TRANSP Notional Transportation Prototy Roand	TRANSP Tational Transportation Safety Board NTSB ID: DEN00LA124 Aircraft Registration Number: N38903									
FACTUAL REPORT			nce Date: 07/07	7/2000	Most Critical Injury: None					
AVIATION			ice Type: Accid	lent		vestigated By: NTSB				
TETYBORS		Occurren	ice Type. 7 toolo		Investigated D	y. HTO	5			
Location/Time Nearest City/Place										
LOGAN	UT		4321	1500	MDT					
Airport Proximity: Off Airport/Airstrip Distance From Landing Facility:										
Aircraft Information Summary Aircraft Manufacturer Model/Series Type of Aircraft										
							Type of Aircraft			
Bell			206L-3	/206L-3			Helicopter			
Revenue Sightseeing Flight: No			Air N	Medical Transport	Flight: No					
Narrative										
maintenance test flight opera meteorological conditions were A torque gauge had been change- persons on the ground noticed and was making a precautionar followed by a slight vibrat started to drift right, the unresponsive and loose. He the flare for landing, the he left side. The pilot secured to During the impact sequence, damaged by impact, and the ta of the horizontal stabilizer area but the number 4 section w When the flight originated,	<pre>the flare for landing, the helicopter turned rapidly to the right and upon touchdown rolled on its left side. The pilot secured the engine and he and the passenger exited the helicopter. During the impact sequence, the helicopter shed the main rotor head and blades, which were both damaged by impact, and the tail boom was partially separated by main rotor impact about 3 feet aft of the horizontal stabilizer. The tail rotor drive shaft was intact through the boom separation area but the number 4 section was fractured and the number 5 section bent. They remained attached. When the flight originated, there were several items lying on the passenger seats. One of the items was a jacket with some red and black lettering stenciled on the back. This item was not</pre>									
Examination of the tail rotor drive shaft sections revealed a torsional fracture of the number 4 drive shaft 11.2 inches from the engine end as mounted on the aircraft. Wall thickness of the 1.26-inch diameter drive shafts was 0.0498-inch, which was within the range spelled out in the American National Standard Dimensional Tolerance for Aluminum Mill Products. Hardness of the 2024-T3 aluminum drive shaft tubes was 98 HRB, which met the 66 HRB minimums per BPS 4467 for typical 2024-T3 aluminum. Spectrographic analysis of the drive shaft tubes showed conformation to WWW-T-700/3 per the engineering drawing (reference SJL00-0361). Examination of tail rotor blade S/N CS 6266 revealed a red paint spot on the blade tip inboard side. The painted section of the blade was removed and sent to the Bell chemical laboratory for analysis. Paint transfer on the blade was analyzed and compared to the paint on a jacket like the one missing from the passenger seat. The analysis revealed that the paints were not chemically similar.										
Examination of tail rotor blade S/N CS 5999 reveled red paint transfer on the inboard and outboard sides of the blade's leading edge 5 inches from the blade tip. Analysis provided evidence that the										

FACTUAL REPORT - AVIATION

National Transportation Safety Board	NTSB ID: DEN00LA124	
FACTUAL REPORT	Occurrence Date: 07/07/2000	
AVIATION	Occurrence Type: Accident	

Narrative (Continued)

paint was not chemically similar to that on the jacket. This blade also exhibited a dent on the outboard side of the blade 4.8 inches from the blade tip. In addition, this blade was bent 8.5 inches from the blade butt.

Neither tail rotor blade exhibited damage consistent with rotation at impact.

The helicopter color was white, yellow, red, maroon, and blue. The tail boom exhibited both main and tail rotor slap marks on the red painted portion of the boom. Paint transfer from the blades was present on the boom.

National Transportation Safety Board	National Transportation Safety Board NTSB ID: DEN00LA124									
FACTUAL REPORT	Occurrence Date: 07/07/2000									
AVIATION	Осси	Irrence Type								
Landing Facility/Approach Information										
Airport Name		Airport ID:	Airport Elevation	Run	way Used	Runwa	ay Length	n Rui	nway Width	
			Ft. MSL				, ,			
Runway Surface Type:										
Runway Surface Condition:										
Approach/Arrival Flown: NONE										
VFR Approach/Landing: Forced Landing; Precautio	nary L	anding								
Aircraft Information										
Aircraft Manufacturer Bell			/Series -3 /206L-3				Serial N 51017	Number		
Airworthiness Certificate(s): Normal										
Landing Gear Type: High Skid										
Amateur Built Acft? No Number of Seats: 7 Certified Max Gross Wt. 4150 LBS Number of Engines: 1										
Engine Type:Engine Manufacturer:Model/Series:Rated ITurbo ShaftAllison250 C30P650 H								ted Power: 50 HP		
- Aircraft Inspection Information										
Type of Last Inspection	Date of Las	nce Last Inspe			Airframe T	otal Time				
100 Hour 05/2000 72 Hours 10							0509 Hours			
- Emergency Locator Transmitter (ELT) Information										
ELT Installed?/Type Yes / ELT Operated? Yes ELT Aided in Locating Accident Site? No										
Owner/Operator Information										
Registered Aircraft Owner		Street A	Address 12515 WILLC	WS RE	NE STE 20	0				
PAPILLON AIRWAYS, INC.		City						State	Zip Code	
		Street A	KIRKLAND					WA	98034	
Operator of Aircraft			12515 WILLC	WS RE	NE STE 20	0				
PAPILLON AIRWAYS, INC.								State WA	Zip Code 98034	
Operator Does Business As: PAPILLON GRAND C	ANYO	N HELOS		0	perator Desigr	nator Co	ode: GCI	HA		
- Type of U.S. Certificate(s) Held:										
Air Carrier Operating Certificate(s): On-demand Air	Гахі									
Operating Certificate: Aircraft External Load										
Regulation Flight Conducted Under: Part 91: General Aviation										
Type of Flight Operation Conducted: Unknown										
FACTUAL REPORT - AVIATION Page 2									Page 2	

				1				1				
Encourage Date: Ort/R012000 First Hormation Courage Type: Accident Rane On File On File On File Age On File On File On File Age Age On File On File On File Age Age Sex: M Seat Occupied: Right Occupational Plot? Civilian Plot Certificate Sex: M Seat Occupied: Right Occupational Plot? Certificate Certific	National Transportation Safety Board NTSB ID: DEN00LA124											
Occurrence Type: Accident State Plot Information Name City On File State On File Age On File On File On File On File 41 Sex: M Set Occupied: Righ Occupational Plot? City Internet Support State On File 41 Contracted Right Occupational Plot? City Internet Support State On File 41 Applane Rain(s): Single=ngine Land Single	0	7		Occurren	ce Date: 0	7/07/2000						
First Pilot Information Name On File State On File State On File Age On File On File On File On File On File On File Age Ser: M Seat Occupied: Right Occupational Pilor? Circlian Pilor Certificate Ceritate Certificate <td< td=""><td>乙酸酸乙酸</td><td>1 2</td><td></td><td></td><td></td><td></td><td></td><td>-</td><td></td><td></td><td></td><td></td></td<>	乙酸酸乙酸	1 2						-				
Name City State Date of Birth Age On File On File On File On File On File On File All Sex: M Seat Occupied: Right Occupational Pilot? Civilian Pilot Certificate Number: Certificate(s): Commercial; Private Commercial; Private Certificate Number: Certificate Number: Arglane Rating(s): Single-engine Land Rational Pilot? Civilian Pilot Certificate Number: Current Blennial Flight Raview? Instrument Rating(a): Helicopter Instrument Rating(a): None Current Blennial Flight Raview? Instrument Rating(a): Medical Cert. Status: Valid Medicalno waivers/lim. Date of Lest Medical Exam: 04/2000 - Flight Time Matrix Instrument Matrix	ETYBO	Agent		Occurren	ce Type: A	ccident						
On File On File On File On File 41 Sex: M Set Occupied: Right Occupational Pilot' Ovilian Pilot Centricate Number: Centricate Number: Centricate(s): Commercial; Private Centricate Number: Centricate Number: Centricate Number: Arplane Rating(s): Single-engine Land Centricate Number: Centricate Number: Centricate Number: Instrument Rating(s): Helicopter Instrument Rating(s): None Date of Last Medical Exam: 04/2000 Current Biennial Flight Review? Medical Cent: Status: Valid Medical-no waivers/Im. Date of Last Medical Exam: 04/2000 Centricate Number: Flight Time Matrix 4/A Wedical Cent: Status: Valid Medical-no waivers/Im. Date of Last Medical Exam: 04/2000 Current Biennial Flight Review? Medical Cent: Status: Valid Medical-no waivers/Im. Date of Last Medical Exam: 04/2000 Current Status 1/A 1/A 1/A Tast Time 8300 6000 2/6 700 6/0 4/0 7/A Tast Time Matrix 4/A 1/A 1/A 1/A 1/A 1/A Tast Time Matrix 4/A 1/A 1/A 1/A 1/A Tast Time Matrix 4/A 1/A 1/A 1/A 1/A T	First Pilot Information											
Sear Occupied: Right Occupiedical Pilor? Curtificate / Events Certificate (s): Commercial; Private Certificate / Events Cerificate / Events Certificate / Even	Name City									ate	Date of Birth	Age
Certificate(a): Commercial, Private Airplane Rating(a): Single-engine Land Rotorrad/Rolide/I.TA: Helicopter Instructor Rating(a): Helicopter Instructor Rating(a): None Current Biennial Flight Review? Medical Cert. Status: Valid Medical-no waivers/lim. Date of Last Medical Exam: 04/2000 - Flight Time Matrix Medical Cert. Status: Valid Medical-no waivers/lim. Date of Last Medical Exam: 04/2000 - Flight Time Matrix Medical Cert. Status: Valid Medical-no waivers/lim. Date of Last Medical Exam: 04/2000 - Flight Time Matrix Medical Cert. Status: Valid Medical-no waivers/lim. Date of Last Medical Exam: 04/2000 - Flight Medical Exam: 04/2000 8000 500 400 700 - Flight Medical Exam: 500 400 700 50 400 700 Medical Objes 150 150 - - 150 - - - - - - - - - - - - - - - -	On File					On File			Or	n File		41
Certificate(a): Commercial, Private Airplane Rating(a): Single-engine Land Rotorrad/Rolide/I.TA: Helicopter Instructor Rating(a): Helicopter Instructor Rating(a): None Current Biennial Flight Review? Medical Cert. Status: Valid Medical-no waivers/lim. Date of Last Medical Exam: 04/2000 - Flight Time Matrix Medical Cert. Status: Valid Medical-no waivers/lim. Date of Last Medical Exam: 04/2000 - Flight Time Matrix Medical Cert. Status: Valid Medical-no waivers/lim. Date of Last Medical Exam: 04/2000 - Flight Time Matrix Medical Cert. Status: Valid Medical-no waivers/lim. Date of Last Medical Exam: 04/2000 - Flight Medical Exam: 04/2000 8000 500 400 700 - Flight Medical Exam: 500 400 700 50 400 700 Medical Objes 150 150 - - 150 - - - - - - - - - - - - - - - -	Sex: M Seat Occupied	· Right	00	cupational Pi	lot? Civili	n Pilot			Certific:	ate Numh	per:	
Rotorcalf/Glider/LTA: Helicopter Instructor Rating(s): Helicopter Instructor Rating(s): None Current Blannial Flight Review? Medical Cert: Class 2 Medical Cert. Status: Valid Medicalno waivers/lim. Date of Last Medical Exam: 04/2000 - Flight Time Matrix MAC Too Matrix MarEape. Name - Flight Time Matrix MAC Too Matrix MarEape. Name - Flight Time Matrix MAC Too Matrix MarEape. Name - Flight Time Matrix MAC Too Matrix MarEape. Name - Flight Time Matrix MAC Too Matrix MarEape. Name Name - Flight Time Matrix MAC Too Matrix MarEape. Name Name Name - Flight Time Matrix MAC Too Matrix MarEape. Name Name Name Name - Flight Plan Reviewed -												
Rotorcaft/GldenLTA: Helicopter Instrument Rating(s): None Current Biennial Flight Review? Medical Cert: Class 2 Medical Cert. Status: Valid Medical-no waivers/lim. Date of Last Medical Exam: 04/2000 - Flight Time Matrix At AL: Tork Mate Addition - Flight Time Matrix At AL: Tork Mate Addition - Flight Time Matrix At AL: Tork Mate Addition - Flight Time Matrix At AL: Tork Mate Addition - Flight Time Matrix At AL: Tork Mate Addition - Flight Time Matrix At AL: Tork Mate Addition - Flight Time Matrix At AL: Tork Mate Addition - Flight Time Matrix At AL: Tork Mate Addition - Flight Time Matrix At AL: Tork Mate Addition - Flight Plan Flide 6000 25 - </td <td colspan="10">Airplane Rating(s): Single-engine Land</td>	Airplane Rating(s): Single-engine Land											
Instrument Rating(s): Helicopter Current Biennial Flight Review? Medical Cert.: Class Q Medical Cert.: Class Q - Flight Time 8300 6000 400 800 50 400 8000 - - Flight Time 8300 6000 400 800 50 400 8000 - <td< td=""><td></td><td>-</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td<>		-										
Instructor Rating(s): None Current Biennial Flight Review? Medical Cert.: Class 2 Medical Cert. Status: Valid Medicalno waivers/lim. Date of Last Medical Exam: 04/2000 - Flight Time Matrix MAX Townsee Nore Townsee Review Nore - Flight Time Matrix MAX Townsee Nore Review Nore Review												
Medical Cert. Class 2 Medical Cert. Status: Valid Medicalno waivers/lim. Date of Last Medical Exam: 04/2000 - Flight Time Matrix MAC Tris Mais Arpine Mage Arpine Mage Rescart Glade Lorge Total Time 8300 6000 400 800 50 400 8000 - Total Time 8300 6000 400 800 50 4000 7500 - Instructor 7500 600 25 700 50 400 7500 - Instructor 750 700 50 400 750 - - Last 80 Days 50 50 2 2 2 150 - - - 160 - - - 160 - - - 2												
- Flight Time Matrix MIAC The Matrix All AC All prove Matrix All prove Matrix Resource All Prove Matrix Re	Current Biennial Flight Review?											
- Fight Time Matrix min.c ward Mode Mark Engine Mays Actual Binutaned Potorem Other Time Ar Total Time 8300 6000 400 800 50 400 8000 750 400 7500 6000 25 700 50 400 7500 6000 25 700 50 400 7500 6000 25 700 50 400 7500 6000 25 700 50 400 7500 6000 25 700 50 400 7500 100	Medical Cert.: Class 2	Medica	al Cert. Statu	s: Valid Me	dicalno v	vaivers/lim.		Date o	f Last N	/ledical E	xam: 04/2000)
- Fight Time Matrix min.c ward Mode Mark Engine Mays Actual Binutaned Potorem Other Time Ar Total Time 8300 6000 400 800 50 400 8000 750 400 7500 6000 25 700 50 400 7500 6000 25 700 50 400 7500 6000 25 700 50 400 7500 6000 25 700 50 400 7500 6000 25 700 50 400 7500 100		1										
Pilot In Command(PIIC) 7500 6000 25 700 50 400 7500 Instructor Instructor Instruction Received Image: Constraint of the second of the se	- Flight Time Matrix	All A/C				Night				Rotorcraft	Glider	-
Instructor Image: Construction Received Image: Construction Received Receiv	Total Time	8300	6000	400		800		50 400		800	00	
Instruction Received Image: Construction Received Recei	Pilot In Command(PIC)	7500	6000	25		700		50	400	750	00	
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Last 30 Days 50	Instruction Received											
Last 24 Hours 8 9 <	Last 90 Days											
Seatbelt Used? Yes Shoulder Harness Used? Yes Toxicology Performed? No Second Pilot? No Flight Plan/Itinerary Type of Flight Plan Filed: None Image: State of Flight Plan Filed: None Departure Point Departure Point Departure Time of Time Zone Same as Accident/Incident Location State of LGU Airport Identifier Departure Time of MDT Destination State Airport Identifier MDT Local Flight State Airport Identifier Image: State of Clearance: None Type of Clearance: None Type of Airspace: Class G Veather Information Source of Wx Information: No record of briefing	Last 30 Days									Ę	50	
Flight Plan/Itinerary Type of Flight Plan Filed: None Departure Point Same as Accident/Incident Location Destination Local Flight Type of Clearance: None Type of Airspace: Class G Weather Information: Source of Wx Information: No record of briefing	Last 24 Hours	8	8								8	
Type of Flight Plan Filed: None Departure Point State Airport Identifier Departure Time Time Zone Same as Accident/Incident Location State Airport Identifier MDT Destination State Airport Identifier MDT Local Flight State Airport Identifier Vertice Type of Clearance: None Type of Airspace: Class G Vertice Vertice Weather Information Source of Wx Information: No record of briefing Vertice Vertice	Seatbelt Used? Yes Shoulder Harness Used? Yes Toxicology Performed? No Second Pilot? No									0		
Departure Point State Airport Identifier Departure Time Time Zone Same as Accident/Incident Location LGU 1440 MDT Destination State Airport Identifier 1440 MDT Local Flight State Airport Identifier Image: Class G Image: Class G Type of Airspace: Class G Email Class G Image: Class G Image: Class G Weather Information Source of Wx Information: Image: Class G Image: Class G Image: Class G No record of briefing Image: Class G Image: Class G Image: Class G Image: Class G	Flight Plan/Itinerary											
Same as Accident/Incident Location LGU 1440 MDT Destination State Airport Identifier Image: Class G Type of Clearance: None Veather Information Veather Information: Source of Wx Information: No record of briefing Image: Vertical State Image: Vertical State	Type of Flight Plan Filed: No	one										
Same as Accident/Incident Location ILGU 1440 MDT Destination State Airport Identifier Image: Clearance: None Type of Clearance: None Type of Airspace: Class G Image: Class G Image: Class G Weather Information Source of Wx Information: Image: Class G Image: Class G Image: Class G No record of briefing Image: Class G Image: Class G Image: Class G Image: Class G	Departure Point					State	e A	virport Iden	tifier	Depa	rture Time	Time Zone
Local Flight Type of Clearance: None Type of Airspace: Class G Weather Information Source of Wx Information: No record of briefing	Same as Accident/Incide	nt Location										MDT
Local Flight Type of Clearance: None Type of Airspace: Class G Weather Information Source of Wx Information: No record of briefing	Destination					State	e A	Airport Iden	tifier			•
Type of Airspace: Class G Weather Information Source of Wx Information: No record of briefing												
Weather Information Source of Wx Information: No record of briefing	Type of Clearance: None											
Source of Wx Information: No record of briefing	Type of Airspace: Class	G										
No record of briefing	Weather Information											
	Source of Wx Information:											
FACTUAL REPORT - AVIATION Page 3	No rec	ord of briefi	ng									
				FACTUAL	REPORT	- AVIATIO	N					Page 3

National Transportation Safety Board NTSB ID: DEN00LA124														
	ACTUAL REPOI		Oc	Occurrence Date: 07/07/2000						1				
	AVIATION ETYBO			Occurrence Type: Accident										
Weather	Information				1									
	WOR INFORMATION Time Zone WOF Elevation WOF Distance From Accident Site Direction From Accident Site											Site		
				Lievation			otarioc	1 1011	1710010			Direction		
LGU	1453 MDT 4485 Ft. MSL 6 NM 90 Deg. M										eg. Mag.			
Sky/Lowest Cloud Condition: Clear 0 Ft. AGL Condition of Light: Day														
Lowest Ce	iling: None			0 Ft. AGL		Visibi	ility:		10	SM Altimeter: 29.00 "Hg				
Temperatu	ure: 31 °C	Dew Point:		3°C W	eath	er Condi	tions at	Accio	dent S	site: Visual	Cond	litions		
Wind Direc	ction: 220	Wind Spo	eed: 9	•		Wind	d Gusts:	:						
Visibility (F	RVR): 0 Ft	. Visibility	(RVV)	0 SM	м									
Precip and	l/or Obscuration:	I												
	Information													
Aircraft Da	mage: Substantial		Airc	raft Fire: No	one					Aircraft Exp	olosio	n None		
- Injury Su	mmary Matrix	Fatal	Serious	Minor		None	ΤΟΤΑ	L						
First Pi	ilot				\bot	1		_1						
Second	d Pilot				\perp									
Studen	t Pilot				\bot									
Flight li	nstructor				\bot									
Check	Pilot				\bot									
Flight E	Engineer													
Cabin A	Attendants													
Other C	Crew													
Passer	ngers					1		1						
- TOTAL A	ABOARD -					2		2						
Other C	Ground	0	0	C)			0						
- GRANE	D TOTAL -	0	0	C)	2		2						
			FAC	TUAL RE	POF	۲۲ - AV	IATIO	N	_					Page 4

National Transportation Safety Board	NTSB ID: DEN00LA124	
FACTUAL REPORT	Occurrence Date: 07/07/2000	
AVIATION	Occurrence Type: Accident	
Administrative Information		•
Investigator-In-Charge (IIC)		
NORMAN F. WIEMEYER		
Additional Persons Participating in This Acciden	t/Incident Investigation:	
RICHARD LUND SALT LAKE CITY, UT		