Runway Safety

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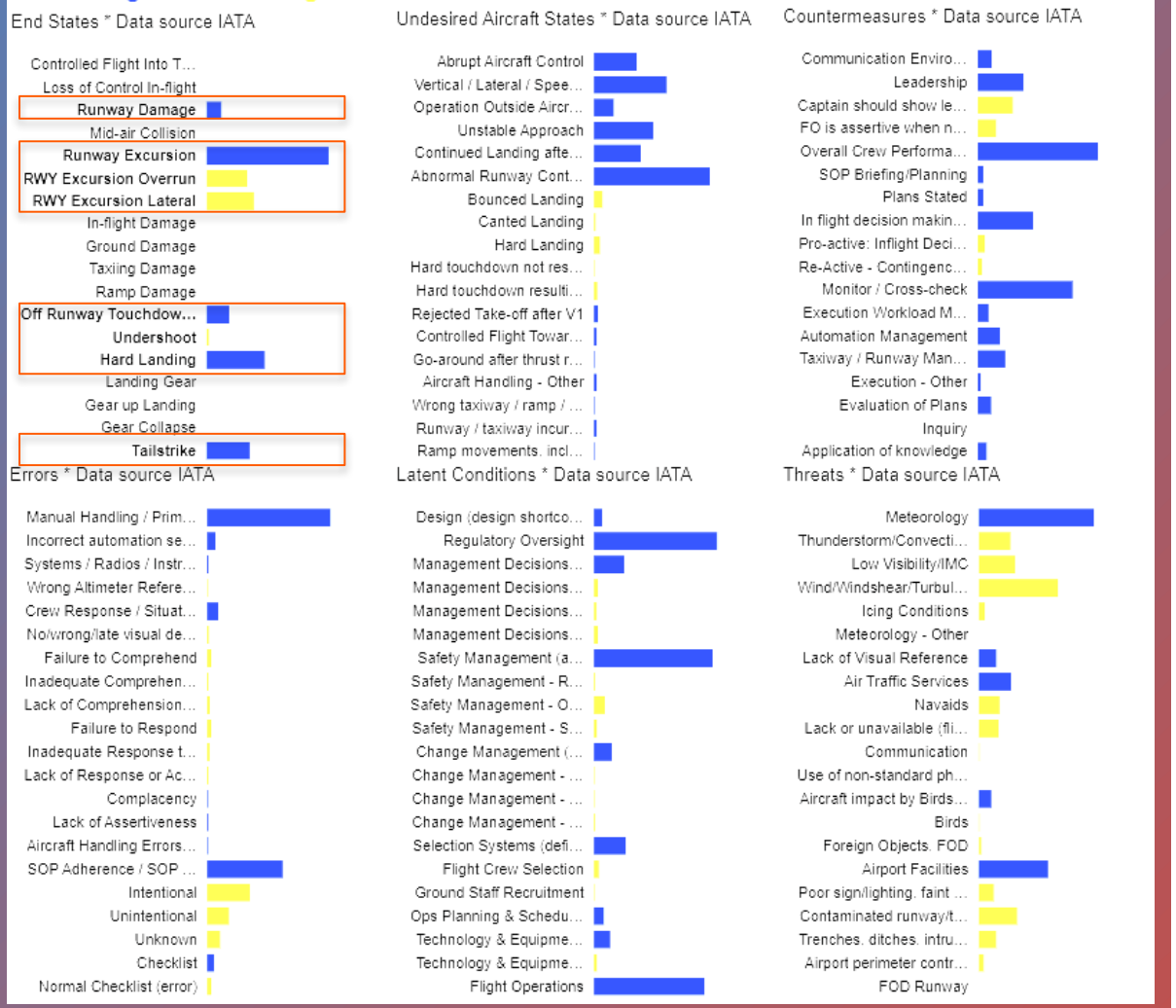
SMS Director

This dashboard shows comprehensive aviation safety data until 2025, including detailed regional performance.

Accidents	Fatal Accidents	Fatalities Onboard	Other Fatalities	Jet	Turboprop	Passenger	Cargo	IATA	IOSA
702	51	916	110	446	256	559	131	206	307

Main categories Subcategories



Executive Summary

1.5 IATA Global Accidents (last10y) involved a Runway Excursion

702 of IATA Global accidents (last10y) involved a Runway Safety events

30 of IATA Global Runway Safety events (last 10y) involved a Runway Excursion

102 Total Fatalities in Runway Accidents (last 10y)

Runway Safe is a collabora system risk involving:

- Op ators
- Air rt authorities
- Regulators / Manufactures
- ATC Organizations

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Incursion ris is associated but r limited to:

- human performance,
- communication,
- surface navigation
- degraded runway-status awareness.

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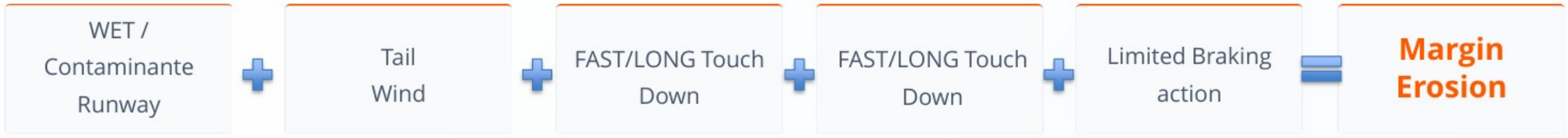
Excursion ris is strongly driven interacting factors:

- manual handling
- runway condition
- weather
- performance margins
- approach stability
- touchdown and braking

Mitigating actions should be apply to:

+ robust procedures
+ accurate information
+ technology
+ trained people
+ collaborative RST/SMS.

Risk is Cumulative – Not Additive



FSF Finding: Multiple risk factors create a synergistic effect: the combined exposure can consume available safety margin much faster than a single factor.

Runway Safety Team (RST): The collaborative Engine

- ✓ Maintain a runway safety action plan
- ✓ Monitor runway incursion / excursion / confusion statistics and traffic conflicts
- ✓ Share safety data and lessons learned
- ✓ Feed hazards into the aerodrome SMS and track mitigation effectiveness
- ✓ Review changes to manoeuvring-area procedures and infrastructure

FLIGHT SAFETY FOUNDATION

Runway Safety at GOL

FDM Analisys

Special Training

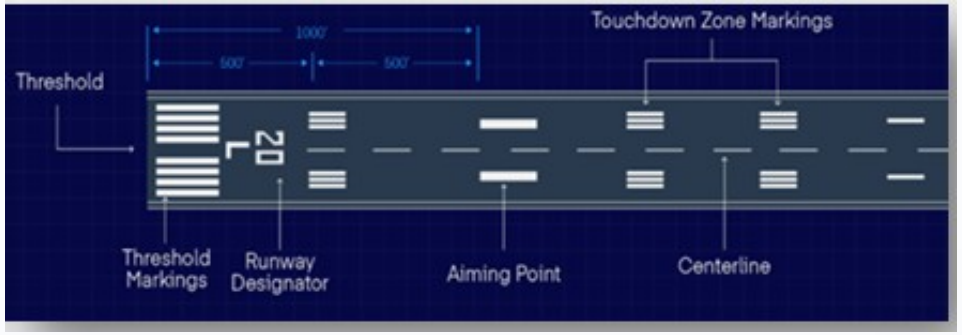
BCAST
Grupo Brasileiro de Segurança Operacional da Aviação Comercial

Runway Safety Group

Airports RST meetings participatiom

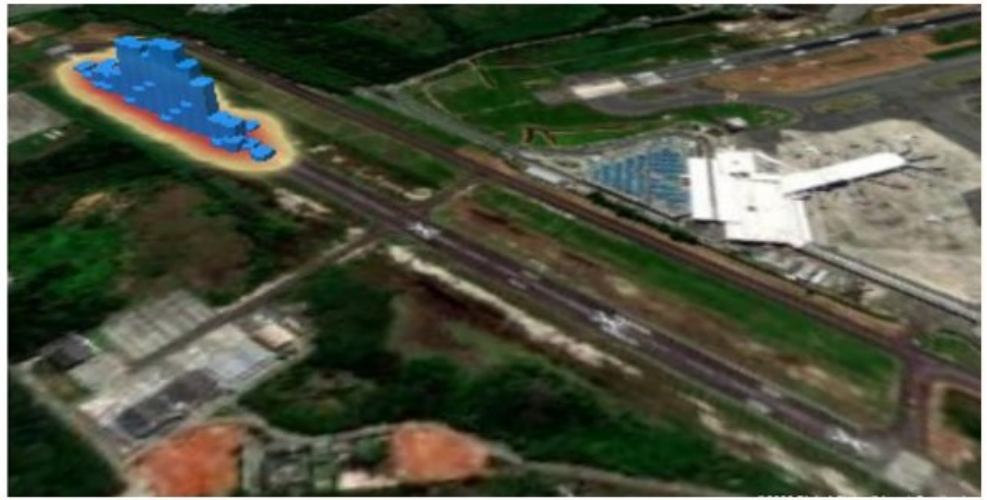
Infraestructure Safety Inspection

Slippery Runway Committee

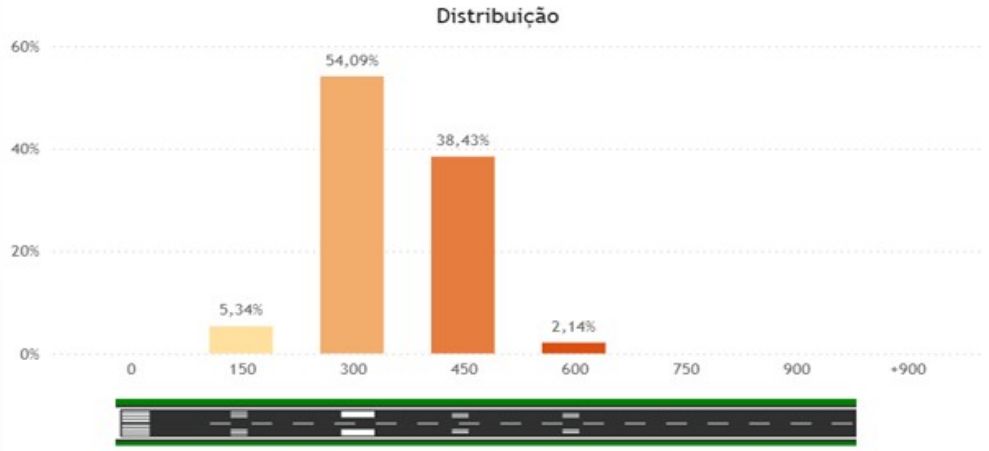


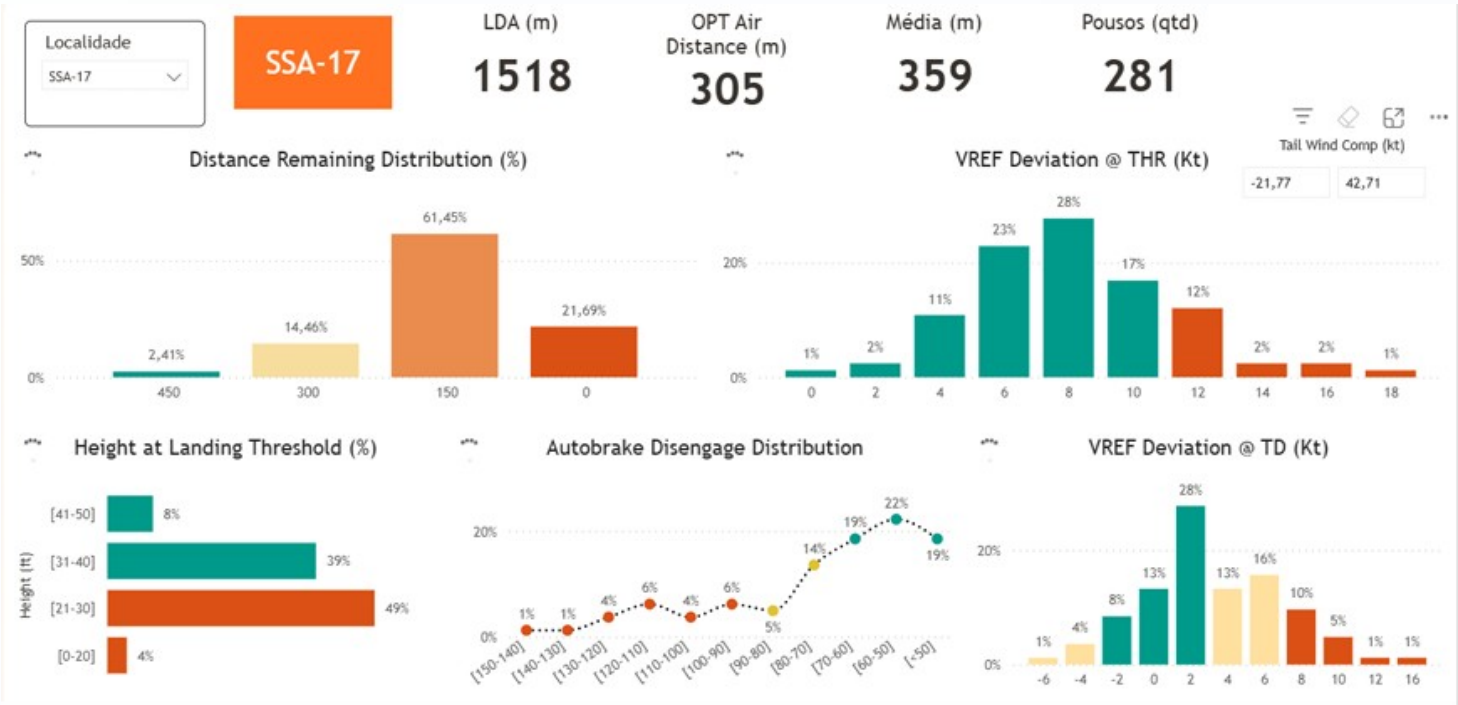
Last Touchdown Point policy implementation

FDM Analyses



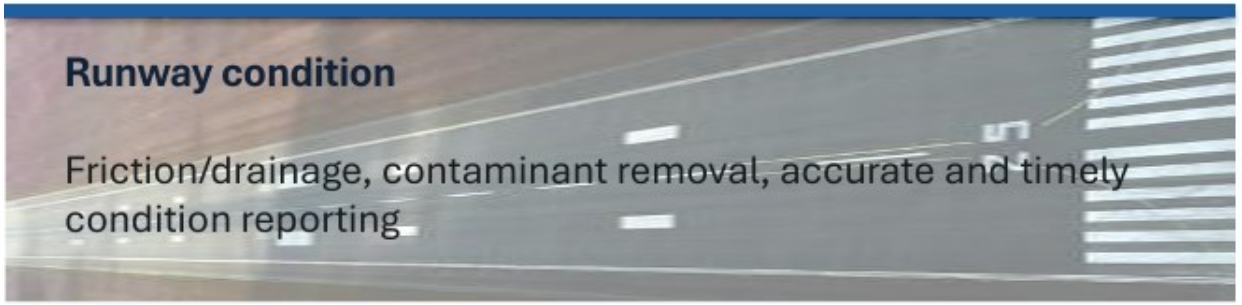
SSA-17	LDA (m)	OPT Air Distance (m)	Média (m)	Pousos (qtd)
	1518	305	359	281





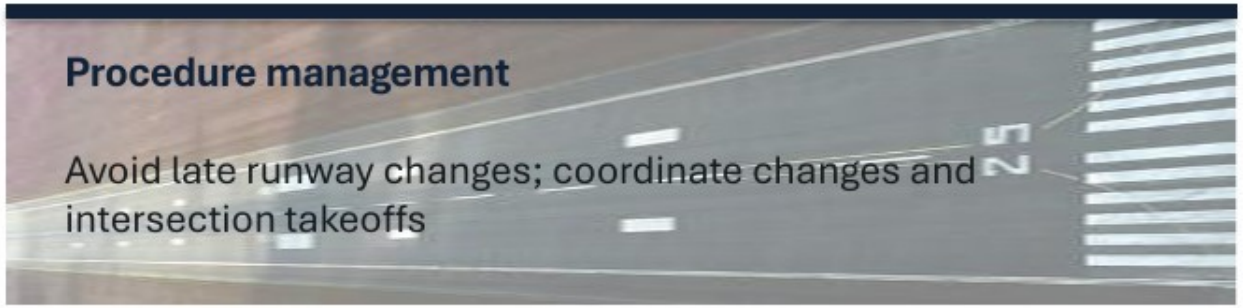
Even so…

Airport & Agency Priorities



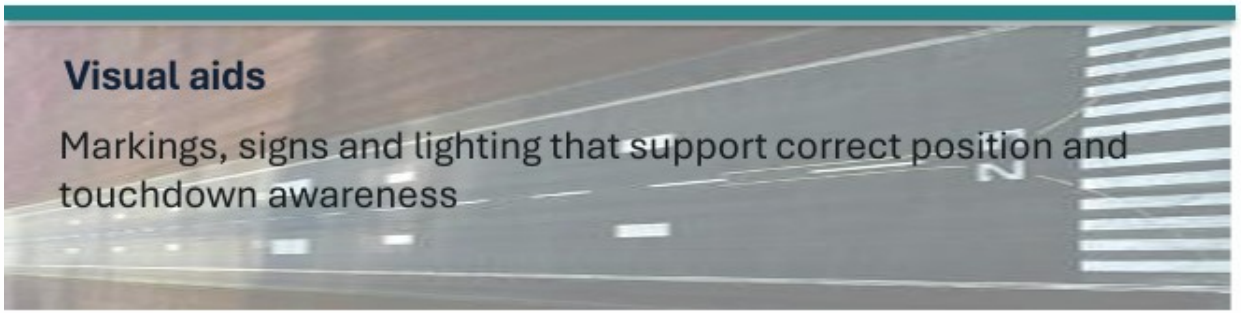
Runway condition

Friction/drainage, contaminant removal, accurate and timely condition reporting



Procedure management

Avoid late runway changes; coordinate changes and intersection takeoffs

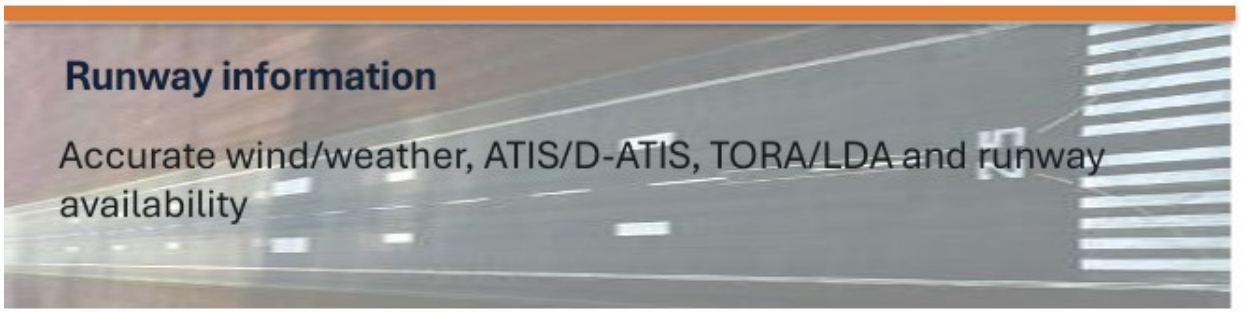


Visual aids

Markings, signs and lighting that support correct position and touchdown awareness

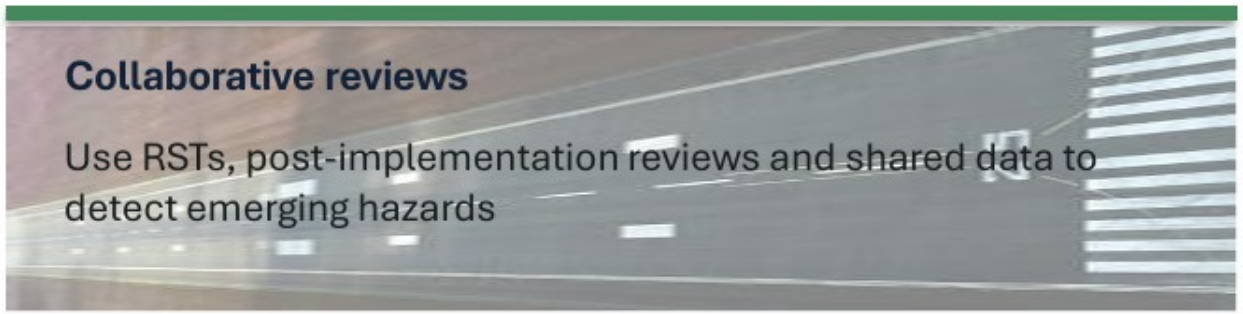
Surface awareness

Stop-bars, surveillance, conflict detection and alerting where appropriate



Runway information

Accurate wind/weather, ATIS/D-ATIS, TORA/LDA and runway availability



Collaborative reviews

Use RSTs, post-implementation reviews and shared data to detect emerging hazards

Key Takeaways

- Runway safety is a networked risk. No single organization owns the complete picture
- Excursion prevention depends on preserving performance margin from dispatch to touchdownand deceleration.
- Incursion prevention depends on shared situational awareness, communication, surface navigation and multiple barriers.
- FDM, LOSA, occurrence data and RST intelligence should converge into actionable SPIs and risk controls.
- The objective is not simply compliance. It is resilient runway operations that remain safe as traffic and complexity increase.

Thank You

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