

# Aviation Supply Chain Issues

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HIA Global

May 2025



## Aviation & Space Capabilities - Global Dispute Resolution

From ground-based infrastructure and operations, aviation engineering, airworthiness and flight operations, our industry-leading expert witnesses provide specialist knowledge and experience to advise, understand and resolve disputes.

We cover all aspects of airports, heliports, vertiports, spaceports and associated services. This includes air traffic control and all aspects of airside, landside and terminal operations. HKA's technical expert team provides the specialist disciplines needed to resolve all types of disputes across these complex operating environments.

We work alongside HKA's construction, quantum, delay and damages experts as required, to provide a comprehensive multi-disciplinary expert solution.

**The highly regulated aviation environment requires the very best aviation experts with global experience to decode technical complexities in disputes.**

### Sector Expertise

Pilots &  
Cabin Crew

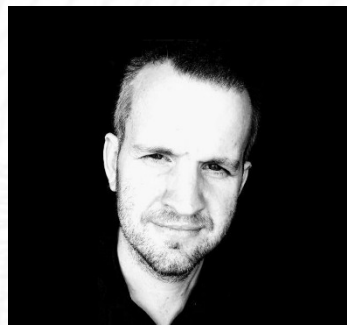
Aircraft  
Maintenance

Airports

Space



## What happens if explosive devices are remotely detonated on board an aircraft or at an airport ?



Recently numerous pagers and walkie talkies were interfered with in Lebanon. They appear to have been booby trapped – perhaps on a timer or remotely detonated. Explosions involving these types of devices could have had several significant impacts on aviation operations.

## How does a counterfeit part enter the aviation supply chain?



Aviation fraud has been in the spotlight, including criminal investigations of airport parts suppliers. The supply of aircraft parts has also faced attempts to circumvent economic sanctions imposed by countries.

# Unexplained Components

## Lebanon – Sept 2024

- Walkie Talkies and Pagers

## Denmark – May 2025

- Energy Equipment Supplies

## USA – May 2025

- Rogue Communication Devices

## ICAO Annex 17 – Security Management

## ICAO Annex 19 – Safety Management

Orders placed online



Supply  
Chain  
Integrity ?

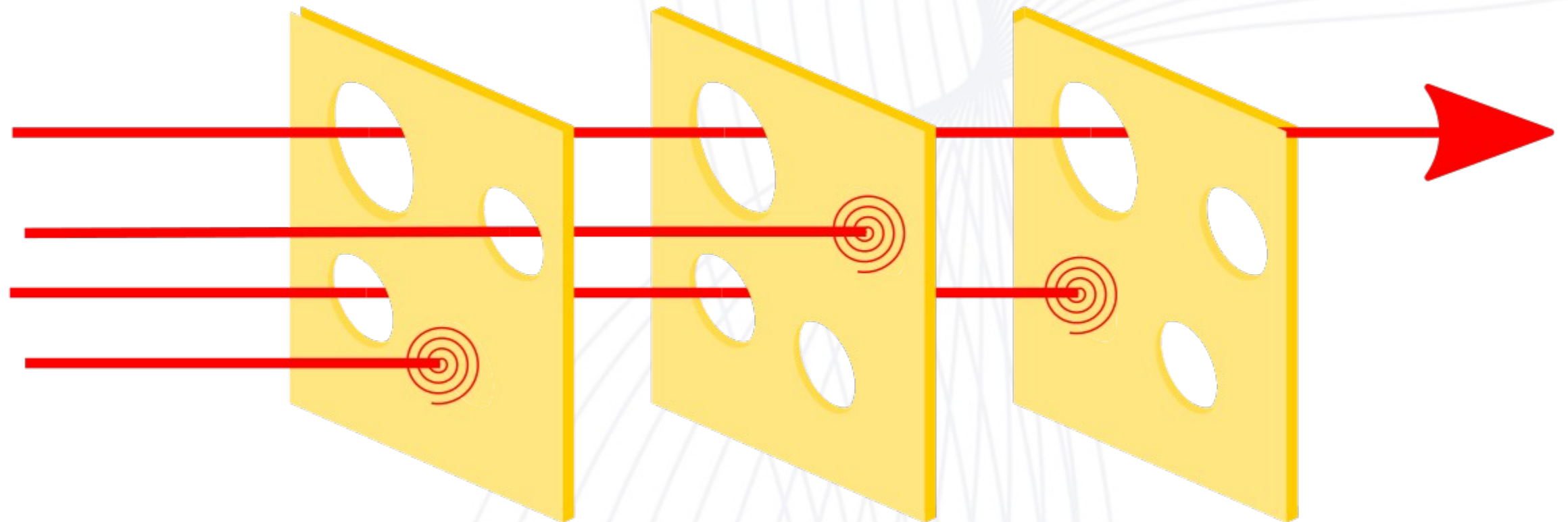
Receive Goods



# Swiss Cheese Model and Aviation Safety

- Widely recognized framework in aviation
- Visualises human systems in layers
- Each slice is a defence

Trajectory of Incident Opportunity



# Mitigating the Risks

## SeMS

Security Management Systems

Annex 17 and Annex 19  
GAP Analysis





# Counterfeit Products

Responsible  
HKX Global

May 2025



## How does a counterfeit part enter the aviation supply chain?

In today's aviation market, there are pressures on the supply of parts in the secondary parts market;

Recently aviation fraud has been in the spotlight, including criminal investigations of airport parts suppliers.

In addition, the supply of aircraft parts has also witnessed attempts to circumvent economic sanctions imposed by countries.





# Counterfeit Products





# Causal Factors





## Counterfeit Swash Plate Support

PARTS SHOULD  
FIT WITHOUT  
ANY  
ADJUSTMENTS

**COUNTERFEIT INCLUDING THE ID PLATE**



Paradigm Consulting Inc.

## Special Hardware

**APPROVED**



**UNAPPROVED**

FOUND BY MARKING DIFFERENCE. Look at the machine finish on the shoulder. This was undetected at the time of receiving inspection

Paradigm Consulting Inc.

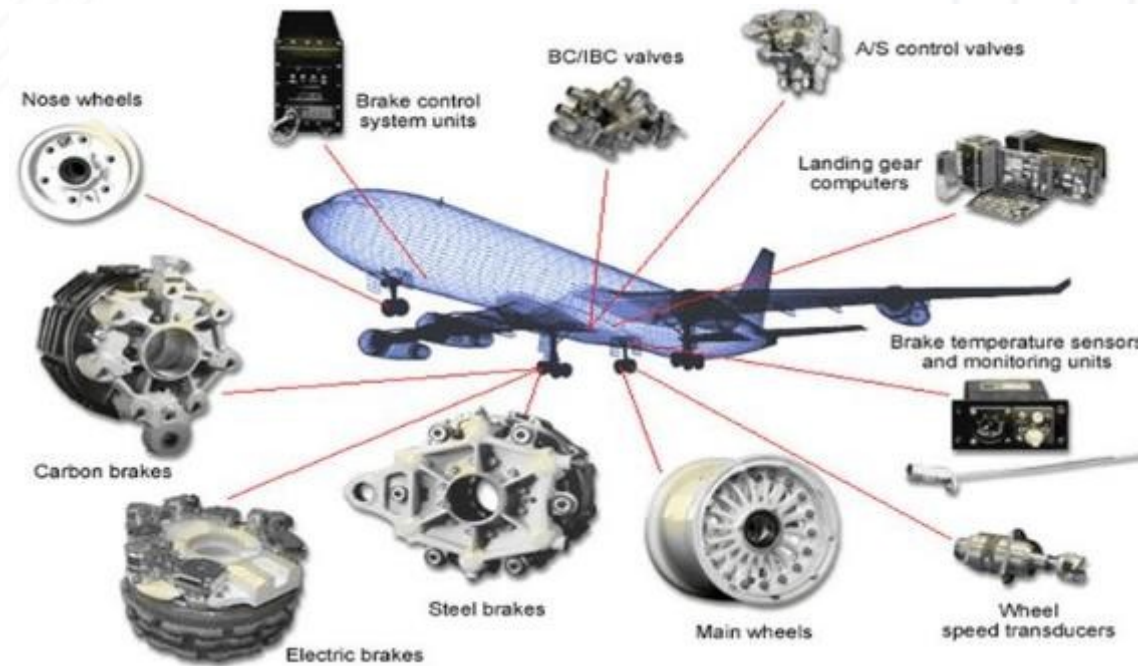
## Standard Hardware

EVEN STANDARD PARTS LIKE THESE ARE  
COUNTERFEITED



INSPECT BY USING THE STANDARD TO ENSURE  
CONFORMITY TO THE PUBLISHED STANDARD

Paradigm Consulting Inc.



## Making OLD Parts Look Like NEW

EXPIRED LIFE ITEM WITH COUNTERFEIT DATA  
PLATE AND HISTORY CARD.



Paradigm Consulting Inc.



## The FAA has resorted to buying parts on eBay because its equipment is so old, Transportation Secretary Sean Duffy says

Sasha Rogelberg

12 May 2025 · 5-min read



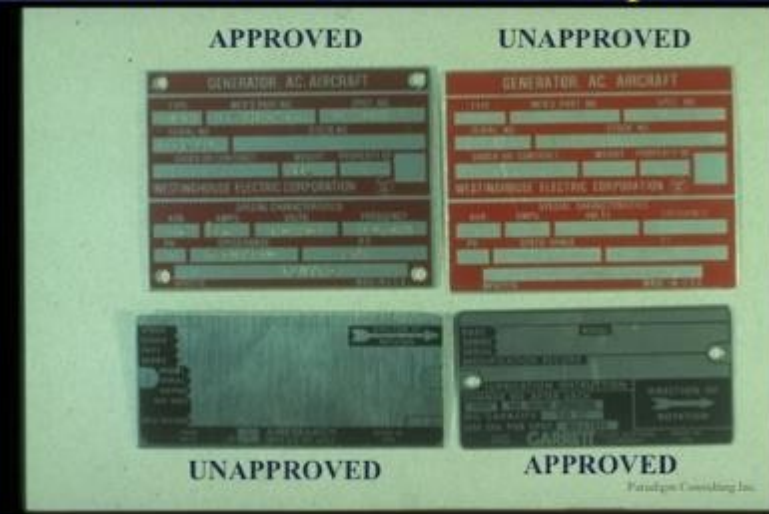
eBay





# How does a counterfeit part enter the aviation supply chain?

## Counterfeit identification plates

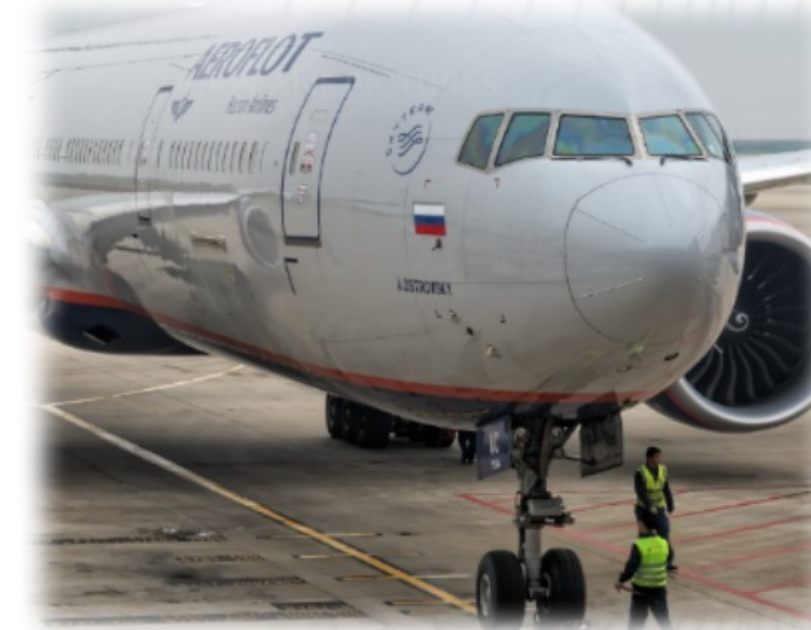


## Turbine Wheels

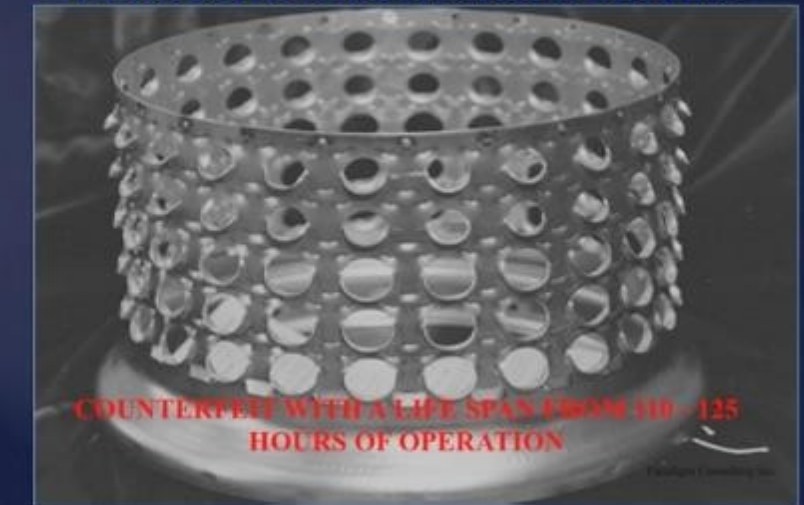
SOLD AS NEW WITH TWISTED SPLINE AND INSTRUCTIONS TO SEAT WITH HAMMER AND BLOCK OF WOOD.



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## Counterfeit Combustion Liners

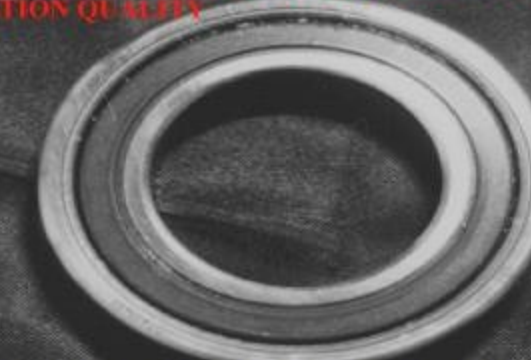


## Unapproved Repairs



## Unapproved Bearings

AUTOMOTIVE BEARINGS USED IN PLACE OF AVIATION QUALITY



GREASE SEAL MAY BE AN INDICATOR IN THE DIFFERENCE

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## Counterfeit Logos



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# Sanctions and Tariffs





## Winds of Change?

## AOG Technics: UK fraud body makes arrest in aircraft parts probe

🕒 6 December 2023





## Knowing what is Real or Fake





# THANK YOU!

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