

DGCA



Changing Demographics

Innovating to address the changing demographics of the industry

A Regulatory Perspective

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Growth and its challenges

Growth in aviation means, MORE:

- aircraft
- human resource (pilots, engineers, cabin crew, ATCOs)

Which require, MORE:

- training establishments
- Maintenance facilities

Thus brings the need to 'Innovate' with the changing demographics

India's Growth curve

Aircraft Departures: 1.5 million

(Domestic and International)

About 4000 departures per day

Passengers: 200 million

(Domestic and International)

Close to 6 lakh passengers travel every day

Changing Demography

- India with its substantial population size, has a sizeable population (including the fair gender) venturing into aviation as compared to 30-40 years back
- Coupled with this is the new generation, what today is called the 'digital natives'
- The challenge being faced is to develop this new generation using the right balance of conventional and technology driven methods

Civil Aviation in India

- Pilots (\approx ATPL 8500/ CPL 16000)
- Aircraft Maintenance Engineers (\approx 14000)
- Air Traffic Controllers (\approx 3000)
- Flight Despatchers (\approx 700)
- Cabin Crew (\approx 16000)



INDIA

Signatory to Convention on International Civil Aviation

(Signed at Chicago on 7th Dec. 1944)

193 Contracting States



Lays down Global standards for safety and security of aircraft operations

Global Standards

- ICAO Standards
 - Primarily gives the direction to a conventional method of licensing a pilot or an engineer
 - Allows for some credit for technological use – one accepted example is the use of Simulators
- Same is the case for other regulatory agencies such as FAA, EASA
- Challenge is *'how little or how much'*, these technological advancements can be accepted

Pilot Training – Basic Skills

- Skills acquired in a live environment cannot be 100% replaced by the use of devices such as simulators
- Disadvantages of using simulators (follows a pre-determined script) :
 - Lack of fidelity – does not adequately represent reality [e.g. visual illusion, real world (dynamic) ATC environment, spatial disorientation].
 - Psychological – person is subconsciously aware it is “only a simulation” and there is no physical danger

Challenges with the regulator

- Need for increased training establishments
 - Meet the regulations
 - Continue to adhere safety standards
 - Acceptance of other means of imparting training (use of technology) – how much or how little
- Relaxed/ reduced Regulations
 - Industry Demand
 - Poses a safety challenge

Way forward

- Balance in approach – for the existing aviation professional and the new ‘digital native’
- Today’s regulations should support growth/increase human resource demand
- Accept that today’s new generation is ‘digital native’
- Make optimum use of this demographic shift to benefit the aviation community with a balanced approach while ‘maintaining safety’

Thank You

