Landmarks Preservation Commission July 19, 1994; Designation List 259 LP-1916

# TRANS WORLD AIRLINES FLIGHT CENTER (now TWA Terminal A) AT NEW YORK INTERNATIONAL AIRPORT

GROUND LEVEL INTERIOR, consisting of the entrance lobby, the information desk, the sculpted piers and archways at the juncture of the side wings, and the stairway leading to the main level; the MAIN LEVEL INTERIOR, consisting of the ticketing area, telephone alcoves, the stairways leading to the balcony level and the adjacent "air fountains" (sculptural ventilation ducts), the elevated walkways leading to the gate structures, and the southern gate structure interior, including the central area, glazed walkways, and two triangular gate areas; and the BALCONY LEVEL INTERIOR, consisting of the balconies and bridge between the balconies, the restaurant and club areas and their sculpted central service cores (excluding the interiors of the service areas), window seats, and the upper portion of the balcony area; and the fixtures and interior components of these spaces, including but not limited to, wall and ceiling surfaces; floor surfaces; windows; skylights; vertical window blinds; doors; balustrades; stairway railings; piers; water fountains; telephone booth dividers; lighting fixtures; signage, including the TWA sign mounted on the window-wall facing the runway; ventilation elements; built-in seating and counter units; and attached decorative and sculptural elements, John F. Kennedy International Airport, Queens.

Built 1956-1962; Architects, Eero Saarinen & Associates (Eero Saarinen and Kevin Roche).

Landmark Site: Borough of Queens, Tax Map Block 14260, Lot 1 in part, consisting of a site encompassed by a continuous line beginning at a point at the southernmost end of the terminal building, extending northeasterly and northerly along the outermost edge of the terminal building, easterly along the southernmost edge of the elevated walkway between the terminal building and the southern gate structure, extending around the outermost contours of the southern gate structure, westerly along the northernmost edge of the elevated walkway between the terminal building and the southern gate structure, northerly and northwesterly along the outermost edge of the terminal building between the elevated walkways, northerly along the easternmost edge of the elevated walkway between the terminal building and the northern gate structure, westerly along the line of connection between the elevated walkway and the northern gate structure, southerly along the westernmost edge of the elevated walkway between the terminal building and the northern gate structure, westerly and southwesterly along the outermost edges of the terminal building to its westernmost end, southerly from the western end of the terminal building to the curbline of the service road, southeasterly along the western edge of the curbline of the service road, southerly and easterly along a line corresponding to the outermost edge of the overhanging canopy of the terminal building, southerly along the western edge of the curbline of the service road to a point opposite the southernmost end of the terminal building and easterly to the point of beginning.

On June 15, 1993, the Landmarks Preservation Commission held a public hearing on the proposed designation as an Interior Landmark of the Trans World Airlines Flight Center at New York International (Idlewild) Airport (now TWA Terminal A), John F. Kennedy International Airport, and the proposed designation of the related Landmark Site (Item No. 11). Two persons testified in favor of designation and both Trans World Airlines and the Port Authority of New York and New Jersey expressed uncertainty about the proposed action. A representative of TWA requested that the hearing be continued. On September 21, 1993, the Commission continued the public hearing (Item No. 10). Both hearings had been duly advertised in accordance with provisions of law. At the continued hearing, similar reservations concerning designation were expressed by TWA and the Port Authority. A representative of Queens Borough President Claire Shulman expressed delight at the consideration of the TWA terminal for designation, and also expressed concern about the continued use of the facility by the airline and the airport. The Commission has received three letters in support of the proposed designation. Since that time, the Commission has met with the Port Authority to discuss its plans for the terminal.

### **DESCRIPTION AND ANALYSIS**

## Summary

The interior of the TWA Flight Center, designed by Eero Saarinen & Associates (Eero Saarinen and Kevin Roche), is among the chief works of one of the most highly-regarded architectural firms of the modern era. Saarinen's firm revolutionized air terminals through an expressive approach to design that extended to the interior and the incorporation of technological advances, producing a distinctive and highly-acclaimed work of modern interior design with the TWA Terminal (1956-62). The design of the building interior expressed Saarinen's intentions "to interpret the sensation of flying" and "be experienced as a place of movement and transition." The design concept was carried throughout the entire building with a "family of forms," so that "all the curvatures, all the spaces, and all the elements - down to the shapes of signs, railings, counters, and other elements — ... have one consistent character." The expressive interior, which remains largely intact, was modeled to provide a succession of differentiated spaces in which all elements are integral to the building. Among the elements integrating and articulating the spaces are the circular white marble tile cladding the floor and most of the vertical surfaces which accentuates the monolithic quality of the smaller elements as well as spatial volumes; window walls, narrow skylights, and fixtures which provide striking and controlled lighting in the main portion of the terminal; and a variety of unconventional forms, including walls, piers, and smaller elements such as the information desk. The open central space, enclosed by roof vaults, is divided into three levels and joined by curving staircases and functions as a modern crossroads below the aerie-like balcony space open to the enclosing roof forms and the lower levels. The design of the enclosed walkways to the gate structures creates a feeling of expectancy and transition which is heightened by the rise of the floor surface and the indirect lighting on the upper portion of the concave walls. The main gate structure, with services grouped in a central core and projecting jetway access arms, incorporates some of the first solutions for satellite gate structures for jet aircraft and its interior elements relate to the aesthetic and materials of the main terminal area.

#### New York City's International Airport<sup>1</sup>

The development of New York's international airport was the result of Mayor Fiorello H. LaGuardia's interest in aviation and his long-range planning for New York City airports. Due to its remoteness from Manhattan, the city's first airport, Floyd Bennett Field on Jamaica Bay, had limited appeal both for mail delivery and passenger service. LaGuardia did not consider the Newark (N.J.) Airport, which had opened in 1928 and rapidly became the major airport on the eastern seaboard, a His first remedy was the proper substitute. construction of the New York City Municipal Airport, LaGuardia Field, commonly known as LaGuardia Airport. Commercial air service at LaGuardia soon surpassed that of Newark, and LaGuardia began planning for a much larger airport, since he was convinced that after the war the city would need another field to accommodate increased demands for domestic and transatlantic passenger traffic and air freight service.

During the fall of 1941, Mayor LaGuardia announced plans for an additional airport to be constructed on a large area of marshlands on the south side of Long Island. The land purchased for the air field included the Idlewild golf course, an old summer hotel, and the Jamaica Sea-Airport landing strip. Although never officially a part of the name of the airport, the facility was known during its early years as Idlewild, later as New York International Airport, and since late 1963 as John F. Kennedy International Airport.<sup>2</sup> The initial planning for the large airport, undertaken by the City Department of Marine and Aviation, was based on the concept of one large terminal building and proceeded slowly because of a disagreement over the lavout of the runways and the negotiation of leases with each airline. While the final layout of the airport remained in dispute, construction began in 1942. Commercial flights began to use the airport on July 1, 1948, making use of the first terminal facilities - a small cinder block building and a control tower. Even before the construction of the present terminals began, nearly three million passengers and hundreds of millions of pounds of airmail and air cargo had passed through Idlewild airport in 1954; by that time the facility had the highest volume of international traffic of the world's airports.<sup>3</sup>

In 1947, the Port of New York Authority (now known as the Port Authority of New York and New Jersey) and the City of New York signed a leasehold agreement for fifty years under which the Port Authority would finance, develop, and operate the

airports in New York City.<sup>4</sup> The Authority began work on a new master plan for the Idlewild field because after the Second World War air travel had increased more rapidly than first projected. During the late 1940s, thirty to forty percent of all U.S. airline passengers passed through New York City in the course of their air travels, and the city had earned the position of "air capital" of the world. By 1953 it became apparent that the new airport would require more aircraft gates, and that the centralized terminal scheme had serious defects. Consequently, the use of unit terminals - separate terminals for each airline was considered to avoid the projected two-mile-long centralized terminal, as well as to minimize passenger walking distances, reduce congestion, and provide maximum flexibility. In 1954, the decision was made to use unit terminals in order to eventually provide 140 aircraft loading gates, and in February 1955, the Port Authority and the airlines reached an agreement on a revised master plan.

The plan adopted for New York International Airport – envisioned as the largest and most efficient airport in the world, where there would be "no confusion and no congestion"<sup>5</sup> - was developed under the direction of Thomas M. Sullivan, deputy director of the Aviation Department for the Port of New York Authority, and Wallace K. Harrison, who served as design consultant and coordinator. The airport's "Terminal City" would consist of the International Arrival Building with flanking Airline Wing Buildings (to be built by the Port Authority); an eleven-story control tower; seven airline terminal buildings; a network of roadways, parking lots, taxiways; and a central plaza with reflecting lagoon (now replaced by parking facilities). The allocation of sites for the airline terminals was based on carriers' traffic, seniority at the Idlewild facility, and relationship to overseas traffic. Each airline would have the freedom to erect a terminal designed by the architect of its choice to meet individual operational needs.

The New York International Airport, strongly identified with the "Jet Age," incorporates some of the first solutions for accommodating jet aircraft and is a contemporary of facilities built in Los Angeles, San Francisco, and Chicago. Terminals built before the Second World War had been enlarged by the use of "fingers" or covered piers, which led to boarding areas on the ramp for the increasing number of aircraft; the piers – enclosed and enlarged to twostory structures – evolved into the familiar concourses of a later generation of airports. An operational change that had a great impact on airport

design was the use of a "hold area" for processed passengers near the aircraft gate, which became known as the gate departure lounge. The gate lounges eliminated the need for large central waiting rooms, and prompted the relocation of passenger services nearer to aircraft gates. During the post-war airport construction boom, engineers and planners analyzed airport design and function, diagraming variations of terminal finger configurations - where aircraft were typically parked on both sides of a concourse that contained walkways, services, and gate departure lounges – and the alternative satellite form, where aircraft gates were grouped around a central waiting and service area which was connected to the main terminal by an elevated walkway. Separating routes through terminals for arriving and departing passengers, minimizing passenger walking distances, reducing congestion during peak hours of travel, and automating baggage handling were airport planning issues addressed during the period. The more widespread use of jet aircraft during the years that the Idlewild was under construction introduced yet another set of concerns: how to deal with larger sizes of aircraft, increased noise levels, and jet blasts, and how to protect passengers boarding planes at an elevated level.

Port Authority planners projected that the unit terminals at Idlewild would have finger configurations. The first group of terminals designed for the airport exhibited several solutions to providing a large number of aircraft gates. The first project to be completed was the International Arrivals Building (designed by Skidmore, Owings, & Merrill), which had long wings and perpendicular fingers. The finger plan was adopted for the American Airlines terminal (designed by Kahn & Jacobs), which had staggered lounges off a central corridor, and the United Air Lines facility (designed by Skidmore, Owings and Merrill). The terminal of Eastern Air Lines (designed by Chester L. Churchill) was based on the concept of large, centralized waiting rooms and "loading arcades." Pan American World Airway's "umbrella" terminal (designed by Tippetts-Abbett-McCarthy-Stratton) was yet another solution: six jets could be nosed in under the roof which would protect boarding passengers from the weather. TWA was the only airline to adopt the satellite configuration for its terminal. Elevated walkways, variations on early "Jetways" introduced to commercial aviation by United Airlines at Chicago, were used at the United, Pan Am, American, and TWA terminals at Idlewild.<sup>6</sup> The airline terminals also demonstrated various approaches to passenger

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service and technological advances in information presentation (electronic signage and closed-circuit television monitors) and baggage handling.

### Trans World Airlines

Trans World Airlines<sup>7</sup> has played a major role in the history of commercial aviation in the United States; the carrier was, for many years, the only airline with both domestic and transatlantic routes and the second-largest one in the country. At the time the terminal at New York International Airport was under construction, TWA linked sixty-five American cities with twenty-three points abroad. A series of mergers, involving portions of several parent airlines, including Western Air Express, Standard Air Lines, Maddux Air Lines, and Trans-Continental Air Transport produced Transcontinental & Western Air, Inc. (TWA); the name Trans World Airlines was adopted in 1950. The history of TWA is dominated by aviation advances, financial reorganizations, and the controversial role of the long-term principal stockholder Howard Hughes. The airline has a long association with aviation in New York City as one of the first carriers to contract for space at the LaGuardia airport; the airline operated the first scheduled flight into that field in 1939. TWA operated a domestic freight and passenger service prior to World War II and expanded to overseas service via southern routes to Europe and the Midand Far East, which was inaugurated early in 1946 with a flight from LaGuardia to Paris; weekly transatlantic air-cargo service was established in 1947. TWA competed with Pan Am, the nation's other transatlantic carrier, for passengers by introducing tourist-class transatlantic flights in 1952, switching to jet aircraft for transatlantic passenger service, and by offering an appealing and efficient new terminal at New York International Airport.

TWA was the sixth international airline to sign an agreement with the Port of New York Authority in 1949 for use of the Idlewild facility, and when the locations of the individual airline terminals at New York International Airport were announced, TWA was not especially pleased. TWA and Pan Am, as overseas carriers, were assigned positions on either side of the International Arrivals Building, but TWA would have preferred the opposite side, which was nearer to its new hanger. The carrier would be the only one to operate both foreign and domestic service from one terminal at the airport. Though the leadership of the airline underwent several changes during the course of the planning and construction of the terminal, it was during Ralph S. Damon's term as president that the TWA terminal was conceived. Scullin reports that Damon was advised by TWA's real estate board and construction engineers to commission the firm of Eero Saarinen & Associates (which was completing the General Motors Technical Center) to design the terminal, and attributes to Damon the vision of the terminal as "a building that starts your flight with your first glimpse of it and increases your anticipation after you arrive," and the statement, "the spirit of flight, inside and out, and nothing less will do." The airline was regarded as a "client with vision and confidence."<sup>8</sup>

### Eero Saarinen<sup>9</sup>

A master architect of the mid-twentieth century, Finnish-born Eero Saarinen (1910-1961) was groomed from childhood to be a successful designer by his parents, textile artist Loja Gesellius Saarinen, and highly regarded international architect (Gottlieb) Eliel Saarinen (1873-1950). Eliel's early career is best remembered for his Helsinki Railroad Station (1904-c. 1913, with Herman Gesellius) which successfully demonstrates his sympathies with the Arts and Crafts movement. The Saarinen family immigrated to the United States in 1923, yet visited Finland annually. Eliel contributed significantly to the creation of the Cranbrook School and Academy of Art, a complex of children's schools and an advanced-level art academy, located at Bloomfield Hills, north of Detroit. Cranbrook was devoted to every field of design - textiles, metalwork, architecture, and city planning. Eliel designed several buildings there, including the Cranbrook School for Boys (1924-30) and the Kingswood School for Girls (1929-30). The latter project exemplifies the Arts and Crafts ideal of collaboration between the fine and applied arts: while Eliel oversaw all aspects of design, Loja designed and wove fabrics (in association with the Cranbrook Looms), Eero designed furniture, and his sister, Eva-Lisa, assisted with selecting wall and ceiling treatments.

During the early 1930s Eero studied sculpture at the Parisian Acadèmie de la Grand Chaumiére, completed a Bachelor of Fine Arts in the Beaux-Artsoriented architecture program at Yale University, toured Europe and Egypt on a travel fellowship, during which time he was influenced by the architecture of Erich Mendelsohn and Alvar Aalto – before joining his father's firm in 1936. Together, the Saarinens produced the much-praised Crow Island School (1939-40, with Perkins, Wheeler & Will) in Winnetka, Illinois. Eero entered many design competitions, and won several prizes. He collaborated with designer Charles O. Eames on the scheme for a molded plywood chair which won the Organic Design in Home Furnishings competition (1940-41), sponsored by the Museum of Modern Art. Recognized from that point on as an important furniture designer, Saarinen produced many designs for the Knoll furniture company, best represented by his Womb chair (1946-48) and Nos. 71 and 72 chair series (c.1956).

Saarinen has been credited with developing the innovative "systems approach" to design; he carefully analyzed each problem, and usually relied on modern technology, in order to find a unique form and structure to express a concept architecturally. As a result, each of his designs has a certain wholeness about it; he claimed to be concerned with the "esthetics of the whole organism" and sought an "expressive architecture, an antiassembly-line architecture," stating "each building should be as distinctive as each person should."<sup>10</sup> The commission which firmly established his architectural career was the General Motors Technical Center (1945-56, with Smith, Hinchman & Grylls) in Warren, Michigan. Though its initial designs were begun in association with his father, the final scheme was largely due to Eero. The complex is ruled by its strictly modular design (structure, partitions, and mechanical systems are fully integrated) and features such technological innovations as neoprene window gaskets and walls of thin insulated panels sheathed in porcelainized sheet metal; yet the architect also added brightly colored brick surfaces and his signature element, a reflecting pool. During the GM project, the elder Saarinen died and Eero formed a successor firm, Eero Saarinen & Associates. An intensely devoted and methodical worker - he worked 365 days a year, according to his chief of design, Kevin Roche - Eero produced a number of buildings which have become American landmarks. Aside from his Jefferson National Expansion Memorial (designed 1948, completed 1964) - the famous parabolic arch in St. Louis, Missouri, in which the interior is of little relevance each of his most famous designs is defined by its unusually configured envelope which characterizes both exterior and interior and unites them as complementary parts of a whole. These projects include the Kresge Auditorium and Chapel (1953-56, with Anderson & Beckwith) at the Massachusetts Institute of Technology in Cambridge, the David S. Ingalls Hockey Rink (1956-59) at Yale University in New Haven, and two soaring reinforced concrete masterpieces associated with flight: the Trans World Airlines Flight Center (1956-62) at New York (now

J.F.K.) International Airport – probably his most renowned design – and Dulles Airport (1958-62, with Ammann & Whitney) in Chantilly, Virginia. The last three commissions were completed after Saarinen's death in 1961 as was his other prominent New York project, the somber granite-clad Columbia Broadcasting System (CBS) Headquarters (1960-64) on Sixth Avenue between West 52nd and 53rd streets.

Saarinen's buildings received extensive publicity in the press, and he was given several prestigious awards. Though many architects and architectural writers sympathetic to the International style criticized Saarinen's work as lacking consistency (a necessary by-product of his design method), his oeuvre has withstood the test of time: by 1993 six of his designs had received the American Institute of Architects' 25-Year Award for "exemplif[ying] design of enduring significance." These include the Crow Island School, GM Technical Center, and Dulles Airport.<sup>11</sup> Saarinen's successor firm, Kevin Roche and John Dinkeloo, founded by his colleagues, has been a significant force in American architecture during the second half of this century. Other architects influenced by his design philosophy are Cesar Pelli, Gunnar Birkerts, and Robert Venturi.

#### A Terminal To Catch the Excitement of the Trip<sup>12</sup>

Saarinen's design for the TWA Flight Center is the exemplar of expressionistic architectural trends of the late 1950s and 1960s. Saarinen and his likeminded peers expressed their dissatisfaction with the restrictive minimalism of the International Style, as it had been interpreted in America, through attempts to imbue modern architecture with a monumentalism appropriate to public structures.

To paraphrase Saarinen, the design intent of the Trans World Airlines terminal was to create, within the complex of terminals that makes up Idlewild, a building for TWA which would be distinctive and memorable, in which the architecture itself would express the drama, specialness, and excitement of travel, and which would be experienced as a place of movement and of transition. Saarinen, particularly when discussing the interior of the terminal, placed great emphasis on his total approach to design, noting that the architectural team members had committed themselves to a "family of forms" that they felt had to be used throughout the entire building; the goal was that "all the curvatures, all the spaces and elements, down to the shapes of signs, information boards, railing, counters, would have to have one consistent character."13 Only through such consistency and

consequent development could the building make its fullest impact and achieve its highest expression, as Saarinen put it, "Wherever you are, inside or outside, the building sings with the same message."<sup>14</sup>

According to co-designer Kevin Roche, the first design for the terminal was an oval shell resting on four points, a form that Saarinen found awkward, but which incorporated an interior layout that remained largely set and only refined during the design revision process. Obviously, the practical issues of the terminal design were dealt with early; one observer has described the interior as a "built circulation diagram."<sup>15</sup> A series of clay models and then larger cardboard forms were used in a three-dimensional design process, especially to perfect the exterior forms that enclose the terminal as both roof and ceiling. The interior was similarly designed through a series of models and the area around the central stairway was remodeled numerous times as the architects developed a more flowing line for the bridge connecting the balconies. All parts of the building were studied like parts of a giant, unified piece of sculpture.<sup>16</sup>



Plan of Terminal

When Saarinen's design for the terminal was presented to the public in November 1957, the shape of the structure was described as bold and futuristic. Edward Hudson, aviation columnist for the *New York Times*, assuming that the airline had some misgivings about spending a projected \$12 million on such an unusual plan, thought that TWA was counting on winning public acceptance for the terminal.<sup>17</sup> Attention was focused on the functional aspects of the terminal, both when the design was presented and

upon its completion. It would be the airline's solution to three problems of air travel: quick and efficient service at check-in; up-to-the-minute information on arrivals and departures; and rapid baggage delivery. The placement of the long ticketing counter and the baggage claim area in the two low wings, at street level opposite curb areas protected by the projecting roof, was an attempt to increase passenger convenience. Recent advances in technology were employed in the electronically-controlled doors at the drop-off and pick-up points, large electronic signs huge Solari (the Swiss watch manufacturer) Datavision boards where flight information could be kept up-to-date - and the transfer of that information throughout the terminal via closed-circuit television monitors. Originally, it was thought that passengers would have to walk to aircraft parked around a onestory structure on the ramp, the "Flight Wing." The use of "Jetways" was under study by late 1957, and the delay in the beginning of construction of the terminal allowed for the evaluation and adoption of this newly-available equipment. The use of jetways raised the height of the ramp structure to two stories, and determined its final form - a more compact "starshaped" variation of the violin-shaped structure that appears in early images of the design. The projections from the main volume of the building are connections for the jetways, one at the front and one near the rear of each aircraft (for the segregation of first class and coach passengers).<sup>18</sup> The structure has two remote gate lounges in order to accommodate seven aircraft; perched on the roof of the gate near the center of TWA's ramp area is the carrier's control tower, from which personnel direct ground traffic and control the flight information system. The use of baggage carousels in the main terminal area was an addition to the original plan for baggage-handling automation.<sup>19</sup>

The architectural critic Edgar Kaufmann, Jr., described Saarinen's interior as "one of the few major works of American architecture in recent years that reaches its full stature as an interior." He praised the vaulted forms with their leaping, glass-linked curves, and the freely imaginative sculptural play of surfaces and details that were gracefully and firmly coordinated in a unified total impact.<sup>20</sup> The vaults, four sections of the roof shell, meet to enclose an open central space, – a modern crossroads – divided into three levels and joined by a prominent central staircase at the lower two levels, and, at the upper levels, by pairs of more staircases placed at the perimeter of the central space. The continuous curve of the balustrade at the stairs to the main and balcony

levels and edging the balcony echoes the forms of the enveloping ceiling vaults. The levels are linked by the interpenetration of modeled piers that frame the space under the balconies and extend through the balcony floors to articulate the forms of service core areas at the upper level. Monolithic sculpted forms such as the arched entryways to the ticketing and baggage areas of the lower level, the piers and walls of the service areas for the restaurants at the balcony level, and smaller elements, such as the main information desk, piers supporting the balcony, and ventilation ducts (called "air fountains" by Saarinen) articulate the space. The uniformity and small-scale pattern of the circular, gray-flecked "oyster" marble tiles on most of the vertical surfaces, as well as the floors, accentuate the terminal's spatial volumes. Light floods into the interior through window-walls. bands of narrow skylights, and the odd-shaped windows in the piers; lighting fixtures provide daytime and after-dark continuity between illumination.

The balcony areas of the terminal – a partial third floor - provide an open, outdoor-like setting for restaurants and clubs that are, in effect, turned insideout with unenclosed seating areas arranged around small service cores that rise like sculpted mesas under the roof vaults. The introduction of small-scale elements in these areas presented a challenge in interior design. Saarinen's firm was responsible the TWA's private Ambassador Club on the west half of the balcony (closed off from general view and The office of Raymond Loewy/William access). Snaith, Inc. provided furnishing schemes for the other three establishments on the balcony: the Lisbon Lounge, the Paris Cafe, and the London Club. Designers attempted to subordinate the decor to the architecture and the view, but critics found the original schemes only somewhat successful.<sup>21</sup> Though the furnishings of these areas have been replaced, patrons continue to occupy the elevated spaces framed by the canted window walls, ceiling vaults, and balcony railings - aeries from which to watch the activity on the aircraft ramps and passenger traffic in the "main crossroads" of the terminal.

The walkways to the gate structures are dramatic and unexpected elements of the terminal. Instead of the more usual glazed airport concourses, Saarinen's team chose to use tunnels that provide an enclosed environment quite different from the lofty grandeur of the main terminal and the transparent upper level of the gate structure. The gentle rise of the tunnel floors, noted Ken Macrorie, writing for *The Reporter*, draws one into what are really elongated caves that beckon to the wondering child in all of us. The concave walls rise to meet a broad, flat ceiling that emphasizes the low height of the walkways; the walls are washed from above by indirect lighting in a *chiaroscuro* manner.<sup>22</sup>

The interior of the east gate structure is related to that of the main terminal with its glazed walls, and curved and irregular forms, though it is obviously a separate space where the need for efficient passenger service dominates. Service functions are grouped in a central core, a plan that has remained in use in modern airport satellite boarding areas. The glazed passageways to two remote lounge areas are more characteristic of airport concourses than the solid tunnels that provide access to the structure itself. The aesthetic and the materials used in the main terminal appear in the two separate triangular gate lounges (now Gates 39 and 42), where the original tile surfaces, built-in seating, and the red- and oystercolor scheme remain. The interior elements of the gate areas and glazed walkways were multi-purpose, establishing traffic patterns, defining waiting areas, and providing seating; originally, the open space of the main gate had built-in elements similar to those that remain in the remote gate lounges.

Aline Saarinen noted her husband's familiarity with the acclaimed Helsinki Railroad Station and his interest in providing terminals "as great and appropriate" for the age of air travel.<sup>23</sup> The grandeur of older railroad terminals is recalled in the TWA Flight Center with the procession through a series of spaces that is reminiscent of the movement through passageways and large ticketing and waiting rooms. The unusual waiting area in the main level of the terminal (no longer extant), which had built-in seating in a depressed area in a theater-like setting facing the aircraft ramp, was a modern reinterpretation of the main railroad station waiting room that celebrated the act of waiting. Ken Macrorie noted the similarities between the building types and suggested that 1962 may be remembered as the year New York City lost Pennsylvania Station and gained the TWA terminal. To him, these two buildings, with their different ways of enclosing space for waiting and departing, were both exceptional achievements in architecture.24

The interior of the Flight Center engendered much discussion and was not without its critics. Ada Louise Huxtable praised the notably successful interior of "Eero Saarinen's magnificently detailed and executed *tour de force*" for TWA as the part of the structure that took flight with its stunning manipulation of reinforced concrete into unconventional forms of arbitrary but dazzling grace. She found that the carefully engineered forms of the interior produced a gem where every line and finish was carried out with a fine consistency and consummate elegance.<sup>25</sup>

### Description\*

The Main Terminal. Four sections of the roof shells (painted light brown), which are separated by narrow bands of skylights, meet at the solid central plate to enclose the open central space of the terminal. The interior is divided into three levels, where different functions are located, joined by staircases. At the ground level, a wedge-shaped entry area open to the vaults above is dominated by the sculpted information desk. The desk, which faces the central space rather than the doors, is sheathed with tiles and has a marble counter surface; the unusuallyshaped sign above and behind the counter is currently not in use. The desk is now flanked by security equipment related to two entrance vestibules that extend into the space. The entrances to the flanking wings of the terminal are framed by irregular modeled archways that are tile-clad as they terminate at the ceiling and piers, and extend as low walls, above which counters have been installed. The wide central flight of stairs (joining the ground and main levels) is divided by two landings and separated into thirds by freestanding curved aluminum pipe railings. On the main level, the stairs are flanked by flights of stairs to the balcony which curve around low horizontal openings for the air circulation system covered by aluminum grilles. Adjacent to the stairs to the balcony are service areas which include telephone alcoves; open, staggered booths have shallow dividing walls (perforated sheet metal), which have been extended with solid wall sections. The telephones are wall-mounted on panels of polished aluminum and a canister light-fixture hangs in each booth. Aluminum drinking fountains, framed by recessed rectangular surrounds, are set in walls near both telephone alcoves and also in a pier opposite the entrance to the west walkway. The central portion of the main level was the location, originally, of the theater-like waiting area; the floor level has been raised and a low, arrow-head-shaped bench (that was part of the wall enclosing the seating area) and carpeting indicate the original extent of the area.<sup>26</sup> Low, sculpted walls (with a textured stucco

<sup>&</sup>lt;sup>\*</sup>For the sake of convenience, north is used in the description rather than northeast, and so on.

finish) now enclose the area behind a ticketing counter which stands in front of the window wall. A second pair of stairs near the window wall join the main and balcony levels; attached to the bases of these stairs are built-in marble bench seats and nearby stand tall, flaring ventilation ducts with sheet-metal flared top elements (like overscaled newel posts).

A bridge links the two halves of the balcony and separates the entrance lobby from the waiting room on the ramp side. The curving balustrade railing continues in long, unbroken expanses along the stairs and edges of the balcony: the railings have alternating large and small diameter verticals (which appear to be replacement elements). The restaurant areas on the balcony surround central service cores which are sculpted shapes with tile-clad and smooth wall surfaces. The east half of the balcony area is fully accessible to the public. The modeled form of the central core, upholstered curved bench seats in front of the windows, and the pedestal of a "finial" sign remain in their original form. On the south side (now a cafeteria), a tile-clad pier defines a corner of the service core near the top of the stairs; the central area is open on this side and the ceiling is supported by columns. On the west side of the balcony, the central service core appears little altered, although walls extend from it to enclose the Ambassador Club. On the side above the entry area, a wall at the height of the tile-clad pier near the top of the stairs encloses the space, while on the ramp side, a translucent screen spans the opening behind a tile-clad planter adjacent to the low seat in front of the window in the buttress.<sup>27</sup> The window walls at the east and west ends of the balcony have two tiers of light-gray perforated plastic vertical blinds which appear similar to the original ones.

Originally, the interior reflected TWA's color scheme of red and oyster (gray-white). In addition to the gray-flecked tiled surfaces, white was used as the background of oval signs (now removed). A carmine red was used sparingly for carpeting and other accent elements. This scheme, with the addition of gray, remains with the extensive marble tile and elements such as the TWA sign now mounted in the rampfacing window wall (where originally Solari Datavision boards with flight information were mounted). Closed-circuit television monitors were relatively new at the time the terminal was under construction and were set at various locations (including on ledges in the restaurant and bar areas). Monitors are now hung in a row from a red structure above the bench at the main level. The aluminum "enclosure of futuristic design" hanging from the speaker; a clock with three faces now hangs from it.<sup>28</sup> The lighting of the central portion of the terminal

apex of the ceiling was a public address system

is striking and controlled. Daylight enters the central portion through the window walls (with braced vertical muntins), narrow skylights, and windows in the Y-shaped piers. Canister lighting fixtures hanging from the skylights provide a continuity between daytime and after-dark illumination. Fluorescent fixtures, aimed upward, that lie concealed on the tops of the service areas of the balcony provide a general ceiling-wash. Grouped spherical spotlights, hung close to the ceiling, direct light on signage, while recessed spotlights are used under the edges of the balcony and service core soffits.<sup>29</sup>

Walkways to the Gate Structures. The tunnels leading to the gate structures are windowless concrete tubes with carpeted floors (dark gray and red) and light-colored walls. Modeled edges mark the slight widening at the central portion. The concave walls rise from a low curb to meet the broad, flat acoustical-tile-clad ceiling; side openings are fitted with diffusers in front of the fluorescent light fixtures.

The East Gate Structure. In the main area of the gate structure, the central service core is organized by the segments of a many-sided polygon. The sheet-metal-clad segments serve as doors, telephone alcoves, a fountain alcove, and vents; an aluminum letter box is mounted in one of the segments. The central space has an open plan, interrupted only by a small number of square white piers which are also used in the concourses and triangular lounges. Tiles (into which vents are set) mark the perimeter of the spaces. The floor-toceiling window walls have dark gray aluminumframed sash with waist-high horizontal muntins. Light fixtures with glazed diffusers are recessed in the acoustical-tile-clad ceiling. Projections from the central space have stairs descending to the ramp flanked by approaches to jetway entrances. Glazed concourses lead to triangular departure lounges (Gates 39 and 42); white square piers rise from the red carpeted floor to support flat ceilings which have two rows of recessed light fixtures. Adjacent to the main gate structure, tile-clad waist-high walls (in two straight sections and a curved one near the jetway door) divide the walkway into thirds. At the gate lounges, walkways at the perimeter of the space are set off by chest-high, tile-clad walls to which seating is attached; these walls connect with counters (above baggage conveyors) and walls flanking stairs to the

ramp (and to the control tower above Gate 39). The upholstery for built-in rectangular and circular bench seating and the seats attached to the perimeter wall, and the carpeting, are carmine red.

### Subsequent History

The interior of the Flight Center – now shared with America West – remains essentially intact,

except for the replacement of the depressed waiting area on the main level with ticket counters. Currently, security equipment is located near entrance vestibules that have been added to the entry area.

> Report prepared by Betsy Bradley, with contributions by David M. Breiner, Research Department

### NOTES

- This section is based on George Scullin, *International Airport* (Boston & Toronto: Little, Brown & Co., 1968); Thomas M. Sullivan, "Planning Airport Terminal buildings," *Civil Engineering* 29 (May 1959), 334-38; Dudley Hunt, Jr., "How Idlewild Was Planned for the Jet Age," *Architectural Record* 130 (Sept. 1961), 152-154 and Arnold W. Thompson, "Evolution and Future of Airport Passenger Terminals," Journal of the Aero-Space Transport Division, Proceedings of the American Society of Civil Engineers 90 (Oct. 1964), 127-134.
- 2. In 1943 the airfield was named Major General Alexander E. Anderson Airport, in honor of a decorated veteran of two world wars. In March 1948, the City Council changed the name of the facility to New York International Airport, Anderson Field. In December 1963, during the month following the president's assassination, the airport was named the John F. Kennedy International Airport.
- 3. Edward Hudson, "New Structures Rise at Idlewild," *NYT*, Dec. 6, 1955, p. 39.
- 4. All structures at the airport are on property that belongs to the City of New York, which was leased to the Port of New York Authority for fifty years; the Authority subleases terminal sites to various occupants. The construction bills for the terminals and other structures were largely the responsibility of the Port Authority which has been repaid through the subleases.
- 5. Howard S. Cullman, "Tomorrow's Airport -- A World Fair," NYT, June 8, 1947, VI, p. 12.
- 6. United Airlines tested an "Aero-Gangplank" during the summer of 1958; by 1959 United had ordered "Jetways" for use at its terminals at New York International, LaGuardia, and several other major airports. "Jetway" appears to have been a proprietary name that has become a generic term. *Airports and Airport Engineering* 12 (July-August 1958), 75 and 13 (May-June 1959), 42-43.
- 7. Information on TWA was compiled from Geoffrey Arend, Air World's Great Airports, LaGuardia (New York: Air Cargo News, Inc., 1979), 84-91; Arch Whitehouse, The Sky's the Limit (New York: Macmillan Co., 1971); and Robert J. Serling, Howard Hughes' Airline: an informal history of TWA (New York: St. Martin's Press, 1983).
- 8. Scullin, 154. Ralph S. Damon, the airline's long-term leader during the post-war rebuilding period for the carrier, assumed the presidency of TWA in 1949 and remained in that position until his death in January 1956. Damon was succeeded as president by Carter L. Burgess, who served a brief term of only eleven months. Charles S. Thomas' two-year term as president, from July 1958 to July 1960, preceded that of Charles C. Tillinghast, Jr., who assumed the position in March 1961, presided at the opening of the TWA Flight Center, and continued to lead the airline for a number of years. Edgar Kaufmann, Jr., noted in "Inside Eero Saarinen's TWA Building," *Interiors* 121 (July 1962), 87 the vision and confidence of the airline as a client and the turnover of responsible officials at TWA after 1956; he cited George Clay (an attorney from Missouri who held several positions at TWA prior to becoming a Vice-President for Administration in 1954 and a Director in 1956) and later Byron Rathbun (about whom little is known) as two men played leading roles in the terminal project. Donald Keogh was the TWA project engineer at the

time the terminal was nearing completion, according to the NYT, April 22, 1962, p. 14.

- 9. This section is based on: Alan Temko, *Eero Saarinen* (New York: George Braziller, 1962); Walter McQuade, "Eero Saarinen, A Complete Architect," *Architectural Forum* 116 (April 1962), 102-107; Rupert Spade, introduction to *Eero Saarinen*, Library of Contemporary Architects (New York: Simon & Schuster, 1971); "Slouching towards Barcelona," *Progressive Architecture* 56 (Feb. 1975), 78-85; Andrea O. Dean, "Eero Saarinen in Perspective," *A.I.A. Journal* 70 (Nov. 1981), 36-[51]; R. Craig Miller, "Saarinen, Eliel, and Saarinen, Eero," *Macmillan Encyclopedia of Architects* (New York: Macmillan-The Free Press, 1982), vol. 3, 625-633; *Design in America. The Cranbrook Vision, 1925-1950* (New York: Harry N. Abrams, 1983); "Eero Saarinen," *Architecture and Urbanism* extra edition (1984); and Peter Papademetriou, "Coming of Age. Eero Saarinen and Modern American Architecture," *Perspecta* 21 (1984), 116-141.
- 10. Quoted in McQuade, 107.
- "Saarinen's GM Technical Center Receives AIA's 25-Year Award," Architecture: the AIA Journal 74 (Apr. 1985), 11, 15; "Eero Saarinen's Dulles Airport Wins AIA 25-Year Award," Architecture: the AIA Journal 77 (May 1988), 38, 43; "Deere HQ Wins Saarinen a Sixth 25-Year Award," Progressive Architecture 74 (Feb. 1993), 18.
- 12. This section draws upon criticism of the TWA terminal in Peter Papademetriou and Thomas Fisher, "TWA's Influence," Progressive Architecture 73 (May 1992), 102-104; Eero Saarinen on His Work, ed. Aline B. Saarinen (New Haven & London: Yale University Pres, 1962); Michael Brawne, Airport Passenger Buildings," Architectural Review 132 (Nov. 1962), 341-348; "Dream of Eero Saarinen a Tribute to His Memory" Aviation News 4 (May 25, 1962), 2; "One Family of Forms," Progressive Architecture 43 (Oct. 1962), 158-165; "Air Terminal Design," Industrial Design 10 (), 68-70; "Recent Work of Eero Saarinen," Zodiac 4 (1959), 54-57; and "Saarinen's TWA Center," Industrial Design 9 (Sept. 1962), 14; "Trans World Airlines," Architectural Record 130 (Sept. 1961), 162-162; "TWA Flight Center, Idlewild," Architectural Record 132 (July 1962), 129-130; "I Want to Catch the Excitement of the Trip," Architectural Forum 117 (July, 1962), 72-75; and other sources individually cited.
- 13. *Eero Saarinen on his Work*, 60 (from a *Horizon* interview, June 19, 1959). Kaufmann suggested that Saarinen's use of unusual forms may have been influenced by the work of Antonio Gaudí and by Erich Mendelsohn's Einstein Tower, "Inside Eero Saarinen's TWA Building," 92.
- 14. Quoted in Papademetriou, "Coming of Age," 134.
- 15. Roche's description appeared in "TWA's Graceful New Terminal," *Architectural Forum* 108 (Jan. 1958), 79-83; Thomas Fisher's comment appeared in "TWA's Influence," 103.
- 16. "TWA's Graceful New Terminal," 79-83 and "Saarinen's TWA Center," *Industrial Design* 9 (Sept. 1962), 14.
- NYT, Edward Hudson, "Aviation: Unusual Terminal for Idlewild," Nov. 17, 1957, p. 37. The NYT, Oct., 11, 1958, p. 45, reported that engineers were reworking the plans for the terminal because it was too costly to build as originally designed; what changes were made as a result of this study are undetermined.
- 18. Several airlines at Idlewild used two jetways to access aircraft parked parallel to terminal structures, but the use of the nose-in parking position and one jetway became favored for economic reasons. According to Glenn Garrison, "TWA Picks Futuristic Terminal Design," *Aviation Week* 67 (Nov. 18, 1957), 40-41, the traveler would have a choice of using a moving sidewalk or walking through the long passageway linking the main terminal with the ramp gate structures. The design of these walkways changed from glass-enclosed structures with moving sidewalks to the enclosed tunnels and the use of the moving sidewalks was abandoned. The functional aspects of the TWA terminal were described in "TWA: Wing-Like Roof, Theater-Type Lounge," *Airlift* (Sept. 1959), New York City Airports Clipping file, Municipal Reference Library.

- 19. According to Bruno H. Hake, "Baggage Handling: Passenger and Baggage Processing at Air Terminals," in *Journal of the Aero-Space Transport Division, Proceedings of the American Society of Civil Engineers* 39 (Oct. 1963), 42, baggage carousels had been in operation for some time at terminals in Montreal and San Francisco. TWA may have been the first airline to install carousels at New York International Airport; they were located in the ground level of the west wing, not in their present location (neither space is included in this designation).
- 20. "Inside Eero Saarinen's TWA Building," 86-93.
- 21. "A Problem in Adaptation at Saarinen's TWA Terminal," *Interiors* 122 (Nov. 1962), 128-133 and "Inside the Bird," *Architectural Review* 132 (Mar 1963), 160.
- 22. "Arriving and Departing," The Reporter 27 (Sept. 13, 1962), 52-55.
- 23. "Dream of Eero Saarinen a Tribute to His Memory" Aviation News 4 (May 25, 1962), 2.
- 24. "Arriving and Departing," 52-55.
- 25. Ada Louise Huxtable, "Idlewild: Distressing Monument to Air Age," NYT, Nov. 25, 1962, II, p. 25. "Forget the Bird," Architectural Review 132 (Nov. 1962), 306-07. acknowledged the artistry of the space-modelling and the magisterial clarity of the composition, but noted that some observers would not agree that the detailing was either "vigorous or inevitable," and that the scale of some elements was "toy-like." "TWA Spreads Its Wings," Progressive Architecture 43 (July 1962), 68-69 presented the full spectrum of comments, including a description of the space as a "powerful spatial symphony played without compromise, a sequence of spaces within spaces." It reported that others found the curved bridge balcony, winding stairs, the upturning volutes at the bases of the stairs, the sculptured eyes that tell flight times (the Solari boards above the information desk), the bracketed ceilings leading to the ticketing and baggage-receiving areas the elements usually considered so successful as obscuring Saarinen's bold, poised space conception, and that the strongly sinuous elements, the dark-ceilinged tunnels, and even the delicately small-scaled tile floor material, gave a surrealist impression.
- 26. An oval dedication plaque is set into the bench is inscribed: "Trans World Flight Center Dedicated May the twenty-eighth, 1962 Eero Saarinen, Architect." The circular marble seats that surround pedestal signs are additions to this space.
- 27. It appears that the planter was created from bench seating. Currently, show-cases for the duty-free shop are mounted on the main balcony side of the service core.
- 28. A triangular sign has been hung under the center of the balcony bridge.
- 29. Spotlights aimed at the ceiling are located at the top of the two "air-fountains" on the main level and the top of the sign behind the information desk. The lighting for the terminal was designed by Jaras, Baume, & Bolles, Engineers, New York, with Frink Corp., Brooklyn, according to "TWA's Lighting Technique," *Illuminating Engineering* 59 (June 1964), 422-424; Stanley McCandless served as a lighting consultant, and Bolt, Beranek & Newman, were acoustical consultants.

## FINDINGS

On the basis of a careful consideration of the history, the architecture, and other features of this building, the Landmarks Preservation Commission finds that the Trans World Airlines Flight Center (now TWA Terminal A) at New York International Airport ground level interior, consisting of the entrance lobby, the information desk, the sculpted piers and archways at the juncture of the side wings, and the stairway leading to the main level; the main level interior, consisting of the ticketing area, telephone alcoves, the stairways leading to the balcony level and the adjacent "air fountains" (sculptural ventilation ducts), the elevated walkways leading to the gate structures, and the southern gate structure interior, including the central area, glazed walkways, and two triangular lounge areas; and the balcony level interior, consisting of the balconies and bridge between the balconies, the restaurant and club areas and their sculpted central service cores (excluding the interiors of the service areas), window seats, and the upper portion of the balcony area; and the fixtures and interior components of these spaces, including but not limited to, wall and ceiling surfaces; floor surfaces; windows; skylights; vertical window blinds; doors; balustrades; stairway railings; piers; water fountains; telephone booth dividers; lighting fixtures; signage, including the TWA sign mounted on the window-wall facing the runway; ventilation elements; built-in seating and counter units; and attached decorative and sculptural elements, has a special character, special historical and aesthetic interest and value as part of the development, heritage and cultural characteristics of New York City, and the Interior is one which is customarily open and accessible to the public, and to which the public is customarily invited.

The Commission further finds that, among its important qualities, the interior of the TWA Flight Center, designed by Eero Saarinen & Associates (Eero Saarinen and Kevin Roche), is among the chief works of one of the most highly-regarded architectural firms of the modern era; that Saarinen's firm revolutionized air terminals through an expressive approach to design that extended to the interior and the incorporation of technological advances, producing a distinctive and highly-acclaimed work of modern interior design with the TWA Terminal (1956-62); that the design of the building interior expressed Saarinen's intentions "to interpret the sensation of flying" and "be experienced as a place of movement and transition:" that the design concept was carried throughout the entire building with a "family of forms," so that "all the curvatures, all the spaces, and all the elements - down to the shapes of signs, railings, counters, and other elements - ... have one consistent character;" that the expressive interior, which remains largely intact, was modeled to provide a succession of differentiated spaces in which all elements are integral to the building; that among the elements integrating and articulating the spaces are the circular white marble tile cladding the floor and most of the vertical surfaces, which accentuates the monolithic quality of the smaller elements as well as spatial volumes; window walls, narrow skylights, and fixtures which provide striking and controlled lighting in the main portion of the terminal; and a variety of unconventional forms including walls, piers, and smaller elements such as the information desk; that the open central space, enclosed by roof vaults and divided into three levels and joined by curving staircases functions as a modern crossroads below the aerie-like balcony space open to the enclosing roof forms and the lower levels; that the design of the enclosed walkways to the gate structures creates a feeling of expectancy and transition which is heightened by the rise of the floor surface and the indirect lighting on the upper portion of the concave walls; and that the main gate structure, with services grouped in a central core and projecting jetway access arms, incorporates some of the first solutions for satellite gate structures for jet aircraft and its interior elements relate to the aesthetic and materials of the main terminal area.

Accordingly, pursuant to the provisions of Chapter 74, Section 3020 of the Charter of the City of New York and Chapter 3 of Title 25 of the Administrative Code of the City of New York, the Landmarks Preservation Commission designates as an Interior Landmark the Trans World Airlines Flight Center (now TWA Terminal A) at New York International Airport ground level interior, consisting of

the entrance lobby, the information desk, the sculpted piers and archways at the juncture of the side wings, and the stairway leading to the main level; the main level interior, consisting of the ticketing area, telephone alcoves, the stairways leading to the balcony level and the adjacent "air fountains" (sculptural ventilation ducts), the elevated walkways leading to the gate structures, and the southern gate structure interior, including the central area, glazed walkways, and two triangular lounge areas; and the balcony level interior, consisting of the balconies and bridge between the balconies, the restaurant and club areas and their sculpted central service cores (excluding the interiors of the service areas), window seats, and the upper portion of the balcony area; and the fixtures and interior components of these spaces, including but not limited to, wall and ceiling surfaces; floor surfaces; windows; skylights; vertical window blinds; doors; balustrades; stairway railings; piers; water fountains; telephone booth dividers; lighting fixtures; signage, including the TWA sign mounted on the window-wall facing the runway; ventilation elements; built-in seating and counter units; and attached decorative and sculptural elements, John F. Kennedy International Airport, Queens and designates Borough of Queens, Tax Map Block 14260, Lot 1 in part, consisting of a site encompassed by a continuous line beginning at a point at the southernmost end of the terminal building, extending northeasterly and northerly along the outermost edge of the terminal building, easterly along the southernmost edge of the elevated walkway between the terminal building and the southern gate structure, extending around the outermost contours of the southern gate structure, westerly along the northernmost edge of the elevated walkway between the terminal building and the southern gate structure, northerly and northwesterly along the outermost edge of the terminal building between the elevated walkways, northerly along the easternmost edge of the elevated walkway between the terminal building and the northern gate structure, westerly along the line of connection between the elevated walkway and the northern gate structure, southerly along the westernmost edge of the elevated walkway between the terminal building and the northern gate structure, westerly and southwesterly along the outermost edges of the terminal building to its westernmost end, southerly from the western end of the terminal building to the curbline of the service road, southeasterly along the western edge of the curbline of the service road, southerly and easterly along a line corresponding to the outermost edge of the overhanging canopy of the terminal building, southerly along the western edge of the curbline of the service road to a point opposite the southernmost end of the terminal building and easterly to the point of beginning, as its Landmark Site.









TRANS WORLD AIRLINES FLIGHT CENTER (now TWA Terminal A) AT NEW YORK INTERNATIONAL AIRPORT John F. Kennedy International Airport QUEENS

# **BALCONY LEVEL INTERIOR**

Designated: July 19, 1994 Landmarks Preservation Commission



NOT DESIGNATED

NOTE: THIS DRAWING IS NOT TO SCALE





Trans World Airlines Flight Center at New York International Airport Interior. John F. Kennedy International Airport Queens. Central area of main terminal.



Trans World Airlines Flight Center at New York International Airport Interior. TWA Flight Center Interior, John F. Kennedy International Airport, Queens Central area of main terminal.



Trans World Airlines Flight Center at New York International Airport Interior. TWA Flight Center Interior, John F. Kennedy International Airport, Queens. Entry area, archway framing side wings.



Trans World Airlines Flight Center at New York International Airport Interior. TWA Flight Center Interior, John F. Kennedy International Airport, Queens. Walkway to gate structure.

Photo credit: Carl Forster



Trans World Airlines Flight Center at New York International Airport Interior. TWA Flight Center Interior, John F. Kennedy International Airport, Queens. East gate structure.

Photo credit: Carl Forster



Trans World Airlines Flight Center at New York International Airport Interior. TWA Flight Center Interior, John F. Kennedy International Airport, Queens. Departure Lounge, Gate 42.



Trans World Airlines Flight Center at New York International Airport Interior. John F. Kennedy International Airport, Queens. Main level of the terminal.

Photo credit: Carl Forster



Trans World Airlines Flight Center at New York International Airport Interior. John F. Kennedy International Airport, Queens. Telephone alcove, main level.



Trans World Airlines Flight Center at New York International Airport Interior. John F. Kennedy International Airport, Queens. Balcony level of the terminal.

Photo credit: Carl Forster



Trans World Airlines Flight Center at New York International Airport Interior. John F. Kennedy International Airport, Queens. Walkway to Gate 42.

Photo credit: Carl Forster



"Air Fountain" ventilation duct. I Trans World Airlines Flight Center at New York International Airport Interior. TWA Flight Center Interior, John F. Kennedy International Airport, Queens.



Information desk.

Photo credit: Carl Forster