Ground Collision with construction equipment, Boeng 727-225, March 27, 1996

Micro-summary: This Boeing 727-225 collided with construction equipment.

Event Date: 1996-03-27 at 0918 CST

Investigative Body: National Transportation Safety Board (NTSB), USA

Investigative Body's Web Site: http://www.ntsb.gov/

Cautions:

- 1. Accident reports can be and sometimes are revised. Be sure to consult the investigative agency for the latest version before basing anything significant on content (e.g., thesis, research, etc).
- 2. Readers are advised that each report is a glimpse of events at specific points in time. While broad themes permeate the causal events leading up to crashes, and we can learn from those, the specific regulatory and technological environments can and do change. Your company's flight operations manual is the final authority as to the safe operation of your aircraft!
- 3. Reports may or may not represent reality. Many many non-scientific factors go into an investigation, including the magnitude of the event, the experience of the investigator, the political climate, relationship with the regulatory authority, technological and recovery capabilities, etc. It is recommended that the reader review all reports analytically. Even a "bad" report can be a very useful launching point for learning.
- 4. Contact us before reproducing or redistributing a report from this anthology. Individual countries have very differing views on copyright! We can advise you on the steps to follow.

Aircraft Accident Reports on DVD, Copyright © 2006 by Flight Simulation Systems, LLC All rights reserved.

www.fss.aero

National Transportation Safety Board NTSB ID: MIA96LA107 Aircraft Registration Number: N468FE FACTUAL REPORT Occurrence Date: 03/27/1996 Most Critical Injury: None AVIATION Occurrence Type: Accident Investigated By: NTSB Location/Time Nearest City/Place State Zip Code Local Time Time Zone **MEMPHIS** ΤN 38132 0918 CST Distance From Landing Facility: 1 Direction From Airport: 360 Airport Proximity: On Airport Aircraft Information Summary Aircraft Manufacturer Model/Series Type of Aircraft Boeing 727-225 Airplane Sightseeing Flight: No Air Medical Transport Flight: No

Narrative

Brief narrative statement of facts, conditions and circumstances pertinent to the accident/incident:

On March 27, 1996, about 0918 central standard time, a Boeing 727-225, N468FE, registered to and operated by Federal Express Corporation, as flight 3244, collided with construction equipment during taxi from landing at Memphis International Airport, Memphis, Tennessee, while on a 14 CFR Part 121 non-scheduled domestic cargo flight. Visual meteorological conditions prevailed at the time and an instrument flight rules flight plan was filed. The aircraft received substantial damage. The airline transport-rated pilot, first officer, and second officer were not injured. The flight originated from Norfolk, Virginia, the same day, about 0825 eastern standard time.

The flightcrew stated they received the Automatic Terminal Information Service (ATIS) from the FAA Memphis Control Tower while about 120 miles from Memphis. There were no Notice to Airmen (NOTAMS) regarding field conditions or taxiway closures. Their landing data card indicated they received ATIS information "Alpha". They approached Memphis International Airport and landed on runway 36 center. After landing they exited the runway on taxiway bravo. The FAA ground controller cleared them to taxi and hold short of runway 27 at the approach end. Their taxi speed was about 10-15 mph. The flight engineer stated that as they taxied to the ramp he heard the captain and first officer discussing the construction equipment to the right of the taxiway. At that time he got a glimpse of the equipment out of the first officer's side window as they taxied by it. The captain then steered the aircraft to the left to clear the equipment; but, the right wing struck the equipment. They stopped the aircraft and called for crash equipment and company personnel.

Witnesses stated they observed the N468FE taxing east on the closed taxiway "Alpha." As the aircraft approached construction equipment, positioned on the right shoulder of the taxiway, it was observed to slow down and then speed up again. The right wing of the aircraft then struck the construction equipment.

At the time of the accident, a NOTAM issued by Memphis-Shelby County Airport Authority, for closure of taxiway "A", between taxiway "B" and the Northwest Airlink hangar, was in effect. The NOTAM was issued on March 26, 1996, and was in effect for March 27 to March 30 from 0700 to 1630 central standard time. The accident occurred on the part of the taxiway that was closed. The closed area of taxiway was not blocked off. Memphis-Shelby County Airport Authority confirmed that the NOTAM was sent on March 26, 1996, by facsimile to the FAA Memphis Tower and Federal Express.

A review of Air Traffic Control recordings maintained at the FAA Memphis Air Traffic Control Tower indicated that ATIS information "Alpha" was recorded at 0808:41. No information concerning the closure of taxiway alpha was included in this report. ATIS information "Bravo" was recorded at 0855:27. Information concerning the closure of taxiway alpha was included in this report. At 0904:11, the flightcrew of Federal Express 3244 contacted the Memphis Approach Control and reported they had information "Alpha". The approach controller did not inform the flightcrew that ATIS information "Bravo" was the current information. From this time until the time the flight is told to contact the tower, several other aircraft report to the approach controller that they

National Transportation Safety Board
FACTUAL REPORT

NTSB ID: MIA96LA107

Occurrence Date: 03/27/1996

Occurrence Type: Accident

Narrative (Continued)

have information "Bravo".

At 0911:37, the flight was instructed to contact the tower. At 0912:04, the flight contacted the tower and was cleared by the controller to land on runway 36 center. At 0915:36, the flight was instructed to contact the ground controller at the end of the runway. At 0916:20, the ground controller told the flight to hold short of runway 27 at the approach end. The ground controller did not inform the flight that taxiway "A" was closed. At 0917:56, the flightcrew reported to the ground controller that collided with the construction equipment off to the side of taxiway "A". See ATC Transcripts.

On September 20, 1995, the Federal Aviation Administration, issued to all FAA inspectors, Flight Standards Information Bulletin 95-23, titled NOTAM's and Adequate Airport Information. This bulletin states that NOTAMs, while critical to the safety of flight, are not always reviewed by pilot's prior to flight, resulting in aircraft operation without current aeronautical information. The bulletin goes on to state that certificate holders should review their operations manuals and procedures to ensure that flight crews are obtaining all aeronautical information necessary to safely conduct their flight. FAA inspectors were directed to forward a copy of the bulletin

National Transportation Safety Board
FACTUAL REPORT

NTSB ID: MIA96LA107

Occurrence Date: 03/27/1996

AVIATION			Occurrence Type: Accident										
Landing Facility/Approach In	formation												
Airport Name			Airpoi	rport ID: Airport Elevation F			Run	way Used	ay Lengt	th	Run	way Width	
MEMPHIS INTERNATIONAL M						332 Ft. MSL 36C		-	8400	-		150	•
Runway Surface Type: Concrete	<u> </u>												
Runway Surface Condition: Dry													
Type Instrument Approach: ILS-co	omplete												
VFR Approach/Landing:													
Aircraft Information													
Aircraft Manufacturer				Model/							erial Number		
Boeing				727-2	25					2145	2		
Airworthiness Certificate(s): Trans	sport												
Landing Gear Type: Retractable	- Tricycle												
Homebuilt Aircraft? No	Number of Seats	: 4		Certified Max Gross Wt.			190500 LBS Numb		Numbe	nber of Engines: 3		s: 3	
				Engine Manufacturer: Model/Series: P&W JT8D-15						Rated Power: 15500 LBS			
- Aircraft Inspection Information													
Type of Last Inspection			Date	Date of Last Inspection Time Si			Time Sir	Since Last Inspection			Airframe Total Time		
Continuous Airworthiness			03/	03/1996					38 Hours 4			1770 Hours	
- Emergency Locator Transmitter (ELT) Information									•			
ELT Installed? No	ELT Opera	ated?		ELT Aided in Locating Accident Site?									
Owner/Operator Information													
Registered Aircraft Owner			S	Street A		NR PC	NRATE 4	WENI IE					
FEDERAL EXPRESS				2005 CORPORATE AVENUE City								te	Zip Code
					MEMPH	IS					TN		38132
Operator of Aircraft			Street Address Same as Reg'd Aircraft Owner										
Same as Reg'd Aircraft Owner			С	City							Sta	te	Zip Code
Operator Does Business As: FEDB	ΞX						Op	perator Desig	gnator Co	ode: FD	EA		
- Type of U.S. Certificate(s) Held:							•						
Air Carrier Operating Certificate(s)	: Cargo												
Operating Certificate:					Operator 0	Certifi	cate:						
Regulation Flight Conducted Unde	r: Part 121: Air C	arrier											
Type of Flight Operation Conducted	d: Non-schedule	d; Dom	estic;	Cargo									
		FACT	UAL	REPO	RT - AVIATI	ION							Page 2

National Transportation Safety Board
FACTUAL REPORT
AVIATION

NTSB ID: MIA96LA107

Occurrence Date: 03/27/1996

	AVIATI	Occurrence Type: Accident												
First Pilot	Information								•					
Name						City					State	. [Date of Birth	Age
On File						On Fil	ile				On F	ïle (On File	42
Sex: M	n Pilot	t Certificate Number: On File												
Certificate(s): Airline Transport; Flight Engineer														
Airplane Rating(s): Multi-engine Land; Single-engine Land														
Rotorcraft/0	Glider/LTA: None	<u> </u>												
Instrument Rating(s): Airplane														
Instructor F	Rating(s): None	е												
Type Rating	g/Endorsement fo	or Accident/In	ncident Aircra	ft? Yes			С	urrent B	iennial	Flight R	eview?	>		
Medical Ce	rt.: Class 1	Medica	al Cert. Statu	s: Valid Me	dicalw/ wa	aivers/li	im.		D	ate of La	st Med	lical Ex	am: 11/1995	
- Flight Tim	ight Time Matrix All A/C This Make and Model			Airplane Single Engine	Airplane Mult-Engine	Nig	ht	Actual	Instrument Actual Simu		Rotorcraft		Glider	Lighter Than Air
Total Time		3000	2164											
Pilot In Cor	nmand(PIC)													
Instructor														
Last 90 Day	ys													
Last 30 Day		_				_								
Last 24 Ho		3	3		3	 						1.		
Seatbelt Us	sed? Yes	Shou	ılder Harness	Used? Yes			Toxico	ology Pe	rforme	d? Yes		Sed	cond Pilot? Ye	S
Flight Pla	n/Itinerary													
	ht Plan Filed: IF	R												
Departure F						П	State	T.	Airport Identi		er Departur		ure Time	Time Zone
NORFOL	K						VA		ORF			0825		EST
Destination							State		Airport	irport Identifier				
Same as Accident/Incident Location							MEM		identine	'				
Type of Cle	earance: IFR							-						
Type of Air	space: Class	D												
Weather	Information													
Source of I	Briefing: Compa	any												
Method of	Briefing:													
	FACTUAL REPORT - AVIATION Page 3													

National Transportation Safety Board
FACTUAL REPORT
AVIATION

NTSB ID: MIA96LA107

Occurrence Date: 03/27/1996

Occurrence Type: Accident

	FTYBOR			Julience	туре.	Accidei	π								
Weather	Information														
WOF ID	Observation Time	Time Zone	WOF	Elevation	า	WOF D	istance F	rom Acci	dent Site		Direction From Accident Site				
MEM	0851	CST	3	332 Ft. M	/ISL				1 NM		180 Deg. Mag.				
Sky/Lowes	st Cloud Condition: Scat	tered				1	1000 Ft.	AGL	Condition o	on of Light: Day					
Lowest Ce	iling: Broken		250	000 Ft. A	GL	Visib	ility:	20) SM Altimeter: 30.00						
Temperatu	ure: 6 °C	Dew Point:		4 °C	Wind I	Direction:	: 70		Density Altitude: 332						
Wind Spee	ed: 10	Gusts:			Weath	er Condt	ions at A	ccident S	ite: Visual C	ond	itions				
Visibility (F	RVR): 0 Ft.	Visibility	(RVV)	0	SM	Intensit	y of Preci	pitation:	Unknown						
Restriction	Restrictions to Visibility: None														
Type of Precipitation: None															
Accident	Information														
Aircraft Da	mage: Substantial		Airc	raft Fire:	None	e Aircraft Explo					n None				
Classificati	ion: U.S. Registered/U	.S. Soil													
- Injury Su	mmary Matrix	Fatal	Serious	Minor		None	TOTAL								
First Pi	ilot					1		1							
Second	d Pilot				\top	1		1							
Studen	nt Pilot				\top										
Flight I	nstructor				\top										
Check	Pilot				\top										
Flight E	Engineer				\top	1		1							
Cabin A	Attendants				\top										
Other C	Crew				\top										
Passer	ngers				\top										
- TOTAL A	ABOARD -				\top	3		3							
Other 0	Ground	0	0		0			0							
- GRANE	O TOTAL -	0	0		0	3		3							
					•										

National Transportation Safety Board

FACTŲAL REPORT AVIATION

NTSB ID: MIA96LA107

Occurrence Date: 03/27/1996

Occurrence Type: Accident

Δ	dm	inis	trativ	r⊵ Int	f∩rm	ation
$\overline{}$	ulli	บบอ	uauv			alioi

Investigator-In-Charge (IIC)

JEFFREY L. KENNEDY

Additional Persons Participating in This Accident/Incident Investigation:

JIM WILSON FAA FSDO MEMPHIS, TN 38312

KENNETH C ENSSLIN FEDERAL EXPRESS CORPORATION MEMPHIS, TN 38312