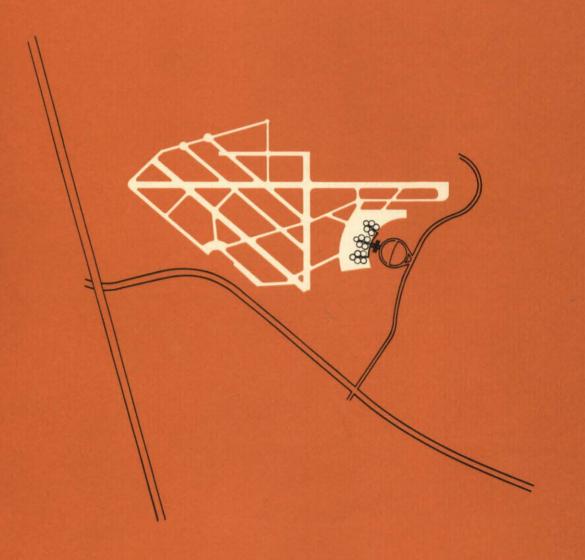
AUSTIN

B. Frank McCullough

TEXAS

Card made

TERMINAL BUILDING ANALYSIS ROBERT MUELLER MUNICIPAL AIRPORT



F G OFFICE OF FEHR AND GRANGER
MEMBERS OF THE AMERICAN INSTITUTE OF ARCHITECTS
ARCHITECTS AND PLANNING CONSULTANTS
403 EAST FIFTEENTH STREET AUSTIN, TEXAS

TERMINAL BUILDING ANALYSIS
ROBERT MUELLER MUNICIPAL AIRPORT
AUSTIN, TEXAS

CITY COUNCIL
Tom Miller, Mayor
Wesley Pearson, Mayor Pro-Tem
Mrs. Emma Long
Ben White
Lester Palmer

CITY MANAGER
W. T. Williams, Jr.

DIRECTOR, DEPARTMENT OF PUBLIC WORKS S. Reuben Rountree, Jr.

ARCHITECTS
Office of Fehr & Granger

GENERAL ANALYSIS

Terminal: Building, Austin Airport

The evolution of a program for the various facilities needed at an airport consists of a complex series of calculation. The basic problem is one of circulation, human and vehicular, and hence one of coordination of the various points of the project.

As in any planning study in which a projection and prediction of future needs is required, this program for the Terminal Building, and supporting facilities for Robert Mueller Municipal Airport is based on forecast of ten and twenty years requirements for passengers, airlines and related facility requirements. Forecasts have been compiled from a study of population trends in Austin and Texas, indications of future economic, governmental educational and industrial growth and the past record of air traffic and its relation to the national average. These indicate an upward trend in air traffic through 1980, based on the following:

- 1. A continuing increase in population.*
- 2. An increase in income exceeding the rate of population growth.
- 3. Continuing improvements in the technological and service characteristics of aircraft which will tend to increase the airlines share of inter-city travel.**

⁻¹⁻

^{*} Charts P-1 and P-2

^{**} In 1957 for the first time airlines operated more passenger miles than either railroads or inter-city buses.

To establish the space requirements for the various functions within the terminal building the annual passenger traffic forecast has been reduced to peak hour traffic loads since the building must be able to accommodate a normal peak period's traffic.

Close cooperation of city departments, commercial airlines, civil aeronautics administration, weather bureau and others have made possible sound economical planning for the terminal building. Facilities and structures to be built immediately cannot be designed for ultimate growth for obvious economic reasons. For this reason, first stage program which will provide the necessary facilities for approximately ten years is planned.

A second stage expansion program to provide additional facilities required, is projected in the master plan. This will provide a terminal building and supporting areas sufficient to care for the passenger traffic possible with the present runway system. It is felt that a projection beyond this point is not practical due to the unknown factor of technological developments in aircraft beyond 1980.

PLANNING ANALYSIS

According to the Civil Aeronautic Administration a new Terminal Building should be built sufficiently large in the first stage of construction to accommodate the activities anticipated at the end of a ten year period. Space thus provided may not be fully utilized at the outset, but this condition is compensated for by the advantages gained through accommodating traffic increases with no interruption in service, and obviating frequent and costly additions to the building. The original construction should be considered as a "stage" of the final development, rather than the final development. The Terminal Building should be conceived in its final form, so that when expansion is necessary, there will be a minimum of structural changes required as succeeding stages in the construction take place. This type of development, in keeping with long range planning, is advisable not only from an economic standpoint, but also from the standpoint of making provisions for possible future changes in operating requirements.

A CAA study of activities at a representative group of airports revealed the existence of relationships between the number
of annual passengers and the number of passengers accommodated
during the typically busy or peak hours. This study also revealed
that relationships existed between the number of peak hour passengers and the number of visitors, concession customers, and occupants

of public areas. For airports of like passenger volume, the peak relationship fell within a sufficiently narrow range to permit use of them for planning purposes.

According to the Airline Records* at the Austin Terminal the peak period occurs in the Fall, Spring and Winter months between the hours of 7:40 to 8:40 a.m., 8:17 to 9:17 a.m., 4:00 to 5:00 p.m., and 6:45 to 7:45 p.m. In 1956, the average peak number of total passengers for this period was from 64 to 70 passengers enplaning and deplaning. Thus, this would be considered the number of typical peak hour passengers. This is approximately the same as the national average of peak-hour passengers for airports handling the same volume of annual revenue passengers which for Austin in 1956 was 139,668. The forecast** of the annual passenger volume shows that in 1970 Austin will handle 403,560 enplaning and deplaning passengers, with a peak hour rate of 162 passengers as shown on Charts no. C-1 and C-2.

According to the CAA the Austin airport's potential traffic characteristics will probably continue at the same rate as the national forecast for U.S. total annual airline passengers. Then the projection of the peak hour passenger rate will be 162 passengers in 1970 and 230 passengers in 1980, which would cover both the 10 year planning period and the 20 year long range planning period.

LOADING GATES AND APRON ANALYSIS

For planning purposes it should be assumed that a plane normally requires an average of 30 minutes on the loading apron.* Austin Airport handles at the present time 33 scheduled commercial airline aircraft per day and has a peak-hour load of 7 aircraft. According to the A.T.A. an airport which handles 7 aircraft operations per hour; i.e., 7 landings and 7 take-offs or a total of 14 plane movements per hour, would require at least 3 gate positions; however, due to close scheduling at the Austin Airport, there are often more than 3 planes on the loading apron at one time. It would, therefore, seem feasible to plan the loading apron capacity for at least 4 planes and possibly up to 6 planes. We recommended that the Airport Administration make a study of the gate requirements and recommend how many will be required. This has been set at 6 gate positions to take care of the immediate future.

By 1970 at the projected rate of growth there will be approximately two and one half times the peak-hour passenger load, which means that the number of loading gates should be planned at the present time to be increased at least two times the present needed capacity, or 8 to 9 aircraft. The rate of increased gate capacity is less than the projected rate of passenger growth since the trend is toward larger aircraft rather than an increase in the number of scheduled flights.

-5-

^{*} Air Transport Association of America Airline Airport Design Recommendations Part #1

By 1980 at the projected rate of growth there will be approximately three and one half times the peak-hour passenger load which means that the number of loading gates to be planned for in the long-range plan should be increased at least three times the present needed capacity, or 12 aircraft. This could be decreased if the future carrying capacity of aircraft is considerably increased, which is the general tendency.

The 10 year and long-range capacity may be developed by the capacity indicated in such stages as required; and, in order to attain the estimated final stage, it is necessary only to locate the initial construction in proper relation to the runway pattern and preserve the areas of width and length required for the ultimate development. If subsequent developments become stabilized and the areas so preserved are not required, they may then be available for other useful purposes.

The shape of the Loading Apron is optional and careful study*
has been given to the present needs and the ultimate capacity so
that the apron does not develop into a bottleneck. At the present
time the Finger Loading system will be the most efficient and economical type loading system. This consists of piers stretching into the
field perpendicular or radial to the building, with planes grouped along
these extensions. By use of this system, the walking time and distance
for passengers from the waiting room to the aircraft can be reduced

considerably along with the loading and rolling distances for baggage, mail, etc. This will be important with the future increase in peak-hour load of aircraft.

The number of required aircraft loading positions, in any system, can be held to a minimum through effective monitoring and control of their use. To carry on the operation of these positions with a maximum or near maximum utilization of the results in three important effects:

- (1) Savings in original and costly construction of excess aircraft loading positions.
- (2) Reduction in the length of passenger way or finger necessary to reach the outermost positions.
- (3) Reduction of the time and distance required for passengers or apron service vehicles to reach the remote positions from the terminal building.

The A.T.A. recommends that the Loading Apron should have the aircraft loading position from 150 to 175 feet average spacing. The actual spacing being dependent on the types of aircraft which will operate on the field. Distances and sizes of aprons should be similar to those shown on drawing No. A-2.

OUTLINE OF SPACE REQUIREMENTS

Sma ac	Dragont Area	STAGE 1 Recommended* Areas to take care of growth
<u>Space</u>	Present Area	to 1970
Public Spaces		
Waiting Lounge	835	3,350
Ticket Lobby and Corridor		2,400
Baggage Claims		1,267
Public Restrooms and Nursery	420	Men 720 Ladies 640 Nursery 170
Concourse, corridor Lobby, closets, entra foyer, miscl. areas		6,700
Airline Facilities Passenger service counters and operation	ons	
Braniff	590	1,890
Continental	330	1,755
Trans-Texas	360	1,080
Future		675
	Tota1	 5,400

Present Area	STAGE 1 Recommended Areas to take care of growth to 1970
Weather Bureau	
Offices and Radar 2,240* Storage Generator in basement	1,300 200 50 1,550
CAA Facilities Office	
Control Tower Cab Storage Tower Chief Office in Tower Recorder Room in Tower ATCS Operations Room ATCS Operations Room Storage ATCS Chief ATCS and Tower Equip. Room Service Area Maintenance Storage SEMT Office Telco Room Engine-Generator Room in Basement Junction Room in Tower Stairs, Misc. in Tower Tower Wiring Shaft Wiring Shaft Terminal Room Tower Toilet	324 200 160 100 450 100 180 624 160 150 160 100 200 2,908 320 1,000 120 176 30
Airport Administration Office and Storage	365
Restaurant Dining and Snack Bar 786 Kitaban Starage and	2,664
Kitchen, Storage and Miscellaneous 508	1,200

Concoggiona	Drogont Amon	STAGE 1 Recommended Areas to take care of growth
Concessions	Present Area	to 1970
Vending machines, new novelties, gifts, displa		280
Telephones and lockers	\$	120
Travel Insurance Sales		80
Car Rental Systems		120
Miscellaneous		
2 offices-fixed Base Op Rental offices and futur		240 1,175
Mechanical and air con (Basement, Main Floor	•	2,360
Basement Storage		250
Wall allowance TOTAL	Stage 1	$\frac{2,140}{37,745}$
First Stage - Basic Sq.	Footage	
Main Floor		33,053
Tower		2,268
Basement	Total Sq. Footage	$\frac{2,424}{37,745}$

COST ANALYSIS

Stage 1

Building Loading Finger Vehicle covered loading	652,000.00 40,000.00 12,000.00 704,000.00
Contingency Fees	35,000.00 45,000.00 784,000.00
Loading apron for 6 planes 11,600 sq. yds. 8" concrete 42,000 sq. yds. asphalt	260,800.00
300 car min. parking, drive 31,000 s.y.	24,800.00
Curbs 12,000 1. Ft.	7,200.00
Lighting parking area	20,000.00
	\$1,096,800.00

TOTAL PASSENGERS PER YEAR 1947 - 1957

1. Passengers originating (departing) flights in Austin.

	Comm.	*Civilian	Total Airline	
Year	Airlines	Transit	and Civilian	**U.S.Military
$\overline{1947}$	$\overline{37,482}$	$\overline{30,177}$	67,659	1900
1948	33,445	27,196	60,641	1500
1949	37,252	21,899	59,151	3000
1950	38,247	36,088	74,335	3500
1951	43,975	36,474	80,449	4500
1952	45,545	30,248	75,793	4500
1953	49,630	26,562	76,192	5000
1954	53,553	33,093	86,646	6000
1955	62,228	36,926	99,154	4500
1956	69,996	44,417	114,413	6000
1957	74,590	,	,	
	=			

*Estimated from Radio Contact Records **Estimated. Some U.S. Military Flight Information on classified.

2. Passengers terminating (arriving) flights in Austin.

	Comm.	*Civilian	Total Airline	
Year	Airlines	${ t Transit}$	and Civilian	**U.S.Military
$\overline{1947}$	35,625	30,173	65,798	1850
1948	33,495	27,192	60,687	1500
1949	36,391	21,899	58,290	3000
1950	36,279	36,094	72,373	3800
1951	42,214	36,472	78,686	4500
1952	45,320	30,235	75,555	4500
1953	47,887	26,353	74,240	5000
1954	52,864	33,093	85,957	6500
1955	61,716	36,928	98,644	5000
1956	69,672	44,433	114,105	6000
1957	72,808			

*Estimated from Radio Contact Records **Estimated. Some
U.S. Military Flight
Information on
classified

1956 MONTHLY AIRLINE TOTAL PASSENGERS OFF AND ON

	Braniff			Trans-Texas		iental_		
	<u>off</u>	<u>on</u>	off	<u>on</u>	<u>off</u>	on	<u>Totals</u>	
Jan.	3189	3205	374	296	1750	1725	10,539	
Feb.	3226	3114	444	310	1574	1604	10,272	
Mar.	3599	3895	625	450	2023	2034	12,626	
Apr.	3418	3678	574	403	2104	1957	12,134	
May	3628	4059	573	481	1947	1951	12,639	
June	3255	3496	646	470	1900	1904	11,671	
July	2846	3032	605	502	1649	1639	10,273	
Aug.	3133	3370	648	500	1754	1656	11,061	
Sept.	3250	3229	855	541	20 4 6	1920	11,841	
Oct.	3299	3699	858	675	2057	1989	12,567	
Nov.	3300	3681	736	611	2038	2117	12,483	
Dec.	3155	3343	730	534	1864	1936	11,562	
Totals	39,298 4	1,801	7,668	5,773	22,706 2	22,432	139,668	
% of total all airlines		<u>59.8%</u>	<u>11%</u>	<u>8.2%</u>	<u>32.5%</u>	32%		

^{*} Source: Airline Records

PASSENGERS ARRIVING AND DEPARTING AIRPORT

Month	Comn Arrive	nercial Air Depart	lines Total	<u>Militar</u> <u>Arrive</u>	·y* Depart	<u>Civil</u> <u>Arrive</u>	ian* <u>Depart</u>	Total Arrive	Total Depart
Jan. 1957	5,726	5,794	11,520	3,176	3,174	5,941	5,939	14,843	14,907
Feb. 1957	5,612	5,644	11,256	3,648	3,648	8,467	8,463	17,727	17,755
Mar.1957	6,801	6,993	13,794	3,424	3,424	8,149	8,147	18,374	18,564
Apr. 1957	6,612	6,654	13,266	3,212	3,212	7,790	7,790	17,614	17,656
May 1957	6,260	6,655	12,915	3,632	3,632	10,142	10,142	20,034	20,429
June 1957	5,907	6,200	12,107	3,624	3,266	10,691	10,691	20,222	20,513
July 1957	5,511	5,581	11,092	5,096	5,096	11,498	11,498	22,105	22,175
Aug. 1957	5,653	5,852	11,505	5,636	5,636	11,691	11,689	22,980	23,177
Sept. 1957	6,130	5,907	12,037	5,398	5,396	10,389	10,392	21,917	21,695
Oct. 1957	7,243	7,310	14,553	4,880	4,882	10,979	10,977	23,102	23,169
Nov. 1957	5,445	5,758	11,203	1,926	1,924	9,715	9,715	17,086	17,397
Dec. 1957	5,908	6,242	12,150	2,644	2,644	10,104	10,103	18,656	18,989
Totals	72,808	74,590	147,398	46,296	45,934	115,556	115,546	234,660	236,426

^{*} Estimated number of passengers from tower reports.

LIST OF AIRLINE SCHEDULES AS OF

APRIL 1, 1958

	Flight No.	Depart. Time	Type Aircra	ı <u>ft</u>
Braniff	90	7:00 AM	Convoin	
	28 525	8:19 AM	Convair DC 6	
	23	8:37 AM	DC 3	
	228	9:13 AM	DC 3	no operate Sun.
	34	10:49 AM	Convair	-
	15	11:04 AM	Convair	
	4 2	1:39 PM	Convair	
	48	3:36 PM	, DC 3	
	39	4:04 PM	Convair	
	54	5:39 PM	Convair	
	382	6:59 PM	Convair	no operate Sat.
	53	7:14 PM	Convair	
	57	7:49 PM	Convair	
	261	10:22 PM	DC 3	no operate Sat.
	564 3	10:44 PM 1:24 PM	Convair	
	อ	1:24 PW	Convair	
Continental				
<u> </u>	110	7:55 AM	DC 3	no operate Sun.
	311	8:33 AM	Convair	•
	113	12:09 PM	DC 3	
	312	1:44 PM	Convair	
	315	4:28 PM	Convair	
	114	4:56 PM	DC 3	
	117	7:40 PM	DC 3	no operate Sat.
	316	8:34 PM	Convair	
Птота Потто а				
Trans-Texas	91	8:30 AM	DC 3	no operate Sun.
	70	9:17 AM	DC 3	no operate Sun.
	90	9:36 AM	DC 3	no operate Sun.
	94	2:34 PM	DC 3	no operate ban.
	97	3:00 PM	DC 3	
	93	7:20 PM	DC 3	no operate Sat.
	72	7:25 PM	DC 3	no operate Sat.
	73	7:26 PM	DC 3	no operate Sat.
	_			or Sun.
	92	7:34 PM	DC 3	
	71	10:54 PM	DC 3	no operate Sat.

1956* AVERAGE TOTAL PASSENGERS FOR

AIRLINE FLIGHTS

Flight	Airline Co.	Plane Type	Time	al Dept. Time	Min.on ramp		rage total s.on and off
28	В	Conv.	6:49 a	m 7:00 an	n 11	22	
110	C	DC 3	7:49	7:55	6	13	
525	В	Conv.	8:09	8:19	10	12	
a311	C	Conv.	8:25	8:33	8	22	
91	TT	DC 3	8:26	8:30	4	7	Peak hour
23	В	DC 3	8:27	8:37	10	14	of operation
a228	В	DC 3	9:03	9:13	10	11	70 total pass.
a 70	${ m TT}$	DC 3	9:14	9:17	3	4	-
a 90	${ m TT}$	DC 3	9:31	9:36	5	4	
34	В	Conv.	10:39	10:49	10	21	
15	В	Conv.	10:54	11:04	10	17	
113	С	DC 3	12:04 pa	m 12:09 pn	n 5	11	
42	B	Conv.	1:29	1:39	10	18	
312	С	Conv.	1:36	1:44	8	23	
94	${ m TT}$	DC 3	2:32	2:34	2	5	
97	${ m TT}$	DC 3	2:56	3:00	4	7	
48	В	DC 3	3:26	3:36	10	12	
39	В	Conv.	3:54	4:04	10	25	
315	C	Conv.	4:20	4:28	8	24	
114	Ċ	DC 3	4:51	4:56	5	15	
54	В	Conv.	5:29	5:39	10	$\overline{21}$	
a382	B	Conv.	6:49	6:59	10	13	
53	B	Conv.	7:04	7:14	10	25	
b 93	$\overline{\mathrm{T}}\mathrm{T}$	DC 3	7:16	7:20	4	5	
b 72	${ m TT}$	DC 3	7:22	7:25	3	4	
ab73	${ m TT}$	DC 3	7:23	7:26	3	5	
92	$\overline{\mathrm{T}}$	DC 3	7:30	7:34	4	3	
b117	Ċ	DC 3	7:34	7:40	8	10	
316	Ċ	Conv.	8:26	8:34	8	17	
b261	B	DC 3	10:12	10:22	10	15	
564	B	Conv.	10:34	10:44	10	12	
b 71	$\widetilde{\mathrm{TT}}$	DC 3	10:51	10:54	3	3	
3	В	Conv.	1:14	1:24	10	11	

a - no Sunday schedule

Abbreviations:

B - Braniff; C - Continental; TT - Trans-Texas; Conv. - Convair Note: See following Chart A-1

b - no Saturday schedule

^{*}Data compiled from total enplaned and deplaned passengers taken during 6 average weeks throughout 1956; Jan. 22-28, March 25-31, June 3-9, Sept. 16-22, Nov. 18-24, Dec. 16-22.

PEAK - HOURS PASSENGERS

1956 Airline Activity

US Enplaned Passengers		40,752,563 *
Austin Enplaned Passengers		69,672 **
Austin Enp. Pass. : US Enp.	Pass.	.171%

1956 Peak Hours

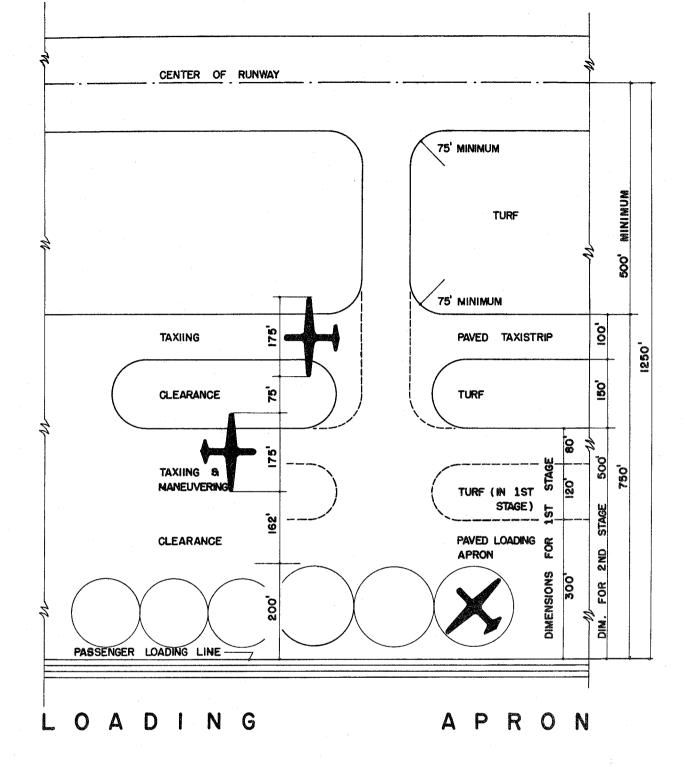
From CAA chart C-2 Peak hours passengers	-	68 for 1956
From actual count peak hour passengers	=	68 for 1956

Therefore Austin can be considered a typical station as compared with the national average.

1970 Forecast

US Enplaned Passengers Austin Enp. Pass. = .00171 x 118,000,000 Austin Total Passengers 2 x 201,780 •	=	118,000,000 * 201,780 403,560
From CAA chart C-2 peak hour passengers	=	162
1980 Forecast		
US Enplaned Passengers Austin Enp. Pass00171 x 168 M Austin - Total annual passengers		168,000,000 * = 287,280 = 574,560

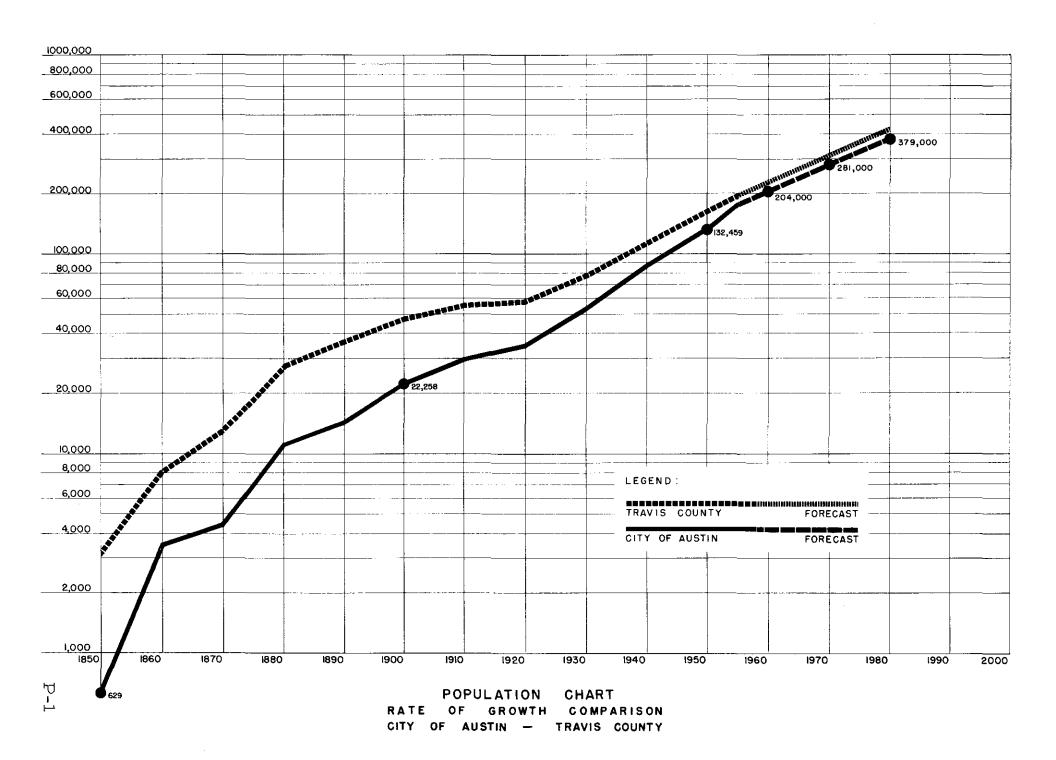
From CAA chart C-2 peak hour passengers = 230

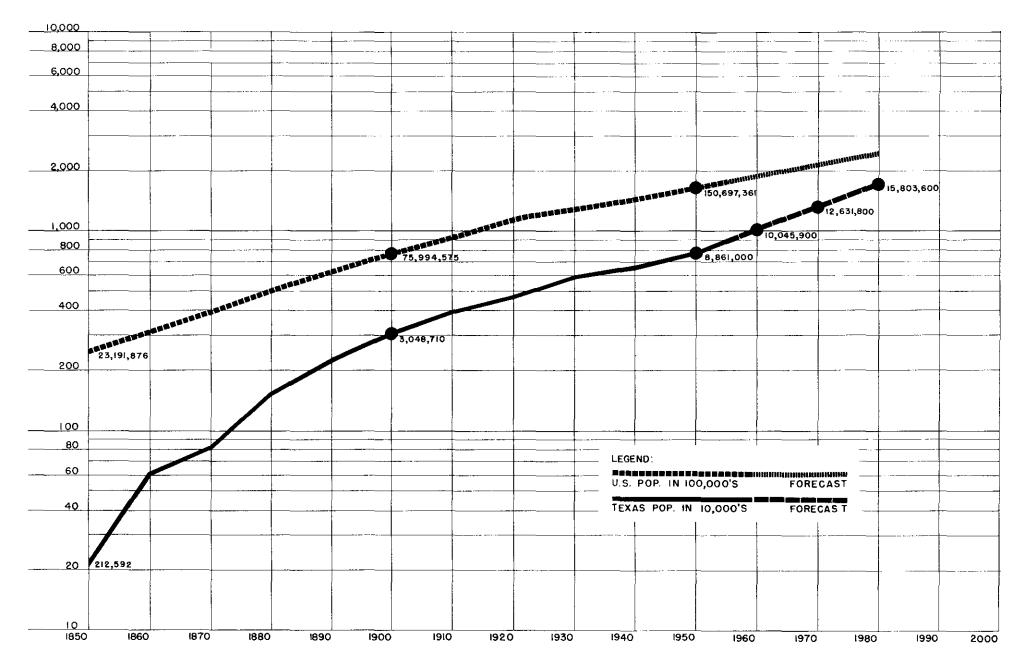


AVERAGE OF 150' ON CENTERS PROBABLY SUFFICIENT FOR APRON PLANNING FOR AIRCRAFT OF IMMEDIATE FUTURE. AVERAGE OF 175' MAY BE DESIRABLE AT SOME AIRPORTS.

MANEUVERING AREA, PARKING APRON AND CLEARANCES ARE INCREASED OVER THOSE SHOWN FOR SINGLE RUNWAY PATTERN TO PROVIDE ADEQUATE CLEARANCE FOR OPERATION OF AIRCRAFT WITH GREATER WING SPAN. ALSO TWO-WAY TAXING IS PROVIDED FOR LARGER AIRCRAFT DUE TO INCREASED APRON ACTIVITY WITH LARGER NUMBER OF LOADING POSITIONS.

		SCALE	IN	FEET		
100 50	0	100	200	300	400	500
	- F	SCHOOL AND	COLUMN TWO IS NOT THE OWNER.		CONTRACTOR OF THE PARTY OF THE	





POPULATION CHART
RATE OF GROWTH COMPARISON
STATE OF TEXAS — UNITED STATES

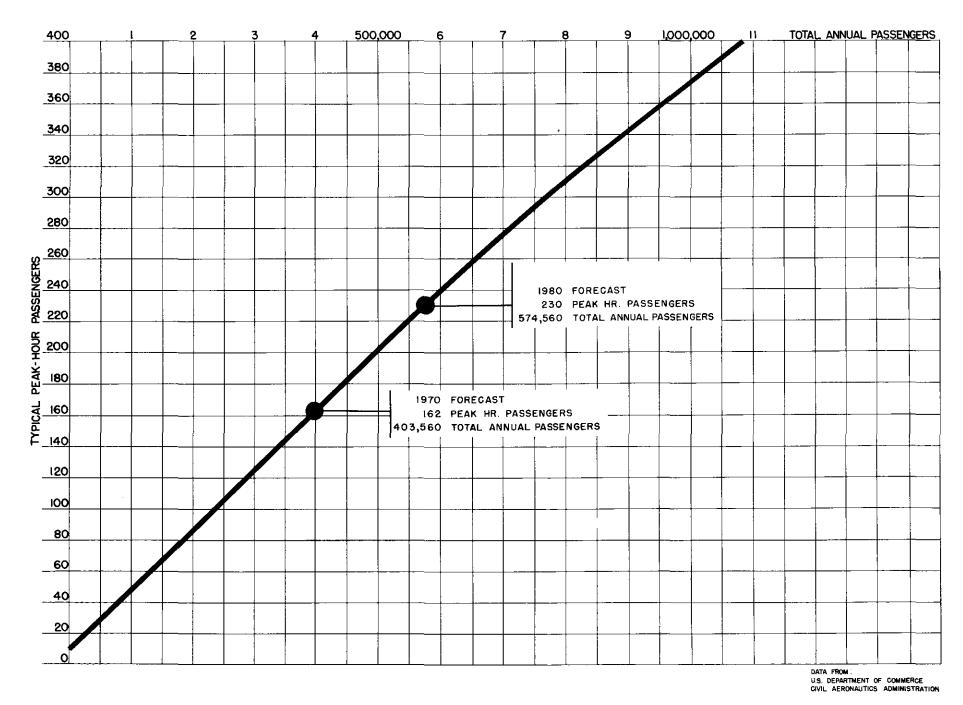
AUSTIN

AIRLINE

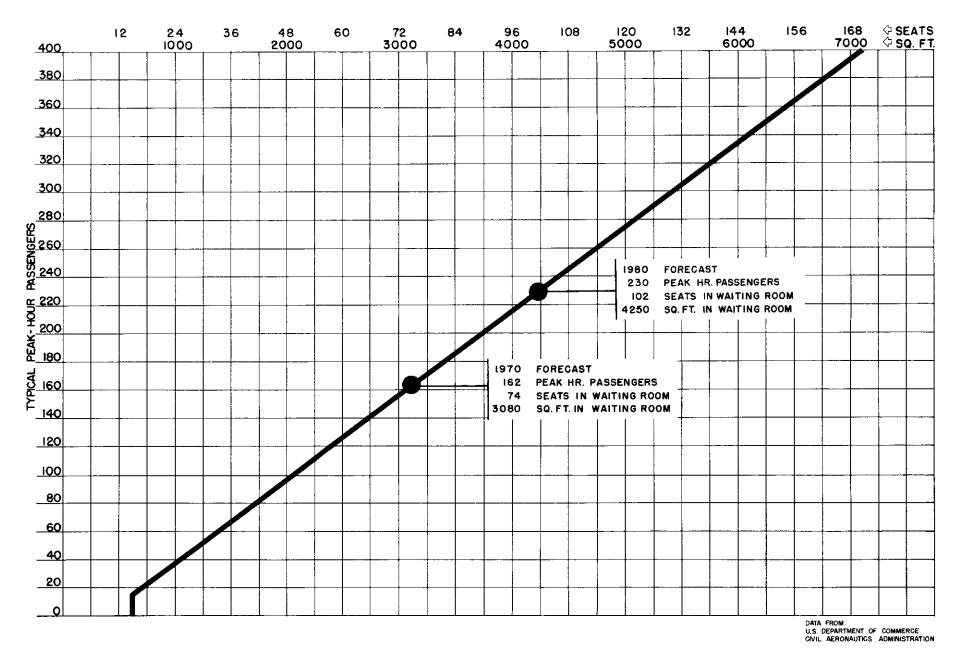
PASSENGERS

ANNUALLY

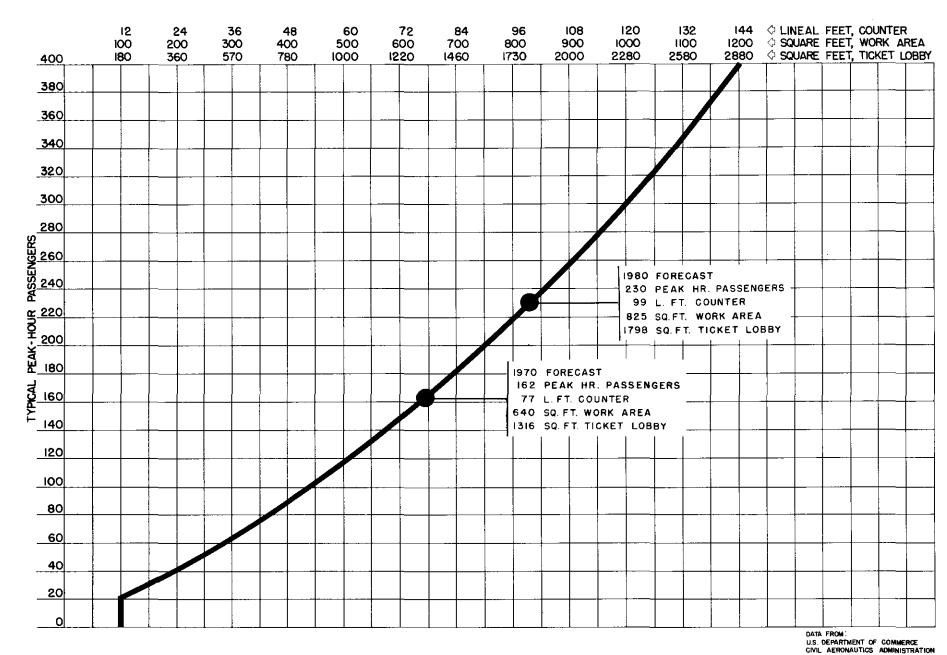
(THOUSANDS)



TYPICAL PEAK - HOUR PASSENGERS RELATED TO TOTAL ANNUAL PASSENGERS



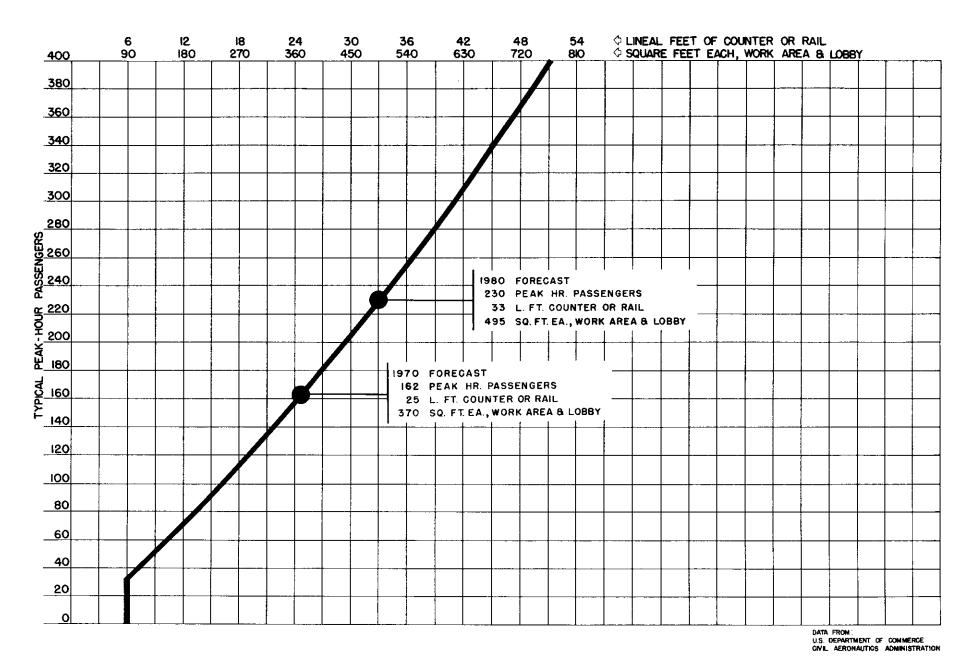
NAITING ROOM SPACE REQUIREMENTS AS DETERMINED BY PEAK HOUR PASSENGERS



PASSENGER SERVICE COUNTER & TICKET LOBBY

SPACE REQUIREMENTS AS DETERMINED

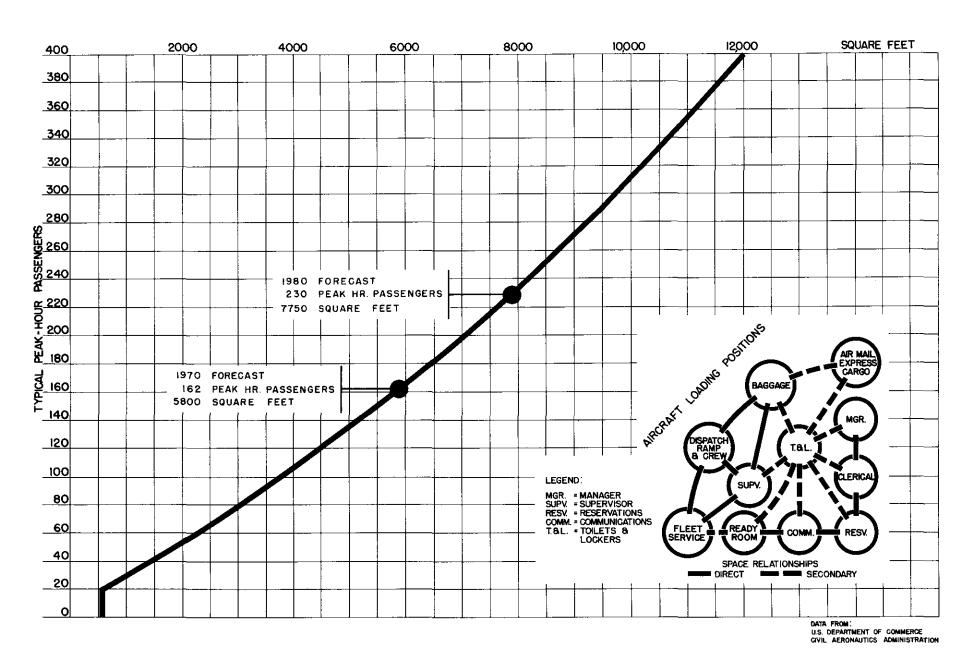
BY PEAK HOUR PASSENGERS



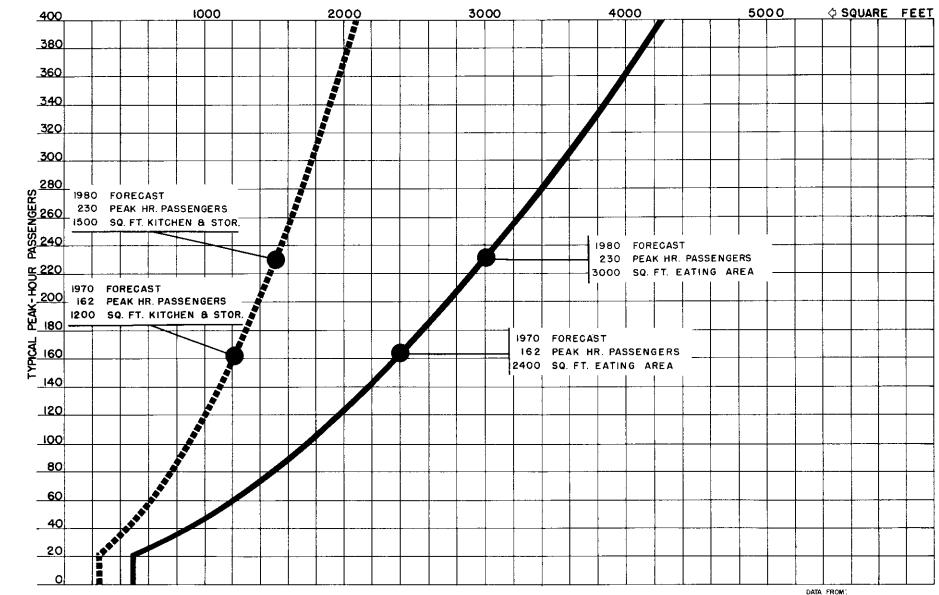
C L A I M S
AS DETERMINED
PASSENGERS

BAGGAGE

SPACE REQUIREMENTS AS E
BY PEAK HOUR PAS



A I R L I N E O P E R A T I O N S SPACE REQUIREMENTS AS DETERMINED BY PEAK HOUR PASSENGERS



DATA FROM:
U.S. DEPARTMENT OF COMMERCE
CIVIL AERONAUTICS ADMINISTRATION

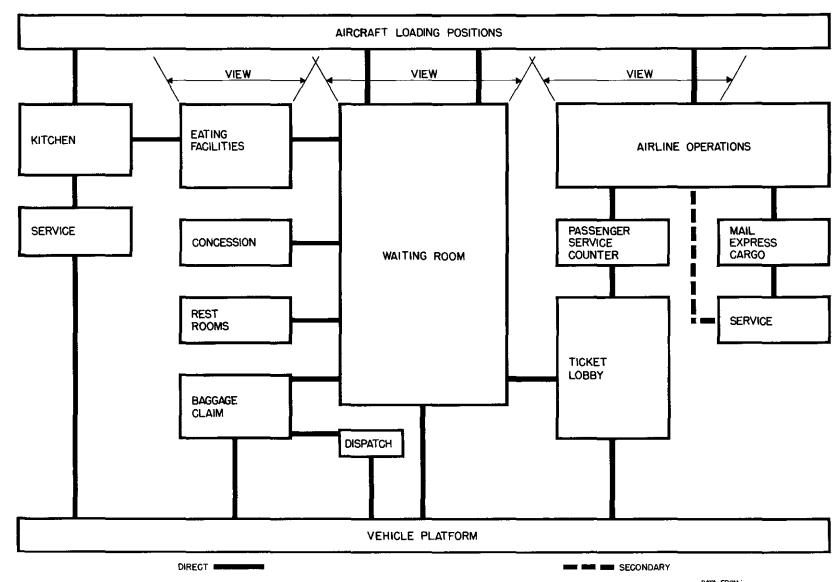
PUBLIC EATING F SPACE REQUIREMENTS AS BY PEAK HOUR PA

F A CILITIES

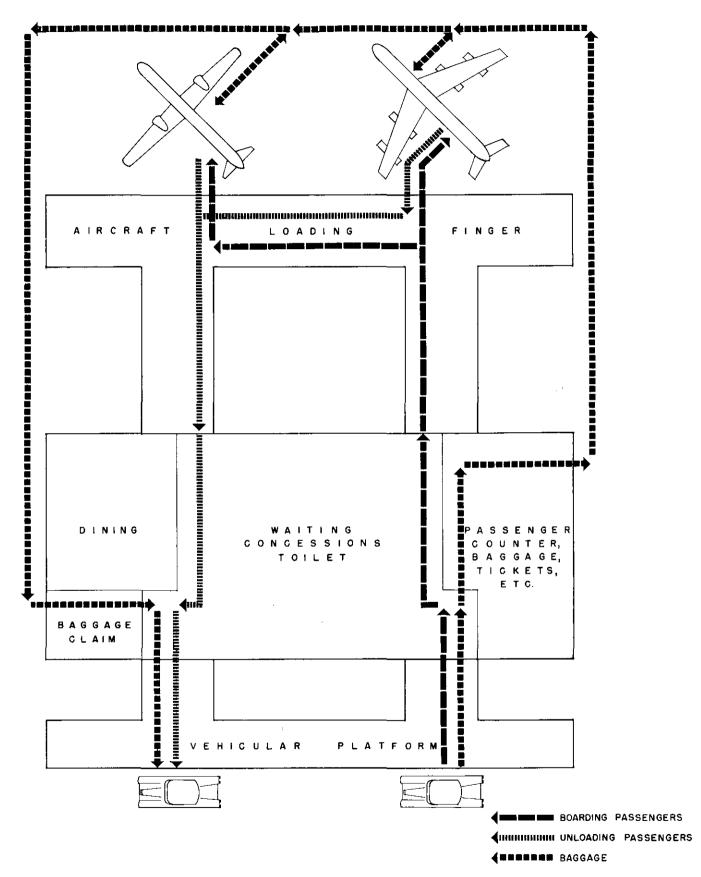
S DETERMINED

PASSENGERS

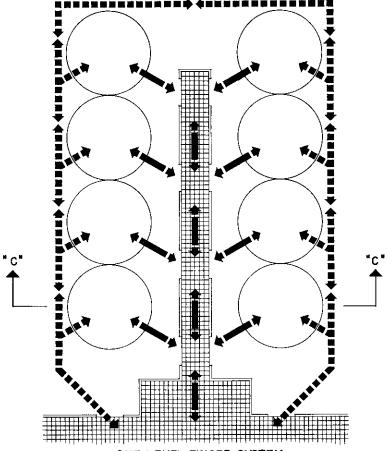
EATING AREA



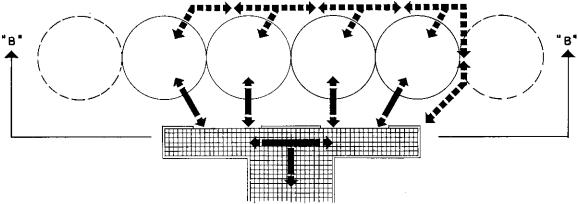
U.S. DEPARTMENT OF COMMERCE CIVIL AERONAUTICS ADMINISTRATION



TERMINAL BUILDING GENERAL FLOW DIAGRAM



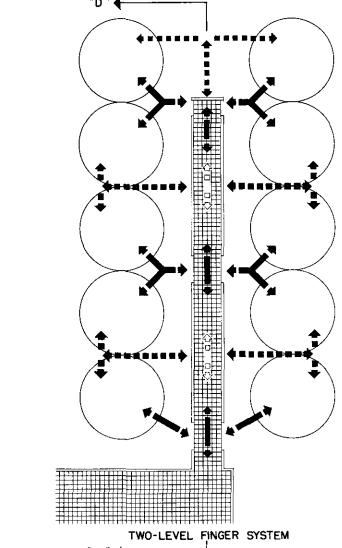
ONE-LEVEL FINGER SYSTEM

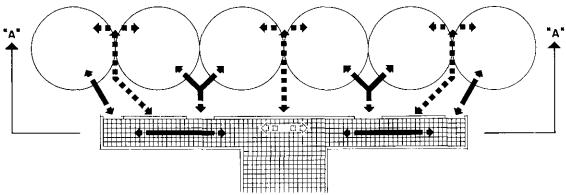


ONE-LEVEL FRONTAL SYSTEM

BAGGAGE

AIRCRAFT LOADING POSITIONS ONE - LEVEL SYSTEM

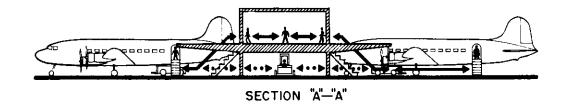


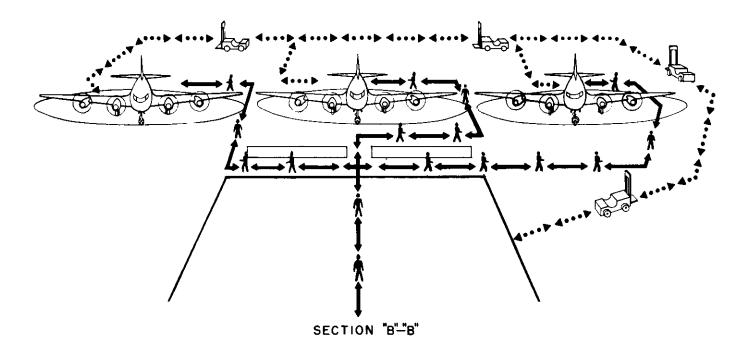


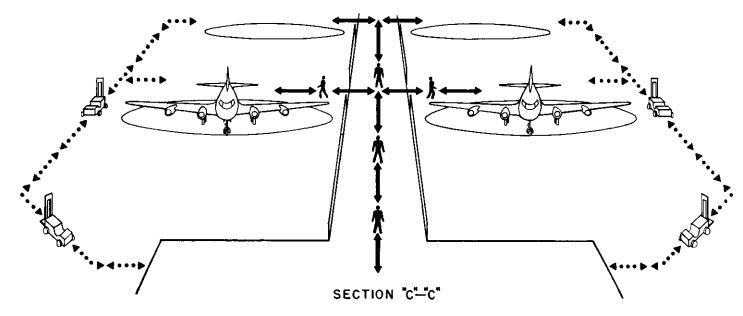
TWO-LEVEL FRONTAL SYSTEM

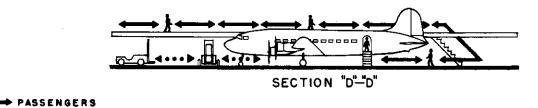
PASSENGERS . ■■■■ BAGGAGE

> AIRCRAFT LOADING POSITIONS TWO - LEVEL SYSTEM



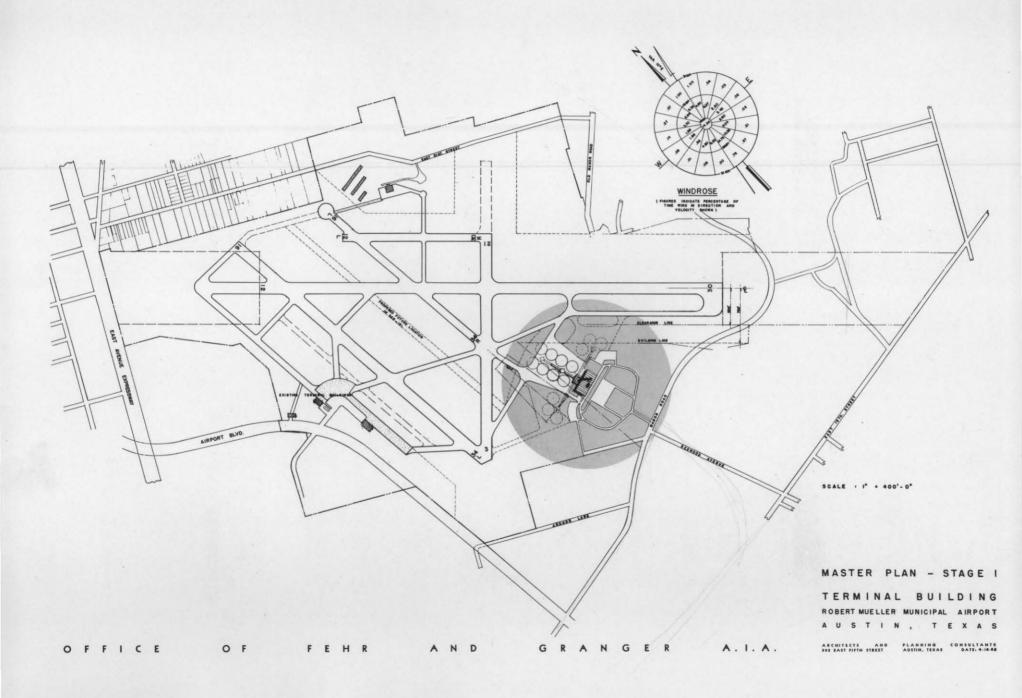






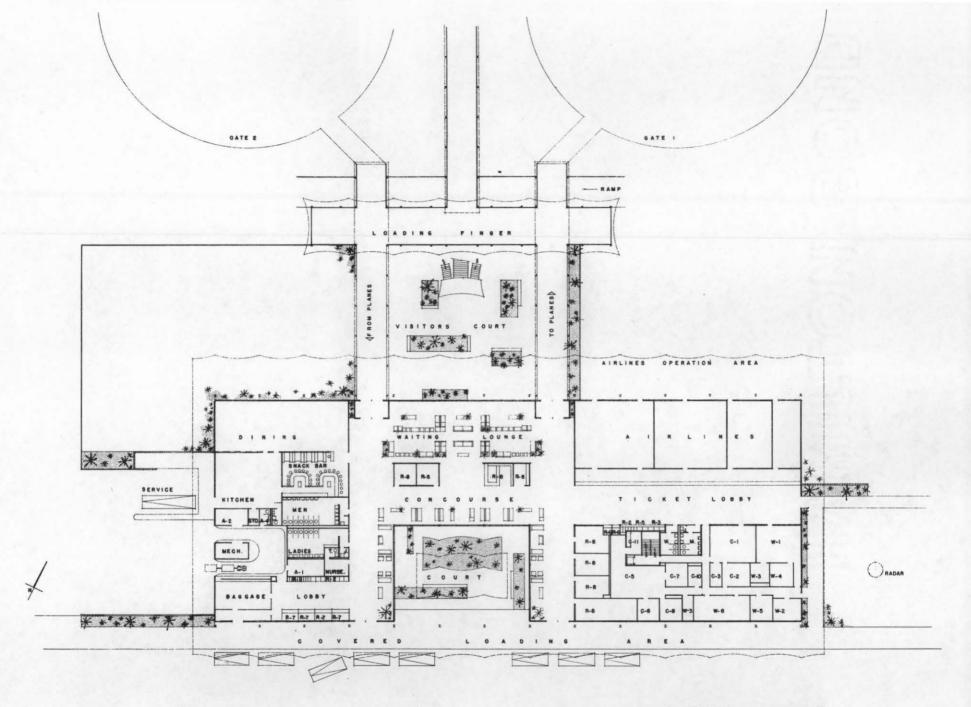
Data compiled from information provided through the courtesy of the Civil Aeronautics Administration

BAGGAGE ◀ · · · ▶



LEGEND

Concessions a	nd Rental Areas
R-1	Concessions, News, Novelties, Etc.
R - 2	Lockers
R - 3	Telephones
R-4	Vending Machines
R - 5	Insurance Machines
R-6	Travel Insurance Sales
R-7	Car Rental Systems
R-8	Rental Offices
CAA Facilities	5
C-1	ATCS Operations Room
C-2	ATCS Chief Office
C - 3	ATCS Operations Room Storage
C-4	Tower Chief Office
C - 5	ATCS Tower and Equipment Room
C - 6	Service Area
C-7	Maintenance Storage
C - 8	SEMT Office
C - 9	Recorder Room in tower
C-10	TELCO Room
C-11	Tower Wiring Shaft
C-12	Control Tower CAB
C-13	Control Tower CAB Storage
C-14	Control Tower Toilet
C - 15	Engine Generator Room in Basement
Weather Bures	au
W-1	Briefing and Observations
W-2	MIC Office
W - 3	Briefing and Observations Storage
W-4	Radar
W - 5	Electronic Technician
W-6	Climatologist
W-7	Engine Generator Room in Basement
Airport Admin	istration
A-1	Offices and Storage
A-2	Storage
A-4	Employees Toilet
Mechanical Eq	uipment
M-1	Mechanical Equipment Rooms
M-2	Basement Area for Heating, Ventilating,
	Air Conditioning and Mechanical Equipment



FLOOR PLAN

