United States Department of the Interior National Park Service

National Register of Historic Places Continuation Sheet

Name of Property

County and State

Name of multiple listing (if applicable)

Section number

Supplementary Listing Record

NRIS Reference Number: SG100003488

Date Listed: 3/6/2019

Property Name: Houston Municipal Airport Terminal

Page

County: Harris

State: TX

This Property is listed in the National Register of Historic Places in accordance with the attached nomination documentation subject to the following exceptions, exclusions, or amendments, notwithstanding the National Park Service certification included in the nomination documentation

Signature of the Keeper

Amended Items in Nomination:

Verbal Boundary Description

The Verbal Boundary Description should read: "...a shown on the accompanying maps on page 39 of the nomination."

The TEXAS SHPO was notified of this amendment.

DISTRIBUTION:

National Register property file Nominating Authority (without nomination attachment) OMB No. 1024-0018

OMB No. 1024-0018

NPS Form 10-900 United States Department of the Interior National Park Service National Register of Historic Places Registration Form

1. Name of Property

Historic Name: Houston Municipal Airport Terminal Other name/site number: 1940 Houston Air Terminal Name of related multiple property listing: NA

2. Location

Street & number: 8325 Travelair Rd. City or town: Houston State: Texas Not for publication: DVicinity: D

County: Harris

3. State/Federal Agency Certification

As the designated authority under the National Historic Preservation Act, as amended, I hereby certify that this (I nomination I request for determination of eligibility) meets the documentation standards for registering properties in the National Register of Historic Places and meets the procedural and professional requirements set forth in 36 CFR Part 60. In my opinion, the property (I meets I does not meet) the National Register criteria.

l recommend that this property be considered significant at the following levels of significance: □ national Ø statewide □ local

Applicable National Register Criteria: ZA DB ZC D

Signature of certifying official / Title

State Historic Preservation Officer

Texas Historical Commission State or Federal agency / bureau or Tribal Government

Signature of commenting or other official

State or Federal agency / bureau or Tribal Government

4. National Park Service Certification

I hereby certify that the property is:

V entered in the National Register

determined eligible for the National Register

determined not eligible for the National Register.

removed from the National Register

____ other, explain:

Signature of the Keeper

te of Action

Date

5. Classification

Ownership of Property

	Private
Х	Public - Local
	Public - State
	Public - Federal

Category of Property

Х	building(s)
	district
	site
	structure
	object

Number of Resources within Property

Contributing	Noncontributing	
1	0	buildings
0	0	sites
0	0	structures
0	0	objects
1	0	total

Number of contributing resources previously listed in the National Register:

6. Function or Use

Historic Functions: Transportation: Air-related = Airport

Current Functions: Recreation and Culture: Museum

7. Description

Architectural Classification: Modern Movement: Art Deco

Principal Exterior Materials: STONE/limestone; TERRA COTTA; Metal/copper

Narrative Description (see continuation sheets 6 through 15)

8. Statement of Significance

Applicable National Register Criteria: A, C

Criteria Considerations: NA

Areas of Significance: Transportation, Architecture

Period of Significance: 1940-1954

Significant Dates: 1940, 1950

Significant Person (only if criterion b is marked): NA

Cultural Affiliation (only if criterion d is marked): NA

Architect/Builder: Joseph Finger (architect), Dwight C. Holmes (sculptor)

Narrative Statement of Significance (see continuation sheets 16 through 33)

9. Major Bibliographic References

Bibliography (see continuation sheet 34-37)

Previous documentation on file (NPS):

- _ preliminary determination of individual listing (36 CFR 67) has been requested.
- _ previously listed in the National Register
- _ previously determined eligible by the National Register
- _ designated a National Historic Landmark
- _ recorded by Historic American Buildings Survey #
- _ recorded by Historic American Engineering Record #

Primary location of additional data:

- <u>x</u> State historic preservation office (*Texas Historical Commission*, Austin)
- _ Other state agency
- _ Federal agency
- _ Local government
- _ University
- _ Other -- Specify Repository:

Historic Resources Survey Number (if assigned): NA

10. Geographical Data

Acreage of Property: Approximately 1.7 acres

Latitude/Longitude Coordinates

Datum if other than WGS84: NA

- 1. Latitude: 29.647022° Longitude: -95.286239°
- Verbal Boundary Description: The nominated property is located on the west side of the William P. Hobby Airport (HOU) at 8325 Travelair Street and is a 73,548-square-foot parcel leased by the City of Houston to the Houston Aeronautical Heritage Society, as shown on the accompanying maps on pages XX and XX.
- **Boundary Justification:** The nominated property includes the historic terminal and its immediate surroundings under lease by the City of Houston to the applicant. The boundary excludes non-historic buildings and structures adjacent to the terminal.

11. Form Prepared By

Name/title: John L. Graves, with assistance from NR Coordinator Gregory Smith Organization: The 1940 Air Terminal Museum Street & number: 8325 Travelair St. City or Town: Houston State: Texas Zip Code: 77061 Email: Telephone: 713-650-0811 Date: August 28, 2018

Additional Documentation

Maps (see continuation sheets 38-40)

Additional items (see continuation sheets 41-58)

Photographs (see continuation sheets 59-71)

Paperwork Reduction Act Statement: This information is being collected for applications to the National Register of Historic Places to nominate properties for listing or determine eligibility for listing, to list properties, and to amend existing listings. Response to this request is required to obtain a benefit in accordance with the National Historic Preservation Act, as amended (16 U.S.C.460 et seq.).

Estimated Burden Statement: Public reporting burden for this form is estimated to average 100 hours per response including time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding this burden estimate or any aspect of this form to the Office of Planning and Performance Management. U.S. Dept. of the Interior, 1849 C. Street, NW, Washington, DC.

Photograph Log

Houston Municipal Airport Terminal Houston, Harris County, Texas

Photo 1 West Elevation Camera facing east Photo by Blair McFarlain, 2017

Photo 2 Southeast Oblique Camera facing northwest Photo by Blair McFarlain, 2017

Photo 3 Southeast Oblique Camera facing northwest Photo by Gregory Smith, December 2016

Photo 4 North Elevation Camera facing south Photo by Blair McFarlain, 2017

Photo 5 South Elevation Camera facing north Photo by Blair McFarlain, 2017

Photo 6 Man Takes Wing, sculpture over west main entrance Camera facing east Photo by Gregory Smith, December 2016 Photo 7 Winged wheel motif, south elevation Camera facing north Photo by Gregory Smith, December 2016

Photo 8 West elevation detail Camera facing east Photo by Gregory Smith, December 2016

Photo 9 Lobby, facing runway Camera facing east Photo by Blair McFarlain, 2017

Photo 10 Lobby, facing runway Camera facing southeast Photo by Blair McFarlain, 2017

Photo 11 Lobby ceiling Camera facing east Photo by Gregory Smith, December 2016

Photo 12 Control Tower interior Camera facing north-northeast Photo by Gregory Smith, December 2016

Photo 13 Control Tower exterior Camera facing south. Photo by Gregory Smith, December 2016

Description

The 1940 Houston Municipal Airport Terminal building is a five-story Streamline Moderne building designed in 1938-1939 by noted Houston architect Joseph Finger. It is a steel-framed building with masonry and concrete exterior walls covered in stucco that incorporate numerous streamline elements: aerodynamic lines, white exterior color, smooth walls, curved corners with curved windows, horizontal string-courses, recessed entries, stepped-back upper floors, curved entry steps, curved canopies, and the use of modern and utilitarian metals; aluminum canopy fascia, aluminum external doors, railings and balusters, and steel window frames. Measuring 168 feet wide and 70 feet deep, the terminal's primary orientation is east-west, presenting a mirror image facade to the east (runway) and west (street). The terminal's vertically-oriented central mass rises five stories to the top of the air traffic control cab at the summit and is flanked by two symmetrical one-story wings spread to the north and south, with windows separated by fluted pilasters. The central mass steps back as it rises from the second to the third floor, and third to fourth floor. Atop the fourth floor, a copper-clad hipped roof narrows the façade further, to the edge of a catwalk just below and surrounding the flat-roofed octagonal tower cab. The building retains its original steel windows, decorative carved stone panels depicting modes of flight, a formal entranceway with modernistic freestanding aluminum lettering above the door spelling "Houston Municipal Airport," and large relief stone carvings over the east and west entrances featuring a semi-nude winged male figure representing flight. Currently housing a flight museum, the building retains a very high degree of integrity.

The terminal was originally three floors plus the tower cab. In 1946, an architecturally unassuming, single-story structure was added to the west façade of the south wing, serving international arrivals and departures, and in 1950 the fourth floor – also designed by Joseph Finger, Inc. Architects – was added. The international wing was removed by the City during a \$298,000 restoration, stabilization and weather proofing project undertaken in 1988 which returned the exterior of the terminal to its original appearance.¹ The concrete foundation of the international wing remains. It is the same height as the platform on which the terminal sits, and this broad, one-foot high raised platform is presently used by the 1940 Air Terminal Museum to display aircraft. The terminal is intact, its fourth-floor addition is seamlessly in keeping with the design of the floors below it and for the same purpose, and thus this building has a high degree of integrity.

Site

The terminal is situated on the south side of Houston at 8325 Travelair Street, Houston, Texas, on the west side of William P. Hobby Airport (the "Airport") two blocks east of Telephone Road (Texas State Highway 35). The west façade of the terminal faces the terminal parking lot fronting on Travelair Street. The east façade of the terminal fronts immediately onto a concrete aircraft parking apron where airliners would board passengers and load baggage, air mail and express packages. Immediately west of the apron and parallel to the terminal is active Airport Taxiway "Golf", and beyond that, Airport Runway 17-35. The land to the north and south of the terminal is occupied by aircraft hangars lined up along the west side of the Airport.

Structure

The terminal is constructed of a steel frame, with masonry and concrete external walls. Floors are marble in the public spaces of the ground level and concrete floors in the non-public areas of the ground floor and the floors above. These concrete-floored areas originally were covered with a form of plastic-laminate tile found to contain asbestos, which was removed during restoration. The interior curtain walls are constructed of non-load-bearing, hollow clay, fire resistant tiles produced by Alliance Tile Company of Houston. The use of these clay curtain wall tiles was the latest in

¹ Paul B. Gaines, City of Houston Inter Office Correspondence to Councilman Frank C. Mancuso, April 12, 1988. City of Houston Aviation Department Collection, RG.A.0005. Houston Metropolitan Research Center, Houston Public Library.

fire resistant construction techniques when the terminal was built. The clay tile curtain walls were originally covered in plaster that was removed due to asbestos concerns during the 2003-2004 renovation conducted by Houston Aeronautical Heritage Society, Inc. ("HAHS"). The walls of the central atrium lobby and portions of the mezzanine visible from the ground floor were re-covered during renovation with sheet rock.

Exterior

At ground level a central bay containing the portico juts forward. The glorification of travel is emphasized by this portico's two massive, giant order pillars flanking the central east and west double entrance doorways. The doorways are recessed under an aluminum fasciaed, lunette cantilevered brow adorned on top with aluminum letters proclaiming, "Houston Municipal Airport" (the font of the lettering resembles *ITC Anna*). The face of the brow has two evenly spaced aluminum appliques, each a roundel with two outstretched, stylized wings. The smooth, unadorned pillars at each side of the grand entrance extend from ground level to the top of the third-floor parapet, accentuating the entrance. The recessed primary entrances are comprised of modern double, aluminum-framed glass doors. The doors are flanked by one-piece side lights. The double doors and the side lights are topped by fixed transoms. Above the crescent cantilevered brow, the recession of the entry-way is continued upward with 16-light, steel-framed, awning windows providing a view from second floor lounges. The effect of this recessed, two-story glassed space made up of the entry doors below with these windows above, is of a monumental, important entry-way accentuating the importance of travel as an event.

This entryway is topped by a massive, plain lintel, slightly inset from the pillars, the top of which gently slopes outward from the center toward the north and south sides. In the center of the lintel is a raised, convex-fluted ornamental sculptural panel in stone, the vertical fluting of which stretches from the top of the lintel to the bottom of the lintel face, and then turns under the lintel return until it reaches the wall of glass. Set within the fluting is a rectangular, flat sculptural image in relief of a winged male figure with outstretched wings, holding the light of knowledge and the dove of peace, flanked below his wings by globes representing the East and West hemispheres. The figure is nude with the exception of an aviator's cap and a strategically placed Spad (WWI French-made fighter aircraft) in lieu of a fig leaf. The sculptor, Dwight C. Holmes (1900-1986)² described the theme of his sculpture as "Man takes wing and covers the earth, spreading the light of education."³

On either side of the two-story pillars, the rounded corners of the wall curve ninety degrees to the several-foot deep return which meets the east and west-facing façades of the central mass of the terminal. The curved corners contain curved, steel-framed windows on both the first and second floors.

In plan, the first floor of the terminal is a cruciform shape with long arms having rounded corners to the north and south (the wings of the building), and two much shorter arms with rounded corners (the entrance of the gateway on the east and west sides). The second floor continues this cruciform theme in plan, resembling a Humetty cross with shortened, nearly equal width arms.⁴ Two of these arms, the east and west, have rounded corners; the corners of the north and south arms of this second-floor cross are square. The upper (3rd and 4th) floors have an octagonal structural shape and feature horizontal banding at the corners, whereas the lower floors (1st and 2nd) exterior walls are smooth. The third floor has stubby rectangular "wings" with rounded corners on the north and south side.

On both the west and east façades of the central mass, there is a slight step-back from the first to the second floor measuring a few inches which provides for the continuity of the image of the parapet over the wings to the top of the

² Obituary of Dwight C. Holmes, San Angelo Standard-Times, Friday, November 14, 1986, p. 2A.

³ Dwight C. Holmes, hand-written notes accompanying blue prints of sculpture drawings and typewritten correspondence dated November 16, 1984.

⁴ Definition found at <u>http://www.seiyaku.com/customs/crosses/humetty.html</u>, last accessed June 4, 2017.

spandrel above the first-floor window flanking the return. Above this, at the third floor, the step-back is more pronounced on the east and west façades. The step-back and the change in the shape of the structure from cruciform to octagonal makes room for a broad, deep balcony on the third floor. This third-floor balcony is of varying depth and bordered by a parapet. The northwest, southwest, southeast and northeast corners of the parapet are topped by an aluminum balustrade. The original multi-light double glass doors flanked by steel-framed, multi-light windows open onto the third-floor balcony from the center of the east and west sides of the terminal. The octagon corners of the third-floor feature decorative quoins.

The fourth-floor continues the octagonal shape without the winglets. There are decorative quoins at the corners of the walls, and on the east, west and south sides in the center of each wall is a six-light, horizontally oriented window with a steel sash. The bottom light is a hopper window, opening inward, while the awning windows above open outward. The northwest, southwest and southeast walls of the octagon at this floor contain a central, vertically-oriented, three-light window with a steel sash. The mix of hopper and awning windows is repeated. On the northwest side, instead of a glass window, there is a louver covered opening providing ventilation to an equipment room. Above the fourth floor, the octagonal copper roof rises to the catwalk around the base of the tower cab. The perimeter of the catwalk is defined by a waist-high steel railing. From the edge of the catwalk at the base of the tower cab, on the southwest side, is a steel fire escape, a stairway extending down the side of the copper roof until it reaches the top of the vertical fourth-floor wall, and then continuing as a vertical ladder down to the third-floor balcony. The original, multi-light glass, steel-framed door situated on the west façade provides access to the catwalk and to the fire escape. Inside, the doorway is set at a landing in the stairway to the tower cab from the fourth floor below. The eight large tinted plate glass windows of the tower cab cant outward. Above them the flat roof of the tower cab has a steel railing, antennas, and obstruction warning lights. Originally, there was a large rotating beacon atop the original "birdcage" style tower cab.

Wings

The single story, twelve-bay wings of the terminal extend out to the north and south. The wings are symmetrical, each having six massive, evenly spaced fenestrations, being multi-light, steel-framed, mixed hopper- and awning-sashed windows of over 60 square feet each. Between the fenestrations are convex-fluted pilasters that roll over the top of the second-floor parapet and extend to a point level with the window sills. The convex-fluted pilasters resemble stylized flowing water, and this impression is enhanced by the fact that the pilasters don't feature capitals, but instead have rounded tops over which the convex flutes curve, thus forming a visual element of the parapet at the top of each wing. Above each window of the wings, centered between the pilasters horizontally, and vertically centered between the top of each window and the edge of the parapet above, are rectangular, bas-relief sculptural ornamentation plaques. There are 28 of these ornaments around the north and south wings of the terminal. These sculptures depict three different scenes representing the Past, Present and Future of Aviation, and these scenes are repeated eight times each on the north and south wings of the terminal. The Past is represented by a head-on image of a bi-plane similar to a Wright Flyer. The Present is represented by a DC-3, a then-modern, streamlined passenger airplane being loaded with air mail. The Future is represented by a streamlined auto-gyro with radio-control symbolically represented by a lightning bolt connecting a ground transmitter station and the plane. At the north and south termini of the east and west façades of each wing, there is a smooth, flat, square-edged pilaster mimicking the massive pylons on either side of the main entrances. On the north and south façades of the ground-floor wings of the terminal there are four large evenly spaced plain pilasters that also mimic the monumental pylons of the main entrances. Those nearest the corners have squared sides. These pilasters nearest the center have squared inner edges and rounded outer edges that return to the wall. Within the center recess between the inner pilasters is a second slight recess, and within that a double doorway topped with a transom. Above the transom is a canopy, a lunette brow with aluminum fascia. Above this brow is a horizontally-fluted panel. Above this panel are horizontal aluminum louvres. Above the top of the louvered panel and centered between the pilasters is a panel of vertical convex-fluting repeating the theme of the pilasters on the east and west façades of the terminal's wings. Mounted in the center of this panel is a raised image of a winged roundel. The

roundel is a circle within a circle. There are wings outstretched horizontally to either side of the roundel, emblematic of stylized eagle's wings. In the other two recesses to either side of the doorway, and between the pilasters are two six-light, steel-sash, hopper windows. Above these windows and centered between the pilasters are one of the rectangular stone, bas-relief plaques that adorn the façade of the east and west sides of the terminal.

On the second floor, the north and south arms of the cross-shaped central mass appear to extend outward onto the wings due to the continuation of the parapet wall motif onto the central mass. Centered on these north and south second-floor façades are modern, aluminum-framed double glass doors leading to the second-floor observation decks situated on the roof of both wings of the terminal. Flanking these doors are small, two-light, steel-sash windows. Several feet further to each side are two large multi-light, steel-sashed mixed hopper and awning windows. At the third floor, the north and south façade of the terminal presents the short wall of the stubby winglets that extend to the north and south from the stepped back, octagonal, central mass. There are rounded corners, and the north and south facing wall is bisected by a central three-light, steel-sash window.

At the fourth floor, the octagonal shape of the structure continues without the stubby wings of the third floor. Here, the south façade features a large, horizontally-oriented, nine light mixed hopper and awning window in the center, flanked by smaller, vertically-oriented, three-light, awning windows at the mid-points of the compass (the southeast and southwest walls). On the north façade of this floor, a small steel-sashed window is positioned in the center, while the northwest and northeast walls have a vertically-oriented, three-light, steel-sashed window centered within each. The horizontal banding at the corners of the octagon continue on the fourth floor. Atop the fourth floor on the north and south façades are the copper hipped roof, the catwalk and tower cab. The exterior wall below the windows of the tower cab are sheathed in vertically corrugated copper.

Interior - Ground Floor

The central lobby first floor is an atrium open on all four sides to a mezzanine balcony. To the left and right of the west (street-side) entry, set back into the rounded corners, are protruding rounded counters topped with aluminum-banded plastic laminate. The floor is described as "pink rasota" marble on the plan by Joseph Finger Architects, with a central motif in the form of a giant budded cross (an even-sided cross with convex ends) produced in a contrasting oriental red marble and visible from the mezzanine above. Walls are white plaster with Texas (seashell) limestone wainscoting ("Texas Stone"). A foot board is comprised of St. Genevieve inkley veined marble. The cornice molding is plaster with vertical concave fluting. Four round, plaster-clad support columns positioned several feet inside of the corners of the main lobby reach up to the ceiling and support the mezzanine above. The foot of the columns is marble that matches the footboard along the walls. The foot of each column is encircled by a matching ring of stone in the floor. Above the marble foot, the columns have wainscoting of Texas Stone. The columns have capitals of vertical concave fluting that matches the fluting of the cornice in the central atrium lobby.

An art deco, multi-light chandelier hangs centered in the atrium. Its design is of an octagonal wedding cake with metal decoration dividing the vertical glass panels. In the center bottom is a round white conical glass shade. Under the ceiling in the corners of the atrium hang four pendant lamps with round, conical, white glass shades. Beneath the ceiling on the north and south wall hang evenly spaced pendant lamps with thin, drum-shaped shades with metal sides and glass bottoms.

The right hand (south) wall is open to the area formerly occupied by the airport coffee shop, which extends 40.5 feet to the south, and is bisected at 18 feet by the curving kitchen wall with a chest-high opening in the curved corner for delivery of food from the kitchen to the dining area. At the center of the main lobby's south side, a hallway runs southward the length of the terminal to the exterior doorway of the south wing. The same marble footboard that is in the central atrium lobby runs along the walls of this south wing corridor. Along the west side of this south wing corridor lie – in order from north to south — the coffee shop area (now a museum gift shop), the kitchen, and the

men's and ladies' restrooms. There is a large plate glass window on the kitchen wall. On the east side of this south wing corridor lie four offices. The first office on the east side (in order from north to south) has its north wall open to the atrium. All corridor doorways frame wood, single-pane, half window doors with wood frames. The rooms along the south corridor are plain, devoid of any decoration such as foot boards, wainscoting or ceiling molding. The ceiling in the south corridor and rooms on either side are 12 feet 4 inches high. The floor of the corridor is of pink rasota marble. At the corner where the south wall of the central atrium lobby meets the east wall of the south corridor, the wall is curved. Inset along the east wall of the south corridor is an alcove for a free-standing, electric-powered, chilled water fountain.

The southeast corner of the central atrium lobby is occupied by a stairway leading to the second-floor mezzanine. The balustrade is aluminum with a newel post composed of four square, vertical aluminum rods connected by a peaked, square cap at its top. The balustrade features four lateral aluminum members that repeat the angle of the stairway, and like the rest of the balustrade, are plain, squared aluminum. The stair strings and treads are of the same stone as the lobby floor, and the treads are worn in the center by decades of foot traffic. The stairway is narrow, measuring 3 feet wide. The stairway rises to the east and is positioned immediately adjacent to the south wall of the central atrium lobby. The stairway curves 90° to the left where it meets the southeast curve of the atrium wall, and rises three treads to the north, then turns left a further 90° toward the west and rises westward to its junction with the floor of the mezzanine.

The north wall of the central atrium lobby is occupied by the ticket counters of two airlines. These counters were originally occupied by Braniff Air Lines to the left (west half of north wall), and Eastern Air Lines to the right (east half of north wall). The counter tops are straight rectangles at 3 feet 6 inches height along the north wall. Each is surfaced in plastic laminate with aluminum banding. Low openings in the counter are for passing baggage to the ticket agents and originally held scales. There are two of these low openings at each counter. At the east and west termini of the north wall of the central atrium lobby are doorways for access to the rear (airline side) of the ticket counters. There is an east-west corridor/working space behind the ticket counters extending the full width of the terminal. In the center of the north wall of this east/west corridor is the intersection with a central, north-south corridor that extends the length of the north wing of the terminal. The corners of this intersection are curved walls. On either side of this corridor proceeding northward were offices for ticketing, scheduling, reservations, radio rooms and a store room for baggage (all now exhibit galleries or offices), none of which include any ornamentation in the form of floor molding or cornices. This north wing corridor is floored with the same stone as the central atrium lobby. The ceiling of the central atrium lobby is open to the mezzanine above. The opening is an elongated octagon with the longer side on an east-west axis. The underside of the mezzanine bulkhead features grooves that trace the bulkhead

Ine ceiling of the central atrium lobby is open to the mezzanine above. The opening is an elongated octagon with the longer side on an east-west axis. The underside of the mezzanine bulkhead features grooves that trace the bulkhead outline. Where the ground floor ceiling meets the walls of the central atrium lobby, there is a vertically fluted cornice (originally plaster throughout, some pieces have been replaced with fiberglass castings from the original).

Mezzanine

In addition to corner columns that repeat from the floor below, the mezzanine is supported by metal hangers that rise through the railing around the atrium opening and attach to the ceiling above. The streamline modern railing matches the stair rail that rises from the ground floor. The mezzanine of the terminal is presently unoccupied. Around the perimeter of the mezzanine are offices on the west (formerly a lounge) situated above the main (street-side) entrance to the terminal, two flight crew sleeping quarters with full bathrooms on the south side, an observation room with floor to ceiling multi-paned, steel-framed, awning-sash window on the east side, and offices on the north side (the north-east of which was originally the Weather Services' balloon room). Doors are wood with glass over wood and wooden frames. The corner rooms have rounded walls with rounded, six-light, horizontally-oriented, steel-framed, fixed-sashed windows. The north and south sides of the mezzanine are bisected by short corridors leading to two-light, steel-framed glass doors opening onto the rooftop observation decks situated atop the north and south wings of the terminal. These wings, originally roofed with concrete and topped with clay tiles similar to brick, have, following the restoration, been

covered with a modern, white, flexible roof membrane material designed to improve water resistance. The perimeter of the roof is mounted by a waist-high parapet punctuated by the tops of the ten pilasters on both the east and west façades of the terminal. The parapet wall is stucco covering concrete and masonry. On the east side of the short, north corridor, is the foot of a stairway leading up to the third floor. This stairway is 3 feet wide, rising to the north before meeting the exterior wall and turning back upon itself to rise to the third floor. This stairway features a wood balustrade with simple longitudinal railings topped by a smooth, plain wood hand-rail. It completely lacks the moderne composition and design of the ground floor staircase. The mezzanine ceiling above the atrium is framed with an elongated octagonal cornice with grooves tracing the octagon and a convex-fluted cornice matching the cornice of the ground floor.

Third Floor

The third-floor is octagonal with short wings protruding to the north and south sides. The third floor is bisected by a narrow corridor on a north-south axis. The floor is of concrete. The stairway that rises from the mezzanine below is in the northeast corner of the north wing of this level. Opposite, across the corridor, is a restroom. This north wing has vertically oriented, three-light, steel-framed, awning-sashed windows in the center of its north, east and west walls. In the central octagon, on the east side of the corridor, there is one room with three exterior walls facing northeast, east and southeast. There are three-light, steel-framed hopper windows in the center of the northeast and southeast walls. In the center of the east wall is a multi-paned, double glass door with aluminum frames and sash that has multi-paned side-lights to either side. This door opens onto a balcony formed by the roof of the floor below. The balcony is ringed by a parapet that forms the top of the monumental lintel over the large east and west primary entrances to the terminal. The northeast and southeast corner parapets are topped by an aluminum balustrade. The floor of this third-floor balcony is concrete topped with a fiberglass roofing membrane designed to handle foot traffic. This membrane was added during the restoration of the building in 2004. On the east side of the central corridor are two rooms previously used as offices by the Civil Aviation Authority, the precursor of the FAA. The west wall of the third floor has features identical to the east wall and its identical doorway opens to an identical balcony on the west side of the third floor. Another office is situated in the south wing of this 3rd floor of the terminal. This south wing has a three-light, vertically-oriented, aluminum framed, awning-sashed window in the south wall, and multi-light, steel-framed, double glass doors in the east and west walls that open to the southeast and southwest corners of the third floor balcony. The interior of the third floor is utilitarian. It lacks the ornamentation of the ground floor and the portions of the mezzanine that are visible to the public. In the center of the west wall of the corridor on the third floor, a doorway opens to a stairwell that rises to the fourth floor.

Fourth Floor

The fourth floor continues the octagonal shape of the floor below, but it lacks the wings of the third floor. The floor is concrete. A central, narrow, east-west corridor terminates at the north end in a compact restroom. In the northeast corner is a mechanical room. This room has louvres instead of glass in the window opening centered in the northeast wall of the octagon. In 2013, this room was renovated with new electrical wiring and computer servers, and transmitters and receivers were installed to support a new ADS-B antenna installation on the roof of the tower cab.⁵ The room occupying the center east side of the fourth floor was previously offices. This east center room has a single, horizontally-oriented, nine-light, steel-framed, awning-sashed window. The central corridor is shortened just south of the stairway landing. There it opens to a larger room with walls facing southeast, south and southwest. The windows in the southeast and southwest wall). The window in the south wall is a duplicate of the window in the east wall (as is the window in the west wall). The enclosed stairwell near the center of this fourth floor leads up three further flights of

⁵ ADS-B is a new generation air traffic control tool that provides controllers with a better understanding of aircraft positioning.

stairs to a small landing with a multi-paned, steel-framed glass door in the west wall that opens to the catwalk below and around the base of the tower cab. From that landing, there are just a few steps upward to the level of the tower cab.

Tower Cab

The control tower cab interior is an octagon. There is a short railing to prevent personnel from falling into the stairway recess in the floor. The floor is concrete and would have been inset with linoleum originally. At waist height, large, plate glass tinted windows rise to the flat ceiling of the room. The roof of the cab is larger than the floor, so the windows tilt outward. The tower cab is presently empty but for cable races holding the ADS-B antenna cables that run to the roof from the third floor below.

Modifications to the terminal, 1946 and 1950

During the period of the terminal's use as the sole commercial aviation gateway to Houston, there were two significant modifications to the building.

On July 3, 1946, Mayor Otis Massey asked the City Council to "pass an ordinance appropriating the sum of \$50,000 out of the airport bond fund to pay for the cost of constructing a building at the Municipal Airport to handle international passengers."⁶ This structure would be added to the existing Terminal and attach to the building across the entire west façade of the south wing, forming an "L" shape. A plain, flat-roofed box, the international wing housed a waiting room for outgoing passengers, Braniff and Pan American Airways counters, Pan Am teletype room, an FAA crew room, and an FAA port steward's office. For incoming passengers, there were two U.S. public health clearance rooms with a quarantine antechamber, a Customs waiting room, Customs and Immigration counters and a Customs baggage inspection counter.⁷ This wing would serve as the international gateway to Houston from 1946 until 1954 when a new terminal built on the north side of the airport opened. New signage was added over the main east entrance of the terminal, proclaiming in large neon italics *Houston International Gateway*,⁸ the Airport's unofficial designation from May 1947. The addition of the international wing necessitated the removal of the coffee shop and kitchen in the terminal to a free-standing building placed in the parking lot opposite the north wing of the west façade of the terminal. A ticket counter for Chicago & Southern Airways replaced the lunch counter, and a barbershop took up a portion of the space previously occupied by the kitchen.⁹ The international wing opened with the arrival of a Pan American World Airways Clipper from Mexico City on December 15, 1946.¹⁰

As mentioned above, the terminal was originally a three-story building topped by an air traffic control cab. During 1950, the City again engaged the architectural firm of Joseph Finger Inc. to design a fourth floor to be added to the building. The original bird-cage style tower cab was removed along with the copper hipped roof. The fourth floor, identical in shape to the third floor but without the stubby rounded wings to the north and south sides, was added. The roof was replaced in the same style and materials as the original, and maintaining its original lines, and a new, larger, more modern tower cab with outward canted windows of plate glass providing improved visibility was installed.

⁶ Memo from Mayor Otis Massey to the Honorable City Council, July 3, 1946. City of Houston Aviation Department Collection, RG.A.0005. Houston Metropolitan Research Center, Houston Public Library.

⁷ Floor Plan, International Wing, Houston Municipal Airport. Handwritten notation indicates June 2, 1946. City of Houston Aviation Department Collection, RG.A.0005. Houston Metropolitan Research Center, Houston Public Library.

⁸ Photograph of west façade of the terminal, ca. 1948. Collection of Michael Bludworth.

⁹ Floor Plan, Modifications to Houston Municipal Airport Administration Building, 1946. City of Houston Aviation Department Collection, RG.A.0005. Houston Metropolitan Research Center, Houston Public Library.

¹⁰ Students of the University of Houston under the guidance of Dr. Rinaldo A. Petrini, Ph.D., AIA, *The Houston Municipal Airport: A Nomination to the National Register of Historic Places.* May 12, 1983. Apparently never submitted to the NRHP. Machine copy in the Collection of The 1940 Air Terminal Museum.

City-Performed Renovation

During late 1987 and 1988, the City of Houston Department of Aviation (now known as Houston Airport System) marked 50 years of service to the City of Houston by preserving the terminal with a \$298,000 exterior restoration designed to return the building to its near-original appearance. The international wing, which had been added in 1946, was taken down, though the raised concrete platform foundation for that wing was retained. The opening that connected the west façade of the south wing of the terminal with the international wing was closed and the exterior wall returned to its original appearance. Work was also performed inside the terminal, which included "cleaning, safety lighting, and stabilization of decaying ceiling plaster."¹¹ The architect chosen to handle the job was Barry Moore Architects, Inc. Mike Davis, writing in *Cité* opined that:

"The restoration will accomplish more than arresting deterioration, which is in itself a laudable goal. Preservation of the exterior of the building will leave only the task of interior rehabilitation when a new use for the long-abandoned building is selected. Meanwhile the terminal will attract the attention it deserves as a significant piece of Houston's architectural heritage."¹²

HAHS-Performed Renovations¹³

When Houston Aeronautical Heritage Society was formed in 1998 and subsequently gained custody of the building, the terminal was in a significantly deteriorated state. Though the terminal remained structurally sound, persistent and serious roof leaks had caused substantial damage to the interior. Plaster was falling off of the walls and ceilings in large areas, and in most other areas, the plaster wall finishes were rotting. Much of the interior stone wainscot was either broken or had suffered from having been covered over in various ways. The terminal's exterior plaster had numerous areas of cracked plaster, but the decorative bas-relief panels were fortunately all intact with the exception of two on the west façade of the south wing which had been damaged during the City's 1988 restoration effort. The terminal's mechanical, electrical and plumbing systems were in complete disrepair.

Phase I Renovation

HAHS began fund-raising to restore the terminal and after four years of effort, determined the feasibility of initiating the building's restoration with Phase One of a probable multi-phase project. Phase One would bring the terminal's north wing ground floor back to life. The major features of this phase included:

- Removal of all existing interior plaster Forensic investigation had indicated that the building's interior finishes were asbestos-containing materials. It was not clear whether this asbestos was in the actual wall plaster or in the finish on the wall plaster. Given this uncertainty, as well as the seriously deteriorated condition of the building's interior plaster, the decision was made to abate the asbestos by removing all interior plaster finishes.
- Roofing all existing terracotta roof pavers above the North and South Wings were removed and a new, single-ply TPO roof membrane was installed.¹⁴ All intact terracotta roof pavers were saved. In future phases, the roof pavers will be reinstalled, and the roof terraces will be reopened to the public.

¹¹ Mike Davis, "CiteLines: Look Both Ways", *Cité*, the Journal of the Rice Design Alliance, No. 18 (October 1987): p. 3, on the website OffCite, <u>http://offcite.org/cite-18/</u>, last accessed April 12, 2017.

¹² *Ibid.*, p. 3.

¹³ This section on HAHS-performed restoration was drafted by Howard Hill, HAHS's architect for the restoration, and by Museum intern Erin Sterling during 2010. The content has been edited by John Graves to conform with the balance of the text of this application.

¹⁴ Thermoplastic Polyolefin (TPO) is a single-ply reflective roofing membrane made from polyprophylene and ethylene-propylene

- New underground utility lines were installed, bringing new water and electricity service to the terminal. Sufficient capacity was installed for the entire building.
- Air conditioning systems were installed for the North Wing.
- A sprinkler system was installed in the North Wing, with capacity calculated to extend the system through the remainder of the terminal in future phases.
- Repairs were made to the exterior plaster finish on the entire Terminal, and the building exterior was completely repainted.
- Existing restrooms were demolished, and new, handicap-accessible restrooms were constructed in the North Wing.
- A new wall was built between the North Wing and the central atrium lobby in order to separate the Phase One area from the remainder of the terminal. This wall was designed and constructed to recreate the original Terminal's ticket and baggage counters situated on the north side of the central atrium lobby where the closure wall was built.
- The marble stone floor of the central atrium lobby was thoroughly cleaned and polished.
- Existing walls were left unfinished in the north wing, with the inner clay tile sub-wall left exposed. Future phases will see the installation of new gypsum board wall finishes to recreate the original appearance of the interior, with a small area left bare to help tell the story of building techniques in use during 1939-1940.
- New lighting was added for operational use, although this lighting is considered temporary, pending full, finished renovation of the North Wing space.

Phase One officially opened in January 2004, and the 1940 Air Terminal Museum began operations in the building in February of that year.

Phase II Renovation

Fund raising by HAHS continued throughout this period and, by 2008, HAHS was ready to initiate Phase Two of the terminal's restoration. This phase envisioned fully restoring the central atrium lobby off the main entrance and opening the south wing by bringing it to the same level of partial-restoration as the north wing. Major features of Phase Two included:

- Removal of all remaining existing interior plaster in the terminal, including all upper floors.
- Plaster removal included saving carefully selected representations of all existing decorative plaster details, cornices and moldings. These artifacts would be used to create molds for casting new details exactly matching the originals.
- Fully restoring the existing public restrooms in the south wing.
- Addition of new lighting, carefully selected to closely match original light fixtures. Historic photographs of the terminal's interior were used to guide selection of new fixtures wherever possible.
- Recreations of all plaster wall finishes and decorative details in the central atrium lobby. This work included portions of the mezzanine that are visible from the ground floor.
- Extension of the sprinkler system throughout the first floor.
- Addition of new air conditioning systems for the remainder of the first floor.

Phase Two was completed and officially opened to the public in June 2009.

rubber polymerized together. It is typically installed in a fully adhered or mechanically attached system, allowing the white membrane to remain exposed throughout the life of the roof.

All of this work benefited substantially from the availability of the original architectural drawings of the terminal prepared by the office of Joseph Finger, Inc. Though these drawings depict a slightly different configuration for the interior spaces than as actually built, they have proved invaluable in depicting the terminal's original details.

Between the thorough roof repairs and the installation of air conditioning systems, it is expected that the life of the building has already been extended indefinitely. The ongoing efforts of HAHS will insure that this is true, and the goal is to eventually fully restore the building to its condition circa 1950, sans the international wing. The 1940 Air Terminal Museum may ultimately function as a full-immersion experience, placing visitors into the look and feel of the era.

Summary of Significance

The Houston Municipal Airport Terminal opened in 1940 to replace a wood-framed administration building that could no longer adequately serve the needs of the expanding airport. Houston architect Joseph Finger designed the building in the popular Streamline Moderne style using a steel frame system with a curved masonry and concrete façade to create one of the most attractive modern buildings in the city. The building retains its original steel windows, a formal entranceway with modernistic freestanding aluminum lettering above the door spelling "Houston Municipal Airport," decorative carved stone panels depicting modes of air transportation, and large relief stone carvings by Dwight C. Holmes over the east and west entrances featuring a semi-nude winged male figure representing flight. The building is nominated at the state level of significance under Criterion C in the area of Architecture as an excellent example of Streamline Moderne design with a very high degree of integrity, and Criterion A in area of Transportation for its role in the development and functioning of the Houston Municipal Airport during a period of rapid expansion. The period of significance is 1940-1954, marking the year of its dedication through the year that a new administration building opened at the airport's north side. The property is nominated at the state level of significance for its association with the early evolution of commercial aviation in Texas, as the most intact example of late 1930s modernistic airport architecture in Texas, and as an exceptional example of the artistry of architect Joseph Finger and sculptor Dwight C. Holmes.

Establishment of Houston's Airport

Several airports sprang up around Houston before and during the 1920s to serve a growing number of private and commercial flyers. These included the South Houston airfield, the Bellaire field, and Main Street Airport.¹⁵ The Houston business community quickly grasped the capacity of aviation to enhance competitiveness, with its ability to deliver mail, express packages and personnel by air much more rapidly than rail or road transportation. During the early 1920s more than a score of small commercial planes capable of carrying one or two passengers operated from Houston fields.¹⁶ By 1924, businessmen sought Houston's inclusion in the U.S. Post Office's coming assignment of air mail routes, and prodded the city to acquire an airport suitable for hosting and servicing air mail planes.¹⁷ Mayor Oscar Holcombe, however, "was not interested in any city administration support for the development of an airport, saying it is just as logical for the city to help build a Southern Pacific Railroad Station as an airport."¹⁸

The Kelly Act of February 1925 provided for the transport of air mail by privately-owned air lines.¹⁹ The National Air Transport Company ("NAT") was created by Henry Ford and his associates²⁰ to carry mail and express between U.S. cities in May of that year. Banker A. D. Simpson continued to lobby for the acquisition and equipping of an airport to convince NAT to extend its airmail line to Houston.²¹ By the Autumn of 1926, the Houston Chamber of Commerce appointed an Aviation Committee, which inspected every airfield within a reasonable distance of the post office and rejected them all either as unsuitable or because the land was prohibitively expensive.²² Though the committee had

¹⁵ The 1940 Air Terminal Museum, Houston Aviation, pp. 11 & 31.

¹⁶ Fred S. Wilbur, "Municipal Airport Dream of Other Years Becomes a Reality," *The Houston Chronicle*, November 27, 1927, Sec. 1.

¹⁷ *Ibid.*, Sec. 1.

 ¹⁸ Vickie Barrington, et al, Students of the University of Houston under the guidance of Dr. Rinaldo A. Petrini, Ph.D., AIA, "The Houston Municipal Airport A Nomination to the National Register of Historic Places, May 12, 1983 (never submitted), p. 5.
¹⁹ Welman A. Shrader, *Fifty Years of Flight: a Chronicle of the Aviation Industry in America, 1903-1953* (Cleveland: Eaton Manufacturing Company, 1953) n. p.

²⁰ "Will America Lead in the Air?" *Houston Post*, November 20, 1926, Sec. 1.

²¹ "City Should Become Sky Depot," *Houston Post,* November 16, 1926. NAT's extension of air mail service to Houston would never materialize.

²² A. D. Simpson, "Air Mail Now Regular Part of U.S. Service," *The Houston Chronicle*, November 27, 1927, Sec. 1.

lobbied the city for several years, no city funds would be supplied for an airport acquisition. In June 1927, the city council authorized the mayor to negotiate to obtain the land necessary for the construction of an airport, but no financing was approved.²³

W. T. Carter, Jr. of W. T. Carter Lumber & Building Co., and other members of his family created the Houston Airport Corporation to build a new airport on company property about eight miles south of downtown. He constructed an airfield on 193 acres of cow pasture where the terminal is situated today, fronting on the east side of Telephone Road, and agreed to lease "W.T. Carter Field" to the city for \$150 per month.²⁴ Carter's goal was to build an airfield that would meet the Department of Commerce's Aeronautic Branch's triple-A field standard.²⁵ A *single-A rating* required a 2,500 foot landing field in all directions (a little under 144 acres) with clear approaches and the entirety of the field suitable for landing.²⁶ An *AA rating* required the addition of fuel and lubrication services, licensed mechanics, fire extinguishers, public ground transportation into the host city, and weather service. An *AAA rating* required the addition of night flying facilities such as beacons, lighted boundaries, flood lights, signal lights, and night attendants.²⁷ Airport historian Linda Ann Collins says that "Carter freed the City from having to get the money needed for not only land but also the equipping of an airport."²⁸ The *Houston Post* editorialized that Carter had "made it possible for airplane commerce to gain a real hold at Houston."²⁹

On June 27th, a ground-breaking ceremony took place, and afterward the cow pasture was mowed, the grass burned, and the field leveled and sodded.³⁰ Carter enlisted Englishman and Rice Institute graduate, Edward Wilkinson, architect for the lumber company, to design the airfield layout, which included offices, a club house, weather bureau, first aid station, sleeping quarters, and boundary and field lighting.³¹

In 1927, the airport's first tenant was Captain Frank Hawks, a famous flyer and the holder of transcontinental speed records who flew a variety of aircraft promoting the Texaco brand.³² Other early tenants included Houston Airways, Houston Airplane Company, and Southwestern Air Service. The airport also hosted the Texas National Guard's 111th Observation "Ace in the Hole" Squadron which had previously been stationed at Ellington Field.³³ By the summer of 1928, Houston would lead the state in passenger and air mail volume.³⁴

In 1930 six new airlines started serving Houston, and improvements at the airport continued. The wood-framed administration building was modified to double the original office space, enlarge the waiting room, and accommodate weather instruments.³⁵ In 1932, Houston received one of only ten Airways Radio Stations from the federal government capable of transmitting weather reports and flying conditions to pilots. With this and other additions, the airport received an A1A rating.³⁶ During FDR's administration, the propriety of the issuance of air mail routes by his

²⁷ "Federal Inspectors Praise Site," Houston Post, July 13, 1927, Sec. 1.

²⁹ Editorial, *Houston Post*, June 25, 1927, Sec. 1.

²³ City of Houston Minutes, 1927.

²⁴ "Air Mail Now Regular Part of U.S. Service," *The Houston Chronicle*, November 27, 1927, Special section.

²⁵ "Aviators Celebrate Airport Assurance," Houston Post, June 25, 1927, Sec. 1.

²⁶ "Cities Seek Airport Rating by Department of Commerce," *Gettysburg Times*, June 29, 1929, pg. 5.

²⁸ Linda Ann Collins, *Houston Municipal Airport, 1927-1941*, Thesis presented to the faculty of The University of Houston-Clear Lake in Partial Fulfillment of the Requirements for the Degree of Master of Arts, December 1994.

³⁰ "Ground Will be Broken Today for Houston's Airport," *Houston Post*, June 27, 1927.

³¹ Thirteen years later there were only seven hangars. "Model of Airport Placed on Display," Houston Post, July 30, 1927.

³² Houston Aviation, p. 40.

³³ Houston Aviation, p. 39.

³⁴ "Houston Leads State in Air Service," *Houston Post*, September 19, 1929, Local sec.

³⁵ "New Office Work Starts," *Houston Post*, July 16, 1930, Sec. 1.

³⁶ "Houston Air Industry in Big Increase," Houston Post, December 31, 1932, Sec. 1. The A1A rating had replaced the AAA

predecessor Herbert Hoover's postmaster general were questioned amid accusations of favoritism, fraud and collusion, and all domestic air mail contracts were cancelled on February 19, 1934.³⁷ Houston, the busiest air mail hub in the south, lost its air mail service, and mail from Houston would have to first travel to Dallas by railroad.³⁸ Houston air mail service was reinstituted in July 1934.³⁹

By March 1936, Braniff Airways began the first pure passenger service on the Dallas to Houston route. Demand was strong, and within weeks, Braniff had added a night flight between Houston and Fort Worth.⁴⁰ In December 1936, Eastern Air Lines president and Great War flying ace Eddie Rickenbacker, acquired the Wedell-Willams Air Service and its airmail route from New Orleans to Houston.⁴¹ Soon after beginning service to Houston, Rickenbacker commented upon what he considered the "inadequate runways and hangar facilities" at Houston's airport.⁴² Rickenbacker flew to Houston to preside over the inaugural flight and pronounced that Eastern would expand its flight service only after poorly-lit taxiways and inadequately paved runways were improved.⁴³ Arthur C. Furchgott, Jr., Eastern's first field manager at Houston, worried that one of Eastern's DC-2s might sink into the oyster shell paved runways during a heavy rain and get stuck. When this eventually happened, Eastern replaced its DC-2s flying into and out of the Airport with lighter Lockheed Electras, and sent a strongly-worded personal telegram from Captain Rickenbacker to the mayor. Aviation historian Roger Bilstein believes that the stuck DC-2 and Eastern's tirade were important reasons that the city decided to purchase the Airport from Houston Airport Corporation.⁴⁴

1930s Airport Improvements and New Terminal Building

Improvements such as longer and wider runways and modern lighting were needed to handle larger commercial airliners, particularly with Eastern having to change passengers and mail out of larger planes to smaller ones that could safely utilize the Houston field.⁴⁵ These and other concerns led the Aviation Committee to recommend that the city acquire the airport from Houston Airport Corporation and make the necessary improvements. The purchase agreement called for the corporation to make the initial extensions to the shell-paved runways using city money. A combination of federal funds and a \$500,000 bond would be used to purchase and improve the field.⁴⁶ The *Houston Post* commented that:

If Houston was to continue to grow, industrially, commercially and culturally, the city government must match the initiative of private citizens and business interests...by obtaining sufficient support from its citizens to pass the bond.⁴⁷

The bond passed in April 1937, and the improvements to the runways began even before the ordinance authorizing the purchase of the airport passed the following month.⁴⁸ The improvements to the runways included lengthening to 4,500

rating previously in use. An A1A rating required runways of 2500 feet, mechanic shop, lights, drainage, windsocks, and 24-hour service.

³⁷ Robert Kane and Allen Vose, *Air Transportation*, (Dubuque, Iowa: Kendall/hunt Publishing Company, 1974), p. 30-32.

³⁸ "Houston Air Mail Service Will End," *Houston Post*, February 16, 1934.

³⁹ "Houston Gets Direct Air Mail to East Coast," *Houston Post*, June 27, 1934, Sec. 1.

⁴⁰ "Night Flights To Begin Here," Houston Post, March 15, 1936, Sec. 1.

⁴¹ Website of U.S. Centennial of Flight Commission, "Eastern Airlines", at

http://www.centennialofflight.net/essay/Commercial_Aviation/EasternAirlines/Tran13.htm, last accessed May 13, 2017.

⁴² "Progress is Made Toward New Airport," *Houston Chronicle*, December (date unknown), 1936, Sec. 1.

⁴³ "Rickenbacker Visions Increased Commerce if Port Enlarged," Houston Post, December 16, 1936, Sec. 1.

⁴⁴ Roger Bilstein, "Hobby Airport: Fifty Years of Flight," We Mean Business, 1987, p. 26.

⁴⁵ Letter by Gen'l. Walter Pyron, Chair of Aviation Committee, to Mayor Fonville and City Council, Aviation Committee Minutes, April 10, 1937.

⁴⁶ "The City Bond Issues," *The Houston Chronicle*, March 1, 1937, Sec. 1.

⁴⁷ "Houston's Future Growth," *Houston Post*, March 28, 1937, Sec. 1.

feet and widening to 150 feet, plus the addition of a new fourth runway capable of handling the largest planes then in use.⁴⁹ The airport was expanded to 655 acres with the purchase of additional land by the city.⁵⁰ The name of the airport was changed to Houston Municipal Airport.

A new, significantly larger administration building was needed, and on August 10, 1937, the city engaged the architecture firm of Joseph Finger, Inc. to design the terminal.⁵¹ According to Barry M. Moore, F.A.I.A.:

Finger's task was formidable, because in those days there were only about 10 other cities in the U.S. that actually had airports. Finger, who also designed our present City Hall, therefore had very few municipal airport 'precedents' to work from in designing the new terminal.⁵²

The result of Finger's work was magnificent. According to Michael Bludworth:

In many respects this is the most ornate and splendid piece of work by Finger easily being much more decorative and classy than his other civil works... It now stands as one of the most elegant, distinctive and accessible historic buildings in Houston. In the nation it stands as one of the very few classic terminals remaining from the Golden Age of Aviation.⁵³

The purchase of the field, plus the improvements to the grounds, drainage system, landing and boundary lights, and a new hangar utilized the majority of the \$500,0000 bond funds. There was optimism that the federal government would fund the construction of the terminal.⁵⁴ The estimate for the construction of Finger's design was \$175,000. Finger's blueprints were submitted to the chief engineers of Eastern Airlines and Braniff Airways who responded that the plans met the requirements of the highest principles of airport design; however, the project remained at a standstill since funds were not available.⁵⁵

An Army reserve officer, Lt. Louis E. Hobbs (1905-1967), was hired as the new airport manager in 1937.⁵⁶ Hobbs would serve in this position for three important years during the airport's growth and the construction of the terminal. The air traffic situation at Houston had become congested enough that by March 1938 that Acting Secretary of Commerce, J. M. Johnson, wrote to Mayor R. H. Fonville to inform him that air traffic at the Houston airport had increased to the point that without a radio equipped tower with a certified tower operator on duty, flight operations would have to be suspended when visibility was less than three miles.⁵⁷

On April 27, 1938, the Chamber of Commerce voted to request approval from the federal government for the commencement of airmail, passenger and express service between Houston and Brownsville. Braniff and Eastern would compete for this air mail route, and amid some controversy, Eastern won with a bid of zero cents.⁵⁸ Meanwhile

⁴⁹ "Ships Carrying 21 Passengers to Be Put on Run Here," *Houston Post*, May 14, 1937, Sec. 2.

⁵¹ Letter by Gen'l. Walter Pyron to the Aviation Committee, August 10, 1937.

⁴⁸ Resolution of Houston City Council, passed September 9, 1937, approved by Mayor Fonville, September 10, 1937. City of Houston Aviation Department Collection, RG.A.0005. Houston Metropolitan Research Center, Houston Public Library.

⁵⁰ "Airport Building's Completion Marks New Era for Houston," Houston Press, September 27, 1940.

⁵² David L. Coles, "Hobby Terminal nearly preserved," *IAH-HOU PEOPLE*, April 21, 1988.

⁵³ Michael Bludworth, email dated September 28, 2013 to the author and other undisclosed recipients.

⁵⁴ "Airport Problems," *Houston Post*, September 1, 1937

⁵⁵ "Design of Proposed Municipal Airport," *The Houston Chronicle*, September 10, 1937, Sec. 1.

⁵⁶ "Council Names Louis E. Hobbs Manager," *Houston Post,* September 10, 1937, Sec. 1.

⁵⁷ Letter dated March 8, 1938 by Acting Secretary of Commerce J. M. Johnson to Mayor R. H. Fonville. Houston Aviation

Department Collection, RG.A.0005. Houston Metropolitan Research Center, Houston Public Library.

⁵⁸ "U.S. Rules Zero Bid on Houston Airmail Legal," *Houston Post,* July 8, 1938, Sec. 1.

Eddie Rickenbacker continued to complain of the facilities and services at the Airport, and had visited with the mayor and the Aviation Committee in Houston to express his displeasure and the opinion that the monthly fee paid by Eastern for landing rights and the use of a hangar should not exceed \$150.⁵⁹

On May 10, 1938, Maj. General Walter B. Pyron, (4/10/1882 - 1/8/1951) Vice President of Gulf Oil Refining Company, and Chairman of the Aviation Committee of the Chamber of Commerce, wrote to Mayor R. H. Fonville:

Your committee thinks... that we should, in the near future, build an administration building, as both of the air lines entering here have inadequate space in the little office building, and, furthermore, the size and type of building is entirely inadequate and will not permit the proper handling of the business the port will have. The Council some months ago, I believe, appointed Mr. Finger architect for any building to be done, and I understand from him that a building which would be suitable would cost a minimum of \$85,000.00. In order to facilitate the handling of ships, to save the wear and tear on runways, to prevent danger of collision of ships on the runways, it will be necessary that about 6,000' of taxi strips be put in for the use of the ships in getting to and from the various runways. I estimate this will cost \$25,000.00, meaning that there should be an additional \$170,000.00 available for the construction of an administration building, one large hangar and the taxi strips. I think perhaps half this money can be gotten from the Government, because the Army, Navy and Coast Guard will be large users of the port. Your committee, within the next week, will submit a plan whereby we think this necessary construction can be done at a minimum cost to the city.⁶⁰

On July 14, 1938, Howard Hughes and his crew completed his record-setting flight around the world with his landing at Floyd Bennett Field in New York, beating the previous record by 3 days, 23 hours and 35 minutes.⁶¹ The reaction around the country was electric; the crowds at the ticker-tape parade in Manhattan enormous. Hughes was invited to see the President at the White House and another tickertape parade in Chicago awaited as he made his way towards his Houston hometown.

On July 21st, a Chamber of Commerce member suggested changing the name of the airport to Howard Hughes Airport.,⁶² There was some debate at city council, with Mayor Fonville pointing out that naming the airport for a living person might jeopardize federal funding, but within a week city council agreed to the change.⁶³ Hughes returned to Houston on July 31, 1938 and was greeted by a tumultuous crowd of over 25,000 at the Airport and along the route of the parade from the airport to the Rice Hotel downtown where a reception and dinner followed.⁶⁴ It wasn't long, however, before the federal government informed the mayor and city council that the Howard Hughes name would have to be dropped in order to retain a PWA grant for the construction of the terminal and other airport improvements. Federal funds could not be used for airports named after a living person. Architect Joseph Finger suggested the

⁵⁹ Memo by Rickenbacker to Eastern staff dated June 9, 1938. City of Houston Aviation Department Collection, RG.A.0005. Houston Metropolitan Research Center, Houston Public Library.

⁶⁰ In 1911 Pyron drilled the first over-water well for Gulf Oil Company in Caddo Lake, Louisiana. He became commander of the 56th Cavalry Brigade of the State of Texas during 1938. During WWII he was Chief for Operations, Fuel Section, Service of Supply, responsible for coordinating the total petroleum requirements of the Army – exclusive of the AAF – with the Office of Petroleum Coordinator, the Army-Navy Petroleum Board, and with other governmental agencies. Along with four other oilmen and their families, he was one of the original five owners of Cinco Ranch on the west side of Houston during the 1930s. Letter dated May 10, 1938, by W. B. Pyron, Chairman, Airport Committee to Honorable R. H. Fonville, Mayor of Houston. City of Houston Aviation Department Collection, RG.A.0005. Houston Metropolitan Research Center, Houston Public Library. ⁶¹ "Howard Hughes Completes Round the World Flight," *New York Daily News*, July 15, 1938.

⁶² "Strong Head Winds Suggest to Name Airport for Hughes," *Houston Post*, July 21, 1938, Sec. 2.

⁶³ "Council to Name Airport in Honor of Howard Hughes," *Houston Post*, July 27, 1938, Sec. 2.

⁶⁴ Houston Aviation, p. 67.

Council change the name of the airport back to Houston Municipal Airport in order to preserve the federal funding, and the ordinance passed.⁶⁵

On August 2, 1938, Joseph Finger and his associate, R. W. Leibsle, appeared before the City Council and reported that preliminary sketches for the planned improvements at the Airport had been approved by General Pyron, the airlines and the Post Office. They asked that Lt. Hobbs, Manager of Howard Hughes Airport, be instructed to study the drawings and make any recommendations he thought appropriate. A typewritten note at the base of the resulting Council resolution states:

"Mayor Fonville called Mr. Finger's attention to the fact that no payment would be made by the city for the work he is now doing, unless a PWA grant was secured and the work was done, and Mr. Finger agreed that he understood that arrangement."⁶⁶

The city council requested \$112,500 in PWA funding for the terminal, as well as a new hangar, expanded fencing and a taxiway, approximately 45% of the expected total cost.⁶⁷ The city had concerns about its ability to come up with the balance of \$125,000, for which city council planned to sell time warrants. Accordingly, some contracts were negotiated ahead of the fund raising in order to meet a December 31, 1938 deadline to retain the PWA funding.⁶⁸

Knutson Construction Company of Houston submitted the lowest bid for the construction of the terminal and other improvements of \$202,700.⁶⁹ A ground breaking ceremony took place on December 29, 1938, but construction of the terminal would not actually begin until April 10, 1939 due to delays in creating the time warrants.⁷⁰ The construction site was several hundred yards south of the original wood-frame administration building, which was intended to become class rooms and offices after the completion of the terminal.⁷¹ The interior of the terminal was designed by Finger with the specific needs of the several agencies that would be resident there. The ground floor would house a Post Office, the Civil Aeronautics Authority ("CAA") inspector's office, the airline's offices and their respective radio rooms, as well as a coffee shop. The mezzanine would be the site of the CAA radio system, the weather broadcasting bureau, and overnight sleeping accommodations for flight crews.⁷² The large hangar designed by Finger to accompany the terminal measured 150 by 174 feet and was positioned to the south of the terminal.⁷³

In April 1939, Finger's office received word that Eastern Air Lines' representatives had been suggesting changes to the arrangement of the ticket office, private offices and the radio rooms of the airlines that would occupy the ground floor when the terminal was completed. Any changes needed to be agreed upon at the earliest possible date, and Eastern was invited to participate in a meeting between the chair of the Aviation Committee, Hobbs, and Finger's personnel on April 13, 1939 for the purpose of "chrystalizing" (sic) the design.⁷⁴

⁶⁵ "Howard Hughes Name Junked for Aid," *Houston Post*, December 1, 1938, Sec. 1.

⁶⁶ Resolution of Houston City Council passed August 2, 1938, approved by Mayor Fonville August 5, 1938. City of Houston Aviation Department Collection, RG.A.0005. Houston Metropolitan Research Center, Houston Public Library.

⁶⁷ "PWA Airport Plea Approved," *July 21, 1938*

⁶⁸ "City Acts to Save \$112,500 PWA Cash For Airport Work," *Houston Post*, October 20, 1938, Sec. 1.

⁶⁹ "Council Receives Bids on Airport and Park Buildings," *Houston Post*, December 23, 1938, Sec. 1.

⁷⁰ Chamber of Commerce Aviation Committee Chairman's Report, March 15, 1939, p. 2.

⁷¹ "Fire Razes Old Headquarters At City Airport," *The Houston Chronicle*, April 10, 1941.

⁷² "First and Mezzanine Floor Plans & Details," Joseph Finger, Inc. Architects, 1938.

⁷³ "Municipal Airport Building to Start Monday," *Houston Post*, April 9, 1939, Sec. 1.

⁷⁴ Letter dated April 6, 1939 by R. W. Leibsle of Joseph Finger, Inc. Architects to Eastern Air Lines, Inc. City of Houston Aviation Department Collection, RG.A.0005. Houston Metropolitan Research Center, Houston Public Library.

Terminal construction was progressing, and R. W. Leibsle of Joseph Finger, Inc. wrote to Lt. Hobbs on November 7, 1939 to confirm their discussion concerning moving the control desk from the old Control Tower to the new: it would need to be hoisted "over the outside of the building to the Control Tower" and "necessary to leave a section of the steel windows loose to obtain sufficient clearance." Those windows were being installed by Knutson Construction Company at that time, and Hobbs needed to closely coordinate with them, and then ensure that the tower cab was "closed in and glazed immediately after the desk is placed, in order to protect it from the weather."⁷⁵

By April 10, 1940, the construction work at the Airport for the terminal, taxiways, aircraft parking ramps, parking lot, and improvements to field and boundary lighting had cost \$256,466.80, as per the summary reproduced below:⁷⁶

HOUSTON MUNICIPAL AIRPORT					
Summary of Construction Cost to date	April 10, 1940				
Contract No. 1 Knutson Construction Co. (Terminal) Architect's fee, Jos. Finger, Inc.	\$181,101.43 9,055.07				
Contract No. 2 Brown & Root, Inc. (runways, taxiways, parking Engineering and Testing materials	\$ 48,000.00 3,000.00				
Contract No. 3 Caywood Electric Company Engineering Addition to Contract No. 3 for lighting fixtures		\$ 12,310.00 500.00 2,500.00			
Public Works Administration Grant City of Houston Funds	\$119,045.00 <u>\$145,500.00</u>				
Total funds available -	\$264,545.00				
Approximate total cost of improvements <u>\$256,46</u>					
Apparent surplus	\$ 8,078.50"				

In anticipation of the terminal's completion, the city leased space on the ground floor of the north wing to Braniff Airways and Eastern Air Lines for ticket counters, reservation and scheduling offices, and radio rooms. The city also leased space on the third floor to the CAA for an Airway Communication Station, as well as office space for the Aeronautical Inspection, General Inspection Section, of the CAA.⁷⁷ Space was also leased to the Weather Bureau, Department of Agriculture for offices, instruments and a weather balloon room.

⁷⁵ Letter dated November 7, 1939 by R. W. Leibsle of Joseph Finger, Inc. Architects to Lieutenant Louis Hobbs, Manager, Municipal Airport. City of Houston Aviation Department Collection, RG.A.0005. Houston Metropolitan Research Center, Houston Public Library.

⁷⁶ "Summary of Construction Cost to date," April 10, 1940. City of Houston Aviation Department Collection, RG.A.0005. Houston Metropolitan Research Center, Houston Public Library.

⁷⁷ Letter dated July 10, 1940 by M. H. Westermon, Assistant City Attorney to Commissioner Phil Hamburger. Aviation Department Collection.

The terminal was completed on July 27, 1940, and by then, the tower cab had already been in operation for a week, with 630 takeoffs and landings on its first day, July 20, 1940.⁷⁸ The tower crew initially used a light gun to communicate with planes. It would be several weeks later before two-way radio communication capability was installed in the tower cab.⁷⁹ By August, the airport was considered one of the busiest in the United States. In its first week, the control tower monitored 3,631 landings and takeoffs. Houston Municipal Airport was more active than the new New York's La Guardia Field (1,988), or the airports at Kansas City (1,771) or Washington, D.C. (2,088) during the same week.⁸⁰

Eastern continued to fulminate on the need for hard surfaced runways at Houston that would be capable of handling Eastern's larger aircraft. On August 15th, A. E. Blomquist, Airport Engineer for Eastern Air Lines, Inc. sent to Mayor Holcombe a report titled *Surfacing of Runways for the Houston Municipal Airport*. Despite Holcombe's hopeful reply, the runways in front of the terminal would still be paved with shell a year later.⁸¹

The terminal was dedicated in a well-attended celebration on Saturday, September 28, 1940. The open house began at 1:30 and the formal dedication began at 4 p.m. Bishop Clinton S. Quin delivered the invocation, and Mayor Oscar Holcombe and Brigadier General Walter B. Pyron addressed the assembled throng.⁸² Transcontinental and Western Air Lines, though only having offices but not service to the city, sent a 30-passenger four engine plane, and Braniff Airways sent a 21-passenger Douglas Super B-Liner. Both provided courtesy flights to dignitaries and lucky winners of a drawing.⁸³ T. E. Braniff spoke of the terminal, proclaiming "It is more than a building. It is a symbol of the spirit that made Houston one of the fastest growing cities in the country."⁸⁴ It was loaded with modern features, like the paved concrete boarding apron; the overnight quarters for airline crews; a radio room; lighted tower; a modern weather station and more. While some complained that the airport was too far from downtown, its location would continue to be of benefit for decades to come.

The *Houston Press* reported that with the new terminal and accompanying hangar, the public's investment in aviation had "elevated Houston's municipal airport to a position of importance among the air terminals of the nation. The *Press* reported that:

Out of the \$500,000 bond issue voted, \$150,000 went for the purchase of the airport, plus additional acreage enlarging it to 655 acres. A WPA (actually PWA) project was secured for the grading, draining and establishing adequate runways. Another \$50,000 was spent for a new and efficient lighting system. The balance was spent for buildings.⁸⁵

Continued Improvements at the Airport

The city would come to regret the selection of Knutson Construction Company to build the terminal. An inspection of the terminal and its companion hangar following a heavy rain revealed that the roofs leaked in several places and the roof of the terminal's tower cab did not even connect with its side wall on the west side. Public Utility Engineer F. N.

⁷⁸ "City May Ask Aid of W.P.A. in Fixing Roads at Airport," *Houston Post*, July 27, 1940, Sec. 1.

⁷⁹ "Control Tower Service Inaugurated at Municipal Airport," *Houston Chronicle*, July 20, 1940.

⁸⁰ "City Airport, with Student Aid, One of Busiest in U.S.," Houston Post, August 14, 1940, Sec. 2.

⁸¹ Memo dated September 10, 1941 by Duncan Neblett, City Secretary, to John Turney, informing him that McGuire had requested "200 yards of mudshell for repairs necessary in front of the Administration Building of the Municipal Airport." Aviation Department Collection.

⁸² "Airport Building's Completion Marks New Era for Houston," Houston Press, September 27, 1940.

⁸³ "2 Big Airliners Will Fly Here for Airport Ceremony," *Houston Post*, September 25, 1940, Sec. 1.

⁸⁴ "Houston Airport Called Vital U.S. Defense Link," *Houston Post*, September 26, 1940, Sec. 1.

⁸⁵ "Airport Building's Completion Marks New Era for Houston," Houston Press, September 27, 1940.

Baldwin noted that the leaks were caused by poor workmanship, and Knutson did not quickly remedy the situation, the city would have the work performed and make a claim against Knutson's surety.⁸⁶ Ten months later the roof in the new hangar would still leak in numerous places in the lean-to shop space.⁸⁷

The shell-paved runways were inadequate for both civilian airliners and the heaviest military bombers, and by December 1940, Col. Donald H. Connolly, the administrator of the CAA in Washington, announced \$297,000 in improvements to the airport had been approved under a \$40 million national defense civil aviation program. Local officials said that the work to be undertaken at the airport would "make it one of the finest in the nation," meeting a Class 4 airport designation.⁸⁸ Hard surfacing of the north-south runway was the first to be undertaken. Upon completion in August 1940, the northwest-southeast and the east-west runways were closed to traffic for hard-surfacing.⁸⁹ In September, Congress approved over \$400,000 for additional paving, grading, drainage, lighting, sodding and fencing of the field, with the work to be conducted over three years.⁹⁰

Airport Manager J. S. McGuire advised Tilford Jones, Chairman of the Houston Municipal Airport Committee, that the CAA would be taking over all control towers in the country "sooner or later," and thought it imperative to get the CAA to take over the tower atop the terminal immediately. McGuire's tower payroll was over \$500 per month, and he could see this number increasing in the coming months. As usual, the roofs were leaking, particularly the shop space in the lean-to of Hangar 7, and the tenants were insisting that repairs be made.⁹¹

Maintenance and repairs at the airport continued to present a problem in 1943. In April, the three station managers for Braniff, Chicago & Southern, and Eastern requested the installation of screens in their terminal office windows to keep out mosquitoes and other insects.⁹² W. M. Rogers, Station Manager for Eastern Air Lines, said that dealing with the "tremendous volume of insects" was "particularly disagreeable in view of the number of women personnel, although supposedly doing a man's job it is impossible to expect them to work under some of the same crude conditions."⁹³ The city had trouble finding the money to make repairs it was contractually obligated to make.⁹⁴ Alongside repairing leaky roofs, the city had also promised the airlines to improve the lighting on the ramp in front of the terminal and installing fences to separate the public from the passengers. John Busselle, Station Manager for Braniff Airways, pointed out near accidents as passengers "grope(d) their way off our aircraft" in semi-darkness, instances where airmail and cargo had been placed on the wrong flights because poor lighting made it difficult to read addresses

⁸⁶ Letter dated November 13, 1940, by F. M. Baldwin, Public Utility Engineer, City of Houston, to Knutson Construction Company

⁸⁷ Letter dated September 19, 1941 by J. S. McQuire, Airport Manager to Tilford Jones, Chairman, Houston Municipal Airport Committee. Aviation Department Collection.

⁸⁸ Staff Correspondent, "200 PROJECTS ANNOUNCED IN ALL OF NATION," *Houston Chronicle*, December 12, 1940.

⁸⁹ Bulletin dated August 27, 1941 by James C. Deal, Jr., 2nd Lieut. Corps of Engineers, Officer in Charge, U.S. War Department,

U.S. Engineering Field Office, Municipal Airport, to C.A.A. Radio, Control Tower, Airport Manager, Braniff Airways, Eastern Airlines, Chicago & Southern, and Russ Mitchell, Inc. Aviation Department Collection.

⁹⁰ "\$408,076 for Houston Included in Federal Airport Work Program," *Houston Post*, September29, 1941, Sec. 1.

⁹¹ Letter dated September 19, 1941 by J. S. McGuire, Manager, Municipal Airport, to Tilford Jones, Chairman, Houston Municipal Airport Committee. Aviation Department Collection.

⁹² Letter dated April 13, 1943 by Paul B. Koonce, Acting Manager, to John G. Turney, Director of Public Works. Aviation Department Collection.

⁹³ Letter dated April 8, 1943 by W. M. Rogers, Station Manager, Eastern Air Lines, to Paul Koonce, Airport Manager, Municipal Airport. Aviation Department Collection.

⁹⁴ Letter dated June 17, 1943 by J. G. Turney, Director of Public Works to John N. Edy, City Manager. Aviation Department Collection. Turney needed \$17,688 to perform the work, but only \$4,000 was available. Edy, in a hand-written note at the bottom of Turney's letter, says "Ask JT how to spend 4000 to best advantage."

correctly, and the difficulty of adding gasoline and oil to their planes in the darkness.⁹⁵ Jack Brough, Superintendent of Operations for Braniff Airways in Dallas added his voice to the chorus when he complained about mail that had been misdirected on the ramp due to the poor lighting conditions.⁹⁶

Despite the work to repair the roof of the terminal, during heavy rains water entered the third floor Weather Bureau's record room and the Chief Air Traffic Controller's offices. Water leaked into the tower cab and around the East door to the third floor balcony. Hangars 5, 6 and 7 leaked so badly that Aviation Enterprises and Braniff had to stop work in those spaces.⁹⁷ The CAA complained to the airport manager Paul Koonce in December 1943 that the heating in the tower cab was inadequate. Even though the city supplied the tower with an electrical heater and a gas fired steam heater, the gas pressure was very low at that height, and there was a "constant current of air circulating through the stairwell leading to the tower."⁹⁸

Air travel was expanding rapidly. In February 1944, the airport was handling 20 scheduled airline flights each day. The total number of passengers through the Airport for the year was 85,167.⁹⁹ Six months later, the Airport had 30 scheduled arrivals and departures each day and the number of passengers for the month of August was 8,825, or an average of over 280 per day.¹⁰⁰ There was so little available room in the terminal that International Aircraft Sales Co. applied to occupy just 11 feet by 12 feet of the northeast corner of the mezzanine, setting up a counter and desk there to offer charter air travel services as Great Southern Airways.¹⁰¹

In January 1946 the CAA was ready to install two new Very High Frequency ("VHF") transmitting and receiving channel radios, but there was no place to install the new radio equipment in the already overcrowded tower cab. The Chief Airport Traffic Controller's office just below the tower was also overcrowded, since some of the present tower radio equipment was installed in his office.

Mayor Otis Massey had appointed a committee in November 1945 to study the growth in demand for air travel and the steps that Houston should take to "reap benefits from the tremendous expansion which is expected." The committee's report of April 4, 1946, noted that "the present airport has reached the saturation point insofar as terminal facilities, parking ramps, and hangars are concerned..." The creation of a comprehensive plan was recommended so as to position Houston to take federal funds that might become available and included a new terminal capable of handling the increased passenger traffic.¹⁰²

⁹⁵ Letter dated September 6, 1943 by John Busselle, Station Manager, Braniff Airways, to Paul Koonce, Airport Manager. Aviation Department Collection.

⁹⁶ Letter dated September 11, 1943 by Jack Brough, Superintendent of Operations for Braniff Airways to Paul Koonce, Airport Manager, Municipal Airport. Aviation Department Collection.

 ⁹⁷ Letter dated November 3, 1943 by Paul. B. Koonce, Supt., Airport Division to J. W. Nagle, Director, Department of Utilities. City of Houston Aviation Department Collection, RG.A.0005. Houston Metropolitan Research Center, Houston Public Library.
⁹⁸ Letter dated December 6, 1943 by Paul B. Koonce to J. M. Nagle, Director, Utilities Department. Aviation Department Collection.

⁹⁹ Letter dated February 13, 1945 by Paul B. Koonce, Superintendent, Houston Municipal Airport to C. W. Thurston, Director of Records, Dallas Chamber of Commerce. City of Houston Aviation Department Collection, RG.A.0005. Houston Metropolitan Research Center, Houston Public Library.

¹⁰⁰ Letter dated September 21, 1944 by Paul B. Koonce, Superintendent, to Major Roland Laird, Chamber of Commerce. Aviation Department Collection.

¹⁰¹ Undated letter by Jack H. Halfen, International Aircraft Sales Co. to J. M. Nagle, Director of Public Utilities. Aviation Department Collection.

¹⁰² Committee Report dated April 4, 1946 to Honorable Otis Massey, Mayor, City of Houston. Aviation Department Collection.

In July 1946, Mayor Massey asked the city council to "pass an ordinance appropriating the sum of \$50,000 out of the airport bond fund to pay for the cost of constructing a building at the Municipal Airport to handle international passengers."¹⁰³ This structure would be attached to the terminal across the entire west façade of the south wing, forming an "L" shape. The resulting plain, flat-roofed box, housed a waiting room for outgoing passengers, Braniff and Pan American Airways counters, Pan Am teletype room, an FAA crew room, and an FAA port steward's office.

For incoming passengers, there were two U.S. public health clearance rooms with a quarantine antechamber, a waiting room, customs and immigration counters and a baggage inspection counter.¹⁰⁴ The addition of the international wing necessitated the removal of the coffee shop and kitchen in the terminal to a free-standing building placed in the parking lot opposite the north wing of the west façade of the terminal. A ticket counter for Chicago & Southern Airways replaced the lunch counter, and a barbershop took up a portion of the space previously occupied by the kitchen.¹⁰⁵ The international wing opened in December 1946 and served as the international gateway to Houston until 1954 when a new terminal opened on the north side of the airport.¹⁰⁶

The astonishingly rapid growth in aviation and overcrowding of the terminal and airport facilities would continue to push the city to consider building a larger airport terminal. Representative Albert Thomas and CAA administrator Delos W. Rentzel announced in December 1949 that the CAA would match local funds with approximately \$4,000,000 for construction of a new and bigger airport. In 1949 the city again engaged the architectural firm of Joseph Finger Inc. to design a fourth floor to be added to the terminal. The original bird-cage style tower cab was removed along with the copper hipped roof. The fourth floor, identical in shape to the third floor but without the stubby rounded wings to the north and south sides, was added. The roof was replaced in the same style and materials as the original, and maintained its original lines, and a new, larger, more modern tower cab with outward canted windows of plate glass providing improved visibility was installed atop the replaced hipped roof. The work was completed in 1950.

By 1953, the continued growth in air traffic was such, and facilities at the Airport so cramped, that Trans-Texas Airways contemplated leaving the city and taking its 400 employees and \$1,500,000 payroll with it. Practically all of the tenants at the airport complained of the lack of space. J. D. Reed, who had been at the airport nearly from the beginning in 1927, and had a significant business there, said caustically, "The Houston airport is the laughing stock of the nation."¹⁰⁷ The city had by then already decided to construct a new, more modern facility on the north side of the Airport. The firm of Wyatt C. Hedrick was engaged to design the building, and construction was completed by 1954, with the grand opening in early November. That year, the airport's name was changed from Houston Municipal to Houston International Airport.¹⁰⁸ With the airlines and passengers moving to the new terminal on the north side of the Airport in 1954, the terminal's status as the gateway to Houston for air travelers came to an end. Only the control tower at the old Terminal would continue in operation as before, and the offices, ticket counters and radio rooms of the airlines would be given over to administrative offices, flying services, fixed base operators, charter services, aircraft salesmen, and for a time, the Military Airlift Command.

¹⁰³ Memo from Mayor Otis Massey to the Honorable City Council, July 3, 1946. City of Houston Aviation Department Collection, RG.A.0005. Houston Metropolitan Research Center, Houston Public Library.

¹⁰⁴ Floor Plan, International Wing, Houston Municipal Airport. Handwritten notation indicates June 2, 1946. City of Houston Aviation Department Collection, RG.A.0005. Houston Metropolitan Research Center, Houston Public Library.

¹⁰⁵ Floor Plan, Modifications to Houston Municipal Airport Administration Building, undated. City of Houston Aviation Department Collection, RG.A.0005. Houston Metropolitan Research Center, Houston Public Library.

¹⁰⁶ Students of the University of Houston under the guidance of Dr. Rinaldo A. Petrini, Ph.D., AIA, *The Houston Municipal Airport: A Nomination to the National Register of Historic Places.* May 12, 1983. Apparently never filed with the NRHP. Machine copy in the Collection of The 1940 Air Terminal Museum.

¹⁰⁷ *Ibid.* Remembering the good times before the terminal became overcrowded, during a 1978 interview Reed would speak rhapsodically of the terminal.

¹⁰⁸ Jeffry S. Kelly, "Aviation relic on standby," *The Houston Post*, April 11, 1986.

The Terminal Building after 1954

The tower atop the terminal would continue to serve the Airport for air traffic control duties until 1975, and the last two tenants – Lori's Flight School and Gulf Coast Helicopters – would remain in the building until evicted by the city effective September 15, 1978.¹⁰⁹ In 1978, Hobby Airport Manager James DeLong and Acting Aviation Director Bill Brackley developed plans to tear down the terminal and combine the land on which it sits with the block of land to the west across Travelair Street to become either general aviation facilities in the form of maintenance or office space, or commercial airline maintenance space. Fortunately, there were a few people who believed that the terminal was "an important link to Houston's aviation past, the site of important arrivals and celebrated departures" before newer facilities took its place. Among these people with a sense of history was J. D. Reed, the 71-year old airplane salesman and flying service owner who had had offices in the terminal in its prime. Reed remembered the terminal as "a real showplace back then." He believed that the terminal could reclaim its former glory. Fortunately, following significant public outcry, DeLong and Brackley would be overruled, and the building would be saved from the wrecking ball that had destroyed so much of Houston's built heritage to that time.¹¹⁰

Roland W. Howard, a real estate developer, joined the effort to try to save the terminal. He believed that it could become an aviation museum and a "centerpiece for aviation-related development." Howard believed that popular nostalgia for aviation history could ensure the success of an aviation museum in the terminal. He thought that between a museum, the Johnson Space Center and the Goodyear blimp operations, Houston could emphasize its leading role in aerospace operations.

Joseph S. Finger, the son of Joseph Finger and a nationally prominent golf course designer, believed that restoration of the terminal could prove a catalyst for "positive community action." Finger said that: "Houston is fortunate to have one of the last intact 1930s air terminals in the nation, and with the Texas Sesquicentennial celebrations refreshing interest in the state's heritage, the restoration of this pioneer aviation gateway could serve as part of Houston's contribution." Finger believed that the "demolition of the ill-designed 'international wing' would return the terminal to its original architectural balance and add space for parking at the same time.¹¹¹

Restoration of the terminal was enthusiastically supported by members of the city council, including Frank Mancuso and Eleanor Tinsley. The terminal was situated in Mancuso's district. He said that "The building strongly deserves preservation," and that "It is a tremendous waste to let it stand empty and deteriorate." Tinsley said that, "An aviation museum would be a fine idea, one whose time has come."¹¹² Paul B. Gaines, who had become director of the Houston Aviation Department in 1982, said that the "restoration of the building as a historic entity should be the paramount concern, rather than the structure's potential as a money maker. We don't intend to tear the building down. It's part of our heritage as a city."¹¹³

In 1986, Continental Airlines announced it would once again serve the Airport with six flights per day. Phil Bakes, president of Continental, held a news conference to announce the decision in front of the unused and dilapidated terminal. Bakes stated that Continental would make a cash donation for every customer who boarded a Continental flight at the airport during its first seven months of service. The ultimate donation was anticipated to be in the range of \$250,000. Joseph S. Finger applauded the move:

- ¹¹² *Ibid*.
- ¹¹³ *Ibid*.

¹⁰⁹ Terry Kliewer, "Old facility called white elephant," *Houston Post*, September 5, 1978.

¹¹¹ Ibid.

¹¹¹ *Ibid*.

Continental's decision to launch a fundraising program to fund the restoration of the original permanent administration building at Hobby Airport should serve as a rallying point and a catalyst for other civic-minded companies and individuals to preserve priceless heritages for the enjoyment of present and future citizens.¹¹⁴

Though Continental was able to raise enough money only to repain the exterior of the terminal,¹¹⁵ the airline would subsequently be a strong supporter of the building's restoration.

In 1988, the City Aviation Department conducted its restoration work, removing the international wing, returning the west façade of the terminal to its original appearance, and stabilizing the building. This work received the Greater Houston Preservation Alliance's Good Brick Award on January 19, 1989. The award was presented by the president of the alliance, Barrie Scardino, to the Aviation Department's assistant director of aviation for planning and programming, James Sartain. Department spokesman Bill Ainsworth said that the city "spent \$300,000 to weatherproof and stabilize the building, and we are now earmarking another \$750,000 to restore the old terminal to utility and public access."¹¹⁶

In 1998, aviation heritage enthusiasts and architectural preservationists came together to form the nonprofit Houston Aeronautical Heritage Society, Inc. HAHS obtained a lease of the terminal from the City of Houston in 2003 and began its Phase I restoration of the north wing of the building. In February 2004, the north wing was opened to the public as The 1940 Air Terminal Museum. Phase II began in 2008 and was completed in 2009, when the entirety of the ground floor of the terminal was opened to the public. HAHS is laying the groundwork now for the Phase III restoration that will complete the restoration of the upper floors of the building.

On August 3, 2001, the Texas Historical Commission determined that the terminal was eligible for a listing in the National Register of Historic Places. On February 2, 2006, the City of Houston Archeological & Historical Commission designated the terminal as a Protected Landmark. The American Institute of Aeronautics and Astronautics ("AIAA") Historic Aerospace Sites Committee designated the terminal as its 35th Historic Aerospace Site on April 18, 2009.¹¹⁷ Howard Hill, the architect who worked with HAHS on the restoration, commented about Houston's penchant for destroying its built heritage when he said this about the survival of the terminal:

It never fails to amaze me that this is the case in *this* city of all cities. Other cities built on or over their old terminals. In Houston, they just dropped the old and moved on to the new. It was just easier to build a new one (on the other side of the field). That's the reason this building is still here.¹¹⁸

Criterion C: Art Deco and Streamline Moderne

The Houston Municipal Terminal is a rare surviving example of Streamline Moderne airport architecture, rarer still that it remains in its original site, facing active taxiways and runways on an operating airport serving commercial airline traffic, as it was intended. Many contemporary modernistic airport terminals around the United States have

¹¹⁴ Tom Scott, "Continental to reinstate Hobby flights," *Houston Chronicle*, April 30, 1986, Sec. 3, p. 1, p. 4. Joseph S. Finger went on to say that the streamline moderne Terminal was one of his father's "most cherished works."

¹¹⁵ Protected Landmark Designation Report, 1940 Houston Municipal Airport Terminal, p. 3, hearing date February 2, 2006, Archeological & Historical Commission, Planning and Development Department, City of Houston.

¹¹⁶ Leslie Loddeke, "Terminal earns its wings," *The Houston Post*, January 20, 1989. However, the \$750,000 in earmarked funds do not appear to have been actually spent on the terminal.

¹¹⁷ "2009 Dedicated Historic Sites," on the website of AIAA, <u>https://www.aiaa.org/HistoricAerospaceSites/</u>, last accessed June 7, 2017.

¹¹⁸ Damond Benningfield, "Flying First-Class." Texas Highways, July 2006.

either been demolished (Meacham Field, Ft. Worth, Texas; Washington Airport, Wash., D.C.; Imeson Field, Jacksonville, Florida; Baltimore Airport, Baltimore, Maryland; Great Falls International, Great Falls, Montana; Greater Pittsburgh Airport, Allegheny, Pennsylvania; Nashville International, Nashville, Tennessee, etc.), moved to another site at the airport (Newark Liberty Airport, Newark, New Jersey; Manchester Airport, Manchester, New Hampshire), or the building has survived but the airport that the terminal served has ceased to exist (Grand Central Terminal, Glendale Airport, Los Angeles; Wichita Municipal Airport, Wichita, Kansas; Pan American flying boat terminal, Miami, Florida), or the airport still exists, but the context of scheduled commercial airline service and its passengers has moved to another airport (Lunken Field, Cincinnati, Ohio; Shushan (Lakefront) Airport, New Orleans, Louisiana). The terminal is completely authentic in its context, and has a high degree of integrity of location, feeling, setting and association.

The integrity of setting is enhanced by the presence nearby of aircraft hangars and maintenance workspaces that were present during the terminal's heyday. Among these, the original art deco hangar designed by Joseph Finger and constructed at the same time to accompany the terminal is near the building and still occupied by the successor to the airline to whom it was originally leased in the 1940s. The integrity of association has been maintained by the utilization of the renovated Terminal as an aviation museum featuring the history and artifacts of the airlines that used the building from 1940 to 1954, and by the continued hosting of aeronautical aids to navigation in the form of the ADS-B antenna and transmitters. The high level of integrity of feeling, workmanship, design and materials has been maintained by the careful series of interior and exterior restoration efforts undertaken by the city and by HAHS.

Professionals in a variety of disciplines believe the terminal to be nationally significant and the best extant example of its type. Oliver James, a student of the flow of people through physical space, says, "The best surviving early airport terminal is the 1940 Houston Municipal Airport."¹¹⁹ David Gebhard, writing in his book, *The National Trust Guide to Art Deco in America*, says, "One of the few that have survived...this terminal offers a rare glimpse of what a late 1930s airport was like."¹²⁰ Architect Howard Hill puts it succinctly: "This is the best example of 1930s air terminal architecture left in the United States."¹²¹

The term "Art Deco" did not come into use until the 1960s, deriving from a retrospective of design and architecture of the 1920s and 1930s that owe their origin to the 1925 Paris *Exposition Internationale des Arts Décoratifs et Industriels Modernes*. The exposition was widely publicized and the taste for Art Deco style in the arts and architecture spread throughout the United States.¹²² Art Deco is the antecedent of Streamline Moderne. The event that separates high Art Deco from Streamline Moderne is the Wall Street Crash of 1929. Prior to that, the exuberance of the Jazz Age was exemplified in high Art Deco architecture by vertical skyscrapers with ziggurat motifs, setbacks, geometric ornamentation, sunrise patterns, the use of expensive materials, and the rich use of ornament in public interiors with accompanying murals.¹²³ Afterward, the excesses of the 1920s gave way to the austerity of the 1930s, during which the City of Houston at least briefly turned off its street lights due to the lack of public funds to pay for the electricity.¹²⁴ Streamline Moderne architecture in the 1930s began to emphasize "simpler, aerodynamic lines and forms" and the use

¹²² Hänsel Hernández-Navarro, "Art Deco & Art Moderne (Streamline Moderne): 1920-1945", on the website of *Circa*, found at <u>http://circaoldhouses.com/art-deco-art-moderne/#</u>, last accessed March 13, 2017.

¹¹⁹ Oliver James, "The Evolution of Airport Design", found online at <u>https://www.linkedin.com/pulse/evolution-airport=design-oliver-james?articleId=62271473</u>... Last accessed March 21, 2017.

¹²⁰ Gebhard, David. The National Trust Guide to Art Deco in America, 1996.

¹²¹ Damond Benningfield, "Flying First-Class." *Texas Highways*, July 2006, pp. 52-56. Found online at <u>https://texashighways.com/travel/item/1664-flying-first-class-houston-s-1940-air-terminal-museum</u>.

¹²³ Hänsel Hernández-Navarro, "Art Deco & Art Moderne (Streamline Moderne): 1920-1945", on the website of *Circa*, found at <u>http://circaoldhouses.com/art-deco-art-moderne/#</u>, last accessed March 13, 2017.

¹²⁴ The Texas State Historical Association, "Holcombe, Oscar Fitzallen," *The Handbook of Texas Online*, on the website at <u>https://tshaonline.org/handbook/online/articles/fho21</u>, last accessed June 4, 2017.

of "smooth surfaces, curved corners" and horizontal lines that mimicked movement, the flow of air, and symbolized industrial progress.¹²⁵ Rich ornamentation with expensive materials was replaced with the use of simpler, less expensive and utilitarian machine-made materials such as aluminum and linoleum. Joseph Finger's career spanned both decades, and he produced both high Art Deco and Streamline Moderne civic and corporate structures in Houston and the region.¹²⁶

There are references to "WPA Modern" architecture with respect to contemporary modernistic airport terminals,¹²⁷ but it was the Public Works Administration ("PWA") funding that would play a role in large-scale public construction projects such as the development of the Airport. David Gebhard wrote that:

From the mid-1930s to the end of the decade the PWA sponsored the design and construction of several new airport terminals throughout the country. Befitting their commitment to the airplane, most of these terminals and hangars were Moderne in design, and most of them adopted a Streamline Moderne image. With rare exception, these terminals were superseded by larger facilities in the years after World War II... this Houston airport... remains primarily because a new municipal airport (terminal) was built in an entirely different location (on the same airfield).¹²⁸

Beginning in the 1920s the design and construction of airports and the structures upon them opened up as an entirely new field of endeavor for architects, designers, and engineers. There were initially no standards for the design and layout of airfields. Numerous airports sprang up around the country that would eventually become obsolete and close, either because of insufficient landing space without obstructions, or the inability of the ground to handle newer, heavier planes. In many cases, structures built to handle passengers were originally wooden shacks constructed without a thought to passenger flow or comfort. As the decade progressed, opinions began to be formed concerning what worked and what didn't. As experience was gained, efforts were made during the 1920s and 1930s to share knowledge and best practices through government bulletins, books and periodic literature.¹²⁹ During the fifteen years between 1922 and 1937, more than 230 articles on the subjects of airport buildings, construction and design appeared in general, professional and trade periodicals.¹³⁰

The pervasiveness of articles on the subjects of airport buildings, construction and design in the fifteen years leading up to Finger's selection as architect for the terminal in August 1937 means that it would have been unlikely for him not to have been influenced to some degree by the literature. Among the literature that might have had an influence on Finger, one publication in particular stands out, *American Airport Designs*.

¹²⁵¹²⁵ David Ryan, "The American Moderne: 1920-1940," on the website of the Minneapolis Institute of Arts, <u>http://archive.artsmia.org/modernism/e_AM.html</u>, last accessed March 13, 2017.

¹²⁶ The Texas State Historical Association, "Finger, Joseph," *The Handbook of Texas Online*, on the website at https://tshaonline.org/handbook/online/articles/fho21, last accessed June 4, 2017.

¹²⁷ For example, Alastair Gordon, *Naked Airport: A Cultural History of the World's Most Revolutionary Structure* (New York: Henry Holt and Company, LLC, 2004), p. 102. Gordon, a fan of the International-style airport, dismisses the terminal and those of Cleveland and Detroit as having "the deco streamlined look of so much Depression architecture..." with a "squat profile" that "might have been mistaken for high schools or post offices..." in "a style that some referred to as "WPA Modern."¹²⁷

¹²⁸ David Gebhard, The National Trust Guide to Art Deco in America (New York: John Wiley & Sons, 1996), p. 187.

 ¹²⁹ Deborah G. Douglas, "Who Designs Airports... Engineers, Architects, or City Planners? Aspects of American Airport Design Before World War II," in P. Galison and A. Roland, eds. *Atmospheric Flight in the Twentieth Century*, pp. 301-322. Archimedes (*New Studies in the History and Philosophy of Science and Technology*), vol. 3. (Dordrecht: Kluwer Academic Publishers, 2000).
¹³⁰ U.S. Works Progress Administration, *Bibliography of Aeronautics, Part 37 – Airports* (New York City: U.S. Works Progress Administration, 1937).

It is not known whether Finger took notice of it or not, but something of a guidebook did exist in the form of a slim volume titled *American Airport Designs*, which was published for the Lehigh Portland Cement Company in 1930. In 1928, Lehigh had conceived and sponsored the first Lehigh Airports Competition with the goal to "stimulate airport development, create standards to guide future work…to encourage the establishment of permanent structures and facilities and to plan for the future." *American Airport Designs* published the designs of the prize winning and honorable mention designs, which were predominantly art deco and streamline moderne.¹³¹ Several of the designs included in the book featured a balanced design of a central tower flanked by symmetrical wings, and in that respect at least superficially resemble the terminal.¹³²

Architect Joseph Finger (1887-1953)¹³³

Born in Austria, Joseph Finger was educated in Bielitz, immigrated to the U.S in 1905, and settled in Houston in 1908. He arrived in Houston in 1908 "with a cancelled railway ticket, \$10 in his purse and looking for a job."¹³⁴ A versatile and prolific architect, Finger is perhaps best known for his design of office, hotel, retail, and industrial buildings. Early in his career. Finger had designed the Panama Hotel (1912-13), the 11-story American National Insurance Company Building (1912-1913; demolished), and the Model Laundry Building (1913; Galveston Central Business District, National Register, 1984), all in Galveston. The American National Building was designed for W.L. Moody, Jr., the brother-in-law of Sealy Hutchings. In 1923, Finger also designed the Broadmoor Apartments in Galveston for Moody. By 1929 Finger's Houston commissions included the Bender Hotel, South Texas Commercial National Bank, First Church of Christ, Scientist, the Plaza Hotel, Auditorium Hotel, and William Penn Hotel. Other notable works include the American National Insurance Building of Galveston, the 10-story Charleston Hotel in lake Charles, LA, and the Vaughan Hotel in Port Arthur. His residential work included the James Marion West mansion in Clear Lake, about 25 miles south of downtown Houston.¹³⁵

Finger was one of the first architects in Houston to experiment with the stark, abstracted, and stylized forms of modemistic architecture, beginning with his Congregation Beth Israel Temple (1924; NRHP 1984). During the 1920s, he produced Houston masterpieces of what the historian David Gebhard has termed the zig-zag phase of modemistic design with the Houston Turn-Verein clubhouse (1929; NRHP 1978; demolished), the A.C. Burton Company auto agency (1929, demolished), and the interiors of the West Ranch House at Clear Lake (1930; NRHP 1994). Beginning in 1930 with the design of the Houston Paper Company Building (1930, demolished). Finger began to produce a more restrained version of modemistic design that Gebhard designates as stripped classical. The Temple of Rest at Beth

¹³³ Handbook of Texas Online, Stephen Fox, "Finger, Joseph," accessed July 27, 2018,

¹³¹ The book included an introduction by Clarence M. Young, Assistant Secretary of Commerce for Aviation, and analysis of the designs by Archibald Black. Lehigh Portland Cement Company, *American Airport Designs* (New York: Taylor, Rogers & Bliss, Incorporated, 1930).

¹³² However, Deborah G. Douglas, curator of science and technology at the MIT Museum, doesn't think that the Portland competition particularly influenced airport designs, saying, "A review of articles about airport design in architectural and engineering publications of the 1930s shows no evidence that either architects or engineers who were actually designing airports borrowed any ideas from designs entered in the competition." Deborah G. Douglas, "Who Designs Airports... Engineers, Architects, or City Planners? Aspects of American Airport Design Before World War II," in P. Galison and A. Roland, eds. *Atmospheric Flight in the Twentieth Century*, pp. 301-322. Archimedes (*New Studies in the History and Philosophy of Science and Technology*), vol. 3. (Dordrecht: Kluwer Academic Publishers, 2000).

http://www.tshaonline.org/handbook/online/articles/ffi37. Uploaded on June 12, 2010. Modified on April 13, 2018.; "Clarke and Courts, Houston, Harris County, Texas," National Register nomination (1994); "Texas State Hotel, Houston, Harris County, Texas," National Register nomination (2007).

¹³⁴ Houston Chronicle, 29 December 1929.

¹³⁵ Ibid.

Israel Cemetery (1935), the Montgomery County Courthouse in Conroe (1936; extensively altered), Houston City Hall (1939, National Register, 1990), and the Houston Municipal Airport Terminal (1940) are examples by Finger of this phase. Finger died on February 6, 1953. At the time of his death the Harris County Courthouse was under construction, a building he designed with George W. Rustay, his business partner since 1944.

Artist Dwight Clay Holmes (1900-1986)¹³⁶

Dwight C. Holmes, was a versatile artist, working in ornamental architectural sculpting, painting and etching, but is best known for his western landscapes. He was born in Albany, Oregon, but moved to Texas at a young age and began his art training at Ball High School in Galveston. Holmes attended Texas Christian University, where he received his Certificate of Art and Bachelor of Arts degree in 1923 and became a faculty member in the Art Department. He left teaching for a five-year apprenticeship to become a journeyman sculptural modeler and received membership in Modelers and Sculptors of America. He sstudied under George Franz of Germany and Michael Lengyl of Austria, after which he settled in Fort Worth. He received several large mural commissions, including sixty yards of paintings in 1929 for the Main Lounge of the Arlington Downs Jockey Club at depicting the history of the W.T. Waggoner family (building demolished; fate of paintings unknown), and 1934 murals at the U.S. Post Office in Fort Worth (with William H. Baker). Between 1925-1935 Holmes created architectural moldings for the Southern Plastic Relief Company of Dallas. A 1939 article in the *Abilene Reporter-News* reported that his sculptural reliefs could be found in post offices in Fort Worth, Wichita Falls, El Paso, Pampa, Texarkana, and Brownwood, Texas, as well as Meridian, Mississippi.¹³⁷ Holmes was also connected with the C. J. Sutton Company of Fort Worth. Other sculptural commissions included colleges and universities, stores, and theaters throughout the southwest, with a large number reported in Fort Worth and Dallas.¹³⁸

Mr. Holmes' undated, hand-written notes concerning the ornamentation over the entrance to the 1940 Air Terminal reads as follows:

This is a drawing of the over entrance ornament on the Old Houston Hobby Airport. It was made on request of the architect Mr. Jos. Finger who approved it before the full size pattern was made by modeler artist Dwight C. Holmes. The sculptored (sic) ornament was made in clay and plaster then in concrete by the Southern Plastic Relief Co. of Dallas. Owners were Mr. John Bianchi, Joseph Lastilec(sp?) and John Casci. I believe the latter two are still living and in Dallas. Toni Salvadore, one of the shop casters, posed for the figure. Dwight Holmes took the theme 'Man takes wings and covers the Earth, spreading peace and the light of education.' There were several other smaller ornamental patterns on the building expressing the theme of Aviation, past, present, and future."

I had been recommended to Mr. Finger by another fine Houston architect, Mr. Albert Finn for whom I had done the ornamental work in the Houston Businessman's Club, in the Levi Building. I appreciated the confidence in me as he (Finger) literally turned me loose in designing and making this ornament.

Conclusion

Although it is being nominated at the state level of significance, the Houston Municipal Airport Administration Building (1939-1940) fits within a national context that perceives the evolution of the commercial aviation industry alongside the development of government supervision, the advancement of the airplane as a mode of transportation,

¹³⁶ http://www.vintagetexaspaintings.com/texas-art/265-dwight-holmes-verbenas-oil

¹³⁷ "Work of Noted Sculptor Includes Local Post Office Ornamentation," Abilene Reporter News, May 31, 1938.

¹³⁸ "Artist Holmes to Present Culture Club Program," *Llano News*, February 6, 1964.

and the importance of streamline moderne influences to public architecture, particularly airport architecture of the 1930s. The terminal is significant as one of the few surviving 1930s airport terminals in the United States. It is considered among the best examples of streamline moderne airport architecture in the U.S., and it retains the highest degree of integrity of setting, workmanship, materials, design, feeling and association. The terminal also represents the epitome of the work of both an important architect and a master sculptor and is emblematic of the development of several nationally significant commercial airlines. It is a significant and rare building in the broad pattern of U.S. history (Criterion A) and is the epitome of the work of masters and embodies the distinctive characteristics of a type, period and method of construction (Criterion C).

Appendix

Partial list of buildings with sculpture by Dwight Holmes

- Women's Club Building, Fort Worth
- University Christian Church, Fort Worth
- Travis Avenue Baptist Church, Fort Worth
- Carr Chapel, Fort Worth
- Amon Carter Stadium, Fort Worth (demolished)
- Interior ornamentation, Blackstone Hotel, Fort Worth
- Marquee patterns, Trinity Valley Iron and Steel Co., Fort Worth
- Lone Star Gas Company, Fort Worth
- Petroleum Building, Fort Worth
- Texas Pacific Warehouse Building, Fort Worth
- Masonic Temple, Fort Worth
- Fair Department Store, Fort Worth
- Hollywood Theatre, Fort Worth Club Building, Fort Worth
- Striplings Department Store, Fort Worth
- Monnig Wholesale Building, Fort Worth
- Leonard Bros. Store, Fort Worth
- Fort Worth Public Library
- U.S. Post Office, Fort Worth
- Universal Mills Office, Fort Worth.¹³⁹
- Elks Club, Ft. Worth
- Presbyterian Church, Breckenridge, Texas
- First National Bank, Houston
- Dallas Athletic Club, Dallas
- Santa Fe Building, Dallas
- Cotton Exchange, Dallas

¹³⁹ http://www.waymarking.com/waymarks/WM7GJW_Universal_Mills_Office_Building_Relief_Fort_Worth_Texas

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Harris County, Texas



Location Map Houston Municipal Airport Termina;l at Hobby Airport, southeast of downtown



Google Earth Map, accessed June 20, 2018.



Google Earth Map, accessed June 20, 2018.

1940 Terminal west of runways.



Original Plan by Joseph Finger, 1938.



Original drawing by Joseph Finger, 1938. (Houston Public Library) West Elevation from blueprints.



Original drawing by Joseph Finger, 1938. (Houston Public Library) South Elevation from blueprints.



Restoration Plans, Hillmyers Architects, 2007 (Floor 1)



Restoration Plans, Hillmyers Architects, 2007 (Floor 2)



Restoration Plans, Hillmyers Architects, 2007 (Floor 3)



Restoration Plans, Hillmyers Architects, 2007 (floor 4)



Wedell-Williams Lockheed Vega in front of the 1928 Terminal, early 1930s. Collection of the 1940 Air Terminal Museum.



Municipal Airport aerial view, 1933. Collection of the 1940 Air Terminal Museum.



Opening Day, September 28, 1940

Aerial view of the Houston Municipal Airport Terminal. The doorway on the taxiway side of the North Wing was a surprise. It is not included in the original architectural drawings. At some point, it was removed, and a window was installed in its place. Collection of the 1940 Air Terminal Museum.



Opening Day, September 28, 1940

The parking lot is filled to capacity. Guests take in the view from the North and South Wing Observation Decks. An Eastern Airlines Douglas DC-3 is parked in front of the North Wing. Collection of the 1940 Air Terminal Museum.



Terminal with DC-3, 1940s. Photo from the Michael Bludworth Collection.



Original "birdcage" style tower cab, 1940s. Collection of the 1940 Air Terminal Museum.



Lobby, 1940s. Collection of the 1940 Air Terminal Museum.



Jess Gibson photo, published in the Houston Chronicle, 1941.

"Control tower operator, Judson Phillips, at work directing all planes in radius of 20 miles of the airport. By radiotelephone and powerful lights he gives the stop and go signals to all planes both on the ground and in the air in this area."



Eddie Schisser Photo, Houston Chronicle, 1940.

"Passengers are checked in at the ticket counters in the lobby of the administration building."



The terminal in 1953, with addition on the fourth floor. The structure in the mid-ground left may be the free-standing restaurant that replaced the coffee shop inside the Terminal when the international wing, right, was added. Photo by Dr. J. Bryan Elby, collection of the 1940 Air Terminal Museum.



Modes of flight reliefs. Photos by Gregory Smith, December 2016.







Photo 1 West Elevation Photo by Blair McFarlain, 2017



Photo 2 Southeast Oblique Photo by Blair McFarlain, 2017



Photo 3 Southeast Oblique Photo by Gregory Smith, 2016



Photo 4 North Elevation Photo by Blair McFarlain, 2017



Photo 5 South Elevation Photo by Blair McFarlain, 2017



Photo 6 Man Takes Wing, sculpture over east and west main entrances Photo by Gregory Smith, December 2016



Photo 7 Winged wheel motif, south elevation Photo by Gregory Smith, December 2016



Photo 8 West elevation detail Photo by Gregory Smith, December 2016



Photo 9 Lobby, facing runway (east) Photo by Blair McFarlain, 2017



Photo 10 Lobby, facing runway (southeast) Photo by Blair McFarlain, 2017



Photo 11 Lobby ceiling, facing east Photo by Gregory Smith, December 2016



Photo 12 Control Tower interior, facing north-northeast Photo by Gregory Smith, December 2016



Photo 13 Control Tower exterior, facing south Photo by Gregory Smith, December 2016




























UNITED STATES DEPARTMENT OF THE INTERIOR NATIONAL PARK SERVICE

NATIONAL REGISTER OF HISTORIC PLACES EVALUATION/RETURN SHEET

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Requested Action:	Nomination				
Property Name:	Houston Municipal	l Airport Terminal			
Multiple Name: State & County:	TEXAS, Harris	· · · · · · · · · · · · · · · · · · ·			
Date Rece 1/29/201		÷	16th Day: D /2019	ate of 45th Day: Date of Weekly List: 3/15/2019	
Reference number:	SG100003488				
Nominator:	SHPO				
Reason For Review: Appeal SHPO Waiver Resubi Other Other Abstract/Summary Comments:	Request mission The Houston Munici and C in the areas of was designed in 193 (removed) and 1950 twentieth century St	f Transportation and Archi 38-39 by Houston architec) (fourth floor). The design reamline Moderne style in	<u>3/6/20</u> tate level signi tecture. The f t Joseph Finge embodied the its aerodynam	Text/Data Issue Photo Map/Boundary Period Period Less than 50 years 019 Date ificance under National Register Criteria A ive-story, Streamline Moderne building er with compatible additions in 1946 esalient architectural forms of the early sic lines, smooth stucco surfaces, curved aluminum trim details. The opening of the	
	new terminal in 1940 became an increasing infrastructure improvi	D marked the early evolution ngly important factor in loca vements became necessar s of comparable passenge	n of commerc al and regiona y to meet expa	ial aviation in Texas, as air transportation I economic development, and modern anded operational needs. With additional m this period national level significance	
Recommendation/ Accept NR Criteria		a A and C			
Reviewer Paul Lu	usignan		Discipline	Historian	
Telephone (202)354-2229			Date	3/6/2019	
DOCUMENTATION	see attached o	comments : No see :	attached SLF	R : Yes	

TEXAS HISTORICAL COMMISSION

real places telling real stories

- TO: Paul Lusignan National Park Service National Register of Historic Places 1849 C Street, NW, Mail Stop 7228 Washington, DC 20240
- From: Mark Wolfe, SHPO Texas Historical Commission
- RE: Houston Municipal Airport Terminal, Houston, Harris County, Texas

DATE: 1.28.19

The following materials are submitted:

	Original National Register of Historic Places form on disk.
Х	The enclosed disk contains the true and correct copy of the National Register of Historic Places nomination for the Houston Municipal Airport Terminal, Houston, Harris County, Texas.
	Resubmitted nomination
х	Original NRHP signature page signed by the Texas SHPO
	Multiple Property Documentation form on disk
	Resubmitted form
	Original MPDF signature page signed by the Texas SHPO
х	CD with TIFF photograph files, KMZ files, and nomination PDF
	Correspondence

COMMENTS:

- ____ SHPO requests substantive review (cover letter from SHPO attached)
- ____ The enclosed owner objections (do__) (do not__) constitute a majority of property owners

Other: