



APERTURE

RESEARCH & VERIFICATION

MH370 RESEARCH ADDENDUM

Version 0.6 - Technical Closure and Proposition Update

Evidence cut-off: 7 August 2026

RESEARCH CLOSED FOR GENERAL DESK WORK - SPECIALIST REVIEW PENDING

**Reality before reliance. Verification before interpretation.
No conclusion stronger than the available evidence.**

Independent public-source case study - not a client engagement
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1. PURPOSE AND CONTROL

This Addendum records research completed after the author-approved Version 0.5 base dossier. It does not silently overwrite the controlled v0.5 record. Where a v0.6 proposition differs from v0.5, the v0.6 proposition governs the current research state.

2. SATCOM AND 18:25 SDU EVENT

The 18:25 log-on is best treated as two questions: what happened to the SDU, and why it happened. The technical record strongly supports restoration of SDU power following a material interruption. The public record does not establish whether that interruption resulted from deliberate cockpit electrical reconfiguration, a local technical failure or another electrical event.

3. 00:19 END-OF-FLIGHT SEQUENCE

The final aircraft-initiated SDU log-on is more strongly connected to fuel exhaustion than the 18:25 event. The ATSB framework links engine flame-out, main AC power loss, APU auto-start and restoration of SDU power. This remains the best-supported public explanation, subject to Boeing 777 systems specialist review.

The absence of the expected subsequent IFE ground connection constrains the terminal sequence but does not uniquely distinguish impact, loss of APU/SDU power, earlier IFE isolation or satellite line-of-sight loss.

4. FINAL BFO AND ADVERSARIAL MODEL

The final BFOs strongly support a substantial and rapidly changing descent component, but BFO is not a direct vertical-speed recorder. Exact descent rate, attitude, track and control state remain model-dependent.

The 2024 Lyne controlled-eastward-descent paper is retained as a serious adversarial source. It demonstrates the need to test alternate motion decomposition, but it does not presently falsify the ATSB/DSTG/Holland interpretation. Its broader controlled-ditching and precise-location narrative requires assumptions not established by the final BFO values alone.

5. RADAR AND ACTIVE CONTROL

The Malaysian investigation records the military association of the primary-radar track with MH370 and notes that some reconstructed speed/height variations could not be replicated in Boeing 777 simulator work. This supports caution about precise altitude/speed claims while preserving the stronger westward-diversion and active-control inference.

6. SIMULATOR EVIDENCE

The official forensic report recovered more than 2,700 coordinates, mostly default-game coordinates, plus seven manually programmed coordinates from Volume Shadow Information. The report could not determine whether the seven waypoints came from one or more files and did not find a route similar to MH370's actual reconstructed path. The evidence is relevant circumstantial material but does not establish an exact rehearsal.

7. CARGO AND FIRE CLAIMS

The official cargo record confirms a 2,453 kg Motorola consignment, but only 221 kg was lithium-ion batteries; the remainder comprised chargers and radio accessories. The recurring claim that MH370 carried approximately 2.4 tonnes of lithium batteries is materially misleading. No occurrence-specific public evidence establishes a battery/mangosteen fire as the cause.

8. DEBRIS AND FLAP STATE

ATSB examination linked recovered outboard flap sections to 9M-MRO through manufacturing records. The right outboard flap was assessed as most likely retracted when it separated, and the flaperon probably at or close to neutral. This weakens a conventional flap-extended ditching scenario but does not establish control state at impact.

9. SEARCH AND LOCATION

Historical search exclusion must be resolution-sensitive. ATSB documented greater than 95% detection confidence for good-quality sonar coverage, but lower-confidence and data-gap categories also existed. Searched is therefore not treated as uniform 100% exclusion.

Malaysia extended the current Ocean Infinity agreement from 1 July 2026 to 30 June 2027. The official notice states that 7,428.54 km² remains to be completed.

10. CAUSE AND ACTOR

The new work does not justify a change from the canonical cause boundary. H3 deliberate onboard human action and H6 emergency response followed by later incapacitation remain the strongest broad causal families. Neither is established. Actor, intent and motive remain indeterminate.

11. UPDATED PROPOSITION MATRIX

V06-P001	00:19 SATCOM sequence records an SDU log-on following an interruption and restoration of electrical power.	ESTABLISHED / R1
V06-P002	Fuel exhaustion followed by APU-supplied electrical restoration is the best-supported explanation for the 00:19 SDU log-on.	STRONGLY SUPPORTED / R2
V06-P003	Absence of the expected post-log-on IFE connection constrains the terminal sequence but does not uniquely identify impact, APU power loss, IFE isolation or loss of satellite line-of-sight.	ESTABLISHED LIMITATION / R1
V06-P004	The final BFO measurements are strongly consistent with a substantial and rapidly changing descent component but do not independently establish exact descent rate, attitude or control state.	STRONGLY SUPPORTED, MODEL-DEPENDENT / R3
V06-P005	The official final-BFO framework accounts for aircraft horizontal motion and track-dependent Doppler effects; it is not accurately described as simply ignoring horizontal motion.	STRONGLY SUPPORTED / R2
V06-P006	Alternative combinations of horizontal trajectory and vertical motion can change the final-BFO solution; the last two BFO values do not uniquely determine one exact 3-D trajectory.	STRONGLY SUPPORTED / R2
V06-P007	The 2024 controlled-eastward-descent paper raises a material adversarial challenge but does not presently falsify the ATSB/DSTG rapid-descent interpretation.	SUPPORTED - specialist review required / R3
V06-P008	The 18:25 SDU log-on is strongly consistent with restoration of SDU power after a material interruption; the specific historical cause of that interruption remains indeterminate.	STRONGLY SUPPORTED / cause INDETERMINATE / R2/R4
V06-P009	A routine loss of only the left engine generator or a normal brief AC-bus transfer is not, by itself, a sufficient explanation for the 18:25 SDU log-on.	STRONGLY SUPPORTED / R2
V06-P010	The public record does not establish that the 18:25 event was an aircraft-wide dual-AC-bus failure or deliberate cockpit action.	INDETERMINATE / R4
V06-P011	The right outboard flap was most likely retracted when it separated; this weakens a conventional flap-extended ditching scenario but does not establish control state at impact.	STRONGLY SUPPORTED, SPECIALIST-DEPENDENT / R3
V06-P012	The pilot home-simulator evidence is relevant circumstantial evidence, but the official forensic record did not establish one continuous rehearsal of MH370's later route.	ESTABLISHED LIMITATION / R2
V06-P013	The lithium-ion battery mass was 221 kg within a 2,453 kg consignment; describing MH370 as carrying 2.4 tonnes of lithium batteries is materially misleading.	ESTABLISHED / R1
V06-P014	The Malaysian military associated the primary-radar track with MH370; radar-based speed/height reconstructions contain acknowledged limitations, while the track behaviour supports active control during at least part of the diversion.	STRONGLY SUPPORTED / R2/R3
V06-P015	Historic underwater search data includes areas with >95% detection confidence and lower-confidence/gap areas; searched must not automatically be equated with uniform 100% exclusion.	ESTABLISHED / QUALIFIED / R2
V06-P016	The 2026 Ocean Infinity agreement was extended to 30 June 2027 with 7,428.54 km ² of the current target area reported as remaining.	ESTABLISHED CURRENT STATUS / R1

12. SOURCES ADDED OR RE-OPENED

V06-S001 - Malaysia Ministry of Transport. Safety Investigation Report MH370 (9M-MRO), 2018. <https://www.mot.gov.my/en/MH370%20Investigation%20Report/01-Report/MH370SafetyInvestigationReport.pdf>

V06-S002 - ATSB. MH370 Data Communication Logs, amended 30 March 2017. <https://www.atsb.gov.au/publications/educational-fact-sheet/2022/aviation/mh370-update-signalling-unit-logs>

V06-S003 - ATSB. Definition of Underwater Search Areas, 3 Dec 2015. <https://www.atsb.gov.au/investigations/ae-2014-054>

V06-S004 - ATSB. Operational Search for MH370 Final Report, 3 Oct 2017. https://www.atsb.gov.au/sites/default/files/media/5773565/operational-search-for-mh370_final_3oct2017.pdf

V06-S005 - ATSB. MH370 Search and Debris Examination Update. https://www.atsb.gov.au/sites/default/files/media/5773389/ae-2014-054_mh370-search-and-debris-update_aug2017.pdf

V06-S006 - Ian D. Holland. MH370 Burst Frequency Offset Analysis and Implications on Descent Rate at End-of-Flight. <https://arxiv.org/abs/1702.02432>

V06-S007 - Vincent Lyne. Final two MH370 communications suggest controlled eastward descent, Journal of Navigation 77(2). <https://doi.org/10.1017/S0373463324000262>

V06-S008 - CSIRO. MH370 drift modelling using genuine Boeing 777 flaperon, 2017. <https://www.csiro.au/en/news/All/Articles/2017/April/mh370>

V06-S009 - Geoscience Australia. MH370 Data Release / Phase Two underwater search data.

<https://www.ga.gov.au/about/projects/marine/mh370-data-release>

V06-S010 - Malaysia Ministry of Transport. Extension of Agreement with Ocean Infinity, 29 Jun 2026. https://www.mot.gov.my/my/Kenyataan%20Media/Tahun%202026/29%20JUN%2026_KENYATAAN%20MEDIA%20MENTERI%20PENGANGKUTAN%20PERLANJUTAN%20PERJANJIAN%20ANTARA%20KERAJAAN%20MALAYSIA%20%26%20OCEAN%20INFINITY%20BAGI%20MENGESAN%20BANGKAI%20PESAWAT%20MH370.pdf