ناس افغانستان
NAS Afghanistan

Safety Management Manual

SAFETY MANAGEMENT MANUAL

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DISTRIBUTION LIST

Note:

1. The soft copy of the Safety Management Manual is available on NAS I-portal system. The users are advised to refer to NAS I-portal system for updated version of the manual.

2. Regulatory authorities / external agencies will be circulated with controlled Copy (CD Format) of this manual. The distribution list for controlled copies of this manual will be maintained by NAS Technical Library.

CROSS – REFERENCE MATRIX

Cross - Reference Matrix within SMM

Cross Reference Matrix within SMM gives cross reference of one section of SMM with another section of the SMM. It enables easy tracking for revision incase of any revision to SMM.

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National Aviation Services
Safety Management Manual

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RECORD OF REVISIONS

Issue No.	Date	Revision No.	Date	Incorporated By	Date
1	Dec 2009	0	Dec 2009		

ABBREVIATIONS

ACARS	Aircraft Communications Addressing and Reporting System
ADREP	Accident/ Incident Data Reporting (ICAO)
AEP	Aerodrome Emergency Plan
AHM	Airport Handling Manual
ALARP	As Low As Reasonably Practicable
ALS	Acceptable level of safety
AM	Accountable Manager
AME	Aircraft Maintenance Engineer
AMO	Approved Maintenance Organization
ASR	Air Safety Report
ATA	Air Transport Association of America
ATC	Air Traffic Control
ATCO	Air Traffic Controller
ATM	Air Traffic Management
ATS	Air Traffic Services(s)
CAST	Commercial Aviation Safety Team
CD	Compact Disc
CEO	Chief Executive Officer
Cir	Circular
CMC	Crisis Management Centre
CNS	Communications, Navigation and Surveillance
CSM	Corporate Safety Manager
Doc	Document
DGCA	Directorate General of Civil Aviation Kuwait
EASA	European Aviation Safety Agency
ERP	Emergency Response Plan
EUROCONTROL	European Organization for the Safety of Air Navigation
FAA	Federal Aviation Administration (U.S)
FMEA	Flight Modes and Effects Analysis
FMS	Flight Management System
FOD	Foreign Object Damage
FSF	Flight Safety Foundation
GASP	Global Aviation Safety Plan (ICAO)
GCAA	General Civil Aviation Authority UAE
HAZid	Hazard Identification
HIRA	Hazard identification and Risk Assessment
IATA	International Air Transport Association
ICAO	International Civil Aviation Organization
ISO	International Organization for Standardization
JAA	Joint Aviation Authorities
JAR	Joint Aviation Requirement(s) (JAA)
KPI	Key Performance Indicator
LOSA	Line Operations Safety Audit

MEDA	Maintenance Error Decision Aid (The Boeing Company)
MOH	Ministry of Health
MRM	Maintenance Resource Management
OSH	Occupational Safety and Health
QA	Quality Assurance
QAS	Quality Assurance System
QCAA	Qatar Civil Aviation Authority
R/T	RadioTelephony
SARPs	Standards and Recommended Practices (ICAO)
SDR	Service Difficulty Reporting
SHEL	Software/ Hardware/ Environment/ Liveware
SMM	Safety Management Manual
SMS	Safety Management System(s)
SOPs	Standard Operating Procedures
TEM	Threat and Error Management
TNA	Training Need Analysis
TOR	Tolerability of Risk

DEFINITIONS

Acceptable Level of Safety	The acceptable level of safety is a reference against which safety performance can be measured. Set levels need to be acceptable to the Authority and related to any State safety program, in particular any ALS for Airport/AIS/Airline interface areas; for example, in relation to system hazards that could have outcomes such runway incursions. Acceptable level of safety expresses the safety performance indicator benchmark or alert level(s) of an organization. They are the minimum safety performance deemed acceptable to an organization while conducting their core business functions. They are subject to acceptance by Regulatory Authorities.
Accident	An occurrence associated with the operation of an aircraft which takes place between the time any person boards the aircraft with the intention of flight until such time as all such persons have disembarked, 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 the engine , its cowlings or accessories; or for damage limited to propellers, wing tips, antennas, tires, brakes, fairings, small dents or puncture holes in the aircraft skin; 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 as a fatal injury by ICAO.

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

Aircraft Ground Damage	Any event in which the aircraft sustains damage during ground operations.
Aircraft Incident	Any event not classified as either aircraft ground damage or serious personal injury occurring during ground operations and includes any dangerous or hazardous occurrence.
Acceptable level of safety Damage Rate	Frequency of damage to aircraft on the apron expressed in terms of number of occurrences per 1,000 departures.
Foreign Object Damage	Any damage caused to any part of an aircraft on the apron by a mobile object that is not a piece of ground support equipment (except jet blast damage).
Gap Analysis	A process to compare required resources, such as facilities and systems, and defences against hazards, with those resources and defences that exist. The purpose being to identify where there are gaps to be filled.
Ground Support Equipment	Any motor vehicle or piece of equipment, fixed, mobile or towed, that's use is exclusively for aircraft ground handling operations.

Hazard	Condition, object or activity with the potential of causing injuries to personnel, damage to equipment or structures, loss of material, or reduction of ability to perform a prescribed function. In summary, the damaging potential of an existing or future condition, object or activity.
HIRA	Hazard Identification and Risk Assessment
Incident	An occurrence, other than an accident, associated with the operation of an aircraft which affects, or could affect the safety of operation. A serious incident is an accident involving circumstances indicating that an accident nearly occurred.
Internal Safety Investigations	One of three considerations in the assessment of risk (severity and exposure being the other two). The rate of exposure, or time period exposed to a hazard, can be regarded as another dimension of probability.
Jet Blast Damage	Any damage to an aircraft on the apron caused by jet blast interference from another aircraft.
Mitigation	Measures to eliminate a hazard or to reduce the probability severity of a risk.
Personal Injury	Any event resulting in a fatality or serious injury of a person.
Probability	Likelihood that a situation of danger might occur.
Risk	Risk is the assessed potential for adverse consequences resulting from a hazard. It is the likelihood that the hazard's potential to cause harm will be realized. (The likelihood of injury to personnel, damage to equipment or structures, loss of material, or reduction of ability to perform a prescribed function, measured in terms of probability and severity Is the chance of a loss or injury, measured in terms of severity and probability. The chance that an event can happen and the consequences when it does.

Risk Communication	Risk communication includes any exchange of information about risks, i.e. any public or private communication that informs others about the existence, nature, form, severity or acceptability of risks.
Risk Index	Combined value of Risk probability and severity.
Risk Management	The identification, analysis and elimination (and/or mitigation to an acceptable or tolerable level) of those hazards, as well as the subsequent risks, that threaten the viability of an organization. It comprises of three essential elements: hazard identification, risk assessment and risk mitigation.
Safety	"Safety is the state in which the risk of harm to person or of property damage is reduced to, and maintained at or below, an expectable level through a continuing process of hazard identification and risk management."
Safety Assessment	A particular application of the risk management process to assess a system that is new or about to undergo a major change.
Safety Management System (SMS)	SMS is an organized approach to managing safety, Including the necessary organizational structures, Accountabilities, policies and procedures.
Safety Performance Indicator	Expansions of safety policies and related to safety culture, these lead to a commitment to action as detailed in the SMS process. A key safety measure used to express the level of safety performance achieved in a system.
Safety Performance Target	The expression of an acceptable level of safety for a specific element of the operation, such as procedures, technology, systems or programs, and against which achieved performance can be measured, using Safety KPIs.
Safety Program	A Safety program is an integrated set of regulations and activities aimed at improving safety.

Safety Survey	A systematic mechanism to examine particular organizational elements or the processes used to perform specific operation either generally or from a particular safety perspective. They are particularly useful in assessing attitudes of selected populations. Safety surveys seek feedback from front-line personnel about areas of dissatisfaction and unsatisfactory conditions that may have accident potential.
Service Provider	Any organization certified to provide aviation related services. The term encompasses aircraft operators, maintenance organizations, air traffic service providers and aerodrome operators, as applicable.
Severity	One of three considerations in the assessment of risk (probability and exposure being the other two - the rate of exposure, or time-period exposed to a hazard can be regarded as another dimension of probability).
Unreported Damage	Any damage found on the aircraft that was not previously reported at the time of occurrence.

SECTION 0

CONCEPT OF SAFETY

0. CONCEPT OF SAFETY

In order to understand safety management, it is necessary to consider what is meant by "safety". Depending on one's perspective, the concept of aviation safety would have different connotations.

While the elimination of accidents (and serious incidents) would be desirable, a one hundred percent safety rate is an unachievable goal. Failures and error will occur, in spite of the best efforts to avoid them. No human endeavor can be guaranteed to be absolutely safe, i.e. free from risk. Safety is a relative notion whereby inherent risks are acceptable in a "safe" system.

Safety is increasingly viewed as a management of risks. ICAO has defined the term" SAFETY" in Doc 9859 as follows:

> **"Safety is the state in which the risk of harm to person or of property damages is reduced to, and maintain at or below, at acceptable level through a continuing process of hazard identification and risk management."**

0.1 Statutory Requirements

Safety has always been the overriding consideration in all aviation activities. This is reflected in the aims and objectives of ICAO as stated in Article 44 of the Convention on International Civil Aviation (Doc 7300), commonly known as Chicago Convention, which charges ICAO with ensuring the safe and orderly growth of international civil aviation around the world.

In establishing State's requirements for the management of safety ICAO differentiates between safety programs and safety management systems as follows:

- A **safety program** is an integrated set of regulations and activities aimed at improving safety. ICAO Standard and Recommended Practices (SARPs) (Annexes 6, 11, 14) require that State/Operator establish a safety program to achieve an acceptable level of safety. It will be broad in scope, including many safety activities aimed at fulfilling the program's objectives. A State's safety program embraces those regulations and directives for the conduct of safe operations from the prospective of aircraft operators and those providing air traffic services (ATS), aerodromes and aircraft maintenance. The safety program may include provisions for such diverse activities as incident reporting, safety investigations, safety audits and safety promotions. To implement such safety activities in an integrated manner requires a coherent SMS.

- A **safety management system (SMS)** is an organized approach to managing safety including the necessary organizational structure, accountabilities and policies and procedures. In accordance with the provisions of Annexes of 6, 11 and 14, the State shall require that individual operator, maintenance organizations, ATS providers, and certified aerodrome operators implement the SMS accepted by the State. At the core of the SMS is a formal Risk Management process that identifies hazard and assesses and mitigates risk.

Regulatory authorities, in compliance with ICAO regulations and intentions outlined above have issued Civil Aviation requirements KCASR Part 25 Chapter 7 & GCAA CAR Part X, requiring all airport operators, Air operator Certificate holders, Approved Maintenance Organizations, other Service Providers (Ground Handling, Fuelling companies etc) and organizations providing Air Navigation services to implement Safety Management System.

Ref: NAS/SMM 1.3
ICAO 9859

0.2 Purpose & Scope

The primary purpose & scope of Safety Management System (SMS) to illustrate and applies to aircraft maintenance activities (Part 145) and Ground handling activities being undertaken by National Aviation Services (NAS) handled airports for managing the core business process and all aviation related activities in compliance with all ICAO and regulatory authorities' guidelines on Safety Management including other international standards prescribed by NAS.

This Safety Management Manual (SMM) serves as the primary document to describe our organization's policy on Safety and associated key processes / procedures to achieve and maintain the safety standards as prescribed by the Regulatory authorities, legal requirements and organizational goals.

0.3 Safety Policy

SAFETY POLICY

Safety is the first priority in all our activities. We are committed to implementing, developing and improving strategies, management systems and processes to ensure that all our activities uphold the highest level of safety performance and meet national and international standards.

Our commitment is to:

a) Develop and embed a safety culture in all our aviation activities that recognizes the importance and value of effective safety management and acknowledges at all times that safety is paramount;

b) Clearly define for all staff their accountabilities and responsibilities for the development and delivery of safety strategy and performance;

c) Minimize the risks associated with aircraft operations and associated activities to a point that is as low as reasonably practicable/achievable;

d) Ensure that externally supplied systems and services that impact upon the safety of our operations meet appropriate safety standards;

e) Actively develop and improve our safety processes to conform to world-class standards;

f) Comply with and, wherever possible, exceed legislative and regulatory requirements and standards;

g) Ensure that all staff are provided with adequate and appropriate aviation safety information and training, are competent in safety matters and are only allocated tasks commensurate with their skills;

h) Ensure that sufficient skilled and trained resources are available to implement safety strategy and policy;

i) Establish and measure our safety performance against realistic objectives and/or targets;

j) Achieve the highest levels of safety standards and performance in all our aviation activities;

k) Continually improve our safety performance;

l) Conduct safety and management reviews and ensure that relevant action is taken; and
m) Ensure that the application of effective aviation safety management systems is integral to all our aviation activities, with the objective of achieving the highest levels of safety standards and performance.

Signed: _____
Rashad Sinokrot
President & Chief Executive Officer

Signed: _____
Hassan B. El-Houry
Chief Executive Officer, MENA

0.4 Non - Punitive Hazard Reporting

NAS COMPANY POLICY ON NON-PUNITIVE HAZARD REPORTING

NAS - NON-PUNITIVE REPORTING POLICY

1. NAS is committed to the highest safety standards possible. To achieve this, NAS encourages all employees of uninhibited reporting of all incidents, near misses and occurrences which may compromise the safe conduct of our operations. To this end, every employee is responsible for communicating any information that may affect the integrity of safety. Such communication must be completely free of any form of reprisal.

2. NAS will NOT take disciplinary action against any employee who discloses an incident or occurrence involving safety.
   This policy will not apply to criminal, international or regulatory infractions as well as in the following circumstances.
   - Willful negligence
   - Criminal intent; and
   - Use of illicit substances

3. Safety remains the primary concern and responsibility of each and everyone while carrying out their duties. Management is responsible at all times to ensure the overall implementation of Safety Policy and Procedures within the workplace.

4. Our method of collecting, recording and disseminating information obtained from Safety Reports has been developed to protect, to the extent permissible by law, the identity of any employee who provides flight safety information.

I urge all staff to use our safety programme to help NAS become a leader in providing our customers and employees with the highest level of safety operating environment.

Signed: _____
Rashad Sinokrot
President & Chief Executive Officer

Signed: _____
Hassan B. El-Houry
Chief Executive Officer, MENA

0.5 Objectives

Our commitment to achieve the highest possible safety level is by way of;

a. **Safety Management System**: set up a Safety department to oversee the development and implementation of a Safety Management system and ensure that the application of effective Safety Management system is integral to all our activities;
b. **Safety Culture**: develop and embed a safety culture in all our activities that recognises the importance and value of effective Safety Management and acknowledge at all levels that Safety is paramount;
c. **Safety Accountabilities**: Clearly define for all staff their accountabilities and responsibilities for the development and delivery of Safety Strategy and Performance. Ensure that all staff are provided with adequate and appropriate Safety information in Training, are competent in Safety matters and are only allocated tasks commensurate with their skills;
d. **Risk Management**: Minimizes the risk associated with aircraft operation to a point that is as low as is reasonably practicable and establish & measure our Safety Performance against realistic objectives and/or targets;
e. **Applicability**: Ensure that who ever works for us, works with us, visits us meets appropriate Safety standards;
f. **Resource Allocation**: Ensure that sufficient skilled and trained resources are made available to implement this safety policy and continually improve our Safety Performance;
g. **Safety Oversight**: Conduct and arrange internal as well as External Safety Audits and Management Reviews and ensure that relevant actions are taken.

Ref: Safety Policy
Training policy

0.6 Principles of the Safety Management at NAS:

The following principles will apply to active businesses on the premium owned by NAS:

a. The guarantee of a safe operating environment is the key success factor at NAS
b. In daily operations, "Safety first" will apply. All safety relevant decisions will be taken impersonally and keeping in mind all external business factors;
c. The CEO/ Accountable manager carries the uppermost responsibility for Safety Management
d. The implementation of the safety Management is an executive function of every departmental head
e. The Corporate Safety Manager supports and supervises the responsible lines in terms of operational planning and implementation in accordance with specification of the Safety Management system. He is responsible also for the further development of Safety Management system.
f. Through training and continued education, all employees will be enlightened to perceive and discharge their Safety responsibility in their daily work.

An open and transparent safety culture will be created and promoted so that we can learn from events / occurrences including near-miss.

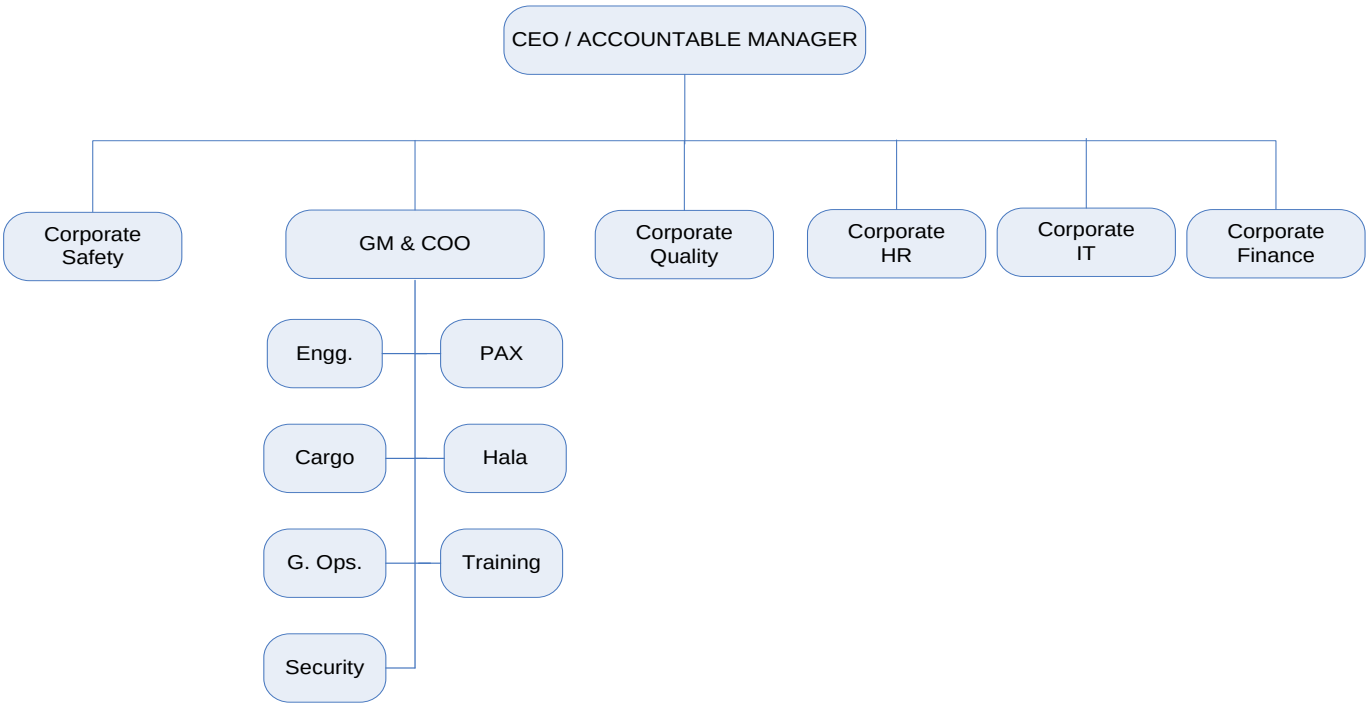
Ref: Safety Policy
Training Policy
Non-Punitive Policy

SECTION 1

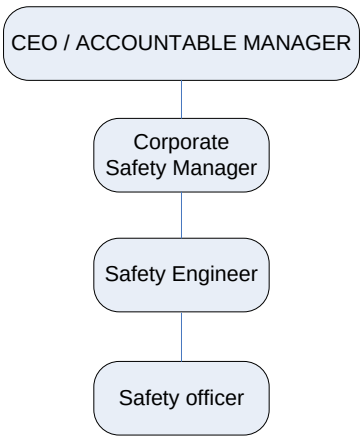
ORGANIZATIONAL STRUCTURE: CORPORATE & SAFETY DEPARTMENT

1 ORGANIZATIONAL STRUCTURE:

Corporate Structure



Corporate Safety Department



Note: In case of lengthy absence (more than 21 working days) of Accountable Manager / Corporate Safety Manager, the following will deputize their functions relating to SMS of NAS.

Accountable Manager	-	GM & COO
Corporate Safety Manager	-	Safety Engineer

1.1 Management commitment and responsibilities

Ref. SMM Section 0.5 & 0.6

1.2 Safety Accountabilities and Responsibilities

CEO/ Accountable Manager of the organization is responsible for the implementation and continuing compliance of the SMS. The CEO/Accountable Manager, with the Senior Management team, sets the standards to promote organization's safety culture and implement SMS in an effective manner. For the purpose of the Safety Management System, the Senior Management team includes GM & COO, Departmental Heads, Safety Manager and QA Manager.

1.2.1 Chief Executive Officer (CEO) / Accountable Manager

Safety Accountability: The CEO is accountable to NAS Management for safe management of services provided by NAS.

Safety Responsibility: The Accountable Manager shall have full responsibility for the SMS and -

- Authorising a Safety Policy that indicates NAS Safety objectives and its commitment to safety.
- Establishment of a Safety Management system at NAS. Assuming the leadership role to ensure commitment throughout the organisation, particularly at the senior management level, to the safety management policy intent and safety management system requirements.
- Corporate authority for ensuring all activities are financed and that resources are allocated to manage the safety risks of the consequences of hazards that threaten the capabilities of the organisation;
- Full authority for ensuring adequate staffing levels. Ensuring that NAS executives and staff are aware and held accountable for their safety performance and:
- Direct responsibility for the conduct of the organisation's affairs;
- Final authority over operational matters; and
- Final responsibility for all safety issues. Ensuring that NAS safety management system and operational performance are evaluated for effectiveness on a regular basis.

1.2.2 General Manager (GM) & Chief Operations Officer (COO)

Safety Accountability: The GM & COO is accountable to the CEO for the safe and efficient operational management of the services provided by NAS.

Safety Responsibility: In discharging this responsibility, the GM & COO is responsible for

- Ensuring adequate resource requirement for the design, implementation and administration of a safety management system

- Continuously promote the safety policy to all Operational staff and demonstrate their commitment to it. Assuming the leadership role to ensure the commitment throughout the operations departments to the safety management policy intent and safety management system requirements
- Ensuring that operations department managers and staff are aware of safety guidelines and are held accountable for their safety performance;
- Ensuring provision of adequate level of emergency services of NAS in association with concerned Authorities;
- Ensuring provision of adequately trained and competent manpower to ensure safe operations;
- Ensuring adequate liaison/co-ordination between various partners and other stakeholders including the Regulatory authorities for safe and efficient aircraft operations; and

1.2.3 Corporate Safety Manager

The Corporate Safety Manager is responsible for and is the focal point for the development, administration and maintenance of an effective SMS.

Corporate Safety Manager is accountable to CEO for-

- Maintenance of the Safety policy and Safety Management System on behalf of the Accountable Manager;
- Establishing Safety standards;
- Facilitate the risk management process that should include hazard identification, risk assessment and risk mitigation;
- Oversee hazard identification systems; and
- Monitor any corrective action required in order to ensure accomplishment;
- Provide half yearly reports on safety performance;
- Maintain safety documentation;
- Establishing a system for safety management education and safety awareness among staff;
- Provide independent advice on safety matters;
- Advise Senior Managers on safety matters; and
- Assist Line Managers by providing advice and assurance relating to safety issues and performance: internal, external and international safety initiatives and requirements
- Be involved in occurrence/accident investigations;
- Establishing a safety audit and surveillance system;
- Effective interface with Regulatory Authority
- Establishing industry liaison on safety matters; and
- Establishing safety relations with local and international bodies

Safety Responsibilities: In discharging these accountabilities, the Corporate Safety Manager is responsible for

- Developing and maintaining a Safety Management Policy;

- Establishing and maintaining a safety management system including arrangements for identifying, reporting, tracking and correcting safety issues and for the initiation of preventive action where necessary;
- Establishing adequate safety Guidelines and publishing them to all users;
- Undertaking safety audits of all operational and maintenance units and corporate aspects of safety management;
- Undertaking ongoing review of safety management system to evaluate its effectiveness in ensuring that improvements are made where required;
- Overseeing the performance of NAS's safety management activities and providing advice on potential improvements to safety performance resulting from Safety Committee decisions.
- Reviewing and reporting on compliance with safety management policies, plans, systems and procedures and regulatory arrangements and standards; ensuring safety issues are reported in a timely manner to the NAS Management;
- Designing, developing and managing an effective audit program directed towards safe operations/activities with the highest risk exposure at the Airport;
- Designing, developing and managing an effective surveillance program in co-ordination with Corporate QA manager
- Ensuring that Departmental managers and staff are aware of and held accountable for their safety performance; (Ref: NAS/SMM Sec 4)
- Ensuring that Safety Department staff members and NAS staff are trained, qualified and competent to discharge their safety related obligations,
  (Ref: NAS/ Training Need Analysis)
- Developing and promoting safety management training across NAS
- Ongoing review of the interface between NAS, and Regulatory Authorities, and other aviation organisations and ensuring improvements are made where required.

1.2.4 Head - Human Resources

Safety Accountability: The Head - HR is accountable to the CEO for supporting Safety Management through;

- Developing personnel policies, personnel management and placement of personnel most suited for the task and having the correct attitude towards the operational safety;
- Career planning and management of performance appraisal records taking into consideration each employee's safety track records;
- Creation of review of manpower requirements (recruitment, training and counselling) in keeping with NAS's overall Safety Performance;
- Implementation of aviation safety related government policies with respect to general administration matters like restrictions on duty hours etc.

Safety Responsibility: In discharging this accountability, the Head- Human Resources (HR) is responsible for:

- Ensuring that safety considerations are given the foremost priority in decisions involving personnel management;
- Ensuring that the application of the explicit safety management policy and procedure in accordance to the NAS's Safety Management system within the HR department;
- Ensuring that any safety issues are reported in a timely manner to the Department of Aviation Safety;
- Ensuring that all HR department executives and staff are aware of, and held accountable for, their safety performance;
- Ensuring that all HR department executives and staff are trained, qualified and competent to discharge their safety related obligations;
- Ensuring that management of human resources is appropriate to facilitate safe operations.

1.2.5 Department Head / Managers

Safety Accountability:

- Accountable for ensuring the application of an explicit Safety Management system i.e. Management policies, Processes & Procedures in accordance with NAS's Safety Management System;

Safety Responsibilities:

- Ensuring acceptance and overview of any residual risk or hazard, and their associated control, that are identified within the department functions/activities, in accordance with the procedures contained in NAS's Safety Management Manual (Ref: NSF/SOP -16)
- Overseeing the safety and Operational performance of Daily operations at NAS;
- Ensuring that safety issues are reported immediately but not exceeding the next working day to the Safety Department;
- in a timely manner to the Safety Department;
- Ensuring that all staff are aware of and held accountable for their safety performance;
- Ensuring that all Supervisors and staff reporting to them are trained, qualified and competent to discharge their safety related obligations;
- Ensuring that fitness for service including any necessary safety assessment has been declared and accepted by the responsible authority, in relation the development of all plans, procedures, policies, processes and systems at NAS;
- Ensuring that proper management of human resources as appropriate to facilitate safe operations.

1.2.6 All NAS personnel

All NAS personnel have the following safety responsibilities:

- To comply with relevant safety requirements and procedures outlined in NAS Safety Management Manual (SMM) and other NAS Corporate Manuals;
- To comply with department manuals, standard operating procedures, circulars, directives, bulletins, instructions and notices;
- To apply system safety measures as required by safety management procedures and instructions;
- To provide valuable inputs to the Safety Department of any safety occurrence or system failure and to identify and report any situation of potential risk or concern affecting system safety via one of the following means:

  - Report directly to Corporate Safety Manager / Safety officer or their supervisor;
  - Via team meetings;
  - Submitting either an Occurrence report or a confidential report;
  - Supporting as and when the safety audits occur;
  - Supporting safety investigations as and when they occur.

1.3 NAS Safety Program

The NAS safety program to comply with requirements of relevant statutory authorities and/or customer airlines to prevent the operational accidents and incidents as a minimum include the following, but not limited to:

- NAS Personnel to report operational hazards, deficiencies and areas of concern;
- Reporting of accident and incidents;
- Investigation of accidents and incidents, near misses, irregularities or other non routine operational occurrences that may be precursors of accidents or incident;
- Identification and analysis of operational hazards and potentially hazardous conditions;
- The production of analytical information for use by department managers in the prevention of accidents and incidents;
- Conducting Safety audits/ surveillance activities;
- Safety promotion;
- Safety communication;
- Ensuring significant issues arising from safety program are subjected to regular review by the Senior Management;
- The dissemination of Safety program information to appropriate personnel.

At NAS, Corporate Safety Manager is responsible for managing the performance of NAS safety program and he shall also be responsible for communication and coordination with the regulatory authorities, customer airlines and NAS department managers for effective implementation.

Ref: NAS/SMM – 0.1

SECTION 2

DOCUMENT & RECORD CONTROL

2 DOCUMENT & RECORD CONTROL

2.1 Introduction

Every organization operates according to specific policy, processes, procedures and practices which are generally communicated through written forms, manuals, and other publications. Documentation includes all written material which contains information or records, required to conduct business.

A consolidated documentation to describe the organization's SMS and the interrelationships between its components and elements are essential. Any changes in regulations or legal requirements and standards are required to be tracked and reflected in the organizational documentation and processes to show conformance. These revised procedures and work instructions need to be disseminated to all the staff effectively.

This Safety Management Manual (SMM) serves as the primary document to describe our organization's policy on Safety and associated key processes / procedures to achieve and maintain the safety standards as prescribed by the Regulatory authorities, legal requirements and organizational goals. This section describes the responsibility and method for control of documents and records as part of NAS' Safety Management System.

2.2 Documentation

The documentation associated/interrelated with the Safety Management System includes the following but not limited to:

- Policies
- Operations Manuals
- SOPs
- Check Lists
- Forms
- Standards/ Requirements

2.2.1 Control of Documents

National Aviation Services controls all documents related to the SMS to ensure that they are reviewed, revised as necessary and approved. Only current versions of documents are available to the users and obsolete documents are promptly removed from work places and clearly identified to ensure the integrity of the documents.

2.2.2 Documents Availability

NAS documentation is made available on NAS Share drive/share point

2.2.3 Documentation System Back Up

The documentation system backup on NAS Share Drive /Share Point is done on daily basis by NAS IT Department.

2.2.4 Record Control

Records are defined as "information created, received, and maintained as evidence and information by NAS personnel, in pursuance of Safety Management System.

The records associated with the SMS include the following, but not limited to -

- Occurrence reports (Mandatory as well as Voluntary)
- Risk Assessment
- Safety objectives monitoring plan
- Statistical data of occurrences
- Audit reports
- Minutes/notes of Safety Meetings

All records are kept in a legible, secured, protected, readily identifiable and retrievable condition. The access is restricted for the authorized personnel only.

2.2.5 Retention of Records

Documents relating to safety shall be retained for a period of 24 months.

Ref: ICAO 9859
ICAO Annex 6
EASA/KCASR/CAR Part 145
NAS/MOE
NQA/QSP.001

SECTION 3

SAFETY RISK MANAGEMENT

3 SAFETY RISK MANAGEMENT

Introduction

Safety is a condition in which the risk of harm or damage is limited to an acceptable level. The safety hazards creating risk may become evident after and obvious breach of safety, such an accident or incident or they may be proactively identified through formal safety management programs before an actual safety event occurs. Having identified a safety hazard, the associated risk may be assessed. With a clear understanding of the nature of the risks, a determination can be made as to the "acceptability" of the risks. Those found to be unacceptable must be acted upon.

Safety management is centered on such a systematic approach to hazard identification and risk management with an objective of prevention / minimizing the loss of human life, personal injuries, property damage, and financial, environmental and societal losses.

3.1 Risk Management

The identification, analysis and elimination (and/or mitigation to an acceptable or tolerable level) of those hazards, as well as the subsequent risks, that threaten the viability of an organization.

Risk management is an integral component of Safety management and comprises of three essential elements: hazard identification, risk assessment and risk mitigation. The Risk Analysis Process includes

- Involvement of People
- System Approach to Management
- Analytical 'Process' Approach
- Factual Approach to Decision Making
- Feed Back Loop
- Accountability
- Continual Improvement

Hazard: Condition, object or activity with the potential of causing injuries to personnel, damage to equipment or structures, loss of material, or reduction of ability to perform a prescribed function. A hazard may involve any situation or condition that has the potential to cause adverse consequences.

Risk: The chance of a loss or injury, measured in terms of severity and probability. The chance that something is going to happen, and the consequence if it does is called a risk.

3.1.1 Hazard Identification Process:

A process required to be established and maintained for the ongoing identification of safety hazards. This process shall be applied to both routine and non-routine activities as well as the activities of all personnel having access to the workplace (subcontractors and visitors).

Given that a hazard may involve any situation or condition that has the potential to cause adverse consequences, the concept for hazard in aviation is wide. The following are some examples –

(a) **Design Factors**, including equipment and task design;
(b) **Procedures and operating practices**, including their documentation and checklists, and their validation under actual operating conditions;
(c) **Communications**, including the medium, terminology and language;
(d) **Personnel factors**, such as company policies for recruitment, training and remuneration;
(e) **Organizational factors**, such as the compatibility of production and safety goals, the allocation of resources, operating pressures and the corporate safety culture;
(f) **Work environment factors**, such as ambient noise and vibration, temperature, lighting and the availability of protective equipment and clothing;
(g) **Regulatory oversight factors**, including the applicability and enforceability of regulations; the certification of equipment, personnel and procedures; and the adequacy of surveillance audits; and
(h) **Defenses**, including such factors as the provision of adequate detection and warning systems, the error tolerance of equipment and the extent to which the equipment is hardened against failures.

Hazards may be recognized through actual safety events (accidents or incidents), or they may be identified through proactive processes aimed at identifying hazards before they precipitate an occurrence. In practice, both reactive measures and proactive processes provide an effective means of identifying hazards.

3.1.2 Risk Assessment and mitigation processes

(i) Risk assessment: Risk is the assessed potential for adverse consequences resulting from a hazard. It is the likelihood that the hazard's potential to cause harm will be realized. ***Risk assessment*** involves consideration of both the probability and the severity of any adverse consequences; in other words, the loss potential is determined. In carrying out risk assessments, it is important to distinguish between hazards (the potential to cause harm) and risk (the likelihood of that harm being realized within a specified period of time). The risk assessment matrix tool shall be used for prioritizing the hazards most warranting attention by assessing the probability of the risk causing harm or damage and severity of the nature of adverse consequences if the event does occur.

Risk Index / Factor = Probability of risk x Severity of risk

Note: While undertaking risk assessment, the statistical data of incidents, accidents, injuries, aircraft property damage etc within NAS may be used for computation of probability and severity. Where necessary, statistics from external agencies, undertaking similar operations/activities of NAS, will be used as a guide. This includes IATA, Flight Safety Foundation etc.

(ii) Risk acceptability: Based on the risk assessment, the risks can be prioritized relative to other, unresolved safety hazards. This is critical in making rational decisions to allocate limited resources against those hazards posing the greatest risks to the organization. Having used a risk matrix to assign values to risks, a range of values may be assigned in order to categorize risks as acceptable, undesirable or unacceptable.

These terms are explained below:

- ***Acceptable*** means that no further action needs to be taken (unless the risk can be reduced further a little cost or effort).
- ***Undesirable*** (or **tolerable**) means that the affected persons are prepared to live with the risk in order to have certain benefits, in the understanding that the risk is being mitigated as best as possible.
- ***Unacceptable*** means that operations under the current conditions must cease until the risk is reduced to at least the *Tolerable* level.

(iii) Risk Mitigation: Where risk is concerned, there no such thing as absolute safety. Risks have to be managed to as low as reasonably practicable (***ALARP***). This means that the risk must be balanced against the time, cost and difficulty of taking measures to reduce or eliminate the risk. When the acceptability of the risk has been found to be *Undesirable* or *Unacceptable*, control measures need to be introduced – the higher the risk, the greater the urgency. The level of risk can be lowered by reducing the severity of the potential consequences, by reducing the likelihood of occurrence or by reducing the exposure to that risk. The optimum solution will vary depending on the local circumstances and exigencies. In formulating meaningful safety action, an understanding of the adequacy of existing defenses is required.

Defenses can be categorized into two types, namely:

a) ***Physical defenses***. These include objects that discourage or prevent inappropriate action, or that mitigate the consequences of events.
b) ***Administrative defenses***. These include procedures and practices that mitigate the probability of an accident (for example, safety regulations, SOPs, supervision and inspection, and personal proficiency).

The process of hazard identification and risk management shall mandatorily be completed and documented for each safety relevant activity to be undertaken and a copy of the same be provided to the safety department for records and reference. A representative of the NAS Safety Team must be included as a member for the group conducting this assessment. The Safety department would maintain a log of each Hazard identified associated Risk and its mitigation measures, if any, proposed to be

implemented. Whenever mitigation measures are proposed their implementation are required to be audited and a periodic review of their effectiveness as well as possibility of better mitigation strategies shall be undertaken.

3.1.3 Implementation Procedure

Refer to the Risk Management Flowchart

The Six -step assessment procedure:
The risk assessment is to be carried out as per the following seven-step process

Step 1: Development of a complete description of the system to be evaluated and of the environment, in which the system is to be operated

Step 2: Identification of hazards associated with the operation or task

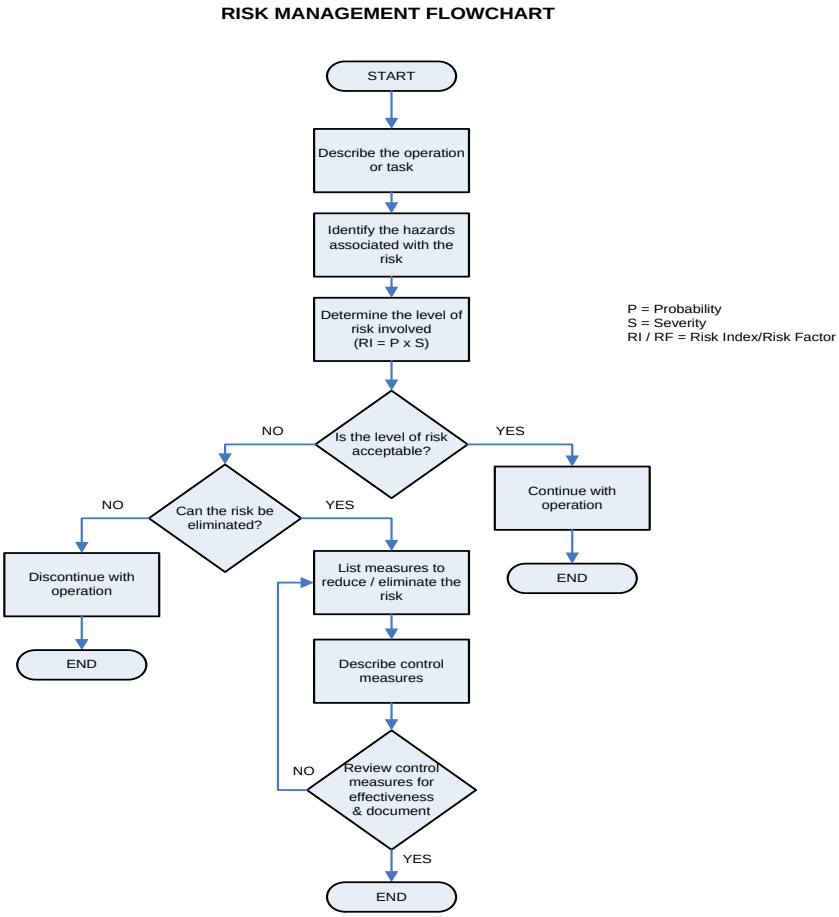
Step 3: Determine the level of risk involved

Step 4: Evaluation of risk

Step 5: Mitigation of risk

Step 6: Development of safety assessment documentation

RISK MANAGEMENT FLOWCHART



Organizational Procedure: All departments shall ensure –

- Arrangements are implemented for the identification of hazards and the assessment of associated risk to health and safety.
- Following the identification of hazards, measures are taken to reduce risk to the lowest level reasonably practicable or comply with the relevant statutory provisions.
- The significant findings of assessments are recorded, maintained and effectively communicated by using Hazard Identification and Risk Assessment form (NSF - F19).
- Sufficient resources are made available for effective implementation of this policy.
- The central guidance on methods of hazard identification, assessing risk and general principles of prevention of risk shall be used.

- Awareness among employees to report any hazards they have identified to the appropriate manager by using Occupational Hazard & Near Miss Reporting form NSF - F18.
- The periodic monitoring of performance against these standards.

This policy & associated central procedure should be revised as necessary at least every year and also following each critical incident by the respective departmental manager in association with the safety department.

3.1.4 Revision Process:

Hazard Identification and risk assessment are not static processes. They need to be performed whenever:

1. A major organisational change is being planned
2. Whenever a new Project is embarked which results in a new Policy, Process, Procedure, or Product.
3. The organisation is undergoing rapid expansion or contraction;
4. Introduction of new equipment or facilities is being considered;
5. Existing equipment is being decommissioned;
6. Introduction of new procedure is being planned
7. Existing procedures are being revised;
8. Changes to key personnel are taking place;
9. There are changes to the legislation that the Organisation operates

Whenever any of the above events is contemplated at NAS handled Airports, the concerned departmental Head shall conduct hazard identification and risk assessment and submit the filled forms for approval to Corporate Safety Manager. The entire process, including the mitigation measures proposed to be implemented, is to be documented and signed off by at the concerned Departmental Head and Corporate Safety Manager. Where necessary, senior management will be involved in determining acceptable level of risks.

The results of hazard identification and risk assessment will be taken into consideration while setting SMS objectives.

3.1.5 Corrective Action plans

Corrective action plans are those actions taken to implement risk control measures developed following a risk assessment. They should capture the output of the risk management process and translate risk mitigation requirements into safe operating conditions or procedures.

Ref: NSF/SOP 016

3.2 Reporting Processes

3.2.1 Introduction to Reporting System

Safety management systems involve the proactive and reactive identification of safety hazards. Accidents investigation reveal a great deal about safety hazards; but fortunately, aviation accidents are rare events. They are, however, generally investigated more thoroughly than incidents. Research leading to the 1:600 Rule showed that number of incidents is generally greater than the number of accidents for comparable types of occurrences. The casual and the contributory factors associated with incidents may also culminate in accidents. Often, only good fortunes prevent an incident from becoming an accident. Unfortunately, these incidents are not always known to those responsible for reducing and eliminating the associated risks. This may be due to the unavailability of reporting system, or people not being sufficiently motivated to report incidents.

a. Need for Occurrence reports

Knowledge derived from accidents/incidents can provide significant insights into hazard. Occurrence reporting system should not just be restricted to accidents/incidents but should also include all hazards and near-misses, i.e. unsafe conditions that have not yet caused an accident/incident. Data from such reports facilitates an understanding of the causes of hazards, helps to define intervention strategies and helps to verify the effectiveness of interventions. Depending on the depth to which they are investigated, incidents can provide a unique means of obtaining first-hand evidence on the factors associated with mishaps from the participants. Incidents data can also be used to improve operating procedures, and display and control designs, as well as to provide a better understanding of human performance associated with all aviation & associated activities.

b. Statutory requirements

ICAO and Regulatory Authorities require NAS to establish an occurrence reporting system to facilitate the collection of information on actual and potential safety deficiencies.

In addition, the personnel are encouraged to submit voluntary occurrence report which, facilitate collection of information that may not be captured by a mandatory occurrence reporting system, which

- is non-punitive and;
- Affords protection to the source of the information

3.2.2 Occurrence Reporting

a. Mandatory Occurrence Reporting

It is mandatory to report any accident/ incident/ near miss involving an unsafe or potentially unsafe, occurrence or condition, irrespective of whether it involves injury or

property damage or not. The report is to be submitted to the Safety Department as soon as possible after the occurrence but in any case not later than 24 hrs after the occurrence.

It is mandatory to report the following occurrences:

- Bird strike of an aircraft;
- Failure of Lighting systems in the Aerodrome & NAS facilities;
- Failure of any facility or procedures used in airside operations;
- Collision between moving aircraft or vehicles or any other ground equipments;
- Collision between vehicle or vehicles and GSE;
- Fuel Spillage;
- Apron jet blast incident;
- Breaches of airside driving rules resulting in hazards to aircraft;
- Any incident of fire which either necessitates use of fire extinguishers or causes failure of any equipment or facility or disturbs smooth flow of air traffic of passenger or visitors;
- Any incident that has jeopardised safety of passenger/ public and was avoided being an accident only by exceptional handling or by good fortune;
- Any mandatory occurrence events required to be reported by Regulations/NAS customers.

All factual information associated with the occurrence of airside operational accidents/incidents shall be recorded and submitted in the form NAS/HS-105. The occurrences related to aircraft maintenance shall be recorded and submitted in the form NAS/QA/001.

b. Voluntary Reporting:

The Occupational Hazard & Near Miss Report form NSF-F18, or in any other format the user finds it more suitable, may be used to submit other reports. The person reporting, at own discretion, may or may not disclose his/her identity.

3.3 Confidentiality of Safety Report

At NAS, confidentiality of the report is guaranteed. This will be achieved by de-identification i.e. by not recording any identifying information of the originator. The identity of the reporter will never be disclosed.

3.3.1 Safety Incident Recall Meeting

Each Departmental Head at NAS is expected to hold regular departmental "Safety Incident Recall" meetings, as appropriate. The purpose of these meetings is to ensure that even minor incidents which have an implication on safe Working Environment, and which may otherwise go unreported, are recalled, reported and acted upon. This system helps to promote a positive and non- punitive safety culture. The minutes of this meeting are to be forwarded to Corporate Safety Manager who would screen the reported incidents for those required to be brought to the notice of the management.

In any case, a feedback would be provided to each department on the action taken (or the reasons for not taking any) on the incidents reported. The Departmental Heads may, at their discretion or on request, choose not to report the names of the personnel reporting safety incidents.

3.3.2 Handling Occurrence Reports

The Occurrence reports received will be handled with absolute confidentiality as far as the names and identities are concerned. The reports, which are mandatory to be transmitted to Regulatory Authorities, would be transmitted and followed up with a brief investigation report, wherever applicable.

In any case, each report would be investigated, analyzed and entered in a database. A trend projection and analysis of contributing factors would be carried out and feedback provided to the management concerned and relevant authorities. Based on the above analysis, the need to review or reassess any safety measure will be evaluated, documented and acted upon accordingly.

In order to ensure build-up of user confidence in the system, a feedback to the reporting agency or employee on what action, if any, was taken on the report will be given. It is important to remember that this feedback is even more important when no action was taken since in the absence of any visible action, the user may loose confidence in the system and stop reporting matters altogether.

In the event, the report was anonymous, this feedback may be circulated in the form of a notice board entry containing a brief statement of the problem and action taken to resolve the same without referring to the fact that the same was consequential to the anonymous report.

Ref: Safety Policy
Non-punitive Policy
NAS/MOE 2.18
PIM 7.3, 7.4
Reporting Accidents or Near Misses NSF/SOP 001
Occupational Hazard / Near Miss Reporting System NSF/SOP 015
Occupational Hazard / Near Miss Reporting Form NSF-F18
Accident / Incident Form NAS/HS-105
Occurrence Report Form NAS/QA/001
Job Description (JD)

3.4 Internal Safety Investigations

This process involves the study or analysis of a safety significant event. It will be applied following an incident or accident, although it could also be triggered by the identification of a safety/security hazard. The sole objective of this activity is prevention and not to apportion blame or liability. For the investigation of accident and/or Serious Incidents AHM 653 may be used as a guidelines and for the aircraft maintenance related errors, MEDA may be used.

NAS employees are responsible to take all reasonable measures immediately to protect the evidence until the arrival of the Investigation Authority at the scene whenever accidents/ serious incidents occur at a place under their jurisdiction. Arrangements must be made for guarding of the wreckage including the preservation, by photographic or other means of any evidence, which might be removed, effaced, lost or destroyed.

In the event of an airside occurrence which is directly related to the aircraft, the necessary investigation will be conducted as per regulatory requirements and customer airlines.

Investigation of all accidents and incidents shall be carried out by Safety Department in associated with the concerned departments to find out the root causes and contributing factors. This should include human, organizational and other factors. The corrective and preventive action after investigating any occurrences (incidents / accidents / near miss / reported hazards) would include, but not be limited to

- Engineering modification
- Change in Operating procedures
- Corrective Training
- Supervision/Monitoring
- Briefing
- Counseling
- Re-evaluation of personal competency
- Communication of lessons learnt for increasing the awareness of all concerned staff by any means such as circulars/bulletins/training

The data base of the Accidents/incidents and also trend projections will be maintained by Safety Department to review safety performance over a period and also to measure the effectiveness of the corrective/preventive actions initiated previously. This will also enable to initiate additional appropriate corrective & Preventive measures for continuous improvement of the safety performance.

3.4.1 Submission & Retention Period of investigation Reports

All accident/incident investigation reports shall be forwarded to concerned departments/customer airlines and regulatory authorities as applicable. The retention period of the accident/incident investigation reports is 2 years from date of closure or as required by Regulatory Authorities / customer Airlines which ever is more.

SECTION 4

SAFETY ASSURANCE

4 SAFETY ASSURANCE

Safety Assurance is a process that ensures safety performance is measured through the monitoring of established safety indicators, reviewed through inspections and audits periodically, and when triggered by changes in any activity of the organization.

4.1 Safety Performance monitoring and measurement

4.1.1 Performance monitoring and measurement

It is a process to identify and select measurable parameters, collect data related to them, and track and compare this information over time. It is the mechanism which enables to determine whether actions/measures taken to improve safety in the organization are working (or not) and to what extent these efforts are successful. The overall goal is to measure the safety health of NAS as an organization so that weaknesses can be identified and dealt with before accidents happen.

The process established by NAS may include any or all of the following:

- occurrence reporting (Mandatory/Voluntary);
- safety reviews including trending of data, Key Performance indicators;
- safety audits / other surveillance activities; and
- surveys - safety surveys aimed to examine particular elements or processes of a specific operation and may involve the use of checklists, questionnaires and informal confidential interviews. Survey information is subjective and should therefore be verified before any corrective action is initiated, but may provide an inexpensive source of safety information.

4.1.2 Safety Performance Indicators, Targets and Requirements

In any system, it is necessary to set and measure performance outcomes in order to determine whether the system is operating in accordance with expectation, and to identify where action may be required to enhance performance levels to meet the expectation.

The relationship between acceptable level of safety, safety performance indicator, safety performance targets and safety requirement is as follows:

- acceptable level of safety is the overarching concept,
- safety performance indicators are the measures/ metrics used to determine if the acceptable level of safety has been achieved,
- safety performance targets are the quantified objectives pertinent to the acceptable level of safety; and
- The safety requirements are the tools or means required to achieve the safety targets.

In practice, the concept of acceptable level of safety is expected by two measures/

metrics i.e. safety performance indicators and safety performance targets implemented through various safety requirements.

Safety performance indicators are a measure of the safety performance of the organization. Safety performance indicators established by NAS may include the following, but not limited to –

- Compliance to Regulations & International Standards
    - Number of Accidents/Incidents
    - To reduce the number of findings per external audit by X% over the next Y year(s)
    - Percentage of Safe operation (Incident free operation)
    - Number of Fatalities/Major/Minor injuries per 1000 flights handled/departures
    - Aircraft Damage per 1000 flights handled/departures
    - Number of incidents resulting property damage

Safety performance targets (sometimes referred to as goals or objectives) are determined by considering what safety performance levels are desirable and realistic for an organization. Safety targets should be measurable, acceptable to stakeholders and consistent with SMS.

To achieve the safety performance indicators and safety performance targets, NAS has laid down safety requirements in terms of Manuals, the operational procedure and comprehensive safety programs.

The achievement of this shall be evaluated by the Corporate Safety Manager in consultation with the concerned Manager as a part of Safety Performance Review Program. This assessment shall be taken into consideration for evaluating the performance of each department. In case, any department is found deficient in efforts in achieving the safety targets, the same would be discussed with the concerned Manager to identify the reasons for appropriate action and a time frame will be decided by the Corporate Safety Manager to make good the deficiency. It is important to note that establishing acceptable level(s) of safety for the safety program does not replace legal, regulatory or other established requirements, nor does it relieve NAS from it's obligations towards compliance of safety and other related provisions.

4.1.3 Audit

Introduction

Audits are one of the principal methods for fulfilling safety performance monitoring functions. They are core activities of the Safety Management system. External as well as Internal audits serve as a means for monitoring the effectiveness of performance of Integrated Management systems.

The NAS Corporate Quality and Safety Departments shall arrange for internal audit for the Management systems encompassing all the activities undertaken by NAS and the sub-contractors of NAS.

This section focuses on the requirement, planning, conduct and follow-up of such audits, whether conducted by internally or by external auditors employed for such purpose.

Safety Audits

Safety Audits will be conducted to ensure that:

- The structure of the SMS is sound in terms of appropriate levels of staff compliance with approved procedure and instructions and a satisfactory level of competency and training to operate equipments and facilities and to maintain their levels of performance:
- Equipments performance is adequate for the safety levels of the services provided;
- Effective arrangements exists for promoting safety, monitoring safety performance, and processing safety issues and;
- Adequate arrangements exists to handle foreseeable emergencies;

Safety Audits will be conducted regularly, following a cycle that ensures each functional area is audited as a part of NAS's plan for evaluating overall safety performance. Safety audits will entail a periodic detailed review of safety performance, procedures and practices of each department with safety responsibilities. Thus in addition to an organization-wide audit plan, a detailed audit plan will be prepared for each individual department

Safety Audits go beyond just checking compliance with regulatory requirements and conformity with organization standards.

Checklists, standards, regulatory requirements and Standard Operating Procedures will be used to undertake the audit in sufficient detail in order to ensure that all intended tasks and functions are covered. The extent and elaboration of the checklists will depend on the size and the complexity of the activity being audited.

Trained and qualified auditors **who are not in a conflict of interest in the areas** being audited would perform audit functions.

The audit will include review of previous audit results, processes, procedures, analyses, inspections, trainings etc and the audit team shall asses whether the procedures in use are appropriate and whether there are any work practices that could have unforeseen safety consequences.

Following an audit, a monitoring mechanism will be implemented to verify the effectiveness of any necessary corrective action. Follow-Up audit would concentrate on aspects of the operations where the need for corrective action was identified.

Apart from Regular audits, surveillance by means of spot checks, un-scheduled audits and inspections would be carried out to monitor compliance to regulatory requirements, standards and Standard Operating Procedures.

The results of the safety & Quality program would be communicated to all concerned and also reviewed as a part of Management Review with an aim for continuous improvement. The records pertaining to audits shall be preserved for a period of 2 years from the closure date of the related audit finding.

Reference: NQA/QSP.011
NAS/MOE 3.3

4.2 The Management of Change

The Management of Change is a formal process that identifies external and internal change that may affect established processes and services. The existing risk management process of NAS should be utilized to ensure that there is no adverse effect on safety. Changes that can introduce new hazards and could impact the appropriateness and effectiveness of any existing risk mitigation and should be reviewed.

Ref: NAS/SMM 3.1.1
NAS/SMM 3.1.4

4.3 Continuous Improvement of the Safety Management System

4.3.1 Continuous Improvement is more an attitude than a process. Continuous improvement of the NAS SMS is achieved by review of all those actions following every inspection, audit, assessment, review and specifically the Management Review.

It includes –

- determining the immediate causes of below-standard performance and their implications in the operation of the SMS; and
- rectifying situations involving below-standard performance identified through safety assurance activities.

4.3.2 Continuous Improvement may be also be achieved through output of all NAS SMS processes, i.e. -

- Proactive evaluation of facilities, equipment, documentation and procedures through safety audits and surveys;
- evaluation of an individual's performance to verify the fulfillment of their safety responsibilities;
- reactive evaluations in order to verify the effectiveness of the system for control and mitigation of risk, e.g. incidents, accidents and investigations; and
- Tracking organizational changes to ensure that they are effective.

Ref: NAS Safety Policy
Management Review NQA/QSP.002

SECTION 5

SAFETY PROMOTION

5 SAFETY PROMOTION

One of the most effective elements of SMS in developing and maintaining a strong safety culture in the organization is Safety Promotion. The tools of safety promotion ensure that safety information and understanding are transferred throughout the organization, and that everyone is made aware of the hazards and risks associated with particular areas of operation.

5.1 Training and Education

NAS Safety and Training policies require all staff shall be trained to maintain a degree of competency and also to discharge safety responsibilities commensuration with each job function. The training methodology adopted by NAS includes –

- Training Needs analysis for each job function
- Identification of Training requirements
- Evaluation of training effectiveness
- Competency assessment

Ref: NAS Training Manual

All staff shall receive safety training as appropriate for their safety responsibilities and also, in particular, all Operational Staff, Managers, Supervisors, Senior Managers and the Accountable Manager shall be trained and be competent to perform their SMS duties.

Ref: NAS Policies Manual
NAS Training Manual
TNA

5.2 Safety Communication

Safety communication is an essential foundation for the development and maintenance of an adequate safety culture.

The objectives of Safety communication are to -

- ensure that all staff are fully aware of the SMS and the organization's safety culture;
- convey safety-critical information;
- explain why certain actions are taken;
- explain why safety procedures are introduced or changed;
- complement and enhance NAS's safety culture; and
- initiate a process for assessing the suitability of safety communication and its effect on the organization.

The modes of communication adopted by NAS include:

- safety policies and procedures;
- newsletters;
- presentations;
- safety notices;
- safety briefing; and
- Informal workplace meetings between staff and the Accountable Manager or Senior Managers.

SECTION 6

SAFETY MEETINGS

6 SAFETY MEETINGS

6.1 Introduction

NAS Safety Management System recognizes the need and strength of participation management and staff at all levels. Towards this end, periodic safety meetings will be conducted as appropriate with an objective of improving NAS Safety Management System. The purposes of these meetings are;

- To enable various departments to exchange ideas and information;
- To allow the concerns of departments to be raised and taken into the account by NAS, with a genuine desire on all sides to resolve any issues that may emerge through agreed voluntary action.
- To determine the immediate causes of below-standard performance and their implications in the operation of the SMS; and
- To rectify situations involving below-standard performance identified through safety assurance activities

These meetings could be in the form of formal & Informal work place meetings, discussions and includes Safety briefings, Operations Meeting, Management Review Meeting and Conformity Team meetings etc.

The Management Review meeting will be conducted once a year. Corporate QA Manager in coordination with Corporate Safety Manager will hold the management review meeting under the chairmanship of CEO/ Accountable manager.

The minutes of these meetings should be recorded and circulated to all appropriate personnel by the section/Department who conducts such meetings. Informal meetings, briefings and discussions should be recorded and communicated by E mail, Read & sign etc.

6.2 Airside Safety Committee Meeting

NAS Line Managers, Corporate Safety Manager/Safety officer and appropriate staff would participate in Airside safety Committee meetings or any other safety forums as and when convened by Airport Authorities / Customer Airlines with an objective of improving safety and security of operations at the Airport.

The terms of reference for the Airside Safety Committee may include, but not be limited to:

- Investigation, discussions and publications of incident and accident occurring at the airside;
- Promote best working practices;
- Review training program;
- Presentation of offences (Comparison of company performances);
- Improve collection, analysis and dissemination of airside safety relevant data;
- Discussion on local safety procedures and guidelines;
- Generation and evaluation of safety suggestions;
- Discussions on forthcoming works programs affecting apron operations.

SECTION 7

EMERGENCY RESPONSE PLAN

7 EMERGENCY RESPONSE PLAN

The Emergency Response Plan and Procedures are laid down in NAS / ERPM (Emergency Response Procedures Manual). The objective of Emergency Response Procedures Manual is to provide guidance to National Aviation Staff (NAS) staff on how to support customer airlines in the unfortunate event of an incident/ accident at Kuwait International Airport (KIA) and any emergencies related to NAS Operation (within NAS premises). This has been compiled in conjunction with the Emergency rules and regulations issued by the Department of Civil Aviation (DGCA) and within the guidelines of the IATA handling manual as well as the customer airline Emergency Response procedures, which shall form the main framework for handling those emergencies.

NAS OCC is designated as the Emergency Response Center for notification to the Regulatory authorities and/or customer airlines and other departments in the event of airside accident/incidents or any emergencies that would affect safety & security of operations.

OCC Contacts: Mobile: 0093 790 300114
Mobile: 0093 789 809627
Email: Naskblocc@nascorporate.com

OCC & Line Manager acts as Emergency Response Officer and is responsible for the development, maintenance and implementation of the NAS Emergency Response Procedures.

Ref: NAS/ERPM
ICAO 9859
NAS/SMM Appendix I – Key Safety Personnel

Appendix I

KEY SAFETY PERSONNEL	
Name	**Designation**
Mr. Hassan El-Houri	CEO / Accountable Manager
Mr. A.V.D.K Ravishankar	Corporate Safety Manager
Mr. Jovito Valencia	OCC & Line Manager