



Aviation Investigation Final Report

Location: GRANTS, New Mexico Accident Number: DEN85FQA04

Date & Time: August 6, 1985, 11:30 Local Registration: N65010

Aircraft: STAR DUSTER TOO SA- Aircraft Damage: Substantial

Defining Event: 1 Serious

Flight Conducted Under: Part 91: General aviation - Personal

Analysis

THE PILOT-IN-COMMAND OF N65010, A STARDUSTER II ON 8/6/85 TOOK OFF FROM GRANTS, NM AT ABOUT 1100 MDT, SOUTH BOUND TO INTERCEPT WINSLOW, AZ VOR, RADIAL 255. WHEN TRYING TO GAIN ALTITUDE THE PILOT STATED THE AIRCRAFT FELT THE EFFECTS OF DENSITY ALTITUDE MAKING IT DIFFICULT TO REACH THE AIRWAY ALTITUDE. A DOWN-DRAFT FINALLY CAUSED THE AIRCRAFT TO LOSE FORWARD AIRSPEED CAUSING THE AIRCRAFT TO CRASH IN A NOSE DOWN ATTITUDE. THE ELEVATOR TRIM WAS IN A FULL NOSE UP CONDITION. THE AIRCRAFT WAS DEMOLISHED. THERE WAS NO FIRE. THE PILOT RECEIVED SERIOUS INJURIES. THE ELT ACTIVATED WHICH LED TO THE PILOT'S RESCUE. ACCIDENT ALT WAS 7400 FT MSL.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be:

Findings

Occurrence #1: LOSS OF CONTROL - IN FLIGHT Phase of Operation: CLIMB - TO CRUISE

Findings

1. (F) WEATHER CONDITION - HIGH DENSITY ALTITUDE

2. (F) WEATHER CONDITION - DOWNDRAFT

- 3. (C) ELEVATOR TRIM IMPROPER USE OF PILOT IN COMMAND
- 4. (C) LACK OF TOTAL EXPERIENCE IN TYPE OF AIRCRAFT PILOT IN COMMAND
- 5. (C) WEATHER EVALUATION MISJUDGED PILOT IN COMMAND
- 6. (C) STALL/MUSH UNCONTROLLED PILOT IN COMMAND

Occurrence #2: IN FLIGHT COLLISION WITH TERRAIN/WATER

Phase of Operation: DESCENT - UNCONTROLLED

Findings

7. (F) TERRAIN CONDITION - HIGH TERRAIN

Page 2 of 5 DEN85FQA04

Factual Information

Pilot Information

| Certificate: | Private | Age: | 28.Male |
|---------------------------|---------------------------------------------------------------------------------------------------------------|-----------------------------------|------------------|
| Certificate. | Tilvate | Age. | 20,111016 |
| Airplane Rating(s): | Single-engine land | Seat Occupied: | Rear |
| Other Aircraft Rating(s): | None | Restraint Used: | |
| Instrument Rating(s): | None | Second Pilot Present: | No |
| Instructor Rating(s): | None | Toxicology Performed: | No |
| Medical Certification: | Class 3 Valid Medicalno waivers/lim. | Last FAA Medical Exam: | January 28, 1985 |
| Occupational Pilot: | No | Last Flight Review or Equivalent: | |
| Flight Time: | 210 hours (Total, all aircraft), 65 hours (Total, this make and model), 4 hours (Last 24 hours, all aircraft) | | |

Aircraft and Owner/Operator Information

| Aircraft Make: | STAR DUSTER TOO | Registration: | N65010 |
|-------------------------------|--------------------------------------------------|-----------------------------------|-----------------|
| Model/Series: | SA-300 SA-300 | Aircraft Category: | Airplane |
| Year of Manufacture: | | Amateur Built: | Yes |
| Airworthiness Certificate: | Experimental (Special) | Serial Number: | BJ101 |
| Landing Gear Type: | Tailwheel | Seats: | 2 |
| Date/Type of Last Inspection: | May 2, 1985 Annual | Certified Max Gross Wt.: | |
| Time Since Last Inspection: | 9231 Hrs | Engines: | 1 Reciprocating |
| Airframe Total Time: | | Engine Manufacturer: | LYCOMING |
| ELT: | Installed, activated, aided in locating accident | Engine Model/Series: | 10-320 |
| Registered Owner: | MICHAEL C. RYAN | Rated Power: | 150 Horsepower |
| Operator: | | Operating Certificate(s) Held: | None |
| Operator Does Business As: | | Operator Designator Code: | |

Page 3 of 5 DEN85FQA04

Meteorological Information and Flight Plan

| Visual (VMC) | Condition of Light: | Day |
|----------------------------------|---------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | Distance from Accident Site: | |
| | Direction from Accident Site: | |
| Clear | Visibility | |
| Unknown | Visibility (RVR): | |
| / | Turbulence Type Forecast/Actual: | / |
| 192° | Turbulence Severity Forecast/Actual: | / |
| 30 inches Hg | Temperature/Dew Point: | 28°C |
| No Obscuration; No Precipitation | | |
| GRANTS , NM (GNT) | Type of Flight Plan Filed: | None |
| WINSLOW , AZ (1NW) | Type of Clearance: | None |
| 00:00 Local | Type of Airspace: | Class G |
| | Clear Unknown / 192° 30 inches Hg No Obscuration; No Precipitate GRANTS , NM (GNT) WINSLOW , AZ (1NW) | Distance from Accident Site: Direction from Accident Site: Visibility Unknown Visibility (RVR): Turbulence Type Forecast/Actual: 192° Turbulence Severity Forecast/Actual: Temperature/Dew Point: No Obscuration; No Precipitation GRANTS , NM (GNT) Type of Flight Plan Filed: WINSLOW , AZ (1NW) Type of Clearance: |

Airport Information

| Airport: | | Runway Surface Type: | |
|----------------------|-------------|---------------------------|------|
| Airport Elevation: | 0 ft msl | Runway Surface Condition: | |
| Runway Used: | 0 | IFR Approach: | None |
| Runway Length/Width: | 0 ft / 0 ft | VFR Approach/Landing: | None |

Wreckage and Impact Information

| Crew Injuries: | 1 Serious | Aircraft Damage: | Substantial |
|------------------------|-----------|-------------------------|----------------------------|
| Passenger Injuries: | | Aircraft Fire: | None |
| Ground Injuries: | N/A | Aircraft Explosion: | None |
| Total Injuries: | 1 Serious | Latitude, Longitude: | 35.180557,-107.890594(est) |

Page 4 of 5 DEN85FQA04

Administrative Information

Investigator In Charge (IIC): Horner, Dale

Additional Participating Persons:

Original Publish Date:

Last Revision Date:

Investigation Class: Class

Note:

Investigation Docket: https://data.ntsb.gov/Docket?ProjectID=16561

The National Transportation Safety Board (NTSB) is an independent federal agency charged by Congress with investigating every civil aviation accident in the United States and significant events in other modes of transportation—railroad, transit, highway, marine, pipeline, and commercial space. We determine the probable causes of the accidents and events we investigate, and issue safety recommendations aimed at preventing future occurrences. In addition, we conduct transportation safety research studies and offer information and other assistance to family members and survivors for each accident or event we investigate. We also serve as the appellate authority for enforcement actions involving aviation and mariner certificates issued by the Federal Aviation Administration (FAA) and US Coast Guard, and we adjudicate appeals of civil penalty actions taken by the FAA.

The NTSB does not assign fault or blame for an accident or incident; rather, as specified by NTSB regulation, "accident/incident investigations are fact-finding proceedings with no formal issues and no adverse parties ... and are not conducted for the purpose of determining the rights or liabilities of any person" (Title 49 Code of Federal Regulations section 831.4). Assignment of fault or legal liability is not relevant to the NTSB's statutory mission to improve transportation safety by investigating accidents and incidents and issuing safety recommendations. In addition, statutory language prohibits the admission into evidence or use of any part of an NTSB report related to an accident in a civil action for damages resulting from a matter mentioned in the report (Title 49 United States Code section 1154(b)). A factual report that may be admissible under 49 United States Code section 1154(b) is available here.

Page 5 of 5 DEN85FQA04