



National Transportation Safety Board Aviation Accident Final Report

Location:	BRIDGETON, MO	Accident Number:	CHI95MA044B
Date & Time:	11/22/1994, 2203 CST	Registration:	N441KM
Aircraft:	CESSNA 441	Aircraft Damage:	Destroyed
Defining Event:		Injuries:	2 Fatal

Flight Conducted Under: Part 91: General Aviation - Positioning

Analysis

During the takeoff roll on runway 30R, the MD-82, N954U, collided with the Cessna 441, N441KM, which was positioned on the runway waiting for takeoff clearance. The pilot of the Cessna acted on an apparently preconceived idea that he would use his arrival runway, runway 30R, for departure. After receiving taxi clearance to back-taxi into position and hold on runway 31, the pilot taxied into a position at an intersection on runway 30R, which was the assigned departure runway for the MD-82. The ATIS current at the time the Cessna pilot was operating in the Lambert-St. Louis area listed runways 30R and 30L as the active runways for arrivals and departures; there was no mention of the occasional use of runway 31. Air traffic control personnel were not able to maintain visual contact with the Cessna after it taxied from the well-lighted ramp area into the runway/taxiway environment of the northeast portion of the airport. An operational ASDE-3, particularly ASDE-3 enhanced with AMASS, could be used to supplement visual scan of the northeast portion of the airport.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The Cessna 441 pilot's mistaken belief that his assigned departure runway was runway 30R, which resulted in his undetected entrance onto runway 30R, which was being used by the MD-82 for its departure. Contributing to the accident was the lack of Automatic Terminal Information Service and other air traffic control (ATC) information regarding the occasional use of runway 31 for departure. The installation and utilization of Airport Surface Detection Equipment (ASDE-3), and particularly ASDE-3 enhanced with the Airport Movement Area Safety System (AMASS), could have prevented this accident. (NTSB Report AAR-95/05)

Findings

Occurrence #1: COLLISION BETWEEN AIRCRAFT (OTHER THAN MIDAIR)
Phase of Operation: STANDING - ENGINE(S) OPERATING

Findings

1. (C) WRONG RUNWAY - SELECTED - PILOT IN COMMAND
2. EXPECTANCY - PILOT IN COMMAND
3. (F) COMMUNICATIONS/INFORMATION/ATC - INADEQUATE
4. (F) RADAR,ASDE - UNAVAILABLE

Factual Information

See published report NTSB/AAR-95/05.

Pilot Information

Certificate:	Commercial	Age:	56, Male
Airplane Rating(s):	Multi-engine Land; Single-engine Land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	Seatbelt, Shoulder harness
Instrument Rating(s):	Airplane	Second Pilot Present:	Yes
Instructor Rating(s):	None	Toxicology Performed:	Yes
Medical Certification:	Class 2 Valid Medical--w/ waivers/lim.	Last FAA Medical Exam:	02/16/1994
Occupational Pilot:		Last Flight Review or Equivalent:	
Flight Time:	7940 hours (Total, all aircraft), 2060 hours (Total, this make and model), 155 hours (Last 90 days, all aircraft), 64 hours (Last 30 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	CESSNA	Registration:	N441KM
Model/Series:	441 441	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Normal	Serial Number:	441-0196
Landing Gear Type:	Retractable - Tricycle	Seats:	10
Date/Type of Last Inspection:	07/01/1994, AAIP	Certified Max Gross Wt.:	6800 lbs
Time Since Last Inspection:		Engines:	2 Turbo Prop
Airframe Total Time:	3779 Hours	Engine Manufacturer:	AIRESEARCH
ELT:	Installed, not activated	Engine Model/Series:	TPE331
Registered Owner:	GARRETT AVIATION, INC.	Rated Power:	904 hp
Operator:	SUPERIOR AVIATION, INC.	Operating Certificate(s) Held:	On-demand Air Taxi (135)

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Night/Dark
Observation Facility, Elevation:	STL, 605 ft msl	Distance from Accident Site:	0 Nautical Miles
Observation Time:	2151 CST	Direction from Accident Site:	0°
Lowest Cloud Condition:	Clear / 0 ft agl	Visibility	25 Miles
Lowest Ceiling:	None / 0 ft agl	Visibility (RVR):	0 ft
Wind Speed/Gusts:	8 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	270°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	1°C / -6°C
Precipitation and Obscuration:			
Departure Point:	(STL)	Type of Flight Plan Filed:	IFR
Destination:	IRON MOUNTAIN, MI (IMT)	Type of Clearance:	IFR
Departure Time:	0000	Type of Airspace:	Class B

Airport Information

Airport:	LAMBERT-ST. LOUIS INTL (STL)	Runway Surface Type:	Asphalt
Airport Elevation:	605 ft	Runway Surface Condition:	Dry
Runway Used:	30R	IFR Approach:	None
Runway Length/Width:	9003 ft / 150 ft	VFR Approach/Landing:	None

Wreckage and Impact Information

Crew Injuries:	1 Fatal	Aircraft Damage:	Destroyed
Passenger Injuries:	1 Fatal	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 Fatal	Latitude, Longitude:	

Administrative Information

Investigator In Charge (IIC):	JODI L REEVES	Report Date:	02/14/1996
Additional Participating Persons:	JOHN M KLAY; ST. ANN, MO CARL D'AGNESE; ST. ANN, MO ROBERT HENLEY; WASHINGTON, DC		
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.nts.gov/pubdms/ .		

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