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www.safetymatters.co.in | CIN: U85300HR2021NPL096553

WHITE PAPER · OCTOBER 2026

Known Hazards, No Owner

Regulatory oversight, investigation follow-up and accountability in Indian civil aviation, 2018–2026

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India's accident investigator has repeatedly found the civil aviation regulator's own approvals and audits within the chain of events leading to accidents. This paper examines what follows those findings, and concludes that nothing does. Hazards identified by the State are left without an owner, and accidents of the same kind recur.

This paper relies on published reports of the Aircraft Accident Investigation Bureau, the Parliamentary Standing Committee on Transport, Tourism and Culture, Parliamentary replies, ICAO publications and the author's correspondence under the Right to Information Act, 2005. Statements that no action is "on record" mean that no published record was found; the authorities named may correct the record by publishing it. Quotations from investigation reports are reproduced verbatim, including original spelling. The reform architecture proposed in response is set out in the companion policy paper, *Closing the Safety-Action Loop*.

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Executive summary

Accidents in India keep happening for the same reasons. The accident investigator keeps finding that the regulator failed, writes it down, and sends it to the regulator. Then nothing happens. No one is responsible for making sure it is fixed.

Between 2018 and 2025, the Aircraft Accident Investigation Bureau (AAIB) investigated 54 accidents. In 28 of them, the AAIB report documents a failing by the regulator, DGCA: an approval that should not have been granted, an audit that missed the problem, a missing rule, or a finding never closed. Those 28 accidents killed 69 people and seriously injured 99.

Safety Matters Foundation read every final report the Aircraft Accident Investigation Bureau (AAIB) has published on accidents and incidents between 2018 and 2025 – 129 reports in all. In 35 of them, our analysis finds that the AAIB report documents a failing by the regulator, the Directorate General of Civil Aviation (DGCA): an approval that should not have been granted, an audit that missed the problem, a rule that was missing, or an audit finding that was never closed. In 19 more, the report documents a fault in something DGCA had approved, such as an operations manual. Every such classification rests on AAIB's own words, which are quoted in this paper; the classification and the counts are Safety Matters Foundation's.

Most AAIB reports end with recommendations: the actions AAIB says must be taken so that the same thing does not happen again. 108 of the 129 reports make recommendations, 606 in all, and 259 of them (43%) are addressed to DGCA. In 11 reports AAIB recorded that earlier safety recommendations had still not been implemented; in 7 of these, the earlier recommendations had been made to DGCA.

EXHIBIT 1 What Safety Matters Foundation's analysis of AAIB's reports finds about DGCA

	Reports	Fatal accidents	Deaths
DGCA deficiency documented in the AAIB report	35	18	69
Fault documented in something DGCA approved	19	0	0
No DGCA deficiency found	75	0	0
All AAIB final reports, 2018–2025	129	18	69

Source: Safety Matters Foundation analysis of all 129 AAIB final reports for occurrences in 2018–2025. Classification rests on AAIB's own words, quoted in the census register.

EXHIBIT 2 The 28 accidents in which SMF's analysis finds a DGCA deficiency, 2018–2025

Year	Accident	DGCA deficiency documented in the AAIB report (SMF summary)	Where AAIB says it	Killed	Seriously injured
2018	VT-PWA helicopter	Audit report never given to the operator; no debrief	Findings	7	0
2018	VT-UPZ non-scheduled	Operating permit granted without a validated safety system; audit faults left uncorrected	Cause and findings	5	3

Year	Accident	DGCA deficiency documented in the AAIB report (SMF summary)	Where AAIB says it	Killed	Seriously injured
2019	VT-SYK scheduled	DGCA audits missed serious safety weaknesses	Findings	0	0
2019	VT-HDX helicopter	DGCA inspectors did not perform their assigned relief-operations role	Findings	3	0
2019	VT-SVK helicopter	No guidelines or coordination for relief flights	Findings	0	1
2019	VT-RGF FTO	Audits checked paperwork only; post-accident audit aimed at resuming flying	Findings	2	0
2020	VT-CAF FTO	Night-flying procedure submitted in 2013 never acted on	Findings	2	0
2020	VT-GLE glider/microlight	Glider circulars not available to training institutes	Findings	1	1
2020	VT-ENF FTO	Instructor approved despite known weaknesses; flawed safety manual accepted	Findings	2	0
2020	VT-AXH scheduled	Flight-data monitoring accepted without follow-up; rule not revised after 2010 crash	Cause and findings	21	76
2020	VT-IGE FTO	No weather guidelines for flying schools	Findings	1	0
2021	VT-GHE scheduled	Same audit findings closed three years running	Findings	0	0
2021	VT-MPQ state/government	Audit finding dropped; manual and simulator oversight lapses	Findings	0	2
2021	VT-IYX scheduled	No DGCA rule for post-incident medical tests, so the crew was never tested	Findings	0	0
2021	VT-BRP FTO	DGCA circular silent on recording radio calls at uncontrolled airfields	Findings	1	1
2022	VT-AMU FTO	Faulty training manual approved and renewed repeatedly	Findings	0	0
2022	VT-FAO FTO	Earlier AAIB recommendations on radio recording never implemented by DGCA	Findings	1	0
2022	VT-SLH scheduled	Aircraft released to lessor without AAIB clearance	Findings	1	3
2022	VT-CHG state/government	Safety manual unapproved; surveillance inadequate	Findings	2	0
2022	VT-PWI helicopter	Flotation equipment not checked at inspection or certification	Findings	4	2
2022	VT-RPN helicopter	Kedarnath operating rules vague and unsafe	Findings	7	0
2023	VT-PTE FTO	Obsolete circular left in force; night-flying rules unclear	Cause and findings	1	1
2023	VT-RGT FTO	No rule covering student pilots in this situation	Findings	0	0
2023	VT-GDI glider/microlight	No oversight of the glider school; licences issued improperly	Cause and findings	0	1

Year	Accident	DGCA deficiency documented in the AAIB report (SMF summary)	Where AAIB says it	Killed	Seriously injured
2023	VT-RNK helicopter	No one responsible for supervising Kedarnath helipad	Findings	1	0
2023	VT-DBL non-scheduled	DGCA audits found no significant safety issues	Findings	0	8
2024	VT-CHP FTO	Radio recording still not required despite earlier AAIB recommendation	Findings	0	0
2025	VT-BKA helicopter	Revised circular ignored points AAIB had raised earlier	Findings	7	0
28 accidents			4 cause; 24 findings	69	99

Source: AAIB final reports. Summaries are Safety Matters Foundation's plain-language paraphrase; AAIB's exact words and section references are in the census section. "Cause" means AAIB listed the DGCA failing among the causes or contributory factors; "Findings" means it appears in AAIB's analysis and findings.

These findings are sent to DGCA – the same body that failed. AAIB's own rules say DGCA must reply within 90 days and AAIB must check whether the reply is good enough. But when the author asked AAIB under the Right to Information Act what happens to its recommendations, it said only that they are "forwarded". Asked what action was taken against DGCA officials, it replied: "Matter pertains to DGCA." There is no public record of any action against DGCA or its officials for any of these failures. After accidents, it is pilots, engineers and airline managers who face action.

The results show in the safety record. In April 2025, four out of five problems DGCA's own inspectors had found earlier that year were still not fixed. The same kinds of accident keep happening. Some accidents are first recorded as less serious than they were, and most incidents never become public. And when Air India flight AI171 crashed at Ahmedabad in June 2025, killing 260 people, the investigator itself turned out to lack the staff and equipment it had been told to build up after the Kozhikode crash in 2020.

EXHIBIT 3 The record in figures

Measure	Figure
Reports in which SMF's analysis finds a DGCA deficiency (2018–2025)	35 of 129
Accidents in which SMF's analysis finds a DGCA deficiency	28 (4 with DGCA named as a cause)
People killed in occurrences with a DGCA deficiency	69 of 69
People seriously injured in those occurrences	100 of 106
AAIB recommendations aimed at DGCA	259 of 606
Reports recording that earlier recommendations were not implemented	11 (7 of them made to DGCA)
Action taken against DGCA or its officials	None on public record
Problems found by DGCA inspectors in Jan–Apr 2025 still not fixed in April	3,747 of 4,692 (80%)
Of these, classed as an immediate danger (Level I)	37
DGCA posts vacant, January 2026	787 of 1,630 (48%)
Runway incursions in 2024, per million movements	14.12, against DGCA's own target of 9.78 (44% over)
AAIB investigations opened in 2023–24 with a final report two years later	23%

Measure	Figure
Fatal accidents shown for India on ICAO's 2023 safety dashboard (previous five years)	0 – although the Kozhikode crash killed 21

Source: AAIB final reports; Parliamentary Standing Committee, 380th Report (2025); Parliamentary replies; Safety Matters Foundation; ICAO.

What we found

- 1. AAIB's reports keep documenting DGCA failings.** Our analysis finds them in 35 reports, including 28 of the 54 accidents, which together killed 69 people. After one fatal crash (VT-RGF, 2019), AAIB's report states that DGCA's audit was done "to restart the flying activities of the FTO at the earliest", not to find out what went wrong (Section 1).
- 2. Recommendations are sent to DGCA, and then nothing is published.** No DGCA reply, AAIB check or decision on whether a recommendation was carried out has ever been made public (Section 2).
- 3. Nobody holds DGCA to account.** Pilots, engineers and airline managers face action after accidents. DGCA officials do not (Section 3).
- 4. The same kinds of accident keep happening** – take-offs from the wrong runway, unapproved manuals, flying-school crashes, helicopter crashes at Kedarnath – because problems that are found are not fixed (Section 4).
- 5. Some accidents are first recorded as less serious than they were.** IndiGo VT-IYX (2021) was called a "serious incident" for ten weeks before it was reclassified as an accident. Because of this, the crew's post-flight alcohol test, required only after an accident, was never done (Section 5).
- 6. The investigator itself is short of people and equipment.** In August 2025 the Government told Parliament that the Kozhikode recommendations on AAIB's staff and laboratory had been carried out. Two months earlier, for AI171, AAIB had borrowed DGCA officers and US equipment to read the flight recorder (Section 6).
- 7. The safety system does not learn.** A safety management system should feed lessons back into the rules and the inspections. In India that last step is missing (Section 7).
- 8. ICAO's audit points the same way.** India scores well overall (85.65%), but lowest on qualified technical staff (51%), and its score for accident investigation fell (Section 8).
- 9. The public cannot see what has been done.** DGCA's replies, AAIB's checks and any action on DGCA's failings are not published (Section 9).

What must change

- 1. Make DGCA answer.** Every AAIB finding against DGCA should get a public reply from the Ministry of Civil Aviation within 90 days, saying who was responsible and what was done, including any disciplinary action.
- 2. Have someone independent check.** An independent panel, appointed by the Ministry and reporting to Parliament, should check whether each DGCA failing has actually been fixed. Parliament's transport committee called for an independent safety review in March 2026.
- 3. Publish the record.** AAIB should publish every recommendation, DGCA's reply, and whether it was carried out.
- 4. Give the investigator its own people.** DGCA staff should not investigate accidents in which DGCA's own role is in question. AAIB needs permanent investigators and specialists, and the 43 Kozhikode recommendations should be checked independently.

The detailed reform plan – a national register of safety actions, an independent review, a twelve-month timetable and measures of progress – is in the companion policy paper, *Closing the Safety-Action Loop*.

1 AAIB's findings concerning DGCA oversight

The final reports of the Aircraft Accident Investigation Bureau are the primary evidence for this paper. Read together, they show deficiencies at each point at which DGCA controls an operator: the grant of approvals, the acceptance of manuals, the audit of operational practice and the closure of findings. These are the findings of India's statutory investigator, not of an external critic.

1.1 Census of AAIB final reports

Every AAIB final report for an occurrence between 2018 and 2025 was read and coded against a published codebook: occurrence details, injuries, recommendations addressed to DGCA, verbatim findings concerning DGCA, and an evidence tier.

EXHIBIT 4 What AAIB's 129 final reports for 2018–2025 say about DGCA, with cumulative totals

By tier								Cumulative			
Tier	What AAIB found	Rating	Reports	Deaths	Serious	Recs to DGCA	Points	Reports	Deaths	Serious	Points
A	DGCA deficiency documented; lives lost	High	18	69	87	93	54	18	69 (100%)	87 (82%)	54 of 54
A	DGCA deficiency documented; no lives lost	Medium	17	0	13	71	34	35	69 (100%)	100 (94%)	88 of 105
B	Defect in a DGCA-approved control; lives lost	Medium	0	0	0	0	0	35	69 (100%)	100 (94%)	88 of 105
B	Defect in a DGCA-approved control; no lives lost	Low	19	0	2	47	19	54	69 (100%)	102 (96%)	107 of 162
C	AAIB requires DGCA action; no deficiency stated	Advisory	26	0	1	48	–	80	69 (100%)	103 (97%)	107
N	Nothing directed at DGCA		49	0	3	0		129	69 (100%)	106 (100%)	
Of which: accidents whose cause or findings cite a DGCA deficiency (4 cause and findings; 24 findings)			28	69	99						

Cumulative oversight risk score (Tiers A and B)

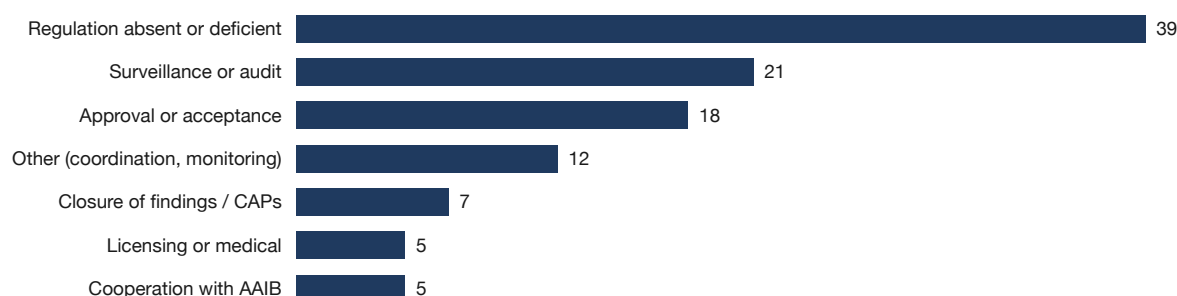
107 of 162 (66%)

Source: Safety Matters Foundation census of all 129 AAIB final reports for occurrence years 2018–2025. Cumulative columns add each row to those above it; percentages are of the 69 deaths and 106 serious injuries in all reports. Points: High 3, Medium 2, Low 1; maximum 3 per Tier A or B report; Tier C is shown but not scored. AI171 and other open investigations are excluded.

How the points in the table above are given. Each of the 54 reports in which our analysis finds a DGCA deficiency, or a fault in something DGCA approved, is given points for how serious it is:

- **3 points** – a DGCA deficiency is documented *and* people died (18 reports)
- **2 points** – a DGCA deficiency is documented but no one died, or a fault in something DGCA approved where people died (17 reports)
- **1 point** – a fault in something DGCA approved, no one died (19 reports)

If every case were the most serious kind, the total would be $54 \times 3 = 162$. The actual total is **107**, or **66%** of the maximum. In plain terms: most of these cases are at the serious end; 18 of the 54 (33%) involved loss of life.

EXHIBIT 5 DGCA functions AAIB found deficient, Tier A reports (number of findings)

Source: Census of AAIB final reports; one report may contain several findings.

Combining AAIB's causes and findings, 28 accidents between 2018 and 2025 cite a deficiency in DGCA's oversight: in 4 AAIB names it among the causes or contributory factors as well as in its findings, and in 24 in its findings alone. Those 28 accidents killed 69 people and seriously injured 99.

EXHIBIT 6 Accidents, 2018–2025, in which AAIB's cause or findings cite a DGCA deficiency

Date	Accident	DGCA deficiency cited in	AAIB's words	DGCA findings	Fatal	Serious
2018-01-13	VT-PWA helicopter	Findings	"The audit report was not provided to the operator by DGCA till the date of accident" (2.1.18)	2	7	0
2018-06-28	VT-UPZ non-scheduled	Cause and findings	Cause: "Lack of Safety Oversight, Approval of incoherent policies in the Policy Manuals, Incoherent Regulations and poor enforcement of Surveillance System were factors" (2.3.1, factors in the accident) Finding: "the AOP was issued to UYAPL in Aug 2016 by DGCA without an adequate safety mechanism being validated" (2.3.1)	9	5	3
2019-07-01	VT-SYK scheduled	Findings	"none of the audit reports have pointed out to these serious safety weaknesses in the system." (3.1 A)	1	0	0
2019-08-21	VT-HDX helicopter	Findings	"DGCA (Fols) were having a specific role during relief operation and this was not performed." (2.3)	4	3	0
2019-08-23	VT-SVK helicopter	Findings	"in the absence of specific guidelines/SOP and co- ordination between DGCA, Local Authorities and operator for conducting these relief/rescue flights" (2.3.3)	2	0	1
2019-10-06	VT-RGF FTO	Findings	"the reports of surveillance/audit carried out by the DGCA teams of the FTO were not in true letter and spirit." (2.3.2)	3	2	0
2020-01-03	VT-CAF FTO	Findings	"CAA submitted an SOP for Night Cross Country Flight to DGCA in July 2013 but no record of matter being perused further" (2.2.2)	2	2	0
2020-02-03	VT-GLE glider/microlight	Findings	"Glider circulars issued by DGCA are not available on DGCA website for ready reference by Glider Training Institutes." (3.1)	1	1	1

Date	Accident	DGCA deficiency cited in	AAIB's words	DGCA findings	Fatal	Serious
2020-06-08	VT-ENF FTO	Findings	"inspite of acceptance by DGCA, the SMS Manual has various ambiguities regarding rule position on notification of occurrence and obligation to investigate" (2.6.1)	4	2	0
2020-08-07	VT-AXH scheduled	Cause and findings	Cause: "DGCA did not comprehensively revise CAR Section 5, Series F, Part II ... resulting in the persisting ambiguities in this matter" (contributory factor xv) Finding: "DGCA has been accepting low DFDR monitoring figures and Safety Audits are closed without any follow up action." (2.9.1.1)	11	21	76
2020-09-21	VT-IGE FTO	Findings	"Also, there is no specific requirements/guidelines by DGCA in this regard for FTOs." (3.1.18)	1	1	0
2021-02-20	VT-GHE scheduled	Findings	"DGCA didn't take cognizance of seriousness of similar nature of findings appearing in consecutive 3 years and every time level of finding given was level-II." (2.4)	2	0	0
2021-05-06	VT-MPQ state/government	Findings	"Post the reply of DoA. GoMP, the DGCA did not pursue the said Class II finding, however the current situation remains the same." (2.1.2.1)	8	0	2
2021-06-14	VT-IYX scheduled	Findings	"in the absence of mandatory DGCA's Civil Aviation Requirement (CAR) for conducting medical test in case of serious incident" (2.2.1)	1	0	0
2021-07-16	VT-BRP FTO	Findings	"However, it does not contain any directions for developing means to record conversation between ATC and aircraft flying in uncontrolled airfield/region which will further enhance the safety oversight." (3.1.17)	2	1	1
2022-01-21	VT-AMU FTO	Findings	"The wrong reference to a deleted circular escaping scrutiny by DGCA during approvals and subsequent renewals on multiple occasions" (2.2.2(xiv))	5	0	0
2022-02-26	VT-FAO FTO	Findings	"Provision to record and retrieve the VHF communication held between company aircraft and local ATC is presently nowhere mandated under DGCA regulations" (2.5)	1	1	0
2022-05-01	VT-SLH scheduled	Findings	"the aircraft was deregistered and returned to the lessor without DGCA or Airline obtaining clearance from AAIB." (3.1.7)	1	1	3
2022-05-12	VT-CHG state/government	Findings	"till the date of accident, the flight safety manual was not approved by DGCA." (2.4.4)	4	2	0
2022-06-28	VT-PWI helicopter	Findings	"thus was not being checked by AME or DGCA during annual inspection required as per the CAR or during issue of ARC." (2.1.1)	7	4	2
2022-10-18	VT-RPN helicopter	Findings	"This provision is vague and not conducive for safe operations from Kedarnath Helipad" (2.2.2)	1	7	0

Date	Accident	DGCA deficiency cited in	AAIB's words	DGCA findings	Fatal	Serious
2023-01-05	VT-PTE FTO	Cause and findings	Cause: "Non-clarity of existing regulations which allows flying training operations in VFR conditions only" (contributory factor) Finding: "as on date of accident, no instruction was given by DGCA to FTOs regarding non validity of the Flying Grants Circular 02 of 2005." (2.5)	3	1	1
2023-02-08	VT-RGT FTO	Findings	"any mandatory regulation similar to DGCA operation circular no. 2 of 2004 applicable to Student Pilots. This type of situation remains unattended" (2.3.1)	2	0	0
2023-03-23	VT-GDI glider/microlight	Cause and findings	Cause: "lack of regulatory oversight and regulatory control on the Glider training Organization were also a contributory factor to this accident" (2.4.1.3, contributory factor) Finding: "However, the DGCA never carried out any safety oversight of M/s JFI Dhanbad airport base" (2.4.1.2)	4	0	1
2023-04-23	VT-RNK helicopter	Findings	"This provision is not conducive for safe operations from Kedarnath Helipad as each operator gives emphases to their own operations" (2.2)	1	1	0
2023-09-14	VT-DBL non-scheduled	Findings	"The DGCA audit/surveillance reports of the organization perused by the investigation team did not had any significant safety findings." (3.1.11)	2	0	8
2024-03-06	VT-CHP FTO	Findings	"provision to record and retrieve the VHF communication held between aircraft and local ATC is presently nowhere mandated under DGCA regulations" (2.6)	2	0	0
2025-06-15	VT-BKA helicopter	Findings	"it did not cater for requirements for oversight of DGCA on the established control center at Sitapur" (3.1.16)	2	7	0
28 accidents		4 cause and findings; 24 findings		88	69	99

Source: Census of AAIB final reports; quotations verbatim with section references. "Cause" covers the probable cause and contributory factors. 28 accidents account for 69 of the 69 deaths recorded in the census.

1.2 Selected cases

EXHIBIT 7 Selected cases from the census, with human cost (VT-JKB, 2015, shown as a precedent)

Date	Occurrence	AAIB finding concerning DGCA	Tier	Risk	Fatal	Serious
23 Nov 2015	VT-JKB Helicopter, Katra (precedent)	Operator flying without valid SMS or Operations Manual approval; Flight Safety Manual unrevised since December 2010	A	High	7	0
28 Jun 2018	VT-UPZ King Air C90, Ghatkopar	Air Operator Permit granted without an approved Flight Safety post holder; audit discrepancies closed without verification on site	A	High	5	3

Date	Occurrence	AAIB finding concerning DGCA	Tier	Risk	Fatal	Serious
2019	VT-WGR Serious incident	DGCA special audit raised two Level I and ten Level II findings; operator's corrective action plan left without acceptance for a year	A	Medium	0	0
6 Oct 2019	VT-RGF Cessna 172, Sultanpur	Pre-accident surveillance "generic"; post-accident audit conducted "to restart the flying activities"; DGCA reports "not in true letter and spirit"	A	High	2	0
7 Aug 2020	VT-AXH Boeing 737-800, Kozhikode	Flight-data exceedances and action-taken reports accepted without verifying correction; inadequate DGCA cooperation with AAIB (Rec. 4.4.18)	A	High	21	76
13 Nov 2020	VT-EXM Airline, wrong-runway take-off attempt	DGCA-approved manuals lacked hot-spot and intersection-departure procedures	B	Low	0	0
6 May 2021	VT-MPQ Air ambulance	Defective scrutiny of operations manual; unqualified manager accepted; deficient simulator oversight; unapproved weight-and-balance software; earlier DGCA findings open at the time of the accident	A	Medium	0	2
24 Oct 2021	VT-SQC Airline, wrong runway	Line and training guide in use without manufacturer or DGCA approval; repeat wrong-runway history	B	Low	0	0
12 May 2022	VT-CHG Helicopter	Flight Safety Manual revision and SMS Manual unapproved at the time of the accident; inadequate surveillance	A	High	2	0
28 Jun 2022	VT-PWI S-76D, Mumbai offshore	DGCA-approved passenger briefing card depicted a lifejacket not fitted to the aircraft	A	High	4	2
23 Mar 2023	VT-GDI Glider	No regulatory framework or oversight for glider training; identified as contributory	A	Medium	0	1
14 Sep 2023	VT-DBL Learjet 45XR, Mumbai	Maintenance-record, recurrent-training and internal-audit failures not detected by DGCA surveillance	A	Medium	0	8
Total, selected cases					41	92

Source: AAIB final investigation reports, section 1.2 (Injuries to persons) and analysis sections; see Annex B. VT-AXH figures cover persons on board; VT-UPZ includes one fatality and three serious injuries on the ground. VT-SQC: injuries recorded as nil. These cases are selected from the census for the detail of their findings; the full census register is in Annex C.

How to read the Tier column. **Tier A** – the AAIB report contains a statement, quoted in this paper, that a DGCA function was deficient: an approval granted, an audit or surveillance conducted, a rule absent, or a finding left open. **Tier B** – the AAIB report documents a defect in something DGCA approved or oversees, such as an approved manual or briefing card, without stating that DGCA's oversight was at fault. The classification and the counts are Safety Matters Foundation's analysis; every classification rests on AAIB's own words. Tiers grade the evidence about the regulator. They do not assign accident causation or personal responsibility.

Risk rating. Each occurrence is rated on two facts: whether SMF's analysis finds a DGCA deficiency documented in the AAIB report (Tier A) or a documented defect in a DGCA-approved control (Tier B), and whether lives were lost. High: Tier A with fatalities. Medium: Tier A without fatalities, or Tier B with fatalities. Low: Tier B without fatalities. The rating measures the documented link between oversight and harm, not the probability of a future accident.

1.3 VT-RGF: an audit to resume operations

Cessna 172 VT-RGF of a flying training organisation crashed near Sultanpur, Telangana, on 6 October 2019, during a solo cross-country sortie on which an unauthorised second person was carried. Both occupants were killed. AAIB devoted section 2.3.2 of its report, "Safety Oversight Function by DGCA", to the regulator.

EXHIBIT 8 DGCA oversight of the operator of VT-RGF, in AAIB's words

Date	DGCA action	AAIB's assessment
July 2019	Surveillance of the flying training organisation	Observations "were generic in nature and were primarily related to documents and records"; "no observation concerning operational/ flying safety deficiencies"
6 October 2019	Accident	–
December 2019	Post-accident audit	"Once again, during the audit, no operational deficiencies were found or flagged"; "the purpose of this audit was not proactive but rather was to restart the flying activities of the FTO at the earliest"
Conclusion	–	DGCA's reports "were not in true letter and spirit. Otherwise, the procedural anomalies and safety lapses observed during accident investigation could have been easily captured during the regulatory audits/ surveillances"

Source: AAIB final report VT-RGF, section 2.3.2; Recommendation 4.1.

The investigator thus recorded that the regulator's post-accident audit served the resumption of commercial activity rather than the identification of causes. Training oversight failed again in 2023, when AAIB found that no regulatory framework governed glider training (VT-GDI). In the same year, in the Learjet accident at Mumbai (VT-DBL), AAIB again found that DGCA surveillance had missed maintenance-record and recurrent-training deficiencies.

1.4 The pattern

- **Documentation is audited; practice is not** – VT-RGF, VT-CHG, VT-MPQ, VT-DBL.
- **Approvals are granted before their prerequisites are met** – VT-JKB, VT-UPZ, VT-CHG, VT-SQC.
- **Findings are raised and left open** – VT-WGR, VT-MPQ.
- **Post-accident audits do not seek root causes** – VT-RGF.

- **Regulatory gaps remain unfilled – VT-GDI.**

The pattern extends across scheduled airlines, air ambulances, helicopters, gliders and flying training organisations. The common factor is neither an operator, an aircraft type nor a crew, but the oversight function.

2 What becomes of a safety recommendation

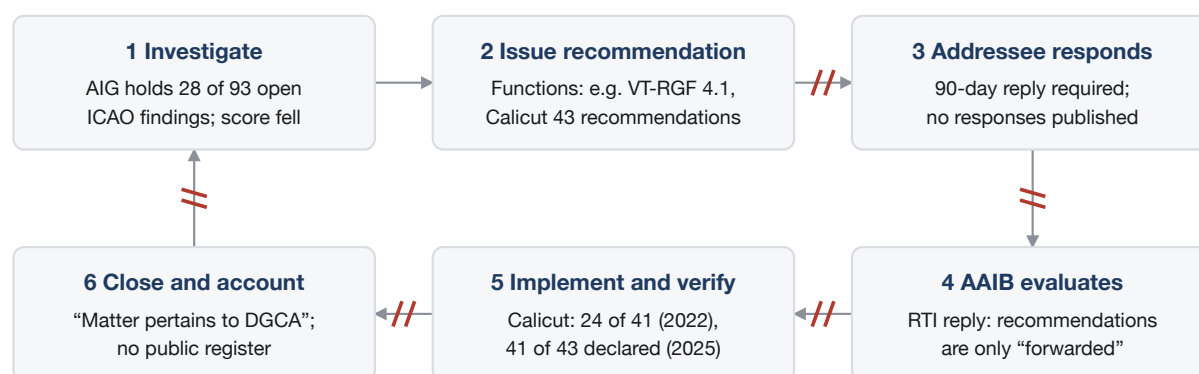
AAIB's published procedure describes a closed loop. Its reply to the author's RTI application describes a one-way transmission. Nothing on the public record shows the loop being closed for any recommendation addressed to DGCA.

EXHIBIT 9 AAIB's published procedure compared with the public record

Step	AAIB's published procedure	Public record
Transmit	AAIB "forwards the recommendations made in investigation reports and safety studies to DGCA and other regulatory authorities"	Performed. RTI reply of 8 October 2020: recommendations "are forwarded to concerned action addressees as per Aircraft Rules 2017"
Respond	DGCA to inform AAIB "within ninety days of the date of the transmittal correspondence, of the preventive action taken or under consideration"	No DGCA response published
Evaluate	AAIB "evaluates the response ... to examine if the safety concerns have been suitably addressed"	No evaluation published; none mentioned in the RTI reply
Follow up	Where inadequate, "consultations are held with DGCA ... and justification and clarifications obtained"	None on record
Monitor	AAIB "monitors the progress of the action taken ... and maintains a database of recommendations and action taken"	Database not public
Account	Not addressed	"Matter pertains to DGCA"

Source: AAIB, Safety Recommendations (aaib.gov.in); AAIB reply F-24011/16/2020-AAIB, 8 October 2020.

EXHIBIT 10 The safety recommendation loop (ICAO Annex 13 and AAIB procedure)



// A documented break at that step. Step 2 functions; the loop fails after it.

Source: Sections 2, 5 and 6 of this paper.

EXHIBIT 11 AAIB's reply of 8 October 2020 to the author's RTI application of 25 September 2020, transferred to AAIB by DGCA

Question	AAIB reply
VT-UPZ: the accepted report finds that DGCA granted the AOP without an approved Flight Safety post holder. What action was taken against the DGCA personnel responsible?	"Matter pertains to DGCA."
VT-JKB: the report found no valid SMS or Operations Manual approval and a Flight Safety Manual unrevised since December 2010. What action was taken against DGCA personnel?	"Matter pertains to DGCA."
How are recommendations processed, and where is the policy laid down?	"Forwarded to concerned action addressees as per Aircraft Rules 2017"
Has AAIB filed all final reports with ICAO as required by Annex 13?	"All the laid down mandates wherever applicable are followed"
Has a preliminary report been obtained for every investigation under Rule 8(3)(a)?	Preliminary investigation is carried out "if considered expedient"

Source: AAIB reply F-24011/16/2020-AAIB, 8 October 2020.

Where a finding concerns DGCA, the recommendation is addressed to DGCA, the response is prepared by DGCA, and the question of accountability is referred to DGCA. The regulator is the only party in the process able to act on its own deficiency.

3 Accountability of the regulator

No institution in India's aviation safety system is charged with acting when the regulator itself fails, whether the failure arises from negligence, insufficient capacity or deliberate omission. Accountability after an accident therefore rests on the operator's personnel alone.

An investigation under ICAO Annex 13 does not apportion blame or liability; that separation is deliberate. It presupposes that another body will act on the investigation's findings. For operators and licence holders that body is DGCA. For DGCA, there is none.

EXHIBIT 12 Who can act on a finding concerning DGCA

Institution	Powers over operators	Powers over DGCA	Action on AAIB findings concerning DGCA, 2018–2026
AAIB	Recommendation only	Recommendation only; findings sent to DGCA	Referred to DGCA
DGCA	Licensing, approvals, suspension, financial penalties	Itself	None published
Ministry of Civil Aviation	Through DGCA	Administrative control of DGCA as an attached office	None published
Parliamentary Standing Committee	Examination and report	Examination and report; recommendations not binding	380th Report (2025) criticised closure of findings; 387th Report (2026) called for an independent high-level safety review
Vigilance bodies and courts	Case by case	On a specific complaint only	None identified for an oversight failure

Source: Aircraft Act, 1934 and rules; 380th Report (2025); AAIB RTI reply (2020).

Whether a particular deficiency was negligent, the product of under-staffing or a decision not to act is therefore never determined, because no one is tasked with determining it.

3.1 Enforcement falls on operator personnel

DGCA does act after accidents, against operators. On 20–21 June 2025, about a week after AI171, it directed Air India to remove three named crew-scheduling officials, including a Divisional Vice President, from all rostering functions, to initiate disciplinary proceedings within ten days, and warned of licence suspension and operational restrictions for further violations. DGCA cited “systemic failures” in crew management.

EXHIBIT 13 Consequences after an accident: operator and regulator compared

Consequence	Operator personnel	DGCA personnel
Removal from role	Yes – three Air India officials, June 2025	None on record, 2018–2026
Disciplinary proceedings	Ordered within ten days	None on record
Licence or approval action	Routine for pilots and engineers	No equivalent sanction exists
Review of the failed control	Required of the operator	No published DGCA review of its own audits (VT-RGF, VT-UPZ, VT-DBL)

Source: DGCA order to Air India, June 2025, as reported by Scroll; AAIB final reports.

Accountability that stops at the operator conveys a clear message to the system: the regulator’s failures carry no consequence. The remainder of this paper documents the safety culture that results.

4 Recurrence of accidents and incidents

DGCA’s surveillance identifies deficiencies in large numbers but leaves most of them open, and the hazards behind them produce further occurrences. The accident record is the downstream consequence of the oversight record described in Sections 1 to 3.

4.1 Surveillance that detects but does not correct

EXHIBIT 14 DGCA surveillance output and closure

Measure	2024	January–April 2025 cohort
Inspections completed against plan	3,995 of 4,027 (99.2%)	–
Findings raised	12,683 (81 Level I)	4,692
Findings rectified at reporting date	–	945 (20.1%)
Findings open at reporting date	–	3,747 (79.9%), including 37 Level I
Open: Airworthiness / Aerodrome Standards / Flight Standards	–	1,304 / 764 / 462

Source: Parliamentary Standing Committee on Transport, Tourism and Culture, 380th Report, 20 August 2025, paras 3.3.1–3.3.5.

A Level I finding denotes an immediate safety risk; thirty-seven were open without any published containment measure. Separately, 377 of 754 aircraft examined between January 2025 and February 2026 exhibited repetitive defects, faults that recur after being certified as rectified.

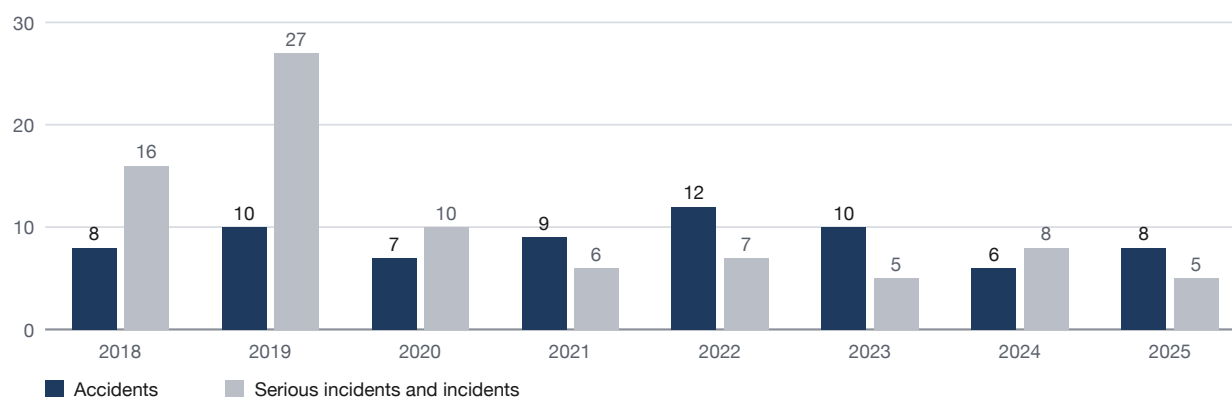
4.2 The same hazards, again

EXHIBIT 15 Recurrence of hazard classes after a documented warning

Hazard class	Warning on record	Recurrence
Wrong runway or taxiway take-off	VT-EXM, Nov 2020: approved manuals lacked hot-spot procedures	VT-SQC, Oct 2021; VT-EXT, Dec 2024
Unapproved manuals and SMS	VT-JKB, Nov 2015	VT-UPZ, Jun 2018; VT-CHG, May 2022
Training oversight	VT-RGF, Oct 2019; Recommendation 4.1 to DGCA	VT-GDI, Mar 2023: no regulatory framework for glider training
Fuel policy	VT-ESH, 2016 recommendations	VT-TTN and VT-TNH, Jul 2019: AAIB cited unimplemented recommendations
Char Dham helicopter operations	Earlier accidents and DGCA circulars	VT-BKA, Jun 2025: circular revised only after further accidents
Runway incursions	2024 target: 9.78 per million movements	2024 actual: 14.12 (+44.4%)

Source: AAIB final reports; 380th Report, para 3.5.

EXHIBIT 16 AAIB investigations by year of occurrence, 2018–2025



Source: AAIB accident and incident statistics (updated 9 June 2026). Not adjusted for traffic.

AAIB's series represents a small fraction of the occurrence population. DGCA's Occurrence Review Board reviewed approximately 9,631 reportable occurrences in 2025 and DGCA ordered 1,381 investigations of its own; neither their findings nor their corrective actions are published.

4.3 A regulator without the staff to verify

EXHIBIT 17 DGCA capacity

Indicator	Value
DGCA posts sanctioned / filled / vacant, January 2026	1,630 / 843 / 787 (48.3% vacant)
DGCA technical posts, Parliamentary review 2025	553 filled of 1,063 (48.0% vacant)
ICAO score for qualified technical personnel (CE-4), 2023	51.16%, India's lowest critical element

Source: Parliamentary disclosures, 2025–2026; ICAO State Safety Briefing, 2023.

The Standing Committee also recorded that DGCA lacks recruitment and financial autonomy. With half its posts vacant, DGCA can raise findings but cannot return to verify their rectification. This explains the 79.9% open rate; it does not excuse it, since the staffing position has been known for years without correction by the Ministry.

5 Occurrences recorded below their severity

Classification determines who investigates and what obligations follow. Accidents and serious incidents fall to AAIB; incidents remain with DGCA. A lower classification therefore removes an occurrence from independent scrutiny and disapplies obligations that attach only to accidents. The record shows occurrences entering the system below their true severity, and much of the occurrence record never reaching the public domain.

5.1 VT-IYX: a serious incident that was an accident

EXHIBIT 18 Classification of IndiGo ATR 72-600 VT-IYX, Hubli, 14 June 2021

Date	Classification	Consequence
16 June 2021	Order of the Director General, AAIB, classifies the occurrence a serious incident	DGCA's requirements mandate a post-flight alcohol and medical examination only after an accident; none was carried out
26 August 2021	Corrigendum: "based on the severity of damages to the aircraft, the occurrence classification was changed to Accident "	Ten weeks later; the examination could no longer be performed
Final report	Recommendation 4.1: DGCA to require post-flight examination "in case of serious incidents also"	A gap in DGCA's requirements, exposed only because the classification was corrected

Source: AAIB final report VT-IYX, sections 1 and 1.13. ICAO Safety Report 2022 lists the occurrence as an accident.

5.2 What does not reach the record

EXHIBIT 19 Official occurrence data compared with the public record

Measure	Official or internal figure	Public record	Share visible
Runway incursions, 2024	14.12 per million movements (AAI)	About 3 per million	About 22%
Bird strikes, 2020–2025	7,489 (reported to Parliament)	20	0.27%
Occurrences reviewed by DGCA's ORB, 2025	About 9,631	Not published	–
AAIB investigations opened 2023–24 with a final report two years later	–	–	23%

Source: Safety Matters Foundation, India's aviation safety register versus the public record; 380th Report; Ministry of Civil Aviation Annual Report 2025.

5.3 The internationally reported record

ICAO's State Safety Briefings of June and September 2023 report that India “had no fatal accidents as State of Occurrence on scheduled commercial flights with aircraft over 5.7t in the last 5 years” and record the target as achieved. ICAO's own Safety Report 2021 (Appendix 2) lists a scheduled commercial accident in India on 7 August 2020 – a Boeing 737-800 with 21 fatalities. That accident is Air India Express VT-AXH at Kozhikode.

5.4 What remains to be established

VT-IYX is a documented instance of under-classification at the point of notification. Its frequency can be established only from DGCA and AAIB records: the initial against the final classification of every notified occurrence, and every DGCA-investigated incident tested against the Annex 13 definitions of accident and serious incident (Annex A).

6 AI171 and the investigator's capacity

Air India Boeing 787-8 VT-ANB crashed shortly after take-off from Ahmedabad on 12 June 2025 with the loss of 260 lives, 241 on board and 19 on the ground; the one surviving passenger was seriously injured and 67 people on the ground were injured. The accident tested AAIB against the capability the Calicut (VT-AXH) report had required it to acquire. That capability was not in place; two months later the Government informed Parliament that the Calicut recommendations had been implemented.

EXHIBIT 20 Calicut recommendations: required, declared and demonstrated

Recommendation (2021)	Required	Declared to Parliament, 18 Aug 2025	Demonstrated by AI171
4.5.1 Adequate manpower	Permanent full-time investigators; establishment enlarged with traffic; permanent aviation-medicine and human-factors expertise	Implemented	Three officers drawn from DGCA's Air Safety Directorate for site work; investigation team included officers with DGCA service; aviation medicine, aviation psychology and flight recorder specialists "taken on board as Subject Matter Experts", not on AAIB's establishment
4.5.2 Flight recorder laboratory	Fully equipped laboratory with hardware, software, spectrum analysis and OEM support	Implemented	Forward recorder read only after the US NTSB supplied a golden chassis and download cables; aft recorder too damaged for conventional recovery
4.4.18 DGCA cooperation	Full DGCA cooperation with AAIB investigations	Implemented	The organisation whose cooperation was found wanting was placed within the AI171 investigation, while its own oversight of Air India falls within the investigation's scope

Source: AAIB final report VT-AXH, sections 4.4.18, 4.5.1 and 4.5.2; AAIB preliminary report VT-ANB (July 2025); Rajya Sabha Unstarred Question 2740, 18 August 2025. The reply does not identify the two recommendations dropped; the three above are treated as declared implemented.

EXHIBIT 21 Sequence of events

Date	Event
September 2021	Calicut final report issued: 43 recommendations, including 4.5.1 and 4.5.2 addressed to AAIB
May 2022	Implementation panel reports 24 of 41 accepted recommendations implemented
12 June 2025	AI171 accident: AAIB draws on DGCA officers and NTSB recorder equipment
July 2025	AAIB preliminary report records both
18 August 2025	Government informs Rajya Sabha that 41 of 43 recommendations are implemented and two dropped

The declaration of implementation was made after AI171 had demonstrated the gaps. It records an administrative closure, not a capability. Three further observations follow:

- **Independence.** DGCA certified and oversaw Air India's operations and maintenance; DGCA officers worked on the investigation; no recusal or conflict-of-interest declaration has been published.
- **Declared, not demonstrated, closure.** The pattern of Section 2 repeats: a recommendation is marked complete without evidence that its purpose has been achieved.
- **Prior warning from ICAO.** India's ICAO score for accident investigation (AIG) fell from 67.00% to 64.56% after the 2022 audit; AIG accounts for 28 of India's 93 open ICAO findings, eleven of them concerning tools and technical guidance.

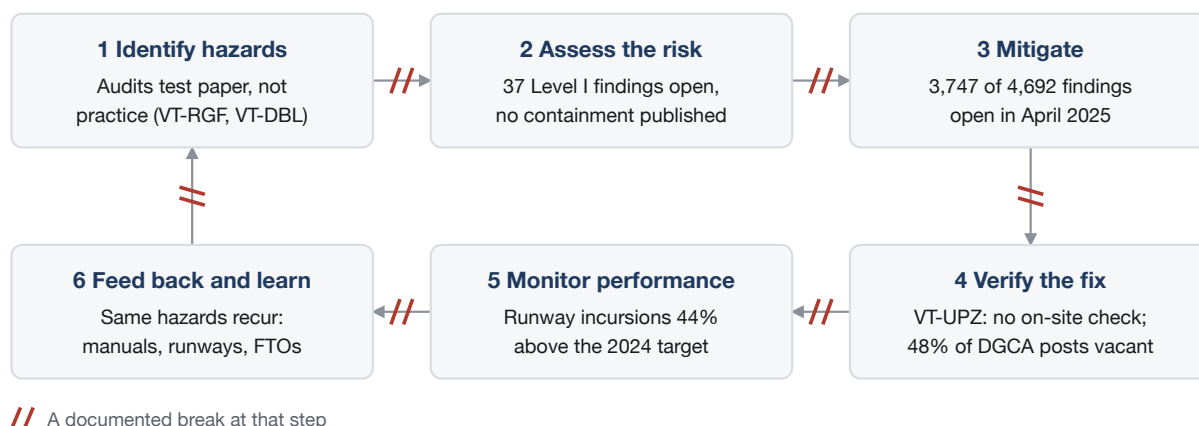
Whether the DGCA officers assigned to AI171 were among those concerned in the Calicut non-cooperation is not established by published records; their appointment orders would settle the question.

7 The broken feedback link

A safety management system operates as a closed loop: hazards are identified and assessed, risks are mitigated, rectification is verified, performance is monitored, and the lessons are fed back into

regulations, approvals and surveillance. ICAO Annex 19 places this loop at the centre of every State Safety Programme. In India the final link, feedback, is broken or disregarded, so the loop does not close and the same hazards return.

EXHIBIT 22 The safety risk management loop (ICAO Annex 19)



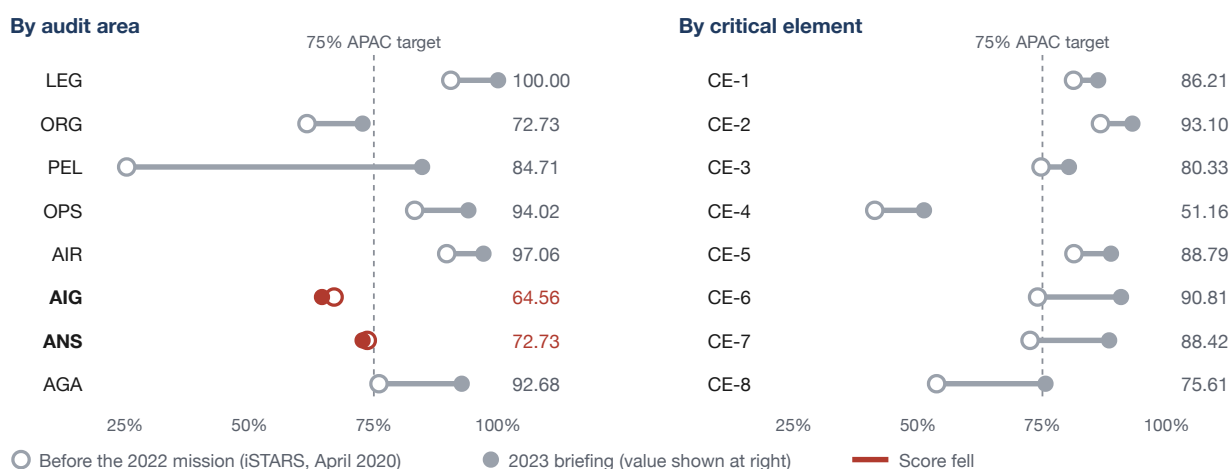
Source: Sections 1 to 5 of this paper.

The feedback link carries two kinds of learning. The first belongs to the operator: procedures are revised and crews retrained. That learning occurs, and is enforced. The second belongs to the regulator: why its approval or audit failed to detect the deficiency, and what it must change. AAIB's findings call for that second kind of learning from DGCA, and the record shows that it does not occur. A system that learns only at operator level will continue to produce accidents that pass through the regulator's blind spots.

India has declared its State Safety Programme to be at ICAO Level 4, "fully implemented". ICAO records that this level is "self-reported by the State and not validated by ICAO". The evidence assembled in this paper does not support it.

8 ICAO USOAP results in brief

ICAO's audit findings corroborate the AAIB record. India's overall Effective Implementation (EI) rose to 85.65% following the November 2022 ICAO mission, but its weakest results lie in the functions with which this paper is concerned: qualified technical personnel and accident investigation.

EXHIBIT 23 Effective Implementation by audit area and critical element, before and after the 2022 mission

Source: ICAO iSTARS USOAP report for India, 24 April 2020; ICAO State Safety Briefing, 6 June 2023.

EXHIBIT 24 Selected ICAO indicators, 2023

Indicator	India	Significance
Overall EI	85.65% (72.93% before 2022)	Above the 70% global and 75% regional targets
CE-4, qualified technical personnel	51.16%	Lowest critical element; consistent with 48% DGCA vacancy
AIG, accident investigation	64.56% (67.00% before 2022)	Declined after 2022 while most areas improved
Open ICAO findings	93, of which AIG 28 and ANS 30	AIG resolved 5 of 33 earlier findings; other areas 67%
Aerodrome certification, full implementation (PQ 8.086)	Unsatisfactory	Requirements exist but are not fully implemented
SSP implementation	Level 4, self-reported	Not validated by ICAO (Section 7)
Fatal accidents, previous five years	0	Inconsistent with ICAO Safety Report 2021 (Section 5.3)

Source: ICAO State Safety Briefings, June and September 2023; ICAO iSTARS, April 2020.

EI is computed from ICAO's protocol questions, not from accident data, so the omission of Kozhikode does not affect the score. The score measures whether rules, structures and procedures exist. The AAIB record measures whether they work.

9 Transparency and public accountability

Oversight that the public cannot see cannot be held to account. At every point where this paper finds the safety loop broken, the break is also invisible: the public record stops at the point where action should begin.

EXHIBIT 25 What is published, and what is not

Record	Public status	Consequence
AAIB final reports	Published	Only 23% of investigations opened in 2023–24 had a final report two years later
AAIB safety recommendations	Published within each report	No consolidated public register
DGCA responses to AAIB recommendations (due in 90 days)	Not published	The public cannot see whether any recommendation was accepted, rejected or acted on
AAIB evaluation of those responses	Not published	AAIB's database of action taken is maintained but not public
Action on AAIB findings concerning DGCA's own oversight	Not published	RTI reply: "Matter pertains to DGCA"
DGCA surveillance findings and their closure	Aggregates to Parliament only	No finding-level ledger, ages or containment measures
DGCA Occurrence Review Board (about 9,631 occurrences, 2025) and 1,381 DGCA investigations	Not published	Ground and operational hazards largely invisible
Runway incursions	Partly	About one in five internally logged events reaches the public record
Changes of occurrence classification	Only within individual final reports	No register of reclassifications
Calicut close-out evidence (43 recommendations)	Status claim only	41 of 43 declared implemented; no evidence published
AI171 investigation team declarations	Names only	No conflict-of-interest or recusal declarations

Source: AAIB, DGCA and Parliamentary sources cited in this paper; Safety Matters Foundation analysis.

The author's own experience illustrates the gap. An application under the Right to Information Act, 2005, filed on 25 September 2020, asked what action had followed AAIB's findings concerning DGCA in VT-UPZ and VT-JKB, and how recommendations are processed. DGCA transferred the application to AAIB, which replied on 8 October 2020 that both questions were a "matter pertains to DGCA" and that recommendations are "forwarded to concerned action addressees". A question about the regulator's accountability was passed from the regulator to the investigator and back again, and remained unanswered.

What public accountability requires

- **Proactive disclosure.** Section 4 of the RTI Act requires public authorities to publish information suo motu. DGCA's responses to AAIB recommendations, AAIB's evaluations and the action taken on findings concerning DGCA fall squarely within it and should not depend on individual applications.
- **A public safety-action register.** One record per finding or recommendation: owner, due date, interim control, closure evidence and status, with protected information redacted.
- **Quarterly reporting to Parliament** of finding ages, Level I containment, verified closures and the response to every AAIB finding concerning DGCA.
- **Published reclassification and conflict records:** every change of occurrence classification, and conflict-of-interest declarations for every investigation team.

- **Timely final reports**, with interim statements where an investigation passes its first anniversary, as Annex 13 provides.

10 Conclusions and recommendations

10.1 Conclusions

1. AAIB's reports establish that deficiencies in DGCA oversight recur within the chain of events leading to accidents, across every segment of civil aviation: 35 of 129 final reports state one, and those occurrences account for 69 deaths.
2. The recommendation process ends at transmission; AAIB's published procedure is not visibly applied.
3. No mechanism exists to hold the regulator accountable, and the nature of each deficiency, whether negligent, capacity-driven or deliberate, is never determined.
4. Enforcement is confined to operator personnel; the regulator's failures carry no consequence.
5. Accidents recur in the same hazard classes because findings remain open and lessons are not fed back.
6. Occurrences are recorded below their severity and most do not reach the public record.
7. AI171 demonstrated that capacity declared to Parliament as implemented was not in place.
8. The feedback link of the safety management system is broken; the declared SSP maturity is not supported by evidence.

10.2 Recommendations

EXHIBIT 26 Recommendations

No.	Recommendation	Addressee	Measure of completion
1	Statutory duty to respond publicly within 90 days to every AAIB finding concerning DGCA, naming the responsible office and the action taken, including disciplinary action	MoCA	Published response for every such finding since 2018
2	Independent Assurance Review of each AAIB finding concerning DGCA since 2018: test the evidence of correction and determine whether the systemic cause has been removed; convene the independent high-level review recommended in the 387th Report	MoCA; independent panel	Reviewer verdicts laid before Parliament
3	Publication of AAIB's recommendation database: recommendation, DGCA response, AAIB evaluation and status	AAIB	Public register, updated quarterly
4	DGCA review of its own approval and audit history after every accident in which AAIB identifies an oversight deficiency	DGCA	Review published with each such final report
5	Containment of every open Level I finding within 30 days; quarterly publication of the findings ledger	DGCA	Ledger of findings raised, overdue and closed on site
6	Exclusion of DGCA personnel from investigations in which DGCA oversight is within scope; published conflict declarations	AAIB; MoCA	Amended investigation rules; declarations for VT-ANB
7	Independent audit of all 43 Calicut recommendations against their full text	MoCA; external auditor	Item-by-item report laid before Parliament

No.	Recommendation	Addressee	Measure of completion
8	Permanent AAIB investigator and specialist posts; OEM recorder support for every type on the Indian register	AAIB; MoCA	Filled posts; equipment inventory by aircraft type
9	Audit of occurrence classification: initial against final, and DGCA-investigated incidents against Annex 13 definitions	AAIB; DGCA	Published classification audit, 2018–2026
10	Filling of DGCA technical posts; recruitment and financial autonomy for DGCA	MoCA	Technical vacancy below 10% within 24 months
11	Reconciliation of India's ICAO fatal-accident record; ICAO validation of the declared SSP level	DGCA	Corrected ICAO dashboard; validation result

Annex A Records required to complete the assessment

EXHIBIT 27 Records sought

Record	Custodian	Purpose
All Level I and Level II findings, 2018–2026, with dates, entity, corrective action due date, closure date and evidence	DGCA	Age and overdue profile of findings; repeat findings
Containment measures for the 37 Level I findings open in April 2025	DGCA	Whether known immediate risks were contained
Any disciplinary, vigilance or administrative action against DGCA officials arising from AAIB findings, 2018–2026	DGCA; MoCA	Confirms or corrects Section 3
AAIB recommendation database with DGCA responses and AAIB evaluations	AAIB	Whether recommendations were closed on evidence
Item-wise status of the 43 Calicut recommendations with closure evidence	MoCA; AAIB	Reconciliation of 24 of 41 (2022) with 41 of 43 (2025)
AAIB sanctioned and filled posts 2020–2026; laboratory inventory and OEM agreements by type	AAIB	Implementation of 4.5.1 and 4.5.2
VT-ANB appointment orders, affiliations and conflict declarations	AAIB	Independence of the AI171 investigation
Initial and final classification of every notified occurrence, 2018–2026	AAIB; DGCA	Frequency of under-classification
December 2019 VT-RGF audit report and resumption approval	DGCA	Basis of the resumption decision
iSTARS record for VT-AXH and the query underlying India's five-year fatal-accident figure	ICAO; DGCA	Source of the NIL entry

Annex B Method, definitions and sources

Census. All 129 AAIB final reports listed on aaib.gov.in for occurrence years 2018–2025 were downloaded in October 2026; scanned pages were read by optical character recognition. Each report was coded for injuries (section 1.2), recommendations (section 4) and findings concerning DGCA (sections 2 and 3), with verbatim quotations checked by script against the source text. Recommendation counts were then independently recounted from each report’s recommendations section, with optical character recognition of every image-only page; a recommendation is counted as addressed to DGCA only where AAIB names DGCA as the body that must act. Treating every borderline wording (for example “DGCA may also ensure” within a recommendation to an operator) as addressed to DGCA would raise the count by eight; the share would remain 43–44%. Preliminary reports were excluded. Reports for occurrences still under investigation, including AI171, are not included.

The paper rests principally on AAIB final and preliminary reports. Where AAIB or the Parliamentary Standing Committee states a regulatory deficiency in terms, the paper quotes it. Where an inference is the author’s, it is presented as such. Fatality and serious-injury figures are taken from section 1.2 (Injuries to persons) of each AAIB report.

Evidence tiers. Tier A: AAIB’s report itself states that a DGCA approval, surveillance, audit or closure function was deficient. Tier B: AAIB found a defect in a control DGCA approved or oversees, without stating that DGCA’s oversight was at fault; such cases raise an oversight question only. Tiers grade evidence about the regulator; they do not assign accident causation or personal responsibility.

Definitions. DGCA Level I findings denote an immediate safety risk; Level II findings require correction within a specified period. ICAO audit areas: LEG legislation; ORG organisation; PEL personnel licensing; OPS aircraft operations; AIR airworthiness; AIG accident and incident investigation; ANS air navigation services; AGA aerodromes and ground aids. CE-1 to CE-8 are ICAO’s eight critical elements of a safety oversight system; CE-4 concerns qualified technical personnel.

Sources

1. AAIB final investigation reports: VT-JKB (2015), VT-UPZ (2018), VT-WGR (2019), VT-RGF (2019), VT-AXH (2020), VT-EXM (2020), VT-MPQ (2021), VT-IYX (2021), VT-SQC (2021), VT-CHG (2022), VT-PWI (2022), VT-GDI (2023), VT-DBL (2023). aaib.gov.in/Reports
2. AAIB preliminary report, VT-ANB (AI171), July 2025. aaib.gov.in
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13. ICAO, Safety Report, 2021 and 2022 editions, Appendix 2. icao.int
14. ICAO, Report on USOAP CMA Results, 2013–2015 (2016).
15. Calicut implementation panel findings, May 2022, as reported by the Times of India.
16. Department-related Parliamentary Standing Committee on Transport, Tourism and Culture, 387th Report, Demands for Grants 2026–27, March 2026. sansad.in
17. Safety Matters Foundation, *Closing the Safety-Action Loop*, policy white paper, October 2026.

Annex C Census register of DGCA-related findings

The table lists every AAIB final report in the census rated Tier A or Tier B, ordered by risk rating and date.

EXHIBIT 28 Census register: the 54 AAIB final reports identifying a DGCA or DGCA-approved-control deficiency

Date	Occurrence	AAIB finding (first cited) or approved-control defect	Tier	Risk	F	S	Recs to DGCA
2018-01-13	VT-PWA helicopter; accident	"The audit report was not provided to the operator by DGCA till the date of accident" (2.1.18)	A	High	7	0	0
2018-06-28	VT-UPZ non-scheduled; accident	"the AOP was issued to UYAPL in Aug 2016 by DGCA without an adequate safety mechanism being validated" (2.3.1)	A	High	5	3	13
2019-08-21	VT-HDX helicopter; accident	"DGCA (Fols) were having a specific role during relief operation and this was not performed." (2.3)	A	High	3	0	3
2019-10-06	VT-RGF FTO; accident	"the reports of surveillance/audit carried out by the DGCA teams of the FTO were not in true letter and spirit." (2.3.2)	A	High	2	0	2
2020-01-03	VT-CAF FTO; accident	"CAA submitted an SOP for Night Cross Country Flight to DGCA in July 2013 but no record of matter being perused further" (2.2.2)	A	High	2	0	3
2020-02-03	VT-GLE glider/microlight; accident	"Glider circulars issued by DGCA are not available on DGCA website for ready reference by Glider Training Institutes." (3.1)	A	High	1	1	2
2020-06-08	VT-ENF FTO; accident	"inspite of acceptance by DGCA, the SMS Manual has various ambiguities regarding rule position on notification of occurrence and obligation to investigate" (2.6.1)	A	High	2	0	4
2020-08-07	VT-AXH scheduled; accident	"DGCA has been accepting low DFDR monitoring figures and Safety Audits are closed without any follow up action." (2.9.1.1)	A	High	21	76	18
2020-09-21	VT-IGE FTO; accident	"Also, there is no specific requirements/guidelines by DGCA in this regard for FTOs." (3.1.18)	A	High	1	0	2
2021-07-16	VT-BRP FTO; accident	"However, it does not contain any directions for developing means to record conversation between ATC and aircraft flying in uncontrolled airfield/region which will further enhance the safety oversight." (3.1.17)	A	High	1	1	5
2022-02-26	VT-FAO FTO; accident	"Provision to record and retrieve the VHF communication held between company aircraft and local ATC is presently nowhere mandated under DGCA regulations" (2.5)	A	High	1	0	6

Date	Occurrence	AAIB finding (first cited) or approved-control defect	Tier	Risk	F	S	Recs to DGCA
2022-05-01	VT-SLH scheduled; accident	"the aircraft was deregistered and returned to the lessor without DGCA or Airline obtaining clearance from AAIB." (3.1.7)	A	High	1	3	2
2022-05-12	VT-CHG state/government; accident	"till the date of accident, the flight safety manual was not approved by DGCA." (2.4.4)	A	High	2	0	9
2022-06-28	VT-PWI helicopter; accident	"thus was not being checked by AME or DGCA during annual inspection required as per the CAR or during issue of ARC." (2.1.1)	A	High	4	2	9
2022-10-18	VT-RPN helicopter; accident	"This provision is vague and not conducive for safe operations from Kedarnath Helipad" (2.2.2)	A	High	7	0	2
2023-01-05	VT-PTE FTO; accident	"as on date of accident, no instruction was given by DGCA to FTOs regarding non validity of the Flying Grants Circular 02 of 2005." (2.5)	A	High	1	1	7
2023-04-23	VT-RNK helicopter; accident	"This provision is not conducive for safe operations from Kedarnath Helipad as each operator gives emphases to their own operations" (2.2)	A	High	1	0	4
2025-06-15	VT-BKA helicopter; accident	"it did not cater for requirements for oversight of DGCA on the established control center at Sitapur" (3.1.16)	A	High	7	0	2
2018-02-07	VT-TNE / VT-SCV scheduled; serious incident	"a verbal dispensation was sought for the same from DGCA and hence AAIB is not in a position to cross-check the statement with CVR" (2.0)	A	Medium	0	0	1
2018-10-15	VT-ALN scheduled; serious incident	"requirements for declaring unfit Cabin Crew fit for flight duties as per Para 4.7 of CAR are very subjective" (2.2.2)	A	Medium	0	1	1
2019-06-30	VT-SUM scheduled; serious incident	"DGCA has not laid down any period/ experience for transition from right seat to left seat for pilots (from Forces)" (2.5)	A	Medium	0	0	3
2019-07-01	VT-SYK scheduled; accident	"none of the audit reports have pointed out to these serious safety weaknesses in the system." (3.1 A)	A	Medium	0	0	3
2019-07-04	VT-TTN scheduled; serious incident	"recommendations addressed to DGCA and Operators in the earlier investigation reports have not been implemented in true letter and spirit." (2.2)	A	Medium	0	0	3
2019-07-15	VT-TNH scheduled; serious incident	"Air India A320 aircraft (VT-ESH) released on 12th Aug 2016 are still not fully implemented by the DGCA." (3.1)	A	Medium	0	0	5
2019-08-23	VT-SVK helicopter; accident	"in the absence of specific guidelines/SOP and co- ordination between DGCA, Local Authorities and operator for conducting these relief/rescue flights" (2.3.3)	A	Medium	0	1	2

Date	Occurrence	AAIB finding (first cited) or approved-control defect	Tier	Risk	F	S	Recs to DGCA
2021-02-20	VT-GHE scheduled; accident	"DGCA didn't take cognizance of seriousness of similar nature of findings appearing in consecutive 3 years and every time level of finding given was level-II." (2.4)	A	Medium	0	0	2
2021-05-06	VT-MPQ state/government; accident	"Post the reply of DoA. GoMP, the DGCA did not pursue the said Class II finding, however the current situation remains the same." (2.1.2.1)	A	Medium	0	2	20
2021-06-14	VT-IYX scheduled; accident	"in the absence of mandatory DGCA's Civil Aviation Requirement (CAR) for conducting medical test in case of serious incident" (2.2.1)	A	Medium	0	0	1
2022-01-21	VT-AMU FTO; accident	"The wrong reference to a deleted circular escaping scrutiny by DGCA during approvals and subsequent renewals on multiple occasions" (2.2.2(xiv))	A	Medium	0	0	6
2022-09-14	VT-ANM / G-VBZZ scheduled; serious incident	"The aircraft was released by DGCA without ensuring that CVR is removed for investigation in accordance with CAR Section 5 Series C, Part II." (3.1.9)	A	Medium	0	0	3
2023-02-08	VT-RGT FTO; accident	"any mandatory regulation similar to DGCA operation circular no. 2 of 2004 applicable to Student Pilots. This type of situation remains unattended" (2.3.1)	A	Medium	0	0	3
2023-03-23	VT-GDI glider/microlight; accident	"However, the DGCA never carried out any safety oversight of M/s JFI Dhanbad airport base" (2.4.1.2)	A	Medium	0	1	6
2023-09-14	VT-DBL non-scheduled; accident	"The DGCA audit/surveillance reports of the organization perused by the investigation team did not had any significant safety findings." (3.1.11)	A	Medium	0	8	7
2024-02-02	VT-SCV / IN714 scheduled; serious incident	"Air Force pilots or Air Force ATCOs are involved in an incident and does not include other defence forces" (3.1.17)	A	Medium	0	0	1
2024-03-06	VT-CHP FTO; accident	"provision to record and retrieve the VHF communication held between aircraft and local ATC is presently nowhere mandated under DGCA regulations" (2.6)	A	Medium	0	0	4
2018-04-26	VT-PTD FTO; accident	DGCA-approved TPM allowed Special VFR on CFI authorisation without citing any DGCA regulation, though CAR prohibits Special VFR for commercial air transport (2.3).	B	Low	0	0	2
2018-05-21	VT-AIX scheduled; serious incident	RESA at the end of Runway 09 was not graded in accordance with the standards laid down in CAR Section 4 and was mainly covered with loose gravels. (1.10 (aerodrome licensed by DGCA on 21 Sep 2017))	B	Low	0	0	1

Date	Occurrence	AAIB finding (first cited) or approved-control defect	Tier	Risk	F	S	Recs to DGCA
2018-10-11	VT-AYD scheduled; accident	Operations Manual Part D has no review process when competence issues are raised in a pass assessment (2.3, finding 15). Report does not itself state DGCA approval of Part D.	B	Low	0	0	1
2018-11-24	VT-ABK FTO; accident	DGCA-approved TPM only copies POH emergency procedures; no local procedures or forced-landing fields identified (finding 13-14); same gap found in other FTOs' TPMs.	B	Low	0	0	1
2019-04-29	VT-SGJ scheduled; serious incident	DGCA-approved Operations Manual lacked runway excursion procedure and tailwind training; DGCA-licensed Shirdi aerodrome had faulty wind indicators, blocked windsock and ATC blind spot (2.5).	B	Low	0	0	4
2019-06-30	VT-AYA scheduled; serious incident	DGCA-approved Operations Manual had no procedure for runway excursion situations and no tailwind-landing training in initial/recurrent programme (2.5).	B	Low	0	0	2
2019-09-11	VT-BRT non-scheduled; serious incident	DGCA-approved Nanded Aerodrome Manual omitted AAIB notification and was not compliant with AAI Rules 2017 on evidence custody/wreckage removal (2.7, 2.8).	B	Low	0	0	4
2019-09-23	VT-UTC helicopter; accident	DGCA joint SOP for Kedarnath shuttles caps valley at 6 helicopters, but AAIB found 'a very good probability of more than 06 helicopters in the valley' at slot changeovers; SOP lacks detailed take-off/landing procedures (	B	Low	0	0	2
2019-11-11	VT-WGR scheduled; serious incident	"submitted through the ATR were acceptable to the DGCA or not." (1.17.2(B))	B	Low	0	0	2
2020-01-20	VT-SZK scheduled; serious incident	Risk mitigations on which DGCA approved commissioning of RWY 09L/27R (closure markers, DATIS) not effective: cross marker placed 350 m from threshold, not on runway; no DATIS caution (1.18.1, 2.2).	B	Low	0	0	0
2020-06-28	VT-JSS non-scheduled; accident	DGCA-approved Flight Safety Manual contained obsolete accident-investigation regulations (2.4, finding 26).	B	Low	0	0	5
2020-11-13	VT-EXM scheduled; serious incident	DGCA-approved Operations Manual lacked intersection-departure and hotspot-briefing procedures; DGCA-approved Ops and Flight Safety Manuals cited repealed rules, 'not in line with the existing regulations at the time of a	B	Low	0	0	6
2021-06-07	VT-TGE scheduled; accident	DGCA-approved Operations Manual had no procedure for circumnavigating en-route weather; listed as a contributory factor.	B	Low	0	2	1

Date	Occurrence	AAIB finding (first cited) or approved-control defect	Tier	Risk	F	S	Recs to DGCA
2021-09-20	VT-RBE FTO; accident	DGCA-approved TPM training syllabus omitted the AFM balked landing procedure (gap between AFM and TPM); cause involved incorrect balked landing.	B	Low	0	0	5
2021-10-05	VT-EXQ / VT-NKF scheduled; serious incident	DGCA-approved CSOP (OM Part B) gave no explicit procedure for headset use in congested RT or briefings above 10,000 ft (not a listed contributory factor).	B	Low	0	0	0
2021-10-24	VT-SQC scheduled; serious incident	Operations Manual Part A (and unapproved QLTG) did not require PF to cross-check FMS against ATC clearance; matches contributory factors 3-4.	B	Low	0	0	5
2021-11-17	VT-SYZ scheduled; serious incident	DGCA-approved AME OJT syllabus let B1 skip OFV replacement (50% task option) and did not cover it for B2; operator training on manual pressurisation found inadequate (latent cause).	B	Low	0	0	0
2022-04-17	VT-ETU non-scheduled; accident	The Operations Manual of the aircraft operator included FAA guidelines and requirements which are applicable for operators operating under US regulations. (3.1.1(11))	B	Low	0	0	3
2022-06-06	VT-EUW FTO; accident	DGCA-approved TPM syllabus had no rejected/aborted take-off training; lack of it is a contributory factor. FTPR format also needed amendment.	B	Low	0	0	3

Source: AAIB final reports; quotations verbatim. F = fatal, S = serious injuries (section 1.2 of each report). Full coded dataset, including Tier C and N reports, available from Safety Matters Foundation.