"CNS/ATM contingency procedures for public health emergencies due to communicable diseases - Nepal's Experience."

Presented by :
Er. Sanjeev Singh Kathayat
Director
Technical Services Department
Civil Aviation Authority of Nepal

Welcome to Nepal
Tribhuvan International Airport
(TIA)

Chronological Development of Tribhuvan Int'l Airport (TIA)

o 1989 – Completion of present day Int'l Terminal

o Building of Kathmandu Airport (Tribhuvan Int'l Airport)

o 1992 – Beginning of private airlines service in Nepal

o 1997- Commencement of Radar service in Nepal

o 1998 – Establishment of Civil Aviation Authority of Nepal as an autonomous body

"One kilometer of Road takes you nowhere

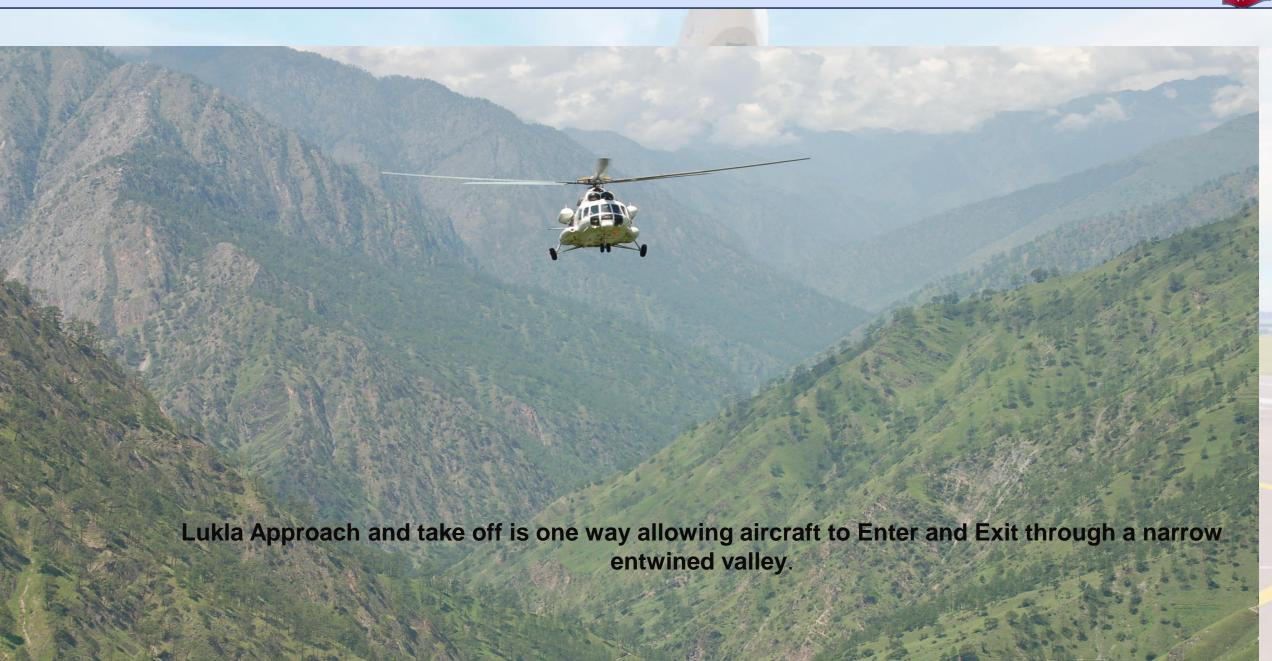but one kilometer of Runway can take you anywhere in the world"

Role of Air Transportation In Nepal

Not even a kilometer but the air strips – which is less than 500 to 600 hundred meters length have been the life line of the most of the remote part of the country in Nepal.
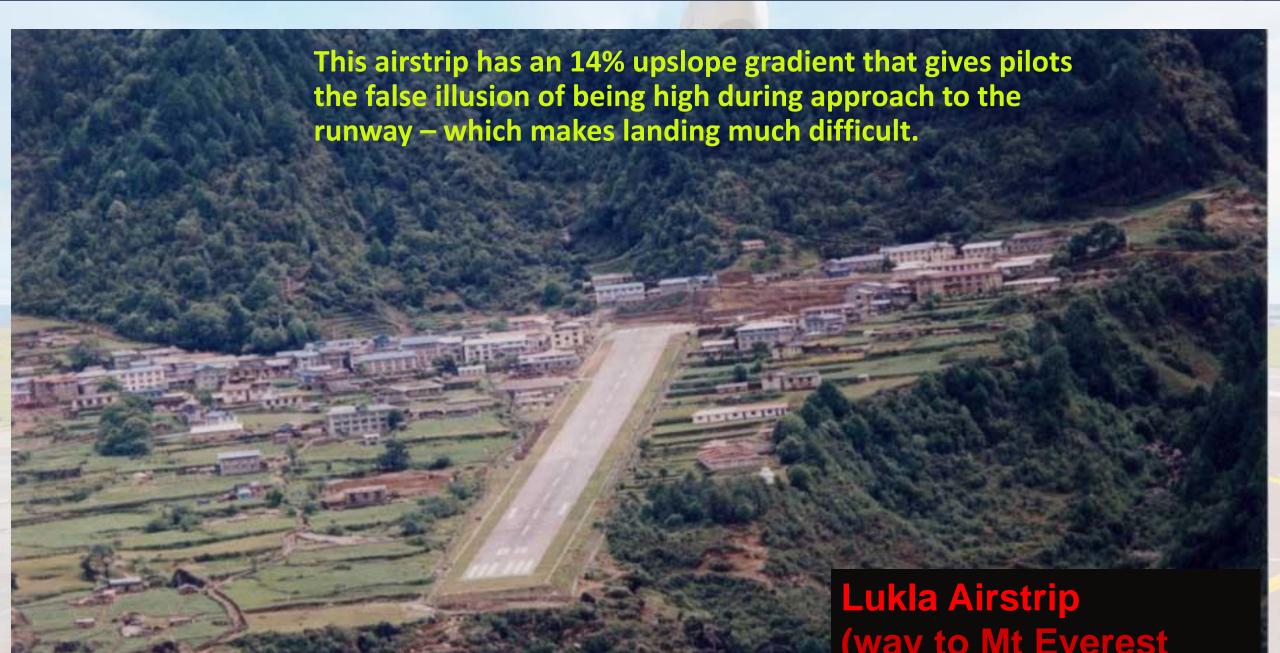
Lukla Approach and take off is one way allowing aircraft to Enter and Exit through a narrow entwined valley.

This airstrip has an 14% upslope gradient that gives pilots the false illusion of being high during approach to the runway – which makes landing much difficult.

Lukla Airstrip
(way to Mt Everest

Syangboche Airstrip

**12297 ft (3400m) AMSL
Highest Airport on the wat to Mt. Everest**

फिस्टेल एयर

Nigel F.Gifford
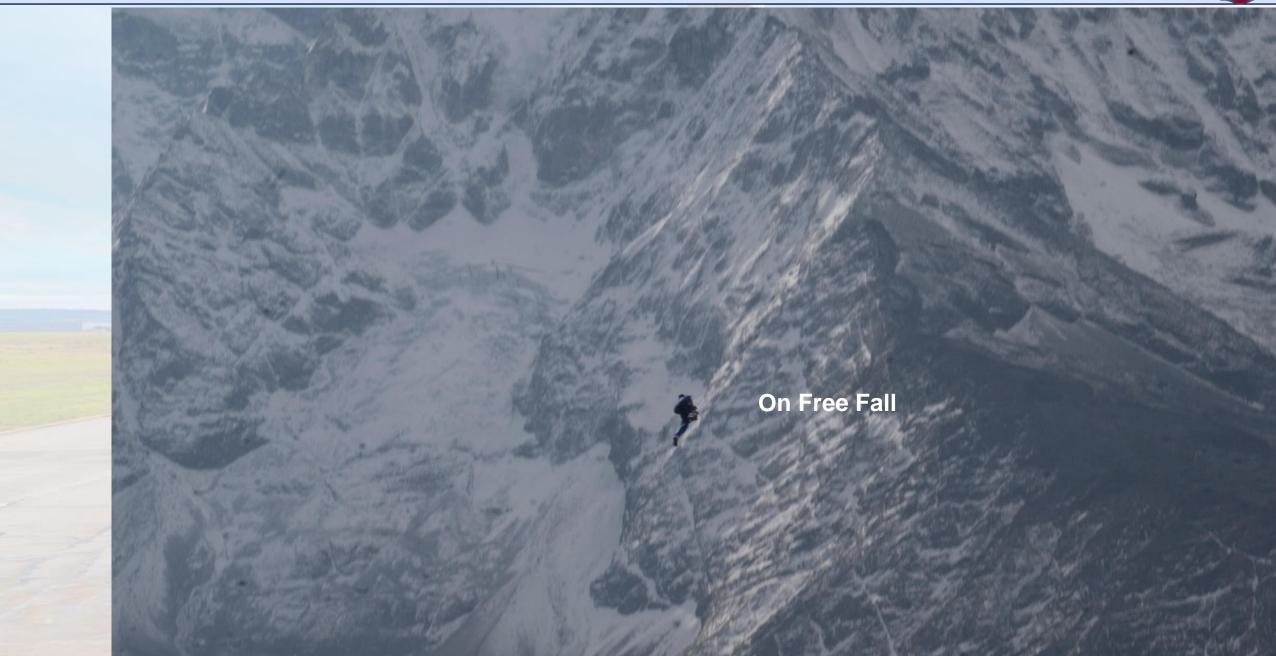**Leader of the Skydiving Team**

On Free Fall

READY for FREE FALL
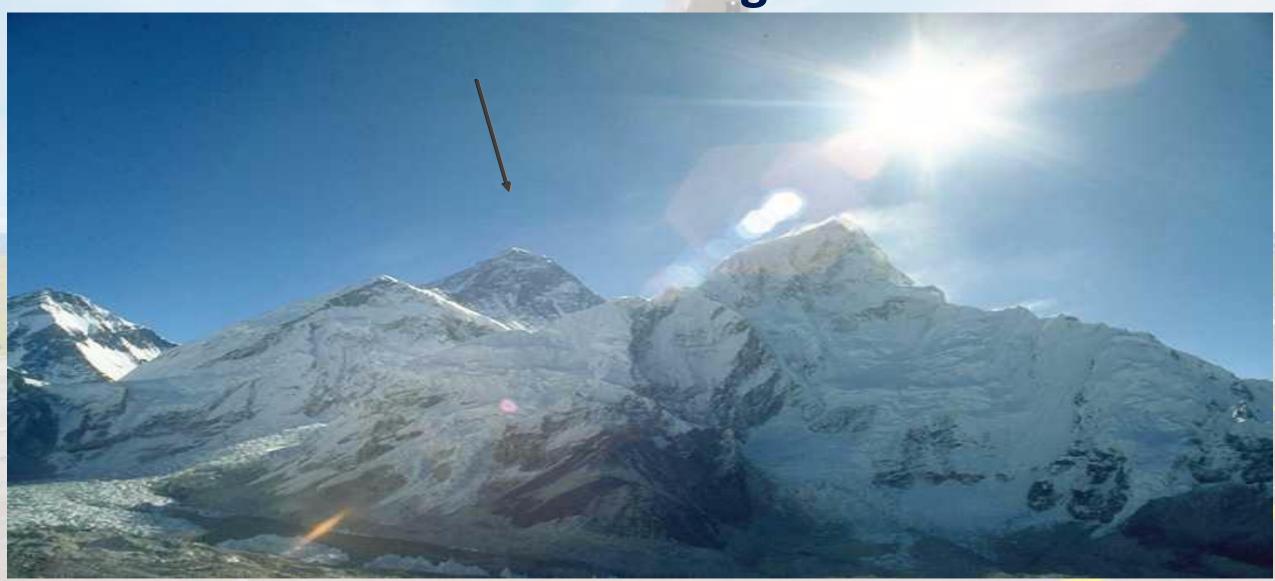
Mount Everest during Sunrise

Mount Everest , 8848meter (290002 ft)

Air Service Agreement by Region

Asia Pacific

India	Sri Lanka	South Korea	Bhutan
Japan	Myanmar	Bangladesh	Brunei
China	Malaysia	Singapore	Thailand
Macau	Maldives	Hong Kong	Philippines

Middle East

Oman	Egypt	Saudi Arabia	Jordan
Qatar	Bahrain	Pakistan	Kuwait
UAE	Israel		

Europe & North Atlantic

Austria	France	Luxembourg	Russian Federation
Germany	Italy	Netherlands	United Kingdom
Croatia			

International Connectivity

ISTANBUL (TURKEY)	HAMAD INTERNATIONAL AIRPORT,QATAR	VARANASI (INDIA)	ABU DHABI , UAE	GUANGHOU, CHINA
DHAKA	COLOMBO, SRILANKA	DELHI (INDIA)	SHARJAH, UAE	SICHUAN, CHINA
KUWAIT	HONKONG	BANGALORE (INDIA)	DUBAI, UAE	KUNMIN (CHINA)
KULALUMPUR	BANGKOK	MUMBAI (INDIA)	DAMAM (SAUDI)	CHENGDU (CHINA)
DOHA, QUATAR	SINGAPORE	KOLKATA (INDIA)	MUSCAT, OMAN	NARITA (JAPAN)
INCHEON, KOREA	PARO (BHUTAN)		RIYADH (SAUDI)	

Nationwide Lock Down Declearation due COVID-19

Year 2020

Suspention of Int'l Flight: 24th March

Resumption of Flight: 1st September

Year 2021

Suspention of Int'l Flight: 07th May

Resumption of Flight: 1st June

International
Civil Aviation
Organization

Organisation
de l'aviation civile
internationale

Organización
de Aviación Civil
Internacional

Международная
организация
гражданской
авиации

منظمة الطيران
المدني الدولي

Tel.: +1 514-954-8219 ext. 8080

Ref.: AN 11/55-20/50

3 April 2020

Subject: Operational measures to ensure safe operations during the COVID-19 pandemic

Action required: a) Note the information; b) Provide information as requested in

paragraphs 7 and 8

Sir/Madam,

1. I have the honour to refer to the urgent need to reduce the risks of the spread of COVID-19 by air transport and to protect the health of air travellers and aviation personnel while maintaining essential aviation transport operations and ensuring an orderly return to normal operations in due course. In this respect, it has come to my attention that as a result of social distancing practices, closure of work spaces and other preventive measures, a number of States are taking various actions to enable service providers and personnel to maintain the validity of their certificates, licenses and other approvals during the COVID-19 pandemic.

2. Service providers and aviation personnel are facing different challenges depending on where their State is with regard to the COVID-19 pandemic. There are approximately 650 000 licensed personnel supporting commercial air transport worldwide. If a fraction of those personnel is affected by the pandemic measures, the potential for the disruption may be significant. In order to facilitate safe operations during these difficult times, I encourage States to be flexible in their approaches while at the same time adhering to their obligations under the *Convention on International Civil Aviation* (Doc 7300, Chicago Convention).

3. ICAO estimates that States may have COVID-19 related aviation contingency measures in place to some extent until 31 March 2021. To assist all States and relevant stakeholders, ICAO has launched a COVID-19 Operational Safety Measures public website (https://www.icao.int/safety/COVID- 19OPS) that will provide measures to ensure safe operations during this period. All States are encouraged to make use of this website and inform ICAO of any latest developments in your State using the information highlighted on the website, which will be maintained by ICAO through 31 March 2021 unless circumstances otherwise dictate.

4. During the period of these contingency measures, particular attention should be given to the Standards and Recommended Practices (SARPs) related to certificates and licenses. In this regard, States are reminded of their obligations under Article 38 of the Convention to notify ICAO of any differences that may arise. In order to facilitate the notification and dissemination of temporary differences during this period, a COVID-19 Contingency-Related Differences (CCRDs) sub-system

accessible through the Electronic Filing of Differences (EFOD) dashboard (www.icao.int/usoap) has been created and will also tentatively be maintained through 31 March 2021.

5. Particular attention should be given to Article 39 of the Convention which states that any aircraft or person that does not satisfy in full applicable Standards or conditions shall have endorsed on or attached to relevant certificate or license a complete enumeration of the details or particulars in respect of which the aircraft or person does not satisfy such requirements or conditions.

6. It should be further noted that Article 40 of the Convention provides that no aircraft or personnel having certificates or licenses so endorsed shall participate in international navigation, except with the permission of the State or States whose territory is entered.

7. With these considerations in mind, States are urged to inform ICAO of any temporary differences that may arise from your State's COVID-19 contingency measures, particularly those related to licensing and certification. States should also indicate, in general terms, whether your State will recognize or accept the validity of certificates and licenses affected by the special temporary measures of other States. The aforementioned information can be provided by the National Continuous Monitoring Coordinator (NCMC) or any other authorized user:

   a) via the CCRD sub-system accessible through the EFODs dashboard; or

   b) by sending an off-line CCRD form available on the ICAO COVID-19 Operational Safety Measures public website by email to [ops@icao.int.](ops@icao.int)

Guidance on how to submit the information is provided on the ICAO COVID-19 Operational Safety Measures public website.

8. States are also encouraged to share with ICAO any information on the measures taken during this period providing links when possible. This information should be sent to [ops@icao.int.](ops@icao.int) All information, including CCRD reports, will be made available on the public website ([https://www.icao.int/safety/COVID-19OPS)](https://www.icao.int/safety/COVID-19OPS).

9. Should you require specific guidance on any of the above matters, please contact your accredited ICAO Regional Office or submit an inquiry via email at [ops@icao.int.](ops@icao.int)

   Accept, Sir/Madam, the assurances of my highest consideration.

国 际 民 用

航 空 组 织

Fang Liu
Secretary General

IFAIMA, IFATCA, IFATSEA and ITF joint statement on Air Navigation Services

During these trying times, IFAIMA, IFATCA, IFATSEA and ITF would like to offer our deepest condolences to the families of those who lost a loved one to the pandemic. We express our sincere sympathies to those affected by the virus and the measures in place to combat the spread, and share everyone's concerns with regards to the long term impacts on society.

We understand the restriction of passenger flights is an effective mitigation to the spread. However, it must also be recognised that the efficient transit of freight flights is critical to the timely distribution of medical supplies and personnel. In a number of remote locations, it is of paramount importance to facilitate the timely operations of MEDEVAC flights; these air missions are indeed essential to transport those who require immediate and critical healthcare towards facilities that can accommodate their needs.

Amid this pandemic, Air Traffic Management (ATM) staff and, in particular, air traffic controllers continue to work, keeping our skies safe. They provide crucial services to the medical, humanitarian, military, repatriation and cargo flights still taking place. International organisations, governments, regulators and Air Navigation Service Providers (ANSPs) must ensure continuity of operations by complying with the health and sanitary requirements that this situation demands. They must also provide sufficient financial and regulatory support to the ANSPs to fulfill their mission [1].

IFAIMA, IFATCA, IFATSEA and ITF are working closely with the relevant United Nations agencies and other key international organisations to provide guidance material, gather and share best practices and offer support to those associations and professionals in need of assistance.

In the longer term, the COVID-19 pandemic will remain a global health emergency for the foreseeable future and has triggered an economic catastrophe. Millions of people are already suffering the dire economic circumstances as businesses shut down, income is reduced, and jobs disappear.

It is crucial that governments understand the importance of aviation and support the aviation industry. Laying off highly qualified staff and/or implementing irreversible cost-reduction measures will delay the recovery of the aviation industry and should be avoided at all cost. Protecting these jobs in this crisis and enabling the training for existing and new staff will guarantee that aviation can support functioning global supply chains and ensure that they are capable to lead in the economic recovery when the pandemic has

We thank those governments that have put in place income protection for workers and urge that any remaining people not covered should also be assisted.

IFAIMA, IFATCA, IFATSEA and ITF therefore call on governments to provide immediate financial and regulatory support for all air navigation service providers, in order to ensure the provision of air navigation services is financially supported to overcome this crisis and ensure that sufficient essential qualified staff is available when commercial air traffic returns. We also urge to investigate alternative and sustainable ways of financing these and other essential services, making them less dependent on volatility and economic downturns.

1The provision of Air Navigation Services (ANS) is a State's task, in accordance with Article 28 of the Chicago Convention. It is a State's task to "provide, in its territory, airports, radio services, meteorological services and other air navigation facilities to facilitate international air navigation, in accordance with the standards and practices recommended or established from time to time, pursuant to this Convention".

2https://eu2020.hr/Home/DocumentDownload/216

TIA Year to year comparative chart of Int'l flight movement from 2018 to 2021

Year	Flight Movement	Growth in Flight Mov.	Growth % in Flight Mov.
2018	95580	2443	2.66
2019	91819	-3761	-3.93
2020	38610	-53209	-57.95
2021	81174	42564	110.24
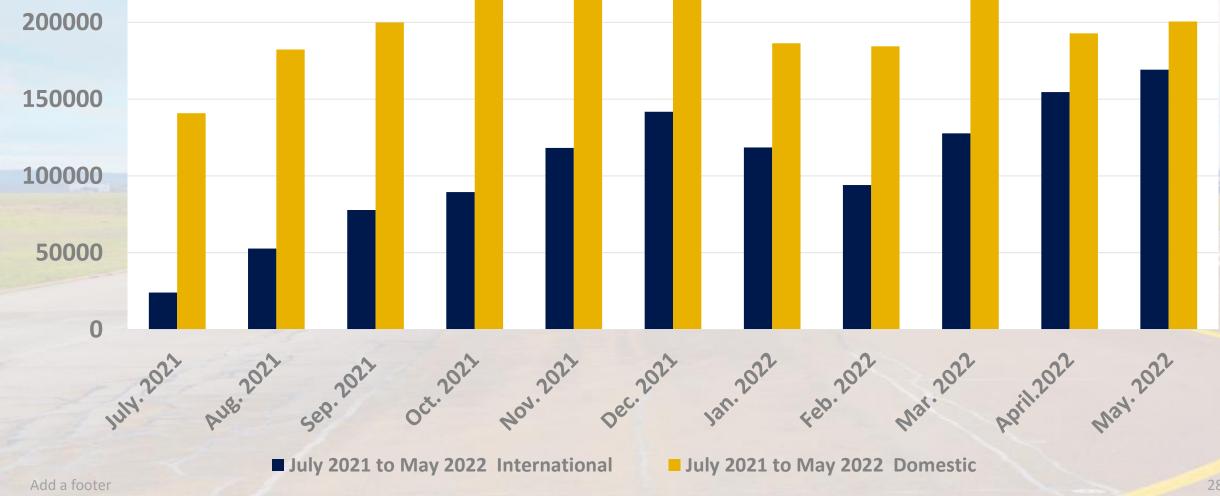
TIA Year to year comparative chart of Int'l pax movement from 2018 to 2021

Year	Pax Movement	Growth in Pax Mov.	Growth % in Pax Mov.
2018	2847752	396362	16.17
2019	3188549	340797	11.97
2020	1457539	-1731010	-54.29
2021	3576977	2119438	145.41

Passenger Movement from July 21 to May 22

ATM Challenges during COVID-19 crisis

Joint ICAO EUR/NAT-WFP Aviation Safety Campaign Webinar on Humanitarian operations during COVID-19 Crisis, 29 November 2021

Contingency Plan challenge

- **States develop and promulgate contingency plans for implementation in the event of disruption to ATS (ICAO Annex 11 and USOAP PQ) with the assistance of ICAO when necessary**

- **State Letter 20/47 from March 2020 highlighted obligations to Annex 9 and Annex 11 and for States to review restrictions and to consider the following operations:**

  o aircraft in a state of emergency;
  o overflights;
  o operations related to humanitarian aid, medical and relief flights;
  o alternate aerodromes identified in the flight plan (including those being used for extended
  o diversion time operations (EDTOs);
  o technical landings where passengers do
     not disembark; cargo flights; and
     other safety-related operations.

NOTAM challenge

- **ICAO EUR/NAT office issued a State Letter on 25 March 2020, provided detailed information on the contingency arrangements and recommended a NOTAM template which considered exemption of essential flights**

- **This had become necessary as different States within the EUR Region published different forms of NOTAMs with different exclusions of specific types of flights and different operational restrictions for overflight and arrival/departure traffic**

- **Due to a COVID-19 related evacuation of an ACC and the subsequent closure of the facility for cleaning and desinfection, another NOTAM template was developed/published which adressed the unavailabilty of Air Naviagtion Services within an Controlled Airspace (CTA) for a specific timeframe and the related contingency arrangements**

Airspace challenge

- **Even with traffic numbers falling to record low levels during the COVID-19 pandemic crisis the access to airspace and the safe, efficient and sustainable operations of flights had to be maintained**

- **ICAO discussion on additional guidance which resulted in State Letter 21/06 (Distribution of COVID-19 Vaccines and Air Cargo Security) from 21 January 2021 helping States and Industry apply aviation security measures while facilitating a smooth flow of vaccines throughout the supply chain and to the final destination**

Airport challenge

- **States had to cope with challenges of renewing aerodrome certificates that were expiring during this contingency period**

- **States and airport operators had to address operational and technical challenges such as**

  o   maintenance and calibration of MET equipment
  o   Aerodrome maintenance (pavements, visual aids, electric systems, etc)
  o   Maintenance and testing of CNS equipment
  o   Ground/Flight check of NAV AIDs
  o   Instrument Flight Procedure (IFP) validation

Personal Licencing PEL challenge

- States had to issue exemptions to ICAO PEL SARPS in specific areas and had to address the problems related to the extension of validity for:
  - o medical certificates due to lack of access to aeromedical doctors
  - o type ratings due to lack of access to Flight Simulation Training Devices (FSTDs) in other States
  - o category ratings for ATCOs due to the lack of practice
  - o ATSEP ratings due to lack of maintenance practice
  - o aircraft maintenance personnel licences due to the lack of practice
  - o FSTD qualification certificates due to the lack of State's oversight capabilities following travel restrictions
- States also had to accomodate COVID-19 related effects on operational staff

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Description

The term **Air Traffic Safety Electronic Personnel (ATSEP)** describes those technical specialists working to provide and support the electronics and software which enable air traffic service (ATS) systems to function. ATSEP comprise engineers, technicians, and computer hardware and software specialists who are responsible for the specification, procurement, installation, calibration, maintenance, testing and certification of ground electronic systems used to help control aircraft movements.

In the context of a regulatory environment, the **International Civil Aviation Organisation (ICAO)** describes ATSEP as "personnel proven to be competent in the installation, operation, and/or maintenance of a communications, navigation, surveillance/air traffic management **(CNS/ATM)** system**. ICAO Doc 10057**, Manual on Air Traffic Safety Electronics Personnel Competency-based Training and Assessment, said it is the responsibility of the air navigation service provider (ANSP) to define the scope of ATSEP activities.

The "KEY" for Safety in Air Navigation Services is…the ATSEP

12TH NOVEMBER

International ATSEP day

2019

Mt. Bhattedada MSSR Site Visit

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Kathmandu, Nepal

CNS Contingency procedures to address COVID-19 pandemic

First edition

JULY 2020

Foreword

CNS Contingency procedures to address the medical health emergencies due to communicable diseases like COVID-19 pandemic, First Edition, July 2020 has been issued by the Director General, Civil Aviation Authority of Nepal, using his authority vested in him pursuant to Rule 82 of Civil Aviation Regulation, 2058 B.S.(2002 A.D.). This procedure will be applicable to all Air Traffic Safety Electronic Personnel (ATSEP) directly involved in installation, acceptance, certification, operations

and maintenance of CNS equipment/systems that are in operation at different civil aviation offices of Nepal.

This document spells out the requirements to be met for operating CNS Systems/Equipment in pandemic situations (contingency period) like COVID-19. 'Technical Service Department, TIA' and 'Com. and Nav. Aid. Department, Sinamangal' are jointly responsible offices to develop/update and implement these procedures. While developing this requirement, ICAO circulars during COVID-19 related to ANS, WHO guidance, Government of Nepal, Ministry of health guidance have been used as the basis.

This procedure, First Edition is approved and issued under the authority of Director General of CAAN. Any discrepancies noted and suggestions can be forwarded to the Offices of CAAN.

These requirements will come into effect immediately.

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Director General

Civil Aviation Authority of Nepal

Contents

1. Introduction

Communication, Navigation and Surveillance (CNS) are the backbone of Air Traffic Management. In this regard, when there are any disruptions in operation and Maintenance of CNS facilities due to communicable diseases, it has a tremendous impact on air traffic services and finally on the whole air transportation system. So, to provide continuous Air Traffic Services to ensure safe and smooth flight, we have to maintain continuous, reliable and accurate CNS facilities during the airport operation period. It is the responsibility of Air Traffic Safety Electronic Personnel (ATSEP) working on CNS related Department and Divisions. Thus, ATSEP working in their workplace should be aware of how public health events might affect the whole organization, as well as their own health. They should know how to respond to pandemic like Coronavirus (COVID-19).

As per the article 14 of the Chicago convention on Civil Aviation, each contracting state will have a plan or procedure to mitigate the risks from a communicable disease, by reducing the risk of dissemination of disease. Therefore, it is necessary for every Air Navigation Service Provider (ANSP) to ensure CNS Contingencies procedure will be in place to quickly restore CNS facilities in and after an emergency.

The contingency procedure illustrated in this document will form a part of CNS contingency plan. This document provides the guidelines to ATSEPs to maintain accurate and reliable CNS facilities as well as personal health hygiene within their workplace during the occurrence of epidemic/pandemic like COVID-19. ATSEPs are required to comply with the provisions of this document to perform their operational responsibilities.

This document will be applied in contingency situation (developed due to the pandemic diseases like COVID-19) after the situation has been evaluated by the CNS Contingency Monitoring Group (CCMG) as specified in this document, recommended by Chief of Airport, Civil Aviation Office and approved by DGCA Nepal.

The current situation highlights that Air Navigation Services (ANS) are part of a country's essential infrastructure, playing a key role in the distribution of much-needed medical and other supplies to address this health crisis. This was for instance recognised by the EU Ministers of Transport in their most recent video conference [2] at the end of April 2020. Regrettably, the funding of this critical infrastructure is at risk due to the flawed financing mechanism that includes airspace users wanting to defer the payment of route charges already incurred. This will severely impact both the current and future operation of ANSPs

2.Objectives

To provide uniform policy and guidelines for arrangement of reliable and accurate CNS and related facilities ensuring ATSEP personnel hygiene who are working at CNS and Security Equipment units for responding to pandemic like COVID-19.

3.CNS Contingency procedure

Responsibilities for management of risk of communicable or epidemic/pandemic diseases like COVID-19 at Airport including CNS and its related facilities units rest with respective Airport management. Each airport authority plays a vital role to manage and address at least following aspects in coordination with respective CNS related Department and Divisions.

a)Precautionary health measure
b)Manpower management
c)CNS facilities availability arrangement
d)CNS facilities recovery procedure
e)Coordination with government authorities

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3.1 Precautionary health measure

3.1.1 ATSEP Code of conduct:

To reduce exposure to COVID-19 and its transmission, following code of conduct for ATSEP will effectively be implemented:

a) Maintain social distance (As per the guidance of health authority, GoN).

b) Wash hands quite often with soap and water for at least 20 seconds or sanitize with hand sanitizer manufactured as per "Instant Hand Sanitizer (Alcohol Based) standard 2076, GoN".

c) Minimize the dispersion of respiratory droplets when coughing, sneezing and talking.

d) Screen the body temperature by proper instrument before the commencement of duty.

e) Cover the mouth with a medical or procedural mask or tissue paper during coughs and sneezes and if possible, use individual gloves.

f) Clean and disinfect objects often such as mobile phone, office keys, wallets and work pass.

g) Dispose of tissues in a waste container and safely cover it.

h) Avoid touching your face (eyes, nose and mouth).

i) Minimize contact with other personnel/staff related to the service.

j) Avoid crowds, stores, sporting or mass entertainment events, and other situations likely to attract large numbers of people.

k) Use individual slippers and utensils to avoid the risk of shared

contamination.

3.1.1.1 ATSEP will self-monitor themselves and others for any kind of symptoms, particularly fever and symptoms of respiratory problems such as coughing or difficult breathing and immediately report any fever, cough, or difficulty breathing to the in-charge/section chief/division chief and consult the doctor immediately.

3.1.1.2 As far as possible, use of private transport will be promoted; if not possible airport authority should manage pick up/drop facilities.

3.1.2	CNS duty personnel entry procedure at ATSEP workplace

a) If possible, a face recognition attendance system will be arranged at the main entrance of CNS operation building/facility.

b) If not possible, alcohol-based hand sanitizer will be arranged at the entrance and attendance taking system.

a) A dedicated person and proper instrument will be arranged for monitoring the body temperature above 100.4ºF of and cough or difficulty breathing will also be monitored.

d) Employees with suspected health issues will not be allowed to enter the workplace. Airport management will be informed and s/he will be taken to the health facility at the airport wherever available, otherwise to the nearby hospital in an isolated way.

3.1.4 Arrangement of Personnel Protective Equipment (PPE) i.e. apron, mask, glove(s) at ATSEP workplace.

3.1.4.1 In the present situation as CNS management falls under the umbrella of the airport management, airport management will ensure that the adequate supplies of appropriate PPE such as individual apron, gloves face masks along with hand wash, hand sanitizers, tissue papers, etc. are available to ATSEP workplace. In case of Com. Navaids department, respective directorate (includes Com. Navaids department) will ensure the adequate supplies of appropriate PPE at ATSEP workplace.

3.1.5 Disinfection procedure and frequency

   a) Disinfection of ATSEP working position, dormitory, CNS control and monitoring equipment, CNS test equipment, office PC/Laptops and telephone at least once for each shift daily otherwise at least once a day.

   b) If not possible, ATSEP on duty will disinfect or sanitize CNS control and monitoring equipment, CNS test equipment and office PC/Laptops and telephones before starting of work/new shift.

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3.1.6 ATSEP dormitory procedure for night duty staffs After end of flight, following procedure will be executed for refreshment of night/whole night duty ATSEP.

a)Airport management will arrange a dormitory with individual bed separated as per health authority (GoN) guidelines for ATSEP on night/whole night duty.

b)If possible, airport management will arrange individual mattress, blanket, pillow and bed sheet for ATSEP.

d)If not possible, ATSEP on night duty will use a common mattress and arrange themselves bed sheets and blankets ensuring good isolation from the mattress. Airport management will arrange office dormitory disinfection every day.

d)Alcohol-based sanitizers will be made available at dormitories.

3.1.7 ATSEP maintenance procedure in equipment room, site station and ATS room

a) Department/Divisions will arrange manpower for preventive as well as corrective maintenance of CNS equipment.

b) Comm. Nav. Aid/Radar Surveillance Division will issue NOTAM if necessary, as per ICAO guidelines for maintenance purposes.

c) Airport management will arrange PPE i.e. working aprons, masks and gloves for ATSEP.

d) Airport management will arrange disinfection of test equipment and tools before maintenance otherwise ATSEP on duty will disinfect/sanitize test equipment and tools before and after use.

e) ATSEP will wear PPE i.e. Apron, mask and glove(s) during maintenance work and if possible, will maintain social distancing of one meter.

f) Respective Airport management will arrange disinfection of the working place before and after maintenance in ATS rooms.

g) ATSEP on corrective maintenance work at ATS room will maintain social distancing of one meter with ATCO on duty.

g) If possible, preventive maintenance work at ATS rooms will be done after operation duty i.e. ends of flight to ensure a safe working environment.

i) If possible, Airport management will arrange dedicated vehicles only for ATSEP otherwise disinfection of vehicle before and after every use for maintenance purpose at site station to ensure ATSEP health hygiene during pandemic like COVID-19.

j) Airport management will discourage non-essential people to travel with ATSEP during site visits.

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3.1.8 Arrangement of health unit and associated coordination procedure

3.1.8.1 Airport management will

a) Establish a medical care team or unit at the airport premises for employees and crisis intervention team, if needed and monitor the number of staff affected by the pandemic situation.

b) Provide information to ATSEP regarding available medical facilities at the office.

c) If any employee has a fever, cough and difficulty breathing, immediately isolate the employee and arrange for immediate medical care to protect the affected employee and others from pandemic disease like COVID-19. The PCR test for affected employees will be arranged by airport management as soon as possible.

d) Ensure that the public health officials when needed will have quick and efficient access to the CNS related Department and Divisions.

3.1.8.2 Airport management will establish a focal point/person with responsibility for the operational implementation of the airport preparedness plan having reasonable autonomy/flexibility for rapid decision making during contingency operation.

3.1.8.3 CNS management as part of Airport Management will establish a small monitoring group- CNS Contingency Monitoring Group (CCMG) that comprises Chief of TSD, Chief of Comm. Nav. Aid Division, Chief of Radar Surveillance Division and Manager of respective unit as appropriate. In case of Communication and Navigation Aid. Department, Department head will responsible for the CCMG.

CNS management will also establish a dedicated focal point/person, most probably the chief of Departments. Such CNS focal point will have direct communication linkage with airport focal point and s/he will coordinate the airport focal point whereas in case of Com. Navaids department, s/he will coordinate with respective directorate and domestic airport management on any issues related to pandemic or any communicable diseases and its impact on CNS facilities for further actions and support.

3.8.1.4 The airport focal point/person will have communication linkage established with the internal and external entities: air traffic services, electromechanical unit, local hospital(s), airport medical services, emergency medical services, security police, or other domestic/international airports and other stakeholders as necessary.

3.1.9 Isolation and medical evacuation procedure
   a) Airport management will appropriately identify temporary appropriate isolation areas to initially isolate the suspects of pandemic or any communicable disease so as to avoid exposure of risk to others.

   b) Then, under the lead of the health unit established at the airport, ambulance or any airport vehicle will be used to evacuate such suspects to the nearby hospital immediately.

b) Relatives of the suspects will be informed as soon as possible.

3.1.10 Control of visitors in workplace environment

a)All non-essential/unnecessary visits to Comm. Nav. Aid/Radar Surveillance Division/unit duty room, equipment room, working place and site station will be suspended, including private, individual or group visits.

b)If necessary, TSD/Division Chiefs may allow the staff from the

service providers/company to CNS duty room, equipment room,

working place and site station with necessary arrangement of health precautions and good health assurance which also includes relevant code of conduct of para 3.1.1.

3.1.11 Appropriate ventilation in workplace/dormitories

a) Adequate ventilation will be maintained at every CNS duty room and office dormitory.

3.1.12 Transportation, lodging and fooding arrangement   for travelling ATSEPs to work on remote sites/domestic airport during pandemic: For   CNS   facilities   installation/operation/maintenance purpose at domestic airport and remote site outside Kathmandu, following arrangement will be done for ATSEPs.

a)For ATSEPs travelling from Kathmandu, respective management (TIA management/Com. Navaids department) will arrange the dedicated vehicle with complete disinfection for maintenance work at remote sites (e.g. Communication and Navigation Facilities at domestic Airports, RCAG stations, RADAR sites, Radio Link Sites, NDB Stations, ADS-B sites).

b)Minimum number of ATSEP will be ensure for site maintenance.

c)Facility located/maintaining respective airport or department or unit will coordinate to arrange the following lodging and food facility   for   ATSEP   travelled   from   other   station   to maintain/operate/install the CNS facility:

- Where possible, guest room arrangement with individual bed separated at least one meter, otherwise respective management will support to find safe lodge.

- Cleaned and disinfected mattress, blanket, pillow and bed sheet in guest room.

- Disinfection of guest room every day during installation/operation/maintenance period.

- Alcohol-based sanitizer will be made available at guest room.

- ATSEP are highly encouraged to consume only packaged food safely delivered from restaurant/hotel/canteen and will not go to the restaurant/hotel/canteen

- Clean and disinfected rest room.

d) If necessary, ATSEP will stay in quarantine as per health guidelines and regulation issued by health authority of government of Nepal (GoN) after returning from other station (domestic airports/ other station outside Kathmandu) after completion of maintenance/operational/installation work of CNS facility and quarantine period will be officially consider as a paid leave.

3.2 Manpower management

3.2.1 Due to Pandemic like COVID-19, ATSEP personal health is the most important to maintain accurate, continuous and reliable CNS and relate other facilities. So, CNS management including the security equipment unit will review the existing ATSEP workforce available with it and their health status. Then, from available manpower, respective units will creat a new group with minimum ATSEP as appropriate and all CNS and security equipment related facilities
will be provided effectively as usual but with limited necessary manpower.

3.2.2 In such a pandemic situation, due to the requirement to look after ill members of family or fear of becoming infected if attending the work, there may be a possibility of absence of safety critical personnel like ATSEP in CNS related Department and Divisions and that needs to be taken into consideration. As such, besides providing the CNS facilities with limited necessary manpower, the sufficient number of ATSEP manpower will be kept reserve as a backup during contingency period.

3.2.3 So, to run CNS related Department and Divisions with minimum manpower as stated above, following procedures will be adopted

i. Identify and allocate the required number of minimum ATSEP manpower per shift to provide the CNS and related other facilities as per the sensitivity of facilities for reliable service against possibilities of risk of failure of system and scheduled preventive maintenance by ensuring that the adequate additional ATSEP manpower will be made available not only to the working shift but also to manage the backup CNS staff for the contingency, if required. For this, the following two measures can be taken as per the requirement:

a) As a first measure, reduce the number of CNS personnel per shift
up to 50% or any suitable percentage as appropriate from pre- determined staff strength ensuring reliable CNS facilities as usual to maintain safe ATS operation and keep rest manpower on hot standby duty over the contingency period. Or,

b) As an alternate measure, separate available ATSEP personnel in two block teams (Team B- on hot standby, Team A- working) and watertight measures between the teams.

Example: Team "A" will work for the first 15 days or as required; team "B" will remain on a hot standby duty at home ready to replace team "A" in case one of them is found positive by the pandemic disease like Covid-19. In a normal situation, Team "B" will be on hot-standby over the quarantine period of 14 days specified by the WHO for pandemic like COVID-19.

After 15 days or as required, team "B" will work for 15 days or as required and Team "A" will remain on a hot standby duty at home. After 15 days or as required, the role will change again. :

Note. 'Hot standby duty' is considered as paid roster duty, staying at home in alert position, ready for operation duty without unnecessary delay. During such duty, ATSEP personnel will remain in contact with respective CNS related Department and Divisions.

ii. ATSEP in respective units may continue to work subsequent shifts with the consent of Department/Division/Section Chief or Shift In- charge as appropriate, as long as they remain asymptomatic.

3.2.4 In the event of extreme health impact in CNS workforce, following contingency procedures for the CNS Manpower arrangement will be executed to address pandemic like COVID-19

i.Collate total number of available ATSEP in respective Department/Division/Section and review minimum ATSEP required for operational duty along with prioritization of preventive maintenance and required corrective maintenance of system as per priority mentioned in para 3.3(b).

a) Other than preventive maintenance (system parameter checkup)/corrective maintenance purpose, if available, remote status monitoring system e.g. Remote control monitoring system (RCMS), CCTV like available technology will be used to monitor health status of system minimizing site visit to ensure reliable system operation as well as health hygiene of working duty staff during pandemic.

b) Preventive maintenance which is on less priority may be postponed for an appropriate time period.

3.2.5. Contingency duty roster will be prepared and distributed to all the ATSEP working on operation duty. Such roster along with the personal contact numbers will be displayed at all ATSEP working positions.

3.2.6 Division/Section chief and senior managers will play crisis management roles as well as monitor the contingency operation.

3.3 CNS facilities availability arrangement

To ensure availability of CNS facilities during extreme pandemic situation, following arrangements will be done:
a)Department/Divisions will arrange minimum necessary manpower for system operation, preventive as well as corrective maintenance.

b)Department/Divisions will prioritize available facilities based on their criticality and sensitivity from ATS operation to ensure safe and smooth flight operation.

Priority 1: Communication

CNS respective departments/divisions/units will arrange minimum necessary manpower to provide communication facilities i.e. air to ground communication.

Priority 2: Navigational aid

CNS respective departments/divisions/units will arrange minimum necessary manpower to provide Navigational aid facilities i.e. VOR, DME, NDB etc. Nav-Aids systems are further prioritized based on sensitivity and criticality from safe flight operation point of view as:
VOR/DME
NDB etc.

Priority 3: Surveillance

CNS respective departments/divisions/units will arrange minimum necessary manpower to provide Surveillance facilities i.e. ASR, SSR, TMSSR, EMSSR etc. to ensure safe flight operation during pandemic. Surveillance systems are further prioritize as based on sensitivity and criticality from safe flight operation point of view as:
TMSSR
EMSSR
SSR/ASR
ADS-B etc.

4.CNS facilities recovery procedure

3.4.1 Once the infection of pandemic or communicable disease will be under control, then, for the safe and smooth transitioning from contingency to normal operations, following procedures will be adopted:

3.4.4.1 CNS Contingency Monitoring Group will monitor the transitioning of CNS related Department and Divisions to normal operations and recommend respective Department and Divisions to arrange the number of ATSEP personnel as needed from the hot-standby manpower and provide supervisory support if needed.

3.4.1.2 Gradually the CNS related Department and Divisions shifts its manpower strength to the original (normal) position as usual in the ratio as it was reduced during the contingency operations.

3.4.1.3 If any NOTAM issued related to facilities non-availability during

pandemic, corrective, preventive maintenance and their operation will be recovered as on same priorities mentioned on para 3.3 (b) and (c) within respective units.

3.4.1.4 Scheduled preventive maintenance checkup and required corrective maintenance will be done as usual with full strength of rated ATSEP.

3.4.1.5 Airport terminal local CNS stations as well as other outer stations will be maintained with same priorities after the end of pandemic to ensure full strength CNS facilities.

3.5 Coordination with government authorities

Airport management and/or Com. Navaids department will coordinate with government administrative authority (Home Ministry/CDO office/traffic police/police etc.) to travel during pandemic and arrange the vehicle to visit all CNS facilities stations including outside the valley station (e.g. Nalinchowk, Thecho, Bhattedada, Phulchoki, domestic airports) during the pandemic like COVID-19 for preventive and corrective maintenance of system to ensure reliable CNS facilities.

List of actions taken by Civil Aviation Authority of Nepal following official declaration of Global outbreak of corona virus (covid 19) epidemic by WHO on 31st December 2019

1. Implementation of preventive measures as directed by national public health emergency plan-2013 and civil aviation airport emergency plan AEP-2019 ALERT-12

2. Formulation and execution of public health emergency response guidelines-2022 which amplify and provide implementing guidance to the provisions contained in AEP.

3. Establishment and operation of airport health desk equipped with trained manpower together with ISO propyl 70% sanitization in collaboration with Ministry of Health and Population (MOHP) in international arrival lounge .

4. Provision of liquid soap/hand sanitizer in all areas of International Terminal Building (ITB) where passenger and staff have access including enhanced level of airport cleanliness and general hygiene.

5. Full compliance of government of Nepal decisions relating to lockdown, flight suspension, conduct of evacuation, rescue, relief and medical supplies flights.

6. Exchange of data and information among stakeholders working for evacuation, rescue, relief and medical supplies flights.

7. Opening and regular operation of TIA aerodrome in support of above mentioned flight categories during lockdown.

8. Active participation of DGCAAN on video conference program conducted by APAC Regional Office, Bangkok on 31st March 2020 and sharing of initiatives taken by Nepal for prevention of spread of covid19.

9. Efforts given for the continuation of essential airport infrastructure development projects during lockdown.

10. Gradual resumption of regular scheduled flights with assurance and arrangement of all preventive measures in close coordination with industry stakeholder and government authority under the direction and guidance of high level national committee.

CIVIL AVIATION
AUTHORITY OF NEPAL

Tribhuvan International Airport(TIA) Preparedness of dealing with Public Health Emergencies including COVID-19

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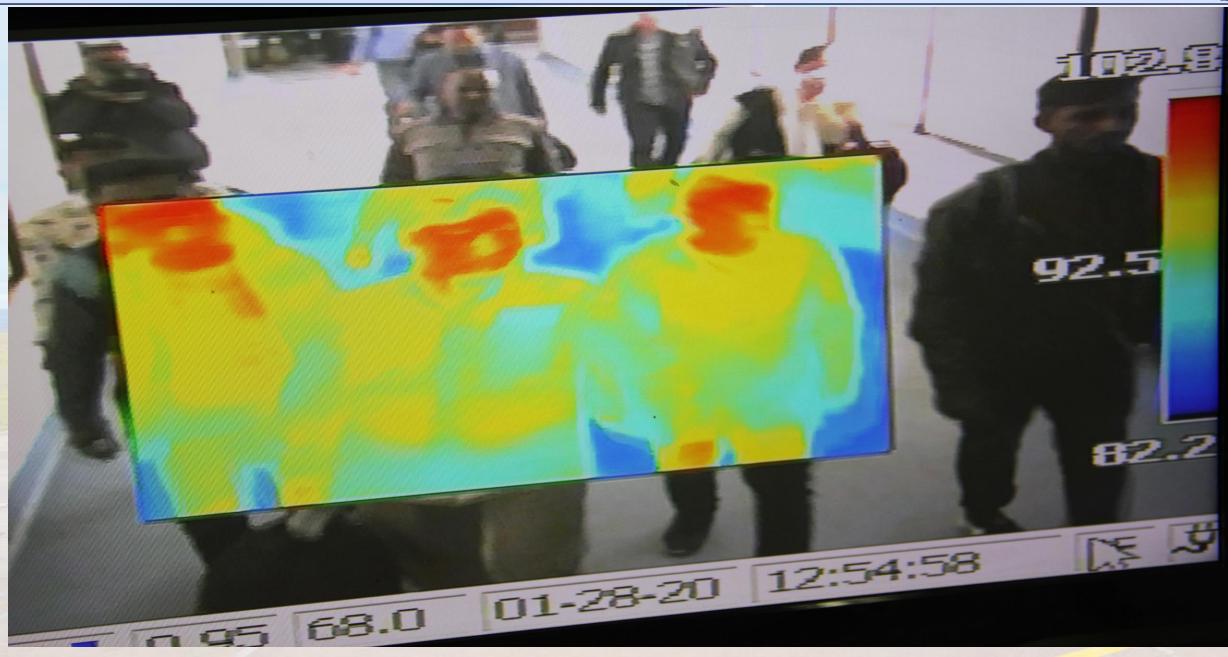
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Thank You