



# Investigation Challenges of Wet Lease Operators involving Foreign AOCs



*An Investigator's Perspective*

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# Basic Definition(s) and Core Concept(s)

## Wet Lease



- | Optimize operational efficiency
- | Situational Awareness
- | Keeps Stakeholders Informed



## Operational Control

- ✓ **FARs:** a “wet lease” is any lease whereby the lessor provides both the aircraft and at least one crewmember (whether flight crewmember or cabin crewmember). The FAA's presumption is that under a wet lease, the lessor retains operational control of the flight.
- ✓ **ACMI:** lease is common and refers to (Aircraft, Crews, Maintenance, Insurance) being offered by the lessor
- ✓ Wet leasing **motivation** is to allow airlines to respond quickly to changes in demand, seasonal fluctuations, or unexpected disruptions. By securing additional aircraft when needed, airlines can expand their capacity without making long-term commitments or significant capital investments.
- ✓ **Wet lease** agreement means an agreement between commercial air transport operators where the aircraft is operated under the **Air Operator Certificate** of the lessor.

### ICAO (Short):

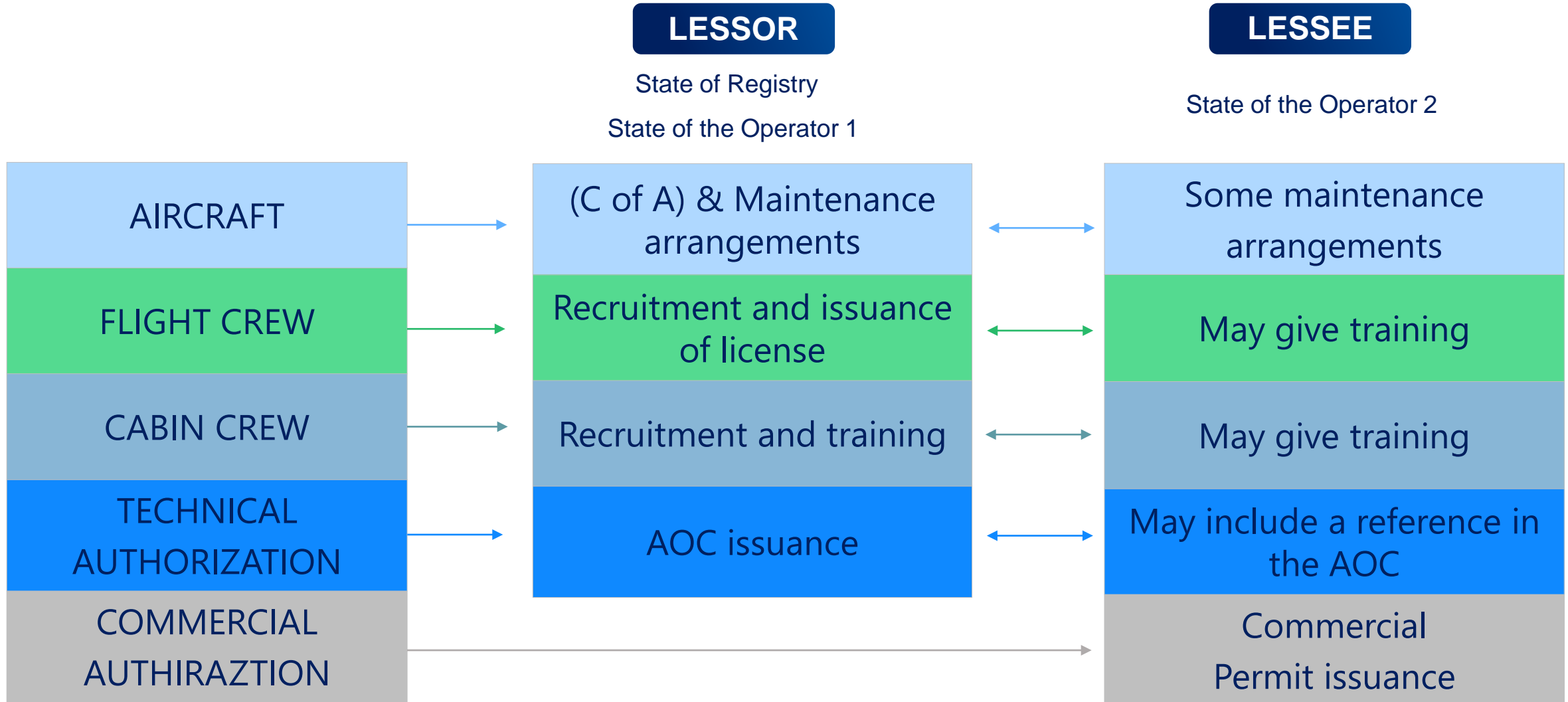
- ✓ The responsibility for the **initiation, continuation, termination** or **diversion** of a flight in the interest of safety.

### [Industry EXPANDED Definition

- ✓ Operational control is the process of managing and controlling the day-to-day operations of an aviation organization. It involves coordination of personnel, resources, and activities to ensure that the organization is operating safely and efficiently. **This includes the monitoring of aircraft operations, maintenance, and safety procedures, as well as the implementation of policies and procedures to ensure compliance with applicable regulations.** Operational control also involves the management of personnel, including the hiring and training of personnel, and the development of operational plans and procedures.

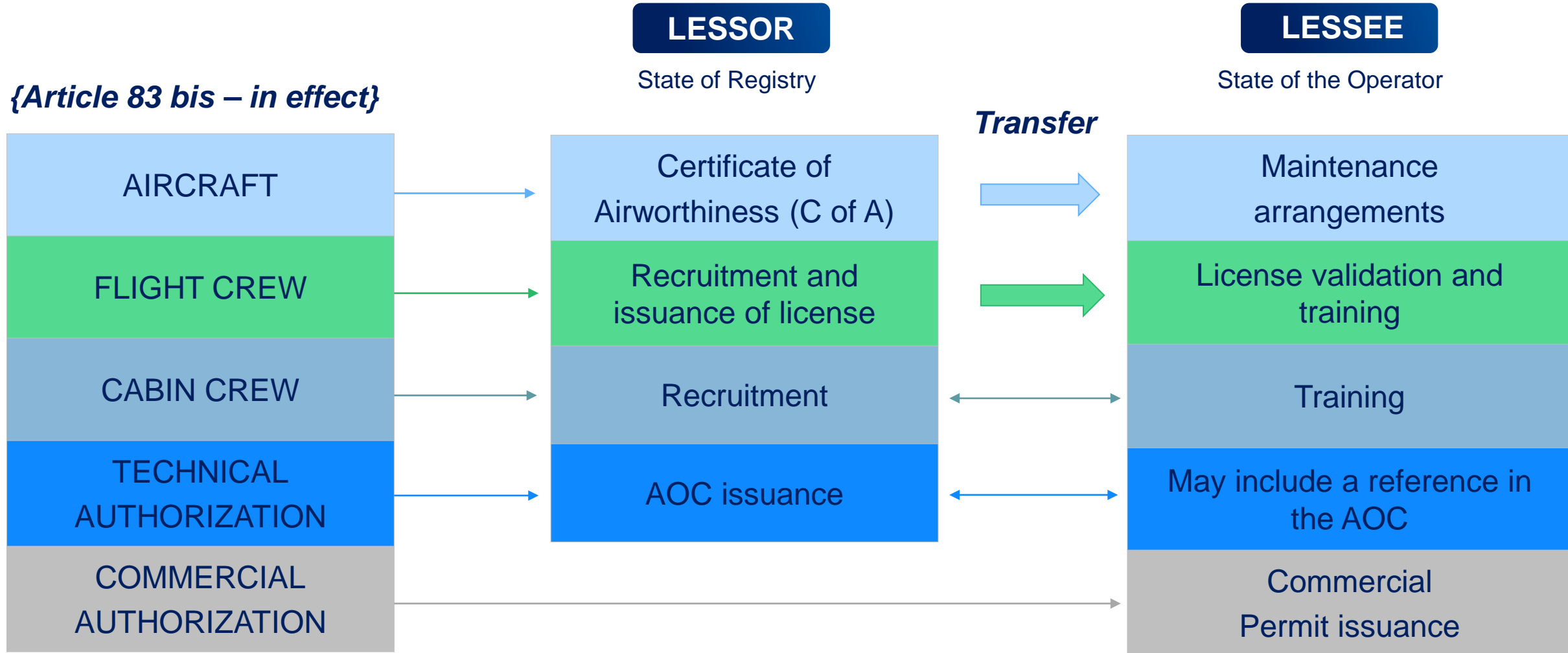
# ICAO

## Wet lease – Cross-border States' responsibilities



**Transfer of functions and duties and NOT responsibility**

## Wet lease – Cross-border States' responsibilities



*Transfer of functions and duties **and** responsibility*



# FAA Regulates WET Leasing

Selected **extract** out of **FAR § 119.53** *Wet Leasing of aircraft*

- (a) Unless otherwise authorized by the Administrator, prior to conducting operations involving a wet lease, each certificate holder under this part authorized to conduct common carriage operations under this subchapter shall provide: the Administrator with a copy of the wet lease to be executed which would lease the aircraft to any other person engaged in common carriage operations...
- (b) No certificate holder under this part may wet lease from a foreign air carrier or any other foreign person or any person *not authorized to engage in common carriage*
- (c) Upon receiving a copy of a wet lease, the Administrator determines which party to the agreement has *operational control* of the aircraft and issues amendments to the ***operations specifications*** of each party to the agreement, as needed.

# FAA Regulates WET Leasing

The lessor must provide the following information to be incorporated into the **operations specifications** of both parties, as needed.

- (1) The names of the parties to the agreement and the duration thereof.
- (2) The nationality and registration markings of each aircraft involved in the agreement.
- (3) The kind of operation (e.g., domestic, flag, supplemental, commuter, or on-demand).
- (4) The airports or areas of operation.
- (5) A statement specifying the party deemed to have operational control and the times, airports, or areas under which such operational control is exercised.

(d) In making the determination of paragraph (c) of this section, the Administrator will consider the following:

- (1) ***Crewmembers and training.***
- (2) ***Airworthiness and performance of maintenance.***
- (3) ***Dispatch.***
- (4) ***Servicing the aircraft.***
- (5) ***Scheduling.***

# Regulatory Compliance for Designating Operational Control

1

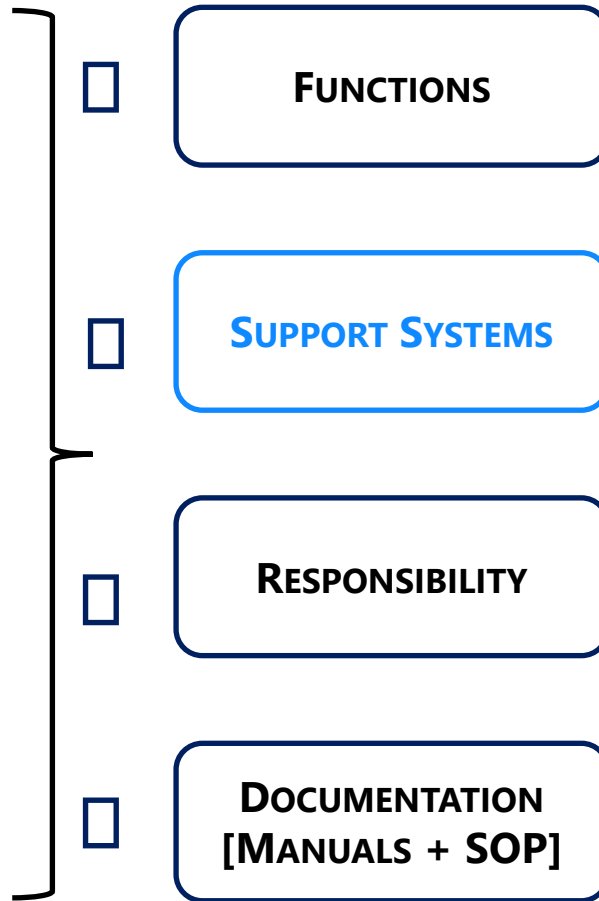
## REQUIREMENTS FOR OPERATIONAL CONTROL



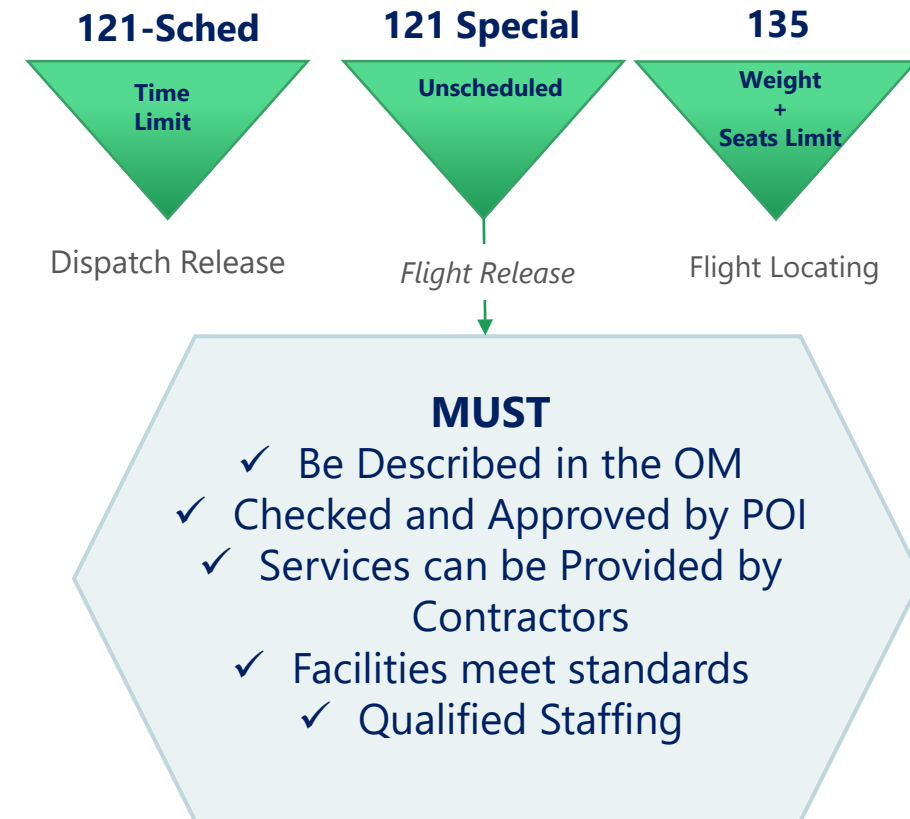


# Regulatory Compliance for Designating Operational Control 2

## REQUIREMENTS FOR OPERATIONAL CONTROL

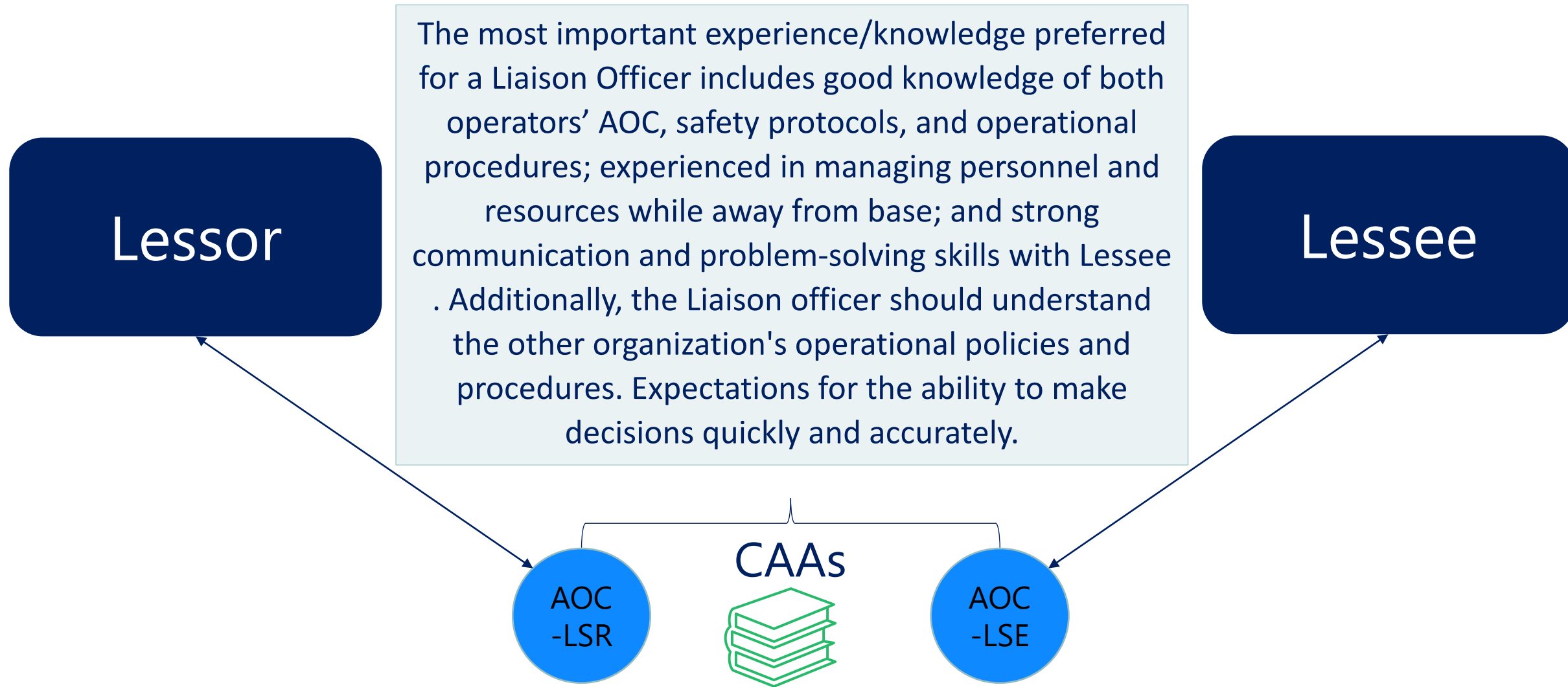


### General Operating Systems in Descending Order of Complexity



# The Link

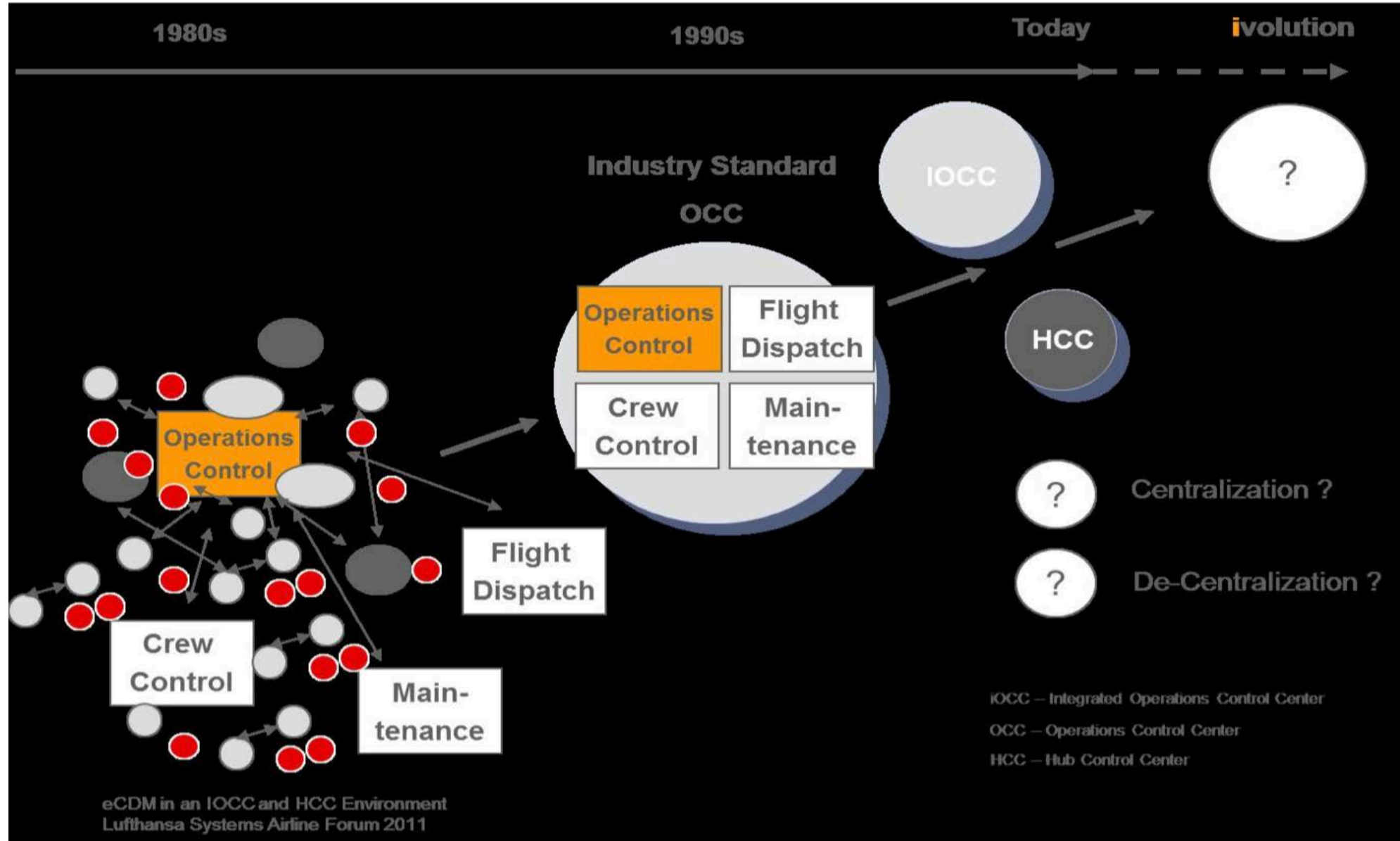
## Assigning a Wet Lease Liaison Officer



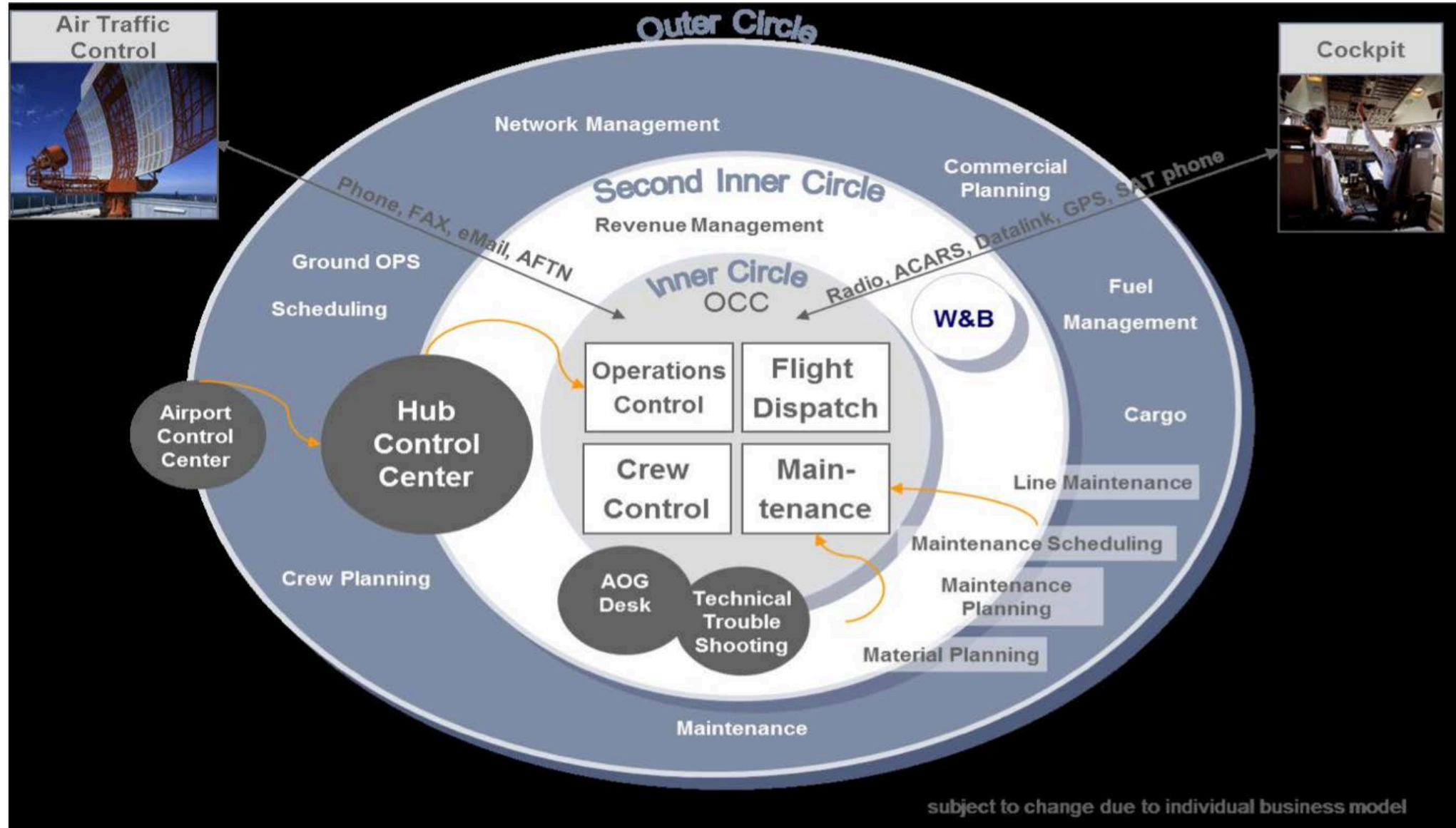
# WET LEASE Officers - Observations and Opinions of Concern

- Inadequate qualification of Personnel assigned;
- Neglected by home base when breach of contract issues arise;
- Understaffed: parttime or not available;
- Exposed to misconduct by the crew;
- Mechanical failures or defect of aircraft with weak or no home support causing out of control delays
- Limited to specific functions as to Crew scheduling or accommodation support type;
- Slow or out of synchronization with aircraft unforeseen troubled movement causing late or no information; and,
- Difficulty with resolution and responses to third parties claims such as passengers, airports or authorities when unexpected events occur, i.e., weather, communications service disruptions and ground support services.

# Evolution of OPS Control



# Complex – International Commercial Carrier



# Case Study

1

## Wet Lease B747-400 Cargo "Tail Strike"

At OEDF airport, during cockpit preparation, the flight crew made an erroneous entry of 100-ton KG mass into the FMS. This resulted in CDU replacing of all takeoff V speeds with DASHES. The flight crew, using Onboard Performance Tool (OPT), overrode the FMS safety feature and manually inserted low speeds and accordingly selected low takeoff thrust settings. A combination of derated thrust and low rotation speed resulted in tail contact with the runway surface lasting for 16 seconds. ATC reported to the flight crew visible sparks as the aircraft almost reached the end of runway and became airborne.

Climbing out of 15 feet the flight recovered out of a "Stick Shaker" and continued to a designated holding point for FUEL jettisoning. Unable to locate QRH "Unannunciated" Tail Strike CKLST and post contact with company operational control, a 13-min fuel jettison was terminated, and it was decided with company OCC to divert to OEJN. The flight made 2 pressurized step climbs (F100-150 and 170) enroute flying over densely populated areas. During descend ATC approved a request for an additional 24-minute fuel jettison after which the flight landed safely runway 34R.

AIB-310120-092  
Investigation Report



### Tail Strike

Boeing 747-400F aircraft, Registration TC-MCT of Air ACT Airlines; Operating Flight SVA919 for Saudi Arabian Airlines (Saudia Cargo)

King Fahd International Airport (OEDF)  
Dammam, Kingdom of Saudi Arabia  
06 Jumada II 1441H – 31 January 2020G



## What really happened?

1. Undisciplined Cockpit Preparations
2. Tail Strike
3. AD HOC inflight Operational Control:
  - Could not locate TS checklist in QRH.
  - Flight crew memory-allocated procedures.
  - Multiple Risk-Pressurized Step Climbs.
  - Multiple unplanned Jettison operations.
  - No Flight Dispatch support.
  - Flight routing over densely-populated areas.
  - Diverting to Jeddah is contrary to inflight SAFETY requirements (in terms of distance and time).
  - Non-existent maintenance support

## Cause

The flight crew override action of FMS DASHES accepting a 100-ton mass entry error. Equally RISKY was the “I know it by memory” flight crew actions coupled with Lessee dysfunctional Operational Control support.

## Contributing Factors

A breakdown of independent cross-check policy of Mass and Balance data sheet FMS input. And the flight crew lack of awareness/familiarity with aircraft takeoff roll performance.

## Wet Lease Factor(s)

1. Lessee not informed or consulted in a timely manner.
2. Undetermined CAA OpSpecs editing or entries.
3. Lessor total dysfunctional Operational Control.
4. Air worthiness elevated risk factors were completely ignored.

## Closing: A Defensive Outlook

With airlines increasingly looking to wet leasing as a revenue source the AIB recognizes a growth trend; looking ahead, there are opportunities and obstacles facing the industry. A FOCUS on a defensive strategy encourages:

- Competent/Developed Civil aviation authorities to establish a more robust oversight functions to check lessee/lessor client and supplier relationship adequately equating safety standards; and,
- After the start of the lease, "Competent/Developed CAAs" to continue monitoring the lease performance relative to operations, ensuring that contracted safety metrics are still met. In all cases, assessing if contract adjustments are required to resolve unexpected issues as quickly and smoothly as possible."

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**BE SAFE**