Who we are
A clear vision
To be the preferred supplier of air traffic control, navigation, training and associated services to the African continent and surrounding regions.

An unambiguous mission
To provide safe, orderly, expeditious and efficient air traffic control, navigation, training and associated services.

Overview
ATNS, the Air Traffic and Navigation Services Company of South Africa is the sole provider of air traffic control, navigation, training and associated services within South Africa and is also responsible for a further ten percent of the world’s airspace.

Standing strong with over 850 dedicated, passionate people ATNS strives to continuously provide safe, orderly, expeditious and efficient management of air traffic.

As a globally competitive employer of choice ATNS is committed to diversity and has achieved ranking within the top ten companies in South Africa with regards to female representation at executive levels.

Operating at 21 aerodromes within the country, including OR Tambo, Cape Town and Durban International Airports, ATNS is internationally recognized as one of the top air navigation service providers (ANSP’s) on the globe.

Our services extend beyond air traffic control services into the provisions of vitally important aeronautical information used for all flight planning purposes as well as alert, search and rescue activities, and the maintenance of a reliable navigation infrastructure.

What we do
ATNS’ services extend beyond the familiar Air Traffic Control (ATC) service and include the following:

• Alert, search and rescue co-ordination services
• Management of the flexible use of airspace through the Central Airspace Management Unit (CAMU)
• National slot co-ordination
• Support for special events and special requirements such as test flights, demonstration flights
• Pre-flight information services
• The implementation and maintenance of a terrestrial-based air navigation infrastructure
• ATS Surveillance services for aircraft in distress
• A flight information service outside of controlled airspace
• ATC service at appropriate levels, depending on the airspace of operation
• A flight co-ordination service with adjacent Air Traffic Service (ATS) providers
• Lectures and general ATS awareness training to pilots
• The African Indian Ocean (AFI) Regional Monitoring Agency (ARMA), acting on behalf of the International Civil Aviation Organization (ICAO), is delegated to South Africa and hosted by ATNS

ATNS is also very closely involved in the work of the Civil Air Navigation Services Organization (CANSO). CANSO has been a prime force in the promotion of the separation between ANS regulators and service provision, and is recognized as the principal exponent of customer focused Air Navigation Services.

IATA
We are constantly exploring ways in which we can work together on various projects with our partners.

ATNS entered into a joint venture with IATA for the SADC VSAT and NAFISAT networks. Both ATNS and IATA are the network service providers for the 2 networks. In addition, ATNS works with IATA on various initiatives including RVSM, VSAT II training, WGS-84 and RVSM implementation.
economic and market indicators, including bond yields, market risk premiums, the industry risk profile, cost of debt and ideal gearing levels, as well as factors specifically applicable to the Company.

**ICAO**

As a member State, South Africa is obliged to comply with the SARP’s published by ICAO. As the organisation that has been designated to deliver air traffic and navigation services for South Africa in terms of the Chicago Convention, ATNS participates in various work groups, task forces and panels that are tasked with development and implementation of the Global Air Navigation Plan in the AFI region.

ATNS has further been appointed by ICAO to fulfill the role of the regional monitoring agency for the RVSM in Africa.

As part of our commitment to the development of air navigation services on the African continent, ATNS is steadfast in its support of ICAO and provides advisory specialist services to ICAO where required.

**VSAT**

ATNS and IATA are the joint service providers for the SADC VSAT 2 and NAFISAT networks that cover Southern, Eastern and Northern Africa as well as Saudi Arabia and Yemen. Through the dedicated aeronautical satellite communications network, voice and data communications are provided between the air traffic control centres of 26 States by the two networks.

**Domestic VSAT Networks**

ATNS provides a turnkey solution for the VSAT networks including:

- Network design
- Equipment acquisition
- Equipment installation
- Maintenance of equipment
- Management of networks

The domestic VSAT networks that ATNS implements provide amongst others AFTN, ATS/DS, VHF, radar data, remote monitoring and control services and IP services for WAN.

**Technology**

**Reduced Vertical Separation Minima (RVSM)**

RVSM is an aviation term used to describe the reduction of standard ICAO Conventional Vertical Separation Minima (CVSM) required between aircraft operating between FL290 and FL410 inclusive from 2000FT to 1000FT.

This has effectively increased the number of aircraft that can operate between the above-mentioned levels by an additional six flight levels being introduced. This has been made possible by the increased and proven accuracy of the modern altimeter used in aircraft to determine flight levels.

Only aircraft with the required MASPS and approved by their respective States for RVSM operations are permitted to fly in RVSM airspace. Non-compliant aircraft, excluding State aircraft, are required to operate at or below FL280.

RVSM was successfully implemented on 25 September 2008 throughout Africa.

**Infrastructure**

**Implementation of the advanced surface movement, guidance and control system (A-SMGCS) at ORTIA and CTIA**

**Benefits**

- The A-SMGCS systems will allow ATNS to improve the quality of aerodrome control services provided at ORTIA and CTIA during visual and instrument meteorological conditions.
- The system will facilitate the monitoring and control of suitably equipped aircraft and vehicles on the manoeuvring area and improve operational safety through the provision of tools to monitor possible runway incursions by either aircraft or vehicles.
- The system will mitigate delays due to weather and improve safety at the two airports at times of low visibility such as bad weather and at night.
Implementation of the air traffic flow management tool (ATFM) for the central airspace management unit (CAMU)

Background
The need for a central flow management unit (CFMU) was recognized by ATNS several years ago and as a result of this the central airspace management unit (CAMU) was born. The CAMU has since then carried out strategic, pre-tactical and tactical flow management whilst also managing the flexible use of airspace and the successful implementation of slot allocations. Existing international air traffic flow management best practices were researched and it was found that further specific development was required for the unique South African environment. Hence it was decided to take the best ATFM concepts and to integrate them into the existing SAAATS Eurocat Air Traffic Management System.

This system is unique in that it is the first time that an ATFM system of this type will be fully integrated into an advanced ATM system enabling automated strategic, pre-tactical and tactical ATFM to be carried out.

Benefits
A highly integrated system it will have collaborative decision making capabilities which will ensure that the reasonable requirements of air traffic control, aircraft operators, military aviation and airport operators are considered by the CAMU before an airspace plan is finalized.

- This process also ensures that the South African airspace and airport facilities are optimally used and aircraft trajectories are calculated accommodating the aircraft operator’s requirements.
- Part of the CAMU Program will consist of an ATFM System for strategic, pre-tactical and tactical Airspace Organisation and Management in terms of air traffic flow modelling of specific airspace.
- Tactical management of Arrival and Departure slots at any of the coordinated airports including slot usage statistics.
- Balancing of airspace demand against capacity for any selected airspace or airport in South Africa.
- Optimum rerouting of flight hours around segregated or constrained airspace volumes before the day of operation.

- Collaborative information flow between the Air Traffic Control, Airport Operations and the Aircraft Operators regarding strategic and tactical real time and future use of any airspace and airport situation.
- The project will support Green ATM by ensuring that minimal fuel burn is achieved for the majority of flight hours thereby reducing the amount of green house gas emissions.

Deployment of radar sensors at George and the new airport at La Mercy

Background
ATNS has an ongoing national civil surveillance improvement program. This program has seen the replacement of approach radar systems at East London and Port Elizabeth airports and the upgrading of various en-route surveillance radars. Going forward new surveillance radar systems will be installed at the new international airport at La Mercy and George airport.

- George is used as a diversion airport for Cape Town International and the radar system at George will improve aviation safety by means of positive electronic surveillance of aircraft arriving, departing and operating in the vicinity of George airport.

The environment in which we operate
The Regulating Committee regulates ATNS from an economic perspective. This includes the capping of the company’s tariffs and prescribing minimum service standards. In setting these price caps (CPI-X) and standards, the Regulating Committee considers the air traffic movements, capital expenditure, safety, capacity, and value for money, interests of clients and the long term viability of the Company. Economic regulation is recorded in a Permission which contains conditions within which ATNS must operate.

A Permission lasts 5 years with a review and re-issue in the third year. The last two years of a Permission overlap with the first two years of the next Permission. In estimating a reasonable rate of return for the Company, the Committee has taken into consideration the various...
Products & Services
AIS Documentation

ATNS Aeronautical Information Services (AIS) has the operational and technical capability to provide a professional consultancy and production service in the field of Aeronautical Documentation.

The documentation section has the infrastructure to provide a complete Integrated Aeronautical Information Package (IAIP) to the ICAO Standard, as specified in the ICAO Annex 15 and to the customer’s requirements i.e. Aeronautical Information Publication (AIP) and the Amendment Service, AIP Supplements, Aeronautical Information Circulars (AIC), NOTAM Checklist and Summaries. AIP is compiled in the ICAO three parts format consisting of General (GEN), En-route (ENR) and Aerodromes (AD).

All documents are produced in A4 print master size, with a layout which will accommodate reduction to A5 format without further text manipulation. AIS can provide print master copies to the customer for own printing or if required, arrange for the printing, packaging and delivery of the printed product to the customer for distribution. Information can also be provided electronically.

aXcess AIS - A Document Management System

System aXcess, developed for ATNS AIS by a South African Information Technology company is currently utilized to manage the development and updating of aeronautical data, e.g. AIP, AIP Supplements and AIC’s for ATNS clients.

The system consists of three types of workstations namely, administrator, editor and publisher. Some of the system functionalities include:

- Data-based controlled access
  Each user has to log into the system as an administrator, editor or publisher
- Create/import new AIP’s or AIC’s into the archive and master environments
- Create new revisions of aeronautical documentation, e.g. AIP, AIC etc.
- Retrieve a document from the Archive and Master environment to the Working environment, where the document can be opened, reviewed and edited
- Allocate certain documents to specific users. Other personnel cannot access documents allocated to certain users
- Approve documents and move them back to the Archive and Master environment from the Working environment
- Open, view and edit documents
- View the Status of documents
- Re-allocate documents to other users
- Display a list of specific documents in the Document List Box, which allows the Editor to select and open the document
- Allows the Editor to edit or make changes to documents by means of an editing application (MS Word)
- Save documents and send for approval by the System Administrator
- View the Publishing status of a document
- Print paper documents
- Publish PDF documents with the purpose of viewing on the Web

References:
- Namibia
- Cabo Verde
- Mozambique
- Swaziland
Billing Services

ATNS has the capability and infrastructure to offer billing services to individual States for collection of aircraft’s movement fees from non IATA member airlines, thereby enhancing the States’ financial muscle to continuously maintain the ATM infrastructure. The ATNS billing system allows for setting up a separate user customizable billing environment. The billing system provides for capturing and processing records of aircraft landing and en-route information, in order to bill aircraft approach fees as well as en-route fees.

ATNS offers billing services to service providers such as Régie Des Voies Aériennes, (RVA) in DRC, Namibia DCA and South African Weather Services (SAWS).

The main objective is to ensure that the system is efficient and effective. The billing services model offers the client the option to either choose to send electronic data reflecting aircraft movements to ATNS for generation of invoices or compute the charge and generate its own invoices and forward the electronic invoices to ATNS for collection of fees from airlines.

At ATNS the aircraft movement data is captured into the billing system by the Air Traffic Service Assistants (ATSA’s) using the tower log system.

Components of the Billing System

The Billing System consists of the following three components, data capturing, data transfer and data processing. The aircraft’s movement data that is captured by the Air Traffic Controllers at the airports is used as input data to the billing system for the generation of invoices.

This Billing System was designed to do data correction at the first line of the billing process. Each data entry will therefore be checked to ensure that the data entering the system is valid and in the right format. This component of the billing system is based at ATNS.

All the processes and functions performed by this component of the system are the responsibility of ATNS.
Engineering Services
ATNS undertakes the planning, specification, acquisition and implementation of the South African national aeronautical communication, navigation and surveillance system. Professional consultative services in this respect are offered to other air navigation services providers in support of their national development programmes. The services can be provided on either an hourly basis, a job basis or on a turn key basis. Services available are as follows:

- Communication, navigation and surveillance system design
- Coverage planning and site selection
- Radio frequency planning
- Communication, navigation and surveillance system specification
- Acquisition management services
- Project management services

References:

- Department of Civil Aviation Republic of Namibia:
  Surveillance System planning and specification
- Department of Civil Aviation Republic of Namibia:
  Project Management services in respect of infrastructure upgrade
- Tanzania Civil Aviation Authority:
  VHF radio planning study and Recommendations
- Polokwane International Airport:
  Navigation and Landing aids planning and project management
- Southern African Development Community:
  Planning, acquisition and operation of VSAT services for aeronautical use
- North East African States under the auspices of the East African Office of the International Civil Aviation Organisation:
  Planning of VSAT services for aeronautical use
- International Civil Aviation Organisation Cairo Office:
  Feasibility study for an aeronautical VSAT network for the Middle East region
Flight Procedure Design

The Flight Procedure Design Section has the infrastructure, equipment and expertise to design and verify Flight Procedures and Airspace Development.

The Flight Procedure Design section aims to add value to the operations of clients by designing safe and efficient instrument and non-instrument procedures that will allow optimization of operation capabilities. This service is conducted in accordance with ICAO Standards and Recommended Practices (SARP’s) as complemented by ISO 9001:2000 Quality Standards. ISO 9001:2000 Certification was achieved in 1998, and is maintained.

The department has newly trained procedure designers, who were mentored by National Air Traffic Services (NATS) in the UK. They are qualified and utilize various specialized procedure design software tools to ensure data accuracy and integrity.

Various flight and technical tolerances, as defined by ICAO, are applied to designs in order to ensure safety and to promote efficiency. The final chart product is in compliance with ICAOcharting

The following specific services are provided:

1. Non-precision Instrument Approach Procedures design or verification, including Global Navigation Satellite System procedure (e.g. VOR/DME, NDB, Localizer and GNSS)
2. Precision Instrument Approach Procedure design or verification (e.g. ILS)
3. Standard Arrival Route (STAR) and Standard Instrument Departure (SID) Procedure design or verification
4. Air Route (including RNAV) and Airspace design or verification
5. ICAO Annex 14 Obstacle Evaluations and building restrictions on and in the vicinity of airports
6. Aviation consulting relating to procedure and airspace design

References:

• Namibia CAA
• Cabo Verde Air Navigation Service Provider (ASA)
• Airports Company of South Africa (ACSA)
• Richards Bay Municipality
• Angola (ENANA)
• SA Express Airlines
• South African Civil Aviation Authority (SACAA)
• MTN
• VODACOM
• Lanseria Airport Management
**Training**

The Aviation Training Academy (ATA) utilizes computer-based training (CBT), radar simulators, engineering laboratories as well as 2-D and 3-D aerodrome simulators to the highest industry and safety standards.

Since April 2000, the ATA has proudly trained more than 8365 international and local delegates.

Various training programs are offered to prepare graduates for a successful professional career in Air Traffic Services and Engineering Support.

**The ATA:**

- Offers comprehensive and cost effective quality training in all disciplines associated with air traffic management
- Presents all listed training courses as an entity or as refresher training
- Is committed to upholding aviation safety standards, legislation and practices
- Rigorously trains and upgrades safety knowledge and skills
- Puts people and safety first
- Complies to world class quality training – ISO 9001: 2000 certified
- Subscribes to ICAO Standards and Recommendations Practices (SARPS) and Requirements
- Is accredited to various domestic and international institutions
AIR TRAFFIC MANAGEMENT CAREERS & QUALIFICATIONS

CAREER PROGRESSION

Aeronautical Information Services/Management (AIS/M)  
Air Traffic Services  
Air Traffic Control

Aeronautical Information Services/Management (AIS/M) Assistant  
Air Traffic Services Assistant (ATSA)  
Air Traffic Services Assistant (ATSA)

Aeronautical Information Services/Management Officer  
Air Traffic Services Assistant (ATSA) – (Rated in Assistant & Coordinator)  
Rated Air Traffic Services Assistant (ATSA) – (Assistant & Coordinator)

Senior Air Traffic Services Assistant (ATSA) – (Rated in Flight Information Service, and/or Aerodrome Flight Information Service, and/or Clearance Delivery)  
Air Traffic Controller (ATC) – Aerodrome Control

Senior Air Traffic Controller (ATC) – Approach Procedural Control

Principal Air Traffic Controller (ATC) – Area Radar Control  
Principal Air Traffic Controller (ATC) – Approach Radar Control

ATS Instructor and Management Positions
AT/AIM Core Content

Requirements:
Learners will have successfully completed secondary level education with English language, mathematics and preferably geography as subjects passed.

Course Content:
• Life skills
• ICAO Organisation, Planning Processes, Procedures and Documents
• Aerodrome Physical
• Navigation and Maps
• Meteorology
• Avionics
• Aviation legislation
• Aircraft Identification, performance and Principles of Flight
• Instrument and Approach Procedures
• ATS Messages and Practical
• ATC/AIM Theory and Procedures
• Aviation Legislation

Flight
• Instrument and Approach Procedures
• ATS Messages and Practical
• ATC/AIM Theory and Procedures
• Aviation Legislation

Aeronautical Information Services

Qualification:
Aeronautical Information Services
Air Traffic Control Service Assistant

Aerodrome Control

Requirements:
Participants on this course will have satisfied the relevant authorities of their aptitude and abilities for air traffic control and will have successfully completed the ATSA courses.

Course Content:
• ATC General (Reinforcement)
• ATC Theory and Procedures
• Aerodrome Control
• Air Law (Update only)
• Navigation (ELECTIVE)
• Meteorology (ELECTIVE)
• Search and Rescue procedures
• Technical
• ATM/cns
• Simulated Operational Training

Qualification:
Aerodrome Controller

Approach Procedural and/or Radar Control

Requirements:
Participants will have successfully completed the Aerodrome Control Course (ATNS participants will also have successfully completed an entrance examination, based on all subject matter covered during ATSA courses and the Aerodrome control course).

Course Content:
• General ATC Procedures (Reinforcement)
• Approach Control Procedures
• Separation Standards
• Radar Control and Surveillance Theory
• Radar Technical
• ATM/cns
• Meteorology
• Approach Procedural Simulated Exercises
• Approach Radar Simulated Exercises

Qualification:
Approach Procedural and/or Radar Controller

Area Procedural and/or Radar Control

Requirements:
Participants on this course will have successfully completed the Aerodrome Control Course (ATNS participants will also have successfully completed an entrance examination, based on all subject matter covered during ATSA courses and the Aerodrome Control course).

Course Content:
• General ATC Procedures (Reinforcement)
• Area Control Procedures
• Separation Standards
• Radar Control and Surveillance Theory
• Radar Technical
• CNS/ATM
• Meteorology
• Area Procedural Simulated Exercises
• Area Radar Simulated Exercises

Qualification:
Area procedural and/or Radar Controller

Air Traffic Service Refresher Training Courses

Refresher training is presented to qualified air traffic controllers in the following disciplines:
• Aerodrome Control
• Approach Procedural Control
• Approach Radar Control
• Area Procedural Control
COURSES OFFERED:

ENGINEERING CAREERS, VOCATIONAL CATEGORIES AND QUALIFICATIONS

CAREER PROGRESSION

Selected learner

Engineering Technician Learner Training

Trainee Engineering Technician

Trainee Engineering Technician (ATM Systems)

Trainee Engineering Technician (Operations and Intermediate level in particular discipline)

Engineering Technician (ATM Systems)

Engineering Technician (Operations level training in associated three disciplines)

Shift Competent Engineering Technician

Specialist (Communication or Navigation or Radar or Display)

Technical Support Management/Management and Engineering Training Instructor Positions

TRAINING MATRIX

Communication  Navigation  Surveillance

General Support Training Courses

Introduction Training Courses  Introduction Training Courses  Introduction Training Courses
Concepts Training Courses  Concepts Training Courses  Concepts Training Courses
Systems/Equipment Training Courses  Systems/Equipment Training Courses  Systems/Equipment Training Courses
Engineering Technician-Communications Category

Courses:
- Introduction to Air Traffic Communication Systems
- Transmitter & Receiver Systems Concepts
- Telecommunication Systems Concepts
- Voice Communication Systems Concepts
- VHF TX: Park air 1500/2100 RX - Equipment
- AIS/AFTN Systems Concepts

Engineering Technician-Navigation Category

Courses:
- Introduction to Air Traffic Navigational Systems
- CVOR Systems Concepts
- DVOR Systems Concepts
- DME Systems Concepts
- ILS Systems Concepts
- ILS: Thomson 381 - Equipment
- NDB: Southern Avionics - Equipment
- DRDF: Fernau - Equipment
- CVOR: Thales 431 - Equipment
- DVOR: Thales 432 – Equipment
- DME: Thales 435 – Equipment

Engineering Technician-Surveillance Category

Courses:
- Introduction to Air Traffic Radar Systems
- PSR Systems Concepts
- SSR Systems Concepts
- Surveillance Data Processing Systems Concepts

General Support Category

Courses:
- Electronic Test Equipment
- Cables & Cable Jointing
- Data Communications
- Networking
- Advanced Networking
- Introduction to Satellite Communication Systems
- Computer Skills
- Systems Maintenance Theory
- Introduction to ATM Operational Concept
- Digital Techniques Practice
- Practical Project Management
- Antennas

Please note:
The above Engineering courses can be packaged to suit the individual client’s needs.

For all courses certain prior course requirements apply.

Further Aviation Management Professional Development Qualifications

Specific prescribed entry qualification and experience requirements have to be met prior to acceptance to these training programmes.

ATNS is an accredited training institute for IATA training courses.

IATA/ATNS Training Programme

Target group:
Applicable to all aviation management professionals

Qualification offered:
International aviation management training programmes offered by the International Air Transport Organization Training and Development Institute (IATA/ITDI):
- Diploma in Air Navigation Systems Management
- Diploma in Civil Aviation Management
- Diploma in Airport Management
- Diploma in Human Performance/Project Management
- Diploma in Safety Management in Civil Aviation
- Diploma in Airline Operations (in conjunction with South African Airways)

ICAO GSI Training Programme

Careers:
Flight Operations Inspector
Airworthiness Inspector

Qualification offered:
International Civil Aviation Organization (ICAO) in conjunction with SACAA and ATNS Government Safety Inspector (GSI) Programmes:
- ICAO GSI Operations: Air Operator Certification Course
- ICAO GSI Airworthiness Certification Course
- ICAO GSI Train-The-Trainer Course
The SADC VSAT Network has been operational since 1998 and has eliminated all communication deficiencies in the SADC region. This network fulfills the region’s communication requirements in terms of the ICAO Africa Indian Ocean (AFI) plan. It has succeeded in integrating a regional communications network, contributing to increased communication allowing for greater safety on air traffic movements and financially sustainable.

ATNS is the network service provider and cost recovery for capital and operational costs is through a special tariff agreement with IATA. Connectivity with the ASECNA states was achieved in October 2002 and in 2003 and 2004 Burundi and Rwanda joined the network.

The following states are also part of the network:

- Angola
- Democratic Republic of Congo
- Malawi
- Mozambique
- South Africa
- Tanzania
- Botswana
- Lesotho
- Mauritius
- Namibia
- Swaziland
- Zambia

The SADC VSAT II network became operational on 1 December 2007. The replacement of the network was necessitated by technological advancements, user requirements, as well as the fact that the SADC VSAT equipment had reached its “end of life”. The deficiencies of the network further required that the network be replaced.

In 2001, ATNS and IATA were appointed the network service providers for the VSAT network in the North Eastern Africa region. The network is known as the NAFISAT network. The network is made up of:

- Djibouti
- Eritrea
- Libya
- Saudi Arabia
- Somalia
- Uganda
- Yemen
- Egypt
- Ethiopia
- Kenya
- Seychelles
- Sudan
- Tanzania

The network became operational on 1 April 2008.

ATNS works closely with ASECNA, the operator of a VSAT network in West Africa known as AFISNET. Both the SADC VSAT II network and the NAFISAT network are interconnected with AFISNET through Congo, Ghana, Chad, Niger, Senegal and Côte d’Ivoire.

ATNS also implements domestic VSAT networks that provide amongst others AFTN, ATS/DS, VHF, radar data, remote monitoring and control services and IP services for...
WGS-84 Survey

ATNS Aeronautical Information Service (AIS) has the operational and technical capability to provide professional consultancy and surveying service in the field of Aeronautical WGS-84 surveying. This service is conducted in accordance with ICAO Standards and Recommended Practices (SARP’s) as complemented by ISO9001: 2000 Quality Standards. ISO 9001:2000 Certification was achieved in 1998, and is maintained.

What is WGS-84?
The World Geodetic System of 1984 (WGS-84) is a mathematical model or an ellipsoid that represents the shape and size of the earth. The WGS-84 ellipsoid has its centre coincident with the centre of gravity of the earth, and is known as an earth centered earth fixed system. WGS-84 has become the international standard for positioning and navigation in aviation.

Why Conduct a WGS-84 Survey of Aerodromes and Navigation Aids?
The contracting states of ICAO agreed that WGS-84 is implemented by 1 January 1998. This statement appears as standard in the relevant ICAO Annexes.

In view of ICAO’s adoption of the WGS-84 system as the Standard geodetic reference frame, it will be necessary to convert all aeronautical co-ordinate data into the WGS-84 reference system by this date. Many States have not been able to comply with this requirement by 1 January 1998; however efforts are ongoing to convert all the required data to WGS-84 as soon as practicable.

The WGS-84 survey supports the implementation of the global ATM/CNS (Air Traffic Management/communications, navigation and surveillance) which includes the GNSS (Global

ATNS and the Implementation of WGS-84
ATNS has the capacity and has for the past 10 years been conducting aerodrome and navigational aid surveys to the ICAO WGS-84 Standards and Recommended Practices (SARP’s).

All survey data is quality controlled utilizing an electronic data quality tool set, and quality assurance is applied in accordance with ISO 9001: 2000 standards.

References
• International Civil Aviation Organisation (ICAO)
• Regie des Aeroports du Rwanda - Rwanda
• Empresa National de Aeroportos E Seguranca Aerea EP (ASA) - Cape Verde
• North-West Province Government
• Rand Mutual Hospital
• Airport Company of South Africa (ACSA)
• Richards Bay Municipality
• FOSKOR Limited
• SIA Solutions
• South African Civil Aviation Authority (SACAA)
• Namibia CAA
• Madagascar CAA
• Ivory Coast CAA
• Kenya CAA
• Angola ENANA
• Gambia
• Grintek Electronics
• Lanseria Airport Management
• United States FAA
• Burundi
• Guinea - Bissau
• Uganda
• Matjhabeng Municipality
• Ethiopia
• Maldives
• Eritrea
• Djibouti
• United Nations
• Democratic Republic of Congo (DRC)
Safety & Regulation Oversight
Safety and Regulation Oversight

Overview

The Safety and Regulation Oversight Section is responsible for the oversight of the ATNS Safety Management System (SMS) encompassing Air Traffic and Technical Services including adherence with all relevant Regulations within ATNS pertaining to operational matters.

Abilities

The Safety and Regulation Oversight Section is responsible inter alia for:

• Monitoring of safety standards in ATNS
• Advise the ATNS Executive on matters relating to safety
• Co-operating with the SACAA on development of Regulations and Technical Standards pertaining to ATNS
• Receiving information and responding to client queries
• Preparing monthly safety reports for the Executive, the Board and the Service Standard Report for the Economic Regulator
• Preparation of working papers and providing accompanying research

• Client Liaison relating to safety matters in order to provide a service to clients and to develop their knowledge of ATNS, as well as provide feedback to users and the SACAA
• Safety management policy development
• Safety management organization
• Safety performance monitoring which includes the recording and analysis of ATS Occurrence Reports
• Safety Event investigation oversight
• Technical investigation
• Conducting safety audits at ATSU’s both ATS and Technical
• Safety assessment
• Safety promotion
Standards Assurance
The standards and safety assurance programme in ATNS was established prior to the inception of ATNS in 1993. The programme originated in the Directorate of Air Traffic Services, Division of Civil Aviation and was adopted and developed by ATNS during the commercialization process.

ATNS currently operates a mature safety and standards management system with well documented requirements, comprehensive investigations, standards and safety audits.

The Seventh AFIRAN Meeting accepted the ATNS standards and safety programme as a model for the region to follow. Representatives from ATNS attend the AFI Safety Enhancement Team activities, the CANSO Safety Workgroup activities and have delivered papers and lectures internationally regarding standards, safety and quality management within the ambit of aviation and ATM.

Risk Management
ATNS’s Risk Management System was implemented effectively from the 4th of August 2006 and has been formulated in order to evaluate, mitigate and prioritise
Security Management
The ATNS Security Directive was formulated in compliance with Company requirements, South African Security Wing initial requirements and National Intelligence Agency specifications. This policy was implemented in August 2007 and has been formulated in order to evaluate, mitigate and prioritise identified security requirements within the organisation. The policy was re-issued in

Quality Management
The ATNS Quality Management System (QMS) is now a mature system functioning within the Company since the initial ISO 9001:2000 certification in August 1998. SGS recertification is conducted every 3 years and SGS surveillance audits are conducted annually.
Careers at ATNS

The SHR department is responsible for the implementation of the recruitment processes within ATNS and also to ensure that the Policies and Procedures are adhered to in this regard. ATNS utilizes reputable and highly recognized interview techniques as well as applicable assessments in sourcing and attracting highly qualified prospective employees.

The interview technique used is the Competency Based Interview style and there are various types of assessments used i.e. PPA (Personality Profile Analysis), SHL Assessments, Elsa Tests.

The following are some of the careers available at ATNS within the different departments:

**Service Delivery**
- Service Assistants
- Air Traffic Controllers
- Senior Air Traffic Controllers
- Principal Air Traffic Controllers
- Airspace Efficiency
- AIM clerks
- Flow Management Specialists
- Central Airspace Management Specialists
- Technicians
- Engineering Technicians
- Project Engineers
- Systems Engineers

**Air Traffic Management/Communication**

**Navigation & Surveillance and Planning**
- Aeronautical Information Services Specialists
- Air Traffic Management Specialists
- Human Factors Specialists
- Investigations and Standards Specialists
- Surveyors
- Flight Procedure Designers

**Aviation Training Academy**
- ATS Instructors
- Engineering Instructors
- Simulator Support Officers
- Course Administrators
- Instructional Designers

**Business Development**
- Project Managers
- Marketing Specialists
- Communication Specialists
- Business Development Managers
- Corporate Relations Officers

**Strategic HR**
- HR Development Specialists
- Employee Wellness Practitioners
- HR Generalists
- Employee Relations Practitioners
- HR & Payroll Administrators
- Organisational Development Practitioners

**Finance**
- Financial Accountants
- Management Accountants
- Creditors and Debtors Specialists
- Procurement Officers

**Information Technology**
- End User Supporters
- Business Systems Supervisors
- Network Infrastructure Personnel
- Project Management Specialists
Bursary Programmes

ATSA Bursary Programme

ATNS is the sole air traffic control and navigation services provider (ANSP) in South Africa and provides all of the training for career opportunities in air traffic control and related services at our training academy (ATA) in Johannesburg.

ATNS is proud to provide bursaries in order for motivated and interested people to train to become Air Traffic Controllers (ATSA’s).

An ATSA performs a support function to an Air Traffic Controller and is an important member of the team who ensures the safe, orderly and expeditious travel by air of millions of passengers per annum.

Bursary overview

The bursary programme facilitates an opportunity to perform the necessary studies and to obtain the relevant exposure necessary in order to qualify as an ATSA.

The study bursary provides each bursar with an opportunity to conduct their studies at the ATA and includes a practical exposure period. The following is offered as part of the bursary:

- Transport to the guest lodge in Johannesburg at the beginning of the training programme and returning at the end of the programme (if the bursar is from outside Gauteng)
- Cost of tuition
- Accommodation, on a sharing basis, at a guest lodge arranged by the ATA
- Transport to and from the ATA and operational control centre for practical exposure, as per study and practical requirements
- Breakfast, lunch and dinner daily
- A monthly allowance
- 10 days of non-academic activities as determined by the study programme co-ordinators

After the initial part of the course, when bursars are posted to an operational control center for operational exposure learning, bursars may elect to take care of their own accommodation, meals and transport. ATNS will then provide a monthly allowance to cover these expenses. Bursars must ensure that they are on time for their classes and shifts. Punctuality will be strictly enforced.

Bursary requirements

Bursars are required to pass all of their modules, courses and examinations in order for the bursary to continue. Should a bursar not successfully complete an examination or assessment, but achieve more than 50%, he/she may be given the opportunity to rewrite or be re-assessed. Should he/she still not be successful, the bursary will be terminated.

Once a bursar has successfully completed the bursary programme, he/she will have graduated with an ATSA license rating qualification. The next step in becoming an ATSA is to validate this rating on operational positions.

In order to validate the ATSA rating, ATNS may offer the bursar a six-month fixed term contract to complete the necessary operational work to validate the ratings. In terms of the bursary contract, the successful bursar accepts this contract. During this time, the bursar receives a salary and is no longer eligible for company accommodation, transport etc. medical aid and pension are not provided as benefits during this contract period.

Should a bursar choose not to undertake the fixed term contract, ATNS may claim the investment made to date by the company. During the fixed term contract the bursar must complete all of the necessary validations required to perform solo duties as an ATSA. The bursar’s performance is continually monitored during this time and feedback is provided on an ongoing basis.

Within one month of the end of the fixed term contract, the line manager will take a decision regarding offering the bursar permanent employment as an ATSA with ATNS. The offer of permanent employment will include an ATSA salary and full benefits including medical aid, pension etc. On acceptance of the offer, the ATSA becomes a fully fledged member of the ATNS air traffic control team. He/she will be obliged to work for ATNS for one year in terms of the bursary agreement.

Minimum Requirements

- Preferably 18 years or older
- Grade 12 with Maths and English HG D or SG C or have achieved a minimum level 4 and above
- South African Citizen
- ATC Trainee Bursary Programme

ATNS is proud to provide bursaries for motivated and interested ATC trainees to train to become Air Traffic Controllers (ATC’s). An ATC is an important member of the team who ensures the safe, orderly and expeditious travel by air of millions of passengers per annum by
ensuring that aircraft are separated from one another and ensuring an organised flow of air traffic.

The ATC Trainee programme consists of 3 phases, namely the Bursary Scheme (bursary contract), the ATC Learnership (under fixed term contract) and ATC aerodrome course and validation phase (under fixed term contract). The study bursary provides each bursar with an opportunity to conduct their studies at the ATA and includes a practical exposure period of phase one of the ATC Trainee programme.

Phase 1: Bursary Scheme
The following is offered as part of the ATC Trainee bursary:

- Transport to the guest lodge in Johannesburg at the beginning of the training programme and returning at the end of the programme (if the bursar is from outside Gauteng)
- Cost of tuition
- Accommodation, on a sharing basis, at a guest lodge arranged by the ATA for the duration of the core content course
- Transport to and from the ATA as per study requirements for the duration of the core content course
- Breakfast, lunch and dinner daily for the duration of the core content course
- A monthly allowance payable at the end of each month
- 10 days of non academic activities as determined by the study programme co-ordinators

The bursary arrangement will cease upon successful completion of the ATS rating course. Bursars must ensure that they are on time for their classes and shifts. Punctuality will be strictly enforced. Bursars are required to pass all of their modules, courses and examinations in order for the bursary to continue. Should a bursar not successfully complete an examination or assessment, but achieve more than 50%, he/she may be given the opportunity to rewrite or be re-assessed. Should he/she still not be successful, the bursary will be terminated.

Phase 2: ATC Trainee
Once a Trainee has successfully completed the bursary phase, Phase 1 of the ATC Trainee training programme, he/she will have graduated with an ATSA license rating qualification. The next step to becoming an ATC is to validate this rating on operational positions. The following is offered as part of

In order to validate the ATSA rating and continue with the ATC Trainee training programme, ATNS may offer the bursar:

- An eighteen month fixed term contract. In terms of the bursary contract, the successful bursar accepts this contract
- During this time, the bursar receives a salary
- No longer eligible for company accommodation, transport etc.
- Medical aid and pension are not provided as benefits during this contract period
- ATC Trainees should ensure that adequate measures are taken to provide for these

Should a bursar choose not to undertake the fixed term contract, ATNS may claim the investment made to date by the company.

Responsibility of Bursar/Trainee:
During the fixed term contract the bursar must complete all of the necessary validations required to perform solo duties as an ATSA. The ATC Trainee’s performance is continually monitored during this time and feedback is provided on an ongoing basis. During this phase the trainee will be required to sign an Aerodrome training contract. This agreement will cover the aerodrome exposure, rating training and validation and oblige the individual to work for ATNS for five years after aerodrome validation.

In the event that an ATC Trainee is not successful in the aerodrome selection process, or fails the aerodrome related courses, or fails the aerodrome validation training, the trainee will not qualify to continue with the ATC Trainee bursary programme and ATNS may claim the investment made to date by the company. The trainee may apply for other positions e.g. ATSA should vacancies exist and if he/she meets the selection criteria. The fixed term contract will end after the eighteen months or upon successful validation of the Aerodrome rating and subsequent offer of permanent employment, depending on which milestone is reached first.

Phase 3: ATC
The offer of permanent employment as an Air Traffic Controller (ATC) will include an ATC salary in line with the Air Traffic Services (ATS) salary matrix and full benefits including medical aid, pension etc. On acceptance of the offer, the ATC Trainee becomes a fully fledged member of
Phase 3: ATC

More information

Bursars are required to pass all of their modules, courses and examinations in order for the bursary to continue. Should a bursar not successfully complete an examination or assessment, but achieve more than 50%, he/she may be given the opportunity to rewrite or be re-assessed. Should he/she still not be successful, the bursary will be terminated.

Once a bursar has successfully completed the bursary programme, he/she will have graduated with an ATSA license rating qualification. The next step in becoming an ATC is to validate this rating on operational positions.

Aeronautical Information Management Bursary

ATNS is proud to invite dynamic and enthusiastic individuals to apply to be part of the Aeronautical Information Management (AIM) bursar programme.

Aeronautical information management is the skeletal and vascular system of the Air Traffic Management body. Opportunities exist to grow and develop skills in the following careers within Aeronautical Information Management:

- ATS flight-planning
- Communications
- NOTAM
- Static and dynamic data management
- Publication of Integrated Aeronautical Information Packages
- Aeronautical flight procedural design and charting
- Aeronautical Surveying

This bursar programme facilitates the initial training and exposure necessary to take the first steps along an interesting and ever evolving journey in the field of aeronautical information management as an Aeronautical Information Management Clerk.

Bursary overview

The study bursary provides each bursar with an opportunity to conduct their studies at the Aviation Training Academy (ATA). The following is offered as part of the bursary:

- Cost of tuition for the ATS Core content and Human Factors Courses
- Accommodation, on a sharing basis, at a guest lodge arranged by the ATA
- Transport to and from the ATA, as per study and practical requirements
- Breakfast, lunch and dinner daily
- A monthly allowance
- 10 days of non academic activities as determined by the study programme coordinators

After the successful completion of the initial course at the ATA, ATNS may offer the bursar a six months fixed term contract to complete the necessary operational on the job training in either Flight-planning or Aeronautical Communications. In terms of the bursary contract, the successful bursar accepts this contract. During this time, the bursar receives a salary and is no longer eligible for company accommodation, transport etc. medical aid and pension are not provided as benefits during this contract period. Learners will be working in a shift environment and must ensure that they are on time for their shifts.

AIM students now become permanent employees and do not qualify for the next phase of exposure offered on the ATSA contract. After the initial course, core content course, when bursars are posted to an operational control centre for operational exposure learning, bursars may take care of their own accommodation, meals and transport. ATNS will then provide a monthly allowance.

Bursary requirements

Bursars are required to pass all of their modules, courses and examinations in order for the bursary to continue. Should a bursar not successfully complete an examination or assessment, but achieve more than 50%, he/she may be given the opportunity to rewrite or be re-assessed. Should he/she still not be successful, the bursary will be terminated.

Bursars are required to pass all of their modules, courses and examinations in order for the bursary to continue. Should a bursar not successfully complete an examination or assessment, but achieve more than 50%, he/she may be given the opportunity to rewrite or be re-assessed. Should he/she still not be successful, the bursary will be terminated.

Minimum Requirements

- Preferably 18 years or older
- Grade12 with Maths and English HG D or SG C or have achieved a minimum level 4 and above
- South African Citizen