

Air Accident Investigation Sector Case Study



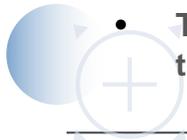


Occurrence Details

Runway Incursion- Serious Incident

Date	9 January 2022
Place of Occurrence	Dubai International Airport
Operator	Emirates Airlines
Aircraft Type	777-31H(ER) and 777-36N(ER)
State of Occurrence	The United Arab Emirates

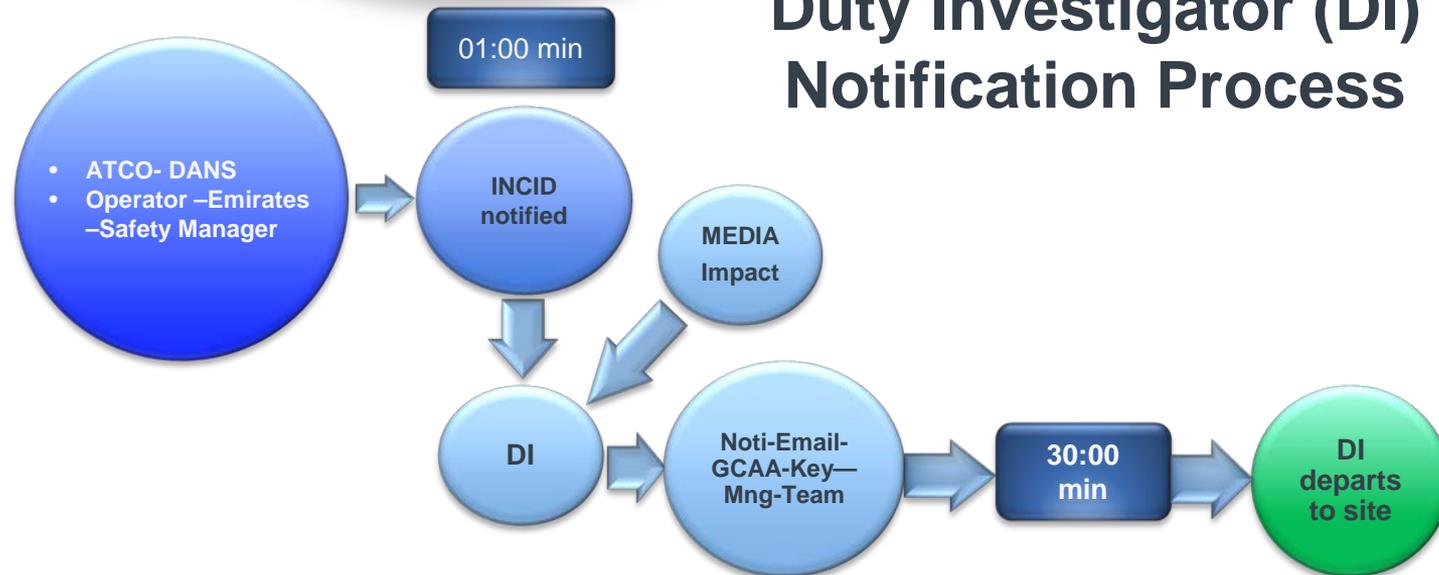
- The occurrence involved Emirates Boeing 777 Aircraft, registration marks A6-EQA, operating flight number EK524.
- The aircraft commenced take-off roll without clearance. At about 126 knots, the flight crew rejected the takeoff after air traffic controller instructions due to runway incursion by another aircraft.
- The Air Accident Investigation Sector (AAIS) Duty Investigator (DI) was notified of the occurrence by a call to the Hotline Number (+971 50 641 4667).





Occurrence

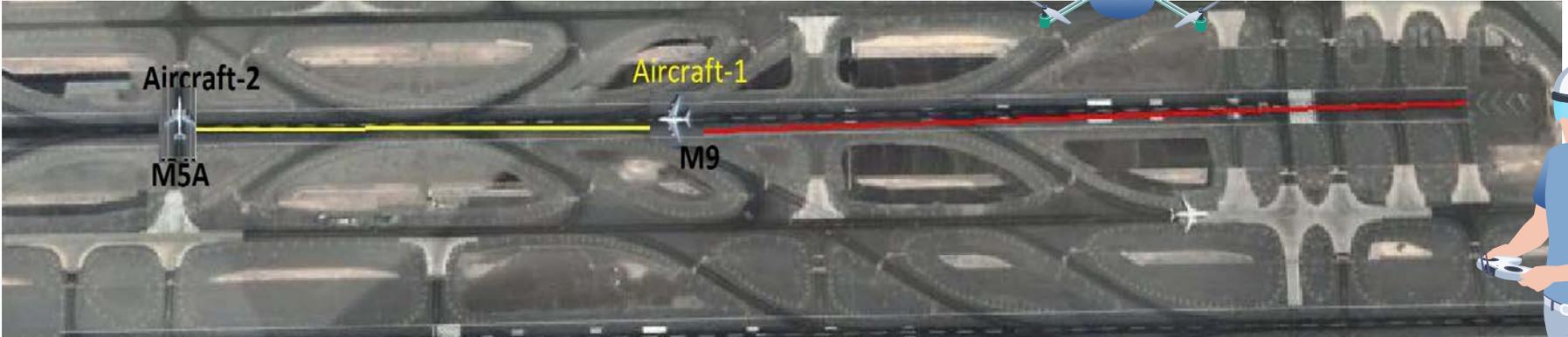
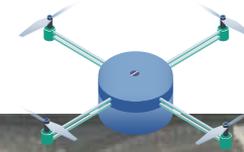
Duty Investigator (DI) Notification Process



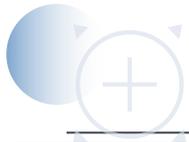


On-Site Investigation-Evidence Collection

Runway Incursion-Serious Incident

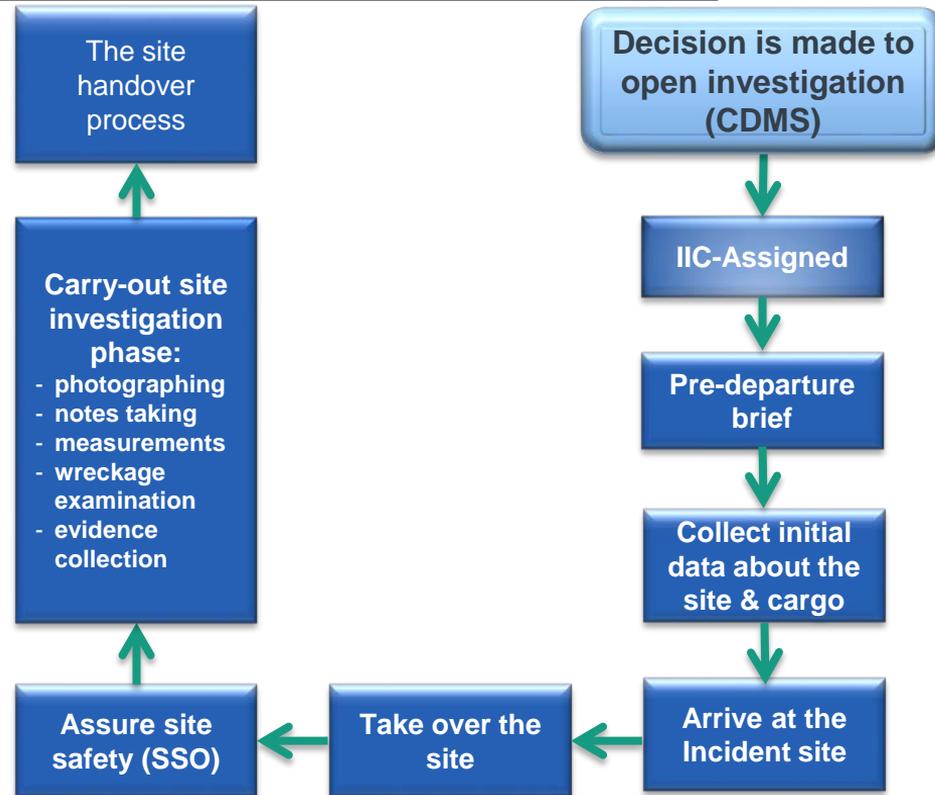


Aircraft-1 and Aircraft-2 on Runway 30R





On-Site Investigation Process





Off - Site Investigation

Notification

- ICAO
- State of Aircraft Manufacturer - NTSB
- State of Engine Manufacturer - AAIB- UK

Aircraft Operations : both Aircraft

- Flight Manual
- Operations Manuals
- Minimum Equipment List
- Crew Records (License & Medical)
- Crew Training Records
- Crew Interviews

Aircraft Maintenance Records

- Aircraft Maintenance Records
- Aircraft History Documents

Air Traffic Management

- ATC Comms Audio Recording
- ATCO Records
- ATCO Interview
- ATC On-Duty Supv Interview
- NOTAMs





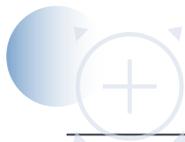
Off - Site Investigation - Data Collection

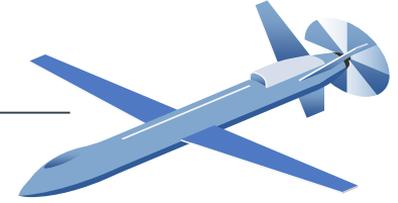
Flight Recorders: both Aircraft

- FDR/CVR Download
- CVR Playback Sessions
- FDR Plots
- Flight Data Analysis
- Flight Recorder Laboratory Report

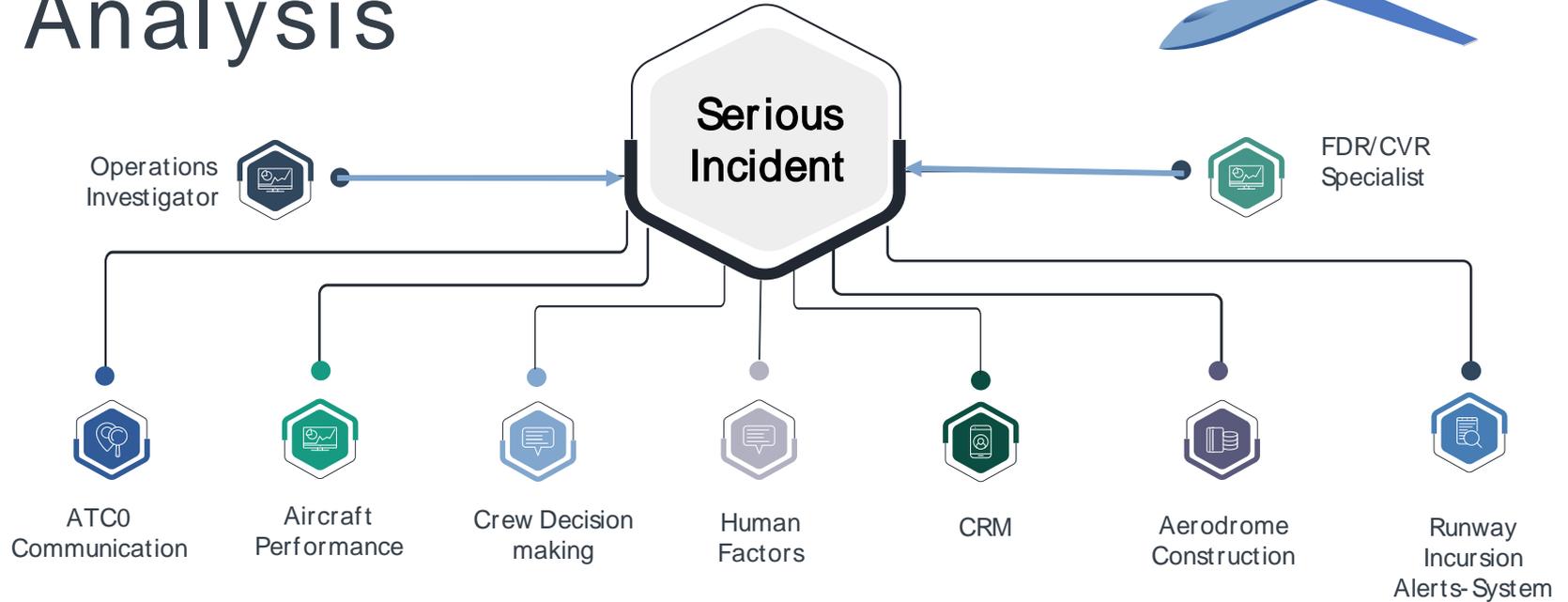
Aerodrome

- Taxiway Construction
- Airside Traffic Management
- Emergency Response Management





Analysis





Findings



ATCO
Records



Crew
Records



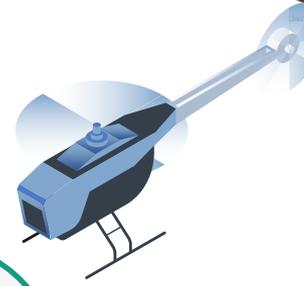
Aircraft GND
Movement



Aircraft
Airworthiness

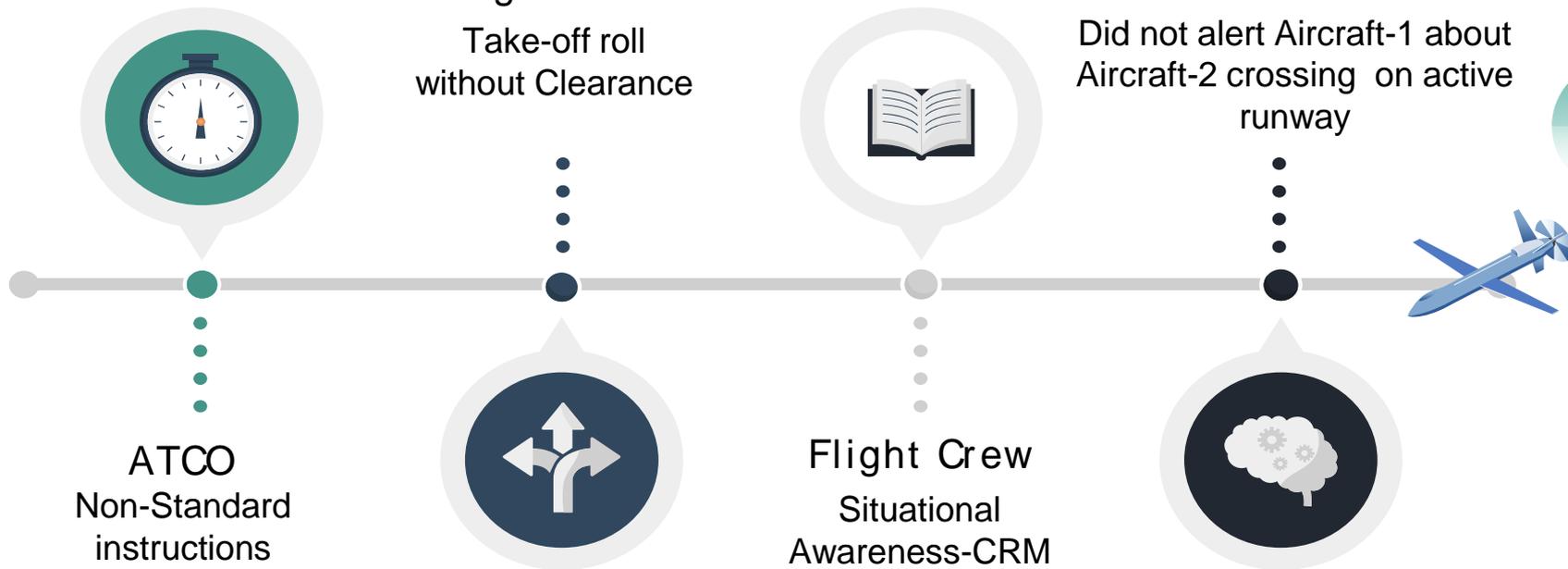


Taxiway
Construction
-NOTAM





Cause





Contributory Factors

01

Taxiway
Construction

02

PM
Read back
Instructions

03

ATCO
Non-Standard
Phraseology

04

Crew
Non-adherence
to procedures





Safety Recommendations

Emirates Airlines

In order to assure the continuous effectiveness of CRM, and that the crew effectively practices CRM, the Investigation recommends that Emirates establish a mechanism that continuously monitors and evaluates the CRM and accordingly makes the necessary improvements.

The system should refer to multiple data sources, such as the flight data analysis system, incident reports, and crew self - evaluations.

Dubai Air Navigation Services (DANS)

It is recommended that dans review DMATS and eliminate inconsistencies in runway inspection policies and procedures.

Dubai Airport

Dubai Airports initiate a safety case study in coordination with the GCAA, DANS, and Emirates for the need of enhancing the ground based alert systems that provide warnings and alerts of detected runway incursions to ATC controllers and flight crew.

GCAA

GCAA in conjunction with UAE ANSPs and Airlines emphasize and review AMC69 with regard to standardizing phraseology, to ensure that any ambiguities are identified and litigated.



ANY
QUESTIONS ?

