OA2008-07150 - Occurrence Details

Occurrence

| Logged date | 6/13/2021 12:53:55 AM |
|-------------------------|---|
| Status | Approved for release |
| Occurrence class | Accident |
| Highest injury | Fatal |
| Occurrence date | 11/19/2008 |
| Occurrence time | 11:50 Cen. Australia Standard Time |
| Public summary | On the morning of 19 November 2008, the pilot of a McDonnell Douglas 369D helicopter, registered VH-PLJ, and two lineworkers were conducting airborne joint-testing operations on an electricity transmission line between Mannum and Mobilong, South Australia. Joint testing involves closely approaching the transmission line to check joints in transmission wires. At about 1150 Central Daylight-saving Time, when about 13 km north of Murray Bridge, the helicopter's main rotor blades contacted a transmission line conductor. The pilot lost control and the helicopter impacted the ground. One lineworker was fatally injured, the other lineworker received minor injuries and the pilot received serious injuries. The helicopter was seriously damaged. The investigation found that the crew was not aware before the flight that there were transpositions (changes in the relative positions of individual wires) in the line and that they did not detect such a transposition during the approach for the joint test that led to the accident. Following the occurrence, the helicopter operator amended the guidance for conducting joint-testing and expanded training and supervision of new crews. The powerline owner reviewed the risk profile of its airborne operations and revised a number of hazard treatment options. The powerline maintenance provider made a number of operational changes and contracted an external auditor to examine its operation. All of the recommendations from that audit were adopted by the maintenance provider. In response to the failure of the recording lineworker's shoulder harness, the shoulder harness repair facility has upgraded relevant repair equipment and provided a replacement program for any incorrectly-stitched harness in the operator's helicopter fleet. In addition, the Civil Aviation Safety Authority took action to have a number of seat belt harnesses recalled and examined. No issues were found with any of the seat belts that were examined and they were able to be rereleased without further rework. |
| 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 |
|-----------------|-------|---------|-------|-------|
| Ground injuries | 0 | 0 | 0 | 0 |

Location

| Location | Murray Bridge (ALA), 030° M 8Km |
|-----------|---------------------------------|
| Latitude | -35.00930000 |
| Longitude | 139.25330000 |
| State | SA |
| Country | Australia |

Aircraft

| Registration | VH-PU |
|-----------------------------|--------------------------------------|
| Туре | Helicopter |
| Manufacturer | MCDONNELL DOUGLAS HELICOPTER COMPANY |
| Model | 369D |
| Engine type | Turboshaft |
| Engine manufacturer | ALLISON GAS TURBINES |
| Engine model | 250-C20B |
| Number of engines | 1 |
| Landing gear type | Skid |
| Fuel type | Kerosene |
| Year of manufacture | 1979 |
| Amateur built | |
| Maximum takeoff weight (kg) | 1360 |
| ELT Type | |
| ELT Fitted | Unknown |
| ELT Activated | No |

Airspace

| Controlling agency | Other |
|--------------------|-------|
| ATS service type | Other |
| ATS position | Other |
| Airspace class | G |
| Airspace type | OCTA |

Operation

| Registration | VH-PLJ Section 47E(d) |
|-----------------------|---------------------------------------|
| Flight number | |
| Related runway | |
| Phase of flight | Manoeuvering/airwork |
| PIC status | Employee |
| Pilot flying role | Pilot in command |
| Departure aerodrome | Mannum sub-station, SA |
| Destination aerodrome | Mobilong sub-station, SA |
| Actual landing | 4.5 NM NNE Murray Bridge SA |
| Aerodrome proximity | Off aerodrome < 10 km |
| Operation type | Aerial Work |
| Operation subtype | Survey / Photographic - (Aerial Work) |
| Activity group | General aviation / Recreational |
| Activity type | Aerial work |
| Activity subtype | Pipeline / powerline surveying |
| Flight rules | VFR |
| Flight conditions | VMC |
| Altitude type | AGL (above ground level - ft) |
| Altitude | Exactly |

Occurrence category

Exact altitude
Other information

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| Registration | VH-PU |
|--------------|--|
| Level 1 | Operational Operational |
| Level 2 | Terrain collisions Terrain collisions |
| Level 3 | Wirestrike Collision with terrain |

Damage level and injuries

| Registration | VH-PLJ |
|--------------|--------|

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| Injury level | Fatal | Serious | Minor | Total |
|-----------------------|-------------|---------|-------|-------|
| Crew | 1 | 1 | 1 | 3 |
| Passengers | | | | |
| Aircraft damage level | Substantial | | | |
| Post impact fire | No | | | |
| Damage description | | | | |

Weather and environment

| Cloud cover | Broken (5-7 OKTAS) |
|--------------------------------|--------------------|
| Visibility (km) | 10 |
| Light conditions | Daylight |
| Wind direction | 270 |
| Average wind speed (kts) | 5 |
| Cloud base (ft) | 5000 |
| Visibility reduced by | None |
| Turbulence conditions | Nil |
| lcing conditions | Nil |
| Precipitation type | Nil |
| Precipitation intensity | Nil |
| QNH | |
| Outside temperature | |
| 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 | |

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