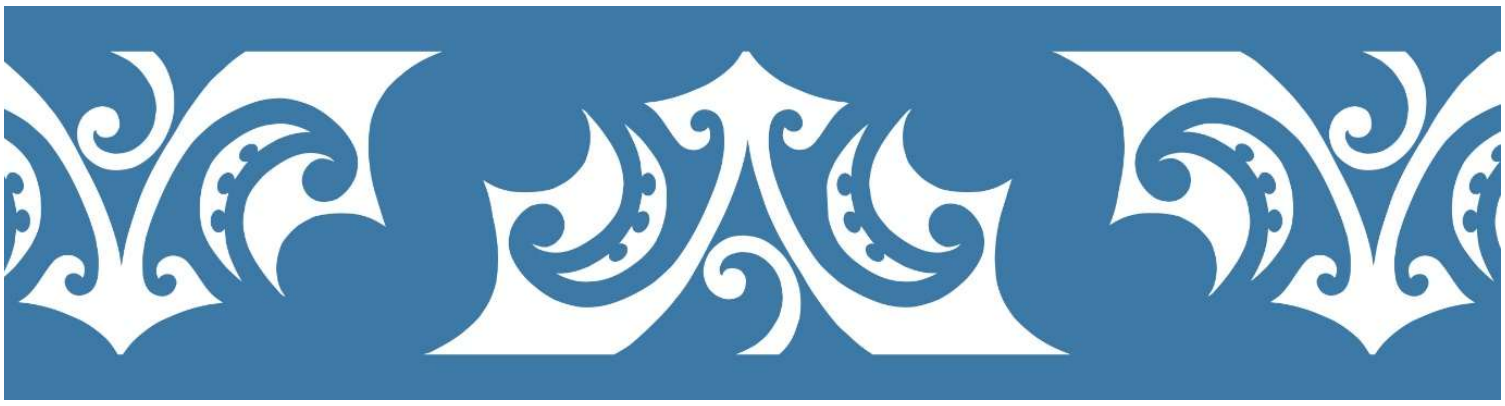
Transport Accident Investigation Commission

Final interim report

Rīpoata Whakamutunga Mō Nāianei

Aviation inquiry AO-2024-007
Airbus A320neo, ZK-NHA
Uncommanded engine shutdown
Wellington–Sydney enroute
1 December 2024

November 2025



The Transport Accident Investigation Commission
Te Kōmihana Tirotiro Aituā Waka

No repeat accidents – ever!

'The principal purpose of the Commission shall be to determine the circumstances and causes of accidents and incidents with a view to avoiding similar occurrences in the future, rather than to ascribe blame to any person.'

Transport Accident Investigation Commission Act 1990, s4 Purpose

The Transport Accident Investigation Commission is an independent Crown entity and standing commission of inquiry. We investigate selected maritime, aviation and rail accidents and incidents that occur in New Zealand or involve New Zealand-registered aircraft or vessels.

Our investigations are for the purpose of avoiding similar accidents and incidents in the future. We determine and analyse contributing factors, explain circumstances and causes, identify safety issues, and make recommendations to improve safety. Our findings cannot be used to pursue criminal, civil, or regulatory action.

At the end of every inquiry, we share all relevant knowledge in a final report. We use our information and insight to influence others in the transport sector to improve safety, nationally and internationally.

Commissioners

Chief Commissioner	David Clarke
Deputy Chief Commissioner	Stephen Davies Howard
Commissioner	Paula Rose, QSO
Commissioner	Bernadette Roka Arapere (until 6 November 2025)

Key Commission personnel

Chief Executive	Martin Sawyers
Chief Investigator of Accidents	Louise Cook
Investigator-in-Charge for this inquiry	James Burtenshaw
Lead investigators	Graham Thomas and Jeffrey Shearer
Acting Commission General Counsel	Polly Leeming

Notes about Commission reports
Kōrero tāpiri ki ngā pūrongo o te Kōmihana

Nature of this interim report

The Commission issues interim reports in the initial stages of an investigation. The interim report presents the facts and circumstances established up to this point in the Commission's inquiry.

The Commission may issue an interim report in line with international guidance where inquiries are complex and ongoing.

Final report

Upon the completion of the full investigation, the Commission will issue a final report on the incident after it completes its inquiry. That report will contain an analysis of the facts of the incident, findings and recommendations. The information contained in the Commission's final report may differ from the information contained in this interim report.

Photographs, diagrams, pictures

The Commission owns the photographs, diagrams and pictures in this report unless otherwise specified.

Verbal probability expressions

For clarity, the Commission uses standardised terminology where possible.

One example of this standardisation is the terminology used to describe the degree of probability (or likelihood) that an event happened, or a condition existed in support of a hypothesis. The Commission has adopted this terminology from the Intergovernmental Panel on Climate Change and Australian Transport Safety Bureau models. The Commission chose these models because of their simplicity, usability, and international use. The Commission considers these models reflect its functions. These functions include making findings and issuing recommendations based on a wide range of evidence, whether or not that evidence would be admissible in a court of law.

Terminology	Likelihood	Equivalent terms
Virtually certain	> 99% probability of occurrence	Almost certain
Very likely	> 90% probability	Highly likely, very probable
Likely	> 66% probability	Probable
About as likely as not	33% to 66% probability	More or less likely
Unlikely	< 33% probability	Improbable
Very unlikely	< 10% probability	Highly unlikely
Exceptionally unlikely	< 1% probability	

Figure 1: Airbus A320, *ZK-NHA*
(Credit: Tim Gorman)

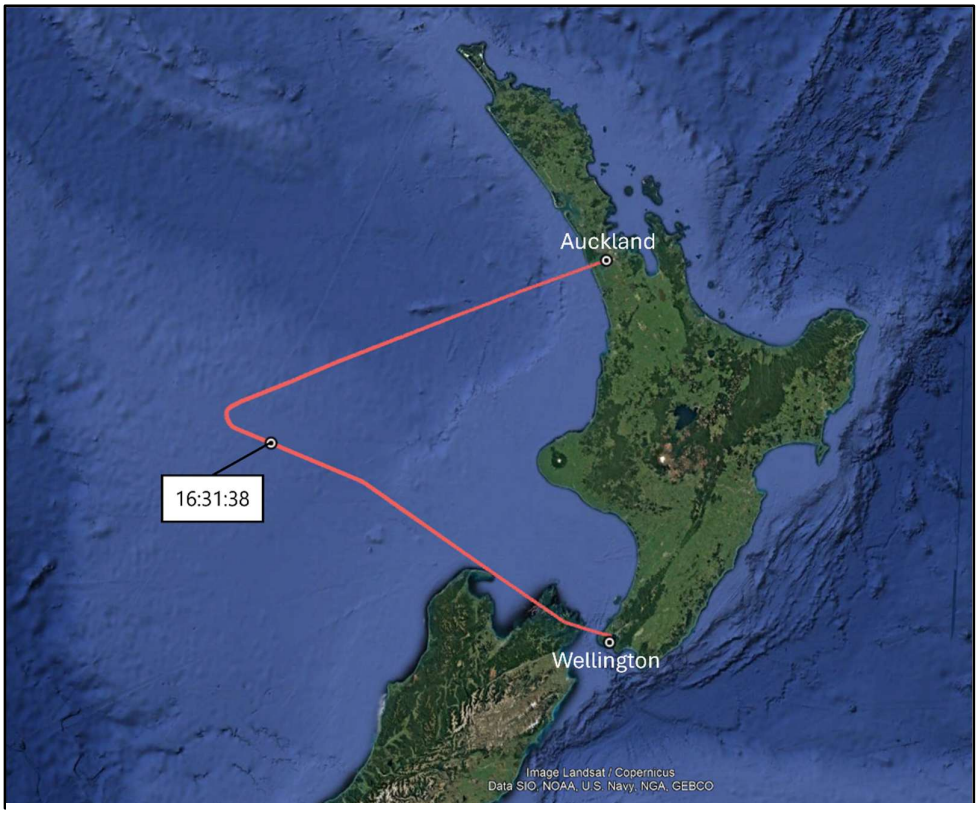


Figure 2: Location of incident
(Credit: Google Earth Pro)

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1 Factual information
Pārongo pono

Narrative

1.1. At 1551[1] on Sunday 1 December 2024, *ZK-NHA*, an Airbus A320-271N neo aeroplane (the aeroplane) operated by Air New Zealand (the operator) as flight NZ249, departed Wellington on a scheduled flight to Sydney. On board were 142 passengers and 6 crew, consisting of 2 pilots and 4 cabin crew. The captain was the pilot flying[2] and the first officer was performing the duties of pilot monitoring.[3]

1.2. The initial stages of the flight were uneventful. During the climb out of Wellington the cabin crew contacted the flight crew and offered to serve the flight crew their lunch. Before starting their lunch, the captain outlined the contingency plan to cover potential non-normal events.[4]

1.3. The aeroplane was established in the cruise at 36,000 feet (ft) for approximately 15 minutes when, at 1631, a master caution[5] audible tone and warning light were triggered. The captain noted that the number two engine indications on the engine instrument display showed that the engine was rolling back.[6] In interview, the first officer recalled that their first indication that something was wrong was loud clicking noises from the panel behind their seat, which they considered could be indicative of a system power change.

1.4. The flight crew carried out the engine shutdown checklist for the number two engine as prompted by the Electronic Centralized Aircraft Monitor (ECAM). The captain initiated the driftdown procedure[7] while they both discussed, then actioned, a diversion to Auckland and declared a mayday. The flight crew completed several checklists then spoke to the cabin crew and passengers and informed them of the diversion to Auckland.

1.5. The aeroplane landed safely at Auckland with no injuries to passengers or crew and no damage to the aeroplane.

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[1] Times are in New Zealand Daylight Time (coordinated universal time (UTC) +13 hours) and expressed in 24-hour format.

[2] The pilot responsible for controlling the aeroplane

[3] The pilot responsible for monitoring the flight management and aeroplane control actions of the pilot flying, and for carrying out support duties such as radio communications and checklist reading

[4] Standard operating procedure is that, on reaching top of climb and before the extended time over water portion of the flight, the flight crew discuss how they would deal with an abnormal situation such as engine failure or depressurisation and where they would divert to.

[5] Master caution forms part of the Electronic Centralized Aircraft Monitor (ECAM), which is a system on Airbus aircraft for monitoring and displaying engine and aircraft system information to the pilots and generates an illuminated indicator and audible warning when an aircraft system malfunctions. It will display the fault and may also display a checklist of the appropriate remedial steps.

[6] Reducing thrust uncommanded

[7] When the aeroplane is unable to maintain its current cruise level following an engine failure, the flight crew initiate descent to the cruise altitude that the aeroplane can maintain with only one engine operating.

1.6. The flight was met in Auckland by the duty management pilot, a union support pilot and an engineer. The people entering the flight deck noticed that the fire push button switch (PB-SW)[8] for the number two engine on the overhead fire panel was in the activated position and pointed this out to the flight crew. Neither pilot recalled activating the fire switch and none of the checklists used by the crew required activation of this fire switch.

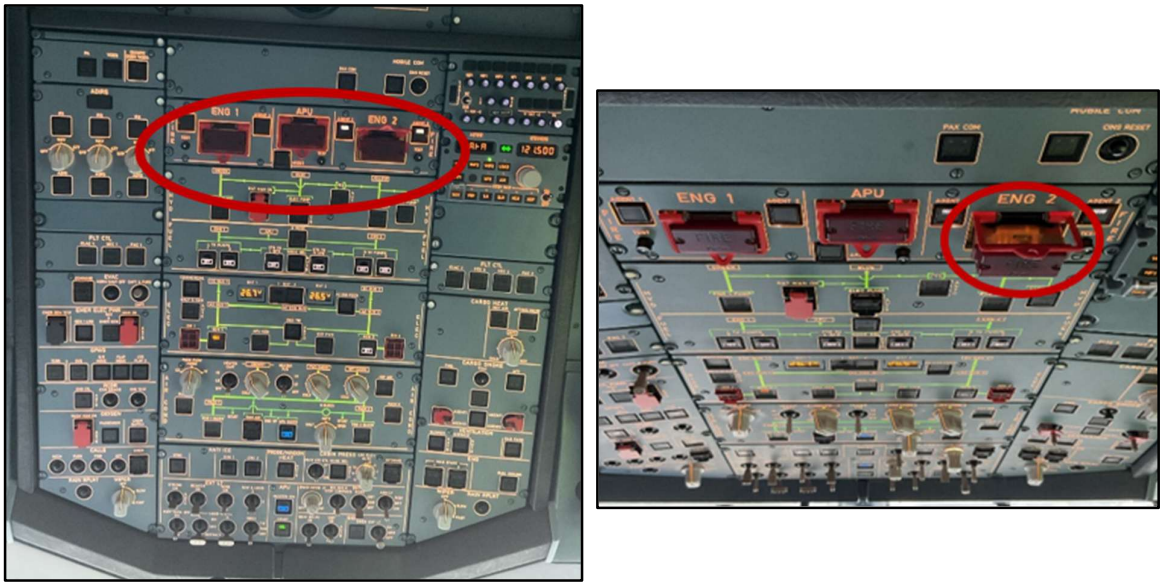

Figure 3: Overhead panel of *ZK-NHA* after shutdown, showing the activated fire switch for number two engine

Aircraft information

1.7. The aeroplane is an Airbus A320-271N neo[9] aeroplane with a manufacturer's serial number (MSN) 8715 and registration *ZK-NHA*. The aeroplane is fitted with two Pratt and Whitney PW1127GA-JM engines. It has a maximum take-off weight of 79,000 kilograms (kg) and entered service with the operator in February 2019.

Fire switch

1.8. The fire panel is located at the rear of the overhead panel on the flight deck, behind the flight crew's heads (*see* Figure 3). The panel is comprised of three fire switches: one for each engine and one for the auxiliary power unit (APU).[10] The fire panel also has buttons to action the fire-extinguisher squibs[11] and fire-system test buttons (*see* Figure 4).

[8] Referred to as the fire switch in this report

[9] New engine option (neo), designating an enhanced variant of the previous versions of the A320 aeroplane

[10] The APU is a small jet engine, normally located in the tail cone of the aeroplane, that provides power and air on the ground, used to start the engines. In some aeroplanes, particularly those used for extended-range operations such as the incident aircraft, the APU can also be used in flight as an additional power source.

[11] Small electrically fired devices used to activate the aircraft's fire-suppression system

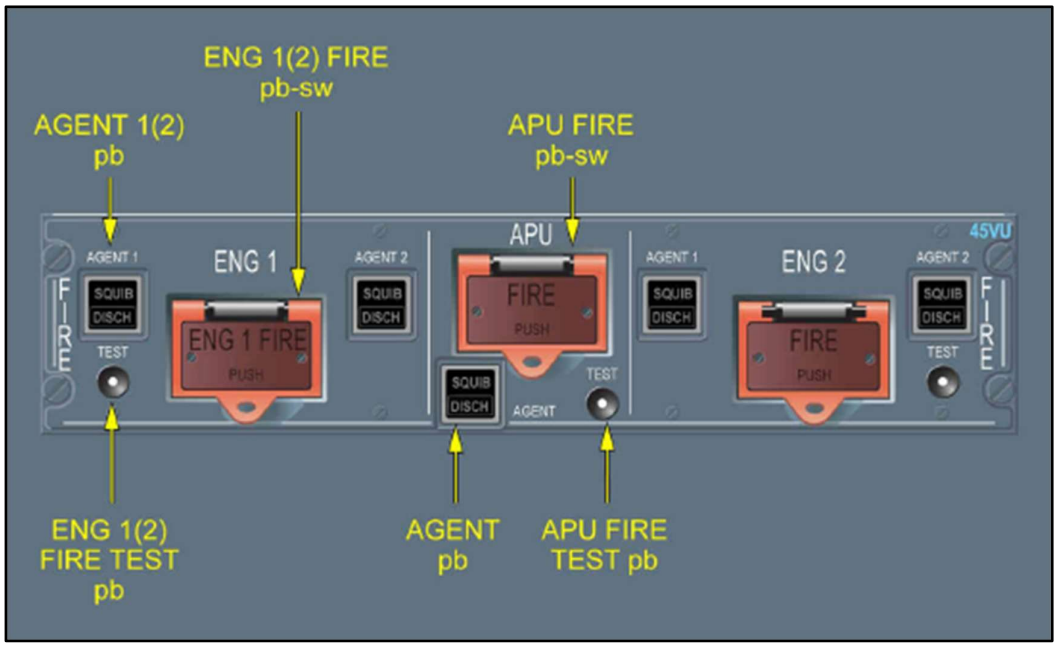

Figure 4: A320 fire panel

1.9. The normal fire switch position is in and guarded. The fire switch is only pushed when instructed by a checklist or during routine maintenance procedures on the ground. To activate the fire switch, the red switch guard around the fire switch is held up, and the fire switch is pushed in. After pushing the fire switch in, it then extends outwards from the panel and in its final activated position is protruding from the panel. The red light in the fire switch only comes on when a fire has been detected regardless of the fire switch position.

1.10. When either engine's fire switch is pushed, the fire switch is released and sends an electrical signal that performs the following for the corresponding engine:[12]

- silences the aural fire warning (if active)
- arms the fire-extinguisher squibs
- closes the low-pressure fuel valve
- closes the hydraulic fire shut-off valve
- closes the engine bleed valve
- closes the pack flow control valve
- cuts off the Full Authority Digital Engine Control System (FADEC)[13] power supply
- deactivates the Integrated Drive Generator (IDG).

1.11. Versions of this fire panel were installed on all the A320 family fleet since the aeroplane's entry into service. The same fire switch is fitted to the A330, A340, A350 and A380 aeroplanes.[14] Airbus, the aeroplane's manufacturer, states the A320 family

[12] Extract from Air New Zealand manual *ANZ A320/A321 Flight Crew Operations Manual (FCOM).* DSC-26-20-20P 1/6

[13] Controls all aspects of aircraft engine performance

[14] A330 and A340 aeroplanes do not have a separate fire-panel unit; the fire switch is installed directly in the cockpit panel.

are the most popular single-aisle aeroplane family with 11,524 delivered and 7,128 in backlog of orders (Airbus, 2024, July).

Flight recorders

1.12. The aeroplane was fitted with a cockpit voice recorder (CVR) and a flight data recorder (FDR). The CVR and FDR were removed from the aeroplane under Commission supervision and taken to the Australian Transport Safety Bureau's (ATSB's) recorder facility in Canberra for downloading and verification. A Commission investigator was present for the downloads. The downloaded data was confirmed as being of good quality.

Previous incidents of uncommanded fire switch activation

1.13. The Commission was made aware of an investigation report into an Airbus A321 incident by the Portuguese safety body Gabinete de Prevencao e Investigacao de Acidentes com Aeronaves e de Acidentes Ferroviarios (GPIAAF, 2024) published on 18 December 2024. The incident occurred in October 2023 when an A321, flying from Milan (Italy) to Lisbon (Portugal), experienced an engine shutdown and diverted to Barcelona (Spain). After parking the aeroplane, the flight crew noticed that the fire switch for the number two engine had disengaged (popped-out).

1.14. The report noted that:

> … due to the absence of a fire condition in the engine, the fire handle did not appear illuminated to the crew when it became released from its normal operating position (GPIAAF, 2024, p5).

Additionally:

> the standard operating procedures defined by Airbus and followed by the operator do not require the condition of the fire panel to be checked following an uncommanded in-flight engine shutdown (GPIAAF, 2024, p6).

1.15. The report also identified that Airbus was aware of three previous events involving uncommanded fire switch activation.

1.16. The Commission contacted the French safety body Bureau d'Enquêtes et d'Analyses (BEA) to obtain details of the three previous incidents. They confirmed that two events occurred in 2016 and one in 2021. The common factor in these events, which aligned with the incident investigated in the Portuguese report, was that when the fire panel was subsequently examined it was noted that there was damage to the fire panel unit and the pin locking system within one of the fire switches.

1.17. The GPIAAF report detailed examination of the fire panel and fire switches for their investigation, carried out in Paris (France) by Safran Electronics & Defense (Safran ED), the original equipment manufacturer (OEM) of the fire panel. Safran ED's report concluded 'The fire panel has been damaged by mishandling, causing external and internal damage, and resulting of randomness disengagement of the pushbutton (PB-SW)'.[15] They observed that 'the damage to the unit resulted in bending of the PB-SW retaining pin' and therefore reducing 'the retention security of the switch in the latched position' (GPIAAF, 2024, p8).

[15] Safran ED report *SA-SUP-2023-CR-433* cited in GPIAAF, 2024, p7.

Actions taken by panel manufacturer

1.18. Safran ED issued a Vendor Service Information Letter (SIL)[16] dated 31 May 2024. This SIL covered part numbers (PNs) for three variants of the fire panel[17] fitted to A320 aeroplanes and provided the following details:

> 1. Purpose
>
> Safran Electronics & Defense informs operators about the risk of fire pushbutton spurious disengagement due to mishandling of the fire panel during the installation or removal from aircraft or logistic operation.
>
> 2. Background
>
> Two fire panels involved in spurious disengagement have been investigated. The two fire panels showed mechanical damages on the front face. The most probable root cause of the disengagement was linked to the bending of the locking pin.
>
> 3. Description
>
> Safran Electronics & Defense has confirmed by testing, a fall on ground of fire panel is sufficient to induce the bending of the locking pin on the pushbutton.
>
> The most probable circumstances of shock on the fire panel are the handling of the unit when it is not installed on the aircraft, and during its shipping.
>
> 4. Action
>
> In case of shock traces identified on a fire panel, Safran Electronics & Defense recommends to replace the damaged parts and to preventively replace the pushbuttons Stop Fire and the push buttons.

1.19. Safran ED issued two vendor Service Bulletins (SBs)[18], one dated 24 September 2024 and the other dated 22 October 2024, that collectively identified 108 fire panels that Safran ED recommended should be removed from aeroplanes and sent to an approved facility for inspection for external damage. Specific tooling is required and Safran ED, or its affiliates, had the capability to carry out the actions required in the SBs. Safran ED advised the Commission that Safran ED could supply the specific tools to other repair shops if they need that capability.

1.20. An SB is the document used by both the manufacturers of aircraft and the manufacturers of their engines or their components to communicate details of modifications or inspections that the manufacturer suggests to maintain the aircraft's airworthiness. A component manufacturer's SB is called a vendor SB. If a National Aviation Authority assesses that an SB is a matter of safety, they may issue an airworthiness directive (AD), which mandates inspection or repair. In this case, Safran ED issued vendor SBs categorised as 'Recommended'[19] and copied them to Airbus.

1.21. The SIL and vendor SBs were issued by Safran ED to Airbus and made available on the Safran ED portal to all operators. While the documents were accessible on the portal, individual operators were not aware of the availability of these documents.

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[16] Safran ED. (2024, 03 December).SIL 303-26-001.

[17] PNs 330TS08Y, 335TS08Y00 and 335TS08Y01

[18] Safran ED. (2024). Vendor SB 330TS08Y-26-001 covers PN 330TS08Y; SB 335TS08Y-26-006 covers PNs 335TS08Y00 and 335TS08Y01.

[19] Safran ED defines 'Recommended' as 'Service Bulletin recommended to be accomplished to prevent significant operational disruption', (Safran ED. (2024, 22 October). Vendor SB 335TS08Y-26-006, Section E, Safran compliance table, p3).

1.22. This incident on the Air New Zealand aeroplane occurred on 1 December 2024. The serial number of the fire panel installed on the aeroplane was on the list of panels identified in the vendor SB. The Commission became aware of the Safran ED vendor SB and passed to the operator. The operator identified two other panels listed in the vendor SBs that were installed in their aeroplanes and advised the Commission that they were removed on 10 and 20 December 2024.

1.23. On 18 December 2024, Airbus issued an Operator's Information Transmission (OIT) referring to the two Safran ED vendor SBs[20], encouraging operators and maintenance and repair organisations (MROs) to download and review the SBs and to retrieve and return the identified fire panel units to Safran ED for inspection. The OIT was categorised as 'Advice',[21] and this was the first formal notification from Airbus to operators that an issue existed with the fire panels.

1.24. BEA advised the Commission of a further incident of an uncommanded fire switch activation that occurred in October 2024. The Commission noted from a subsequent Airbus document that the fire panel involved had indications of damage on the housing panel and a bent locking pin. The serial number for this fire panel was not one of the fire panels identified in the two Safran ED vendor SBs. This incident is referred to as FP event 6 in Figure 5.

Fire panel history

1.25. The fire panel installed on the Air New Zealand aeroplane was manufactured in 2015 and installed on another A320 aeroplane delivered to the operator that year. The fire panel was removed from that aeroplane in 2018 to replace an unrelated unserviceable light within the fire panel. The fire panel was sent to the Zodiac Aero Electric[22] repair shop based in Niort (France) for repair and then returned to the operator where it remained in stores. It was installed in the aeroplane in 2020 and operated with no reported defects until this incident. This fire panel is designated SN 4816 in Figure 5.

1.26. The incident covered in paragraph 1.13, investigated by GPIAAF and involving Airbus A321 CS-TJL, is depicted as event 4 in Figure 5. The two events in 2016 referred to in paragraph 1.16, involving aeroplanes JY-AYW and N517JB, are depicted as FP events 1 and 2. The third event, in 2021 and involving aeroplane F-HBNL, is depicted as FP event 3. The event covered in paragraph 1.24, involving aeroplane HZ-NS67, is depicted as event 6. The Commission received notification of event 6 after this investigation commenced.

[20] Airbus refers to SBs as VSBs or OEM service bulletins when SBs have originated from one of their original equipment manufacturers.

[21] Airbus has three categories of OIT: Incident, Advice or General Information.

[22] Safran ED acquired Zodiac Aerospace in 2018. The repair facility became Safran Aerosystem Services in 2019.

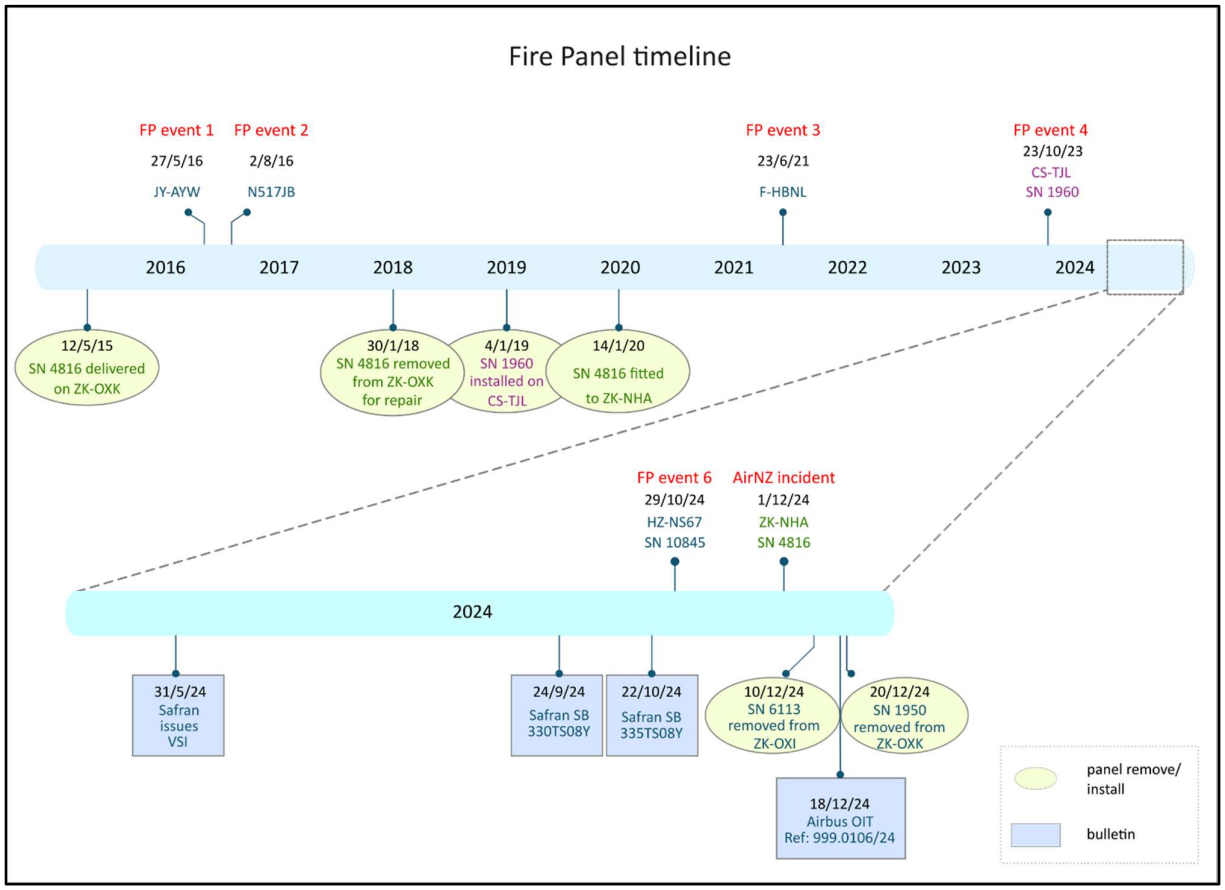

Figure 5: Timeline of known fire-panel incidents, May 2015 to December 2024

Fire-panel testing

1.27. The fire panel was removed from the aeroplane under the supervision of a Commission investigator and taken to Safran ED in France for examination. The examination was conducted by Safran ED at Roissy (France) and overseen by a Commission investigator.

1.28. Safran ED staff were immediately able to identify external damage to the fire switch guard that surrounds the fire switch and deformation on the front panel (*see* Figure 6).[23] The retention pin within the fire switch was misaligned by 2.73° (tolerance specification is +/- 1°) and there was evidence of chamfer on the pin (*see* Figure 7). Safran ED concluded that the damage to the panel was very likely caused when the fire panel was dropped at some stage.

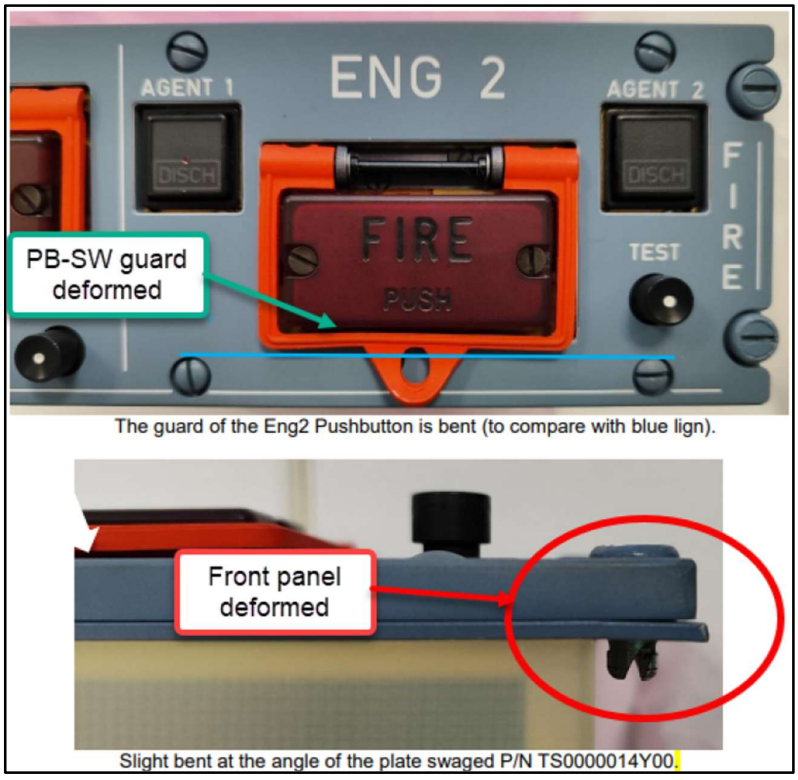

Figure 6: Fire-panel testing
(Credit: Airbus. (2025, 8 April))

[23] Technical staff from the Civil Aviation Authority of New Zealand (CAA) and a Commission investigator had conducted a visual inspection of the fire panel and had not identified external damage before the examination conducted at Safran ED in Roissy.

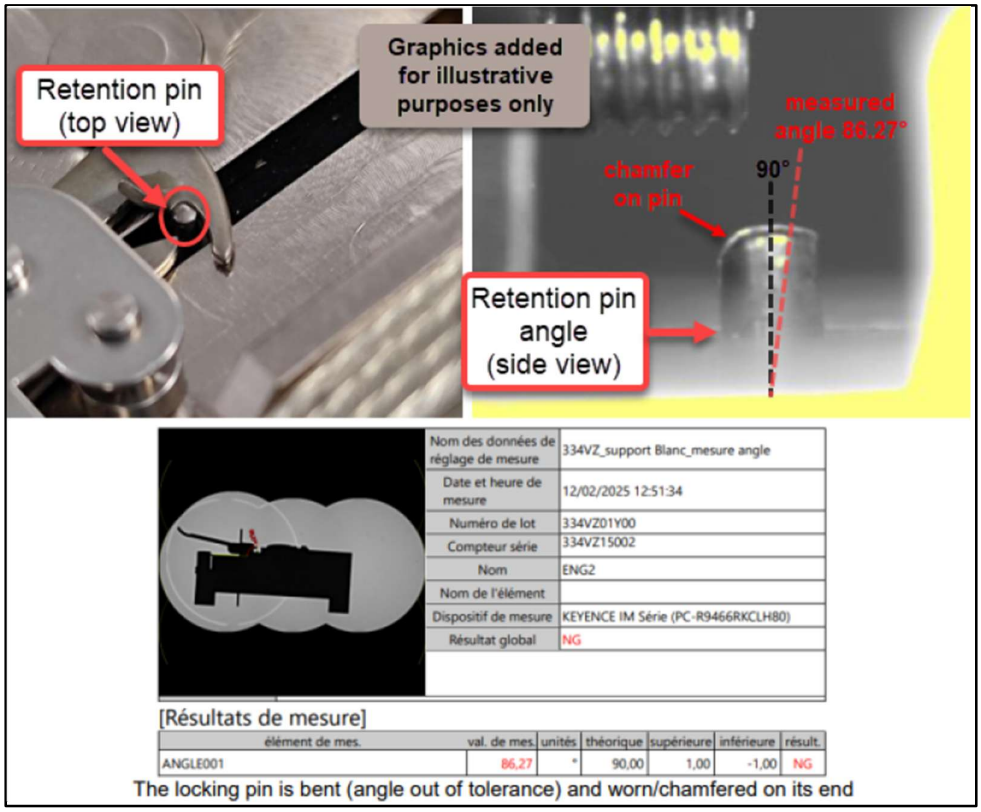

Figure 7: Fire switch testing

(Credit: Airbus. (2025, 8 April))

1.29. The two vendor SBs referred to in paragraph 1.19 identified the serial numbers of 108 fire panels that require inspection. Safran ED issued SIL 306-26-001 dated in December 2024 (Safran Electronics & Defense, 2024, 3 December) that identified a further 17 older-style fire-panel units that required inspection. Safran ED explained that it compiled these lists of fire panels requiring examination by identifying fire panels that had been previously repaired at the Zodiac Aero Electric repair shop based at Niort (France) and potentially had external damage at the time, but they had not been assessed for switch damage.

1.30. They further explained to the Commission that the Safran ED and Zodiac facilities only accounted for a percentage of the fire panels repaired and returned to operators worldwide. They were unable to quantify the extent of any issues with fire panels that had been repaired at other affiliated facilities. Safran ED has maintenance, repair and overhaul facilities in Roissy, Singapore and Texas (USA). Fire panels can also be repaired at non-Safran ED affiliated facilities such as Lufthansa Technik.

1.31. As noted in paragraph 1.24, since the Commission initiated this investigation another fire panel has been identified that experienced a fire switch uncommanded activation. That fire panel was also examined by Safran ED, and they reported that the panel exhibited signs of external damage. However, this fire panel was not one of those identified by Safran ED as requiring examination. The scale and number of damaged fire panels is currently unquantified.

1.32. Airbus issued two SBs, on 20 June 2025 and 9 July 2025, to cover all A320 aeroplanes. The SBs detailed inspection of each fire panel. If a panel is one of the 125 panels identified by Safran ED (as discussed in paragraph 1.29), or the panel has any sign of

external damage, it should be sent to the vendor for repair. The compliance classification of the SBs was 'Recommended', and the accomplishment timescale is within 1000 flight cycles.[24]

1.33. Airbus continues to work with operators to address the problems identified with the fire switch panels.

1.34. On 10 September 2025, the European Union Aviation Safety Agency (EASA) issued a Notification of a Proposal to issue an Airworthiness Directive (PAD) with consultation closing on 24 September 2025. The PAD proposed that inspections to A320 family aircraft be carried out as per the Airbus SBs.

1.35. On 23 October 2025, EASA issued AD 2025-0234, with an effective date from 6 November 2025. This AD implemented the PAD. The AD requires inspection of fire panels as outlined in the Airbus SBs. If damage to a panel is identified, the panel must be replaced within six months. This was increased from the two months stated in the PAD in response to comment from one operator that shorter compliance times would create market shortages and limited shop capacity.

[24] A single take-off and landing sequence

2 Preliminary safety issue/recommendation and safety action taken
Te take/tūtohi haumaru hukihuki me te mahi haumaru i whakaoti

2.1. The Commission's purpose is to improve future transport safety. The Commission can raise urgent safety issues when it identifies them during the conduct of an investigation.

2.2. In this investigation the Commission identified that damage to the A320 aeroplane fire panel can lead to the uncommanded activation of a fire switch leading to an engine shut down. This is a risk to future transport safety.

2.3. The Commission sent an urgent safety issue letter to the Director of the Civil Aviation Authority of New Zealand (CAA) on 17 December 2024. The letter highlighted the incident and the history of similar events to bring the regulator's attention to two safety themes:

- communication regarding the inspection of fire switch panels
- operational guidance to pilots.

2.4. On 26 February 2025, following the Commission's fire-panel examination at Safran ED's Roissy facility, the Director of CAA wrote to the Executive Director of the European Union Aviation Safety Agency (EASA), the certifying regulator for A320 aeroplanes, to raise issues identified in both the CAA's and the Commission's investigations into this incident. This letter highlighted that the scale of the problem of damaged fire panels is unknown, as Safran ED can only comment on the fire panels that they had previously repaired at the Zodiac Aero Electric repair shop at Niort or at the Safran ED facility.

2.5. The Commission sent an urgent safety issue follow-up letter to the Director of CAA on 14 March 2025, explaining that the list of fire panels in Safran ED's SBs that required inspection may be incomplete. Therefore, the full extent of the safety issue remained undetermined.

2.6. The aircraft manufacturer, Airbus, released a detailed report into the Air New Zealand incident (Airbus, 2025, 8 April). Their investigation used the flight data provided by the operator. They observed that this is the sixth event of this kind across the worldwide fleet. They stated that five of the fire panels involved have been examined by Safran ED (the sixth being unavailable) and they all exhibited signs of impact/shock damage on the fire panel and a bent pin in the affected fire switch. In the five fire panels examined the other engine and APU fire switches were checked and found to be serviceable.

2.7. On 2 July 2025, the Commission recommended that the CAA notify and work with EASA to ensure appropriate action was taken to identify and replace any defective fire switches.[25] Recommendation [**045/25**].

2.8. The Commission gave notice to EASA of the preliminary recommendation and provided the preliminary recommendation to the Secretary of Transport.

2.9. On 16 July 2025, the CAA responded, accepting the preliminary recommendation and further noting:

> As discussed, TAIC has previously been made aware that the CAA has notified EASA of its concerns, along with the EASA response as referenced in your letter. While the CAA cannot direct or provide any surety that EASA will take specific action, the CAA will follow up with EASA for an update in coming weeks.
>
> The actions already taken and those planned as part of the CAA's investigation process align with the intent of this recommendation, and on that basis it is accepted. However, it should be noted that the CAA does not have the mandate to provide assurance regarding the actions of EASA as outlined. Additionally, the CAA believes there would be value in TAIC raising this matter through the BEA as well.
>
> The CAA continues to engage with Air New Zealand, who have maintained ongoing communication with Airbus since the ZK-NHA event. Air New Zealand has proactively removed affected fire panels and advocated for clearer inspection criteria in response to Airbus's Inspection Service Bulletin (ISB). Air New Zealand has advised the CAA of its intention to implement the revised ISB once received, even if it remains a recommendation. Air New Zealand expects an updated ISB in coming weeks.

[25] Section 9(1) of the Transport Accident Investigation Commission Act 1990 states that the Commission may make such preliminary reports and recommendations to the Civil Aviation Authority, in the case of aviation accidents and incidents, …, as may be necessary in the interests of transport safety.

3 Further lines of inquiry
Ngā aho uiuinga atu

3.1. A full inquiry into this occurrence is continuing. A final report, setting out findings, safety issues and recommendations, if any, will be issued at the completion of this inquiry.

4 Data summary
Whakarāpopoto raraunga

Aircraft particulars

Aircraft registration:	*ZK-NHA*
Type and serial number:	A320-271N neo MSN 8715
Number and type of engines:	Two Pratt and Whitney PW1127GA-JM
Year of manufacture:	2019
Operator:	Air New Zealand
Type of flight:	Scheduled flight NZ249 Wellington to Sydney
Persons on board:	6 crew and 142 passengers

Crew particulars

Captain's licence:	Airline Transport Pilot Licence, issued 2001
Captain's age:	69
Captain's total flying experience:	17,000 hours
First officer's licence:	Airline Transport Pilot Licence, issued 2015
First officer's age:	38
First officer's total flying experience:	5,400 hours

Date and time	1 December 2024, 1631
Location	approximately 300 NM west of Auckland latitude: 38° 59′ 08 S longitude: 169° 50′ 17 E
Injuries	Nil
Damage	Nil

5 Conduct of the inquiry
Te whakahaere i te pakirehua

5.1. On 1 December 2024, the Civil Aviation Authority of New Zealand (CAA) notified the Commission of an incident involving an Air New Zealand Airbus A320neo aeroplane, *ZK-NHA*, that had experienced an engine rollback during the early stage of a flight from Wellington to Sydney and had diverted to Auckland.

5.2. On 2 December 2024, the Commission opened an inquiry into the incident under section 13(1) of the Transport Accident Investigation Commission Act 1990.

5.3. On 2 December 2024, a protection order was issued to ensure the aeroplane's CVR and FDR were secured. The two recorders were removed from the aeroplane under the supervision of a Commission investigator and subsequently taken to the Australian Transport Safety Bureau's (ATSB's) laboratory in Canberra for downloading.

5.4. On 5 December 2024, the fire panel was removed from the aeroplane and held by the Commission.

5.5. The Commission advised the United States National Transport Safety Board (NTSB) of the incident and requested they assign an accredited representative. On 5 December 2024 the NTSB appointed an accredited representative as the State of Engine Manufacturer in accordance with ICAO Annex 13 to the Convention on International Civil Aviation.

5.6. The Commission advised the ATSB of the incident and requested they assign an accredited representative to provide assistance with data download from the CVR and FDR. On 6 December 2024 the ATSB appointed an accredited representative and opened investigation AA-2024-010.

5.7. The Commission advised the French Bureau d'Enquêtes et d'Analyses (BEA) of the incident and requested they assign an accredited representative. On 6 December 2024 the BEA appointed an accredited representative as the State of Aircraft Manufacturer in accordance with ICAO Annex 13 to the Convention on International Civil Aviation. The BEA in turn nominated a technical advisor from the aircraft manufacturer Airbus. On 18 February 2025, BEA advised that EASA had nominated a technical advisor to BEA for this investigation.

5.8. The Commission wrote to the Director of CAA on 17 December 2024 to raise two urgent safety issues and the letter was acknowledged by the CAA on 19 December 2024.

5.9. A Commission investigator travelled to France and on 12 February 2025 an examination of the fire panel and fire switch was conducted at the facilities of Safran ED in Roissy. These examinations were overseen by a Commission investigator.

5.10. On 26 February 2025 the Director of CAA wrote to the Executive Director of EASA to highlight their concerns following the issues identified in the panel testing and from the parallel investigations. On 8 April 2025 the Executive Director of EASA responded that their assessment of the situation was ongoing.

5.11. On 14 March 2025 the Commission issued an urgent safety issue follow-up letter to the Director of CAA highlighting new information gained during the fire panel

examination and requesting details of the CAA's planned actions. They responded on 25 March 2025.

5.12. On 16 April 2025 the Commission notified the Saudi Arabia National Transport Safety Center (NTSC) and requested they assign an accredited representative. On 22 April 2025 NTSC appointed an accredited representative to facilitate contact with a local airline to assist the investigation with information on aeroplane *HZ-NS67*.

5.13. On 2 July 2025 the Commission sent a Preliminary Recommendation to the Director of CAA and copied it to the Secretary for Transport and the Director of the EASA. The CAA responded on 16 July 2025 accepting the recommendation.

5.14. On 27 August 2025 the Commission approved a draft interim report for circulation to seven interested parties and two other interested parties for their comment.

5.15. The Commission received responses from all interested parties, of which four were submissions. Any changes as a result of these submissions have been included in the final interim report.

5.16. On 19 November 2025, the Commission approved the final interim report for publication.

Abbreviations
Whakapotonga

APU	auxiliary power unit
ATSB	Australian Transport Safety Bureau
BEA	Bureau d'Enquêtes et d'Analyses
CAA	Civil Aviation Authority of New Zealand
CVR	cockpit voice recorder
EASA	European Union Aviation Safety Agency
ECAM	electronic centralised aircraft monitor
ENG	engine
FADEC	Full Authority Digital Engine Control System
FDR	flight data recorder
ft	feet
GPIAAF	Portugal's Gabinete de Prevencao e Investigacao de Acidentes com Aeronaves e de Acidentes Ferroviarios
ICAO	International Civil Aviation Organization
IDG	Integrated Drive Generator
kg	kilogram
neo	new engine option

NM	nautical mile
NTSC	Saudi Arabia National Transport Safety Center
OIT	Operator's Information Transmission
pb-sw	push button switch
Safran ED	SAFRAN Electronics & Defense
SB	service bulletin
SIL	Service Information Letter
VSB	vendor service bulletin

Citations
Ngā tohutoru

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Kōwhaiwhai - Māori scroll designs

TAIC commissioned its four kōwhaiwhai, Māori scroll designs, from artist Sandy Rodgers (Ngāti Raukawa, Tūwharetoa, MacDougal). Sandy began from thinking of the Commission as a vehicle or vessel for seeking knowledge to understand transport accident tragedies and how to avoid them. A 'waka whai mārama' (i te ara haumaru) is 'a vessel/vehicle in pursuit of understanding'. Waka is a metaphor for the Commission. Mārama (from 'te ao mārama' – the world of light) is for the separation of Rangitāne (Sky Father) and Papatūānuku (Earth Mother) by their son Tāne Māhuta (god of man, forests and everything dwelling within), which brought light and thus awareness to the world. 'Te ara' is 'the path' and 'haumaru' is 'safe' or 'risk free'.

Corporate: Te Ara Haumaru - the safe and risk free path

The eye motif looks to the future, watching the path for obstructions. The encased double koru is the mother and child, symbolising protection, safety and guidance. The triple koru represents the three kete of knowledge that Tāne Māhuta collected from the highest of the heavens to pass their wisdom to humanity. The continual wave is the perpetual line of influence. The succession of humps represents the individual inquiries.

Sandy acknowledges Tāne Māhuta in the creation of this Kōwhaiwhai.

Aviation: Ngā hau e whā - the four winds

To Sandy, 'Ngā hau e whā' (the four winds), commonly used in Te Reo Māori to refer to people coming together from across Aotearoa, was also redolent of the aviation environment. The design represents the sky, cloud, and wind. There is a manu (bird) form representing the aircraft that move through Aotearoa's 'long white cloud'. The letter 'A' is present, standing for a 'Aviation'.

Sandy acknowledges Ranginui (Sky father) and Tāwhirimātea (God of wind) in the creation of this Kōwhaiwhai.

Maritime: Ara wai - waterways

The sections of waves flowing across the design represent the many different 'ara wai' (waterways) that ships sail across. The 'V' shape is a ship's prow and its wake. The letter 'M' is present, standing for 'Maritime.

Sandy acknowledges Tangaroa (God of the sea) in the creation of this Kōwhaiwhai.

Rail: rerewhenua - flowing across the land

The design represents the fluid movement of trains across Aotearoa. 'Rere' is to flow or fly. 'Whenua' is the land. The koru forms represent the earth, land and flora that trains pass over and through. The letter 'R' is present, standing for 'Rail'.

Sandy acknowledges Papatūānuku (Earth Mother) and Tāne Mahuta (God of man and forests and everything that dwells within) in the creation of this Kōwhaiwhai.

Transport Accident Investigation Commission

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AO-2023-003	Runway excursion (veer-off), Boeing 777-319ER ZK-OKN, Auckland International Airport, 27 January 2023
AO-2023-011	ZK-JED BE76 / ZK-WFS C172, near mid-air collision, Ardmore Aerodrome, 3 October 2023
AO-2023-010	Kawasaki BK117 B-2, ZK-HHJ, collision with terrain, Mount Pirongia, 19 September 2023
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AO-2023-001	Airbus Helicopters AS350B2 (ZK-IDB) and EC130B4 (ZK-IUP), reported close air proximity, Queenstown Aerodrome, 27 December 2022
AO-2018-009	MD Helicopters 500D, ZK-HOJ, In-flight breakup, near Wānaka Aerodrome, 18 October 2018
AO-2022-002	Robinson R22, ZK-HEQ, loss of control inflight, Karamea, West Coast, 2 January 2022
AO-2021-003	Airbus Helicopters AS350 B3e, ZK-ITD, loss of control in flight, Lammerlaw Range, 40 km northwest of Dunedin Aerodrome, 16 September 2021
AO-2020-002	Glider, Schleicher ASK21, ZK-GTG, Impact with Terrain, Mount Tauhara, Taupō, 31 May 2020

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