



# RUNWAY

# INCURSION RISK

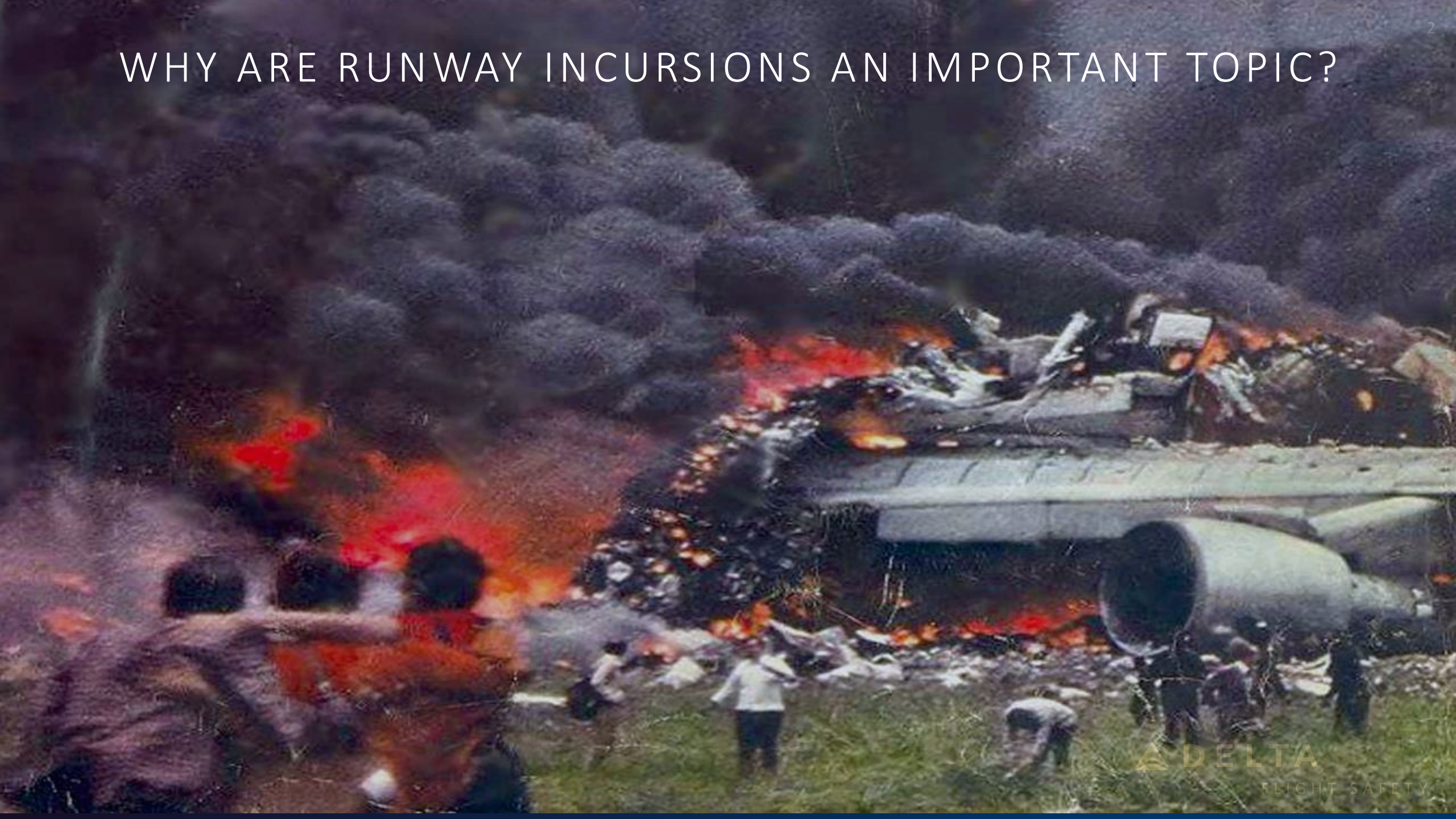
SIRM 2023 – Montreal

20-21 March 2023

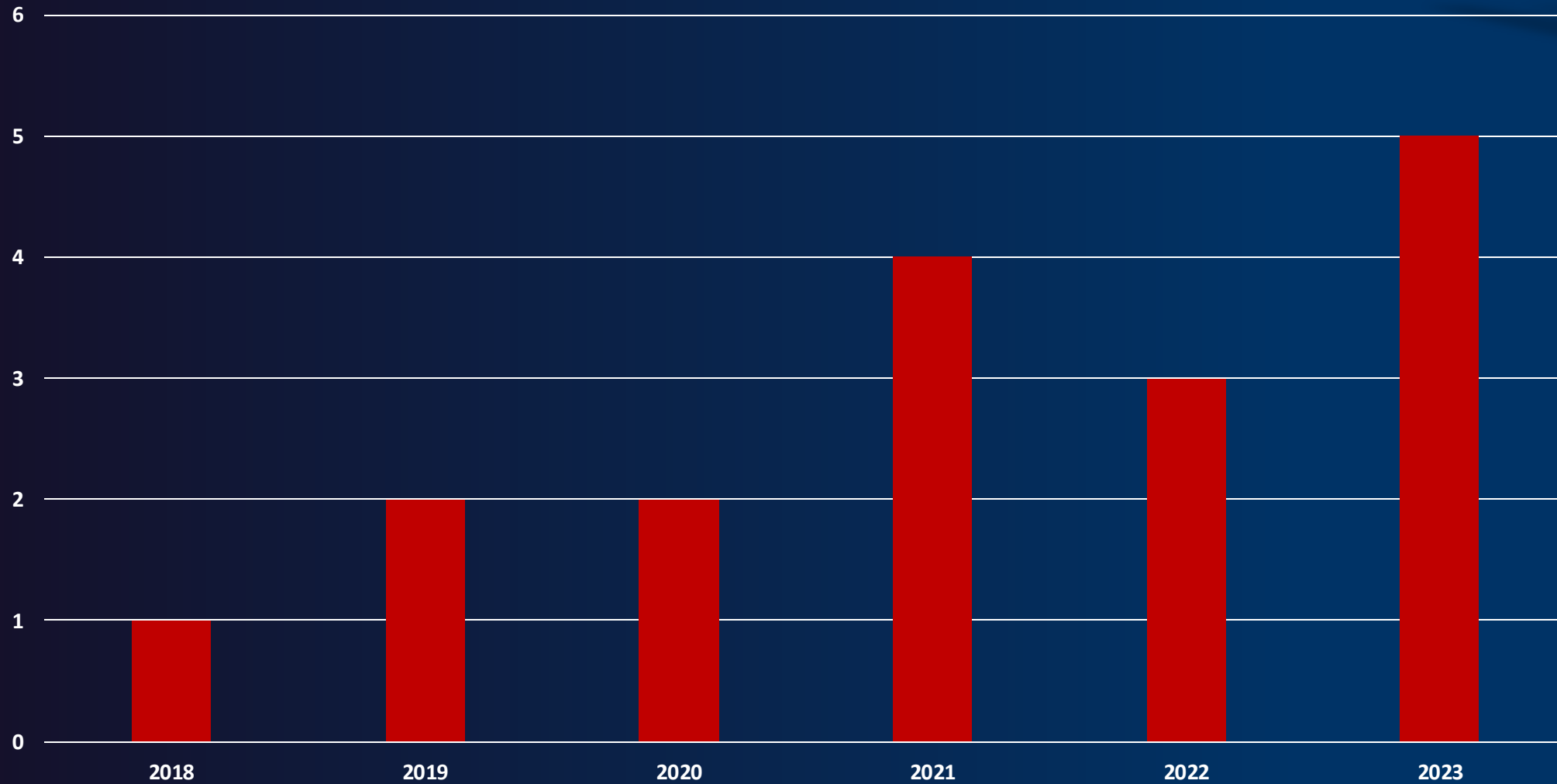
**Andy Hamilton**

*Flight Safety SMS Manager*

# WHY ARE RUNWAY INCURSIONS AN IMPORTANT TOPIC?



# NTSB INVESTIGATIONS



# 2023 NTSB INVESTIGATIONS

New York (JFK) (January 2023)

Delta Air Lines B737; American Airlines B777



Photo from NTSB Preliminary Report

YouTube video re-creation



# 2023 NTSB INVESTIGATIONS

Honolulu, HI (January 2023)

United Airlines B777; Kamaka Air C208



## NTSB Actions:

- UAL DFDR downloaded on February 14<sup>th</sup>
- ATC and Pilot interviews completed

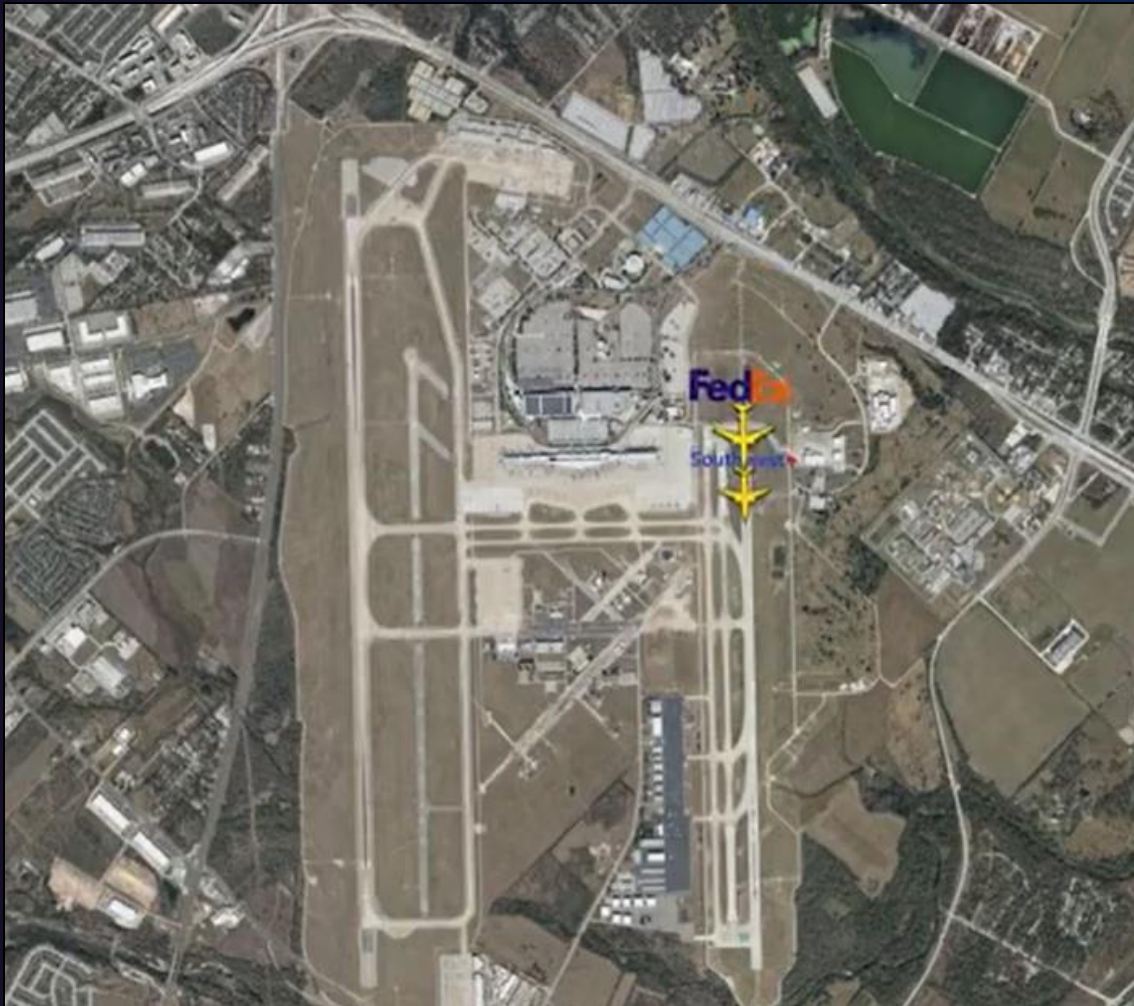
All photos from NTSB Preliminary Reports

# 2023 NTSB INVESTIGATIONS

Austin, TX (February 2023)

Image courtesy – FlightRadar24

Southwest B737; FedEx B767



YouTube video re-creation



# 2023 NTSB INVESTIGATIONS

Fort Myers, FL (February 2023)

American Airlines B737; Air Canada Rouge A321

Air Canada Rouge A321 was cleared for takeoff on Runway 14

An American Airlines B737 was on final approach and cleared to land on Runway 14.

The American Airlines aircraft self-initiated a go around.

Boston, MA (February 2023)

JetBlue Airways E190; Learjet 60



Learjet 60 took off runway 9 without clearance

JetBlue was landing 4R and conducted go around



FLIGHT SAFETY

The AP logo consists of the letters 'AP' in a bold, black, sans-serif font, positioned above a short red horizontal line.

## Close call, turbulent flight add to aviation safety concerns

By DAVID KOENIG March 2, 2023



## 'I'm concerned': Buttigieg takes a look at the increase in near-collisions at airports

[Zach Wichter](#) and [Nathan Diller](#) USA TODAY

Published 3:25 p.m. ET March 7, 2023 | Updated 8:22 a.m. ET March 9, 2023

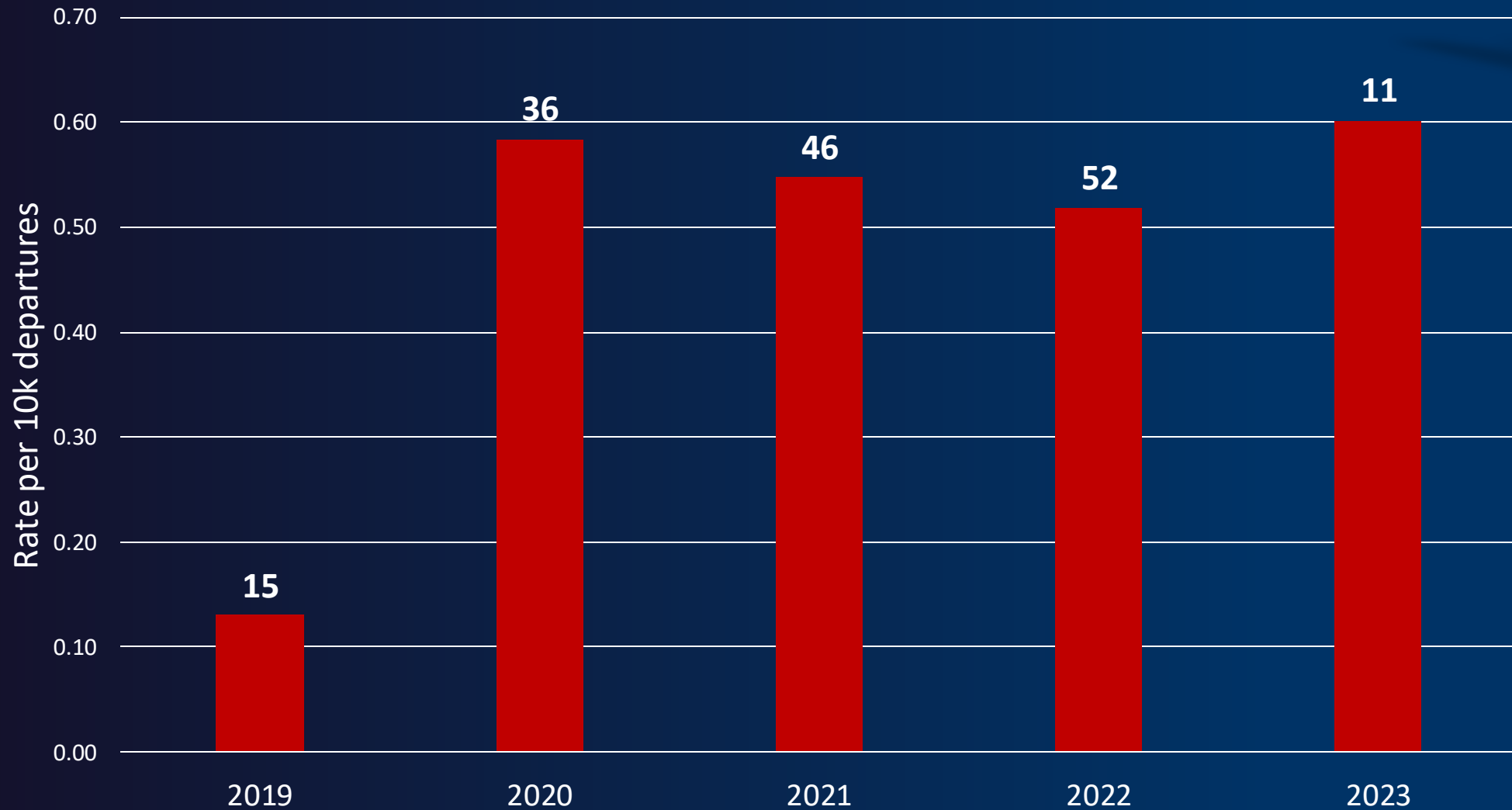
The CNN travel logo features the letters 'CNN' in white on a red background, followed by the word 'travel' in a black, sans-serif font.

## Investigators look into a third runway near-miss in less than a month

The DELTA FLIGHT SAFETY logo features a stylized white triangle above the word 'DELTA' in a bold, black, sans-serif font, with 'FLIGHT SAFETY' in a smaller, black, sans-serif font below it.

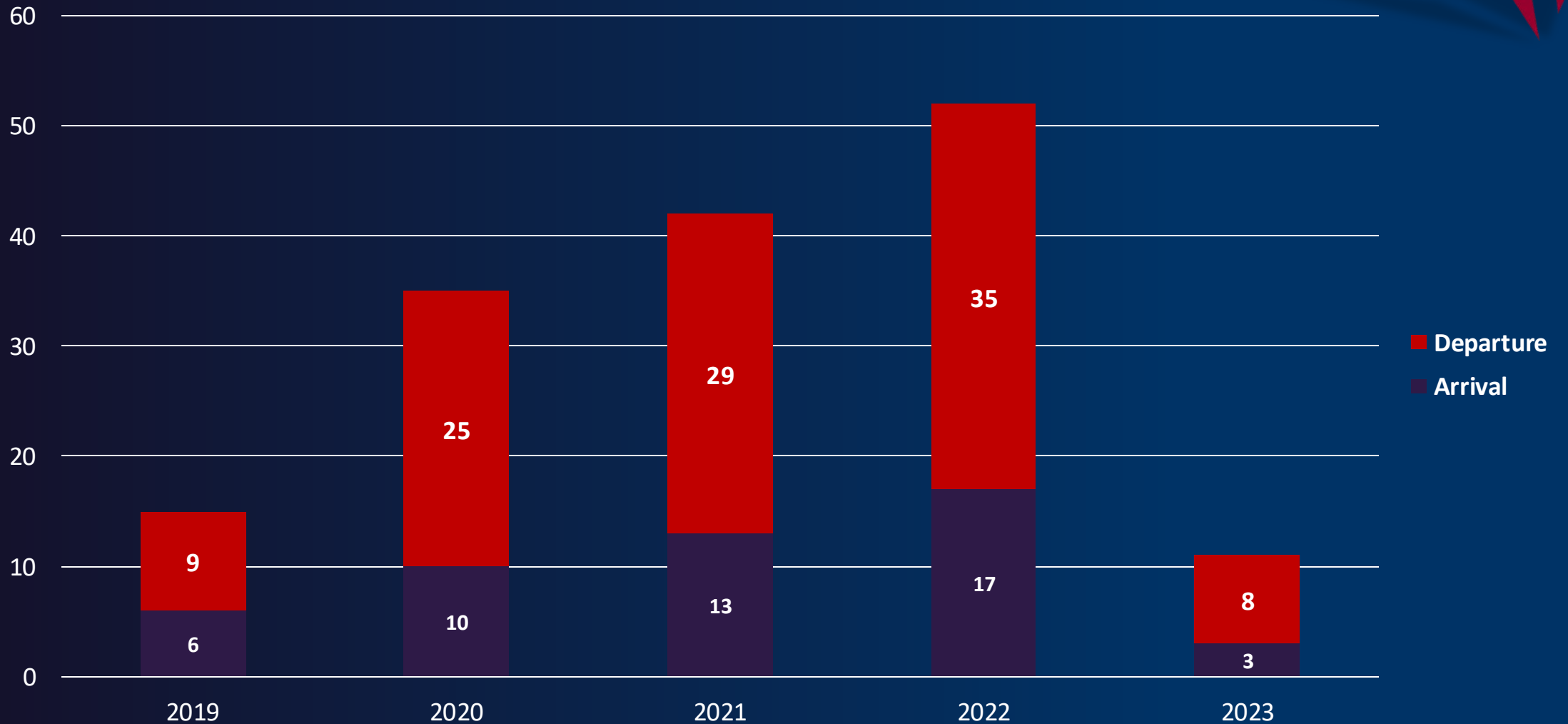


# DELTA RUNWAY INCURSIONS



# DELTA RUNWAY INCURSIONS

## Phase of Flight



# COMMON CAUSES

## ➤ ATC Issues

- ATC Inexperience
- Radio Interference

## ➤ Airport Markings

## ➤ Expectation Bias

## ➤ Inexperience

## ➤ Situational Awareness

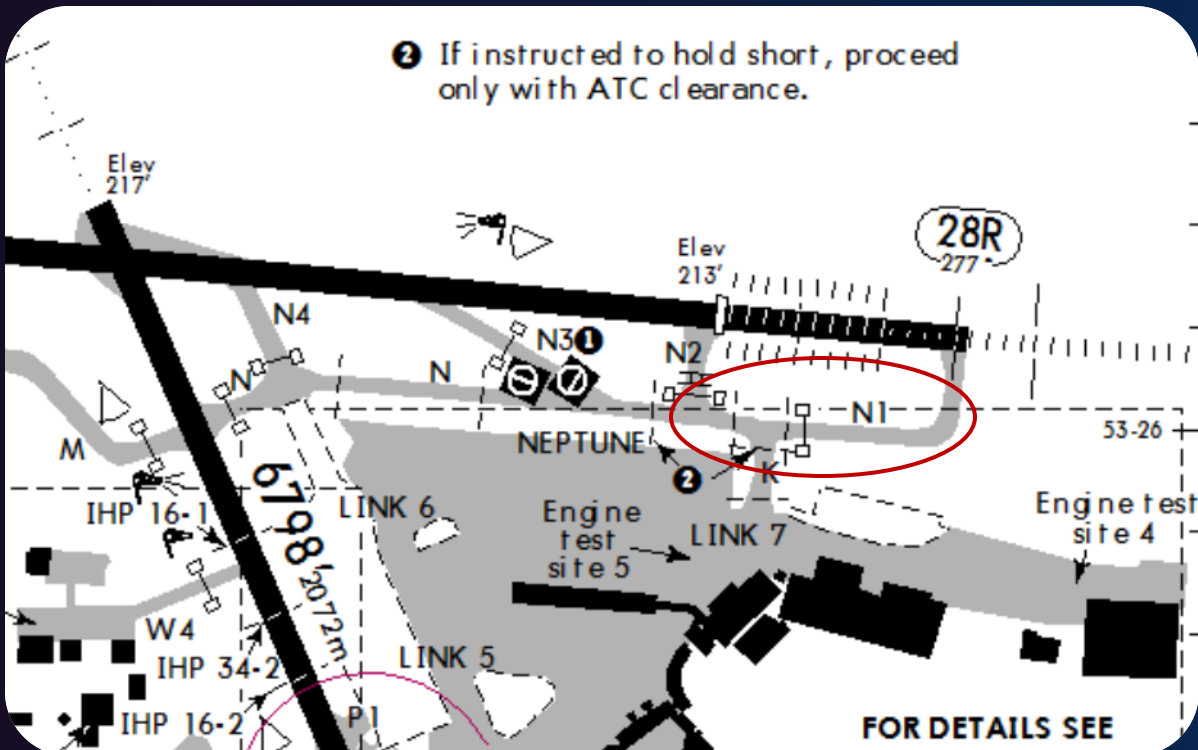
- Electronic Flight Bag
- Heads Down
- Task Saturation
  - Flight Attendant chatter
  - Checklist
- Startle Effect

## Positive Events

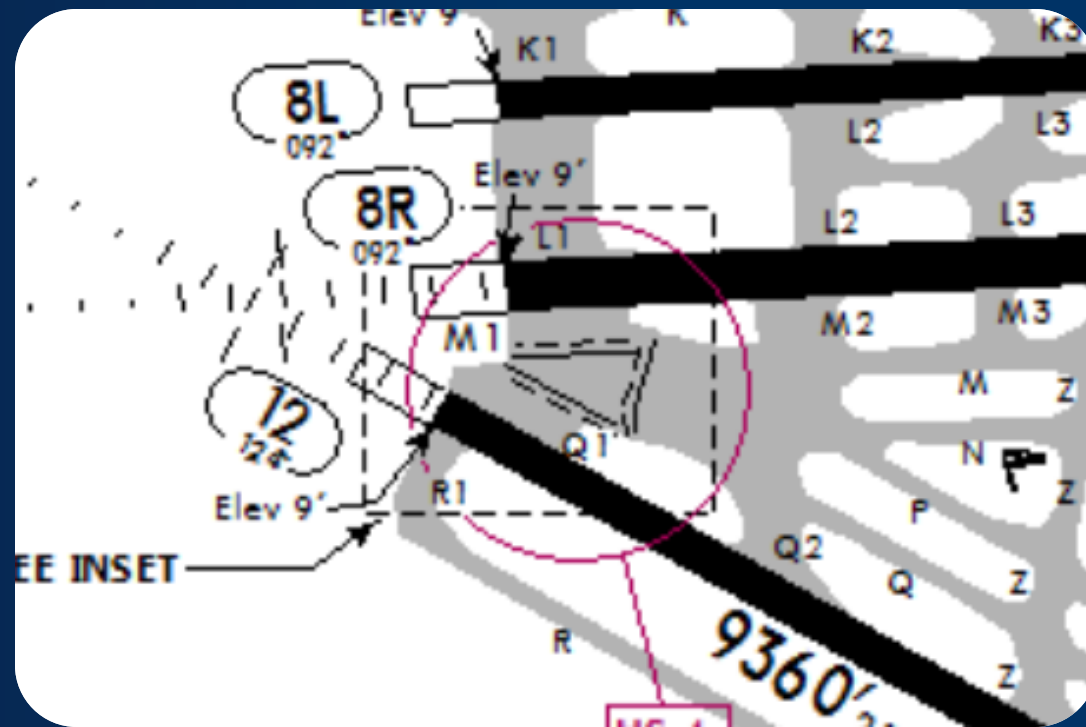
- 26 Reports identified a first officer speaking up prior to the incursion.
  - 5 reports where the Captain stopped the aircraft until they figured out what was going on.

# DUB

② If instructed to hold short, proceed only with ATC clearance.



# MIA



# MOVING FORWARD

- Review of Taxiway Incursion and Ramp Incursion data to increase the data set
- Deeper review of the Situational Awareness contributing factors
  - Distraction management
- Should checklists only be accomplished when stopped?
  - E.g. taxi checklist, after landing flow, etc..
- Review of Coded Taxi Routes
  - Is there a way to color code them on the moving map?

# INDUSTRY PARTNERSHIP

- FSF Global Runway Incursion Working Group
  - Kick off meeting 3/30
- FAA Safety Summit (March 15<sup>th</sup>)
  - Senior airline safety/operational leaders and senior members from FAA to discuss recent incidents.
  - Additional meetings at InfoShare and CAST meetings in March/April
- Other ways to partner?

# CLOSING



*LATAM Airlines (2022)  
A320 / ARFF Truck*

*Northwest Airlines (1990)  
B727 / DC9*



*US Air / SkyWest (1991)  
B737-300 / Metroliner*

*Safety cannot be taken for granted.*

*It can take just one large fatality event to change the public trust in the entire industry*



FLIGHT SAFETY

# THANK YOU



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