

# Considerations in the Investigation of Incidents:

## Documentation of Investigation Findings

Presented to: **Air Traffic Incident Analysis Workshop**

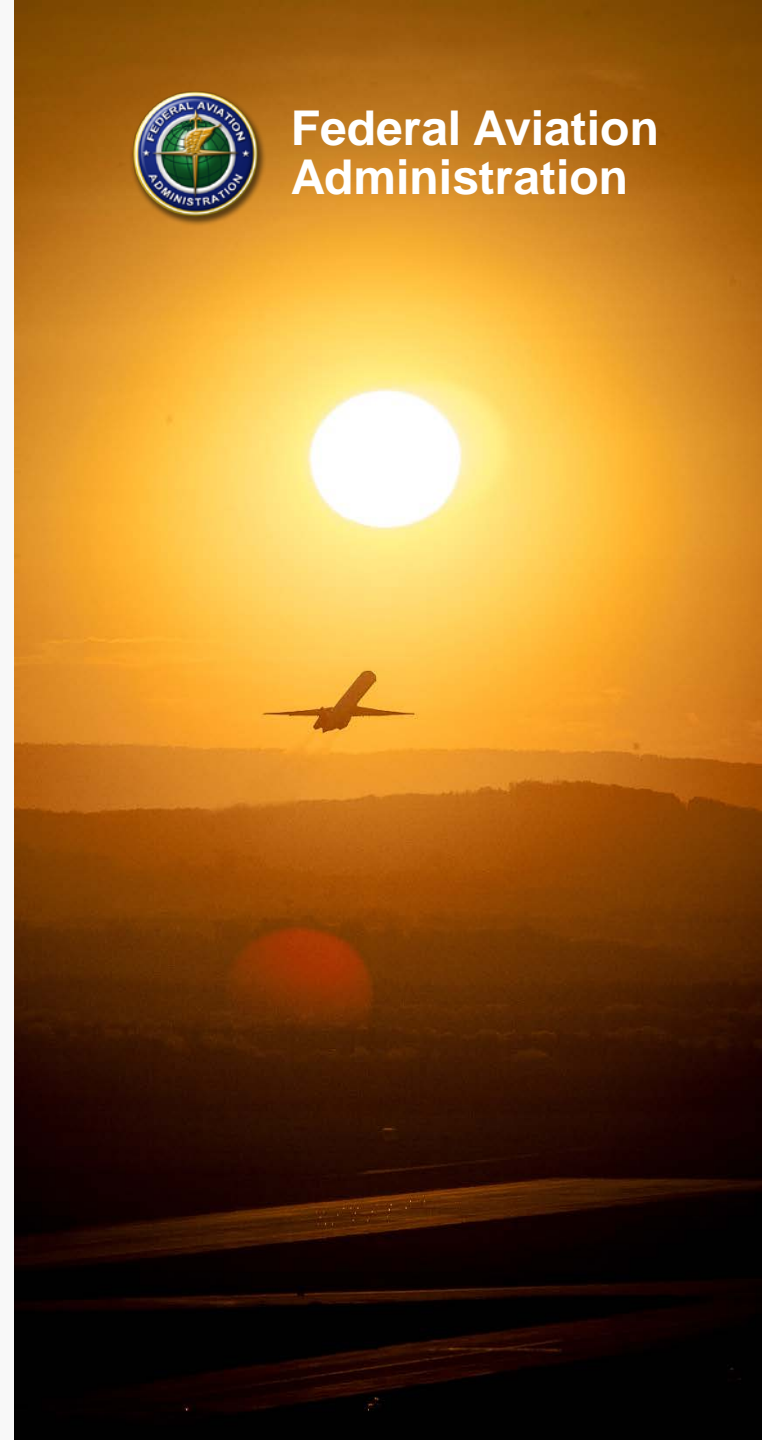
By: **Andrew Johnson & Lenard Carter**  
FAA ATO Safety and Technical Training

Date: 20 July 2016

ATS Incident Analysis Group



**Federal Aviation  
Administration**





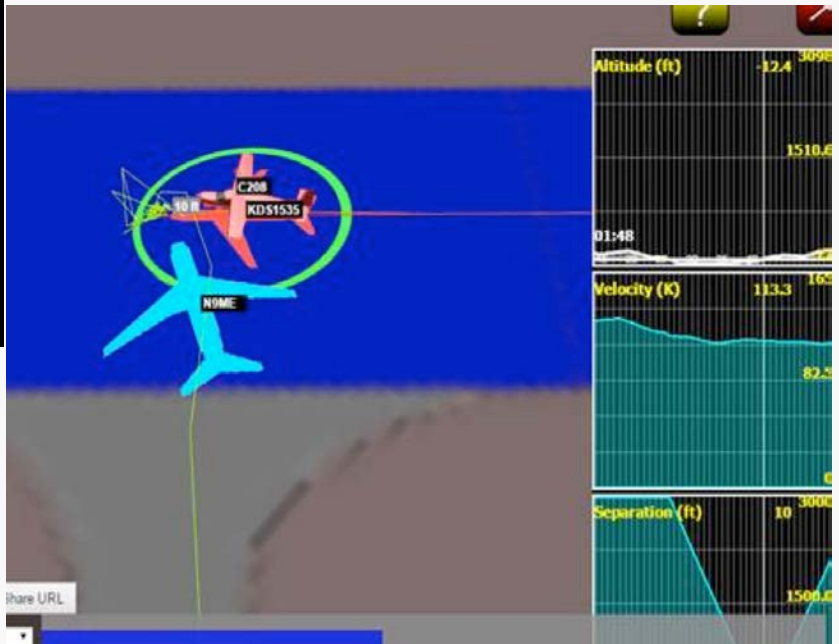
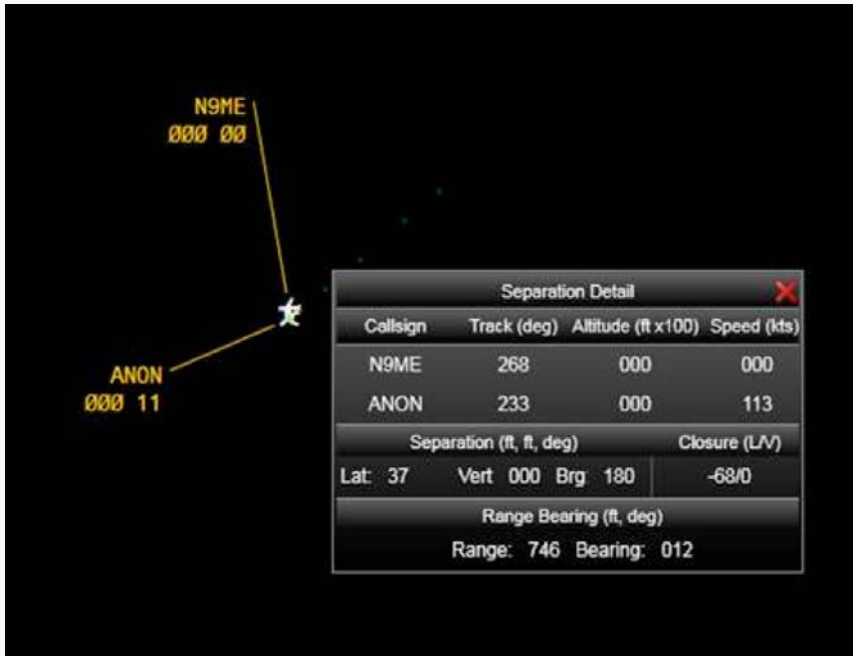
# Honolulu Airport – 26 February, 2016

## Initial Page-out:

### Honolulu Control Facility (HCF) - Friday 26, 2016, at 3:48 p.m. HST:

N9ME/C172 was instructed to LUAW on Runway 22L at Papa intersection. N9ME was not issued takeoff instructions and the aircraft remained in position on the runway for approximately 4 minutes. (Kaydos) KDS1535/C208 was subsequently cleared to land on runway 22L. When KDS1535 was on short final, the ASDE-X activated, and KDS1535 was issued Go Around instructions by the Local Control; however KDS1535 had already past the Runway 22L threshold. KDS1535 over flew N9ME on Runway 22L and the vertical altitude was less than 100 feet. A Services Rendered Telcon will be conducted Tuesday, March 1, at a time to be determined.

# Cont.



# SRT Write-up

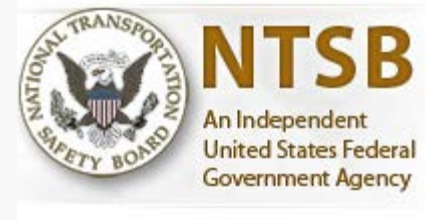
- Bulleted Findings
- Color determination
- Any follow-up

A Services Rendered TELCON (SRT) was conducted and the event was color coded "Yellow" with Western Service Center QCG follow-up. These were the main findings from the SRT:

- When N9ME was instructed to LUAW, the pilot was not given the reason for the LUAW instruction. The facility briefed that (Delta) DAL837/A333 was landing Runway 26L. In addition, N9ME was going to turn right after departure and fly across the departure end of Runway 26R and therefore had to wait for traffic departing Runway 26R.
- The ATM briefed that inappropriate use of LUAW is a systemic problem. In addition to N9ME waiting for 4 minutes on Runway 22L, the LC controller instructed 2 aircraft to LUAW on Runway 26R at the same time, one at an intersection and one at the full length of the runway. The ATM briefed that LUAW should be used only when a takeoff clearance is imminent.
- The facility briefed that they do not have memory aids for LUAW. Intersection departures require annotation of the intersection on the flight progress strip. The facility could not confirm that the intersection departures were annotated.
- The LC1 and LC2 positions were combined. The facility briefed that the Local Control 2 (LC2) position is typically staffed from 9:00 a.m. to 3:00 p.m. and other times at the discretion of the FLM/CIC. The event took place at 3:48 p.m.
- The LC controller may have been distracted by detailed taxi instructions issued several times to DAL837 while N9ME waited on Runway 22L. If the LC2 position had been staffed at the time of the event (3:48 p.m.), the detailed taxi instructions would have been issued by LC2. The ATM briefed that the culture at HCF tends to resist staffing the LC2 position and that available staffing sometimes complicates the decision to staff the LC2 position.
- The Local Assist (LA) position was staffed.
- KDS1535 was initially told to expect Runway 22R and was subsequently cleared to land on Runway 22L. The facility briefed that there is a reluctance to have aircraft taxi between Runway 22R and Runway 22L because of a history of runway incursions with aircraft between the runways.
- The facility briefed that the ASDE-X alerted when KDS1535 was approximately 1000 feet from the threshold of Runway 22L and the LC controller subsequently issued go-around instructions approximately 4 seconds later.
- The FLM was not present in the ATCT during the event. The facility briefed that the CIC reported the event to the FLM approximately 15 minutes after it happened and the FLM did a preliminary investigation. The FLM filed an MOR, but did not mark it significant. On Monday, Quality Assurance (QA) advised the facility to mark the MOR significant. The facility briefed that they have a review process in place that would have identified the MOR as significant later that day if QA had not already identified it.



# National Transportation Safety Board (NTSB) Launch

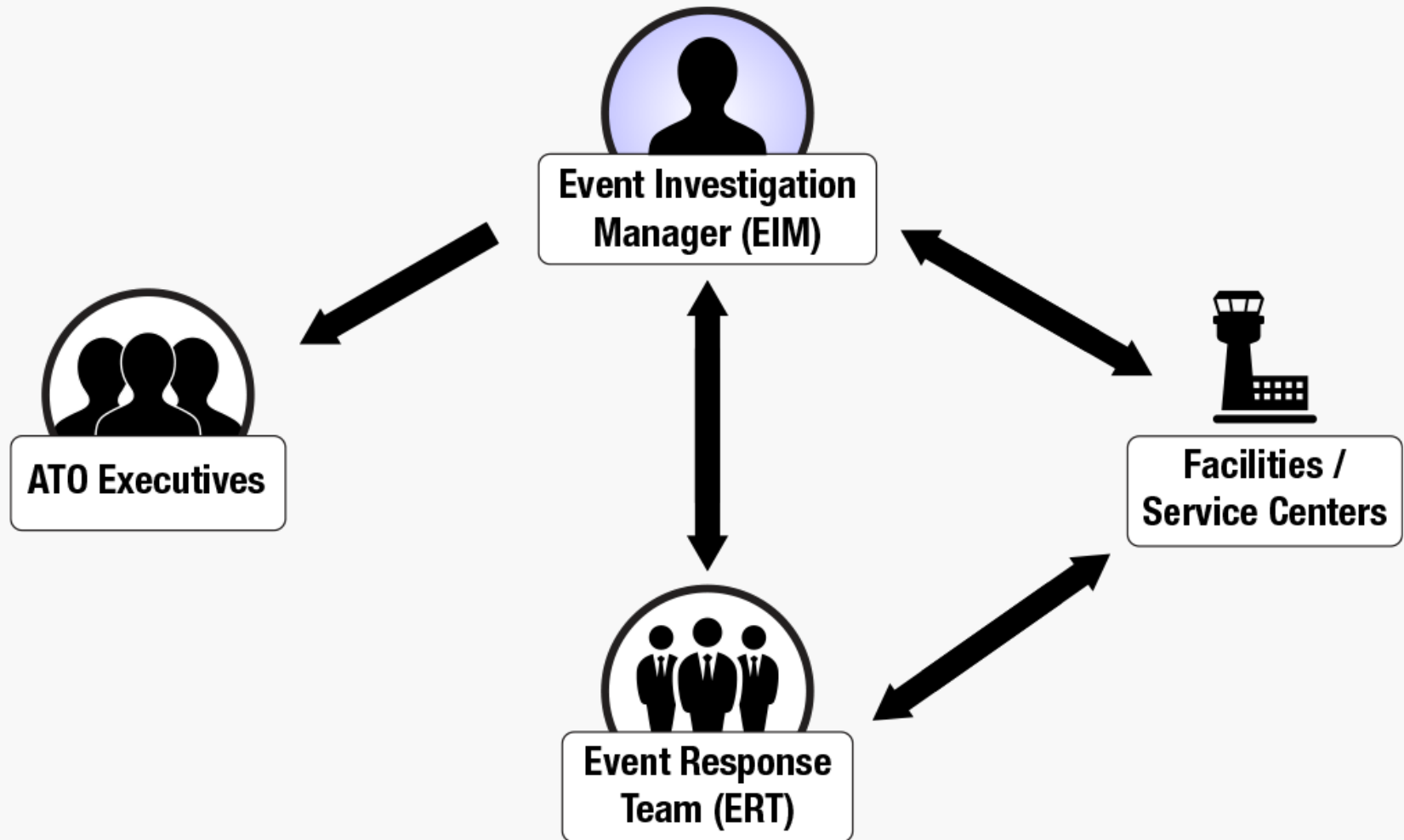


# NTSB ATC Work Group On-site Investigation

- Work Group made up of individuals who are granted “party status”:
  - NTSB Chairman
  - FAA Subject Matter Expert
  - NATCA Air Safety Investigator
  - NTSB Subject Matter Experts (e.g. Human Factors, Meteorologist, etc.)
- Event Response Team also launches
  - EIM
  - Quality Control Group Specialist



# Data Gathering Protocol

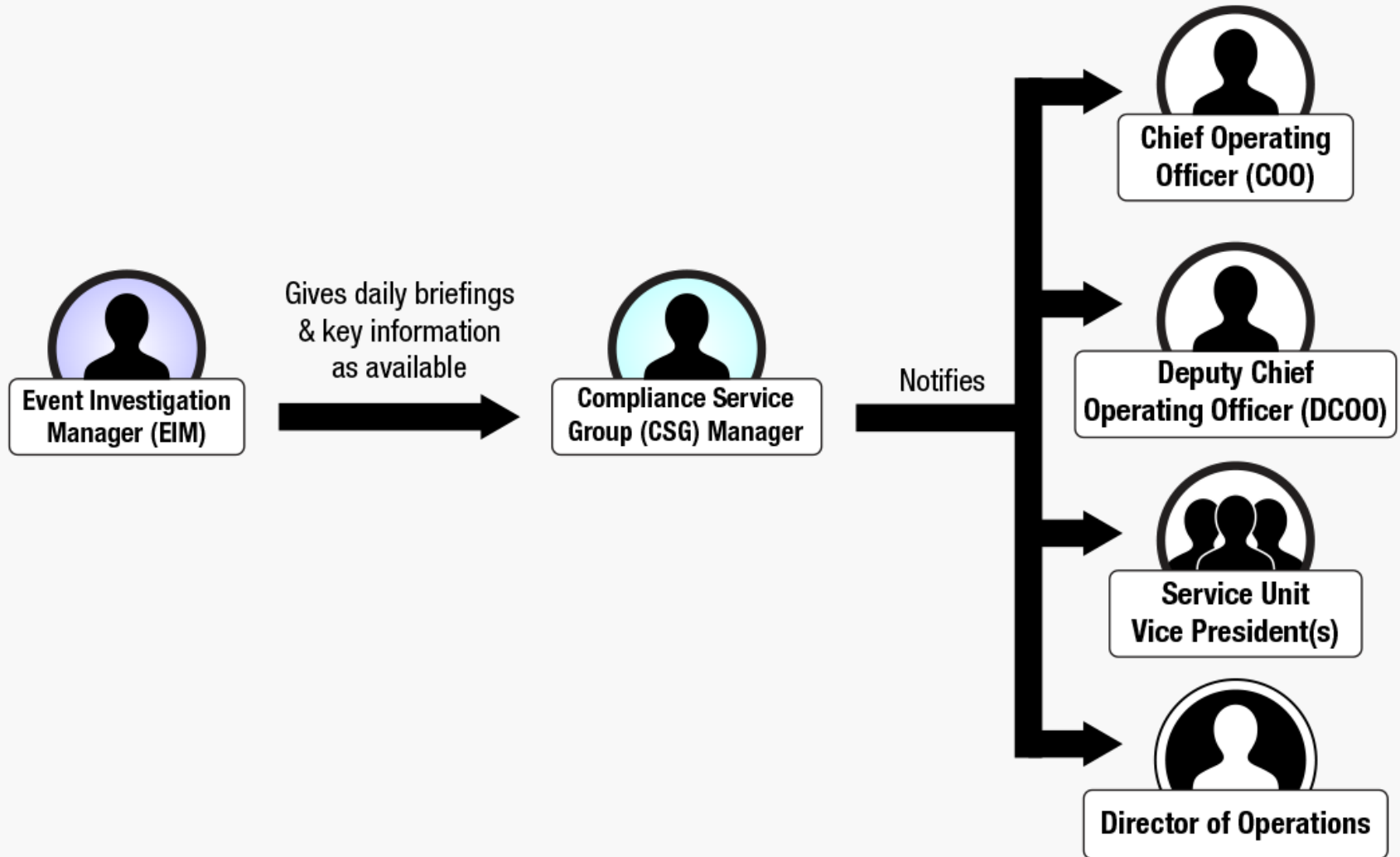


# Daily EIM Updates:

- Bulleted email with the main findings to emerge from that day's activities/interviews
- Activities may include:
  - Tour of the operations room/tower cab
  - Airfield tour
  - Replay of the event on an operational radar scope



# Upward Reporting



# Exit Briefings



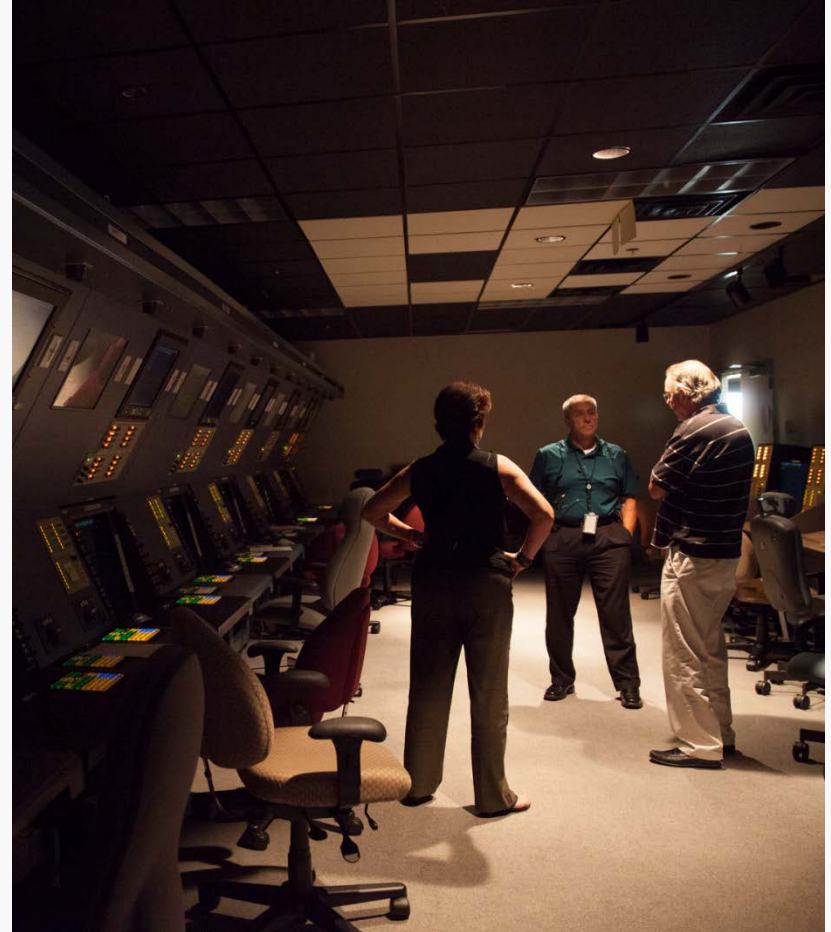
NTSB



ERT

# Conclusion Notification

- The EIM must inform the affected:
  - Facility manager(s)
  - Service Unit(s)
  - Director(s) of Operations
  - Compliance Service Group (CSG)





# Investigation Report

- Factual
- Investigation Findings
- Safety concerns



# Final EIM Report:



## Federal Aviation Administration

### Memorandum

Date:

To: Randy Park, Deputy Chief Operating Officer, Air Traffic Organization, AJO-0

From: Terry Biggio, Vice President, Safety and Technical Training, AJI-0

Subject: Event Investigation Manager Report: National Transportation Safety Board On-site Investigation at the Honolulu Control Facility, April 25-29, 2016

#### Executive Summary

On Friday, February 26, 2016, at 3:48 p.m. Hawaii-Alcution Standard Time, N9ME/C172 was instructed to Line Up And Wait (LUAW) on Runway 22L at the intersection of Taxiway P at Honolulu International Airport. N9ME was not issued takeoff instructions and the aircraft remained in position on the runway for approximately four minutes. (Kaleo) KDS1535/C208 was subsequently cleared to land on Runway 22L. When KDS1535 was on short final, the ASIDE-X activated, and KDS1535 was issued go-around instructions by the Local Control (LC) controller, however KDS1535 had already passed the Runway 22L threshold which resulted in KDS1535 over-flying N9ME holding on Runway 22L. KDS1535 overflew N9ME by less than 100 feet.

The National Transportation Safety Board (NTSB) launched an Air Traffic Control Work Group to conduct an on-site investigation at the Honolulu Control Facility (HCF) during the period of April 25-29, 2016. During the on-site phase of the investigation, the Work Group identified that the air traffic services were deficient in several areas. There was a consistent lack of understanding by the workforce on general procedures outlined in the facility Standard Operating Procedures (SOP) and a lack of engagement by facility management due to a culture of avoiding performance management. The Work Group Chairman stated that if the Local Control 2 (LC2) position had been open, it would have prevented this event from occurring. The facility does not have a documented process for opening and closing the position, although it is required to be open from 0900-1500 Local Time, daily. The Work Group Chairman also highlighted Crew Resource Management and the Tower Team concept as being ineffective at HCF. As a result of this event, LUAW was suspended on Runways 4L/22R and 4R/22L. The Work Group Chairman stated that several recent investigations by the NTSB, the Air Traffic Safety Oversight Service (AOS) and the Compliance Services Group (AJI) failed to address the issues identified during this investigation. The facility immediately suspended LUAW operations after this event.

- The LC controller self professed that he should not have been at work that day, due to distractions that were occurring in his personal life. The Local Assist controller advised the Controller-in-Charge (CIC) that he should remove the LC controller from the position due to diminishing performance, however, the CIC did not remove the LC controller. This was possibly due to the intimidation factor of the LC controller. The event occurred approximately five minutes after the LA controller suggested removing the LC controller from position.
- The LC2 position is required to be open from 0900-1500 local time or when determined by the FLM or CIC. There is no documented process for the opening or closing of the LC2 position or documentation of when the activity takes place.
- As a result of this event, LUAW was suspended on Runways 4L/22R and 4R/22L. The suspension of LUAW on those runways has added complexity to the operation.
- There was a consistent lack of understanding by the workforce on general procedures outlined in the facility SOP.
- There did not appear to be any Traffic Management Initiatives (TMI) that were in place during the event. During interviews, the employees said that TMI are rarely used at the facility. One employee used the word apathy when describing Traffic Management at the facility.

#### Facility Actions

As a result of the event, the facility created multiple briefings for employees. The facility posted a reminder briefing to all Terminal controllers that highlighted the expectation that appropriate traffic calls be made when conducting LUAW operations. The facility Air Traffic Manager briefed the Terminal OM and all Terminal FLMs on the requirement to only utilize LUAW procedures when a departure is imminent. The briefing covered why the requirement exists and the potential risk that the procedures introduce at the facility. The Support Manager worked collaboratively with NATCA to amend existing LUAW procedures and develop LUAW memory aids. The amended procedures include restricting LUAW operations on all runways by not allowing controllers to have more than one aircraft lined up on a runway at a time. The new procedures and memory aids will be implemented as soon as all facility personnel receive the briefing.

If you have questions or need additional information, please contact Andrew Johnson, Acting Compliance Services Group Manager, AJI-13, at 202-267-9263 or Andrew.R.Johnson@faa.gov.

cc: Timothy L. Arel, Vice President, Air Traffic Services, AJT-0





# EIM Report:

- The EIM Report will have the following sections:
  - Executive Summary
  - Introduction
  - EIM Activities and Preliminary Findings
  - NTSB On-site Activities and Findings
  - Facility Actions
- NTSB Report includes the probable cause

# External Release of Information



# End-of-Lesson

