Human Resources Remains a Priority

The Air Traffic and Navigation Services Company of South Africa has not been immune to the challenge that faces air navigation service providers across the globe, i.e. the challenge of recruiting and retaining specialist air traffic service staff.

Finding and Keeping the Best

Within ATNS, the recruitment and retention of staff has gained momentum. The Managing Director of ATNS personally conducted approximately 96 hours of interviews to understand the challenges being faced by air traffic service staff, as well as their reasons for leaving ATNS. This culminated in a number of initiatives and policy changes aimed at improving the workplace climate, as well as the retention of staff. Amongst others, a new maternity policy was introduced, the salary mapping process was implemented, a new rostering tool was acquired, a five-year incentive scheme was introduced, station allowances have been improved, the target number of days off has been brought in line with international best practice, a new management structure has been implemented within the operational environment, and a new scale of working hours was implemented with the technical support staff during the year.

A further challenge currently facing ATNS is the transition to new equipment. We are in the process of installing state-of-the-art technology, which will certainly see a change in work patterns, more specifically a reduction in air traffic controller workload over the long term. The short term challenge however, is to switch to the new system after technical and air traffic service staff have been properly orientated and trained, with minimal disruption to service delivery. Staff requirements have been adjusted in order to allow for the necessary training on the system and international controllers are being brought in to assist over the transition period.

Recruitment of specialised personnel continues to receive priority attention. Our objective is not only to get the staffing mix right, but also to achieve staffing levels of 150% in key staffing areas. We are extremely serious about creating and retaining a sustainable base of highly qualified and skilled personnel.

Within the framework of our employment equity plan, we have critically reviewed our recruitment and selection processes to increase the accuracy of placements through the use of specialised selection tools. Recruitment and selection activities for air traffic service staff will in future be driven by focused resources at our Aviation Training Academy (ATA) under the leadership of a Recruitment, Selection and Placement Committee reporting directly to the ATNS Board. Hand in hand with this, our career-marketing initiative, Ha se Bokhutlo, meaning ‘the sky is not the limit,’ has rendered some results in creating awareness amongst previously disadvantaged groups.

After the consideration of best practice in the area of air traffic control training processes, a new structure and approach to training was developed, which will change the face of career progression and experience within the system at ATNS in line with best practice.
Celebrating and Rewarding

Over the last year, our staff has managed - through dedication and flexibility - to operate with an impressive safety record and minimum service delivery interruption.

Acknowledgement of their efforts and hard work in this pressured and changing environment is vital to us. This year, in a revised reward and recognition programme, we celebrated the achievements of our staff at a gala awards evening held in each of our Northern and Southern regions. Over and above special awards made to staff in recognition of their long service to ATNS, individual and team awards were presented for achievement and performance. This was the first occasion that the extended ATNS family came together to celebrate and share in each other's contribution to the company.

Celebrating our successes is important. ATNS uses every opportunity to let staff know how important they are and make the public aware of their valuable contribution to the country. Last year we again celebrated the International Day of the Controller, National Aviation Day, as well as International Civil Aviation Day.

ATNS maintains a healthy relationship of negotiation and consultation with the Guild of Air Traffic Controllers (GATCSA), as well as the Association of Avionicians of South Africa (AASA).

Our Future Leaders

From the outset of the commercialisation process, ATNS recognised that the successful commercialisation of the company depended on the creation of a culture of delivery and service excellence amongst its staff. Leadership development and commercial training is an ongoing process within ATNS and spans the entire scope of the company. This year, much emphasis was placed on developing our leaders for the future. ATNS embarked on an internal Leadership and Commercial Development Programme, the first step of a focused leadership development process intended to create, stimulate and develop the future leaders and change agents for ATNS. The programme involved the identification of leadership potential within the company, succession planning, talent mapping, as well as identifying the critical skills, knowledge and experiences that are essential to ensure sustained leadership competence and enhanced performance.
10 May 1994, proudly displaying the South African flag, a military helicopter on its way to the Inauguration ceremony of Nelson Mandela at the Union Buildings in Pretoria.

Approximately 75% of aviation activity in the SADC sub-region involves South African airspace, which has the densest air traffic on the continent. ATNS is responsible for 22,000,000 km² of airspace and a large proportion of Africa’s air traffic.

South Africa has assumed an active role on the global aviation stage.

A year of active and challenging interaction with the global community culminated in the exciting election of South Africa to the International Civil Aviation Organisation (ICAO) Council in Montreal, which is responsible for shaping policy affecting the global aviation arena. ATNS also represents South Africa on the ATM Panel.

ATNS actively participates in the Civil Air Navigation Services Organisation (CANSO), a vehicle which enables constructive interaction, the sharing of experiences and benchmarking among air navigation service providers. The Asia/Pacific benchmarking workgroup, a follow-on to the Southern Hemisphere workgroup, has established benchmarks, enabling participating air navigation service providers to evaluate their performance relative to their peers and to identify best practice within the industry. ATNS also participates in the CANSO workgroups dealing with Human Resources and CNS/ATM developments.

The eleventh informal meeting on the improvement of Air Traffic Services over the South Atlantic (SAT/11) was hosted and chaired by ATNS in Johannesburg. The meeting, run by ICAO, included delegates from air traffic service providers within the South Atlantic region, which includes South Africa, Senegal, Cape Verde, Portugal, Spain, Brazil as well as Argentina. Members reviewed, planned and discussed ways of improving Air Traffic Services within the region. Issues debated included area navigation (RNAV) routes, integration of satellite aeronautical telecommunication services and GNSS.

ATNS and ASECNA jointly hosted African air navigation service providers in Senegal to discuss the challenges facing air navigation in the region. The focus was on the benefits of regional service provision to reduce duplication of services, the importance of the interoperability of systems, as well as a continued drive for the commercialisation of air navigation service providers to ensure that aviation revenue is reinvested into aviation.

In November 2002, the Aviation Training Academy (ATA) hosted an international training conference themed Future Aviation Training in Africa. The conference boasted an impressive list of international speakers and focused on solutions for perceived deficiencies over Africa.

ATNS also hosted a number of international delegations from China, the Democratic Republic of the Congo, Ethiopia, Kenya, Angola, Mozambique, Saudi Arabia and Swaziland.

**Satellites Play an Important Role in Our Future**

ATNS is fully committed to the realisation of satellite navigation (GNSS) on the African continent. The ICAO global CNS/ATM plan envisages the use of satellite technology for navigation by 2010. We have been involved in a number of related initiatives focused on achieving this, amongst others: the on-going use of satellite technology in the form of VSAT technology for aviation communication; participation in the establishment of the AFI testbed; aeronautical surveying;
GNSS-supported RNAV terminal area (TMA) operations; as well as participating in initiatives to establish an upper airspace control centre for SADC.

ATNS continued to support the satellite communication system (VSAT) network, which ensures reliable aviation communication between the states of the region as well as with West Africa and, in the near future, with South America.

This year, a considerable effort was made to improve the serviceability and availability of the SADC VSAT network. This included the installation of Aristel voice switches, AFTERMs and uninterrupted power source (UPS) units at sites where a requirement existed. Additional training was also conducted at all of the sites in the network. These initiatives, together with the commencement of site audits by ATNS, have resulted in the above contractual call success rate of 96% and system availability of 99.37%. Current utilisation of the SADC VSAT is in excess of one million data messages and 46 000 calls per month.

The expansion of the network is well underway with an additional contract being entered into for the installation of a VSAT terminal in Burundi. This site is expected to be operational by mid-2003. Current negotiations will clear the way to incorporate Rwanda and Seychelles into the SADC VSAT network in the near future.

Further future planning for the SADC VSAT network gained momentum during the year with discussions among the SADC States centring on the replacement of the current network. Necessity for this replacement has become apparent due to high operating costs, redundancy of equipment and difficulty in obtaining spares. The requirement for integration with new sub-regional networks is also a key consideration in the need and planning for new technology. A representative Taskforce was established to guide the process, which is expected to result in a new system being operational in 2005.

The launch of Intelsat 904 during May 2002 increased the amount of satellite power available to the network. Connectivity with ASECNA was achieved during October 2002 with direct speech (ATS/DS) connectivity between Antananarivo (Madagascar) and Beira, Mauritius and Dar Es Salaam being made available. In addition, Aeronautical Fixed Telecommunication Network (AFTN) connectivity has been achieved between ASECNA and SADC through the implementation of an AFTN link between Johannesburg and Brazzaville.

VSAT developments are also extending beyond the SADC region. ATNS has also been working together with the International Airline Transport Association (IATA), as well as the International Civil Aviation Organisation (ICAO) in assessing the feasibility of installing two satellite-based VSAT networks in North East Africa (NAFISAT) and the Middle East (MIDVSAT) respectively. The feasibility study for the MIDVSAT, covering 15 Middle East countries, will be presented to member states in September 2003, while the workgroup on the NAFISAT is expecting to make tender documents for the network available by July 2003.

South Africa will, in co-operation with African airlines, participate in the AFI GNSS taskforce. We are in the process of establishing an AFI testbed as an extension of the European Geostationary Navigation Overlay Service (EGNOS). The first step of this project, which will begin in mid-2003, will be the deployment of four mobile Range and Integrity Monitoring Stations (RIMS) in the region, two of which will be situated in South Africa. Further stations will be rolled out within the next two years.

Providing Services to Our Colleagues in Africa

ATNS and Namibia have a long-standing working relationship. ATNS is conducting an evaluation of the proposed restructuring of Namibia’s airspace, currently provides an Oceanic Control service on behalf of Namibia and produces their Integrated Aeronautical Information Publication (IAIP). An IAIP was also produced during the period for Cape Verde and ATNS was recently awarded the contract to produce the AIP for Mozambique.
Furthering a Global Cause (continued)

Over a number of years, ATNS has built up a highly regarded capability for aeronautical surveying to the WGS-84 standard. In terms of a contract with the National Imagery and Mapping Agency (NIMA), signed in 2002, ATNS carried out 20 surveys in Ethiopia, Rwanda, Namibia, Uganda, Guinea Bissau, Guinea and Djibouti. Routine surveys were also carried out in South Africa during the year.

In recognition of the role that ATNS plays in this arena of aeronautical surveying, the ATNS survey team was invited to attend and help facilitate an ICAO Training Programme in Nairobi, Kenya in September 2002. The objective of the workshop was to develop training for conducting WGS-84 surveys to support GNSS Aeronautical Operations.

The benefits of service provision on a regional level are evident. Another example of how this is envisioned for the SADC region is the setting up of an Upper Airspace Control Centre (UACC) to control all high-level (above FL 245) flights over the region from a single centre and under a single set of regulations. The UACC has been approved in concept by the governments of SADC. ATNS attends and chairs the UACC steering committee meetings held throughout the year.

Following concerns raised by a number of states, a decision was taken during the course of the financial year for a further feasibility study to be undertaken to access the viability of the lower airspace in the UACC model. This study is expected to get underway during the course of the next year. We are very excited and committed to the realisation of this significant initiative.
The Airbus A380 is to be the largest airliner ever built - a giant with room for more than 555 passengers on its twin upper and lower decks. It's reported to be on course to enter airline service in 2006.

Aviation Training Academy

The ATA, formed in 1999, is a joint venture between the Air Traffic and Navigation Service Company and The Airports Company of South Africa, and supports the complete spectrum of technical training courses required for air traffic control, engineering support and airports.

The Academy has expanded its client base and curriculum, and enrolled 3652 students this year, as opposed to 3070 last year. Of the 769 students trained in the Air Traffic Services and Technical support fields, 36% were international students from 15 countries. Of the 2708 students trained in airports related training, 43% of the students were external learners.

Three new courses were added to the ATA suite of courses over the last year: Trauma and Crisis Management; ATS Operational Management, and an On-The-Job-Training-instructor (OJTI) course for Technical Support Personnel.

In order to ensure high standards, the Academy has maintained its ISO 9001:2000 accreditation, its accreditation with the South Africa Civil Aviation Authority (SACAA) and the Namibian Department of Civil Aviation, as well as the Transport Education Training Authority. Currently, the Aviation Training Academy is in the process of gaining accreditation with the ICAO Trainair programme.

The first ever ATNS learnership programme was approved by the Aerospace Chamber of the Transport Education Training Authority and has been successfully completed by a group of five engineering learners. This "Learnership for Engineering Technicians", now registered with the Department of Labour, forms an integral component for students, who follow the Electronics Engineering discipline and who are required to satisfy the experiential learning component of the National Diploma for Electrical Engineering qualification.

Although most ATS training is designed around generic concepts, simulator software now offers the opportunity to tailor site-specific training. Site-specific training has already been successfully offered to students from Cape Verde in the Aerodrome Control and Approach Procedural Control disciplines and will be complemented with Area Procedural Control training in the near future. Site-specific training was also presented to students from Namibia in the combined Aerodrome/Approach Procedural discipline.

On-site training, offered to further impact the safety effect of training, was provided in Cape Verde in various Technical Training disciplines, as well as in Mali in both the ATS and Technical disciplines.

Technology is changing! In order for the benefits of new technology to be realised, they need to go hand in hand with changes in our approach to training. The introduction of the South African Advanced Air Traffic System (SAAATS), offered the Aviation Training Academy an exciting opportunity to review its approach to training. After substantial benchmarking, consultation with the relevant operational role players and approval from the South African Civil Aviation Authority, EDUCATS was born.

EDUCATS (Efficient Development of Universal Competence in Air Traffic Services) is a new training approach, structure and course content which will see the time between joining...
ATNS as an ATS cadet to being fully validated as an ATC, reduced to approximately 2 years. This is made possible through specialisation in the various fields - Aerodrome, Approach and Area Control - from the outset. The concept of "training as required" for a specific unit will also be one of the various benefits. The first course is expected to run by mid-2003.

A further current development entails the development of computer-assisted training, which will be introduced into the ATNS spread over the next 3 years. This will result in all ATS courseware being located in a central computer database, allowing for material dependent training, rather than instructor-dependent training. This will allow instructors to enhance their face-to-face contact with delegates by presenting subject matter in a professional multimedia environment. It will also afford learners the opportunity to revise, research and learn at his/her own pace.

As a customer-orientated organisation, ATA conducted regular visits to the major ATS centres to ensure that training is aligned with client needs and expectations.
There are pages reserved in history for the dreamers, there are however more that are reserved for the doers. It takes a great crew to get things off the ground.

Mark Rostron

G van Heerden (61) - Chairman
Appointed 15/9/95
PMD (Harvard)

A Bradshaw (51) - General Manager
Air Traffic Management
Appointed 1/4/94

J Swemmer (39) - General Manager
Aviation Training Academy
Appointed 1/11/95 / BSc (Hons) Industrial Psychology

W Stander (37) - General Manager
Business Development
Appointed 1/6/01 / BA(Hons) History, MBA

Dr J van Vollenhoven (54) - Managing Director
Appointed 1/5/98
DSc, MBL
S Boomgaard (55) - Director
Appointed 1/8/00
BCompt (Hons), CA(SA), H Dip Tax

H Khoza (55) - Director
Appointed 1/1/98
BSc

M Letlape (44) - Director
Appointed 1/4/94
BSc, Computer Science and Psychology

T Mokgosi (42) - Director
Appointed 14/8/00
BSc, MSc, Medicinal Chemistry

Executive Management

Hawke (50) General Manager Operations
Appointed 1/4/94

D Majari (41) General Manager People Solutions
Appointed 1/8/02 / B Sw S; (Hons), M Sw S, MIPM, M PsySSA

P Marais - 46 General Manager Technical Services
Appointed 1/4/94 / PrEng, BEng (Electronics)
### Abbreviations and Acronyms

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACSA</td>
<td>Airports Company of South Africa (controls SA's major airports)</td>
</tr>
<tr>
<td>ADS</td>
<td>Automatic Dependent Surveillance</td>
</tr>
<tr>
<td>AFI</td>
<td>African Indian Ocean (Region)</td>
</tr>
<tr>
<td>AFTN</td>
<td>Aeronautical Fixed Telecommunication Network</td>
</tr>
<tr>
<td>AIS</td>
<td>Aeronautical Information Service</td>
</tr>
<tr>
<td>ASECNA</td>
<td>L'Agence pour la Sécurité de la Navigation Aérienne en Afrique et à Madagascar</td>
</tr>
<tr>
<td>ATA</td>
<td>Aviation Training Academy</td>
</tr>
<tr>
<td>ATC</td>
<td>Air Traffic Control</td>
</tr>
<tr>
<td>ATN</td>
<td>Aeronautical Telecommunication Network</td>
</tr>
<tr>
<td>ATNS</td>
<td>Air Traffic &amp; Navigation Services Company Ltd (provides air traffic control and navigation services and training in South Africa and the region)</td>
</tr>
<tr>
<td>ATM</td>
<td>Air Traffic Management</td>
</tr>
<tr>
<td>ATS/DS</td>
<td>Air Traffic Service / Direct Speech</td>
</tr>
<tr>
<td>CAA</td>
<td>Civil Aviation Authority</td>
</tr>
<tr>
<td>CAFSAT</td>
<td>Central Atlantic FIR Satellite Network</td>
</tr>
<tr>
<td>CAMU</td>
<td>Central Airspace Management Unit</td>
</tr>
<tr>
<td>CANSO</td>
<td>Civil Air Navigation Services Organisation</td>
</tr>
<tr>
<td>CNS</td>
<td>Communication Navigation Surveillance</td>
</tr>
<tr>
<td>CPDLC</td>
<td>Controller-Pilot Data Link Communication</td>
</tr>
<tr>
<td>DATIS</td>
<td>Digital Automated Terminal Information System</td>
</tr>
<tr>
<td>DRC</td>
<td>Democratic Republic of the Congo (formerly Zaire)</td>
</tr>
<tr>
<td>FAA</td>
<td>Federal Aviation Authority (US agency to control aviation in that country)</td>
</tr>
<tr>
<td>FAME</td>
<td>Future Airspace Management Efficiency</td>
</tr>
<tr>
<td>FIR</td>
<td>Flight Information Region</td>
</tr>
<tr>
<td>FL</td>
<td>Flight Level</td>
</tr>
<tr>
<td>FUA</td>
<td>Flexible Use of Airspace</td>
</tr>
<tr>
<td>GNSS</td>
<td>Global Navigational Satellite System</td>
</tr>
<tr>
<td>IATA</td>
<td>International Air Transport Association</td>
</tr>
<tr>
<td>ICAO</td>
<td>International Civil Aviation Organisation</td>
</tr>
<tr>
<td>ISO</td>
<td>International Standards Organisation</td>
</tr>
<tr>
<td>NEPAD</td>
<td>New partnership for African Development (launched by South Africa's President Thabo Mbeki, to unite African countries supporting market-based economic growth, human rights and democratic governance)</td>
</tr>
<tr>
<td>RNAV</td>
<td>Area Navigation</td>
</tr>
<tr>
<td>SAAATS</td>
<td>South African Advanced Air Traffic System</td>
</tr>
<tr>
<td>SAA</td>
<td>South African Airways</td>
</tr>
<tr>
<td>SACAA</td>
<td>SA Civil Aviation Authority (the South African counterpart of the FAA)</td>
</tr>
<tr>
<td>SADC</td>
<td>Southern African Development Community (includes Angola, Botswana, the DRC, Lesotho, Malawi, Mauritius, Mozambique, Namibia, Seychelles, South Africa, Swaziland, Tanzania, Zambia and Zimbabwe)</td>
</tr>
<tr>
<td>SARRIP</td>
<td>South African Radar Replacement and Improvement Programme</td>
</tr>
<tr>
<td>SAT</td>
<td>South Atlantic Meeting</td>
</tr>
<tr>
<td>SID</td>
<td>Standard Instrument Departure</td>
</tr>
<tr>
<td>STAR</td>
<td>Standard Terminal Arrival Route</td>
</tr>
<tr>
<td>TBCSA</td>
<td>Tourism Business Council of South Africa</td>
</tr>
<tr>
<td>TETA</td>
<td>Transport Education and Training Authority</td>
</tr>
<tr>
<td>TRAINAIR</td>
<td>ICAO training standards programme</td>
</tr>
<tr>
<td>UACC</td>
<td>Upper Airspace Control Centre</td>
</tr>
<tr>
<td>VCCS</td>
<td>Voice Communication Control System</td>
</tr>
<tr>
<td>VDF</td>
<td>VHF Direction Finder</td>
</tr>
<tr>
<td>VSAT</td>
<td>Very Small Aperture Terminal (satellite communication system)</td>
</tr>
<tr>
<td>WAN</td>
<td>Wide Area Network</td>
</tr>
<tr>
<td>WGS-84</td>
<td>World Geodetic System (1984 reference frame for aeronautical surveying)</td>
</tr>
</tbody>
</table>
COMPANY DIRECTORY

AIR TRAFFIC AND NAVIGATION SERVICES COMPANY LIMITED
REGISTRATION NUMBER 93/04150/06

Postal Address
Private Bag X15
Kempton Park
1620

Street Address
Block H4
Old Mutual Business Park
Gewel Street
Isando
1600
Tel: +27 11 961-0100
Fax: +27 11 392-3948
Website: www.atns.co.za

Aviation Training Academy
Private Bag X1
Bonaero Park
1622
Tel: +27 11 570-0400
Fax: +27 11 390-1209
Website: www.ata.co.za

NORTH REGION

Johannesburg International Airport
Private Bag X1
Bonaero Park
1622

Air Traffic Control
Tel: +27 11 928-6526
Fax: +27 11 395-1045

Technical Support
Tel: +27 11 928-6469

Durban International Airport

Air Traffic Control
Tel: +27 31 469-0005

Technical Support
Tel: +27 31 469-2446

SOUTH REGION

Cape Town International Airport
Private Bag X17
Cape Town
7525

Air Traffic Control
Tel: +27 21 937-1125
Fax: +27 21 934-5550

Technical Support
Tel: +27 21 937-1129