National Transportation Safety Board
Aviation Accident Final Report

Location:	HAMPTON, GA	**Accident Number:**	ATL97LA047
Date & Time:	03/07/1997, 1400 EST	**Registration:**	N357T
Aircraft:	Convair 240-27	**Aircraft Damage:**	Substantial
Defining Event:		**Injuries:**	1 Minor, 1 None
Flight Conducted Under:	Part 91: General Aviation - Positioning		

Analysis

About two minutes into the flight, the pilot noticed a high cylinder head temperature on the right engine. The pilot opened the cowl flap doors and the cylinder head temperature dropped 200 degrees. When the pilot noticed a reduction in right engine power, he elected to shut down the engine. The copilot was instructed to secure the right engine in accordance with the emergency procedures. Unable to maintain altitude, the pilot selected an emergency landing to a large open field, and the landing gear collapsed during the landing. Examination of the airplane at the accident site disclosed that the engine cowl flaps on both engines were in the open position. Examinations of the right engine subsystems failed to disclose a mechanical malfunction or component failure. A review of the normal and emergency procedures for the aircraft disclosed that the cowl flaps normal position for the shutdown engine is closed. A review of the aircraft performance data revealed that the airplane was capable of maintaining flight and a climb attitude with one engine. There was no cargo on the airplane. During the pilot's subsequent type rating reexamination in the Convair 240-27, the pilot failed to demonstrate a satisfactory level of knowledge in emergency procedures during the oral examination. The pilot subsequently surrendered the Convair 240-27 type rating to the FAA.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: a partial loss of power on one engine for undetermined reason(s), and the pilot's failure to follow aircraft emergency procedures. A factor was inadequate transition/upgrade training.

Findings

Occurrence #1: LOSS OF ENGINE POWER(PARTIAL) - NONMECHANICAL
Phase of Operation: CLIMB - TO CRUISE

Findings
1. 1 ENGINE
2. (C) REASON FOR OCCURRENCE UNDETERMINED

Occurrence #2: FORCED LANDING
Phase of Operation: EMERGENCY DESCENT/LANDING

Findings
3. (C) CHECKLIST - NOT FOLLOWED - PILOT IN COMMAND
4. (C) EMERGENCY PROCEDURE - NOT FOLLOWED - PILOT IN COMMAND
5. (C) INADEQUATE TRANSITION/UPGRADE TRAINING - PILOT IN COMMAND

Occurrence #3: GEAR COLLAPSED
Phase of Operation: EMERGENCY DESCENT/LANDING

Findings
6. LANDING GEAR - OVERLOAD

Factual Information

On March 7, 1997, at 1400 eastern standard time, a Convair 240-27, N357T, collided with the ground during an emergency landing to an open field near Hampton, Georgia. The cargo positioning flight operated under the provisions of Title 14 CFR Part 91 with no flight plan filed. Visual weather conditions prevailed at the time of the accident. The airplane sustained substantial damage. The airline transport pilot was not injured, but the co-pilot received minor injuries. The flight departed Griffin, Georgia, at 1330.

The pilot and copilot had planned the visual flight from Griffin to Augusta, Georgia, under the provisions of Title 14 CFR Part 91. The departure from Augusta was to be conducted under the provisions of Title 14 CFR Part 125. According to the pilot, the takeoff and initial climb from Griffin were normal. Within one minute of takeoff, the pilot reported that the fire warning light flickered and went out, but there was no associated fire warning horn. The pilot elected to continue the flight since there was no other indication of a malfunction. About a minute later, the pilot noticed a high cylinder head temperature on the right engine. The pilot opened the right engine cowl flap doors and the cylinder head temperature dropped 200 degrees. At approximately the same time, the pilot noticed a reduction in airspeed and the airplane descended from 1800 feet to 800 feet.

At this point, the pilot noticed a reduction in right engine power and elected to shut down the right engine. The copilot was instructed to secure the right engine in accordance with the emergency procedures. Since the pilot could not maintain level or a climb attitude, he selected another nearby airstrip for a forced landing. Because of the relative position of the airplane to the airstrip, the pilot decided that a safe approach and landing were not possible. As the airplane flew over the airstrip, a spectator in the auto raceway grandstands adjacent to the airstrip video taped the airplane as it flew near the race track. The video tape showed that the main landing gear were in the extended position.

Unable to maintain altitude, the pilot selected another emergency landing area and established an approach to a large open field. During the approach for the forced landing, the pilot realized that the landing gear handle would not operate, and he was not sure of the landing gear position. The airplane touched down in the open field, and rolled about 700 feet. Examination of the airplane at the accident site disclosed that the main and nose landing gear had collapsed.

Examination of the airplane at the accident site disclosed that the engine cowl flaps on both engines were in the open position (see attached photographs #2 & #3). Subsequent examinations of right engine subsystems failed to disclose a mechanical malfunction or component failure. The engine ignition and induction system were examined and both functioned normally.

A review of the normal and emergency procedures for the aircraft disclosed that the cowl flaps normal position for the shutdown engine is closed. A review of the aircraft performance data revealed that the airplane was capable of maintaining flight and a climb attitude with one engine (see attached climb performance charts). There was no cargo on the airplane during the emergency. The estimated gross weight of the airplane at the time of the accident was 31,000 pounds.

A review of the pilot's airmen certificate disclosed that, he had been issued a type rating in the Convair 240-27 on January 13, 1997. The pilot reported that he had acquired the type rating

from a Federal Aviation Administration National Designated Examiner. According to the pilot, the examiner was not type rated in the Convair 240-27, but had extensive flight experience in other similar aircraft. A review of the pilot's records disclosed that he was in compliance with Title 14 CFR Part 61.31. The initial transition training in the Convair 240-27was accomplished and signed off by an instructor at Tol-Air Services of San Juan, Puerto Rico.

During a subsequent reexamination of the pilot's type rating in the Convair 240-27, the Federal Aviation Administration Safety Inspector reported that the pilot failed to demonstrate a satisfactory level of knowledge in emergency procedures during the oral examination (see attached inspector's statement). Subsequent to this reexamination attempt, the pilot surrendered the Convair 240-27 type rating to the Federal Aviation Administration.

Pilot Information

Certificate:	Airline Transport	**Age:**	40, Male
Airplane Rating(s):	Multi-engine Land; Single-engine Land; Single-engine Sea	**Seat Occupied:**	Left
Other Aircraft Rating(s):	None	**Restraint Used:**	Seatbelt
Instrument Rating(s):	Airplane	**Second Pilot Present:**	Yes
Instructor Rating(s):	None	**Toxicology Performed:**	
Medical Certification:	Class 2 Valid Medical--no waivers/lim.	**Last FAA Medical Exam:**	08/14/1996
Occupational Pilot:		**Last Flight Review or Equivalent:**	
Flight Time:	18000 hours (Total, all aircraft), 35 hours (Total, this make and model), 15000 hours (Pilot In Command, all aircraft), 100 hours (Last 90 days, all aircraft), 20 hours (Last 30 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Convair	**Registration:**	N357T
Model/Series:	240-27 240-27	**Aircraft Category:**	Airplane
Year of Manufacture:		**Amateur Built:**	No
Airworthiness Certificate:	Transport	**Serial Number:**	340
Landing Gear Type:	Retractable - Tricycle	**Seats:**	2
Date/Type of Last Inspection:	11/30/1996, AAIP	**Certified Max Gross Wt.:**	41790 lbs
Time Since Last Inspection:	50 Hours	**Engines:**	2 Reciprocating
Airframe Total Time:	16331 Hours	**Engine Manufacturer:**	P&W
ELT:	Installed, not activated	**Engine Model/Series:**	2800-CB3
Registered Owner:	TOL-AIR SERVICES INC.	**Rated Power:**	2400 hp
Operator:	TOL-AIR SERVICES INC.	**Operating Certificate(s) Held:**	
Operator Does Business As:	DODITA FLYING SERVICE	**Operator Designator Code:**	

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	**Condition of Light:**	Day
Observation Facility, Elevation:	FFC, 808 ft msl	**Distance from Accident Site:**	35 Nautical Miles
Observation Time:	1453 EST	**Direction from Accident Site:**	290°
Lowest Cloud Condition:	Clear / 0 ft agl	**Visibility**	10 Miles
Lowest Ceiling:	None / 0 ft agl	**Visibility (RVR):**	0 ft
Wind Speed/Gusts:	3 knots /	**Turbulence Type Forecast/Actual:**	/
Wind Direction:		**Turbulence Severity Forecast/Actual:**	/
Altimeter Setting:	30 inches Hg	**Temperature/Dew Point:**	17°C / -6°C
Precipitation and Obscuration:			
Departure Point:	GRIFFIN, GA (6A2)	**Type of Flight Plan Filed:**	None
Destination:	AUGUSTA, GA (AGS)	**Type of Clearance:**	None
Departure Time:	1350 EST	**Type of Airspace:**	

Wreckage and Impact Information

Crew Injuries:	1 Minor, 1 None	**Aircraft Damage:**	Substantial
Passenger Injuries:	N/A	**Aircraft Fire:**	None
Ground Injuries:	N/A	**Aircraft Explosion:**	None
Total Injuries:	1 Minor, 1 None	**Latitude, Longitude:**	

Administrative Information

Investigator In Charge (IIC):	PHILLI P POWELL	**Report Date:**	04/24/1998
Additional Participating Persons:	BOB MAYNARD; COLLEGE PARK, GA		
Publish Date:			
Investigation Docket:	NTSB accident and incident dockets serve as permanent archival information for the NTSB's investigations. Dockets released prior to June 1, 2009 are publicly available from the NTSB's Record Management Division at pubinq@ntsb.gov, or at 800-877-6799. Dockets released after this date are available at http://dms.ntsb.gov/pubdms/.		