

Aviation Investigation Final Report

Location: WRIGHTSTOWN, New Jersey Incident Number: NYC87IA118

Date & Time: April 8, 1987, 10:31 Local Registration: N42RA

Aircraft: de Havilland DHC-7-102 Aircraft Damage: Minor

Defining Event: 2 Minor, 10 None

Flight Conducted Under: Part 121: Air carrier - Scheduled

Analysis

RANSOM FLT 444 (DHC-7) RPRTD A NEAR COLLISION WITH USAF C-141 (GLEEK 41) AS FLT 444 WAS AT 5000' & GLEEK 41 WAS CLBG TO 7500' FM A COMBAT AIRCREW TRAINING (CAT) MNVR. FLT 444 WAS UNDER IFR CTL OF MCGUIRE AFB RAPCON; GLEEK 41 WAS VFR, RCVG RADAR ADZYS FM RAPCON. THE DHC-7 CREW RPRTD THE CAMOUFLAGED C-141 BLENDED WITH THE BACKGROUND. AS THEY MNVRD TO AVOID A COLLISION, THE F/A & 1 PAX WERE INJURED. THE C-141 CAT MNVR (FM RWY 36 AT MCGUIRE) SIMULATED VFR APCH & DEP FM A HOSTILEARPT ENVIRONMENT. TO STAY IN THE ALLOCATED AIRSPACE, GLEEK 41 SHOULD HAVE MADE A LEFT CLBG DEP. THE RAPCON CTLR LACKED FAMILIARITY WITH THE CAT MNVR, BUT APPROVED A CLB TO 7500'. HE NOTED FLT 444 WAS COMING FM THE WEST, SO GAVE A TRAFFIC ADZY & TOLD GLEEK 41 TO TURN RGT TO 090 DEG. BY THAT TIME, GLEEK 41 WAS WELL IN A LEFT TURN, CLBG ABT 3000'/MIN. ANOTHERTRAFFIC ADZY WAS GIVEN & GLEEK 41 WAS TOLD TO LVL AT 4500', BUT IT RCHD ABT 5000' & CONVERGED WITH FLT 444 BFR ASCENT WAS ARRESTED. THE RAPCON RADAR (GPN-12/PIDP) DIDN'T HAVE CONFLICT ALERT FUNCTION. THE C-141 CREW DIDN'T SEE THE DHC-7.

Probable Cause and Findings

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

Findings

Occurrence #1: NEAR COLLISION BETWEEN AIRCRAFT

Phase of Operation: CRUISE - NORMAL

Findings

- 1. (C) RADAR TRAFFIC INFORMATION SERVICE INADEQUATE ATC PERSONNEL(DEP/APCH)
- 2. PROCEDURES/DIRECTIVES NOT FOLLOWED ATC PERSONNEL(DEP/APCH)
- 3. (F) INADEQUATE TRAINING OTHER GOVERNMENT PERSONNEL
- 4. (F) FACILITY INADEQUATE OTHER GOVERNMENT PERSONNEL
- 5. (C) VISUAL LOOKOUT INADEQUATE PILOT OF OTHER AIRCRAFT

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Factual Information

Pilot Information

Certificate:	Airline transport	Age:	40,Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	Yes
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 1 Valid Medicalno waivers/lim.	Last FAA Medical Exam:	October 2, 1986
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	
Flight Time:	15674 hours (Total, all aircraft), 4666 hours (Total, this make and model), 180 hours (Last 90 days, all aircraft), 8 hours (Last 24 hours, all aircraft)		

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Aircraft and Owner/Operator Information

Aircraft Make:	de Havilland	Registration:	N42RA
Model/Series:	DHC-7-102 DHC-7-102	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	58
Landing Gear Type:	Retractable - Tricycle	Seats:	52
Date/Type of Last Inspection:	Unknown	Certified Max Gross Wt.:	44000 lbs
Time Since Last Inspection:		Engines:	4 Turbo prop
Airframe Total Time:		Engine Manufacturer:	P&W
ELT:	Installed, not activated	Engine Model/Series:	PT6A-50
Registered Owner:	GENERAL ELECTRIC CREDIT CORP.	Rated Power:	1174 Horsepower
Operator:	PAN AM EXPRESS	Operating Certificate(s) Held:	Commuter air carrier (135)
Operator Does Business As:		Operator Designator Code:	

Meteorological Information and Flight Plan

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Visual (VMC)	Condition of Light:	Day
	Distance from Accident Site:	
	Direction from Accident Site:	
Scattered / 4500 ft AGL	Visibility	7 miles
None	Visibility (RVR):	
7 knots /	Turbulence Type Forecast/Actual:	/
350°	Turbulence Severity Forecast/Actual:	/
29 inches Hg	Temperature/Dew Point:	
No Obscuration; No Precipita	ation	
PHILADELPHIA , PA (PHL)	Type of Flight Plan Filed:	IFR
JAMAICA , NY (JFK)	Type of Clearance:	IFR
00:00 Local	Type of Airspace:	Class E
	Scattered / 4500 ft AGL None 7 knots / 350° 29 inches Hg No Obscuration; No Precipitate PHILADELPHIA , PA (PHL) JAMAICA , NY (JFK)	Distance from Accident Site: Direction from Accident Site: Scattered / 4500 ft AGL Visibility None Visibility (RVR): Turbulence Type Forecast/Actual: 350° Turbulence Severity Forecast/Actual: 29 inches Hg Temperature/Dew Point: No Obscuration; No Precipitation PHILADELPHIA , PA (PHL) JAMAICA , NY (JFK) Type of Clearance:

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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 Minor, 2 None	Aircraft Damage:	Minor
Passenger Injuries:	1 Minor, 8 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 Minor, 10 None	Latitude, Longitude:	

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Administrative Information

Investigator In Charge (IIC): Twine jr., Chauncey

Additional Participating
Persons:

Original Publish Date: July 10, 1989

Last Revision Date:
Investigation Class: Class

Note:

Investigation Docket: https://data.ntsb.gov/Docket?ProjectID=30528

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.

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Aviation Investigation Final Report

Location: WRIGHTSTOWN, New Jersey Incident Number: NYC87IA118

Date & Time: April 8, 1987, 10:31 Local Registration: USAF

Aircraft: LOCKHEED C-141 Aircraft Damage: None

Defining Event: 5 None

Flight Conducted Under: Part 91: General aviation

Analysis

RANSOM FLT 444 (DHC-7) RPRTD A NEAR COLLISION WITH USAF C-141 (GLEEK 41) AS FLT 444 WAS AT 5000' & GLEEK 41 WAS CLBG TO 7500' FM A COMBAT AIRCREW TRAINING (CAT) MNVR. FLT 444 WAS UNDER IFR CTL OF MCGUIRE AFB RAPCON; GLEEK 41 WAS VFR, RCVG RADAR ADZYS FM RAPCON. THE DHC-7 CREW RPRTD THE CAMOUFLAGED C-141 BLENDED WITH THE BACKGROUND. AS THEY MNVRD TO AVOID A COLLISION, THE F/A & 1 PAX WERE INJURED. THE C-141 CAT MNVR (FM RWY 36 AT MCGUIRE) SIMULATED VFR APCH & DEP FM A HOSTILEARPT ENVIRONMENT. TO STAY IN THE ALLOCATED AIRSPACE, GLEEK 41 SHOULD HAVE MADE A LEFT CLBG DEP. THE RAPCON CTLR LACKED FAMILIARITY WITH THE CAT MNVR, BUT APPROVED A CLB TO 7500'. HE NOTED FLT 444 WAS COMING FM THE WEST, SO GAVE A TRAFFIC ADZY & TOLD GLEEK 41 TO TURN RGT TO 090 DEG. BY THAT TIME, GLEEK 41 WAS WELL IN A LEFT TURN, CLBG ABT 3000'/MIN. ANOTHERTRAFFIC ADZY WAS GIVEN & GLEEK 41 WAS TOLD TO LVL AT 4500', BUT IN RCHD ABT 5000' & CONVERGED WITH FLT 444 BFR ASCENT WAS ARRESTED. THE RAPCON RADAR (GPN-12/PIDP) DIDN'T HAVE CONFLICT ALERT FUNCTION. THE C-141 CREW DIDN'T SEE THE DHC-7.

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Phase of Operation: CRUISE - NORMAL

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- 2. PROCEDURES/DIRECTIVES NOT FOLLOWED ATC PERSONNEL(DEP/APCH)
- 3. (F) INADEQUATE TRAINING OTHER GOVERNMENT PERSONNEL
- 4. (F) FACILITY INADEQUATE OTHER GOVERNMENT PERSONNEL
- 5. (C) VISUAL LOOKOUT INADEQUATE PILOT IN COMMAND

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Factual Information

Pilot Information

Certificate:	Military	Age:	Female
Airplane Rating(s):	None	Seat Occupied:	Right
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	None	Second Pilot Present:	Yes
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 2 Unknown	Last FAA Medical Exam:	
Occupational Pilot:	UNK	Last Flight Review or Equivalent:	
Flight Time:			

Aircraft and Owner/Operator Information

Aircraft Make:	LOCKHEED	Registration:	USAF
Model/Series:	C-141 C-141	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Transport	Serial Number:	63-8090
Landing Gear Type:	Retractable - Tricycle	Seats:	209
Date/Type of Last Inspection:	Continuous airworthiness	Certified Max Gross Wt.:	344000 lbs
Time Since Last Inspection:		Engines:	4 Turbo fan
Airframe Total Time:		Engine Manufacturer:	P&W
ELT:		Engine Model/Series:	TF33-P-7
Registered Owner:	USAF	Rated Power:	21000 Lbs thrust
Operator:		Operating Certificate(s) Held:	
Operator Does Business As:		Operator Designator Code:	

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Meteorological Information and Flight Plan

Visual (VMC)	Condition of Light:	Day
	Distance from Accident Site:	
	Direction from Accident Site:	
Scattered / 4500 ft AGL	Visibility	7 miles
None	Visibility (RVR):	
7 knots /	Turbulence Type Forecast/Actual:	/
350°	Turbulence Severity Forecast/Actual:	/
29 inches Hg	Temperature/Dew Point:	
No Obscuration; No Precipita	ition	
MCGUIRE AFB , NJ (WRI)	Type of Flight Plan Filed:	Military VFR
(WRI)	Type of Clearance:	VFR
10:30 Local	Type of Airspace:	Class E
	Scattered / 4500 ft AGL None 7 knots / 350° 29 inches Hg No Obscuration; No Precipital MCGUIRE AFB , NJ (WRI) (WRI)	Distance from Accident Site: Direction from Accident Site: Scattered / 4500 ft AGL Visibility None Visibility (RVR): Turbulence Type Forecast/Actual: Turbulence Severity Forecast/Actual: 29 inches Hg Temperature/Dew Point: No Obscuration; No Precipitation MCGUIRE AFB , NJ (WRI) Type of Flight Plan Filed: (WRI) 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:	5 None	Aircraft Damage:	None
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	5 None	Latitude, Longitude:	

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Additional Participating
Persons:

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