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ACCIDENTS

A PRELIMINARY STATISTICAL ANALYSIS OF AIRCRAFT ACCIDENT DATA

U.S. CIVIL AVIATION 1973



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NATIONAL TRANSPORTATION SAFETY BOARD Washington, D.C. 20591
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Adopted: May 1, 1974

NATIONAL TRANSPORTATION SAFETY BOARD Washington, D.C. 20591

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This report presents the record of aircraft accidents which occurred in U. S. Civil Aviation Operations during calendar year 1973. It includes a statistical recapitulation of all accidents and a brief of each air carrier accident, containing the essential items of information.

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FOREWORD

This publication presents preliminary 1973 aircraft accident and exposure data. The National Transportation Safety Board believes that useful statistical measures of safety should be made available to the aviation community. Recent changes in aircraft equipment, speed, and passenger-carrying capacity have prompted requests for new ways to measure safety. This publication as well as others published by the Safety Board present rates based on aircraft-hours flown, aircraft-miles flown, passenger-miles flown and aircraft departures. Since all exposure data are not available for each category analyzed, it is not possible to report each rate for each category.

The accident data in this report reflect the 50-state concept of domestic operations which the Civil Aeronautics Board (CAB) initiated in 1970. These operations include mainland Hawaii and mainland Alaska traffic (when flights from the mainland terminate at one of these two points, or when flights to the mainland originate at one of these two points). The 50-state concept results in a larger volume of traffic for domestic operations and a correspondingly lower volume for international operations.

The tables in Section II refer to the passenger service of U. S. certificated route air carriers. In the tables, the term <u>revenue</u> passenger enplanements was substituted for <u>revenue passenger originations</u> beginning in 1970. The CAB's annual "Air Carrier Traffic Statistics" defines these two terms as follows:

"Revenue passenger enplanements - The count of the total number of passengers boarding aircraft. This count may be measured on the basis of a standard number of passenger enplanements per on-line originating passenger.

"Revenue passenger originations - The unduplicated count of passengers originating journeys on the lines of each reporting entity with the return portion of a round trip counted separately as an initial origination."

NATIONAL TRANSPORTATION SAFETY BOARD Washington, D. C. 20591

Adopted: May 1, 1974

A PRELIMINARY STATISTICAL ANALYSIS OF AIRCRAFT ACCIDENT DATA
U. S. CIVIL AVIATION
1973

INTRODUCTION

Section I of this report contains an analysis of accident data by class of carrier; Section II provides tables of accidents, accident rates, and fatalities; and Section III lists accidents, by date of occurrence, and briefs of accidents which occurred in air carrier operations.

The report is preliminary, because all cases have not been received, classified and analyzed. Nevertheless, timely publication of the information available will benefit the aviation community and interest the general public.

The analytical portion of this report presents data on accidents, fatalities, rates, and growth changes as percentage changes of the 1973 data compared with a base figure. The base figure was derived by averaging data for the 5-year period, 1968-1972. When the base period average is relatively small compared to the corresponding 1973 figure, the resulting percentage increase will be large. In case of accidents or fatalities, a large percentage increase at first glance would imply a serious decline in safety. However, a large percentage increase is explained, at least in part, by an excellent safety record during the 5-year base period.

The base figure helps to eliminate annual variations inherent in accident report data and allows more meaningful comparisons than the customary year-by-year comparisons. This base figure can also be used as a standard and compared with other base periods. If this method of analysis is used for several consecutive years, the Safety Board will have a sound basis for analyzing and projecting trends in both growth and accident indices.

Statistical Recapitulation Of Accidents U. S. Civil Aviation (All Operations) 1972-73

and Supple	emental Air	Aviat	ion
1972	1973	1972	1973
50 8	42 9	4,228 68 3	4,180 701
190	227	1,4001/	1,340
6,302	6,5292/	27,3003/	28 , 200 ³ /
2,619,043	2,721,0002/	3,400,0003/	3,500,0003/
0.793 0.127	0.643 0.138	15.5 2.50	14.8 2.49
0.019 0.003	0.015 0.003	1.24	1.19 0.20
	and Supple Carriers, (all 1972) 50 8 190 6,302 2,619,043 0.793 0.127	50 42 8 9 190 227 6,302 6,529 ² / 2,619,043 2,721,000 ² / 0.793 0.643 0.127 0.138	and Supplemental Air Carriers, (all operations) 1972 1973 1972 50 42 8 9 683 190 - 227 1,400 6,302 6,529 27,300 2,619,043 2,721,000 3,400,000 0.793 0.127 0.019 0.015 1.24

 $[\]underline{1}$ Includes five air carrier fatalities involved in collision with general aviation aircraft.

^{2/} Estimated by the CAB.

^{3/} Estimated by FAA.

SECTION I

ANALYSIS BY CLASS OF CARRIERS

U. S. CERTIFICATED ROUTE AND SUPPLEMENTAL AIR CARRIERS

All Operations

In 1973, U. S. certificated route and supplemental air carriers flew 6,529,000 aircraft-hours-an increase of 1.06 percent from the 1968-72 base period average of 6,640,726 aircraft-hours flown per year. Aircraft-miles flown increased 3.07 percent, from an average of 2,639,954,000 during the base period, to 2,721,000,000 in 1973. Total accidents decreased substantially, 26.83 percent, while fatal accidents decreased slightly, 8.16 percent, compared with base period averages of 57.4 and 9.8, respectively. However, although the number of accidents decreased significantly, the number of fatalities increased 8.51 percent, compared with the 5-year base period. This increase is due, primarily, to two fatal accidents which accounted for 73.13 percent of the fatalities and only 4.8 percent of the accidents. Therefore, one cannot assume that the number of fatalities is a barometer for the total aviation safety picture and it should not be used as such.

Accidents, Fatalities, Rates, And Growth Changes From 1968-1972 Base

	Base	1973	Percentage Change
Aircraft-hrs. flown	6,460,726	6,529,000	+ 1.06
Aircraft-mi. flown (Thousands)	2,639,954	2,721,000	+ 3.07
Accidents Total Fatal	57.4 9.8 <u>1</u> /	42 9	-26.83 -08.16
Fatalities	209.2	227	+08.51
Accident rate per 100,000 aircraft-hrs. flown			
Total Fatal	0.888 0.136	0.643 0.138	-27.59 + 1.47

^{1/} Based on 49 fatal accidents, 5 of which were midair collisions non-fatal to air carrier occupants, excluded in fatal accident rates.

Accidents, Fatalities, Rates, And Growth Changes From 1968-1972 Base (Cont'd)

	Base	1973	Percentage Change
Accident rate per million aircraft-			
mi. flown Total Fatal	0.022	0.015 0.003	- 31.82 0
Fatality rate per 100,000 aircraft-hrs. flown	3.238	3.477	+ 7.38
Fatality rate per million aircraft-mi. flown	0.079	0.083	+ 5.06

U. S. CERTIFICATED ROUTE AIR CARRIERS

All Operations

From 1968 through 1972, U. S. certificated route air carriers in all operations flew an average of 2,536,561,000 aircraft-miles per year. In 1973, the figure was 2,620,000,000-an increase of 3.29 percent. Total accidents decreased 28.84 percent, and fatal accidents decreased 11.11 percent. Fatalities, however, increased 12.30 percent. Two major accidents accounted for 166 fatalities which partly explains why fatalities increased while the number of accidents decreased. With the increase in exposure and concurrent decrease in accidents, the total accident rate per million aircraft-miles flown decreased 28.57 percent. The fatal accident rate did not change over the 5-year base period.

Accidents, Fatalities, Rates, And Growth Changes From 1968-1972 Base

	Base	1973	Percentage Change
Aircraft-mi. flown (Thousands)	2,536,561	2,620,000	+ 3.29
Accidents Total Fatal	53.4 9.01/	38 8	-28.84 -11.11
Fatalities	196.8	221	+12.30
Accident rates per million aircraft- mi. flown Total	0.021	0.015	- 28.57
Fatal	0.003	0.003	0
Fatality rates per million aircraft-mi. flown	0.078	0.084	+ 7.69

^{1/} Based on 45 fatal accidents, 5 of which were midair collisions non-fatal to air carrier occupants, excluded in fatal accident rates.

U. S. CERTIFICATED ROUTE AIR CARRIERS

All Scheduled Service

The hours and miles flown for aircraft in this segment of U.S. air carrier operations increased 3.66 and 5.21 percent, respectively, while aircraft departures were down 0.44 percent. This decrease reflects the use of wide-body jets to carry more persons greater distances per flight. Although accidents decreased 26.78 percent, fatal accidents increased 2.56 percent. All rates which reflect total accidents decreased in 1973, and all fatal accident rates (except one, which did not change) increased in 1973 compared with the 5-year base period averages.

Accidents, Accident Rates, Growth Changes From 1968-1972 Base

	Base	1973	Percentage Change
Aircraft-hrs. flown	5,712,089	5,921,000	+ 3.66
Aircraft-mi. flown (Thousands)	2,335,436	2,457,000	+ 5.21
Aircraft departures	5,148,568	5,126,000	- 0.44
Accidents Total Fatal	47.8	35	-26.78
	7.8 <u>1</u> /	8	+ 2.56
Accident rates per 100,000 aircraft- hrs. flown Total Fatal	0.837	0.591	- 29.39
	0.123	0.135	+ 9.76
Accident rates per million aircraft- mi. flown Total Fatal	0.020	0.014	-30.00
	0.003	0.003	0
Accident rates per 100,000 aircraft departures Total Fatal	0.928	0.683	-26.40
	0.136	0.156	+14.71

^{1/} Based on 39 fatal accidents, 4 of which were nonfatal to air carrier occupants, excluded in fatal accident rate.

Scheduled Domestic And International Passenger Service

Scheduled domestic and international passenger service of the U.S. certificated route air carriers showed substantial growth in 1973, compared with the base period, because passenger-miles flown increased 19.48 percent. Total and fatal accidents decreased 30.80 and 14.29 percent, respectively. There were 197 passenger fatalities in 1973, compared with an average of 154.6 for the base period--an increase of 27.43 percent. While both passenger-miles flown and passenger fatalities increased substantially, the passenger fatality rate per 100 million passenger miles flown increased 6.31 percent in 1973, compared with the base period.

Accidents, Fatalities, Rates, And Growth Changes From 1968-1972 Base

	Base	1973	Percentage Change
Passengers carried 1/	168,735,376	204,000,000	+ 20.90
Passenger-mi. flown (Thousands)	139,266,573	166,400,000	+ 19.48
Accidents Total Fatal	44.8 7.0	31 6	- 30.80 - 14.29
Fatalities Passengers Crew Others Total	154.6 15.6 5.8 176.0	197 20 0 217	+ 27.43 + 28.21 -100.00 + 23.30
Passenger fatality rate per 100 million passenger- mi. flown	0.111	0.118	+ 6.31

^{1/} Beginning in 1970, carriers were required to report revenue passenger enplanements, whereas before 1970 revenue passenger originations were reported.

Scheduled Domestic Passenger Service

U. S. certificated route air carriers that engaged in scheduled domestic passenger service during 1973 carried 185,700,000 passengers, 2 22.5 percent increase over the base period average of 151,585,022. Passenger-miles flown increased 29.85 percent over the base figure, while total and fatal accidents decreased 22.22 and 35.48 percent, respectively. The first fatal accident involving a DC-10 accounted for 1 of the 128 passenger fatalities for this segment of U. S. air carrier operations. The DC-10 accident occurred when fragments from a disintegrating fan on the no. 3 engine fractured a window, causing rapid depressurization and subsequent ejection of one passenger.

Accidents, Accident Rates, Growth Changes From 1968-1972 Base

	Base	1973	Percentage Change
Passengers Carried	151,585,022	185,700,000	+ 22.50
Passenger-mi. flown (Thousands)	107,736,883	139,900,000	+ 29.85
Accidents Total Fatal	36.0 6.2	28 4	- 22.22 - 35.48
Fatalities Passengers Crew Others Total	144.8 13.6 5.6 164.0	128 10 0 138	- 11.60 - 26.47 -100.00 - 15.85
Passenger fatality rate per 100 million passenger-mi. flown	0.134	0.098	- 26.87

^{1/} Beginning in 1970, carriers were required to report revenue passenger enplanements, whereas before 1970 revenue passenger originations were reported.

Scheduled International Passenger Service

In 1973, U. S. certificated route air carriers that engaged in scheduled international passenger service recorded two fatal accidents. The first occurred when a Boeing 707 crashed during takeoff, resulting in 68 passenger fatalities. The second occurred when a Boeing 707 began porpoising in flight, causing one passenger fatality, which brought passenger fatalities to 69, a 604-percent increase over the base-period average of 9.8.

Accidents, Fatalities, Rates, And Growth Changes From 1968-1972 Base

	Base	1973	Percentage Change
Passengers carried 1/	17,150,350	19,000,000	+ 10.78
Passenger-mi. flown (Thousands)	31,529,690	35,500,000	+ 12.5 9
Accidents Total Fatal	8.8 o.8	3 2	- 65.91 +150.00
Fatalities			
Passengers	9.8	69	+604.08
Crew	2.0	10	+400.00
Others	0.2	Ο	-100.00
Total	12.0	79	+558.33
Passenger fatality rate per 100 million			
passenger-mi. flown	0.031	0.194	+525.81

^{1/} Beginning in 1970, carriers were required to report revenue passenger enplanements, whereas before 1970 revenue passenger originations were reported.

U. S. SUPPLEMENTAL AIR CARRIERS

All Operations

In 1973, U. S. supplemental air carriers in all operations recorded four accidents, one of which was fatal. There was no change in the number of accidents, but the one fatal accident caused a 25-percent increase in the number of fatal accidents, compared to the base period. Six fatalities which resulted from the single fatal accident caused a 51.61-percent decline in fatalities, compared with the base-period average of 12.4. The fatal accident occurred when a DC-8 military contract cargo flight crashed while landing. The crew and three deadheading aircrew employees died in the crash.

Accidents, Fatalities, Rates, And Growth Changes From 1968-1972 Base

	Base	1973	Percentage Change
Aircraft-mi. flown	103,593,000	101,200,000	- 2.31
Accidents Total Fatal	4.0 0.8	ц 1	0 +25.00
Fatalities	12.4	6	-51.61
Accident rates per million aircraft-mi. flown Total Fatal	0.039 0.008	0.040 0.010	+ 2.56 +25.00
Fatality rates per million aircraft-mi. flown	0.120	0.059	- 50.83

Passenger Operations - Civil And Military

U. S. supplemental air carriers engaged in civil and military passenger operations have not had a fatal accident in 3 years. In addition, 1973 was the ninth out of 12 years in which no fatal accidents were recorded for this segment of U. S. air carrier service. The one accident that did occur showed no change when compared to the base period average of 1.0. Only one accident and an increase in passengers carried and passenger-miles flown, gives civil and military passenger operations of U. S. supplemental air carriers an outstanding safety record in 1973.

Accidents, Fatalities, Rates, And Growth Changes From 1968-1972 Base

	Base	1973	Percentage Change
Passengers carried	3,219,013	3,505,000	+ 8.88
Passenger-mi. flown (Thousands)	10,186,509	11,200,000	+ 9.95
Accidents Total Fatal	1.0	1 0	0
Fatalities Passengers Crew Others Total	9.4 0.2 0 9.6	0 0 0	-100.00 -100.00 0 -100.00
Passenger fatality rate per 100 million passenger-mi. flown	0.092	0	-100.00

U. S. GENERAL AVIATION

In 1973, U. S. general aviation accidents decreased to 4,180, compared with 4,665.2 for the base-period average, a 10.40-percent decrease. At the same time, the number of hours flown increased from 25,649,000 for the base period to 28,200,000 in 1973, an increase of 9.95-percent. The decrease in the number of accidents and the increase in hours flown have lowered the accident rate per 100,000 aircraft-hours flown 18.53-percent. The number of fatalities and fatal accidents were not consistent; fatalities decreased, but the number of fatal accidents increased, 4.41 and 5.41 percent, respectively, compared with the base-period average.

Accidents, Fatalities, Rates, And Growth Changes From 1968-1972 Base

	Base	<u> 1973</u>	Percentage Change
Aircraft-hrs. flown (Thousands)	25,649	28,200	+ 9.95
Aircraft-mi. flown (Thousands)	<u>2</u> /	3,500,000	<u>2</u> /

^{1/} Estimated by FAA.

^{2/} Base figure and percentage change not computed because "aircraft-miles flown" figures for the base period are not compatible.

Accidents, Fatalities, Rates, And Growth Changes From 1968-1972 Base (Cont'd)

	Base	1973	Percentage Change
Accidents Total Fatal	4,665	4,180	-10.40
	665 <u>3</u> /	701	+ 5.41
<u>Fatalities</u>	1401.8	1,340	- 4.41
Accident rates per 100,000 aircraft-hrs. flown Total Fatal	18.19	14.82	-18.53
	2.59	2.49	- 3.86
Accident rates per million aircraft-mi. flown Total Fatal	<u>2/</u>	1.19	<u>2/</u>
	2/	0.200	2/

^{3/} Based on 3,325 fatal accidents, 3 of which were suicide/sabotage accidents, excluded in fatal accident rates.

AIR TAXI OPERATIONS

Accidents in air taxi operations declined 13.47-percent, while hours flown increased 14.16 percent—a decrease of 24.21-percent in the rate of accidents per 100,000 aircraft hours flown, compared with the base-period average. Fatal accidents rose slightly, 3.26 percent, but fatalities declined 17.39-percent, compared to the base period average. Fatal accidents occurred at a rate of 1.53 per 100,000 aircraft—hours flown, a decline of 9.47-percent, compared to the 5-year base period average of 1.69.

Scheduled service in air taxi operations accounted for 37 accidents, of which 7 were fatal and resulted in 17 fatalities. The accidents and fatalities were divided between scheduled passenger and cargo service as follows:

	Accide	ents	
	Total	Fatal	<u>Fatalities</u>
Scheduled Passenger	17	2	11
Scheduled Cargo	20	5	6

Accidents, Fatalities, Rates, And Growth Changes From 1968-1972 Base

	Base	1973	Percentage Change
Aircraft-hrs. flown (Thousands)	2,182	2,490.92/	+14.16
Accidents Total Fatal	172 .2 36.8	149 38	-13.47 + 3.26
Fatalities	115.0	95	-17.39
Accident rates per 100,000 aircraft-hrs.			
Total Fatal	7.89 1.69	5.98 1.53	-24.21 - 9.47

^{1/} Estimated by FAA.

^{2/} Estimated by NTSB.

SECTION II

TABLES

FATAL ACCIDENTS - FATALITIES U. S. AIR CARRIERS (ALL OPERATIONS) 1973

DATE ====	LOCATION				FT/DMGE		==== PSG	CR	OTH	=== TOT	TOTAL ABOAR	D OF ACCIDENT
CERTIFICATED ROUTE AIR CARRIERS												
	PAPEETE, TAH				B-707	D	68	10	0	78	79	CRASHED DURING TAKEOFF
072373	ST. LOUIS, MO	OZA	PSG	SD	FH227B	D	37	1	0	38	44	CRASHED DURING LANDING
073173	BOSTON, MASS.	DAL	PSG	SD	DC-9	D	82	6	0	88	89	CRASHED DURING LANDING
082873	NR. L.A., CAL	TWA	PSG	SI	B-707	N	1	0	0	1	152	PORPOISING IN FLIGHT
092773	NR. MENA, ARK	TTA	PSG	SD	CV600	D	8	3	0	11	11	CRASHED ENROUTE
100873	TOKYO, JAPAN	FTLX	CRG	SI	DC-8	N	0	0	1	1	3	GROUND CREW RUN OVER
110373	BOSTON, MASS.	PAA	CRG	SI	B-707	D	0	3	0	3	3	FIRE IN FLIGHT CRASHED DURING LANDING
110373	ALBUQUERQUE, N MEX.	NAL	PSG	SD	DC-10	S	1	0	0	1	127	RAPID DEPRESSURIZATION
	MENTAL AIR CAR											
090873	COLD BAY, ALAS	WRLB	CRG	_	DC-8 CTR.	D	3	3	0	6	6	CRASHED DURING LANDING
					TOT	AL	200	26	1	227	514	

NATIONAL TRANSPORTATION SAFETY BOARD WASHINGTON, D. C. 20591
JANUARY 4,1974

ACCIDENTS, ACCIDENT RATES AND FATALITIES U. S. CERIFICATED ROUTE AND SUPPLEMENTAL AIR CARRIERS (ALL OPERATIONS) 1963 - 1973

PER 100,000 AIRCRAFT-HOURS FLOWN ACC IDENTS FATALITIES AIRCRAFT-TOTAL FATAL YEAR PASG CREW OTH TOT HOURS FLOWN ACCIDENTS **ACCIDENTS** TOTAL FATAL ----77 223 264 1963 13 41 4,126,399 1.866 0.315 1964 79 13 202 35 1 238 4,312,764 1.809 0.278 1965 83 9 226 35 0 261 4,690,882 1.769 0.192 1966 75 8 137 27 108 272 5,104,984 1.469 0.157 1967 70 12 229 39 18 286 5,868,842 1.193 0.204 1968 71 15* 306 37 349 6,404,260 1.109 0.203 1969 63 10* 132 22 4 158 6,740,199 0.935 0.134 1970 55 8 118 24 4 146 6,470,351 0.850 0.124 1971 48 8* 174 23 203 6,386,662 0.752 0.094 1972 50 8 17 13 190 160 6,302,160 0.793 0.127 9 1973PREL 42 200 26 1 227 6,529,000** 0.643 0.138

NOTE--A SABOTAGE ACCIDENT OCCURRING 5/7/64 IS INCLUDED IN ALL COMPUTATIONS EXCEPT RATES.

NATIONAL TRANSPORTATION SAFETY BOARD
WASHINGTON, D. C. 20591
JANUARY 9, 1974

ACCIDENT RATE

^{*} INCLUDES MIDAIR COLLISIONS NONFATAL TO AIR CARRIER OCCUPANTS, EXCLUDED IN FATAL ACCIDENT RATES (1968-2, 1969-1, 1971-2).

^{**} ESTIMATED BY CAB.

ACCIDENTS, ACCIDENT RATES AND FATALITIES U. S. CERIFICATED ROUTE AND SUPPLEMENTAL AIR CARRIERS (ALL OPERATIONS) 1963 - 1973

ACCIDENT RATE PER MILLION AIRCRAFT-MILES FLOWN **ACCIDENTS** FATALITIES AIRCRAFT-MILES FLOWN TOTAL FATAL YEAR TOT (000) ACCIDENTS ACCIDENTS TOTAL FATAL PASG CREW OTH ____ 1963 77 13 223 41 0 264 1,231,312** 0.063 0.011 79 238 1964 13 202 35 1 1,336,867** 0.058 0.009 1965 83 9 226 35 0 261 1,536,395** 0.054 0.006 75 8 108 272 0.005 1966 137 27 1,768,458 0.042 1967 229 39 18 286 70 12 2,179,739** 0.032 0.006 1968 37 6 349 2,498,848** 0.028 0.005 71 15* 306 1969 63 10* 132 22 4 158 2,736,596** 0.023 0.003 1970 55 8 24 146 0.003 118 2,684,552** 0.020 1971 48 8≄ 174 23 6 203 2,660,731** 0.018 0.002 1972 50 8 160 17 13 190 2,619,043** 0.019 0.003 200

1 227

26

42

NOTE -- A SABOTAGE ACCIDENT OCCURRING 5/7/64 IS INCLUDED IN ALL COMPUTATIONS EXCEPT RATES.

9

NATIONAL TRANSPORTATION SAFETY BOARD WASHINGTON, D. C. 20591 JANUARY 9, 1974

0.015

2,721,000#

0.003

1973PREL

^{*} INCLUDES MIDAIR COLLISIONS NONFATAL TO AIR CARRIER OCCUPANTS, EXCLUDED IN FATAL ACCIDENT RATES (1968-2, 1969-1, 1971-2).

^{**} NONREVENUE MILES OF THE SUPPLEMENTAL AIR CARRIERS ARE NOT REPORTED.

[#] ESTIMATED BY CAB.

ACCIDENTS, ACCIDENT RATES AND FATALITIES U. S. CERTIFICATED ROUTE CARRIERS (ALL OPERATIONS) 1963 - 1973

PER MILLION AIRCRAFT-MILES FLOWN FATALITIES AIRCRAFT-**ACCIDENTS** TOTAL MILES FLOWN FATAL CREW NTH TOT (000)ACCIDENTS ACCIDENTS YFAR PASG TOTAL FATAL 0.056 0.008 222 37 259 1,180,620 1963 66 10 1,286,029 0.054 0.009 1964 70 12 200 33 1 234 30 256 1,473,744 0.050 0.005 1965 73 8 226 0 59 107 1,683,547 0.041 0.004 1966 69 6 20 186 283 0.032 0.005 1967 229 36 18 2,083,668 66 11 305 37 348 2,385,309 0.026 0.005 1968 62 14* 4 158 0.023 0.003 1969 10* 132 22 2,620,803 61 49 5 72 9 85 2,591,706 0.019 0.002 1970 1971 47 8* 174 23 203 2,557,968 0.018 0.002 1972 160 17 13 190 2,526,021 0.019 0.003 48 1973PREL 38 8 197 23 1 221 2,620,000** 0.015 0.003

NOTE--A SABOTAGE ACCIDENT OCCURRING 5/7/64 IS
INCLUDED IN ALL COMPUTATIONS EXCEPT RATES.

NATIONAL TRANSPORTATION SAFETY BOARD WASHINGTON, D. C. 20591

JANUARY 9, 1974

ACCIDENT RATE

^{*} INCLUDES MIDAIR COLLISIONS NONFATAL TO AIR CARRIER OCCUPANTS, EXCLUDED IN FATAL ACCIDENT RATES (1968-2, 1969-1, 1971-2).

^{**} ESTIMATED BY CAB.

				ACCIDENTS	, ACCIDENT RA	TES	ACCIDENT RATES						
		CERTIFICATED ROUTE AIR CARRIERS ALL SCHEDULED SERVICE 1963 - 1973			PER MI AIRCRAF	LLION T-MILES		PER 100,000 AIRCRAFT-HOURS		PER 100,000 DEPARTURES			
	YEAR	TOTAL	FATAL	AIRCRAFT- MILES FLOWN (000)	AIRCRAFT- HOURS FLOWN	DEPARTURES	TOTAL ACC IDENTS	FATAL ACCIDENTS	TOTAL ACCIDENTS	FATAL ACCIDENTS	TOTAL ACCIDENTS	FATAL ACCIDENTS	
	1963	54	6	1,094,525	3,604,228	3,787,779	0.049	0.005	1.498	0.166	1.426	0.158	
	1964	59	11	1,189,135	3,774,771	3,954,083	0.049	0.008	1.537	0.265	1.467	0.253	
	1965	65	8	1,353,499	4,071,987	4,197,489	0.048	0.006	1.596	0.196	1.549	0.191	
	1966	56	5	1,482,273	4,232,982	4,373,229	0.038	0.003	1.323	0.118	1.281	0.114	
	1967	54	8	1,833,563	4,924,080	4,945,969	0.029	0.004	1.097	0.162	1.092	0.162	
	1968	56	13*	2,146,038	5,521,931	5,299,987	0.026	0.005	1.014	0.199	1.057	0.208	
-23-	1969	51	8	2,385,082	5,892,254	5,377,302	0.021	0.003	0.866	0.136	0.948	0.149	
	1970	43	4	2,417,550	5,780,503	5,100,201	0.018	0.002	0.744	0.069	0.843	0.078	
	1971	43	7*	2,380,664	5,706,270	4,999,093	0.018	0.002	0.754	0.088	0.860	0.100	
	1972	46	7	2,347,846	5,659,485	4,966,256	0.020	0.003	0.813	0.124	0.926	0.141	
	1973PREL	. 35	8	2,457,000**	5,921,000**	5,126,000**	* 0.014	0.003	0.591	0.135	0.683	0.156	

^{*} INCLUDES 2 MIDAIR COLLISIONS NONFATAL TO AIR CARRIER OCGUPANTS, EXCLUDED IN FATAL ACCIDENT RATES.

NOTE--A SABOTAGE ACCIDENT OCCURRING 5/7/64 IS INCLUDED IN ALL COMPUTATIONS EXCEPT RATES.

NATIONAL TRANSPORTATION SAFETY BOARD WASHINGTON, D. C. 20591
JANUARY 9, 1974

^{**} ESTIMATED BY CAB.

ACCIDENTS, FATALITIES, FATALITY RATES U. S. CERTIFICATED ROUTE AIR CARRIERS SCHEDULED DOMESTIC AND INTERNATIONAL PASSENGER SERVICE 1963 - 1973

	ACCI	DENTS	F	ATAL:	ITIES		DACCENCERC	PASSENGER- MILES FLOWN	RATE PER 100 MILLION PASSENGER- MILES FLOWN	
YEAR	TOTAL	FATAL	PASG	CREW	отн	TOT	PASSENGERS CARRIED**	(000)		
1963	49	5	121	24	0	145	71,437,828	52,703,333	0.230	
1964	53	9	200	26	1	227	81,762,273	61,022,488	0.261	
1965	63	7	226	27	0	253	94,662,314	71,796,399	0.315	
1966	53	4	59	13	0	72	109,390,556	83,142,197	0.071	
1967	51	8	226	24	5	25,5	132,088,038	103,381,996	0.219	
1968	53	13*	305	34	6	345	150,162,701	119,612,578	0.255	
1969	48	7	1 32	17	3	152	159,213,414	132,161,593	0.100	
1970	39	2	2	0	1	3	171,697,097	139,157,806	0.001	
1971	41	6*	174	14	6	194	173,664,737	145,678,876	0.119	
1972	43	7	160	13	13	186	188,938,932	159,722,015	0.100	
1973P	31	6	197	20	0	217	204,700,000#	166,400,000#	0.118	

P PRELIMINARY

* INCLUDES MIDAIR COLLISIONS NONFATAL TO AIR CARRIER OCCUPANTS.

** BEGINNING IN 1970, CARRIERS WERE REQUIRED TO REPORT REVENUE PASSENGER ENPLANEMENTS, WHEREAS PRIOR TO 1970 REVENUE PASSENGER ORIGINATIONS WERE REPORTED.

ESTIMATED BY CAB.

NOTE--PASSENGER DEATHS OCCURRING IN SABOTAGE ACCIDENTS ARE INCLUDED IN THE PASSENGER FATALITY COLUMN BUT EXCLUDED IN THE COMPUTATION OF PASSENGER FATALITY RATES(1964-41).

NATIONAL TRANSPORTATION SAFETY BOARD WASHINGTON, D. C. 20591
JANUARY 9, 1974

PASC FATALITY

ACCIDENTS, FATALITIES, FATALITY RATES
U. S. CERTIFICATED ROUTE AIR CARRIERS
SCHEDULED DOMESTIC PASSENGER SERVICE
1963 - 1973

	ACCIO	DENTS	F	FATAL	ITIES	;	0.4.655.4050.6	PASSENGER-	RATE PER 100 MILLION	
YEAR	TOTAL	FATAL	PASG	CREW	0TH	TOT	PASSENGERS CARRIED**	MILES FLOWN (000)	PASSENGER- MILES FLOWN	
1963	39	4	48	16	0	64	63,924,577	40,263,416	0.119	
1964	45	6	106	14	0	120	72,987,736	46,044,743	0.141	
1965	55	6	205	18	0	223	84,466,884	54,254,616	0.378	
1966	50	4	59	13	0	72	97,745,566	62,964,948	0.094	
1967	43	8	226	24	5	255	118,663,542	78,911,773	0.286	
1968	42	11*	258	24	6	288	134,434,632	91,668,180	0.281	
1969	36	7	132	17	3	152	142,364,035	100,815,837	0.131	
1970	32	1	0	0	1	1	155,097,644	109,183,837	0	
1971	33	6*	174	14	6	194	156,097,403	113,240,603	0.154	
1972	37	6	160	13	12	185	169,931,415	123,775,960	0.129	
1973P	28	4	128	10	0	138	185,700,000#	139,900,000#	0.098	

P PRELIMINARY

NOTE--PASSENGER DEATHS OCCURRING IN SABOTAGE ACCIDENTS ARE INCLUDED IN THE PASSENGER FATALITY COLUMN BUT EXCLUDED IN THE COMPUTATION OF PASSENGER FATALITY RATES(1964-41).

NATIONAL TRANSPORTATION SAFETY BOARD WASHINGTON, D. C. 20591
JANUARY 9, 1974

PASS FATALITY

^{*} INCLUDES 2 MIDAIR COLLISIONS NONFATAL TO AIR CARRIER OCCUPANTS.

^{**} BEGINNING IN 1970, CARRIERS WERE REQUIRED TO REPORT REVENUE PASSENGER ENPLANEMENTS, WHEREAS PRIOR TO 1970 REVENUE PASSENGER ORIGINATIONS WERE REPORTED.

[#] ESTIMATED BY CAB.

ACCIDENTS, FATALITIES, FATALITY RATES U. S. CERTIFICATED ROUTE AIR CARRIERS SCHEDULED INTERNATIONAL PASSENGER SERVICE 1963 - 1973

	ACCIDENTS		F	-ATAL:	ITIES			PASSENGER-	PASG FATALIT RATE PER 100 MILLION	
YEAR	TOTAL	FATAL	PASG	CREW	OTH	TOT	PASSENGERS CARRIED*	MILES FLOWN (000)	PASSENGER- MILES FLOWN	
1963	10	1	73	8	0	81	7,513,251	12,439,917	0.587	
1964	8	3 .	94	12	1	107	8,774,537	14,977,745	0.628	
1965	8	1	21	9	0	30	10,195,430	17,541,783	0.120	
1966	3	0 ,	o	0	0	0	11,644,990	20,177,249	0	
1967	8	0	0	0	0	0	13,424,496	24,470,223	0	
1968	11	2	47	10	0	57	15,728,069	27,944,398	0.168	
1969	12	0	0	0	0	0	16,849,379	31,345,756	0	
1970	7	1	2	0	0	2	16,599,453	29,973,969	0.007	
1971	8	0	0	0	0	0	17,567,334	32,438,273	0	
1972	6	1	0	0	1	1	19,007,517	35,946,055	0	
1973P	3	2	69	10	0	79	19,000,000**	35,500,000*	* 0 _° 194	

P PREL IMINARY

NATIONAL TRANSPORTATION SAFETY BOARD WASHINGTON, D. C. 20591
JANUARY 9, 1974

^{*} BEGINNING IN 1970, CARRIERS WERE REQUIRED TO REPORT REVENUE PASSENGER ENPLANEMENTS, WHEREAS PRIOR TO 1970 REVENUE PASSENGER ORIGINATIONS WERE REPORTED.

^{**} ESTIMATED BY CAB.

ACCIDENTS, ACCIDENT RATES AND FATALITIES U. S. SUPPLEMENTAL AIR CARRIERS (ALL OPERATIONS) 1963 - 1973

PER MILLION AIRCRAFT-MILES FLOWN **ACCIDENTS** FATALITIES AIRCRAFT TOTAL FATAL MILES FLOWN CREW OTH TOT (000) ACCIDENTS ACCIDENTS YEAR PASG FATAL -50,692* 0.217 0.059 1963 11 3 1 4 0 5 1964 9 1 2 2 0 50,838* 0.177 0.020 0 5 0 5 62,651* 0.160 0.016 1965 10 1 1966 2 78 7 1 86 84,911* 0.071 0.024 6 96.071* 0.010 1967 1 0 3 0 3 0.042 9 1 0 0 1 113,540* 0.079 0.009 1968 1 1969 0 0 0 0 115,793* 0.017 0 0.065 0.032 15 0 61 92,846* 1970 6 3 46 0 0 0 0 0 102,763* 0.010 1971 1 0 0 93,022* 0.022 0 1972 0 0 0 3 3 0 6 101,200# 0.040 0.010 1973PREL 1

NATIONAL TRANSPORTATION SAFETY BOARD WASHINGTON, D. C. 20591
JANUARY 9, 1974

ACCIDENT RATE

^{*} NONREVENUE MILES NOT REPORTED.

[#] ESTIMATED BY CAB.

ACCIDENTS, FATALITIES, FATALITY RATES U. S. SUPPLEMENTAL AIR CARRIERS PASSENGER OPERATIONS (CIVIL AND MILITARY) 1963 - 1973

	ACC IDENTS		F	FATAL	ITIES		DACCENCEDO	PASSENGER -	RATE PER 100 MILLION		
YEAR		TOTAL	FATAL	PASG	C REW	0TH	TOT	PASSENGERS CARRIED	MILES FLOWN (000)	PASSENGER - MILES FLOWN	
	1963	2	0	0	0	0	0	749,164	1,533,810	0	
	1964	0	0	0	0	0	0	674,489	1,502,018	0	
	1965	0	0	0	0	0	0	1,060,206	2,489,173	0	
	1966	1	1	78	5	0	83	1,597,911	4,125,445	1.891	
	1967	0	0	0	0	0	0	2,315,820	5,995,901	0	
	1968	3	1	1	0	0	1	2,669,466	8,885,783	0.011	
D D	1969	0	0	0	0	0	0	3,705,975	11,134,706	0	
	1970	2	1	46	1	0	47	2,950,224	10,288,728	0.447	
	1971	0	0	0	0	0	0	3,295,803	10,573,646	0	
	1972	0	0	0	0	0	0	3,473,599	10,049,683	0	
	1973P	1	0	0	0	0	0	3,505,000*	11,200,000*	0	

P PRELIMINARY

DASC EATALITY

^{*} ESTIMATED BY CAB.

ACCIDENTS, FATALITIES, RATES U. S. GENERAL AVIATION 1962 - 1973

ACCIDENT RATES

										_
		ACCID	ENT S		AIRCRAFT- HOURS FLOWN	AIRCRAFT- MILES FLOWN	AIRCE	00,000 RAFT- FLOWN	AIRC	ILLION RAFT- FLOWN
	YEAR	TOTAL	FATAL	FATAL IT IES		(000)**		FATAL	TOTAL	FATAL
	1962	4,840	430	857	14,500	1,964,586	33.4	2.97	2.46	0.219
	1963	4,690	482	893	15,106	2,048,574	31.0	3.19	2.29	0.235
	1964	5,069	526	1,083	15,738	2,180,818	32.2	3.34	2.32	0.241
	1965	5,196	538	1,029	16,733	2,562,380	31.1	3.22	2.03	0.210
	1966	5,712	573	1,151##	21,023	3,336,138	27.2	2.73	1.71	0.172
	1967	6,115	603	1,333##	22,153	3,439,964	27.6	2.72	1.78	0.175
-29-	1968*	4,968#	692#	1,399	24,053	3,700,864	20.6	2.86	1.34	0.186
•	1969	4,767	647	1,495##	25,351	3,926,461	18.8	2.55	1.21	0.164
	1970	4,712	641	1,310	26,030	3,207,127***	18.1	2.46	1.47	0.200
	1971	4,651	662	1,405	25,512	3,143,181	18.2	2.59	1.48	0.211
	1972	4,228	683	1,400##	27,300EST	3,400,000EST	15.4	2.52	1.24	0.200
	1973P	4,180	701	1,340	28,200EST	3,500,000EST	14.8	2.49	1.19	0.200

P PRELIMINARY

****BEGINNING IN 1970, THE DECREASE IN AIRCRAFT-MILES FLOWN IS THE RESULT OF A CHANGE IN THE FAA STANDARD FOR ESTIMATING MILES FLOWN.

NATIONAL TRANSPORTATION SAFETY BOARD WASHINGTON, D. C. 20591
JANUARY 9, 1974

^{*} COMMENCING JANUARY 1, 1968, THE DEFINITION OF SUBSTANTIAL DAMAGE WAS CHANGED, THEREFORE, FEWER ACCIDENTS WERE REPORTED. CARE SHOULD BE USED IN COMPARING WITH SIMILAR DATA FOR PRIOR YEARS.

[#] THREE SUICIDE/SABOTAGE ACCIDENTS INCLUDED IN ALL COMPUTATIONS EXCEPT RATES.

^{##} INCLUDES AIR CARRIER FATALITIES(1966-2, 1967-104, 1969-82, 1972-5)
WHEN IN COLLISION WITH GENERAL AVIATION AIRCRAFT.

^{**} SOURCE FAA

ACCIDENTS, ACCIDENT RATES AND FATALITIES

U. S. AIR TAXI
(ALL OPERATIONS)
1964 - 1973

ACCIDENT RATE
PER 100,000
AIRCRAFT HOURS FLOWN

		ACC I		FATALI	TIES					
	YEAR	TOTAL	FATAL	PASSG	CREW	ОТН	TOT	AIRCRAFT HOURS FLOWN≭	TOTAL ACCIDENTS	FATAL ACCIDENTS
	1964	169	23	39	23	0	62	1,659,000	10.19	1.39
	1965	192	25	32	19	2	* 53	1,802,000	10.65	1.39
	1966	217	25	35	25	2	62	1,744,000	12.44	1.43
	1967	237	33	60	31	3	94	1,766,000	13.42	1.87
	1968**	179	46	59	48	4	111	1,999,000	8.95	2.30
1	1969	207	29	105	36	1	142	2,238,000	9.25	1.30
\sim	1970	190	38	53	42	5	100	2,481,000	7.66	1.53
ĭ	1971	148	32	70	36	3	109	2,059,000	7.19	1.55
	1972	137	39	69	38	6	113	2,185,000***	6.27	1.78
	1973#	149	38	54	39	2	95	2,490,906***	5.98	1.53

- # PRELIMINARY DATA.
- * AIRCRAFT HOURS ESTIMATED BY FAA.
- ** DEFINITION OF ACCIDENT CHANGED.
- *** AIRCRAFT HOURS ESTIMATED BY NTSB.

NATIONAL TRANSPORATION SAFETY BOARD WASHINGTON, D. C. 20591

JANUARY 9, 1974

SECTION III
LISTING AND BRIEFS OF ACCIDENTS
U. S. AIR CARRIERS
ALL OPERATIONS
1973

	ı			

U.S. AIR CARRIER ACCIDENTS ALL OPERATIONS 1973(PRELIMINARY) LISTED IN DATE ORDER

FILE NUMBER =====	AIRCRAF REGIST.	DATE	LOCATION	AIRCRA MAKE ====	MODEL ====	INJURY INDEX =====
1 0003	N307EA	011273	MIAMI, FLA	LOCKHEED	L-1011	NONE
1 0001	N8436	012073	ELK GRV VLLG, ILL	BOEING	707	NONE
1 0002	N1302L	022873	NLAS VEGAS, NEV	DOUGLAS	DC-8	SERIOUS
1 0005	N12307	030373	WICHITA, KANS	BOEING	727	MINOR
1 0009	N7577A	030573	DENVER, COLO	BOEING	707	NONE
1 0006	N11ST	031773	PENSACOLA, FLA	LOCKHEED	L-382G	NONE
1 0007	N7002	031773	NHARRISBURG, PA	BOEING	727	SERIOUS
1 0004	N33247	040173	NEW YORK-ATLANTA	DOUGLAS	DC-9	SERIOUS
1 0010	N4 73 PA	040973	MIAMI,FLA	BOEING	707	NONE
1 0008	N601US	042673	TALLAHASSEE, FLA	BOEING	747	SERIOUS
1 0012	N9312K	060473	DILLINGHAM, ALAS	GRUMMAN	G-44A	SERIOUS
1 0014	N5837	061273	PITTSBURGH, PA	CONVAIR	580	MINOR
N153	N863F	062073	BANGOR, ME	DOUGLAS	DC-8	SERIOUS
A053	N45040	062673	DILLINGHAM, ALAS	CESSNA	402	NONE
1 0016	N4508W	062973	NW.YELLOWSTNE, MONT	BOEING	737	SERIOUS
2002	N417PA	072273	NPAPEETE, TAHITI	BOEING	707	FATAL
Z003	N4215	072373	ST.LOUIS, MO	FAIRCHILD	FH22 7 B	FATAL
1 0013	N7370F	072473	NST.LOUIS,MO	BOEING	737	SERIOUS
1 0030	N2 845D	072873	NKODIAK, ALAS	GRUMMAN	G-21A	NONE
2004	N975NE	073173	BOSTON, MASS	DOUGLAS	DC-9	FATAL
M013	N67NA	081073	NMIAMI, FLA	DOUGLAS	DC-10	SERIQUS
1012	N136J	081573	NBEL AIR, MD	BRITISH AC	1-11	SERIOUS
1 0022	N7381F	081673	MISSOULA, MONT	BOEING	737	SERIOUS
1 0021	N821E	082073	NBELLE GLADE, FLA	DOUGLAS	DC-8	SERIOUS
1 0025	N7381F	082273	NRAPID CITY, S DAK	BOEING	737	SERIOUS
1 0024	N2021A	082373	TOGIAK, ALAS	GRUMMAN	G-21A	MINOR

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U.S. AIR CARRIER ACCIDENTS ALL OPERATIONS 1973(PRELIMINARY) LISTED IN DATE ORDER

FILE NUMBER =====	AIRCRAF REGIST.		LOCATION	AIRCRA MAKE ====	MODEL	INJURY INDEX =====
1 0032	N318EA	082573	NGRND TURK IS, BAH	LOCKHEED	L-1011	SERIOUS
1 0020	N18703	082773	NO.ATLANTIC OCEAN	BOEING	707	SERIOUS
L019	N8705T	082873	NO.PACIC OCEAN	BOEING	707	FATAL
1 0023	N 96 76	090473	N.ATLANTIC OCEAN	BOEING	747	SERIOUS
Z005	N 80.2WA	090873	NKING COVE, ALAS	DOUGLAS	DC-8	FATAL
Z006	N94230	092773	NMENA, ARK	CONVAIR	600	FATAL
1 0027	N794FT	100873	TOKYO, JAPAN	DOUGLAS	DC-8	FATAL
Z009	N751	102873	GREENSBORO, NC	BOEING	737	MINOR
L031	N60NA	110373	NSOCORRO, N MEX	DOUGLAS	DC-10	FATAL
Z010	N458PA	110373	BOSTON, MASS	BOEING	707	FATAL
ZO11	N3323L	112773	CHATTANOOGA, TENN	DOUGLAS	DC-9	SERIOUS
Z012	N8967E	112773	AKRON, OHIO	DOUGLAS	DC-9	SERIOUS
C048	N259US	120973	MADISON, WIS	BOEING	727	NONE
1035	N8978E	121773	GREENSBORO, NC	DOUGLAS	DC-9	MINOR
1 0031	N3338L	122173	NLEBANON, NH	DOUGLAS	DC-9	SERIOUS
C066	N2914	122273	DETROIT, MICH	BOEING	727	SERIOUS

U.S. AIR CARRIER ACCIDENTS

ALL OPERATIONS

U.S.CIVIL AVIATION

LISTED IN DATE ORDER

			AIRCRAFT DATA	F S M/N	PURPOSE	PILOT DATA
		MIAMI,FLA		CR- 0 0 13	FERRY	AIRLINE TRANSPORT, AGE 55, 25007 TOTAL HOURS, 190 IN TYPE, INSTRUMENT RATED.
	OPERATOR -	MICH CIDENT	INC. NIENDED DESTINATION		OPERATION G LEVEL OFF/TOUCHDOWN	
	PILOT IN	COMMAND - FAILED T COMMAND - IMPROPER	O FOLLOW APPROVED PRO LEVEL OFF IDLE PWR SETTINGS.	CEDURES,DIRECTI	VES,ETC.	
1-0001	1/20/73 TIME - 0933	ELK GRV VLLG,ILL 3	ROEING 707 N8436 DAMAGE-SURSTANTIAL	CR- 0 0 8 PX- 0 0 64	SCHED DOM PASSG SRV	AIRLINE TRANSPORT, AGE 57, 24061 TOTAL HOURS, 8000 IN TYPE, INSTRUMENT RATED.
	DEPARTURE F CHICAGO TYPE OF ACC	,ILL CIDENT AILURE OR MALFUNCTI	NTENDED DESTINATION HONOLULU, HAWAII	IN FLI	OPERATION GHT CLIMB TO CRUISE GHT CLIMB TO CRUISE	
	MISCELLAN MISCELLAN FACTOR(S) MISCELLAN COMPLETE PO	NT - TURBINE ASSEMB NEOUS ACTS, CONDITIO NEOUS - FOREIGN OBJ NEOUS ACTS, CONDITIO DWER LOSS - COMPLET	ONS - SEPARATION IN FL E ENGINE FAILURE/FLAM	IGHT EOUT-1 ENGINE	RUCT WING DMG FRM SEPD	TURBINE ASSY.

		BKIEF	S UF ACCIDENTS		
FILE	DATE LOC	ATION AIRCRAFT DATA		IGHT RPOSE	PILOT DATA
1-0002	2/28/73 NR.LAS VE TIME - 1254	EGAS, NEV DOUGLAS DC-8 N1302L DAMAGE-NONE	CR- 0 1 8 SCHED PX- 0 0119	DOM PASSG SRV	AIRLINE TRANSPORT, AGE 52, 25000 TOTAL HOURS, 2500 IN TYPE, INSTRUMENT RATED.
	OPERATOR - DELTA A	AIR LINES, INC.			
	DEPARTURE POINT	INTENDED DESTINATION			
	DALLAS, TEX	LAS VEGAS, NEV			
	TYPE OF ACCIDENT		PHASE OF OPERA		
	TURBULENCE		IN FLIGHT [DE SCEND I NG	

PROBABLE CAUSE(S)

WEATHER - TURBULENCE, ASSOCIATED W/CLOUDS AND/OR THUNDERSTORMS
PERSONNEL - OTHER FLIGHT PERSONNEL

MISCELLANEOUS ACTS, CONDITIONS - SEAT BELT NOT FASTENED

FACTOR(S)

MISCELLANEOUS ACTS, CONDITIONS - SEAT BELT SIGN ON
WEATHER BRIEFING - COMPANY DISPATCH
WEATHER FORECAST - FORECAST SUBSTANTIALLY CORRECT

SKY CONDITION
BROKEN
VISIBILITY AT ACCIDENT SITE
UNKNOWN/NOT REPORTED
OBSTRUCTIONS TO VISION AT ACCIDENT SITE
UNKNOWN/NOT REPORTED
TYPE OF FLIGHT PLAN
IFR

CEILING AT ACCIDENT SITE
UNKNOWN/NOT REPORTED
PRECIPITATION AT ACCIDENT SITE
UNKNOWN/NOT REPORTED
TYPE OF WEATHER CONDITIONS
IFR

FILE	DATE LOCATION	AIRCRAFT DATA		FLIGHT PURPOSE	PILOT DATA			
1-0005	3/3/73 WICHITA, KANS TIME - 1250	BOEING 727 N12307 DAMAGE-SUBSTANTIAL	PX- 0 0 60	SCHED DOM PASSG SRV	AIRLINE TRANSPORT, AGE 37, 5730 TOTAL HOURS, 1340 IN TYPE, INSTRUMENT RATED.			
	NAME OF AIRPORT - WICHI OPERATOR - TRANS WORLD	AIRLINES, INC.						
	CHICAGO, ILL	INTENDED DESTINATION WICHITA, KANS						
	TYPE OF ACCIDENT	WICHITAINANS	PHASE (OF OPERATION				
	OVERSHOOT	WN						
	OVERSHOOT GROUND-WATER LOOP-SWERVE LANDING ROLL							
	MISCELLANEOUS ACTS,CO MISCELLANEOUS ACTS,CO FACTOR(S) PILOT IN COMMAND - MI WEATHER - SNOW WEATHER - UNFAVORABLE WEATHER BRIEFING - COMP		WET RUNWAY UND-WATER-LOOP	-SWERVE				
	BROKEN		500	3 AT ACCIDENT SITE				
	VISIBILITY AT ACCIDENT	SITE	PRECIPITATION AT ACCIDENT SITE					
	2 MILES OR LESS			SHOWERS, THUNDERSTORM				
	OBSTRUCTIONS TO VISION	AT ACCIDENT SITE		VE BEARING OF WIND	CDEEC			
	FOG WIND DIRECTION-DEGREES			CROSS WIND 248-292 DE ELOCITY-KNOTS	GKEES			
	110		6	LEGGT T-KNOTS				
	TYPE OF WEATHER CONDITI	ONS	-	F FLIGHT PLAN				
	IFR		IFR					
	REMARKS- UN STOP ON REM	IAINING RWY DUE HYDROPLANIN	G. TURNED OFF	RWY INTO MUD TO TAXIWA	Y.L GR COLLAPSED.			

FILE	DATE LOCA	TION AIRCRAFT DATA	INJURIES	FLIGHT	PILOT DATA			
	3/5/73 DENVER,CO TIME - 1057		CR- 0 0 3 F PX- 0 0 0	ERRY				
	NAME OF AIRPORT - S OPERATOR - AMERICAN DEPARTURE POINT DENVER, COLO TYPE OF ACCIDENT GROUND-WATER LOOP- COLLISION WITH GRO	AIRLINES, INC. INTENDED DESTINATION TULSA, OKLA	PHASE OF TAKEOFF TAKEOFF					
	PROBABLE CAUSE(S) PILOT IN COMMAND - IMPROPER OPERATION OF POWERPLANT & POWERPLANT CONTROLS PILOT IN COMMAND - FAILED TO MAINTAIN DIRECTIONAL CONTROL PILOT IN COMMAND - FAILED TO ARORT TAKEOFF PILOT IN COMMAND - PREMATURE LIFT-OFF FACTOR(S) PILOT IN COMMAND - INADEQUATE PREFLIGHT PREPARATION AND/OR PLANNING FIRE AFTER IMPACT REMARKS- 3 ENG FERRY, ACFT VEERED R 3 TIMES, PLT CONT TKOF. L WG TIP, NR 1 ENG HIT GRND. T/D TO R OF RWY IN YAW.							
	KEMAKKS- 3 ENG FERK	Y, ACFT VEEKED K 3 TIMES, PLT CL	INT TRUF•L WG TIP•	ONK I ENG HII GRND.170 I	U R OF RWY IN YAW.			
1-0006	3/17/73 PENSACOL TIME - 1645	A,FLA LOCKHEED L-382G N11ST DAMAGE-SURSTANTIAL	PX- 0 0 0	MILITARY CTR CARGO DOM	ATR.FLIGHT INSTR., AGE 47, 18500 TOTAL HOURS, 1800 IN TYPE, INSTRUMENT RATED.			
	NAME OF AIRPORT - NAS PENSACOLA OPERATOR - SATURN AIRWAYS, INC.							
		INTENDED DESTINATION	JACKSO PHASE OF	OUTE STOP ONVILLE,FLA OPERATION G LEVEL OFF/TOUCHDOWN				
	AIRFRAME - LANDIN MISCELLANEOUS ACT	ENANCE, SERVICING, INSPECTION I G GEAR NOSEWHEEL ASSEMBLIES S, CONDITIONS - FATIGUE FRACTUR ROSION-NOSE GR CYLINDER.PITS N	E					

DATE	LOCATION	AIRCRAFT DATA	INJURIES F S M/N	FLIGHT PURPOSE	PILOT DATA
3/17/73 NR.HAR TIME - 0800	RISBURG, PA	BOEING 727 N7002 DAMAGE-NONE	CR- 0 2 5 PX- 0 0 69	SCHED DOM PASSG SRV	AIRLINE TRANSPORT, AGE 43, 12049 TOTAL HOURS, 2880 IN TYPE, INSTRUMENT RATED.
DEPARTURE POINT WASHINGTON, D	c	INTENDED DESTINATION			
WEATHER - TUR PERSONNEL - O MISCELLANEOUS FACTOR(S) MISCELLANEOUS WEATHER BRIEFIN	BULENCE, ASSO THER FLIGHT P ACTS, CONDITI ACTS, CONDITI G - COMPANY D	ERSONNEL DNS - SEAT BELT NOT F DNS - SEAT BELT SIGN ISPATCH	A STENED ON		
ZERO OBSTRUCTIONS TO NONE	VISION AT AC	CIDENT SITE	UNK NO PRECIPI THUND	WN/NOT REPORTED TATION AT ACCIDENT SIT ERSTORM	E
REMARKS- KNOWN	TSTMS IN AREA	OBS ON RADAR. ENCOUN	ITERED MDT TO SE	VERE TURB.	
4/1/73 NEW TIME - 2005	YNRK-ATLANTA	DOUGLAS DC-9 N33247 DAMAGE-NONE	CR- 0 1 4 PX- 0 0 50	SCHED DOM PASSG SRV	AIRLINE TRANSPORT, AGE 36, 9000 TOTAL HOURS, 1100 IN TYPE, INSTRUMENT RATED.
DEPARTURE POINT JAMAICA,NY		INTENDED DESTINATION			, and the second
WEATHER - TUR WEATHER - TUR WEATHER BRIEFING	BULENCE IN FL BULENCE, ASSOC G - COMPANY D	CIATED W/CLOUDS AND/C ISPATCH	R THUNDERSTORMS		
	CCIDENT SITE		UNK NO PRECIPI NONE ,	WN/NOT REPORTED	E
-	3/17/73 NR.HAR TIME - 0800 OPERATOR - UNIT DEPARTURE POINT WASHINGTON,D TYPE OF ACCIDEN TURBULENCE PROBABLE CAUSE(WEATHER - TURI PERSONNEL - O MISCELLANEOUS FACTOR(S) MISCELLANEOUS WEATHER RRIEFIN WEATHER FORECAS SKY CONDITION OVERCAST VISIBILITY AT AV ZERO OBSTRUCTIONS TO NONE TYPE OF FLIGHT IFR REMARKS- KNOWN 4/1/73 NEW TIFE REMARKS- KNOWN 4/1/73 NEW TIFE COPERATOR - DELT DEPARTURE POINT JAMAICA,NY TYPE OF ACCIDEN TURBULENCE PROBABLE CAUSE(S) WEATHER - TURN WEATHER - TURN WEATHER FORECAS SKY CONDITION UNKNOWN/NOT RI VISIBILITY AT ACCIT	3/17/73 NR.HARRISBURG, PA TIME - 0800 OPERATOR - UNITED AIR LINES, DEPARTURE POINT WASHINGTON, DC TYPE OF ACCIDENT TURBULENCE PROBABLE CAUSE(S) WEATHER - TURBULENCE, ASSOU PERSONNEL - OTHER FLIGHT P MISCELLANEOUS ACTS, CONDITION OVERCAST VISIBILITY AT ACCIDENT SITE ZERO OBSTRUCTIONS TO VISION AT ACCOMMENTATION IFR REMARKS- KNOWN TSTMS IN AREAS 4/1/73 NEW YORK-ATLANTA TIME - 2005 OPERATOR - DELTA AIR LINES, IN DEPARTURE POINT JAMAICA, NY TYPE OF ACCIDENT TURBULENCE PROBABLE CAUSE(S) WEATHER - TURBULENCE IN FLI WEATHER RIFEING - COMPANY D WEATHER RIFEING - COMPANY D WEATHER - TURBULENCE IN FLI WEATHER RIFEING - COMPANY D WEATHER FORECAST - UNKNOWN/NO SKY CONDITION UNKNOWN/NOT REPORTED VISIBILITY AT ACCIDENT SITE	3/17/73 NR.HARRISBURG, PA TIME - 0800 DERATOR - UNITED AIR LINES, INC. DEPARTURE POINT WASHINGTON, DC TYPE OF ACCIDENT TURBULENCE PROBABLE CAUSE(S) WEATHER - TURBULENCE, ASSOCIATED W/CLOUDS AND/OF PERSONNEL - OTHER FLIGHT PERSONNEL MISCELLANEOUS ACTS, CONDITIONS - SEAT BELT NOT FACTOR(S) MISCELLANEOUS ACTS, CONDITIONS - SEAT BELT SIGN WEATHER BRIEFING - COMPANY DISPATCH WEATHER FORECAST - FORECAST SUBSTANTIALLY CORRECT SKY CONDITION OVERCAST VISIBILITY AT ACCIDENT SITE ZERO OBSTRUCTIONS TO VISION AT ACCIDENT SITE NONE TYPE OF FLIGHT PLAN IFR REMARKS - KNOWN TSTMS IN AREA, OBS ON RADAR. ENCOUN 4/1/73 NEW YORK-ATLANTA DOUGLAS DC-9 N33247 DAMAGE-NONE OPERATOR - DELTA AIR LINES, INC. DEPARTURE POINT INTENDED DESTINATION JAMAICA, NY ATLANTA, GA TYPE OF ACCIDENT TURBULENCE PROBABLE CAUSE(S) WEATHER - TURBULENCE IN FLIGHT, CLEAR AIR WEATHER - TURBULENCE, ASSOCIATED W/CLOUDS AND/OF WEATHER BRIEFING - COMPANY DISPATCH WEATHER FORECAST - UNKNOWN/NOT REPORTED VISIBILITY AT ACCIDENT SITE SKY CONDITION UNKNOWN/NOT REPORTED VISIBILITY AT ACCIDENT SITE	3/17/73 NR.HARRISBURG,PA BOEING 727 CR- 0 2 5 TIME - 0800 N7002 PX- 0 0 69 DAMAGE-NONE OPERATOR - UNITED AIR LINES,INC. DEPARTURE POINT INTENDED DESTINATION WASHINGTON,DC BUFFALO,NY TYPE OF ACCIDENT ON FACE PROBABLE CAUSE(S) WEATHER - TURBULENCE, ASSOCIATED W/CLOUDS AND/OR THUNDERSTORMS PERSONNEL - OTHER FLIGHT PERSONNEL MISCELLANEOUS ACTS,CONDITIONS - SEAT BELT NOT FASTENED FACTOR(S) MISCELLANEOUS ACTS,CONDITIONS - SEAT BELT NOT FASTENED FACTOR(S) MISCELLANEOUS ACTS,CONDITIONS - SEAT BELT NOT FASTENED FACTOR(S) MISCELLANEOUS ACTS,CONDITIONS - SEAT BELT SIGN ON WEATHER RRIEFING - COMPANY DISPATCH WEATHER FORECAST - FORECAST SUBSTANTIALLY CORRECT SKY CONDITION OVERCAST VISIBILITY AT ACCIDENT SITE PRECIPI TYPE OF FLIGHT PLAN IFR REMARKS- KNOWN TSTMS IN AREA,OBS ON RADAR. FNCOUNTERED MDT TO SE 4/1/73 NEW YORK-ATLANTA DOUGLAS DC-9 CR- 0 1 4 TIME - 2005 N33247 PX- 0 0 50 DEPARTURE POINT INTENDED DESTINATION JAMAGE-NONE OPERATOR - DELTA AIR LINES,INC. DEPARTURE POINT INTENDED DESTINATION JAMAGE-NONE OPERATOR - DELTA AIR LINES,INC. DEPARTURE POINT INTENDED DESTINATION JAMAGE-NONE OPERATOR - TURBULENCE IN FLIGHT, CLEAR AIR WEATHER TURBULENCE, ASSOCIATED W/CLOUDS AND/OR THUNDERSTORMS WEATHER RRIEFING - COMPANY DISPATCH WEATHER RRIEFING - COMPANY DISPATCH WEATHER FORECAST - UNKNOWN/NOT REPORTED SKY CONDITION UNKNOWN/NOT REPORTED VISIBILITY AT ACCIDENT SITE PRECIPI SKY CONDITION UNKNOWN/NOT REPORTED VISIBILITY AT ACCIDENT SITE PRECIPI PRECIPI CEILING UNKNOWN/NOT REPORTED VISIBILITY AT ACCIDENT SITE PRECIPI PRECIPI PRECIPI OFFICIAL PROPORTED VINNO UNKNOWN/NOT REPORTED VISIBILITY AT ACCIDENT SITE PRECIPI PRE	## S M/N PURPOSE 3/17/73 NR, HARRISAURG, PA ROEING 727 CR 0 2 5 SCHED DOM PASSG SRV TIME - 0800 DAMAGE-NONE OPERATOR - UNITED AIR LINES, INC. DEPARTURE POINT INTENDED DESTINATION WASHINGTON, DC TYPE OF ACCIDENT OF THE FLIGHT PERSONNEL MISCELLANEUS ACTS, CONDITIONS - SEAT BELT NOT FASTENED FACTOR(S) MEATHER - TURBULENCE, ASSOCIATED W/CLOUDS AND/OR THUNDERSTORMS PERSONNEL - OTHER FLIGHT PERSONNEL MISCELLANEOUS ACTS, CONDITIONS - SEAT BELT NOT FASTENED FACTOR(S) MISCELLANEOUS ACTS, CONDITIONS - SEAT BELT NOT FASTENED FACTOR(S) MISCELLANEOUS ACTS, CONDITIONS - SEAT BELT NOT FASTENED FACTOR(S) MISCELLANEOUS ACTS, CONDITIONS - SEAT BELT SIGN ON WEATHER FORECAST - FORECAST SUBSTANTIALLY CORRECT SKY CONDITION OVERCAST VISIBILITY AT ACCIDENT SITE ZERO OBSTRUCTIONS TO VISION AT ACCIDENT SITE NONE TYPE OF FLIGHT PLAN IFR REMARKS- KNOWN TSTMS IN AREA, ORS ON RADAR. FNCOUNTERED MOT TO SEVERE TURR. 4/1/73 NEW YORK-ATLANTA DOUGLAS DC-9 CR- 0 1 4 SCHED DOM PASSG SRV TIME - 2005 N33247 PX- 0 0 50 DAMAGE-NONE OPERATOR - DELTA AIR LINES, INC. DEPARTURE POINT INTENDED DESTINATION JAMALCA, NY TYPE OF ACCIDENT TURBULENCE PROBABLE CAUSE(S) WEATHER - TURBULENCE, ASSOCIATED W/CLOUDS AND/OR THUNDERSTORMS WEATHER - TURBULENCE, ASSOCIATED W/CLOUDS AND/OR THUNDERSTORMS WEATHER - TURBULENCE, ASSOCIATED W/CLOUDS AND/OR THUNDERSTORMS WEATHER TORGAST - UNKNOWN/NOT REPORTED SKY CONDITION UNKNOWN/NOT REPORTED VISIBILITY AT ACCIDENT SITE VPC. OR OTHER TION TORMAL CRUISE PROBABLE CAUSE SI WEATHER TORMAL CRUISE PROBABLE CAUSE SI WEATHER TORMAL C

		ATION AIRCRAFT DATA	F S M/N	PURPOSE	PILOT DATA
	4/9/73 MIAMI,FL TIME - 0302	LA BOEING 707	CR- 0 0 3 PX- 0 0 0	SCHED INTERNATE CARGO	O SRV AIRLINE TRANSPORT, AGE UNK/NR, 11775 TOTAL HOURS, 2975 IN TYPE, INSTRUMENT RATED.
	NAME OF AIRPORT - NOPERATOR - PAN AMER DEPARTURE POINT MIAMI,FLA TYPE OF ACCIDENT GEAR COLLAPSED	MIAMI INTL RICAN WORLD AIRWAYS,INC. INTENDED DESTINAT: CARACAS,VENEZUE	ELA PHASE O	F OPERATION TO TAKEOFF	
	MISCELLANEOUS ACT	NG GEAR NOSEWHEEL ASSEMBLIE TS,CONDITIONS - FATIGUE FRAC JTER CYL FAILED DURING RWY L	CTURE	TED PRE-EXISTING STRE	SS CORROSION CRACK.
-0008	4/26/73 TALLAHAS TIME - 1345	SSEE,FLA BOEING 747 N601US DAMAGE-NONE	CR- 0 0 10 PX- 0 1 90	SCHED DOM PASSG SRV	AIRLINE TRANSPORT, AGE 51, 21000 TOTAL HOURS, 715 IN TYPE, INSTRUMEN RATED.
	OPERATOR - NORTHWES DEPARTURE POINT CHICAGO, ILL TYPE OF ACCIDENT TURBULENCE	ST AIRLINES,INC. INTENDED DESTINAT: TAMPA,FLA	PHASE O	F OPERATION IGHT NORMAL CRUISE	NATED.
	PERSONNEL - MISCE MISCELLANEOUS ACT FACTOR(S)	ENCE IN FLIGHT, CLEAR AIR ELLANEOUS-PERSONNEL PASSFNO TS, CONDITIONS - SEAT BELT NO TS, CONDITIONS - SEAT BELT S	DT FASTENED		
	SKY CONDITION SCATTERED VISIBILITY AT ACCID 5 OR OVER OBSTRUCTIONS TO VIS	DENT SITE SION AT ACCIDENT SITE	UNLIM PRECIPI NONE TYPE OF	AT ACCIDENT SITE ITED TATION AT ACCIDENT SITE WEATHER CONDITIONS	re .
	NONE TYPE OF FLIGHT PLAN IFR REMARKS- CREW DID N	N Not warn pax on p.a. of ture	VFR B AND TO FASTEN SEA	T BELTS.	

FILE	DATE LOCATION	AIRCRAFT DATA	INJURIES F S M/N	FLIGHT PURPOSE	PILOT DATA
	6/4/73 DILLINGHAM, AL TIME - 1712 NAME OF AIRPORT - DILLIN OPERATOR - KODIAK AIRWAY DEPARTURE POINT MANDKOTAK, ALAS TYPE OF ACCIDENT TURBULENCE COLLISION WITH GROUND/ PROBABLE CAUSE(S) PILOT IN COMMAND - MIS MISCELLANEOUS - VORTEX	AS GRUMMAN G-44A N9312R DAMAGE-SUBSTANTIAL GHAM S,INC. INTENDED DESTINATION DILLINGHAM, ALAS WATER UNCONTROLLED JUDGED DISTANCE, SPEED, AND	CR- 0 1 0 PX- 0 0 0	SCHED DOM PASSG SRV F OPERATION NG FINAL APPROACH IGHT UNCONTROLLED DESC	COMMERCIAL, AGE 61, 18873 TOTAL HOURS, 2323 IN TYPE, INSTRUMENT RATED.
1-0014	6/12/73 PITTSBURGH, PATIME - 0910 NAME OF AIRPORT - GRTR POPERATOR - ALLEGHENY AIR DEPARTURE POINT BALTIMORE, MD TYPE OF ACCIDENT MISCELLANEOUS GEAR COLLAPSED	N 583 7 DA MA GE - SUR STA NTIAL ITT SBURGH	PX- 0 050 LAST EN PITTS PHASE 0 TAKEO		AIRLINE TRANSPORT, AGE UNK/NR, 11433 TOTAL HOURS, 2944 IN TYPE, INSTRUMENT RATED.
	MISCELLANEOUS ACTS, CON FACTOR(S) MISCELLANEOUS ACTS, CON EMERGENCY CIRCUMSTANCES	R NOSEWHEEL ASSEMBLIES DITIONS - FATIGUE FRACTUR DITIONS - PREVIOUS DAMAGE - PRECAUTIONARY LANDING O SUSPECTED MECHANICAL DI UNUSUAL NOISE DRAG STRUT FAILED. NOSE	N AIRPORT SCREPANCY	ACT ON PREVIOUS TKOF.	
-N1 53	6/20/73 BANGOR, ME TIME - 0026 OPERATOR - OVERSEAS NATI TYPE OF ACCIDENT FIRE OR EXPLOSION ON	DAMAGE-SURSTANTIAL DNAL AIRWAYS,INC.	PHASE O	NS/CTR REVENUE PASSG I F OPERATION FF ABORTED	INTL NOT AVAILABLE
	UNDER INVESTIGATION REMARKS- DURING TAKEOFF	ACFT DEVELOPED A FIRE IN	THE RIGHT LANDI	NG GEAR.ACFT WAS EVACUA	ATED VIA SLIDES.

FILE	DATE LOCATION	AIRCRAFT DATA	INJURIES F S M/N	FLIGHT PURPOSE	PILOT DATA			
	6/26/73 DILLINGHAM, ALAS TIME - 1935		CR- 0 0 2 PX- 0 0 0					
	OPERATOR - KODIAK AIRWAYS,IN TYPE OF ACCIDENT GEAR RETRACTED		PHASE O	F OPERATION NG ROLL				
	UNDER INVESTIGATION							
1-0016	6/29/73 NR.W.YELLOWSTNE,MON TIME - 1607	N4 508 W DAMAGE-NONE	CR- 0 1 4 PX- 0 0 34	SCHED DOM PASSG SRV	AIRLINE TRANSPORT, AGE 38, 7810 TOTAL HOURS, 710 IN TYPE, INSTRUMENT RATED.			
	OPERATOR - WESTERN AIR LINES,INC. DEPARTURE POINT INTENDED DESTINATION LAST ENROUTE STOP GREAT FALLS,MONT SALT LAKE CITY,UT W.YELLOWSTNE,MONT TYPE OF ACCIDENT PHASE OF OPERATION TURBULENCE IN FLIGHT NORMAL CRUISE							
	PROBABLE CAUSE(S) WEATHER - TURBULENCE, ASSO PERSONNEL - OTHER FLIGHT P MISCELLANEOUS ACTS, CONDITI FACTOR(S) MISCELLANEOUS ACTS, CONDITI WEATHER BRIEFING - COMPANY D WEATHER FORECAST - FORECAST	ERSONNEL ONS - SEAT BELT NO T F ONS - SEAT BELT SIGN ISPATCH	ASTENED ON					
	SKY CONDITION BROKEN VISIBILITY AT ACCIDENT SITE 1/4 MILE OR LESS OBSTRUCTIONS TO VISION AT AC NONE TYPE OF FLIGHT PLAN	CIDENT SITE	8000 PRECIPI THUND	AT ACCIDENT SITE TATION AT ACCIDENT SITE ERSTORM, RAIN SHOWERS WEATHER CONDITIONS	E			
	IFR REMARKS- FLT ATTNOT DISREGAR	DED SEAT BELT SIGN &	P/A WARNING.					
- Z002	7/22/73 NR.PAPEETE, TAHITI TIME - 2215	DA MA GE-DESTRO YED	CR- 10 0 0 PX- 69 0 0	SCHED INTERNATL PASSG	SRV NOT AVAILABLE			
	OPERATOR - PAN AMERICAN WORL TYPE OF ACCIDENT FIRE OR EXPLOSION IN FLIG			OF OPERATION OFF INITIAL CLIMB				
	UNDER INVESTIGATION REMARKS- INVESTIGATION UNDER	THE JURISDICTION OF	THE FRENCH GOVE	ERNMENT.				

				INJURIES FLIGH F S M/N PURPO		PILOT DATA
	7/23/73 ST.LOU TIME - 1747		FAIRCHILD FH227B	CR- 1 2 0 SCHED DO PX- 37 4 0		
	OPERATOR - OZARK TYPE OF ACCIDENT COLLISION WITH			PHASE OF OPERAT LANDING FINAL		
	UNDER INVESTIGATI REMARKS- WEA-		EAVY RAIN SHWRS,TST	M IN AREA.		
1-0013	7/24/73 NR.ST.LO TIME - 1521	UIS,MO	ROEING 737 N7370F DAMAGE-NONE	CR- 0 1 5 SCHED DO	DM PASSG SRV	AIRLINE TRANSPORT, AGE 52, 24615 TOTAL HOURS, 2511 IN TYPE, INSTRUMENT RATED.
	OPERATOR - FRONTI DEPARTURE POINT ST.LOUIS, MO TYPE OF ACCIDENT TURBULENCE	IV	NC. ITENDED DESTINATION DENVER, COLD	PHASE OF OPERAT: IN FLIGHT CL		NATED.
	PERSONNEL - OTH FACTOR(S) WEATHER - THUND MISCELLANEOUS A WEATHER BRIEFING	ER FLIGHT PER ERSTORM ACTIV CTS, CONDITION - COMPANY DIS	ITY S - SEAT BELT SIGN	ON		
	SKY CONDITION OVERCAST VISIBILITY AT ACC ZERO OBSTRUCTIONS TO V NONE TYPE OF FLIGHT PL	ISION AT ACCI	DENT SITE	CEILING AT ACCII UNKNOWN/NOT RE PRECIPITATION AT THUNDERSTORM TYPE OF WEATHER IFR	PORTED C ACCIDENT SITE	

	DATE LOCATION	AIRCRAFT DATA	F S M/N	FLIGHT PURPOSE	PILOT DATA
	7/28/73 NR.KODIAK,ALAS TIME - 1940		CR- 0 0 1 PX- 0 0 4	NS/CTR REVENUE PASSG D	OM COMMERCIAL, FL.INSTR., AGE 46, 6000 TOTAL HOURS, 1100 IN TYPF, INSTRUMENT RATED.
	OPERATOR - KODIAK AIRWAY DEPARTURE POINT BROOKS CAMP, ALAS TYPE OF ACCIDENT TURBULENCE COLLISION WITH GROUNDA	INTENDED DESTINATION KODIAK, ALAS	LANDI	F OPERATION NG FINAL APPROACH IGHT UNCONTROLLED DESC	
	PROBABLE CAUSE(S) WEATHER - OTHER FACTOR(S) MISCELLANEOUS ACTS, CON WEATHER BRIEFING - COMPA WEATHER FORECAST UNKNO MISSING AIRCRAFT - LATER	WN/NOT REPORTED	O REST IN WATER		
	SKY CONDITION UNKNOWN/NOT REPORTED VISIBILITY AT ACCIDENT S 5 OR OVER OBSTRUCTIONS TO VISION A NONE TYPE OF FLIGHT PLAN		1800 PRECIPI NONE	AT ACCIDENT SITE TATION AT ACCIDENT SITE WEATHER CONDITIONS	
	VFR REMARKS— ENCOUNTERED LOC	CAL CYCLONIC COND & WATER	SPOUT JUST BFOR	. LDG FLARE. RECOVERY DA	TE 7/29/73.
- Z O O 4	7/31/73 BOSTON, MASS TIME - 1008	N975NF DAMAGE-DESTROYED	CR- 6 0 0 PX- 82 1 0	SCHED DOM PASSG SRV	NOT AVAILABLE
	OPERATOR - DELTA AIR LIN TYPE OF ACCIDENT COLLIDED WITH ORJECT	ES,INC.		F OPERATION NG FINAL APPROACH	
	UNDER INVESTIGATION FIRE AFTER IMPACT REMARKS- WEA-LOW CLG	,VIS,FOG. HIT SEA WALL.			
-M013	8/10/73 NR.MIAMI,FLA TIME - 1000	DOUGLAS DC-10 N67NA DAMAGE-NONE	CR- 0 1 12 PX- 0 0218	SCHED DOM PASSG SRV	NOT AVAILABLE
	OPERATOR - NATIONAL AIRL TYPE OF ACCIDENT MISCELLANEOUS	INES, INC		F OPERATION IGHT NORMAL CRUISE	
	UNDER INVESTIGATION REMARKS- CABIN ATTND INJ	IN FOOD SERVICE ELFVATOR	•		

FILE	DATE	LUCATION	AIRCRAFT DATA	INJU	JRIES S M/N	FLIGHT I PURPOSE	PILOT DATA		
-1012	8/15/73 NR.BE TIME - 1600	L AIR,MD	BRITISH AC 1-11 N136J DAMAGE-NONE	CR- (0 4	SCHED DOM PASSG SRV	NOT AVAILABLE		
	OPERATOR - ALL TYPE OF ACCIDE TURBULENCE	EGHENY AIRLINES, NT				OF OPERATION LIGHT DESCENDING			
	UNDER INVESTIG	ATION				,			
						•			
1-0022	8/16/73 MIS TIME - 0740	SOU LA, MONT	BOEING 737 N7381F DAMAGE-NONE	CR- (0 1 5 0 0 5	5 SCHED DOM PASSG SRV	AIRLINE TRANSPORT, AGE 52, 25586 TOTAL HOURS, UNK/NR IN TYPE, INSTRU- MENT RATED.		
		T N T	INC. NTENDED DESTINATION ST LOUIS,MO			OF OPERATION -LIGHT NORMAL CRUISE			
		IGHT CONTROL SY:	STEMS RUDDER AND RUE SYSTEM TRANSFER VALVE		R CONT	RNL SYSTEM			
1-0021	8/20/73 NR.BE TIME - 1640	LLE GLADE,FLA		CR- PX-		7 SCHED DOM PASSG SRV 3	AIRLINE TRANSPORT, AGE 42, 13298 TOTAL HOURS, 1997 IN TYPE, INSTRUMENT RATED.		
	OPERATOR - DELTA AIR LINES,INC. DEPARTURE POINT INTENDED DESTINATION LAST ENROUTE STOP								
	DEPARTURE POIN LOS ANGELES TYPE OF ACCIDE TURBULENCE	,CALIF	NTENDED DESTINATION SAN JUAN, PR		NE PHASE	ENROUTE STOP W ORLEANS,LA OF OPERATION FLIGHT NORMAL CRUISE			
	PERSONNEL - MISCELLANEOU FACTOR(S) MISCELLANEOU WEATHER - TH WEATHER BRIEFI	RRULENCE IN FLI OTHER FLIGHT PE S ACTS, CONDITION S ACTS, CONDITION UNDERSTORM ACTI NG - COMPANY DI	RSONNEL NS - SEAT BELT NOT FA NS - SEAT BELT SIGN (VITY						
	SKY CONDITION RROKEN VISIBILITY AT UNKNOWN/NOT		IDENT SITE		UNK PRECI NON	NG AT ACCIDENT SITE NOWN/NOT REPORTED PITATION AT ACCIDENT SITE E OF WEATHER CONDITIONS			
	NONE TYPE OF FLIGHT IFR		AVERY SAIL		VFR				

FILE	DATE	LOCATION	AIRCRAFT DATA	INJU F	RIES S M/N	FLIGHT PURPOSE		PILOT DATA
								ATR,FLIGHT INSTR., AGF 49, 20112 TOTAL HOURS, 2050 IN TYPE, INSTRUMENT RATED.
		DAK CIDENT	NTENDED DESTINATION TUCSON.ARI7		ALBU PHASE O	ROUTE STOP QUERQUE,N MEX F OPERATION IGHT NORMAL CRU	UISE	
	MISCELLA MISCELLA FACTOR(S) PILOT IN	- FLIGHT CONTROL SY NEOUS ACTS, CONDITIO NEOUS ACTS, CONDITIO COMMAND - FAILED T	STEMS FLIGHT CONTROL NS - FLUCTUATING NS - INTERFERENCE WIT O FOLLOW APPROVED PRO DAMPER-INDUCED RUDDEF	TH FLIGH	T CONTR	OLS IVES,ETC.	SYS.CTL MAL	F DRG PREV TKOF.
-0024		TOGIAK, ALAS	GRUMMAN G-21A N2021A DAMAGE-SURSTANTIAL		0 1 0 0	FERRY		ATR, FLIGHT INSTR., AGE 41, 5491 TOTAL HOURS, 50 IN TYPE, INSTRUMENT RATED.
	OPERATOR - DEPARTURE TOGIAK TYPE OF AC	CANERY, ALAS CIDENT ATER LOOP-SWERVE	NTENDED DESTINATION TOGIAK VILLAGE,ALAS	S	LANDI	F OPERATION NG ROLL NG ROLL		
			OPERATION OF BRAKES	AND/OR	FLIGHT	CONTROLS		
	WEATHER BR	/AIRWAYS/FACILITIES IEFING - NO BRIEFIN RECAST - UNKNOWN/NO		S SOFT	SHOULDE	RS		
		NOT REPORTED AT ACCIDENT SITE			1500	AT ACCIDENT SIT		
		NS TO VISION AT ACC	IDENT SITE		RELATIV RIGHT	E REARING OF WIN CROSS WIND 068- RECTION-DEGREES		: S
	50 WIND VELOC 20 TYPE OF FL	ITY-KNOTS			160	WEATHER CONDIT	ONS	
	VFR [.] REMARKS- W	IND GUSTING 25K.						

			BKIEF	S UF ACCII) EN 12			
FILE	DATE	LOCATION	AIRCRAFT DATA	INJUR F :	IES S M/N	FLIGHT PURPOS		PILOT DATA
-0032	8/25/73 NI TIME - 140	R.GRND TURK IS,BAH 8	LOCKHEFD L-1011 N318EA DAMAGE-NONE	CR- 0 PX- 0		SCHED DOM	1 PASSG SRV	AIRLINE TRANSPORT, AGE UNK/NR, UNK/NR TOTAL HOURS, UNK/NR IN TYPE, INSTRUMENT RATED.
	OPERATOR — DEPARTURE I SAN JUAN TYPE OF ACC TURBULENCE	N,PR CIDENT	INC. NTENDED DESTINATION MIAMI,FLA	PF		F OPERATIO		
	PERSONNEI MISCELLAM FACTOR(S) MISCELLAM WEATHER BR	- TURBULENCE IN FLI L - MISCELLANEOUS-F NEOUS ACTS, CONDITIO	PERSONNEL PASSENGER NS - SEAT BELT NOT F DNS - SEAT BELT SIGN (SPATCH					
	VISIBILITY UNKNOWN/I OBSTRUCTION	NOT REPORTED AT ACCIDENT SITE NOT REPORTED NS TO VISION AT ACC NOT REPORTED IGHT PLAN	IDENT SITE	PI	UNKNO RECIPI UNKNO	AT ACCIDE WN/NOT REF TATION AT WN/NOT REF WEATHER C	PORTED ACCIDENT SITE PORTED	

				-S UF AC	, С 1	. 17 = 1	113					
	DATE	LOCATION	AIRCRAFT DATA	F	:	S	1/N	PU	RPOSE			PILOT DATA
-0020		NO.ATLANTIC OCEAN		CR-	0	0	9				RV AIRLINE UNK/NR, HOURS,	
	DEPARTURE	FRANCE ACCIDENT	ES,INC. NTENDED DESTINATION WASHINGTON,DC		P			OF OPER.	ATION NORMAL CRU	JISE	morno	
	PERSONN MISCELL FACTOR(S) MISCELL WEATHER F	R - TURBULENCE, ASSOC NEL - MISCELLANEOUS-P LANEOUS ACTS,CONDITIO	ERSONNEL PASSENGER NS - SEAT BELT NOT F NS - SEAT BELT SIGN WEATHER BUREAU PERS	ON SONNEL,)							
	SKY COND: SCATTER VISIBILIT UNKNOWN OBSTRUCT: NONE TYPE OF F IFR REMARKS-	CEILING AT ACCIDENT SITE UNKNOWN/NOT REPORTED PRECIPITATION AT ACCIDENT SITE NONE TYPE OF WEATHER CONDITIONS VFR										
-L019	TIME - 2	- TRANS WORLD AIRLIN ACCIDENT	N8705T DAMAGE-NONE	CR - PX-	1	2 РНД	138 SE (OF OPER			AVA TON VP	ILABLF
		/ESTIGATION ACFT PORPOISED. FL 2	80,350K.									

FILE	DATE	LOCATION	AIRCRAFT DATA	INJUR F	IES S M/N	FLIGHT PURPOSE	PILOT DATA		
	9/4/73 TIME - 005	N.ATLANTIC OCEAN 55	BOEING 747 N9676 DAMAGE-NONE	CR- 0 PX- 0	0 16 1329	SCHED DOM PASSG SRV	AIRLINE TRANSPORT, AGE 59, 29400 TOTAL HOURS, 1500 IN TYPF, INSTRUMENT RATED.		
	DEPARTURE	CCIDENT		PI		OF OPERATION .IGHT NORMAL CRUISE			
	FACTOR(S) MISCELLA MISCELLA WEATHER BE	CAUSE(S) - TURBULENCE IN FLIG ANEOUS ACTS, CONDITION ANEOUS ACTS, CONDITION RIEFING - BRIEFING RE DRECAST - UNKNOWN/NOT	S - SEAT BELT SIGN S - SEAT BELT NOT F CEIVED-METHOD UNKNO	ASTENED					
	VISIBILITY UNKNOWN/ OBSTRUCTIO	/NOT REPORTED Y AT ACCIDENT SITE //NOT REPORTED //NOT REPORTED //NOT REPORTED	DENT SITE	CEILING AT ACCIDENT SITE UNKNOWN/NOT REPORTED PRECIPITATION AT ACCIDENT SITE UNKNOWN/NOT REPORTED TYPE OF WEATHER CONDITIONS VFR					
		CAPT ADVSD PAX: TO KEE	P SEATRELTS ON.CAT	3-4 SEC.PE	RS IN	IJURED WERE NOT SFATED.			
-Z005	9/8/73 N TIME - 144	NR.KING COVE,ALAS	DOUGLAS DC-8 N8O2WA DAMAGE-DESTROYED	CR- 3 PX- 3	0 0	MIL CONTRACT CARGO INTE	NOT AVAILABLE		
	TYPE OF AC	- WORLD AIRWAYS, INC. CCIDENT ON WITH GROUND/WATER	UNC ONTR OLLED			DF OPERATION IGHT DESCENDING			
	UNDER INVE FIRE AFTER								
- Z006		NR.MENA,ARK (/NR	CONVAIR 600 N94230 DAMAGE-DESTROYED	CR- 3 PX- 8		SCHED DOM PASSG SRV	NOT AVAILABLE		
	OPERATOR - TYPE OF AC UNDETERM					OF OPERATION DWN/NOT REPORTED			
	UNDER INVE	STIGATION							

		LOCATION	AIRCRAFT DATA	IN	JUR F	IES S M	/N	FL]	IGHT RPOSE			PILOT DATA .
	10/8/73	TOKYO, JAPAN 7	DOUGLAS DC-8 N794FT DAMAGE-NONE								V AIRLINE UNK/NR, HOURS,	
	OPERATOR - DEPARTURE TOKYO, JA TYPE OF AC	RPORT - TOKYO INTL FLYING TIGER LINE,I POINT IN PAN CIDENT WITH OBJECT	NC. TENDED DESTINATION LOS ANGELES, CALIF					ROUTE S TLE,WAS F OPERA OTHER	STOP SH ATION			
	REMARKS- G	RND GREWMAN RUN OVER	BY NOSE GR DRG PUSH	BACK	FR	MO.	GAT	E.INVES	ST UNDER	JURISDICTI	ON OF GOV	VT JAPAN.
-2009		GREENSBORO, NC	BOEING 737 N751 DAMAGE-SUBSTANTIAL	P X -	0	0	5 89	SCHED	DOM PASS	SG SRV	NOT AVA	AILABLE
	OPERATOR - TYPE OF AC OVERSHOO			PHASE OF OPERATION LANDING LEVEL OFF/TOUCHDOWN								
	UNDER INVE	STIGATION										
-L031	11/3/73 N TIME - 164	IR.SOCORRO,N MEX	DOUGLAS DC-10 N60NA DAMAGE-SUBSTANTIAL		0	0 0 1	12	SCHED	DOM PASS	SG SRV	NOT AV	AILABLE
	TYPE OF AC	- NATIONAL AIRLINES,I CCIDENT 'AILURE OR MALFUNCTIO	NC					F OPER	ATION NORMAL CF	RUISE		
	UNDER INVE REMARKS- N	STIGATION IR 3 ENG FAN DISINTER	GRATED,DMGD FUSELAGE	•RAPI	D D	ECC	MPR	ESSION	,PAX PULI	LED OUT OF	wINDOw.	
-2010	11/3/73 TIME - 094	BOSTON, MASS		CR- PX-				SCHED	INTERNA	TL CARGO SR	V NOT AV	AILABLE
	TYPE OF AC	- PAN AMERICAN WORLD CCIDENT NN WITH GROUND/WATER	,					F OPER	ATION NAL APPRO	DACH		
	UNDER INVE REMARKS- I	ESTIGATION IN FLT FIRE ENROUTE.										

FILE	DATE	LOCATION	AIRCRAFT DATA	I N .		FLIGHT PURPOSE	PILOT DATA
		HATTANOOGA, TENN		CR - P X -	0 6 66 0 0 0	SCHED DOM PASSG SRV	
	TYPE OF ACCI	ELTA AIR LINES, INC.	,			F OPERATION NG FINAL APPROACH	
	UNDER INVEST FIRE AFTER I REMARKS-	MPACT	, ILS APCH, HIT APCH	LTS.			
-2012	11/27/73 A TIME - 2127		DOUGLAS DC-9 N8967E DAMAGE-DESTROYED	C R - P X -	0 3 2 0 13 8	SCHED DOM PASSG SRV	NOT AVAILABLE
	OPERATOR - E TYPE OF ACCI OVERSHOOT	ASTERN AIR LINES, II DENT	NC •			F OPERATION NG LEVEL OFF/TOUCHDOW	WN.
	UNDER INVEST REMARKS-		AIN SHWRS,FOG. RAN O	IFF END	OF RWY	INTO RAVINE.	
-C048	12/9/73 M TIME - 1438	ADISON, WIS	ROEING 727 N259US DAMAGE-SUBSTANTIAL	C R- P X -	0 0 6 0 0 38	SCHED DOM PASSG SRV	NOT AVAILABLE
	OPERATOR - NORTHWEST AIRLINES, INC. TYPE OF ACCIDENT COLLIDED WITH BUILDING(S)					F OPERATION TO TAKEOFF	
	UNDER INVEST	IGATION					
-1035	12/17/73 G TIME - 1654	REENSBORO,NC	DOUGLAS DC-9 N8978E DAMAGE-SUBSTANTIAL	CR- PX-	0 0 5 0 0 85	SCHED DOM PASSG SRV	NOT AVAILABLE
	TYPE OF ACCI	ASTERN AIR LINES, II DENT ER LOOP-SWERVE	NC. /			F OPERATION FF ABORTED	
	UNDER INVEST REMARKS- RUN	IGATION WAY COVERED WITH SI	NOM				

FILE			AIRCRAFT DATA	F	S M/N	FLIGHT PURPOSE	PILOT DATA					
		LEBANON,NH		CR-	0 1 4		AIRLINE TRANSPORT, AGE 48, 15394 TOTAL HOURS, 4618 IN TYPE, INSTRUMENT RATED.					
		DELTA AIR LINES,				IDOUTE STOD						
	DEPARTURE PO	JINI RDALE • ELA	INTENDED DESTINATION BURLINGTON, VT		LASI EN	IRUUTE STOP						
	TYPE OF ACC TURBULENCE	IDENT	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		PHASE (OPERATION IGHT NORMAL CRUISE						
	PROBABLE CAUSE(S) WEATHER - TURBULENCE IN FLIGHT, CLEAR AIR PERSONNEL - OTHER FLIGHT PERSONNEL											
	FACTOR(S)											
		MISCELLANEOUS ACTS, CONDITIONS - SEAT BELT SIGN OFF WEATHER BRIEFING - COMPANY DISPATCH										
	WEATHER FORECAST - UNKNOWN/NOT REPORTED											
	SKY CONDITION OVERCAST				UNKNO	AT ACCIDENT SITE DWN/NOT REPORTED						
		AT ACCIDENT SITE OT REPORTED			PRECIPI NONE	TATION AT ACCIDENT SITE						
	OBSTRUCTIONS	S TO VISION AT A DT REPORTED	CCIDENT SITE			WEATHER CONDITIONS						
	TYPE OF FLIC											
	• • • • •	FORECAST CAT.STE	WARD SERVING DRINKS.									
00//	10/00/70	SET DO LE MICH	0.05.1110. 70.7			66450 004 04660 604						
-0066	12/22/73 (TIME - 1713	DELKOII,MICH	NUEING 727 N2914 DAMAGE-NONE	PX-	0 0 8	SCHED DOM PASSG SRV	NOT AVAILABLE					
		AMERICAN AIRLINE	S, INC.		0							
	TYPE OF ACC MISCELLANI					OF OPERATION C IDLING ENGINE(S)						
	UNDER INVEST											

LIST OF ABBREVIATIONS USED IN BRIEFS

ABBREVIATION

MEANING

AERIAL ADVERTISE AERIAL ADVERTISING AIRLINE TRANSPORT INSTRUCTOR ATR, FLIGHT INSTR. AIR SHOW/RACING AIR SHOW/AIR RACING AIR TAXI-CARGO AIR TAXI-CARGO OPERATIONS AIR TAXI-PASSG AIR TAXI-PASSENGER OPERATIONS APPROACH CTL-DEPARTURE APPROACH CONTROL-DEPARTURE APR CTL-TOW ENRT CTL SRV APPROACH CONTROL-TOWER EN ROUTE CONTROL SERVICE ASSOC CROP CTL ACTIVITIES ASSOCIATED CROP CONTROL ACTIVITIES ASSOCIATED FIRE CONTROL ACTIVITIES ASSOC FIRE CTL ACTIVITIES COMMERCIAL , FLIGHT . INSTR. COMMERCIAL FLIGHT INSTRUCTOR CORP /E XEC CORPORATION/EXECUTIVE CR-CREW CTR CARGO-D CONTRACT/ CHARTER-CARGO-DOMEST IC CTR CARGO-I CONTRACT/ CHARTER-CARGO-INTERNATIONAL CTR PASSG-D CONTRACT/CHARTER-PASS ENGER-DOMESTIC CTR PASSG-I CONTRACT/CHARTER-PASS ENGER-INTERNATIONAL LAST ENROUTE STOP LAST PLANNED EN ROUTE LANDING POINT MAPPING/PHOTO AERIAL MAPPING/PHOTOGRAPHY MIL CONTRACT CARGO INTL MILITARY CONTRACT-CARGO-INTERNATIONAL MIL CONTRACT PASS6 INTL MILITARY CONTRACT-PASSENGER-INTERNATIONAL MILITARY CONTRACT-CARGO-DOMESTIC MILITARY CTR CARGO DOM MILITARY CTR PASSG DOM MILITARY CONTRACT-PASSENGER-DOMESTIC MIL/CTR CARGO MILITARY CONTRACT-CARGO MIL/CTR PASSG MILITARY CONTRACT-PASSENGER NR . NEAR NS CTR CARGO NONSCHEDULED/CHARTER REVENUE CARGO-INTRA-STATE NS CTR PASSG NONSCHEDULED/ CHARTER REVENUE PASSENGER-INTRA-STATE NS/CTR REVENUE CARGO DOM NONSCHEDULED/CHARTER REVENUE CARGO-DOMESTIC NS/CTR REVENUE CARGO INTL NONSCHEDULED/CHARTER REVENUE CARGO-INTERNATIONAL NS/CTR REVENUE PASSG DOM NONSCHEDULED/CHARTER REVENUE PASSENGER-DOMESTIC NS/CTR REVENUE PASSG INTL NONSCHEDULED/CHARTER REVENUE PASSENGER-INTERNATL OT-CTHER AIRCRAFT AND GROUND PARAJUMP PARACHUTE JUMP PRIVATE, FL. INST R. PRIVATE FLIGHT INSTRUCTOR PX-**PASSENGERS** RADAR CTL/SURVEILLANCE RADAR CONTROL/SURVEILLANCE SCHEDULED CARGO SERVICE SCHED CARGO SRV SCHED DOM CARGO SRV SCHEDULED DOMESTIC CARGO SERVICE SCHED DOM PASSG SRV SCHEDULED DOMESTIC PASSENGER SERVICE SCHED INTERNATL CARGO SRV SCHEDULED INTERNATIONAL CARGO SERVICE SCHED INTERNATL PASSG SRV SCHEDULED INTERNATIONAL PASSENGER SERVICE SCHED PASSG SRV SCHEDULED PASSENGER SERVICE S-D SCHEDULED-DOMESTIC S- I SCHEDULED-INTERNATIONAL UNKNOWN/NOT REPORTED UNK/NR

DATE DUE

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