



STATE SAFETY PROGRAMME, NEPAL



Second Edition

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Civil Aviation Authority of Nepal

FOREWORD

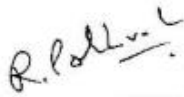
Civil Aviation Authority of Nepal (CAAN) has regulatory responsibility for aviation safety in Nepal.

The SSP is based on comprehensive analysis of the State's aviation system, safety policies and risk management, safety assurance and promotion. Thus, SSP provides the means to combine prescriptive and performance-based approaches to safety rulemaking, policy development and oversight by CAAN.

The SSP shall be implemented based on the regulatory framework regarding aviation in Nepal and SMS amongst stakeholders shall be established and maintained in accordance to the requirements set by CAAN through SSP.

Most of the essential elements of the safety framework are well established. However, a number of items have been identified for improvement which need further concentrated efforts to work upon in related areas. Various tasks outlined in the Programme need to be completed by concerned officials to make SSP a wholesome subject under CAAN. CAAN will work with service providers in cooperative and collaborative manner to help them develop and establish their SMS.

I would like to urge all concerned to follow the SSP and abide by the requirements set by CAAN so that SSP implementation in Nepal becomes effective.



Director General

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LIST OF ABBREVIATIONS

AGA:	Aerodrome and Ground Aids
AIR:	Airworthiness
ALoSP:	Acceptable Level of Safety Performance
ANS:	Air Navigation System
ANSSSD:	Air Navigation System Safety Standards Department
ASSD:	Aerodrome Safety Standards Department
C of A:	Certificate of Airworthiness
CAA:	Civil Aviation Authority
CAAN:	Civil Aviation Authority of Nepal
CAR:	Civil Aviation Requirement
CASRD:	Civil Aviation Safety Regulation Directorate
CEs:	Critical Elements
DGHR:	Dangerous Goods Handling Procedure
DHM:	Department of Hydrology and Meteorology
FOR:	Flight Operation Requirement
FSSD:	Flight Safety Standards Department
GASP:	Global Aviation Safety Plan
GoN:	Government of Nepal
HLSCC:	High Level Safety Coordination Committee
HRD:	Human Resource Department
ICAO:	International Civil Aviation Organization
MOC:	Management of Change
MoCTCA:	Ministry of Culture, Tourism and Civil Aviation



MoU:	Memorandum of Understanding
NASP:	Nepal Aviation Safety Plan
NAST:	National Aviation Safety Team
NFSR:	Nepalese Flying School Requirement
NSBS:	Nepal Sainik Biman Sewa
OPS:	Operation
PeLR:	Personnel Licensing Requirements
RASG:	Regional Aviation Safety Group
RSOO:	Regional Safety Oversight Organization
SARPs:	Standards and Recommended Practices
SDCPS:	Safety Data Collection and Processing System
SMI:	Safety Management Implementation
SMS:	Safety Management System
SSO:	Safety Oversight Organization
SSP:	State Safety Programme

CHAPTER -1

GENERAL

Provisions outlined in Civil Aviation Requirement for Safety Management (CAR- 19) states to establish a State Safety Programme (SSP) in order to achieve an Acceptable Level of Safety Performance (ALoSP) in civil aviation. For the implementation of the requirements of Safety Management System, the Civil Aviation Authority of Nepal (CAAN) has promulgated this State Safety Programme, Nepal (SSP Nepal), 2011 (second edition 2019) under the power conferred by Rule 82 of CAAN, Civil Aviation Regulations, 2058 (2002).

1.1 Purpose

The purpose of this document is to communicate the aviation safety programmes for civil aviation in Nepal to all stakeholders. This focuses on roles and responsibilities, as well as actions taken by the Civil Aviation Authority of Nepal as the responsible organization for the State safety management in civil aviation. It aims to achieve an Acceptable Level of Safety Performance (ALoSP) in civil aviation.

1.2 Scope

The SSP Nepal provides an overview of civil aviation safety programmes to the personnel involved in safety regulations as well as to all stakeholders with a responsibility of SMS implementation.

1.3 Document Control

The copy of the SSP Nepal will be made available to all regulatory staff having safety oversight responsibilities electronically.

Changes to this document will be achieved by a re-issue of the entire document rather than by the amendment of individual pages.

It is the function and responsibility of the High Level Safety Coordination Committee (HLSCC) to review the document at least annually to ensure the relevance and currency of all Legislation, Regulations, CAA Requirements and Advisory Circulars etc.

CHAPTER- 2

DEFINITION

Acceptable Level of Safety Performance (ALoSP). The level of safety performance agreed by State authorities to be achieved for the civil aviation system in a State, as defined in its State safety programme, expressed in terms of safety performance targets and safety performance indicators.

Accident. An occurrence associated with the operation of an aircraft which, in the case of a manned aircraft, takes place between the time any person boards the aircraft with the intention of flight until such time as all such persons have disembarked, or in the case of an unmanned aircraft, takes place between the time the aircraft is ready to move with the purpose of flight until such time as it comes to rest at the end of the flight and the primary propulsion system is shut down, in which:

a) a person is fatally or seriously injured as a result of:

— being in the aircraft, or — direct contact with any part of the aircraft, including parts which have become detached from the aircraft, or — direct exposure to jet blast,

except when the injuries are from natural causes, self-inflicted or inflicted by other persons, or when the injuries are to stowaways hiding outside the areas normally available to the passengers and crew; or

b) the aircraft sustains damage or structural failure which:

— adversely affects the structural strength, performance or flight characteristics of the aircraft, and — would normally require major repair or replacement of the affected component,

except for engine failure or damage, when the damage is limited to a single engine, (including its cowlings or accessories), to propellers, wing tips, antennas, probes, vanes, tires, brakes, wheels, fairings, panels, landing gear doors, windscreens, the aircraft skin (such as small dents or puncture holes), or for minor damages to main rotor blades, tail rotor blades, landing gear, and those resulting from hail or bird strike (including holes in the radome); or

c) the aircraft is missing or is completely inaccessible.

Note 1.— For statistical uniformity only, an injury resulting in death within thirty days of the date of the accident is classified, by ICAO, as a fatal injury.

Note 2.— An aircraft is considered to be missing when the official search has been terminated and the wreckage has not been located.

Accountable Executive. A single, identifiable person having responsibility for the effective and efficient performance of the service provider's SMS.

Hazard. A condition or an object with the potential to cause or contribute to an aircraft incident or accident.

Incident. An occurrence, other than an accident, associated with the operation of an aircraft which affects or could affect the safety of operation.

Note.— The types of incidents which are of main interest to the International Civil Aviation Organization for accident prevention studies are listed in the Accident/Incident Reporting Manual (ADREP Manual) (Doc 9156).

Risk mitigation. The process of incorporating defences, preventive controls or recovery measures to lower the severity and/or likelihood of a hazard's projected consequence.

Safety. The state in which risks associated with aviation activities, related to, or in direct support of the operation of aircraft, are reduced and controlled to an acceptable level.

Safety data. A defined set of facts or set of safety values collected from various aviation-related sources, which is used to maintain or improve safety.

Note.— Such safety data is collected from proactive or reactive safety-related activities, including but not limited to:

- a) accident or incident investigations;
- b) safety reporting;
- c) continuing airworthiness reporting;
- d) operational performance monitoring;
- e) inspections, audits, surveys; or
- f) safety studies and reviews.

Safety information. Safety data processed, organized or analysed in a given context so as to make it useful for safety management purposes.

Safety management system (SMS). A systematic approach to managing safety, including the necessary organizational structures, accountability, responsibilities, policies and procedures.

Safety objective. A brief, high-level statement of safety achievement or desired outcome to be accomplished by the State safety programme or service provider's safety management systems.



Note 1.— Safety objectives are developed from the organization’s top safety risks and should be taken into consideration during subsequent development of safety performance indicators and targets.

Safety oversight. A function performed by a State to ensure that individuals and organizations performing an aviation activity comply with safety-related national laws and regulations.

Safety performance. A State’s or service provider’s safety achievement as defined by its safety performance targets and safety performance indicators.

Safety performance indicator. A data-based parameter used for monitoring and assessing safety performance.

Safety performance target. The State or service provider’s planned or intended target for a safety performance indicator over a given period that aligns with the safety objectives.

Safety risk. The predicted probability and severity of the consequences or outcomes of a hazard.

State safety programme (SSP). An integrated set of regulations and activities aimed at improving safety.

Surveillance. The State activities through which the State proactively verifies through inspections and audits that aviation licence, certificate, authorization or approval holders continue to meet the established requirements and function at the level of competency and safety required by the State.

System. An organized, purposeful structure that consists of interrelated and interdependent elements and components, and related policies, procedures and practices created to carry out a specific activity or solve a problem.

CHAPTER- 3

Introduction

3.1 SSP Concept

An SSP is defined as an integrated set of regulations and activities aimed at improving Safety. It includes specified safety activities that must be performed by the State, and regulations and directives promulgated by the State to support fulfillment of its responsibilities concerning safe and efficient delivery of aviation activities of the State. An SSP is a management system for the management of safety by the State. The implementation of an SSP must be commensurate with the size and complexity of the State's aviation system and may require coordination among multiple authorities responsible for individual elements of civil aviation functions in the State.

3.2 SSP framework

SSP Nepal has been developed in accordance with the ICAO SSP framework as contained in CAR 19 that consists of four components and fourteen elements:

1. State safety policy, objectives and resources

- 1.1 Primary aviation legislation
- 1.2 Specific operating regulations
- 1.3 State system and functions
- 1.4 Qualified technical personnel
- 1.5 Technical guidance, tools and provision of safety critical information

2. State Safety Risk Management

- 2.1 Licensing, certification, authorization and approval obligations
- 2.2 Safety management system obligations
- 2.3 Accident and incident investigation
- 2.4 Hazard identification and safety risk assessment
- 2.5 Management of safety risks

3. State safety assurance

3.1 Surveillance obligations

3.2 State safety performance

4. State safety promotion

4.1 Internal communication and dissemination of safety information

4.2 External communication and dissemination of safety information.

3.3 Nepal Aviation Safety Plan (NASP)

Nepal's desired outcome for safety of civil aviation (as per Nepal Aviation Safety Plan, 2018-2022) are:

1. Continuous reduction of operational safety risk
2. Strengthen safety oversight capabilities of Nepal
3. Implement of State Safety Programme

Continuous reduction of operational safety risk is realized by maintaining a decreasing trend of accident rate and reducing the rate of occurrences related to high risk categories. Similarly, safety oversight capability is strengthened by reaching a positive safety oversight margin in all categories. To achieve this, Nepal shall develop and implement strategies, regulatory frameworks, and processes to ensure that aviation activities perform to the highest level of safety practicable. So far Nepal has taken a performance-based approach to aviation safety regulation, to encourage and support the Safety Management Systems (SMS) of the service providers of Nepal, and implement ICAO's Standards and Recommended Practices (SARPs) to the highest degree practicable.

3.4 International obligations

Annex 19, Safety Management to the Convention on International Civil Aviation, brings together the standards for safety management that requires ICAO States to establish an SSP. An SSP is an ICAO framework for States to co-ordinate their regulatory oversight and achieve an Acceptable Level of Safety Performance (ALoSP) in civil aviation. An SSP is intended to support a risk-based aviation system and thus the implementation of SMS by aviation service providers.

The ICAO Global Aviation Safety Plan (GASP, Doc 10004) objectives call for States to put in place robust and sustainable safety oversight systems and to progressively evolve these into a more sophisticated means of managing safety performance. These objectives align with ICAO's requirements for the implementation of SSPs by States and SMSs by service providers.

3.5 Nepal State Safety Programme:

Nepal's SSP is a system-level description of its aviation safety management and the specific safety activities it undertakes to support its responsibilities to achieve safe and efficient aviation. As required in CAR 19, the core of Nepal's SSP consists of the eight critical elements (CEs) of safety that ICAO requires States to manage effectively. These are as follows:

- Primary aviation legislation (CE-1);
- Specific operating regulations (CE-2);
- State system and functions (CE-3);
- Qualified technical personnel (CE-4);
- Technical guidance, tools and provision of safety-critical information (CE-5);
- Licensing, certification, authorization and approval obligations (CE-6);
- Surveillance obligations (CE-7); and
- Resolution of safety issues (CE-8).

These are incorporated in the four components of Nepal's SSP framework, which are: 1. State safety policy, objectives and resources; 2. State safety risk management; 3. State safety assurance; and 4. State safety promotion.

The monitoring and oversight framework described in this document also guides the establishment and maintenance of the SMS that Nepal's certificated aviation service providers are required to establish.



CHAPTER- 4

STATE SAFETY POLICY, OBJECTIVES AND RESOURCES

Safety Policy

Safety policy is a formal document describing the safety intentions and direction of CAAN. The State safety policy projects senior management's attitude to safety and to the promotion of a positive safety culture. It is the safety mission and vision statement of Nepal. So as to ensure it remains relevant and appropriate, the safety policy is reviewed annually in the High Level Safety Coordination Committee and revised if found necessary.

The safety policy Statement is included in Attachment 1

Safety Objectives

The development of safety objectives starts with a clear understanding of the highest safety risks in the aviation system. Safety risk in the aviation system is influenced by many different factors, such as the size and complexity of the aviation system as well as the operational environment. The safety objectives are set once the top safety risks are identified. The safety objectives thus set are revised annually during HLSCC meetings in accordance to the safety data analysis of that year.

In order to develop an understanding of the top safety risks, quantitative data is used as far as is available. Qualitative information and expert analysis may also be used where needed. The SSP implementation Team shall carry out guided discussions to gain understanding of the broader safety risks across the aviation system. These experts can be guided by available safety trend information, known accidents and serious incidents contributing factors, or known deficiencies in the State SSO processes. The objectives as identified in the NASP shall also be taken into consideration during the discussion. This brainstorming-type approach may be done collaboratively with service providers, during each type of NAST meetings, to identify "known" safety issues for each aviation sector.

Safety resources

The Civil Aviation Safety Regulations Directorate has been shouldered with regulatory responsibilities of the Civil Aviation Authority of Nepal. The CAAN manages sufficient human resources in accordance to the manpower requirement regarding the safety functions to be carried out as declared by each of the departments/divisions under the directorate. The

oversight related experts are appointed on contract basis as well besides the regular process of manpower recruitment.

Similarly, the regular budgetary system adopted by CAAN through Corporate Directorate ensures that departments/divisions that have safety responsibilities are given sufficient financial resources to carry out their mandates and plans.

4.1 Primary Aviation Legislation (CE- 1)

Legislative System in Nepal

Constitution is the fundamental law of Nepal. Nepal's Parliament has the power to promulgate other laws for the implementation of various provisions made in the Constitution. Laws promulgated under the power of legislative body are referred to as Acts. The government of Nepal can formulate various regulations under the powers given by the respective Acts. Additionally, government organizations (like CAAN) can issue and enforce necessary Requirements, Directives and Manuals exercising the authority of respective regulations.

Primary Aviation Legislation

The Civil Aviation Act, 1959 and Civil Aviation Authority of Nepal Act, 1996 together with all regulations under the acts constitute the primary legislative framework for the regulation of civil aviation in Nepal.

Civil Aviation Act,1959

The Civil Aviation Act of 1959 confers upon the GoN the power to formulate regulations on the establishment of aerodromes; prohibition of flight in a certain portion of Nepal's air space or conditions of its operation; provision relating to the protection of public life; compensation issues relating to aerodrome construction; prohibition, control, restriction and regulation on transportation of certain goods by air; issuance of License to Airline Operators, Aerodrome Operators, Aircraft Maintenance Organizations, other Aviation Organizations; Aircraft Accident Investigation; Search and Rescue Service; noise control and environment protection.

Civil Aviation Authority of Nepal Act, 1996

The Civil Aviation Authority of Nepal Act of 1996 was promulgated to establish Civil Aviation Authority of Nepal (CAAN) as an autonomous regulatory body for civil aviation as well as the services provider for aerodrome and ANS services. The regulatory aspects incorporated in this Act are: Issuance, suspension and revocation of operating certificate to airline operator, aerodrome operator, aviation training organization, aircraft and its parts production,

maintenance and test organizations, Issuance, suspension and cancellation of license to personnel Registration of civil aircrafts and issue Nationality Mark Issuance, suspension and revocation of Certificate of Airworthiness (C of A) Inspection of aircraft, hangar, aircraft operation activities and aircraft maintenance organization's functioning Coordinate Search and Rescue Operation Implementation of Standards and Recommended Practices (SARPs) of the Annexes to the Convention on International Civil Aviation Issuance of Order and Direction to any government or non-government personnel working in airports with regard to the passenger service, facility and security; aerodrome security; and security of aircraft, flight, and personnel involved in flight operation. of Meteorology Services for Aviation; Air Navigation Facilities and Equipments.

Civil Aviation Rules, 1995

Civil Aviation Regulation, 1995 promulgated under the Clause 3 of Civil Aviation Act, 1959, authorizes CAAN to enforce provisions of Annexes (or its parts) to the Convention on International Civil Aviation and also formulate necessary requirements, directives and manuals to implement its objectives. Rule 79 of the Regulation empowers CAAN to issue orders and directives to concerned agencies on the various matters relating to the civil aviation operations.

CAAN- Airport Certification Regulation, 2004

Airport Certification Regulation, 2004 was enforced under the Clause 34 of Civil Aviation Authority of Nepal Act, 1996. This regulation requires that the International Aerodrome for the operation of public air transport service shall obtain aerodrome certificate from CAAN. Application can also be made to obtain aerodrome certificate for the operation of domestic airport of the use of public air transport service. The Regulation has made detailed provisions regarding the certification of aerodrome used for public air transport service.

Civil Aviation (Investigation of Accident) Regulation 2071 (2014)

This regulation was promulgated under the Clause 5 of Civil Aviation Act, 1959 and relates to aircraft accident investigation. As per the regulation, the right to carry out the investigation of any kind of accident occurred within the territory of Nepal shall remain with the Government of Nepal. The investigation carried out under this Regulation is purely technical in nature and does not intend to apportion blame or liability and the report thereof cannot be presented before the court as the evidence for civil or criminal proceedings.

4.2 Specific Operating Regulations (CE-2)

In order to incorporate the Standards and Recommended Practices (SARPs) of ICAO in Nepal's national regulatory framework, the following Civil Aviation Requirements (CARs) have been issued by CAAN under the authority of Rule 84 of CAAN-Civil Aviation Regulation, 2002:

Civil Aviation Personnel Licensing Requirements (PELR)

Personnel Licensing Requirements for Air Traffic Services Electronic Personnel

Civil Aviation Requirements for Rules of the Air (CAR2)

Civil Aviation Requirements for Meteorological Service for International Air Navigation (CAR3)

Civil Aviation Requirements for Aeronautical Chart (CAR 4)

Civil Aviation Requirements for Units of Measurement to be used in Air and Ground Operations (CAR 5)

Civil Aviation Flight Operations Requirements (FOR)

Nepalese Civil Airworthiness Requirements (NCAR)

Civil Aviation Requirements for Aeronautical Telecommunication (CAR10)

Civil Aviation Requirements for Air Traffic Services (CAR 11)

Civil Aviation Requirements for Search and Rescue (CAR12)

Civil Aviation Requirements for Aerodromes (CAR 14, Part I)

Requirements for the Operations of Hospital Helipads

Civil Aviation Requirements for Aeronautical Information Services (CAR 15)

Civil Aviation Requirements for Safety Management (CAR 19)

Dangerous Goods Handling Requirements (DGHR)

Nepalese Flying School Requirements (NFSR)

Civil Aviation Authority of Nepal also issues directives, advisory circulars and guidance materials for the effective implementation of the regulations. A number of procedure manuals are issued by the CAAN for providing guidance to its staff in order to perform their duties and responsibilities effectively. Civil aviation regulations can be accessed on Civil Aviation Authority of Nepal website: www.caanepal.gov.np.

The specific operating regulations are periodically reviewed in accordance to 'Procedure Manual for ICAO, International Affairs and Legal Functions' so that they remain relevant and authentic.

4.3 State System and Functions (CE-3)

4.3.1 Organizations involved in Civil Aviation

Ministry of Tourism and Civil Aviation (MoCTCA)

The MoCTCA is the policy making body for matters relating to civil aviation in Nepal. The MoCTCA, in consultation with CAAN and other ministries formulates rules and regulations necessary for safe, and regular civil aviation system in the country. The MoCTCA is also responsible for inter-ministerial coordination in matters of civil aviation. MoCTCA also constitutes accident investigation commission for the investigation of civil aircraft accident within the territory of Nepal.

Civil Aviation Authority of Nepal (CAAN)

The CAAN, an autonomous body for civil aviation is responsible for the regulation of civil aviation in Nepal. Roles and responsibilities of the CAAN are stipulated in the CAAN Act and related regulations. While implementing the national aviation policy issued by the GoN, the CAAN also formulates the safety policy in civil aviation and is therefore responsible for the establishment, maintenance and continuous improvement of SSP. The Civil Aviation Safety Regulations Directorate is responsible for carrying out all the regulatory functions of CAAN besides the oversight of meteorological service provision functions which is delegated to the Department of Hydrology and Meteorology.

As the regulatory body of civil aviation in Nepal, CAAN is also responsible for the establishment, maintenance and continuous improvement of the SSP. The holders of certificates issued by the CAAN are required to satisfactorily demonstrate that their management systems adequately reflect an SMS approach. The anticipated result from this approach is tangible improvement in safety management and practices. The CAAN shall endeavor to develop requirements and specific operational policies that build upon sound safety management principles in active consultation with all stakeholders. CAAN shall allocate sufficient resources for discharging its safety oversight responsibilities effectively.

Department of Hydrology and Meteorology (DHM)

DHM is responsible for providing and overseeing Meteorological Services necessary for civil aviation in Nepal in accordance with Annex 3 to the Convention on International Civil Aviation.

CAAN and DHM have exchanged a Memorandum of Understanding (MoU) detailing the modus of providing meteorological services and its oversight as well.

Nepal Army

In Nepal, military aircraft operate from civil airports, use common airspace and share services and facilities meant for civil aviation. Nepali Sainik Biman Sewa (NSBS), the flying wing of Nepal Army, carries out search and rescue operations. Nepal Army is also an integral part of airport emergency plan in Nepal.

4.3.2 Organizational Units and Committees

Accountable Executive

The Director General of CAAN is designated as the accountable executive of SSP and is responsible for ensuring that all levels of management deliver the highest level of safety performance within CAAN. It shall be the duty of the director general to develop and implement requirements and specific operational policies that build upon safety management principles.

The director general of the CAAN is responsible for the implementation, operation and the supervision of the SSP and coordinate the activities of the various state aviation organizations as necessary under the SSP.

Besides, the whole SSP runs with active participation of the all the agencies involved including the working and coordinating committees.

The functional organization structure of the State regulatory system of Nepal is attached in Appendix 2.

Aviation Safety and Security Regulations Directorate (ASSRD)

The regulatory functions carried out by CAAN are distributed among the following Departments and Divisions of CASRD:

- a) Flight Safety Standards Department (FSSD) which is responsible for the oversight of flight operations and airworthiness of airline operators, licensing of personnel such as flight crew members, aircraft maintenance, dispatcher etc. The oversight functions as directed by ICAO Annexes 1, 6, 7, 8, 16, 18 and 19 are carried out by FSSD.
- b) ANS Safety Standards Department which is responsible for oversight of ANS service provider functions, and licensing of air traffic control and safety electronic personnel. The oversight functions as directed by ICAO Annexes 1, 2,3, 4,5, 10, 11, 12, 15 and 19 are carried out by ANSSSD.

- c) Aerodrome Safety Standards Department which is responsible for oversight of Aerodrome operator functions and licensing and certification of aerodromes. The oversight functions as directed by ICAO Annex 14 and 19 are carried out by ASSD.
- d) Safety Management Division which is responsible for the implementation of SSP in Nepal. The functions as directed by ICAO Annex 19 are carried out by Safety Management Division.

High Level Safety Coordination Committee

A collaborative inter-agency High Level Safety Coordination Committee (HLSCC) is used to ensure SSP functions are effective by monitoring its implementation and guiding its development. The Committee brings together the following representatives and agencies as decided by the 345th meeting of the Civil Aviation Authority of Nepal Board of Directors:

1. Director General, Civil Aviation Authority of Nepal -Coordinator
2. Joint Secretary, Civil Aviation Division, MoCTCA-Member
3. Deputy Director General, Civil Aviation Safety Regulations Directorate, CAAN - Member
(Safety Management Division of CAAN to work as the Secretariat of the Committee)

Representative (s) from Nepal Army and other relevant entities shall be called in 'as and when required' basis.

Frequency of meeting of HLSCC shall be as provisioned in Procedure Manual for Safety Management Functions.

The main purpose of the establishment of the HLSCC is:

- To ensure efficient SSP implementation through good communication together with avoidance of duplication of efforts and conflicting policies.
- To facilitate continuous coordination in high level of all agencies and stakeholders.
- To evaluate and implement the safety recommendations originating from SSP implementation Team meetings.
- To ensure that State is achieving the established ALoSP;

To provide guidance for the effective implementation of SMS in the concerned organization each member represents. In addition, to carry out discussions in matters of aviation safety for ensuring effective communication, sharing of information and data exchange

SSP Implementation Team

For an effective implementation of SSP, an SSP Implementation Team has been formed which comprises the following ex-officio members:



Deputy Director General, ASSRD	Coordinator
Director, FSSD	Member
Director, ANSSSD	Member
Director, ASSD	Member
Director, ICAO, International Affairs and Legal Department	Member
Representative, MoCTCA (looking after AIG matter)	Member

(Safety Management Division of CAAN to work as the Secretariat of the Committee)

The Team is responsible for carrying out such actions that are related to the concerned department and division of each of the members in accordance to the phase wise implementation of SSP together with Nepal Aviation Safety Plan. It manages SSP implementation within the CAAN by ensuring that procedures, terms of reference and training are developed in accordance with the SSP and developing a consistent approach to safety management throughout Nepal.

Team can call representative(s) from other entities as invitees when deemed necessary.

Frequency of meeting of SSPIT shall be as provisioned in Procedure Manual for Safety Management Functions.

2.4 State Safety Action Group

The State Safety Action Group (SSAG) is the operational committee that acts on the actions needed for successful implementation of SSP together with NASP with respect to duties and responsibilities of the CAAN and MoCTCA (for Accident Investigation issues). The composition of the group shall be as follows:

Chief, Safety Management Division,	Coordinator
Designated Representative/s, Flight Safety Standards Department	Member
Designated Representative/s, Aerodrome Safety Standards Department	Member
Designated Representative/s, ANS Safety Standards Department	Member
Designated Representative, Safety Management Division	Member Secretary

Frequency of meeting of SSAG shall be as provisioned in Procedure Manual for Safety Management Functions.

Responsibilities of the group are as follows:

- Carry out State Safety Data Collection and Processing Activities together with State Safety Data Verification.
- Carry out State Safety Risk management Activities.
- Determine and propose to SSP implementation Team for endorsement, the State SPIS and SPTS based on analysis of Safety data available from SDCPS
- Involve in Safety promotion activities.
- Study the recommendations of all accident/serious incident report and prepare report on the status of implementation of such recommendations.
- Prepare an annual safety report based on all the activities mentioned above.
- Determine and propose any other issues to SSP implementation Team, as may be considered relevant, to assist the SSP implementation Team in continuously improving the effectiveness of the SSP and NASP.

Group can call representative(s) from MoCTCA (looking after AIG matter) and other entities as invitees when deemed necessary.

National Aviation Safety Teams (NASTs)

SSP implementation is a coordinated approach that requires the involvement of all safety related departments/division within CAAN. To ensure the effective SSP implementation a National Aviation Safety team (NAST) Nepal is essential that comprises the representatives of service providers as well. The NAST Nepal is responsible for the exchange of safety information, review of safety risks, agree on the acceptable of safety performance level, suggest respective oversight department on SMS matters, evaluation of SSP and its continuous improvement.

The composition of NAST Nepal is given in 'Appendix-3'

4.4 Qualified Technical Personnel (CE-4)

Those persons who perform safety related functions for or on behalf of Nepal are referred as technical personnel.

The CAAN attaches a great deal of importance to recruiting highly-qualified personnel, to the induction and training of personnel commensurate with their specific jobs, and to systematic, targeted further development of their skills. Qualified, responsible, socially aware action is an integral part of the corporate strategy and culture of the CAAN.

The basic qualification requirements for oversight personnel is decided by the CAAN and included in the documents of the respective safety oversight departments detailing the process of oversight functions.

The minimum qualification requirements of safety inspectors in the areas of ANS, AIR, OPS, AGA and SMS are specified in the respective inspector handbooks and/or procedure manuals. The training requirements are determined by the Civil Aviation Safety Regulations Directorate in coordination with HRD. The training records of these personnel shall be maintained in the Safety Management Division.

Besides regular recruitment, the Director General is empowered to appoint, through contract, safety oversight experts such as inspector, senior inspector and subject matter expert in accordance to the "Employee Regulations related to the Terms, Conditions and Facilities of their Service, 2056". The qualification requirement for such experts is specified by in 'Directive for Recruitment of Safety Oversight Personnel, 2072' as approved by the board of directors.

4.5 Technical Guidance, Tools and Provision of Safety Critical Information (CE -5)

The technical guidance material and procedures in accordance with the set regulations are provided to the personnel responsible for safety oversight so as to enable them to perform their functions effectively and in a standardized manner. Each of the safety oversight departments/division has established its own procedure manual as guidance to the safety personnel.

CAAN has also been providing technical guidance to the aviation industry on the implementation of relevant regulations. 'SMS Implementation Guidance Material' has been issued in order to guide all the service providers for their SMS implementation.

The tools needed for the assessment of SMS to determine both the compliance and performance of the service providers' SMS is contained in the "Procedures Manual of Safety Management Functions, 2019" issued by CAAN. The manual also details the procedures followed during SMS assessments.

In order to ensure that personnel performing safety oversight functions are provided with guidance that addresses ethics, personal conduct and the avoidance of actual or perceived conflicts of interest in the performance of official duties, CAAN has issued (Ethical Code of Conduct for the safety oversight inspectors, 2075) besides the 'employee code of conduct 2075'.

CHAPTER- 5

STATE SAFETY RISK MANAGEMENT

Identification of potential safety risks to the aviation system as a whole is the main function under an effective State Safety Programme. The traditional methods of analyzing the causes of an accident or incident are augmented by CAAN with proactive processes to achieve this. These processes help in identifying and addressing precursors and contributors of accidents, and strategically manage safety resources to maximize safety improvements. CAAN, therefore,

- a) requires through CAR 19 that all the service providers implement SMS to manage and improve the safety of their aviation related activities;
- b) has established procedures of acceptance means to determine whether service providers' SRM is acceptable; and
- c) has established procedures to review and ensure the effectiveness of the service provider's SMS.

5.1 Licensing, certification, authorization and approval obligations (CE-6)

Licensing, certification, authorization and approval obligations are important components of the State safety risk control strategy. They provide the State with assurance that service providers have achieved the required standards to operate safely within the aviation system.

The processes and procedures relating to Licensing, certification, authorization and approval system of Nepal are documented in the 'CAAN Civil Aviation Regulation, 2002' to ensure that individuals and organizations performing an aviation activity meet the established requirements before they are allowed to exercise the privileges of a license, certificate, authorization or approval to conduct the relevant aviation activity.

5.2 SMS Obligations

In accordance with CAR 19, CAAN has required that service providers implement SMS. The procedures for the acceptance of these service providers SMS Manuals shall be as per the requirements set by the respective oversight departments for the service providers under their jurisdiction of oversight. The assurance of the implementation of this requirement shall be made by CAAN in accordance to the 'Procedure Manual for Safety Management Functions.' This manual includes the procedure for audit in detail.

Similarly, the service providers are provided with the guidance for implementation of SMS in the "SMS implementation Guidance Material, 2019" issued by CAAN. The Procedure Manual together with the Guidance Material are reviewed annually in the SSP implementation Team whereas the CAR-19 shall be amended in accordance to the "Procedure Manual for ICAO, International Affairs and Legal Functions."

5.3 Accident and Incident Investigation

Civil Aviation (Investigation of Accident) Regulation 2071, has provisioned that the responsibility to carry out the investigation of civil aircraft accidents and serious incidents that has occurred within the territory of Nepal shall remain with the Government of Nepal. The Government may form an investigation commission including the experts from the pool of qualified investigators as enlisted in the Ministry of Culture, Tourism and Civil Aviation. The investigation procedures as set in the Regulation are purely technical in nature and are in accordance with Annex-13.

The regulation has not limited CAAN to carry out preliminary investigation of such accidents and get a report thereof. However, investigation of incident and occurrences is the responsibility of CAAN. It is also the responsibility of service providers to conduct investigation of occurrences and submit the report to CAAN.

5.4 Hazard Identification and Safety Risk Assessment

CAAN has established and maintained a process to collect safety data through a directive "Safety Occurrence Reporting Procedures, 2016". It also has a system of identifying hazards from such collected Data. The overall process of collecting safety data and processing it is contained in the "Procedure Manual for Safety Management Functions." The Manual details the system for capturing, storing, aggregating and enabling the analysis of safety data and safety information. This system is an aggregate of the processing and reporting systems, safety databases, schemes for exchange of information, and recorded information including, inter alia, data and information pertaining to accident and incident investigations; data and information related to safety investigations by Government of Nepal/ CAAN or aviation service providers, mandatory safety reporting systems, voluntary safety reporting systems as indicated and self-disclosure reporting systems.

5.4.1 Just Culture

The safety policy should actively encourage effective safety reporting and, by defining the line between acceptable performance (often unintended errors) and unacceptable performance (such as gross negligence, recklessness, violations or sabotage), provide fair protection to reporters.

The CAAN and service providers within its responsibility should take into consideration the advantages and disadvantages of the adoption of safety and —just culture, and any cultural and legal implications. For purposes related to the management of safety, the process that needs to be promoted, nurtured and defended is effective safety reporting; the —criminalization of error is of lesser relevance.

The protection of safety information from inappropriate use is essential to ensure its continued availability, since the use of safety information for other than safety-related purposes may inhibit the future availability of such information, with an adverse effect on safety. The CAAN's audits of SMSs should pay particular attention to this matter during service providers' SMS audit.

The Safety Policy Statement of the Accountable Executive, the Director General of CAAN has made commitment to establish provisions for the protection of safety data, collection and processing systems (SDCPS), so that people are encouraged to provide essential safety-related information on hazards. It further states to promulgate an enforcement policy that ensures that no information derived from any SDCPS established under the SSP or the SMS will be used as the basis for enforcement action, except in the case of gross negligence or willful deviation. The enforcement policy is included in "Enforcement Policy and Procedure Manual, 2016."

5.5 Management of Safety Risk

The objective of the management of safety risks is to ensure safety risks are controlled and an ALoSP is achieved. CAAN has developed and maintained a process to manage safety risks that include acceptance, mitigation, avoidance or transfer of safety risk.

The safety risk mitigation process to take appropriate actions, up to and including enforcement measures, to resolve identified safety issues are contained in "Procedure Manual for Safety Management Functions."

CAAN ensures that identified safety issues are resolved in a timely manner through a system which monitors and records progress, including actions taken by individuals and organizations performing an aviation activity in resolving such issues.

CHAPTER- 6

STATE SAFETY ASSURANCE

6.1 Surveillance obligations (CE-7)

CAAN verifies whether the existing safety level within the various companies corresponds to the specified state target level with the aid of audits and inspections. CAAN periodically reviews the safety performance of an individual service provider.

Within the scope of its supervision of service providers in Nepali aviation, CAAN proactively assures with the aid of audits and inspections whether the holders of licenses, certificates and permits duly comply with the corresponding safety procedures and processes in accordance with the applicable national and international regulations and legal provisions.

Foreign airlines that are subject to supervision in their country of origin are subjected to random inspections of aircraft and flight crews by the CAAN.

The surveillance of the service providers takes into consideration the safety performance as well as the size and complexity of its aviation products or services.

For effective state safety oversight, each regulatory domain shall determine number of personnel required. Detail procedure regarding the method for calculation of personnel required shall be included in the domain's respective manuals.

CAAN shall adopt Risk Based Surveillance approach for performing Surveillance, where planning is driven by the organizational risk profile (the combination of organizational safety performance and Operational Complexity Level); and execution focuses on the management of risks, besides ensuring compliance. A risk-based approach to surveillance entails the assessment of the performance influencing factors, organisational changes and other safety performance indicators that make up an organization's risk profile. An organization's risk profile is inevitably be dynamic. The CAAN shall have a process that acquires and analyses different sources of intelligence that provide insight into the changing risks in an operation and determine the surveillance frequency.

6.2 State safety performance

CAAN shall establish the acceptable level of safety performance to be achieved through its SSP. An acceptable level of safety performance for the State can be achieved through the implementation and maintenance of the SSP as well as safety performance indicators and targets showing that safety is effectively managed and built on the foundation of implementation of existing safety-related SARPs.

The process to evaluate the effectiveness of actions taken to manage safety risks and resolve safety issues shall be as maintained in the "Procedure Manual for Safety Management Functions."

6.2.1 Acceptable level of safety performance (ALoSP)

The ALoSP expresses the safety levels CAAN expects of its aviation system, including the targets that each sector needs to achieve and maintain in relation to safety, as well as measures to determine the effectiveness of their own activities and functions that impact safety.

Detailed process for establishment and implementation of ALoSP shall be included in Procedure Manual for Safety Management Functions.

6.2.2 Management of Change (MOC)

CAAN evaluates and manages the impact of change in the aviation system of Nepal. When changes are planned, the CAAN analyses the impact of the change on the existing system and, using the existing SRM process, analyse, assess and if appropriate mitigate any new or altered safety risks. No operation takes place in a changed system or operational context until all safety risks are evaluated. The procedure to assess and mitigate such risk at State Level is included in the "Procedure Manual for Safety Management Functions."

CHAPTER- 7

STATE SAFETY PROMOTION

CAAN promotes safety awareness and the sharing and exchange of safety information with the aviation community to foster the maintenance and improvement of safety and to support the development of a positive safety culture.

7.1 Internal communication and dissemination of safety information

CAAN promotes safety awareness and the sharing and exchange of safety information to support, within the aviation organizations and the development of a positive safety culture that fosters an effective SSP.

CAAN has annually been publishing a civil aviation safety report since 2017. These reports contain information about safety in the areas of commercial flight operations, general aviation, helicopter operations, air traffic control, airports and airfields etc. They also include statistics concerning incidents and accidents, together with an assessment of the status of implementation of the recommendations of the accident/serious incident investigations. The report is made accessible to the public and is published in the CAAN-website www.caanepal.gov.np.

In addition to these safety reports, the Safety Management Division also places other safety-relevant information at the disposal of concerned via e-mails. For the ease of communication and time effectiveness of coordination regarding matters related to safety, each of the safety oversight departments (ASSD, ANSSSD and FSSD) coordinate on safety matters through the focal points they have nominated. The correspondence and coordination is normally carried out through official emails so that exchange of communication shall be quick and free of formal administrative hassles. The name and contact details of the focal points are maintained formally in SMD.

The SSP implementation Team meetings also form a part of the internal communication to decide on broader concerns and to share and exchange knowledge and information.

Furthermore, the information regarding new adaptations in accordance to ICAO SARPs is disseminated to the concerned regulators and through them, to the service providers, pursuant to the "Procedure Manual for ICAO, International Affairs and Legal Functions". New employees learn about the SSP and SMS requirements as part of their induction programme.

The CAAN also publishes "Newsletter" every four months with the updates on latest activities of CAAN including the safety related activities and information. The official magazines "CAAN Souvenir" and "CAAN Report" are published every which also serve the purpose of information flow throughout the organization and outside as well.

6.2 External communication and dissemination of safety information

The CAAN uses various channels for communicating with stakeholders. In addition to direct communication via post and e-mail, its web site is also in use. On the CAAN website, all updated documentation is uploaded to the "Legal Framework". The safety report is posted annually on the website. Similarly, the Newsletter, Souvenir and the CAAN Report are also published in the website.

For communicating information about amendments to legislation or safety regulations, the CAAN sends notifications by post or e-mail, or organises corresponding meetings. For the purpose, four different teams viz. "NAST-aeroplane", "NAST-Rotor" "NAST-ANS" and NAST-Aerodrome" have been formed.

Under the heading, "Aviation Safety Campaign", the CAAN has been organizing, in collaboration with the stakeholders, safety trainings since past few years. CAAN also organizes promotional activities in Kathmandu as well as at other domestic airports. CAAN shares its safety information with other states and get informed about the safety status of other states through Safety Management Implementation (SMI) website, a platform provided by ICAO for the sharing and exchange of safety information. Besides, CAAN works in close collaboration with RASG and RAOOs participating in different meetings, seminars, workshops and trainings.

Appendix 1



Civil Aviation Authority of Nepal **State Safety Policy**

Civil Aviation Authority of Nepal (CAAN) is responsible for the management of civil aviation safety in Nepal. We are committed to developing strategies, policies and processes to ensure that all aviation activities within Nepal are carried out to the highest level of safety performance, while meeting international standards.

As Director General of CAAN I am accountable for the implementation, operation and the management of the State Safety Programme (SSP). The SSP sets out our approach to managing aviation safety risk in Nepal and our commitment to:

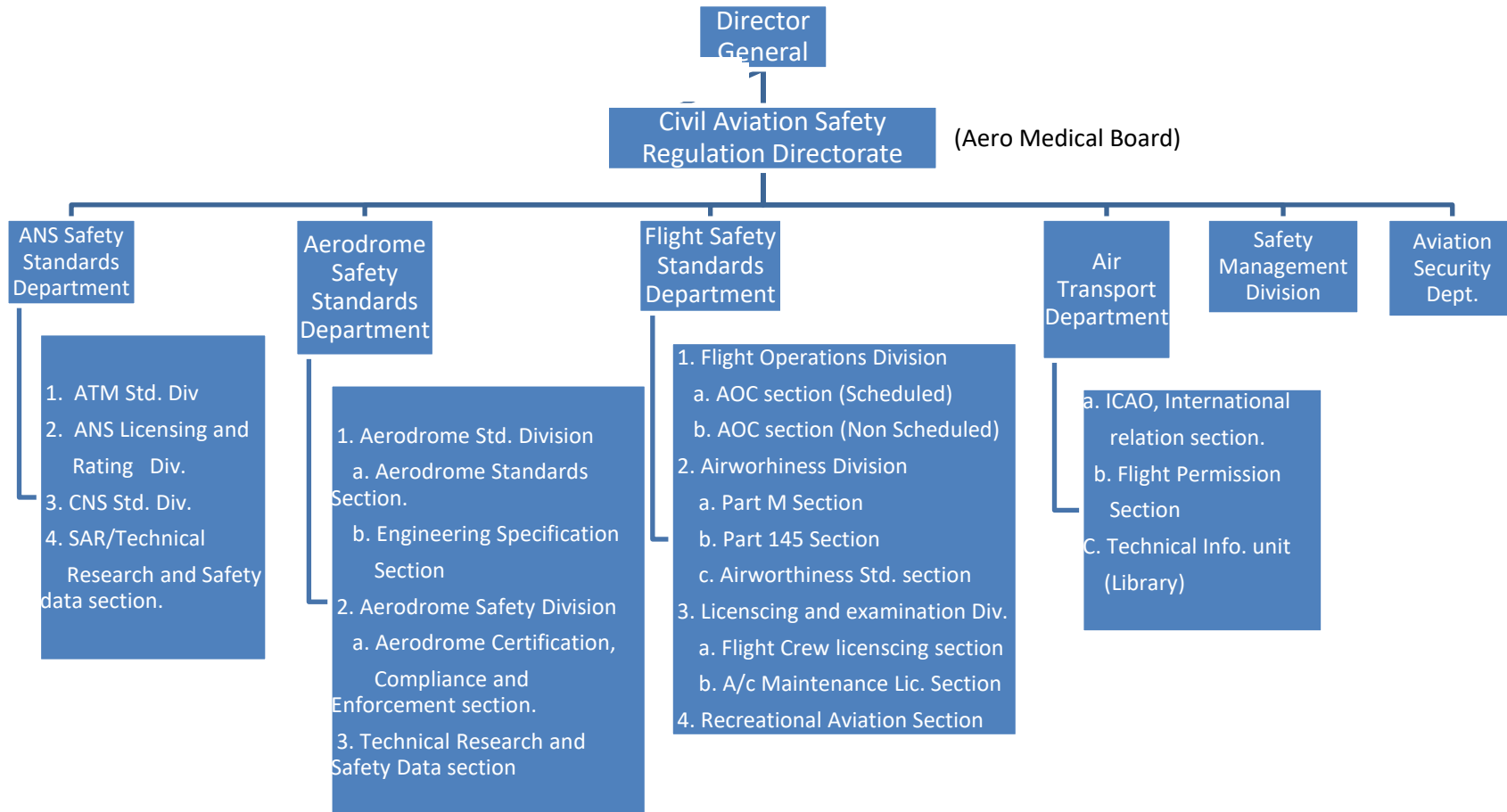
- a. ensuring that CAAN management is accountable for the delivery of the highest level of safety performance;
- b. establishing an effective SSP that will identify and manage state safety risks to reduce the likelihood of a fatal accident occurring;
- c. working collaboratively with our aviation industry on safety issues to encourage the sharing of safety information;
- d. ensuring that CAAN has sufficient resources and competent personnel to discharge their safety responsibilities;
- e. carrying out surveillance and oversight activities in a targeted and proportionate manner, supported by analyses based on safety risks;
- f. promoting a positive safety culture within CAAN and across the whole of the aviation industry;
- g. establishing a just culture in respect of our safety reporting systems to encourage individuals and organisations to report safety issues or concerns;
- h. establishing state safety objectives supported by meaningful Safety Performance Indicators and Targets to continuously improve safety within Nepal; and
- i. ensuring that no information gathered under the SSP or the SMS will be used as the basis for enforcement action, except in the case of gross negligence or willful deviation.

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Director General

Date:

Appendix 2

Organization Structure of State Regulatory System



Appendix 3

Composition of National Aviation Safety Teams (NASTs)

A. NAST- Aeroplane

- | | |
|---|------------------|
| 1. Chief of Flight Safety Standards Department, CAAN | Coordinator |
| 2. Chief of Safety Management Division, CAAN | Member |
| 3. Safety Managers of Operators of Aeroplane in Nepal | Members |
| 4. Manager, Safety Management Division, CAAN | Member Secretary |

B. NAST- Helicopter

- | | |
|--|------------------|
| 1. Chief of Flight Safety Standards Department, CAAN | Coordinator |
| 2. Chief of Safety Management Division, CAAN | Member |
| 3. Safety Managers of Operators of Helicopter in Nepal | Members |
| 4. Manager, Safety Management Division, CAAN | Member Secretary |

C. NAST- Air Navigation Services (ANS)

- | | |
|---|------------------|
| 1. Chief of ANS Safety Standards Dept. CAAN | Coordinator |
| 2. Chief of ATM Standards Division, CAAN | Member |
| 3. Chief of ANS Licensing Rating Division, CAAN | Member |
| 4. Chief of CNS Standards Division, CAAN | Member |
| 5. Chief of SAR/Technical Research and Safety Data Division, CAAN | Member |
| 6. Representative from DAFD | Member |
| 7. Representative from Safety Management Div., CAAN | Member |
| 8. Representative from ATS Safety Office, TIA | Member |
| 9. Representative from ATS/SAR Division, TIACAO | Member |
| 10. Representative from ATM Dept. CAAN | Member |
| 11. Representative from AIM Dept. CAAN | Member |
| 12. Representative from Com. And Nav. Aid. Division, TIA | Member |
| 13. Representative from Surveillance Division, TIA | Member |
| 14. Representative designated by ANSSSD Chief | Member Secretary |

D. NAST- Aerodrome

- | | |
|---|------------------|
| 1. Chief of Aerodrome Safety Standards Dept., CAAN | Coordinator |
| 2. Chief of Aerodrome Engineering Dept., CAAN | Member |
| 3. Chief of Elector-Mechanical Dept., CAAN | Member |
| 4. Chief of Rescue and Fire Fighting Dept., CAAN | Member |
| 5. Representative from Safety Management Div., CAAN | Member |
| 6. Aerodrome Safety Managers, fo all certified aerodromes | Members |
| 7. Manager, Aerodrome Safety Standards Dept., CAAN | Member Secretary |

Frequency of meetings of NASTs shall be as provisioned in Procedure Manual for Safety Management Functions.