Accidental landing on taxiway, Douglas DC-9-82, March 14, 2003

Micro-summary: This Douglas DC-9-82 crew misidentified a taxiway as the active runway and landed on it.

Event Date: 2003-03-14 at 1620 PST

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

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

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National Transportation Safety Board NTSB ID: SEA03IA046 Aircraft Registration Number: N298AA FACTUAL REPORT Occurrence Date: 03/14/2003 Most Critical Injury: None ÁVIATION Occurrence Type: Incident Investigated By: NTSB Location/Time Nearest City/Place State Zip Code Local Time Time Zone 1620 PST WA 98188 Seattle Distance From Landing Facility: Direction From Airport: Airport Proximity: On Airport Aircraft Information Summary Aircraft Manufacturer Model/Series Type of Aircraft Boeing DC-9-82 Airplane

Narrative

Sightseeing Flight: No

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

On March 14, 2003, at 1620 Pacific standard time, an American Airlines DC-9-82, N298AA, landed on Taxiway Charlie at Seattle-Tacoma International Airport, Seattle, Washington. There were no injuries to the flight crew, the cabin crew, or any of the 105 passengers. The aircraft, which is owned and operated by American Airlines, Inc., was not damaged. All occupants exited the aircraft at the passenger terminal using normal means. The 14 CFR Part 121 scheduled domestic passenger flight, which departed Dallas-Fort Worth Airport at 1435 central standard time, was being operated in visual meteorological conditions at the time of the incident.

Air Medical Transport Flight: No

At the time the aircraft arrived in the area adjacent to Mount Rainer, the Bay Visual Approach was in effect, and according to American Airlines, during his pre-landing flight crew briefing, the Captain stated that he intended to execute the visual approach backed up by the ILS to Runway 16 Right. Because there was a ceiling over the final approach course, while the flight was tracking to the north on the east side of the airport, they were advised by the approach controller to expect the ILS to Runway 16 Right. The flight was then vectored to a 15 mile final and cleared for the ILS approach. About four to five miles from the end of the runway, at about 3,500 feet above the ground (AGL), the flight crew passed through the cloud deck, made visual contact with the runway environment, and transitioned to visual navigation. According to the information collected from the flight data recorder immediately after the event, the aircraft started a constant-rate deviation to the right of the localize approximately the same time as the aircraft passed 3,500 feet AGL. This deviation was the result of the flight crew maintaining a heading between 153 degrees and 156 degrees magnetic, which was taking them directly to the "approach end" of Taxiway Charlie. Neither the Captain nor the First Officer were aware they were lined up on the taxiway, and they did not know they had landed on the taxiway until advised by the tower. A rain shower had recently moved through the area, and although there was an overcast over the center and north end of the airport, south of the field rays of sunlight were shining through holes in the clouds, resulting in a glare from the wet paved surfaces.

During the investigation it was determined that during the four years prior to this event, there had been one other reported landing on Taxiway Charlie, and two reported instances where flight crews had lined up on the taxiway, but on short final had either executed a go-around or sidestepped to Runway 16 right. In May of 2000, the airport installed an "X" (about 12 feet across) about 150 feet off the north end of Taxiway Charlie, but the subject crew did not detect it on this approach. It was also noted that since January of 2001, there has been an entry in the United States Government Airport Facility Directory stating, "Do not mistake Txy C for a landing surface."

National Transportation Safety Board
FACTUAL REPORT

NTSB ID: SEA03IA046

Occurrence Date: 03/14/2003

AVIATION Occurre				е Туре:	Incident								
Landing Facility/Approach In	formation						Į						
Airport Name			Airpo	ort ID:	Airport Eleva	tion	Run	way Used	Runwa	ay Lengt	th	Run	way Width
Seattle-Tacoma International SE				A	429 Ft.	. MSL	. T/V	T/W		9425		180	
Runway Surface Type: Concrete									1				
Runway Surface Condition: Wet													
Type Instrument Approach: ILS-co	omplete; Visual												
VFR Approach/Landing: Full Stop													
Aircraft Information													
Aircraft Manufacturer				Model/							Numbe	er	
Boeing			!	DC-9	-82					4931	0		
Airworthiness Certificate(s): Trans	sport												
Landing Gear Type: Retractable	- Tricycle												
Homebuilt Aircraft? No	Number of Seats	mber of Seats: 136 Certified Max Gross Wt. 150500 LBS Number							er of Er	r of Engines: 2			
Engine Type: Engine Manufacturer: Turbo Fan Pratt & Whitney												ed Power: 850 LBS	
- Aircraft Inspection Information													
Type of Last Inspection Date of Last Inspection Time Since Last Inspection Airframe Total Time								tal Time					
Continuous Airworthiness 03/2003 27 Hours							51944 Hours						
- Emergency Locator Transmitter (ELT) Information									•	•		
ELT Installed? No	ELT Oper	ELT Operated? ELT Aided in Locating Accident Site?											
Owner/Operator Information													
Registered Aircraft Owner				Street A	ddress 4333 Am	on C	arter Bl	vd					
American Airlines					City							te	Zip Code
					Fort Wor	th					TX		75261
Operator of Aircraft Same as Reg'd Aircraft Owner													
Same as Reg'd Aircraft Owner					City							te	Zip Code
Operator Does Business As: Operator Designator Code: AAL													
- Type of U.S. Certificate(s) Held:							-						
Air Carrier Operating Certificate(s)	: Flag Carrier/Do	omestic											
Operating Certificate:					Operator C	Certifi	cate:						
Regulation Flight Conducted Unde	r: Part 121: Air (Carrier											
Type of Flight Operation Conducted	d: Scheduled; D	omestic	; Pas	senger	Only								
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National Transportation Safety Board
FACTUAL REPORT
AVIATION

NTSB ID: SEA03IA046

Occurrence Date: 03/14/2003

AVIATION Occurrence Type: Incide															
First Pilot Information															
Name	City					State Da		Date of Birth	Age						
On File On F							ile			On F	File	On File	46		
Sex: M Seat Occupied: Left Principal Profession: Civilian Pilot									Cer	tificate	e Numb	er: On File			
Certificate(s): Airline Transport; Flight Engineer															
Airplane Rating(s): Multi-engine Land															
Rotorcraft/Glider/LTA:															
Instrument Rating(s): Airplar	ne														
Instructor Rating(s): None															
Type Rating/Endorsement for Accident/Incident Aircraft? Yes Current Biennial Flight Review? 09/2001															
Medical Cert.: Class 1 Medical Cert. Status: None									Date of La	st Me	dical Ex	cal Exam: 02/2003			
<u>'</u>															
- Flight Time Matrix	me Matrix All A/C This Make and Model			Airplane Mult-Engine	Night		Actual	Instrument Simula		F	Rotorcraft	Glider	Lighter Than Air		
Total Time 3372															
Pilot In Command(PIC)	Pilot In Command(PIC)														
Instructor								_		_					
Last 90 Days															
Last 30 Days								\dashv		_					
Last 24 Hours					 						Τ.	1.50 10.11			
Seatbelt Used? Yes Shoulder Harness Used? Yes Toxicology Performed? No Second Pilot? Yes									S						
Flight Plan/Itinerary															
Type of Flight Plan Filed: IFR															
Departure Point						State Airport Ide		ort Identifier Departu		ture Time	Time Zone				
Dallas-Ft Worth TX DFW 1435 CST								CST							
Destination State Airport Identifier															
Same as Accident/Incident Location SEA															
Type of Clearance: IFR															
Type of Airspace: Class D															
Weather Information															
Source of Briefing: Company															
Method of Briefing: Telephone															
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National Transportation Safety Board FACTUAL REPORT AVIATION

NTSB ID: SEA03IA046

Occurrence Date: 03/14/2003

TYBOA			Occurrent	Occurrence Type: Incident											
Weather	Information														
WOF ID	Observation Time	Time Zoi	ne	WOF Elevat	ion	WOF Di	stance Fron	n Acci	dent Site		Direction From Accident Site				
KOEA	4550			-	MOL				NIN 4						
KSEA	1556				. MSL				NM	NM			eg. Mag.		
Sky/Lowes	st Cloud Condition: Sca	ttered			3000 Ft. AGL					Condition of Light: Day					
Lowest Ceiling: Broken			6000 Ft.	AGL	Visibi	lity:	10	SM		meter:	29.52	"Hg			
Temperatu	ıre: 12 °C	2 °C Dew Point:			Wind	180			Dei	nsity Altitude:		Ft.			
Wind Spee	ed: 4	Gusts:			Weath	ner Condti	ons at Accid	dent S	ite: Visual C	ond	itions				
Visibility (F	RVR): Ft	Ft. Visibility (RVV)			SM	Intensity	of Precipita	ation:							
Restrictions to Visibility: None															
Type of Pro	ecipitation: None														
Accident	Information														
Aircraft Damage: None Airc				Aircraft Fir	Aircraft Fire: None					losio	n None				
Classificati	on: U.S. Registered/l	J.S. Soil													
- Injury Su	mmary Matrix	Fatal	Ser	ious Mind	or	None	TOTAL								
First Pi	lot					1	1								
Second	d Pilot					1	1	1							
Studen	t Pilot				\top			1							
Flight I	nstructor				\neg			1							
Check	Pilot				\neg			1							
Flight E	Engineer							1							
Cabin A	Attendants					4	4	1							
Other C	Crew							1							
Passer	ngers				\neg	105	105								
- TOTAL A	ABOARD -					111	111	1							
Other 0	Ground							1							
- GRANE	TOTAL -					111	111	1							

National Transportation Safety Board

FACTUAL REPORT AVIATION NTSB ID: SEA03IA046

Occurrence Date: 03/14/2003

Occurrence Type: Incident

		rmation

Investigator-In-Charge (IIC)

Orrin K. Anderson

Additional Persons Participating in This Accident/Incident Investigation:

Eugene Beauchemin Seattle CMO