cent per year as had been projected in 1967. Interview, Sampson, June 29, 1970.

that congestion with aircraft existed since the 1920's when the first beacons attracted planes like so many moths.¹ Nothing is new. Today, the increasing number of flights, seeming to necessitate more federal regulation for safety purposes, concerns those who fear such controls. In 1944, Joseph T. Geuting, Jr., vice president of the General Aircraft Corporation, gave this opinion: "The industry feels that policing of personal aircraft and personal pilots has grown to a point where it constitutes an onerous burden hampering the public's right to fly."² Congestion grew, however, as did the speed of aircraft until by 1958 legislation was needed to meet the challenges of the jet age. The Federal Aviation Act was passed in that year which merged the Civil Aeronautics Administration, Civil Aeronautics Board, and other bureaus concerned with aviation into the Federal Aviation Agency on December 31, 1958. The new F.A.A. had the responsibility of developing policies to promote air safety. This included research and development, dissemination of information, the training of controllers, and operating air traffic control centers such as the extremely busy control tower at O'Hare Field.³

¹International Airport, p. 281.

²Tribune, Dec. 6, 1944.

³Scullin, International Airport, pp. 286-87 and 301. See also Department of Transportation, Federal Aviation Administration, FAA Statistical Handbook of Aviation (Washington: U.S. Gov't Printing Office, Nov. 1967), p. 1. In 1966, the Federal Aviation Agency became the Federal Aviation Administration with the founding of the Department of Transportation.

The O'Hare control tower was completed in 1955. It was only eighty-five feet (seven stories) high because the controllers at Idlewild (Kennedy) who occupied a building of one hundred-seventy-five feet were often in a low cloud or fog layer which limited visibility.¹ By 1958, before the traffic boom began, controllers were guiding 25,000 flights per year using the instrument landing system (ILS). The planes descended on a three per cent glide path (303 feet per mile). At the six mile outer marker, the aircraft were 1,819 feet above ground level (O'Hare Field is 666 feet above sea level). At the airport boundary on York Road, the planes were at an altitude of 300 feet. Thirty-three tower personnel were on duty twenty-four hours per day in 1958 to aid pilots on visual flight rules (VFR) as well as instrument flight rules (IFR).²

Activities of the Federal Aviation Agency demonstrated the increasing importance of O'Hare Field and Midway's decline. In 1959, the F.A.A. installed VASI, a visual approach slope indicator system, at O'Hare which would show incoming pilots their direction and distance from the runway and enable the airfield to handle more

¹Tribune, Oct. 23, 1955.

²Bensenville Register, July 3, 1958. See Peterson, Airports for Jets, pp. 22-23.

traffic.¹ In addition, the air traffic control center for the Chicago area was moved from Midway in 1960. The new F.A.A. center would be responsible for civilian and military flights in the region with a perimeter of these cities: Green Bay to Detroit to Indianapolis to Omaha. The new center was located three miles north of Aurora, Illinois, probably out of the damage zone in case of a nuclear attack on the metropolitan area, and cost \$2 million.²

O'Hare Field had instrument landing systems placed on its two parallel northwest to southeast runways by 1961. In that year, a third instrument landing system was provided for the east to west runway, making O'Hare the only airport in the world with three such systems. The IRS was built by the Federal Aviation Administration at a cost of \$200,000, and was expected to eliminate circling in poor weather.³ Instrument flight rule operations, used more and more even in good weather, was the key to the handling by O'Hare Field of large quantities of air traffic. The natural question which Chicago officials asked was:

¹Downes, Bureau of Aviation Annual Report, 1958, p. 18. See also Najeeb E. Halaby, F.A.A. Administrator, "Congratulating Chicago Citizens," Airlines, Aug., 1962, p. 11.

²Tribune, Jan. 12, 1960. See also addition to this chapter made at the O'Hare tower, May 25, 1970.

³Daily News, Jan. 19, 1961. See also Sun-Times, Jan. 19, 1961.

What is the dimension required between independent runways, parallel runways, or converging or diverging runways that would permit independent operation of one runway versus another runway during instrument flight conditions?¹

This problem of how far apart must runways be for safe simultaneous use in poor weather, was taken up with the Civil Aeronautics Administration Technical Development Center at Indianapolis. On October 14, 1958, a meeting was held which included Chicago controllers and officials of the City of Chicago and the Civil Aeronautics Administration. Flight tests were about to begin to determine the feasibility of simultaneous parallel approaches for O'Hare.²

The Civil Aeronautics Administration believed in the late 1950's that a 5,000 to 6,000 foot separation was adequate for independent instrument flight rule operations. The O'Hare plan was developed with a spacing of 6,500 feet between runways. After study and analysis by the C.A.A., the plan was evaluated beginning in 1958 under visual flight conditions. The airlines volunteered airplanes and "pilots volunteered their time to test [eventually] under blind flying techniques, the spacing criteria for independent simultaneous, operational capability during instrument flight

¹Letter, Landrum, Jan. 13, 1970. See also Martin A. Warskow and Howard C. Burns, Analysis of Capacity and Staging of Runway Construction at Chicago O'Hare Airport. Report No. 8914-1. (Deer Park, N. Y.: Airborne Instruments Laboratory, Apr. 1962), p. 13.

²Manny, "Log," p. 130.

rule conditions for the O'Hare operation." The C.A.A. was absorbed by the Federal Aviation Agency which issued a design standard setting "5,000 feet as a minimum spacing between parallel runways" for "simultaneous independent landings and takeoffs on two parallel runways." O'Hare began such operations in 1961.¹

On December 15, 1962, the F.A.A. lowered the minimum cloud ceiling for simultaneous instrument landings to the southeast on parallel runways from 3,000 to 900 feet. O'Hare became the first airfield to be able to handle simultaneous parallel IRS weather approaches.² This was a major breakthrough for reducing peak traffic and bad weather delays which were costing the airlines \$36 million per year. O'Hare Field was chosen, because it was anticipated that it would be the world's busiest airport with as many as two takeoffs or landings every minute.³ President Kennedy praised O'Hare Field for pioneering air safety, for it was the only airport in the world where planes could make instrument landings on

¹Letter, Landrum, Jan. 13, 1970. See also "Chicago-O'Hare International" F.A.A. file in Washington, correspondence folder no. 5, for information sent to Senator Everett M. Dirksen (R-Ill.); and addition made at the O'Hare tower, May 25, 1970.

²Downes, Department of Aviation Annual Report, 1963. See also Daily News, Jan. 30, 1963, p. 40.

³Bensenville Register, Dec. 13, 1964. See also Roy Allen, Great Airports of the World (London: Ian Allan, 1968), p. 32.

parallel runways simultaneously.¹ By January 1970, only one other airport, Los Angeles International, had the capability to do this, although a number of master plans for the future provide for it.²

Other facilities were added to make O'Hare Field highly efficient. Airport Surface Detection Equipment (ASDE) was inaugurated on July 31, 1963 to control planes and vehicles on the ground. It was a radar to "see" taxiways and runways even if clouds or fog were in the way.³ Airline supervisors in the ramp area were equipped with two-way radios to coordinate the flow of company aircraft.⁴ A new mercury-vapor floodlighting system was installed throughout the airport area in 1967 to improve visibility. The system gave 200 per cent more lighting while using one-third less electricity. Shields voided the glare which might hamper the ability to see from the control tower.⁵

Much consideration had been given to making Chicago-O'Hare International Airport a safe field. The Air Traffic Control Association called the O'Hare control tower the

¹Kennedy, "Draft Remarks," p. 63. See also Sun-Times, Mar. 23, 1963, p. 3. Daily News, Oct. 17, 1963.

²Letter, Landrum, Jan. 13, 1970.

³Downes, Dept. of Aviation Annual Report, 1963, p.6.

⁴Cook, Aviation Week, p. 47.

⁵"Jet-age Lights for an Air Terminal," American City, Feb., 1968, p. 124.

outstanding facility in the nation in 1963.¹ Newspapers said "O'Hare's tower team is regarded as the best in the world" by aviation experts.² In 1967, General William F. McKee, administrator of the Federal Aviation Administration, called O'Hare Field "one of the safest airports in the country."³

With so much praise for the personnel and facilities of O'Hare, what problems of traffic and air safety did exist? In early 1961, the aviation committee of the City Council held hearings on air safety. Captain Robert Stone of the United Airlines spoke for the Air Line Pilots Association (ALPA). When asked if there had been any close calls between commercial and private airplanes, he did not answer directly but said that traffic patterns had been worked out by letters to small airports near O'Hare. He continued to say that the area was a high density zone and "that some problems exist" and then Stone added that ". . . more stringent regulations of all aircraft are required here."⁴ There was talk in 1967 of banning private planes from O'Hare for safety reasons, but this was not done. Leonard J.

¹Daily News, Oct. 17, 1963.

²Robert Wiedrich, "O'Hare," Omnibus, III (July, 1966), p. 24.

³Daily News, Dec. 28, 1968, p. 5. See also Daily News, July 24, 1967.

⁴Tribune, Jan. 26, 1961.

Kmiecek of the Greater Chicago Area Pilots Association (a non-airline, non-military group) declared that such talk was "hitting the panic button." He said that O'Hare was a public place and supported by tax money, that it would take an act of Congress to stop private planes from using the field. In Kmiecek's opinion, midair collisions do not occur near big airports.¹ But when Lieutenant Commander R. D. Riley of the Glenview Naval Air Station was questioned concerning conflicting air traffic with O'Hare Field, he replied that the "biggest problem to date lies within the complex of surrounding small general aviation satellite field," rather than with O'Hare. During good weather, such aircraft fly where they wish, but under instrument flight conditions with private planes under positive control, this problem of conflicting traffic for Glenview diasappeared.²

Leonard Kmiecek, secretary of the Chicago Area Pilots Association, stated in 1965 that O'Hare was so busy with so many flights that "runway roulette" was being played; that the airport was "tempting fate" by such heavy traffic.³ Captain Vernon W. Lowell, a commercial pilot

¹Daily News, July 25, 1967. Private planes were restricted to an altitude under 14,500; commercial piston planes in flight have the area from 14,500 to 24,000 feet reserved, and jet planes fly at an altitude above 24,000 feet by F.A.A. regulation. The only place a private and commercial plane could collide would be near a large airport. Scullin, International Airport, p. 290.

²Letter, LCDR Riley, USNR, Assistant Operations Officer, Naval Air Station, Glenview, Illinois, to Doherty, Jan. 1970.

³Daily News, Oct. 2, 1965.

turned author, seemed to agree with Kmiecek. Lowell wrote that there is no time to repeat clearances to the control tower at O'Hare, as there is at most other airports. And besides congestion, Lowell pointed out that frequent gusts of wind, runways which are often slippery, and weather which could limit visibility were also hazards to safety at Chicago-O'Hare.¹ Did a safety problem exist near congested airports because of private planes?

In mid-1968, there were about 2,450 commercial airliners and 120,000 private planes in the United States, and a study by R. Dixon Speas Associates predicted the number of small planes would increase to 260,000 by 1980. The small planes usually lacked sophisticated navigational aids, and, when near large airports, sometimes become a problem for controllers. The airlines desired priority at the large airports. Government regulations have historically been that "all major airports must accept for takeoff or landing even the smallest plane on a first-come basis."² Richard Mack, air traffic controller at the O'Hare tower, stated that during poor weather under instrument flight rules, the aircraft (mainly commercial) which had filed such flight

¹Lowell, Airline Safety Is a Myth (USA: Bartholomew House, 1967), pp. 127-28.

²"Crisis of the Cluttered Air," Life, Aug. 9, 1968, p. 42. See also Peter Reich, Herald-American, Apr. 14, 1969, p. 12.

plans received service over aircraft (chiefly private) without instrument flight qualification that do not operate in IFR conditions. During good weather, planes continued to be taken for landings in the order of which they arrived at the airport.¹

The Federal Aviation Authority wanted to learn if private planes were dangerous to commercial aviation. In 1968, it inaugurated a policy of immunity from discipline by the airlines or the federal government to commercial pilots who reported coming near enough to another plane so that it would be considered hazardous. During the 1960's about 500 such cases had been reported each year, but under the immunity rule of 1968, the number soared to 2,577.² On the basis of such information, Secretary of Transportation John Volpe has stated that small airplanes will have to be restricted from certain areas near twenty-two major airports.³

Granting that no airport, let alone the busiest one in the world, can eliminate all fatal accidents, the safety record of Chicago-O'Hare International Airport has been

¹Interview, Mack, Feb. 17, 1970. See qualification to statement in letter from O'Hare tower, May 25, 1970.

²Herald-American, Apr. 26, 1969, p. 4. The near-misses were usually between private and commercial planes, near an airport.

³Today Show (NBC-TV), Nov. 12, 1969. See also James R. Polk, Muncie Evening Press, Sept. 10, 1969.

amazingly good. An Air Force F-86D sabre Jet fighter crashed and burned at O'Hare Field in 1954, and the pilot was killed.¹ In 1955, the afterburner fire retainer ring of an F-86 sabre jet in flight blew out. A five pound piece of the ring fell through the roof of an automobile. A ten pound chunk of the red-hot metal set the grass afire near where some children were playing in Park Ridge, Illinois which adjoins O'Hare on the northwest. No one was injured.² Bensenville received its first scare from air operations in 1956. An Air Force F-86D jet's cockpit filled with smoke. The pilot was forced to eject and the plane crashed north of Irving Park Road, 300 yards from the outer village limits of Bensenville.³

The first accident involving death in a commercial liner near O'Hare occurred on September 17, 1961. A Northwest Orient Airline Lockheed Electra II took off from the main runway, 14R-32L, towards the southeast. It rose about 100 feet, and then went into a bank with its right wing down. The plane crashed off the airport near Irving Park and Mount Prospect roads, killing all thirty-seven persons

¹Sun-Times, Nov. 28, 1954.

²Ibid., May 4, 1955.

³Bensenville Register, Aug. 23, 1956, p. 1.

on board. A faulty wing assembly was blamed for the tragedy.¹ On December 27, 1968, a North Central Airlines Convair 580 prop-jet crashed into a hangar while landing in a heavy fog. Twenty-seven persons were killed and twenty-six injured. This was the first fatal accident on the airport involving a commercial plane.²

Safety advances are not unique to Chicago-O'Hare International Airport. All over the nation there have been fewer accidents proportional to the increase of traffic because of improved technology and surveillance by the Federal Aviation Administration.³ Scullin predicts that air controller will be using \$6 billion worth of equipment by 1975 in order to meet higher standards.⁴ The F.A.A., which supplies the radar, computer, and electronic instruments for air safety, had 778 requests for aid totaling \$339.3 million in 1968, but had funds to allocate only \$70.2 million.⁵ The O'Hare air controllers are waiting for the arrival and

¹Tribune, Oct. 5, 1961. See also Daily News, Dec. 28, 1968, p. 5. Someone at the O'Hare tower believed that the actual final cause was determined to be faulty mechanical maintenance.

²Frank Maier and John McHugh, Daily News, Dec. 28, 1968, p. 1. Editorial, Daily News, Jan 3, 1969.

³Scullin, International Airport, p. 301. See also Kurtz, New York Times Encyclopedic Almanac, 1970, p. 690.

⁴Scullin, International Airport, p. 307.

⁵U.S., Congress, Maintenance of an Adequate Airport System, p. 25.

installation of the latest electronic machinery in the new control tower so that it can be used.¹

The old control tower was used from 1955-1970. Since it was only eighty-seven feet high, planes could not be observed visually at all times on the airfield, although they were kept under radar observation. The old tower also lacked space.² After O'Hare became the busiest airport in the world, the Federal Aviation Administration pressured the city to locate the new control tower in the center of the parking lot adjacent to the terminal area. Chicago officials had desired a multi-level parking lot or a hotel there, but federal funds were made conditional upon the tower being in the central location specified by the F.A.A.³ The new tower was begun in 1966 with the expectation that the building might be operational in 1968, but delays occurred first in construction and then in obtaining the latest equipment.⁴ By 1971, the "Arts III program," a computer correlated with radar to track and identify each plane, is to be installed,

¹Interview, Richard Mack, Feb. 17, 1970.

²Howard James, Tribune, Feb. 12, 1962.

³Letter, Najeeb E. Halaby, Administrator, Federal Aviation Administration, to Mayor Richard J. Daley, June 3, 1965.

⁴Downes, Department of Aviation Annual Report, 1966, p. 20.

and the old tower can be vacated.¹

In some ways the men of the control tower at O'Hare Field are fortunate. The field has a "very complicated and straight-forward air space situation with a minimum of conflict with other airport air traffic and air space control procedures, along with a highly sophisticated runway and taxiway systems." These conditions give O'Hare the capability to do what it has done for years--to be first in the world in aircraft operations.² Nevertheless, the job of being a controller is extremely difficult.

About 100 men are on the staff of the O'Hare tower. Most began as air traffic controllers while in the military service, and most undergo two years training from the F.A.A. Following this, it takes another two years on the job before a man is considered experienced at the O'Hare tower.³ Each controller must be able to handle all eighteen job positions and alternate in them. Not more than an hour is spent on one job. In a typical eight hour day, a controller would

¹Interviews, James Wrzesien and Otto Stark, C. F. Murphy Associates, Oct. 27, 1969 and Richard Mack and Ed Haynes, officials at the O'Hare control tower, Feb. 17, 1970.

²Letter, Landrum, Jan. 13, 1970. See also letter, LCDR Riley, Jan. 1970; Warskow and Burns, Analysis of Capacity, p. 7.

³Interview, Mack. See also Ridgely Hunt, Tribune Magazine, Nov. 24, 1968, p. 46. About twenty-eight persons would normally be on a day shift. Arthur Siddon, Tribune, Apr. 5, 1970, p. 3.

have responsibility for about 100,000 lives.¹

An area within a thrity-five mile radius of O'Hare is supervised from the control tower there. One hundred planes may be in the territory concurrently, and each must be instructed and watched. A controller might have ten or more aircraft to care for at the same time. The skies are becoming "saturated" with airplanes.² Because of "air jams" from increased traffic which happened in the summer of 1968, the Federal Aviation Administration limited O'Hare Field to 135 flights an hour, 115 of which were allocated to commercial aviation.³

Federal regulations do not allow two planes on the same runway at the same time. During good weather, a rhytm is developed by the controller, so that no time is lost and a plane is on the runway landing the instant one takes off from the opposite end of the landing strip. During very low visibility, however, the intervals between aircraft coming in to land may be stretched from three to six miles.⁴

¹Connie Meyers, Chicago Today, July 8, 1969, p. 21.

²Hunt, Tribune Magazine, p. 37. Scullin, International Airport, pp. 308-9, stated that the air was not congested; the runways and airports were. Richard Mack of the O'Hare tower disagreed and believed the air space in the Chicago area was "getting crowded." Interview, Feb. 17, 1970.

³Robert L. Dishon, Daily News, Dec. 3, 1968, p. 1.

⁴Hunt, Tribune Magazine, p. 42.

O'Hare handles 1,600 to 2,400 operations, landings, and takeoffs, every day. The controller has to be "fine tuned" to make split second decisions. Any interruption in the flow of traffic can cause delay for many planes.¹ If one plane attempts to land too soon, while another is yet on the runway, the one in the air must go back and come in again. This mistake would cost an airline about \$500 in extra salaries and fuel. An even more difficult task for a controller than directing landings and takeoffs is that of being the ground controller in charge of planes between the loading gates and the runway. He may have fifty planes waiting to leave which he must instruct. This instruction is complicated by the fact that the aircraft are waiting on the taxiway all at a great distance, and confusion can arise because jets of the same carrier may be distinguished only by small numbers on the tail section.²

The position of controller paid about \$6,000 for a beginner and went up to \$14,000 annually in 1968. Ridgely Hunt, a writer, stated that most of the men who did such

¹Interview, Mack. Goodyear Aerospace Corporation has developed a computer called "staran" which can perform 40 million mathematical operations per second to aid air traffic controllers in reducing the amount of space needed between airplanes landing and taking off. Muncie Evening Press, Jun. 16, 1970.

²Hunt, Tribune Magazine, p. 38. A member of the O'Hare tower believed Hunt was overestimating the difficulty of distinguishing aircraft.

work were young, poised, relaxed, and confident.¹ Dr. W. Wayne Sands, psychiatrist from Des Moines, did not agree. He studied forty-four of the O'Hare controllers and said that thirty-six of the group suffered from "terrifying dream," "combat fatigue," and "collisionitis."² Dr. Sands' study was done for PATCO, the Professional Air Traffic Controllers Association, and he declared the job of controller was the most mentally demanding he had found. Dr. Sands did intensive studies of the personnel of three other traffic control centers besides O'Hare Field, and believed that fifty to sixty per cent of the persons observed should be under the care of a psychiatrist.³ F. Lee Bailey, criminal lawyer and former executive director of PATCO, claimed that eighty-six per cent of the persons studied from O'Hare had some internal bleeding and one-fourth of the controllers in the United States suffered from ulcers.⁴ The chief of the O'Hare tower, D. M. Vicurevich, said that few resigned from that difficult job because of the pay which in 1969 could go up to \$24,000 a year.⁵ Dick Mack, when questioned about

¹Ibid., p. 46.

²Karen Hasman, Daily News, Aug. 16, 1969.

³Muncie Evening Press, Apr. 7, 1970.

⁴Bailey statement made on the Dick Cavett Show, American Broadcasting Company, night of Mar. 27, 1970. Bailey did not explain "internal bleeding."

⁵Karen Hasman, Daily News, Aug. 16, 1969, p. 3.

the discrepancy between the picture of poised, confident, able, young men and a nervous group in need of psychiatric help, did not want to express an opinion, but said there were different views concerning the controllers.¹

As a protest against the shortage of personnel and the low pay relative to job responsibilities, controllers began a campaign in the summer of 1968 to follow every regulation to the letter. The result was a tremendous traffic jam at airports. Life magazine commented, "The truth is that the air traffic equation is dangerously unbalanced: too many planes and passengers; not enough airports and electronic gear; too few men trained to control it."² On June 19, 1969, members of the Professional Air Traffic Controllers Association (PATCO) in New York, Kansas City, and Denver called in sick to dramatize poor working conditions and in reaction to an "anticontroller remark" by the Federal Aviation Administrator who was testifying at a congressional hearing. The result was another traffic crisis, and thousands of travelers were temporarily stranded at O'Hare.³ On March 25, 1970, many controllers phoned in "sick," and

¹Interview, Richard Mack, training supervisor at O'Hare tower, Feb. 17, 1970.

²"Crisis of the Cluttered Air," Aug. 9, 1968, p. 39. See also Herald-American, Apr. 26, 1969, p. 4. The crisis of 1968 did result in a big increase in pay.

³Chicago Today, June 19, 1969, p. 5. See also Kurtz, New York Times Encyclopedia Almanac, 1970, p. 19.

F. Lee Bailey called for a walkout by controllers on March 26, 1970.¹ On the day before Easter, Saturday, March 28th, over 250 flights at O'Hare Field were cancelled, including 108 by Trans World Airlines and 100 flights by United, most of them to the East coast. Eastern Airlines was the only carrier that would allow its pilots to fly visually (VFR) rather than by instrument flight rules (IFR), and cancelled no flights.² Apparently, the reason for the "sick-in" was the failure of the federal government to meet demands by PATCO concerning overwork and inadequate equipment.³ The strike slowly faded out after three weeks.⁴ The federal government would not negotiate with the Professional Air Traffic Controllers Organization, and PATCO elected a new

¹Indianapolis Star, Mar. 27, 1970, p. 3. See also Muncie Star, Mar. 26, 1970.

²Tribune, Mar. 29, 1970, p. 1. On Friday, March 27, 1970, the Muncie Evening Press reported the O'Hare controllers were back to work. However, the next day, March 28, not only did 40 of 100 controllers at the Aurora center for the Chicago region phone in sick, but there were eight anonymous threats to bomb the O'Hare tower (see Tribune, Mar. 29, 1970). In the eleventh day of the sick-in, April 4, 1970, the Aurora control center still had 40 of 100 persons on the day shift absent and 36 of 108 controllers out at night. At the O'Hare control tower on this day, thirteen men of fifty-two on two shifts were reported absent (see Arthur Siddon, Tribune, Apr. 5, 1970).

³Louis Dombrowski, Tribune, Apr. 12, 1970, p. 1. An unidentified member of the O'Hare tower wrote that this statement was "very questionable." There were some who believed that PATCO was seeking recognition as the bargaining agent for the air traffic controllers.

⁴Muncie Evening Press, Apr. 15, 1970.

president and abolished the post of executive director which had been held by F. Lee Bailey. The new president, John Leyden, doubted that there would be any more "sick-ins." "A lot of us feel a different course must be pursued for future relief of our problems."¹ Congress is expected to appropriate the funds for many more controllers.²

The fantastic growth of commercial aviation has regularly outstripped predicted gains. This surge of jet travel has ehlped to make Chicago-O'Hare International Airport one of the busiest airfields in the world. Ironically, it has left Midway Field in a distressed state despite renovation and the efforts of the city to transfer traffic there. However, O'Hare has outstanding facilities to handle its great quantities of aircraft with safety; especially worthy of mention are the parallel instrument runways. Safety and speed of operation mark procedure at O'Hare Field, but problems exist, particularly congestion and the pressures on the men of the control tower of the busiest airport in the world. The numerous jet aircraft have caused another difficulty not yet mentioned, namely the discomfort of noise on the communities surrounding the airfield.

¹Ibid., Apr. 24, 1970.

²Ibid., May 21. 1970.

CHAPTER IX

O'HARE UNDER ATTACK

The growth of Chicago-O'Hare International Airport has been a mixed blessing to the suburbs that surround it. Along with economic benefits from the huge increase of commercial jet traffic has come a great deal of unwelcome noise. Inhabitants of the communities near the airfield also fear decreased property values and restrictive zoning. They have campaigned individually and in groups to fight noise, air pollution, and potentially harmful zoning by writing letters to public officials and aviation personnel, speaking to persons who might help their cause, and taking legal action.

Supporters of the airport and the aviation industry have met these attacks in ways as varied as those used by their opponents. One important means has been to relate the salutary effect O'Hare has had on the region around it. In 1950, for example, the six major suburbs of the O'Hare area--Bensenville, Des Plaines, Elk Grove, Park Ridge, Franklin Park, and Schiller Park--had a combined population of 30,633. The census of 1960 showed that the area's

population had quadrupled to 108,223. By 1966, the number of persons estimated to be living near the airport was 155,000. The only suburb of Chicago which exceeded this growth rate in the 1950's was Mount Prospect which adjoins the area to the north. The increase in population was matched by the growth of industry. Charles Wilson of the Chicago Association of Commerce and Industry reported that there were 100 new plants plus many service industries established in the O'Hare area during 1959 and 1960. He credited the airport with attracting most of the new factories. Marshall Bennett, who developed an industrial park at Elk Grove, stated that many businesses liked to be near airports for a number of reasons. Their executives could travel quickly; low bulk, high cost items could be distributed easily; and labor is available because airports attract people. A survey by the Air Transport Association in 1960 showed that seventy per cent of the businesses they sampled required available air transportation before the companies would locate a plant or branch office in an area.¹

The impact of jet traffic has not injured residential real estate in the O'Hare area. Many homes have been built

¹Peter Reich, Herald-American, Oct. 25, 1960. See also Department of Development and Planning, O'Hare Development Area, p. 14. U.S., Department of Commerce, Bureau of the Census, United States Census of Population: 1960, Vol. I, Characteristics of the Population, pt. 15, Illinois.

since the airport became extremely busy, and despite the rise in cost of housing everywhere, the value of homes there remains about the same as in comparable Chicago suburbs. The price of vacant land near the airfield, however, has far outstripped that of similar property elsewhere.¹ This is because the value of land for non-residential purposes around O'Hare Field has risen tremendously, especially in the decade of the 1960's.

During 1961, United Airlines constructed a \$7 million building at Elk Grove and moved its national headquarters, which employed 1,300 persons, from Midway to the O'Hare area.² Almost 20,000 persons daily were working at the airfield by 1968. This included seventy-nine policemen, eleven nurses, and sixty firemen.³ The Chicago Association of Commerce and Industry reported that the number of manufacturing plants in the suburbs surrounding O'Hare Field increased sixty-nine per cent from 1960-1966 to bring a rise in employment during the period from 25,000 to 54,000 persons. By 1968, there were thirty-one industrial districts in the O'Hare area, the largest being the Centex Industrial Park

¹Walther, Airport Study, pp. 42-43. Mr. David Sloan of Sloan Realty, Bensenville, stated that the prices for homes were remaining high in the O'Hare area in 1969. Interview, Aug., 1969. See also Sun-Times, June 29, 1961.

²Thomis, Dec. 3, 1961, p. 48.

³Downes, Department of Aviation Annual Report, 1968, p. 8.

in Elk Grove with 2,200 acres.¹

Probably the most important facility that O'Hare Field helped attract was the 200 Billion Electron Volt Accelerator Laboratory of the United States Atomic Energy Commission at Weston, Illinois to explore the fundamental structure of matter. The accelerator is planned to have a diameter of one mile and to be the most complex machine ever built for basic scientific research. The laboratory will cost \$375 million to build, including equipment, and will employ 2,000 persons.² One of the crucial factors determining location near Chicago was the availability of transportation. The report announcing the selection of the Weston site over five others which were considered stated "it is essential that this Laboratory be readily accessible to scientists of other countries." It went on to say that Weston had "no equal in terms of accessibility" because of O'Hare Field.³ The laboratory was expected to be fully

¹Department of Development and Planning, O'Hare Development Area, pp. 14-15.

²United States Atomic Energy Commission, "AEC Selects Site for 200-BEV Accelerator," Washington, D.C., Dec. 16, 1966. (Mimeographed.)

³United States Atomic Energy Commission, "Basis for the Selection of the Chicago (Weston) Site for Location of the 200-BEV Accelerator Laboratory," Washington, D.C., Jan. 18, 1967. (Mimeographed.)

operative by June, 1972.¹

Robert Sampson, chairman of the Chicago Airlines Top Committee, felt that it was ironic that almost everyone connected with O'Hare Field except the City of Chicago had profitted. He believed there were about 75,000 industrial plant jobs around the airport's periphery in 1970; that industry had been attracted which paid taxes to the suburb where such business was located rather than the city; that Chicago made no profit from the airfield, because all funds taken in there had to pay for its operation and the retirement of revenue bonds.² Wayne Thomis, an aviation editor, thought that O'Hare acted as a magnet drawing commercial and industrial development. Because of this, Chicago has desired to have the proposed new major airport built in Lake Michigan near the downtown area of the city.³ To Colonel John Corey, O'Hare had made an obvious and beneficial economic impact on the area around it. However, he felt there were so many variables involved that this would

¹Ronald Kotulak, Tribune, Mar. 15, 1970. Other things besides transportation entered into the selection of the Weston site. These included the availability of land and housing, the co-operativeness of state and local governments, and political influence. Senators Dirksen and Douglas of Illinois worked very hard to obtain the Laboratory for their state.

²Interview, Sampson, Jan. 4, 1970. See also Peterson, Airports for Jets, p. 59 who wrote that major airports attract both people and industry.

³Tribune, Mar. 15, 1970, sect. 5B, p.8.

be impossible to prove.¹

A magazine writer declared that a location near O'Hare was agony and ecstasy. The joy was economic development, but the pain was noise.² Complaints about the sound of airplanes are not new; they predate the founding of O'Hare. For example, an undated letter sent in the mid-1920's to Varney Airlines, one of the parent companies which joined to make United, already expressed disgust with noise. The punctuation, spelling, and word usage are unchanged: "Dear Aviators one & all. Please have sence enough to stay off from over the bery pickers As the pickers get the headache and are unable to pick berries on the count of your God Damned racket---- by Berrie Raisers of Ada County"³

The noise problem at O'Hare existed from the beginning of the airport. Park Ridge protested to the Defense Department concerning noise from single-engined Air Force jets at O'Hare for the tenth time during the summer of 1955.⁴

¹Interview, Corey, administrative assistant to Mayor Daley, Aug., 1970.

²Wierich, Omnibus, p. 26.

³Letter, Berry Raisers of Ada County, Washington to Leon Cuddleback of Varney Airlines on display at the museum of United Airlines in Elk Grove, Ill.

⁴Tribune, Sept. 10, 1955. In 1956, a doctor assured communities near Air Force fields that the B-47, a six-engined jet bomber, caused no severe psychological or hearing damage from the sound of its motors. Dr. Horace P. Paroack, "Noise Vibration and People," Noise Control, II (Nov., 1956), 22.

At this time, the sound from the four-engined Boeing 707 jet was "thunderous" below 30,000 feet.¹ The New York Port Authority would not allow a test model of the Boeing 707 into Idlewild (Kennedy) Field because of its noise. The plane did stop at O'Hare.

During the mid-1950's, it was still possible to dispute the problem of jet noise. After the Boeing 707's test flight into O'Hare Field, a filling station operator near the airport declared, "Maybe we've got leather eardrums out here, but I was watching and waiting for that thing to arrive, and I didn't even hear it."² William E. Downes, Jr., director of airports for Chicago, was quoted as follows in 1958:

We'll have no noise problems here, because of the vast expanse of O'Hare Field, we more than meet the Civil Aeronautics Board's requirements. A jet taking off from our longest runway [8,839 feet at that time] has an area of 3,000 feet by 1,000 feet [a clear area at the end of the runway] and by the time the plane passes over houses, it will be high enough so that noise will be no problem.³

By 1960, O'Hare Field was yet far from being the busiest airport in the world, but complaints about noise were increasing. The mayor of Park Ridge and an alderman

¹Scullin, International Airport, p. 138. The action by the Port of New York Authority spurred the aviation industry to develop noise suppressors. Peterson, Airports for Jets, p. 39.

²White, Saturday Evening Post, p. 39.

³Wade Franklin, Sun-Times, Nov. 20, 1958, p. 8.

of Des Plaines urged the Federal Aviation Agency to change flight patterns at O'Hare or force the aircraft to adopt sound suppressors. A spokesman for O'Hare said criticism of noise had come in from Arlington Heights, Elk Grove, and Mount Prospect. The spokesman felt that some of the callers would like the commercial airliners to "go straight up and down on a string" when arriving and departing from the airport.¹

The National Aircraft Noise Abatement Council (NANAC) was formed in the late-1950's by the Air Transport Association (fifty airlines), the Aerospace Industries Association (seventy manufacturers of aircraft and equipment), and the Air Line Pilots Association (14,000 members). The purpose of NANAC was to coordinate a program to solve the problem of aircraft noise. So many complaints had come from the O'Hare area that representatives of the National Aircraft Noise Abatement Council went to Park Ridge, Illinois, from Washington, D.C. in the autumn of 1960 to explain to the citizens there what was being done by the aviation industry to reduce the sound made by airplanes. The audience of 1,800 booed the speakers only once--when it was told that pilots were supposed to climb to 2,000 feet and maintain

¹Herald-American, June 12, 1960. See also Steve Franzmeier, Bensenville Register, June 23, 1960.

at least that height above residential areas.¹

Criticism brought some alleviation from noise for the O'Hare area. New flight patterns, particularly at night, were adopted to avoid residences as much as possible.² Noise suppressors or "hush kits" to reduce sound were being added to jet engines at a cost of \$49 million. The airlines were also spending \$10,000 more per plane per month to operate using the added suppressors which reduced power as well as sound. This expense was estimated to be \$20 million per year.³ By mid-1961, American Airlines had a new, quieter, more powerful Pratt and Whitney engine on its entire jet fleet. The engine was called a "fan-jet," and the planes using it were known as "Astrojets."⁴

Also in 1961, a third instrument landing system was constructed for O'Hare at a cost of \$200,000. It was built to lower noise in poor weather, when planes had to circle low for a visual landing, as well as for safety reasons.⁵

¹Lucia Lewis, Daily News, Sept. 24, 1960. One can get the impression from the sound of a jet airliners that it is much lower than it actually is. See also Statement of Federal Aviation Agency, p. 11.

²Bensenville Register, Nov. 3, 1960.

³Gabriel Favoino, Sun-Times, Apr. 16, 1961. See also Bensenville Register, Nov. 17, 1960.

⁴Bensenville Register, June 15, 1961.

⁵Ibid., Jan. 26, 1961. See also Daily News, Jan. 19, 1961 and Tribune, Jan. 19, 1961.

Yet, the Aeronautical Committee chairman of Elk Grove charged that the jets were not following noise-abatement procedures, but were flying over the village. Mount Prospect made a formal protest to officials at O'Hare Field saying aircraft were flying lower than was necessary.¹ The level of both sound and complaints continued to increase with the volume of jet traffic.²

Chicago-O'Hare International Airport became the busiest airfield in the world in number of operations as well as passenger traffic for the first time in 1962. The increase in commerce added to the noise problems, and during that year, Commissioner Downes told a congressional committee, called to investigate sound pollution at O'Hare Field because of the number of complaints, how the Doolittle Commission for Airport Safety had studied O'Hare and recommended one-half mile clear zones at the end of each runway be incorporated within the airport boundaries.³ This was done for purposes of both noise abatement and flying safety and made the airfield unique.⁴ The Doolittle Report, however, was made in 1952. Chicago had good intentions in following

¹Bensenville Register, July 27, 1961.

²Gabriel Favoino, Sun-Times, Apr. 16, 1961.

³Statement of Federal Aviation Agency, pp. 3-4.
Later, the name was changed to the Federal Aviation Administration.

⁴Kirchherr, "Airport Land Use," p. 257.

it, but the jet engine made the study by the Doolittle Commission obsolete. (Representative Roman Pucinski of Illinois testified to a later committee, investigating noise problems at airports, that he knew of a test taken in 1963 which registered 108 decibels of sound ten miles from O'Hare for a jet taking off. Although there were no definite standards for noise developed, 100 decibels was considered quite high.¹⁾

In 1962 as now, public officials were groping to obtain noise standards, to fix responsibility for enforcement of such measures, and to establish legal precedents to handle airplane noise cases in court. With such an uncertain atmosphere, Commissioner Downes concluded to the investigating committee that "the City of Chicago obviously can not control who flies what, and how, or where, such control is vested in others than the airport operator."² The City Council passed a resolution urging the passage of a bill to give the F.A.A. the power to "determine criteria and means for abating excessive aircraft noise near airports."³

¹U.S., Congress, House, Committee on Interstate and Foreign Commerce, Aircraft Noise Problems, Hearings before a subcommittee of the Committee on Interstate and Foreign Commerce, House of Representatives, 86th Cong., 2d sess., 1962, and 87th Cong., 1st sess., 1963, pp. 329-30.

²Statement of Federal Aviation Agency, p. 6.

³Sun-Times, Oct. 2, 1962.

The federal government was not particularly eager to assume the extremely difficult responsibility of noise control. After a two year \$150,000 study, Congress stated the problem was technical rather than political.¹ The Federal Aviation Act of 1958 would not allow it to "assume total responsibility for all the problems associated with aircraft noise. The F.A.A.'s primary interest and authority are to foster air commerce and ensure safety of aircraft operations."² It stated further that the decision to limit operations outside of safety considerations "falls within the prerogative of airport management."³ A dilemma existed for the F.A.A., as the cutting of power to decrease noise was the suspected cause of several crashes including one at Idlewild Field in 1962 which killed ninety-five persons.⁴ The Federal Aviation Agency believed that "safety must be paramount" to noise abatement.⁵ It felt that land use planning near airports was the best long range solution to noise and that local operators and communities needed to do more to discourage persons from building homes in locations where they would

¹James W. Ramsey, "Jet Noise . . . Nobody's Problem," Airlift, XXVI (Apr., 1963), 23-24.

²Statement of Federal Aviation Agency, p. 3.

³Ibid., p. 8.

⁴Herald-American, July 5, 1963.

⁵Statement of Federal Aviation Agency, p. 5. See also Lowell, Airline Safety a Myth, p. 9.

be disturbed by jet aircraft.¹ For its part, the F.A.A. had secured the cooperation of the Federal Housing Authority which refused to lend money for such construction, but persons refused federal loans were obtaining other financing.²

However, air traffic, jet noise, and complaints continued to increase proportionately. An example is this letter to the administrator of the Federal Aviation Agency:

There may be a special place in the Hall of Fame for the inventor of the jet plane but what I'm concerned about is that special place in Satan's Domain reserved expressly for him.

.....³
Gone is the song of the birds and crickets"

Chicago alderman Harry Bell (41st Ward), declared, "The whole Northwest Side is aroused over what people regard as infractions of the regulations on minimum altitudes." Commissioner Downes replied that the altitude of an airplane was beyond the jurisdiction of Chicago.⁴ Congressman Roman Pucinski, whose area was the northwest side 11th district, proposed something that the city favored--the return of piston-engined aircraft to Midway to reduce noise by alleviating traffic and allowing the jets to land sooner.⁵ The

¹Statement of Federal Aviation Agency, pp. 2 and 10.

²Bensenville Register, Apr. 12, 1962.

³Letter, Toni P. Golden of Skokie, Illinois to Mr. Najeeb Hallaby, F.A.A., Aug. 18, 1962, F.A.A. files.

⁴Daily News, July 13, 1962.

⁵Sun-Times, July 13, 1962.

congressman charged in 1964 that airliners were flying lower than the prescribed altitude for visual flight rules and were causing unnecessary disturbances to 500,000 people by going over Chicago.¹ The president of Schiller Park told a congressional committee that when the weather was poor and airplanes came in low over his village, the sound cracked windows and plaster and even knocked people out of beds. A fourteen day study of interruptions at schools in Park Ridge, District 64 during the spring of 1963 counted 750 such disturbances for eleven schools. The sum could be multiplied by the number of classrooms.² Park Ridge became the second town in the United States--Hempstead, New York was the first--to pass a law prohibiting airplanes from making excessive noise over a municipality. The ordinance provided that anyone producing a sound over eighty-seven decibels, somewhat louder than a passing train, was to be punished by a fine of \$200 for each violation. A patrolman was trained to check for noise, but, the law was difficult to enforce.³

The ear ringing whine and thunder of the jets, which

¹Peter Reich, Herald-American, Sept. 6, 1963.

²U.S., Congress, Aircraft Noise Problems, pp. 368 and 488.

³John Reddy, Sun-Times, Jan. 18, 1964. See also Mike Royko, Daily News, Feb. 7, 1964 and Kirchherr, "Airport Land Use," p. 170.

temporarily drowns out all other sound to those over whom the aircraft is passing, was being attacked on many fronts. Floods of correspondence, complaints, and threats of legal action did make authorities keenly conscious of the problems of persons living close to O'Hare. Mr. J. E. Wenzel, director of the Illinois Department of Aeronautics, testified about legislation in his state concerning air transportation to a committee of California lawmakers investigating the subject in 1964. Mr. Wenzel candidly observed, "We have no legislation concerning noise. We don't want any. We don't want to get into this at all. But I don't know of any further or greater problem area than that at O'Hare Field." The position of a public official is most difficult when confronted with emotional people. Wenzel told of hearings that he had conducted for a proposed zoning ordinance. People talked more of noise than about zoning. They related stories of disturbed sleep, the fluttering of television, and the roar of the jets. He admitted, "I just shuddered. I was very happy that we were not in the noise problem."¹

Zoning was connected with the noise problem, however. Although its chief purpose was safety, especially by the elimination of high rise obstacles, its restrictions on concentrations of people acted also as a means of noise

¹California Legislature, The Role of Commercial Air Carriers, p. 258.

abatement. Chicago, as the airport operator of O'Hare, requested that the field be zoned. According to state statute, the Illinois Department of Aeronautics must comply with such a request.¹ When it was learned what Chicago was planning, the reaction was immediate. "32 Suburbs to Fight O'Hare Zoning" a headline proclaimed. The village president of Schiller Park, chairman of the newly organized Suburban Municipal Council on O'Hare Field Zoning Regulations, said the regulations proposed were unreasonable; they would be so restrictive that it was comparable to taking 330 square miles of land in the area without compensation. The height and location of industrial buildings would be controlled.² Thirty-three villages paid \$100 each for legal fees to stop O'Hare Field from becoming the first major airport with such regulations.³ Some of the state hearings on zoning were "dandies" according to state

¹Letter, J. E. Wenzel, director, Illinois Department of Aeronautics, "To Whom It May Concern." See F.A.A. file 5100.6, Correspondence Folder No. 6 dated 1963, Washington, D.C. See also California Legislature, The Role of Commercial Air Carriers, pp. 252-53. An airport operator in Illinois has the right to request and obtain zoning under "An Act Relating to Airport Zoning" passed on July 17, 1945 and amended on July 9, 1951 and August 8, 1961. See Zoning Regulations for Chicago-O'Hare International Airport, p. 1 and also Kirzherr, "Airport Land Use," p. 255.

²Daily News, Aug. 19, 1963. See also Tribune, Aug. 12, 1963.

³Lee Sechler, Bensenville Register, Feb. 13, 1964.

director Wenzel. Names were called which were not printable. At the final meeting, however, both the Illinois Department of Aeronautics and the protesting communities gave in on stipulations and compromise was reached.¹

The Illinois Department of Aeronautics adopted zoning regulations for O'Hare on December 16, 1964. The ordinance was accepted by the Illinois Commerce Commission on January 6, 1965, and according to law, filed with the Secretary of State of Illinois. After the zoning regulations were placed on file, January 20, 1965, they went into effect.² A month later, Richard Thomas, village president of Bensenville, which adjoins O'Hare to the south and west, was asked of the effect of the zoning restrictions on his community. Mr. Thomas replied that the new ordinance would stop more townhouses from being built south of the airfield, but that it was not retroactive and would not eliminate the buildings already there. He said that the zoning and height regulations of the village were more strict than those of the state Department of Aeronautics.³

¹California Legislature, The Role of Commercial Air Carriers, pp. 253-54. See also Bensenville Register, Aug. 22, 1963 and Lee Sechler, Bensenville Register, June 18, 1964.

²City of Chicago, Chicago--Ordinances, Etc. Zoning Regulations for Chicago-O'Hare International Airport (Chicago: n.p., n.d.). See also Eric Yordorf, Land Use and Zoning Considerations in the Vicinity of O'Hare Field (Chicago Department of City Planning, June 22, 1961). See Sun-Times, Feb. 12, 1965.

³Bensenville Register, Feb. 18, 1965.

The conflict over zoning regulations was resolved in 1965, but this was not true of the problem of noise from jet engines. The commercial aircraft industry had invested about \$150 million for in-flight noise suppressors by 1965. After this year, newly developed turbofan engines replaced those with suppressors at a cost of about \$1 million per airplane.¹ Not only were steps taken by private companies to counteract aircraft noise, but in March of 1966, the Office of Science and Technology recommended to President Lyndon B. Johnson that the federal government do something to fight the problem.² The result of this recommendation was the organization of an interagency noise abatement program by the federal government in late 1966. Projects included the development of quieter airplane engines, the promotion of improved land use and zoning by airports, and a revision of aircraft flight procedures. The Federal Aviation Administration had power to prescribe noise abatement flight procedures under section 307(c) of the Federal Aviation Act. The methods employed included a rapid take off to a specified altitude and then a reduction of the thrust

¹Committee On Environmental Quality of the Federal Council for Science and Technology, Noise-Sound without Value (Washington: U.S. Gov't Printing Office, 1968), p. 10.

²United States Department of Transportation, First Annual Report, Part II, Fiscal Year 1967 (Washington: U.S. Gov't Printing Office, 1968), p. 54. See also Tom Littlewood, Sun-Times, Mar. 19, 1966 and Herald-American, Mar. 19, 1966.

of the climb until ten miles from the airport.¹

The Norwood Park Citizens Association of Chicago attempted to obtain the cooperation of members of Congress to support legislation which would require noise suppressors on airplanes, penalties to pilots violating sound levels, and the elimination of night flights at Chicago-O'Hare Field. Representatives Roman Pucinski and Harold Collier promised support. These congressmen had testified at F.A.A. hearings in Washington earlier in 1968 which resulted in a permanent shut down of two of O'Hare's runways from 11:00 P.M. until 7:00 A.M. so that sleep would not be disturbed in nearby communities.²

The problem of noise became very significant in the summer of 1968. O'Hare's 11,600 foot runway, 14R-32L, the busiest in the world, was closed for major reconstruction from June 27, 1968 to November 26, 1968. A much heavier burden of traffic fell on the east-west runway, 9R-27L, as planes landed and took off over Bensenville. This caused a great deal of dissention between residents of the village

¹United States Department of Transportation, First Annual Report, pp. 55-56. See also Federal Aviation Agency, Aircraft Noise and Sonic Boom (Washington: U.S. Gov't Printing Office, 1966), preface.

²John Walker, Tribune Northwest Neighborhood News, Nov. 3, 1968. See also letter, John F. Wubbolding, Federal Aviation Administration, to Agatha Fosse of Chicago, May 13, 1969 in the F.A.A. correspondence file in Washington, D.C.

and officials at O'Hare Field.¹ Early in 1969, Bensenville hired noise consultant Richard Young who possessed a \$3,000 meter to measure jet sound, and village attorney William A. Remond traveled to Inglewood, California to study a \$2.8 billion suit filed there by citizens disturbed over noise from Los Angeles International Airport.² Furthermore, Bensenville with sixteen other suburbs formed the O'Hare Area Noise Abatement Council during the spring of 1969. This council called for a more comprehensive zoning ordinance; more industrial and less residential development; and the use of airplane corridors, shown on original land-use maps of O'Hare, to eliminate "fanning out" which is done upon take off. "Fanning out" permits a more rapid succession of departures by maintaining spacing standards more easily, but spreads noise over a far greater area. The Abatement Council also proposed legislation to limit the number of hourly operations, to offer fare incentives during non-peak hours, and to eliminate flights with less than half of the capacity of the flight. The O'Hare Area Noise Abatement Council also urged citizens to phone the

¹Bensenville Banner, Dec. 4, 1968, p. 1.

²Tribune Northwest Neighborhood News, Feb. 17, 1969, p. 1. Interview, Young, June 22, 1970. Mr. Young, an engineering expert on pollution of various types, stated that noise of 100 decibels can be heard daily from aircraft in any section of Bensenville. He said the minimum sound now tolerated before earphones are required in industrial jobs is ninety-five decibels.

O'Hare control tower if disturbed by noise.¹

A conference of towns concerned with the problems of jet noise was held in Washington from October 7, 1969 to October 9, 1969. The National Organization to Insure a Sound-controlled Environment, N.O.I.S.E., was formed to lobby at all levels of government for laws regarding air and noise pollution, and especially to seek federal legislation for noise abatement.² The actions of pressure groups finally had results, as the Federal Aviation Administration adopted noise rules to apply to the engines of the "jumbo jets," the Boeing 747, Lockheed 1011, and Douglas DC-10, under the provisions of a law passed in 1968 which gave the F.A.A. the power to set limits to noise levels which were "technologically feasible" and "economically reasonable."³ In response to public feeling and to meet the tougher F.A.A. requirements which resulted from it, the "jumbo jets" are designed to be twenty per cent quieter than the Boeing 707, yet the new engines are so powerful that the much larger Boeing 747 needs 2,000 less runway space than the conventional sized jet of the decade of the 1960's.⁴ F.A.A.

¹Dan Egler, Tribune Northwest Neighborhood News, Aug. 24, 1969.

²Mayor John Varble of Bensenville, Newsletter, II (Fall, 1969).

³Robert A. Dobkin, Muncie Evening Press, Nov. 2, 1969.

⁴Lou Jacobs, Jr., "Here Come the Jumbo Jets!" Family Weekly Magazine, Nov. 2, 1969.

behavior may also be explained in part by the fact that operators of large airports are fearful of damage suits from noise. The villages of Bensenville, Park Ridge, and Schiller Park have brought suit against the City of Chicago to stop construction of a new runway at O'Hare Field and to force the city to pay property damage. Four suburban couples have sued both the city and the airlines using O'Hare for property damage. Such suits are pending in Texas, California, and New Jersey against the "owners" of airfields. Court decisions have awarded dollar settlements to home owners if their residences were built before the airport. This is another reason why officials of Chicago desire a future airport to be located in Lake Michigan.¹

Air pollution from the jets at O'Hare Field is something which has become a recent topic of concern for the northwest suburban communities. The Tribune reported that runway lights had to be left on until the middle of the morning once in August, 1969. It also stated that an Elmhurst College field trip flight scheduled in January,

¹Tribune, June 21, 1970. Thomis, Tribune, Mar. 15, 1970. See also Charles Nicodemus, Daily News, Feb. 19, 1963; Sun-Times, Dec. 8, 1965; and Kirchherr, "Airport Land Use," p. 170 which show that court decisions have been conflicting over airplane noise damage suits. A report released in October, 1969 stated that sound from the supersonic transport (SST) under development would probably make living intolerable within thirteen miles of the airport. Robert A. Dobkin, Muncie Evening Press, Nov. 2, 1969.

1970 was cancelled because pollutants had lowered the ceiling to only 700 feet. Ironically, the field trip had planned to fly over Chicago to observe air pollution.¹ William A. Redmond, a state representative and village attorney for Bensenville, read of a law suit by the New Jersey Department of Health against seven airlines for polluting the air and requested legal action from the office of the Attorney General of Illinois.² By November 1969, Attorney General William J. Scott was threatening court proceedings against O'Hare and Midway airports because of air pollution. Scott declared, "One jet airplane puts as much pollution in the air as do 10,000 cars."³ He did bring suit to halt pollution against twenty-three airlines operating in Chicago.⁴

Legal proceedings stimulated action from the airlines. Studies by the air pollution control board of Illinois indicated that one jet taking off or landing puts as many pollutants into the atmosphere as seventy-two cars going full speed for twenty minutes. O'Hare Field has over 1,500 such movements by airplanes daily, and the jets do

¹Feb. 1, 1970. Richard Mack of the O'Hare control tower commented that atmospheric conditions have much to do with such a limitation of visibility. Interview, Feb. 17, 1970.

²Thomas M. Gray, Sun-Times, Sept. 3, 1969, p. 24.

³Tribune, Nov. 9, 1969.

⁴Casey Bukro, Tribune, Mar. 15, 1970, sect. 5B, p. 8.

deplete the oxygen in the area around the airport. The studies also showed, however, that only one per cent of the air pollution in Illinois is caused from jet aircraft. Thirty-one domestic airlines, aware of the problem, have agreed to place antipollution devices on the types of airplanes now in use by the end of 1972.¹

O'Hare Field has been under attack as a source of noise and air pollution. The airline industry and public officials have reacted to alleviate these conditions. Zoning, once condemned by suburbs fearful of an encroaching Chicago, is now recognized as being a beneficial agent to help reduce problems from the airport. Most residents of the O'Hare area probably do not realize the tremendous economic benefits, including industry and high land values, derived from the airport. All are aware of the continuing, obnoxious roar of the jets, so complaints concerning noise will continue despite recent federal regulations and improved jet engines as traffic accelerates. Only the opening of a huge new international airport in the Chicago area, strong legal restrictions on flights, or the technological development of efficient vertical take off and landing

¹Ibid. Robert Finch, Secretary of Health, Education, and Welfare announced that the airline industry of its own volition was installing devices which would eliminate jets as a source of pollution by 1972. Art Linkletter television program, Life with Linkletter, Mar. 4, 1970.

aircraft would greatly reduce the noise problem at O'Hare. None of these things is expected to occur in the decade of the 1970's.¹

¹The school of engineering at the University of Southern California was awarded a \$529,000 grant by the Department of Transportation in June of 1970 to study the aircraft noise problem. Seymour Korman, Tribune, June 16, 1970.

CHAPTER X

PRESENT AND FUTURE

Advances in technology and increases in traffic have made great demands on Chicago-O'Hare International Airport. The persons responsible for the extraordinary expansion which made O'Hare the busiest airport in the world by 1962 could not lean back for long and admire their accomplishment, as changes requiring attention were occurring steadily.

One of these changes was the great increase in volume of air cargo. Although scheduled air freight was reported to have begun in 1931 when Pan American flew a shipment of baby chickens from Miami to Havana, many unscheduled flights were said to have taken place before this, during Prohibition, between the United States and its neighbors, Mexico and Canada.¹ Despite the outstanding record of the Air Transport Command during World War II, established companies were reluctant to use such means

¹Scullin, International Airport, p. 247.

of transport. Air cargo was not popular for a decade after World War II, then suddenly a "boom of unprecedented proportions" began in the early 1960's along with the acceptance of jet planes.¹

Air shipment was increasingly used for high value and perishable goods, and businesses such as horticulture, drugs, and dressmaking were flying their goods more and more.² So were businesses dealing with electronics, synthetics, as well as heavy industries such as automobile, mining, and steel companies with world-wide branches. The latter organizations found it easier and cheaper to fly spare parts when they were needed rather than establish and stock many warehouses.³

In 1962, 450,000,000 pounds of air freight passed through O'Hare Field. Canadair would handle a 70,000 pound cross country shipment at a price near the trucking rate of 10¢ per ton mile.⁴ These low rates, rather uniform between competitive airlines, encouraged more air cargo and the expansion of facilities. United Airlines, the leading domestic freight carrier at O'Hare, completed

¹Ibid., pp. 11 and 254-55. Aviation experts are not sure why this boom occurred.

²Peterson, Airports for Jets, p. 3.

³Scullin, International Airport, pp. 257 and 269.

⁴Wise, Sun-Times, Aug. 26, 1962.

a \$3.5 million cargo building in early 1964. It was so large that thirty-three trucks could unload in it at one time. United expected to handle 1,000,000 pounds of air freight per day in the new building within a year.¹ Trans World Airlines opened a million dollar, fully mechanized air cargo building in 1965.² The result was that in 1965, Chicago surpassed New York City for the first time in volume of air cargo shipped, to become the leader with fifteen per cent of the nation's air freight originating at O'Hare Field.³

Great increases in the amount of cargo continued. Although such gains were secondary to the growth of passenger traffic, both made further expansion necessary. Fifteen million dollars worth of construction was underway at O'Hare in 1968. This included the twenty-two story, world's tallest, control tower; a \$12.7 million hangar of United Airlines, the largest commercial hangar in the world; and Continental Airlines' computer controlled \$6.2 million cargo building--the world's largest.⁴ From 1963-1968, the

¹Downes, Department of Aviation 1964 Annual Report, p. 11.

²Ibid., 1965, p. 3.

³Ibid., 1966, p. 15.

⁴June Markey, Chicago Irving Park News, Jan. 30, 1969. See Downes, Department of Aviation Annual Report, 1967, p. 11. Continental and United Airlines have the most modern air cargo systems at O'Hare Field. Letter, Dunne, Dec. 12, 1969. See also correspondence, Corey, June 11, 1970 and interview, Sampson, June 29, 1970.

amount of mail and air cargo handled at O'Hare went from 543,070,583 pounds to 1,411,780,288 pounds, an increase of 160 per cent in five years.¹ Almost a ton per minute of cargo and mail was handled in 1968.²

Only twenty acres were developed as a cargo area at O'Hare Field in 1962. This had been raised to 130 acres by 1968, and plans were underway to greatly increase the amount of cargo space through the construction of facilities on 240 acres in the southwest corner of the airport. Bensenville would become the interchange for cargo with a new entrance to the field from there.³ A prediction made in 1944 by aviation experts that Chicago would become the air freight center of the United States has come true.⁴ Another forecast made about the same time was that Douglas (O'Hare) Airport would lose air cargo to Municipal (Midway) Airport which would become the freight station for Chicago.⁵

¹Murphy, Final Progress Report, p. 15.

²Downes, Department of Aviation Annual Report, 1968, p. 7.

³Interview, Sampson, Jan. 6, 1970. See also Department of Development and Planning, O'Hare Development Area. The public would not have access to the terminal area, however, from the new entrance in the southwest corner of the airport. Sampson, interview, June 29, 1970.

⁴See John Jenkins, Daily News, Dec. 6, 1944.

⁵General Airport Company, Comprehensive Study, p. 81. See Kirchherr, "Airport Land Use," p. 132.

The latter turned out to be an incorrect prediction.

The experts may not always be correct, but there is one thing, generally true, upon which they have agreed upon since the mid-1960's. The nation's airports were not able to keep up with the demands being made upon them.¹ The following headlines illustrate the point: "Airport Plans Lag as Traffic Grows;"² "Nation's Airports Falling Behind in Race to Meet Airline Growth."³ Those concerned with O'Hare Field, however, reacted to the situation. It continued to improve and was unique in having more runway capacity than its gate facilities could handle. During the period 1967-1969, \$75 million of revenue bonds were sold to make improvements that included the building of a new east-west runway called 9R-27L, 10,000 feet in length, the reconstruction (8,000 feet) of the main, northwest-southeast runway, 14R-32L, improvement of the power plant by increasing its heating and refrigeration capacity, the expansion of roads, construction of additional (remote sites) automobile parking lots, taxiways, and apron areas. The financing of these projects was guaranteed by the commercial carriers.⁴

¹"Can Airports Cope?" Business Week, July 22, 1967, p. 64.

²New York Times, Nov. 20, 1966, p. 16A.

³Thomas Germuska, Sun-Times, Nov. 26, 1967, p. 90.

⁴Interviews, Sampson, Jan. 6, 1970 and June 29, 1970.

It has been difficult to maintain adequate facilities at all airports, because seemingly, every decade brings technological improvements in aircraft that strain existing facilities. Larger piston-engined airplanes came into general commercial use at the end of the decade fo the 1940's, a development that brought expansion. The inauguration of even larger and faster passenger jets in 1959 required the great expansion that took place at O'Hare and was the beginning of an era. Approximately ten years after the first commercial jets, another new era, that of the "jumbo jets," began.¹

By the autumn of 1966, the Boeing Company had orders for more than eighty of its gigantic 747 airplanes which cost over \$20 million each.² The length of the aircraft is 231 feet; it has a wingspan of 196 feet, and to the top of its tail, it is 63 feet high. The Boeing 747 cruises at 625 miles per hour at a maximum altitude of 45,000 feet. Its range is 6,700 miles; about 500 passengers

¹Interview, Mr. A. A. Rothengaas, Jr., Assistant to Commissioner Downes, Aug. 13, 1969. See also Downes, Department of Aviation Annual Report, 1968, p. 16.

²Business Week, Nov. 26, 1966, p. 108.

could be carried.¹ The four engines of the airplane have the power equivalent to 900 automobiles.²

Pan American Airlines was the first carrier to place the "jumbo jet" in service. The Boeing Company turned over a 747 to the airline on December 13, 1969 for a test flight from the state of Washington to Nassau in the Bahama Islands. From Nassau, the airplane flew to New York City and returned to Washington by way of Chicago. The aircraft landed at O'Hare Field on December 16th, the initial Boeing 747 to land there, but O'Hare expected to serve 200 other models of the same plane by the end of 1972.³

After eleven months of testing by the Federal Aviation Administration, the Boeing 747 received government approval, and its first intercontinental scheduled flight was

¹Murray J. Brown, Tribune, July 20, 1969, sec. 6, p. 12. See also Muncie Evening Press, Dec. 3, 1969, p. 21. The Boeing 707 cruises at 575 miles per hour at a maximum altitude of over 42,000 feet. Its range is 6,000 miles carrying nearly 200 passengers. Obviously, the 707 aircraft is much smaller and less powerful than the 747. The latter is so large that the Austin Company (the same firm which constructed the Douglas plant at O'Hare Field during World War II) erected the "largest structure ever built by man" for the assembly of the Boeing 747 aircraft at Everett, Washington. The plant contains over 205 million cubic feet of interior space. C. R. Wing, "Timing is the key to Boeing 747 project," Civil Engineering--ASCE, Sept. 1968. See also "World's Biggest Plant Rises Fast," Industrial World, Oct. 1968; Tribune, Dec. 21, 1969.

²John Handley, Tribune, Dec. 21, 1969, sect. 6, p.7.

³Sun-Times, Dec. 14, 1969, p. 97. See also Handley, Tribune, Dec. 21, 1969 and Daily News, Aug. 27, 1969, p. 45.

made on January 21, 1970 from New York to London. The beginning was inauspicious, as the airplane supposed to make the trip developed engine trouble. It had to be replaced, and the second plane landed in England seven hours late.¹

Trans World Airlines planned to begin a "jumbo jet" flight from O'Hare Field to Los Angeles on May 14, 1970. Two other flights were being dropped to California because of the 342-seat capacity of the Boeing 747. On July 23, 1970, United Airlines hoped to inaugurate service from O'Hare to San Francisco, Los Angeles, and Honolulu.²

Twenty-eight air carriers, including Lufthansa, Air France, Japan Air Lines, and the British Overseas Airline Corporation, await delivery of the Boeing 747.³ United Airlines has ordered eighteen, American Airlines sixteen, and both Northwest and Trans World Airlines have requested fifteen of the Boeing 747's. The largest sale, however, will be to Pan American Airlines. The Boeing Company has a contract to deliver thirty-three planes to Pan American for \$765 million. These aircraft contain fifty-eight first class seats, three hundred and four economy class seats, a

¹Muncie Evening Press, Jan. 22, 1970, p. 1. See also Muncie Evening Press, Dec. 31, 1969, p. 17.

²Sun-Times, May 3, 1970.

³Vern Haugland, Muncie Evening Press, Nov. 27, 1969, p. 48.

lounge on the upper deck, and a bar. Fourteen stewardesses serve such jets.¹

The term "jumbo jets" refers to two three-engined aircraft as well as the Boeing 747. These two airplanes or "airbuses" are the McDonnell Douglas DC-10 and the Lockheed Tri-star L-1011.² These medium sized "jumbos" are scheduled to be in operation by late 1971. Both the Tri-star and the DC-10 will carry from 250 to 350 passengers at speeds of about 600 miles per hour. They will have lower landing and takeoff speeds than the Boeing 747 and make less demands on runways. They cost about \$9 million less than the \$25 million Boeing 747, so foreign and domestic carriers have placed orders for about 200 Lockheed Tri-stars, a nearly equal number of Dc-10's and 200 Boeing 747's.³

Warren H. Hawes of the Airport Operators Council International stated:

The immediate problem is that the 747 will be in service before the airports are ready for it.
.....

¹Horace Sutton, Tribune, Dec. 21, 1969, sect. 6, p. 7. See also Muncie Evening Press, Dec. 31, 1969, p. 17. The seating capacity of the Boeing 747 varies among airlines.

²Lou Jacobs, Jr., "Here Come the Jumbo Jets!" Family Weekly Magazine, Nov. 2, 1969, p. 11.

³Thomis, May 10, 1970. See also New York Times, Apr. 3, 1968. Robert Sampson believes that O'Hare Field will become an airport at which the airbus or medium jumbo jet will be primarily used by domestic carriers, because of passenger demand for frequency of flights. Interview, June 19, 1970.

The biggest problem of all is people--handling them, ticketing them, feeding them, getting them to and from the airport.¹

O'Hare is now coping well with the first wave of passengers, but with the huge increases expected with the jumbo jets and with one-half of the people arriving at O'Hare using it as a place to transfer, future problems will be immense.²

The Boeing 747 is seventy feet longer and fifty feet wider than the Boeing 707's in use. More terminal facilities and ramp space will be required as well as more and larger loading gates to handle the aircraft.³ There were seventy-one gates in the concourse extensions in 1968.⁴ Sixteen more are expected to be needed to handle the Boeing 747's as well as nineteen additional gates for the airbus or "medium jumbo" Lockheed Tri-stars and McDonnell-Douglas DC-10's by 1973.⁵ The additional gates can be added only by extending the existing fingers or adding a new concourse.⁶

¹Vern Haugland, Muncie Evening Press, Nov. 27, 1969, p. 48. See also "Period of Adjustment," Newsweek, July 13, 1970, p. 82.

²William Hines, Sun-Times, Dec. 7, 1969, p. 70.

³Ed McCahill, Sun-Times, Oct. 6, 1968, p. 96. See also Ruth Moore, Sun-Times, Oct. 24, 1969, p. 12.

⁴Department of Development and Planning, O'Hare Development Area, p. 8.

⁵C. F. Murphy Associates, Terminal Complex Design Potential Progress Report (Chicago: n.p., Oct., 1968), p. 3.

⁶Donna Gill, Tribune, Sept. 14, 1969.

Improved baggage facilities will be required of all airports serving "jumbo jets," undoubtedly some kind of system using electronic sorting.¹ All of these things will require large amounts of money.

In 1959, the airlines assumed the responsibility for guaranteeing revenue bonds to develop the airport. Landing fees are the biggest source of income to O'Hare Field. They are established by a formula in the use agreement between the city and the airlines, and the funds from these fees, like all airport revenue, go into the retirement and service of the bonds. By 1970, almost half of the bonded indebtedness was retired. Because of the tremendous volume of traffic, low landing fees were charged, but enough funds were received to be able to make bond payments ten per cent higher than the agreed amount.² O'Hare Field has been doing quite well financially, but the airlines see grave difficulties for themselves ahead. They have ordered 200 Boeing

¹Roy Allen, Great Airports, p. 33. See also Muncie Evening Press; Jan. 16, 1970.

²Interview, Sampson, June 29, 1970 and Thomis, Tribune, Mar. 15, 1970, sec. 5B, p. 2. See letter, Colonel Corey, June 11, 1970 which stated that the airport consultant, Landrum and Brown, recommends landing fees. The airlines do not establish their own fees. Letter, Sampson, July 10, 1970 indicated that \$224 million in revenue bonds have been issued by the city for O'Hare Field and that \$30-\$35 million of this amount will be retired by the end of 1970. Sampson also stated that the rate for landing fees at O'Hare in 1970, 64.8¢ per thousand pounds, was the third or fourth highest rate among major airports in the United States.

747's at \$25 million each, as well as 200 McDonnell-Douglas DC-10 tri-jets and 194 Lockheed L-1011's at \$16 million apiece. The carriers have \$12 billion of new airplanes ordered and not paid for.¹ Fees and rental at some of the other airports have risen considerably as other cities, unlike Chicago, look to their fields as sources of revenue. Since the airport is a monopoly of a public agency, often there is little the airlines can do but pay. Thinking of the strained credit of the airlines and the fact that huge, new airports will probably have to be financed by long-term commitments by the carriers, Curtis Barkes, former head of the Top Committee, stated, "It will be interesting to see if over the next fifteen to twenty years it will be possible to build any new major airports."²

In October 1967, city officials proposed to the airlines that the latter underwrite a \$282 million expansion program to prepare for the jumbo jets with \$249 million of the amount to be spent on the terminal area.³ The airlines complained that they had not been consulted about the plans of the city and desired that more of their ideas be used.⁴

¹Ibid.

²Letter, Barkes, Feb. 24, 1970.

³Sun-Times, Oct. 7, 1967. See also William Spencer, Herald-American, Oct. 7, 1967.

⁴Robert L. Dishon, Daily News, Jan. 1, 1969, p. 10. The airlines desired less costly solutions to O'Hare's needs than were favored by Chicago.

A task force to reach agreement about expansion plans was established in November, 1968. It was composed of representatives of the airlines, the city, and C. F. Murphy Associates, the firm that directed the huge expansion of ten years before. Each of the parties desired the best from an economic, esthetic, and engineering standpoint.¹ However, each party had its own point of emphasis for the qualities sought.

By March of 1969, it was thought that compromise had been reached on a \$212 million, first stage expansion program. This included \$160 million for the terminal area and \$52 million for a five-deck parking structure and a new southwest-northeast runway in the southeastern section of the airport. Differences arose, however, concerning the terminal area, particularly about the type of people moving device to be installed.² In the middle of March, not long after these differences arose, Mayor Daley called a meeting in his office with representatives of fifteen airlines. The mayor proposed to enlarge the \$212 million program to add an international terminal on what is now the Air Force reservation and to construct a new domestic

¹Downes, Department of Aviation Annual Report, 1968, p. 19. See also interview, Sampson, June 29, 1970.

²Interview, Sampson, June 29, 1970. See also Thomis, Mar. 10, 1969, p. 11. Editorial, Tribune, Mar. 11, 1969, p. 12.

terminal where the international terminal stands. The cost of the entire program would then be over \$300 million.¹

The carriers did give a pledge to back \$160 million of revenue bonds for increasing the loading ramp frontage; the construction of two more concourses, and expansion of the heating and refrigeration plant; plus the construction of a \$14 million, 8,000 foot, northeast-southwest runway.² Besides this, Chicago felt that \$50 million more was needed for new parking facilities and runway work and \$50 million for a new international terminal. Curtis Barkes also recommended another \$100 million be spent for two more concourses on the United Airlines terminal, another domestic carrier terminal, and "people moving" devices. The cost of all of these improvements, if they were undertaken, would approach \$400 million.³

The Chicago Plan Commission approved the first phase of a new seven-year master plan for O'Hare Field in October, 1969. The proposal included adding the following: 520 acres of land; a second and third parallel runway in a northeast to southwest direction; and a third parallel

¹Interview, Sampson, June 29, 1970. See also Ruth Moore, Sun-Times, Mar. 21, 1969. Edward Schreiber, Tribune, Mar. 11, 1969, p. 12.

²Sun-Times, Aug. 27, 1969.

³Jay McMullen, Daily News, Aug. 27, 1969, p. 16.

runway in a northwest to southeast direction.¹ Improvement and expansion at O'Hare will probably cost from \$160 to \$350 million during the 1970's² However, the only firm commitment by the airlines was to support the \$52 million program that contained the construction of the five-storied garage for parking 9,500 automobiles and the new southwest to northeast runway. The new runway will parallel an existing landing strip and give O'Hare three sets of parallel runways.³ The garage under construction over the present parking lot will cost about \$38 million and will be the world's largest building of its kind.⁴ It will be needed because traffic is expected to increase from 44,000 vehicles per day entering the airport in 1968 to 71,000 daily by 1980.⁵

The airlines have pledged to support a large expansion program. Agreement has been reached that concourse loading fingers should be straight-line additions as the

¹Ruth Moore, Sun-Times, Oct. 24, 1969, p. 12.

²Alvin Nagelberg, Tribune, Oct. 19, 1969.

³Thomis, Mar. 15, 1970, sec. 5B, p. 2. See Appendix for layout of the three sets of parallel runways. See also interview Robert Sampson, June 29, 1970 and C. Owsley Shepherd, Chicago Today, Sept. 2, 1969.

⁴Daily News, June 11, 1969, p. 8. Interview Otto Stark and Jim Wrzesien, C. F. Murphy Associates, Oct. 7, 1969 and interview, Sampson, June 29, 1970.

⁵Department of Development and Planning, O'Hare Development Area, p. 9.

airlines had desired. The city feared that as such extensions were made, there would only be about 750 feet of clearance between a "Y" and a straight-line addition which might injure future development. However, the carriers wished to load the jumbo jets from end positions of the concourse extensions where clearance was not a problem. The airlines believed that the thrust of the big airplanes might damage other aircraft in a confined space.¹ The Federal Aviation Administration has expressed an opinion supporting the view that space near the terminal would be too confined for large planes if straight-line extensions were added to the terminal.

A large expansion program would mean even longer distances to walk. One of the personnel at the Continental Airlines' counter said that many of the travellers joked that they should go half-fare, as they had walked halfway

¹Interview, Sampson, June 29, 1970. The carriers believed that snow also would cause problems if the jumbo jets were close to the terminal. See Appendix, design drawn by Gladych, for example of airplane positions. See Thomis, Mar. 15, 1970, sec. 5B, p. 3, for the view that the airlines were primarily concerned with cost. Thomis repeated this in a letter of July 1, 1970, and asserted that the city had wished to open up the terminal area for large planes by having concourses that were not connected to the terminal other than by an underground people transport system and that Trans World Airlines had favored the plans of Chicago. See also Thomis, Tribune, June 21, 1970. Letter, Manny, July 1, 1970. Manny concurred that expense was extremely important to the air carriers and that the city had desired disconnected concourses which were also supported by TWA.

to their destination.¹ The chief point of disagreement between the city and the airlines has been over the previously mentioned "people-mover" system.² The carriers have accepted as fact the contention that walking distances are too far at O'Hare and that something needs to be done to alleviate the problem. The city is studying a full-sized, three-track, \$65 million, underground train to circle the terminal area. A spokesman for United Airlines stated that "cost is the major element in opposition now," but the air carriers also fear the disruption that might come to the airport while such an underground system was being built.³ Alternatives to such a system are mini-trains, rubber-tired computer operated vehicles, overhead monorails, and moving sidewalks.⁴ The contracts for finger extensions, which would add to the number of gate positions, have been held up until the

¹Donna Gill, Tribune, Sept. 14, 1969.

²C. Owsley Shepherd, Chicago Today, Sept. 2, 1969. See also interview, Sampson, June 29, 1970.

³Interview, Sampson, June 29, 1970 and Thomis, Mar. 15, 1970, sec. 5B, p. 4. See also Chicago Today, June 24, 1970. The airlines have always favored the above-ground circulation of passengers and question the capacity and accessibility of an underground system. Letter, Sampson, July 10, 1970.

⁴Thomas Buck, Tribune, Mar. 15, 1970, sec. 5B, p. 7.

"people-mover" is definitely agreed upon.¹ Agreement should be resolved in 1970 from the results of consultant studies being done which compare different types of systems to transport people in the terminal area.²

Before the previously mentioned northeast-southwest runway can be built, Route 19 (Irving Park Road) will have to be relocated further south. Also public hearings concerning the need for the runway will be held.³ Studies have shown the need for this sixth major runway which would allow O'Hare to operate at regular capacity under almost any type of weather conditions. The airfield would then have parallel runways going in an east-west, northwest-southeast,

¹Thomis, Mar. 15, 1970, sec. 5B, p. 5. Commissioner of Public Works Milton Pikarsky replaced Colonel John B. W. Corey as the chief city negotiator with the airlines in mid-1970. On June 14, 1970, Pikarsky told the airlines that there would be no concourse extensions without the funding of an underground "people mover" system. Chicago hopes to have two-thirds of the cost of such a system paid for by a federal grant and the remainder by airport revenue bonds guaranteed by the carriers. Letter, Manny, July 1, 1970. The city fears that long-range expansion may be hindered if economy measures are adopted to meet the passenger traffic needs of the 1970's. Letter, Thomis, July 1, 1970.

²Interview, Sampson, June 29, 1970. The airlines guaranteed over \$2 million from 1968-1970 in architectural, engineering, and consultant fees to improve O'Hare Field-- a major portion of this money went for the new parking structure.

³Interview, Sampson, Jan. 5, 1970.

and northeast-southwest direction.¹ Commissioner Downes was quoted as saying:

Our parallel runways, with 6,000 feet of space in between them, are the secret of O'Hare's success. They make us the only airport in the world that can handle simultaneous instrument approaches. When we get our sets of parallels, we will be able to handle simultaneous instrument landings in any wind direction.²

In the future, rather than having three sets of double parallel runways, it is proposed to have two sets of triple runways. Because of the prevailing winds, the main runways used would be three in a northwest-southeast direction. Crosswinds occasionally occur which force the use of the northeast-southwest direction, therefore the other set of triple runways would be in that direction.³

Another major project desired, which has run into difficulties, is the creation of a new international terminal. When the present terminal complex was guaranteed by the domestic carriers, there were only a few international airlines operating from Chicago, and the finances of these

¹Department of Development and Planning, O'Hare Development Area, p. 7. See also Naess and Murphy, Landrum and Brown, and James P. O'Donnell, Chicago-O'Hare International Airport Master Plan Report, II (Chicago" n.p., Nov. 1960), 60-61.

²Ruth Moore, Sun-Times, Oct. 24, 1969, p. 12. See also Warskow and Burns, Analysis of Capacity, pp. 20 and 22.

³Interviews, Sampson, Jan. 5, 1970 and June 29, 1970. A master plan was released in 1970 showing this runway alignment which had been recommended by the airlines and also advising the relocation of the international terminal facilities to a site presently occupied by the military reservation.

companies were doubtful, so they did not participate in the expansion program. The domestic firms underwrote construction to avoid delay. Now, however, the foreign carriers have demonstrated that they are at O'Hare Field on a long-term basis and do not need special consideration. The city desires an international building that would cost \$80 million and have twenty gates to handle the largest transports. Nine international carriers have been told that they will have to underwrite the structure. These airlines have begun to organize for negotiation. Some have indicated a willingness to participate in a revenue bond funding, according to Commissioner Downes, although the group also has contended that it can not finance a terminal as large as has been proposed by the city.¹

The city wishes to have the Air Force military reservation of approximately 300 acres in the northeast corner of O'Hare as the site for the new international terminal.² In 1962, Chicago sought unsuccessfully to obtain 243 acres of this land. The federal government acquired a twenty-five lease in 1946 to use the facilities of O'Hare and has option to extend the lease for another twenty-five years if it

¹Thomis, Mar. 15, 1970, sec. 5B, p. 5. See also C. Owsley Shepherd, Chicago Today, Sept. 2, 1969.

²Interview, Colonel Corey. See also Department of Development and Planning, O'Hare Development Area, p. 8; Thomis, Mar. 15, 1970, sec. 5B, p. 5; interview, Sampson, June 29, 1970.

should desire to do this.¹ The finance committee proposed an ordinance in the summer of 1968 to request the military to vacate the Air Force reservation so that an international terminal could be located there. The idea made headlines, although the village president of Glenview, adjacent to the naval air station that would probably receive Air Force reserve units from O'Hare, felt "miserable" about the suggestion.² The city also would like to transfer the reserve unit with its C-119 troop carriers and the Illinois Air National Guard group with KC-97 refueling planes to Midway Airport.³

In January 1970, the 928th Troop Carrier Group of 900 men, the largest reserve unit at O'Hare, was scheduled to move to Dobbins Air Force Base near Atlanta, Georgia. Representatives Harold R. Collier and Roman Pucinski, leaders in the fight to restrict flights at O'Hare and reduce noise, attempted to keep the group stationed at O'Hare. Colonel Francis A. DeLlorto, deputy commander of the unit, speculated that the efforts of the legislators had been successful. He stated that orders had been received "to

¹Sun-Times, Jan. 17, 1962.

²Harry Golden, Jr., Sun-Times, Aug. 13, 1968, p. 1.

³Tribune, Mar. 15, 1970, sec. 5B, p. 8. There are eighteen such aircraft stationed on the military reservation plus four of other types of airplanes. See Form FAA-29A (1-61), dated 18 Apr. 1969 in the Federal Aviation Administration file in Washington about O'Hare Field.

stay our plans to move for an indefinite period. . . . The feeling here is that we may never move from O'Hare."¹

Colonel Lloyd D. Chapman of the Air Force confirmed that Chicago's request for Department of Defense property had been under negotiation for some time. He stated that there had been a reduction in military activity at O'Hare for three reasons in order of priority: first, the reduction of such forces as were stationed at the airfield; second, changes in the Air Force's mission requirements; and third, a desire by the Air Force to aid the city in its need for expansion. He further commented that the Air Force would "support the city in its expansion program but only to the extent that relocation of our units can be accomplished at no expense to the Air Force." The current Air Force program indicated that a continued requirement will exist, as the military had to be able to fulfill its mission too.² Obviously, there are issues to be resolved before the major reconstruction of Chicago-O'Hare International Airport can take place. Chicago is continuing negotiations with the Department of Defense and the airlines which the city hopes will lead to agreement soon for

¹Sun-Times, Jan. 11, 1970, p. 32. The presence of the Air Force on this land will hinder full potential development and restrict traffic.

²Letter, Colonel Lloyd D. Chapman, Headquarters United States Air Force, Washington, D.C., to Doherty, Dec. 11, 1969.

an expansion program of \$300-\$400 million to be finished by 1975.¹

Another situation that could become critical is concerned with transportation to and from the airport. There is only one public entrance to the field and that is on the east side of the airfield.² In early, 1969, the daily number of cars into O'Hare averaged 44,000. This was expected to be 71,000 by 1980, and city officials were strongly recommending a rapid transit line that would be able to transport automobiles as well as people. Studies indicate that the Kennedy Expressway will be inadequate to handle the traffic expected on it by the end of the 1970's.³ To relieve this pressure on the Kennedy, a road link with the Northwest Tollway from the northern part of the airport is under consideration, and the main cargo entrance is being shifted from the eastern side of the airfield to the southwest corner.⁴

¹Interview, Metschke, Jan. 7, 1970. The new construction will probably be equal to the \$150 million program of 1959-1963. Price increases since that time make it appear to be larger.

²Interview, Corey. See also Thomas Buck, Tribune, Mar. 15, 1970.

³Jay McMullen, Daily News, Feb. 14, 1969. See also Edward Schreiber, Tribune, Feb. 15, 1969, p. 5. Robert Sampson, chairman of the Chicago Top Airlines Committee, believes that congestion on the Kennedy Expressway is the most important problem affecting O'Hare Field. Interview, Sampson, June 29, 1970.

⁴Interview, Corey. See also interview, Sampson, Jan. 5, 1970.

Many airline executives expect the access routes to airports to become much worse. Roadways will be especially taxed when a number of jumbo jets arrive discharging over 300 passengers each. When Pan American Airlines brought the first Boeing 747 to Kennedy Airfield in December, 1969, it had a fleet of automobiles waiting for the passengers with drivers experienced in New York traffic. However, the trip which had gone so well, ended poorly, as Pan American's automobiles became bogged down in the congestion of the ground.¹

The carriers have opposed mass transit systems to the airport that lacked speed and convenience, feeling such systems would not be satisfactory to customers with luggage and in a hurry. They do agree, however, that rail connections between O'Hare and downtown Chicago are needed, and say that such a system should be financially self-sustaining and not have to look for subsidization from the airlines.²

In January of 1970, double rails down the median strip of the Kennedy Expressway were completed to the Jefferson Park terminal and brought northwest Chicago into the

¹Editors of the National Observer, The Seventies, pp. 144-45. Marion Sadler, vice chairman of American Airlines declared that there was a great need for a rapid-transit system to connect major airports with their city and its suburbs. He gave an opinion that ultimately all private vehicles would be prohibited from airports because of congestion.

²Interview, Sampson, June 29, 1970. See also Thomis, Mar. 15, 1970, sec. 5B, pp. 4-5.

Chicago Transit Authority system. From Jefferson Park, a bus line proceeds nonstop to O'Hare Field.¹ Chicago has agreed not to extend the transit tracks further to O'Hare on the Kennedy Expressway. The limitation to only two tracks would not be efficient, and the Chicago and Northwestern Railroad objected to competing with a public corporation, the Chicago Transit Authority. The Chicago and Northwestern, however, is one of three railroads with track adjacent to the airport which might connect by subway to O'Hare.² It was proposed to join the Northwestern Railroad to the airfield in this manner in the mid-1950's.³

The city intends to request a federal transportation grant to study the access needs of O'Hare. This would include not only the possibility of a rapid transit system between O'Hare and the Loop but also with Midway Airport.⁴ Secretary of Transportation John A. Volpe believes, as did President Dwight Eisenhower, that airports must be situated

¹Fletcher Wilson, Sun-Times, Jan. 25, 1970.

²Thomas Buck, Tribune, Mar. 15, 1970, sec. 5B, p. 7. A study has shown that only 6.7 per cent of the passengers getting off at O'Hare are going outside the metropolitan area. The first rapid transit system in the United States to an airport from the downtown sections of a city was inaugurated by Cleveland in November, 1968. It has proven successful, and other cities are planning similar systems.

³White, Saturday Evening Post, p. 136.

⁴Buck, Tribune, Mar. 15, 1970.

about thirty miles from the heart of a city with speedy rail connections to it, so federal support is hoped for.¹

Federal aid has been going toward something which could have a big on impact on O'Hare and the community around it. By July 1971, the government will have contributed about \$1 billion towards development of the jet supersonic transport or SST.² The problems that supersonic transports would bring to airports were under consideration by the Airport Operators Council at least as early as 1959.³ Now the aircraft is a reality as the British Aircraft Corporation and Sud Aviation of France have jointly developed the supersonic Concorde. The Russians also have an operational SST, the Tupelov TU-144.⁴ Soon SST's will be flying to Chicago. United Airlines prepared for this by constructing a hangar at O'Hare in 1968 that was designed to enclose at least two 318 foot SST's.⁵ American Airlines has six of the 1,450 mile per hour foreign Concorde on order for a 1971 delivery.⁶ Trans World Airlines also has six Concorde

¹Shepherd, Chicago Today, June 9, 1969, p. 15.

²Muncie Evening Press, May 28, 1970.

³Manny, "Log," p. 179.

⁴Downes, Department of Aviation, 1964 Annual Report, p. 13. See also Bob Considine, Muncie Evening Press, Dec. 9, 1969, p. 4.

⁵Downes, Department of Aviation Annual Report, 1968, p. 19.

⁶Scullin, International Airport, p. 218.

ordered, and it will receive the first American SST's when they are ready--twelve Boeing supersonic transports.¹

The Concrode and TU-144 can carry 150 passengers at about 1,400 miles per hour. The Boeing SST is designed to transport 300 passengers at nearly 1,800 miles per hours, but may not be in service until at least six years after the other two jets. Boeing hopes to sell the aircraft for \$40 million apiece.² Part of the delay problem came from a need to change the complicated movable wing version of the original design to a fixed wing which looks similar to the Boeing 707.³ Financial trouble looms ahead for the Boeing SST. Presidents Kennedy and Johnson spent \$662 million for the development of two prototype planes. President Richard M. Nixon requested \$662 million more in 1969 to be spread over five years.⁴ Congress approved \$96 million in the fall of 1969 rather easily, but Mr. Nixon's request for another \$290 million in mid-1970 has encountered much more resistance.⁵

Former Secretary of the Interior Stewart L. Udall

¹Trans World Airlines, "TWA Year End-1969," News from TWA (Chicago: Mimeographed, 1970), p. 3.

²Editorial, Muncie Evening Press, Oct. 8, 1969, p.6.

³William Hines, Daily News, Dec. 6, 1968, p. 30.

⁴Editorial, Muncie Evening Press, Oct. 8, 1969, p. 6. See also Sun-Times, Sept. 24, 1969, p. 4.

⁵See Muncie Evening Press, Nov. 13, 1969, p. 5; Muncie Evening Press, May 21, 1970, and Muncie Evening Press, May 28, 1970.

had requested a report by a panel of scientists concerning the effects of supersonic flight. The panel warned of grave potential harm not only to property from sonic booms but also to people.¹ The Boeing Company concedes the dangers from breaking the sound barrier, but states that the aircraft is planned for international flight. People opposed to the SST demand laws now against the future use of the plane at high speeds over land areas, so that later it cannot be said that economic necessity requires such domestic flights.²

The anti-supersonic transport groups have concentrated on noise pollution and the millions of dollars of property damage from sonic boom. A report to President Nixon in late 1969 warned of other dangers--radiation and toxic ozone at high altitudes but especially water vapor from jets in the upper atmosphere that might even change the weather.³ Brenn Stilley in "The SST" wrote that the

¹Editorial, Daily News, Nov. 23, 1968, p. 12.

²John Cunniff, Muncie Evening Press, Mar. 19, 1970, p. 8. The Concorde is not allowed to make a sonic boom over land. Muncie Evening Press, May 29, 1970.

³Editorial, Ottawa (Ill.) Daily Times, Mar. 9, 1970. See also Cunniff, Muncie Evening Press, Mar. 19, 1970 and George Getze, Sun-Times, Aug. 10, 1967. The Boeing Company stated that it had made studies which showed that the SST's would have no measurable effect on the weather. Tribune, Jan. 7, 1970. The federal government plans a \$27.6 million program to study the potential effect of the SST on the weather. Indianapolis Star, July 21, 1970.

door-to-door savings in time by use of a supersonic international flight would only be three hours, a reduction from eleven to eight hours. Stilley believed the Boeing SST was being built because of national prestige and profit. However, if the company is not to lose money, it needs to sell 300 SST's. Boeing has only 122 tentative orders, none from 1968-1970, and is not likely to sell 300 if the airplane is restricted to breaking the sound barrier only on over water flights.¹

Like most technological innovations with aircraft, the supersonic transport will do nothing to alleviate the serious problems of airports--noise, congestion, and overburdened air lanes. There is an advancement which could do much to relieve noise and crowded holding areas, the development of vertical take off and landing (VTOL) and short take off and landing (STOL) aircraft. In 1956, it was predicted that they would soon be in service to revolutionize air travel through increased safety and the elimination of long runways.² Vertical take off airplanes were considered to be "technically feasible" in 1959, but needed more research and development to reduce their much higher operating

¹Garrett DeBell (ed.), The Environmental Handbook (N. Y.: Ballantine friends of the Earth Book, 1970), pp. 177-79.

²Tribune, Apr. 23, 1956, p. 20.

costs in relation to conventional transports.¹ A site at O'Hare Field has been selected for vertical take off aircraft.² American Airlines has been experimenting with short take off and landing (STOL) planes for possible use in scheduled service in the mid-1970's.³ An area for three runways of 2,000 feet to service STOL's has also been chosen at O'Hare.⁴

Jumbo jets, supersonic transports, and vertical take off and landing aircraft seem like fantastic innovations to many people, but this should be considered:

The history of the aviation industry, particularly the recent history, indicates that pessimism in aviation facility planning is a dangerous attitude. . . . Approach the task with an open mind, considering the unbelievable as a probability.⁵

Something that seems fantastic at the present is commercial

¹Airport Operations Council, Airports of the Future (Washington: Airport Operators Council, 1959), pp. 89 and 92. An architectural study done by the University of Illinois in 1964 assumed that by 1985 there would be only VTOL aircraft at O'Hare because of the noise of present jets, the high cost of runways, and the problems of acquiring large amounts of land near metropolitan areas to provide for new airports. See Graham Foundation for Advanced Studies in the Fine Arts and the Northeastern Illinois Planning Commission, O'Hare Airport--A Design Potential Study (Champaign: College of Fine and Applied Arts, University of Illinois, 1965).

²Interview, Jim Wrzesien, C. F. Murphy Associates, Oct. 27, 1969.

³American Airlines, Astrojet News, Jan. 13, 1969.

⁴Interview, Walter Metschke, Jan. 7, 1970.

⁵Peterson, Airports for Jets, p. 78.

space flight. Dr. Thomas O. Paine, the administrator of the National Aeronautic and Space Administration, was asked about such flight. He replied, ". . . it should be possible for passengers to fly back and forth to the moon by the end of the century. . . ." ¹

In aviation, ever progressing technology advances faster than men are able to solve the problems it presents. Usually there is accord that a difficulty exists, and often there is even concensus on a solution. The differences exist on how to pay for the remedies. As far as O'Hare Field is concerned, a lack of money is the root of many of the evils that exist. A newspaper cartoon expressed it well. The drawing showed a huge airliner marked "bigger and bigger planes" eyeing a little bird house with "airport facilities" written on its roof. ²

There is general agreement that the congestion and noise at O'Hare Field would be greatly alleviated for a time by the spending of up to \$1 billion for a new international airport for the Chicago area. Some have jokingly named the proposed airfield "O'Where Field," because great differences arise as to its location. A third major airport was being considered even before the first major expansion at Chicago-O'Hare International Field took place. The Chicago Plan

¹Tribune Magazine, Nov. 9, 1969, p. 38.

²Muncie Evening Press, Jan. 24, 1970.

Commission produced an eighty-eight page report in 1957 recommending such an airfield be located south of Lake Calumet in the southwest section of the metropolitan region.¹ In 1959, a commission for the study of the feasibility of a jet airport for the south Chicago area was established by the Illinois General Assembly.² A study by the University of Illinois and the Northeastern Illinois Planning Commission in 1964 indicated that there would be a major airport southwest of Chicago by 1985.³

A committee was commissioned by Mayor Daley in 1966 to determine the best sites in the Chicago area for a large airport. The study was carried out by Landrum and Brown, airport consultants, the Airborne Instruments Laboratory, and the Real Estate Research Corporation of Chicago with the co-operation of the Chicago Plan Commission. Certain criteria were established. The distance should not be more than an hour's drive from Chicago. Airspace conflict with O'Hare, Midway, and Glenview Naval Air Station should be avoided. A tract of land of 11,000 to 14,000 acres was desired. Established communities should not be uprooted, and locations near places such as the Tinley Park State Hospital, the Joliet Penetentiary, or the Argonne and Weston Laboratories,

¹Mervin Block, Herald-American, Apr. 21, 1957.

²Ronald Kotulak, Herald-American, Dec. 10, 1959.

³Graham Foundation, O'Hare Airport.

public institutions which would be very costly to relocate, should not be considered. The selection of such a site would add great expense (and possible legal difficulties) to estimated costs for the airport which already are extremely high. Land prices for a site doubled from 1967 to 1970. Even the roadway to a new airport would be very expensive figured at the rate of \$1 million per lane per mile.¹

In April of 1967, Commissioner of Aviation William Downes told the Airport Symposium in London that Chicago needed a third airport by 1975, and that it would be in Lake Michigan.² Also in 1967, William F. Flener, an official for the Federal Aviation Administration, declared that the traffic situation at O'Hare was "all bad and getting worse" and that the answer to the problem was the construction of a new airport.³

The F.A.A. conducted a study of locations for another Chicago airport. The study selected the Joliet area as best suited for the development of the airfield with the second choice being the Chicago lakefront.⁴ The National

¹Thomis, Mar. 15, 1970, sec. 5B, p. 6.

²Allen, Great Airports, p. 32. See Downes, Department of Aviation Annual Report, 1967, p. 6 which stated that Chicago must have another airport by 1975.

³Tom Littlewood, Sun-Times, Apr. 2, 1967, p. 89.

⁴Frank Martin, Bensenville Banner, Sept. 11, 1968, p. 1.

Airport Plan was revised in the latter part of 1968 by the Federal Aviation Administration to call for another major airport in the Chicago area by 1973.¹ By 1968, there was general agreement between the city, airlines, Federal Aviation Administration, Airline Pilots Association, and the Air Transport Association that there was need of a third airport by the mid-1970's.²

The former chief administrator of the Federal Aviation Administration Najeeb E. Halaby declared, "Ten years is the normal gestation period for a new jet airport of the largest size." Dr. Stanley Berge of Northwestern University stated, "It is unthinkable to postpone a joint state-city decision to locate and develop Chicago's next great regional airport."³ Chicago also has considered that the future airport's:

. . . location, layout, and connections into the city's ground transportation network will have profound effects upon the economy, industrial growth, pattern of urban

¹John McHugh, Daily News, Nov. 21, 1968, p. 5 The National Airport Plan is a listing of the airport needs of the country by the F.A.A.

²Real Estate Research Corporation, Chicago Airport Site Selection Study: An Analysis of Some of the Major Considerations (Chicago: n.p., Mar., 1968), p. 1. The airlines had agreed to a program to collect an additional \$563,000 for use in connection with third airport site studies by consultants selected by the City of Chicago. Interview, Sampson, June 29, 1970.

³Thomis, Mar. 15, 1970, sec. 5B, p. 6.

and suburban development, and even upon the labor ¹ force of the metropolitan area for decades to come.

If the site selected is on land, it would have to be south of Chicago to avoid the air traffic of the Midway-O'Hare area.² Because of high land costs and the problem of jet noise, it would have to be far from the city.³ Such a land airport would be nearly impossible to connect with Chicago as was done at O'Hare by use of a "corridor," and would draw industry away from the city. These are some of the reasons officials of Chicago desire an airport in the lake.

As was mentioned in an earlier chapter, the idea of an airfield in or near Lake Michigan is not new. Neither are the arguments against it. An editorial written before World War II believed that such an airport was "visionary, impractical, dangerous and injurious both to the aesthetic values and recreational assets of our lake front."⁴ Before the location for O'Hare Field was chosen, the Chicago Airlines Technical Committee favored a site in Lake Michigan "over all others" if the higher cost of this kind of airfield

¹Ibid.

²Ibid.

³See Peterson, Airports for Jets, p. 59.

⁴Daily News, July 5, 1940.

could be justified.¹

Ralph Burke noted in the late 1940's the possible future need for "some form of a lake front airport."² At that time, however, the expense of a "lakeport" was estimated to be five or six times as much as a similar airport on land, because of the great expense of landfill. Fogs, winds, and icing presented greater difficulties on a body of water at that time also.³ With land costs up immensely and improved technological aids in air safety, some of the earlier disadvantages have been modified.

Alderman John E. Egan, chairman of the city council aviation committee, suggested in 1960 that a major airport be located in Lake Michigan by 1970.⁴ In the mid-1960's, Mayor Daley desired a different kind of lake airport than what had been previously considered--one on the bottom of Lake Michigan with dikes to hold the water out. The Harza Engineering Company studied the possibility and reported

¹ Arthur Evans, Tribune, Jan. 19, 1945. See Tribune, Apr. 25, 1945. William A. Patterson of United Airlines spoke in behalf of a lake airport. See also Roy Gibbons, Tribune, July 16, 1945. Benjamin Regan, Chairman of the Illinois aeronautics commission believed an airport by the lake was a necessity.

² Burke, Master Plan of Chicago Orchard (Douglas) Airport, p. 5.

³ General Airport Company, Comprehensive Study, p. 75.

⁴ Herald-American, Oct. 17, 1960. See also Daily News, Apr. 5, 1961 and Tony Weitzel, Daily News, Mar. 2, 1961.

that it might be done for \$300 million.¹ A report made a year later, boosted the estimated cost to \$413 million.² By 1969, New York City, Los Angeles, Boston, Seattle, New Orleans, and San Diego were also considering an airport below the water level using the Dutch polder dike technique.³

The "jetport" that Mayor Daley had desired would have been located five and a half miles offshore. In April of 1969, the Federal Aviation Administration announced that because of possible conflict with traffic from O'Hare Field as well as danger from the new 100 story John Hancock Building, the airport would have to be eight and a half miles into Lake Michigan. This would double its cost.⁴ There would also be inherent danger to an airport on the lake bottom such as the mayor wanted. The dikes might break because of flood, storm, technical accident, sabotage, or from being undermined by water.⁵

A series of studies done for the Federal Aviation

¹Jay McMullen, Daily News, June 22, 1967. See also "Can Airports Cope with the Jet Age?" Business Week, July 22, 1967, p. 64. See also editorial, Daily News, June 26, 1967 supporting the idea of an airport in the lake.

²Daily News, June 14, 1968.

³C. Owsley Shepherd, Chicago Today, May 6, 1969, p. 23.

⁴C. Owsley Shepherd, Herald-American, Apr. 19, 1969, p. 1. See also Real Estate Research Corporation, Chicago Airport Site Selection Study, p. 21 which had been completed and had considered conflicting air traffic.

⁵Thomis, Mar. 15, 1970, sec. 5B, p. 7.

Administration have indicated that "aquaports" located in bodies of water but built up to be above the water level are promising.¹ Wayne Thomis, aviation editor for the Chicago Tribune, favors such an airfield despite its estimated cost of \$1 billion.² An airport in Lake Michigan would take noise and possible accidents from residential areas, eliminate the need of large, costly clear zones, be convenient to downtown Chicago, and be expandable when such a need arose.³ Many other considerations, however, also must be weighed. The cost of an aquaport would probably be more than an airfield on land, weather and water birds might bring hazards, and access could only come from the west. Different means of access have been studied including a tunnel, a causeway, and a combination of the two with a tunnel seeming to offer the best means of getting to an airport in the lake. Probably the most important factor for consideration is that pollution and ecological disturbance to Lake Michigan could occur. A report in 1970 by a marine biologist indicated that this may not be the danger many persons fear. It stated that rather than destroying

¹Ibid., p. 6.

²Thomis believes that the federal government should pay one-half of the cost. "This is It: Chicago's Airport in the Lake," Tribune Magazine, June 22, 1969, p. 40.

³C. Owsley Shepherd, Chicago Today, May 6, 1969, p. 23. See also Thomis, Mar. 15, 1970, sec. 5B, p. 7.

the lake, an airport might help the lake cleanse itself by altering wave action.¹

Governor Richard Ogilvie of Illinois was believed to favor an airport on land. The Metropolitan Housing and Planning Council came out strongly against a lakeport saying new types of aircraft might make it obsolete soon after it was constructed and that the navigation, recreation, and pure water of the south end of Lake Michigan would be destroyed.² Douglas Schroeder, a conservationist, was positive that if an airport were built in the lake, many industries would also desire to do this, and it would mean the death of the southern part of Lake Michigan as a scenic recreation area.³

Controversy has held up plans for a new major airport to relieve O'Hare Field of congestion. Mayor Daley has stated that it will not be needed for another ten to fifteen years if greater use is made of Midway Airport,⁴ but such a facility does need to be operating in the 1980's

¹Shepherd, Chicago Today, May 6, 1969 and Tribune, June 14, 1970. See also Downes, Department of Aviation Annual Report, 1968, p. 20. See also Jack Houston, Tribune, July 16, 1970 and Gerald Lipson, Daily News, July 18, 1970. Both of these articles tell of conflicting views concerning an airport in Lake Michigan.

²Shepherd, Herald-American, Apr. 19, 1969, p. 3. See also Ruth Moore, Sun-Times, Sept. 23, 1968, p. 24.

³Kingsley Wood, Sun-Times, Apr. 13, 1969, p. 5. See also letter, Manny, June 7, 1970 which stated that Mr. Schroeder was a conservationist.

⁴Ottawa (Ill.) Daily Times, Feb. 13, 1970.

if Chicago is to maintain air transportation leadership. The Chicago Department of Aviation declared that "an exhaustive comparative study has been undertaken" of sites on both land and in Lake Michigan. It believed that there were no easy answers but that "preliminary results, however, all indicate that a lake site is preferable."¹

The problems of Chicago-O'Hare International Airport exist because the airport has been extraordinarily successful. Neil Callahan of the F.A.A. district office was convinced that the only real answer to the difficulties of the O'Hare region would be a reduction of traffic because of a third airport.² Congressmen Roman Pucinski and Harold Collier, leaders in the fight to limit noise and congestion at the airfield, agreed with Callahan about the need for another airport but differed on its location. Representative Pucinski favored an airport in the lake to separate traffic from congested areas, but Collier supported one on land, as it would be completed and relieve traffic at O'Hare sooner.³

Until another major airport is built in the Chicago area, and probably long after, the airfield known as O'Hare

¹Downes, Annual Report, 1968, p. 20.

²Frank Martin, Bensenville Banner, Sept. 11, 1968, p. 1.

³John Walker, Tribune Northwest Neighborhood News, Nov. 3, 1968, p. 3.

will continue to move more passengers and cargo than any other such facility has ever done. There will be another huge expansion program to enable it to accept not only jumbo and supersonic jets but vertical takeoff and landing planes too in the decades ahead. It is hoped that technological improvements soon will alleviate the anxiety and aggravation brought by O'Hare to the surrounding area and leave only the pride and prosperity that come from association with what many conclude is the most important airport in the world. Carter Manny, who played such an important role in O'Hare's development, will not be a part of the large expansion to take place at the airport in the 1970's. He noted this solemnly but concluded that it was still only the beginning for Chicago-O'Hare International Airport-- ". . . O'Hare will go on and on and the cast of characters will continue to change."¹

¹Letter, Manny, July 1, 1970. See also Thomis, Tribune, June 21, 1970.

EPILOGUE

The city of Chicago has an unfortunate, world-wide reputation as a town where gangsters and corrupt politicians thrive. With the possibilities for wrongdoing presented by the millions of dollars involved in the construction and operation of Chicago-O'Hare International Airport, many assume that there has been a good amount of financial spoliation. This would not only be a false assumption, but would be an injustice to the efficiency and honesty of those involved with the operation of the airport. It is unfortunate that the public is unaware of the outstanding job done at the airfield.¹ The author is convinced that O'Hare Field stands as a refutation to the Peter principle in that it has brought out the best talents of many of the persons who have played a role in its development.²

¹One colleague jokingly advised the author to wear a bullet-proof vest while investigating for this dissertation; another, when told that no evidence of political corruption had been found, stated that he was quite surprised. The doctoral committee for this study has exhibited an interest in the possibilities of chicanery in the construction and operation of the airport.

²The Peter principle states that a person's ability will cause him to rise in his job until he reaches a level at which he is incompetent. He is likely to be retained at this level.

The author is equally certain that the airlines have been and are extremely concerned with keeping down expenses. To provide fine service to their passengers, they must be alert to the reduction of costs wherever this can be done with safety. All income received at O'Hare Field goes toward the operation of the airport. If funds are wasted or misused, they must be made up in landing fees paid by the commercial carriers. There have been no complaints by the airlines about misuse of money at O'Hare. To the contrary, William A. Patterson, founder of United Airlines, stated that he had "great confidence in Mayor Daley."¹ In the 1960 expansion, the carriers had feared that "political manipulation" had brought about the need for \$29 million more funds. After a thorough investigation, the carriers concluded that such wrongdoing did not exist.² A consulting firm was employed for a few months to check the work of those employed by the city, but the firm was soon dropped as the task was considered unnecessary.³

The competence with which O'Hare is directed by the City of Chicago can be shown by the caliber of the organizations selected to work for the airport. One of these is

¹Letter, Patterson, Nov. 12, 1969.

²Thomis, Oct. 25, 1969. See also Letter, Sampson, June 5, 1970.

³Letter, Arnold Thompson, Feb. 13, 1970. See also letter, Joseph Baker, Mar. 5, 1970, and Malcolm Wise, Sun-Times, Jan. 17, 1961.

Landrum and Brown of Cincinnati, which acts as airport consultant. It is an internationally known company and has worked as a consultant for many major airports.¹ Naess and Murphy (C. F. Murphy Associates) requested the assistance of Landrum and Brown to aid in planning for the development of O'Hare Field in 1957, and Commissioner of Public Works DeMent agreed to allow Naess and Murphy to employ the consultants.² Landrum and Brown served by contract with the Department of Public Works from 1957 to 1960. The company is now the airport consultant to Chicago according to the provisions of the Airport Revenue Bond Ordinance of January, 1960.³

Glore Forgan and Company headed the underwriting group that sold the revenue bond issues for the major expansion program at O'Hare Field. Mr. Robert G. Sampson, United Airlines' executive, stated that the minutes of the Top Committee do not indicate how the selection of Glore

¹Consultant work has been done by Landrum and Brown for the cities of Boston, Cincinnati, Cleveland, Denver, Detroit, Los Angeles, Miami, Pittsburgh, Philadelphia, St. Louis, Washington, D.C. and many other cities in the United States as well as for airports in Athens, Greece; Tel Aviv, Israel; Tunis, Tunisia and other foreign airfields. See "A New Airport for Jets," Architectural Record, Mar. 1960, p. 175; Leonora M. Anderson, "Greater Pittsburgh Targets for 2000," Airport World, Apr. 1970, p. 46 and Roy Madison Associates, Greater Cincinnati Airport and Development (Cincinnati: n.p., 1965).

²Manny, "Log," p. 1.

³Letter, Landrum, June 15, 1970.

Forgan was made, but that Chicago seems to have no pattern for "one financial firm having all the work for an extended period of time" in its issuance of municipal securities.¹ There was a rumor that in 1959 American Airlines had wished Blythe and Company of New York to manage the airport bond issue and that the choice of Glore Forgan may have been an attempt by Chicago to get away from financial subservience to New York City.

Over eight firms participated in the original \$120 million revenue bond issue for O'Hare Field in February, 1959.² These included such well known companies as A. C. Allyn and Company; Halsey, Stuart and Company; Harriman, Ripley and Company; Kuhn Loeb and Company; and Merrill Lynch Pierce, Fenner and Smith. Glore Forgan has specialized in the marketing of tax exempt securities and has managed or co-managed these important bond issues besides that of O'Hare Field: the Greater New Orleans Expressway for \$46 million in 1954; Illinois State Toll Highway Commission for \$415 million in 1955; State of Illinois (multi-purpose issue) for \$100 million in 1961; Massachusetts Port Authority

¹Letter, Sampson, June 5, 1970. In the 1960's, the company became known as Glore Forgan, William R. Staats, Inc.

²There were two parts to the revenue bond issue handled by Glore Forgan during the O'Hare expansion. The first was in February, 1959 for \$120 million; the second was for an additional \$29 million in January, 1960.

for \$106 million in 1964; Dallas North Tollway for \$33.65 million in 1965; and Parish of Calcasieu, Louisiana (industrial revenue bonds) for \$62.7 million in 1967.¹ Glore Forgan and Company is a respected and responsible financial organization.

C. F. Murphy Associates designed facilities and supervised the expansion program that made Chicago-O'Hare International Airport an airfield of major importance. Officials of Chicago called upon the firm in April of 1957 to review the Master Plan of 1956 that had been prepared by Ralph Burke who had recently died. Architects and engineers do not bid for contracts, but negotiations for one took place between C. F. Murphy Associates and Commissioner of Public Works DeMent, Director of the Bureau of Aviation Downes, and Corporation Counsel Meliphany.² The firm worked under the Department of Public Works, and in the spring of 1959, Charles F. Murphy was named the consulting engineer for O'Hare by the City Council. There were no "nays" of opposition to this appointment.³

¹Letter and materials, James P. Jamieson, Senior Vice President of Glore Forgan, William R. Staats, Inc., to Doherty, June 5, 1970.

²Manny, "Log," p. 1. Mr. Downes became the commissioner of aviation with the creation of the Department of Aviation in December, 1958. See Daley, Journal of the Proceedings, Dec. 8, 1958, p. 8619.

³Daley, Journal of the Proceedings, Mar. 16, 1959, p. 9863.

J. L. Donoghue believed that Mayor Daley and Commissioner DeMent wanted to ease the organization of Ralph Burke out so that they would have complete control over the O'Hare expansion.¹ Others held that the close association of Ralph Burke with Mayor Kelly and newspaper articles that had implied possible wrongdoing by them may have made Mayor Daley wish to bring in a new group to manage O'Hare's development.² C. F. Murphy, Sr. and Richard J. Daley did grow up in the same Irish neighborhood of Bridgeport in Chicago. The mayor, however, is more than ten years younger than Murphy. No doubt, they have common friends and interests. At the time the city called upon the Murphy group to work on the O'Hare project, the architects had improved the design of the Central Filtration Plant to help satisfy the property owners of Lake Shore Drive who were opposing the plant by legal action.³ This may have been a factor in the selection of the Murphy organization for the work at O'Hare. Regardless of the reason, C. F. Murphy Associates is "well known and respected in the professional

¹Interview, Donoghue, Jan. 6, 1970.

²Interview, Hazekamp. See Thomas Buck, Tribune, June 5, 1951 and Tribune, June 12, 1951 for insinuations against Kelly and Burke.

³This information was offered by a person who wished to remain anonymous. It was corroborated in part by Professor Hermansen of the Ball State School of Architecture. Interview, June 19, 1970.

field."¹ In Chicago, the work of the firm includes the Sun-Times Building, Prudential Building, Civic Center, Federal Center, Federal Reserve Bank of Chicago, First National Bank, St. Xavier College, the Union Buildings of the University of Illinois at Chicago Circle, and the second McCormick Place. The firm also is responsible for the construction of the F.B.I. Building in Washington, and the Home Economics Building as well as the Animal Science Building of the University of Illinois at Urbana, and many other projects.² Professor David R. Hermansen of the Ball State University School of Architecture stated that Mayor Daley should be commended for consistently hiring first-rate architects for city projects unlike some previous administrations in Chicago. Professor Hermansen also declared that the city did not play favorites, but divided its jobs between the top firms. He said that C. F. Murphy Associates was a "young, dynamic group" and "one of the best in Chicago."³

The reputation of most of the chief participants in the expansion of Chicago-O'Hare International Airport is

¹Letter, Sampson, June 5, 1970.

²See "Carter H. Manny, Jr." and "Charles F. Murphy, Sr.," Who's Who in the Midwest, 1969-1970 (Chicago: Marquis--Who's Who, 1968), pp. 650 and 741. See also George S. Koyl (ed.), American Architects Directory (New York: R. R. Bowker Co., 1962), pp. 460 and 503.

³Interview, Hermansen, June 19, 1970.

exemplary. There was much unfavorable publicity concerning one of the companies, the Malan Construction Company of New York, before the project was finished. Malan made the lowest of the nineteen bids submitted on the second revenue bond contract (RB-2) for the \$7 million American Airlines hangar in 1959. Turner Construction Company of Chicago submitted the next lowest bid, \$127,000 higher than Malan.¹ In checking on the reliability of the New York firm, Carter Manny, project manager, had two telephone reports which made him cautious about recommending Malan Construction. Because of the relatively small difference between the bids, Manny advised Commissioner of Public Works DeMent that the dependable Turner Construction Company should be awarded the contract.² John Ward, the city purchasing agent and a person who was consistent in desiring to give a contract to the lowest bidder, did not agree. Ward sent out twenty-eight telegrams to suppliers, architects, and owners concerned with jobs done by Malan. Most replies were favorable, and Manny's recommendation was overruled at a meeting between city officials.³ Malan was required, as were all firms working on city contracts, to post a \$7 million performance bond

¹Tribune, Aug. 20, 1959. See also Sun-Times, Aug. 20, 1959 and Tribune, July 16, 1959.

²Manny, "Log," pp. 192-93.

³Ibid., p. 196. See also Sun-Times, Aug. 20, 1959.

for the full amount of the construction.¹ One might have received the impression from newspaper accounts that political favoritism toward a Chicago contractor had almost excluded the low bidder for the project.

During the development of O'Hare from 1959-1962, Malan Construction received more contracts from the city than any other firm. These included the American Airlines hangar, the fuel tank farm, the Eastern Airlines hangar, work on the circular restaurant as well as the power house, and the \$18,366,000 contract to build the twin terminals for which Malan was paid a bonus of \$338,000 for finishing its work ahead of schedule.²

By May, 1961, however, some of the problems with Malan that Manny's inquiries had hinted at had become evident. Malan had been slow on some of its projects. Three subcontractors for Malan filed liens against it for not paying them for work which they had completed. Furthermore, Alderman Thomas E. Keane (31st Ward), chairman of the city council finance committee, was charged with having close associations with the Malan organization.³ Alderman Keane was attorney for the Continental Casualty Company,

¹Tribune, Aug. 15, 1959.

²Ibid., Aug. 29, 1961. See also Daily News, May 4, 1961.

³Jay McMullen, Daily News, May 23, 1961. See also Daily News, May 26, 1961.

the firm that wrote performance bonds for Malan.¹

An article in the Daily News made the accusation that Malan was receiving preferential treatment from the city and was being paid ahead of time for work that had not been completed.² Mayor Daley called a meeting of city officials and representatives of C. F. Murphy Associates which was responsible for certifying the completion of work. After the meeting, the mayor called the newspaper report "false, untrue, misleading, and inaccurate" and went on to say that C. F. Murphy Associates had done "an outstanding job of supervising the project."³ The city did withhold over \$2 million from Malan Construction until liens against that company were removed.⁴

In late 1961, Malan Construction Company submitted a bid to the State of Illinois on a mental hospital to be built at Centralia. Malan's offer was almost \$500,000 below the next lowest bidder for the general constructing job worth \$4,460,000. The public works director and the

¹Tribune, May 30, 1961.

²McMullen, Daily News, June 1, 1961.

³Ibid., June 3, 1961. See also Herald-American, June 3, 1961.

⁴Sun-Times, Aug. 19, 1961. See Daily News, June 14, 1961. The revenue bond ordinance required certification that there were no liens on completed work before payment could be made by the city. McMullen, Daily News, June 2, 1961.

attorney general of the state disqualified Malan's low bid and stated that the contract called for bidders to do at least one-half of the work rather than serving as brokers. Competing contractors were reported to be "puzzled" by the action of state officials who were considered to be "protégés" of Mayor Daley, as some believed that Chicago had shown "favoritism" to Malan.¹ Actually, Malan's problems at O'Hare Field must have been a source of embarrassment to the mayor, and city officials had considered limiting the amount of work there which could be sub-contracted.²

The Daily News stated that not only Malan was a loser when it failed to receive the contract on its low bid for the mental hospital work, but so also was the Continental Casualty Company which had provided all of Malan's performance bonds at O'Hare. It further pointed out that Alderman Thomas E. Keane was one of Continental Casualty's top lawyers.³

Carter Manny, considerably skeptical of Malan at first and always cautious in his dealings with that firm, came to have grudging respect for the way it expedited supplies and materials. He stated that Malan Construction

¹Charles Nicodemus, Daily News, Jan. 3, 1962. Most contractors subcontract over one-half of their work. Letter, Manny, June 16, 1970.

²Tribune, May 30, 1961.

³Jay McMullen, Daily News, Feb. 7, 1962.

Company's presence on work at the airport, in spite of criticism, was beneficial to the City of Chicago. Because all contracts were awarded to the low bidder and Malan participated in most of the large contracts, estimates bid by rival contractors were driven down thus saving money for the city.¹ Malan is defunct now, but it has not been completely forgotten. In 1969, an article pointed out that the terminal roof (Malan had received a bonus for completing the terminal ahead of schedule) was in need of repairs costing \$93,000 although one-half of the estimated life of the roof still remained.²

Censure has fallen on Chicago because of actions of a company that was a consistent low bidder on construction work. The city has also received criticism and charges of conflict of interest because lease concessions at the airport have not been put out for bidding. The Airport Sales Corporation, a subsidiary of Continental Casualty, obtained exclusive rights for seven years in 1961 to sell air travelers' insurance at O'Hare Field. Chicago was to be paid twenty-five per cent of the gross sales of the insurance or a fixed sum, whichever was larger, an agreement that Commissioner Downes said was a good rate for the city. Newspapers pointed out that Alderman Thomas Keane had received

¹Letter, Manny, Feb. 4, 1970.

²Emmett Smith, Sun-Times, Jan. 2, 1969.

\$6,000 in fees for concluding the agreement.¹ Immediately after this disclosure, Mayor Daley asked the City Council to drop the exclusive right clause of the contract, and this was done on March 9, 1962.²

The city desires to have high quality operators in charge of the concessions at O'Hare Field, and competitive bidding might bring in someone who would give unsatisfactory service.³ The two most important concessions are parking and food service. It is believed that the lease has expired on the parking concession, but the same operator has continued on a verbal agreement dependent on satisfactory service. The Carson Pirie and Scott Company operates the food concession at O'Hare Field. It is a company noted for high quality service (as is the previous operator of this concession, Marshall Field and Company), the type of firm the city wanted to run the operation. When the major expansion occurred, Carson's agreed to pay \$3.8 million for half of the cost of the city's circular restaurant, to make leasehold improvements on the restaurant, and to guarantee to Chicago \$350,000 per year or a fixed percentage of gross

¹Daily News, Mar. 7, 1962. See also Herald-American, Mar. 7, 1962.

²Peter Deuel, Sun-Times, May 11, 1962.

³Editorial, Daily News, May 25, 1961.

receipts from the food concession, whichever was larger.¹ Virgil Martin of Carson Pirie Scott is known as a person who participates in Democratic politics in Chicago. One may wonder if his friendship with city officials was a factor in securing a contract which has been so beneficial to both the city and Carson's and provided quality service to users of O'Hare.²

Chicago tries to receive high monetary compensation as well as satisfactory service in the leasing of concessions at O'Hare Field. This is demonstrated in the two attempts to acquire a hotel for the airport. In 1960, C. F. Murphy Associates was working on a five-story, 150-room hotel design for the Hilton Corporation. The hotel was to be in the middle of the O'Hare terminal complex and be the property of the city, but it would be built and leased by the Hilton firm.³ Chicago had the power to negotiate a

¹Sun-Times, July 20, 1961.

²This information was supplied by someone familiar with Chicago politics who wished to remain anonymous. In an interview on October 24, 1969, former Commissioner DeMent stated that he had recently spoken to someone from Carson's and that both the company and the city were pleased with the operation of the restaurant at O'Hare.

³Malcolm Wise, Sun-Times, Nov. 12, 1960. The large expense to Hilton would be the cost of the hotel, possibly \$6 million. See editorial, Daily News, May 25, 1961. Even though the structure would belong to the city, Hilton would have to pay the property taxes of about \$175,000 per year to Cook County from which Chicago would get its share. Wise, Sun-Times, May 26, 1961.

lease for a maximum of twenty years. In order to be able to earn the expense of erecting the structure and obtain a profit, Hilton desired a forty-year lease.¹ A bill was introduced into the lower house of the Illinois General Assembly on April 5, 1961, to permit Chicago to enter into a long-term hotel lease without competitive bidding.² Democrats supporting Mayor Daley failed to pass the bill into law. Many legislators opposed the bill, because there was no competitive bidding even though the reason for this was to assure satisfactory operation the Daily News reported.³ Another newspaper, however, declared:

The motel and hotel owners organized, hired a public relations firm, and bombarded the Assembly and news media with statements against the legislation. In the end, their efforts and the natural animosity of Republicans against almost any Daley-backed legislation defeated the bill.⁴

In mid-1969, Mayor Daley submitted a proposed ordinance to the finance committee of the City Council for the

¹Sun-Times, July 7, 1961.

²Herald-American, Apr. 12, 1961.

³Editorial, Daily News, May 25, 1961.

⁴Sun-Times, July 7, 1961. See Tom Littlewood, Sun-Times, May 19, 1961, who reported that Paul Simon, a Democrat (Lieutenant Governor of Illinois in 1970), opposed the bill for lacking competitive bidding. The article went on to say that Speaker of the House Paul Powell, a Democrat (Secretary of State of Illinois in 1970), made a motion to postpone consideration of the bill, but so much hooting took place that he adjourned the House until the following week.

construction of a \$14 million dollar hotel to be leased for twenty years to Western Concession, Incorporated. After this period, it would become the property of the city. Chicago was to receive ten per cent of the gross revenue or \$1 million per year, whichever figure was higher. Alderman John Hoellen, a Republican, charged that the law firm of Schaller, Reilly and Daley, to which the mayor's son Michael belonged, negotiated the lease on behalf of Western Concessions and that there was an apparent conflict of interest involved. Corporation Counsel Raymond Simon, who negotiated for the city, said that Michael Daley had nothing to do with the lease.¹

The Real Estate Research Corporation had suggested a lower rental than the minimum of \$1 million per year desired by the city. Chicago officials obtained what they wanted, and Western Concessions has plans to build a ten-story, 1,000 room, \$14 million hotel at the south end of the parking lot between the new control tower and the parking structure. It is hoped that the hotel will be completed by the end of 1971.² In the spring of 1970, Len O'Connor,

¹Gary Cummings, Chicago Today, July 12, 1969. A lawsuit has been instigated charging fraud and conspiracy in the formation of Transnation Development from Gulf and Western in 1970. Wall Street Journal, July 22, 1970. Western Concessions is a subsidiary of Transnation Development. The O'Hare lease is being examined by the office of the Illinois State's Attorney. Philip J. Levin, the head of Transnation that owns the Arlington Park and Washington Park racetracks, has been under investigation by the Illinois Racing Board. Chicago Today, July 26, 1970, p. 4.

²Alvin Nagelberg, Tribune, May 31, 1970.

a Chicago television commentator who often attacks the "Daley machine," criticized C. F. Murphy Associates for being the architect for both the city and Western Concessions which was building the new hotel. O'Connor considered this a conflict of interest, but there are reasons why it is desirable for the city's architect to do the work. Of course the hotel should fit in architecturally with the buildings there, but more important, there are many complicated underground interconnections to the terminal, the new parking structure under construction, and the probably future underground railroad system. The Murphy firm has worked on and helped plan for all of these facilities.¹

Mayor Daley suggested that one of his major accomplishments has been the construction of the "world's greatest airport."² This writer agrees, and would add that a reason the airport has been so outstanding is that it has been operated honestly and efficiently under leadership concerned with the best interests of the citizens of Chicago. The history of Chicago-O'Hare has been basically that of a job well done. Other airports have been "political footballs," but not O'Hare Field.³ The city has done

¹Letter, Manny, June 7, 1970.

²Tribune, Apr. 19, 1970.

³Interview, Sampson, chairman of the Top Committee, Jan. 5, 1970.

an "outstanding job" in the management of the airfield.¹ O'Hare "ranks among the world's largest and . . . finest" airports.² It "has been, and will continue to be for many years, the greatest [by many measurements] airport in the world."³ Chicago-O'Hare International Airport stands as a "monument to what imaginative, private industry and enlightened government--on city, state and federal levels-- can do in building an internationally important facility."⁴

The experience of the development of O'Hare Field suggests problems and possible solutions to be considered in any planning for another major airport. The federal government donated the original nucleus of land with concrete runways to the City of Chicago and then contributed millions of dollars to expansion. Because of rising costs and the difficulty local governments have in obtaining money, far more aid will be required of the federal government for any future airfield.

The planners of Chicago-O'Hare were forced to rush the airport to completion by the coming of the commercial jet. Despite this, they did have the advantage of many

¹Thomis, Tribune, Mar. 15, 1970.

²Letter, Thompson, airport consultant, Feb. 13, 1970.

³Letter, Barkes, executive of United Airlines, Feb. 24, 1970.

⁴Kennedy, "Draft Remarks."

years for preparation without great pressure to bring large-scale facilities into being. With the acceleration of technology, greater and more rapid demands are likely from now on. O'Hare Field attracted business and homes to the area around it. These communities were affected negatively by the problems of noise and pollution from the airport. This author believes that any major airports for the future should be located away from residential areas, zoned to prohibit persons from locating near the airfield, and should use rapid transit lines to points of distribution in the central city and suburbs. Chicago-O'Hare International Airport is still a good example for such a need.

O'Hare early acquired what was considered to be a huge amount of land that turned out to be insufficient. An area with thousands of acres of available land seems a necessity henceforth. O'Hare also pioneered in the use of parallel instrument runways, another requirement for any airport desiring to handle large amounts of traffic.¹

Tremendous difficulties were encountered and overcome at O'Hare in the areas of planning, development, and finance. There was and will be a need for persons with integrity, imagination, and the willingness to compromise to give leadership to programs that are to come. The

¹Thousands of acres of land and parallel runways would not be a necessity if vertical takeoff aircraft are perfected.

development and operation of a major airport is becoming increasingly complex and requires trained specialists as occurs at O'Hare Field. The bigness and complexity has evolved from many unforeseen events such as the astonishing growth of passenger traffic and technological improvements. Unanticipated difficulties (for example, land which was pocketed with soft soil) occurred in the construction phase also. The history of Chicago-O'Hare International Airport demonstrates only one surety--when dealing with commercial air traffic, expect the unexpected.

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APPENDIXES

APPENDIX A

Traffic - Scheduled and Non-Scheduled

<u>Year</u>	<u>O'Hare Operations</u>	<u>O'Hare Passengers</u>	<u>Midway Passengers</u>
1947	108,704	217,412	2,645,674
1948	121,416	238,314	2,564,103
1949	124,519	259,408	3,246,693
1950	94,682	176,902	3,820,165
1951	80,519	146,278	4,953,160
1952	70,958	127,796	5,945,438
1953	90,940	201,968	7,151,474
1954	117,461	311,530	7,935,879
1955	142,912	471,170	9,134,483
1956	156,043	723,296	9,174,930
1957	207,498	1,030,346	9,709,633
1958	231,412	1,263,147	9,667,696
1959	231,636	2,156,755	10,238,871
1960	252,799	5,691,446	7,237,022

Appendix A (Continued)

1961	322,054	9,615,480 ¹	3,565,561
1962	416,991	13,525,955	659,549
1963	426,098	16,163,414	417,544
1964	458,460	18,394,126	823,676
1965	509,621	20,998,325	882,349
1966	543,500	23,589,683	1,094,878
1967	643,787	27,522,816 ²	1,077,666
1968	709,591	30,124,534 ³	1,663,074 ⁴

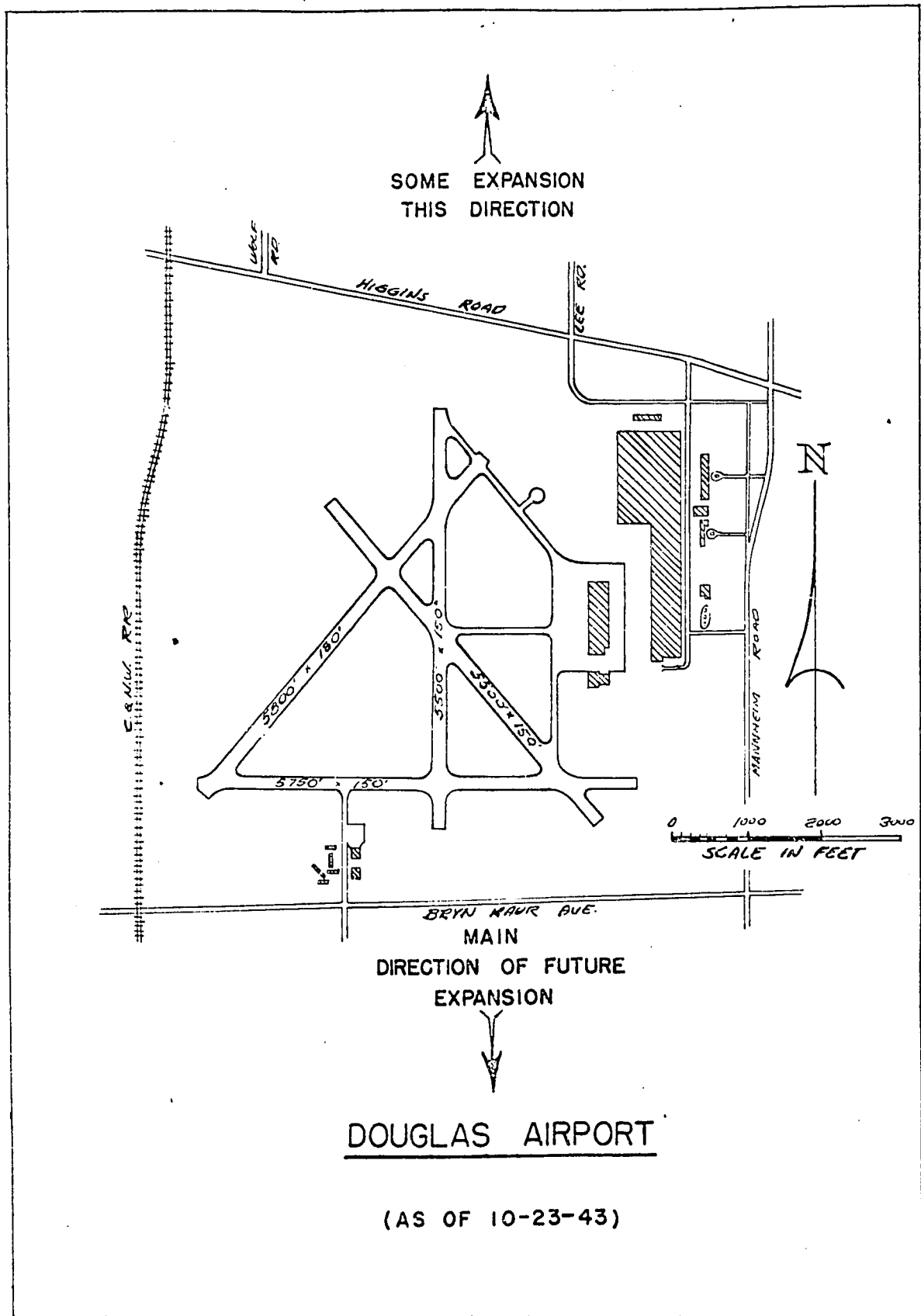
¹Above statistics from Downes, Department of Aviation Annual Report, 1961, p. 15.

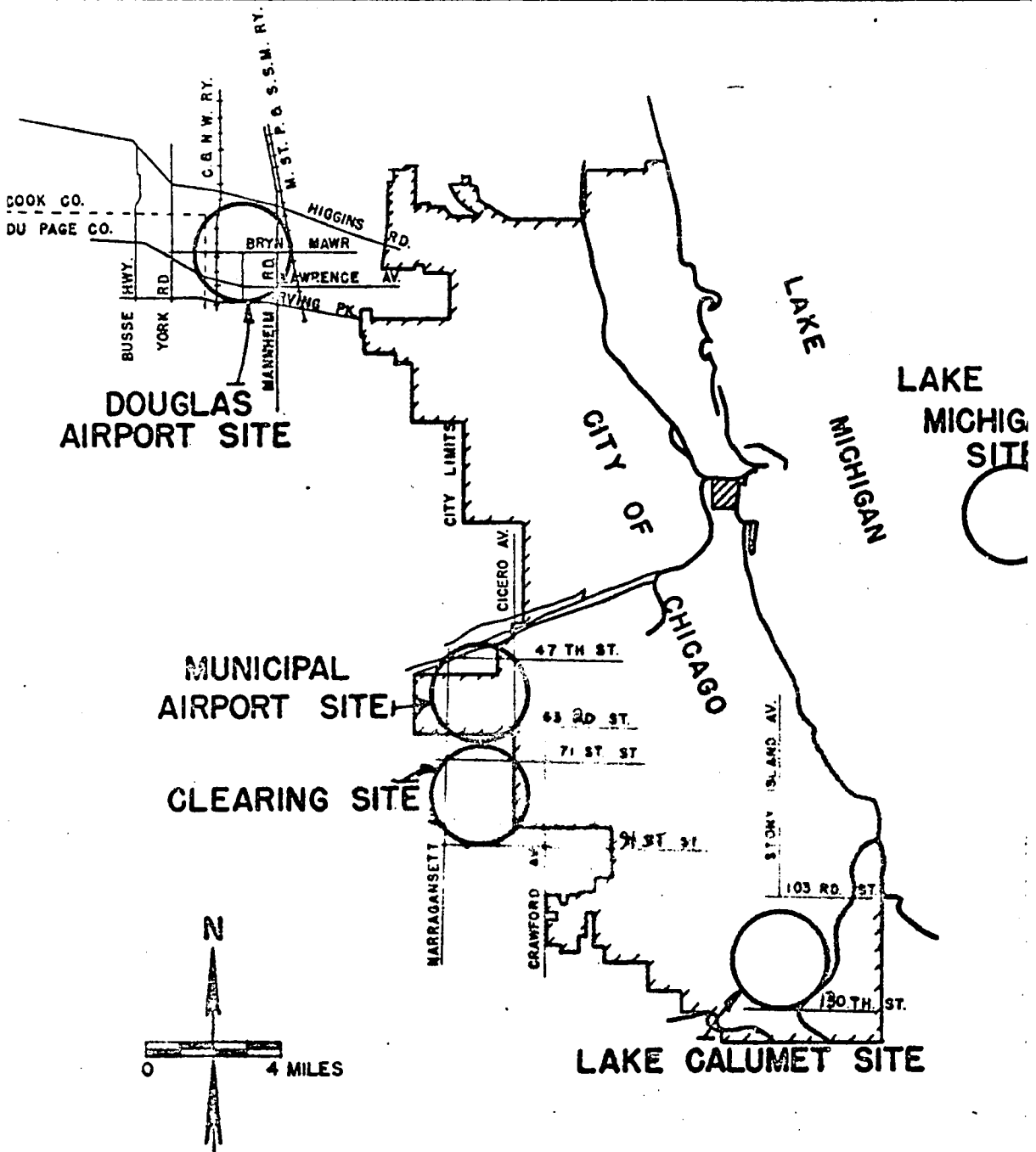
²Ibid., 1967, p. 12.

³Ibid., 1968, p. 6. See also Robert Dishon, Daily News, Jan. 18, 1969.

⁴Chicago Association of Commerce and Industry bulletin statistics on Midway which also included the traffic of O'Hare Field. Figures were taken from the Department of Aviation Annual Reports and agreed with them.

APPENDIX B

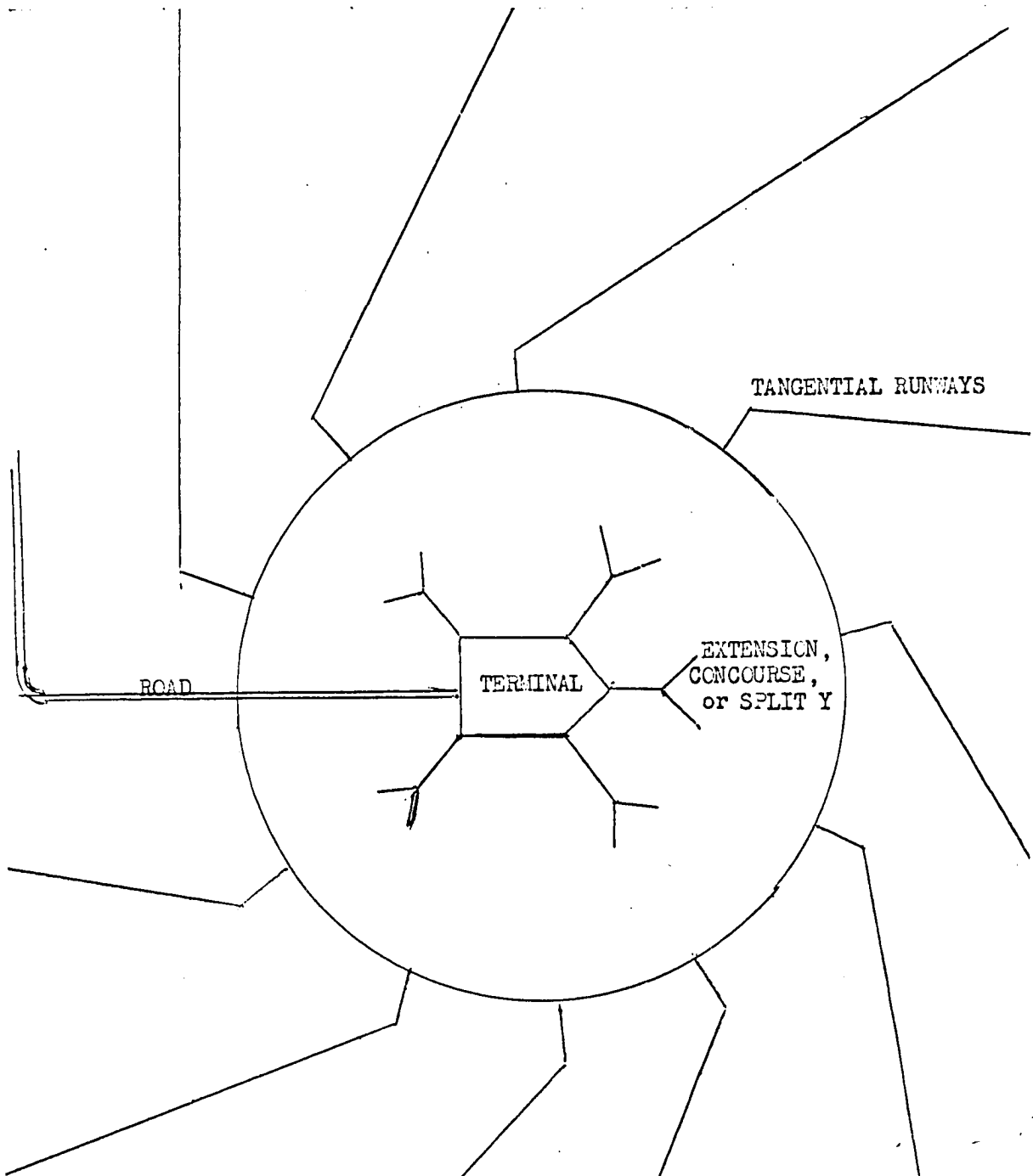




KEY MAP

AIRPORT LOCATION STUDIES FOR CHICAGO METROPOLITAN AREA

Sites under Consideration by City in 1945 for a Major Airport

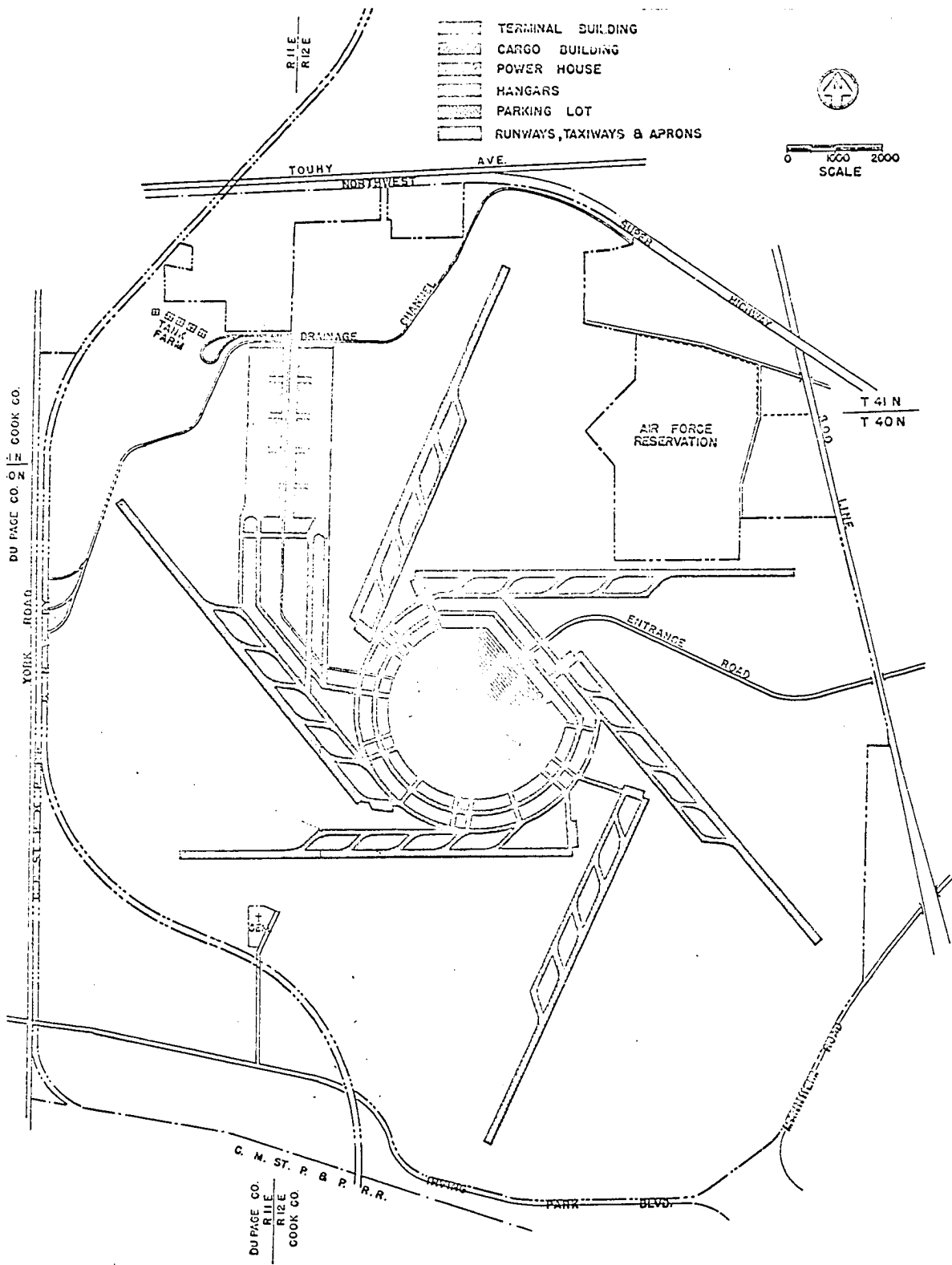


TANGENTIAL PLAN for O'HARE FIELD

Aviation Week, June 25, 1952, p. 75.

(The article connected with this illustration indicated that since 1950, there were plans for six, rather than ten, runways. This drawing is from the master plan in operation in 1948.)

APPENDIX T

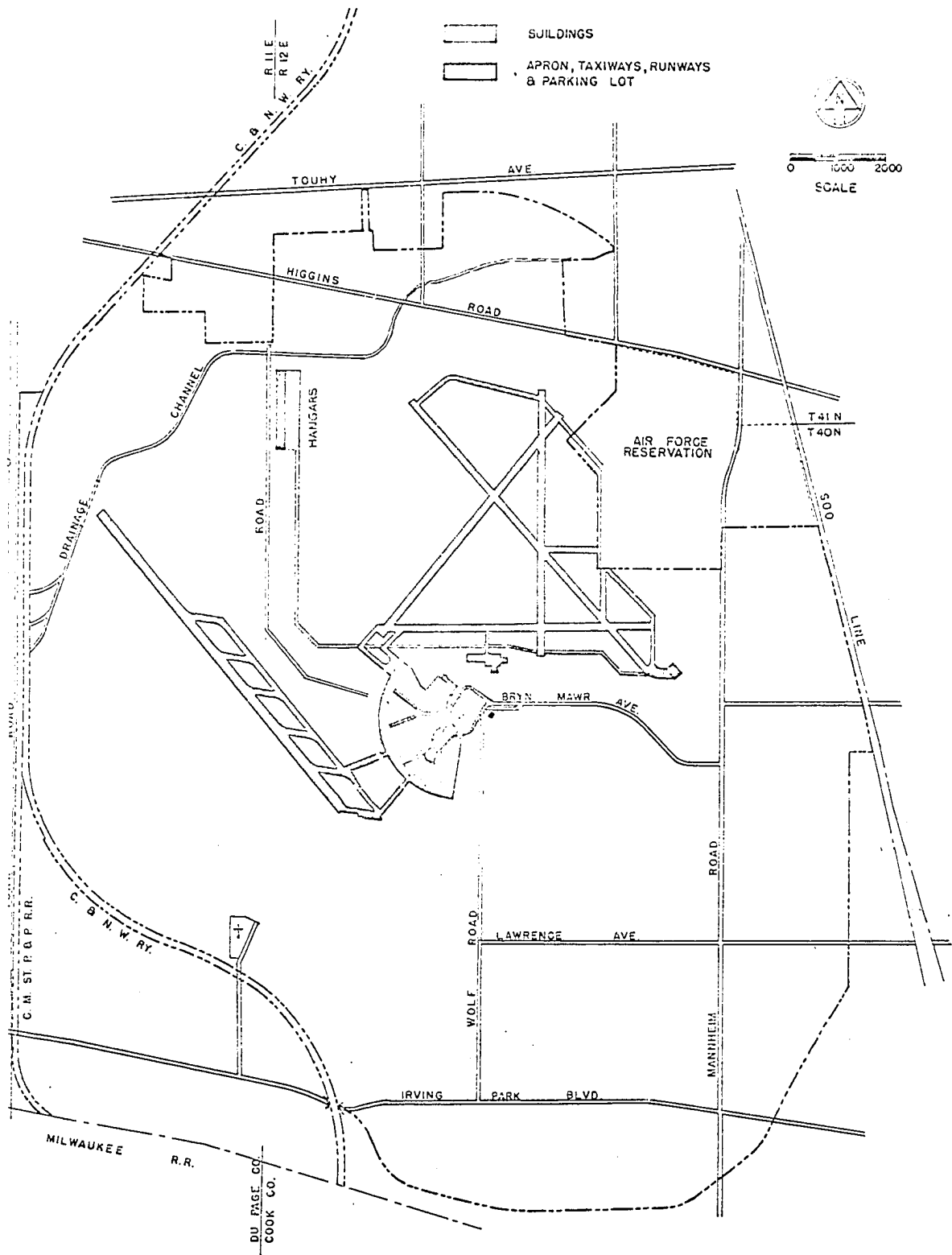


MASTER PLAN
 in Operation at Time of Burke's Death in 1956
 FIGURE 1

PREPARED BY
 RALPH H. BURKE
 AIRPORT CONSULTANT
 CITY OF CHICAGO

8-54

APPENDIX F

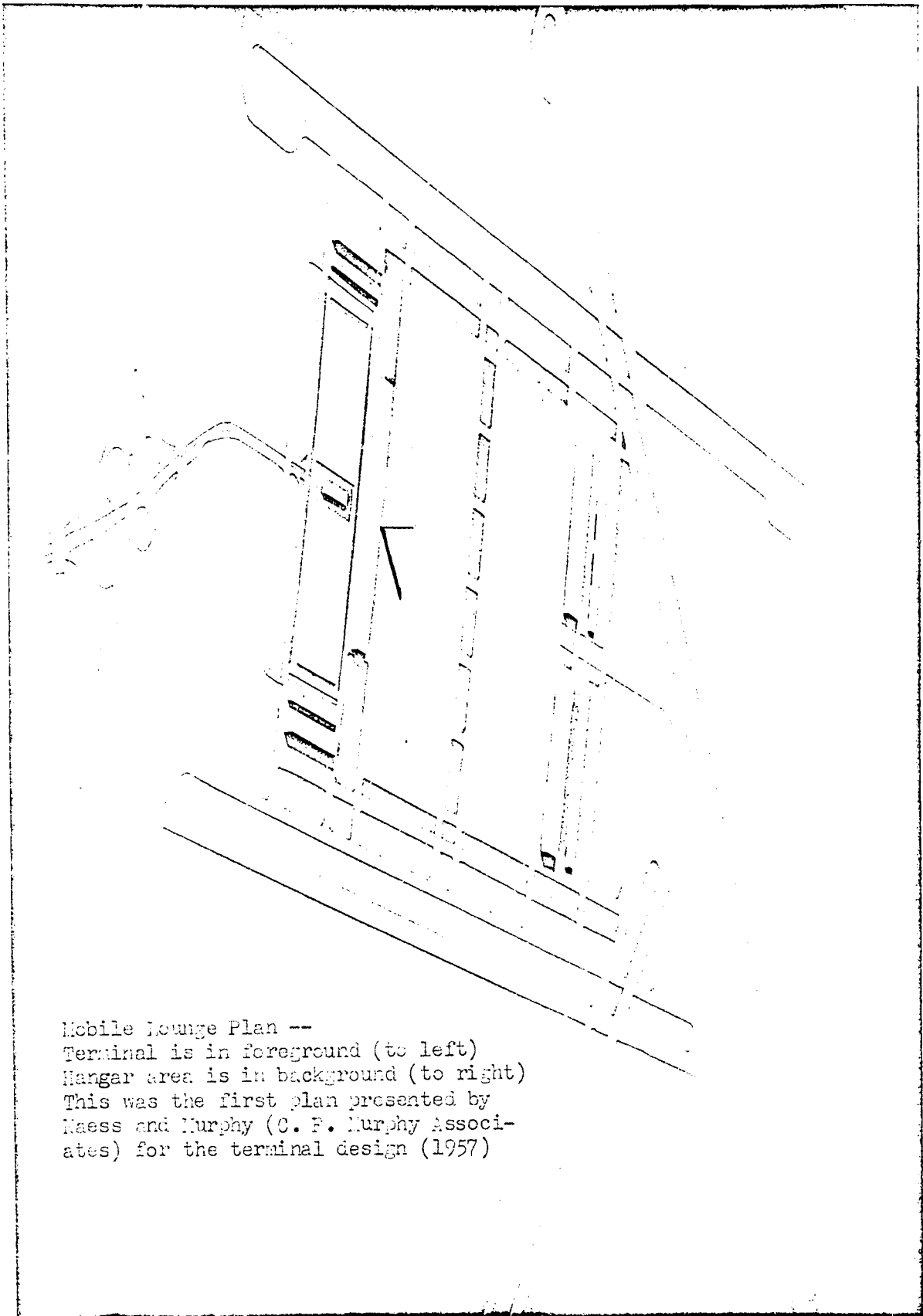


STAGE II PLAN C
Construction Completed by 1956
FIGURE 2 B

PREPARED BY
RALPH H. BURKE
AIRPORT CONSULTANT
CITY OF CHICAGO

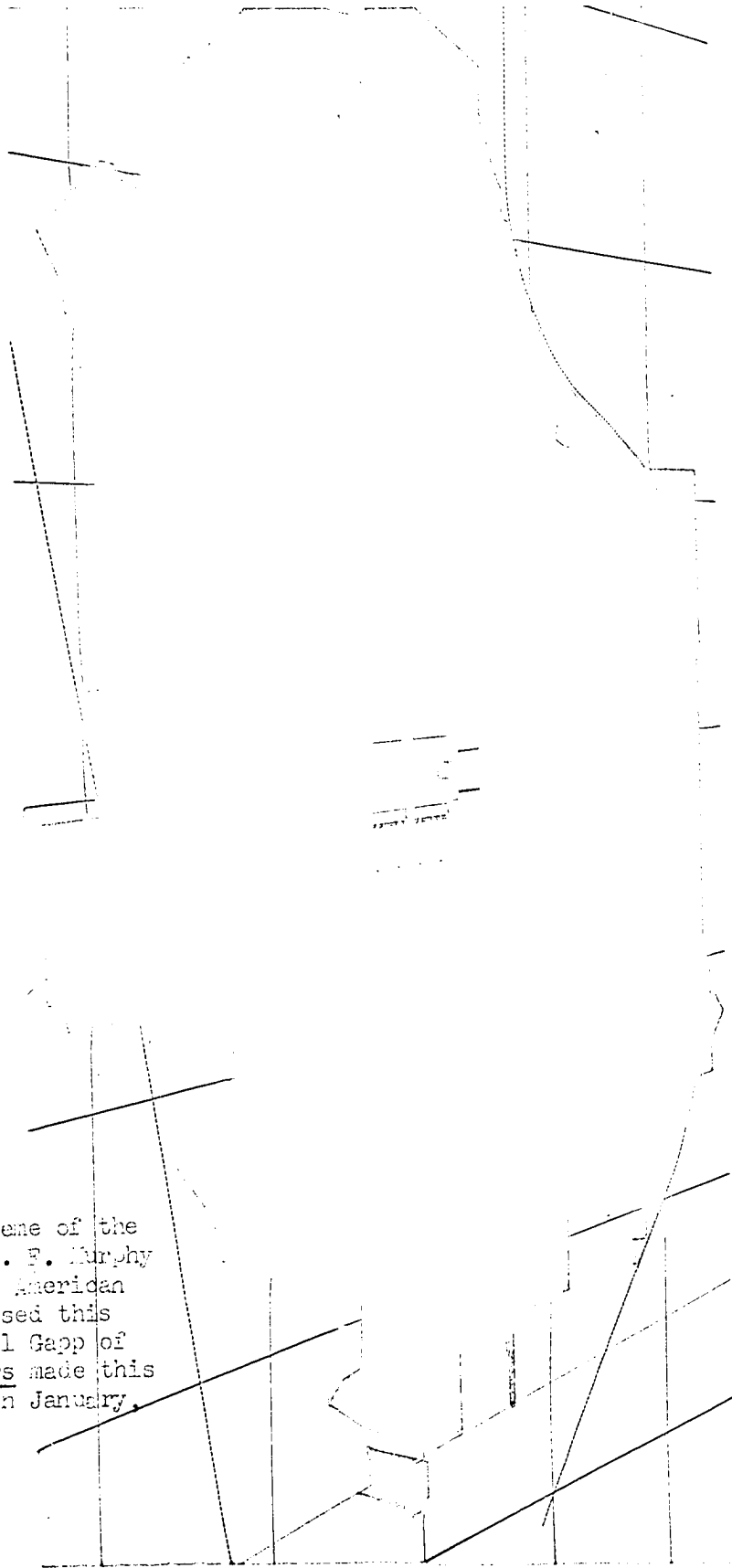
B-54

APPENDIX G



Mobile Lounge Plan --
Terminal is in foreground (to left)
Hangar area is in background (to right)
This was the first plan presented by
Naess and Murphy (C. F. Murphy Associ-
ates) for the terminal design (1957)

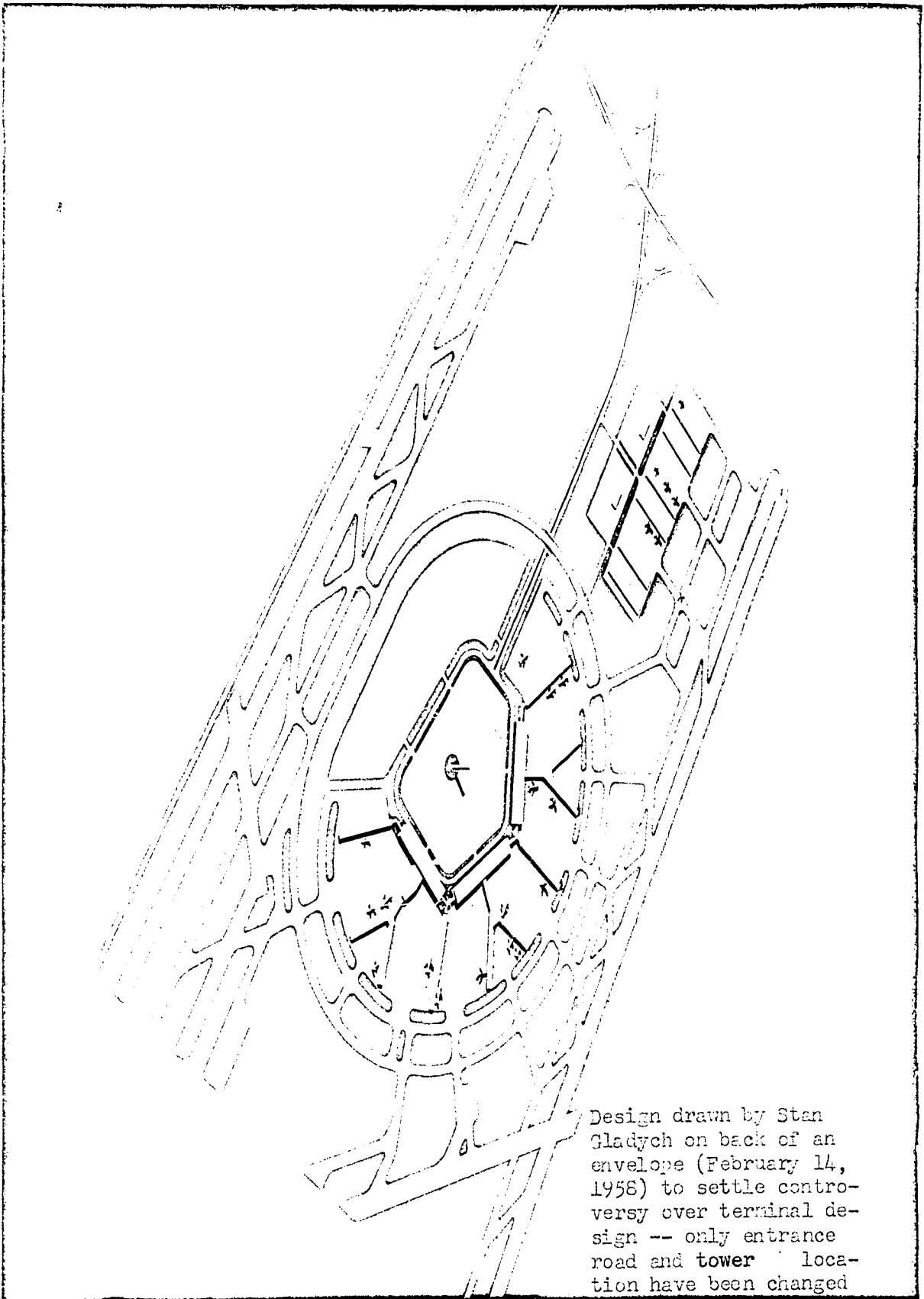
APPENDIX H



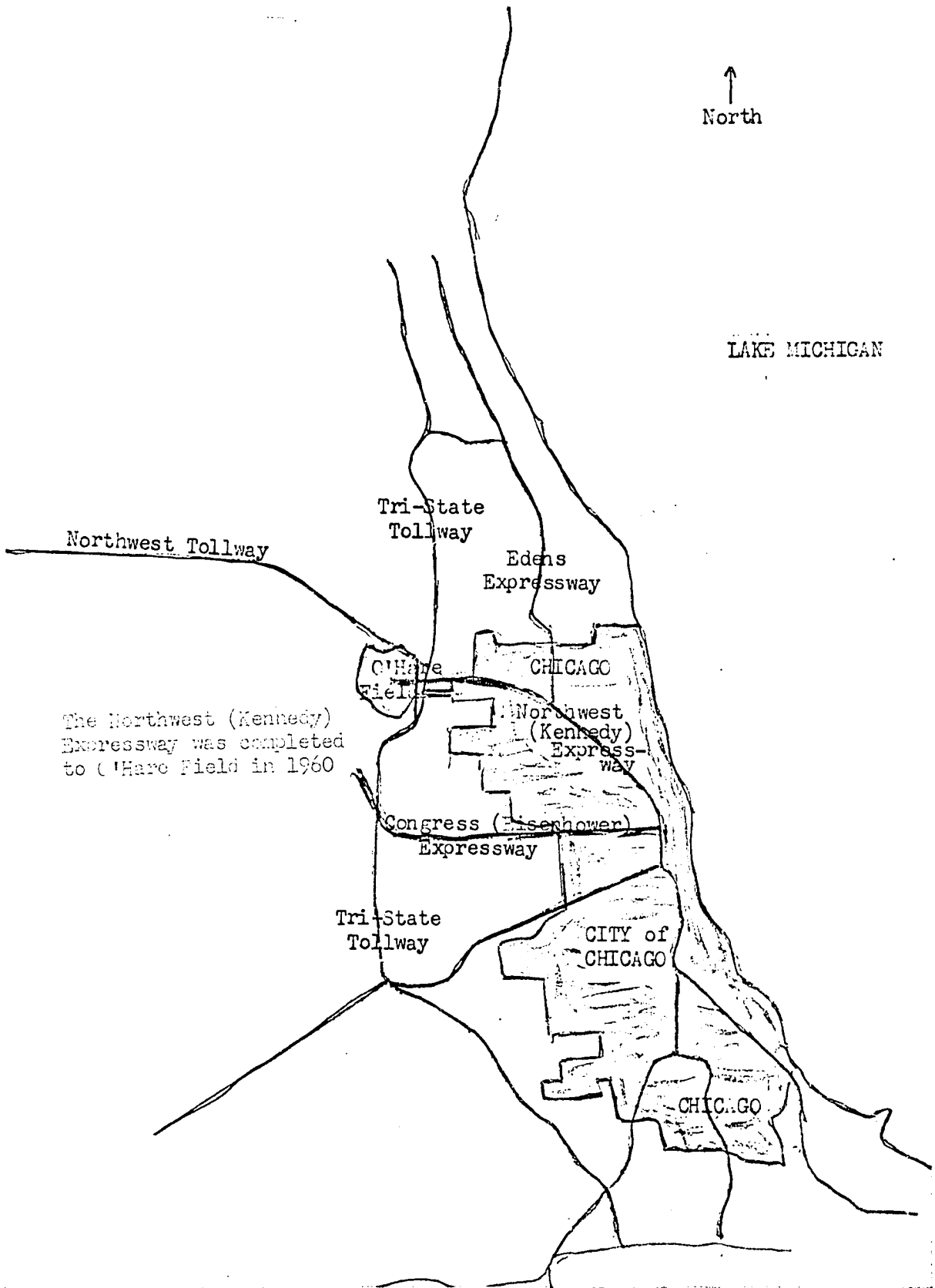
Preferred Scheme of the
Architects (C. F. Murphy
Associates) -- American
Airlines opposed this
design -- Paul Gapp of
the Daily News made this
plan public in January,
1958



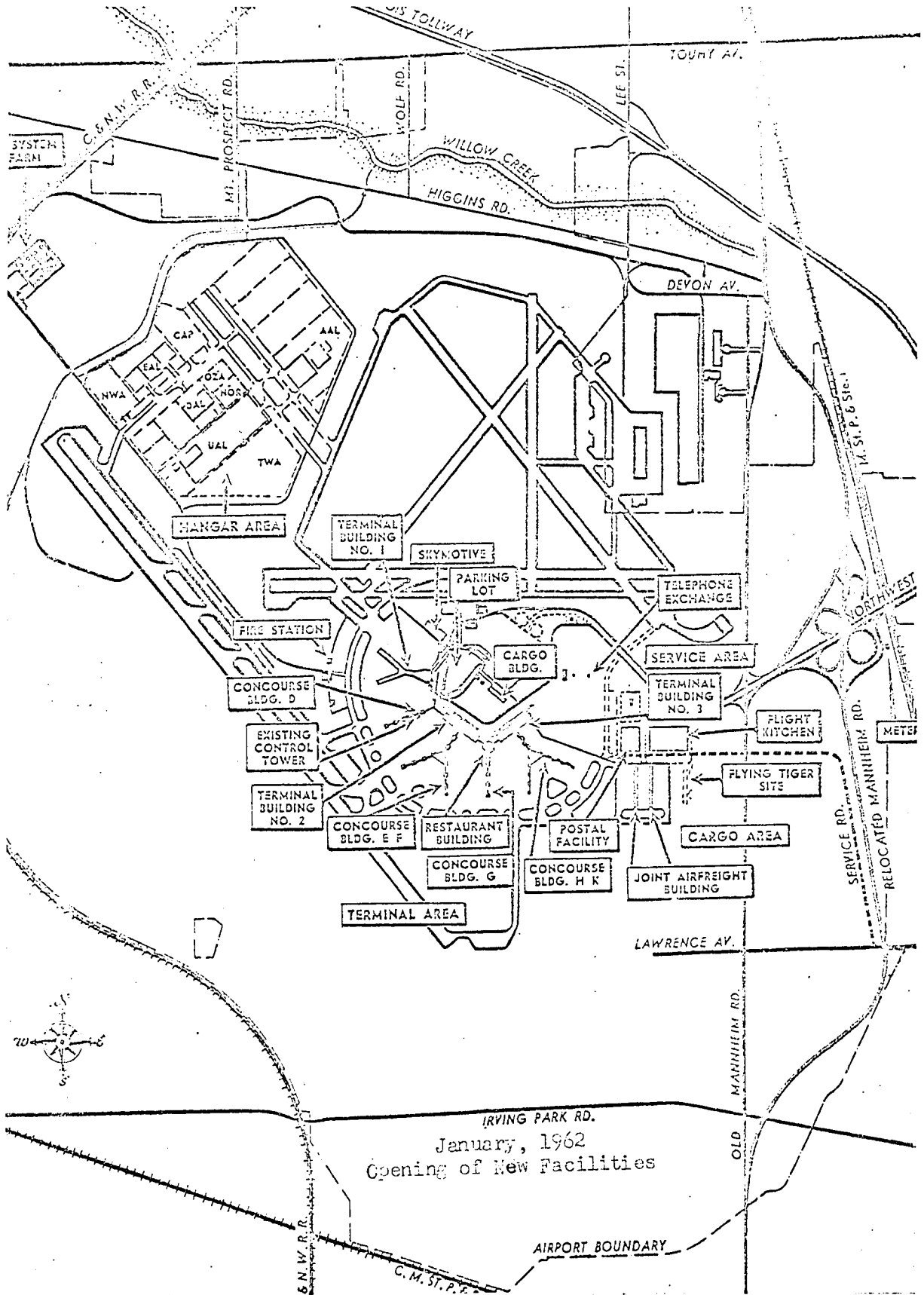
First Stage Construction
of Architects' preferred
Scheme (1958) -- Split
Finger or "Y" of Ralph
Burke Is Utilized



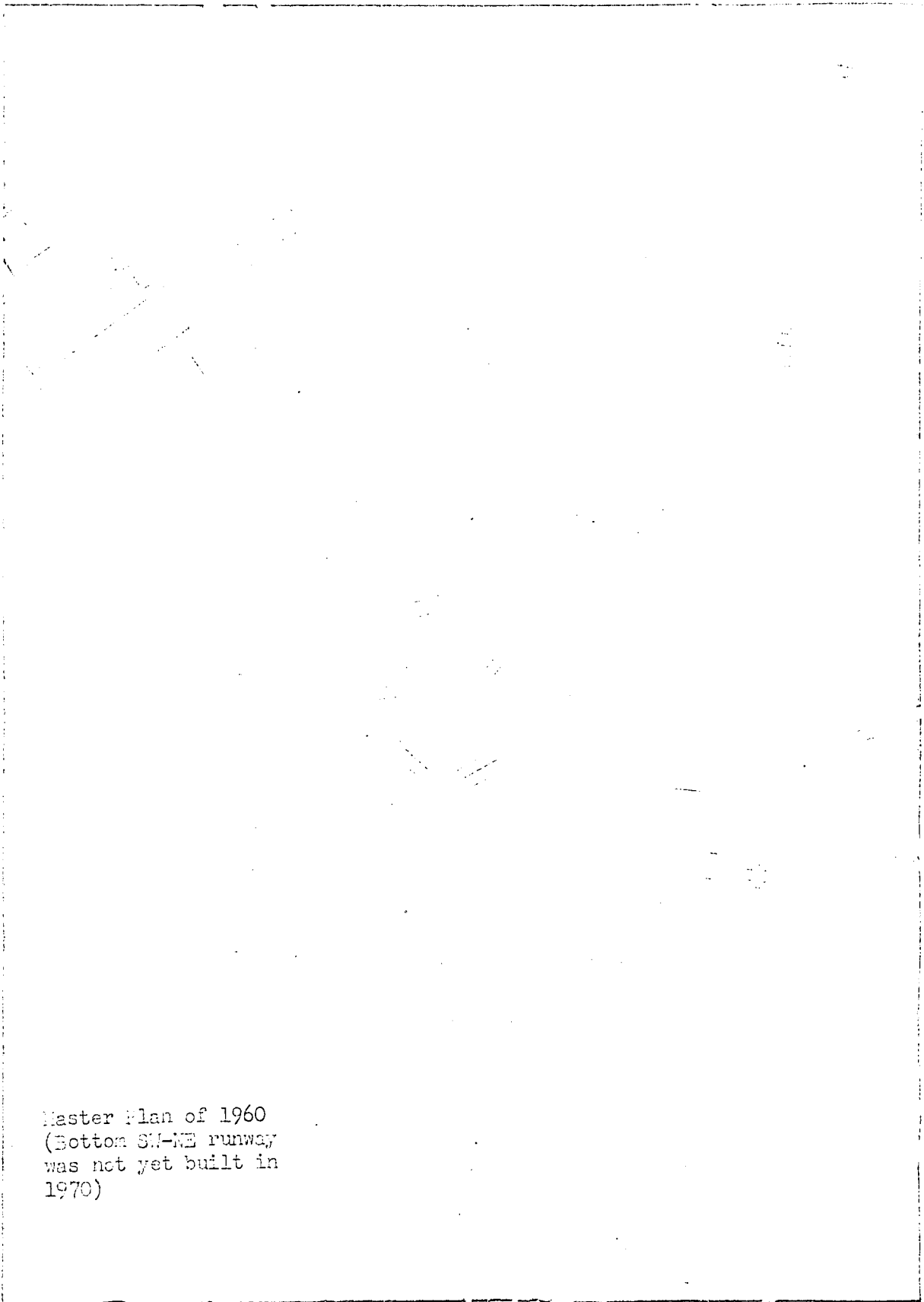
APPENDIX K



APPENDIX L



APPENDIX M



Master Plan of 1960
(Bottom SW-NE runway
was not yet built in
1970)

APPENDIX N

