



| ICAO

INTERNATIONAL CIVIL AVIATION ORGANIZATION

A UN SPECIALIZED AGENCY



LESSONS LEARNED

RUNWAY EXCURSION ACCIDENT OF TURKISH AIRLINES
TC-JOC, A330-303, AT TIA, KATHMANDU, NEPAL
MARCH 4TH, 2015



Below Minima: TC-JOC's Near-Touchdown in Kathmandu



TC–JOC Kathmandu A330: Lessons Learned



MARCH 4, 2015

SUN	MON	TUE	WED	THU	FRI	SAT
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

**A330 TK-726
attempted
landing in
Kathmandu in fog
and Heavy Rain**



The aircraft landed hard, off-center, and slid off the runway

TIMELINE & CONTEXT



Major Contributing Factors



Descended below minima without visual reference



Incorrect Threshold Coordinates



RNAV-RNP Procedure Unfamiliarity



Outdated ATIS Info



Poor ATC Weather Communication



Missing Runway Surface Warnings



Insufficient Terrain Briefing

Systemic Gaps Identified

Threshold coordinates

in FMGS not validated

- Points to AIM/QMS failure or
- lack of data verification protocols

ATIS and facilities status

Outdated or missing

- Weakness in real-time dynamic data provision by AIM

Flight crew

unfamiliar with RNAV-RNP local procedures

- Highlights gaps in localized SOP awareness and training

ATC

ATC failed to communicate rapid weather deterioration

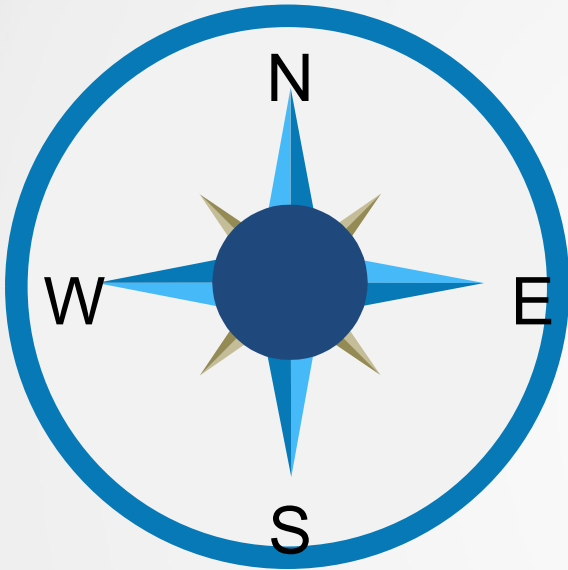
- Lack of procedural reinforcement and real-time updates

AIM, ATC, and Ops

No cross-check mechanism between AIM, ATC, and Ops

- Structural silos hinder collaborative safety assurance

Lessons Learned



AIM's Role When Seconds Count

- ◆ **Validate Navigation Data**

Threshold coordinates must be accurate and routinely verified.

- ◆ **Respect Minima**

Never descend below limits without visual cues—go around.

- ◆ **Know Local Procedures**

RNAV-RNP approaches require regular training and refreshers.

- ◆ **Timely ATC & AIM Updates**

Visibility, outages, and facility changes must be shared fast.

- ◆ **Digital AIM Saves Lives**

Accurate, real-time AIM data directly supports safe operations.

Lessons Learned



Both Landing Gears of aircraft rolling outside the runway in Grass area



Left Engine Side view

Front View



Right Engine

Source: <https://www.baaa-acro.com/sites/default/files/import/uploads/2017/06/TC-JOC.pdf>

Moving Forward → AIM Call to Action

1

Build data
validation into
AIM QMS
workflows

2

Expand digital
AIM scope:
thresholds,
ATIS, terrain

3

Train AIM, ATC
& pilots in
integrated drills

4

Standardize
AIM procedures
for critical
updates

5

Foster cross-
functional AIM-
ATC
collaboration

What first step
does your CAA
or AIM office
need to take to
avoid an incident
like TC–JOC?



*Is it better data
validation, more
simulation or
Improved
communication
procedures?*





Thank You!