DCIAC Maintenance Series — Report Usage Accounting

Which ASRS Reports Were Used in Which Issues, and Which Were Reused

Issue 1 — Analytical (5 reports)

- ACN 1927849 — Cargo door seals installed backwards on two aircraft during the same check; pressurization failure, oxygen mask deployment, air turnback.
- ACN 983512 — CRJ-900 main landing gear torque link apex spacer and washer transposed; gear structural failure on landing.
- ACN 772287 — DHC-8-200 aileron servo wired backwards by manufacturer; detected by technician 10 minutes before departure; manufacturer recall of 13 units.
- ACN 750908 — CRJ-700 landing gear proximity sensor targets installed backwards; gear retraction failure, overweight landing.
- ACN 525249 — Jetstream 41 aileron idler arms installed backwards per an incorrect maintenance manual illustration; hard bank on first flight, declared emergency.

Issue 2 — Interactive (4 reports)

- ACN 772287 — DHC-8-200 aileron servo: First Half presents the pre-departure anomaly; Rest of Story reveals the backwards wiring and manufacturer recall.
- ACN 1370016 — EMB-120 hot mic switch installed upside down, fixed wrong, still wrong; First Half presents after first fix; Rest of Story reveals second error.
- ACN 1421446 — CRJ-700 steering tiller installed backwards; ops check passed by design; First Half presents after sign-off; Rest of Story reveals the design trap.
- ACN 1295814 — DC-10 thrust reverser pneumatic lines transposed fleet-wide; First Half presents the anomalous test results; Rest of Story reveals the escalation.

Issue 3 — Thematic (5 reports)

- ACN 2225305 — EMB-170 valves installed backwards from ambiguous verbal task assignment (Phase 1: Task Assignment).
- ACN 1954904 — Engine driven pump case drain filter housing installed backwards during task-switching on A-check (Phase 2: Installation).
- ACN 743765 — B737-700 elevator tab hinge fitting installed upside down; both technician and inspector missed the same reference note (Phase 3: Inspection).
- ACN 1057981 — Beechjet 400A anti-skid control valve hydraulic lines transposed; brake bleed and functional test both passed (Phase 4: Operational Check).
- ACN 786215 — B737-800 cargo door seal installed backwards on shift turnover; pressurization check passed on ground; failed in flight (Phase 5: In-Service Discovery).

Issue 4 — Resilience (5 reports)

- ACN 772287 — DHC-8-200 aileron servo: technician acted on pre-departure gut check despite passing required test (Resilience quality: Anticipation).
- ACN 925969 — A330 line mechanic called in a backwards IDG quad ring safety wire from home, off shift, before aircraft returned (Resilience quality: Self-Correction).
- ACN 1295814 — DC-10 technician traced fleet-wide thrust reverser line transposition through Engineering and Boeing manual review (Resilience quality: Persistence).
- ACN 743765 — B737-700 C-check inspector caught elevator fitting error by consulting the manual illustration the original RII inspector did not (Resilience quality: Recovery).
- ACN 1057981 — Beechjet 400A technician identified three specific procedural improvements from post-event analysis (Resilience quality: Situational Awareness).

Reports Used in More Than One Issue

- **ACN 772287** — Used in Issues 1, 2, and 4. The DHC-8-200 aileron servo report is the most-used in the dataset. It contains a serious safety consequence (Issue 1 Analytical), a clear pre-departure decision point (Issue 2 Interactive), and a named resilience quality (Issue 4 Anticipation). Each use presents a different aspect of the same event.
- **ACN 1295814** — Used in Issues 2 and 4. The DC-10 fleet-wide thrust reverser line transposition works as an Interactive scenario (the anomalous test results are the decision point) and as a Persistence resilience example (the technician's multi-year investigation).
- **ACN 743765** — Used in Issues 3 and 4. The B737-700 elevator fitting illustrates the Inspection phase failure (Thematic) and the C-check recovery catch (Resilience Recovery).
- **ACN 1057981** — Used in Issues 3 and 4. The Beechjet 400A anti-skid lines illustrate the Operational Check phase gap (Thematic) and the post-event systemic analysis (Resilience Situational Awareness).

Remaining Unused Reports

Of the 44 vetted reports, 14 unique ACNs were used across the four issues, leaving 30 reports available for future Maintenance series issues. The unused ACNs are:

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2297538, 2106437, 1522645, 1021950, 970997, 910849, 854210, 816574, 813405, 785778,
778344, 777093, 753986, 747243, 735529, 712301, 710445, 708078, 692942, 685991,
681082, 663794, 661951, 650872, 650273, 622878, 592355, 563810, 489260, 431286
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