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AIRPORT OPERATOR'S PERSPECTIVE ON RUNWAY INCURSION HAZARDS

Presented to: ICAO Regional Runway
Safety Seminar

by : **Maskon Humawan**

Manager of ATS

PT Angkasa Pura I

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ICAO Doc 9870 First Edition 2007 Manual on the Prevention of Runway Incursions

Difinition

Runway incursion. Any occurrence at an aerodrome involving the incorrect presence of an aircraft, vehicle or person on the protected area of a surface designated for the landing and take-off of aircraft



Runway incursions are a significant aviation hazard.



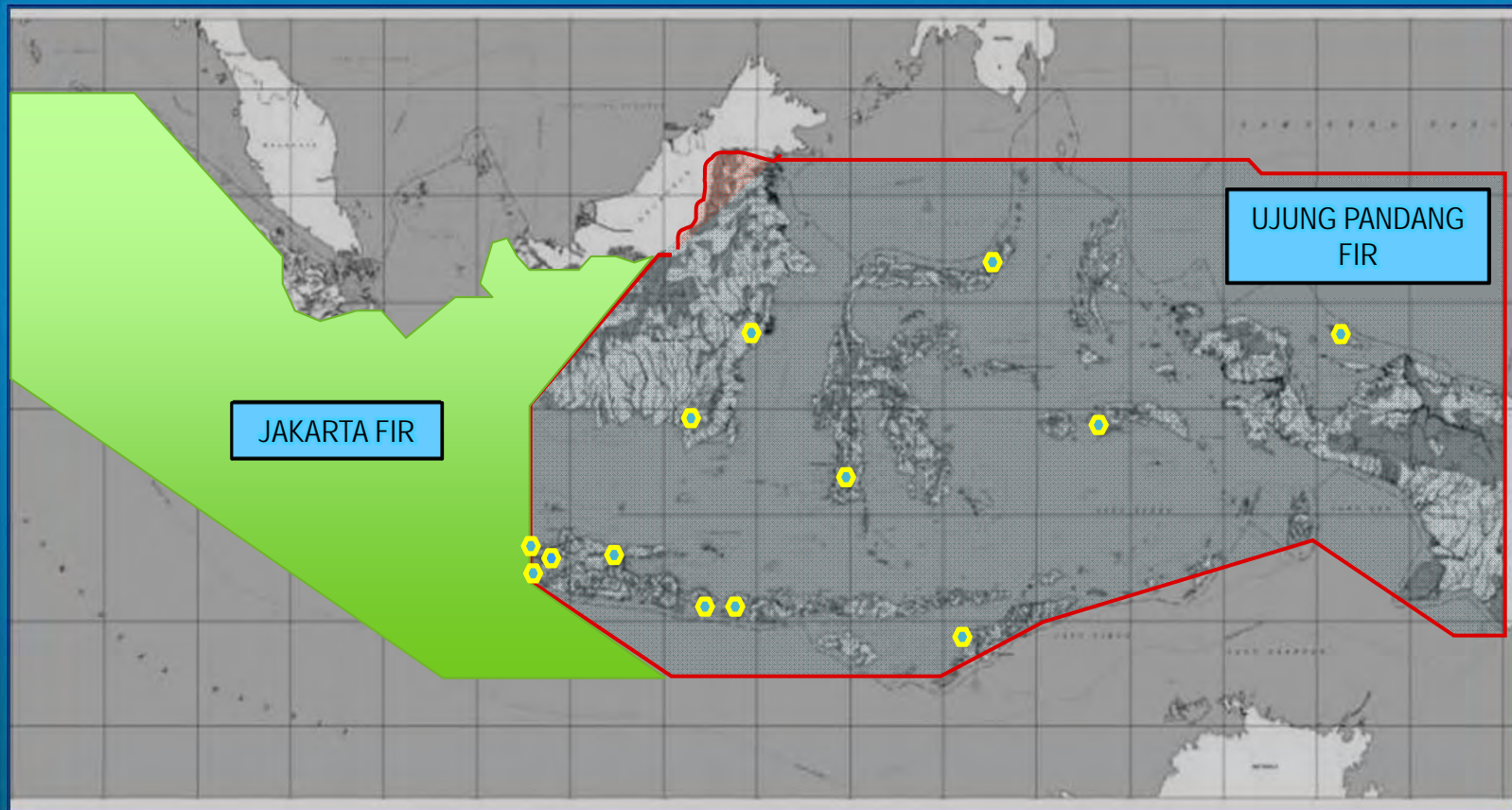
The world's worst aviation accident took place in March 1977 and involved the collision of two Boeing 747 aircraft on a runway at Tenerife in Spain's Canary Islands. A total of 583 lives were lost.

ICAO

- In many countries where traffic density is high runway incursions have been on the increase for several years.
- 2001 - ICAO took action to address the problem of runway incursions
- 2007 – Doc 9870 Manual on the Prevention of Runway Incursions published

13 Airport & ATS Managed by Angkasa Pura I

WAAA WADD WADL WARR WARS WARQ WARJ WATT WAOO WALL WAMM WAPP WABB
UPG BLI LOP SUB SRG SOQ JOG KOE BDJ BPN MDC AMQ BIK



Juanda International Airport of Surabaya



5 Runway Incursion data at Juanda International Airport Surabaya Indonesia

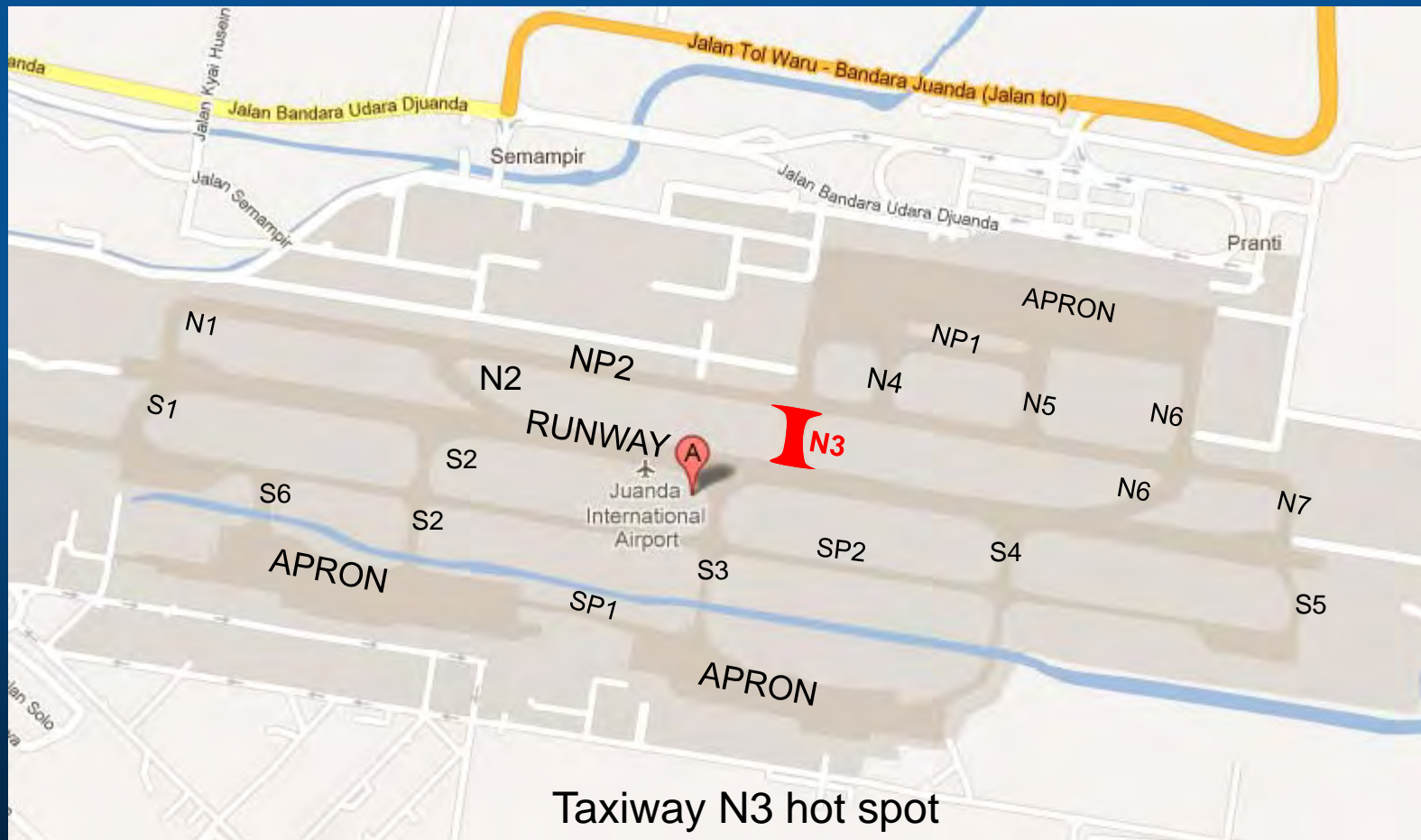
Date Occurrence & a/c involved

- 09 Aug 2007, 1201 UTC DHI777 B737-200 vs BTV342 B737-300
- 30 Okt 2009, 09.11 UTC LNI316 MD80 vs AWQ7614 B737-300
- 18 May 2010 0124 UTC CPA780 A330 vs GIA304 B737-800
- 11 Jan 2011, 2347 UTC BTV251 B737-300 vs LNI311 B737-900
- 17 Jul 2011 0812 UTC WON1824 ATR-72 vs GIA345 B737-800

Location Incident

- Intersection rwy 10 & taxiway N3, BTV342 aborted T/O
- Intersection rwy & taxiway N3, AWQ7614 Landed with hard braked
- On short runway 10, GIA304 Go around.
- Intersection rwy 28 & taxiway N3 action BTV251 continue cross rwy via S3 SP2 than S5
- WON1824 Line Up position runway 10
- GIA345 Go around

Juanda International Airport Surabaya , Single Runway second busiest Airport of Indonesia more than 300 movement / day 27 movement / hour





5 Occurance Runway Incursionat Juanda Airport = Human factor

**Runway incursions are failures to understand
Where the plane is
Where the runway is**

Classically failures of Situation Awareness

**Failures involve two different organisations
Airlines - Pilots
ATC providers -Air traffic controllers**

The real causes are at the organisational level



Reduction of Runway Incursions

- Strict adherence to the recommendations published in ICAO DOC9870
- Training of trainer (ToT) Prevention Runway Incursion for ATCo in AP1 held in Makassar October 2011
- State on SOP “ATC should give ATC en-route clearance prior to taxi”.
- CCTV at WARR, WADD, WABB
- Reduced ROT (Runway Occupancy Time) will establish RET(Rapid Exit Taxiway) at taxiway N5 at WARR
- SMGCS at WARR (YF 2013)
- Special sign at hot spot taxiway N3 at WARR

Reduction of Runway Incursions Cont

- Line-up clearance should not be issued to an aircraft if that aircraft will be required to hold on the runway for more than 90 seconds beyond the time it would normally be expected to depart.
- Emphasize (RI) Runway Incursion Doc 9870 Appendix C ATC BEST PRACTICES at Local performance check ATC , twice a year
- Continuous observation and assessment of performance through safety management and investigation processes

Reduction of Runway Incursions Cont

- application of safety management principles
 - Risk assessment
 - Audit programs
 - Reporting systems
 - Continuous improvement learning from errors
- Indonesia Aviation Law no 1 year 2009 Article 321 :
 - (1) Any aviation personnel in knowledge of occurrence of deviation or discrepancy in aviation procedure, or malfunction of any aviation equipment and facility shall be obligated to report it to the Minister.
 - (2) The aviation personnel reporting any occurrence as meant in item (1) shall
be given adequate protection according to valid regulations.
- Decree President Director Angkasa Pura I number: 64 year 2009 Non Punitive Reporting policy in Angkasa Pura I



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Thank you

