



THE STORY OF

NORTH CENTRAL AIRLINES

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When a small manufacturing company in Wisconsin decided to buy its own airplane in 1940, little did anyone realize that the birth of what is now North Central Airlines was about to take place.

That first aircraft, a four-place Waco biplane, was purchased by The Four Wheel Drive Auto Company of Clintonville, Wisconsin, to carry company officials and other area businessmen to Chicago. As the demand for seats increased, a Howard high-wing monoplane was added, and the two planes made regular daily flights. Then, on May 15, 1944, with Four Wheel Drive as the major stockholder, Wisconsin Central Airlines was set up and incorporated to handle this transportation. The aircraft were traded for two five-place Cessna UC-78's, and North Central's predecessor began taking shape.

An application was made by Wisconsin Central with the Civil Aeronautics Board for a franchise to provide air service in the North Central area – along with about 35 other firms who were also interested in serving this region. Special exhibits were prepared and submitted to the Board by the airline and the communities wanting service. Formal hearings were held and finally, on December 31, 1946, Wisconsin Central was awarded the feeder-line route by the C.A.B. with authority to engage in air transportation of persons,

property, and mail on a three-year basis. Also, the airline was ordered to sever its ties with Four Wheel Drive and to show the adequacy of airport facilities. Wisconsin Central met these requirements, and on October 3,

HOWARD DGA – 1941



1947, its Certificate of Public Convenience and Necessity to engage in air transportation was issued.

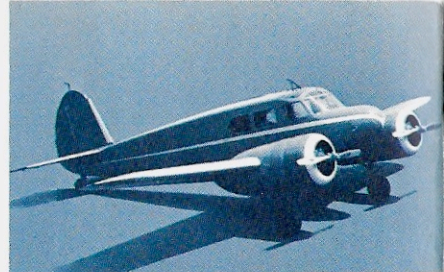
Three nine-passenger Lockheed 10A Electras replaced the Cessnas, and on February 24, 1948, Wisconsin Central began regularly scheduled service to 19 cities on its route system of 1,028 miles. The company made its home in Madison, Wisconsin.

Many problems had to be overcome in those early days. Company executives stumped the countryside to sell stock. A Milwaukee investment firm eventually underwrote a stock issue that netted \$352,000, or about one-third the amount deemed necessary to operate. Cities to be served were persuaded to charge only nominal landing fees until the airline got on its feet.

Early Operations Were Hampered

Inadequate facilities hampered the company's early operations. Many airports had unlighted, sod runways without acceptable navigational aids. Flights were confined to daylight hours and ideal weather conditions. The restrictions resulted in unreliable schedules, low aircraft utilization, disheartening operating results, and heavy financial losses.

Undaunted, the company installed its own navigational aids in an effort to secure instrument authority on as many segments as possible. Installation of a static-free VHF radio system and a private network of navigational facilities was completed in 1949, and the airline's expanded fleet of six Lockheeds was modified for instrument operations. The system of navigational aids, which initially cost \$150,000 and extended over 3,000 miles, was – and still is – one of the longest privately-owned networks in the nation.



CESSNA UC-78 – 1944

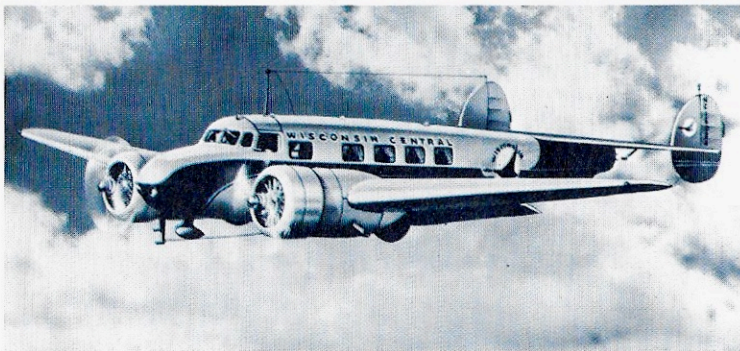
In the first two years of operation, Wisconsin Central began to grow in every respect — including debts. Scheduled route miles increased from 1,032,000 in 1948 to 2,177,000 in 1950. Revenue passengers carried rose from 11,398 to 48,797, passenger revenues climbed from \$114,000 to \$427,000, and employee ranks swelled from 152 to 228. Still the company struggled to make ends meet.

Douglas DC-3's Are Introduced

Increased demand for service and airport development permitted larger aircraft to be introduced. Six Douglas DC-3's, each capable of carrying 21 passengers, were acquired in 1950, and when they were put into service in 1951, the little Lockheeds were retired. Two more DC-3's were purchased and two leased. The next year nine additional DC-3's were acquired and, in 1954, the entire DC-3 fleet was converted to 26-passenger aircraft.

Continually expanding, the company moved its headquarters to

LOCKHEED 10A — 1948



DOUGLAS DC-3—1951

Minneapolis/St. Paul in 1952. To more closely identify with the area served, the name was changed to North Central Airlines.

The following year, the airline carried 219,596 passengers, scheduled 4,524,000 miles, and employed 616 people. Passenger revenues reached \$2,304,000 — but the financial statements for 1953 showed a \$114,588 net loss!

Creditors began clamoring to be paid. The situation was desperate, and the directors sought a way to salvage the fledgling airline. They turned to Hal N. Carr, a management consultant and member of North Central's Board of Directors. Just 33, he became the youngest airline president in the nation.

Carr knew the airline business. He had served as Assistant Director of Route Development and also an Assistant to the Chairman of the Board of Trans World Airlines. His association with North Central dated back to pre-operational days when he joined the airline as Vice President-Traffic in 1947. He was named Executive Vice President of Wisconsin Central later that year.

During the first three months of 1954, losses at North Central ranged from \$50,000 to \$70,000 a month. Carr took over on April 15, and one month later the airline showed a profit. By the end of the year, North Central realized an operating profit of \$166,781. The most startling recovery in airline history had begun.

Maintenance and overhaul procedures were dramatically improved which permitted increased utilization of the airplanes. Mechanical delays were reduced from an average of 45 per 1,000 hours in 1953 to 27 in 1954. Mechanical cancellations were averaging 12.3 per 1,000 hours in 1953. These were substantially reduced to 2.9 in 1954.

In the area of flight operations, Carr convinced Alvin D. Niemeyer to join the company as operations manager. Niemeyer, who was a pioneer pilot and had been with the Civil Aeronautics Administration for 17 years, helped the airline establish procedures and programs that improved flight completion performance and on-time operation, while reducing flight costs.

New Pride Develops

Expenses were cut drastically as Carr implemented the ideas of employees with programs of his own. One group even offered to work for a week without wages, but Carr refused. This act was indicative of the new pride employees had taken in their company. Everyone was made aware of his duties, greater care was taken to see that they were car-

ried out efficiently, and passenger service improved.

Applications were filed for several thousand additional route miles, and planes that had been idle much of the time were put to work with increased flight frequencies over heavy traffic routes. A new "shuttle service" was offered between Chicago and Milwaukee.

By 1956, North Central was scheduling 8,155,000 miles over a 3,240-mile route system. The company's 976 employees cared for 551,775 passengers who provided \$6,137,000 in revenues. Air express cargo added \$150,000, and mail revenues \$1,538,000. Black ink, that had been in storage for so long, appeared in the earnings statement for the third straight year.

It was not long before the company's large fleet of 32 DC-3's became inadequate to handle the traffic growth. In 1959, pressurized Convair 440 aircraft were inaugurated into service to supplement the DC-3's. The five Convairs initially purchased carried 44 passengers and cruised at 250 miles an hour, compared with the

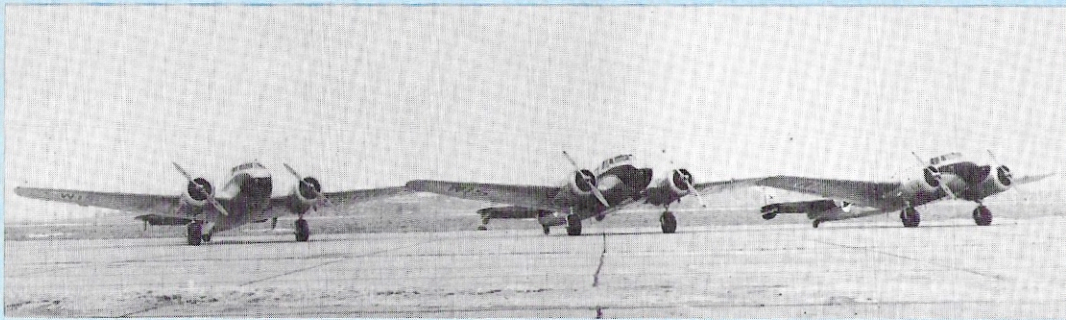
DC-3's which flew 160 miles an hour.

In 1960, North Central was the first regional airline to pass the one million mark in annual passenger boardings when 1,035,076 passengers were carried. Passenger revenues were \$12,661,000. Air mail, freight, and express produced over \$8,635,000 in revenues. Scheduled miles reached 14,628,000, and 2,152 employees were on the payroll. Operating profits were \$432,262. In six years, every ma-

CONVAIR 440 – 1959



North Central Airlines Photo Highlights



NINE-PASSENGER LOCKHEED 10As, THE FLEET WHEN SERVICE BEGAN—FEBRUARY 24, 1948.



PILOTS PETE PETIT AND BOB CERONKY
IN LOCKHEED ELECTRA—1947



COMPANY HEADQUARTERS AT MADISON—1948-1952

EXECUTIVE VP HAL CARR, PRESIDENT FRANCIS HIGGINS—1948





FIRST DOUGLAS DC-3—1951



GRAND FORKS-OMAHA INAUGURAL STOPS AT NORFOLK—1957



FIRST DETROIT-CHICAGO FLIGHT AT MIDWAY AIRPORT—1955



NINTH ANNIVERSARY CELEBRATION IN MILWAUKEE—1957



"BEER FLIGHTS" CHRISTENED AT MILWAUKEE—1959



EMPLOYEES GREET FIRST 100-PASSENGER DOUGLAS DC-9—1967



WELCOMING DELEGATION, DETROIT-TORONTO SERVICE—1967



NONSTOP MILWAUKEE-NEW YORK FLIGHTS—1970



MILWAUKEE-OHIO POINTS SERVICE BEGINS—1970



ESCORT, \$8-MILLION ELECTRONIC SYSTEM FOR RESERVATIONS, OPERATIONS, TELECOMMUNICATIONS—1970

INITIAL MINNEAPOLIS/ST. PAUL-DENVER NONSTOP—1969



major phase of North Central's operation had tripled!

Rapid growth continued after 1960. Each year more Convairs were purchased to replace the DC-3's. New records for passenger and cargo traffic were being set every month. On December 11, 1964, the company carried its ten millionth passenger since beginning operations in 1948 and was the first regional airline to reach this milestone. Four and a half years later, on April 23, 1969, the Airline boarded its 20 millionth passenger.

North Central's headquarters also expanded. More space was leased as it became available, and eventually the company's General Office and Main Operations Base occupied seven buildings at the Minneapolis-St. Paul International Airport. The airline was striding firmly ahead instead of struggling as it had less than a decade before.

Plans for More and Better Service

Plans were made for continued improvement and growth. The airline was operating a 7,000-mile route system in 1961 that spread over 10 Midwest states and Canada. More and better service had to be provided.

"Operation Cold Front" was developed to increase flight reliability under the severe weather conditions that plague North Central's operation during the winter months. Long before the start of the



CONVAIR 580 PROP-JET — 1967

winter season each year, equipment is readied for sub-zero operation. These special preparations and improved maintenance programs have helped the airline maintain one of the most outstanding performance records in the airline industry. Since 1961, the company has completed over 98.5 per cent of its scheduled passenger miles.

In 1961, a technological breakthrough in telecommunications made telephone lines available to large volume users at reduced rates. This development allowed North Central to begin the establishment of a consoli-

dated Reservations Center that would improve its reservations service and allow for expansion to keep up with the airline's traffic growth. Milwaukee was selected as the site, and reservations offices of three cities were connected to it in the first year. Others continued to be added in subsequent years, and most passengers could then secure immediate seat availability information on North Central.

Another improved service was added in October 1963. North Central became the nation's first regional airline to be connected to the industry Electronic Switching System, which permitted teletype messages to be exchanged at a rate of 100 words a minute. A nationwide hookup of all scheduled airlines took place in 1964. By 1966, most of the major traffic centers on North Central's system were tied into the Reservations Center and a 200-line Call Distributor System was installed. Electronic reservations became a reality as the Center was linked to a real-time computer to provide instantaneous reservations and flight information.

Jet Transition

The company entered the jet-age on April 1, 1967 when two Convair 580 prop-jets began serving 21 cities. Powered by turbine engines, the Convairs offered greater speed and comfort for passengers, improved performance, and more economical operation. Until the 35-Convair aircraft program was completed, 580's were added at a rate of about one a month. July 28, 1967 marked the arrival of the first Douglas DC-9 fan jet bearing North Central colors. Two of the 100-passenger DC-9's inaugurated service to 17 cities on September 8.

In 1968, North Central's growth rate accelerated rapidly. Northliner passenger traffic increased an impressive 28 percent—exceeding three million for the first time in one year—while cargo ton miles gained 40 percent and revenues reached a record high of \$55,226,000. New service was extended to Rochester, Minnesota, and nonstop flights were inaugurated between Milwaukee-Detroit and Milwaukee-Minneapolis/St. Paul.

Construction of a \$2.5-million Milwaukee boarding terminal, with eight second-level gates, was completed in 1969. Later that year, North Central received a major nonstop route award of 694 miles—from the Twin Cities to Denver. In addition, Twin Cities-Chicago nonstops were introduced when operating restrictions on the segment were lifted.

Nonstop service to New York began in 1970. This 738-mile route



DOUGLAS DC-9 FAN JET – 1967

extension is the longest and most important in the company's history. That same year, service started between Milwaukee and Cincinnati/Dayton/Columbus, Ohio. Capitalizing on these long-haul awards, the company has achieved the distinction of being the dominant Milwaukee carrier by boarding more passengers than any of the other four airlines serving that city.

In July 1970, the company took delivery of two more fan jet aircraft, completing its initial 15 DC-9 acquisition program. By the end of the year, the Northliner system had grown to 9,900 route miles, and the airline served 90 cities in 13 states and two Canadian provinces.

Gains achieved from the nonstop routes helped set new traffic records in 1970 with 3,753,000 passengers, 806,165,000 passenger miles and 10,985,000 cargo ton miles.

Capacity For Growth

North Central moved into its new \$15-million general office and main operations base at the Minneapolis-St. Paul International Airport early in 1969. Dedication ceremonies in October marked the official opening. The facility combines the company's major corporate and operational functions into one massive 516,000-square-foot complex.

The main base has three huge hangar bays, each large enough to hold three DC-9's or five Convair 580's at one time. Behind the bays are related shop areas, and nearby is the \$900,000 jet-engine test cell. The general office is housed in an adjoining two-story building. North Central also operates an employee cafeteria and Flight Kitchen, becoming the first regional carrier to cater its own flights. Over 1,500 of the company's 3,200 employees are based in the Twin Cities.

In March 1970, North Central introduced ESCORT, its \$8-million electronic reservations and communications system. The IBM and Sanders equipment is located in the Computer Services Section at

the company's headquarters. The system is designed to expedite passenger reservations, message-switching, flight information inquiries, and is being used to implement automated ticketing. ESCORT has the capability of transmitting data to a single computer system for common retrieval by remote agent sets installed at 160 locations over the airline's 13-state system.

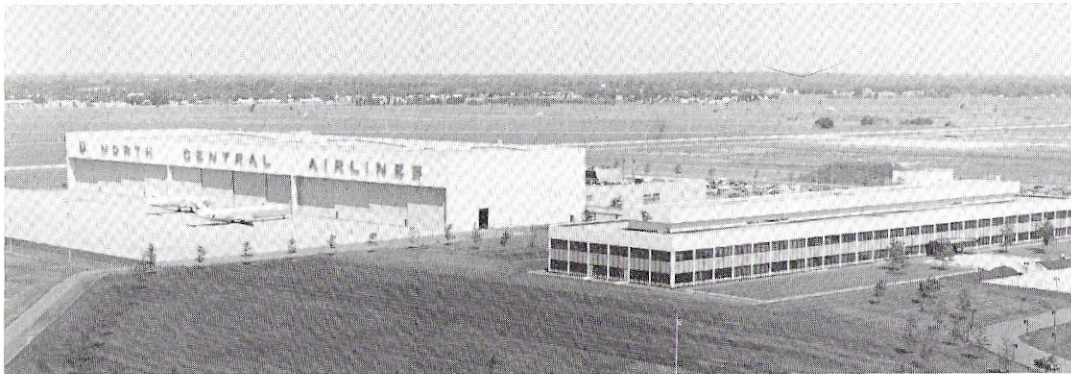
Aware of its responsibility as a corporate citizen, the company has instituted environmental and social action programs. Revised hiring guidelines and training policies enhance employment opportunities for disadvantaged people. Operationally, all of the airline's JT8D jet engines have been converted to a "smokeless" configuration. Revised takeoff procedures have decreased ground noise levels up to 50 percent, without jeopardizing the airline's high safety standards.

North Central achieved its greatest financial gains in 1972 with record revenues of \$120,627,000. Net profit for the year was \$7,356,000, highest in the airline's 25-year history. The company has operated profitably for 18 of the 19 years under the management

team that joined the company in 1954, and achieved the best financial record in the regional airline industry. In 1972 North Central boarded over four million passengers and flew one billion revenue passenger miles in a single year, surpassing these milestones for the first time since beginning operations in 1948.

North Central starts its second quarter-century of service in 1973 with modern facilities, a fleet of 19 DC-9's and 33 Convair 580's and a strong financial base for continued growth.

NEW GENERAL OFFICE AND MAIN OPERATIONS BASE — 1969



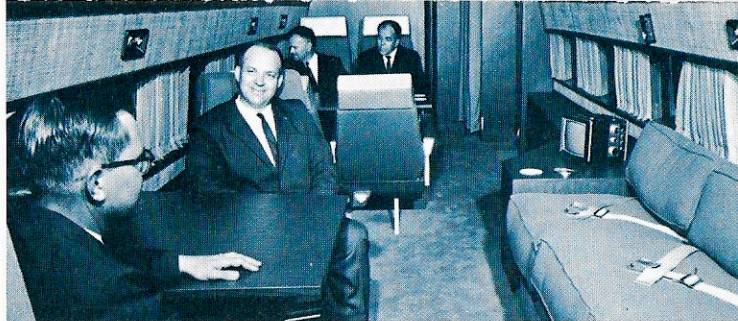
"728" Achieves Distinction

While North Central was making its mark in the airline industry, a DC-3 bearing serial number N21728, was achieving the unique distinction of flying more hours than any other aircraft in the history of aviation.

The story of this historic plane, known now as "728," began on August 11, 1939, when the aircraft rolled off the Douglas Aircraft Company production line at Santa Monica, California.

Its first owner, Eastern Air Lines, logged more than 50,000 hours on the aircraft before it became part of the North Central fleet in 1952. Number "728" flew on North Central's route system for 13 years before being retired from scheduled service on April 26, 1965. The plane had logged 83,032 hours and 52 minutes of flying, more time in the air than any other airplane.

Had it flown those hours in one hop, "728" would have remained in the air well over nine years. It has flown more than 12 million miles, the equivalent of 25 trips to the moon and back. This DC-3 produced 260 million passenger miles for its owners, the same as taking the entire population of Chicago for a 30-minute hop, 21 passengers at a time, or flying everyone in Dallas to Oklahoma City and back.



During its years in the air, "728" is estimated to have worn out 550 main gear tires, 25,000 spark plugs and 136 engines. It has burned eight million gallons of gasoline, enough to run a family car 10,000 miles a year for 11,007 years. Number "728" has taxied well over 100,000 miles.

Its pilots joke that "everything has changed but the serial number and the shadow," but North Central figures the ship's airframe is 90 per cent original.

Although its operating record was impressive, the story of "728" was not yet finished. She was to undergo a complete facelifting and become a "flying sophisticate" in a day of supersonic jets as North Central's corporate airplane. Modifications inside the cabin included reclining seats, a down-filled couch, wall-to-wall carpeting, and oversized windows. A television set, a stereo tape system, and an AM radio receiver complement the cabin's many comfort features.

The World's High-Time Aircraft, which has now flown over 84,600 hours, was cited in March 1966 when Donald W. Douglas, Sr., Chairman of the Board and founder of Douglas Aircraft Company, presented a plaque to North Central's President Hal N. Carr. The bronze plaque, which is mounted permanently in the plane's cabin, bears this inscription: "This aircraft N21728 has flown more hours than any other plane in the history of aviation. It is symbolic of all the DC-3's and the role they have played in the development of air transportation."

NORTH CENTRAL AIRLINES
7500 Northliner Drive, Minneapolis, Minn. 55450