

SAFETY ISSUES IN HELICOPTER OPERATIONS

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CONTEXT

- Regional Connectivity is Poor. Udaan Scheme. A step in the right direction
- Safety concerns on the expansion of NE Aviation Operations are real.
- Achieve accelerated growth with enhanced safety.

HELICOPTER ACCIDENTS

- VIP Helicopter accidents.
- Human Error :- Pilot, Ground Crew, Maintenance, ATC.
- CFIT – Controlled Flight Into Terrain.
- Weather – The Act of God?

FINANCIAL VIABILITY CONCERNS

- Financial viability of Heliports.
- High cost of mitigating safety concerns.
 - Multi-engine vs Single-engine.
 - Equipment for Instrument Flight Rules.
 - Precision Navigation Facilities on the ground.

SINGLE VS MULTI-ENGINE

- What does data say?
- Engine performance vs Altitude.
- Performance certification.
- NE terrain and performance restrictions.
- Low engine failure rate.
- Lower precision navigational equipment in single-engine helicopters

CHALLENGES IN NAVIGATION

- Poor quality maps.
- Lack of Precision Navigational Facilities on the ground.
- Single-engine Helicopter limitations.
- Restricted helipads.
- Unpredictable weather.

PROBLEMS TO SOLVE

- Ensure financial viability.
- Ensure safety of operations.

PROBLEMS TO SOLVE



- Ensure financial viability – Single-engine flying.
- Ensure safety of operations – Single-engine perspective.
 - Safety through regulation.
 - Navigational safety.
 - Safety against weather.
 - Safety through training.

SAFETY THROUGH REGULATION


- Adequate guidance and regulation are in place
 - DGCA OC 3/2016 Rev 1 of 2021 and OC 1/2022

NAVIGATIONAL SAFETY

- Performance Bas
- GPS with Satellite
- Reduces the need
- High precision an
- Perfect solution f


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Noteworthy milestone for the sector! It underscores our commitment to embracing advanced technologies for a safer and more efficient air traffic management.

Jyotiraditya M. Scindia  @JM_Scindia
A fine example of the Indian aviation sector blazing a trail in innovation!

India conducts Asia's first demonstration for Performance-Based Navigation for helicopters.

The flight from Juhu to Pune made use of the #GAGAN satellite technology that enhances accuracy, allowing...

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oment.

SAFETY AGAINST WEATHER

- Satellite and Doppler Weather Radar is inadequate for NE.
- Automated Weather Stations with Visibility measurement.
- Networked system with access to operators.
- Organisational Culture.
- Operational Risk Management.
- Train, train a little more, and then some more.

SAFETY THROUGH TRAINING

- Crew Resource Management.
- Leave no one behind – From the frontline to the Boardroom.
- Leadership Training.

WHERE THE BUCK STOPS

- MoCA
- DGCA
- AAI
- Operators
- MROs

INTERACTIONS

