

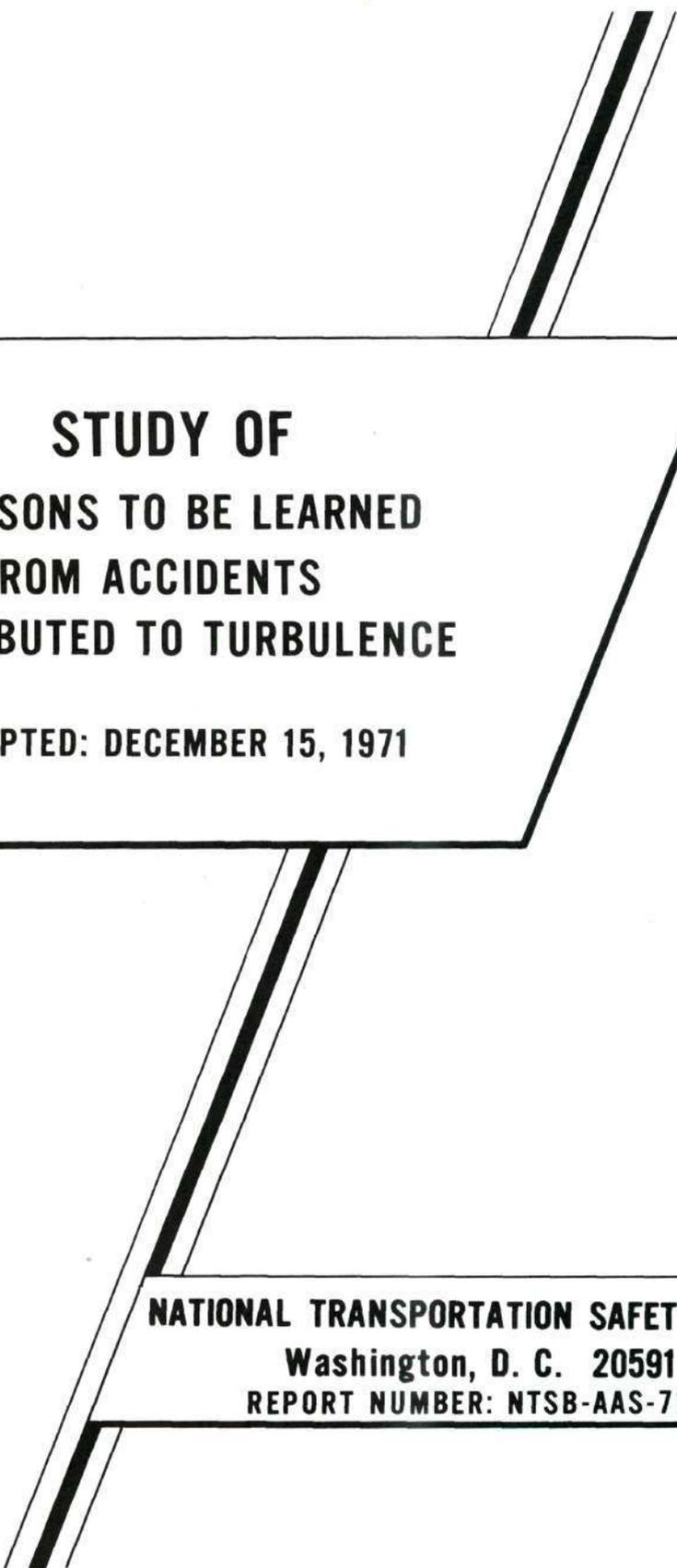
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NATIONAL
TRANSPORTATION
SAFETY
BOARD

**STUDY OF
LESSONS TO BE LEARNED
FROM ACCIDENTS
ATTRIBUTED TO TURBULENCE**



**NATIONAL TRANSPORTATION SAFETY BOARD
Washington, D. C. 20591
REPORT NUMBER: NTSB-AAS-71-1**



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LESSONS TO BE LEARNED
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ADOPTED: DECEMBER 15, 1971

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16. Abstract The study deals with 97 turbulence-involved U. S. air carrier accidents occurring from 1964-1969. Based on the detailed investigation of those accidents, there is discussed lessons to be learned primarily from the point of view of the meteorologist, the air carrier and the pilot. Observations are made and conclusions drawn in regard to such factors as the adequacy of CAT (clear air turbulence) versus thunderstorm-associated turbulence forecasts, the use of airborne weather radar as a thunderstorm avoidance tool, airborne weather radar maintenance problems, the requirement for real-time data in the cockpit, CAT detectors, turbulence associated losses, the nuisance problem and information derived from cockpit voice recorders and flight data recorders.			
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FOREWORD

This study of Lessons to be Learned from Accidents Attributed to Turbulence was prepared by Meteorologist Alan I. Brunstein, National Transportation Safety Board. He presented the paper in London, England, at the Royal Aeronautical Society in May 1971. The occasion was the International Conference on Atmospheric Turbulence sponsored jointly by the American Institute of Aeronautics and Astronautics (AIAA), the Canadian Aerospace Institute (CASI) and the Royal Aeronautical Society (RAeS).

TABLE OF CONTENTS

	<i>Page</i>
Foreword	iii
Part I – Turbulence Experience	1
Part II – Case Studies and Lessons Learned	2
Table 1 – Accidents	8
Table 2 – Injuries	8
Table 3 – Aircraft Damage	8
Table 4 – Category of Weather Involvement	9
Table 5 – Type of Power vs. First Phase of Operation	9
Table 6 – Turbulence Accident Rates by Aircraft Hours and Miles Flown	9
Figures 1,2 and 3 – Thunderstorm Penetration - Radar Weather Photographs	10
Figure 4 – Flight Data Recorder Graph, Thunderstorm Penetration ..	11
Figure 5 – Flight Data Recorder Graph, CAT Penetration	12
APPENDIX – Briefs of Turbulence Accidents	13

NATIONAL TRANSPORTATION SAFETY BOARD
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STUDY OF
LESSONS TO BE LEARNED FROM ACCIDENTS ATTRIBUTED TO TURBULENCE

Part I. Turbulence Experience

National Transportation Safety Board records for United States air carriers during the past 11 years show a total of 755 accidents, 147 of which involved turbulence. The discussion which follows concerns itself with the accidents occurring from 1964 through 1969, since these data are more easily retrievable because of the conversion of Safety Board records to Automatic Data Processing methods. During the 1964-69 period, the total number of air carrier accidents was 441, including 97 involving turbulence. Turbulence-involved accidents are defined as those in which turbulence was cited as a probable cause or related factor, as well as those in which turbulence was cited as a type of accident.

It is readily apparent from the air carrier data summarized in Tables 1 and 2 that approximately one out of every five total accidents over the 6-year period was a turbulence-involved accident, but that only one out of 16 *fatal* accidents was turbulence-involved. An optimistic look at Table 2, Injuries, and Table 3, Aircraft Damage, shows that in the total of 97 accidents, more than 90 percent of those aboard the aircraft sustained either minor injuries or none at all, and more than 90 percent of the aircraft involved sustained either minor damage or none at all. The optimist might consider, then, that

atmospheric turbulence is really no more than a nuisance generally and is of minor concern.

On the other hand, with 228 fatalities, 127 persons injured seriously, five aircraft destroyed, and four damaged substantially, we are forced to consider that turbulence is one of the major weather problems to be encountered by aircraft in flight. It should be kept in mind that the turbulence occurrences considered here are those meeting the criteria for an accident, i.e., a person suffered death or serious injury or the aircraft received substantial damage. We are aware that there were many relatively serious turbulence encounters not in our record books simply because the latter two criteria were not met and, therefore, the encounter was not required to be reported.

Little comment is required in regard to Table 4, which separates the clear air turbulence (CAT) involved accidents from those which occurred in association with convective activity. It does, however, highlight the fact that, despite the carriage and use of airborne weather radar equipment, there are many accidents in the convective category.

In view of the changing character of air carrier fleets, it is not surprising as shown in Table 5 that more than three-fourths of the accidents involved turbojet aircraft. Table 5 also shows that the most favored flight regime for the accidents was in normal cruise (almost 65 percent) with the next most favored flight regime being

the descent phase (almost 20 percent). Discussions of accidents are never quite complete without a mention of accident rates. Accordingly, Table 6 has been assembled to show the turbulence accident rates per 100,000 aircraft-hours and the rates per million miles flown. Except for 1968, the latter rate decreased steadily over the 6-year period.

Part II. Case Studies and Lessons Learned

There are many lessons to be learned from those accidents attributed to turbulence. One basic lesson is that, regardless of the excellence of airborne weather radar equipment and the efficiency of its operator, that equipment was *always* intended to have been used as a thunderstorm avoidance tool and was *never* intended for use as a thunderstorm penetration aid.

This philosophy regarding the use of an extremely valuable electronic device was expressed by the Safety Board in a letter to the management of all U.S. scheduled air carriers several years ago following a series of thunderstorm-involved catastrophic accidents. The Board was well aware at that time, as it is now, that all of the carriers did have procedures and policies regarding appropriate use of airborne weather radar during severe weather conditions. Concern was expressed that nonadherence to those policies and procedures might have been involved. Fortunately, the catastrophic type of severe weather-involved accident occurs infrequently and the overall U.S. air carrier safety record was and is outstanding. The past 2 years, 1969 and 1970, have been particularly noteworthy.

Nevertheless, accidents involving turbulence associated with convective activity do occur. Of the turbulence-involved accidents from 1964-69 at least 58 occurred in or near convective activity. It is recognized that, in some of these cases, the flightcrews were aware of the turbulence potential, but that deviations were not authorized by Air Traffic Control because of conflicting traffic or other airspace problems.

There were also numerous cases in which the pilots indicated that their weather radar did not reveal thunderstorm activity to them in the area in which the turbulence encounter took place. There are documented cases in the latter category wherein photographs were taken of ground-based weather radarscopes within a few minutes of the accident and show thunderstorm cells of such intensity that one is forced to conclude that a properly operating and properly operated airborne weather radar set *would* have revealed the activity.

One such case involved a regularly scheduled air carrier flight of a DC-8 which encountered severe turbulence and hail upon penetration of a thunderstorm during cruise westbound over the central United States at Flight Level 390. Six passengers were injured, two of them seriously, and the aircraft was damaged as follows: Nos. 2 and 4 heat exchangers damaged, all four engine chin scoops cracked at island, No. 1 engine PT2 probe damaged and bent, left cabin heat exchanger door damaged, fuselage skin just aft of radome lifted, radome damaged - replaced, splitter between Nos. 3 and 4 compressors damaged, left wingtip window cracked, numerous static wicks missing, five seat tables damaged, hole in right aft lavatory ceiling, isolation band on vertical stabilizer damaged and right horizontal stabilizer damaged.

The turbulence was encountered between about 1545 and 1552 G.m.t. within approximately 50 nautical miles of an operating WSR-57, long range, ground-based weather radar, whose operator was photographing the Plan Position Indicator (PPI) scope. Figs. 1, 2, and 3, are enlargements of several of those photographs. In all three photographs, the radar was on the 250-mile range and the range markers were at 50-mile intervals. In Fig. 1 and 2, which were taken during the turbulence encounter, there was 1/2 degree antenna uptilt, while in Fig. 3, taken shortly after the encounter, the antenna uptilt was 3°. Cell penetration is estimated to have occurred at about the 50-mile range marker east-northeast of the antenna. Tops in that cell at the time of the encounter

were reported by the radar operator as 51,000 feet.

Fig. 4 is a reproduction of a portion of the flight data recorder graph associated with this accident. It can be seen that the maximum variance in vertical acceleration was from + 2.23 g's to -0.99 g or an incremental peak variation of 3.22 g's, while several variations of more than 2 g's are noted. During the worst of the encounter, airspeed fluctuated as much as 52 knots, the heading varied 20° and there were two successive altitude losses of almost 1,000 ft. Although the turbulence in this case has been categorized as severe, the variations in the parameters above, particularly the variation in vertical acceleration, meet the criteria for extreme turbulence.

The captain of the flight later stated that just prior to the encounter the flight was on instruments, the weather radar was on the 150-mile scale, 4° to 5° downtilt, the seat belt sign was on, the air was slightly choppy, light ice was encountered and anti-ice systems were activated. When the turbulence and hail were encountered, the Area Control Center was asked for a vector out of the weather, but the flight was informed that they were unable to comply because they were not "painting" any weather. Various adjustments were made to the airborne radar, but "there was no echo." The ATC radar controller later confirmed the captain's statement regarding his inability to provide the requested vector and indicated, *inter alia*, that the traffic control radar was operating on circular polarization and that "weather" didn't start to show on his radar until it had moved eastward another 25 miles. It was also learned that ground checks of the airborne radar showed that it was functioning normally.

Another DC-8 flight at the same altitude and about 30 miles, or 4 minutes behind the first DC-8, requested and received clearance to deviate from course and remained in the clear about 15 miles south of the original route. That flight confirmed the large, strong echo shown in Fig. 1-3. Neither the company nor the National Weather Service (NWS) forecasts warned of

severe thunderstorm activity for the area and time pertinent to this accident.

During the period 1964-69, the Board's records show that at least 34 accidents occurred in clear air. The clear air turbulence accidents listed are those for which available information indicated that they were not associated with convective activity. One of the CAT accidents occurred during a regularly scheduled eastbound flight of a Boeing 720B, in cruise at Flight Level 370, over the western portion of the north-central United States at 1937 G.m.t. The crew indicated that the flight was above a scattered cloud deck whose tops were estimated as having been some 4,000 to 6,000 feet below the aircraft. There was mountainous terrain below. Because of turbulence described as "light turbulence" or "light chop," the seatbelt sign was turned on 15 minutes or more prior to the encounter of concern. An appropriate announcement had been made by the captain. According to passenger statements, the turbulence became progressively worse. During the worst of the turbulence encounter, a male passenger left his seat to assist in securing his infant grandson who was in the seat directly in front of him. The man was observed to have been thrown against the overhead, then slammed to the floor, striking the armrest of an aisle seat. Because of the seriously injured passenger, the flight diverted and made an emergency landing at a relatively nearby airport. No other serious injuries were reported and there was only minor damage to the aircraft.

A reproduction of a portion of the flight data recorder graph concerning this flight is shown as Fig. 5. It is evident that considerable turbulence was experienced for about 3 minutes and the worst of the occurrence took place during a period of approximately 30 to 40 seconds. During that period, the maximum incremental g forces were about 4.8, i.e., from about +3 g's to -1.8 g. Heading changes were relatively minor and just prior to the maximum g forces, the captain had begun a normal descent in order to vacate the area of turbulence. The airspeed fluctuated about 40 kts. and built up during the

beginning of the descent, but diminished as the turbulence diminished then increased as the turbulence ceased. Safety Board records show that company forecasts called for CAT, but in areas adjacent to the latter occurrence. Some National Weather Service forecasts, including SIGMET, did indicate that CAT was anticipated over an area which included the one in which the accident occurred. It is interesting to note that when the flightcrew was interviewed, they stated that the temperature dropped 10° approximately 3 to 5 minutes prior to the turbulence encounter. As in many other cases of CAT, this one generated a number of detailed meteorological studies, or aftercasts, including one by the Safety Board. Those studies agreed generally that the area in which the accident took place was characterized by the proximity of the jet stream core, a cold air trough, it was at or close to the tropopause, and that mountain wave conditions probably existed. There was some doubt in one of the studies in regard to the contribution of the mountain wave effect, since the winds, even though strong, were not from the most favorable direction for strong mountain wave formation over the area of concern. It also appears that, in this particular case, large vertical wind shears did exist, but probably several thousand feet below the altitude of the occurrence.

Particularly in those accident investigations in which the Board's meteorological staff becomes involved, there is an attempt to assess the adequacy of available forecasts. Unfortunately, data are not available for the total 97 turbulence accidents. The data on forecast adequacy are available for 74 of those accidents and show that, for 58 cases, or almost 78.5 percent of the time, the forecast was considered to have been substantially correct. In the remaining 16 cases, or approximately 21.5 percent of the time, the weather was considered to have been worse than forecast. A review of the adequacy of the CAT forecasts indicates that the ratio of good to bad in the CAT cases was about 2 1/2 to 1, while in the thunderstorm cases, the ratio was about 4 1/2 to 1. The obvious lesson to be learned here

is that there is room for considerable improvement in the forecasting of CAT. In fairness to the meteorological community, it is recognized that the majority of these accidents occurred regardless of the adequacy of the forecasts and it is also recognized that good forecasting has no doubt been at least partly responsible for keeping the turbulence accident statistics to their current levels. However, it is noted that in half the fatal turbulence-involved accidents, the forecasts were not posted in the "substantially correct" column.

Until our understanding of the atmosphere is more comprehensive and has led us to develop CAT forecasts which are much more accurate than they are today, there is a continuing requirement for an efficient, economical, airborne CAT detection system. Ground-based CAT detection would also be desirable, particularly in terminal areas.

Following the several thunderstorm-involved catastrophic accidents, and the Board's letter to U.S. air carrier management mentioned earlier, it became apparent that large segments of the industry were reviewing, amending, and updating their safety and training programs, as well as some of their operational procedures. At about that time, a Government/Industry meeting was convened to discuss generally the subject of severe weather avoidance. Those discussions might be considered as having revealed a series of lessons to be learned from involvement in thunderstorm type turbulence. Most of the lessons were learned well, but our accident statistics would indicate that a certain amount of homework still needs to be accomplished.

Like any other piece of equipment, airborne weather radar is not perfect but, as pointed out previously, a properly operating and properly operated set is an invaluable tool for the avoidance of hazardous weather conditions. Some carriers, having had problems maintaining the equipment, have changed over to solid-state equipment which represents a big step forward in maintenance reliability. At least one large carrier has learned that poor water drainage from the radome, which was made of a honey-

comb material, has caused signal interference. As a result, their radomes are being replaced. The new radomes are made of a fluted material to enhance water drainage. Unfortunately, a properly operating radar is of limited value unless the operator is not only familiar with the mechanics of the system, but he must be trained adequately in its operational use with considerable emphasis on the interpretation of the weather echoes displayed. While all carriers have some type of training program for pilots in the use of airborne weather radar, there are some which require more formalizing. At the Government/Industry meeting mentioned above, the lack of recurrent training was also emphasized.

A most valuable lesson learned as a result of turbulence-involved accidents, and by complaints of the pilot group, is the requirement in the cockpit for up-to-date information concerning the location, intensity and movement of thunderstorm activity and for CAT information as well. Real-time information is also required at originating points and at en route stops. The U.S. Government services have made progress in expediting the flow of weather radar information, particularly via the National Facsimile Network and in the not too distant future the flow of data via weather teletype should be expedited by means of a new and improved system. Meanwhile, in order to provide pilots with as near real-time data as possible, several U.S. air carriers have rented drops on a Government teletype network which carries, among other things, raw weather radar data, i.e., weather radar observations made and transmitted almost immediately.

One of these carriers plots the weather radar data, CAT information and other material such as forecasts on a special plotting board located at their headquarters. The information is coded, sent to outlying stations and is also transmitted directly to the affected aircraft. A flightcrew member plots the coded message on a special chart and deviations are planned accordingly. It is interesting to note that since the system became operational in October 1968, the Safety

Board's records show that the aircraft of that carrier have not been involved in a single turbulence accident.

Another method for obtaining real-time information is by means of radar remoting. The radarscope image is displayed at locations remote from the radar equipment, either by microwave links or by scan conversion with telephone line connections. The telephone line links are either dedicated lines with constant readouts, or can be on a dial-up basis. This allows government forecast centers to receive pictures from selected radars at great distances. There is also considerable air carrier interest in the dial-up capability.

Radar remoting is expanding rapidly in the NWS. At the beginning of 1971, there were eight transmitters and 32 receivers installed. By the end of the year, there should be a total of 25 transmitters and 49 receivers in operation. It is anticipated that eventually all long-range weather radar will have transmitters, and all forecast and warning offices will have receivers. By the end of 1971, there will be approximately 50 long-range radars in operation. This would mean that in the not too distant future, it will be possible, for the price of a telephone call, to receive a radarscope picture, either on a television monitor or on a facsimile receiver, from about 50 locations in the United States. This capability could certainly revolutionize the dispatching and routing of aircraft.

Some years ago, as a result of a catastrophic accident involving severe turbulence shortly after takeoff, joint action was taken by Australian Civil Aviation and Meteorological authorities to develop a system to provide advice and guidance to flights in the terminal areas, in order for pilots to avoid severe convective activity. The experimental system has been in operation at three of the larger terminals, Sydney, Brisbane, and Melbourne, and is known as the Joint Approach Control Meteorological Advisory Service (JACMAS). Based on radar storm cell information from ATC radar, AIREPS and other visual observations, ATC authorities may close airspace or authorize diversions. The

system is in effect within a 50-mile radius of the three airports mentioned.

Additional dissemination of JACMAS advice is made by broadcasting it in plain language over the appropriate NDB and VOR channels. Flightcrews have been informed that, on occasion, there have been areas which were forecast to contain severe turbulence, but have been reported by pilots to have been clear. Accordingly, pilots were instructed to regard the information received as an "advisory service." However, one of the basic principles of the JACMAS system was that clearances issued to insure that aircraft do not enter areas of severe turbulence are mandatory, and a pilot who considers that a clearance is unnecessarily restrictive should request an alternative clearance and advise the reason. If ATC approves the alternative, the pilot must accept full responsibility for the intended course of action. It is understood that evaluations of the JACMAS system indicated that it had, in fact, provided effective storm warning information in the three areas where it was in operation and that there were plans to remove the "experimental" label.

Air carriers have learned that the economic penalties of turbulence accidents are severe. There are no current figures available on the economic loss, but, according to a study made by the Flight Safety Foundation for the National Aeronautics and Space Administration, in 1964 there was a total (U.S.) expense attributable to turbulence of \$18,090,000. That figure did not include loss of use of grounded aircraft, loss of employable time by injured occupants, and overhead involved in settling claims for injuries. There is little reason to assume that the losses are any less today.

An interesting sidelight to turbulence accident investigation is the use of new techniques. One means of postaccident determination of the existence of turbulence is the cockpit voice recorder (CVR). This device reflects not only intracockpit conversation (which might be related to the subject), but the sound of objects

being tossed about on the flight deck, the "tin-canning" sounds made by the aircraft as it encounters successive air masses moving from different directions, sounds of hail and/or heavy rain striking the airframe and other sounds within the cockpit. In addition, on aircraft whose CVR is powered by Direct Current, such as the turbo-Convairs and the F-27, FH-227 series, there is installed an impact switch on the CVR power circuit which causes electrical power to be removed when the associated accelerometer senses a fore-to-aft acceleration of 2 g's or more. This type of power failure cannot be rectified until after landing. In the case of an F-27 which lost a wing in CAT conditions over Alaska, this type of power shutdown was observed to have occurred coincident with the wing failure. Another new technique is the use of weather satellite pictures especially for areas from which data are sparse. Jet streams may be located, some wind information may be inferred, convective clouds as well as lenticulars may be located and identified, as may many other local and synoptic scale features.

To summarize the main lessons learned from turbulence-involved accidents it can be said that:

1. Turbulence is one of the major in-flight weather problems.
2. Airborne weather radar is an excellent thunderstorm avoidance tool.
3. Airborne weather radar must be maintained and operated properly.
4. Training should be formalized in the use and interpretation of airborne weather radar.
5. Recurrent airborne weather radar training is desirable.
6. CAT forecasts need considerable improvement.
7. CAT detection systems, airborne and ground-based, are needed.
8. Real-time weather data are needed on the ground, and most certainly in the cockpit.

BY THE NATIONAL TRANSPORTATION SAFETY BOARD:

/s/ JOHN H. REED
Chairman

/s/ OSCAR M. LAUREL
Member

/s/ FRANCIS H. McADAMS
Member

/s/ LOUIS M. THAYER
Member

/s/ ISABEL A. BURGESS
Member

December 15, 1971

THE FOLLOWING STATISTICAL TABLES ARE BASED ON
TURBULENCE ACCIDENTS INVOLVING U. S. AIR CARRIERS, 1964-1969

TABLE 1 – ACCIDENTS

TOTAL ACCIDENTS	YEAR	TURBULENCE ACCIDENTS
79	1964	15
83	1965	14
75	1966	13
70	1967	13
71	1968	22
63	1969	20
<u>441</u>		<u>97</u>

TABLE 2 – INJURIES

	FATAL	SERIOUS	MINOR	NONE	TOTAL
PILOT	5	-	-	92	97
COPILOT	5	-	-	91	96
CHECK PILOT	-	-	-	2	2
FLIGHT ENGINEER	3	-	1	80	84
NAVIGATOR	-	-	-	4	4
CABIN ATTENDANT	9	50	42	245	346
EXTRA CREW	-	1	-	12	13
PASSENGERS	<u>206</u>	<u>76</u>	<u>198</u>	<u>6021</u>	<u>6501</u>
TOTAL	228	127	241	6547	7143

INVOLVES 97 TOTAL ACCIDENTS INCLUDING 6 FATAL ACCIDENTS

TABLE 3 – AIRCRAFT DAMAGE

YEAR	DESTROYED	SUBSTANTIAL	MINOR	NONE	TOTAL
1964	2	2	3	8	15
1965	-	1	-	13	14
1966	1	-	-	12	13
1967	-	-	3	10	13
1968	2	1	2	17	22
1969	-	-	2	18	20
TOTAL	<u>5</u>	<u>4</u>	<u>10</u>	<u>78</u>	<u>97</u>

TABLE 4 – CATEGORY OF WEATHER INVOLVEMENT

YEAR	CAT	CONVECTIVE ACTIVITY	UNKNOWN*	TOTAL
1964	5	9	1	15
1965	2	12	-	14
1966	4	7	2	13
1967	4	8	1	13
1968	10	11	1	22
1969	<u>9</u>	<u>11</u>	<u>-</u>	<u>20</u>
TOTAL	34	58	5	97

*The investigations of these cases are under the jurisdiction of other governments and the data were not available.

TABLE 5 – TYPE OF POWER VS. FIRST PHASE OF OPERATION

	PISTON	TURBOJET	TURBOPROP	ACCIDENT	PERCENT
INITIAL CLIMB	2	-	-	2	2.06
CLIMB TO CRUISE	-	8	1	9	9.28
NORMAL CRUISE	6	50	7	63	64.95
DESCENT	2	15	2	19	19.59
UNCNTRLD. DESCENT	-	1	-	1	1.03
INITIAL APPROACH	1	-	-	1	1.03
OTHER	<u>-</u>	<u>-</u>	<u>2</u>	<u>2</u>	<u>2.06</u>
ACCIDENTS	11	74	12	97	
PERCENT	11.3	76.3	12.4		

TABLE 6 – TURBULENCE ACCIDENT RATES BY AIRCRAFT HOURS AND MILES FLOWN

YEAR	TURBULENCE ACCIDENTS	AIRCRAFT-HRS. FLOWN	AIRCRAFT-MI. FLOWN (000)	TURBULENCE	ACCIDENT RATE
				PER 100,000 AIRCRAFT-HRS. FLOWN	PER MILLION AIRCRAFT-MILES FLOWN
1964	15	4,312,764	1,336,867	.347	.011
1965	14	4,690,882	1,536,395	.298	.009
1966	13	5,104,984	1,768,458	.255	.007
1967	13	5,868,842	2,179,739	.222	.006
1968	22	6,404,260	2,498,848	.328	.009
1969	<u>20</u>	<u>6,612,161</u>	<u>2,736,815</u>	.302	.007
TOTAL	97	32,993,893	12,057,122		

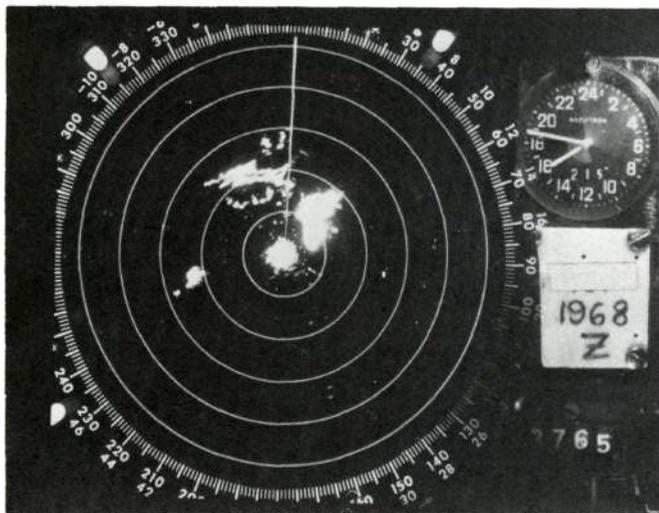


Figure 1



Figure 2

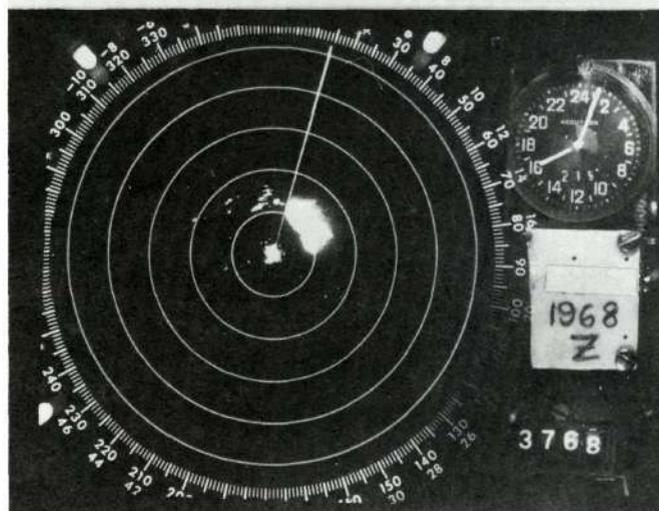


Figure 3

THUNDERSTORM PENETRATION

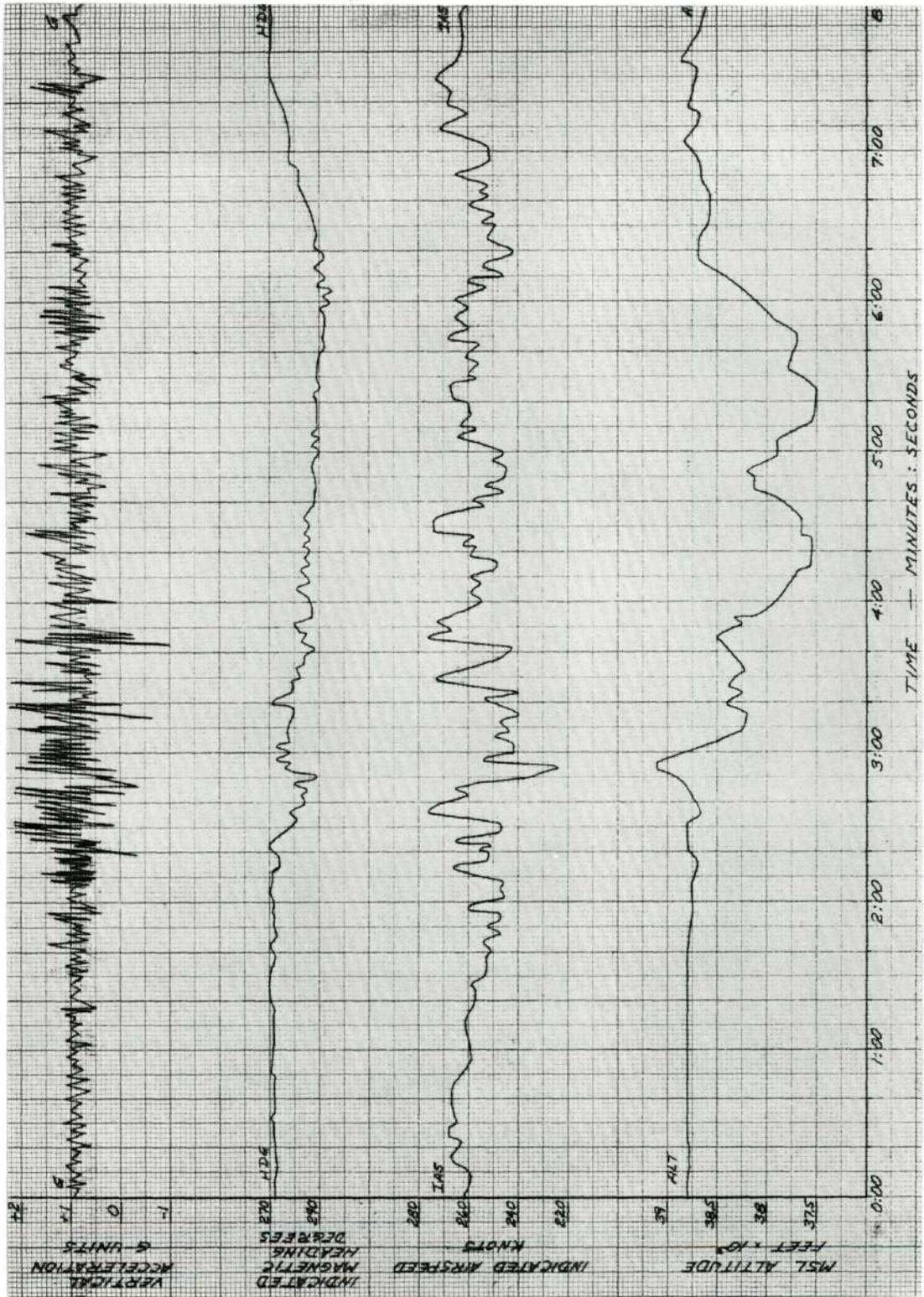


Figure 4 FLIGHT DATA RECORDER GRAPH
THUNDERSTORM PENETRATION

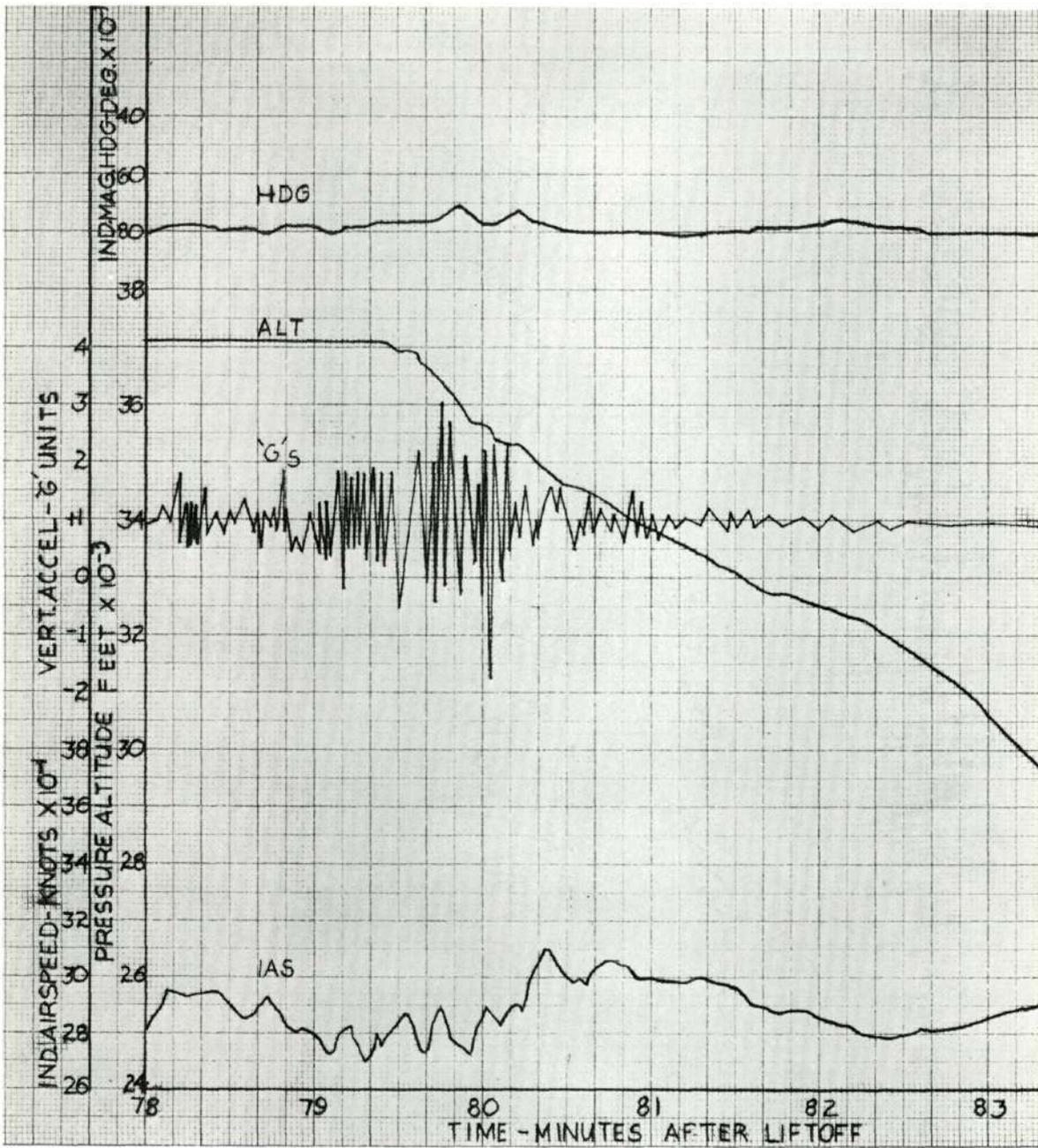


Figure 5 FLIGHT DATA RECORDER GRAPH CAT PENETRATION

APPENDIX

BRIEFS OF TURBULENCE ACCIDENTS

NATIONAL TRANSPORTATION SAFETY BOARD

BUREAU OF AVIATION SAFETY

WASHINGTON, D. C. 20591

BRIEFS OF TURBULENCE ACCIDENTS

AS A TYPE OF ACCIDENT

OR AS A CAUSE/FACTOR(LESS VORTEX)

U.S. AIR CARRIERS

1964-1969

FILE	DATE	LOCATION	AIRCRAFT DATA	INJURIES			FLIGHT PURPOSE	PILOT DATA
				F	S	M/N		
I-0006	2/25/64 TIME - 0206	NR. NEW ORLEANS LA	DOUGLAS DC-8 N8607 DAMAGE-DESTROYED	CR- PX-	7 51	0 0 0 0	SCHED INTERNATL PASSG SRV	AIRLINE TRANSPORT, AGE 47, 19160 TOTAL HOURS, 916 IN TYPE, INSTRUMENT RATED.
OPERATOR - EASTERN AIR LINES, INC.				PHASE OF OPERATION				
TYPE OF ACCIDENT				IN FLIGHT: UNCONTROLLED DESCENT				
COLLISION WITH GROUND/WATER: UNCONTROLLED								
PROBABLE CAUSE(S)								
SYSTEMS - FLIGHT CONTROL SYSTEMS: HORIZONTAL STABILIZER DRIVE SYSTEM								
MISCELLANEOUS ACTS, CONDITIONS - MATERIAL FAILURE								
WEATHER - TURBULENCE, ASSOCIATED W/ CLOUDS, THUNDERSTORMS								
WEATHER BRIEFING - COMPANY DISPATCH								
WEATHER FORECAST - FORECAST SUBSTANTIALLY CORRECT								
SKY CONDITION				CEILING AT ACCIDENT SITE				
OVERCAST				1000				
VISIBILITY AT ACCIDENT SITE				PRECIPITATION AT ACCIDENT SITE				
5 OR OVER				NONE				
OBSTRUCTIONS TO VISION AT ACCIDENT SITE				TEMPERATURE-F				
NONE				46				
WIND DIRECTION-DEGREES				WIND VELOCITY-KNOTS				
20				12				
TYPE OF WEATHER CONDITIONS				TYPE OF FLIGHT PLAN				
VFR				IFR				
REMARKS- AIRCRAFT CRASHED IN LAKE PONTCHARTRAIN WITH DISINTEGRATING FORCE.								

BRIEFS OF ACCIDENTS

FILE	DATE	LOCATION	AIRCRAFT DATA	INJURIES F S M/N	FLIGHT PURPOSE	PILOT DATA
1-0010	1/13/64 TIME - 1826	NR. ASHVILLE, NC	VISCOUNT V-745D N7429 DAMAGE-NONE	CR- 0 1 2 PX- 0 0 20	SCHED DOM PASSG SRV	AIRLINE TRANSPORT, AGE UNK/NR, UNK/NR TOTAL HOURS, UNK/NR IN TYPE, INSTRUMENT RATED.
OPERATOR - UNITED AIR LINES, INC.						
TYPE OF ACCIDENT TURBULENCE			PHASE OF OPERATION IN FLIGHT: CLIMB TO CRUISE			
PROBABLE CAUSE(S) PERSONNEL - MISCELLANEOUS-PERSONNEL: PASSENGER FACTOR(S) WEATHER - TURBULENCE IN FLIGHT, CLEAR AIR WEATHER BRIEFING - UNKNOWN/NOT REPORTED WEATHER FORECAST - FORECAST SUBSTANTIALLY CORRECT						
TYPE OF WEATHER CONDITIONS IFR			TYPE OF FLIGHT PLAN IFR			
REMARKS- FAILURE OF A PASSENGER TO COMPLY WITH SEAT BELT ON SIGN						
1-0022	3/17/64 TIME - 0950	NR. BILLINGS MONT	BOEING B-720B N732US DAMAGE-NONE	CR- 0 1 6 PX- 0 0 33	SCHED DOM PASSG SRV	AIRLINE TRANSPORT, AGE 48, 18510 TOTAL HOURS, 310 IN TYPE, INSTRUMENT RATED.
OPERATOR - NORTHWEST AIRLINES, INC.						
TYPE OF ACCIDENT TURBULENCE			PHASE OF OPERATION IN FLIGHT: NORMAL CRUISE			
PROBABLE CAUSE(S) WEATHER - TURBULENCE IN FLIGHT, CLEAR AIR MISCELLANEOUS ACTS, CONDITIONS - SEAT BELT NOT FASTENED WEATHER BRIEFING - COMPANY DISPATCH WEATHER FORECAST - FORECAST SUBSTANTIALLY CORRECT						
SKY CONDITION CLEAR			CEILING AT ACCIDENT SITE UNLIMITED			
VISIBILITY AT ACCIDENT SITE 5 OR OVER			PRECIPITATION AT ACCIDENT SITE NONE			
OBSTRUCTIONS TO VISION AT ACCIDENT SITE NONE			TYPE OF WEATHER CONDITIONS VFR			
TYPE OF FLIGHT PLAN IFR						
REMARKS- STEWARDESS ATTENDING TO CABIN DUTIES						

BRIEFS OF ACCIDENTS

FILE	DATE	LOCATION	AIRCRAFT DATA	INJURIES			FLIGHT PURPOSE	PILOT DATA
				F	S	M/N		
1-0027	7/1/64 TIME - 2033	NR.ALLENTOWN PA	CONVAIR CV-880 N803TW DAMAGE-NONE	CR-	0 1 5		SCHED DOM PASSG SRV	AIRLINE TRANSPORT, AGE 45, 16220 TOTAL HOURS, 229 IN TYPE, INSTRUMENT RATED.
		OPERATOR - TRANS WORLD AIRLINES, INC. TYPE OF ACCIDENT TURBULENCE					PHASE OF OPERATION IN FLIGHT: NORMAL CRUISE	
		PROBABLE CAUSE(S) WEATHER - TURBULENCE IN FLIGHT, CLEAR AIR PERSONNEL - FAILURE HOSTESS TO COMPLY CO PROCEDURES.						
		FACTOR(S) MISCELLANEOUS ACTS, CONDITIONS - SEAT BELT NOT FASTENED WEATHER BRIEFING - UNKNOWN/NOT REPORTED WEATHER FORECAST - UNKNOWN/NOT REPORTED						
		SKY CONDITION UNKNOWN/NOT REPORTED OBSTRUCTIONS TO VISION AT ACCIDENT SITE HAZE TYPE OF FLIGHT PLAN IFR					VISIBILITY AT ACCIDENT SITE UNKNOWN/NOT REPORTED TYPE OF WEATHER CONDITIONS VFR	
1-0030	3/26/64 TIME - 1256	NR.TAMPA FLA	CONVAIR CV-880 N8803E DAMAGE-MINOR	CR-	0 0 6		SCHED DOM PASSG SRV	AIRLINE TRANSPORT, AGE 47, 19970 TOTAL HOURS, 1828 IN TYPE, INSTRUMENT RATED.
		OPERATOR - DELTA AIR LINES, INC. TYPE OF ACCIDENT TURBULENCE					PHASE OF OPERATION IN FLIGHT: CLIMB TO CRUISE	
		PROBABLE CAUSE(S) PILOT IN COMMAND - INADEQUATE SUPERVISION OF FLIGHT WEATHER - TURBULENCE, ASSOCIATED W/ CLOUDS, THUNDERSTORMS						
		FACTOR(S) MISCELLANEOUS ACTS, CONDITIONS - SEAT BELT NOT FASTENED WEATHER BRIEFING - COMPANY DISPATCH WEATHER FORECAST - FORECAST SUBSTANTIALLY CORRECT						
		SKY CONDITION OVERCAST VISIBILITY AT ACCIDENT SITE UNKNOWN/NOT REPORTED TYPE OF WEATHER CONDITIONS IFR					CEILING AT ACCIDENT SITE 800 OBSTRUCTIONS TO VISION AT ACCIDENT SITE UNKNOWN/NOT REPORTED TYPE OF FLIGHT PLAN IFR	

BRIEFS OF ACCIDENTS

FILE	DATE	LOCATION	AIRCRAFT DATA	INJURIES F S M/N	FLIGHT PURPOSE	PILOT DATA
1-0035	2/12/64 TIME - 1848	HUNTSVILLE ALA	DOUGLAS DC-3 N655A DAMAGE-NONE	CR- 0 0 3 PX- 0 1 25	SCHED DOM PASSG SRV	AIRLINE TRANSPORT, AGE 42, 8092 TOTAL HOURS, 6000 IN TYPE, INSTRUMENT RATED.
		NAME OF AIRPORT - MADISON COUNTY OPERATOR - SOUTHERN AIRWAYS, INC. TYPE OF ACCIDENT TURBULENCE		PHASE OF OPERATION IN FLIGHT: DESCENDING		
		PROBABLE CAUSE(S) MISC - PSGS SEAT BELTS RELEASED FOR UNK REASON. FACTOR(S) WEATHER - TURBULENCE, ASSOCIATED W/ CLOUDS, THUNDERSTORMS WEATHER BRIEFING - COMPANY DISPATCH WEATHER FORECAST - FORECAST SUBSTANTIALLY CORRECT				
		SKY CONDITION CLEAR VISIBILITY AT ACCIDENT SITE 5 OR OVER OBSTRUCTIONS TO VISION AT ACCIDENT SITE NONE TYPE OF FLIGHT PLAN VFR		CEILING AT ACCIDENT SITE UNLIMITED PRECIPITATION AT ACCIDENT SITE NONE TYPE OF WEATHER CONDITIONS VFR		
1-0041	7/20/64 TIME - 1210	PUEBLO COLO	DOUGLAS DC-3 N91003 DAMAGE-NONE	CR- 0 1 2 PX- 0 0 11	SCHED DOM PASSG SRV	AIRLINE TRANSPORT, AGE 32, 6837 TOTAL HOURS, 5376 IN TYPE, INSTRUMENT RATED.
		OPERATOR - CENTRAL AIRLINES, INC. TYPE OF ACCIDENT TURBULENCE		PHASE OF OPERATION IN FLIGHT: DESCENDING		
		PROBABLE CAUSE(S) WEATHER - TURBULENCE IN FLIGHT, CLEAR AIR WEATHER BRIEFING - COMPANY DISPATCH WEATHER FORECAST - FORECAST SUBSTANTIALLY CORRECT				
		SKY CONDITION CLEAR VISIBILITY AT ACCIDENT SITE 5 OR OVER OBSTRUCTIONS TO VISION AT ACCIDENT SITE NONE TYPE OF FLIGHT PLAN IFR		CEILING AT ACCIDENT SITE UNLIMITED PRECIPITATION AT ACCIDENT SITE NONE TYPE OF WEATHER CONDITIONS VFR		
		REMARKS- STEWARDESS COMPLETING DUTIES THROWN AGAINST CABIN STRUCTURE.				

BRIEFS OF ACCIDENTS

FILE	DATE	LOCATION	AIRCRAFT DATA	INJURIES			FLIGHT PURPOSE	PILOT DATA
				F	S	M/N		
1-0049	7/15/64	NEW YORK NY	LOCKHEED L-1049 N6223C DAMAGE-NONE	CR- 0	1	4	SCHED DOM PASSG SRV	AIRLINE TRANSPORT, AGE 46, 16996 TOTAL HOURS, 2503 IN TYPE, INSTRUMENT RATED.
	TIME - 1525			PX- 0	0	15		
		OPERATOR - EASTERN AIR LINES, INC.						
		TYPE OF ACCIDENT MISCELLANEOUS					PHASE OF OPERATION TAKEOFF: INITIAL CLIMB	
		PROBABLE CAUSE(S) PERSONNEL - OTHER FLIGHT PERSONNEL						
		FACTOR(S) WEATHER - TURBULENCE, ASSOCIATED W/ CLOUDS, THUNDERSTORMS						
		SKY CONDITION SCATTERED					CEILING AT ACCIDENT SITE UNLIMITED	
		VISIBILITY AT ACCIDENT SITE 5 OR OVER					PRECIPITATION AT ACCIDENT SITE NONE	
		OBSTRUCTIONS TO VISION AT ACCIDENT SITE NONE					TYPE OF WEATHER CONDITIONS VFR	
		TYPE OF FLIGHT PLAN IFR						
1-0059	7/3/64	NR. KNOXVILLE TENN	CARAVELLE N1007U DAMAGE-NONE	CR- 0	0	5	SCHED DOM PASSG SRV	AIRLINE TRANSPORT, AGE 56, 27000 TOTAL HOURS, 200 IN TYPE, INSTRUMENT RATED.
	TIME - 1210			PX- 1	0	48		
		OPERATOR - UNITED AIR LINES, INC.						
		TYPE OF ACCIDENT TURBULENCE					PHASE OF OPERATION IN FLIGHT: CLIMB TO CRUISE	
		PROBABLE CAUSE(S) MISC - SEAT BELT FAILED TO HOLD PAX REASON UNKNOWN.						
		WEATHER - DOWNDRAFT, UPDRAFTS						
		WEATHER - TURBULENCE, ASSOCIATED W/ CLOUDS, THUNDERSTORMS						
		WEATHER BRIEFING - BRIEFING RECEIVED-METHOD UNKNOWN						
		WEATHER FORECAST - UNKNOWN/NOT REPORTED						
		SKY CONDITION BROKEN/LOWER SCATTERED					CEILING AT ACCIDENT SITE 15000	
		VISIBILITY AT ACCIDENT SITE UNKNOWN/NOT REPORTED					PRECIPITATION AT ACCIDENT SITE NONE	
		OBSTRUCTIONS TO VISION AT ACCIDENT SITE NONE					TYPE OF WEATHER CONDITIONS VFR	
		TYPE OF FLIGHT PLAN IFR						

BRIEFS OF ACCIDENTS

FILE	DATE	LOCATION	AIRCRAFT DATA	INJURIES F S M/N	FLIGHT PURPOSE	PILOT DATA
I-0064	12/24/64 TIME - 0031	SAN FRANCISCO CAL	LOCKHEED L-1049 N6915C DAMAGE-DESTROYED	CR- 3 0 0 PX- 0 0 0	SCHED DOM CARGO SRV	AIRLINE TRANSPORT, AGE 49, 14911 TOTAL HOURS, 3942 IN TYPE, INSTRUMENT RATED.
		NAME OF AIRPORT - SAN FRANCISCO INT OPERATOR - FLYING TIGER LINE, INC. TYPE OF ACCIDENT COLLISION WITH GROUND/WATER: CONTROLLED		PHASE OF OPERATION TAKEOFF: INITIAL CLIMB		
PROBABLE CAUSE(S)						
PILOT - DEVIATED FROM COURSE FOR UNDETERMINED REASON						
WEATHER - DOWNDRAFT, UPDRAFTS						
WEATHER - TURBULENCE, ASSOCIATED W/ CLOUDS, THUNDERSTORMS						
WEATHER BRIEFING - BRIEFED BY WEATHER BUREAU PERSONNEL, BY PHONE						
WEATHER FORECAST - FORECAST SUBSTANTIALLY CORRECT						
		SKY CONDITION OVERCAST		CEILING AT ACCIDENT SITE 1100		
		VISIBILITY AT ACCIDENT SITE 5 OR OVER		PRECIPITATION AT ACCIDENT SITE RAIN		
		OBSTRUCTIONS TO VISION AT ACCIDENT SITE FOG		TEMPERATURE-F 59		
		WIND DIRECTION-DEGREES 240		WIND VELOCITY-KNOTS 22		
		TYPE OF WEATHER CONDITIONS VFR		TYPE OF FLIGHT PLAN IFR		
		FIRE AFTER IMPACT				

BRIEFS OF ACCIDENTS

FILE	DATE	LOCATION	AIRCRAFT DATA	INJURIES F S M/N	FLIGHT PURPOSE	PILOT DATA
1-0065	11/28/64	NR. HUGHES ALAS	PIL-PORIER PC-6A N1421Z DAMAGE-SUBSTANTIAL	CR- 0 0 1 PX- 0 0 4	SCHED DOM PASSG SRV	COMMERCIAL, AGE 36, 5663 TOTAL HOURS, 263 IN TYPE, INSTRUMENT RATED.
OPERATOR - WIEN ALASKA AIRLINES, INC.			PHASE OF OPERATION			
TYPE OF ACCIDENT GEAR COLLAPSED			LANDING: LEVEL OFF/TOUCHDOWN			
PROBABLE CAUSE(S)						
AIRFRAME - LANDING GEAR: MAIN GEAR-SHOCK ABSORBING ASSY, STRUTS, ATTACHMENTS, ETC.						
MISCELLANEOUS ACTS, CONDITIONS - FROZEN, MOISTURE						
FACTOR(S)						
MISCELLANEOUS ACTS, CONDITIONS - OVERLOAD FAILURE						
WEATHER - TURBULENCE IN FLIGHT, CLEAR AIR						
WEATHER BRIEFING - NO BRIEFING RECEIVED						
WEATHER FORECAST - FORECAST SUBSTANTIALLY CORRECT						
EMERGENCY CIRCUMSTANCES - FORCED LANDING ON AIRPORT/SEAPLANE BASE/HELIP.						
SKY CONDITION			CEILING AT ACCIDENT SITE			
CLEAR			UNLIMITED			
VISIBILITY AT ACCIDENT SITE			PRECIPITATION AT ACCIDENT SITE			
5 OR OVER			NONE			
OBSTRUCTIONS TO VISION AT ACCIDENT SITE			TEMPERATURE-F			
NONE			-30			
WIND VELOCITY-KNOTS			TYPE OF WEATHER CONDITIONS			
CALM			VFR			
TYPE OF FLIGHT PLAN						
VFR						
REMARKS- SUDDEN INFLIGHT RELEASE OF STRUT WHICH WAS FROZEN IN COMPRESSED POSITION-WATER GOT IN STRUT TUBE						
1-0068	7/24/64	NR. GAINESVILLE FLA	DOUGLAS DC-8 N8609 DAMAGE-NONE	CR- 0 0 7 PX- 0 1129	SCHED INTERNATL PASSG SRV	AIRLINE TRANSPORT, AGE 56, 27453 TOTAL HOURS, 381 IN TYPE, INSTRUMENT RATED.
OPERATOR - EASTERN AIR LINES, INC.			PHASE OF OPERATION			
TYPE OF ACCIDENT TURBULENCE			IN FLIGHT: NORMAL CRUISE			
PROBABLE CAUSE(S)						
WEATHER - TURBULENCE, ASSOCIATED W/ CLOUDS, THUNDERSTORMS						
PERSONNEL - MISCELLANEOUS-PERSONNEL: PASSENGER						
FACTOR(S)						
WEATHER - THUNDERSTORM ACTIVITY						
MISCELLANEOUS ACTS, CONDITIONS - SEAT BELT NOT FASTENED						
WEATHER BRIEFING - COMPANY DISPATCH						
WEATHER FORECAST - UNKNOWN/NOT REPORTED						
SKY CONDITION			CEILING AT ACCIDENT SITE			
UNKNOWN/NOT REPORTED			UNKNOWN/NOT REPORTED			
VISIBILITY AT ACCIDENT SITE			PRECIPITATION AT ACCIDENT SITE			
UNKNOWN/NOT REPORTED			RAIN			
OBSTRUCTIONS TO VISION AT ACCIDENT SITE			TYPE OF WEATHER CONDITIONS			
UNKNOWN/NOT REPORTED			IFR			
TYPE OF FLIGHT PLAN						
IFR						
REMARKS- INJURED PASSENGER DID NOT COMPLY WITH FASTEN-SEAT-BELTS SIGN.						

BRIEFS OF ACCIDENTS

FILE	DATE	LOCATION	AIRCRAFT DATA	INJURIES			FLIGHT PURPOSE	PILOT DATA	
				F	S	M/N			
1-0069	9/7/64 TIME - 1700	NR, MINNEAPOLIS MINN	BOEING B-720 N736US DAMAGE-MINOR	CR- PX-	0 0	1 1	6 84	SCHED DOM PASSG SRV	AIRLINE TRANSPORT, AGE 52, 24071 TOTAL HOURS, 1627 IN TYPE, INSTRUMENT RATED.
OPERATOR - NORTHWEST AIRLINES, INC.			PHASE OF OPERATION						
TYPE OF ACCIDENT			IN FLIGHT: DESCENDING						
TURBULENCE									
PROBABLE CAUSE(S)									
WEATHER - TURBULENCE, ASSOCIATED W/ CLOUDS, THUNDERSTORMS									
WEATHER BRIEFING - COMPANY DISPATCH									
WEATHER FORECAST - FORECAST SUBSTANTIALLY CORRECT									
SKY CONDITION			CEILING AT ACCIDENT SITE						
OVERCAST/LOWER SCATTERED			5000						
VISIBILITY AT ACCIDENT SITE			PRECIPITATION AT ACCIDENT SITE						
5 MILES OR LESS			RAIN						
OBSTRUCTIONS TO VISION AT ACCIDENT SITE			TEMPERATURE-F						
FOG			70						
WIND DIRECTION-DEGREES			WIND VELOCITY-KNOTS						
240			2						
TYPE OF WEATHER CONDITIONS			TYPE OF FLIGHT PLAN						
IFR			IFR						
1-0074	11/15/64 TIME - 1145	WICHITA KANS	LOCKHEED L-749A N6013C DAMAGE-MINOR	CR- PX-	0 0	0 2	5 13	SCHED DOM PASSG SRV	AIRLINE TRANSPORT, AGE 44, 16279 TOTAL HOURS, 6718 IN TYPE, INSTRUMENT RATED.
OPERATOR - TRAKS WORLD AIRLINES, INC.			PHASE OF OPERATION						
TYPE OF ACCIDENT			LANDING: INITIAL APPROACH						
TURBULENCE									
PROBABLE CAUSE(S)									
WEATHER - TURBULENCE, ASSOCIATED W/ CLOUDS, THUNDERSTORMS									
FACTORS									
MISCELLANEOUS ACTS, CONDITIONS - MATERIAL FAILURE									
WEATHER BRIEFING - COMPANY DISPATCH									
WEATHER FORECAST - FORECAST SUBSTANTIALLY CORRECT									
SKY CONDITION			CEILING AT ACCIDENT SITE						
BROKEN			600						
VISIBILITY AT ACCIDENT SITE			PRECIPITATION AT ACCIDENT SITE						
5 OR OVER			NONE						
OBSTRUCTIONS TO VISION AT ACCIDENT SITE			TEMPERATURE-F						
NONE			54						
WIND DIRECTION-DEGREES			WIND VELOCITY-KNOTS						
340			28						
TYPE OF WEATHER CONDITIONS			TYPE OF FLIGHT PLAN						
IFR			IFR						
REMARKS- SEAT 9C SEAT BELT FAILED, 9C PASSENGR WAS INJURED			TURBULENCE CONSIDERED EXTREME RENDERED A/C UNCONT						

BRIEFS OF ACCIDENTS

FILE	DATE	LOCATION	AIRCRAFT DATA	INJURIES F S M/N	FLIGHT PURPOSE	PILOT DATA
1-0075	4/11/64	NR. SAN JOSE COSTA RI	DOUGLAS DC-6B N6520C DAMAGE-SUBSTANTIAL	CR- 0 1 4 PX- 0 0 20	SCHED INTERNATL PASSG SRV	AIRLINE TRANSPORT, AGE 44, 14440 TOTAL HOURS, 4629 IN TYPE, INSTRUMENT RATED.
<p>OPERATOR - PAN AMERICAN WORLD AIRWAYS, INC. TYPE OF ACCIDENT TURBULENCE REMARKS- INVESTIGATION UNDER JURISDICTION COSTA RICA GOVT MISC-TURBULENCE CAUSED BY NEARBY VOLCANO</p>						
1-0005	1/24/65	NR. ALLENTOWN PA	CARAVELLE VIR N1001 DAMAGE-NONE	CR- 0 1 4 PX- 0 0 26	SCHED DOM PASSG SRV	AIRLINE TRANSPORT, AGE 43, 18000 TOTAL HOURS, 310 IN TYPE, INSTRUMENT RATED.
<p>OPERATOR - UNITED AIR LINES, INC. TYPE OF ACCIDENT TURBULENCE PHASE OF OPERATION IN FLIGHT: NORMAL CRUISE</p> <p>PROBABLE CAUSE(S) WEATHER - TURBULENCE, ASSOCIATED W/ CLOUDS, THUNDERSTORMS WEATHER BRIEFING - COMPANY DISPATCH WEATHER FORECAST - FORECAST SUBSTANTIALLY CORRECT</p> <p>SKY CONDITION OVERCAST VISIBILITY AT ACCIDENT SITE UNKNOWN/NOT REPORTED OBSTRUCTIONS TO VISION AT ACCIDENT SITE UNKNOWN/NOT REPORTED TYPE OF WEATHER CONDITIONS IFR REMARKS- STEWARDESS WAS PERFORMING GALLEY DUTIES, THROWN TO THE FLOOR-SEAT BELT SIGN ON-WEATHER INVOLVED.</p> <p>CEILING AT ACCIDENT SITE UNKNOWN/NOT REPORTED PRECIPITATION AT ACCIDENT SITE SNOW GRAINS/SNOW PELLETS TEMPERATURE-F -23 TYPE OF FLIGHT PLAN IFR</p>						

BRIEFS OF ACCIDENTS

FILE	DATE	LOCATION	AIRCRAFT DATA	INJURIES F S M/N	FLIGHT PURPOSE	PILOT DATA
1-0009	4/1/65 TIME - 1655	NR. JULIAN CALIF	FAIRCHILD F-27A N750L DAMAGE-NONE	CR- 0 0 3 PX- 0 1 39	SCHED DOM PASSG SRV	AIRLINE TRANSPORT, AGE 43, 14297 TOTAL HOURS, 3382 IN TYPE, INSTRUMENT RATED.
OPERATOR - BONANZA AIR LINES, INC.						
TYPE OF ACCIDENT						
TURBULENCE						
PROBABLE CAUSE(S)						
PERSONNEL - MISCELLANEOUS-PERSONNEL: PASSENGER						
PERSONNEL - OTHER FLIGHT PERSONNEL						
WEATHER - TURBULENCE, ASSOCIATED W/ CLOUDS, THUNDERSTORMS						
WEATHER BRIEFING - COMPANY DISPATCH						
WEATHER FORECAST - FORECAST SUBSTANTIALLY CORRECT						
SKY CONDITION						
BROKEN						
VISIBILITY AT ACCIDENT SITE						
5 OR OVER						
OBSTRUCTIONS TO VISION AT ACCIDENT SITE						
NONE						
TYPE OF FLIGHT PLAN						
VFR						
REMARKS- NONREVENUE PASSENGER AND STEWARDESS TALKING IN GALLEY DID NOT COMPLY WITH FASTEN SEAT BELT SIGN.						
1-0025	1/31/65 TIME - 1213	NR. BERMUDA ISLANDS	BOEING 707 321C N797PA DAMAGE-NONE	CR- 0 0 10 PX- 0 2 65	SCHED INTERNATL PASSG SRV	AIRLINE TRANSPORT, AGE 47, 17965 TOTAL HOURS, 1207 IN TYPE, INSTRUMENT RATED.
OPERATOR - PAN AMERICAN WORLD AIRWAYS, INC.						
TYPE OF ACCIDENT						
TURBULENCE						
PROBABLE CAUSE(S)						
WEATHER - TURBULENCE, ASSOCIATED W/ CLOUDS, THUNDERSTORMS						
PERSONNEL - MISCELLANEOUS-PERSONNEL: PASSENGER						
FACTOR(S)						
MISCELLANEOUS ACTS, CONDITIONS - SEAT BELT NOT FASTENED						
WEATHER BRIEFING - COMPANY DISPATCH						
WEATHER FORECAST - FORECAST SUBSTANTIALLY CORRECT						
EMERGENCY CIRCUMSTANCES - PRECAUTIONARY LANDING ON AIRPORT ADVERSE/UNFAVORABLE WEATHER						
SKY CONDITION						
OVERCAST/LOWER SCATTERED						
VISIBILITY AT ACCIDENT SITE						
5 OR OVER						
OBSTRUCTIONS TO VISION AT ACCIDENT SITE						
NONE						
TYPE OF FLIGHT PLAN						
IFR						
REMARKS- AIRSPEED AT TIME OF TURBULENCE .80 MACH						

BRIEFS OF ACCIDENTS

FILE	DATE	LOCATION	AIRCRAFT DATA	INJURIES F S M/N	FLIGHT PURPOSE	PILOT DATA
1-0028	3/28/65 TIME - 1330	PRESCOTT, ARIZ	FAIRCHILD F-27A N755L DAMAGE-NONE	CR- 0 0 3 PX- 0 1 37	SCHED DOM PASSG SRV	AIRLINE TRANSPORT, AGE 36, 10467 TOTAL HOURS, 4653 IN TYPE, INSTRUMENT RATED.
<p>OPERATOR - BONANZA AIR LINES, INC.</p> <p>TYPE OF ACCIDENT TURBULENCE</p> <p>PHASE OF OPERATION IN FLIGHT: DESCENDING</p> <p>PROBABLE CAUSE(S) WEATHER - TURBULENCE, ASSOCIATED W/ CLOUDS, THUNDERSTORMS PERSONNEL - MISCELLANEOUS-PERSONNEL: PASSENGER</p> <p>FACTOR(S) MISCELLANEOUS ACTS, CONDITIONS - SEAT BELT NOT FASTENED</p> <p>SKY CONDITION BROKEN</p> <p>CEILING AT ACCIDENT SITE UNKNOWN/NOT REPORTED</p> <p>VISIBILITY AT ACCIDENT SITE 5 OR OVER</p> <p>PRECIPITATION AT ACCIDENT SITE RAIN SHOWERS</p> <p>OBSTRUCTIONS TO VISION AT ACCIDENT SITE NONE</p> <p>TYPE OF WEATHER CONDITIONS VFR</p> <p>TYPE OF FLIGHT PLAN IFR</p> <p>REMARKS- SEAT BELT SIGN ON, PILOT SKIRTING CLOUD BUILD-UPS PASSENGER LEFT SEAT FOR LAVATORY</p>						
1-0037	5/4/65 TIME - 1612	NR. CHICAGO ILL	CONVAIR CV-880 N812TW DAMAGE-NONE	CR- 0 0 7 PX- 0 1 55	SCHED DOM PASSG SRV	AIRLINE TRANSPORT, AGE UNK/NR, UNK/NR TOTAL HOURS, UNK/NR IN TYPE, UNK/NR INSTRUMENT RATED.
<p>OPERATOR - TRANS WORLD AIRLINES, INC.</p> <p>TYPE OF ACCIDENT TURBULENCE</p> <p>PHASE OF OPERATION IN FLIGHT: CLIMB TO CRUISE</p> <p>PROBABLE CAUSE(S) PERSONNEL - MISCELLANEOUS-PERSONNEL: PASSENGER MISCELLANEOUS ACTS, CONDITIONS - SEAT BELT NOT FASTENED PILOT IN COMMAND - INADEQUATE SUPERVISION OF FLIGHT</p> <p>FACTOR(S) WEATHER - THUNDERSTORM ACTIVITY WEATHER - TURBULENCE, ASSOCIATED W/ CLOUDS, THUNDERSTORMS WEATHER BRIEFING - COMPANY DISPATCH WEATHER FORECAST - FORECAST SUBSTANTIALLY CORRECT</p> <p>SKY CONDITION OVERCAST</p> <p>CEILING AT ACCIDENT SITE 4500</p> <p>VISIBILITY AT ACCIDENT SITE UNKNOWN/NOT REPORTED</p> <p>PRECIPITATION AT ACCIDENT SITE THUNDERSTORM</p> <p>OBSTRUCTIONS TO VISION AT ACCIDENT SITE NONE</p> <p>TYPE OF WEATHER CONDITIONS IFR</p> <p>TYPE OF FLIGHT PLAN IFR</p> <p>REMARKS- CREW DID NOT ANNOUNCE SEAT BELT SIGN ON, PASSENGER STATEMENTS INDICATED LACK OF AWARENESS OF SIGN</p>						

BRIEFS OF ACCIDENTS

FILE	DATE	LOCATION	AIRCRAFT DATA	INJURIES F S M/N	FLIGHT PURPOSE	PILOT DATA
1-0039	7/6/65 TIME - 0200	NR, OMAHA NEBR	BOEING 707 131B N756TW DAMAGE-NONE	CR- 0 1 6 PX- 0 0 45	SCHED DOM PASSG SRV	AIRLINE TRANSPORT, AGE 49, 20939 TOTAL HOURS, 3980 IN TYPE, INSTRUMENT RATED.
OPERATOR - TRANS WORLD AIRLINES, INC.			PHASE OF OPERATION			
TYPE OF ACCIDENT TURBULENCE			IN FLIGHT: NORMAL CRUISE			
PROBABLE CAUSE(S) MISC - SEAT BELT ATTACH FITTING FAILED						
FACTOR(S) WEATHER - TURBULENCE, ASSOCIATED W/ CLOUDS, THUNDERSTORMS WEATHER - THUNDERSTORM ACTIVITY MISCELLANEOUS ACTS, CONDITIONS - MATERIAL FAILURE WEATHER BRIEFING - COMPANY DISPATCH WEATHER FORECAST - UNKNOWN/NOT REPORTED						
SKY CONDITION UNKNOWN/NOT REPORTED			CEILING AT ACCIDENT SITE UNKNOWN/NOT REPORTED			
VISIBILITY AT ACCIDENT SITE UNKNOWN/NOT REPORTED			PRECIPITATION AT ACCIDENT SITE THUNDERSTORM			
OBSTRUCTIONS TO VISION AT ACCIDENT SITE UNKNOWN/NOT REPORTED			TYPE OF WEATHER CONDITIONS IFR			
TYPE OF FLIGHT PLAN IFR						
1-0041	8/27/65 TIME - 1232	NR, NEWPORT VT	DOUGLAS DC-3 N1942B DAMAGE-NONE	CR- 0 1 2 PX- 0 0 5	SCHED DOM PASSG SRV	AIRLINE TRANSPORT, AGE 43, 4746 TOTAL HOURS, 1527 IN TYPE, INSTRUMENT RATED.
OPERATOR - NORTHEAST AIRLINES, INC.			PHASE OF OPERATION			
TYPE OF ACCIDENT TURBULENCE			IN FLIGHT: NORMAL CRUISE			
PROBABLE CAUSE(S) WEATHER - TURBULENCE, ASSOCIATED W/ CLOUDS, THUNDERSTORMS						
FACTOR(S) MISCELLANEOUS ACTS, CONDITIONS - SEAT BELT NOT FASTENED WEATHER BRIEFING - COMPANY DISPATCH WEATHER FORECAST - FORECAST SUBSTANTIALLY CORRECT						
SKY CONDITION OVERCAST			CEILING AT ACCIDENT SITE 6000			
VISIBILITY AT ACCIDENT SITE 5 OR OVER			PRECIPITATION AT ACCIDENT SITE NONE			
OBSTRUCTIONS TO VISION AT ACCIDENT SITE NONE			TEMPERATURE-F 65			
WIND DIRECTION-DEGREES 230			WIND VELOCITY-KNOTS 12			
TYPE OF WEATHER CONDITIONS VFR			TYPE OF FLIGHT PLAN IFR			
REMARKS- CABIN ATTENDANT WAS NOT SEATED WHEN TURBULENCE WAS ENCOUNTERED. SHE WAS ATTENDING PASSENGERS.						

BRIEFS OF ACCIDENTS

FILE	DATE	LOCATION	AIRCRAFT DATA	INJURIES F S M/N	FLIGHT PURPOSE	PILOT DATA
1-0042	8/12/65 TIME - 1316	BATTLE MTN, NEV	LOCKHEED L-188 N7139C DAMAGE-NONE	CR- 0 1 4 PX- 0 0 89	SCHED DOM PASSG SRV	AIRLINE TRANSPORT, AGE 44, 16200 TOTAL HOURS, 950 IN TYPE, INSTRUMENT RATED.
		OPERATOR - WESTERN AIR LINES, INC.				
		TYPE OF ACCIDENT TURBULENCE		PHASE OF OPERATION IN FLIGHT: NORMAL CRUISE		
		PROBABLE CAUSE(S) WEATHER - TURBULENCE, ASSOCIATED W/ CLOUDS, THUNDERSTORMS				
		FACTOR(S) MISCELLANEOUS ACTS, CONDITIONS - SEAT BELT NOT FASTENED				
		SKY CONDITION OVERCAST/LOWER SCATTERED		VISIBILITY AT ACCIDENT SITE 1 MILE OR LESS		
		PRECIPITATION AT ACCIDENT SITE HAIL, THUNDERSTORM		TYPE OF WEATHER CONDITIONS VFR		
		TYPE OF FLIGHT PLAN IFR				
1-0050	1/23/65 TIME - 1150	NR, CHICAGO ILL	BOEING B-720B N7250S DAMAGE-NONE	CR- 0 0 7 PX- 0 2 41	SCHED DOM PASSG SRV	AIRLINE TRANSPORT, AGE 51, 21893 TOTAL HOURS, 2631 IN TYPE, INSTRUMENT RATED.
		OPERATOR - NORTHWEST AIRLINES, INC.				
		TYPE OF ACCIDENT TURBULENCE		PHASE OF OPERATION IN FLIGHT: DESCENDING		
		PROBABLE CAUSE(S) WEATHER - TURBULENCE IN FLIGHT, CLEAR AIR				
		WEATHER - TURBULENCE, ASSOCIATED W/ CLOUDS, THUNDERSTORMS				
		PERSONNEL - WEATHER PERSONNEL: INCORRECT WEATHER FORECAST				
		PERSONNEL - DISPATCHING: OTHER				
		FACTOR(S) MISCELLANEOUS ACTS, CONDITIONS - SEAT BELT SIGN OFF				
		MISCELLANEOUS ACTS, CONDITIONS - CIRCUIT BREAKER POPPED				
		WEATHER BRIEFING - COMPANY DISPATCH				
		WEATHER FORECAST - WEATHER CONSIDERABLY WORSE THAN FORECAST				
		SKY CONDITION OVERCAST		CEILING AT ACCIDENT SITE 400		
		VISIBILITY AT ACCIDENT SITE 2 MILES OR LESS		PRECIPITATION AT ACCIDENT SITE RAIN SHOWERS, SNOW SHOWERS		
		OBSTRUCTIONS TO VISION AT ACCIDENT SITE FOG		TEMPERATURE-F 31		
		WIND DIRECTION-DEGREES 220		WIND VELOCITY-KNOTS 141		
		TYPE OF WEATHER CONDITIONS IFR		TYPE OF FLIGHT PLAN IFR		
		REMARKS- SEAT BELT SIGN DID NOT STAY ON DUE TO TRIPPED CIRCUIT BREAKER-WX BUR AND CO TURBUL FRCSTS INACCUR				

BRIEFS OF ACCIDENTS

FILE	DATE	LOCATION	AIRCRAFT DATA	INJURIES F S M/N	FLIGHT PURPOSE	PILOT DATA
1-0055	8/12/65 TIME - 1126	NR.SALEM OREG	CURTISS C-46A N7769B DAMAGE-SUBSTANTIAL	CR- 0 0 2 PX- 0 0 0	MILITARY CTR CARGO DOM	AIRLINE TRANSPORT, AGE 39, 6065 TOTAL HOURS, UNK/NR IN TYPE, UNK/NR INSTRUMENT RATED.
<p>OPERATOR - ZANTOP AIR TRANSPORT TYPE OF ACCIDENT TURBULENCE</p> <p>PHASE OF OPERATION IN FLIGHT: NORMAL CRUISE</p> <p>PROBABLE CAUSE(S) WEATHER - TURBULENCE, ASSOCIATED W/ CLOUDS, THUNDERSTORMS WEATHER BRIEFING - OTHER WEATHER FORECAST - FORECAST SUBSTANTIALLY CORRECT EMERGENCY CIRCUMSTANCES - PRECAUTIONARY LANDING ON AIRPORT SUSPECTED OR KNOWN AIRCRAFT DAMAGE</p> <p>SKY CONDITION BROKEN</p> <p>CEILING AT ACCIDENT SITE 5500</p> <p>VISIBILITY AT ACCIDENT SITE 5 OR OVER</p> <p>PRECIPITATION AT ACCIDENT SITE RAIN</p> <p>OBSTRUCTIONS TO VISION AT ACCIDENT SITE NONE</p> <p>TYPE OF WEATHER CONDITIONS VFR</p> <p>TYPE OF FLIGHT PLAN IFR</p> <p>REMARKS- CARGO TIEDOWN LINES SEPARATED IN TURBULENCE, LOOSE CARGO DAMAGED UPPER FUSELAGE. WX BRIEF BY MIL.</p>						
1-0064	10/17/65 TIME - 1555	GLENWOOD SPGS COL	BOEING 707 320C N17321 DAMAGE-NONE	CR- 0 1 7 PX- 0 1106	SCHED DOM PASSG SRV	AIRLINE TRANSPORT, AGE 47, 20637 TOTAL HOURS, 3000 IN TYPE, INSTRUMENT RATED.
<p>OPERATOR - CONTINENTAL AIR LINES, INC. TYPE OF ACCIDENT TURBULENCE</p> <p>PHASE OF OPERATION IN FLIGHT: NORMAL CRUISE</p> <p>PROBABLE CAUSE(S) WEATHER - TURBULENCE IN FLIGHT, CLEAR AIR</p> <p>FACTOR(S) PERSONNEL - WEATHER PERSONNEL: INCORRECT WEATHER FORECAST WEATHER BRIEFING - COMPANY DISPATCH WEATHER FORECAST - WEATHER CONSIDERABLY WORSE THAN FORECAST</p> <p>SKY CONDITION BROKEN/LOWER SCATTERED</p> <p>CEILING AT ACCIDENT SITE 0</p> <p>VISIBILITY AT ACCIDENT SITE ZERO</p> <p>PRECIPITATION AT ACCIDENT SITE NONE</p> <p>TEMPERATURE-F -38</p> <p>WIND DIRECTION-DEGREES 130</p> <p>WIND VELOCITY-KNOTS 57</p> <p>TYPE OF WEATHER CONDITIONS IFR</p> <p>REMARKS- COMPANY AND WEATHER BUREAU FORECASTS WERE INADEQVATE WITH REGARD TO TURBULENCE.</p>						

BRIEFS OF ACCIDENTS

FILE	DATE	LOCATION	AIRCRAFT DATA	INJURIES			FLIGHT PURPOSE	PILOT DATA
				F	S	M/N		
1-0072	12/22/65	NR. SAN DIEGO, CALIF.	DOUGLAS DC-8 N8061U DAMAGE-NONE	CR-	0 1 6		SCHED DOM PASSG SRV	AIRLINE TRANSPORT, AGE 53, 27000 TOTAL HOURS, 4300 IN TYPE, INSTRUMENT RATED.
			OPERATOR - UNITED AIR LINES, INC. TYPE OF ACCIDENT TURBULENCE				PHASE OF OPERATION IN FLIGHT: DESCENDING	
			PROBABLE CAUSE(S) WEATHER - TURBULENCE, ASSOCIATED W/ CLOUDS, THUNDERSTORMS FACTOR(S) MISCELLANEOUS ACTS, CONDITIONS - SEAT BELT NOT FASTENED WEATHER BRIEFING - COMPANY DISPATCH WEATHER FORECAST - UNKNOWN/NOT REPORTED					
			SKY CONDITION BROKEN VISIBILITY AT ACCIDENT SITE 5 DR OVER OBSTRUCTIONS TO VISION AT ACCIDENT SITE NONE WIND VELOCITY-KNOTS CALM TYPE OF FLIGHT PLAN IFR				CEILING AT ACCIDENT SITE 3300 PRECIPITATION AT ACCIDENT SITE NONE TEMPERATURE-F 52 TYPE OF WEATHER CONDITIONS VFR	
			REMARKS- STEWARDESS FASTENING SEAT BELT. AIRCRAFT ENCOUNTERED UNANTICIPATED MOD TO, SEVERE TURBULENCE					
1-0073	3/2/65	NR. WILMINGTON NC	CONVAIR CV-880 N8494H DAMAGE-NONE	CR-	0 0 6		SCHED DOM PASSG SRV	AIRLINE TRANSPORT, AGE UNK/NR, 17200 TOTAL HOURS, 3100 IN TYPE, INSTRUMENT RATED.
			OPERATOR - NORTHEAST AIRLINES, INC. TYPE OF ACCIDENT TURBULENCE				PHASE OF OPERATION IN FLIGHT: NORMAL CRUISE	
			PROBABLE CAUSE(S) WEATHER - TURBULENCE, ASSOCIATED W/ CLOUDS, THUNDERSTORMS PERSONNEL - OTHER FLIGHT PERSONNEL MISCELLANEOUS ACTS, CONDITIONS - SEAT BELT NOT FASTENED WEATHER BRIEFING - COMPANY DISPATCH WEATHER FORECAST - FORECAST SUBSTANTIALLY CORRECT					
			SKY CONDITION UNKNOWN/NOT REPORTED VISIBILITY AT ACCIDENT SITE UNKNOWN/NOT REPORTED TYPE OF FLIGHT PLAN IFR				CEILING AT ACCIDENT SITE UNKNOWN/NOT REPORTED TYPE OF WEATHER CONDITIONS VFR	
			REMARKS- ACCIDENT NOTIFICATION 12-17-65. CREW DID NOT CHECK PASSENGERS SEATBELTS FOR PROPER SECURITY					

BRIEFS OF ACCIDENTS

FILE	DATE	LOCATION	AIRCRAFT DATA	INJURIES F S M/N	FLIGHT PURPOSE	PILOT DATA
1-0074	4/19/65	NR. TALLAHASSEE FLA	LOCKHEED L-188 N552R DAMAGE-NONE	CR- 0 1 4 PX- 0 0 53	SCHED DOM PASSG SKV	AIRLINE TRANSPORT, AGE 50, 17474 TOTAL HOURS, 1950 IN TYPE, INSTRUMENT RATED.
OPERATOR - EASTERN AIR LINES, INC.			PHASE OF OPERATION			
TYPE OF ACCIDENT			IN FLIGHT: NORMAL CRUISE			
TURBULENCE						
PROBABLE CAUSE(S)						
WEATHER - TURBULENCE, ASSOCIATED W/ CLOUDS, THUNDERSTORMS						
FACTOR(S)						
WEATHER - THUNDERSTORM ACTIVITY						
PERSONNEL - OTHER FLIGHT PERSONNEL						
MISCELLANEOUS ACTS, CONDITIONS - SEAT BELT NOT FASTENED						
WEATHER BRIEFING - COMPANY DISPATCH						
WEATHER FORECAST - UNKNOWN/NOT REPORTED						
SKY CONDITION			CEILING AT ACCIDENT SITE			
OVERCAST			23000			
VISIBILITY AT ACCIDENT SITE			PRECIPITATION AT ACCIDENT SITE			
UNKNOWN/NOT REPORTED			RAIN			
OBSTRUCTIONS TO VISION AT ACCIDENT SITE			TYPE OF WEATHER CONDITIONS			
NONE			IFR			
TYPE OF FLIGHT PLAN						
IFR						
REMARKS- FLT ATTENDANT PERFORMING DUTIES-INJURED RETURNING TO SEAT						

BRIEFS OF ACCIDENTS

FILE	DATE	LOCATION	AIRCRAFT DATA	INJURIES F S M/N	FLIGHT PURPOSE	PILOT DATA
1-0008	8/5/66 TIME -	NR. FALLS CITY, NEBR	BRITISH AC N1553 DAMAGE-DESTROYED	CR- 4 0 0 PX- 38 0 0	SCHED DOM PASSG SRV	AIRLINE TRANSPORT, AGE 47, 20767 TOTAL HOURS, 549 IN TYPE, INSTRUMENT RATED.
OPERATOR - BRANIFF AIRWAYS, INC.			PHASE OF OPERATION			
TYPE OF ACCIDENT			IN FLIGHT: NORMAL CRUISE			
AIRFRAME FAILURE: IN FLIGHT			IN FLIGHT: NORMAL CRUISE			
FIRE OR EXPLOSION: IN FLIGHT						
PROBABLE CAUSE(S)						
PILOT - OPERATED ACFT IN AREA OF AVOIDABLE WX HAZARD						
WEATHER - TURBULENCE, ASSOCIATED W/ CLCUDS, THUNDERSTORMS						
AIRFRAME - FLIGHT CONTROL SURFACES: OTHER						
AIRFRAME - FUSELAGE: OTHER						
MISCELLANEOUS ACTS, CONDITIONS - OVERLOAD FAILURE						
FACTOR(S)						
WEATHER - SQUALL LINE						
MISCELLANEOUS ACTS, CONDITIONS - SEPARATION IN FLIGHT						
WEATHER BRIEFING - COMPANY DISPATCH						
WEATHER FORECAST - WEATHER CONSIDERABLY WORSE THAN FORECAST						
SKY CONDITION			CEILING AT ACCIDENT SITE			
OVERCAST			2000			
VISIBILITY AT ACCIDENT SITE			PRECIPITATION AT ACCIDENT SITE			
5 OR OVER			NONE			
OBSTRUCTIONS TO VISION AT ACCIDENT SITE			TYPE OF WEATHER CONDITIONS			
NONE			VFR			
TYPE OF FLIGHT PLAN						
IFR						
REMARKS- FIN, RT TAILPLANE AND RT WING FAILED.						
1-0009	1/30/66 TIME - 1408	NR. LOS ANGELES, CALIF	BOEING-707 123 N7520A DAMAGE-NONE	CR- 0 0 7 PX- 0 1 67	SCHED DOM PASSG SRV	CERTIFICATE UNKNOWN, AGE UNK/NR, UNK/NR TOTAL HOURS, UNK/NR IN TYPE, UNK/NR INSTRUMENT RATED.
OPERATOR - AMERICAN AIRLINES, INC.			PHASE OF OPERATION			
TYPE OF ACCIDENT			IN FLIGHT: DESCENDING			
TURBULENCE						
PROBABLE CAUSE(S)						
WEATHER - TURBULENCE IN FLIGHT, CLEAR AIR						
FACTOR(S)						
PERSONNEL - WEATHER PERSONNEL: INCORRECT WEATHER FORECAST						
WEATHER BRIEFING - UNKNOW/NCT REPORTED						
WEATHER FORECAST - WEATHER CONSIDERABLY WORSE THAN FORECAST						
SKY CONDITION			CEILING AT ACCIDENT SITE			
CLEAR			UNLIMITED			
VISIBILITY AT ACCIDENT SITE			PRECIPITATION AT ACCIDENT SITE			
5 OR OVER			NONE			
OBSTRUCTIONS TO VISION AT ACCIDENT SITE			TYPE OF WEATHER CONDITIONS			
NONE			VFR			
TYPE OF FLIGHT PLAN						
IFR						

BRIEFS OF ACCIDENTS

FILE	DATE	LOCATION	AIRCRAFT DATA	INJURIES F S M/N	FLIGHT PURPOSE	PILOT DATA
1-0025	8/4/66 TIME - 1410	NR.LOS MICHIS MEX	BOEING 720B N3156 DAMAGE-NONE	CR- 0 0 7 PX- 0 1 90	SCHED INTERNATL PASSG SRV	AIRLINE TRANSPORT, AGE 56, UNK/NR TOTAL HOURS, UNK/NR IN TYPE, UNK/NR INSTRUMENT RATED.
<p>OPERATOR - WESTERN AIR LINES, INC. TYPE OF ACCIDENT TURBULENCE REMARKS- INVESTIGATION UNDER THE JURISDICTION OF THE GOVT OF MEXICO.</p> <p>PHASE OF OPERATION IN FLIGHT: NORMAL CRUISE</p>						
1-0026	8/9/66 TIME - 1505	NR.HARRISBURG PA	BOEING 707123 N7504 DAMAGE-NCNE	CR- 0 0 8 PX- 0 1131	SCHED DOM PASSG SRV	AIRLINE TRANSPORT, AGE 53, UNK/NR TOTAL HOURS, 4900 IN TYPE, INSTRUMENT RATED.
<p>OPERATOR - AMERICAN AIRLINES, INC. TYPE OF ACCIDENT TURBULENCE</p> <p>PHASE OF OPERATION IN FLIGHT: DESCENDING</p> <p>PROBABLE CAUSE(S) PERSONNEL - MISCELLANEOUS-PERSONNEL: PASSENGER FACTOR(S) WEATHER - TURBULENCE IN FLIGHT, CLEAR AIR MISCELLANEOUS ACTS, CONDITIONS - SEAT BELT NOT FASTENED WEATHER BRIEFING - COMPANY DISPATCH WEATHER FORECAST - FORECAST SUBSTANTIALLY CORRECT</p> <p>SKY CONDITION BROKEN VISIBILITY AT ACCIDENT SITE 5 OR OVER OBSTRUCTIONS TO VISION AT ACCIDENT SITE NONE TYPE OF FLIGHT PLAN IFR</p> <p>CEILING AT ACCIDENT SITE 6000 PRECIPITATION AT ACCIDENT SITE NONE TYPE OF WEATHER CONDITIONS VFR</p> <p>REMARKS- SEAT BELT SIGN WAS ON AND CREW HAD ISSUED WARNINGS. PASSENGER WAS STANDING IN AISLE.</p>						

BRIEFS OF ACCIDENTS

FILE	DATE	LOCATION	AIRCRAFT DATA	INJURIES F S M/N	FLIGHT PURPOSE	PILOT DATA
1-0027	9/9/66 TIME - 1500	NR. HONOLULU HAWAII	BOEING 707321 N401PA DAMAGE-NONE	CR- 0 0 10 PX- 0 1138	MIL CONTRACT PASSG INTL	AIRLINE TRANSPORT, AGE 52, 19740 TOTAL HOURS, 1432 IN TYPE, INSTRUMENT RATED.
		OPERATOR - PAN AMERICAN WORLD AIRWAYS, INC.		PHASE OF OPERATION		
		TYPE OF ACCIDENT		IN FLIGHT: NORMAL CRUISE		
		TURBULENCE				
		PROBABLE CAUSE(S)				
		WEATHER - TURBULENCE, ASSOCIATED W/ CLOUDS, THUNDERSTORMS				
		FACTOR(S)				
		MISCELLANEOUS ACTS, CONDITIONS - SEAT BELT SIGN OFF				
		WEATHER BRIEFING - COMPANY DISPATCH				
		WEATHER FORECAST - FORECAST SUBSTANTIALLY CORRECT				
		SKY CONDITION		CEILING AT ACCIDENT SITE		
		PARTIAL OBSCURATION		33000		
		VISIBILITY AT ACCIDENT SITE		OBSTRUCTIONS TO VISION AT ACCIDENT SITE		
		UNKNOWN/NOT REPORTED		UNKNOWN/NOT REPORTED		
		TYPE OF WEATHER CONDITIONS		TYPE OF FLIGHT PLAN		
		VFR		IFR		
		REMARKS- THUNDERSTORM BUILD-UP WAS NOT OBSERVED ON ACFT RADAR				
1-0029	9/22/66 TIME - 0700	NR. MACON GA.	DOUGLAS DC-8 N820E DAMAGE-NONE	CR- 0 0 7 PX- 0 1 30	SCHED DOM PASSG SRV	AIRLINE TRANSPORT, AGE 54, 26895 TOTAL HOURS, 2475 IN TYPE, INSTRUMENT RATED.
		OPERATOR - DELTA AIR LINES, INC.		PHASE OF OPERATION		
		TYPE OF ACCIDENT		IN FLIGHT: CLIMB TO CRUISE		
		TURBULENCE				
		PROBABLE CAUSE(S)				
		WEATHER - TURBULENCE IN FLIGHT, CLEAR AIR				
		PILOT IN COMMAND - INADEQUATE SUPERVISION OF FLIGHT				
		FACTOR(S)				
		MISCELLANEOUS ACTS, CONDITIONS - DISREGARD OF GOOD OPERATING PRACTICE				
		MISCELLANEOUS ACTS, CONDITIONS - SEAT BELT SIGN OFF				
		MISCELLANEOUS ACTS, CONDITIONS - SEAT BELT NOT FASTENED				
		WEATHER BRIEFING - COMPANY DISPATCH				
		WEATHER FORECAST - FORECAST SUBSTANTIALLY CORRECT				
		SKY CONDITION		CEILING AT ACCIDENT SITE		
		CLEAR		UNLIMITED		
		VISIBILITY AT ACCIDENT SITE		PRECIPITATION AT ACCIDENT SITE		
		5 OR OVER		NONE		
		OBSTRUCTIONS TO VISION AT ACCIDENT SITE		TYPE OF WEATHER CONDITIONS		
		NONE		VFR		
		TYPE OF FLIGHT PLAN				
		IFR				
		REMARKS- PLT WAS BRIEFED TO EXPECT CLR AIR TURB IN AREA WHERE FLT ENCOUNTERED IT. INADEQUATE WARNING TO PAX				

BRIEFS OF ACCIDENTS

FILE	DATE	LOCATION	AIRCRAFT DATA	INJURIES F S M/N	FLIGHT PURPOSE	PILOT DATA
1-0030	9/23/66 TIME - 2320	NR. RAPID CITY S. DAK	DOUGLAS DC-3 N4996E DAMAGE-NONE	CR- 0 1 2 PX- 0 0 7	SCHED DOM PASSG SRV	AIRLINE TRANSPORT, AGE 39, 7718 TOTAL HOURS, 2438 IN TYPE, INSTRUMENT RATED.
		OPERATOR - FRONTIER AIRLINES, INC.			PHASE OF OPERATION	
		TYPE OF ACCIDENT TURBULENCE			IN FLIGHT: NORMAL CRUISE	
		PROBABLE CAUSE(S) WEATHER - TURBULENCE, ASSOCIATED W/ CLOUDS, THUNDERSTORMS				
		FACTOR(S) MISCELLANEOUS ACTS, CONDITIONS - SEAT BELT NOT FASTENED				
		WEATHER BRIEFING - COMPANY DISPATCH				
		WEATHER FORECAST - FORECAST SUBSTANTIALLY CORRECT				
		SKY CONDITION CLEAR			CEILING AT ACCIDENT SITE UNLIMITED	
		VISIBILITY AT ACCIDENT SITE 5 OR OVER			PRECIPITATION AT ACCIDENT SITE NONE	
		OBSTRUCTIONS TO VISION AT ACCIDENT SITE NONE			TYPE OF WEATHER CONDITIONS VFR	
		TYPE OF FLIGHT PLAN VFR				
		REMARKS- STEWARDESS WAS ASSISTING PASSENGERS. FLT WAS OPERATING VFR IN THE VICINITY OF THUNDERSTORMS.				
1-0032	9/30/66 TIME - 1923	INDIANAPOLIS IND	LOCKHEED L-188 N120 DAMAGE-NONE	CR- 0 1 4 PX- 0 0 70	SCHED DOM PASSG SRV	AIRLINE TRANSPORT, AGE 38, 11969 TOTAL HOURS, 286 IN TYPE, INSTRUMENT RATED.
		OPERATOR - AMERICAN AIRLINES, INC.			PHASE OF OPERATION	
		TYPE OF ACCIDENT TURBULENCE			IN FLIGHT: NORMAL CRUISE	
		PROBABLE CAUSE(S) WEATHER - TURBULENCE, ASSOCIATED W/ CLOUDS, THUNDERSTORMS				
		MISCELLANEOUS ACTS, CONDITIONS - SEAT BELT NOT FASTENED				
		WEATHER BRIEFING - COMPANY DISPATCH				
		WEATHER FORECAST - FORECAST SUBSTANTIALLY CORRECT				
		SKY CONDITION OVERCAST			CEILING AT ACCIDENT SITE 12000	
		VISIBILITY AT ACCIDENT SITE 5 OR OVER			PRECIPITATION AT ACCIDENT SITE NONE	
		OBSTRUCTIONS TO VISION AT ACCIDENT SITE NONE			TYPE OF WEATHER CONDITIONS VFR	
		TYPE OF FLIGHT PLAN IFR				
		REMARKS- STEWARDESS SERVING IN FLIGHT MEAL BPOKE ANKLE DUE TURBULENCE.				

BRIEFS OF ACCIDENTS

FILE	DATE	LOCATION	AIRCRAFT DATA	INJURIES F S M/N	FLIGHT PURPOSE	PILOT DATA
1-0040	6/18/66 TIME - 1500	MELBOURNE FLA	BOEING B-727 N8136N DAMAGE-NONE	CR- 0 1 5 PX- 0 0 82	SCHED DOM PASSG SRV	AIRLINE TRANSPORT, AGE 46, 7092 TOTAL HOURS, 965 IN TYPE, INSTRUMENT RATED.
<p>OPERATOR - EASTERN AIR LINES, INC. TYPE OF ACCIDENT TURBULENCE</p> <p>PHASE OF OPERATION IN FLIGHT: NORMAL CRUISE</p> <p>PROBABLE CAUSE(S) WEATHER - TURBULENCE, ASSOCIATED W/ CLOUDS, THUNDERSTORMS PILOT IN COMMAND - DIVERTED ATTENTION FROM OPERATION OF AIRCRAFT</p> <p>FACTOR(S) PERSONNEL - MISCELLANEOUS-PERSONNEL: PASSENGER MISCELLANEOUS ACTS, CONDITIONS - SEAT BELT NOT FASTENED</p> <p>SKY CONDITION BROKEN</p> <p>CEILING AT ACCIDENT SITE UNKNOWN/NOT REPORTED</p> <p>VISIBILITY AT ACCIDENT SITE 5 OR OVER</p> <p>PRECIPITATION AT ACCIDENT SITE NONE</p> <p>OBSTRUCTIONS TO VISION AT ACCIDENT SITE NONE</p> <p>TYPE OF WEATHER CONDITIONS VFR</p> <p>TYPE OF FLIGHT PLAN IFR</p> <p>REMARKS- PILOT INADVERTENTLY ENTERED TOP OF RAPIDLY BUILDING CUMULUS CLOUD. FASTEN SEAT BELT SIGN WAS ON.</p>						
1-0064	8/22/66 TIME - 1500	NR. SAN DIEGO CALIF	LOCKHEED L-188A N7137C DAMAGE-NONE	CR- 0 0 5 PX- 0 1 63	SCHED DOM PASSG SRV	AIRLINE TRANSPORT, AGE 42, UNK/NR TOTAL HOURS, UNK/NR IN TYPE, INSTRU- MENT RATED.
<p>OPERATOR - WESTERN AIR LINES, INC. TYPE OF ACCIDENT MISCELLANEOUS</p> <p>PHASE OF OPERATION UNKNOWN/NOT REPORTED</p> <p>PROBABLE CAUSE(S) WEATHER - TURBULENCE, ASSOCIATED W/ CLOUDS, THUNDERSTORMS WEATHER BRIEFING - COMPANY DISPATCH WEATHER FORECAST - UNKNOWN/NOT REPORTED</p> <p>SKY CONDITION UNKNOWN/NOT REPORTED</p> <p>CEILING AT ACCIDENT SITE Z</p> <p>VISIBILITY AT ACCIDENT SITE UNKNOWN/NOT REPORTED</p> <p>PRECIPITATION AT ACCIDENT SITE UNKNOWN/NOT REPORTED</p> <p>TYPE OF WEATHER CONDITIONS VFR</p> <p>TYPE OF FLIGHT PLAN IFR</p> <p>REMARKS- AIRSICK PX IN LAVATORY INJURED. FASTEN SEAT BELT SIGN ON DUE TURBULENCE.</p>						

BRIEFS OF ACCIDENTS

FILE	DATE	LOCATION	AIRCRAFT DATA	INJURIES F S M/N	FLIGHT PURPOSE	PILOT DATA
1-0068	11/12/66	NR.BILLINGS,MONT	BOEING B-720 N7203U DAMAGE-NONE	CR- 0 0 7 PX- 0 1 73	SCHED DOM PASSG SRV	AIRLINE TRANSPORT, AGE 51, 18555 TOTAL HOURS, 2343 IN TYPE, INSTRUMENT RATED.
OPERATOR - UNITED AIR LINES, INC.						
TYPE OF ACCIDENT TURBULENCE			PHASE OF OPERATION IN FLIGHT: NORMAL CRUISE			
PROBABLE CAUSE(S) WEATHER - TURBULENCE IN FLIGHT, CLEAR AIR PERSONNEL - MISCELLANEOUS-PERSONNEL: PASSENGER PERSONNEL - OTHER FLIGHT PERSONNEL WEATHER BRIEFING - COMPANY DISPATCH WEATHER FORECAST - UNKNOWN/NCT REPORTED						
SKY CONDITION CLEAR			CEILING AT ACCIDENT SITE UNLIMITED			
VISIBILITY AT ACCIDENT SITE 5 OR OVER			PRECIPITATION AT ACCIDENT SITE NONE			
OBSTRUCTIONS TO VISION AT ACCIDENT SITE NONE			WIND DIRECTION-DEGREES 290			
WIND VELOCITY-KNOTS 65			TYPE OF WEATHER CONDITIONS VFR			
TYPE OF FLIGHT PLAN IFR						
REMARKS- PX FELL WHILE RETURNING TO SEAT. COCKPIT WARNING GIVEN. ATTENDANTS FAILED TO OBSERVE PX MOVEMENTS.						
1-0013	3/6/67	POLO, ILL	BOEING 727 N7412U DAMAGE-NONE	CR- 0 1 5 PX- 0 0 68	SCHED DOM PASSG SRV	AIRLINE TRANSPORT, AGE 47, 15000 TOTAL HOURS, 728 IN TYPE, INSTRUMENT RATED.
OPERATOR - UNITED AIR LINES, INC.						
TYPE OF ACCIDENT TURBULENCE			PHASE OF OPERATION IN FLIGHT: CLIMB TO CRUISE			
PROBABLE CAUSE(S) WEATHER - TURBULENCE IN FLIGHT, CLEAR AIR PERSONNEL - OTHER FLIGHT PERSONNEL						
FACTOR(S) MISCELLANEOUS ACTS, CONDITIONS - SEAT BELT NOT FASTENED WEATHER BRIEFING - COMPANY DISPATCH WEATHER FORECAST - FORECAST SUBSTANTIALLY CORRECT						
SKY CONDITION CLEAR			CEILING AT ACCIDENT SITE UNLIMITED			
VISIBILITY AT ACCIDENT SITE 5 OR OVER			PRECIPITATION AT ACCIDENT SITE NONE			
OBSTRUCTIONS TO VISION AT ACCIDENT SITE NONE			TYPE OF WEATHER CONDITIONS VFR			
TYPE OF FLIGHT PLAN IFR						
REMARKS- SEAT BELT SIGN WAS ON.						

BRIEFS OF ACCIDENTS

FILE	DATE	LOCATION	AIRCRAFT DATA	INJURIES		FLIGHT PURPOSE	PILOT DATA
				F	S/M/N		
1-0016	4/4/67 TIME - 1245	NR, SPRINGFIELD, ILL	DOUGLAS DC-8 NR017U DAMAGE-NONE	CR- 0 0 7 PX- 0 1 59		SCHED DOM PASSG SRV	ATR, FLIGHT INSTR., AGE 47, 23336 TOTAL HOURS, 2528 IN TYPE, INSTRUMENT RATED.
OPERATOR - UNITED AIR LINES, INC.			PHASE OF OPERATION				
TYPE OF ACCIDENT TURBULENCE			IN FLIGHT: NORMAL CRUISE				
PROBABLE CAUSE(S)							
WEATHER - TURBULENCE, ASSOCIATED W/ CLOUDS, THUNDERSTORMS							
WEATHER BRIEFING - COMPANY DISPATCH							
WEATHER FORECAST - FORECAST SUBSTANTIALLY CORRECT							
EMERGENCY CIRCUMSTANCES - PRECAUTIONARY LANDING ON AIRPORT							
PHYSICAL CONDITION OF PASSENGER							
SKY CONDITION			CEILING AT ACCIDENT SITE				
OVERCAST			15000				
VISIBILITY AT ACCIDENT SITE			PRECIPITATION AT ACCIDENT SITE				
5 OR OVER			NONE				
OBSTRUCTIONS TO VISION AT ACCIDENT SITE			TYPE OF WEATHER CONDITIONS				
NONE			IFR				
TYPE OF FLIGHT PLAN							
IFR							
REMARKS- PX, AGE 92, FELL, BROKE LEG, WHILE RETURNING TO SEAT. SEAT BELT SIGN TURNED ON WHILE PX WAS IN LAVATORY							
1-0024	3/29/67 TIME - 1237	NR, SHERIDAN, WYO	BOEING B-720 N7220U DAMAGE-MINOR	CR- 0 0 7 PX- 0 1 41		SCHED DOM PASSG SRV	AIRLINE TRANSPORT, AGE 46, 14000 TOTAL HOURS, 935 IN TYPE, INSTRUMENT RATED.
OPERATOR - UNITED AIR LINES, INC.			PHASE OF OPERATION				
TYPE OF ACCIDENT TURBULENCE			IN FLIGHT: NORMAL CRUISE				
PROBABLE CAUSE(S)							
WEATHER - TURBULENCE IN FLIGHT, CLEAR AIR							
PERSONNEL - MISCELLANEOUS-PERSONNEL: PASSENGER							
MISCELLANEOUS ACTS, CONDITIONS - SEAT BELT NOT FASTENED							
PERSONNEL - MISCELLANEOUS-PERSONNEL: OTHER							
WEATHER BRIEFING - COMPANY DISPATCH							
WEATHER FORECAST - WEATHER SLIGHTLY WORSE THAN FORECAST							
SKY CONDITION			CEILING AT ACCIDENT SITE				
CLEAR			UNLIMITED				
VISIBILITY AT ACCIDENT SITE			PRECIPITATION AT ACCIDENT SITE				
5 OR OVER			NONE				
OBSTRUCTIONS TO VISION AT ACCIDENT SITE			WIND DIRECTION-DEGREES				
NONE			210				
WIND VELOCITY-KNOTS			TYPE OF WEATHER CONDITIONS				
R3			VFR				
TYPE OF FLIGHT PLAN							
IFR							
REMARKS- CO WX FCST DID NOT REFLECT TURB., USWB FCSTS DID. SER. INJ. PAX SUBSEQUENTLY DIED DUE HEART CONDITION.							

BRIEFS OF ACCIDENTS

FILE	DATE	LOCATION	AIRCRAFT DATA	INJURIES			FLIGHT PURPOSE	PILOT DATA
				F	S	M/N		
1-0030	6/9/67	NR.DETROIT,MICH	DOUGLAS DC-8 N2621U DAMAGE-NONE	CR- 0	1	7	SCHED DOM PASSG SRV	AIRLINE TRANSPORT, AGE 49, 20909 TOTAL HOURS, 4291 IN TYPE, INSTRUMENT RATED.
	TIME - 1840			PX- 0	0	57		
		OPERATOR - UNITED AIR LINES,INC.						
		TYPE OF ACCIDENT					PHASE OF OPERATION	
		TURBULENCE					IN FLIGHT: NORMAL CRUISE	
		PROBABLE CAUSE(S)						
		WEATHER - THUNDERSTORM ACTIVITY						
		MISCELLANEOUS ACTS,CONDITIONS - SEAT BELT NOT FASTENED						
		WEATHER BRIEFING - COMPANY DISPATCH						
		WEATHER FORECAST - FORECAST SUBSTANTIALLY CORRECT						
		SKY CONDITION					CEILING AT ACCIDENT SITE	
		OBSCURATION					0	
		VISIBILITY AT ACCIDENT SITE					PRECIPITATION AT ACCIDENT SITE	
		ZERO					THUNDERSTORM	
		OBSTRUCTIONS TO VISION AT ACCIDENT SITE					TYPE OF WEATHER CONDITIONS	
		NONE					IFR	
		TYPE OF FLIGHT PLAN						
		IFR						
		REMARKS- FLIGHT ATTENDANTS INJURED WHILE PERFORMING IN FLIGHT DUTIES.						
1-0034	5/15/67	NR.PHILADELPHIA,PA	BOEING 727 N8144N DAMAGE-NONE	CR- 0	0	6	SCHED INTERNATL PASSG SRV	AIRLINE TRANSPORT, AGE 47, 25000 TOTAL HOURS, 1650 IN TYPE, INSTRUMENT RATED.
	TIME - 1800			PX- 0	1	92		
		OPERATOR - EASTERN AIR LINES,INC.						
		TYPE OF ACCIDENT					PHASE OF OPERATION	
		TURBULENCE					IN FLIGHT: NORMAL CRUISE	
		PROBABLE CAUSE(S)						
		WEATHER - TURBULENCE,ASSOCIATED W/ CLOUDS, THUNDERSTORMS						
		PERSONNEL - MISCELLANEOUS-PERSONNEL: PASSENGER						
		MISCELLANEOUS ACTS,CONDITIONS - SEAT BELT NOT FASTENED						
		WEATHER BRIEFING - COMPANY DISPATCH						
		WEATHER FORECAST - UNKNOWN/NOT REPORTED						
		EMERGENCY CIRCUMSTANCES - PRECAUTIONARY LANDING ON AIRPORT						
		ADVERSE/UNFAVORABLE WEATHER						
		SKY CONDITION					CEILING AT ACCIDENT SITE	
		OVERCAST/LOWER SCATTERED					800	
		VISIBILITY AT ACCIDENT SITE					PRECIPITATION AT ACCIDENT SITE	
		ZERO					RAIN	
		OBSTRUCTIONS TO VISION AT ACCIDENT SITE					TYPE OF WEATHER CONDITIONS	
		NONE					IFR	
		TYPE OF FLIGHT PLAN						
		IFR						
		REMARKS- PX OUT OF SEAT WHEN ACFT ENCOUNTERED TURBULENCE.SEAT BELT SIGN ON WELL BEFORE TURBULENCE ENCOUNTER						

BRIEFS OF ACCIDENTS

FILE	DATE	LOCATION	AIRCRAFT DATA	INJURIES F S M/N	FLIGHT PURPOSE	PILOT DATA
I-0038	6/20/67 TIME - 1825	70E HAYES CR. NEBR	DOUGLAS DC-6B N37567 DAMAGE-NONE	CR- 0 1 4 PX- 0 0 47	SCHED DOM PASSG SRV	AIRLINE TRANSPORT, AGE 40, 14677 TOTAL HOURS, 7585 IN TYPE, INSTRUMENT RATED.
		OPERATOR - UNITED AIR LINES, INC.		PHASE OF OPERATION		
		TYPE OF ACCIDENT TURBULENCE		IN FLIGHT: NORMAL CRUISE		
PROBABLE CAUSE(S)						
MISCELLANEOUS ACTS, CONDITIONS - SEAT BELT NOT FASTENED						
WEATHER - TURBULENCE, ASSOCIATED W/ CLOUDS, THUNDERSTORMS						
WEATHER - SQUALL LINE						
WEATHER BRIEFING - COMPANY DISPATCH						
WEATHER FORECAST - FORECAST SUBSTANTIALLY CORRECT						
		SKY CONDITION		CEILING AT ACCIDENT SITE		
		OVERCAST		UNKNOWN/NOT REPORTED		
		VISIBILITY AT ACCIDENT SITE		PRECIPITATION AT ACCIDENT SITE		
		UNKNOWN/NOT REPORTED		SNOW GRAINS/SNOW PELLETS		
		OBSTRUCTIONS TO VISION AT ACCIDENT SITE		TYPE OF WEATHER CONDITIONS		
		UNKNOWN/NOT REPORTED		IFR		
		TYPE OF FLIGHT PLAN				
		IFR				
REMARKS- 30-40 SEC BELT OF MODERATE TURB BTWN RAIN CELLS. SEAT BELT SIGN ON. STEWARDESSES SEAT BLT NOT FSTND.						

BRIEFS OF ACCIDENTS

FILE	DATE	LOCATION	AIRCRAFT DATA	INJURIES F S M/N	FLIGHT PURPOSE	PILOT DATA
1-0039	07/30/67 TIME - 1830	COCOA, FLA	DOUGLAS DC-3 N8615 DAMAGE-NONE	CR- 0 1 7 PX- 0 1102	SCHED DOM PASSG SRV	AIRLINE TRANSPORT, AGE 50, 21212 TOTAL HOURS, 486 IN TYPE, INSTRUMENT RATED.
OPERATOR - EASTERN AIR LINES, INC.			PHASE OF OPERATION			
TYPE OF ACCIDENT TURBULENCE			IN FLIGHT: NORMAL CRUISE			
PROBABLE CAUSE(S)						
PILOT IN COMMAND - FAILED TO FOLLOW APPROVED PROCEDURES, DIRECTIVES, ETC.						
WEATHER - TURBULENCE, ASSOCIATED W/ CLOUDS, THUNDERSTORMS						
FACTOR(S)						
WEATHER - THUNDERSTORM ACTIVITY						
MISCELLANEOUS ACTS, CONDITIONS - SEAT BELT NOT FASTENED						
MISCELLANEOUS ACTS, CONDITIONS - SEAT BELT SIGN OFF						
WEATHER BRIEFING - COMPANY DISPATCH						
WEATHER FORECAST - WEATHER SLIGHTLY WORSE THAN FORECAST						
EMERGENCY CIRCUMSTANCES - PRECAUTIONARY LANDING ON AIRPORT						
PHYSICAL CONDITION OF PASSENGER						
SKY CONDITION			CEILING AT ACCIDENT SITE			
BROKEN/LOWER SCATTERED			15000			
VISIBILITY AT ACCIDENT SITE			PRECIPITATION AT ACCIDENT SITE			
5 OR OVER			NONE			
OBSTRUCTIONS TO VISION AT ACCIDENT SITE			TEMPERATURE-F			
NONE			83			
WIND DIRECTION-DEGREES			WIND VELOCITY-KNOTS			
110			9			
TYPE OF WEATHER CONDITIONS			TYPE OF FLIGHT PLAN			
VFR			IFR			
REMARKS- PLT FAILED TO DIVERT AROUND CLOUDS ON ADVICE OF GRND RADAR.						

PAGE 27

BRIEFS OF ACCIDENTS

FILE	DATE	LOCATION	AIRCRAFT DATA	INJURIES		FLIGHT PURPOSE	PILOT DATA
				F	S M/N		
1-0041	10/17/67	NR. JACKSONVILLE, FLA	DOUGLAS DC-8 N8613 DAMAGE-MINOR	CR- 0 0 7 PX- 0 1105		SCHED INTERNATL PASSG SRV	AIRLINE TRANSPORT, AGE 45, 18576 TOTAL HOURS, 620 IN TYPE, INSTRUMENT RATED.
OPERATOR - EASTERN AIR LINES, INC.			PHASE OF OPERATION				
TYPE OF ACCIDENT TURBULENCE			IN FLIGHT: NORMAL CRUISE				
PROBABLE CAUSE(S)							
WEATHER - TURBULENCE IN FLIGHT, CLEAR AIR							
WEATHER - TURBULENCE, ASSOCIATED W/ CLOUDS, THUNDERSTORMS							
PERSONNEL - MISCELLANEOUS-PERSONNEL: PASSENGER							
MISCELLANEOUS ACTS, CONDITIONS - SEAT BELT NOT FASTENED							
WEATHER BRIEFING - COMPANY DISPATCH							
WEATHER FORECAST - FORECAST SUBSTANTIALLY CORRECT							
SKY CONDITION			CEILING AT ACCIDENT SITE				
CLEAR			UNKNOWN/NOT REPORTED				
VISIBILITY AT ACCIDENT SITE			PRECIPITATION AT ACCIDENT SITE				
5 OR OVER			NONE				
OBSTRUCTIONS TO VISION AT ACCIDENT SITE			TYPE OF WEATHER CONDITIONS				
NONE			VFR				
TYPE OF FLIGHT PLAN							
IFR							
REMARKS- FAILURE OF PX TO REMAIN IN SEAT, FASTEN SEAT BELTS, AFTER BEING ALERTED BY CREW. SEAT BELT SIGN ON.							
1-0049	8/25/67	N. ATLANTIC OCEAN	DOUGLAS DC-8 N8610 DAMAGE-MINOR	CR- 0 2 4 PX- 0 1101		SCHED INTERNATL PASSG SRV	AIRLINE TRANSPORT, AGE 56, 24995 TOTAL HOURS, 43 IN TYPE, INSTRUMENT RATED.
OPERATOR - EASTERN AIR LINES, INC.			PHASE OF OPERATION				
TYPE OF ACCIDENT TURBULENCE			IN FLIGHT: NORMAL CRUISE				
PROBABLE CAUSE(S)							
WEATHER - TURBULENCE IN FLIGHT, CLEAR AIR							
FACTOR(S)							
MISCELLANEOUS ACTS, CONDITIONS - SEAT BELT SIGN OFF							
WEATHER BRIEFING - COMPANY DISPATCH							
WEATHER FORECAST - WEATHER SLIGHTLY WORSE THAN FORECAST							
SKY CONDITION			CEILING AT ACCIDENT SITE				
CLEAR			UNLIMITED				
VISIBILITY AT ACCIDENT SITE			PRECIPITATION AT ACCIDENT SITE				
5 OR OVER			NONE				
OBSTRUCTIONS TO VISION AT ACCIDENT SITE			WIND DIRECTION-DEGREES				
NONE			270				
WIND VELOCITY-KNOTS			TYPE OF WEATHER CONDITIONS				
13			VFR				
TYPE OF FLIGHT PLAN							
IFR							
REMARKS- TURBULENCE OF 5-8 SECS DURATION.							

BRIEFS OF ACCIDENTS

FILE	DATE	LOCATION	AIRCRAFT DATA	INJURIES F S M/N	FLIGHT PURPOSE	PILOT DATA
1-0050	11/2/67 TIME - 2235	NR. JACKSONVILLE, FLA	CONVAIR 880 N8494H DAMAGE-NONE	CR- 0 0 6 PX- 0 1 18	SCHED DOM PASSG SRV	AIRLINE TRANSPORT, AGE 54, 19177 TOTAL HOURS, 1629 IN TYPE, INSTRUMENT RATED.
<p>OPERATOR - NORTHEAST AIRLINES, INC.</p> <p>TYPE OF ACCIDENT TURBULENCE</p> <p>PHASE OF OPERATION IN FLIGHT: NORMAL CRUISE</p> <p>PROBABLE CAUSE(S) WEATHER - TURBULENCE, ASSOCIATED W/ CLOUDS, THUNDERSTORMS</p> <p>FACTOR(S) PILOT IN COMMAND - FAILED TO FOLLOW APPROVED PROCEDURES, DIRECTIVES, ETC. MISCELLANEOUS ACTS, CONDITIONS - SEAT BELT SIGN OFF WEATHER BRIEFING - COMPANY DISPATCH WEATHER FORECAST - FORECAST SUBSTANTIALLY CORRECT</p> <p>SKY CONDITION CLEAR</p> <p>CEILING AT ACCIDENT SITE UNLIMITED</p> <p>VISIBILITY AT ACCIDENT SITE 5 OR OVER</p> <p>PRECIPITATION AT ACCIDENT SITE NONE</p> <p>OBSTRUCTIONS TO VISION AT ACCIDENT SITE NONE</p> <p>TYPE OF WEATHER CONDITIONS VFR</p> <p>TYPE OF FLIGHT PLAN IFR</p> <p>REMARKS- ACFT PENETRATED TOP OF CUMULUS BUILD UP FOR 30 TO 60 SEC. AIRBORNE RADAR NOT IN USE.</p>						
1-0054	8/18/67 TIME - 2115	NR. MANILA, P.I.	8CEING 707 N17322 DAMAGE-NONE	CR- 0 1 8 PX- 0 0123	MIL CONTRACT PASSG INTL	AIRLINE TRANSPORT, AGE 46, UNK/NR TOTAL HOURS, UNK/NR IN TYPE, UNK/NR INSTRUMENT RATED.
<p>OPERATOR - CONTINENTAL AIR LINES, INC.</p> <p>TYPE OF ACCIDENT TURBULENCE</p> <p>PHASE OF OPERATION IN FLIGHT: CLIMB TO CRUISE</p> <p>PROBABLE CAUSE(S) WEATHER - TURBULENCE, ASSOCIATED W/ CLOUDS, THUNDERSTORMS PERSONNEL - OTHER FLIGHT PERSONNEL MISCELLANEOUS ACTS, CONDITIONS - SEAT BELT NOT FASTENED</p> <p>FACTOR(S) WEATHER - THUNDERSTORM ACTIVITY WEATHER BRIEFING - COMPANY DISPATCH WEATHER FORECAST - FORECAST SUBSTANTIALLY CORRECT</p> <p>SKY CONDITION UNKNOWN/NOT REPORTED</p> <p>CEILING AT ACCIDENT SITE UNKNOWN/NOT REPORTED</p> <p>VISIBILITY AT ACCIDENT SITE UNKNOWN/NOT REPORTED</p> <p>OBSTRUCTIONS TO VISION AT ACCIDENT SITE UNKNOWN/NOT REPORTED</p> <p>TYPE OF WEATHER CONDITIONS VFR</p> <p>TYPE OF FLIGHT PLAN IFR</p> <p>REMARKS- SEAT BELT SIGN CN. STEWARDESS THROWN FROM SEAT. PLT HAD ADVISED CREW AND PAX OF EXPECTED TURB.</p>						

435-834 O - 72 - 4

BRIEFS OF ACCIDENTS

FILE	DATE	LOCATION	AIRCRAFT DATA	INJURIES			FLIGHT PURPOSE	PILOT DATA
				F	S	M/N		
1-0057	6/9/67 TIME - 2135	NR, MASSENA, NY	BOEING 727 N8145N DAMAGE-NONE	CR- PX-	0 0 0 1	6 72	SCHED INTERNATL PASSG SRV	AIRLINE TRANSPORT, AGE 40, 10629 TOTAL HOURS, 23 IN TYPE, INSTRUMENT RATED.
OPERATOR - EASTERN AIR LINES, INC.			PHASE OF OPERATION					
TYPE OF ACCIDENT TURBULENCE			IN FLIGHT: CLIMB TO CRUISE					
PROBABLE CAUSE(S)								
WEATHER - TURBULENCE, ASSOCIATED W/ CLOUDS, THUNDERSTORMS								
PERSONNEL - MISCELLANEOUS-PERSONNEL: PASSENGER								
FACTOR(S)								
MISCELLANEOUS ACTS, CONDITIONS - SEAT BELT NOT FASTENED								
PERSONNEL - TRAFFIC CONTROL PERSONNEL: OTHER								
WEATHER BRIEFING - COMPANY DISPATCH								
WEATHER FORECAST - FORECAST SUBSTANTIALLY CORRECT								
SKY CONDITION			CEILING AT ACCIDENT SITE					
OVERCAST/LOWER SCATTERED			12000					
VISIBILITY AT ACCIDENT SITE			PRECIPITATION AT ACCIDENT SITE					
5 OR OVER			RAIN SHOWERS					
OBSTRUCTIONS TO VISION AT ACCIDENT SITE			TEMPERATURE-F					
NONE			A					
TYPE OF WEATHER CONDITIONS			TYPE OF FLIGHT PLAN					
VFR			IFR					
REMARKS- ACFT PENETRATED ISOLATED TSTM CELL. PAX WERE ADEQUATELY WARNED. REQ TO DIVERT DELAYED BY DEP CONTROL								
1-0060	9/29/67 TIME - 1305	NR, UBON, THAILAND	BOEING 707 N417PA DAMAGE-NONE	CR- PX-	0 1 0 0	8 83	SCHED INTERNATL PASSG SRV	CERTIFICATE UNKNOWN, AGE UNK/NR, UNK/NR TOTAL HOURS, UNK/NR IN TYPE, UNK/NR INSTRUMENT RATED.
OPERATOR - PAN AMERICAN WORLD AIRWAYS, INC.			PHASE OF OPERATION					
TYPE OF ACCIDENT TURBULENCE			IN FLIGHT: NORMAL CRUISE					
REMARKS- INVESTIGATION UNDER JURISDICTION OF GOVT. OF THAILAND. STEWARDESS FRACTURED PELVIS DURING FALL.								

BRIEFS OF ACCIDENTS

FILE	DATE	LOCATION	AIRCRAFT DATA	INJURIES F S M/N	FLIGHT PURPOSE	PILOT DATA
I-0003	5/3/68 TIME - 1548	DAWSON, TEX	LOCKHEED L-188 N9707C DAMAGE-DESTROYED	CR- 5 0 0 PX- 80 0 0	SCHED DOM PASSG SRV	AIRLINE TRANSPORT, AGE 46, 10890 TOTAL HOURS, 1380 IN TYPE, INSTRUMENT RATED.
OPERATOR - BRANIFF AIRWAYS, INC.						
TYPE OF ACCIDENT						
TURBULENCE						
AIRFRAME FAILURE: IN FLIGHT						
PHASE OF OPERATION						
IN FLIGHT: NORMAL CRUISE						
IN FLIGHT: OTHER						
PROBABLE CAUSE(S)						
PILOT IN COMMAND - IMPROPER IN-FLIGHT DECISIONS OR PLANNING						
PILOT IN COMMAND - EXCEEDED DESIGNED STRESS LIMITS OF AIRCRAFT						
AIRFRAME - WINGS: OTHER						
MISCELLANEOUS ACTS, CONDITIONS - OVERLOAD FAILURE						
WEATHER - TURBULENCE, ASSOCIATED W/ CLOUDS, THUNDERSTORMS						
FACTOR(S)						
MISCELLANEOUS ACTS, CONDITIONS - SEPARATION IN FLIGHT						
WEATHER BRIEFING - SELF-HELP, PILOT CHECKED WEATHER DATA						
WEATHER FORECAST - FORECAST SUBSTANTIALLY CORRECT						
SKY CONDITION						
UNKNOWN/NOT REPORTED						
CEILING AT ACCIDENT SITE						
UNKNOWN/NOT REPORTED						
VISIBILITY AT ACCIDENT SITE						
UNKNOWN/NOT REPORTED						
PRECIPITATION AT ACCIDENT SITE						
HAIL, RAIN						
OBSTRUCTIONS TO VISION AT ACCIDENT SITE						
UNKNOWN/NOT REPORTED						
TYPE OF WEATHER CONDITIONS						
IFR						
TYPE OF FLIGHT PLAN						
IFR						
REMARKS- DURG ATTEMPTD RECOVERY FROM UNUSUAL ATTITUDE INDUCED BY TSTM TURB, R WING FAILED IN OVERLOAD.						
I-0007	1/13/68 TIME - 0400	NW. PACIFIC OCEAN	BOEING 707 N715PA DAMAGE-NONE	CR- 0 0 9 PX- 0 2 56	SCHED INTERNATL PASSG SRV	ATR, FLIGHT INSTR., AGE 52, 18107 TOTAL HOURS, 4607 IN TYPE, INSTRUMENT RATED.
OPERATOR - PAN AMERICAN WORLD AIRWAYS, INC.						
TYPE OF ACCIDENT						
TURBULENCE						
PHASE OF OPERATION						
IN FLIGHT: NORMAL CRUISE						
PROBABLE CAUSE(S)						
WEATHER - TURBULENCE, ASSOCIATED W/ CLOUDS, THUNDERSTORMS						
PERSONNEL - MISCELLANEOUS-PERSONNEL: PASSENGER						
FACTOR(S)						
MISCELLANEOUS ACTS, CONDITIONS - SEAT BELT NOT FASTENED						
WEATHER BRIEFING - COMPANY DISPATCH						
WEATHER FORECAST - WEATHER SLIGHTLY WORSE THAN FORECAST						
SKY CONDITION						
UNKNOWN/NOT REPORTED						
CEILING AT ACCIDENT SITE						
UNKNOWN/NOT REPORTED						
VISIBILITY AT ACCIDENT SITE						
UNKNOWN/NOT REPORTED						
PRECIPITATION AT ACCIDENT SITE						
UNKNOWN/NOT REPORTED						
OBSTRUCTIONS TO VISION AT ACCIDENT SITE						
UNKNOWN/NOT REPORTED						
TYPE OF WEATHER CONDITIONS						
IFR						
TYPE OF FLIGHT PLAN						
IFR						
REMARKS- PAX WERE PREVIOUSLY ADVISED TO KEEP SEAT BELTS LOOSELY FASTENED. RADAR DID NOT SHOW RETURN.						

BRIEFS OF ACCIDENTS

FILE	DATE	LOCATION	AIRCRAFT DATA	INJURIES			FLIGHT PURPOSE	PILOT DATA	
				F	S	M/N			
1-0017	5/13/68 TIME - 1727	NR. MASON CITY, IOWA	BOEING 720B N7549AA DAMAGE-NONE	CR-	0	0	7	SCHED DOM PASSG SRV	CERTIFICATE UNKNOWN, AGE UNK/NR, UNK/NR TOTAL HOURS, UNK/NR IN TYPE, UNK/NR INSTRUMENT RATED.
OPERATOR - AMERICAN AIRLINES, INC.				PHASE OF OPERATION					
TYPE OF ACCIDENT TURBULENCE				IN FLIGHT: NORMAL CRUISE					
PROBABLE CAUSE(S) WEATHER - TURBULENCE IN FLIGHT, CLEAR AIR									
FACTOR(S) MISCELLANEOUS ACTS, CONDITIONS - SEAT BELT SIGN OFF									
WEATHER BRIEFING - COMPANY DISPATCH									
WEATHER FORECAST - FORECAST SUBSTANTIALLY CORRECT									
SKY CONDITION BROKEN				CEILING AT ACCIDENT SITE 5000					
VISIBILITY AT ACCIDENT SITE 5 OR OVER				PRECIPITATION AT ACCIDENT SITE NONE					
OBSTRUCTIONS TO VISION AT ACCIDENT SITE NONE				TYPE OF WEATHER CONDITIONS VFR					
TYPE OF FLIGHT PLAN IFR									
REMARKS- CREW WARNED PAX TO KEEP SEAT BELTS FASTENED DUE TO POSSIBLE TURB.									
1-0022	8/14/56 TIME - 1650	NR. PRESQUE ISLE, ME	DOUGLAS DC-3 N812PA DAMAGE-NONE	CR-	0	0	9	SCHED INTERNATL PASSG SRV	CERTIFICATE UNKNOWN, AGE UNK/NR, UNK/NR TOTAL HOURS, UNK/NR IN TYPE, UNK/NR INSTRUMENT RATED.
OPERATOR - PAN AMERICAN WORLD AIRWAYS, INC.				PHASE OF OPERATION					
TYPE OF ACCIDENT TURBULENCE				IN FLIGHT: NORMAL CRUISE					
PROBABLE CAUSE(S) WEATHER - TURBULENCE IN FLIGHT, CLEAR AIR									
FACTOR(S) MISCELLANEOUS ACTS, CONDITIONS - SEAT BELT SIGN OFF									
WEATHER BRIEFING - COMPANY DISPATCH									
WEATHER FORECAST - UNKNOWN/NOT REPORTED									
SKY CONDITION CLEAR				CEILING AT ACCIDENT SITE UNLIMITED					
VISIBILITY AT ACCIDENT SITE 5 OR OVER				PRECIPITATION AT ACCIDENT SITE NONE					
OBSTRUCTIONS TO VISION AT ACCIDENT SITE NONE				TYPE OF WEATHER CONDITIONS VFR					
TYPE OF FLIGHT PLAN IFR									
REMARKS- PAX FELL IN AISLE, FRACTURED LEFT FOOT.									

BRIEFS OF ACCIDENTS

FILE	DATE	LOCATION	AIRCRAFT DATA	INJURIES F S M/N	FLIGHT PURPOSE	PILOT DATA
1-0027	7/11/68 TIME - 1310	NR. PHILIPSBURG, PA	BOEING 727 N894TW DAMAGE-NONE	CR- 0 2 5 PX- 0 0 34	SCHED DOM PASSG SRV	CERTIFICATE UNKNOWN, AGE UNK/NR, UNK/NR TOTAL HOURS, UNK/NR IN TYPE, UNK/NR INSTRUMENT RATED.
		OPERATOR - TRANS WORLD AIRLINES, INC.		PHASE OF OPERATION		
		TYPE OF ACCIDENT TURBULENCE		IN FLIGHT: NORMAL CRUISE		
		PROBABLE CAUSE(S) PERSONNEL - OTHER FLIGHT PERSONNEL				
		WEATHER - TURBULENCE, ASSOCIATED W/ CLOUDS, THUNDERSTORMS				
		WEATHER BRIEFING - COMPANY DISPATCH				
		WEATHER FORECAST - UNKNOWN/NOT REPORTED				
		SKY CONDITION OBSCURATION		CEILING AT ACCIDENT SITE UNKNOWN/NOT REPORTED		
		VISIBILITY AT ACCIDENT SITE ZERO		PRECIPITATION AT ACCIDENT SITE UNKNOWN/NOT REPORTED		
		OBSTRUCTIONS TO VISION AT ACCIDENT SITE UNKNOWN/NOT REPORTED		TYPE OF WEATHER CONDITIONS IFR		
		TYPE OF FLIGHT PLAN IFR				
		REMARKS- UNABLE TO CHNG ATC CLNC. PENETRATED CUMULUS LINE. SEAT BELT SIGN ON, CREW AND PAX WARNED.				
1-0035	1/28/68 TIME - 1415	NR. HILO, HAWAII	CONVAIR 640 N5510K DAMAGE-NONE	CR- 0 0 3 PX- 0 1 41	SCHED DOM PASSG SRV	AIRLINE TRANSPORT, AGE 47, 19350 TOTAL HOURS, 875 IN TYPE, INSTRUMENT RATED.
		OPERATOR - HAWAIIAN AIRLINES, INC.		PHASE OF OPERATION		
		TYPE OF ACCIDENT TURBULENCE		IN FLIGHT: NORMAL CRUISE		
		PROBABLE CAUSE(S) PERSONNEL - MISCELLANEOUS-PERSONNEL: PASSENGER				
		MISCELLANEOUS ACTS, CONDITIONS - SEAT BELT NOT FASTENED				
		WEATHER - TURBULENCE, ASSOCIATED W/ CLOUDS, THUNDERSTORMS				
		WEATHER BRIEFING - BRIEFED BY WEATHER BUREAU PERSONNEL, BY PHONE				
		WEATHER FORECAST - FORECAST SUBSTANTIALLY CORRECT				
		SKY CONDITION OVERCAST/LOWER SCATTERED		CEILING AT ACCIDENT SITE 10000		
		VISIBILITY AT ACCIDENT SITE ZERO		PRECIPITATION AT ACCIDENT SITE HAIL		
		OBSTRUCTIONS TO VISION AT ACCIDENT SITE NONE		TYPE OF WEATHER CONDITIONS VFR		
		TYPE OF FLIGHT PLAN IFR				
		REMARKS- SEAT BELT SIGN ON. PAX INADVERTENTLY RELEASED SEAT BELT DURING TURB, WAS THROWN FROM SEAT.				

BRIEFS OF ACCIDENTS

FILE	DATE	LOCATION	AIRCRAFT DATA	INJURIES			FLIGHT PURPOSE	PILOT DATA
				F	S	M/N		
1-0036	11/23/68	NR.CACHIMBO,BRAZIL	BOEING 707 N428PA DAMAGE-NONE	CR- 0 1 8 PX- 0 0 0			SCHED INTERNATL PASSG SRV	CERTIFICATE UNKNOWN, AGE UNK/NR, UNK/NR TOTAL HOURS, UNK/NR IN TYPE, UNK/NR INSTRUMENT RATED.
OPERATOR - PAN AMERICAN WORLD AIRWAYS, INC.			PHASE OF OPERATION					
TYPE OF ACCIDENT			IN FLIGHT: NORMAL CRUISE					
TURBULENCE								
REMARKS- INVESTIGATION UNDER JURISDICTION OF GOVT OF BRAZIL. NO OF PAX ABD UNREPORTED. SCTD TSTMS.								
1-0038	12/2/68	PEDRO BAY,ALAS	FAIRCHILD F-27B N4905B DAMAGE-DESTROYED	CR- 3 0 0 PX- 36 0 0			SCHED DOM PASSG SRV	AIRLINE TRANSPORT, AGE 37, 10557 TOTAL HOURS, 5357 IN TYPE, INSTRUMENT RATED.
OPERATOR - WIEN CONSOLIDATED AIRLINES, INC.			LAST ENROUTE STOP					
DEPARTURE POINT			KING SALMON,ALAS					
ANCHORAGE,ALAS			INTENDED DESTINATION					
DILLINGHAM,ALAS			PHASE OF OPERATION					
TYPE OF ACCIDENT			IN FLIGHT: DESCENDING					
TURBULENCE			IN FLIGHT: DESCENDING					
AIRFRAME FAILURE: IN FLIGHT								
PROBABLE CAUSE(S)								
PERSONNEL - MAINTENANCE, SERVICING, INSPECTION: IMPROPER MAINTENANCE (MAINTENANCE PERSONNEL)								
PERSONNEL - WEATHER PERSONNEL: INCORRECT WEATHER FORECAST								
AIRFRAME - WINGS: SKIN AND ATTACHMENTS								
MISCELLANEOUS ACTS, CONDITIONS - FATIGUE FRACTURE								
WEATHER - TURBULENCE IN FLIGHT, CLEAR AIR								
FACTDR(S)								
MISCELLANEOUS ACTS, CONDITIONS - SEPARATION IN FLIGHT								
WEATHER BRIEFING - COMPANY DISPATCH								
WEATHER FORECAST - WEATHER CONSIDERABLY WORSE THAN FORECAST								
SKY CONDITION			CEILING AT ACCIDENT SITE					
CLEAR			UNLIMITED					
VISIBILITY AT ACCIDENT SITE			PRECIPITATION AT ACCIDENT SITE					
5 OR OVER			NONE					
OBSTRUCTIONS TO VISION AT ACCIDENT SITE			TYPE OF WEATHER CONDITIONS					
NONE			VFR					
TYPE OF FLIGHT PLAN								
IFR								
REMARKS- ENCTRD SVR TO EXTRM UNFCST TURBC. R WING WKND INDETERMINATE DEG BY PRE-EXISTING FATIGUE CRACKS.								

BRIEFS OF ACCIDENTS

FILE	DATE	LOCATION	AIRCRAFT DATA	INJURIES F S M/N	FLIGHT PURPOSE	PILOT DATA
1-0043	8/5/68 TIME - 2100	ELWOOD, PA	SUD AVIATN SE 210 N1005 DAMAGE-NONE	CR- 0 1 4 PX- 0 0 47	SCHED DOM PASSG SRV	AIRLINE TRANSPORT, AGE 44, 11245 TOTAL HOURS, 2937 IN TYPE, INSTRUMENT RATED.
OPERATOR - UNITED AIR LINES, INC. TYPE OF ACCIDENT TURBULENCE			PHASE OF OPERATION IN FLIGHT: DESCENDING			
PROBABLE CAUSE(S) WEATHER - TURBULENCE IN FLIGHT, CLEAR AIR FACTOR(S) MISCELLANEOUS ACTS, CONDITIONS - SEAT BELT SIGN OFF WEATHER BRIEFING - COMPANY DISPATCH WEATHER FORECAST - FORECAST SUBSTANTIALLY CORRECT						
SKY CONDITION CLEAR VISIBILITY AT ACCIDENT SITE 5 OR OVER OBSTRUCTIONS TO VISION AT ACCIDENT SITE NONE TYPE OF FLIGHT PLAN IFR			CEILING AT ACCIDENT SITE UNLIMITED PRECIPITATION AT ACCIDENT SITE NONE TYPE OF WEATHER CONDITIONS VFR			
REMARKS- TWO SHARP JOLTS OF TURBULENCE ENCOUNTERED.						
1-0046	9/14/68 TIME - 1920	NO. ATLANTIC OCEAN	BOEING 707 N757PA DAMAGE-NONE	CR- 0 0 9 PX- 0 1137	SCHED INTERNATL PASSG SRV	AIRLINE TRANSPORT, AGE 45, 10946 TOTAL HOURS, 3869 IN TYPE, INSTRUMENT RATED.
OPERATOR - PAN AMERICAN WORLD AIRWAYS, INC. TYPE OF ACCIDENT TURBULENCE			PHASE OF OPERATION IN FLIGHT: NORMAL CRUISE			
PROBABLE CAUSE(S) WEATHER - TURBULENCE, ASSOCIATED W/ CLOUDS, THUNDERSTORMS WEATHER BRIEFING - COMPANY DISPATCH WEATHER FORECAST - FORECAST SUBSTANTIALLY CORRECT						
SKY CONDITION SCATTERED VISIBILITY AT ACCIDENT SITE 5 OR OVER OBSTRUCTIONS TO VISION AT ACCIDENT SITE NONE TYPE OF FLIGHT PLAN IFR			CEILING AT ACCIDENT SITE 39000 PRECIPITATION AT ACCIDENT SITE NONE TYPE OF WEATHER CONDITIONS VFR			
REMARKS- INSUFFICIENT TIME FOR PAX RET TO SEATS WHEN SEAT BELT SIGN WAS TURNED ON.						

BRIEFS OF ACCIDENTS

FILE	DATE	LOCATION	AIRCRAFT DATA	INJURIES F S M/N	FLIGHT PURPOSE	PILOT DATA
1-0049	7/20/68 TIME - 1106	NR. BILLINGS, MONT	LOCKHEED 188C N130US DAMAGE-NONE	CR- 0 2 3 PX- 0 1 15	SCHED DUM PASSG SRV	AIRLINE TRANSPORT, AGE 38, 5000 TOTAL HOURS, 700 IN TYPE, INSTRUMENT RATED.
OPERATOR - NORTHWEST AIRLINES, INC.			PHASE OF OPERATION			
TYPE OF ACCIDENT TURBULENCE			IN FLIGHT: NORMAL CRUISE			
PROBABLE CAUSE(S)						
WEATHER - TURBULENCE IN FLIGHT, CLEAR AIR						
FACTOR(S)						
PERSONNEL - WEATHER PERSONNEL: INCORRECT WEATHER FORECAST						
WEATHER BRIEFING - COMPANY DISPATCH						
WEATHER FORECAST - WEATHER CONSIDERABLY WORSE THAN FORECAST						
SKY CONDITION			CEILING AT ACCIDENT SITE			
CLEAR			UNLIMITED			
VISIBILITY AT ACCIDENT SITE			PRECIPITATION AT ACCIDENT SITE			
5 OR OVER			NONE			
OBSTRUCTIONS TO VISION AT ACCIDENT SITE			TEMPERATURE-F			
NONE			69			
WIND DIRECTION-DEGREES			WIND VELOCITY-KNOTS			
290			24			
TYPE OF WEATHER CONDITIONS			TYPE OF FLIGHT PLAN			
VFR			NONE			
REMARKS- MTN WAVE EFFECT NOT FCST. SEAT BELT SIGN ON.						
1-0050	4/27/68 TIME - 1425	YAKIMA, WASH	BOEING 727 N7407J DAMAGE-NONE	CR- 0 0 6 PX- 0 1 57	SCHED DUM PASSG SRV	AIRLINE TRANSPORT, AGE 43, 12692 TOTAL HOURS, 429 IN TYPE, INSTRUMENT RATED.
OPERATOR - UNITED AIR LINES, INC.			PHASE OF OPERATION			
TYPE OF ACCIDENT TURBULENCE			IN FLIGHT: NORMAL CRUISE			
PROBABLE CAUSE(S)						
WEATHER - TURBULENCE IN FLIGHT, CLEAR AIR						
WEATHER BRIEFING - COMPANY DISPATCH						
WEATHER FORECAST - FORECAST SUBSTANTIALLY CORRECT						
SKY CONDITION			CEILING AT ACCIDENT SITE			
OVERCAST			12000			
VISIBILITY AT ACCIDENT SITE			PRECIPITATION AT ACCIDENT SITE			
5 OR OVER			NONE			
OBSTRUCTIONS TO VISION AT ACCIDENT SITE			TYPE OF WEATHER CONDITIONS			
NONE			VFR			
TYPE OF FLIGHT PLAN						
IFR						

BRIEFS OF ACCIDENTS

FILE	DATE	LOCATION	AIRCRAFT DATA	INJURIES F S M/N	FLIGHT PURPOSE	PILOT DATA
1-0052	1/11/68 TIME - 0650	INTERNATL WATERS	DOUGLAS DC-6A N90782 DAMAGE-MINOR	CR- 0 1 6 PX- 0 0 0	NS/CTR REVENUE CARGO INTL	AIRLINE TRANSPORT, AGE 39, 10800 TOTAL HOURS, 97 IN TYPE, INSTRUMENT RATED.
OPERATOR - SOUTHERN AIR TRANSPORT, INC.						
TYPE OF ACCIDENT TURBULENCE			PHASE OF OPERATION IN FLIGHT: NORMAL CRUISE			
PROBABLE CAUSE(S)						
WEATHER - TURBULENCE IN FLIGHT, CLEAR AIR						
WEATHER BRIEFING - COMPANY DISPATCH						
WEATHER FORECAST - UNKNOWN/NOT REPORTED						
SKY CONDITION OVERCAST			CEILING AT ACCIDENT SITE 16000			
VISIBILITY AT ACCIDENT SITE 5 OR OVER			PRECIPITATION AT ACCIDENT SITE NONE			
OBSTRUCTIONS TO VISION AT ACCIDENT SITE NONE			TYPE OF WEATHER CONDITIONS VFR			
TYPE OF FLIGHT PLAN IFR						
REMARKS- ACCDT LOCATION, 133 MI NW OF RANGOON, BURMA. OFF DUTY CREW MEMBER THROWN FROM BUNK.						
1-0053	1/28/68 TIME - UNK/NR	N. ATLANTIC	DOUGLAS DC8 N818PA DAMAGE-NONE	CR- 0 0 10 PX- 0 1 53	SCHED INTERNATL PASSG SRV	AIRLINE TRANSPORT, AGE UNK/NR, 20384 TOTAL HOURS, 5715 IN TYPE, INSTRUMENT RATED.
OPERATOR - PAN AMERICAN WORLD AIRWAYS, INC.						
TYPE OF ACCIDENT TURBULENCE			PHASE OF OPERATION IN FLIGHT: NORMAL CRUISE			
PROBABLE CAUSE(S)						
WEATHER - TURBULENCE IN FLIGHT, CLEAR AIR						
PERSONNEL - MISCELLANEOUS-PERSONNEL: PASSENGER						
WEATHER BRIEFING - UNKNOWN/NOT REPORTED						
WEATHER FORECAST - UNKNOWN/NOT REPORTED						
SKY CONDITION UNKNOWN/NOT REPORTED			CEILING AT ACCIDENT SITE UNKNOWN/NOT REPORTED			
VISIBILITY AT ACCIDENT SITE UNKNOWN/NOT REPORTED			PRECIPITATION AT ACCIDENT SITE UNKNOWN/NOT REPORTED			
OBSTRUCTIONS TO VISION AT ACCIDENT SITE UNKNOWN/NOT REPORTED			TYPE OF WEATHER CONDITIONS UNKNOWN/NOT REPORTED			
TYPE OF FLIGHT PLAN IFR						
REMARKS- PX SAID HAD SEAT BELT FASTENED LOOSELY, NO INSTRUCTIONS. CREW SAID SEAT BLT SIGN ON ANNMENT MADE.						

BRIEFS OF ACCIDENTS

FILE	DATE	LOCATION	AIRCRAFT DATA	INJURIES F S M/N	FLIGHT PURPOSE	PILOT DATA
1-0059	7/23/68 TIME - 1522	LAFAYETTE, IND	BOEING 707 N355US DAMAGE-NONE	CR- 0 1 6 PX- 0 0 57	SCHED DOM PASSG SRV	AIRLINE TRANSPORT, AGE 46, 18347 TOTAL HOURS, 1667 IN TYPE, INSTRUMENT RATED.
OPERATOR - NORTHWEST AIRLINES, INC.			PHASE OF OPERATION			
TYPE OF ACCIDENT TURBULENCE			IN FLIGHT: NORMAL CRUISE			
PROBABLE CAUSE(S)						
PERSONNEL - OTHER FLIGHT PERSONNEL						
MISCELLANEOUS ACTS, CONDITIONS - SEAT BELT NOT FASTENED						
WEATHER - TURBULENCE, ASSOCIATED W/ CLOUDS, THUNDERSTORMS						
WEATHER BRIEFING - COMPANY DISPATCH						
WEATHER FORECAST - FORECAST SUBSTANTIALLY CORRECT						
SKY CONDITION			CEILING AT ACCIDENT SITE			
UNKNOWN/NOT REPORTED			UNKNOWN/NOT REPORTED			
VISIBILITY AT ACCIDENT SITE			PRECIPITATION AT ACCIDENT SITE			
UNKNOWN/NOT REPORTED			THUNDERSTORM			
OBSTRUCTIONS TO VISION AT ACCIDENT SITE			TYPE OF WEATHER CONDITIONS			
NONE			IFR			
TYPE OF FLIGHT PLAN						
IFR						
REMARKS- CABIN ATTENDANT WAS NOT SEATED. SEAT BELT SIGN ON.						
1-0065	1/25/68 TIME - 0205	NR. KANDAHAR, AFGHAN	BOEING 707 N427PA DAMAGE-NONE	CR- 0 1 9 PX- 0 5 63	SCHED DOM PASSG SRV	AIRLINE TRANSPORT, AGE 59, 26183 TOTAL HOURS, 5117 IN TYPE, INSTRUMENT RATED.
OPERATOR - PAN AMERICAN WORLD AIRWAYS, INC.			INTENDED DESTINATION			
DEPARTURE POINT			NEW DELHI, INDIA			
TEHRAN, IRAN						
TYPE OF ACCIDENT			PHASE OF OPERATION			
TURBULENCE			IN FLIGHT: NORMAL CRUISE			
REMARKS- INVESTIGATION UNDER JURISDICTION OF GOV'T OF AFGHANISTAN.						

BRIEFS OF ACCIDENTS

FILE	DATE	LOCATION	AIRCRAFT DATA	INJURIES F S M/N	FLIGHT PURPOSE	PILOT DATA
1-0066	8/6/68 TIME - 0945	NEW RICHMOND, NIS	DOUGLAS DC-8 N8010U DAMAGE-SUBSTANTIAL	CR- 0 0 8 PX- 0 2106	SCHED DOM PASSG SRV	AIRLINE TRANSPORT, AGE 47, 11000 TOTAL HOURS, 3327 IN TYPE, INSTRUMENT RATED.
		OPERATOR - UNITED AIR LINES, INC. DEPARTURE POINT BOSTON, MASS TYPE OF ACCIDENT TURBULENCE	INTENDED DESTINATION SEATTLE, WASH		PHASE OF OPERATION IN FLIGHT: NORMAL CRUISE	
		PROBABLE CAUSE(S) WEATHER - TURBULENCE, ASSOCIATED W/ CLOUDS, THUNDERSTORMS FACTOR(S) MISCELLANEOUS ACTS, CONDITIONS - SEAT BELT NOT FASTENED WEATHER - THUNDERSTORM ACTIVITY WEATHER BRIEFING - COMPANY DISPATCH WEATHER FORECAST - WEATHER SLIGHTLY WORSE THAN FORECAST				
		SKY CONDITION OVERCAST VISIBILITY AT ACCIDENT SITE ZERO OBSTRUCTIONS TO VISION AT ACCIDENT SITE NONE TYPE OF FLIGHT PLAN IFR			CEILING AT ACCIDENT SITE 50000 PRECIPITATION AT ACCIDENT SITE HAIL TYPE OF WEATHER CONDITIONS VFR	
		REMARKS- GRND AND ACFT RADAR DIDNT SHOW CELL. WEA FCST INACCURATE AS TO TIME AND LOCATION OF TSTM.				
1-0067	10/3/68 TIME - 1350	NR. FILLMORE, CALIF	BOEING 727 N7622U DAMAGE-NONE	CR- 0 1 6 PX- 0 0 38	SCHED DOM PASSG SRV	AIRLINE TRANSPORT, AGE 43, 12740 TOTAL HOURS, 460 IN TYPE, INSTRUMENT RATED.
		OPERATOR - UNITED AIR LINES, INC. DEPARTURE POINT OAKLAND, CALIF TYPE OF ACCIDENT TURBULENCE	INTENDED DESTINATION LOS ANGELES, CALIF		PHASE OF OPERATION IN FLIGHT: DESCENDING	
		PROBABLE CAUSE(S) WEATHER - TURBULENCE, ASSOCIATED W/ CLOUDS, THUNDERSTORMS FACTOR(S) MISCELLANEOUS ACTS, CONDITIONS - SEAT BELT SIGN ON WEATHER BRIEFING - COMPANY DISPATCH WEATHER FORECAST - FORECAST SUBSTANTIALLY CORRECT				
		SKY CONDITION UNKNOWN/NOT REPORTED VISIBILITY AT ACCIDENT SITE ZERO OBSTRUCTIONS TO VISION AT ACCIDENT SITE NONE TYPE OF FLIGHT PLAN IFR			CEILING AT ACCIDENT SITE UNKNOWN/NOT REPORTED PRECIPITATION AT ACCIDENT SITE NONE TYPE OF WEATHER CONDITIONS VFR	
		REMARKS- RADAR SHOWED NO RETURN.				

BRIEFS OF ACCIDENTS

FILE	DATE	LOCATION	AIRCRAFT DATA	INJURIES			FLIGHT PURPOSE	PILOT DATA
				F	S	M/N		
1-0068	1/25/68 TIME - 0207	NO. ATLANTIC OCEAN	DOUGLAS DC-8 N4904C DAMAGE-NONE	CR- 0 PX- 0	1 1183	6	SCHED INTERNATL PASSG SRV	AIRLINE TRANSPORT, AGE 57, 20000 TOTAL HOURS, 500 IN TYPE, INSTRUMENT RATED.
		OPERATOR - EASTERN AIR LINES, INC.						
		DEPARTURE POINT	INTENDED DESTINATION					
		NEW YORK, NY	SAN JUAN, PR					
		TYPE OF ACCIDENT						
		TURBULENCE						
		PROBABLE CAUSE(S)						
		WEATHER - TURBULENCE, ASSOCIATED W/ CLOUDS, THUNDERSTORMS						
		PERSONNEL - WEATHER PERSONNEL: INCORRECT WEATHER FORECAST						
		FACTOR(S)						
		MISCELLANEOUS ACTS, CONDITIONS - SEAT BELT SIGN ON						
		WEATHER BRIEFING - COMPANY DISPATCH						
		WEATHER FORECAST - WEATHER CONSIDERABLY WORSE THAN FORECAST						
		SKY CONDITION						
		CLEAR						
		VISIBILITY AT ACCIDENT SITE						
		5 OR OVER						
		OBSTRUCTIONS TO VISION AT ACCIDENT SITE						
		NONE						
		TYPE OF FLIGHT PLAN						
		IFR						
		REMARKS- WEA PROG CHART INACCURATE AS TO LOCATION OF CB CLOUDS AND TURB INTENSITY. RADAR DIDNT SHOW RETURN.						
1-0069	6/12/68 TIME - 1315	NR. NORFOLK, VA	DOUGLAS DC-8 N3775 DAMAGE-MINOR	CR- 0 PX- 0	0 1	10 94	SCHED DOM PASSG SRV	AIRLINE TRANSPORT, AGE 47, 19377 TOTAL HOURS, 620 IN TYPE, INSTRUMENT RATED.
		OPERATOR - EASTERN AIR LINES, INC.						
		DEPARTURE POINT	INTENDED DESTINATION					
		JFK INTL, NY	MIAMI, FLA					
		TYPE OF ACCIDENT						
		TURBULENCE						
		PROBABLE CAUSE(S)						
		WEATHER - TURBULENCE, ASSOCIATED W/ CLOUDS, THUNDERSTORMS						
		FACTOR(S)						
		PILOT IN COMMAND - FAILED TO FOLLOW APPROVED PROCEDURES, DIRECTIVES, ETC.						
		MISCELLANEOUS ACTS, CONDITIONS - SEAT BELT SIGN ON						
		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 TSTM ACTIVITY IN AREA. PLT DID NOT GIVE VERBAL WARNING TO PX AND CREW.						

BRIEFS OF ACCIDENTS

FILE	DATE	LOCATION	AIRCRAFT DATA	INJURIES F S M/N	FLIGHT PURPOSE	PILOT DATA
1-0070	7/5/68 TIME - 1317	NR. HECTOR, CALIF	BOEING 727 N898PC DAMAGE-NONE	CR- 0 1 5 PX- 0 0 6	SCHED DOM PASSG SRV	ATR, FLIGHT INSTR., AGE 49, 23000 TOTAL HOURS, 871 IN TYPE, INSTRUMENT RATED.
		OPERATOR - AIR WEST, INC. DEPARTURE POINT LAS VEGAS, NEV TYPE OF ACCIDENT TURBULENCE	INTENDED DESTINATION LOS ANGELES, CALIF	PHASE OF OPERATION IN FLIGHT: NORMAL CRUISE		
		PROBABLE CAUSE(S) WEATHER - TURBULENCE IN FLIGHT, CLEAR AIR FACTOR(S) MISCELLANEOUS ACTS, CONDITIONS - SEAT BELT SIGN ON WEATHER BRIEFING - COMPANY DISPATCH WEATHER FORECAST - FORECAST SUBSTANTIALLY CORRECT		CEILING AT ACCIDENT SITE UNKNOWN/NOT REPORTED PRECIPITATION AT ACCIDENT SITE NONE TYPE OF WEATHER CONDITIONS VFR		
		SKY CONDITION BROKEN VISIBILITY AT ACCIDENT SITE 5 OR OVER OBSTRUCTIONS TO VISION AT ACCIDENT SITE NONE TYPE OF FLIGHT PLAN IFR				
		REMARKS- CUMULUS BUILDUP TO RT. UNABLE TO STEER LEFT DUE TO RESTRICTED AREA 2501.				
1-0071	10/28/68 TIME - 2200	NO. PACIFIC OCEAN	BOEING 707 N424PA DAMAGE-NONE	CR- 0 2 9 PX- 0 0 53	SCHED DOM PASSG SRV	AIRLINE TRANSPORT, AGE 57, 19300 TOTAL HOURS, 5226 IN TYPE, INSTRUMENT RATED.
		OPERATOR - PAN AMERICAN WORLD AIRWAYS, INC. DEPARTURE POINT TOKYO, JAPAN TYPE OF ACCIDENT TURBULENCE	INTENDED DESTINATION SAN FRANCISCO, CALIF	PHASE OF OPERATION IN FLIGHT: NORMAL CRUISE		
		PROBABLE CAUSE(S) WEATHER - TURBULENCE IN FLIGHT, CLEAR AIR FACTOR(S) MISCELLANEOUS ACTS, CONDITIONS - SEAT BELT SIGN OFF WEATHER BRIEFING - COMPANY DISPATCH WEATHER FORECAST - FORECAST SUBSTANTIALLY CORRECT		CEILING AT ACCIDENT SITE UNKNOWN/NOT REPORTED PRECIPITATION AT ACCIDENT SITE NONE TYPE OF WEATHER CONDITIONS VFR		
		SKY CONDITION BROKEN VISIBILITY AT ACCIDENT SITE 5 OR OVER OBSTRUCTIONS TO VISION AT ACCIDENT SITE NONE TYPE OF FLIGHT PLAN IFR				
		REMARKS- PX WARNED TO KEEP SEAT BELTS LOOSELY FASTENED.				

BRIEFS OF ACCIDENTS

FILE	DATE	LOCATION	AIRCRAFT DATA	INJURIES F S M/N	FLIGHT PURPOSE	PILOT DATA
1-0011	3/20/69 TIME - 0400	NR.HONOLULU,HAWAII	BOEING 707 N427PA DAMAGE-NONE	CR- 0 0 8 PX- 0 1 70	SCHED INTERNATL PASSG SRV	AIRLINE TRANSPORT, AGE UNK/NR, 17290 TOTAL HOURS, 3413 IN TYPE, INSTRUMENT RATED.
		OPERATOR - PAN AMERICAN WORLD AIRWAYS, INC. DEPARTURE POINT LOS ANGELES,CALIF TYPE OF ACCIDENT TURBULENCE	INTENDED DESTINATION NEW YORK,NY		LAST ENROUTE STOP LONDON, ENGLAND PHASE OF OPERATION IN FLIGHT: NORMAL CRUISE	
		PROBABLE CAUSE(S) WEATHER - TURBULENCE IN FLIGHT,CLEAR AIR FACTOR(S) MISCELLANEOUS ACTS,CONDITIONS - SEAT BELT SIGN ON WEATHER BRIEFING - COMPANY DISPATCH WEATHER FORECAST - UNKNOWN/NOT REPORTED				
		SKY CONDITION CLEAR VISIBILITY AT ACCIDENT SITE 5 OR OVER OBSTRUCTIONS TO VISION AT ACCIDENT SITE NONE TYPE OF FLIGHT PLAN IFR			CEILING AT ACCIDENT SITE UNLIMITED PRECIPITATION AT ACCIDENT SITE NONE TYPE OF WEATHER CONDITIONS VFR	
		REMARKS- PX RETURNING TO SEAT FROM BLUE ROOM AS SEAT BELT SIGN WAS TURNED ON WAS THROWN TO FLOOR.				
1-0012	3/16/69 TIME - 1640	NR.PULASKI,VA	DOUGLAS DC-8 N8038A DAMAGE-NONE	CR- 0 1 6 PX- 0 0 59	SCHED DOM PASSG SRV	AIRLINE TRANSPORT, AGE 44, 22778 TOTAL HOURS, 1452 IN TYPE, INSTRUMENT RATED.
		OPERATOR - DELTA AIR LINES, INC. DEPARTURE POINT NEW ORLEANS,LA TYPE OF ACCIDENT TURBULENCE	INTENDED DESTINATION DULLES AIRPORT,VA		PHASE OF OPERATION IN FLIGHT: DESCENDING	
		PROBABLE CAUSE(S) WEATHER - TURBULENCE IN FLIGHT,CLEAR AIR FACTOR(S) MISCELLANEOUS ACTS,CONDITIONS - SEAT BELT SIGN ON WEATHER BRIEFING - UNKNOWN/NOT REPORTED WEATHER FORECAST - FORECAST SUBSTANTIALLY CORRECT				
		SKY CONDITION UNKNOWN/NOT REPORTED 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 VFR	
		REMARKS- STEWARDESS THROWN TO CEILING WHILE IN AISLE.				

BRIEFS OF ACCIDENTS

FILE	DATE	LOCATION	AIRCRAFT DATA	INJURIES			FLIGHT PURPOSE	PILOT DATA	
				F	S	M/N			
1-0015	2/9/69	SEATTLE, WASH	BOEING B-727 N7056U DAMAGE-NONE	CR-	0	0	6	SCHED DOM PASSG SRV	AIRLINE TRANSPORT, AGE 38, 7000 TOTAL HOURS, 345 IN TYPE, INSTRUMENT RATED.
OPERATOR - UNITED AIR LINES, INC.			INTENDED DESTINATION			PHASE OF OPERATION			
DEPARTURE POINT			SEATTLE, WASH			IN FLIGHT: DESCENDING			
LOS ANGELES, CALIF									
TYPE OF ACCIDENT									
TURBULENCE									
PROBABLE CAUSE(S)									
WEATHER - TURBULENCE IN FLIGHT, CLEAR AIR									
PERSONNEL - MISCELLANEOUS-PERSONNEL: PASSENGER									
FACTOR(S)									
MISCELLANEOUS ACTS, CONDITIONS - SEAT BELT SIGN ON									
WEATHER BRIEFING - BRIEFING RECEIVED-METHOD UNKNOWN									
WEATHER FORECAST - UNKNOWN/NOT REPORTED									
SKY CONDITION						CEILING AT ACCIDENT SITE			
CLEAR						UNLIMITED			
VISIBILITY AT ACCIDENT SITE						PRECIPITATION AT ACCIDENT SITE			
5 OR OVER						NONE			
OBSTRUCTIONS TO VISION AT ACCIDENT SITE						TYPE OF WEATHER CONDITIONS			
NONE						VFR			
TYPE OF FLIGHT PLAN									
IFR									
REMARKS- PX RETURNING TO SEAT FELL, BROKE ANKLE.									

BRIEFS OF ACCIDENTS

FILE	DATE	LOCATION	AIRCRAFT DATA	INJURIES			FLIGHT PURPOSE	PILOT DATA
				F	S	M/N		
I-0018	4/27/69	OVER CUBA TIME - 1345	DOUGLAS DC-8 N8764 DAMAGE-MINOR	CR-	0	0	8	AIRLINE TRANSPORT, AGE 56, 24289 TOTAL HOURS, 1805 IN TYPE, INSTRUMENT RATED.
				PX-	0	6	177	
		OPERATOR - EASTERN AIR LINES, INC.						
		DEPARTURE POINT BOSTON, MASS	INTENDED DESTINATION JAMAICA, BWI					
		TYPE OF ACCIDENT TURBULENCE		PHASE OF OPERATION IN FLIGHT: NORMAL CRUISE				
		PROBABLE CAUSE(S) WEATHER - TURBULENCE, ASSOCIATED W/ CLOUDS, THUNDERSTORMS						
		FACTORS(S) PILOT IN COMMAND - FAILED TO FOLLOW APPROVED PROCEDURES, DIRECTIVES, ETC. MISCELLANEOUS ACTS, CONDITIONS - SEAT BELT SIGN ON WEATHER - THUNDERSTORM ACTIVITY WEATHER BRIEFING - COMPANY DISPATCH WEATHER FORECAST - WEATHER SLIGHTLY WORSE THAN FORECAST						
		SKY CONDITION OVERCAST		CEILING AT ACCIDENT SITE UNKNOWN/NOT REPORTED				
		VISIBILITY AT ACCIDENT SITE ZERO		PRECIPITATION AT ACCIDENT SITE UNKNOWN/NOT REPORTED				
		OBSTRUCTIONS TO VISION AT ACCIDENT SITE UNKNOWN/NOT REPORTED		TYPE OF WEATHER CONDITIONS IFR				
		TYPE OF FLIGHT PLAN IFR						
		REMARKS- PLT GAVE CREW AND PX AMPLE WARNING BUT DID NOT SLOW ACFT TO COMPANY MAX TSTM PENETRATION A/S.						

BRIEFS OF ACCIDENTS

FILE	DATE	LOCATION	AIRCRAFT DATA	INJURIES F S M/N	FLIGHT PURPOSE	PILOT DATA
1-0019	4/27/69 TIME - 1055	NO. ATLANTIC OCEAN	DOUGLAS DC-8 N8601 DAMAGE-MINOR	CR- 0 0 7 PX- 0 8100	SCHED INTERNATL PASSG SRV	AIRLINE TRANSPORT, AGE 53, UNK/NR TOTAL HOURS, UNK/NR IN TYPE, INSTRU- MENT RATED.
		OPERATOR - EASTERN AIR LINES, INC.				
		DEPARTURE POINT	INTENDED DESTINATION			
		SAN JUAN, PR	PHILADELPHIA, PA			
		TYPE OF ACCIDENT			PHASE OF OPERATION	
		TURBULENCE			IN FLIGHT: NORMAL CRUISE	
		PROBABLE CAUSE(S)				
		WEATHER - TURBULENCE, ASSOCIATED W/ CLOUDS, THUNDERSTORMS				
		FACTOR(S)				
		PERSONNEL - OTHER FLIGHT PERSONNEL				
		MISCELLANEOUS ACTS, CONDITIONS - SEAT BELT SIGN ON				
		WEATHER - THUNDERSTORM ACTIVITY				
		WEATHER BRIEFING - COMPANY DISPATCH				
		WEATHER FORECAST - FORECAST SUBSTANTIALLY CORRECT				
		SKY CONDITION			CEILING AT ACCIDENT SITE	
		UNKNOWN/NOT REPORTED			UNKNOWN/NOT REPORTED	
		VISIBILITY AT ACCIDENT SITE			PRECIPITATION AT ACCIDENT SITE	
		UNKNOWN/NOT REPORTED			UNKNOWN/NOT REPORTED	
		OBSTRUCTIONS TO VISION AT ACCIDENT SITE			TYPE OF WEATHER CONDITIONS	
		UNKNOWN/NOT REPORTED			VFR	
		TYPE OF FLIGHT PLAN				
		IFR				
		REMARKS- RADAR INOPERATIVE. PLT WARNED FLT ATTENDANTS, BUT THEY DID NOT CHECK PX SEAT BELTS.				

BRIEFS OF ACCIDENTS

FILE	DATE	LOCATION	AIRCRAFT DATA	INJURIES F S M/N	FLIGHT PURPOSE	PILOT DATA
1-0023	7/26/69 TIME - 1250	NR. JANESVILLE, WIS	BOEING 720 N7215U DAMAGE-NONE	CR- 0 0 7 PX- 0 1118	SCHED DOM PASSG SRV	AIRLINE TRANSPORT, AGE 52, 20130 TOTAL HOURS, 1250 IN TYPE, INSTRUMENT RATED.
OPERATOR - UNITED AIR LINES, INC.						
DEPARTURE POINT		INTENDED DESTINATION				
DENVER, COLO		CHICAGO, ILL				
TYPE OF ACCIDENT				PHASE OF OPERATION		
TURBULENCE				IN FLIGHT: DESCENDING		
PROBABLE CAUSE(S)						
WEATHER - TURBULENCE, ASSOCIATED W/ CLOUDS, THUNDERSTORMS						
FACTOR(S)						
PERSONNEL - DISPATCHING: FAILURE TO KEEP FLIGHT PROPERLY ADVISED						
PILOT IN COMMAND - FAILED TO FOLLOW APPROVED PROCEDURES, DIRECTIVES, ETC.						
MISCELLANEOUS ACTS, CONDITIONS - SEAT BELT SIGN ON						
WEATHER BRIEFING - COMPANY DISPATCH						
WEATHER FORECAST - WEATHER SLIGHTLY WORSE THAN FORECAST						
SKY CONDITION				CEILING AT ACCIDENT SITE		
OVERCAST				UNKNOWN/NOT REPORTED		
VISIBILITY AT ACCIDENT SITE				PRECIPITATION AT ACCIDENT SITE		
ZERO				RAIN SHOWERS		
OBSTRUCTIONS TO VISION AT ACCIDENT SITE				TYPE OF WEATHER CONDITIONS		
NONE				VFR		
TYPE OF FLIGHT PLAN						
IFR						
REMARKS- PLT DID NOT GIVE VERBAL WARNING TO CABIN. SEVERE WEA FCST WAS NOT RELAYED TO ACFT BY DISPATCHER.						
1-0029	4/8/69 TIME - 2020	NR. ST. LOUIS, MO	BOEING 707 N771TW DAMAGE-NONE	CR- 0 1 6 PX- 0 0 52	SCHED DOM PASSG SRV	AIRLINE TRANSPORT, AGE 49, 21765 TOTAL HOURS, 237 IN TYPE, INSTRUMENT RATED.
OPERATOR - TRANS WORLD AIRLINES, INC.						
DEPARTURE POINT		INTENDED DESTINATION		LAST ENROUTE STOP		
KANSAS CITY, MO		MIAMI, FLA		ST. LOUIS, MO		
TYPE OF ACCIDENT				PHASE OF OPERATION		
TURBULENCE				IN FLIGHT: NORMAL CRUISE		
PROBABLE CAUSE(S)						
WEATHER - TURBULENCE, ASSOCIATED W/ CLOUDS, THUNDERSTORMS						
FACTOR(S)						
MISCELLANEOUS ACTS, CONDITIONS - SEAT BELT SIGN ON						
WEATHER BRIEFING - COMPANY DISPATCH						
WEATHER FORECAST - FORECAST SUBSTANTIALLY CORRECT						
SKY CONDITION				CEILING AT ACCIDENT SITE		
UNKNOWN/NOT REPORTED				UNKNOWN/NOT REPORTED		
VISIBILITY AT ACCIDENT SITE				PRECIPITATION AT ACCIDENT SITE		
UNKNOWN/NOT REPORTED				RAIN		
OBSTRUCTIONS TO VISION AT ACCIDENT SITE				TYPE OF WEATHER CONDITIONS		
NONE				VFR		
TYPE OF FLIGHT PLAN						
IFR						
REMARKS- ARTC WAS RADAR VECTERING ACFT AROUND WORST TSTM ACTIVITY. ACFT RADAR ON AND OPERATING.						

BRIEFS OF ACCIDENTS

FILE	DATE	LOCATION	AIRCRAFT DATA	INJURIES F S M/N	FLIGHT PURPOSE	PILOT DATA
1-0030	7/22/69 TIME - 1620	EVERGREEN,ALA	DOUGLAS DC-8 N812E DAMAGE-NONE	CR- 0 1 6 PX- 0 0 75	SCHED DOM PASSG SRV	AIRLINE TRANSPORT, AGE 47, 13850 TOTAL HOURS, 140 IN TYPE, INSTRUMENT RATED.
OPERATOR - DELTA AIR LINES,INC.						
DEPARTURE POINT		INTENDED DESTINATION				
ATLANTA,GA		NEW ORLEANS,LA				
TYPE OF ACCIDENT				PHASE OF OPERATION		
TURBULENCE				IN FLIGHT: NORMAL CRUISE		
PROBABLE CAUSE(S)						
PILOT IN COMMAND - FAILED TO FOLLOW APPROVED PROCEDURES,DIRECTIVES,ETC.						
WEATHER - TURBULENCE,ASSOCIATED W/ CLOUDS, THUNDERSTORMS						
FACTOR(S)						
WEATHER - THUNDERSTORM ACTIVITY						
WEATHER BRIEFING - COMPANY DISPATCH						
WEATHER FORECAST - FORECAST SUBSTANTIALLY CORRECT						
SKY CONDITION				CEILING AT ACCIDENT SITE		
UNKNOWN/NOT REPORTED				UNKNOWN/NOT REPORTED		
VISIBILITY AT ACCIDENT SITE				PRECIPITATION AT ACCIDENT SITE		
UNKNOWN/NOT REPORTED				UNKNOWN/NOT REPORTED		
OBSTRUCTIONS TO VISION AT ACCIDENT SITE				TYPE OF WEATHER CONDITIONS		
UNKNOWN/NOT REPORTED				VFR		
TYPE OF FLIGHT PLAN						
IFR						
REMARKS- SEAT BELT SIGN WAS TURNED ON TOO LATE. BEVERAGE SERVICE IN PROGRESS.						
1-0031	8/27/69 TIME - 1341	NO.ATLANTIC OCEAN	DOUGLAS DC-8 N8775 DAMAGE-NONE	CR- 0 0 9 PX- 0 1100	SCHED INTERNATL PASSG SRV	AIRLINE TRANSPORT, AGE 55, 24000 TOTAL HOURS, 1000 IN TYPE, INSTRUMENT RATED.
OPERATOR - EASTERN AIR LINES,INC.						
DEPARTURE POINT		INTENDED DESTINATION				
BERMUDA BWI		JFK INTL,NY				
TYPE OF ACCIDENT				PHASE OF OPERATION		
TURBULENCE				IN FLIGHT: NORMAL CRUISE		
PROBABLE CAUSE(S)						
WEATHER - TURBULENCE,ASSOCIATED W/ CLOUDS, THUNDERSTORMS						
FACTOR(S)						
MISCELLANEOUS ACTS,CCNDITICNS - SEAT BELT SIGN ON						
WEATHER BRIEFING - COMPANY DISPATCH						
WEATHER FORECAST - FORECAST SUBSTANTIALLY CORRECT						
SKY CONDITION				CEILING AT ACCIDENT SITE		
OVERCAST				UNKNOWN/NOT REPORTED		
VISIBILITY AT ACCIDENT SITE				PRECIPITATION AT ACCIDENT SITE		
ZERO				NONE		
OBSTRUCTIONS TO VISION AT ACCIDENT SITE				TYPE OF WEATHER CONDITIONS		
NONE				VFR		
TYPE OF FLIGHT PLAN						
IFR						
REMARKS- PX WAS RETURNING TO SEAT FROM BLUE ROOM. ACFT ABOUT MIDWAY BETWEEN BERMUDA AND NY.						

BRIEFS OF ACCIDENTS

FILE	DATE	LOCATION	AIRCRAFT DATA	INJURIES			FLIGHT PURPOSE	PILOT DATA
				F	S	M/N		
1-0032	8/26/69 TIME - 0940	NO. PACIFIC OCEAN	BOEING 707 N17321 DAMAGE-NONE	CR- 0 PX- 0	1 0	7 0165	MIL CONTRACT PASSG INTL	AIRLINE TRANSPORT, AGE 49, 21715 TOTAL HOURS, 5510 IN TYPE, INSTRUMENT RATED.
		OPERATOR - CONTINENTAL AIR LINES, INC. DEPARTURE POINT HONOLULU, HAWAII TYPE OF ACCIDENT TURBULENCE	INTENDED DESTINATION CLARK AFB, PI				PHASE OF OPERATION IN FLIGHT: NORMAL CRUISE	
		PROBABLE CAUSE(S) WEATHER - TURBULENCE, ASSOCIATED W/ CLOUDS, THUNDERSTORMS FACTOR(S) MISCELLANEOUS ACTS, CONDITIONS - SEAT BELT SIGN ON WEATHER BRIEFING - COMPANY DISPATCH WEATHER FORECAST - FORECAST SUBSTANTIALLY CORRECT						
		SKY CONDITION UNKNOWN/NOT REPORTED VISIBILITY AT ACCIDENT SITE ZERO OBSTRUCTIONS TO VISION AT ACCIDENT SITE NONE TYPE OF FLIGHT PLAN IFR					CEILING AT ACCIDENT SITE UNKNOWN/NOT REPORTED PRECIPITATION AT ACCIDENT SITE NONE TYPE OF WEATHER CONDITIONS VFR	
		REMARKS- RADAR DIDNT SHOW RETURN. PLT HAD AVOIDED KNOWN TSTM ACTIVITY. HALFWAY BETWEEN GUAM AND PI.						
1-0034	9/4/69 TIME - 1718	NR. JACKSON, MISS	CONVAIR 880 N3806E DAMAGE-NONE	CR- 0 PX- 0	0 0	5 48	SCHED DOM PASSG SRV	AIRLINE TRANSPORT, AGE 50, 21000 TOTAL HOURS, 6100 IN TYPE, INSTRUMENT RATED.
		OPERATOR - DELTA AIR LINES, INC. DEPARTURE POINT CHICAGO, ILL TYPE OF ACCIDENT TURBULENCE	INTENDED DESTINATION NEW ORLEANS, LA				PHASE OF OPERATION IN FLIGHT: DESCENDING	
		PROBABLE CAUSE(S) PILOT IN COMMAND - FAILED TO FOLLOW APPROVED PROCEDURES, DIRECTIVES, ETC. WEATHER - TURBULENCE, ASSOCIATED W/ CLOUDS, THUNDERSTORMS FACTOR(S) MISCELLANEOUS ACTS, CONDITIONS - SEAT BELT SIGN OFF WEATHER BRIEFING - COMPANY DISPATCH WEATHER FORECAST - FORECAST SUBSTANTIALLY CORRECT						
		SKY CONDITION UNKNOWN/NOT REPORTED VISIBILITY AT ACCIDENT SITE ZERO OBSTRUCTIONS TO VISION AT ACCIDENT SITE NONE TYPE OF FLIGHT PLAN IFR					CEILING AT ACCIDENT SITE UNKNOWN/NOT REPORTED PRECIPITATION AT ACCIDENT SITE NONE TYPE OF WEATHER CONDITIONS VFR	
		REMARKS- SCHED TSTMS FCST FOR ROUTE OF FLT.						

BRIEFS OF ACCIDENTS

FILE	DATE	LOCATION	AIRCRAFT DATA	INJURIES F S M/N	FLIGHT PURPOSE	PILOT DATA
1-0038	7/23/69 TIME - 1150	N. PACIFIC OCEAN	DOUGLAS DC8-63 N8635SW DAMAGE-NONE	CR- 0 2 8 PX- 0 0219	MIL CONTRACT PASSG INTL	AIRLINE TRANSPORT, AGE 44, 13675 TOTAL HOURS, 800 IN TYPE, INSTRUMENT RATED.
<p>OPERATOR - SEABOARD WORLD AIRLINES, INC. DEPARTURE POINT INTENDED DESTINATION TACOMA, WASH CAM RANH, S VIETNAM TYPE OF ACCIDENT LAST ENROUTE STOP TURBULENCE ANDERSON AFB GUAM IN FLIGHT: NORMAL CRUISE</p> <p>PROBABLE CAUSE(S) PILOT IN COMMAND - FAILED TO FOLLOW APPROVED PROCEDURES, DIRECTIVES, ETC. WEATHER - TURBULENCE IN FLIGHT, CLEAR AIR FACTOR(S) MISCELLANEOUS ACTS, CONDITIONS - SEAT BELT SIGN ON WEATHER BRIEFING - BRIEFING RECEIVED-METHOD UNKNOWN WEATHER FORECAST - FORECAST SUBSTANTIALLY CORRECT</p> <p>SKY CONDITION CEILING AT ACCIDENT SITE SCATTERED UNLIMITED VISIBILITY AT ACCIDENT SITE PRECIPITATION AT ACCIDENT SITE 2 MILES OR LESS NONE OBSTRUCTIONS TO VISION AT ACCIDENT SITE TYPE OF WEATHER CONDITIONS UNKNOWN/NOT REPORTED VFR TYPE OF FLIGHT PLAN IFR</p> <p>REMARKS- TCU AND CU IN AREA. FLT ENCRD CHOP APRX 2 MIN BFR HARD GUSTS. SEAT BELT SIGN TURNED ON TOO LATE.</p>						
1-0039	8/2/69 TIME - 0425	NO. PACIFIC OCEAN	BOEING 707 N765PA DAMAGE-NONE	CR- 0 1 10 PX- 0 2 85	SCHED INTERNATL PASSG SRV	AIRLINE TRANSPORT, AGE 59, UNK/NR TOTAL HOURS, 7807 IN TYPE, INSTRUMENT RATED.
<p>OPERATOR - PAN AMERICAN WORLD AIRWAYS, INC. DEPARTURE POINT INTENDED DESTINATION SYDNEY, AUS HONOLULU, HAWAII TYPE OF ACCIDENT PHASE OF OPERATION TURBULENCE IN FLIGHT: NORMAL CRUISE</p> <p>PROBABLE CAUSE(S) WEATHER - TURBULENCE IN FLIGHT, CLEAR AIR FACTOR(S) MISCELLANEOUS ACTS, CONDITIONS - SEAT BELT SIGN OFF WEATHER BRIEFING - COMPANY DISPATCH WEATHER FORECAST - FORECAST SUBSTANTIALLY CORRECT</p> <p>SKY CONDITION CEILING AT ACCIDENT SITE CLEAR UNLIMITED VISIBILITY AT ACCIDENT SITE PRECIPITATION AT ACCIDENT SITE 4 MILES OR LESS NONE OBSTRUCTIONS TO VISION AT ACCIDENT SITE TYPE OF WEATHER CONDITIONS HAZE VFR TYPE OF FLIGHT PLAN IFR</p>						

BRIEFS OF ACCIDENTS

FILE	DATE	LOCATION	AIRCRAFT DATA	INJURIES			FLIGHT PURPOSE	PILOT DATA
				F	S	M/N		
1-0041	10/11/69 TIME - 0245	NO.PACIFIC OCEAN	BOEING 707 N18701 DAMAGE-NONE	CR-	0 2 6	PX-	0 0 62	SCHED INTERNATL PASSG SRV AIRLINE TRANSPORT, AGE 53, 25896 TOTAL HOURS, 6440 IN TYPE, INSTRUMENT RATED.
		OPERATOR - TRANS WORLD AIRLINES, INC. DEPARTURE POINT HONOLULU, HAWAII TYPE OF ACCIDENT TURBULENCE	INTENDED DESTINATION AGANA, GUAM					PHASE OF OPERATION IN FLIGHT: NORMAL CRUISE
		PROBABLE CAUSE(S) WEATHER - TURBULENCE IN FLIGHT, CLEAR AIR FACTOR(S) MISCELLANEOUS ACTS, CONDITIONS - SEAT BELT SIGN ON WEATHER BRIEFING - COMPANY DISPATCH WEATHER FORECAST - FORECAST SUBSTANTIALLY CORRECT						
		SKY CONDITION CLEAR VISIBILITY AT ACCIDENT SITE 5 OR OVER OBSTRUCTIONS TO VISION AT ACCIDENT SITE NONE TYPE OF FLIGHT PLAN IFR						CEILING AT ACCIDENT SITE UNLIMITED PRECIPITATION AT ACCIDENT SITE NONE TYPE OF WEATHER CONDITIONS VFR
		REMARKS- MAIL BAGS STOWED IN REAR SEATS PREVENTED FLT ATTNDS FROM OBSERVING SEAT BELT SIGN.						
1-0042	10/12/69 TIME - 0130	NO.PACIFIC OCEAN	BOEING 707 N18709 DAMAGE-NONE	CR-	0 0 8	PX-	0 1146	MIL CONTRACT PASSG INTL AIRLINE TRANSPORT, AGE 55, 20250 TOTAL HOURS, UNK/NR IN TYPE, INSTRU- MENT RATED.
		OPERATOR - TRANS WORLD AIRLINES, INC. DEPARTURE POINT KADENA, OKINAWA TYPE OF ACCIDENT TURBULENCE	INTENDED DESTINATION HONOLULU, HAWAII					PHASE OF OPERATION IN FLIGHT: NORMAL CRUISE
		PROBABLE CAUSE(S) WEATHER - TURBULENCE IN FLIGHT, CLEAR AIR PILOT IN COMMAND - FAILED TO FOLLOW APPROVED PROCEDURES, DIRECTIVES, ETC. MISCELLANEOUS ACTS, CONDITIONS - SEAT BELT SIGN OFF WEATHER BRIEFING - COMPANY DISPATCH WEATHER FORECAST - FORECAST SUBSTANTIALLY CORRECT						
		SKY CONDITION CLEAR VISIBILITY AT ACCIDENT SITE 5 OR OVER OBSTRUCTIONS TO VISION AT ACCIDENT SITE NONE TYPE OF FLIGHT PLAN IFR						CEILING AT ACCIDENT SITE UNLIMITED PRECIPITATION AT ACCIDENT SITE NONE TYPE OF WEATHER CONDITIONS VFR
		REMARKS- FLT NEAR A TYPHOON AREA.						

BRIEFS OF ACCIDENTS

FILE	DATE	LOCATION	AIRCRAFT DATA	INJURIES F S M/N	FLIGHT PURPOSE	PILOT DATA
1-0043	2/21/69	NR. HOUSTON, TEX	BOEING 720 N780PA DAMAGE-NONE	CR- 0 1 7 PX- 0 0 23	SCHED INTERNATL PASSG SRV	AIRLINE TRANSPORT, AGE 51, 21348 TOTAL HOURS, 868 IN TYPE, INSTRUMENT RATED.
		OPERATOR - PAN AMERICAN WORLD AIRWAYS, INC. DEPARTURE POINT MEXICO CITY, MEX	INTENDED DESTINATION HOUSTON, TEX		PHASE OF OPERATION IN FLIGHT: DESCENDING	
		TYPE OF ACCIDENT TURBULENCE				
		PROBABLE CAUSE(S) WEATHER - TURBULENCE, ASSOCIATED W/ CLOUDS, 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 OVERCAST VISIBILITY AT ACCIDENT SITE ZERO OBSTRUCTIONS TO VISION AT ACCIDENT SITE NONE TYPE OF FLIGHT PLAN IFR			CEILING AT ACCIDENT SITE UNKNOWN/NOT REPORTED PRECIPITATION AT ACCIDENT SITE UNKNOWN/NOT REPORTED TYPE OF WEATHER CONDITIONS IFR	
		REMARKS- SEAT BELT ANNOUNCEMENT HAD BEEN MADE.				

BRIEFS OF ACCIDENTS

FILE	DATE	LOCATION	AIRCRAFT DATA	INJURIES F S M/N	FLIGHT PURPOSE	PILOT DATA
1-0047	8/2/69 TIME - 1243	ATLANTA,GA	DOUGLAS DC-8 N1302L DAMAGE-NONE	CR- 0 1 8 PX- 0 0167	SCHED DOM PASSG SRV	AIRLINE TRANSPORT, AGE 57, 24339 TOTAL HOURS, 4342 IN TYPE, INSTRUMENT RATED.
		OPERATOR - DELTA AIR LINES, INC.				
		DEPARTURE POINT ATLANTA,GA	INTENDED DESTINATION TAMPA,FLA			
		TYPE OF ACCIDENT TURBULENCE			PHASE OF OPERATION IN FLIGHT: CLIMB TO CRUISE	
		PROBABLE CAUSE(S)				
		WEATHER - TURBULENCE, ASSOCIATED W/ CLOUDS, THUNDERSTORMS				
		PERSONNEL - OTHER FLIGHT PERSONNEL				
		MISCELLANEOUS ACTS, CONDITIONS - SEAT BELT NOT FASTENED				
		FACTOR(S)				
		MISCELLANEOUS ACTS, CONDITIONS - SEAT BELT SIGN ON				
		WEATHER - THUNDERSTORM ACTIVITY				
		WEATHER BRIEFING - COMPANY DISPATCH				
		WEATHER FORECAST - FORECAST SUBSTANTIALLY CORRECT				
		SKY CONDITION			CEILING AT ACCIDENT SITE	
		BROKEN/LOWER SCATTERED			10000	
		VISIBILITY AT ACCIDENT SITE			PRECIPITATION AT ACCIDENT SITE	
		ZERO			RAIN SHOWERS, THUNDERSTORM	
		OBSTRUCTIONS TO VISION AT ACCIDENT SITE			TYPE OF WEATHER CONDITIONS	
		NONE			VFR	
		TYPE OF FLIGHT PLAN				
		IFR				
		REMARKS- PLT REQ VECTOR AROUND STORM. ATC RADAR WAS INCP. STEWARDESS INADVERTENTLY RELEASED SEAT BELT.				

BRIEFS OF ACCIDENTS

FILE	DATE	LOCATION	AIRCRAFT DATA	INJURIES F S M/N	FLIGHT PURPOSE	PILOT DATA
1-0057	4/24/69 TIME - 1444	NR.LAS VEGAS,NEV	DOUGLAS DC-9 N9337 DAMAGE-NONE	CR- 0 0 5 PX- 0 1 28	SCHED DOM PASSG SRV	AIRLINE TRANSPORT, AGE 46, 24500 TOTAL HOURS, UNK/NR IN TYPE, INSTRU- MENT RATED.
		OPERATOR - AIR WEST,INC. DEPARTURE POINT REND,NEV TYPE OF ACCIDENT TURBULFENCE	INTENDED DESTINATION PHOENIX,ARIZ		LAST ENROUTE STOP LAS VEGAS,NEV PHASE OF OPERATION IN FLIGHT: DESCENDING	
		PROBABLE CAUSE(S) PERSONNEL - MISCELLANEOUS-PERSONNEL: PASSENGER WEATHER - TURBULENCE IN FLIGHT,CLEAR AIR FACTOR(S) MISCELLANEOUS ACTS,CONDITIONS - SEAT BELT SIGN ON WEATHER BRIEFING - COMPANY DISPATCH WEATHER FORECAST - WEATHER SLIGHTLY WORSE THAN FORECAST				
		SKY CONDITION CLEAR VISIBILITY AT ACCIDENT SITE 5 OR OVER OBSTRUCTIONS TO VISION AT ACCIDENT SITE NONE TYPE OF FLIGHT PLAN IFR REMARKS- PX FRACTURED KNEE WHILE IN LAVATORY.			CEILING AT ACCIDENT SITE UNLIMITED PRECIPITATION AT ACCIDENT SITE NONE TYPE OF WEATHER CONDITIONS VFR	
1-0059	2/7/69 TIME - 0426	SO.PACIFIC OCEAN	BOEING 707 N414PA DAMAGE-NONE	CR- 0 0 10 PX- 0 1 72	SCHED INTERNATL PASSG SRV	AIRLINE TRANSPORT, AGE UNK/NR, 20117 TOTAL HOURS, 4317 IN TYPE, INSTRUMENT RATED.
		OPERATOR - PAN AMERICAN WORLD AIRWAYS,INC. DEPARTURE POINT HONG KONG,CHINA TYPE OF ACCIDENT TURBULENCE	INTENDED DESTINATION SYDNEY,AUSTRALIA		PHASE OF OPERATION IN FLIGHT: NORMAL CRUISE	
		PROBABLE CAUSE(S) WEATHER - TURBULENCE,ASSOCIATED W/ CLOUDS, THUNDERSTORMS 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 3 MILES OR LESS OBSTRUCTIONS TO VISION AT ACCIDENT SITE NONE TYPE OF FLIGHT PLAN IFR REMARKS- PENETRATED TOP OF CB CLOUD FLYING IN STRATUS LAYER,RADAR DIDNT SHOW CB.			CEILING AT ACCIDENT SITE UNKNOWN/NOT REPORTED PRECIPITATION AT ACCIDENT SITE NONE TYPE OF WEATHER CONDITIONS VFR	

BRIEFS OF ACCIDENTS

FILE	DATE	LOCATION	AIRCRAFT DATA	INJURIES F S M/N	FLIGHT PURPOSE	PILOT DATA
1-0061	12/21/69 TIME - 1450	NR.DENVER,COLO	BOEING 720 N17207 DAMAGE-NONE	CR- 0 0 7 PX- 0 1 86	SCHED DOM PASSG SRV	AIRLINE TRANSPORT, AGE 38, 10000 TOTAL HOURS, 2000 IN TYPE, INSTRUMENT RATED.
		OPERATOR - CONTINENTAL AIR LINES, INC.				
		DEPARTURE POINT		INTENDED DESTINATION		
		LOS ANGELES,CALIF		DENVER,COLO		
		TYPE OF ACCIDENT		PHASE OF OPERATION		
		TURBULENCE		IN FLIGHT: DESCENDING		
		PROBABLE CAUSE(S)				
		PERSONNEL - MISCELLANEOUS-PERSONNEL: PASSENGER				
		PERSONNEL - OTHER FLIGHT PERSONNEL				
		WEATHER - TURBULENCE IN FLIGHT,CLEAR AIR				
		FACTOR(S)				
		MISCELLANEOUS ACTS,CONDITIONS - SEAT BELT SIGN ON				
		WEATHER BRIEFING - BRIEFING RECEIVED-METHOD UNKNOWN				
		WEATHER FORECAST - UNKNOWN/NOT REPORTED				
		SKY CONDITION		CEILING AT ACCIDENT SITE		
		SCATTERED		14000		
		VISIBILITY AT ACCIDENT SITE		PRECIPITATION AT ACCIDENT SITE		
		5 OR OVER		NONE		
		OBSTRUCTIONS TO VISION AT ACCIDENT SITE		TYPE OF WEATHER CONDITIONS		
		NONE		VFR		
		TYPE OF FLIGHT PLAN				
		IFR				
		REMARKS- VERBAL AND VISUAL WARN ISSUED IN ANTICIPATION OF TURBC.		STEWARDESS AND PX INJURED.		

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