## Service cart injury, Airbus A320-211, November 28, 2002

Micro-summary: A flight attendant was injured by a service cart during the intiial climb of this Airbus A320-211.

Event Date: 2002-11-28 at 2125 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.

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National Transportation Safety Board	NTS	SB ID:	CHI03LA031		Aircraft Registration Number: N324US				
FACTUAL REPORT	Occ	currenc	e Date: 11/28	3/2002	Most Critical Injury: Serious				
AVIATION ETYBON	Occ	currence	e Type: Accid	lent	Investigated By: NTSB				
Location/Time									
Nearest City/Place	State	Zip	Code	Local Time	Time Zone				
Minneapolis	MN	55	401	2125	CST				
Airport Proximity: Off Airport/Airstrip	Distance Fr	tance From Landing Facility: Direction From Airport:							
Aircraft Information Summary									
Aircraft Manufacturer			Model/Series		Type of Aircraft				
Airbus Industrie			A320-211				Airplane		
Sightseeing Flight: No		Ai	r Medical Tr	ansport Flight: No					
Narrative									
<pre>struck by a galley service of Airport (MSP), Minneapolis, M Northwest Airlines as flight crew and 38 passengers report Sacramento, California, at the further incident. According to company personnel and became detached from the down the center aisle and struck No anomalies were found with the struck of the service of the service</pre>	central cart duri Minnesota 575 ur ted no ir time of , the gal e forwar k a fligh the galle	entral standard time, a flight attendant was seriously injured with the during initial climb from the Minneapolis/St. Paul Internation							

FACTUAL REPORT - AVIATION

National Transportation Safety Board	NTS	NTSB ID: CHI03LA031											
FACTUAL REPORT		Occurrence Date: 11/28/2002											
AVIATION				Accident									
	Landing Facility/Approach Information												
Airport Name	Airport ID: Airport Elevation Runway Used Runway Length									Rur	nway Width		
			Ft. MSL						, 0				
Runway Surface Type:										I			
Runway Surface Condition:													
Type Instrument Approach: ILS-complete													
VFR Approach/Landing: Straight-in													
Aircraft Information													
Aircraft Manufacturer			Model/							l Number			
Airbus Industrie     A320-211     273													
Airworthiness Certificate(s): Transport													
Landing Gear Type: Retractable - Tricycle													
Engine Type: Turbo Fan	v v	Engine Manufacturer: Model/Series: CFM International CFM56-5-A1							Rated Power: 25000 LBS				
- Aircraft Inspection Information													
Type of Last Inspection	1	Date of Last Inspection Time Since Last Inspection							Airframe T				
Continuous Airworthiness		02/2	02/2002 2499 Hot					ours	3	5133 Hours			
- Emergency Locator Transmitter (ELT) Ir	nformation												
ELT Installed? No	ELT Operated? ELT Aided in Locating Accident Site? No												
Owner/Operator Information													
Registered Aircraft Owner		S	Street A	ddress 5101 No	rthwes	st Drive	e						
Northwest Airlines Inc.										State	Zip Code		
			treet A	St. Paul						MN	55111		
Operator of Aircraft					Reg'o	d Aircra	aft Owner						
Same as Reg'd Aircraft Owner	City State Zip							Zip Code					
Operator Does Business As:     Operator Designator Code: NWAA													
- Type of U.S. Certificate(s) Held:													
Air Carrier Operating Certificate(s): Flag	Carrier/Domestic												
Operating Certificate: Operator Certificate:													
Regulation Flight Conducted Under: Part 121: Air Carrier													
Type of Flight Operation Conducted: Sch	eduled; Domestic	; Pass	senger	Only									
FACTUAL REPORT - AVIATION Page 2													

Natio	TRANS	Safety Board	1	NTSB ID: CHI03LA031										
F	ACTUAL RI	EPORT		Occurrence Date: 11/28/2002										
	Le Pla All Lein	36 <		Occurrence Type: Accident										
L	First Pilot Information     City     State     Date of Birth     Age													
Name		City									State	Da	ate of Birth	Age
On File			On File On F											53
Sex: M Seat Occupied: Left Principal Profession: Civilian Pilot Certificate Number: On File														
Certificate(s): Airline Transport														
Airplane Rating(s): Multi-engine Land														
	/Glider/LTA: None	-												
Instructor Rating(s): Airplane None None														
Type Ratir	ng/Endorsement fo	or Accident/Ir	ncident Aircra	aft? Yes			C	Current	Biennial F	light F	Review? 1	1/200	)2	
Medical Cert.: Class 1 Medical Cert. Status: Valid Medicalno waivers/lim. Date of Last Medical Exam: 07/2002														
									<b>!</b>					
- Flight Tir	me Matrix	All A/C	This Make and Model	Airplane Single Engine	Airplane Mult-Engine	Ni	ght	Actua	Instrument	imulated	Rotorc	aft	Glider	Lighter Than Air
Total Time	e	10257	1942											
Pilot In Co	ommand(PIC)	6472	1942							_				
Instructor										_				
Last 90 Da		178	178			_ <del>  </del>				_				
Last 30 Da	-	87	87											
Last 24 Ho		0	0				Taula					0		
Seatbelt Used? Yes         Shoulder Harness Used? Yes         Toxicology Performed? No         Second Pilot? Yes									6					
Flight Plan/Itinerary														
	ight Plan Filed: IF	R											I	
Departure	Point						State	;	Airport Io	port Identifier Departure Time			re Time	Time Zone
Same as	Same as Accident/Incident Location MSP 2106 CST									CST				
Destination State							;	Airport lo	rport Identifier					
Sacramento							CA		SMF					
Type of Clearance: IFR														
Type of Airspace: Class B														
Weather	r Information													
Source of	Briefing: Compa	any												
Method of	f Briefing: Teleph	none												
				FACTUAI	REPORT	- AVL	ΑΤΙΟΙ	N						Page 3

Nationa	al Transportation Safety	Board	NTSB ID:	NTSB ID: CHI03LA031									
FA	ACTUAL REPOR	кТ	Occurrent	Occurrence Date: 11/28/2002									
	AVIATION FTY BOR		Occurrent	Occurrence Type: Accident									
Weather	Information												
WOF ID	Observation Time	Time Zone	WOF Elevat	ion	WOF D	stance Fron	n Acci	dent Site		Direction From	m Accident Site	÷	
MSP	2155	CST	841 Ft	. MSL				0 NM			0 Deg.	Mag.	
Sky/Lowes	st Cloud Condition: Scat	ttered			1:	5000 Ft. AG	SL	Condition of	Condition of Light: Night				
Lowest Ce	iling: None		Ft.	AGL	Visib	ility:	10	SM	Alti	meter:	29.55	"Hg	
Temperatu	ire: 7 °C	Dew Point:	0 °C	Wind	Direction:	240			De	nsity Altitude:	509	Ft.	
Wind Spee	ed: 14	Gusts:		Weath	ner Condt	ions at Accio	dent S	ite: Visual C	Cond	itions			
Visibility (R	RVR): Ft.	Visibility (R	VV)	SM	Intensity	y of Precipita	ation:						
Restriction	s to Visibility: None												
Type of Pre	ecipitation: None												
<b>3</b> 1													
Accident	Information												
Aircraft Dar	mage: None		Aircraft Fir	e: None	)			Aircraft Exp	olosio	n None			
	on: U.S. Registered/L	J.S. Soil											
	mmary Matrix		erious Mino	or	None	TOTAL							
First Pi					1	1							
Second	d Pilot				1	1							
Studen	t Pilot						]						
Flight li	nstructor												
Check	Pilot												
Flight E	Engineer												
Cabin A	Attendants		1		2	3							
Other C	Crew												
Passen	ngers				38	38							
- TOTAL A	ABOARD -		1		42	43	1						
Other G	Ground												
- GRAND	D TOTAL -		1		42	43							
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National Transportation Safety Board	NTSB ID: CHI03LA031	
FACTUAL REPORT	Occurrence Date: 11/28/2002	
AVIATION	Occurrence Type: Accident	
Administrative Information	·	·
Investigator-In-Charge (IIC)		
Andrew T. Fox		
Additional Persons Participating in This Acciden	t/Incident Investigation:	
Jay Livesey Inspector FAA - Minneapolis CMO 2901 Metro Drive, Suite 500 Bloomington, MN 55425		