NATIONAL TRANSPORTATION SAFETY BOARD NTSB Form 6120.1 PILOT/OPERATOR AIRCRAFT ACCIDENT/INCIDENT REPORT

Email the pilot/operator aircraft accident/incident report to the investigator-in-charge of your accident/incident. If email is not available, mail the report per the instructions below.

If your accident/incident occurred in Maine, Vermont, New Hampshire, Massachusetts, Connecticut, Rhode Island, New York, New Jersey, Pennsylvania, Maryland, Delaware, Virginia, West Virginia, Kentucky, Tennessee, North Carolina, South Carolina, Mississippi, Alabama, Georgia, Florida, the District of Columbia, Puerto Rico, or the US Virgin Islands, send the form to: NTSB, ERA, 45065 Riverside Parkway, Ashburn, VA 20147.

If your accident/incident occurred in Ohio, Michigan, Indiana, Wisconsin, Illinois, Minnesota, Iowa, Missouri, Arkansas, Louisiana, North Dakota, South Dakota, Nebraska, Kansas, Oklahoma, Texas, Colorado, or New Mexico, send the form to: NTSB, CEN, 4760 Oakland Street, Suite 500, Denver, CO 80239.

If your accident/incident occurred in Montana, Wyoming, Idaho, Utah, Arizona, Nevada, Washington, Oregon, California, Hawaii, or the territories of Guam or American Samoa, send the form to: NTSB, WPR, 505 South 336th Street, Suite 540, Federal Way, WA 98003.

If your accident/incident occurred in Alaska, send the form to: NTSB, ANC, 222 West 7th Avenue, Room 216, Box 11, Anchorage, AK 99513.

Rules pertaining to notification of aircraft accidents and incidents, as well as overdue aircraft are found in 49 Code of Federal Regulations (CFR) Part 830 http://www.ecfr.gov/cgi-bin/text-idx?c=ecfr&tpl=/ecfrbrowse/Title49/49cfr830_main_02.tpl. These rules state the authority of the NTSB, define accidents, incidents, injuries, and other terms, and provide procedures for initial and immediate notification of accidents and incidents by aircraft pilots/operators.

A. APPLICABILITY

The pilot/operator of an aircraft shall send a report to the office listed above, based on accident/incident location; immediate notification is required by 49 CFR 830.5(a). The report shall be filed within 10 days after an accident for which notification is required by Section 830.5, or after 7 days if an overdue aircraft is still missing.

An aircraft accident, as defined in 49 CFR 830.2, is determined as an occurrence that involves a fatality or serious injury, or substantial damage to the aircraft. For occurrences that do not involve a fatality, the determination that the occurrence is an accident can be appealed by writing to the Director, Office of Aviation Safety, NTSB, 490 L'Enfant Plaza, S.W., Washington, D.C. 20594.

The NTSB uses this form for aircraft accident prevention activities and for statistical purposes. NTSB regulations (49 CFR Part 830) require that **ALL** questions be answered completely and accurately. Completion of this form will take approximately 60 minutes. The NTSB does not guarantee the privacy of any information provided in this form. You need not complete this form unless it displays a valid OMB control number, in accordance with 5 C.F.R. § 1320.5(b), which applies to this collection of information.

B. DEFINITIONS

- 1. "Aircraft Accident" means an occurrence associated with the operation of an aircraft that takes place between the time any person boards the aircraft with the intention of flight and all such persons have disembarked, and in which any person suffers death, or serious injury, or in which the aircraft receives substantial damage. For purposes of this form, the definition of "aircraft accident" includes "unmanned aircraft accident," as defined at 49 CFR 830.2.
- 2. "Substantial Damage" means damage or failure that adversely affects the structural strength, performance or flight characteristics of the aircraft, and that would normally require major repair or replacement of the affected component. NOTE: Engine failure or damage limited to an engine if only one engine fails or is damaged, bent fairing or cowling, dented skin, small puncture holes in the skin or fabric, ground damage to rotor or propeller blades, and damage to landing gear, wheels, tires, flaps, engine accessories, brakes, or wing tips are not considered "substantial damage" for purposes of this report.
- 3. "Operator" means any person who causes or authorizes the operation of an aircraft, such as the owner, lessee, or bailee of an aircraft.
- 4. "Fatal Injury" means any injury that results in death within thirty (30) days of the accident.
- 5. "Serious Injury" means any injury that (1) requires hospitalization for more than 48 hours, commencing within 7 days from the date the injury was received; (2) results in a fracture of any bone (except simple fracture of fingers, toes, or nose); (3) causes severe hemorrhages, nerve, muscle, or tendon damage; (4) involves injury to any internal organ; or (5) involves second- or third-degree burns, or any burns affecting more than 5 percent of the body surface.

INSTRUCTIONS TO PILOTS/OPERATORS FOR COMPLETING THIS FORM

It is necessary that ALL questions on this report be answered completely and accurately.

If more space is needed, continue on a blank sheet of paper.

ii more space is needed, continue on a blank sneed

Nearest City/Place: Use the name of the nearest community in the state where the accident/incident occurred.

Date/Time: Indicate the date and local time of the event. Be sure to indicate the time zone.

Phase of Operation: Indicate the phase of operation during which the accident/incident occurred.

Aircraft Information: Enter aircraft make and model information as indicated on the aircraft registration certificate, including series. If the involved aircraft is certified as "amateur-built," include the name of the producer of the kit or plans, unless an NTSB employee instructs otherwise.

Maximum Gross Weight: Enter the certificated maximum gross weight for the aircraft involved in the occurrence. This should be the same as the maximum gross weight indicated on the aircraft weight and balance documents.

Engine: Enter engine make and model information as indicated on the engine data plate.

Type of Fire Extinguishing System: If a fire extinguishing system was used to fight an aircraft fire, specify the type(s) of extinguishing system(s) used. Examples include handheld extinguisher, engine fire bottle, cargo/baggage compartment fire suppression system, or airport emergency ground equipment.

Owner/Operator Information: Enter the owner information as shown on the registration certificate. Commercial operators, enter the operator information, including "doing business as" when applicable, as shown on the operator certificate.

Revenue Sightseeing Flight: Indicate whether the accident aircraft was conducting **revenue** sightseeing operations under 14 CFR Part 91 at the time of the accident.

Air Medical Flight: Indicate whether the accident flight was being conducted for the purpose of carrying medical personnel, patient(s), or organs.

Public Aircraft: Federal, state or local government flight operations such as official travel, law-enforcement, low-level observation, aerial application, firefighting, search and rescue, biological or geological resource management, or aeronautical research. Indicate whether the flight was conducted by the armed forces, federal, state, or local government.

Purpose of Flight: 14 CFR Parts 91, 103, 133, 136, and 137: Indicate the type of operation that was being conducted at the time of the occurrence using the following definitions:

AERIAL APPLICATION--Operations using an aircraft to perform aerial application or dispersion of any substance. Examples include agricultural, health, forestry, cloud seeding, firefighting, insect control, etc.

AERIAL OBSERVATION--These flights include aerial mapping/photography, patrol, search and rescue, hunting, highway traffic advisory, ranching, surveillance, oil and mineral exploration, criminal pursuit, fish spotting, etc.

AIR DROP--Aerial operations, other than aerial application, that are intended to release items in flight.

AIR RACE/SHOW--Includes any flight operations conducted as part of an organized air race or public demonstration.

BUSINESS--includes all personal flying without a paid professional crew for reasons associated with furthering a business, including transportation to and from business meetings or work. This does not include corporate/executive operations, air taxi, or commuter operations.

EXECUTIVE/CORPORATE--Company flying with a paid, professional crew.

FERRY--Non-revenue flight under a special flight or "ferry" permit. Refer to 14 CFR 21.197 for details of special flight permit issuance.

FLIGHT TEST--Flight for the purpose of investigating the flight characteristics of an aircraft/aircraft component or evaluating an applicant for a pilot certificate or rating.

INSTRUCTIONAL--Flying while under the supervision of a flight instructor or receiving air carrier training. Personal proficiency flight operations and personal flight reviews, as required by federal air regulations, are excluded.

OTHER WORK USE--Miscellaneous flight operations conducted for compensation or hire such as construction work (not 14 CFR Part 135 operation), parachuting, aerial advertising, towing gliders, etc.

PERSONAL--Flying for personal reasons (excludes business transportation) including pleasure or personal transportation. This also includes practice or proficiency flights performed under flight instructor supervision and not part of an approved flight training program.

POSITIONING--Non-revenue flight conducted for the primary purpose of relocating the aircraft. Examples include moving the aircraft to a maintenance facility or to load passengers or cargo etc.

UNKNOWN--Use only if the primary purpose of flight is not known.

Other Aircraft--Collision: For all accidents involving a collision with another aircraft, including parked aircraft, check "Collision with other aircraft" under Basic Information and complete this section indicating details about the OTHER aircraft involved in the collision.

Airport Information: Complete this section if the accident/incident occurred on approach, landing, takeoff, departure, or within 3 statute miles of an airport. Please refer to the FAA Airport/Facility Directory or other official source for airport information.

Airport Identifier: Provide the official 3 or 4 character airport identifier number.

 $\ensuremath{\textit{Runway}}\xspace$: Indicate the number of the runway used, including L, R, or C if applicable.

Runway/Landing Surface: Indicate the type of intended runway/landing surface (do not indicate surface conditions). If the surface type was mixed, check all that apply.

Condition of Runway/Landing Surface: Indicate the condition of the intended runway/landing surface. If multiple conditions existed at the time of the accident, check all that apply.

Weather Information at the Accident/Incident Site: Indicate the weather conditions reported at the accident/incident site at the time of occurrence. If no weather reporting was available for the accident/incident site, indicate the reported conditions at the nearest reporting site. Specify the weather reporting site identifier, the observation time, and distance from the accident/incident.

Sky/Lowest Cloud Condition: Indicate the height above ground level of the lowest cloud condition present at the time of the accident/incident and whether coverage was reported as few, scattered, broken or overcast. Also indicate the height above ground level and coverage of the lowest cloud ceiling present at the time of the accident/incident (reported as broken or overcast).

NOTAMS (*D* and FDC), AIRMETS, SIGMETS, PIREPS: Describe all NOTAMS (distant (D) or Flight Data Center (FDC), if known), AIRMETS, SIGMETS, and PIREPS in effect near the accident/incident.

Flight Crewmember Information: Indicate the category that best describes the capacity served by this flight crewmember at the time of the accident. The designators "Flight Crewmember 1" and "Flight Crewmember 2" do not refer to a specific pilot position or responsibility. If more than one pilot is aboard, they may be entered in any order and their capacity entered as appropriate.

Degree of Injury: See Definitions on the top half of Page 1 of the instructions. Minor injury is not defined. If an injury does not meet the criteria for another injury category, select Minor.

Date of Last Flight Review or Equivalent: Enter the date of the most recent flight review, or equivalent, completed by this pilot. Refer to 14 CFR 61.56 for accepted equivalents.

Type Ratings: List all type ratings on the pilot certificate. If the pilot holds no type ratings indicate "none." If the pilot holds a pilot certificate other than student and was flying an aircraft requiring an endorsement, enter the type and date of any logbook endorsement(s) for that aircraft. See 14 CFR 61 for examples of required endorsements.

Student Endorsements: If the pilot holds a student pilot certificate, enter all solo endorsements and dates on the student pilot certificate.

Flight Time: Complete the flight time matrix. Solo flight time should be included as "Pilot-in-Command (PIC)" and all dual flight instruction given should be included as "Time as Instructor."

Additional Flight Crewmembers: Complete this section if there were more than two required flight crewmembers on the aircraft. This also includes a check airman performing official duties but does not include cabin crew. State the capacity served by each included crewmember at the time of the accident.

Passenger(s)/Other Personnel: Enter identification and injury severity information for all passengers, cabin crew, and other personnel involved in the accident. See Page 1 of the instructions for the official definition of injury levels.

Several questions throughout the form allow for multiple responses; when appropriate, choose all responses that apply.

These instructions only pertain to major issue areas covered by NTSB Form 6120.1 *Pilot/Operator Aircraft Accident/Incident Report.* For additional definitions of questions and responses, please refer to www.ntsb.gov.

NATIONAL TRANSPORTATION SAFETY BOARD PILOT/OPERATOR AIRCRAFT ACCIDENT/INCIDENT REPORT

This form to be used for reporting civil and public aircraft accidents and incidents

BASI	C INFORMA	TION											
Accide	nt/Incident Loc	ation					Accident/Incident Date/Time						
	City/Place: Bost				_ State: <u> </u>	MA	Date		28/2015	Lo	cal Time: _	2320	
	2128(mm/de	d/yyyy	Ti	me Zone: _	FDT	
Latitude	42:21:46.671		Longitude: 071:		W						me zone		
	(Enter in decima	l degrees or d	legrees:minutes:sec	conds)			Col	llision with	Other Air	eraft: C) Midair	On-groun	nd O None
AIRC	RAFT INFO	RMATIO	N										
Registr	ation Number:	N335NW						₫ IFR-Equip					
Manufa	acturer: Airbus	S						□ Commerci □ Unmannec		ght			
Model:	A320-212						Ma	aximum Gr	oss Weigh	t: <u>37,23</u>	0	lbs	
Serial I	Number: <u>340</u>						W	eight at Tin	ne of Accid	ent/Inci	dent:		lbs
Year of	Manufacture:	1992						ımber of Se					
Amate	ır-Built: OYes		Kit/Plans Mal	ke:				bin Crew Seat			Passenger	Seats: <u>150</u>	
	⊙No		Original Design					ımber of En	igines: 2				
_	ry of Aircraft	Type of A (Check all to	irworthiness Ce	rtificate		Landing Ge (Check all tha					Type (Se		1 D14
AirplBallo		Standar						actable			procating o Shaft	• 1	d Rocket Rocket
OBlim	Dirigible	☐ Norma				4 Tricycle			ailwheel	O Turb	o Prop	O Hybr	id Rocket
O Glide O Gyro		☐ Aeroba☐ Balloo						_		O Turb		ONone	
OHelic		Comm	_			☐ Amphibian☐ Emergence			igh Skid kid	O Turb		O Unkr	iown
OPowe		4 Transp				Float	,	□Sl	ki	22.00			
ORocket ☐ Utility ☐ Special Light-Sport ☐ Hu OUltralight ☐ Experimental Light-Sport				Hull			ki/Wheel	Fuel Sy	stem Type	(Reciprocation	ng)		
OUnknown Certificate of Authorization or Waiver (COA)			Other Lau	ınch/	Recovery Sys	stem	O Carb	uretor	O Fuel-	Injected			
		None		Unknown	(COA)	☐ None		□U	Inknown				
							T	Date	Rated Pow		Total		Since:
Engine	Engine Manufa	cturer	Engine Model/Series			acturer's Number		of Mfg. mm/dd/yyyy	O Horsep O lbs of 7		(hours)	Inspection (hours)	(hours)
Eng. 1	CFMI		CFM56-5A3		731571			08/21/1991	21/1991 26,500		63,229	4,154	4,154
Eng. 2	CFMI		CFM56-5A3		733341		4	03/14/2003	26,500		32,284	169	169
Eng. 3							+						
Eng. 4				Propell	<u>l</u> er 1	O Fixed Pi	Pitch Propeller 2 OFixed Pitch			l			
O100-H	spection Type	inuous Airwo	uthin aga			OControll	•						
O AAIP		ditional Inspec		Manufac	OGround Adjustable Manufacturer: Manufacturer:					•	3		
O Annu									Mode				
Date L	ast Inspection:	05/16/2 mm/dd/yy		-		⊙ Yes ○			Additio	nal Equ	ipment (Check all tha	t apply)
Airfran	ne Total Time:		hrs	If Yes:					□ ADS		-1		
hou	rs measured at (S	elect one)		ELT Ma	nufactur	er:				rame Para le of Atta	cnute ck Indicato	r	
O Last Inspection Time of Accident/Incident Model or Part No							4 Aut	opilot					
Type of Maintenance Program (Select one) TSO No.: QC91 (121.: QC126 (406					, C) 1	14 (121.5 WIII	Date	a Recorde		Handheld De	vice		
O Annual				unted in aircra	ft?	OYes ONo			ltifunction		VICC		
O Conditional (Amateur-built only) O Manufacturer's Inspection Program Was I						nected to anter			Electronic Primary Flight Display				
O Other Approved Inspection Program (AAIP)				l		? OYes ON	No	THomal heald CDC					
	nuous Airworthin	ess		If activa			c. 1	4 Onboard Weather					
	, specify:	4	<u> </u>	ł		ocating Aircrat	π: (Ores ONo	Байс	llite Tracl l Warning	king Devic	e	
Descrip O Non	otion of Fire Ex	tınguishing	System	If not ac		☐ Impact Dar	naaa	a.			System ing Device	:	
O Spec						Fire Damag		-		er, Specify	_		
						Battery Exp	pired	d/Damaged					
						Unknown							

OWNER/OPERATOR INFORMA	ATION		
Registered Aircraft Owner		City: Atlanta	
Name: Delta Air Lines, Inc.		State: GA ZIP: 30354	
Fractional Ownership Aircraft: • Yes •	No	Country: U.S.A.	
-			
Operator of Aircraft Same As Reg		Same Address as Registered Owner	
Name:		City:	
		State: ZIP:	
Air Carrier/Operator Designator (4 Characte	er Code): DALA	Country:	
Operating Certificates Held (Check all that apply)	Regulation Flight Conducted Un	Revenue Operation for FAR 121, 125, 129, 135 (Select one for each group)	
□None □Flag Carrier Operating Certificate (FAR 121) □Supplemental □Air Cargo □Foreign Air Carriers (FAR 129) □Rotorcraft External Load (FAR 133) □Commuter Air Carrier (FAR 135)	OFAR 91 OFAR 129 OFAR OFAR 103 OFAR 133 OFAR OFAR 121 OFAR 135 OFAR OFAR 125 OFAR 137 OFAR OFAR 91 Special Flight ONOn-US, Commercial	R 431 O Non-Scheduled or Air Taxi O International R 435	
On-Demand Air Taxi (FAR 135)	O Non-US, Non-commercial	Vivan Conduct Only	
□Commercial Air Tour (FAR 136) □Agricultural Aircraft (FAR 137) □Pilot School (FAR 141)	OPublic Aircraft (Select one) O Armed Forces	Purpose of Flight for FAR 91, 103, 133, 137 (Select one)	
□ Certificate of Authorization or Waiver (COA) □ Commercial Space Transportation Experimental Permit □ Commercial Space Transportation License □ Other Operator of Large Aircraft		O Aerial Application O Aerial Observation O Air Drop O Air Race/Show O Banner Tow O Business O Executive/Corporate O Aerial Application O Flieghting O Unknown O Flight Test O Glider Tow O Instructional O Other Work Use O Personal O Positioning	
Revenue Sightseeing Flight	Air Medical Flight	O External Load O Skydiving O Ferry	
O Yes O No	O Yes O No	Orthy	
AIRPORT INFORMATION (EIII in	if agaident/incident accurred on an	pproach, landing, takeoff, departure, or within 3 miles of an airport)	
Airport Identifier:		Direction From Airport: degrees true	
Proximity to Airport: O Off Airport/Airstrip	On Airport/Airstrip ON/A	Airport Elevation: ft. msl	
Runway Information		Condition of Runway/Landing Surface (Check all that apply)	
Runway ID:(L/R/C) Length: Runway/Landing Surface (Check all that a Grass/Turf	dam	□ Dry □ Snow-Compacted □ Water-Calm □ Holes □ Snow-Crusted □ Water-Choppy □ Ice Covered □ Snow-Dry □ Water-Glassy □ Rough □ Snow-Wet □ Wet □ Rubber Deposits □ Soft □ Slush-Covered □ Vegetation □ Unknown	
Approach/Departure Segment (Select one,)		_
OTaxi OVFR Departure OTakeoff OIFR Departure Proc OInitial Climb	On Instrument Ap	Approach OBase OFinal OCrosswind OCrosswind ODownwind OGo Around OAborted Landing (after touchdown) OUnknown	
IFR Approach (Check all that apply) □None		VFR Approach (Check all that apply) □None	
□ ADF/NDB □ PAR □ SDF □ Sidestep □ VOR/TVOR □ ILS □ VOR/DME □ Localizer Only □ TACAN □ LOC-back course □ RNAV	□MLS □Practice □LDA □GPS □ASR □Visual □Contact □Circling □Unknown	☐ Traffic Pattern ☐ Stop and Go ☐ Straight-In ☐ Touch and Go ☐ Valley/Terrain Following ☐ Simulated Forced Landing ☐ Go Around ☐ Forced Landing ☐ Full Stop ☐ Precautionary Landing ☐ Unknown	

"FLIGHT CREWMEM	BER 1" INF	ORMATI	ON							
"Flight Crewmember 1" Re Pilot O Co-Pilot	sponsibilities at O Student Pilot	the Time of O Flight 1		cident O Check P	ilot O Fli	ght Engineer	O Other 1	Flight Crew		
"Flight Crewmember 1" wa	s pilot flying	4 Yes 1	No							
"Flight Crewmember 1" Ide	entification									
First Name: Joseph					City of I	tesidence:				
Middle Initial: D					State:			ZIP:		
Last Name: Angele					Country	U.S.A.		=		
Age at time of	Accident/Incide	nt: 61	Date of	Birth:			m/dd/yyyy			
			– Certificate Nui							
Degree of Injury	Seat Occup				Restraint 7	 Type			Inflatable F	Restraints
None	⊙ Left	O Front	O Unkno	own	Availal		Used			10011 411110
O Minor O Unknown O Serious	O Right O Center	O Rear O Single			O Nor		O None		4 Not Ins	
		O Single			O Lap O 3-po		O Lap onl	у	☐ Installe ☐ Not De	
Pilot Certificate(s) (Check al. ☐ None ☐ Flight I		Commercial	☐ US M	Military	O 4-pc		O 4-point		☐ Deploy	ed
☐ Private ☐ Recreat	ional 4	Airline Transp	ort Forei		⊙ 5-pc		⊙ 5-point O Unknow	v.n	Unknov	vn
☐ Student ☐ Sport		Flight Engine	er		O Unk	nown	Othkilov	VII		
Principal Occupation N	Medical Certific	ate			Medical C	ertificate Va	lidity		Date of Las	st Medical
		Class 3				imitations/wai	-	nknown		
O Other	Class 1	Driver's Lice	ense (Sport Pilo	ot only)		tations/waiver			$\frac{04/22/20}{mm/dd/y}$	
	• •) Unknown			O Special Is	suance			mm/aa/y	vyy
Medical Certificate Limitati	ons									
Medical Certificate Special	Issuance									
-										
Date of Last Flight Review		Fligh	t Review Air	craft						
or Equivalent, Including			: Airbus							
FAR 121/135 Checks:	11/19/2014 mm/dd/yyyy		ı: A320							
Airplana Dating(s)	Other Aircraf			nent Rati	ing(s)	Instructo	r Rating(s)			
Airplane Rating(s) (Check all that apply)	(Check all that a			ill that app	0 . ,	(Check all	0 . ,			
None	☐ None		☐ None	;	-57	☐ None	11 27		Instrument	Airplane
☐ Single-Engine Land	☐ Airship ☐ Balloon		4 Airpl	lane			e Single-Eng	ine 🗆	Instrument	
☐ Single-Engine Sea ☐ Multiengine Land	Glider		☐ Helio			☐ Gyropla	e Multi-Engii one		Helicopter Glider	
☐ Multiengine Sea	Gyroplane			2100 2111		Powere			Sport	
	☐ Helicopter☐ Powered Lift									
Type Ratings	_ roweled Ent	·				Student I	Endorseme	nts (Include	dates)	
A-330, B757, B767, B777, A32	0							,	,	
, , , ,										
				1		1,				1
Flight Time (Enter appropriate	All	This Make	Airplane Single	Airpla	ane	Inst	rument I			Lighter
number of hours in each box)	Aircraft	& Model	Engine	Multien	ngine Nigh	t Actual	Simulated	Rotorcraft	Glider	Than Air
Total Time	9,611	290								
Pilot in Command (PIC)				+		_	<u> </u>			
Time as Instructor						-	-			
This Make/Model	112						-			
Last 90 Days Last 30 Days	113			+						1
Last 30 Days Last 24 Hours	4			+						

"FLIGHT CREWMEN	IBER 2" INFO	DRMATIC	N							
"Flight Crewmember 2" R O Pilot O Co-Pilot	esponsibilities at t O Student Pilot	the Time of OFlight In		lent Check Pilot	O Flig	ght Engineer	Other I	Flight Crew		
"Flight Crewmember 2" w	as pilot flying [Yes 4	No							
"Flight Crewmember 2" Id	lentification									
First Name: Derek				Ci	ty of Re	esidence:				
Middle Initial: F				Sta	ate:	_	7.	IP:		
Last Name: Nalewajko						U.S.A.		-		
	`Accident/Incident	· 43	Date of Birt		ouniny.					
rige at time of	7 recidenty interdent		tificate Numbe				,,,,,,,,			
Degree of Injury	Seat Occupio		tilleate Ivallibe		traint T	 Tyne		1	Inflatable R	estraints
None	O Left O Right O Center	OFront ORear OSingle	O Unknown		Availab O Non O Lap	o le e	Used O None O Lap onl		⁴ Not Inst	alled
Pilot Certificate(s) (Check of the Check of	Instructor 4 C ational 4 A	ommercial irline Transpo light Engineer	_	tary	O 3-po O 4-po O 5-po O Unk	int int int	O 3-point O 4-point O 5-point O Unknov		□ Not Dep □ Deploye □ Unknow	oloyed ed
Principal Occupation	Medical Certifica	ıte		Med	lical Ce	ertificate Va	lidity		Date of Las	t Medical
Pilot Other Unknown	• Class 1	Class 3 Driver's Licer Unknown	nse (Sport Pilot o	nly) OW		imitations/waiv tations/waivers suance		nknown //A	02/09/20 mm/dd/yy	
Medical Certificate Specia	l Issuance									
Date of Last Flight Review		Flight	Review Aircra	aft						
or Equivalent, Including			Airbus							
FAR 121/135 Checks: _	04/14/2015 mm/dd/yyyy	— Model:								
Airplane Rating(s)	Other Aircraft	Rating(s)	Instrumer	nt Rating(s)		Instructor	0 . ,			
(Check all that apply) ☐ None	(Check all that ap	piy)	(Check all to None	11 .		(Check all th ☐ None	11 .	п	Instrument A	imlana
☐ Single-Engine Land ☐ Single-Engine Sea ☐ Multiengine Land ☐ Multiengine Sea	☐ Airship ☐ Balloon ☐ Glider ☐ Gyroplane ☐ Helicopter ☐ Powered Lift		☐ Airplane ☐ Helicopt ☐ Powered	e ter		☐ Airplane	Single-Engin Multi-Engin ne	ne 🗆 e 🗀	Instrument H Helicopter Glider Sport	elicopter
Type Ratings						Student Er	ndorsemen	ts (Include d	ates)	
A320	<u>.</u>		<u> </u>							
Flight Time (Enter approprion number of hours in each box)	ate All Aircraft	This Make & Model	Airplane Single Engine	Airplane Multiengine	Nigh		rument Simulated	Rotorcraft	Glider	Lighter Than Air
Total Time	488	488								
Pilot in Command (PIC)	\bot									
Time as Instructor										
This Make/Model										
Last 90 Days	159				-		-			-
Last 30 Days Last 24 Hours	4						 		1	-
Lust 27 110U13	7				1	1	I	1	I	I

ADDITIONAL FLIGH	IT CREWMEMBE	ERS (Exclusiv	e of cabin cr	ew, complete	the followin	g information)		
Crew Name and Addres	S					Seat Occupie	d	Injury
First Name: Darin Middle Initial: R Last Name: Anderson	_	City of Reside State:		ZIP:		O Left O Center O Right	O Front O Rear O Single O Unknown	NoneMinorSeriousFatalUnknown
☐ Private	Flight Instructor Recreational Sport		port	t the Time	6hrs	Restraint Tyj Available O None O Lap Only O 3-point O 4-point O 5-point O Unknown	Vsed O None O Lap Only O 3-point O 4-point O 5-point O Unknown	Inflatable Restraints Not Installed Installed Deployed Unknown
Crew Name and Addres	s					Seat Occupie	d	Injury
First Name: Middle Initial: Last Name:	_	State:	ence:	ZIP:		OLeft OCenter ORight	O Front O Rear O Single O Unknown	O None O Minor O Serious O Fatal O Unknown
☐ Private [☐ Flight Instructor☐ Recreational☐ Sport	☐ Commercial ☐ Airline Trans ☐ Flight Engine	port			Available O None O Lap Only O 3-point O 4-point	Used O None D Lap Only O 3-point O 4-point	Inflatable Restraints Not Installed Installed Not Deployed
Type Rating/Endorsemon Accident/Incident Aircra			Flight Time at Accident/Inci		hrs	O 5-point O Unknown	O 5-point O Unknown	☐ Deployed ☐ Unknown
PASSENGER(S) / O	THER PERSONN	VEL (Include	cabin crew; c	ontinue on s	eparate shee	t if necessary)	•	
Name and Address			Seat	Injury	Restraint T	`уре	Inflatable Restraints	Age
First Name: Carrie Middle Initial: Last Name: Giordani O Crew		Other	OLeft OCenter ORight OUnknown Row:	O None O Minor O Serious O Fatal O Unknown	Available O None O Lap Only O 3-point O 4-point O 5-point O Unknown	O 3-point O 4-point O 5-point	☐ Not Installed ☐ Installed ☐ Not Deployed ☐ Deployed ☐ Unknown	☐ Under 5 years If Under 5, ○ Child Restraint ○ Lap-Held ○ Unknown
First Name: Angela Middle Initial: D Last Name: Hyman • Crew	City: Country: U.S.A. OPassenger	Other O	OLeft OCenter ORight OUnknown Row:	None Minor Serious Fatal Unknown	Available O None O Lap Only O 3-point O 4-point O 5-point O Unknown	O 3-point O 4-point O 5-point	Not Installed □ Installed □ Not Deployed □ Deployed □ Unknown	☐ Under 5 years
First Name: Chong Im Middle Initial: C Last Name: Desmarais • Crew	City: Country: U.S.A. OPassenger	Other Other	OLeft OCenter ORight OUnknown Row: 2R	None Minor Serious Fatal Unknown	Available O None O Lap Only O 3-point O 4-point O 5-point O Unknown	O 3-point O 4-point O 5-point	Not Installed ☐ Installed ☐ Not Deployed ☐ Deployed ☐ Unknown	☐Under 5 years If Under 5, ○ Child Restraint ○ Lap-Held ○ Unknown
First Name: Michelle Middle Initial: E Last Name: Mancini	City: Country: U.S.A.		OLeft OCenter ORight	None Minor Serious Fatal	Available O None O Lap Only O 3-point O 4-point	Used O None O Lap Only O 3-point O 4-point		☐ Under 5 years

FLIGHT ITINERARY	INFORMATIO	N						
Last Departure Point Airport ID: KMCO City: Orlando State: FL Country: U.S.A Type of ATC Clearance/Set None VFR Airspace where the acciden Class A	Time Time Time Time Time Time Time Time	e of Departure : 21:07 Zone: EDT apply) Spe VF. I (Check all that	Airport ID: City: Bost State: MA Country: U cecial IFR R On Top apply) itary Operations	KBOS ton J.S.A. Area (MOA)	☐ VFR Flight Foll ☐ Traffic Advisory	<u> </u>	√VFR VFR	O VFR/IFR O IFR O Unknown O No O Unknown
☐ Class C ☐ Class D ☐ Class E ☐	Demo Area Warning Area Prohibited Area Restricted Area	☐ Jet ² ☐ TR!	R 93		☐ Air Traffic Conti ☐ Unknown	rol Area		ft msl
WEATHER INFORM	ATION AT THE	ACCIDEN	T/INCIDEN	T SITE				
Source of Pilot Weather Inf (Check all that apply) National Weather Service Flight Service Station TV/Radio Automated Report Commercial Weather Service On-Board Weather		ary net		Facility ID: Kl Observation Ti Time Zone: U Distance from A	me: <u>0438</u>		nm	s true
Basic Conditions O VMC O IMC O Unknown		Light Conditi ODawn ODay	ODusk Night	O Dark O Brig	Night Q Un	ıknown		
O Few	O Thin Broken O Thin Overcast O Unknown	Ceiling O None (Clear) O Broken O Overcast Ceiling Heigh 1,200	0	Obscured Indefinite Unknown	Temperature: Dew Point: _1 Altimeter Sett	(0	C) or _ in.	(F)
Wind Direction Variable -or- Direction: 300 degrees true Intensity of Precipitation O Light O Moderate O Heavy O N/A O Unknown	Wind Speed Calm Light and Varia or- Speed: 4 Type of Precipit: None Rain Snow Hail Rain Showers	kts	Freezing Snow S Ice Pello Freezing Freezing	kts g Rain hower ets Shower	RVR RVV Density Altitu Restriction to Blowing Dt Blowing Sa Blowing Sn Blowing Sp	de: C	feetmiles	_ ft that apply)
Icing Forecast Amount None None Crace Clear Chiefle Amount Type Crace Crace Clear Chiefle Chiefle		Icing Actual Amount O None O Trace O Light O Moderate O Severe O Unknown	Type O N/A O Rime O Clear O Mixe O Unkr	· ·d	□ Dust Turbulence Type (Check a □ None □ Clear Air □ Terrain-Indu □ Convective	ll that apply)	Jnknown S€ □	everity Light Moderate Severe Extreme
NOTAMs (D and FDC),	AIRMETs, SIGN	IETs, PIREP	s in effect at	the time of th	ne accident/incid	dent:		

DAMAGE	TO AIRCRAFT A	ND OTHER PRO	PERTY		
Aircraft Dam		Aircraft Fire		Aircraft Explosion	
NoneMinor	O Substantial O Destroyed O Unknown	NoneIn-FlightOn-Ground	O Both Ground and In-Flight O Fire at Unknown Time O Unknown	NoneIn-FlightOn-Ground	O Both Ground and In-Flight O Explosion at Unknown Time O Unknown
Description o	f Damage to Aircraft a	nd Other Property (Use additional sheet if necessary)		
•	8	1 0 (, , , , , , , , , , , , , , , , , , ,		
NADDATIV	E HISTORY OF FLI	CUT (Disease from a co	e mains in index		
			g circumstances leading to and nat	ure of accident/incide	ent Describe terrain and include
wreckage dis	tribution sketch if pertin	ent. Attach extra sheet	ts if needed. State departure time and		
	Provide as much detail as	s possible.			
See attached	l.				

RECOMMENDATION (How	could this	accident/incident ha	ave been pre	vented?)				
Operator/Owner Safety Recomm	endation							
MECHANICAL MALFUN	NCTION/F	FAILURE (If mor	re space is n	eeded. co	ontinue on sepai	rate sheet)		
Was there Mechanical Malfund			. Сорисс 10 1.				Total Time	/Cycles
(If yes, list the name of the part, many			scribe the failu	ıre.)			On Part	3
								Hours
								Cycles
							Time Since	
							Inspected/0	Overhauled
								Hours
FUEL & SERVICES INF	ORMATI	ON					_	
Fuel on Board at Last Takeoff		Fuel Type						
(Convert from pounds, as necessary)		O 80/87	O 115/145		O Jet B	O Other, specify		
4,559	Gallons	O 100 Low Lead O 100/130	Jet AJet A-1		O JP8 O Automotive			
Other Services, if Any, Prior to	Departure	3 100/130	3 30171 1		O Tratomonve			
	2 cpcc							
EVACUATION OF AIRC	RAFT							
Was an emergency evacuation	of the aircra	aft performed?	☐ Yes	4 No				
Method of Exit – Describe how	the occupan	ts exited and how ma	any occupant	s evacuate	ed each location			
OTHER AIRCRAFT – C						ъ		A : C:
Aircraft Registration Number		ırer:				pr	nage to Other Destroyed	r Aircraft Minor
	Model:						Substantial	☐ None
Registered Owner of Other Air	craft			Pilot of	Other Aircraft	•		
Name:				Name:				
City:				City:		ZIP:		
State: ZIP: Country:				State:	•	_ZIP:		
- Juliu J				Country	•			

ADDITIONAL INF	ORMATIC	ON (Please type or print in ink)	
Use this space if addit	tional space	is needed for any answers.	
		entative for the injured passenger stated that the passenger sustained a fractured rig e fall was due to an accumulation of water on the surface of the floor immediately ou	
Additional Cabin Cre Roxanne N. Doughe			
No Injury			
LUEDEDY AEDTIEV	/ TILAT TI	TE ADOME INFORMATION IS COMPLETE AND ADOMBATE TO THE DEST OF M	W (4) (4) (5) (5)
	T	IE ABOVE INFORMATION IS COMPLETE AND ACCURATE TO THE BEST OF M	KNOWLEDGE
Date of this Report		Pilot/Operator: Joshua A. Migdal	
10/09/2015 mm/dd/yyyy	or	Check here to electronically sign this document	
If B Od d	-		
	-	erator is Filing Report	
		Title:	
		electronically sign this document	
		FOR NTSB USE ONLY	
NTSB Accident/Incid	lent No.	Reviewed by NTSB Regional Office Name of Investigator	Date Report Received



Internal Memorandum

Date: 7/20/2015

To: Captain Phil Davis, Director & Chief Pilot – SLC

From: Captain Joseph D. Angele, SLC A-320 AIRBUS

Subject: Internal/NTSB II15-113 Pax Injury: F2219 28-JUN-15 MCO-BOS A-320-212 N335NW (3235)

CAP1: ANDERSON, D.R. (ATL), CAP2: ANGELE, J.D. (SLC), FO: NALEWAJKO, D.F. (SLC)

This statement is provided at the request of the Chief Pilot's Office.

I was the Pilot Flying. We had begun our descent into Boston Logan International Airport. The First Officer had turned on the seatbelt sign and made the initial announcement on the PA instructing passengers to remain seated for the duration of the flight and the flight attendants to prepare the cabin for arrival.

Approximately five to seven minutes later, due to a late Air Traffic Control clearance for an altitude restriction and a higher than normal descent angle to meet the altitude restriction, the aircraft speed approached within five knots of the upper limit. I extended the speed brake. The aircraft continued to accelerate so I disconnected the autopilot, which resulted in a bump in the aircraft flight path. Thereafter, the flight deck crew was informed by a flight attendant that a passenger exiting the rear lavatory had fallen and broken her ankle due to a minor bump in the aircraft flight path. The flight crew declared a medical emergency with Air Traffic Control and continued the descent, approach, and landing into Boston without further incident.

The aircraft was met by emergency medical personnel at the gate who attended to the injured passenger.

I acknowledge release of this statement to <u>Delta Flight Safety</u> and the <u>National Transportation Safety Board</u> (NTSB).

Regards,

Captain Joseph D. Angele Employee # (Signature on file)



Internal Memorandum

Date: 7/21/2015

To: Captain Chris Frederick, Director & Chief Pilot – ATL

From: Captain/LCP Darin Anderson, ATL A-320 AIRBUS

Subject: Internal/NTSB II15-113 Pax Injury: F2219 28-JUN-15 MCO-BOS A-320-212 N335NW (3235)

CAP1: ANDERSON, D.R., CAP2: ANGELE, J.D., FO: NALEWAJKO, D.F.

This statement is provided at the request of the Chief Pilot's Office.

I was riding in the jumpseat giving the first of a two-leg line check to the Captain (Pilot Flying). While cruising at FL350, the flight was cleared to descend to FL290. As the Captain initiated the descent, the First Officer (Pilot Monitoring) turned the seat belt sign on and made an appropriate PA.

Prior to reaching the assigned altitude, a subsequent clearance was issued to cross 50 NM south of PROVI at FL210 @ 290 KTS. The Captain entered the crossing restriction into the FMS. The First Officer selected the progress (PROG) page of the FMS to view the aircraft position in relation to the path. The PROG page indicated that the aircraft was 3500 feet high on the path. As the aircraft attempted to intercept the descent path, the airspeed increased to the top of the bracketed range, which was close to the maximum operating speed. The Captain disconnected the autopilot and immediately applied backpressure to the stick to decrease the airspeed. At the same time, I heard a scream from the cabin. I overheard (through my headset) one of the Flight Attendants making a PA requesting any available medical personnel onboard. A Flight Attendant informed the flight crew that a passenger had fallen when exiting the rear lavatory area. Two physicians attended to the injured passenger. A medical emergency was declared and the flight continued to Boston Logan International Airport where emergency medical personnel met the flight at the gate.

I acknowledge release of this statement to <u>Delta Flight Safety</u> and the <u>National Transportation Safety Board</u> (NTSB).

Regards,

Captain/LCP Darin Anderson Employee # (Signature on file)



Internal Memorandum

Date: 7/21/2015

To: Captain Phil Davis, Regional Director – SLC

From: First Officer Derek F. Nalewajko, SLC A-320 AIRBUS

Subject: Internal/NTSB II15-113 Pax Injury: F2219 28-JUN-15 MCO-BOS A-320-212 N335NW (3235)

CAP1: ANDERSON, D.R. (ATL), CAP2: ANGELE, J.D. (SLC), FO: NALEWAJKO, D.F. (SLC)

This statement is provided at the request of the Chief Pilot's Office.

I was the Pilot Monitoring during the above-referenced flight. Prior to our top of descent, the aircraft was cleared to FL290. As the Captain initiated the descent from altitude, I made the standard PA to the passengers regarding the use of their seat belts and turned on the seat belt sign.

Shortly after we commenced the descent, Air Traffic Control (ATC) revised our clearance to cross 50nm south of PROVI at FL210 and 290kts. Once the new constraint was entered in the FMS, the autopilot nosed over the aircraft in order to increase the rate of descent to meet the constraint. As the aircraft continued the descent, the speed started to increase towards maximum operating speed. The Captain disconnected the autopilot and applied back stick pressure in order to raise the nose and slow down the aircraft. Almost immediately after the control stick input, I heard a scream from the main cabin followed by the Flight Attendant call button. We were notified that a passenger had fallen and possibly broken an ankle or leg while leaving the lavatory. ATC and dispatch were notified.

Emergency medical personnel were waiting at the gate when the aircraft arrived.

I acknowledge release of this statement to <u>Delta Flight Safety</u> and the <u>National Transportation Safety Board</u> (NTSB).

Regards,

First Officer Derek Nalewajko Employee # (Signature on file)



Flight Attendant Statements

Flight 2219 (MCO-BOS), A320-200 (Ship N335NW), 06/28/2015

Angela D. Hyman Purser/Flight Leader

Passenger went into lav. Prior to her exiting, the captain announced our decent. When she was exiting lay the aircraft dropped in altitude. F/A Desmarais & I held onto the counter and other parts of aft galley that we could reach as our knees buckled. I was facing the lav and witnessed the passenger fall forward and try to find something to hold onto to get her balance. As she was falling she twisted her ankle and her foot snapped to the side with a visible break to her ankle. She landed against the right door. I immediately paged for help and then notified the cockpit of the event. I let them know that her ankle was definitely broken and that she would need immediate medical attention once we landed. She was screaming in pain. Two Doctors came back to assist her. They wrapped her ankle/foot with ice and gave her OTC pain meds. Her son & husband also came to comfort her. Because of her pain and the nature of the injury (her foot to the side) we couldn't move her. Her son sat on the floor in the back galley (or whatever the area between the jumpseat & lavs is now called on A32k) and braced her during landing while Dr. Nimbkar attended to her and braced her feet. The 2R & the swivel jumpseat could not be occupied. F/A Desmarais switched jumpseats with me for landing & F/A Mancini sat in a passenger aisle seat in the last row. We indicated to them when/how to brace themselves and her for landing. Once they removed her from the back galley we made sure that the door was disarmed and verified it with the cockpit crew. We asked the Passenger Service Agent to ensure that her three younger children were provided with transportation to the hospital to meet up with the rest of the family.

Roxanne N. Dougherty

I was in front of aircraft and event was in the back. There was a drop in the air and a passenger broke her ankle. All flight attendants went into action. A doctor was used, so was medical equipment.

Chong C. Desmarais 2R

At the beginning of initial decent we experienced a sudden drop of the aircraft. LFA Angela Hyman and I were standing in the aft galley. I had to grab the galley counter to stabilize myself so I did not fall. Passenger Carrie Giordani was exiting the lavatory and fell. She broke her ankle. We paged for a doctor and notified the flight deck. Soon after two doctors came forward and we began to give her medical assistance. The doctors wrapped and stabilized her ankle. We landed in Boston and medical personnel took her off the aircraft in a stretcher.

Michelle E Mancini 2L

Upon descent into Boston, we hit what I believe to be some clear air turbulence. I was in the aisle picking up trash and was thrown to the ground. I was not hurt and with the help of passengers, I was able to get back up. I heard screaming in the back of the plane and headed back there immediately. I found Passenger Giordani on the floor of the galley (on her back) screaming in pain. I then noticed her leg had been injured. We attended to her medical needs, called for a physician and also called to notify the pilots. It was clear to me that her injuries were caused from the clear air turbulence that threw me to the floor as

Flight Attendant Statements Flight 2219 (MCO-BOS), A320-200 (Ship N335NW), 06/28/2015 Page 2

I was picking up trash. The flight attendants worked extremely well as a team, and with the help of two medical professionals who were on the flight, we attended to her needs until we landed and medical help arrived on scene and took her to the hospital. I was advised through Delta's attorney that Passenger Giordani's injuries were caused from water on the galley floor. That was CLEARLY not the case. It was from the clear air turbulence that caused me to also fall in the aisle of the aircraft.