

# Root Causes of Runway Accidents and Incidents

The IFATCA logo is centered in a white circle. It features the acronym 'IFATCA' in a bold, dark blue, sans-serif font. Above the letters 'A' and 'T' are two horizontal arrows pointing in opposite directions, one to the left and one to the right.

**IFATCA**



# Contributing Factors to Runway Incursions

- ATC Misjudge the Rate of Closure
  - Optimistic Expectations
- Pilot Deviation - Communication
- Vehicle/Pedestrian Deviation - Loss Situational Awareness



# Causal Factors to Runway Incursions

- ATC Cleared Aircraft to Land/Depart on an Occupied Runway
- Pilot Failed to Hold Short of Runway as Instructed
- Driver entered runway without Authorization
  - Driver failed to Hold Short of Runway

# Manage Risk

- Collaboratively working with industry partners to develop and deploy runway safety solutions
  - Another airport is probably having the same challenges you are
- Pilot/Controller Meet and Greets
  - Allows for a safe place to ask questions
  - Procedural questions
  - Increase participation in Runway Safety Action Team Meetings
- Encourage communication between Pilots and Air Traffic Control





# Manage Risk Cont.

## The Risk is Managed By:

- Infrastructure such as multiple parallel runways allowing separate runways for arrivals and departures.
  - End Around Taxiways
- Procedures for ATC, Pilots, and Vehicle Drivers
- Identify local "Hot Spots"
- Technology (Surface Surveillance, RWSLs, EMASS, RSA)



## Phraseology

Use Proper  
Phraseology in  
All Readbacks



## Hold Short Instructions

Full Readbacks are Required  
for All Hold Short Instructions.  
Acknowledgment is Required  
for All Runway Crossings



## Readbacks

Controllers Expect  
Readbacks on All  
Clearances



## Questions/Mistakes

Missing or Incomplete  
Readbacks Lead to  
Questions and  
Sometimes Mistakes

# Hearback Readback

A full readback allows the controller to ensure that the pilot received the clearance as intended. Sometimes this is the only opportunity to catch and correct a mistake or misunderstanding.





## Safety Works When People Work Together

Bridget Singratanakul (Gee)  
IFATCA - Member on the ICAO ADOP Panel  
[runwaysafety@natca.net](mailto:runwaysafety@natca.net)