

OA2020-03347 - Occurrence Details

Occurrence

Logged date	4/7/2020			
Status	Approved for release			
Occurrence class	Accident			
Highest injury	Fatal			
Occurrence date	4/7/2020			
Occurrence time	14:26 WST			
Public summary	<p>On 4 July 2020, a Robinson Helicopter Company R44 Raven I helicopter, registered VH-NBY and operated on a private flight, departed an industrial property 3 km north of Broome Airport, Western Australia on a local flight. On board were the pilot and 3 passengers.</p> <p>The pilot made a vertical departure to climb clear of obstacles before transitioning forwards. At that time witnesses heard a loud bang, and the empennage and tail rotor system of the helicopter broke away. The helicopter initially continued to climb and rotated to the right with increasing angular velocity.</p> <p>Control of the helicopter was then lost, and it collided with terrain on its right side in a nose low attitude. The pilot and a passenger seated on the right side of the helicopter were fatally injured and the 2 passengers on the left side were seriously injured. The helicopter was destroyed.</p>			
Property damage	No			
Property damage details				
Worst accident outcome	Major accident			
Defence effectiveness	Not effective			
Risk rating	High (500)			
ERC justification				
TSI reportable	Immediately reportable			
Ground injuries	Fatal	Serious	Minor	Total
	0	0	0	0

Location

Location	2.8 km 24 degrees from Broome Aerodrome
Latitude	-17.92670350
Longitude	122.23859294
State	WA
Country	Australia

Aircraft

Registration	VH-NBY
Type	Helicopter
Manufacturer	ROBINSON HELICOPTER CO
Model	R44
Engine type	Piston
Engine manufacturer	LYCOMING
Engine model	O-540-F1B5
Number of engines	1
Landing gear type	Skid
Fuel type	Gasoline
Year of manufacture	2018
Amateur built	
Maximum takeoff weight (kg)	1089
ELT Type	
ELT Fitted	No
ELT Activated	Unknown

Airspace

Controlling agency	Aust Civil
ATS service type	Procedural
ATS position	Tower
Airspace class	D
Airspace type	CTR

Operation

Registration	VH-NBY
Operator	AVANOVA PTY LTD
Flight number	
Related runway	
Phase of flight	Initial Climb
PIC status	Owner
Pilot flying role	Pilot in command
Departure aerodrome	
Destination aerodrome	
Actual landing	

Aerodrome proximity	Off aerodrome < 10 km
Operation type	Private
Operation subtype	Pleasure / Travel - (Private)
Activity group	General aviation / Recreational
Activity type	Sport and pleasure flying
Activity subtype	Pleasure and personal transport
Flight rules	VFR
Flight conditions	VMC
Altitude type	AMSL (above mean sea level - ft)
Altitude	Exactly
Exact altitude	75
Other information	

Occurrence category

Registration	VH-NBY
Level 1	Operational Operational
Level 2	Aircraft control Terrain collisions
Level 3	In-flight break-up Collision with terrain

Damage level and injuries

Registration	VH-NBY			
Injury level	Fatal	Serious	Minor	Total
Crew	1			1
Passengers	1	2		3
Aircraft damage level	Destroyed			
Post impact fire	No			
Damage description	Pilot (front right) 12yo (rear right) deceased. 12yo (front left) and adult (rear left) seriously injured. Helicopter destroyed.			

Weather and environment

Cloud cover	Sky clear
Visibility (km)	
Light conditions	Daylight
Wind direction	SE
Average wind speed (kts)	10
Cloud base (ft)	

Visibility reduced by	None
Turbulence conditions	Unknown
Icing conditions	Nil
Precipitation type	Nil
Precipitation intensity	Nil
QNH	
Outside temperature	33
Light and variable (windspeed)	No
Maximum wind speed (gust)	
Dew point	
CAVOK	
Effective cloud ceiling	
Weather phenomena	

Safety factor

Level 1	
Level 2	
Level 3	