AD-A090 803 FEDERAL AVIATION ADMINISTRATION WASHINGTON DC OFFICE --ETC F/G 1/2
IFR AIRCRAFT HANDLED FORECAST BY AIR ROUTE TRAFFIC CONTROL CENT--ETC(U)
MAY 80 B F HANNAN

UNCLASSIFIED FAA-AVP-80-4 NL

1 OF 2
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REPORT NO. FAA-AVP 80-4

LEVEL II (12)

IFR AIRCRAFT HANDLED

Forecast by
AIR ROUTE TRAFFIC CONTROL CENTER
FISCAL YEARS 1980-1991

MAY 1980

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U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION
Office of Aviation Policy
Aviation Forecast Branch
Washington, D.C. 20591

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Technical Report Documentation Page

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16. Abstract

The report presents the forecasts of Instrument Flight Rule (IFR) aircraft handled by FAA air route traffic control centers (ARTCC). It serves as a base for the FAA planning and budget process in determining future requirements for facilities, equipment and manpower.

The forecasts show that total aircraft handled will increase from 30.1 million in FY 1979 to 44.0 million in FY 1991. These national total numbers along with those for the intervening years are broken down by FAA region and for each air route traffic control center in this report.

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Eastern 17

Southern 23

Great Lakes 35

Central 45

Southwest 49

Rocky Mountain 57

Western 63

Northwest 69

Alaskan 73

Pacific 75

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Accession For
NTIS GRA&I
DDC TAB
Unannounced
Justification
By
Distribution/
Availability Codes
Dist | Avail and/or special
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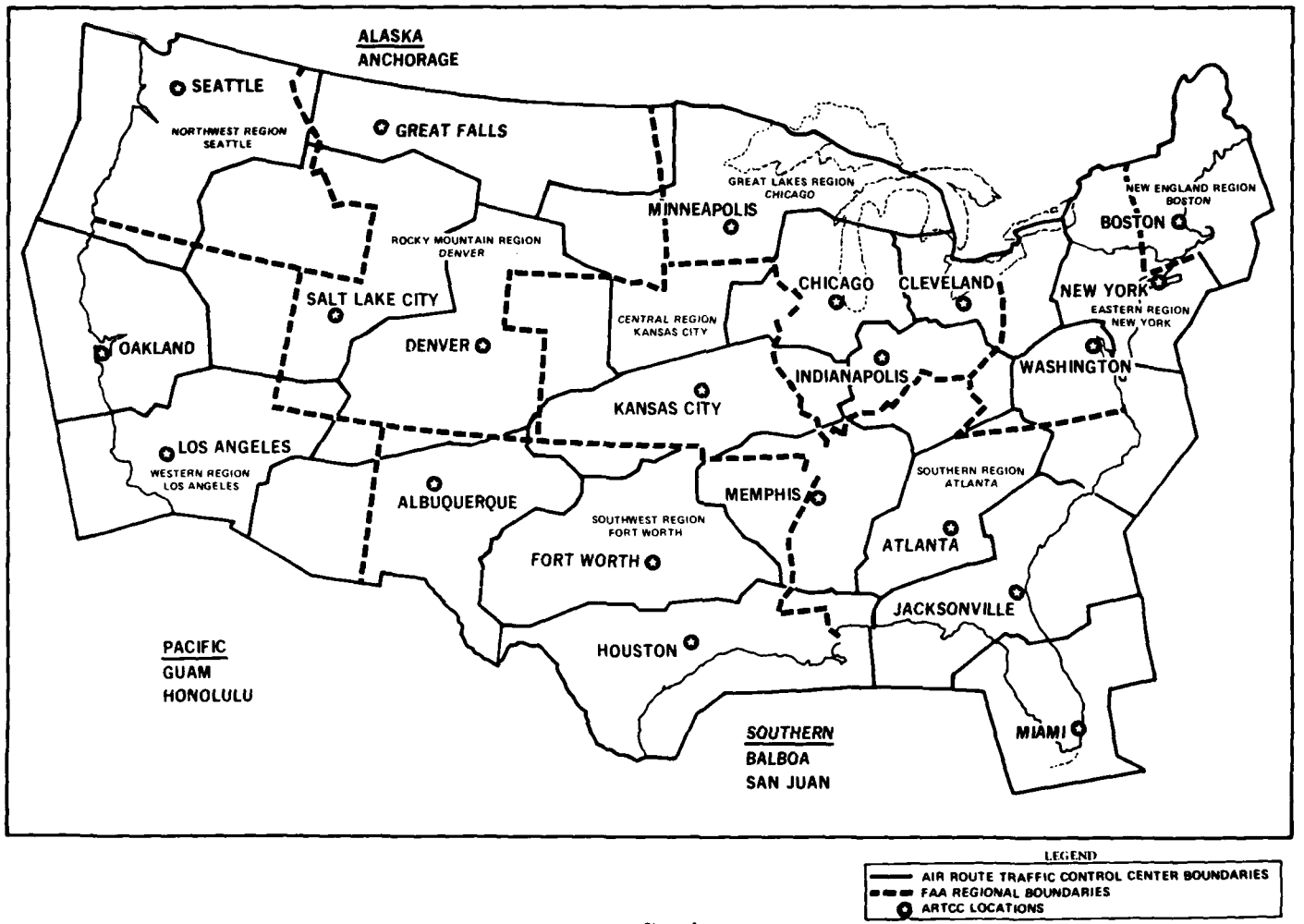

ALASKA
ANCHORAGE
SEATTLE
NORTHWEST REGION
SEATTLE
GREAT FALLS
GREAT LAKES REGION
CHICAGO
MINNEAPOLIS
NEW ENGLAND REGION
BOSTON
BOSTON
ROCKY MOUNTAIN REGION
DENVER
SALT LAKE CITY
CHICAGO
CLEVELAND
NEW YORK
EASTERN REGION
NEW YORK
CENTRAL REGION
KANSAS CITY
OAKLAND
DENVER
INDIANAPOLIS
WASHINGTON
KANSAS CITY
LOS ANGELES
WESTERN REGION
LOS ANGELES
SOUTHERN REGION
ATLANTA
ALBUQUERQUE
MEMPHIS
SOUTHWEST REGION
FORT WORTH
ATLANTA
FORT WORTH
JACKSONVILLE
PACIFIC
GUAM
HONOLULU
HOUSTON
SOUTHERN
BALBOA
SAN JUAN
MIAMI
LEGEND
AIR ROUTE TRAFFIC CONTROL CENTER BOUNDARIES
FAA REGIONAL BOUNDARIES
ARTCC LOCATIONS

Figure 1

INTRODUCTION

This report provides forecasts of Instrument Flight Rule (IFR) aircraft handled by Federal Aviation Administration (FAA) Air Route Traffic Control Centers (ARTCC). The areas covered by each center may be seen on Figure 1. The forecasts serve as a base for the FAA planning and budget process in determining future requirements for facilities, equipment and manpower.

Forecasts of IFR aircraft departures and overs by air carrier, air taxi, general aviation and military categories are presented for fiscal years 1980 through 1991 for ARTCCs in each of the eleven FAA regions. Historical data is also included for the years 1969 through 1979. The forecasts presented in this report agree with the national forecast of IFR aircraft handled, as reported in Aviation Forecasts, Fiscal Years 1980-1991. It should be noted that air taxi operations at centers began to be counted separately on July 1, 1971. Prior to July 1, 1971, much of the air taxi count was included in the air carrier statistics. This change accounts for a decline in national air carrier activity in fiscal year 1972 which is reflected in the data for many individual centers. The national forecast of IFR

aircraft handled, as reported in Aviation Forecasts, Fiscal Years 1980-1991, calls for a modest growth in air carrier activity, a substantial increase in general aviation and air taxi IFR flying, and stabilized level of military activity. The growth rates contained in the national forecast are:

IFR Aircraft Handled

by

FAA Air Route Traffic Control Centers

	1978-1979 Growth	1979-1991 Annual Growth Rate	1979-1991 Total Growth
General Aviation	3.9%	6.0%	133.3%
Air Taxi	15.8%	7.4%	177.3%
Air Carrier	3.7%	1.9%	25.5%
Military	-	-	-
Total	8.1%	3.5%	62.7%

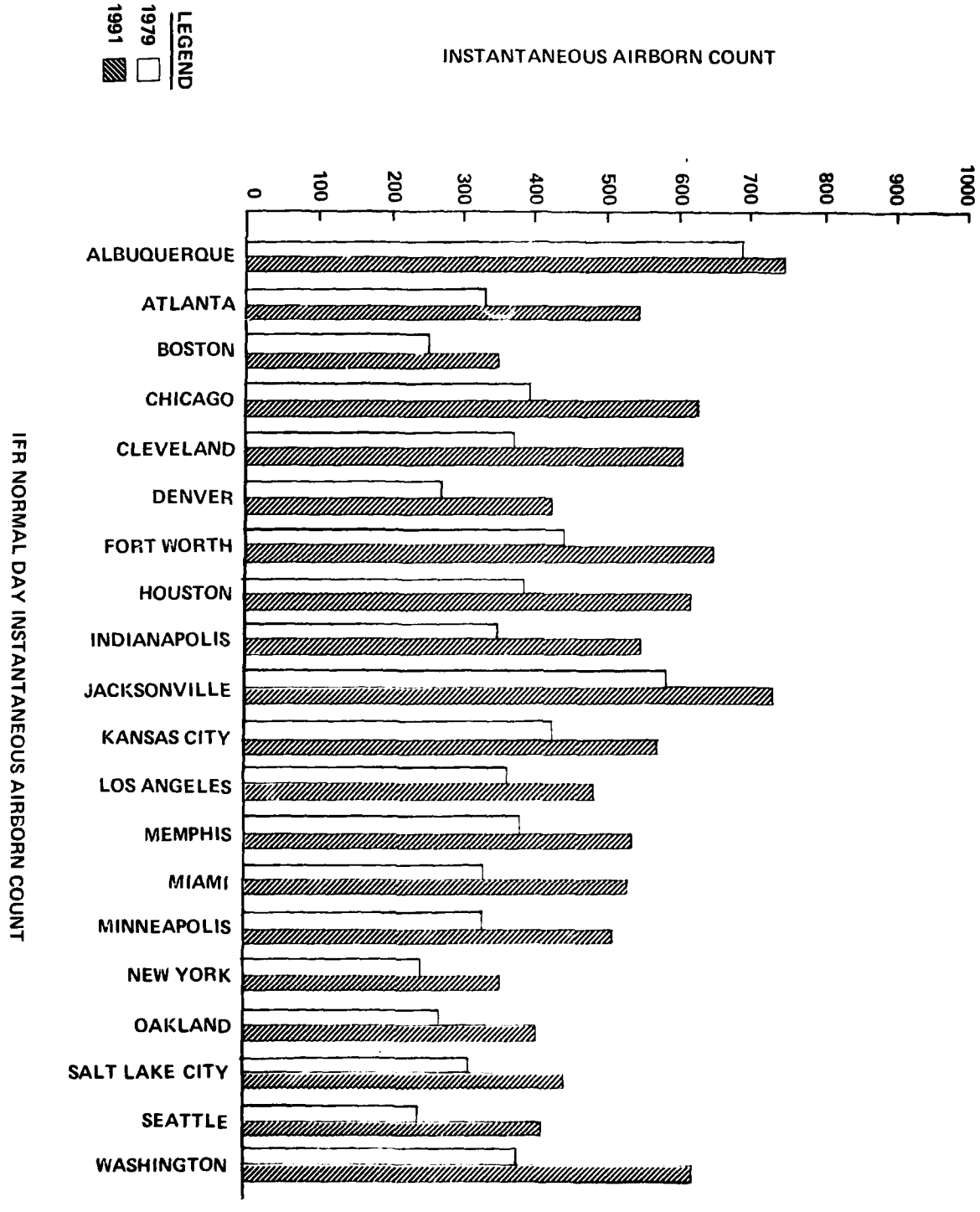
Forecasts of instantaneous airborne counts for IFR normal and peak day operations are presented for fiscal years 1980 through 1991 for 20 domestic ARTCCs. Historical data is also included for the years 1977 through 1979.

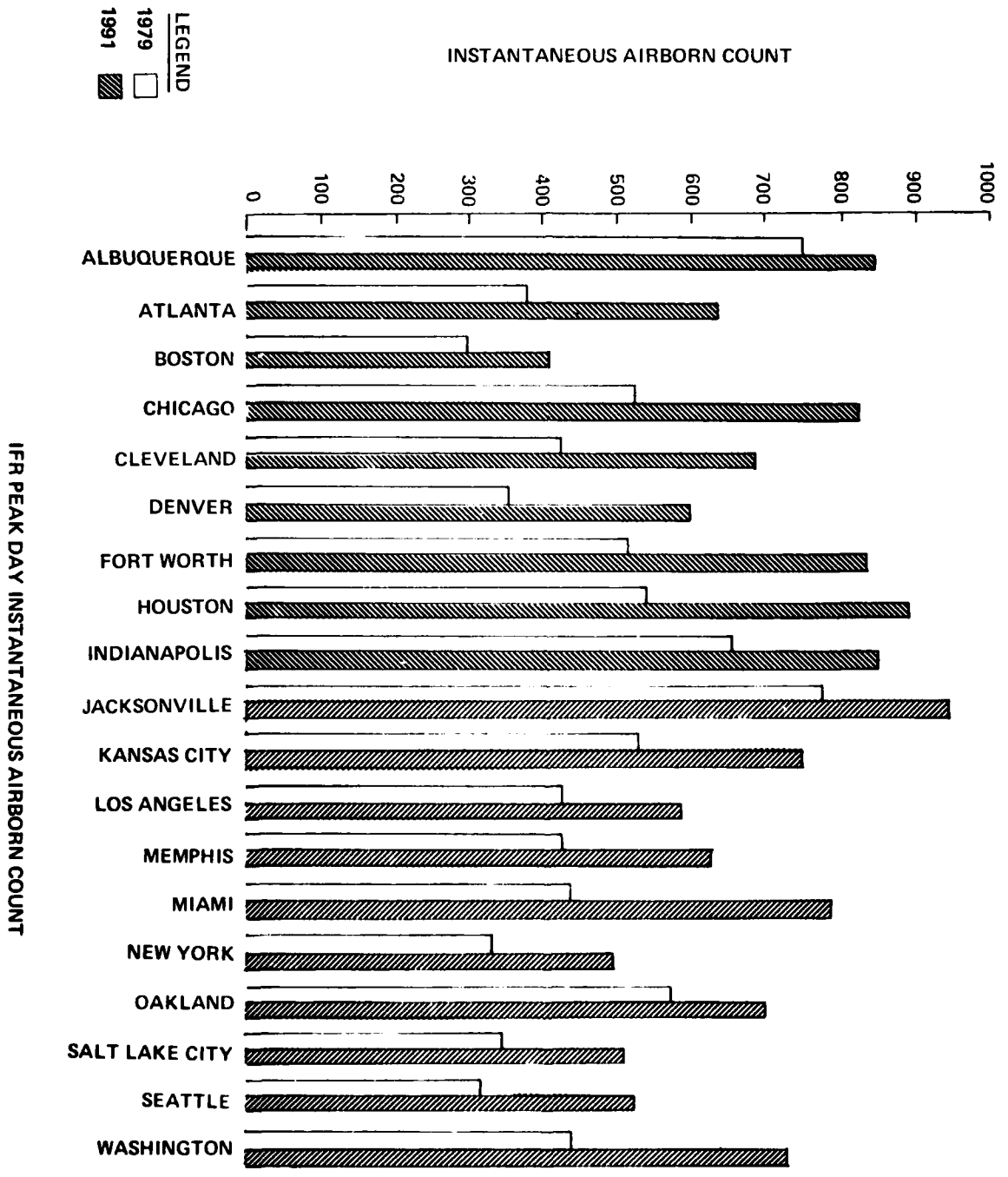
IFR peak day is defined as the day that exhibits the largest number of operations during the year. IFR normal day is the 37th busiest day of the year. An instantaneous airborne count is defined as the maximum number of IFR operations observed at a point in time during the day

Charts A and B on pages 6 and 7 compare instantaneous airborne counts for normal and peak days for the years 1979 and 1991. The comparison shows that the counts will increase significantly at all ARTCCs over the next 12 years. The average increase for all centers for normal day operations over the period is 47 percent; the increase for peak day operations is approximately 50 percent.

An index to FAA regions and Air Route Traffic Control Centers is included on page 9 in order to facilitate the use of this report. Although regional and center boundaries do not coincide, for purposes of this report the total for a region includes all aircraft handled by centers headquartered within that region.

Copies of this report are available from the National Technical Information Service, 5285 Port Royal Road, Springfield, Virginia 22151. Information on the sales price may be obtained from them.


LEGEND
1991
1979
INSTANTANEOUS AIRBORN COUNT
0
100
200
300
400
500
600
700
800
900
1000
ALBUQUERQUE
ATLANTA
BOSTON
CHICAGO
CLEVELAND
DENVER
FORT WORTH
HOUSTON
INDIANAPOLIS
JACKSONVILLE
KANSAS CITY
LOS ANGELES
MEMPHIS
MIAMI
MINNEAPOLIS
NEW YORK
OAKLAND
SALT LAKE CITY
SEATTLE
WASHINGTON
IFR NORMAL DAY INSTANTANEOUS AIRBORN COUNT


LEGEND
1991
1979
INSTANTANEOUS AIRBORN COUNT
0
100
200
300
400
500
600
700
800
900
1000
ALBUQUERQUE
ATLANTA
BOSTON
CHICAGO
CLEVELAND
DENVER
FORT WORTH
HOUSTON
INDIANAPOLIS
JACKSONVILLE
KANSAS CITY
LOS ANGELES
MEMPHIS
MIAMI
NEW YORK
OAKLAND
SALT LAKE CITY
SEATTLE
WASHINGTON
IFR PEAK DAY INSTANTANEOUS AIRBORN COUNT

Further information on specific projections and their underlying assumptions are available from the Aviation Forecast Branch (AVP-120), Federal Aviation Administration, Washington, D.C. 20591, (202) 426-3103.

INDEX TO FAA REGIONS AND AIR ROUTE TRAFFIC CONTROL CENTERS

CENTERS WITHIN EACH REGION	REGIONS
NEW ENGLAND	
Boston	U.S. TOTAL
EASTERN	
New York	
Washington	NEW ENGLAND
SOUTHERN	
Atlanta	EASTERN
Balboa	
Jacksonville	
Memphis	SOUTHERN
Miami	
San Juan	
GREAT LAKES	GREAT LAKES
Chicago	
Cleveland	
Indianapolis	CENTRAL
Minneapolis	
CENTRAL	
Kansas City	SOUTHWEST
SOUTHWEST	
Albuquerque	
Fort Worth	ROCKY MOUNTAIN
Houston	
ROCKY MOUNTAIN	
Denver	WESTERN
Great Falls	
Salt Lake City	
WESTERN	NORTHWEST
Los Angeles	
Oakland	
NORTHWEST	ALASKAN
Seattle	
ALASKAN	
Anchorage	PACIFIC
PACIFIC	
Guam	
Honolulu	

IFR DAILY OPERATIONS

Center	Average IFR Daily Operations			IFR Normal Day Operations[1]			IFR Peak Day Operations		
	1979	1991	% Change	1979	1991	% Change	1979	1991	% Change
Albuquerque	3,337	4,260	27.7	4,355	5,347	22.8	4,807	6,218	29.4
Atlanta	4,671	7,085	51.7	5,870	9,340	59.1	6,430	10,343	60.9
Boston	3,003	3,973	32.3	4,035	5,653	40.1	5,032	7,324	45.5
Chicago	5,715	8,693	52.1	7,521	11,968	59.1	9,336	15,145	62.2
Cleveland	5,436	8,077	48.6	7,221	11,310	56.6	8,063	12,738	58.0
Denver	2,721	4,167	53.1	3,312	4,978	50.3	4,065	6,881	69.3
Fort Worth	4,589	6,918	50.8	5,800	9,042	55.9	7,051	11,440	62.2
Houston	4,367	6,734	54.2	5,535	8,425	52.2	7,112	11,638	63.6
Indianapolis	4,397	6,523	48.4	5,810	9,135	57.2	8,454	11,941	41.2
Jacksonville	3,934	5,441	38.3	4,833	6,686	38.3	5,938	7,965	34.1
Kansas City	3,932	5,545	41.0	5,316	7,701	44.9	6,694	10,182	52.1
Los Angeles	3,964	5,556	40.2	4,690	6,583	40.4	5,714	8,483	48.5
Memphis	4,044	6,038	49.3	5,194	7,805	50.3	6,127	9,830	60.4
Miami	4,066	5,973	46.9	4,820	7,674	59.2	6,016	9,817	63.2
Minneapolis[2]	3,595	5,315	47.8	4,638	7,103	53.1	N.A.	N.A.	N.A.
New York	4,860	6,729	38.5	5,613	7,994	42.4	7,316	10,863	48.5
Oakland	3,381	4,868	44.0	4,436	6,750	52.2	6,327	8,771	38.6
Salt Lake City	2,164	3,156	45.8	2,873	4,608	60.4	3,312	5,455	64.7
Seattle	2,658	4,425	66.5	3,618	6,230	72.2	4,652	8,171	75.6
Washington	4,468	6,603	47.8	5,616	8,797	56.6	6,306	10,026	59.0

1/ IFR Normal Day represents the Center's 37th busiest day.

2/ IFR Peak Day operations not available for the Minneapolis Center.

IFR AIRCRAFT HANDLED BY USER CATEGORY

NATIONAL TOTAL

		DEPARTURES					OVERS								
								DOMESTIC				OCEANIC			
FY	AIRCFT HANDLED	TOTAL	AIR CAR	AIR TAXI	GEN AVI	MIL	TOTAL	AIR CAR	AIR TAXI	GEN AVI	MIL	AIR CAR	AIR TAXI	GEN AVI	MIL
1969	20581	7947	4934	0	1398	1615	4687	2338	0	412	1274	406	0	23	234
1970	21601	8363	5243	0	1542	1578	4875	2613	0	462	1141	443	0	26	190
1971	21328	8154	4911	0	1645	1598	5020	2698	0	487	1205	433	0	26	171
1972	22029	8456	4633	369	1693	1761	5117	2704	15	528	1228	449	16	31	146
1973	22822	8870	4699	429	1995	1747	5082	2758	18	604	1052	450	16	33	151
1974	22875	8958	4637	509	2195	1617	4959	2701	31	652	1003	423	16	35	98
1975	23890	9403	4635	670	2484	1614	5084	2708	40	712	1064	413	16	34	97
1976	23909	9397	4614	667	2582	1534	5115	2788	44	750	1004	384	16	36	93
1977	25740	10082	4771	763	2921	1627	5576	2970	63	854	1129	410	14	44	92
1978	28064	11011	5015	924	3368	1684	6042	3156	77	983	1210	458	9	55	94
1979	30066	11706	5071	1121	3821	1693	6654	3448	89	1127	1318	500	10	62	100
1980	30714	11998	5201	1201	3898	1698	6718	3491	102	1137	1301	509	14	64	100
1981	31520	12497	5299	1301	4201	1696	6826	3491	110	1230	1300	511	16	69	99
1982	33237	13099	5399	1399	4602	1699	7039	3583	123	1325	1297	520	19	74	98
1983	34957	13802	5499	1602	5001	1700	7353	3670	129	1520	1300	531	21	83	99
1984	36060	14298	5597	1701	5301	1699	7464	3667	141	1612	1302	532	23	89	98
1985	37272	14798	5699	1800	5601	1698	7676	3758	151	1704	1301	544	24	94	100
1986	38691	15401	5799	2000	5900	1702	7889	3844	161	1801	1300	558	27	100	98
1987	40103	16004	6003	2099	6201	1701	8095	3931	168	1896	1299	570	28	104	99
1988	41094	16403	6100	2203	6399	1701	8288	4017	178	1971	1300	583	31	108	100
1989	42012	16799	6201	2300	6601	1697	8414	4105	189	1993	1299	586	32	111	99
1990	43038	17201	6300	2399	6803	1699	8636	4193	199	2086	1301	608	34	116	99
1991	44046	17599	6399	2498	7001	1701	8848	4279	212	2182	1298	621	36	120	100

NOTE:
FIGURES IN THOUSANDS

IFR AIRCRAFT HANDLED BY USER CATEGORY

REGION NEW ENGLAND

		DEPARTURES					OVERS								
								DOMESTIC				OCEANIC			
FY	AIRCFT HANDLED	TOTAL	AIR CAR	AIR TAXI	GEN AVI	MIL	TOTAL	AIR CAR	AIR TAXI	GEN AVI	MIL	AIR CAR	AIR TAXI	GEN AVI	MIL
1969	1004	389	233	0	81	75	226	128	0	15	83	0	0	0	0
1970	1038	415	258	0	92	65	208	137	0	17	54	0	0	0	0
1971	1018	404	242	0	96	66	210	135	0	20	55	0	0	0	0
1972	935	375	202	34	76	63	185	115	2	18	50	0	0	0	0
1973	947	378	196	37	85	60	191	120	1	14	56	0	0	0	0
1974	914	362	181	39	69	53	190	120	1	15	54	0	0	0	0
1975	920	370	176	39	101	54	180	113	0	16	51	0	0	0	0
1976	912	365	174	38	103	50	182	117	1	17	47	0	0	0	0
1977	946	374	178	39	109	48	198	120	2	20	56	0	0	0	0
1978	1002	403	189	49	114	51	196	122	3	20	51	0	0	0	0
1979	1096	450	196	69	133	52	196	121	3	20	52	0	0	0	0
1980	1106	457	200	73	132	52	192	119	3	19	51	0	0	0	0
1981	1132	471	202	78	139	52	190	117	3	18	52	0	0	0	0
1982	1173	489	205	82	150	52	195	118	4	20	53	0	0	0	0
1983	1222	510	206	94	158	52	202	120	4	23	55	0	0	0	0
1984	1246	523	208	98	165	52	200	118	4	23	55	0	0	0	0
1985	1280	538	209	105	172	52	204	119	4	25	56	0	0	0	0
1986	1315	554	210	114	178	52	207	120	5	25	57	0	0	0	0
1987	1350	570	213	120	185	52	210	120	5	27	58	0	0	0	0
1988	1375	581	213	126	190	52	213	122	5	27	59	0	0	0	0
1989	1400	595	214	133	194	52	214	124	5	26	59	0	0	0	0
1990	1421	601	215	138	197	51	219	125	5	28	61	0	0	0	0
1991	1450	614	215	144	203	52	222	126	5	29	62	0	0	0	0

NOTE:
FIGURES IN THOUSANDS

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IFR AIRCRAFT HANDLED BY USER CATEGORY

BOSTON

		DEPARTURES					OVERS								
								DOMESTIC				OCEANIC			
FY	AIRCFT HANDLED	TOTAL	AIR CAR	AIR TAXI	GEN AVI	MIL	TOTAL	AIR CAR	AIR TAXI	GEN AVI	MIL	AIR CAR	AIR TAXI	GEN AVI	MIL
1969	1004	389	233	0	81	75	226	128	0	15	83	0	0	0	0
1970	1038	415	258	0	92	65	208	137	0	17	54	0	0	0	0
1971	1018	404	242	0	96	66	210	135	0	20	55	0	0	0	0
1972	935	375	202	34	76	63	185	115	2	18	50	0	0	0	0
1973	947	378	196	37	85	60	191	120	1	14	56	0	0	0	0
1974	914	362	181	39	89	53	190	120	1	15	54	0	0	0	0
1975	920	370	176	39	101	54	180	113	0	16	51	0	0	0	0
1976	912	365	174	38	103	50	182	117	1	17	47	0	0	0	0
1977	946	374	178	39	109	48	198	120	2	20	56	0	0	0	0
1978	1002	403	189	49	114	51	196	122	3	20	51	0	0	0	0
1979	1096	450	196	69	133	52	196	121	3	20	52	0	0	0	0
1980	1106	457	200	73	132	52	192	119	3	19	51	0	0	0	0
1981	1132	471	202	78	139	52	190	117	3	18	52	0	0	0	0
1982	1173	489	205	82	150	52	195	118	4	20	53	0	0	0	0
1983	1222	510	206	94	158	52	202	120	4	23	55	0	0	0	0
1984	1246	523	208	98	165	52	200	118	4	23	55	0	0	0	0
1985	1280	538	209	105	172	52	204	119	4	25	56	0	0	0	0
1986	1315	554	210	114	178	52	207	120	5	25	57	0	0	0	0
1987	1350	570	213	120	185	52	210	120	5	27	58	0	0	0	0
1988	1375	581	213	126	190	52	213	122	5	27	59	0	0	0	0
1989	1400	593	214	133	194	52	214	124	5	26	59	0	0	0	0
1990	1421	601	215	138	197	51	219	125	5	28	61	0	0	0	0
1991	1450	614	215	144	203	52	222	126	5	29	62	0	0	0	0

NOTE:
FIGURES IN THOUSANDS

IFR DAILY OPERATIONS
AND
INSTANTANEOUS AIRBORN COUNTS

BOSTON

YEAR	IFR PEAK DAY		IFR NORMAL DAY	
	OPERATION	IAC	OPERATION	IAC
1977	4148	248	3409	223
1978	4440	263	3620	233
1979	5032	295	4035	257
1980	5164	301	4124	261
1981	5333	311	4244	269
1982	5541	323	4394	276
1983	5844	341	4613	290
1984	6016	350	4726	297
1985	6226	363	4884	308
1986	6484	378	5060	317
1987	6669	389	5207	325
1988	6850	399	5323	332
1989	7005	408	5429	339
1990	7169	416	5541	345
1991	7324	426	5655	351

IFR AIRCRAFT HANDLED BY USER CATEGORY

REGION EASTERN

		DEPARTURES					OVERS								
								DOMESTIC				OCEANIC			
FY	AIRCFT HANDLED	TOTAL	AIR CAR	AIR TAXI	GEN AVI	MIL	TOTAL	AIR CAR	AIR TAXI	GEN AVI	MIL	AIR CAR	AIR TAXI	GEN AVI	MIL
1969	2716	1121	796	0	183	142	474	258	0	57	75	65	0	1	18
1970	2826	1175	820	0	209	146	476	270	0	62	68	60	0	1	15
1971	2746	1133	765	0	215	153	480	280	0	60	64	59	0	1	16
1972	2871	1184	764	20	231	169	503	277	0	65	63	77	0	2	19
1973	2894	1173	742	31	255	145	548	315	1	72	48	89	0	4	19
1974	2869	1166	702	46	275	143	537	307	2	75	42	90	0	3	18
1975	2944	1196	670	74	302	152	548	315	5	86	45	79	0	2	16
1976	2895	1172	644	72	307	149	551	331	5	92	46	63	0	2	12
1977	3063	1227	684	72	320	151	609	363	7	101	51	69	1	4	13
1978	3330	1344	718	96	378	152	642	380	9	115	59	65	0	2	12
1979	3405	1342	660	111	407	164	721	409	12	128	62	84	1	4	21
1980	3477	1373	672	120	416	165	731	416	14	129	61	84	1	5	21
1981	3595	1425	681	128	452	164	745	417	16	140	61	83	2	6	20
1982	3754	1494	692	139	497	166	766	429	16	152	59	82	2	6	20
1983	3936	1569	701	159	544	165	798	439	17	172	59	83	2	7	19
1984	4046	1618	711	166	578	163	810	438	19	184	60	81	2	7	19
1985	4168	1668	719	175	611	163	832	450	20	194	58	83	2	7	18
1986	4332	1739	732	197	646	164	854	462	21	204	57	83	2	7	18
1987	4473	1798	753	204	678	163	877	473	21	216	56	84	2	7	18
1988	4569	1836	763	211	699	163	897	483	22	224	56	85	2	7	18
1989	4660	1875	771	220	722	162	910	494	24	226	55	85	2	7	17
1990	4767	1917	781	229	743	164	933	504	25	236	54	87	2	8	17
1991	4866	1955	789	237	766	163	956	514	27	248	53	88	2	8	16

NOTE:
FIGURES IN THOUSANDS

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IFR AIRCRAFT HANDLED BY USER CATEGORY

NEW YORK

		DEPARTURES					OVERS								
								DOMESTIC				OCEANIC			
FY	AIRCFT HANDLED	TOTAL	AIR CAR	AIR TAXI	GEN AVI	MIL	TOTAL	AIR CAR	AIR TAXI	GEN AVI	MIL	AIR CAR	AIR TAXI	GEN AVI	MIL
1969	1537	673	522	0	112	39	191	56	0	16	35	65	0	1	18
1970	1538	671	520	0	118	33	196	75	0	16	29	60	0	1	15
1971	1438	614	468	0	115	31	210	86	0	18	30	59	0	1	16
1972	1526	650	477	11	127	35	228	80	0	20	30	77	0	2	19
1973	1566	669	476	22	139	32	228	71	0	21	24	89	0	4	19
1974	1531	651	441	35	145	30	229	73	0	23	22	90	0	3	18
1975	1547	655	415	52	157	31	237	86	2	28	24	79	0	2	16
1976	1499	631	395	48	158	30	237	103	2	30	25	63	0	2	12
1977	1567	653	412	49	162	30	261	112	3	32	27	69	1	4	13
1978	1770	744	444	71	197	32	282	127	5	39	32	65	0	2	12
1979	1774	718	384	84	206	44	338	142	8	42	36	84	1	4	21
1980	1807	731	388	90	209	44	345	147	9	43	35	84	1	5	21
1981	1866	756	392	96	225	43	354	150	10	48	35	83	2	6	20
1982	1939	788	396	103	246	43	363	156	9	54	34	82	2	6	20
1983	2028	825	400	117	266	42	378	162	10	61	34	83	2	7	19
1984	2080	848	405	122	281	40	384	163	11	67	34	81	2	7	19
1985	2131	868	408	126	295	39	395	169	12	71	33	83	2	7	18
1986	2214	904	414	142	310	38	406	176	12	76	32	83	2	7	18
1987	2281	932	425	146	324	37	417	181	12	81	32	84	2	7	18
1988	2323	948	430	149	333	36	427	186	13	85	31	85	2	7	18
1989	2363	965	433	155	342	35	433	191	15	85	31	85	2	7	17
1990	2414	984	438	160	351	35	446	196	15	90	31	87	2	8	17
1991	2456	1000	441	164	361	34	456	201	16	95	30	88	2	8	16

NOTE:
FIGURES IN THOUSANDS

IFR DAILY OPERATIONS
AND
INSTANTANEOUS AIRBORN COUNTS

NEW YORK

	IFR PEAK DAY		IFR NORMAL DAY	
YEAR	OPERATION	IAC	OPERATION	IAC
1977	6173	272	4947	203
1978	7109	316	5604	233
1979	7516	337	5613	242
1980	7666	354	5885	253
1981	7948	366	6062	261
1982	8309	384	6290	272
1983	8786	405	6594	285
1984	9057	418	6766	293
1985	9302	430	6931	300
1986	9724	448	7208	313
1987	10017	461	7413	321
1988	10237	471	7563	328
1989	10430	480	7693	333
1990	10659	491	7855	340
1991	10863	498	7994	346

IFR AIRCRAFT HANDLED BY USER CATEGORY

WASHINGTON

		DEPARTURES					OVERS							
								DOMESTIC				OCEANIC			
FY	AIRCFT HANDLED	TOTAL	AIR CAR	AIR TAXI	GEN AVI	MIL	TOTAL	AIR CAR	AIR TAXI	GEN AVI	MIL	AIR CAR	AIR TAXI	GEN AVI	MIL
1969	1179	448	274	0	71	103	283	202	0	41	40	0	0	0	0
1970	1288	504	300	0	91	113	280	195	0	46	39	0	0	0	0
1971	1308	519	297	0	100	122	270	194	0	42	34	0	0	0	0
1972	1343	534	287	9	104	134	275	197	0	45	33	0	0	0	0
1973	1328	504	266	9	116	113	320	244	1	51	24	0	0	0	0
1974	1338	515	261	11	130	113	308	234	2	52	20	0	0	0	0
1975	1397	543	255	22	145	121	311	229	3	58	21	0	0	0	0
1976	1396	541	249	24	149	119	314	228	3	62	21	0	0	0	0
1977	1496	574	272	23	158	121	348	251	4	69	24	0	0	0	0
1978	1560	600	274	25	181	120	360	253	4	76	27	0	0	0	0
1979	1631	624	276	27	201	120	383	267	4	86	26	0	0	0	0
1980	1670	642	284	30	207	121	386	269	5	86	26	0	0	0	0
1981	1729	669	289	32	227	121	391	267	6	92	26	0	0	0	0
1982	1815	706	296	36	251	123	403	273	7	98	25	0	0	0	0
1983	1908	744	301	42	278	123	420	277	7	111	25	0	0	0	0
1984	1966	770	306	44	297	123	426	275	8	117	26	0	0	0	0
1985	2037	800	311	49	316	124	437	281	8	123	25	0	0	0	0
1986	2118	835	318	55	336	126	448	286	9	128	25	0	0	0	0
1987	2192	866	328	56	354	126	460	292	9	135	24	0	0	0	0
1988	2246	888	333	62	366	127	470	297	9	139	25	0	0	0	0
1989	2297	910	338	65	380	127	477	303	9	141	24	0	0	0	0
1990	2353	933	343	69	392	129	487	308	10	146	23	0	0	0	0
1991	2410	955	348	73	405	129	500	313	11	153	23	0	0	0	0

NOTE:
FIGURES IN THOUSANDS

IFR DAILY OPERATIONS
AND
INSTANTANEOUS AIRBORN COUNTS

WASHINGTON

	IFR PEAK DAY		IFR NORMAL DAY	
YEAR	OPERATION	IAC	OPERATION	IAC
1977	5642	353	5070	344
1978	5901	422	5334	366
1979	6306	449	5616	387
1980	6504	461	5799	398
1981	6823	486	6064	417
1982	7227	517	6409	445
1983	7682	551	6789	476
1984	7994	576	7050	493
1985	8303	599	7312	512
1986	8669	623	7640	538
1987	9015	653	7923	559
1988	9255	672	8128	574
1989	9489	689	8333	589
1990	9754	706	8561	606
1991	10026	730	8797	622

IFR AIRCRAFT HANDLED BY USER CATEGORY

REGION SOUTHERN

		DEPARTURES					OVERS								
								DOMESTIC				OCEANIC			
FY	AIRCFT HANDLED	TOTAL	AIR CAR	AIR TAXI	GEN AVI	MIL	TOTAL	AIR CAR	AIR TAXI	GEN AVI	MIL	AIR CAR	AIR TAXI	GEN AVI	MIL
1969	3882	1401	853	0	235	313	1080	456	0	110	274	172	0	21	47
1970	4213	1529	932	0	270	327	1155	523	0	122	259	191	0	23	37
1971	4345	1570	935	0	267	348	1205	558	0	131	260	195	0	24	37
1972	4721	1716	865	105	342	406	1289	597	1	152	279	190	16	27	27
1973	4897	1812	911	96	415	390	1273	607	1	173	232	197	16	26	21
1974	4932	1827	918	97	465	347	1278	621	3	182	219	194	16	27	16
1975	4984	1835	880	110	495	350	1314	631	3	196	240	182	16	29	17
1976	5013	1821	880	112	514	315	1371	672	5	216	233	180	16	30	19
1977	5439	1974	927	112	579	356	1491	704	7	245	271	195	13	36	20
1978	6045	2181	1000	112	691	378	1683	784	9	287	284	240	9	48	22
1979	6444	2323	1025	151	791	356	1798	847	9	321	288	254	9	50	20
1980	6576	2374	1051	161	807	355	1828	865	11	326	285	258	13	50	20
1981	6796	2464	1068	175	868	353	1868	873	13	355	283	257	14	53	20
1982	7095	2580	1086	189	951	354	1935	903	14	380	284	259	17	58	20
1983	7446	2703	1104	215	1032	352	2042	935	14	438	285	263	19	67	21
1984	7686	2801	1123	232	1094	352	2084	941	15	465	287	262	21	72	21
1985	7953	2902	1143	245	1163	351	2149	969	16	492	288	265	22	76	21
1986	8229	3006	1162	269	1223	352	2217	997	15	522	288	269	25	80	21
1987	8553	3134	1205	286	1291	352	2285	1024	17	550	289	274	26	84	21
1988	8785	3219	1224	304	1337	354	2347	1050	18	572	290	278	29	88	22
1989	8984	3296	1247	315	1383	351	2392	1081	19	579	291	278	30	91	23
1990	9206	3371	1264	327	1429	351	2464	1106	20	607	293	288	32	95	23
1991	9436	3452	1284	341	1474	353	2532	1133	21	636	292	294	34	99	23

NOTE:
FIGURES IN THOUSANDS

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IFR AIRCRAFT HANDLED BY USER CATEGORY

ATLANTA

		DEPARTURES					OVERS								
								DOMESTIC				OCEANIC			
FY	AIRCFT HANDLED	TOTAL	AIR CAR	AIR TAXI	GEN AVI	MIL	TOTAL	AIR CAR	AIR TAXI	GEN AVI	MIL	AIR CAR	AIR TAXI	GEN AVI	MIL
1969	1094	438	291	0	78	69	218	93	0	33	92	0	0	0	0
1970	1167	474	318	0	89	67	219	102	0	37	80	0	0	0	0
1971	1169	472	313	0	94	65	225	104	0	39	82	0	0	0	0
1972	1261	503	324	4	110	65	255	110	0	45	100	0	0	0	0
1973	1362	556	345	4	143	64	250	110	0	55	85	0	0	0	0
1974	1409	579	347	5	168	59	251	111	0	58	82	0	0	0	0
1975	1389	565	334	6	165	60	259	115	0	63	81	0	0	0	0
1976	1400	570	339	8	170	53	260	118	1	68	73	0	0	0	0
1977	1496	601	344	14	191	52	294	131	2	81	80	0	0	0	0
1978	1612	655	381	15	220	39	302	135	3	92	72	0	0	0	0
1979	1705	689	375	27	248	39	327	147	3	102	75	0	0	0	0
1980	1738	704	383	29	253	39	330	149	3	104	74	0	0	0	0
1981	1810	734	389	31	274	40	342	150	3	114	75	0	0	0	0
1982	1897	771	395	33	301	42	355	153	3	123	76	0	0	0	0
1983	2001	809	402	37	327	43	383	158	3	144	78	0	0	0	0
1984	2071	838	408	39	347	44	395	158	3	154	80	0	0	0	0
1985	2152	870	415	41	369	45	412	163	3	164	82	0	0	0	0
1986	2229	901	421	45	388	47	427	167	2	175	83	0	0	0	0
1987	2329	943	435	48	411	49	443	171	3	185	84	0	0	0	0
1988	2395	968	442	50	426	50	459	177	3	193	86	0	0	0	0
1989	2453	993	449	52	441	51	467	181	3	195	88	0	0	0	0
1990	2517	1016	455	54	455	52	485	186	3	206	90	0	0	0	0
1991	2586	1042	461	56	471	54	502	191	3	216	92	0	0	0	0

NOTE:
FIGURES IN THOUSANDS

IFR DAILY OPERATIONS
AND
INSTANTANEOUS AIRBORN COUNTS

ATLANTA

	IFR PEAK DAY		IFR NORMAL DAY	
YEAR	OPERATION	IAC	OPERATION	IAC
1977	5538	332	5016	284
1978	5981	348	5466	301
1979	6430	373	5870	329
1980	6608	387	6040	338
1981	6927	408	6314	357
1982	7327	435	6667	378
1983	7796	465	7068	405
1984	8120	486	7506	424
1985	8483	509	7681	444
1986	8830	533	7994	463
1987	9251	558	8366	487
1988	9534	575	8621	501
1989	9776	592	8843	514
1990	10047	608	9077	531
1991	10343	627	9340	547

ATR AIRCRAFT HANDLED BY USER CATEGORY

BALBOA

FY	AIRCFT HANDLED	DEPARTURES					OVERS								
								DOMESTIC				OCEANIC			
		TOTAL	AIR CAR	AIR TAXI	GEN AVI	MIL	TOTAL	AIR CAR	AIR TAXI	GEN AVI	MIL	AIR CAR	AIR TAXI	GEN AVI	MIL
1969	54	14	11	0	1	2	26	0	0	0	0	21	0	1	4
1970	47	12	10	0	0	2	23	0	0	0	0	19	0	1	3
1971	45	11	9	0	0	2	23	0	0	0	0	19	0	1	3
1972	44	9	8	0	0	1	26	0	0	0	0	22	0	1	3
1973	60	17	14	0	0	3	26	2	0	0	0	21	0	1	2
1974	75	24	18	0	2	4	27	5	0	0	0	19	0	1	2
1975	81	25	18	0	3	4	31	7	0	0	0	20	0	2	2
1976	77	21	17	0	2	2	35	9	0	1	0	21	0	2	2
1977	86	23	18	0	3	2	40	11	0	1	2	22	0	2	2
1978	84	22	17	0	3	2	40	12	0	1	0	23	0	2	2
1979	90	24	18	0	3	3	42	12	0	1	0	24	0	2	3
1980	90	25	19	0	3	3	40	11	0	1	0	23	0	2	3
1981	89	25	19	0	3	3	39	11	0	1	0	22	0	2	3
1982	92	26	20	0	3	3	40	11	0	1	0	22	0	3	3
1983	91	26	20	0	3	3	39	11	0	1	0	20	0	4	3
1984	98	29	21	1	4	3	40	11	0	2	0	20	0	4	3
1985	96	29	21	1	4	3	40	11	0	2	0	19	0	5	3
1986	106	32	22	1	6	3	42	10	0	3	0	19	0	7	3
1987	112	34	24	1	6	3	44	10	0	4	0	19	0	8	3
1988	114	35	24	1	6	4	44	10	0	4	0	19	0	8	3
1989	118	37	25	1	7	4	44	11	0	4	0	17	0	9	3
1990	119	37	25	1	7	4	45	11	0	4	0	18	0	9	3
1991	119	37	25	1	7	4	45	11	0	4	0	18	0	9	3

NOTE:
FIGURES IN THOUSANDS

IFR DAILY OPERATIONS
AND
INSTANTANEOUS AIRBORN COUNTS

JACKSONVILLE

	IFR PEAK DAY		IFR NORMAL DAY	
YEAR	OPERATION	IAC	OPERATION	IAC
1977	5059	701	4068	519
1978	5936	833	4747	615
1979	5938	784	4833	589
1980	6058	796	4933	598
1981	6209	810	5076	611
1982	6435	827	5277	627
1983	6668	844	5495	644
1984	6816	854	5636	654
1985	7030	873	5817	668
1986	7173	883	5956	680
1987	7384	903	6151	697
1988	7520	910	6275	705
1989	7657	921	6408	715
1990	7796	932	6536	724
1991	7965	945	6686	736

IFR AIRCRAFT HANDLED BY USER CATEGORY

JACKSONVILLE

FY	AIRCFT HANDLED	DEPARTURES					OVERS							
								DOMESTIC				OCEANIC		
		TOTAL	AIR CAR	AIR TAXI	GEN AVI	MIL	TOTAL	AIR CAR	AIR TAXI	GEN AVI	MIL	AIR CAR	AIR TAXI	GEN AVI	MIL
1969	892	280	107	0	42	131	332	217	0	34	81	0	0	0	0
1970	994	312	114	0	56	142	370	237	0	40	93	0	0	0	0
1971	1000	304	116	0	58	130	392	266	0	44	82	0	0	0	0
1972	1105	345	103	16	71	155	415	282	0	52	81	0	0	0	0
1973	1079	337	100	11	81	145	405	290	0	59	56	0	0	0	0
1974	1064	327	94	12	90	131	410	297	1	61	51	0	0	0	0
1975	1091	326	85	11	97	133	439	299	1	70	69	0	0	0	0
1976	1105	318	85	10	99	124	469	327	1	74	67	0	0	0	0
1977	1208	362	92	7	113	150	484	319	1	77	87	0	0	0	0
1978	1397	421	92	10	135	184	555	362	1	95	97	0	0	0	0
1979	1436	420	93	13	159	155	596	390	1	109	96	0	0	0	0
1980	1459	426	96	13	161	156	607	399	2	111	95	0	0	0	0
1981	1502	441	99	14	172	156	620	402	3	121	94	0	0	0	0
1982	1563	460	101	15	188	156	643	416	3	130	94	0	0	0	0
1983	1629	477	103	16	202	156	675	430	3	149	93	0	0	0	0
1984	1667	491	105	17	214	155	685	432	3	158	92	0	0	0	0
1985	1721	507	107	17	227	156	707	445	3	167	92	0	0	0	0
1986	1764	518	108	18	236	156	728	458	2	177	91	0	0	0	0
1987	1821	535	112	18	249	156	751	470	3	187	91	0	0	0	0
1988	1865	548	114	19	259	156	769	482	3	194	90	0	0	0	0
1989	1898	558	116	19	268	155	782	494	3	196	89	0	0	0	0
1990	1939	568	118	19	276	155	803	505	3	206	89	0	0	0	0
1991	1986	581	120	20	285	156	824	517	3	216	88	0	0	0	0

NOTE:
FIGURES IN THOUSANDS

IFR AIRCRAFT HANDLED BY USER CATEGORY

MEMPHIS

		DEPARTURES					OVERS								
								DOMESTIC				OCEANIC			
FY	AIRCFT HANDLED	TOTAL	AIR CAR	AIR TAXI	GEN AVI	MIL	TOTAL	AIR CAR	AIR TAXI	GEN AVI	MIL	AIR CAR	AIR TAXI	GEN AVI	MIL
1969	707	239	134	0	57	48	229	116	0	38	75	0	0	0	0
1970	606	270	148	0	63	59	266	160	0	41	65	0	0	0	0
1971	895	307	141	0	73	93	281	161	0	44	76	0	0	0	0
1972	980	339	135	9	85	110	302	175	0	49	78	0	0	0	0
1973	1056	371	141	12	104	114	314	180	1	56	77	0	0	0	0
1974	1092	387	152	20	114	101	316	183	2	60	73	0	0	0	0
1975	1155	414	155	29	130	100	327	189	2	60	76	0	0	0	0
1976	1151	405	150	33	136	86	341	192	3	70	76	0	0	0	0
1977	1228	419	152	41	142	84	390	218	4	82	86	0	0	0	0
1978	1347	458	163	42	173	80	431	245	5	94	87	0	0	0	0
1979	1476	507	166	52	199	90	462	268	5	101	88	0	0	0	0
1980	1503	516	170	56	201	89	471	277	6	101	87	0	0	0	0
1981	1552	534	173	61	213	87	484	283	7	108	86	0	0	0	0
1982	1629	561	178	65	231	87	507	296	8	116	87	0	0	0	0
1983	1718	591	181	75	250	85	536	308	8	133	87	0	0	0	0
1984	1776	613	185	80	262	86	550	313	9	140	88	0	0	0	0
1985	1842	636	189	85	276	84	570	324	10	148	88	0	0	0	0
1986	1916	662	193	94	291	84	592	336	11	156	89	0	0	0	0
1987	1991	690	201	100	306	83	611	347	11	164	89	0	0	0	0
1988	2045	708	204	105	316	83	629	356	12	171	90	0	0	0	0
1989	2092	724	208	109	326	81	644	368	13	174	89	0	0	0	0
1990	2151	744	211	114	337	82	663	377	14	182	90	0	0	0	0
1991	2204	761	215	118	347	81	682	387	15	191	89	0	0	0	0

NOTE:
FIGURES IN THOUSANDS

IFR DAILY OPERATIONS AND INSTANTANEOUS AIRBORN COUNTS

MEMPHIS

YEAR	IFR PEAK DAY		IFR NORMAL DAY	
	OPERATION	IAC	OPERATION	IAC
1977	4951	348	4320	330
1978	5535	384	4717	353
1979	6127	424	5194	387
1980	6208	430	5308	391
1981	6560	447	5498	401
1982	6957	470	5714	419
1983	7404	497	6076	436
1984	7695	514	6288	447
1985	8037	535	6524	461
1986	8391	555	6776	476
1987	8765	576	7047	491
1988	9048	595	7249	502
1989	9276	604	7408	509
1990	9553	623	7612	523
1991	9830	639	7805	533

IFR AIRCRAFT HANDLED BY USER CATEGORY

MIAMI

		DEPARTURES					OVERS								
								DOMESTIC				OCEANIC			
FY	AIRCFT HANDLED	TOTAL	AIR CAR	AIR TAXI	GEN AVI	MIL	TOTAL	AIR CAR	AIR TAXI	GEN AVI	MIL	AIR CAR	AIR TAXI	GEN AVI	MIL
1969	869	349	243	0	52	54	171	27	0	5	25	74	0	14	26
1970	912	371	266	0	56	49	170	20	0	3	20	92	0	15	20
1971	926	373	266	0	56	51	180	24	0	3	19	96	0	17	21
1972	1024	419	248	32	70	69	186	26	1	5	19	86	15	18	16
1973	1032	429	264	25	82	58	174	22	0	2	13	93	13	19	12
1974	1025	428	260	32	87	49	169	22	0	2	12	92	14	18	9
1975	1027	431	246	40	95	50	165	21	0	2	14	84	13	21	10
1976	1039	434	248	37	102	47	171	21	0	2	16	85	13	22	12
1977	1187	500	282	31	125	62	187	20	0	3	16	98	10	27	13
1978	1378	561	308	31	154	68	256	24	0	4	28	142	6	37	15
1979	1484	607	334	35	176	62	270	24	0	7	29	153	5	40	12
1980	1526	624	343	37	183	61	278	23	0	7	29	160	7	40	12
1981	1578	648	347	41	200	60	282	22	0	8	28	162	8	42	12
1982	1641	676	350	45	222	59	289	21	0	7	27	167	10	45	12
1983	1720	707	354	51	244	58	306	22	0	8	27	174	12	50	13
1984	1778	732	359	55	261	57	314	21	0	8	27	176	14	55	13
1985	1837	759	365	60	278	56	319	20	0	7	26	181	15	57	13
1986	1901	787	371	66	295	55	327	20	0	8	25	186	16	59	13
1987	1974	819	383	70	312	54	336	20	0	7	24	192	19	61	13
1988	2028	842	389	76	323	54	344	19	0	7	23	196	21	64	14
1989	2075	861	395	79	334	53	353	20	0	7	24	199	22	66	15
1990	2127	881	400	83	347	51	365	20	0	6	23	208	24	69	15
1991	2180	903	407	88	357	51	374	20	0	6	22	213	26	72	15

NOTE:
FIGURES IN THOUSANDS

IFR DAILY OPERATIONS AND INSTANTANEOUS AIRBORN COUNTS

MIAMI

	IFR PEAK DAY		IFR NORMAL DAY	
YEAR	OPERATION	IAC	OPERATION	IAC
1977	4702	340	3797	262
1978	5512	407	4424	306
1979	6016	445	4820	334
1980	6403	476	5204	359
1981	6140	505	5399	376
1982	7096	533	5651	402
1983	7526	576	5952	430
1984	7819	605	6165	450
1985	8113	632	6388	472
1986	8455	664	6642	494
1987	8816	694	6919	516
1988	9090	720	7122	535
1989	9307	739	7278	548
1990	9566	763	7478	566
1991	9817	785	7674	582

IFR AIRCRAFT HANDLED BY USER CATEGORY

SAN JUAN

FY	AIRCFT HANDLED	DEPARTURES					OVERS								
								DOMESTIC				OCEANIC			
		TOTAL	AIR CAR	AIR TAXI	GEN AVI	MIL	TOTAL	AIR CAR	AIR TAXI	GEN AVI	MIL	AIR CAR	AIR TAXI	GEN AVI	MIL
1969	266	81	67	0	5	9	104	3	0	0	1	77	0	6	17
1970	287	90	76	0	6	8	107	4	0	1	1	80	0	7	14
1971	310	103	90	0	6	7	104	3	0	1	1	80	0	6	13
1972	307	101	47	42	6	6	105	4	0	1	1	82	1	8	8
1973	308	102	47	44	5	6	104	3	0	1	1	83	3	6	7
1974	267	82	47	28	4	3	103	3	0	1	1	83	2	8	5
1975	241	74	42	24	5	3	93	0	0	1	0	78	3	6	5
1976	241	73	41	24	5	3	95	5	0	1	1	74	3	6	5
1977	234	69	39	19	5	6	96	5	0	1	0	75	3	7	5
1978	227	64	39	14	6	5	99	6	0	1	0	75	3	9	5
1979	253	76	39	24	6	7	101	6	0	1	0	77	4	8	5
1980	260	79	40	26	6	7	102	6	0	2	0	75	6	8	5
1981	265	82	41	28	6	7	101	5	0	3	0	73	6	9	5
1982	273	86	42	31	6	7	101	6	0	3	0	70	7	10	5
1983	289	93	44	36	6	7	103	6	0	3	0	69	7	13	5
1984	296	98	45	40	6	7	100	6	0	3	0	66	7	13	5
1985	303	101	46	41	7	7	101	6	0	4	0	65	7	14	5
1986	313	106	47	45	7	7	101	6	0	3	0	64	9	14	5
1987	326	113	50	49	7	7	100	6	0	3	1	63	7	15	5
1988	338	118	51	53	7	7	102	6	0	3	1	63	8	16	5
1989	348	123	54	55	7	7	102	7	0	3	1	62	8	16	5
1990	353	125	55	56	7	7	103	7	0	3	1	62	8	17	5
1991	361	128	56	58	7	7	105	7	0	3	1	63	8	18	5

NOTE:
FIGURES IN THOUSANDS

Although San Juan is still functioning as an Air Route Traffic Control Center, they ceased reporting aircraft handled data in May 1979. Fiscal year 1979 data is an estimate.

IFR AIRCRAFT HANDLED BY USER CATEGORY

REGION GREAT LAKES

FY	AIRCFT HANDLED	DEPARTURES					OVERS								
								DOMESTIC				OCEANIC			
		TOTAL	AIR CAR	AIR TAXI	GEN AVI	MIL	TOTAL	AIR CAR	AIR TAXI	GEN AVI	MIL	AIR CAR	AIR TAXI	GEN AVI	MIL
1969	4824	1825	1221	0	473	131	1174	794	0	150	230	0	0	0	0
1970	5001	1692	1276	C	500	116	1217	876	0	163	178	0	0	0	0
1971	4757	1776	1115	0	550	111	1205	869	0	169	167	0	0	0	0
1972	5033	1875	1106	106	550	113	1283	913	6	182	182	0	0	0	0
1973	5429	2050	1108	155	665	122	1329	924	15	218	172	0	0	0	0
1974	5491	2106	1093	187	711	115	1279	872	15	240	152	0	0	0	0
1975	5790	2240	1117	213	787	123	1310	882	15	253	160	0	0	0	0
1976	5842	2266	1129	217	802	118	1310	883	20	258	149	0	0	0	0
1977	6186	2392	1152	236	872	132	1404	935	23	301	145	0	0	0	0
1978	6616	2567	1154	274	996	143	1482	951	33	338	160	0	0	0	0
1979	6987	2690	1137	295	1107	151	1607	1012	37	385	173	0	0	0	0
1980	7101	2744	1156	318	1119	151	1613	1016	41	386	170	0	0	0	0
1981	7372	2666	1170	348	1196	150	1640	1008	42	415	175	0	0	0	0
1982	7730	3017	1187	378	1304	148	1696	1031	47	445	173	0	0	0	0
1983	8172	3195	1202	436	1411	146	1782	1048	49	509	176	0	0	0	0
1984	8449	3319	1218	466	1489	146	1811	1043	53	539	176	0	0	0	0
1985	8746	3439	1235	495	1566	143	1868	1065	56	567	180	0	0	0	0
1986	9114	3596	1250	555	1647	144	1922	1082	61	599	180	0	0	0	0
1987	9459	3740	1290	585	1724	141	1979	1104	63	628	184	0	0	0	0
1988	9701	3835	1306	613	1776	140	2031	1127	67	653	184	0	0	0	0
1989	9927	3933	1322	645	1828	138	2061	1146	71	658	186	0	0	0	0
1990	10182	4033	1338	677	1881	137	2116	1168	73	688	187	0	0	0	0
1991	10440	4131	1357	706	1933	135	2178	1191	77	719	191				

NOTE:
FIGURES IN THOUSANDS

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IFR AIRCRAFT HANDLED BY USER CATEGORY

CHICAGO

		DEPARTURES					OVERS								
								DOMESTIC				OCEANIC			
FY	AIRCFT HANDLED	TOTAL	AIR CAR	AIR TAXI	GEN AVI	MIL	TOTAL	AIR CAR	AIR TAXI	GEN AVI	MIL	AIR CAR	AIR TAXI	GEN AVI	MIL
1969	1645	706	519	0	149	38	233	146	0	30	57	0	0	0	0
1970	1720	738	541	0	162	35	244	170	0	33	41	0	0	0	0
1971	1663	714	483	0	197	34	235	161	0	34	40	0	0	0	0
1972	1594	689	446	46	173	24	216	140	3	34	39	0	0	0	0
1973	1606	701	419	58	205	19	204	117	7	46	34	0	0	0	0
1974	1661	729	420	67	223	19	203	116	6	52	29	0	0	0	0
1975	1782	785	430	80	258	17	212	121	4	57	30	0	0	0	0
1976	1851	814	456	80	260	18	223	129	5	59	30	0	0	0	0
1977	1836	806	437	87	267	15	224	127	6	64	27	0	0	0	0
1978	1981	871	432	112	311	16	239	130	8	76	25	0	0	0	0
1979	2086	905	423	110	353	19	276	155	10	85	26	0	0	0	0
1980	2123	922	428	120	355	19	279	156	11	86	26	0	0	0	0
1981	2206	960	432	132	377	19	286	154	11	94	27	0	0	0	0
1982	2309	1005	437	144	406	18	299	158	12	102	27	0	0	0	0
1983	2446	1064	441	168	437	18	318	160	12	118	28	0	0	0	0
1984	2537	1105	447	181	459	18	327	159	12	127	29	0	0	0	0
1985	2628	1145	453	194	481	17	338	162	13	133	30	0	0	0	0
1986	2743	1196	457	218	503	18	351	164	14	143	30	0	0	0	0
1987	2849	1243	470	232	525	16	363	168	14	149	32	0	0	0	0
1988	2932	1279	476	247	540	16	374	171	15	156	32	0	0	0	0
1989	3009	1315	482	261	556	16	379	173	15	158	33	0	0	0	0
1990	3087	1347	487	275	570	15	393	177	16	166	34	0	0	0	0
1991	3173	1384	494	289	586	15	405	180	17	173	35	0	0	0	0

NOTE:
FIGURES IN THOUSANDS

IFR DAILY OPERATIONS
AND
INSTANTANEOUS AIRBORN COUNTS

CHICAGO

	IFR PEAK DAY		IFR NORMAL DAY	
YEAR	OPERATION	IAC	OPERATION	IAC
1977	7861	423	6463	333
1978	8713	472	7063	367
1979	9336	514	7521	398
1980	9573	524	7722	406
1981	10036	550	8064	425
1982	10589	581	8483	448
1983	11353	624	9053	478
1984	11801	652	9437	500
1985	12345	679	9809	519
1986	12955	711	10267	543
1987	13487	740	10682	563
1988	13907	760	11018	580
1989	14296	781	11315	596
1990	14705	803	11628	612
1991	15145	825	11968	629

IFR AIRCRAFT HANDLED BY USER CATEGORY

CLEVELAND

		DEPARTURES					OVERS								
								DOMESTIC				OCEANIC			
FY	AIRCFT HANDLED	TOTAL	AIR CAR	AIR TAXI	GEN AVI	MIL	TOTAL	AIR CAR	AIR TAXI	GEN AVI	MIL	AIR CAR	AIR TAXI	GEN AVI	MIL
1969	1562	548	357	0	174	17	466	345	0	57	64	0	0	0	0
1970	1604	565	374	0	178	13	474	362	0	60	52	0	0	0	0
1971	1493	507	319	0	174	14	479	369	0	62	48	0	0	0	0
1972	1547	540	329	26	169	16	467	353	2	62	50	0	0	0	0
1973	1661	598	343	42	194	19	465	346	4	71	44	0	0	0	0
1974	1643	601	326	53	204	18	441	320	4	78	39	0	0	0	0
1975	1659	608	317	63	208	20	443	318	5	80	40	0	0	0	0
1976	1652	606	306	66	215	19	440	311	6	85	38	0	0	0	0
1977	1766	653	322	74	239	18	460	324	6	93	37	0	0	0	0
1978	1878	700	328	85	269	18	478	326	8	106	38	0	0	0	0
1979	1984	741	323	101	296	19	502	332	10	122	38	0	0	0	0
1980	2021	760	329	110	302	19	501	331	11	122	37	0	0	0	0
1981	2104	796	333	121	325	19	508	327	11	131	39	0	0	0	0
1982	2216	845	338	133	355	19	526	333	13	141	39	0	0	0	0
1983	2349	899	343	151	386	19	551	337	13	161	40	0	0	0	0
1984	2425	934	346	161	407	20	557	334	14	169	40	0	0	0	0
1985	2503	965	350	169	426	20	573	339	15	178	41	0	0	0	0
1986	2623	1017	355	191	450	21	589	343	16	188	42	0	0	0	0
1987	2710	1053	365	199	468	21	604	348	17	196	43	0	0	0	0
1988	2769	1075	368	206	480	21	619	354	18	203	44	0	0	0	0
1989	2824	1099	372	214	492	21	626	358	19	204	45	0	0	0	0
1990	2895	1126	376	224	505	21	643	364	20	213	46	0	0	0	0
1991	2946	1143	378	230	514	21	660	370	21	222	47	0	0	0	0

NOTE:
FIGURES IN THOUSANDS

IFR DAILY OPERATIONS
AND
INSTANTANEOUS AIRBORN COUNTS

CLEVELAND

	IFR PEAK DAY		IFR NORMAL DAY	
YEAR	OPERATION	IAC	OPERATION	IAC
1977	6972	361	6277	323
1978	7517	390	6739	348
1979	8063	424	7221	374
1980	8279	433	7414	382
1981	8708	458	7788	404
1982	9240	489	8240	430
1983	9386	526	8810	463
1984	10303	551	9169	485
1985	10658	575	9479	501
1986	11226	602	9978	530
1987	11636	626	10342	550
1988	11902	641	10572	562
1989	12157	655	10801	574
1990	12477	673	11079	590
1991	12738	687	11310	602

IFR AIRCRAFT HANDLED BY USER CATEGORY

INDIANAPOLIS

FY	AIRCFT HANDLED	DEPARTURES					OVERS								
								DOMESTIC				OCEANIC			
		TOTAL	AIR CAR	AIR TAXI	GEN AVI	MIL	TOTAL	AIR CAR	AIR TAXI	GEN AVI	MIL	AIR CAR	AIR TAXI	GEN AVI	MIL
1969	1059	354	210	0	105	39	351	233	0	58	60	0	0	0	0
1970	1123	370	218	0	113	39	383	268	0	66	49	0	0	0	0
1971	1111	366	202	0	126	38	379	264	0	68	47	0	0	0	0
1972	1157	380	187	18	134	41	397	269	1	76	51	0	0	0	0
1973	1270	428	195	30	161	42	414	276	4	87	47	0	0	0	0
1974	1261	425	175	39	172	39	411	270	5	96	40	0	0	0	0
1975	1330	453	178	42	191	42	424	277	6	99	42	0	0	0	0
1976	1336	456	175	43	199	39	424	281	8	96	39	0	0	0	0
1977	1436	473	173	48	212	40	490	311	10	126	43	0	0	0	0
1978	1516	505	181	46	232	44	506	310	16	133	47	0	0	0	0
1979	1605	529	176	54	253	46	547	333	15	149	50	0	0	0	0
1980	1623	537	180	57	254	46	549	335	17	148	49	0	0	0	0
1981	1681	561	183	61	271	46	559	333	18	158	50	0	0	0	0
1982	1760	592	186	66	294	46	576	339	20	168	49	0	0	0	0
1983	1864	629	190	76	317	46	606	345	22	190	49	0	0	0	0
1984	1925	654	193	81	334	46	617	343	24	201	49	0	0	0	0
1985	1995	679	196	86	351	46	637	351	25	211	50	0	0	0	0
1986	2070	708	199	96	368	45	654	356	28	221	49	0	0	0	0
1987	2154	740	207	101	386	46	674	363	29	232	50	0	0	0	0
1988	2211	760	210	106	398	46	691	370	31	241	49	0	0	0	0
1989	2260	779	212	112	409	46	702	377	33	243	49	0	0	0	0
1990	2312	798	215	118	420	45	716	382	33	253	48	0	0	0	0
1991	2381	821	219	124	433	45	739	390	35	265	49	0	0	0	0

NOTE:
FIGURES IN THOUSANDS

IFR DAILY OPERATIONS
AND
INSTANTANEOUS AIRBORN COUNTS

INDIANAPOLIS

	IFR PEAK DAY		IFR NORMAL DAY	
YEAR	OPERATION	IAC	OPERATION	IAC
1977	7416	572	5133	306
1978	7948	620	5445	347
1979	8454	658	5810	351
1980	8576	664	5912	356
1981	8875	662	6169	373
1982	9184	694	6518	393
1983	9675	720	6958	421
1984	9927	733	7225	437
1985	10309	757	7531	456
1986	10599	769	7850	475
1987	10967	792	8190	495
1988	11199	805	8432	510
1989	11428	815	8630	521
1990	11654	830	8875	536
1991	11941	850	9135	551

IFR AIRCRAFT HANDLED BY USER CATEGORY

MINNEAPOLIS

		DEPARTURES					OVERS								
								DOMESTIC				OCEANIC			
FY	AIRCFT HANDLED	TOTAL	AIR CAR	AIR TAXI	GEN AVI	MIL	TOTAL	AIR CAR	AIR TAXI	GEN AVI	MIL	AIR CAR	AIR TAXI	GEN AVI	MIL
1969	558	217	135	0	45	37	124	70	0	5	49	0	0	0	0
1970	554	219	143	0	47	29	116	76	0	4	36	0	0	0	0
1971	490	189	111	0	53	25	112	75	0	5	32	0	0	0	0
1972	735	266	144	16	74	32	203	151	0	10	42	0	0	0	0
1973	892	323	151	25	105	42	246	185	0	14	47	0	0	0	0
1974	926	351	172	28	112	39	224	166	0	14	44	0	0	0	0
1975	1019	394	192	28	130	44	231	166	0	17	48	0	0	0	0
1976	1003	390	192	28	128	42	223	162	1	18	42	0	0	0	0
1977	1150	460	220	27	154	59	230	173	1	18	38	0	0	0	0
1978	1241	491	213	29	184	65	259	185	1	23	50	0	0	0	0
1979	1312	515	215	30	203	67	282	192	2	29	59	0	0	0	0
1980	1334	525	219	31	208	67	284	194	2	30	58	0	0	0	0
1981	1381	547	222	34	225	66	287	194	2	32	59	0	0	0	0
1982	1445	575	226	35	249	65	295	201	2	34	58	0	0	0	0
1983	1513	603	228	41	271	63	307	206	2	40	59	0	0	0	0
1984	1562	626	232	43	289	62	310	207	3	42	58	0	0	0	0
1985	1620	650	236	46	308	60	320	213	3	45	59	0	0	0	0
1986	1678	675	239	50	326	60	328	219	3	47	59	0	0	0	0
1987	1746	704	246	53	345	58	338	225	3	51	59	0	0	0	0
1988	1789	721	252	54	358	57	347	232	3	53	59	0	0	0	0
1989	1834	740	256	56	371	55	354	238	4	53	59	0	0	0	0
1990	1888	762	260	60	386	56	364	245	4	56	59	0	0	0	0
1991	1940	783	266	63	400	54	374	251	4	59	60	0	0	0	0

NOTE:
FIGURES IN THOUSANDS

IFR DAILY OPERATIONS
AND
INSTANTANEOUS AIRBORN COUNTS

MINNEAPOLIS

	IFR PEAK DAY		IFR NORMAL DAY	
YEAR	OPERATION	IAC	OPERATION	IAC
1977	N.A.	N.A.	3973	273
1978	N.A.	N.A.	4359	308
1979	N.A.	N.A.	4633	332
1980	N.A.	N.A.	4751	339
1981	N.A.	N.A.	4940	353
1982	N.A.	N.A.	5192	371
1983	N.A.	N.A.	5474	391
1984	N.A.	N.A.	5672	406
1985	N.A.	N.A.	5888	422
1986	N.A.	N.A.	6122	439
1987	N.A.	N.A.	6370	458
1988	N.A.	N.A.	6545	470
1989	N.A.	N.A.	6708	480
1990	N.A.	N.A.	6915	496
1991	N.A.	N.A.	7103	509

IFR AIRCRAFT HANDLED BY USER CATEGORY

REGION CENTRAL

FY	AIRCFT HANDLED	DEPARTURES					OVERS								
								DOMESTIC				OCEANIC			
		TOTAL	AIR CAR	AIR TAXI	GEN AVI	MIL	TOTAL	AIR CAR	AIR TAXI	GEN AVI	MIL	AIR CAR	AIR TAXI	GEN AVI	MIL
1969	907	347	206	6	78	63	213	111	0	25	77	0	0	0	0
1970	990	376	227	0	83	66	238	133	0	31	74	0	0	0	0
1971	1023	378	208	0	106	64	267	156	0	38	73	0	0	0	0
1972	953	361	179	21	86	75	231	137	0	34	60	0	0	0	0
1973	974	372	178	23	107	64	230	135	0	40	55	0	0	0	0
1974	997	380	174	30	118	58	237	137	2	44	54	0	0	0	0
1975	1090	416	193	35	132	56	258	142	4	50	62	0	0	0	0
1976	1080	413	191	32	138	52	254	144	6	53	51	0	0	0	0
1977	1174	443	193	34	157	59	288	159	8	58	63	0	0	0	0
1978	1340	496	208	41	184	63	346	188	8	71	81	0	0	0	0
1979	1435	529	220	47	201	61	377	199	10	85	83	0	0	0	0
1980	1467	542	226	50	205	61	383	203	12	86	82	0	0	0	0
1981	1522	566	229	54	221	62	390	203	13	93	81	0	0	0	0
1982	1587	592	231	59	240	62	403	208	15	99	81	0	0	0	0
1983	1665	621	234	66	260	61	423	213	16	113	81	0	0	0	0
1984	1716	643	237	71	274	61	430	212	17	120	81	0	0	0	0
1985	1761	661	240	74	286	61	439	217	18	124	80	0	0	0	0
1986	1830	690	243	84	301	62	450	220	20	131	79	0	0	0	0
1987	1886	712	249	87	314	62	462	226	21	136	79	0	0	0	0
1988	1922	725	252	91	320	62	472	230	22	141	79	0	0	0	0
1989	1949	736	255	93	327	61	477	234	23	142	78	0	0	0	0
1990	1992	751	259	97	334	61	490	239	25	147	79	0	0	0	0
1991	2024	762	261	100	340	61	500	243	27	152	78	0	0	0	0

NOTE:
FIGURES IN THOUSANDS

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IFR AIRCRAFT HANDLED BY USER CATEGORY

KANSAS CITY

FY	AIRCFT HANDLED	DEPARTURES					OVERS								
								DOMESTIC				OCEANIC			
		TOTAL	AIR CAR	AIR TAXI	GEN AVI	MIL	TOTAL	AIR CAR	AIR TAXI	GEN AVI	MIL	AIR CAR	AIR TAXI	GEN AVI	MIL
1969	907	347	206	0	78	63	213	111	0	25	77	0	0	0	0
1970	990	376	227	0	83	66	238	133	0	31	74	0	0	0	0
1971	1023	378	208	0	106	64	267	156	0	38	73	0	0	0	0
1972	953	361	179	21	86	75	231	137	0	34	60	0	0	0	0
1973	974	372	178	23	107	64	230	135	0	40	55	0	0	0	0
1974	997	380	174	30	118	58	237	137	2	44	54	0	0	0	0
1975	1090	416	193	35	132	56	258	142	4	50	62	0	0	0	0
1976	1080	413	191	32	138	52	254	144	6	53	51	0	0	0	0
1977	1174	443	193	34	157	59	288	159	8	58	63	0	0	0	0
1978	1340	496	208	41	184	63	348	188	8	71	81	0	0	0	0
1979	1435	529	220	47	201	61	377	199	10	85	83	0	0	0	0
1980	1467	542	226	50	205	61	383	203	12	86	82	0	0	0	0
1981	1522	566	229	54	221	62	390	203	13	93	81	0	0	0	0
1982	1587	592	231	59	240	62	403	208	15	99	81	0	0	0	0
1983	1665	621	234	66	260	61	423	213	16	113	81	0	0	0	0
1984	1716	643	237	71	274	61	430	212	17	120	81	0	0	0	0
1985	1761	661	240	74	286	61	439	217	18	124	80	0	0	0	0
1986	1830	690	243	84	301	62	450	220	20	131	79	0	0	0	0
1987	1886	712	249	87	314	62	462	226	21	136	79	0	0	0	0
1988	1922	725	252	91	320	62	472	230	22	141	79	0	0	0	0
1989	1949	736	255	93	327	61	477	234	23	142	78	0	0	0	0
1990	1992	751	259	97	334	61	490	239	25	147	79	0	0	0	0
1991	2024	762	261	100	340	61	500	243	27	152	78	0	0	0	0

NOTE:
FIGURES IN THOUSANDS

IFR DAILY OPERATIONS
AND
INSTANTANEOUS AIRBURN COUNTS

KANSAS CITY

YEAR	IFR PEAK DAY		IFR NORMAL DAY	
	OPERATION	IAC	OPERATION	IAC
1977	5585	437	4526	355
1978	6206	503	4952	401
1979	6694	534	5310	429
1980	6914	545	5479	439
1981	7230	566	5692	454
1982	7610	591	5954	471
1983	8104	622	6214	490
1984	8403	641	6476	503
1985	8685	660	6669	516
1986	9101	693	6940	539
1987	9417	704	7173	547
1988	9601	710	7302	555
1989	9741	724	7399	562
1990	9980	735	7563	571
1991	10182	740	7701	579

IFR AIRCRAFT HANDLED BY USER CATEGORY

REGION SOUTHWEST

FY	AIRCFT HANDLED	DEPARTURES					OVERS								
								DOMESTIC				OCEANIC			
		TOTAL	AIR CAR	AIR TAXI	GEN AVI	MIL	TOTAL	AIR CAR	AIR TAXI	GEN AVI	MIL	AIR CAR	AIR TAXI	GEN AVI	MIL
1969	2773	1160	527	0	158	475	453	181	0	32	216	7	0	1	16
1970	2983	1255	587	0	182	486	473	213	0	37	201	7	0	1	14
1971	2953	1204	554	0	160	470	543	224	0	38	267	8	0	1	7
1972	3070	1230	515	36	208	471	610	210	0	45	328	12	0	1	8
1973	3201	1307	520	40	236	511	587	225	0	51	286	15	0	1	9
1974	3206	1308	541	45	255	467	590	226	8	55	280	13	0	1	5
1975	3316	1355	527	75	311	442	606	217	13	66	291	13	0	1	5
1976	3340	1383	536	71	346	430	574	222	4	68	260	13	0	2	5
1977	3699	1506	558	114	397	437	687	263	12	80	311	13	0	2	6
1978	3967	1622	596	123	458	443	723	283	10	93	315	13	0	3	6
1979	4487	1800	637	149	546	468	887	356	11	115	379	16	0	4	6
1980	4605	1853	660	161	562	470	899	366	13	118	375	16	0	5	6
1981	4775	1930	677	177	608	468	915	369	14	131	372	17	0	6	6
1982	4983	2020	693	189	671	467	943	382	17	143	371	18	0	6	6
1983	5225	2126	708	219	732	467	973	392	18	165	369	18	0	5	6
1984	5389	2199	724	232	778	465	991	395	21	176	367	20	0	6	6
1985	5566	2277	740	249	824	464	1012	404	23	189	364	20	0	6	6
1986	5774	2365	756	275	870	464	1044	418	25	202	363	22	0	7	7
1987	5969	2453	784	291	915	463	1063	427	26	214	359	23	0	7	7
1988	6111	2513	799	307	945	462	1085	437	28	223	359	24	0	7	7
1989	6250	2574	814	322	977	461	1102	448	31	228	357	24	0	7	7
1990	6398	2636	830	337	1009	460	1126	460	33	240	354	25	0	7	8
1991	6538	2696	844	354	1038	460	1146	468	34	251	352	26	0		

NOTE:
FIGURES IN THOUSANDS

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IFR AIRCRAFT HANDLED BY USER CATEGORY

ALBUQUERQUE

		DEPARTURES					OVERS								
								DOMESTIC				OCEANIC			
FY	AIRCFT HANDLED	TOTAL	AIR CAR	AIR TAXI	GEN AVI	MIL	TOTAL	AIR CAR	AIR TAXI	GEN AVI	MIL	AIR CAR	AIR TAXI	GEN AVI	MIL
1969	626	427	99	0	18	110	172	94	0	9	69	0	0	0	0
1970	701	258	110	0	23	125	185	108	0	11	66	0	0	0	0
1971	728	262	104	0	24	134	204	116	0	11	77	0	0	0	0
1972	699	241	98	0	25	118	217	103	0	12	102	0	0	0	0
1973	815	303	108	0	32	163	209	111	0	13	85	0	0	0	0
1974	859	312	108	0	32	172	235	110	0	14	111	0	0	0	0
1975	882	314	112	4	42	156	254	112	0	17	125	0	0	0	0
1976	845	304	116	6	43	139	237	113	1	18	105	0	0	0	0
1977	930	327	117	10	53	147	276	129	1	22	124	0	0	0	0
1978	1010	352	120	13	60	159	306	132	1	26	147	0	0	0	0
1979	1218	403	131	22	74	176	412	169	2	35	206	0	0	0	0
1980	1243	414	135	25	78	176	415	174	2	35	204	0	0	0	0
1981	1269	427	139	28	86	174	415	175	2	38	200	0	0	0	0
1982	1300	440	141	29	98	172	420	181	2	40	197	0	0	0	0
1983	1342	458	144	34	109	171	426	184	2	46	194	0	0	0	0
1984	1363	468	147	35	117	169	427	186	3	48	190	0	0	0	0
1985	1396	483	150	39	127	167	430	190	3	51	186	0	0	0	0
1986	1426	496	153	42	135	166	434	196	3	53	182	0	0	0	0
1987	1461	513	159	45	145	164	435	200	3	55	177	0	0	0	0
1988	1484	522	162	47	151	162	440	205	3	57	175	0	0	0	0
1989	1507	533	165	49	159	160	441	209	4	58	170	0	0	0	0
1990	1530	543	168	51	166	158	444	215	4	59	166	0	0	0	0
1991	1555	555	171	55	172	157	445	218	4	62	161	0	0	0	0

NOTE:
FIGURES IN THOUSANDS

IFR DAILY OPERATIONS
AND
INSTANTANEOUS AIRBORN COUNTS

ALBUQUERQUE

	IFR PEAK DAY		IFR NORMAL DAY	
YEAR	OPERATION	IAC	OPERATION	IAC
1977	5604	561	5307	520
1978	5955	620	5612	573
1979	4807	749	4355	690
1980	4935	762	4474	701
1981	5044	768	4549	705
1982	5180	779	4653	709
1983	5354	795	4781	717
1984	5448	795	4816	720
1985	5573	806	4905	725
1986	5706	811	4996	730
1987	5834	823	5085	734
1988	5950	832	5149	739
1989	6023	851	5208	746
1990	6107	841	5279	745
1991	6218	841	5347	747

IFR AIRCRAFT HANDLED BY USER CATEGORY

FORT WORTH

		DEPARTURES					OVERS								
								DOMESTIC				OCEANIC			
FY	AIRCFT HANDLED	TOTAL	AIR CAR	AIR TAXI	GEN AVI	MIL	TOTAL	AIR CAR	AIR TAXI	GEN AVI	MIL	AIR CAR	AIR TAXI	GEN AVI	MIL
1969	1104	467	216	0	69	180	170	64	0	19	87	0	0	0	0
1970	1197	500	250	0	76	174	197	82	0	22	93	0	0	0	0
1971	1168	467	229	0	73	165	234	83	0	23	128	0	0	0	0
1972	1185	477	212	18	86	161	231	80	0	26	125	0	0	0	0
1973	1191	487	218	19	95	155	217	83	0	31	103	0	0	0	0
1974	1243	513	243	23	104	143	217	83	2	34	98	0	0	0	0
1975	1321	549	248	43	126	132	223	74	6	42	101	0	0	0	0
1976	1323	558	246	34	139	139	207	72	2	41	92	0	0	0	0
1977	1453	597	251	59	152	135	259	94	10	46	109	0	0	0	0
1978	1515	629	274	54	182	119	257	111	8	55	83	0	0	0	0
1979	1675	684	278	70	219	117	307	141	8	66	92	0	0	0	0
1980	1720	703	286	74	225	118	314	145	10	68	91	0	0	0	0
1981	1792	753	291	80	243	119	326	147	11	76	92	0	0	0	0
1982	1882	769	297	85	266	121	344	153	13	84	94	0	0	0	0
1983	1986	810	301	98	289	122	366	159	14	98	95	0	0	0	0
1984	2052	838	307	103	305	123	376	160	15	105	96	0	0	0	0
1985	2126	867	312	110	320	125	392	164	17	113	98	0	0	0	0
1986	2213	902	318	120	336	126	409	171	18	121	99	0	0	0	0
1987	2295	935	328	127	352	128	425	175	19	130	101	0	0	0	0
1988	2354	959	334	134	361	130	436	179	20	135	102	0	0	0	0
1989	2405	978	338	139	370	131	449	184	22	139	104	0	0	0	0
1990	2467	1001	344	145	380	132	465	189	23	148	105	0	0	0	0
1991	2525	1023	349	152	388	134	479	193	24	155	107	0	0	0	0

NOTE:
FIGURES IN THOUSANDS

IFR DAILY OPERATIONS
AND
INSTANTANEOUS AIRBORN COUNTS

FORT WORTH

	IFR PEAK DAY		IFR NORMAL DAY	
YEAR	OPERATION	IAC	OPERATION	IAC
1977	5818	443	4990	412
1978	6224	451	5206	406
1979	7051	507	5600	443
1980	7311	525	6006	456
1981	7675	553	6279	474
1982	8167	592	6627	494
1983	8720	635	7016	519
1984	9086	664	7285	537
1985	9482	695	7573	556
1986	9916	728	7896	575
1987	10312	756	8191	596
1988	10597	778	8410	609
1989	10858	796	8612	622
1990	11162	816	8827	636
1991	11440	838	9042	650

IFR AIRCRAFT HANDLED BY USER CATEGORY

HOUSTON

FY	AIRCFT HANDLED	DEPARTURES					OVERS								
								DOMESTIC				OCEANIC			
		TOTAL	AIR CAR	AIR TAXI	GEN AVI	MIL	TOTAL	AIR CAR	AIR TAXI	GEN AVI	MIL	AIR CAR	AIR TAXI	GEN AVI	MIL
1969	1043	466	210	0	71	185	111	23	0	4	60	7	0	1	16
1970	1085	497	227	0	83	187	91	23	0	4	42	7	0	1	14
1971	1057	475	221	0	83	171	107	25	0	4	62	8	0	1	7
1972	1186	512	205	18	97	192	162	27	6	7	101	12	0	1	6
1973	1195	517	194	21	109	193	161	31	0	7	98	15	0	1	9
1974	1104	483	190	22	119	152	138	35	6	7	71	13	0	1	5
1975	1113	492	167	28	143	154	129	31	7	7	65	13	0	1	5
1976	1172	521	174	31	164	152	130	37	1	9	63	13	0	2	5
1977	1316	582	190	45	192	155	152	40	1	12	78	13	0	2	6
1978	1442	641	204	56	216	165	160	40	1	12	85	13	0	3	6
1979	1594	713	228	57	253	175	168	46	1	14	81	16	0	4	6
1980	1642	736	239	62	259	176	170	47	1	15	80	16	0	5	6
1981	1714	770	247	69	279	175	174	47	1	17	80	17	0	6	6
1982	1801	811	255	75	307	174	179	48	2	19	80	18	0	6	6
1983	1897	858	263	87	334	174	181	49	2	21	80	18	0	5	6
1984	1974	893	270	94	356	173	186	49	3	23	81	20	0	6	6
1985	2044	927	278	100	377	172	190	50	3	25	80	20	0	6	6
1986	2135	967	285	113	397	172	201	51	4	28	82	22	0	7	7
1987	2213	1005	297	119	416	171	203	52	4	29	81	23	0	7	7
1988	2273	1032	303	126	433	170	209	53	5	31	82	24	0	7	7
1989	2338	1063	311	134	448	170	212	55	5	31	83	24	0	7	7
1990	2401	1092	318	141	463	170	217	56	6	33	83	25	0	7	7
1991	2458	1118	324	147	478	169	222	57	6	34	84	26	0	7	8

NOTE:
FIGURES IN THOUSANDS

IFR DAILY OPERATIONS AND INSTANTANEOUS AIRBURN COUNTS

HOUSTON

YEAR	IFR PEAK DAY		IFR NORMAL DAY	
	OPERATION	IAC	OPERATION	IAC
1977	5790	431	4603	327
1978	6396	478	5034	360
1979	7112	532	5535	396
1980	7405	554	5770	411
1981	7771	584	5995	429
1982	8231	622	6274	451
1983	8753	664	6590	475
1984	9172	697	6849	496
1985	9526	726	7015	512
1986	10015	761	7380	536
1987	10398	796	7624	555
1988	10713	823	7839	571
1989	11015	846	8030	587
1990	11333	874	8239	602
1991	11638	897	8425	616

IFR AIRCRAFT HANDLED BY USER CATEGORY

REGION ROCKY MOUNTAIN

FY	AIRCFT HANDLED	DEPARTURES					OVERS								
								DOMESTIC				OCEANIC			
		TOTAL	AIR CAR	AIR TAXI	GEN AVI	MIL	TOTAL	AIR CAR	AIR TAXI	GEN AVI	MIL	AIR CAR	AIR TAXI	GEN AVI	MIL
1969	1119	511	216	0	39	56	497	340	0	16	141	0	0	0	0
1970	1145	512	216	0	41	55	521	377	0	19	125	0	0	0	0
1971	1165	516	206	0	50	58	533	386	0	21	126	0	0	0	0
1972	1192	335	208	13	52	62	522	373	0	22	127	0	0	0	0
1973	1207	362	216	14	63	69	483	357	0	26	100	0	0	0	0
1974	1236	381	226	14	73	68	474	341	0	29	104	0	0	0	0
1975	1350	427	245	20	95	67	496	342	0	32	122	0	0	0	0
1976	1350	425	244	21	96	64	500	342	3	33	122	0	0	0	0
1977	1409	452	240	28	113	71	505	339	4	34	128	0	0	0	0
1978	1582	522	255	39	145	83	538	350	4	41	143	0	0	0	0
1979	1783	585	277	60	160	88	613	386	5	51	171				
1980	1826	608	288	64	167	89	610	383	6	52	169	0	0	0	0
1981	1690	643	299	69	185	90	604	376	7	56	165	0	0	0	0
1982	1977	682	310	74	208	90	613	379	8	61	165	0	0	0	0
1983	2091	732	322	87	231	92	627	383	9	72	163	0	0	0	0
1984	2150	764	330	92	250	92	622	378	9	75	160	0	0	0	0
1985	2226	796	342	97	267	90	634	384	11	81	158	0	0	0	0
1986	2314	836	353	109	285	89	642	388	11	85	158	0	0	0	0
1987	2405	877	371	113	304	89	651	394	12	90	155	0	0	0	0
1988	2470	905	381	120	318	86	660	401	13	94	152	0	0	0	0
1989	2534	933	391	126	330	86	668	406	13	96	153	0	0	0	0
1990	2603	963	402	132	345	84	677	412	14	100	151	0	0	0	0
1991	2673	993	414	139	358	82	687	419	16	105	147				

NOTE:
FIGURES IN THOUSANDS

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IFR AIRCRAFT HANDLED BY USER CATEGORY

DENVER

		DEPARTURES					OVERS							
								DOMESTIC				OCEANIC			
FY	AIRCFT HANDLED	TOTAL	AIR CAR	AIR TAXI	GEN AVI	MIL	TOTAL	AIR CAR	AIR TAXI	GEN AVI	MIL	AIR CAR	AIR TAXI	GEN AVI	MIL
1969	593	163	116	0	21	26	267	193	0	8	66	0	0	0	0
1970	610	167	120	0	23	24	276	210	0	10	56	0	0	0	0
1971	613	166	118	0	24	24	261	216	0	10	55	0	0	0	0
1972	596	168	112	5	27	24	260	201	0	10	49	0	0	0	0
1973	630	189	121	6	34	28	252	201	0	12	39	0	0	0	0
1974	635	193	122	6	37	28	249	191	0	14	44	0	0	0	0
1975	702	220	134	11	48	27	262	193	0	16	53	0	0	0	0
1976	722	226	135	13	51	27	270	198	1	17	54	0	0	0	0
1977	935	269	148	19	68	34	297	207	2	21	67	0	0	0	0
1978	924	311	164	29	82	36	302	208	2	23	69	0	0	0	0
1979	993	334	179	32	91	32	325	225	2	29	69	0	0	0	0
1980	1022	349	188	34	96	31	324	223	3	30	68	0	0	0	0
1981	1059	369	196	37	106	30	321	218	4	32	67	0	0	0	0
1982	1101	390	203	39	118	30	328	220	4	36	68	0	0	0	0
1983	1173	418	212	45	131	30	337	221	5	42	69	0	0	0	0
1984	1211	438	218	48	142	30	335	218	5	44	68	0	0	0	0
1985	1254	455	226	50	150	29	344	221	6	49	68	0	0	0	0
1986	1309	480	234	57	161	28	349	223	5	52	69	0	0	0	0
1987	1360	502	246	58	170	28	356	226	5	56	69	0	0	0	0
1988	1400	519	253	62	177	27	362	229	6	59	68	0	0	0	0
1989	1440	536	261	65	183	27	368	232	6	60	70	0	0	0	0
1990	1482	554	269	68	191	26	374	235	6	63	70	0	0	0	0
1991	1521	570	277	71	196	26	381	238	7	67	69	0	0	0	0

NOTE:
FIGURES IN THOUSANDS

IFR DAILY OPERATIONS
AND
INSTANTANEOUS AIRBORN COUNTS

DENVER

	IFR PEAK DAY		IFR NORMAL DAY	
YEAR	OPERATION	IAC	OPERATION	IAC
1977	3524	280	2827	244
1978	3767	323	3108	266
1979	4065	349	3312	279
1980	4245	363	3425	288
1981	4466	384	3552	299
1982	4731	405	3698	313
1983	5074	440	3889	329
1984	5300	461	4015	340
1985	5538	481	4146	351
1986	5820	506	4303	365
1987	6057	528	4470	379
1988	6267	547	4584	390
1989	6470	563	4723	401
1990	6663	580	4841	411
1991	6681	599	4978	423

IFR AIRCRAFT HANDLED BY USER CATEGORY

GREAT FALLS

FY	AIRCFT HANDLED	DEPARTURES					OVERS								
								DOMESTIC				OCEANIC			
		TOTAL	AIR CAR	AIR TAXI	GEN AVI	MIL	TOTAL	AIR CAR	AIR TAXI	GEN AVI	MIL	AIR CAR	AIR TAXI	GEN AVI	MIL
1969	177	59	42	0	6	11	59	37	0	2	20	0	0	0	0
1970	184	61	42	0	6	13	62	42	0	2	18	0	0	0	0
1971	166	51	25	0	10	16	64	40	0	4	20	0	0	0	0
1972	203	64	31	4	9	20	75	45	0	4	26	0	0	0	0
1973	174	60	26	4	10	20	54	32	0	5	17	0	0	0	0
1974	192	66	32	3	12	19	60	35	0	5	20	0	0	0	0
1975	196	68	34	2	15	17	60	34	0	6	20	0	0	0	0
1976	166	56	29	1	12	14	54	27	0	5	22	0	0	0	0
1977	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1978	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1979	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1980	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1981	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1982	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1983	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1984	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1985	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1986	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1987	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1988	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1989	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1990	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1991	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

NOTE:
FIGURES IN THOUSANDS

IFR AIRCRAFT HANDLED BY USER CATEGORY

SALT LAKE CITY

		DEPARTURES					OVERS								
								DOMESTIC				OCEANIC			
FY	AIRCFT HANDLED	TOTAL	AIR CAR	AIR TAXI	GEN AVI	MIL	TOTAL	AIR CAR	AIR TAXI	GEN AVI	MIL	AIR CAR	AIR TAXI	GEN AVI	MIL
1969	349	89	58	0	12	19	171	110	0	6	55	0	0	0	0
1970	351	84	54	0	12	18	183	125	0	7	51	0	0	0	0
1971	386	99	65	0	16	18	188	130	0	7	51	0	0	0	0
1972	393	103	65	4	16	18	187	127	0	8	52	0	0	0	0
1973	403	113	69	4	19	21	177	124	0	9	44	0	0	0	0
1974	409	122	72	5	24	21	165	115	0	10	40	0	0	0	0
1975	452	139	77	7	32	23	174	115	0	10	49	0	0	0	0
1976	462	143	80	7	33	23	176	117	2	11	46	0	0	0	0
1977	574	183	92	9	45	37	206	132	2	13	61	0	0	0	0
1978	658	211	91	10	63	47	236	142	2	18	74	0	0	0	0
1979	790	251	98	26	69	56	288	161	3	22	102	0	0	0	0
1980	804	259	100	30	71	58	286	160	3	22	101	0	0	0	0
1981	831	274	103	32	79	60	283	158	3	24	98	0	0	0	0
1982	869	292	107	35	90	60	285	159	4	25	97	0	0	0	0
1983	918	314	110	42	100	62	290	162	4	30	94	0	0	0	0
1984	939	326	112	44	108	62	287	160	4	31	92	0	0	0	0
1985	972	341	116	47	117	61	290	163	5	32	90	0	0	0	0
1986	1005	356	119	52	124	61	293	165	6	33	89	0	0	0	0
1987	1045	375	125	55	134	61	295	168	7	34	86	0	0	0	0
1988	1070	386	128	58	141	59	296	172	7	35	84	0	0	0	0
1989	1094	397	130	61	147	59	301	174	7	36	83	0	0	0	0
1990	1121	409	133	64	154	58	303	177	8	37	81	0	0	0	0
1991	1152	423	137	68	162	56	306	181	9	38	78	0	0	0	0

NOTE:
FIGURES IN THOUSANDS

IFR DAILY OPERATIONS AND INSTANTANEOUS AIRBORN COUNTS

SALT LAKE CITY

	IFR PEAK DAY		IFR NORMAL DAY	
YEAR	OPERATION	IAC	OPERATION	IAC
1977	2313	237	1998	210
1978	2704	291	2573	257
1979	3312	350	2873	311
1980	3382	358	2931	319
1981	3584	377	3099	333
1982	3714	391	3252	344
1983	4019	416	3496	365
1984	4217	426	3607	375
1985	4408	443	3761	385
1986	4579	454	3902	395
1987	4637	475	4110	412
1988	4918	484	4219	418
1989	5134	498	4351	429
1990	5273	507	4470	435
1991	5455	516	4608	444

IFR AIRCRAFT HANDLED BY USER CATEGORY

REGION WESTERN

FY	AIRCFT HANDLED	DEPARTURES					OVERS							
								DOMESTIC				OCEANIC		
		TOTAL	AIR CAR	AIR TAXI	GEN AVI	MIL	TOTAL	AIR CAR	AIR TAXI	GEN AVI	MIL	AIR CAR	AIR TAXI	GEN AVI	MIL
1969	1981	856	555	0	87	214	269	50	0	5	119	55	0	0	40
1970	2047	873	586	0	93	194	301	62	0	8	131	65	0	1	34
1971	2057	872	570	0	91	211	313	69	0	8	138	61	0	0	37
1972	1966	860	495	16	79	270	246	59	0	7	93	60	0	0	27
1973	1945	876	526	14	97	239	193	55	0	7	58	51	0	1	21
1974	1914	861	492	22	113	234	192	57	0	8	63	41	0	3	20
1975	2013	915	501	37	137	240	183	50	0	9	58	47	0	1	18
1976	2043	925	500	42	145	238	193	61	0	10	62	41	0	1	18
1977	2295	1041	532	56	194	259	213	69	0	13	71	45	0	1	14
1978	2513	1136	571	75	234	256	241	80	1	15	84	46	0	1	14
1979	2681	1212	586	106	280	240	257	94	2	19	77	48	0	2	15
1980	2742	1241	603	113	283	242	260	98	2	18	75	50	0	2	15
1981	2833	1282	618	122	299	243	269	102	2	19	77	52	0	2	15
1982	2934	1327	630	128	323	246	280	106	2	21	77	57	0	2	15
1983	3067	1387	645	146	347	249	293	112	2	24	77	60	0	2	16
1984	3159	1426	660	153	364	251	303	114	3	26	80	62	0	2	16
1985	3257	1471	674	161	382	254	315	120	3	28	80	65	0	3	16
1986	3356	1515	687	176	396	256	326	125	3	29	82	69	0	3	15
1987	3476	1570	713	184	414	259	336	130	3	31	82	72	0	3	15
1988	3559	1606	728	193	424	261	347	133	3	32	84	76	0	3	16
1989	3634	1641	744	200	434	263	352	138	3	33	82	77	0	3	16
1990	3724	1679	759	208	445	267	366	143	4	35	83	82	0	3	16
1991	3805	1714	774	215	455	270	377	148	5	37	83	85	0	3	16

NOTE:
FIGURES IN THOUSANDS

IFR AIRCRAFT HANDLED BY USER CATEGORY

LOS ANGELES

FY	AIRCFT HANDLED	DEPARTURES					OVERS								
								DOMESTIC				OCEANIC			
		TOTAL	AIR CAR	AIR TAXI	GEN AVI	MIL	TOTAL	AIR CAR	AIR TAXI	GEN AVI	MIL	AIR CAR	AIR TAXI	GEN AVI	MIL
1969	1028	472	317	0	49	106	84	25	0	2	57	0	0	0	0
1970	1039	476	327	0	55	94	87	32	0	5	50	0	0	0	0
1971	1036	472	323	0	49	100	92	33	0	5	54	0	0	0	0
1972	1024	472	291	7	42	132	80	32	0	4	44	0	0	0	0
1973	1050	489	306	7	54	120	72	32	0	4	36	0	0	0	0
1974	1021	473	288	11	60	114	75	32	0	5	38	0	0	0	0
1975	1093	508	296	18	68	126	77	33	0	5	39	0	0	0	0
1976	1091	508	297	19	67	125	75	34	0	6	35	0	0	0	0
1977	1264	587	314	27	94	152	90	41	0	7	42	0	0	0	0
1978	1391	642	332	37	120	153	107	46	1	9	51	0	0	0	0
1979	1447	672	343	58	132	139	103	54	1	10	38	0	0	0	0
1980	1480	688	352	62	133	141	104	56	1	10	37	0	0	0	0
1981	1524	708	360	66	140	142	108	58	1	11	38	0	0	0	0
1982	1576	732	367	70	151	144	112	60	1	12	39	0	0	0	0
1983	1641	762	375	80	162	145	117	63	1	14	39	0	0	0	0
1984	1684	781	383	83	169	146	122	64	2	15	41	0	0	0	0
1985	1734	804	390	88	179	147	126	67	2	16	41	0	0	0	0
1986	1786	827	398	96	184	149	132	69	2	18	43	0	0	0	0
1987	1848	856	412	100	194	150	136	72	2	19	43	0	0	0	0
1988	1892	876	420	106	199	151	140	73	2	20	45	0	0	0	0
1989	1935	896	429	110	205	152	143	76	2	20	45	0	0	0	0
1990	1985	918	437	116	211	154	149	78	3	21	47	0	0	0	0
1991	2026	937	445	120	217	155	154	81	3	23	47	0	0	0	0

NOTE:
FIGURES IN THOUSANDS

IFR DAILY OPERATIONS
AND
INSTANTANEOUS AIRBURN COUNTS

LOS ANGELES

	IFR PEAK DAY		IFR NORMAL DAY	
YEAR	OPERATION	IAC	OPERATION	IAC
1977	4783	385	4160	350
1978	5381	424	4557	377
1979	5714	424	4690	366
1980	5914	436	4851	377
1981	6103	449	4991	385
1982	6308	465	5149	396
1983	6690	483	5357	409
1984	6895	494	5492	417
1985	7123	510	5649	425
1986	7391	525	5828	438
1987	7665	543	6012	450
1988	7891	555	6164	460
1989	8068	565	6296	466
1990	8280	579	6446	477
1991	8483	590	6583	484

IFR AIRCRAFT HANDLED BY USER CATEGORY

OAKLAND

		DEPARTURES					OVERS								
								DOMESTIC				OCEANIC			
FY	AIRCFT HANDLED	TOTAL	AIR CAR	AIR TAXI	GEN AVI	MIL	TOTAL	AIR CAR	AIR TAXI	GEN AVI	MIL	AIR CAR	AIR TAXI	GEN AVI	MIL
1969	953	384	238	0	38	108	185	25	0	3	62	55	0	0	40
1970	1008	397	259	0	38	100	214	30	0	3	81	65	0	1	34
1971	1021	400	247	0	42	111	221	36	0	3	84	61	0	0	37
1972	942	388	204	9	37	138	166	27	0	3	49	60	0	0	27
1973	895	387	218	7	43	119	121	23	0	3	22	51	0	1	21
1974	893	388	204	11	53	120	117	25	0	3	25	41	0	3	20
1975	920	407	205	19	69	114	106	17	0	4	19	47	0	1	18
1976	952	417	203	23	78	113	118	27	0	4	27	41	0	1	18
1977	1031	454	218	29	100	107	123	28	0	6	29	45	0	1	14
1978	1122	494	239	38	114	103	134	34	0	6	33	46	0	1	14
1979	1234	540	243	48	148	101	154	40	1	9	39	48	0	2	15
1980	1262	553	251	51	150	101	156	42	1	8	38	50	0	2	15
1981	1309	574	258	56	159	101	161	44	1	8	39	52	0	2	15
1982	1358	595	263	58	172	102	168	46	1	9	38	57	0	2	15
1983	1426	625	270	66	185	104	176	49	1	10	38	60	0	2	16
1984	1475	647	277	70	195	105	181	50	1	11	39	62	0	2	16
1985	1523	667	284	73	203	107	189	53	1	12	39	65	0	3	16
1986	1570	688	289	80	212	107	194	56	1	11	39	69	0	3	15
1987	1628	714	301	84	220	109	200	58	1	12	39	72	0	3	15
1988	1667	730	308	87	225	110	207	60	1	12	39	76	0	3	16
1989	1699	745	315	90	229	111	209	62	1	13	37	77	0	3	16
1990	1739	761	322	92	234	113	217	65	1	14	36	82	0	3	16
1991	1777	777	329	95	238	115	223	67	2	14	36	85	0	3	16

NOTE:
FIGURES IN THOUSANDS

IFR DAILY OPERATIONS
AND
INSTANTANEOUS AIRBORN COUNTS

OAKLAND

	IFR PEAK DAY		IFR NORMAL DAY	
YEAR	OPERATION	IAC	OPERATION	IAC
1977	5520	539	3575	232
1978	5831	546	3939	246
1979	6327	570	4436	278
1980	6586	563	4657	289
1981	6751	595	4634	299
1982	6959	605	5043	310
1983	7273	624	5335	327
1984	7470	635	5521	336
1985	7699	650	5724	349
1986	7901	656	5953	361
1987	8145	671	6167	372
1988	8302	681	6310	381
1989	8431	681	6438	387
1990	8590	695	6605	394
1991	8771	706	6750	403

IFR AIRCRAFT HANDLED BY USER CATEGORY

REGION NORTHWEST

		DEPARTURES					OVERS								
								DOMESTIC				OCEANIC			
FY	AIRCFT HANDLED	TOTAL	AIR CAR	AIR TAXI	GEN AVI	MIL	TOTAL	AIR CAR	AIR TAXI	GEN AVI	MIL	AIR CAR	AIR TAXI	GEN AVI	MIL
1969	560	256	160	0	50	46	48	7	0	1	40	0	0	0	0
1970	562	258	159	0	53	46	46	8	0	1	37	0	0	0	0
1971	553	251	151	0	56	44	51	9	0	1	41	0	0	0	0
1972	561	257	137	16	57	47	47	10	0	2	35	0	0	0	0
1973	565	261	139	15	60	47	43	9	0	2	32	0	0	0	0
1974	631	298	138	20	82	58	35	7	0	3	25	0	0	0	0
1975	695	330	132	45	94	59	35	8	0	3	24	0	0	0	0
1976	695	328	132	39	102	55	39	12	0	3	24	0	0	0	0
1977	796	379	136	45	143	55	38	14	0	2	22	0	0	0	0
1978	914	437	143	82	155	57	40	14	0	3	23	0	0	0	0
1979	970	463	147	95	164	57	44	18	0	3	23	0	0	0	-
1980	1009	482	152	102	171	57	45	19	0	3	23	0	0	0	0
1981	1065	511	157	109	188	57	47	20	0	3	24	0	0	0	0
1982	1137	544	161	117	209	57	49	21	0	4	24	0	0	0	0
1983	1219	584	167	131	229	57	51	22	0	4	25	0	0	0	0
1984	1274	611	171	138	245	57	52	22	0	4	26	0	0	0	0
1985	1325	635	176	143	259	57	55	24	0	4	27	0	0	0	0
1986	1398	671	179	159	276	57	56	25	0	4	27	0	0	0	0
1987	1454	698	187	164	290	57	56	26	0	4	28	0	0	0	0
1988	1497	718	191	170	300	57	61	27	0	5	29	0	0	0	0
1989	1539	738	196	174	310	58	63	28	0	5	30	0	0	0	0
1990	1579	757	199	181	319	58	65	29	0	5	31	0	0	0	0
1991	1615	774	203	185	328	58	67	30	0	5	32	0	0	0	0

NOTE:
FIGURES IN THOUSANDS

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IFR AIRCRAFT HANDLED BY USER CATEGORY

SEATTLE

FY	AIRCFT HANDLED	DEPARTURES					OVERS								
								DOMESTIC				OCEANIC			
		TOTAL	AIR CAR	AIR TAXI	GEN AVI	MIL	TOTAL	AIR CAR	AIR TAXI	GEN AVI	MIL	AIR CAR	AIR TAXI	GEN AVI	MIL
1969	560	256	160	0	50	46	48	7	0	1	40	0	0	0	0
1970	562	258	159	0	53	46	46	8	0	1	37	0	0	0	0
1971	553	251	151	0	56	44	51	9	0	1	41	0	0	0	0
1972	561	257	137	16	57	47	47	10	0	2	35	0	0	0	0
1973	565	261	139	15	60	47	43	9	0	2	32	0	0	0	0
1974	631	298	138	20	82	58	35	7	0	3	25	0	0	0	0
1975	695	330	132	45	94	59	35	8	0	3	24	0	0	0	0
1976	695	328	132	39	102	55	39	12	0	3	24	0	0	0	0
1977	796	379	136	45	143	55	38	14	0	2	22	0	0	0	0
1978	914	437	143	82	155	57	40	14	0	3	23	0	0	0	0
1979	970	463	147	95	164	57	44	16	0	3	23	0	0	0	0
1980	1009	482	152	102	171	57	45	19	0	3	23	0	0	0	0
1981	1069	511	157	109	188	57	47	20	0	3	24	0	0	0	0
1982	1137	544	161	117	209	57	49	21	0	4	24	0	0	0	0
1983	1219	584	167	131	229	57	51	22	0	4	25	0	0	0	0
1984	1274	611	171	138	245	57	52	22	0	4	26	0	0	0	0
1985	1325	635	176	143	259	57	55	24	0	4	27	0	0	0	0
1986	1398	671	179	159	276	57	56	25	0	4	27	0	0	0	0
1987	1454	698	187	164	290	57	58	26	0	4	28	0	0	0	0
1988	1497	718	191	170	300	57	61	27	0	5	29	0	0	0	0
1989	1539	738	196	174	310	58	63	28	0	5	30	0	0	0	0
1990	1579	757	199	181	319	58	65	29	0	5	31	0	0	0	0
1991	1615	774	203	185	328	58	67	30	0	5	32	0	0	0	0

NOTE:
FIGURES IN THOUSANDS

IFR DAILY OPERATIONS
AND
INSTANTANEOUS AIRBURN COUNTS

SEATTLE

	IFR PEAK DAY		IFR NORMAL DAY	
YEAR	OPERATION	IAC	OPERATION	IAC
1977	3809	270	2640	198
1978	4576	300	3384	228
1979	4652	314	3618	244
1980	4877	328	3810	256
1981	5216	346	4060	271
1982	5600	371	4315	287
1983	6044	399	4653	309
1984	6355	416	4875	324
1985	6645	435	5073	335
1986	7037	458	5389	355
1987	7333	476	5607	370
1988	7509	490	5783	380
1989	7771	505	5921	389
1990	7986	516	6094	399
1991	8171	528	6230	409

IFR AIRCRAFT HANDLED BY USER CATEGORY

REGION ALASKAN

FY	AIRCFT HANDLED	DEPARTURES					OVERS								
								DOMESTIC				OCEANIC			
		TOTAL	AIR CAR	AIR TAXI	GEN AVI	MIL	TOTAL	AIR CAR	AIR TAXI	GEN AVI	MIL	AIR CAR	AIR TAXI	GEN AVI	MIL
1969	301	113	66	0	13	34	75	12	0	1	17	25	0	0	20
1970	299	116	70	0	19	27	67	13	0	2	11	26	0	0	15
1971	264	101	60	0	14	27	62	12	0	1	11	25	0	0	13
1972	256	97	55	4	12	26	62	13	0	1	9	28	0	0	11
1973	228	88	49	4	11	24	52	11	0	1	8	23	0	0	9
1974	236	95	55	6	12	22	46	11	0	1	7	21	0	0	6
1975	332	146	76	20	28	22	40	7	0	1	6	20	0	0	6
1976	314	141	73	20	27	21	32	3	0	0	3	21	0	0	5
1977	307	136	58	24	34	20	35	3	0	0	4	23	0	0	5
1978	305	135	60	27	28	20	35	3	0	0	3	24	0	0	5
1979	313	136	61	26	27	22	41	5	0	0	4	26	0	0	6
1980	330	144	65	27	30	22	42	5	0	0	4	27	0	0	6
1981	351	154	68	28	36	22	43	5	0	0	4	28	0	0	6
1982	369	163	71	30	41	21	43	5	0	0	4	28	0	0	6
1983	394	176	74	34	47	21	42	4	0	0	4	27	0	0	7
1984	416	187	77	36	53	21	42	4	0	0	4	27	0	0	7
1985	445	201	81	38	59	23	43	4	0	0	4	28	0	0	7
1986	464	210	84	41	63	22	44	5	0	0	3	29	0	0	7
1987	492	224	89	43	70	22	44	5	0	0	3	29	0	0	7
1988	510	233	92	45	74	22	44	5	0	0	3	29	0	0	7
1989	525	241	94	47	78	22	43	4	0	0	3	29	0	0	7
1990	543	249	97	49	82	21	45	5	0	0	3	30	0	0	7
1991	562	258	100	51	86	21	46	5	0	0	3	30	0	0	8

NOTE:
FIGURES IN THOUSANDS

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IFR AIRCRAFT HANDLED BY USER CATEGORY

ANCHORAGE

		DEPARTURES					OVERS								
								DOMESTIC				OCEANIC			
FY	AIRCRFT HANDLED	TOTAL	AIR CAR	AIR TAXI	GEN AVI	MIL	TOTAL	AIR CAR	AIR TAXI	GEN AVI	MIL	AIR CAR	AIR TAXI	GEN AVI	MIL
1969	301	113	66	0	13	34	75	12	0	1	17	25	0	0	20
1970	299	116	70	0	19	27	67	13	0	2	11	26	0	0	15
1971	264	101	60	0	14	27	62	12	0	1	11	25	0	0	13
1972	256	97	55	4	12	26	62	13	0	1	9	28	0	0	11
1973	228	88	49	4	11	24	52	11	0	1	8	23	0	0	9
1974	236	95	55	6	12	22	46	11	0	1	7	21	0	0	6
1975	232	146	76	20	28	22	40	7	0	1	6	20	0	0	6
1976	214	141	73	20	27	21	32	3	0	0	3	21	0	0	5
1977	307	136	58	24	34	20	35	3	0	0	4	23	0	0	5
1978	305	135	60	27	28	20	35	3	0	0	3	24	0	0	5
1979	313	136	61	26	27	22	41	5	0	0	4	26	0	0	6
1980	330	144	65	27	30	22	42	5	0	0	4	27	0	0	6
1981	351	154	69	28	36	22	43	5	0	0	4	28	0	0	6
1982	369	163	71	30	41	21	43	5	0	0	4	28	0	0	6
1983	394	176	74	34	47	21	42	4	0	0	4	27	0	0	7
1984	416	187	77	36	53	21	42	4	0	0	4	27	0	0	7
1985	445	201	81	38	59	23	43	4	0	0	4	28	0	0	7
1986	464	210	84	41	63	22	44	5	0	0	3	29	0	0	7
1987	492	224	89	43	70	22	44	5	0	0	3	29	0	0	7
1988	510	233	92	45	74	22	44	5	0	0	3	29	0	0	7
1989	525	241	94	47	78	22	43	4	0	0	3	29	0	0	7
1990	543	249	97	49	82	21	45	5	0	0	3	30	0	0	7
1991	562	258	100	51	86	21	46	5	0	0	3	30	0	0	8

NOTE:
FIGURES IN THOUSANDS

IFR AIRCRAFT HANDLED BY USER CATEGORY

REGION PACIFIC

		DEPARTURES					OVERS							
								DOMESTIC				OCEANIC			
FY	AIRCFT HANDLED	TOTAL	AIR CAR	AIR TAXI	GEN AVI	MIL	TOTAL	AIR CAR	AIR TAXI	GEN AVI	MIL	AIR CAR	AIR TAXI	GEN AVI	MIL
1969	514	168	101	0	1	66	178	1	0	0	2	82	0	0	93
1970	497	162	112	0	0	50	173	1	0	0	3	94	0	0	75
1971	447	149	103	0	0	46	149	0	0	0	3	85	0	0	61
1972	471	166	107	0	0	59	139	0	0	0	2	82	0	1	54
1973	535	191	114	0	1	76	153	0	0	0	5	75	0	1	72
1974	449	174	117	3	2	52	101	0	0	0	3	64	0	1	33
1975	456	171	118	2	2	49	114	1	0	0	5	72	0	1	35
1976	455	156	111	3	2	42	109	1	0	0	7	66	0	1	34
1977	424	156	113	3	3	39	108	1	0	0	7	65	0	1	34
1978	450	168	119	6	5	36	114	1	0	0	7	70	0	1	35
1979	465	176	125	12	5	34	113	1	0	0	6	72	0	2	32
1980	475	180	128	12	6	34	115	1	0	0	6	74	0	2	32
1981	485	185	130	13	7	35	115	1	0	0	6	74	0	2	32
1982	498	191	133	14	8	36	116	1	0	0	6	76	0	2	31
1983	518	199	136	15	10	38	120	2	0	0	6	80	0	2	30
1984	529	205	138	17	11	39	119	2	0	0	6	80	0	2	29
1985	545	210	140	18	12	40	125	2	0	0	6	83	0	2	32
1986	565	219	143	21	15	40	127	2	0	0	6	86	0	3	30
1987	586	228	149	22	16	41	130	2	0	0	6	88	0	3	31
1988	595	232	151	23	16	42	131	2	0	0	5	91	0	3	30
1989	610	239	153	25	18	43	132	2	0	0	5	93	0	3	29
1990	623	244	156	24	19	45	135	2	0	0	5	96	0	3	29
1991	637	250	158	26	20	46	137	2	0	0	5	98	0	3	29

NOTE:
FIGURES IN THOUSANDS

IFR AIRCRAFT HANDLED BY USER CATEGORY

GUAM

		DEPARTURES					OVERS								
								DOMESTIC				OCEANIC			
FY	AIRCFT HANDLED	TOTAL	AIR CAR	AIR TAXI	GEN AVI	MIL	TOTAL	AIR CAR	AIR TAXI	GEN AVI	MIL	AIR CAR	AIR TAXI	GEN AVI	MIL
1969	106	27	7	0	0	20	52	1	0	0	0	16	0	0	35
1970	84	20	7	0	0	13	44	1	0	0	0	17	0	0	26
1971	67	16	7	0	0	9	35	0	0	0	0	15	0	0	20
1972	77	20	7	0	0	13	37	0	0	0	0	14	0	0	23
1973	128	35	8	0	0	27	56	0	0	0	2	13	0	0	43
1974	75	23	8	3	0	12	29	0	0	0	1	12	0	0	16
1975	72	21	9	2	0	10	30	1	0	0	1	14	0	0	14
1976	55	16	6	3	0	7	23	1	0	0	2	9	0	0	11
1977	53	13	6	1	0	6	27	1	0	0	5	9	0	0	12
1978	58	14	7	0	0	7	30	1	0	0	5	11	0	0	13
1979	56	14	7	1	0	6	28	1	0	0	4	11	0	0	12
1980	56	14	7	1	0	6	28	1	0	0	4	11	0	0	12
1981	55	14	7	1	0	6	27	1	0	0	4	10	0	0	12
1982	57	15	7	2	0	6	27	1	0	0	4	10	0	0	12
1983	61	17	8	2	1	6	27	2	0	0	4	10	0	0	11
1984	61	18	8	3	1	6	25	2	0	0	4	8	0	0	11
1985	61	18	8	3	1	6	25	2	0	0	4	8	0	0	11
1986	67	22	8	5	3	6	23	2	0	0	3	8	0	0	10
1987	69	23	9	5	3	6	23	2	0	0	3	8	0	0	10
1988	70	24	9	6	3	6	22	2	0	0	2	8	0	0	10
1989	71	25	9	6	4	6	21	2	0	0	2	8	0	0	9
1990	73	26	10	6	4	6	21	2	0	0	2	7	0	0	10
1991	73	26	10	6	4	6	21	2	0	0	2	7	0	0	10

NOTE:
FIGURES IN THOUSANDS

IFR AIRCRAFT HANDLED BY USER CATEGORY

HONOLULU

FY	AIRCFT HANDLED	DEPARTURES					OVERS								
								DOMESTIC				OCEANIC			
		TOTAL	AIR CAR	AIR TAXI	GEN AVI	MIL	TOTAL	AIR CAR	AIR TAXI	GEN AVI	MIL	AIR CAR	AIR TAXI	GEN AVI	MIL
1969	408	141	94	0	1	46	126	0	0	0	2	66	0	0	58
1970	413	142	105	0	0	37	129	0	0	0	3	77	0	0	49
1971	380	133	96	0	0	37	114	0	0	0	3	70	0	0	41
1972	394	146	100	0	0	46	102	0	0	0	2	68	0	1	31
1973	407	156	106	0	1	49	95	0	0	0	3	62	0	1	29
1974	374	151	109	0	2	40	72	0	0	0	2	52	0	1	17
1975	384	150	109	0	2	39	84	0	0	0	4	58	0	1	21
1976	370	142	105	0	2	35	86	0	0	0	5	57	0	1	23
1977	371	145	107	2	3	33	81	0	0	0	2	56	0	1	22
1978	392	154	112	6	5	31	84	0	0	0	2	59	0	1	22
1979	409	162	118	11	5	28	85	0	0	0	2	61	0	2	20
1980	419	166	121	11	6	28	87	0	0	0	2	63	0	2	20
1981	430	171	123	12	7	29	88	0	0	0	2	64	0	2	20
1982	441	176	126	12	8	30	89	0	0	0	2	66	0	2	19
1983	457	182	128	13	9	32	93	0	0	0	2	70	0	2	19
1984	466	187	130	14	10	33	94	0	0	0	2	72	0	2	18
1985	484	192	132	15	11	34	100	0	0	0	2	75	0	2	21
1986	498	197	135	16	12	34	104	0	0	0	3	78	0	3	20
1987	517	205	140	17	13	35	107	0	0	0	3	80	0	3	21
1988	525	208	142	17	13	36	109	0	0	0	3	83	0	3	20
1989	539	214	144	19	14	37	111	0	0	0	3	85	0	3	20
1990	550	218	146	18	15	39	114	0	0	0	3	89	0	3	19
1991	564	224	148	20	16	40	116	0	0	0	3	91	0	3	19

NOTE:
FIGURES IN THOUSANDS

APPENDIX

REGRESSION MODEL FOR FORECASTING "INSTRUMENT FLIGHT RULE" AIRCRAFT ACTIVITY AT TWENTY-FIVE AIR ROUTE TRAFFIC CONTROL CENTERS

FINAL REPORT

Contract No. DOT-FA79WAI-071

ASI 0126

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1.0 INTRODUCTION

This is the technical report on the regression model constructed for the "Instrument Flight Rule" (IFR) aircraft handled at the twenty-five Air Route Traffic Control Centers (ARTCC). The model has been applied to generate forecasts of IFR aircraft handled by each of the ARTCC's for FY 1980 through FY 1991. The forecasts serve as a basis for the Federal Aviation Administration's (FAA) planning and budget process in determining future requirements for facilities, equipment, and manpower at each ARTCC.

Section 2.0 presents an overview of the model for ARTCC IFR aircraft handled. Section 3.0 describes the data bases used in estimating the model and forecasting the aircraft handled for respective ARTCC's. Section 4.0 will describe the procedures used in the estimation of the model and forecasting. Section 5.0 will present the equations estimated for IFR departures and overs, by user type for each ARTCC. Section 6.0 presents statistics on aircraft handled -- departures and overs -- by user type, by ARTCC for both historical and projected years. Under a separate cover, the computer system documentation was submitted to the Policy Information Systems Branch.

pertinent other centers, resulting in the forecasts of overs annually to year 1991. At this point, the forecasting system is "recursive", since departures projections are first derived based on projected independent variables, then the projected departures are used as determinants for the "overs" projections.

After projecting each category for each center independently, the projections were summed over all twenty-five ARTCC's and compared with the national forecasts made independently by the FAA for years 1980 through 1991. The projections based on the "bottom-up" method were slightly lower than the independently projected national totals -- approximately by four percentage points. In order to assure consistency with the national totals, a smoothing routine was incorporated into the forecasting system, so that the center forecasts were adjusted to conform to the national totals for each projection year by user category. Thus, the ARTCC aircraft handled forecasting system is an automated one, allowing human judgments only at the stage of estimating and selecting the equations of the model.

3.0 DATA BASES

Historical data on dependent variables for the 1969-79 period, by ARTCC, were made available from the FAA. The set of the dependent variables are as follows:

Departures

- air carrier
- air taxi
- general aviation
- military

Overs

Domestic overs

- air carrier
- air taxi
- general aviation
- military

Oceanic overs

- air carrier
- air taxi
- general aviation
- military

Historical data for independent variables were collected from 1969, because demographic and economic variables are available at the county level from 1969. The data bases and their sources follow.

3.1 Population

Population estimates for counties were provided by the Bureau of the Census. In cooperation with state agencies, the Bureau of the Census annually updates the 1970 Census of Population for all counties in the nation.

Population density was computed based on the annual estimates of county population and county land area. County land area data were taken from the 1978 County City Data Book.

3.2 Employment By Industry

Employment by industry is estimated annually by the Bureau of Economic Analysis (BEA) of the U.S. Department of Commerce. Due to the lag in the collection and compilation procedure, 1977 data are the most current year available at the county level. The 1978 and 1979 data were made available from ASI's data file, which is the result of ASI's continuing research project, which updates and projects economic and demographic indicators for all counties in the nation.

The available categories of employment are as follows:

Number of Proprietors (Persons)

- farm proprietors
- nonfarm proprietors

Wage and Salary Employment (Jobs)

- farm wage and salary employment
- nonfarm wage and salary employment
  - (a) Private Industries

    agricultural services, forestry, fishery and others

    mining

construction

manufacturing

- non-durable manufacturing
- durable manufacturing

transportation, communication and public utilities

wholesale trade

retail trade

finance, insurance, and real estate

services

(b) Government and Government Enterprises

federal, civilian

federal, military

state and local governments

3.3 Personal Income And Earnings By Industry

Personal income and earnings by industry are estimated annually by BEA. As was in the case of industry employment, due to the lag in the collection and compilation procedure, 1977 data are the most current year available at the county level. The data for 1978 and 1979 are made available from ASI's data file.

The available categories of industry earnings are as follows:

Farm

Nonfarm

(a) Private

agricultural services, forestry, fishery, and others

mining

construction

manufacturing

- non-durable goods
- durable goods

transportation, communications, and public utilities

wholesale trade

retail trade

finance, insurance, and real estate

services

(b) Government and Government Enterprises

federal, civilian

federal, military

state and local

3.4 Seats Per Aircraft

The recent development of jumbo jet air carriers has caused significant changes in the number of passengers carried by an aircraft. As indicated in the preceding section, this technological change has made a definite impact on the IFR aircraft handled, particularly in the category of air carriers. The data on "seats per aircraft" (air carrier) are available at the national level from the FAA.

Demographic and economic data for the two centers not based in the United States, i.e., Guam ARTCC and San Juan ARTCC, are weak. The historical data for the two areas were collected from respective government agencies. Special care has been exercised in using the data available for these two centers.

The projections of the above-listed independent variables have been made available from ASI's data files, which contain projections (up to the year 2000) of employment by industry, income, and earnings by industry, and population for all counties and independent cities in the nation. The employment and income projections for the Guam and San Juan ARTCC's were made by ASI's staff, by extrapolating the historical trends. Projections of seats per aircraft were made available from the FAA.

4.0 PROCEDURES USED IN MODEL ESTIMATION AND PROJECTION

4.1 Allocation Of Counties To ARTCC

To allocate the 3,141 counties and independent cities to the 23 ARTCC's, a map of the ARTCC boundaries was superimposed upon a detailed United States county map. From this map, counties were assigned to specific ARTCC's. If an ARTCC boundary passed through a county, that county was assigned to the ARTCC which contains the largest city or cities in that county. If the county was a part of a Standard Metropolitan Statistical Area (SMSA), that county was assigned to the ARTCC which contained the SMSA.

Due to the 1976 ARTCC boundary changes, it was necessary to compile two sets of ARTCC county assignments.

A computer routine was developed which built demographic and economic data bases for the 23 ARTCC's based upon the county assignments, as described in the preceding paragraphs. This program creates an output file which contains the 23 ARTCC's demographic and economic data plus seats per aircraft data and the dependent variables for the baseline period.

4.2 Model Estimation And Projection (For Departures By User Category)

The regression model fitted to the data is:

$$Y = a + b_1x_1 + b_2x_2 + \ldots + b_nx_n + e$$

where:

Y represents the dependent variable (i.e., IFR departure).

$x_1, x_2, \ldots, x_n$ represents the independent variables.

$b_1, b_2, \ldots, b_n$ stand for the regression coefficients for respective independent variables.

a is the intercept.

e represents the random variable, whose expected value is assumed to be zero.

Due to the large number of independent variables and the insufficient cumulative body of knowledge and studies dealing with the relationship between IFR departures and independent variables at the ARTCC level, a stepwise multiple regression technique was used for the initial equation estimation. In a stepwise regression, independent variables are entered in single steps only if they meet stipulated statistical criteria. The order of inclusion is determined by the respective contribution of each variable to explain the variance of the dependent variable in question.

The dependent variable, i.e., departures, was regressed against the total set of independent variables, as listed in Section 3.0. This was accomplished by taking one ARTCC at a time, and regressing in a stepwise method each departure category (air carrier, air taxi, general aviation, and military) against that

center's independent variables. Each equation provided by the stepwise regression was screened to see if the result was theoretically "reasonable" and statistically significant.

It was assumed that military departures of a given ARTCC should be related to an independent variable measuring the military activity in that center.

Each equation (i.e., one for departures by each user category for each ARTCC) was re-estimated until it became logically meaningful and statistically significant.

The estimated equation was applied to the projected values of the independent variable or variables included in the equation. This resulted in the annual forecasts of the four categories of IFR departures for each ARTCC. At this point, the summation over all ARTCC's by user category was compared with the national forecasts independently derived and supplied by FAA. The ARTCC forecasts derived by the equations were adjusted to the national totals on a user category-by-category basis.

The estimated equations (for departures) and statistical measures are presented in Section 5.0. The departures forecasts are presented in Section 6.0.

4.3 Model Estimation and Projection (For Overs By User Category)

As mentioned in Section 2.0, logically, it is safe to hypothesize that a given ARTCC's overs for a given user category are a function of other center or centers' departures of the same user category. Now the real question is which "other" ARTCC is the pertinent ARTCC for overs in a given ARTCC. The general regression model of overs in a given ARTCC to be fitted to the data can be stated as follows:

$$Y_{ij} = a_i + b_{ik}x_{ik} + b_{il}x_{il} + \ldots + b_{in}x_{in} + e$$

where:

Y_{ij} represents the dependent variable (i.e., IFR overs of user type i in ARTCC j).

x_{ik}, x_{il}, ..., x_{in} stand for independent variables (i.e., departures of user type i from ARTCC k, l, ..., n) $j \neq k, l, \ldots, n$.

b_{ik}, b_{il}, ..., b_{in} represents the regression coefficients for independent variables with corresponding subscripts.

a_i is the intercept in the equation related to user type i.

e represents the random variable, whose expected value is assumed to be zero.

A stepwise procedure was used in selecting an appropriate overs equation for each user type for each ARTCC. Results were analyzed, eliminating illogical equations (e.g., air taxi domestic overs of Miami ARTCC showed an extremely high R squares with air taxi departures of Honolulu ARTCC).

Many regressions were run until we obtained equations acceptable on the theoretical and statistical ground. It was easier, however, to identify pertinent ARTCC or ARTCC's whose

departures indicated a reasonably good fit to the dependent variable. This implies that, as long as we can forecast IFR departures by user type reasonably well, we can forecast overs also reasonably well. This observation represents one of the most important findings of the present research project. The estimated equations for overs, for respective categories for each ARTCC, are presented in Section 5.0.

The projection of overs utilized the same procedures as used in forecasting departures except for the independent variables used, i.e., projected departures of other pertinent ARTCC's. The forecasts obtained from the equations for each user category were summed for all ARTCC's and compared with the independently forecasted national totals, provided by FAA, on a year-by-year basis. The individually forecast overs were adjusted to conform to the given national totals. The adjustment factors ranged from two to three percent at the national level. The overs forecasts are presented in Section 6.0 below.

5.0 ESTIMATED EQUATIONS FOR IFR DEPARTURES AND OVERS

In this section, first, we present the model equations, in a general form, for departures, domestic overs and oceanic overs, separately. Then, the estimated equations for departures and overs, by user type, are presented for individual ARTCC's.

DEPARTURES MODEL EQUATIONS

$$ACDP = a + b_1x_1 + b_2x_2 + \ldots + b_kx_k + e$$
$$ATDP = a + b_1x_1 + b_2x_2 + \ldots + b_kx_k + e$$
$$GADP = a + b_1x_1 + b_2x_2 + \ldots + b_kx_k + e$$
$$MDP = a + b_1x_1 + b_2x_2 + \ldots + b_kx_k + e$$

where

ACDP represents certificated air carrier departures.

ATDP represents air taxi departures and commuter air carrier departures carrying passengers, mail, or cargo for revenue in accordance with FAR Part 135 or Part 121.

GADP represents all civil aviation activity (departures) except that of certificated route air carriers and air commuters.

MDP represents military departure activity.

$x_1, \ldots, x_k$ represents the significant socioeconomic variables or seats/aircraft.

e represents random variable, whose expected value is assumed to be zero.

DOMESTIC OVERS MODEL EQUATIONS

$$ACDO = a + b_1x_1 + b_2x_2 + \ldots + b_kx_k + e$$
$$ATDO = a + b_1x_1 + b_2x_2 + \ldots + b_kx_k + e$$
$$GADO = a + b_1x_1 + b_2x_2 + \ldots + b_kx_k + e$$
$$MDO = a + b_1x_1 + b_2x_2 + \ldots + b_kx_k + e$$

where

ACDO represents domestic overs of certificated air carriers.

ATDO represents domestic overs of air taxi and commuter air carriers carrying passengers, mail, or cargo for revenue in accordance with FAR Part 135 or Part 121.

GADO represents domestic overs of all civil aviation activity except that of certificated route air carriers and air commuters.

MDO represents domestic overs of military operations.

$x_1, \ldots, x_k$ represents the significant domestic departures of relevant air route traffic control centers other than ARTCC-related with the dependent variable in each equation.

e represents random variable, whose expected value is assumed to be zero.

OCEANIC OVERS MODEL EQUATIONS

$$ACOO = a + b_1x_1 + b_2x_2 + \ldots + b_kx_k + e$$
$$ATOO = a + b_1x_1 + b_2x_2 + \ldots + b_kx_k + e$$
$$GAOO = a + b_1x_1 + b_2x_2 + \ldots + b_kx_k + e$$
$$MOO = a + b_1x_1 + b_2x_2 + \ldots + b_kx_k + e$$

where

ACOO represents oceanic overs of certificated air carriers

ATOO represents oceanic overs of air taxi and commuter air carriers carrying passengers, mail, or cargo for revenue in accordance with FAR Part 135 or Part 121.

GAOO represents oceanic overs of all civil aviation activity except that of certificated route air carriers and air commuters.

MOO represents oceanic overs of military operations.

$x_1, \ldots, x_k$ represents the significant domestic departures of relevant air route traffic control centers other than ARTCC-related with the dependent variable in each equation.

e represents random variable.

The results of regression for each center is shown below. R^2 values are also given.

ARTCC -- BOSTON

$$ACDP = 179.995318 + (0.0018532)\ \text{Wholesale Trade} - (3.2410954)\ \text{Seats/Aircraft}$$
$$R^2 = 0.70$$

ATDP = -1180.606482 + (0.0000922) Population
R^2 = 0.87

GADP = -110.022249 + (0.0001928) Services
R^2 = 0.94

MIDP = 20.850848 + (0.0002752) Federal, Military
R^2 = 0.89

ACDO = 24.524122 + (0.2884012) ACDP Washington + (0.0423614) ACDP New York
R^2 = 0.61

ATDO = 0.214802 + (0.0285946) ATDP New York
R^2 = 0.52

GADO = 16.188963 + (0.0799373) GADP Cleveland - (0.1936175) GADP New York + (0.1003217) GADP Washington
R^2 = 0.44

MIDO = 61.602675 - (0.1108714) MIDP Miami
R^2 = 0.01

ARTCC -- NEW YORK

ACDP = 6.408328 + (0.0013385) Wholesale Trade - (3.8381056) Seats/Aircraft
R^2 = 0.90

ATDP = -781.573197 + (0.0011720) Wholesale Trade
R^2 = 0.52

GADP = -450.841700 + (0.0002344) Services
R^2 = 0.93

MIDP = 30.584490 + (0.0000137) Federal, Military
R^2 = 0.02

ACDO = -181.941658 + (0.8117376) ACDP Atlanta
R^2 = 0.66

ATDO = -0.830125 + (0.1942091) ATDP Washington
R^2 = 0.64

GADO = -4.428168 + (0.2321645) GADP Washington
R^2 = 0.96

MIDO = 16.613115 + (0.2060530) MIDP Boston
R^2 = 0.14

ACOO = 13.518364 + (0.1755047) ACDP Atlanta
R^2 = 0.16

ATOO = -0.080702 + (0.0192515) ATDP Washington
R^2 = 0.27

GAOO = -0.073038 + (0.0185362) GADP Washington
R^2 = 0.37

MIOO = 8.378689 + (0.1363178) MIDP Boston
R^2 = 0.15

ARTCC -- WASHINGTON

ACDP = 244.753720 + (0.0005519) Retail Trade - (2.8450433) Seats/Aircraft
R^2 = 0.49

ATDP = -275.075626 + (0.0000245) Population
R^2 = 0.83

GADP = -494.779708 + (0.0003989) Government and Government Enterprises
R^2 = 0.98

MIDP = 153.564617 - (0.0000996) Federal, Military
R^2 = 0.32

ACDO = -68.558009 + (0.8752730) ACDP Atlanta
R^2 = 0.77

ATDO = -0.013705 + (0.0568569) ATDP New York
R^2 = 0.92

GADO = 4.919781 + (0.2198150) GADP Jacksonville + (0.2162883) GADP New York
R^2 = 0.97

MIDO = -36.828991 + (0.8086011) MIDP Boston + (0.1259747) MIDP Jacksonville
R^2 = 0.82

ARTCC -- ATLANTA

ACDP = 180.960627 + (0.0017824) Finance, Insurance, and Real Estate - (1.5090383) Seats/Aircraft
R^2 = 0.95

ATDP = -75.094777 + (0.0001287) Retail Trade
R^2 = 0.84

GADP = -347.077915 + (0.0006015) Government and Government Enterprises
R^2 = 0.96

MIDP = -1.987690 + (0.0005281) Federal, Military
R^2 = 0.55

ACDO = 21.333714 + (0.6699422) ACDP Denver + (0.0192864) ACDP Miami
R^2 = 0.89

ATDO = 0.035987 + (0.0327154) ATDP Miami
R^2 = 0.17

GADO = 7.886193 + (0.5556890) GADP Miami
R^2 = 0.99

MIDO = 66.028689 + (0.1352459) MIDP Washington
R^2 = 0.02

ARTCC -- BALBOA

ACDP = -11.8 + (0.09) ACDP Los Angeles
R^2 = 0.69

ATDP = -0.0066 + (0.0469) Time
R^2 = 0.99

GADP = -0.727 + (0.327) Time
R^2 = 0.98

MDP = 7.7457 + (-0.0348) MDP Fort Worth
R^2 = 0.45

ACDO = -13.82 + (0.07207) ACDP Miami
R^2 = 0.64

GADO = -0.979 + (0.009931) GADP Houston
R^2 = 0.71

ACOO = 18.51 + (0.01707) ACDP Albuquerque
R^2 = 0.45

GAOO = -0.105 + (0.04323) GADP Atlanta
R^2 = 0.81

MOO = -0.52 + (0.0171) MDP Houston
R^2 = 0.38

ARTCC -- JACKSONVILLE

ACDP = 152.265929 + (0.0003734) Services - (1.4138711) Seats/Aircraft
R^2 = 0.72

ATDP = -24.023603 + (0.0000137) Total Employment
R^2 = 0.36

GADP = -634.521992 + (0.0001369) Population
R^2 = 0.92

MIDP = 205.046281 - (0.0003335) Federal, Military
R^2 = 0.19

ACDO = -309.036742 + (1.8015101) ACDP Atlanta
R^2 = 0.87

ATDO = -0.034191 + (0.0425073) ATDP Washington
R^2 = 0.78

GADO = 6.929295 + (0.1779362) GADP Atlanta + (0.3228026) GADP Miami
R^2 = 0.98

MIDO = 28.529144 + (0.4204614) MIDP Washington
R^2 = 0.04

ARTCC -- MEMPHIS

ACDP = 14.881450 + (0.0003203) Government and Government Enterprises
- (0.4560528) Seats/Aircraft
R^2 = 0.81

ATDP = -556.761770 + (0.0000747) Population
R^2 = 0.98

GADP = -88.970090 + (0.0015283) Wholesale Trade
R^2 = 0.93

MIDP = 245.299294 - (0.0015261) Federal, Military
R^2 = 0.17

ACDO = -319.445081 + (1.5092686) ACDP Atlanta
R^2 = 0.89

ATDO = 0.337340 + (0.2203526) ATDP Atlanta
R^2 = 0.83

GADO = 6.103313 + (0.3746203) GADP Atlanta
R^2 = 0.95

MIDO = 96.029455 - (0.3907252) MIDP Atlanta + (0.3093462) MIDP Kansas City - (0.1006484) MIDP Fort Worth
R^2 = 0.70

ARTCC -- MIAMI

ACDP = 226.774363 + (0.0017442) Wholesale Trade - (1.3191284) Seats/Aircraft
R^2 = 0.57

ATDP = -89.097314 + (0.0000188) Population
R^2 = 0.69

GADP = -324.789037 + (0.0001654) Total Employment
R^2 = 0.90

MIDP = 131.745578 - (0.0013222) Federal, Military
R^2 = 0.13

ACDO = 15.703556 + (0.0723967) ACDP Jacksonville
R^2 = 0.11

ATDO = -0.106742 + (0.0241573) ATDP Jacksonville
R^2 = 0.21

GADO + 2.166115 + (0.0141586) GADP Jacksonville
R^2 = 0.09

MIDO = -8.832209 + (0.1950344) MIDP Jacksonville
R^2 = 0.32

ACOO = -165.234592 + (0.784506) ACDP Atlanta
R^2 = 0.69

ATOO = 7.454060 + (0.0844017) ATDP Atlanta
R^2 = 0.01

GAOO = 1.164872 + (0.2349515) GADP Jacksonville
R^2 = 0.91

MIOO = 1.477612 + (0.2369403) MIDP Atlanta
R^2 = 0.23

ARTCC -- SAN JUAN

ACDP = -223.54 + (0.22856) PCGNP
R^2 = 0.62

ATDP = 0.80 + (0.16561) Other
R^2 = 0.92

GADP = -2.21 + (0.051) Trade
R^2 = 0.23

MDP = 0.516 + (0.0871) MDP Miami
R^2 = 0.12

ACDO = -10.41 + (0.0530) ACDP Miami
R^2 = 0.41

GADO = -0.09 + (0.01081) GADP Miami
R^2 = 0.64

MDO = 1.67 + (-0.00665) MDP Jacksonville
R^2 = 0.32

ACOO = 65.7 + (0.0697) ACDP Jacksonville
R^2 = 0.77

ATOO = 2.55 + (0.00746) ATDP Miami

R^2 = 0.84

GAOO = 2.48 + (0.03585) GADP Miami

R^2 = 0.58

MOO = -4.93 + (0.07706) MDP Jacksonville

R^2 = 0.32

ARTCC -- CHICAGO

ACDP = 515.659304 + (0.0008717) Wholesale Trade - (3.3391670) Seats/Aircraft

R^2 = 0.90

ATDP = -2836.616310 + (0.0001619) Population

R^2 = 0.91

GADP = -349.899360 + (0.0004594) Services

R^2 = 0.95

MIDP = -12.798863 + (0.0003056) Federal, Military

R^2 = 0.96

ACDO = -34.515928 + (0.8689367) ACDP Kansas City

R^2 = 0.67

ATDO = -0.137387 + (0.2306450) ATDP Minneapolis

R^2 = 0.80

GADO = -21.634382 + (0.1974068) GADP Indianapolis + (0.0367632) GADP Minneapolis + (0.1662774) GADP Cleveland

R^2 = 1.00

MIDO = -5.941926 + (0.6510443) MIDP Kansas City

R^2 = 0.17

ARTCC -- CLEVELAND

ACDP = 131.050097 + (0.0004557) Government and Government Enterprises - (2.7798249) Seats/Aircraft

R^2 = 0.58

ATDP = -587.452862 + (0.0005179) Government and Government Enterprises

R^2 = 0.94

GADP = -910.506952 + (0.0009027) Government and Government Enterprises

R^2 = 0.91

MIDP = 27.221805 - (0.0001167) Federal, Military

R^2 = 0.48

ACDO = 45.333368 + (1.0652052) ACDP Washington

R^2 = 0.80

ATDO = -0.341385 + (0.1514138) ATDP Indianapolis

R^2 = 0.90

GADO = -11.506152 + (0.5079813) GADP New York + (0.0903637) GADP Indianapolis

R^2 = 0.97

MIDO = 15.468281 + (0.8708189) MIDP New York

R^2 = 0.17

ARTCC -- INDIANAPOLIS

ACDP = 162.998770 + (0.0002800) Government and Government Enterprises - (1.7338925) Seats/Aircraft

R^2 = 0.83

ATDP = -752.521224 + (0.0000632) Population

R^2 = 0.80

GADP = -271.334120 + (0.0005916) Services

R^2 = 0.96

MIDP = 51.501329 - (0.0001099) Federal, Military

R^2 =0.46

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ACDO = -109.488382 + (1.0357401) ACDP Atlanta + (0.0904396) ACDP Chicago
R^2 = 0.79

ATDO = -0.494144 + (0.1893430) ATDP New York
R^2 = 0.93

GADO = -7.297578 + (0.4434220) GADP Chicago
R^2 = 0.92

MIDO = 8.688742 + (0.6158940) MIDP Kansas City
R^2 = 0.39

ARTCC -- MINNEAPOLIS

ACDP = 97.737774 + (0.0004592) Wholesale Trade
R^2 = 0.81

ATDP = -35.512025 + (0.0005708) Farm
R^2 = 0.93

GADP = -212.237521 + (0.0005039) Services
R^2 = 0.96

MIDP = 30.596544 + (0.0002534) Federal, Military
R^2 = 0.05

ACDO = 47.107807 + (0.8610035) ACDP Denver
R^2 = 0.20

ATDO = -0.146079 + (0.0546022) ATDP Denver
R^2 = 0.81

GADO = -10.066159 + (0.1120906) GADP Chicago
R^2 = 0.87

MIDO = 44.730687 + (0.1663090) MIDP Seattle
R^2 = 0.02

ARTCC -- KANSAS CITY

ACDP = 219.735011 + (0.0014062) Wholesale Trade - (2.1279772) Seats/Aircraft

R^2 = 0.58

ATDP = -257.863446 + (0.0000853) Total Wage and Salary Employment

R^2 = 0.80

GADP = -674.188406 + (0.0002415) Total Wage and Salary Employment

R^2 = 0.96

MIDP = 46.684990 + (0.0001466) Federal, Military

R^2 = 0.17

ACDO = -122.835921 + (0.8063043) ACDP Atlanta

R^2 = 0.69

ATDO = -0.149199 + (0.3276131) ATDP Denver

R^2 = 0.90

GADO = 4.549497 + (0.3625704) GADP Fort Worth

R^2 = 0.97

MIDO = -9.039823 + (1.8539823) MIDP Indianapolis

R^2 = 0.16

ARTCC -- ALBUQUERQUE

ACDP = 36.904360 + (0.0003292) Government and Government Enterprises - (0.3529936) Seats/Aircraft

R^2 = 0.81

ATDP = -112.918411 + (0.0000314) Population

R^2 = 0.87

GADP = -139.759969 + (0.0004836) Government and Government Enterprises

R^2 = 0.98

MIDP = 328.447584 - (0.0024289) Federal, Military

R^2 = 0.43

ACDO = -122.496849 + (0.5856773) ACDP Fort Worth + (0.3150360) ACDP Los Angeles

R^2 = 0.69

ATDO = -0.146079 + (0.0546022) ATDP Denver

R^2 = 0.81

GADO = -2.030054 + (0.1202734) GADP Fort Worth + (0.0651259) GADP Los Angeles

R^2 = 0.98

MIDO = -76.782175 + (1.5147714) MIDP Los Angeles

R^2 = 0.54

ARTCC -- FORT WORTH

ACDP = 124.308959 + (0.0005331) Retail Trade - (1.2415422) Seats/Aircraft

R^2 = 0.65

ATDP = -549.780892 + (0.0000685) Population

R^2 = 0.87

GADP = -459.946360 + (0.0001760) Total Wage and Salary Employment

R^2 = 0.93

MIDP = 7.266149 + (0.0013253) Federal, Military

R^2 = 0.87

ACDO = -142.060070 + (1.5453029) ACDP Memphis

R^2 = 0.57

ATDO = -0.763478 + (0.1865473) ATDP Memphis
R^2 = 0.80

GADO = 4.429317 + (0.8363322) GADP Albuquerque
R^2 = 0.99

MIDO = 32.830616 + (1.1011207) MIDP Kansas City
R^2 = 0.20

ARTCC -- HOUSTON

ACDP = 346.403001 + (0.0004920) Retail Trade - (3.4426843) Seats/Aircraft
R^2 = 0.37

ATDP = -104.712537 + (0.0002282) State and Local
R^2 = 0.93

GADP = -403.651120 + (0.0007237) Services
R^2 = 0.98

MIDP = 90.383197 + (0.0004093) Federal, Military
R^2 = 0.27

ACDO = -20.739172 + (0.1976833) ACDP Miami
R^2 = 0.54

ATDO = -0.356742 + (0.2991573) ATDP Jacksonville
R^2 = 0.38

GADO = 0.584457 + (0.1891337) GADP Albuquerque
R^2 = 0.92

MIDO = -6.509442 + (0.5554455) MIDP Jacksonville
R^2 =0.30

ACOO = -20.686291 + (0.0963485) ACDP Atlanta
R^2 = 0.66

GAOO = -0.734348 + (0.0260518) GADP Jacksonville
R^2 = 0.80

MIOO = -4.110318 + (0.2091986) MIDP Atlanta
R^2 = 0.35

ARTCC -- DENVER

ACDP = 96.612649 + (0.0024514) Wholesale Trade - (0.9938217) Seats/Aircraft
R^2 = 0.92

ATDP = -28.935940 + (0.0011119) Mining
R^2 = 0.86

GADP = -203.829611 + (0.0001588) Total Employment
R^2 = 0.98

MIDP = 80.108453 - (0.0007130) Federal, Military
R^2 = 0.51

ACDO = 50.169898 + (0.4282269) ACDP Los Angeles + (0.1796759) ACDP Albuquerque
R^2 = 0.69

ATDO = 0.060892 + (0.1150943) ATDP Albuquerque
R^2 = 0.82

GADO = 0.654301 + (0.3516265) GADP Albuquerque + (0.3516265) GADP Los Angeles - (0.0234818) GADP Salt Lake City
R^2 = 0.99

MIDO = 42.266251 - (0.1560947) MIDP Albuquerque + (0.2980651) MIDP Los Angeles
R^2 = 0.27

ARTCC -- SALT LAKE CITY

ACDP = -37.524648 + (0.0004408) Government and Government Enterprises
R^2 = 0.90

ATDP = -93.735599 + (0.0003662) Government and Government Enterprises
R^2 = 0.67

GADP = -54.458314 + (0.0015745) Wholesale Trade
R^2 = 0.93

MIDP = -276.422144 + (0.0050421) Federal, Civilian
R^2 = 0.27

ACDO = 13.662954 + (0.3951419) ACDP Los Angeles
R^2 = 0.43

ATDO = -0.202879 + (0.0928237) ATDP Denver
R^2 = 0.81

GADO = 3.748001 + (0.0922953) GADP Seattle
R^2 = 0.83

MIDO = 24.712549 + (0.3498314) MIDP Los Angeles - (0.1050063)
MIDP Seattle
R^2 = 0.19

ARTCC -- LOS ANGELES

ACDP = 6.188663 + (0.0003863) State and Local
R^2 = 0.97

ATDP = -463.144054 + (0.0000357) Population
R^2 = 0.84

GADP = -586.896144 + (0.0000491) Population
R^2 = 0.80

MIDP = 261.632463 - (0.0005348) Federal, Military
R^2 = 0.65

ACDO = -48.487402 + (0.7582677) ACDP Albuquerque
R^2 = 0.81

ATDO = -0.054031 + (0.0471698) ATDP Albuquerque
R^2 = 0.72

GADO = 0.931075 + (0.1214981) GADP Albuquerque
R^2 = 0.87

MIDO = 76.526102 - (0.2237568) MIDP Albuquerque
R^2 = 0.40

ARTCC -- OAKLAND

ACDP = -495.570984 + (0.0000830) Population
R^2 = 0.86

ATDP = -135.764709 + (0.0000626) Private
R^2 = 0.91

GADP = -252.089109 + (0.0001325) Private
R^2 = 0.90

MIDP = 102.347184 + (0.0000768) Federal, Military
R^2 = 0.04

ACDO = -57.939777 + (0.2762915) ACDP Los Angeles
R^2 = 0.60

ATDO = -0.119049 + (0.0125518) ATDP Los Angeles
R^2 = 0.57

GADO = -0.136208 + (0.0580474) GADP Los Angeles + (0.0025993) GADP Seattle

R^2 = 0.91

MIDO = 200.682403 - (3.0429185) MIDP Seattle

R^2 = 0.58

ACOO = -28.654276 + (0.5560337) ACDP Seattle

R^2 = 0.45

GAOO = 0.188781 + (0.0087829) GADP Seattle

R^2 = 0.18

MIOO = 98.560361 - (0.2390190) MIDP Los Angeles - (0.8771613) MIDP Seattle

R^2 = 0.86

ARTCC -- SEATTLE

ACDP = 90.870441 + (0.0004482) Government and Government Enterprises - (1.5128453) Seats/Aircraft

R^2 = 0.84

ATDP = -306.441948 + (0.0001311) Total Employment

R^2 = 0.83

GADP = -396.798848 + (0.0002088) Total Wage and Salary Employment

R^2 = 0.97

MIDP = 73.731846 - (0.0002486) Federal, Military

R^2 = 0.30

ACDO = -9.025862 + (0.1465517) ACDP Denver

R^2 = 0.81

GADO = 1.159881 + (0.0147912) GADP Oakland

R^2 = 0.40

MIDO = 17.130482 + (0.1114787) MIDP Oakland
R^2 = 0.03

ARTCC -- ANCHORAGE

ACDP = 139.139775 + (0.0006671) Total Wage and Salary Employment
- (1.4810979) Seats/Aircraft
R^2 = 0.86

ATDP = -46.541874 + (0.0003220) Total Employment
R^2 = 0.94

GADP = -100.586154 + (0.0015411) Government and Government Enterprises
R^2 = 0.46

MIDP = -7.054145 + (0.0009959) Federal, Military
R^2 = 0.83

ACDO = 12.415820 - (0.0200156) ACDP Kansas City
R^2 = 0.01

GADO = 0.322457 + (0.0556622) Time
R^2 = 0.21

MIDO = -12.509378 + (0.2505549) MIDP Chicago + (0.0968903) Fort Worth
R^2 = 0.88

ACOO = 3.039736 + (0.1452115) ACDP Seattle
R^2 = 0.34

MIOO = 41.776417 - (0.6735634) MIDP Seattle + (0.0619100) MIDP Honolulu
R^2 = 0.69

ARTCC -- GUAM

ACDP = 1.0123 + (0.000120167) Federal, Military -- Honolulu
R^2 = 0.11

ATDP = -16.845 + (0.0009295) Non-Farm Proprietors, Honolulu
R^2 = 0.62

GADP = .016666 + (0.25) Time
R^2 = 0.99

MDP = 6.3 + (.00000047) Federal, Military -- Honolulu
R^2 = 0.45

ACDO = -5.0308 + (.05286) ACDP Honolulu
R^2 = 0.64

MDO = 7.126 + (-0.125654) MDP Honolulu
R^2 = 0.19

ACOO = 23.19048 + (-0.10714) ACDP Honolulu
R^2 = 0.28

GAOO = .279166 + (0.025595) Time
R^2 = 0.98

MOO = -39.4796 + (1.5216) MDP Honolulu
R^2 = 0.33

ARTCC -- HONOLULU

ACDP = -3.707771 + (0.0004136) Total Wage and Salary Employment
- (0.4702268) Seats/Aircraft
R^2 = 0.84

ATDP = -7.037602 + (0.0042349) Agriculture, Services, Forestry, Fisheries, and Other

R^2 = 0.46

GADP = -35.940968 + (0.0000444) Population

R^2 = 0.94

MIDP = 73.171977 - (0.0006835) Federal, Military

R^2 = 0.08

MIDO = 2.003219 + (0.0139485) MIDP Seattle

R^2 = 0.01

ACOO = -12.954953 + (0.5263688) ACDP Seattle

R^2 = 0.52

GAOO = -0.016882 + (0.0120864) ATDP Oakland

R^2 = 0.56

MIOO = -41.449064 + (2.9771310) MIDP Anchorage

R^2 = 0.86

6.0 STATISTICS: IFR AIRCRAFT HANDLED FORECASTS, BY USER TYPE, BY AIR ROUTE TRAFFIC CONTROL CENTER, FISCAL YEAR 1980-1991

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