~~MINNEAPOLIS-ST. PAUL INTERNATIONAL AIRPORT~~
WOLD-CHAMBERLAIN FIELD,
MINNEAPOLIS-HONEYWELL HANGAR
6225 34th Avenue South
Minneapolis
Hennepin County
Minnesota

HABS No. MN-158-C

HABS
MINN
27-MINAP,
35C-

PHOTOGRAPHS

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

Historic American Buildings Survey
United States Department of the Interior
National Park Service
Great Lakes Systems Office
1709 Jackson Street
Omaha, Nebraska, 68102-2571

HABS
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HISTORIC AMERICAN BUILDINGS SURVEY

~~MINNEAPOLIS-ST. PAUL INTERNATIONAL AIRPORT~~
WOLD CHAMBERLAIN FIELD,
MINNEAPOLIS-HONEYWELL HANGAR

HABS No. MN-158-C

Location: 6225 34th Avenue South
Minneapolis, Hennepin County, Minnesota

UTM: 15:482510:4970580
Quad: St. Paul West, Minn., 1:24,000

Construction Date: 1942

Architect: Not known

Present Owner: Metropolitan Airports Commission
6040 28th Avenue South, Minneapolis, Minnesota

Present Use: Storage

Significance: The Minneapolis-Honeywell Hangar was a World War II addition to Wold-Chamberlain Field, the Minneapolis airport. The hangar was built by the federal government to house the war-related activities of the Minneapolis-Honeywell Company, which had a contract with the United States military to develop an autopilot system to complement the Norden bombsight. The military sought this technology to strengthen its air power, which played a decisive role in the outcome of the war.

Project Information: The Original Wold-Chamberlain Terminal Historic District was identified by Hess, Roise and Company during an historic/architectural survey of the Minneapolis-St. Paul International Airport. The Federal Aviation Administration and the State Historic Preservation Office concurred that the district was eligible for the National Register of Historic Places. The survey was completed during preparation of the airport's long-term comprehensive plan. The plan found no feasible or prudent alternative to avoid the demolition of some or all of the properties in the historic district to accommodate necessary growth at the land-locked airport. To carry out its responsibilities under Section 106 of the National Historic Preservation Act of 1966, the Federal Aviation Administration entered into a Programmatic Agreement with the Advisory Council on Historic Preservation, the Minnesota State Historic Preservation Officer, and the Metropolitan Airports Commission

(MAC), with a number of concurring parties. The agreement contained two provisions related to the historic district. MAC agreed to offer the Smithsonian Institution and the Minnesota Historical Society the opportunity to select architectural elements or historical objects from any of the contributing structures in the historic district for curation and display. Both organizations declined the offer. The agreement also stipulated that the historic district be documented to the standards of the Historic American Buildings Survey. MAC retained Hess, Roise and Company to prepare this report to comply with that stipulation. Mark Ryan oversaw the project for MAC. Charlene Roise served as principal investigator for Hess Roise. Cynthia de Miranda was senior historian with primary responsibility for writing and managing the report's production. Denis Gardner was research historian for the project. Ann Gaasch provided clerical assistance.

PHYSICAL DESCRIPTION

The Minneapolis-Honeywell Hangar stands near the northwest corner of Wold-Chamberlain Field (HAER No. MN-158), between the Northwest Municipal Hangar (HAER No. MN-158-B) and the Administration Building (HAER No. MN-158-D). Three sides of the steel-framed hangar are nearly identical: corrugated metal siding on the upper half of each facade with industrial steel-sash windows and brick below, all bordered by corner towers of yellow brick pierced with horizontal glass-block windows. The fourth facade, which faces the airfield to the east, has narrower brick towers on either end of a set of massive hangar doors. Above the doors, corrugated metal siding sheathes the gable end of the building. Pratt trusses carry the gabled roof, providing an open interior free of supporting columns. The hangar is 200'-0" wide with a depth of 159'-8".[1]

The hangar door dominates the east side of the building. Two leaves—each composed of two horizontal panels—compose the door, and industrial steel-sash windows fill each panel almost entirely. As each leaf is opened, the lower panel slides upward to the height of the upper tier. Both panels then swing outward from the bottom to clear the aircraft entry, forming a cantilevered canopy over the doorway. Each double-tiered door panel can be operated individually, and both are moved by an electric engine with the aid of pulleys, spools, and cables rigged to the interior sides of the panels. Stacked weights cabled to the doors counterbalance the panels as they lift and swing outward. The operating engine is encased in a flat-roofed, brick-walled engine room in the northeast corner of the building. To provide access for smaller vehicles and personnel without having to open the large door panels, lifting cargo doors and swinging, single-leaf personnel doors have been cut into the lower-tier panels.

The narrow brick towers on either side of the doorway rise to the height of the upper chord of the trusses that support the roof. On the east facade, these brick-clad sections lack fenestration or detailing and are painted white to match the hangar doors. Corrugated metal covers the gable end above the doors, hiding the seven roof trusses inside the hangar. The flat, white metal cornice of the brick towers continues across the top edge of the corrugated metal siding.

The hangar's three remaining facades closely resemble each other in detailing. All are bordered at either end by brick towers pierced by glass-block windows. Only on the airfield side are the corner towers painted completely white; all other sides have brick bases painted white with the natural yellow brick showing above. The six rectangular glass-block windows are aligned in a column in the top two-thirds of each tower's height. Between the towers, the

[1] This description is based on a site survey by the authors in March 1997 and on drawings completed by Miller Dunwiddie Inc. for the Metropolitan Airports Commission in anticipation of the hangar's demolition.

facades are divided into three horizontal sections: a brick base, a band of industrial steel-sash windows with a metal spandrel, and corrugated metal siding.

The south facade is distinguished by changes to its east end. Brick cladding has been removed from the east tower, revealing metal bracing bars. At the foot of that tower, a 28'-4" x 84'-8"-two-story addition extends to the south. The industrial steel sash, metal spandrel, and corrugated sheathing of the hangar's south facade are painted blue, as are three rows of glass lights in the upper portion of the window. These rows mark the placement of the mezzanine offices that line the interior north, west, and south walls.

The hangar's west facade faces 34th Avenue, once the main street entrance for Wold-Chamberlain Field. Fittingly, personnel and small vehicle entrances punctuate this side of the building. Each brick end-tower holds a single personnel door on the west facade; the doors are set into surrounds of header-bond brick capped by a large poured-concrete cornice. Each cornice displays wave molding near its lower edge finished by a beveled top edge. A large transom with narrow sidelights tops each door; etched glass panes fill the sidelights. Both door and transom are set into a wood frame articulated by stepped boards, and a poured concrete stoop leads to each door.

Two lifting garage doors enable small vehicles to enter the hangar from the west side. The doors are set into the steel-sash windows, positioned near the tower ends of the facade. Concrete ramps lead from the street to the garage entrances. Other than the presence of the garage doors, the steel-sash window matches that of the south facade: industrial sash stretches across the width of the wall between the towers, and a metal spandrel and painted band of panes divide the windows into three horizontal bands. Above the large window, corrugated sheet metal—painted white rather than blue—covers the gabled profile of the roof.

The north facade of this utilitarian structure originally matched the south side. Two enclosed passageways have been added since the initial construction period, linking this hangar to its northern neighbor, the Northwest Municipal Hangar (HABS No. MN-158-B). The west end of the facade has a second-floor bridge sheathed in sheet metal that reaches across the small alley between the buildings. Toward the east end of the north facade, a ground-floor concrete-block hallway with a window and steel personnel door connects the two hangars.

The two-story, flat-roofed addition to the southeast corner of the Minneapolis-Honeywell Hangar extends from the east end of the south facade and provides additional office space. The addition comprises two parts: a 28'-4" x 19'-6" brick block of two stories and a 28'-4" x 65'-3" section of scored concrete block with plywood cladding on its second story. The smaller addition holds a large fixed-sash window with vertical muntins in its first story and four three-light windows with horizontal muntins in its upper story. A single-leaf, glass, personnel door provides entry from the north end of the facade. The door and second-story windows on the

west facade have been infilled with plywood or brick, but the three-light windows with horizontal muntins remain in the three windows of the lower floor. Original brick sills and lintels remain on both stories of each facade. A slightly cantilevered box cornice finishes the east facade.

The larger structure, about three times the length of the first addition, holds storefront sash in the lower floor of the airfield side and five groups of three or four fixed-sash, single-light windows above. A single-leaf glass door with sidelights provides access from the airfield, and a cantilevered plywood boxed canopy extends across the length of the airfield side of the second addition just above the first-floor windows and door. A wide cornice of vinyl or metal siding wraps around the building from the north edge of the second addition on the airfield side to the north edge of the first addition on the street side.

The west side of the second addition holds the main entry for the rectangular structure: a projecting entrance with glass doors and sidelights, topped by a canopy with the same wide cornice as the building. Scored concrete block forms the sides of the entry, and concrete steps lead to the door. The door is the only fenestration on the ground floor of this section; four groups of single-light windows punctuate the second story at uneven intervals. The addition's south facade holds only a ground-floor and a second-floor door. An exterior metal staircase provides access to the entrance on the upper floor.

The hangar's interior consists largely of an open floor plan, with only the northwest and southwest corner towers intruding upon the rectangular plan. The southwest tower holds an elevator, staircase, and, in the tower's basement, a 20'-0" x 8'-6" vault. A large vault door, manufactured by the Diebold Safe and Lock Company of Canton, Ohio, restricts access to the room, which is lined with shelves and storage bins. An OB Automatic Vault Ventilator manufactured by the OB McClintock Company in Minneapolis allows air circulation throughout the room. A staircase in the northwest tower leads to the boiler room in the 45'-0" x 70'-5" basement; a brick smoke stack emerges from the north side of the building.

Pratt trusses support the gabled roof. Cross-bracing laterally connects the seven trusses, each 200'-0" long. At its center, each truss measures 23'-0" high, gradually tapering downward towards the sides to form a shallow roof pitch. Roof boards form the ceiling above the top chords of the trusses.

A mezzanine office block lines the interior just below the trusses on all but the hangar's airfield side. Cantilevered I-beams bolted to the building's steel frame support the mezzanine, which shares its exterior walls and windows with those of the hangar. Windows punctuate the interior wall of the mezzanine, providing views of activities in the hangar. On the west wall, the building's heating system is encased in a concrete-block enclosure that rests on the office mezzanine section just under the peak of the roof. Heating ducts emerge from the north and

south sides of the block, wrap around the building above the mezzanine, and terminate in large vents near the east wall of the hangar. A large vent in the west gable end marks the position of the heating system on the exterior.

HISTORY

Minneapolis-Honeywell Company

As the 1930s drew to a close, Wold-Chamberlain Field began to feel the effects of the escalating conflict on the opposite side of the globe. By the early 1940s, the United States was fully engulfed in World War II, and Wold-Chamberlain was dominated by military affairs. The federal government expanded the facilities at the airport to meet wartime needs. One such expansion was the construction of a hangar for the Minneapolis-Honeywell Regulator Company.

The company formed in 1927 as the result of a merger between the Minneapolis Heat Regulator Company and Honeywell Heating Specialties Company of Wabash, Indiana. Both businesses specialized in automatic controls: devices that measure a change and then trigger a desired modification of that change. Thermostats were the primary product of both companies, putting them in direct competition. The firms viewed a merger as a prudent business maneuver, creating a single enterprise with a large capital base to pursue a future goal of expansion. Both companies also believed that a merger would benefit consumers, since their combined knowledge could eliminate duplicated research efforts.[2]

At the time of the merger, the industry was experiencing rapid growth, thanks, in part, to the development of a practical oil furnace for home use. As heating technologies continued to evolve, the demand for reliable thermostatic controls increased. From its inception, the Minneapolis-Honeywell Company understood that its future was not in the door-to-door sales of crude automatic controls. Rather, success lay in the development of finer control methods and by acquisition of companies specializing in similar technologies.[3]

The new company aptly demonstrated its expansion mission within the first decade of formation, purchasing or merging with four different competing businesses. These efforts expanded the company's product lines in addition to its market share, and the thermostatic controls were joined by systems of pneumatic controls and motorized valves. Minneapolis-Honeywell soon became an industry leader in the variety of automatic controls it offered. Despite its growth, Minneapolis-Honeywell was still a relatively small company. At the end of the 1930s, its total sales were less than $24 million.[4]

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[2] Ira E. Robinson, "Basic and Improving Inventions in Industry: A Study of the Research Scientists of Minneapolis-Honeywell" (Ph.D. diss., University of Minnesota, 1963), 7; C.W. Nessell, *Honeywell: The Early Years* (n.p.: Minneapolis-Honeywell Regulator Company, ca.1960), 23.

[3] Robinson, 7; Nessell, 22.

[4] Robinson, 7-9.

Planning for Conflict

Throughout the late 1930s, as it became increasingly clear that war in Europe was inevitable, the United States began to build and equip a large military. In addition to more traditional weapons systems, the U.S. government explored more secretive weaponry—weapons systems deemed to be of exceptional value because of the mission they performed. One of these "elite" systems was a targeting device known as the Norden bombsight.

Prior to World War II, bombsight technology had become a top priority of the U.S. military, which sought to avoid the slow-moving trench warfare that dominated the First World War. Military experts were convinced that strategic bombing—eliminating legitimate military targets, while limiting the amount of collateral damage caused by bomb detonations—was possible. The military needed a reliable bombsight that would enable a bombardier to accurately strike a desired target.[5]

Carl L. Norden, a mechanical engineer from Holland, was an innovator in the design of military systems. Working for both the U.S. Navy and the Army Air Force, Norden developed instruments and devices that greatly advanced weapons system technology. His projects included such devices as radio-controlled target airplanes and robotic flying bombs. Norden was also instrumental in the design of the catapults and arresting gears for the aircraft carriers Lexington and Saratoga, two examples of a class of naval vessel which defined how the war in the Pacific was waged. As impressive as these accomplishments were, however, his name would forever become linked with a top-secret bombsight he was asked to develop in 1921 by the Navy Bureau of Ordnance.[6]

Upon its completion in 1928, the Norden bombsight was designated the Mark XV and was believed to be one of the most accurate bombsights yet developed. Building the bombsight, however, solved only a portion of the military's overall problem. The device needed a relatively stable environment to perform accurately. If a reliable means of stabilizing the aircraft during a bombing run was not developed, the Mark XV bombsight would be of little value. Norden developed such a system for the Navy by 1935, who designated the device the "SBAE": stabilized bombing approach equipment.[7]

Several flaws in the SBAE design were apparent from the start. The unit—which weighed 178 pounds when installed with the Mark XV bombsight—was much too heavy for its purpose. Furthermore, flight conditions reduced the effectiveness of the mechanically operated system.

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[5] Stephen L. McFarland, *America's Pursuit of Precision Bombing, 1910-1945* (Washington: Smithsonian Institution Press, 1995), 26.

[6] "Carl L. Norden Dead in Zurich: Invented Bombsight Used in War," *New York Times*, June 16, 1965.

[7] McFarland, 68-71, 120.

Long steel cables connected the stabilizing equipment with the aircraft controls, but the extreme temperature fluctuations experienced in changing altitudes altered the tension of the cables. A loss of tension translated into a loss of control, forcing the crew to make constant manual adjustments to maintain stability. Still, the Navy pursued development of the SBAE, stripping it of unnecessary parts to reduce its weight. The Naval Aircraft Factory in Philadelphia modified the unit with an electronic adapter that linked the Norden Bombsight with the A-3 autopilot designed by the Sperry Gyroscope Company.[8]

The Army Air Force, also relying heavily on the Mark XV, chose a somewhat different path than the Navy in solving the aircraft stabilization problem. In 1941, the Army approached the Minneapolis-Honeywell Regulator Company about linking the Sperry A-3 automatic pilot and the Mark XV to create a better bombing system. Minneapolis-Honeywell accepted the challenge. The government secured temporary facilities at Wold-Chamberlain Field for testing and installing the equipment in aircraft in 1942 and immediately set about building a more appropriate facility.[9]

Building the Hangar

Funds for the facility were provided by the Defense Plant Corporation (DPC), a federal agency subsidiary to the Reconstruction Finance Corporation (RFC). The RFC was created during the Depression to provide financial assistance to private banks, insurance companies, mortgage companies, agricultural institutions, and railroads in an effort to speed the country's economic recovery. The DPC was intended to provide funds and facilities to commercial industry to develop innovative products and technologies which would then be sold exclusively to the government. Ultimately, the DPC would invest nearly $7 billion in private industry over the course of the war in an effort to speed the flow of needed products. The majority of the investments were in the aviation industry, as President Franklin Roosevelt realized the strategic value of a large and technologically superior Air Force.[10]

Minneapolis-Honeywell's research operation was temporarily housed in the 80'-0" x 100'-0" Hedberg-Freidheim Hangar, which was situated just south of the Northwest Municipal Hangar (HAER No. MN-158-B). Before Minneapolis-Honeywell occupied the structure, however, it

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[8] Ibid., 118, 123-125; Noel E. Allard and Gerald N. Sandvick, *Minnesota Aviation History 1857-1945* (Chaska, Minn.: MAHB Publishing, 1993), 239.

[9] McFarland, 125; Minneapolis Board of Park Commissioners, *Sixtieth Annual Report*, (Minneapolis: The Board, 1942), 43.

[10] Gerald Taylor White, *Billions for Defense: Government Financing by the Defense Plant Corporation during World War II* (University, Ala.: The University of Alabama Press, 1980), vii, 3, 11, 30-31.

was moved south of its original location and rotated 90 degrees so its hangar doors faced the runway. This move enabled the military to build on the vacated site.[11]

Work on the new hangar began midway through 1942. The structure incorporated design principals common to large hangars. The building had a greater width than depth, allowing aircraft to enter and exit without disturbing planes already in the hangar. The Minneapolis-Honeywell Hangar, which often housed several large military aircraft simultaneously, also held a machine shop, electronic laboratory, radio room and transmitter, and facilities to repair and modify combat aircraft. In addition, a vault was installed in the basement to house top-secret equipment, such as the Norden bombsight.[12]

Roof design is another important consideration for hangars, since the ceiling can limit the capacity of the structure. The roof of the Minneapolis-Honeywell hangar is supported by Pratt trusses built of steel beams and smaller members. The flat bottom chords of the trusses provide greater headroom along the sides of the hangar, which permitted the insertion of a mezzanine with offices and shops along three sides of the hangar. The design freed space at the floor level that could be used to accommodate work stations or aircraft.

Another interesting feature of the Minneapolis-Honeywell Hangar is the aircraft door. Hangar doors come in many forms: balanced canopy, accordion, straight-sliding, around-the-corner-sliding, inward- and outward-folding canopy, and telescoping canopy. Telescoping canopy doors were selected for the Minneapolis-Honeywell hangar, providing extremely high and wide openings. The door can also be opened halfway to admit smaller aircraft or other vehicles, important for climate control in the winter.[13]

When it was completed in spring 1943, the hangar was considered the largest aviation laboratory in the Northwest. Construction costs ultimately came to $565,761, including the small two-story addition built on the southeast corner in 1944. The hangar became known informally as the Honeywell Flight Test Facility, a designation that suggested the special purpose of its construction.[14]

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[11] Allard and Sandvick, 132; Minneapolis Board of Park Commissioners, *Sixtieth Annual Report,* 43; Minneapolis Board of Park Commissioners, *Proceedings,* July 13, 1943, 78.

[12] Conrad Krueger, interview by Denis Gardner, Minneapolis, April 25, 1997. Mr. Krueger worked in Flight Operations at the Minneapolis-Honeywell hangar in the late 1940s.

[13] *Sixtieth Annual Report*, 43; Charles Froesch and Walther Prokosch, *Airport Planning* (New York: John Wiley & Sons, 1946), 190, 193; Toltz, King and Day, Inc., "Appraisal of Wold-Chamberlain Buildings for Aviation Services Company, Minneapolis, Minnesota," April 1, 1946, at Metropolitan Airports Commission, Minneapolis, 48.

[14] Minneapolis Board of Park Commissioners, *Sixty-first Annual Report,* (Minneapolis: The Board, 1943), 53; "Metropolitan Airports Financial and Statistical History," n.d., at Metropolitan Airports Commission offices, Minneapolis-St. Paul International Airport, Minneapolis, 9; Theodore Wirth, "Aviation--The Municipal Airport

Testing and Installing the Autopilot

Meanwhile, engineers from Minneapolis-Honeywell worked to solve the technical problem the Army had presented them. Company engineers removed the gyroscope from a Norden SBAE, replaced its hydraulics with electrical components, and installed it in a modified A-3 autopilot. The unit operated on the "balanced bridge" design principal created by Minneapolis-Honeywell for its heating thermostats. Once the thermostat has been set to a predetermined temperature, a drop in temperature would unbalance the bridge, tripping a circuit which would relay an electronic signal to turn on the heating unit. When the temperature reached the preset level, the system would once again be balanced and an electronic signal would shut off the heating unit. By incorporating this design into the A-3 automatic pilot, Minneapolis-Honeywell created a system which continually corrected the altitude of the bomber's wings, keeping the aircraft stable. Linking the autopilot with the Mark XV, the bombardier could literally steer the plane by aligning the bombsight.[15]

Minneapolis-Honeywell tested its new unit with help from the Boeing Company, which loaned a new B-17 bomber aircraft to the company for the project. Unlike B-17s shipped to war, this bomber—designated "19210" but affectionately dubbed "210"—was stripped of her guns and armor. These modifications made her one of the fastest and highest-flying B-17s in the Army's fleet. Minneapolis-Honeywell worked extensively with the bomber, modifying it on several occasions. The plane become the first bomber installed with the Minneapolis-Honeywell electronic autopilot.[16]

The Army found the test of the final unit to be quite impressive, its electronic components operating much faster than the mechanical design of the Norden SBAE. Also, the electrical cables of Honeywell's unit were less vulnerable to damage by enemy fire than the steel-cable system of the Norden SBAE. This feature proved the saving grace for at least one bomber crew over the skies of Europe. A German Messerschmitt collided with the U.S. plane, almost shearing it in half. The electronic autopilot, undamaged by the impact, steered the plane safely back to its base in England. The Army designated the unit the C-1, and the acronym AFCE—automatic flight control equipment—was attached to the product line.[17]

(Wold-Chamberlain Field) 1917-1945," in *Minneapolis Park System, 1883-1944: Retrospective Glimpses into the History of the Board of Park Commissioners of Minneapolis, Minnesota, and the City's Park, Parkway, and Playground System* (Minneapolis: Minneapolis Park Board, 1945), 314.

[15] McFarland, 125; Allard and Sandvick, 239.

[16] "Grounded Honeywell B-17 is Given a New Life Aloft," *Honeywell Circulator,* December 5, 1952, 3.

[17] McFarland, 125; "Electronic Pilot," *Flying,* May 1944, n.p.

While Minneapolis-Honeywell used the new hangar to refine the C-1 and install it in bombers, the company employed the adjacent Hedberg-Friedheim hangar as a school for training military personnel in the operation of the unit. Known as the Minneapolis-Honeywell School of Aeronautical Electronics, the program was administered by the 3518th Army Air Forces Base Unit. Four regular courses were offered: the C-1 Automatic Pilot Regular Course, the C-1 Automatic Pilot Refresher Course, the Electronic Turbo-Supercharger Regular Course, and the Electronic Turbo-Supercharger Refresher Course. Students were personnel from Army air fields and bases from throughout the country and overseas.[18]

The significance of the C-1 was demonstrated by the sheer number of aircraft that received the autopilot. The Army ordered over 35,000 units from Minneapolis-Honeywell and installed the system in every B-17 and B-24 shipped to Europe. The C-1 also played a primary role in the most noted bombing mission of the war: the *Enola Gay*, a B-29 Superfortress, dropped the first atomic bomb on Hiroshima on August 6, 1945, using a Norden bombsight linked to the C-1 autopilot.[19]

The Aeronautical Division that Minneapolis-Honeywell had set up to produce the autopilots eventually became one of the company's largest and most profitable sections, accounting for one-third of total sales by 1960. The close of the war clearly had not brought the end of the company's contributions to U.S. military technology. Rather, the Cold War continued the government's need for advanced autopilots and other controls that Minneapolis-Honeywell could supply.[20]

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[18] "Mission of Detachment." This manuscript is part of a compilation of manuscripts which chronicle the history of the Army Air Force Base Unit at Wold-Chamberlain Field in Minneapolis, and is in the personal collection of Noel Allard, Chaska, Minnesota.

[19] Allard and Sandvick, 239; McFarland, 1.

[20] Robinson, 12.

CHANGES TO THE HANGAR

In 1944, the first two-story office addition to the hangar was built. The flat-roofed building has been altered since its erection with the addition of the boxed cornice, replacement windows on the first floor of the east facade, and boarded windows on the west facade's second story. Although the building is now painted white, its walls were originally of a similarly light-colored brick as in the hangar's towers, with window surrounds of a darker brick. Sometime after 1945, the addition was extended to the south to provide more office space.[21]

Minneapolis-Honeywell vacated the hangar sometime after the war, and by the 1950s, Northwest Airlines had moved in. Other tenants have included De Ponti, which ran an air-freight service out of the hangar, and Page Airways. The building is currently used for storage by the Metropolitan Airports Commission.[22]

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[21] Toltz, King and Day, 51.

[22] Allard and Sandvick, 131-132.

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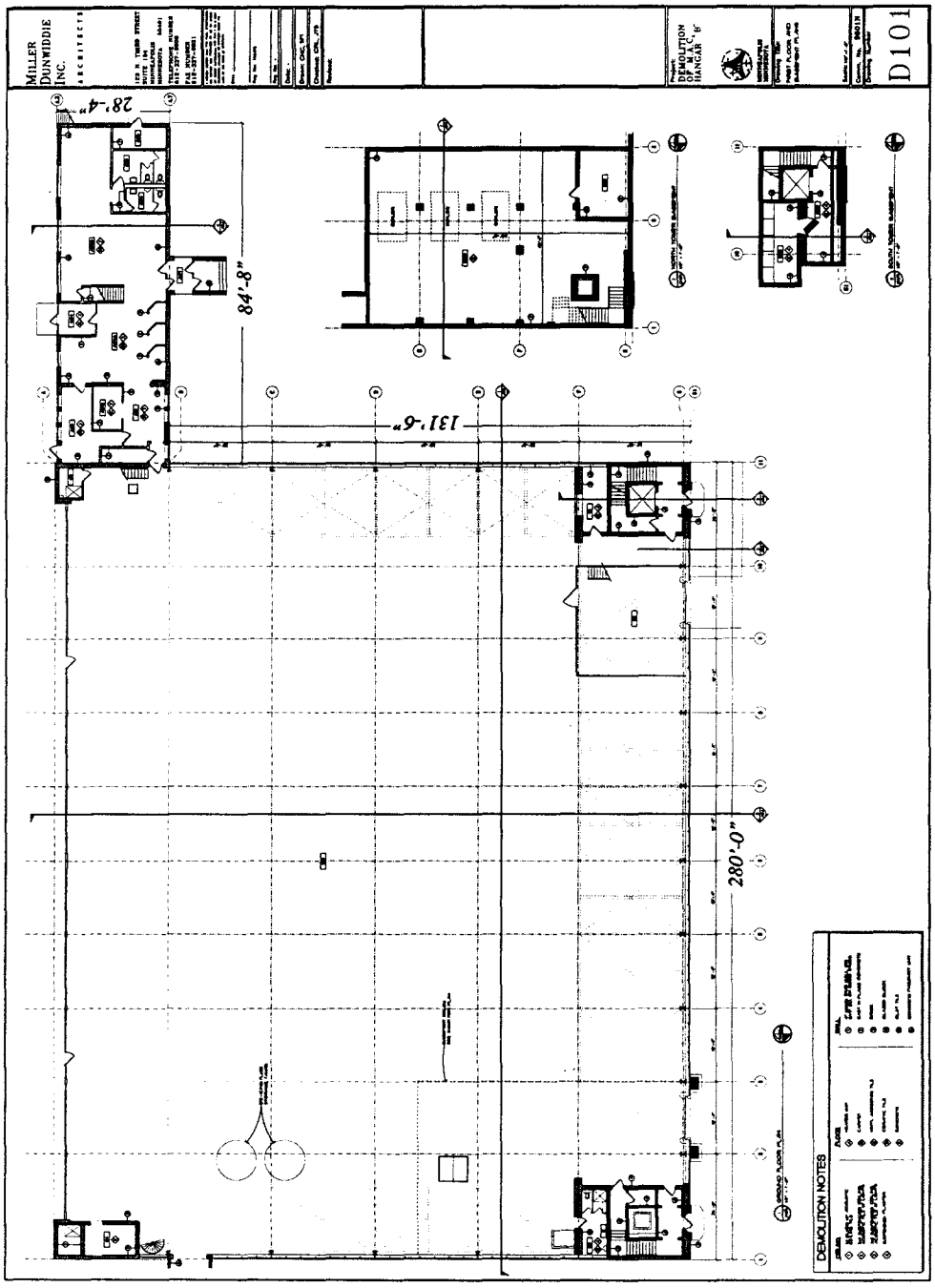

Ground-floor plan of Minneapolis-Honeywell Hangar, Wold-Chamberlain Field, Minneapolis-St. Paul International Airport. Miller-Dunwiddie Architects, Minneapolis, 1997.