NEW JERSEY AND NATIONAL REGISTER FILE F Summary Sheet	CEORGANIZATION - 1980-1981
AME Much and Dispart	
MUNICIPALITY Newark	COUNTY ESSEX Co.
Nomination Form: Final Nomination Form	Signed Unsigned
U.S.G.S. Map	hotocopy X
Other Maps	
Plan(s): Site	Floor
Photographs:	
Identified V	Unidentified Inadequate Coverage
Exterior X	
Streetscapes	
Outbuildings	
Historical	
Negatives:  Same as prints Less than pr Slides:	ints Additional Negatives
Boundaries:  No precise boundaries  Defined by map  U.T.M.'s	Defined in nomination  Latitude & longitude  Boundary justification
National Register notification of listing	
Copies of final approved nomination:	
Other:	
SHPO Notification Letters: Intent to nominate X National R Owner list	Register State Register
Supplemental Information: N.J.H.S.I.	
Newspaper/Magazine articles	Draft nomination
Local ordinance data	Recent correspondence X Maps HABS
Other Supposis Materials in Storage:	
Public Meeting notification	Draft nomination $\chi$
Newspaper articles X	Correspondence
Historical information X	Other
* Flight Into the Past-New	rank Airport - in library

#### MMARY OF NOMINATION INFORMATION IN ONJH FILES TYPE: NAME NEwton Metropolitica August: Brandact Hoppin Medical Building Individual Historic District COUNTY Esser Multiple Property MUNICIPALITY Neurola Care Documentation Form NOMINATION FORM ONJH FILES - Nomination form (If there are continuation sheets, please indicate number) \_\_\_\_\_ CS: \_\_\_\_ -- First page (#1-6) CS: 3 CS: 3 CS: 3 CS: 4 -- Description (#7) -- Significance (#8) -- Last page (#9-11) - SHPO Signatures - USGS Map - Site plan - Tax map - Floorplan - Photo index map - Other maps historic (site picous) - Photographs (Indicate number) --Exterior --Interior --Streetscapes --Outbuildings --Historical --Negatives -- Contact Sheet DATE OF LISTING State Register <u>4/25/80</u> National Register <u>12/12/50</u> SUPPLEMENTAL INFORMATION N.J.H.S.I. # \_\_\_\_\_ Newspaper/Magazine Articles Contextual Data HABS \_\_\_\_\_ Other (Please specify) STAFF MEMBER Ben Gedatum DATE THIS UPDATES: STAFF \_\_\_\_\_ DATE \_\_\_\_\_ STAFF \_\_\_\_\_ DATE \_\_\_\_\_



## STATE OF NEW JERSEY

DEPARTMENT OF ENVIRONMENTAL PROTECTION

OFFICE OF THE COMMISSIONER
P. O. BOX 1390

TRENTON, N. J. 08625

609-292-2885

June 25, 1980

Ms. Carol Shull
Acting Keeper of the National Register
Heritage Conservation and Recreation Service
U.S. Department of the Interior
18th and C Streets, N.W.
Washington, D.C. 20243

Dear Ms. Shull:

I am pleased to nominate the Newark Metropolitan Airport: Administration Building; Brewster Hangar; Medical Building, Newark Essex County to the National Register of Historic Places.

This nomination has received the majority approval of the State Review Committee for Historic Sites and is being submitted under the new regulations.

Should you want any further information concerning this application, please feel free to contact the staff of the Office of Historic Preservation, Department of Enviornmental Protection, 109 West State Street, Trenton, New Jersey 08625; telephone (609) 292-2023.

Simmerely,

Deputy State Historic

Preservation Officer

Enclosure

## National Register of Historic Places Inventory—Nomination Form

received

date entered

For HCAS use only

See instructions in How to Complete National Register Forms
Type all entries—complete applicable sections

al my				
1. Nar	ne	*		
historic Ner	wark Metropolitan Air	Administrat port: Medical Bui	ion Building, Brews lding	ter Hangar,
and/or common	Newark Internation	al Airport		
2. Loc	ation			
street & numbe	, Jct. of Rt. 22/1/9	and Port Road		not for publication
city, town	Newark	X vicinity of	congressional district	10th
state	New Jersey code	034 county	Essex	code 013
3. Olas	ssification			and the state of t
Category  district X building(s) structure site object	Ownership  public private both Public Acquisition in process being considered  IET OF Proper	Status X occupied     unoccupied     work in progress Accessible X yes: restricted     yes: unrestricted     no	Present Use agriculturecommercialeducationalentertainment _X_governmentindustrialmilitary	museum park private residence religious scientific X transportation other:
name	City of Newark			
street & number	920 Broad Street			
city, town	Newark	vicinity of	Otato	New Jersey
5. Loca	ation of Lega	1 Descriptio	<u>n</u>	
courthouse, regis	stry of deeds, etc. Essex	County Hall of Reco	ords	
street & number	High S	treet		*
city, town	Newark		state 1	New Jersey
ි. Pepr	esentation in	n Existing S	uryeys	NO PORTER OF
itle N.J. His	toric Sites Inventory	7 has this prope	erty been determined eleg	ible? vas no
late 1979		· · · · · ·		countylocal
lepository for sur	vey records Office of	Historic Preservat		
ity, town	Trenton		state N	ew Jersey

FHF.-0-300 (11-78)

## United States Department of the Interior Heritage Conservation and Recreation Service

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#### NEWARK AIRPORT

10. Geographical Data - Verbal Boundary Description

The boundaries of the Historic Newark Metropolitan Airport Complex have been defined as the exterior perimeter of each of the three buildings included. (See Description) The measurments of the buildings are as follows:

Administration Building -

250'x60' main block with a 90'x38' wing flanking each end.

Brewster Hangar -

1,106'x210'

Medical Building

approximately 40'x80'

NOTE: Please refer to USGS map for locations of structures.

7. Desc	ription			
Condition  excellent  good  fair	deteriorated ruins unexposed	Check one unaltered X altered	Check one X original site — moved date —	

Describe the present and original (if known) physical appearance

Newark, New Jersey lies on the Passaic River and on Newark Bay, close to a dense low-lying industrial area eight miles west of New York City. The airport is two miles by road from Newark's City Hall, and nine miles by road from 42nd Street and Broadway in New York City.

The airport is situated on the Newark meadows, a large tract of marshland which lies thirteen feet above sea level. West and south of the airport stretch the meadows; to the north is U.S. Route 1, an express highway leading to Newark and New York by way of two vehicular tunnels beneath the Hudson River; to the east are the tracks of the Central Railroad of New Jersey and the New Jersey Turnpike, a mile beyond which lies Newark Bay.

The trio of pre-World War II buildings, which consists of the ADMINISTRATION BUILDING, BREWSTER HANGAR, and the MEDICAL BUILDING was built between 1934 and 1938. Together they represent the early years of the Newark Metropolitan Airport. On the map, the buildings are nearly adjacent to one another, with the 1952 Terminal separating the Brewster Hangar from the Administration Building. Despite the fact that this trio of structures possesses integrity of location, their present uses differ from their original ones. In addition, access to the structures by road and by runway has been altered to the extent that the perception of the buildings in relation to their setting bears no resemblance to that perceived from the original configuration. For these reasons, the boundaries of the nominated property have been defined as the exterior perimeter of each structure.

The airway station known as the ADMINISTRATION BUILDING was completed in 1935. It is a long, relatively narrow structure of concrete construction faced with horizontal bands of poured concrete alternating with bands of windows articulated with brick inserts. The main entrance facade consists of a two-story three-bay central entrance block which is 250-by-60 feet in plan, with two 90-by-38 foot wings bent back from the air-field elevation as if in flight. The center portion of the entrance block projects out slightly from its end bays which are each detailed with a two-story vertical window opening with a recessed square panel above. The entrance doors are reached by ascending six steps which lead to the three-part entrance — a center revolving door with double doors to either side. Each set of doors was originally topped with a 12-pane window with decorative aluminum grillwork decorating each pane. This complete entrance ensemble is recessed. Above this entrance is a round clock flanked by stylized wings.

The air-field elevation was designed with a number of marquees which projected out from the building and under which airplanes were brought and loaded. The centerpiece of this elevation is the air traffic control tower, designed as a semi-circular form which was repeated in the design of the entrance canopy and tiered entrance steps below.

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When first built, the central 80-by-50 foot main concourse provided access to interior corridors on either end which led to three small waiting rooms; the smallest were at either end of the station. Passenger access doors led to the field from the concourse and from each of the six waiting rooms. The main or ground floor also contained loading rooms where mail was assembled and made ready for air transport. This section was divided into office and various mail destination stations. In addition, the main floor contained space for commercial airline ticket counters, the State Aviation Commission, the airport physician, and a newspaper man who wrote daily columns about events at the port.

The second floor consisted of a central lobby flanked by miscellaneous offices in one wing, bedrooms in the other, the airport manager's office, a lounge, and an area with un-utilized space originally intended to serve as a restaurant which would have faced away from the landing area. This area was to one side of the second floor lobby which was decorated with a 10-panel 1,530 square foot abstract mural painted by Archile Gorky. To the other side of the lobby were two open air terraces which overlooked the air field. Atop the building at the rear was the 20-by-10 foot central Air-Traffic Control Tower, a semi-circular aluminum and glass room reached by a spiral stairway from the second floor.

The building was designed in the Art Deco style popular in the 1930's. The design incorporated large areas of glass and contained an interior of fanciful, yet restrained decoration which relied heavily on geometric motifs which were interspersed with references to the theme of flight. In the lobby, plaster wings decorated the capitals of columns which were square in section. The walls of the ground floor public areas were faced with highly polished marble. The stair rails were of aluminum. The theme of flight was repeated over the boarding area door with stylized aluminum birds which were applied to the decorative aluminum grillwork. The original ceiling fixtures were of fluted milkglass.

Today the interior of the structure has been partitioned by United States Postal Service for its airmail operation. The Art Deco lighting fixtures are gone, as are the grillwork and the aluminum seagulls. Although covered with sheetrock and/or paint, the marble wall-facing and the columns and capitals remain in place. The original ceilings and the terrazzo marble floors inlaid with aviation motifs also remain. The Gorky murals which were not destroyed during the U.S. Army's occupation of the airport during World War II have been cleaned and removed and now hang in the Newark Museum.

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The exterior changes include the addition of a loading dock to the east of the main entrance doors on the facade. The semi-circular canopy and tiered entrance steps have been removed from the air-field elevation and a long, covered loading dock extends across this elevation. From this point trucks transport airmail to the new terminals which opened in 1973. The control tower retains its original appearance.

The BREWSTER HANGAR, built in 1938, is of steel-frame construction with hollow tile walls faced on the exterior with stucco. Overall dimensions are 1,106-by-210-by-64 feet, with a cubic contents of 7,816,000 feet, and a total area of approximately 194,000 square feet. There are four three-story, 62-by-28 foot pylons on the field side which were designed for use as office space for the individual airlines. At the rear of the hangar, which happens to be the street facade, are three separate one-story shop sections, the center one housing a central heating plant. The central shop measures 174-by-30 feet, the other two measure 136-by-27 feet.

The hangar is supported on concrete beams and footings resting on wooden piles, and piles support the concrete beams which carry the concrete-slab floor. The central sections of the plane storage area which were designed to support the wheels of transport planes were built on a heavier slab than were the outer areas. The five-ply built-up roof rests on 1-inch wood fiber insulation, which in turn rests on 2-inch gypsum plank supported on steel purlins which are carried by steel trusses. Six 62-ton, 160-foot-long main trusses support the 12-ton, 150-foot-long transverse trusses.

The hangar is divided into three entirely separate plane-storage areas by two sets of 12-inch-thick fire walls spaced five feet apart. The plane-storage areas have a width of 151 feet and total 1,039 feet in length, giving a total area of 157,000 square feet. Overhead clearance within the hangar is 35 feet. The six hangar openings, all facing the landing area, have a clearance of 160-by-32 feet. The hangar doors are electronically operated Morgan type overhead canopy Truscun doors which can be opened in 40 seconds. They can be manually operated in an emergency. Each opening is divided into a 120 foot and a 40 foot door section, either or both of which may be opened at the same time. A safety device extends along the length of the bottom of the doors, and consists of a strip of copper meshing within a flexible rubber shoe. The slightest pressure on this shoe is transmitted to the copper meshing, which closes an electric circuit and halts instantly the downward movement of the 40-ton door, preventing the jamming of the door or injury to a plane or person.

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Each of the three hangar sections may be heated separately. The oil-fired central heating plant supplies steam to heat the hot air, delivered to the planestorage areas by 30 overhead blower units. Heating is thermostatically controlled.

Today the hangar retains all of its original features in excellent condition. Although the structure is too small for most of the airplanes in use by the major airlines, the hangar remains in use as a service and storage area for the various airline companies.

The small Art Deco style MEDICAL BUILDING was built c. 1934-1938. The two-story structure is built of load-bearing brick, three bays wide with the end bays subdivided into two by the fenestration, and four bays deep with each bay also divided into two sub-bays. Two-story brick pilasters, square in section, mark the major divisions of bays.

### 8. Significance

1700–1799 1800–1899	agriculture architecture	community planning conservation economics ducation engineering exploration/settlemen	music	religion science sculpture social/ humanitarian theater X transportation other (specify)
Specifi <b>c dates</b>	1928 to present	Builder/Architect		

Statement of Significance (in one paragraph)

Newark Metropolitan Airport was the first great commercial airport in operation in the United States. Development began in 1928. During the early years of the airport's existence, one-third of the world's air traffic passed down its runways. The trio of Art Deco style structures which includes the ADMINISTRATION BUILDING, BREWSTER HANGAR, and the MEDICAL BUILDING, is the last remaining testement to the early days of the airport's development. Built prior to World War II, they possess national significance in their relation to the historical development of air transportation. In addition, there is significance in the airport's use during World War II, the development of major engineering and communication technology, and the fact that the WPA Project was used to construct the ADMINISTRATION BUILDING.

While not the earliest buildings constructed for the airport's use, this group of structures, built during the 1930's, replaced the outmoded buildings which multiplied during the first five-to-six years of the airport's rapid development. All three structures have survived in good structural condition and with a high degree of architectural integrity. Newark Metropolitan Airport, which officially opened on October 1, 1928, was designated a National Historic Civil Engineering Landmark in 1978 by the American Society of Civil Engineers.

The significance of the ADMINISTRATION LUILDING, BREWSTER HANGAR, and the MEDICAL BUILDING cannot be discussed without addressing the significance of the early development of the airport as a whole.

In 1907, the New Jersey Legislature enacted a law which enabled the City of Newark to purchase swampy lowlands east of the city for the dual purpose of reclamation and development. Lindbergh's dramatic solo flight across the Atlantic Ocean, from New York to Paris, in May, 1927 fastened public attention upon the practical future of aviation. On July 11, 1927, Mayor Thomas L. Raymond of Newark gave his support to the construction of a municipal airport. City Engineer James W. Costello was asked to prepare plans for a \$6,000,000 project. The idea was endorsed by the U.S. Assistant Secretary of Commerce for Aeronautics, William P. MacCracken. Several months later a special commission appointed by then Secretary of Commerce Herbert C. Hoover announced that the proposed site of Newark Airport, adjacent to Newark Bay and U.S. Route 1, provided an excellent location in the metropolitan area for a central air terminal since many railway connections were available and weather conditions were considered favorable. In February, 1928, construction of an aviation field of 420 acres of meadowland was begun.

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Significance

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When the city engineers began operations, the site was covered with earth and ash fill. The tremendous task involved leveling the mounds, filling the depressions, placing two creeks underground, installing a drainage system, and constructing roads and bridges. Yet, in less than seven months, the first unit, which consisted of about one-half of the total acreage, was opened. In August, 1928, a small, four-passenger Ryan monoplane from Washington, D.C. made the first landing on a completed section of 1,600-foot-long runway, the first hard-surfaced strip of any commercial airport in the nation. In addition, there was a 120-foot-square hangar capable of holding twenty-five aircraft.

In 1929, Newark was designated as the metropolitan airmail terminus. The first ADMINISTRATION BUILDING was also completed in this year in the Classical Revival style. By 1930 Newark Metropolitan Airport was the busiest in the world. The Weather Bureau began operations at Newark during this year. They occupied the second floor of the ADMINISTRATION BUILDING along with the Airways Bureau of the Department of Commerce. The first airport post office was also housed there. By the autumn of 1930, Transcontinental and Western Airways (now TWA) inaugurated the first all-passenger service to the West Coast. Colonial Airways (American), National Air Transport (United), and Pitcairn Aviation (Eastern) soon joined them. The airlines proceeded to construct their own hangars at Newark. The year 1932 brough the opening of the first airport restaurant. In August 1934, overnight plane service from Newark to Los Angeles was begun.

During the 1930's, the New Jersey State Military Air Unit, a division of the National Guard, maintained a squadron at Newark manned by 20 commissioned officers and 100 non-commissioned officers and men. In addition to military personnel, Newark Airport has been associated with many famous people including Wiley Post, Amelia Earhart and Howard Hughes who housed experimental planes in one of the hangars.

As new safety aids for flying were developed, Newark provided a testing ground. Night lighting, paved runways, air traffic control, radio transmittal from land to air, and instrument flying were all pioneered at Newark.

In late 1934, an engineer named Wall State received permission from the Army to build a permanent ADMINISTRATION BUILDING. Work on the building was continued by the Federal Civil Works Administration with a total cost of \$700,000. May 15, 1935 was the opening day of the beautiful Art Deco structure and Amelia Earhart dedicated the building. Meanwhile, during 1935, an artist whose studio was located in Greenwich Village, New York joined the WPA Federal Art Project. In August, 1935 the ortist began the monumental ten-panel, 1,530-square-foot mural entitled

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Significance

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"Evolution of Forms Under Aerodynamic Limitations" in colors of red, yellow, blue, brown, black, white and grey - all symbolic of the colors seen on the airfield. The mural was commissioned for the new ADMINISTRATION BUILDING. Unfortunately, the abstract style of the paintings aroused a storm of criticism, and during World War II when the Army Air Force took over the air-field and terminal, the murals were painted over and eight of the ten were eventually discarded. The two remaining panels were discovered in 1972 under fourteen layers of paint. In November, 1976 the paintings were removed and cleaned. Today they hand in the Newark Museum.

When Newark Metropolitan Airport opened, traffic was controlled by an official who stood near the runway and waved aircraft in and out with flags. The first control tower at the airport, a wooden structure built in 1929, contained a signal light. Night flying at the airport first depended upon a battery of floodlights mounted on a wooden platform and trained on the runway. Another early attempt was the installation of a line of lights down the center of the runway, flush with the cinder surface. White cobblestones, aligned along the edge of the black runway helped to define the outline of the landing strip. In 1932, wires which stretched at right angles to the runways emitted signals which gave a pilot a click in his radio headset as he reached a certain point in his landing approach. The first air traffic control center was established on December 1, 1935 with centers at Newark, Chicago and Cleveland. It was run by a corporation formed by four airlines (AA, EA, TWA, and UA) until 1936 when the federal government took over the responsibility.

Construction on the BREWSTER HANGAR began in 1937 and continued through 1938. Its design was promoted as the most advanced of the time. The hangar boasted oil heat which was another Newark Airport first. Mammouth 40-ton doors were operated electronically. A dozen DC3's could be stored inside any one of the Hangar's six bays.

Until 1939 Newark was the world's busiest airport, but in that year Mayor LaGuardia of New York City completed construction of an airport at North Beach. Because of ongoing disorganization in the management of Newark Airport, three major airlines immediately moved their operations to LaGuardia's North Beach airport. Mayor Ellenstein closed his Newark Airport for reorganization.

In the spring of 1942 the War Department took Newark Metropolitan Airport over exclusively for military use. When World War II was over, the airport was returned to the city. While under military control, large new areas of reclaimed land were put to use to lengthen runways. A new drainage system was constructed and modern lighting was installed. New structures included a new control tower, a cargo building containing 40,000-square-feet of storage area, a double Butler hangar, and three supply houses.

FHR-8-300 (11-79)

## United States Department of the Interior Heritage Conservation and Recreation Service

# National Register of Historic Places Inventory—Nomination Form

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In December, 1945, the City of Newark requested the Port Authority to consider taking over Newark Airport, along with Port Newark. The purpose was to allow the major expansion of the airport so that it might regain and retain the position of one of the nation's greatest air terminals. In 1948 the Port Authority of New York and New Jersey assumed administration of the Newark Airport and began their major expansion program which included major land acquisition, and development which continues to this day.

## 9. Major Bibliographical References

See Continuation Sheet

•				
10. Geographical Data				
Acreage of nominated property  Guadrangle name Elizabeth, NJ/NY  UMT References	Quadrangle scale 1:24,000			
A 1 8 5 7 9 2 1 9 4 5 0 6 3 8 0  Zone Easting Northing	B 1 8 5 7 0 2 1 0 4 5 0 5 3 4 0  Zone Easting Northing			
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Verbal boundary description and justification				
See Continuation Sheet	, MCI , GOTEN TES			
List all states and counties for properties overlag	oping state or county boundaries			
state code	county code			
state code	county code			
11. Form Prepared By	*			
name/title Cynthia Martin Goldsmith				
organization N.J. Office of Historic Pre	eservation <sub>date</sub> April 28, 1980			
street & number 109 West State Street	telephone (609) 292-2023			
city or town	state New Jersey			
12. State Historic Prese	rvation Officer Certification			
The evaluated significance of this property within the state is:  national state local				
As the designated State Historic Preservation Officer for the National Historic Preservation Act of 1966 (Public Law 39-665), I hereby nominate this property for inclusion in the National Register and certify that it has been evaluated according to the criteria and procedures set forth by the Heritage Conservation and Recreation Service.  Deputy				
State Historic Preservation Strick signature				
title Deputy Commissioner, Dept. of Environ	nmental Protection date			
For HCRS use only.  I hereby certify that this property is included in the	Netional Secialar			
	date			
Keeper of the National Register				
Attest:	date			
Chief of Registration				

## National Register of Historic Places Inventory—Nomination Form

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Continuation sheet Bibliography

Item number

9

Page 1

Arend, Geoffrey. Air World's Coreat Airports: Newark 1928-1952. New York: Air Cargo News, Inc., 1978.

DiLegge, Peter A., P.E. A Flight Into the Past - Newark Airport. Paper prepared for History and Heritage Committee, New Jersey Section, American Society of Civil Engineers, January, 1978.

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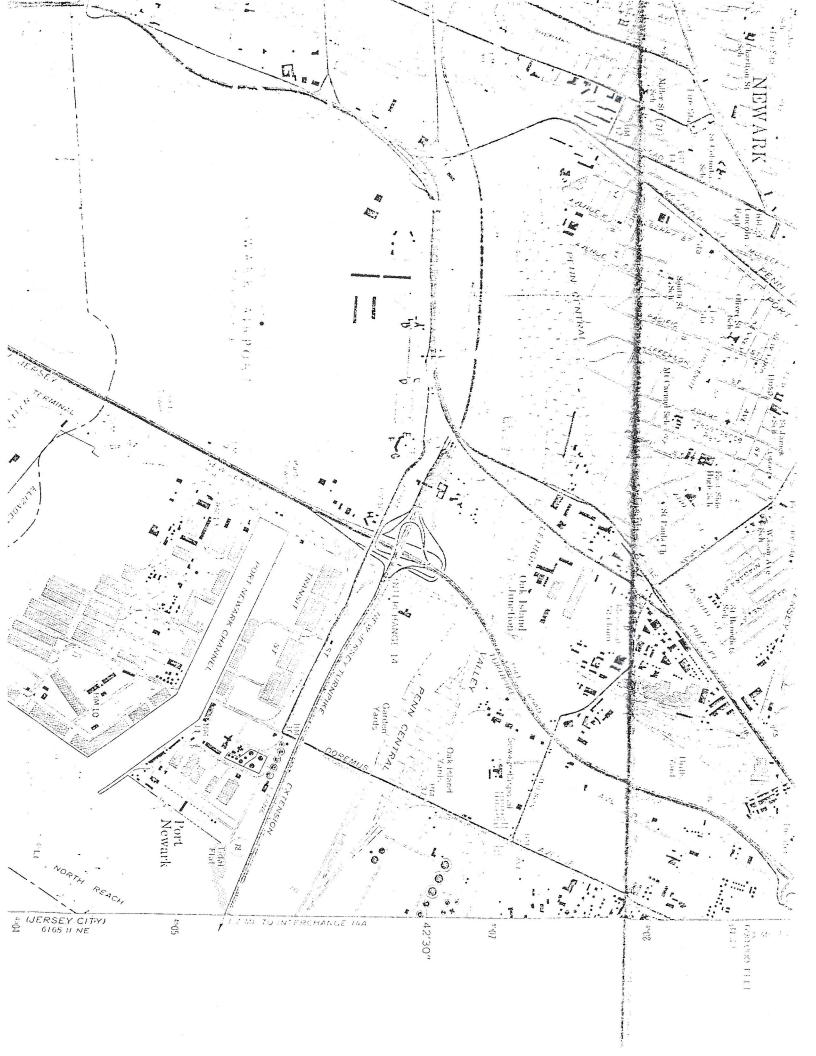
Port of New York Authority. Port of New York Authority - Newark Airport. 1937.

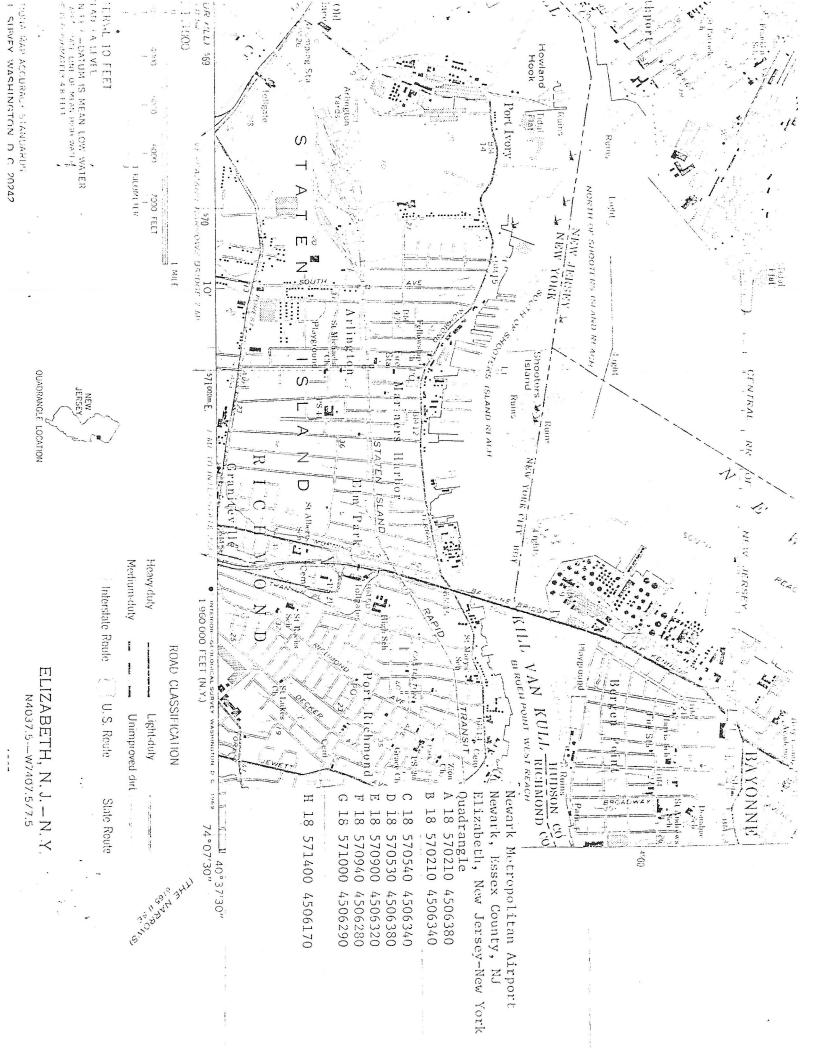
Port of New York Authority. P.A. Operation of Port Newark and Newark Airport., 1948.

Port of New York Authority. P.A. Operation of Port Newark and Newark Airport. 1953.

Port of New York Authority. P.A. Operation of Port Newark and Newark Airport. 1960.

Newark Airport as it appeared in 1953





The Port Authority effectively created an atmosphere where airport business was separated from local politics and the agency's rebuilding and development programs have continued to where, as of this writing, Newark is the most advanced passenger airport in the world.

Facts & figures

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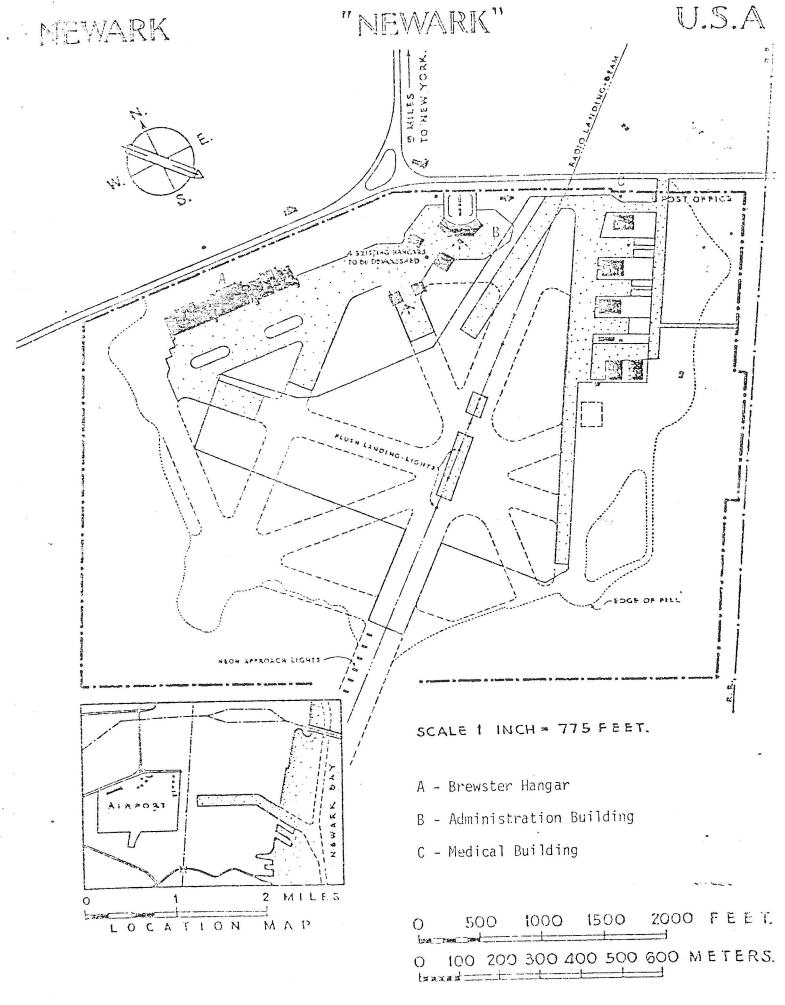
and

In its initial development program, the Port Authority increased the airport's total area, constructed a \$9,000,000 instrument runway in 1952, and completed an \$8,500,000 passenger terminal in 1953. The Authority also constructed a \$3,000,000 hangar for United Airlines in 1958 and a four-building, \$4,000,000 Air Cargo Center and a

\$1,500,000 Control Tower. Other improvements, such as parking lots, taxiways, runway and apron rehabilitation, brought the total investment by the Port Authority by 1960 to over \$200,000,000.

Redevelopment of Newark Airport at a cost of more than \$500,000,000 has been underway since 1965. The redevelopment plan for Newark Airport included the modification and extension of runway 4-22, the construction of new runway parallel to runway 4-22, three new passenger terminals, additional aircraft hangars and cargo handling facilities and a permanent fuel storage system.







#### DEPARTMENT OF ENVIRONMENTAL PROTECTION

OFFICE OF NEW JERSEY HERITAGE

CN 402

TRENTON, N.J. 08625 (609) 292-2028

31 January 85

Mr. Vincent E. Bonaventura General Manager, NJ Airports Port Authority of NY & NJ Newark International Airport Newark, NJ 07114

> Re: Brewster Hangar No. 55 Newark Int'l. Airport

Dear Mr. Bonaventura:

Thank you for seeking our comments on the proposed extension of the Brewster Hangar No. 55, listed on the National Register of Historic Places.

We support your efforts to make the expansion compatible with existing structure. Our main concern is that the integrity of the building be preserved, meaning that new hangar doors and new finishes duplicate the originals. We also recommend a sensitive handling of the transistion between the different roof heights.

We would appreciate the opportunity to see the proposed design and thank you for keeping us informed. Please copy any materials to Ms. Beth Sullebarger of my staff.

Sincerely,

Helen C. Fenske

Deputy State Historic

Preservation Officer

#### NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION

From: OFFICE OF THE COMMISSIONER

TO:

Sender:

**FENSKE** 

BONAVENTRUA

Porth Authority of NY & NJ

Newark NJ 07114

Subject:

BREWSTER HANGAR NO. 55

Action:

RTS

Date of Letter

(Y-M-D)

Date Referred

(Y-M-D)

Date Due

(Y-M-D)

84-12-17

84-11-20

84-12-03

NOTE:

#### ACTION CODE:

RTS = Please reply to sender, stating that this matter has been referred to you by the Commissioner.

RR = Please draft reply suitable for signature of the Commissioner.

= Please submit information upon this matter. SI

IR = Please investigate and report to the Commissioner.

FC = For comments and/or suggestions.

FYI = For your information. (Please initial and return.)

Should you have any questions concerning this referral, please call 2-2885.

#### ENTRIES IN THE NATIONAL REGISTER

STATE NEW JERSEY

Date Entered

Name

Location

Crescent Area Historic District

- c.u. o

Plainfield Union County

Newark Metropolitan Airport Buildings

Newark Essex County

#### Also Notified

Honorable Harrison A. Williams, Jr. Honorable Bill Bradley Honorable Matthew J. Rinaldo Honorable Peter W. Rodino, Jr.

#### THE PORTAUTHORITY OF MYS NJ

Newark International Airport Newark, New Jersey 07114 (201) 961-2000

nder t

November 20, 1984

Mr. Robert E. Hughey Commissioner of Environmental Protection Labor & Industry Building John Fitch Plaza Trenton, NJ 08625

Re: Brewster Hangar No. 55 - Newark International Airport

Dear Mr. Hughey:

The Port Authority of New York and New Jersey is currently reviewing plans submitted by People Express Airlines to expand Brewster Hangar No. 55 at Newark International Airport in order to accommodate contemporary aircraft. This improvement will contribute to the facility's ability to handle increased operations, a long-standing goal of both the State and the Port Authority. We find that the Brewster Hangar is listed in the New Jersey State Register of Historic Places. While the Port Authority, as a bi-State entity, is not legally subject to unilateral State legislation such as N.J.S.A. 13:1B-15.31, this agency as a policy cooperates with appropriate State agencies wherever practicable. For this reason, we wish to advise you of the proposed changes.

The essence of the hangar expansion is an approximate fifty foot extension along the entire south side of the existing structure. The expansion, which would be accomplished in stages will be approximately twenty feet higher than the present building. No structural members will be removed. The finish treatment for the expansion, including new hangar doors, will be compatible with the architecture of the existing hangar.

The proposed changes will not affect the basic character of the hangar and its expansion will serve a critically needed function which will be otherwise unavailable at Newark International Airport. Should you or your staff have any comments or questions pertaining to the Brewster Hangar plans, I would be pleased to discuss them.

Vincent E. Bonaventura

General Manager New Jersey Airports

# AIR WORLD'S GREAT AIRPORTS

**NEWARK** 1928-1952

by Geoffrey Arend

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## Building an airport at Newark

Today, at the southeastern edge of Newark, where once sea gulls glided noiselessly to rest among waving cattails and sawgrass, wide runways stretch to the horizon over the vanished marshes. Now great airplanes swoop down from the sky and park in front of modern steel, concrete and glass terminals. From swampland in 1927 to the world's busiest commercial air terminal by 1938—this was the dynamic rise of Newark Airport.

As early as 1919, Newark had an airport on property belonging to the Forest Hill Golf Club. But Heller Field, as it was called, was abandoned in May 1920 by the U.S. government's airmail service because of its small size and the hazards which caused many accidents. Five years later, airmail was being transported by private companies from their headquarters at Hadley Field near New Brunswick, but increased business necessitated a base closer to New York City. The Aeronautical Club of New Jersey, headed by John J. Bergen and Clarence Chamberlin, the famous aviator, urged construction of an airport at Newark. City officials were intent on improving the docks at Port of Newark and refused to consider using valuable land near the waterfront for an airfield.

Lindbergh's dramatic solo flight across the Atlantic in May 1927 fastened public attention upon the practical future of aviation. City officials saw the prospective need for landing fields near urban centers. Mayor Thomas L. Raymond of Newark publicly gave his support on July 11, 1927 to the building of a municipal airport and requested the City Engineer, James W. Costello, to prepare plans for a \$6,000,000 project. The idea was endorsed by the U.S. Assistant Secretary of Commerce For Aeronautics, William P. MacCracken. Several months later a special commission appointed by the Secretary of Commerce (former President) Herbert C. Hoover announced that the proposed site of the Newark Airport, adjacent to Newark Bay and U.S. Route 1, provided the best facilities in the metropolitan area for a central air terminal. Many railway connections were available and weather conditions were considered favorable.

Inspecting the airport site at the Port of Newark in May 1926. From left to right are: Dr. George W. Lewis, former Chairman of the National Advisory Board on Aeronautics; John J. Bergen of South Orange, President of the Aeronautical Club of New Jersey; Bradford Cabot, President of the National Aeronautic Association; Frank D. Ford; Rear Admiral Moffett; and Porter Adams, Chairman of the National Aeronautics Association.



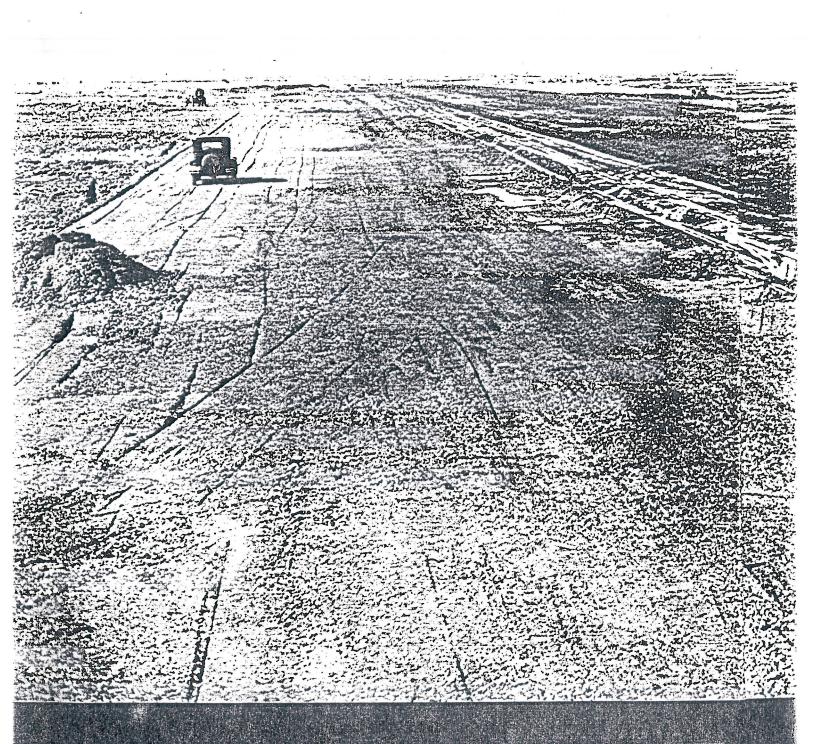


# Construction of an aviation field on 420 acres of meadowland began in February 1928. The city was engaged in a program of expansion and was enjoying a building boom; Newark not only furnished material for the field

Construction of an aviation field furnished material for the field but also stimulated public

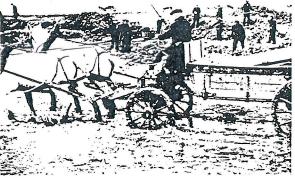
support for its construction.

The task to turn the Newark marshes into an airport was quite a feat. The level of the land had to be raised six feet, four miles of creeks had to be diverted and six miles of subsurface drain and sewer pipes had to be installed. Hydraulic from the b \_ was put million an dry fill wa included a 7,000 Chri safes don:



Newark t was quite and had to r miles of ted and six tain and t installed. Hydraulic fill — mud pumped from the bottom of a ship channel — was pumped in, and over a million and a half cubic yards of dry fill was laid. This dry fill included amongst other things, 7,000 Christmas trees and 200 safes donated by a junk dealer.





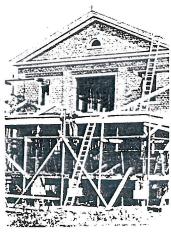
Photos (left) World's first paved runway, 1600-foot strip opened in 1928. (Upper photo) After opening, a 1928 aerial view taken from 10,000 feet. (Above) Equipment used to create Newark Airport. (Right) Airport's first Administration Building, completed in 1929.

Noting this, a writer for the local evening paper in 1928 proclaimed; "Forget the airport! The craze for aviation will soon die out!"

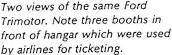
In August 1928, a small four-passenger Ryan monoplane from Washington, D.C., made the first landing on a completed section of 1,600-foot-long runway. This runway was to go down in U.S. airport history as being the first hard surfaced strip of any commercial airport in the nation. One month and \$1.75 million later, the bleak marshland had been converted into a working airport. In addition to the hard runway, the airport had a 120 foot square hangar capable of holding 25 aircraft. With the inauguration of a fare-paying Newark to Washington service, and a passenger-carrying flight from Montreal, the airport was in business.

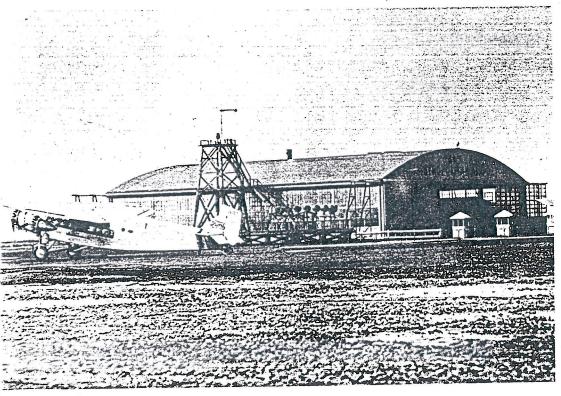
Newark was designated as the metropolitan airmail terminus in 1929, and airmail operations began with the Post Office moving its mail operations from Hadley Field at New Brunswick, N.J. to Newark Airport. The four airlines using Hadley Field also gradually moved to Newark.

During those early days, large crowds flocked to the airport. It is estimated that 30,000 persons visited the airport on the opening day in 1928, and that during those early days, crowds numbered 50,000 every Sunday through 1930.

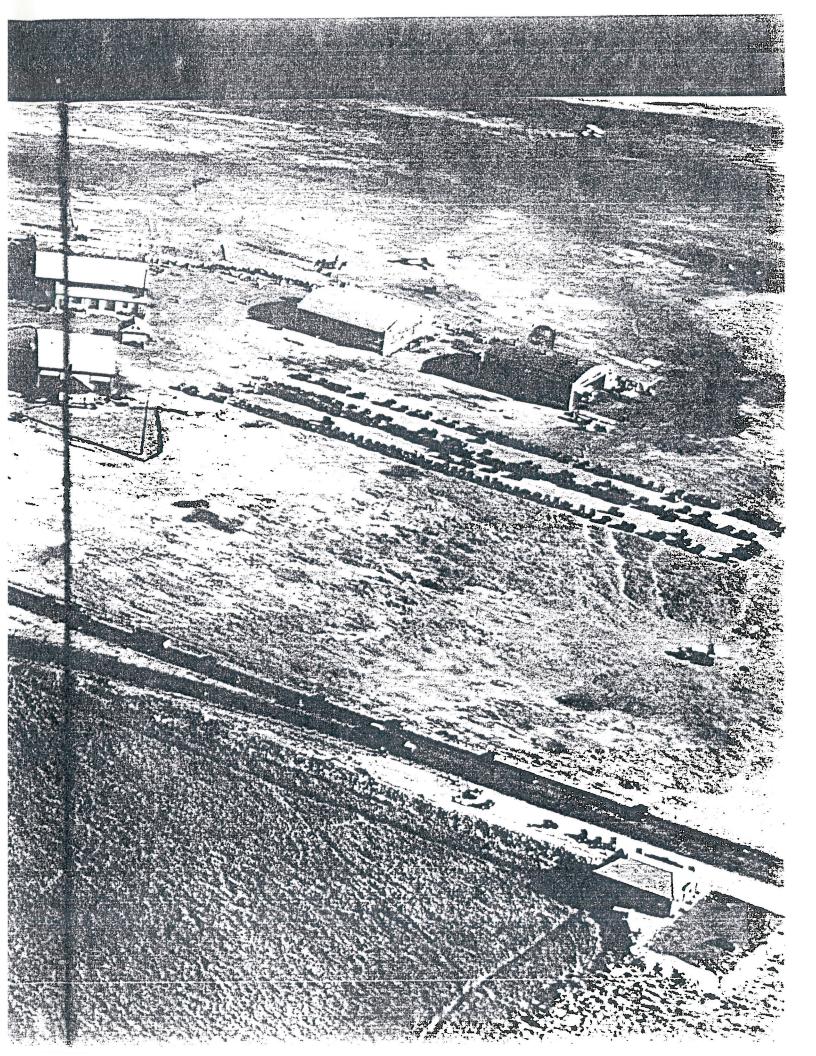












## The Administration Building

Later an engineer named Wall State requested and received permission from the Army to build a permanent Administration Building. At first it was only a moderate project. Plans of the building were conceived on the return trip from Washington. Preliminary sketches were drawn on a couple of old envelopes on the train.

#### Early construction

State called in his engineers and draftsmen and they began working on plans. By Wednesday morning, two days after he started, the workmen began to drive piles for the administration structure. By the following Monday he had all the pile caps cut and ready. By the following week they had the principal supporting beams and within 28 days the east wing of the building was enclosed.

During this time, the weather was incredibly bad. Temperatures averaged 6 to 20 degrees below zero and it stormed continually. The rough structure of the building was completed at about the time the air mail contracts were returned to the airlines.

Newark Mayor Meyer C. Ellenstein inaugurated a vigorous program designed to make Newark the center of commercial aviation in the east. In 1934, therefore, work on the Administration Building that was begun by the Army was continued by the Federal Civil Works Administration, and at a cost of \$700,000, the building was completed.

The new building was the marvel of the day. There were a number of marquees jutting out from the building under which airplanes were brought and loaded from above in all kinds of weather. The building was originally designed with main floor loading rooms where mail was assembled and made ready.

The ground floor was also originally designed to be divided into office and various mail destination sections (interestingly, as of this writing, that is exactly what has happened today).

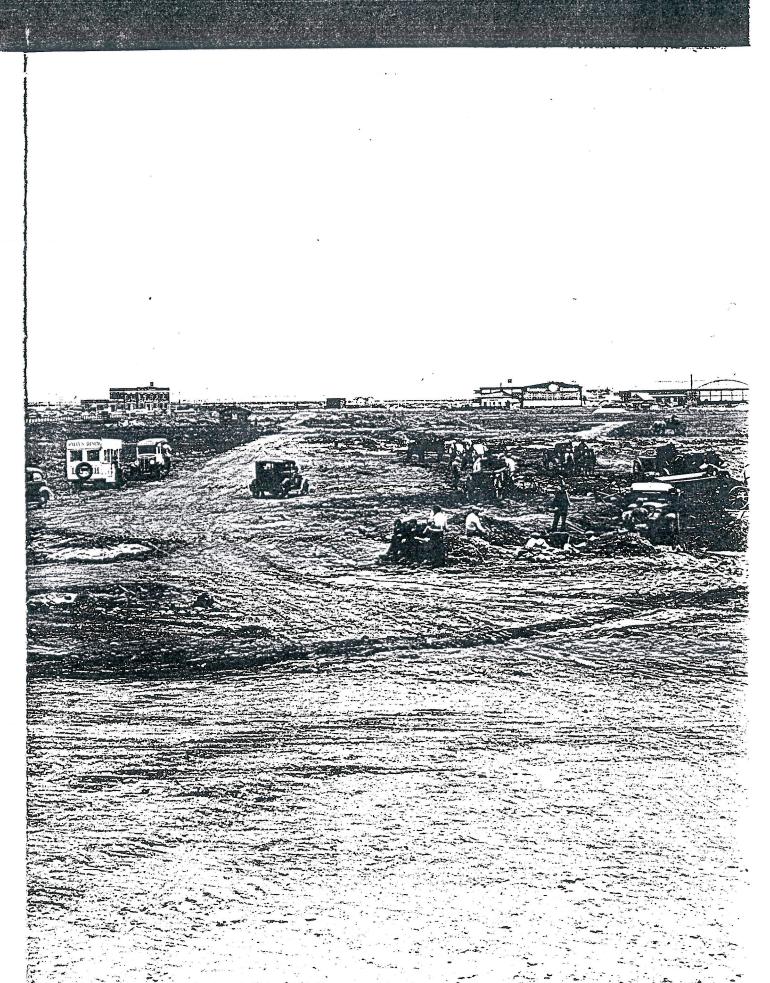
For commercial use, the ground floor included room for airline ticket counters, the State Aviation Commission, and airport physician, and there was space for newspaper men who wrote daily columns about events at the port.

Upstairs a lobby led onto two open air terraces overlooking the field. From here could be seen the hangars of the great transcontinental airlines, the N.J. State Military Unit, Eastern Aeronautical Corp., Newark Air Service and the Standard Oil Co., which operated a fleet of planes to transport company officials about the country and to test the firms airplane products. Beyond the broad expanse of open land were the then sparkling waters of Newark Bay. To the south were the Goethals and Bayonne spans connecting New Jersey and Staten Island. Adjoining the second floor lobby were the offices of the Airport Superintendent and the Airways Traffic Control Station. The latter was operated by the Civil Aeronautics Authority, which regulated all private and commercial flying among the 48 states. Atop the Administration Building at the rear was the airport's own Traffic Control Tower, a glass tower room reached by a spiral stairway from the second floor. These two offices shared control over all airplane travel to and from the airport.

The Newark Administration Building was a positive contribution to modern architecture, in the "art deco" style popular in the 1930's. The structure incorporated large areas of glass as did the best European and American examples of modern architecture of the time and boasted an interior of exhuberant yet restrained nearly classical decoration, relying heavily on geometric motifs which were interspersed with references to flight. Chandeliers and other decorative elements were carefully and skillfully integrated with the architecture in the main public rooms to form a pleasing and artistic whole.

By 1937 the Newark Administration Building was the premier (and subsequently rare) example in airport design of the marriage between talented architects and, as we shall learn, an artist of genius.

The Airport in 1934. Each airline had its own hangar. (Right to Left) The Airport's first Administration Building, Eastern Airlines hangar, United Airlines. Far end, American Airlines hangar. Below is the cancelled check to Max Sax from the City of Newark to purchase additional land for development of Newark Airport.

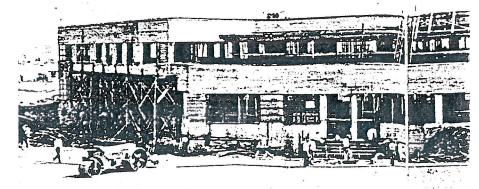


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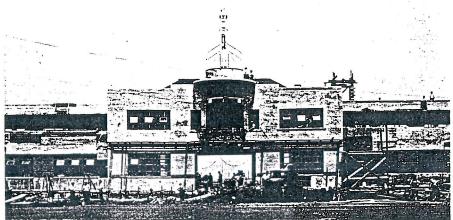
## World's busiest airport

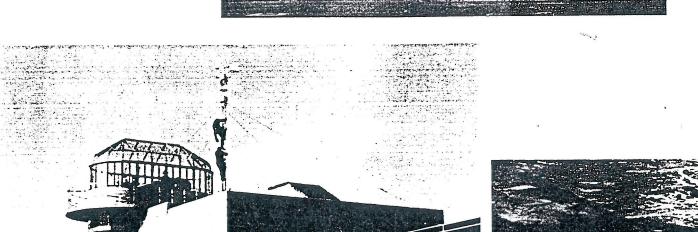
By 1937 Newark shipped a large percentage of the country's airmail; 34.8% of the express and 27.1% of the passenger traffic.

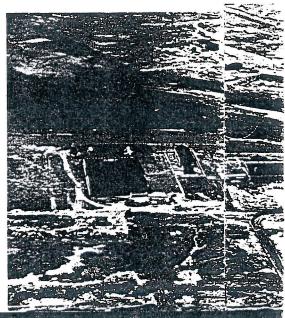
The Traffic Control Tower, in its prime, regulated approximately 125 scheduled take offs and landings daily and about 75 unscheduled flights. Following a hurricane in September 1938, the number of scheduled flights for one day, September 25, skyrocketed to a record mark of 476.



Above, the Administration Building in its early stages of construction. Started by the Army to house the airmail pilots during tte airmail emergency of 1934, the structure was completed by W P A at a cost of \$700,000.







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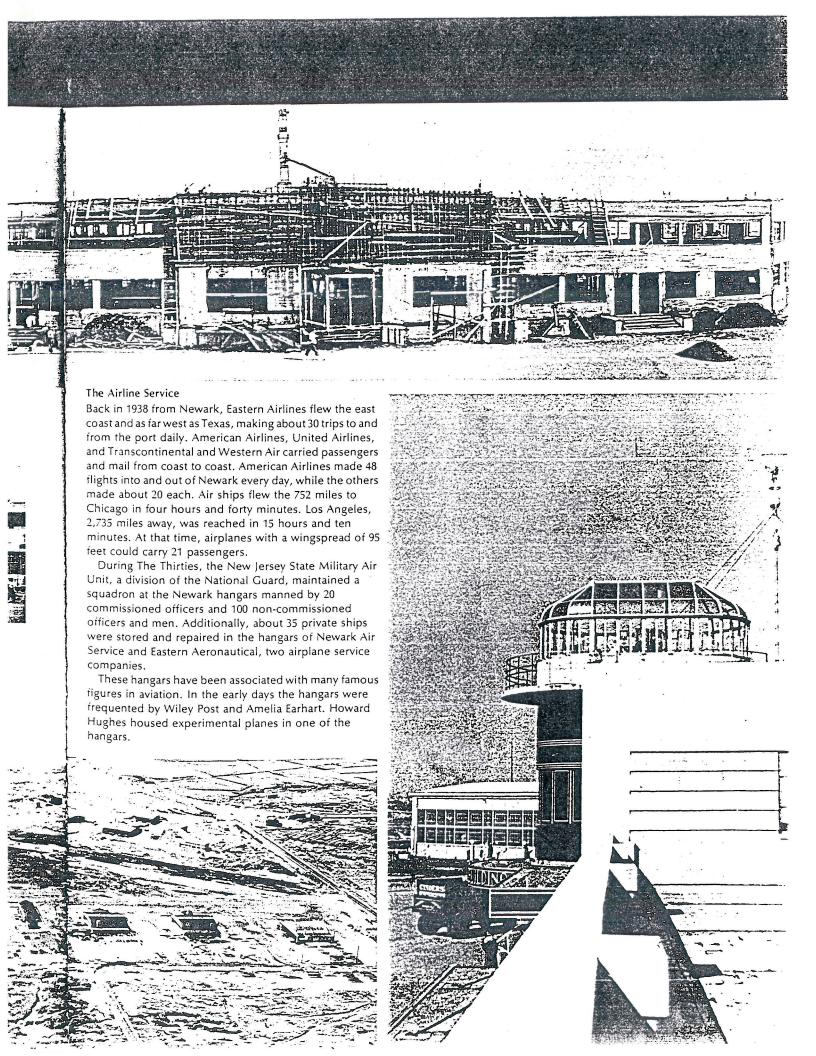
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# The Port Authority

By 1945, Newark Airport represented a capital interest of over \$20,000,000 and its operators had cost the taxpayers of Newark an average of about \$415,000 a year. The City had faith in the future of the airport and was convinced that it could remain one of the busiest airports in the world. But the City also knew that rebuilding and additional construction costing many millions of dollars was necessary if Newark Airport was to fulfill its destiny. To complicate the problem, Newark Seaport was in a similar situation. The City retained a planning and an engineering firm to study the problem.

As a result of this study, the engineering firm in a 100-page report declared:

"Newark's endeavor to create a great seaport and airport has been highly commendable and forward looking. However, these operations have resulted in the creation of a great debt and a substantial increase in taxes... Looking to the future, there is no question but that there is much need for a great seaport and airport at the locations which Newark has developed for these two facilities. Since the location and the traffic of both the seaport and the airport are so completely integrated with the remainder of the New York metropolitan area, it is unwise for Newark to attempt to further develop these facilities by itself."

The solution to the problem, according to the Bartholomew Report, was to place the two City-owned facilities under the administration of the Port of New York Authority (today called The Port Authority of NY & NJ).

The Bartholomew Report was submitted to the Central Planning Board of the City of Newark in October, 1945, and the "satisfactory arrangement" it suggested was two years in the making. The City requested the Port Authority in December, 1945 to study the possibility of taking over Newark Airport and Port Newark.

It is obvious from an examination of the terms of that lease that the City of Newark was determined that it would be satisfied with nothing less than a major expansion and reconstruction program by the Port Authority to enable Newark Airport to regain and retain its position as one of the nation's busiest and greatest air terminals. The lease among other things obligated the Port Authority to further expand the airport to construct a new runway, to construct a new and adequate loading and passenger terminal and to, and these are the exact words in the lease, "provide other appropriate and needed facilities."

#### Earliest benefits

The Port Authority proceeded with the reconstruction and development work. The agency's enthusiasm for the job at hand would realize vast improvements at Newark, culminating in the 1953 opening of the magnificent passenger terminal with its elegant shops and famed Newarker restaurant. However, the basic compact that gave the PA authority to operate the airport would give to

Newark Airport the earliest and pernaps most overlooked benefit. The Port Authority considered each airport as part of a unified regional airport system rather than an isolated facility, the original compact between New York and New Jersey stated:

"Each terminal within the Port District serves the entire district and that the problem of furnishing proper and adequate air terminal facilities within the district is a regional and interstate problem. and that it is and shall be the policy of the two states to encourage the integration of such air terminals, so far as practicable, in a unified system."

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