

# THE FUTURE OF AVIATION RISK

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**V**OLATILE  
**U**NCERTAIN  
**C**OMPLEX  
**A**MBIGUOUS

**VUCA**  
**MAX**

**M**ASSIVE  
**A**CCCELERATING  
**E**XPONENTIAL

EXPLORE MORE



135M

GLOBAL TRIPS AT RISK



526K

DAILY PASSENGER LOSS

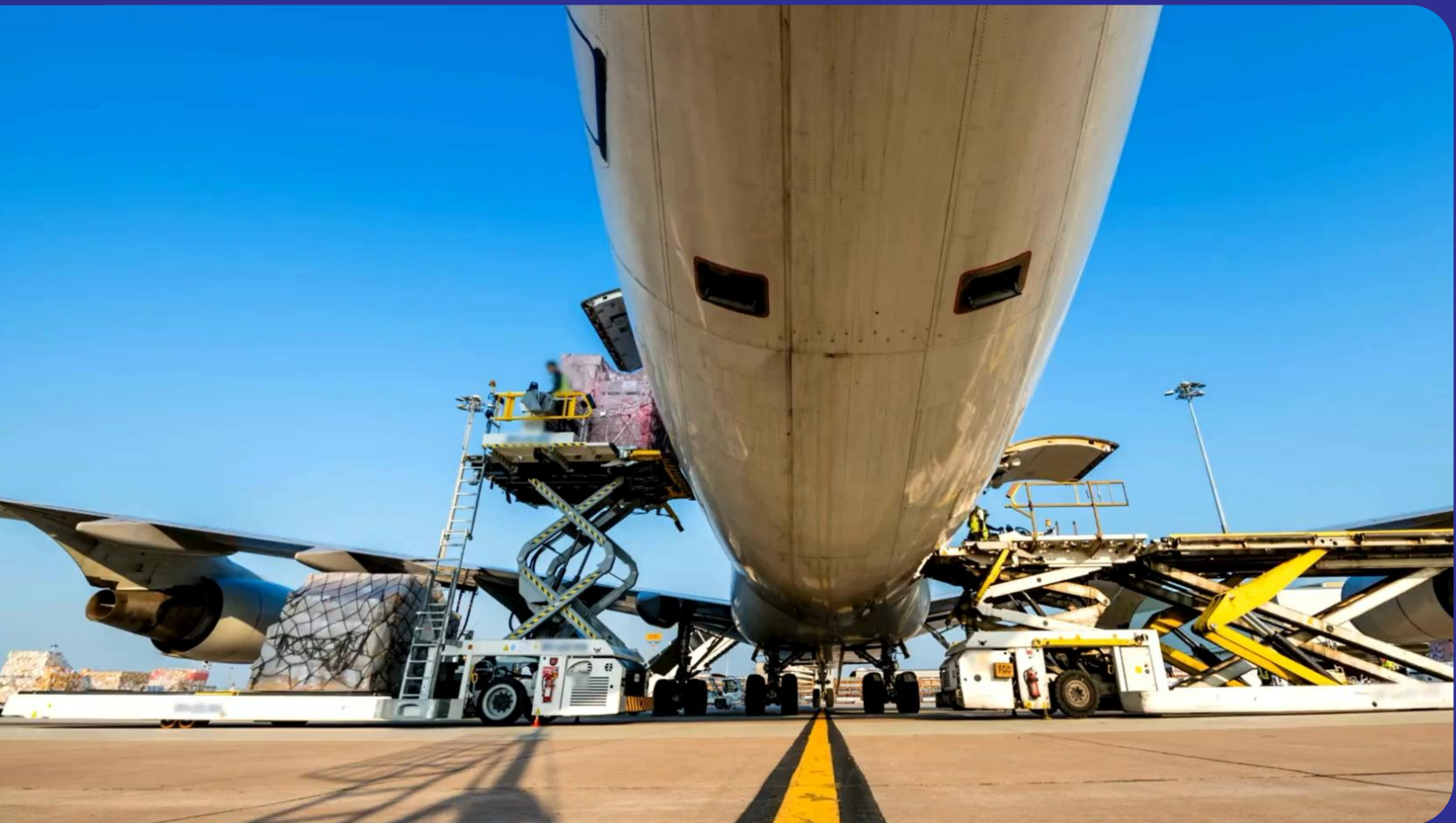
50%

FUEL AS A % OF AIRLINE OPEX



\$94B

EST. SECTOR LOSSES TO DATE,  
PROFIT & MARKET CAPS



# \$33T

**GLOBAL TRADE FLOWS  
AFFECTED BY TARIFFS**



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RISK  
MULTIPLIES  
STRATEGIC DRIFT



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01

# MACRO TRENDS

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MACRO TREND

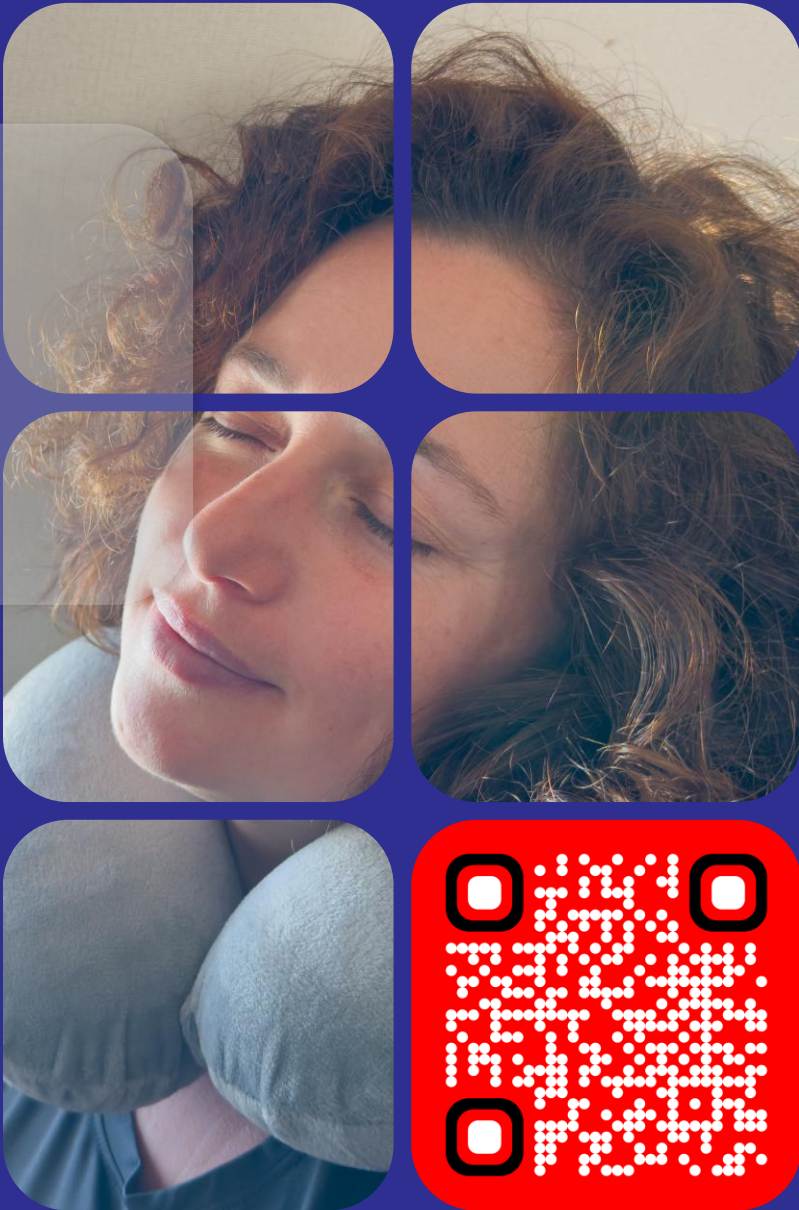
APAC POV

# AIR TRAVELLERS

50%

APAC AIR TRAVELLERS AS % OF  
GLOBAL TOTAL, 2035 IATA

By 2030 there will be an  
extra 1B Middle Class  
consumers with 600M of  
those being in Asia.



SOCIETAL TRENDS

EXPLORE MORE

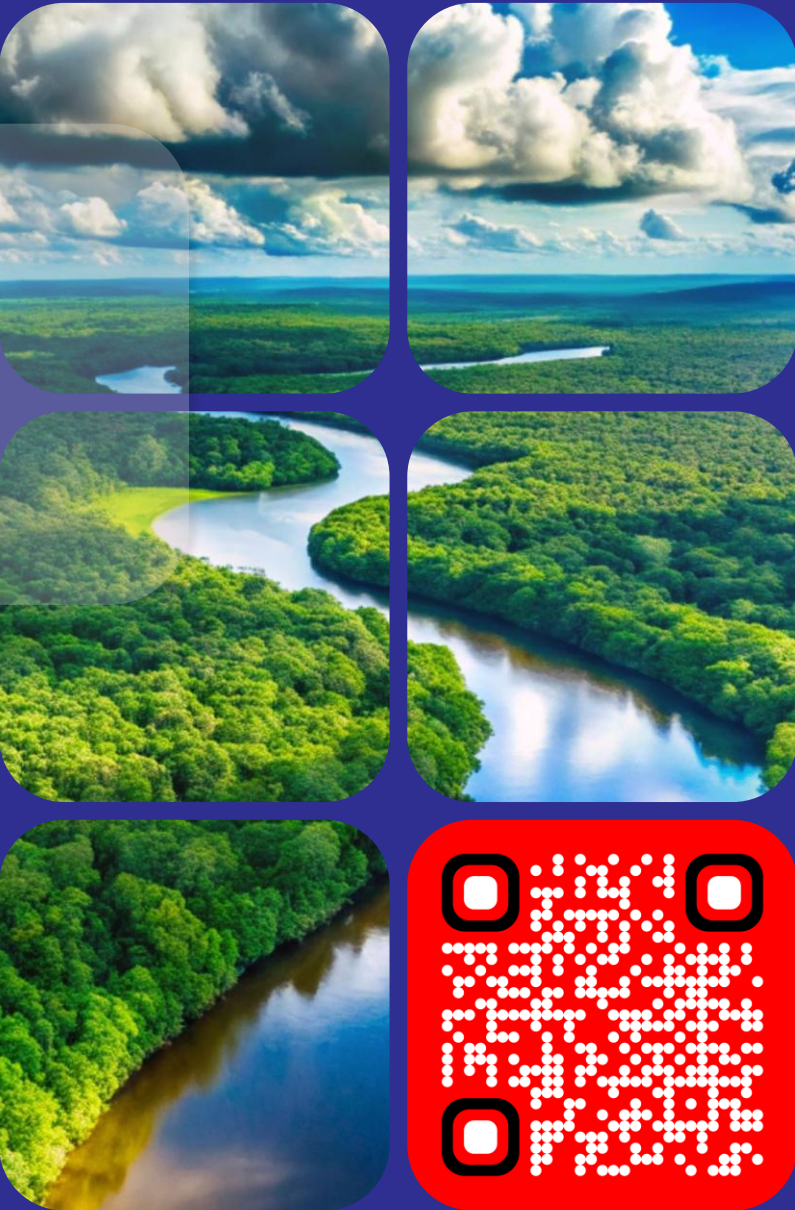


**5.4 B**  
**CONSUMPTION \$63 T . GEN Z \$13 T**

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MACRO TREND

GLOBAL POV



SOCIETAL TRENDS

EXPLORE MORE

# EXPERIENCE SEEKERS

By 2035 it's expected  
people will prioritise  
Experience led travel over  
Destination travel.

80%

EST. EXPERIENCE LED TRAVEL

MACRO TREND

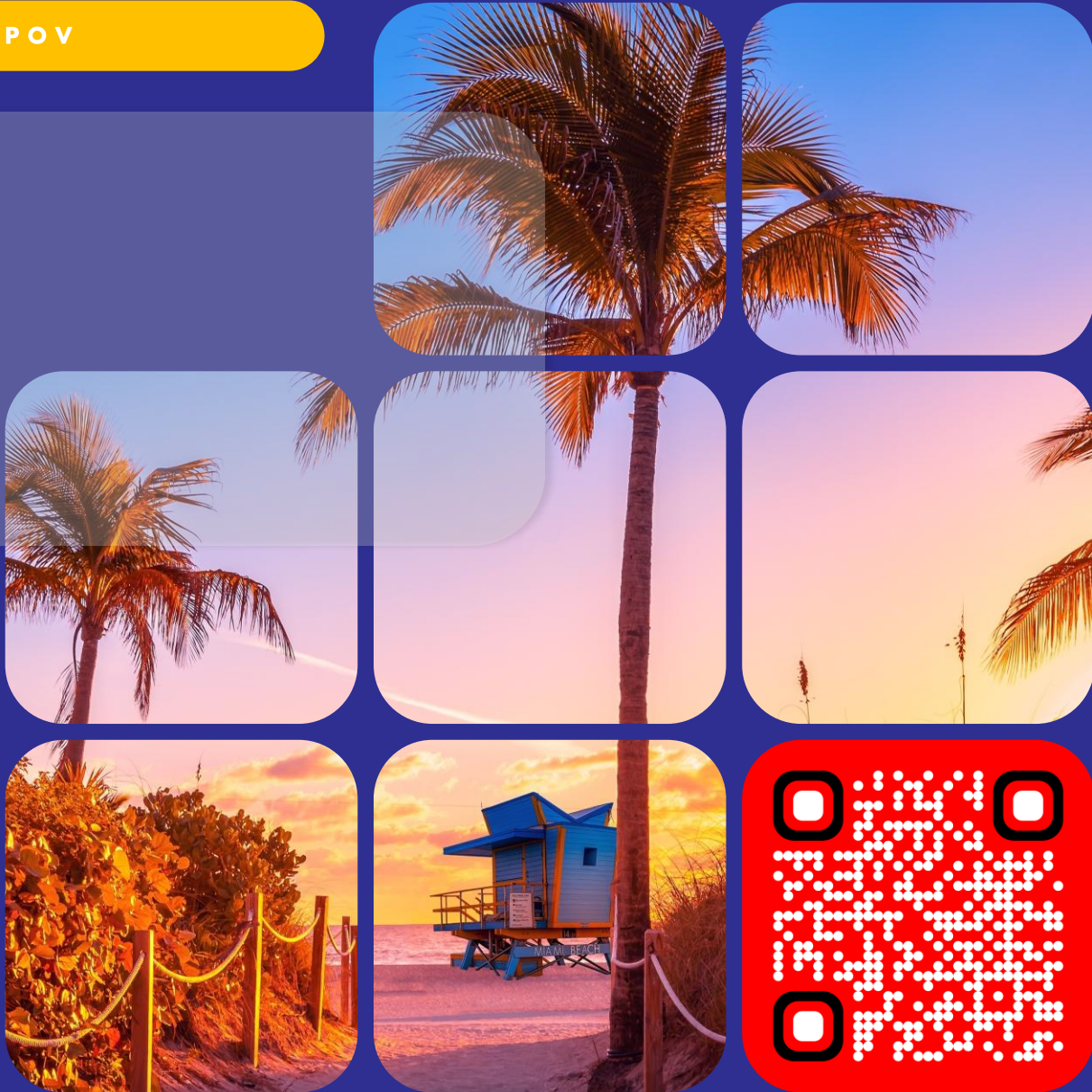
GLOBAL POV

\$20k

EST. 40% TO 70% INC.  
SPEND PER TRIP

PREMIUM  
POLARISATION

Est. HNW and UHNW  
population exceeds 73M by  
2035, a 60% increase and  
assets hit \$187T.



SOCIETAL TRENDS

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MACRO TREND

GLOBAL POV

# MULTI POLAR WORLD

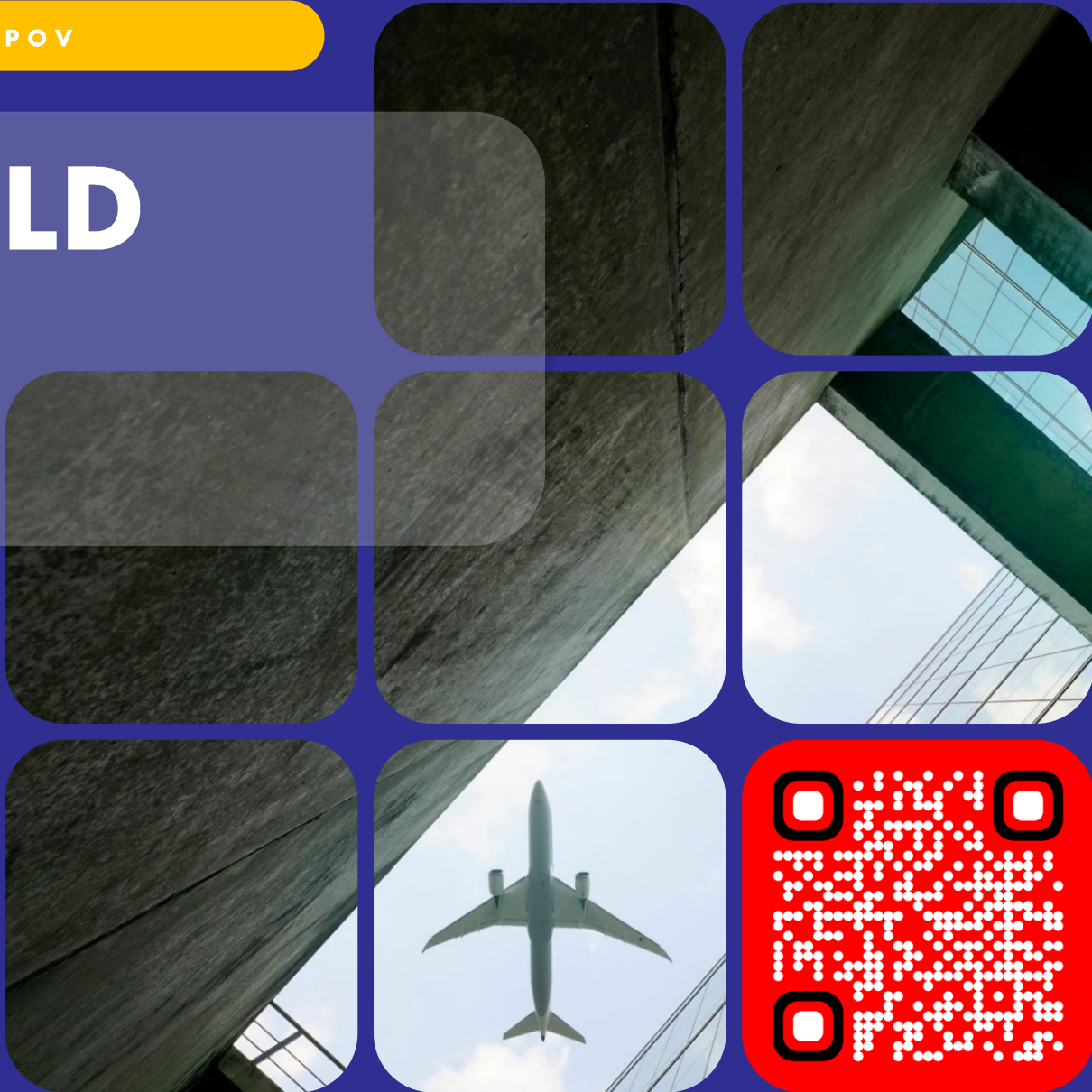
\$11B

UNITED AIRLINES  
2026 FUEL BILL INCREASE

Geopolitical tensions are affecting airspace, critical minerals, supply chains and a whole lot more.

POLITICAL TRENDS

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MACRO TREND

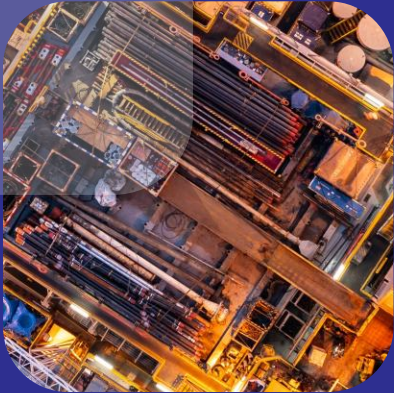
GLOBAL POV

# ENERGY TRANSITION

96

COUNTRIES RELIANT ON  
PRIMARY ENERGY IMPORTS

The world is transitioning and electrifying industries at a record rate despite attempts to derail it.



ECONOMIC TRENDS

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741G

NEW RENEWABLE CAPACITY,  
2024

82G

NEW FOSSIL GENERATION  
CAPACITY, 2024

\$20

RENEWABLE ELECTRICITY  
COST MWH, CHINA

02

# EMERGING RISKS

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67%

JAMMING INC. 2023 TO 2025

# GPS

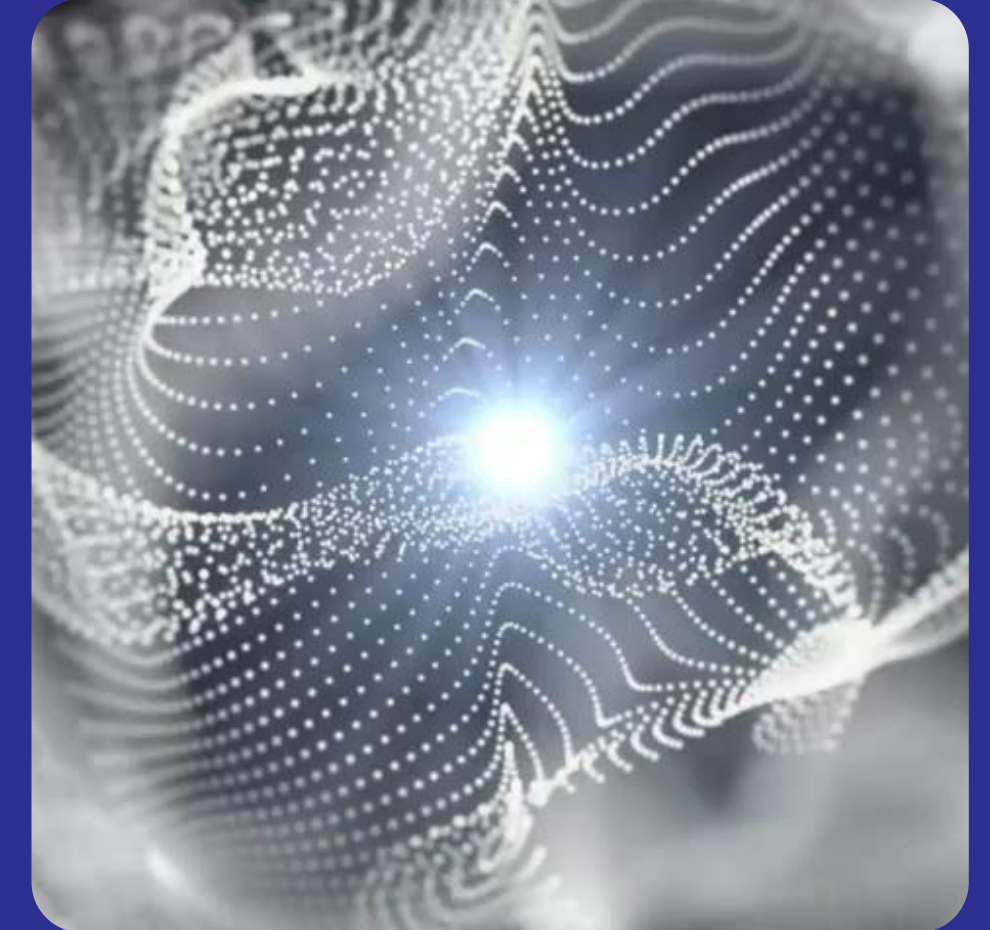
SIGNIFICANT GROWTH  
SINCE 2023. AT THE PEAK  
1,500 FLIGHTS PER DAY WERE  
AFFECTED.

193%

SPOOFING INC. 2023 TO 2025



SOLUTIONS INCLUDE  
GALILEO OSNMA  
ENCRYPTION AND  
AUTHENTICATION, AND  
QUANTUM SENSING.

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# DRONES

INTERFERENCE . EW JAMMING

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2%

EST. INSTALLED AIRCRAFT PARTS  
THAT ARE FAKE, FAA

# FAKES

SANCTIONS AND WARS  
HAVE INCREASED THE  
NUMBER OF COUNTERFEITS  
PARTS IN SUPPLY CHAINS.

38%

EST. MRO DOCUMENTATION THAT  
IS UNVERIFIABLE

SOURCE : FAA

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# 4D PRINTED

## MALICIOUS DESIGN MODIFICATION

[EXPLORE MORE](#)



# MODIFIED

## DIGITAL TWINS AND AR MRO

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# CLEVER

## 3D PRINTED SMART COMPOSITES

EXPLORE MORE

30%

AI AVIONICS AS A % OF  
TOTAL AIRCRAFT VALUE

39%

AVG. MAJOR ENGINE INGESTION  
EVENT COST INC.

10%

EST. TECHNICAL PREMIUM  
INC. , 2026

# ALL CLEAR

## SEVERE CAT 55% . \$2M PER AIRLINE

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# DEORBITED

AIRSPACE DISRUPTION RISK 26%

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# CYBER

## WAR NOT WAR

EXPLORE MORE

# ZERO

COST . RESOURCES . SKILLS . TIME

EXPLORE MORE

# RESILIENCE IS KING

THIS IS 4D CHESS



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**2MINS**

**MILITARY GRADE SYSTEMS**

**10k**

**MALWARE VARIANTS GENERATED**

**5MINS**

**CVE EXPLOIT GENERATION**

**EXPLORE MORE**

# FULL AUTO

## OFFENCE

EXPLORE MORE

# FULL AUTO

## MULTI SENSORY AGENTIC DEFENCE

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A futuristic factory floor with humanoid robots and a human worker. The scene is dimly lit with industrial equipment and machinery in the background. The text "OFFLINE" is overlaid in large, white, bold letters.

# OFFLINE

## CASCADE ATTACKS

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A high-angle, slightly blurred photograph of a large white commercial airplane on an airport tarmac. The plane is the central focus, with its wings and engines visible. Several ground crew members in high-visibility vests are scattered around the aircraft, some near the tail and others further back. The tarmac is paved and has some markings. In the background, there are some airport structures and equipment. The overall tone is professional and industrial.

# AT RISK

## DRONES . HUMANS . ROBOTS

EXPLORE MORE

# AI

ALIEN INTELLIGENCE

EXPLORE MORE



# BOMBED

## AI DATACENTERS . THE NEW CNI

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# EVOLVING

GHOSTS IN THE MACHINE

EXPLORE MORE

# STRESSED

## COGNITIVE STRESS . SKILLS DECAY

EXPLORE MORE



# POISONED

## AFCS FLAWS . SENSOR DECEPTION

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# SILENT AI

## NON CERTIFIED AGENTIC WORKFLOWS

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**TRUST  
NOTHING**



**TEST  
EVERYTHING**

**EXPLORE MORE**

# CALL TO ACTION

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# THIS IS NOT **THE END.** **EXPLORE** MORE.

