Introduction to New Members

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Civil Aviation Authority of Nepal

Shaping Asia Pacific ATM -
Global Vision, Regional Action

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QUEENSTOWN, NEW ZEALAND

CANSO ASIA PACIFIC CONFERENCE
Country Profile of Nepal

- **Nepal**: Birth place of Lord Buddha; lies between India and China. Known to the World by it’s Mount Everest (8848 m.)
- **Area**: 147,181 km²
- **Population**: 28 million.
- **Capital**: Kathmandu
- **Language**: About half of the population speaks the official language Nepali, the rest is using various Indo-Aryan and Sino-Tibetan languages.
- **Attraction**: Rich in Culture, Archaeology, Natural Beauty
Civil Aviation System in Nepal

- Regulatory Authority: CAAN
- ANSP (except Aviation MET): CAAN
- Aviation MET Service Provider: DHM
  
  Note: DHM stands for Department of Hydrology and Meteorology which is a separate entity belonging to Government of Nepal.

- Aerodrome Operator: CAAN
- ATO-ATS: CAAN
- ATO, AMO, Airline Operator: Private and State Aircraft operators
- Aircraft Accident Incident Investigator: CAAN & MOCTCA
Airports of Nepal:

- International Airport: 1
- Regional Int’l Airport (Proposed and under Construction) : 2
- Domestic: 54
Establishment of CAAN

- 1998: Establishment of Civil Aviation Authority of Nepal (CAAN) as an autonomous body.
ANSPs in Nepal

- **ATS Provider (CAAN)**
  - Control Airports (10 airports)- Air Traffic Control Service
  - AFIS Airports (23 airports)- Aerodrome Flight Information Service

- **CNS Provider (CAAN)**
  - Communication- VHF voice communication in all manned airports
  - Navigation- VOR/DME (5 airports), NDB (5 airports) and DME (1 airport), serving the enroute and terminal procedures including SIDs and Approaches.
  - Surveillance- PSR/SSR (1 airport) serving Kathmandu TMA, at or below FL200. Currently, 1 MSSR for Terminal and 1 for Enroute is under installation process.

- **AIS Provider (CAAN)**
- Aviation MET Service Provider (DHM), however, at the airports where DHM has not established its offices, CAAN is providing this service by its ATS personnel, trained on Aviation MET.
SMS Implementation in Nepal

- SMS Requirement, 2010 in place
- SSP Nepal, 2013 is in place
- SMS Requirement, 2010 has mandated the ATS Providers, including the others, to implement the SMS
- TIA has established Safety Office in ATS Operation.
- However, ATS safety office is not fully operational.
- None of the ATS providers have implemented SMS formally, and is one of the major findings of ANS audits conducted by CAAN.
Civil Aviation Authority of Nepal
(Handling both Regulatory and Service Provider Functions)

National Civil Aviation Security Committee
Board of Directors
Internal Audit Department

Director General

Air Navigation Services Directorate
- ATM Dept.
- Domestic Airport and Facilitation Dept.
- Com. & Nav. Aid Dept.
- CNS Planning & Dev. Dept.
- AIM Dept.
- Domestic Airports

Civil Aviation Safety Reg. Directorate
- ANS Safety Stds Dept.
- Aerodrome Safety Stds. Dept.
- Flight Safety Stds. Dept.
- ICAO, Intl. Affairs & Legal Dept.
- Accident / Incident Inv. Division

Corporate Directorate
- Corporate Planning & Moni. Dept.
- Human Resource Dept.
- Asset Mgmt. Div.

Aerodrome Operation Directorate
- Aerodrome Eng. Dept.
- Rescue and Fire Fighting Dept.
- Electro Mechanical Dept.

Aviation Security Dept., Head Office

Finance Dept., Head Office

Administration Dept., Head Office

Civil Aviation Academy

Civil Aviation Office
TIA-Civil Aviation Office
International Traffic Increasing Beyond Forecast

International Passenger Forecast

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<th>Year</th>
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<td>2021</td>
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<td>2024</td>
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Forecasted data as of 2014:
- 3.25 Mil

Actual data as of 2015:
- 3.21 M
Domestic Traffic Forecast

Domestic Passenger Forecast

Year
PAX (in Thousands)
Actual Data
Forecast

1.36 M [2015]
1.4 Mil [2014]
Total Income and Contribution from ANS

- Total Income from Landing, Parking, Housing and Air Navigation Charges: 3.9 billion

- Contribution from ANS: 10 to 15% of above income.
ANS Operations during Earthquake and Beyond

- More than 1000 non-scheduled humanitarian and charter flights were operated for earthquake victims.
- More than 15 countries supported by sending their State and other aircraft.
- Varieties of aircraft operated - C17, C130, IL76, A350, B747, etc.
- TIA parking bay congested, aircraft parked at Taxiways
- Only two out of 5 taxiways available to enter and vacate the runway; rest other taxiways used as aircraft parking
- Consequently, Terminal Airspace congested, most of the time long delay due hold in the sky
- Scheduled aircraft diversions in nearby Indian airports
- Ramp operations running in contingency
- ATS operation was so hectic because of heavy traffic causing Ramp as well as Airspace Congestion
- However, things were managed with own resources as per the demand of time
Challenges of ANSP

- SMS Implementation due:
  - Lack of sufficient manpower
  - Sufficient qualified manpower

- ATC Capacity declaration at Tribhuvan International Airport.

- Provision of Aviation MET service in AFIS airfields
Way Forward

Working Together

Driven by the notion to work hand in hand with all related national and international organizations, stakeholders and well-wishers to enhance ANS Safety, thereby enhancing overall aviation safety meeting all the International Standards.
Thank you for your attention! Thank you for your kind attention!