Syandiza By Lt Col A.L. Cockbain, SO Youth Development Photographs by Col D.F. Spolander, OC SAAF Museum

at swartkop air show

he South African Air Force Siyandiza National Office invited 148 schools in Gauteng and neighbouring provinces to attend the practice day of the Swartkop Air Show on 16 September 2005. 3 000 learners attended the Air Show practice day. Buses were provided by the Gauteng Department of Transport for a further 24 schools to attend the actual Air Show on 17 September. All schoolchildren were allowed to attend free of charge on both days.

All the aircraft that participated in the Air Show on the Saturday flew their sequences to the delight of the children. Hangar 6 at Swartkop housed exhibits to stimulate the children's interest in aviation. In the hangar there were ten virtual aviation simulators, manned by the SANDF Virtual Aviation Club, for the children to practise their skills as pilots. This proved to be a great hit, as many of the youngsters had never 'flown' an aircraft before.

The Young Falcons of the Siyandiza programme manned the Siyandiza exhibit in Hangar 6. They informed the youth about the Young Falcons development programme. They relayed stories and experiences regarding their personal experiences in the 'Air Force'.

The South African Model Aircraft Association was on hand to help the children construct their very own aircraft from balsa wood and paper that was provided. Their tables were never without keen voungsters.

There were many food and drink stalls and fleamarket-type stalls for the children to keep themselves occupied during the day.

The Saturday proved to be very successful and more than 6 000 children from many schools in the area attended the Air Show.

All in all, it was a very successful 2005 Air Show at Swartkop.



More than 6 000 children from many schools attended the Air Show on 16 September 2005



















Through blood, sweat and tears the making of SAAF Officers

Article and Photographs by CO Maryke Lynn

A ninduction phase, better known as GOGGA , over altwo-day period at Ditholoset the wheels in motion for the forming of officers of whom the South African Air Force can be proud.

A heterogeneous group of 73 Candidate Officers from different directorates, bases and units within the Air Force, including pupil+pilots and navigators, photographers, technicians and so forth, were selected to participate in an 18 week officer forming course. The current officer forming course began on 25 July and will finish on 25 November 2005

After setting up housing and sanitation and being stripped of their ranks and turned into numbers in an eye opener under the firm instruction of the Minne, the students embarked on physical exercises such as route marches, IPT, lobstacle courses and 2,4 km runs.

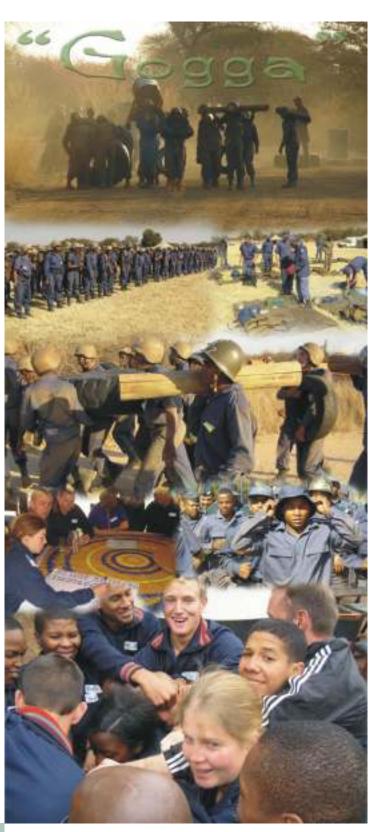
Seemingly purposeless exercises to frustrate the students in order to observe their strength of mind and to identify informal leaders during apparently unorganised tasks were also part of this phase.

Throughout the induction phase learners were exposed to structured activities designed to enforce physical and psychological strain in order to evaluate them under extreme conditions of sustained physical stress while keeping the following objectives in mind:

- ✓ Tounite the learners into a group as isoon as possible □
- ✓ ■To teach learners that no officer can function as an individual within the organisation □
- ☐ To give learners the opportunity to improve their self knowledge in various situations when under pressure □

The determination to keep at it even though their dusty facial expressions often spoke a thousand words about the intense exhaustion and strain their

bodies were under has bestowed upon these candidate officers a reason to be justly proud of themselves!



By Hanrie Greebe, for AD ASTRA magazine

ue to increasing air traffic globally, airspace is no longer designated as either purely civilian or military airspace, but is considered as one continuum and allocated according to user requirements. Until a few years ago the South African National Defence Force 'owned' designated areas of airspace which were prohibited to civilian aircraft. In 2001 the concept of Flexible Use of Airspace, inherited from EUROCONTROL, was implemented in South African airspace. Any airspace segregation is now temporary and based on real-time usage within a specific time period.

The South African Air Force plays a pivotal role in the management of Flexible Use of Airspace through Lt Col Andrea Ehmke, who accepted the challenge to implement the process in June 2001. As DOD Airspace Manager, she initiated Airspace Management at the Central Airspace Management Unit situated at Johannesburg International Airport in the ATNS Control Centre. She had to actualise the concept of Flexible Use of Airspace and convert it to meet the South African airspace clients' needs, and establish policies and procedures, as well as communication channels.

Lt Col Ehmke represents the Air Force, Navy and Army in the daily allocation of airspace in all exercises other than normal flight plan routes in regulated and uncontrolled airspace. "Flexible Use of Airspace entails planning on the three FUA levels, consisting of Strategic, Pre-tactical and Tactical Extensive networking between various stakeholders on a daily basis is imperative in the success of Airspace Management," explains Lt Col Ehmke.

"It is my responsibility to maintain an excellent understanding and cooperational relationship with ATNS role players and ATNS's Airspace Manager to achieve the objective of autonomy of freedom for airspace clients. In cooperation with ATNS's Airspace Manager, it is our mission to plan and ensure Temporary Segregated Airspace according to the SANDF's specific daily requirements, in order to achieve airspace excellence," says Lt Col Ehmke. "When the Navy plans exercises in uncontrolled airspace, requests for allocation of such airspace has to be submitted at least 70 days before the intended operation. The SANDF Central Airspace



Management Unit Manager is involved in the Level 1 strategic planning. Should the planned exercise occur in a portion of existing managed airspace without significant change to route structures, permission must be obtained 30 days prior to the intended exercise. An example is a weapons camp at AFB Langebaanweg."

Lt Col Ehmke travels daily from Pretoria to coordinate and manage airspace requirements and is the only permanent SANDF member at Johannesburg International Airport. This may seem a solitary responsibility, but Lt Col Ehmke is a determined officer with perseverance, noble ideals and excellent time-management skills. She has a passion for studies and will complete her Honours degree in Industrial Psychology in January 2006. "I identified a lack of acknowledgement of the individual in the air traffic environment - the person behind the voice. It takes a specific kind of person to maintain control, especially in an emergency situation when a pilot needs to be kept calm. In this environment conflict management is also essential," says Lt Col Ehmke in motivation of her field of study.



The South African Air Force plays a pivotal role in the management of Flexible Use of Airspace through Lt Col Andrea Ehmke, who accepted the challenge to implement the process in June 2001

education through music

By Tshidi Baloyi

Photographs by WO2 Christo Crous



The South African Air Force Band does not only play at parades or functions, but also at other venues such as schools. It has recently granted pupils from two primary schools, Tipfuxeni and Padisago, in Soshanguve, the opportunity to see a live band. Most of the pupils and staff members had never seen a live band perform before, until the SAAF Band made this possible. These two events took place at Tipfuxeni, on 23 August 2005, and at Padisago, on 13 September 2005.

One of the band members, Sgt Moreochwenyo, was the Master of Ceremonies for these occasions and he kept the pupils entertained. He started by introducing all the different instruments played by the band. The youngest members from the crowd were chosen to attempt to blow one of the biggest instruments, the sousaphone, which is played by FSgt Makgale. Four of the band members played a game called can-can, where the members had to pass cans around at the pace of the music and the music kept playing faster and faster.

The band played songs compiled by the bandmaster, Capt Pienaar; these are theme songs from television dramas and comedies. They played songs from 7de Laan, Noot vir Noot and Friends, and the pupils had to guess the names of the shows. The pupils and staff members danced to the famous song "YMCA". Everybody was surprised and delighted when the band played one of Sipho "Hotsticks" Mabuza's songs, "Burn out".

It was not only entertainment for the pupils at Padisago, but also revision, because the pupils had to write a test on musical instruments that afternoon. Musical instruments are part of their school curriculum in a subject called Arts and Culture. According to the principal, Ms G. Mabena, the pupils would not forget the different instruments because they had a chance to see and hear how they sound. "I would like to see the relationship between the SAAF and the schools grow. I also want the pupils to

visit the SAAF one day," said Mabena.

The principal of the Tipfuxeni school, Ms M.C. Marivate, could not thank the band enough. "I've never seen a live band play before, except on television, and I am so grateful for this great opportunity," she said. However, Capt Pienaar replied that the band had enjoyed it even more than the pupils and staff members did.

The most important lesson learned by the pupils is that the Air Force is not only about aircraft and war. The band playing at these schools breaks the barrier between the community and the South African Air Force. Hopefully this was not the last time the band would play for schools.





Left top and left bottom: The opportunity to see a live band - most of the pupils and staff members at Tipfuxeni and Padisago Primary Schools in Soshanguve had never seen a live band perform before until the SA Air Force Band made this possible



Some of the band members who brightened hearts and minds of young scholars

South African Mathematics Foundation

learn by example

The activities during Mathematics Week highlighted the impact of mathematics on people's daily lives and emphasised the importance of mathematics as a foundation for careers in science, technology and managerial jobs

By Thuli Dube

Photographs by Sgt Marinda Spang and Sgt Lebo Vaarland, Photographers, 5 ASU

"We are trying to create an environment that influences learners to have an interest in aviation, maths and science," said Dr Mathume Bopape, the Executive Director of the South African Mathematics Foundation (SAMF).

SAMF has been operational for five years. It was developed for various reasons, such as providing information and guidance on careers in mathematics and to bring to the attention of learners the utility and applicability of mathematics. This year's exhibition was held at the Sci-Bono Discovery Centre in Newtown, Johannesburg. The event took place from 5 to 9 September 2005.

Mathematics week was first introduced during World Mathematics Year 2000, with the support of the Department of Education. Then Minister Kadar Asmal suggested that, if successful, it should become an annual event. The South African National Committee for the International Mathematical Union (IMU) declared the second week of September every year as National Mathematics Week.

The activities during Mathematics Week highlighted the impact of mathematics on people's daily lives and emphasised the importance of mathematics as a foundation for careers in science, technology and managerial jobs.

The South African Air Force had the privilege of being at the exhibition. There were various other





The South African Air Force had the privilege of being at the exhibition

interesting exhibition stands, which included tertiary institutions, publishers, SAMF, Telkom Foundation, South African Airways and Casio.

SAAF's contribution to the exhibition and Mathematics Week was to tell the learners about Pilot/Navigator training and the phases of training. The aim of this particular exhibition was to show learners who have dreams that they can indeed make their dreams come true. The environment was such that the learners could meet people who were passionate about their careers, and be influenced by them. "The process of interesting the learners is not as fast and effective as was expected, but we are trying to carry the learners into maturity," said Dr Bopape in his address.

§



International NCOs Association

goodwill visit

Article and Photography by CO Maryke Lynn

ine Non-commissioned Officers from foreign embassies and high commissions, representing six different countries, namely Brazil, Argentina, Germany, Canada, the United Kingdom and the USA, joined the Sergeant-Major of the Air Force, WO1 Du Preez, and his delegation on a goodwill visit from 21 to 24 August 2005.

The purpose of this visit was to establish a relationship between NCOs of Foreign Arms of Service and Air Force Warrant Officers, and to afford them the opportunity to experience mountain flying by a helicopter squadron.

This very excited group departed from AFB Waterkloof in two jam-packed mini buses. The eight-hour long drive provided them with more than enough time to get to know one another, eat handfuls of biltong and learn the word "cheers". A rainy Durban, a very palatable traditional "potjie" and a good night's rest awaited the guests on their arrival.

After a short drill session and flag-hoisting parade the following morning, the guests visited 15 Squadron where Capt Beau Skarda briefed them on the ins and outs of the Squadron. They then viewed Durban and the surrounding areas from the air, which was followed by an excursion to the acclaimed and very windy uShaka marine world that the tourists thoroughly enjoyed.

A breathtakingly hot and spicy Asian supper, which was a somewhat new experience to most of their taste buds, was also introduced to the visitors during their stay at the mess.

They proceeded to the Drakensberg in two Oryx helicopters and participated in mountain flying on the lovely morning of 23 August 2005. The flight was scenic and the group made full use of the opportunity to photograph the surrounding areas.

Dragon Peaks Park accommodated the group overnight, and a braai in the lapa with the backdrop of Champagne Castle brought the perfect ending to this pleasurable visit.

After breakfast, the witty FSgt Steve Collins from the United Kingdom entertained all those present with his hilarious songs, which made the long road back to Pretoria not so long at all.



Creating National Consensus

at the pretoria show

By CO Maryke Lynn Photographs by WO2 Christo Crous

The annual Tshwane International Show provided the perfect opportunity to the Department of Defence (DOD) in general and the South African Air Force (SAAF) in particular to enhance its corporate image with the public, as well as with its internal and external stakeholders. Over the period 24 August to 4 September 2005 various exhibitions, ranging from droë wors and biltong tasting stalls to those of the respective defence services, could be seen and appreciated at the Pretoria show grounds.

The SAAF's exhibition included audio-visual presentations, flight simulator stations and indoor and outdoor exhibitions of some of its systems. This included the Umlindi three-dimensional radar system, a mobile air traffic control tower, the Marconi S7-11 tactical mobile radar, the Mamba and, last but not least, "Sneeuwitjie", the SAAF's white Oryx, used under UN control for peacekeeping operations in Burundi. A special effort was put in by the volunteers of the SA Air Force Reserve Force. These members contributed greatly to the success of the SAAF participation. Also represented were the now well-known Siyandiza contingent and the Military Skills Development group.

Throughout the show the SANDF placed specific emphasis on its role in the second decade of democracy and, in particular, on its peacekeeping responsibilities in the region. The exhibition afforded the different services and divisions the opportunity to communicate with and inform the public on defence-related issues, and also served as a major recruiting opportunity, since many individuals showed a definite interest in joining the South African Air Force.

After considering numerous criteria, a gold certificate for achieving above 80% for its exhibition was once again awarded to the SANDF.







The South African National Defence Force saw participation by the SA Army, SA Air Force, SA Navy and SA Military Health Service at the Tshwane International Show



A strong and dedicated team from the SA Air Force Reserve contributed immensely to the success of the exhibition



The Coordinator Team for the SANDF participation was from left to right: Capt Elize Beukes, Mr Chappie Holtzhausen, Lt Col Hettie Cronjé and Capt Pieter Fouché

operational testing and evaluation

Compiled by Lt Col Jacques Swanepoel, Telemetry Support Manager, TFDC - AFB Overberg

T esting of aircraft systems in operational conditions is of paramount importance in the South African Air Force (SAAF). Well-evaluated military aircraft systems mean that the South African National Defence Force will also benefit and fulfil the Air Power requirements of the country.

The safety of our aircrew is not negotiable, and therefore a process must be followed to ensure our aircraft systems are certified as airworthy. The question arises: when does safety becomes an issue in the aviation world? The answer: right at the start or concept phase of any aircraft system. In the acquisition phase of a military aircraft system, the designers and system engineers should, throughout the development process, keep the importance of safety in mind, as well as "build" safety characteristics into the product. Safety can only be guaranteed through the thorough testing and evaluation of an aircraft system under operational conditions.

The operational testing and evaluation (OT&E) of military systems is a specialised process which requires the recruitment and training of pilots, engineers and technical personnel. The need for OT&E does not only apply to new military aircraft systems, but also commissioned systems. It can be argued that a minor modification on a military aircraft system does not need testing and may be

certified as airworthy without conducting full OT&E. However, to assume a military aircraft system, commissioned or modified, to be certified as airworthy without having gone through the full OT&E process could have catastrophic safety implications! Full OT&E must take precedence when it is necessary to certify a military aircraft system as airworthy. The "art" of evaluating a military aircraft system under



testing and Astra Multi-Function Console

operational conditions necessitates the assistance of trained OT&E personnel.

The Test Flight and Development Centre (TFDC) at AFB Overberg near Bredasdorp is responsible for training candidates to qualify as OT&E personnel, which is captured in a one-month residential OT&E course, presented by qualified test pilots and flight test engineers. The course accommodates twelve participants, varying

from operational pilots and engineers to technical personnel across the SAAF. Since 1983 TFDC has trained 220 pilots, engineers and technical personnel to

conduct OT&E tasks at their units. AFB Overberg's mess and base facilities are of an exceptionally high standard, which contributes to the comfort of the students for the duration of the course. With



Astra Multi-Function Display Evaluation

the compliments of the base, each student is issued with a personal computer and this portrays TFDC's absolute commitment towards the support of the students on course.

The scope of the OT&E course is a combination of theory and practical exercises, which will enlighten the students about a specific process before an aircraft can be released for operational use. Therefore the content includes the writing of an accurate end-course flight-test report, preparation and presentation of a full flight-test plan and test flights. The flight-test reports that are generated by the students are submitted to the simulated Military Airworthiness Board (MAB). The MAB, in a real-case scenario, bases its decisions on the professional findings and recommendations of the OT&E personnel and subsequently issues a Release to Service (RTS) certificate. The RTS certifies that the military aircraft system conforms to aviation safety measures and may be utilised safely within its role.

It is always an honour and privilege to be part of an OT&E course. Students who complete the OT&E course will know why it is imperative to test and evaluate military aircraft systems prior to operational use. This is the key to Air Power excellence in the South African Air Force.



hard work and dedication

Pay Dividends

By Lt Col P.A. Wright, Training Coordinator, AF CCS Photograph by Mr Willie de Beer

Five years ago the Air Force Command and Control School (AF C&CS) accredited the Air Traffic Control and Mission Control course contents as being acceptable credits towards the B Com/ BA Aviation Management Degree presented by the University of Pretoria. As there is no similar type of occupation outside the military regarding Mission Control, a lot of hard work and dedication were required from the Mission Control instructors at the AF C&CS to sort out the curriculums and course content.

The key role players during the whole negotiation and accreditation process were Lt Col E. Crous and Lt Col H. Nolan (AF C&CS), Professor Vermeulen (University of Pretoria) and Lt Col F. Redelinghuis (DETD).

These qualifications were also benchmarked against international comparability studies. A prospective student had to fulfil all set requirements as agreed upon by the University and the SAAF in order to be eligible to register for the B Com/ BA Aviation Management degrees,

Today is a proud moment, particularly for AF C&CS, as we celebrate our first Mission Controller who has successfully completed the B Com Aviation Management Degree.

The proud recipient is Maj Eric de Villiers, presently staffed as the Offensive Aviation Management Degree

Executive at Lowveld Airspace Control Centre based at AFB Hoedspruit. He successfully completed his studies and received his degree on 7 September 2005.

On behalf of the Air Force Command and Control environment, AF C&CS congratulates you on your achievement and



Maj Eric de Villiers seen with his B Com Aviation Management Degree

The wonder of flight The air up there in the clouds is very pure and fine, bracing and delicious. And why shouldn't it be? It is the same the angels breathe. Mark Twain, 'Roughing It,' Chapter XXII, 1886. Man must rise above the Earth to the top of the atmosphere and beyond for only thus will he fully understand the world in which he lives. Socrates The exhilaration of flying is too keen, the pleasure too great, for it to be neglected as a sport. Orville Wright No one can realize how substantial the air is, until he feels its supporting power beneath him. It inspires confidence at once. Otto Lilienthal I fly because it releases my mind from the tyranny of petty things... Antoine de Saint-Exupéry

Air Force Base Makhado **exercising its right**

Compiled by Brig Gen D.E. Barker

Written by Tshidi Baloyi

Photograps by WO2 Christo Crous

The right to fly overhead at low level over a city and to march with bayonets drawn is one of the traditions bestowed upon the SA Air Force, and Saturday 27 August 2005 was such an occasion.

The mayor of Makhado announced that AFB Makhado could exercise the freedom of entry into the town. This symbolises the confidence and trust which the people of Makhado Municipality have in the Base. "All of us walk tall with our shoulders back because of the harmonious relationship we have with and the protection we receive from the Base," said the mayor of Makhado, Mr R.S. Nkuzana.

AFB Makhado, formerly known as AFB Louis Trichardt, was originally established in 1987. It was established as a forward air base on the northern border to protect South Africa. With the name change from Louis Trichardt to Makhado, the Air Force Board in 2003 decided that the name of the base should also be changed. The name Makhado comes from the famous Venda king who reigned over this area between 1840 and 1860. History records show that he was a strong and courageous fighter. This made it appropriate for the SAAF to make the decision to co-locate all its fighters at this base.

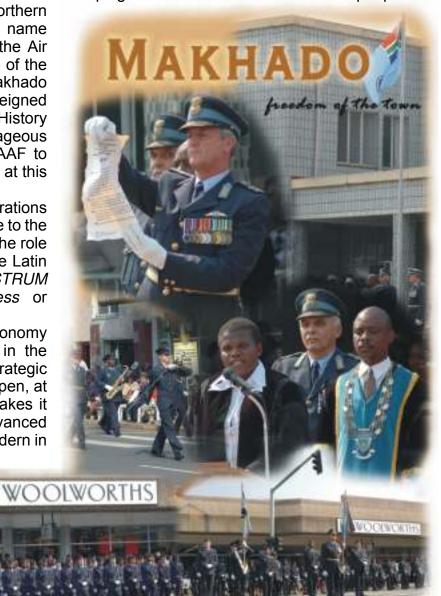
AFB Makhado is the assigned Combat Operations base in the South African Air Force. It is home to the Air Force's fighter aircraft that are assigned the role of protecting the South African airspace. The Latin inscription below the base emblem, *CASTRUM BOREALIS*, means the *Northern Fortress* or *Protector of the North*.

AFB Makhado has contributed to the local economy by creating jobs for a number of people in the Vhembe district. The placement of the new Strategic Defence Package aircraft, the Hawk and Gripen, at AFB Makhado in the Limpopo Province makes it one of the most modern technologically advanced bases in the world and certainly the most modern in

Africa.

The Makhado region has a strong connection with wild life and, in particular, with two of the most dynamic animals of the 'big cat' family. It is also the home of 2 Squadron, the *Flying Cheetahs*, who are tasked with protecting the South African air space, and also the *Black Leopards* football team.

And so it came to pass that AFB Makhado exercised the right to the Freedom of the City and to protect the sovereignty of the South African airspace from within the Makhado municipal region. As an Air Force base, AFB Makhado will continue to build on the strong alliance with the Makhado Municipality as we join in helping to create a better future for all our people.



into the military culture









henever new recruits enter the premises of the Air Force Gymnasium they are all taking the big leap into adulthood. None of them realised that their lives would be transformed and shaped in such a way that they would fit perfectly into the military culture, more specifically the "Blue Culture". With their parents by their sides they enjoyed refreshments and listened attentively to anybody talking about what they could expect. Then finally the time came for the students to say their goodbyes and take a good look at their friends and family. They had to remember their faces because they were not going to see them any time soon.

Whilst the students were orientated on the overall programme, the Officer Commanding, accompanied by a number of the personnel involved in the training of the students, gave a presentation to the families and friends of the students. Here they were given a brief description of what the students could expect during their training at the Gymnasium, important dates were highlighted and they were given the assurance that their children and friends would be cared for in the best way possible for their thirteen (13) week stay at the Gymnasium.

Basic Military Training at the Gymnasium is not basic at all. The students are exposed to a wide variety of subjects, physical training and learning opportunities. Subjects and lectures presented to the students cover various aspects such as Personal Hygiene, Family Matters, Military





Over the thirteen weeks at the Gymnasium a number of evaluations are done on the students, which include the R5 rifle and 9mm pistol musketry assessment

Compliments and Courtesy, Drill Terminology, Military Etiquette, Personal Finance, SAAF Cultures and Values, Weapon Theory and many more.

Over the thirteen weeks at the Gymnasium a number of evaluations are done on the students, which include the following: Four Fitness Assessments; Four Drill Assessments; Theoretical Assessments and R5 and 9mm Musketry Assessments.

To assist with the students' spiritual wellbeing, the Unit Chaplain has spiritual preparedness periods with the students. If students experience any problems, emotionally or spiritually, the Chaplain is always available with a shoulder to cry on or a willing ear to listen.

Basic Military Training has a great variety of lifelessons for the students to learn. Everything presented to the students is something they can take with them throughout their military careers. Although it is a tough and exciting thirteen weeks, it all does come to an end. The end for each and every student is captured in three little words: "Passing-out Parade". This is the highlight of each and every SAAF member's career. With pride and joy in their hearts, the Passing-out Parade gives the opportunity to all students to show their family and friends that they are disciplined soldiers, committed to striving towards Air Power Excellence. At each Passing-out Parade the Gymnasium presents various trophies to students and instructors who excelled in various fields on the course.

The Air Force Gymnasium is a unit that strives towards Training Excellence, which prepares each and every new incoming Air Force member for his/her life in the military.



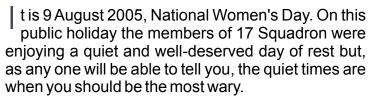


Everything presented to the students is something they can take with them throughout their military careers

'the rescuers'

17 Squadron in firefighting

Article by Lt Kyle Jonker, 17 Squadron, Swartkop Photographs by WO2 Christo Crous



The call for help came through shortly before 2 o'clock that afternoon. The hilly farming area named Bakenkop, near Nigel, was ablaze. Veld fires were raging out of control and residents of the area feared for their houses and possessions.

There is always an Oryx crew on standby should any emergency situation arise. However, experience has shown that firefighting can only be done effectively with two Oryx helicopters working as a team. In the spirit of *pro re nata* (as the occasion arises), the 17 Squadron motto, all the necessary operational personnel, ground crew and flying crew for two Oryx helicopters were ready in no time.

Within one hour of the call-out being activated, the two helicopters lifted off the tarmac at Swartkop and set sail for the area from which the distress call came. The plume of smoke on the horizon guided the crews and served as an indication of what could be expected. Once on the scene the situation was quickly assessed and Bambi buckets were hooked on with the help of the extra ground crew that had volunteered to go along.

The crews started working on the most threatening fires, picking up water at the closest useable farm dams in the area. The helicopters were greeted everywhere by waves of thanks from people on the ground. The local farming community joined with the SAAF by fighting the fires from the ground. As soon as one fire was brought under control from the air, the helicopters could move to the next blaze while the fire was given a *coup de grâ ce* by the firefighters on the ground.



Firefighting from the sky is not only e x t r e m e l y demanding and tiring on the air crews, but also places enormous strain on the aircraft delivering the service



After approximately 140 tons of water had been dropped from the air by the two helicopters at two tons per bucket, the fire was firmly under control throughout the whole area. The helicopters returned to base with little fuel but lots of gratitude from the farming community of Bakenkop.



The crews started working on the most threatening fires, picking up water at the closest useable farm dams in the area







As soon as one fire was brought under control from the air, the helicopters could move to the next blaze while the fire was given a coup de grâce by the firefighters on the ground

bateleur uav

Compiled by CO Maryke Lynn

Information supplied by Denel Aerospace Systems

poorly guarded coastline and territorial waters are an open invitation to villains – be it illegal fishers or immigrants, abalone poachers or smugglers of drugs and other contraband. Under cover of darkness or bad weather, unscrupulous ships' captains love to clean out bunker oil holds with little or no danger of detection and even less of successful prosecution. But valuable and sensitive marine and coastal resources bear the consequences. Busy harbours, adjacent to large bodies of unprotected water, are the hunting ground of the modern-day pirate, who is, as a rule,

much better equipped than his law-enforcing adversary, who desperately, but mostly in vain, attempts to find and apprehend him.

But the good news is that these bad guys' days are numbered! It is no longer necessary to endanger valuable aircrews and expensive patrol aircraft for "dull, dirty and dangerous" maritime surveillance tasks when these types of assignments are right up the Bateleur's alley! The Bateleur never grows weary, gets bored or loses concentration. By day or night, in fine or foul weather, the Bateleur is eager, willing and able, equipped with the right sensors, communications and stamina to seek, find and split on the scoundrels.

Lt Gen Carlo Gagiano recently pointed out that the SAAF has a long-term plan to acquire Medium-Altitude, Long-Endurance (MALE) Unmanned Air Vehicles (UAVs) as part of the SAAF's entire future acquisition plan. "The timescale for the start of the acquisition is about 2010 and no decision has been made on the number of UAVs to be purchased yet," he revealed.

During April 2004 Denel took the decision to embark



on the development of a surveillance UAV in the socalled Medium-Altitude, Long-Endurance (MALE) class. The Bateleur MALE UAV development programme was officially announced at the AAD 2004 event held at AFB Waterkloof in September 2004, with the exhibition of a very realistic full-scale mock-up.

In the absence of a formal User Requirement Specification, the following roles and missions were identified as essential for the Bateleur MALE UAV system:

- * Maritime, coastal and border patrol and assistance in search-and-rescue operations.
- * Battlefield surveillance, artillery fire support and damage assessment.
- * Target location and laser designation.
- * Electromagnetic intelligence gathering.
- * Military and paramilitary reconnaissance.

In order to get a glimpse of the sheer magnitude of maritime, coastal and border patrol duties, as well as search-and-rescue problems faced by the SA Navy and the SA Air Force, it is necessary to take note of the following distances and areas that form part of the SANDF's defence responsibility:

- * The length of the RSA coastline is approximately 3 000 km.
- * The length of the RSA border with neighbouring states is approximately 3 500 km, while the RSA border with Lesotho adds another 700 km.
- * The shortest distance to Marion and Prince Edward Islands is 1 775 km.
- * The RSA off-coast Exclusive Economic Zone (EEZ) of 200 nm (370 km) represents an area of 1,84 million sq km.

The current SAAF/SAN search-and-rescue area amounts to 12,5 million sq km.

These specifications interact in a complex manner that ultimately determined the wing design, fuselage size and airframe configuration chosen. For example, the endurance, altitude and payload carrying requirements determined the volume of onboard fuel needed and very definitely dictated the need for retractable landing gear. The range requirement dictated that provision had to be made for satellite communications, as well as a fuelefficient engine, etc. This airframe sizing process, as well as other considerations, eventually resulted in the adopted modular H-tail airframe design with a wing-span of 15 m, a fuselage length of just over 8 m, a 1,75 m diameter, 3-blade, variable pitch, pusher propeller and an 1800cc Subaru EA-82T turbocharged engine. Other data on the Bateleur:

Nominal/maximum endurance: 18/24 hours.

Nominal/maximum range: 750/3 500 km.

Nominal/maximum payload capability: 200/500 kg.

Altitude ceiling: 25 000 ft.

20 000 16.

Nominal/maximum take-off weight: 1 000/1 400 kg. Nominal cruise/loiter speed: 250/120 km/h.

The modular airframe design has the advantage that an entire airframe can be fitted into a standard 6 m ISO shipping container in partially disassembled form for ease of transportation. In addition, the modular concept facilitates ease of adaptation to specific client requirements – for instance, if a client should prefer an alternative engine, only the propulsion module needs to be redesigned. In order to expedite the development programme and minimise development costs, maximum use is made of existing and proven SKUA HTD and SEEKER 2 building blocks. Also, commercial off-the-shelf items are used wherever possible. Nevertheless, the design processes followed are in line with international UAV airworthiness requirements that will ensure that the Bateleur will ultimately be certifiable for flight in non-segregated airspace – in

other words, to safely share the airspace with manned aircraft.

The choice of an automotive engine as power plant for the flight demonstrator phase continues to be a hotly debated subject, but the rationale is quite simple: the engine is readily available, as are spares; it is of modern design and known for its reliability, it is produced *en masse*

and is thoroughly tested in automobiles worldwide; it is relatively cheap compared to equivalent aero engines and delivers exactly the right power output for a UAV the size of the Bateleur. On the downside, it is not a certified aero engine, but nevertheless makes a lot of sense, even if only for the development phase.

A big justification for the airborne surveillance platform is its onboard sensor payloads. In the case of Bateleur, the main payloads to be carried onboard include an electro-optical day/night TV camera payload, an electronic sensor payload for detecting and positioning radiating targets like radars and, for the maritime role, a surveillance radar with imaging capabilities. The Bateleur will operate from relatively short, paved runways and will be equipped with an automatic take-off and landing system that will enable it to be used even in adverse wind conditions characteristic of coastal areas.

An overseas partner is currently contributing to the development funding, while a number of overseas parties have already expressed their interest in the development. These are being actively followed up and the local clients – the SAN and SAAF - are being targeted in terms of their imminent Maritime and Coastal Patrol Aircraft (MPA) requirement. The aim is to embark on a first test-flight programme during the first half of 2007, with initial operational capability possibly being achieved during 2010.









SAAF members investing in the future

caring in action

Information supplied by WO2 Erna Hill, AFB Overberg

n 19 July 2005 members from 525 Protection Squadron, Air Force Base Overberg, launched a "Donate a Toy" Project. The project was aimed at collecting all unwanted toys at home and giving them to underprivileged children in the Struisbaai community, situated near Cape Agulhas. The members of AFB Overberg all contributed to this project, and donated a huge box full of toys to the children at Struisies Nursery School.

Joy spread over the little ones' faces as they received the gifts from their "heroes" in uniform. The children were very excited and immediately started to play with the toys, showing their appreciation. The project is also aimed at uplifting the disadvantaged children in the Overberg region. Members from 525 Protection Squadron hereby challenge all DOD members to invest in our country's future. Our children are, after all, our future!



A member from 525 Protection Squadron handing over a toy to a child



Members from 525 Protection Squadron with children from Struisies Nursery School

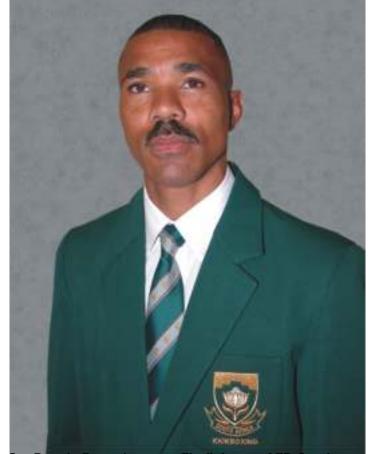
Firefighter selected to compete in Hong Kong

Information supplied by WO2 Erna Hill, AFB Overberg

Sgt Dennis Bogenhagen, a Firefighter at AFB Overberg, was selected to compete in the World Firefighter Karate Games in Hong Kong from 18 to 25 February 2006.

There are 60 different sport codes at the games and more than 6 000 competitors compete every second year in this tournament. Dennis previously won the Firefighter games in karate and was crowned the 2002 World Firefighter karate champion in New Zealand. He is currently training to gain this title for a second time

On 18 June 2005 he won the Boland All Styles Championships in the black belt kata and kumite division. At the SAAF championships he won three silver medals and was chosen for the Air Force team. On 6 July 2005 he won the Shukokai National Championships kumite. He then competed for the SA Shukokai National Team in Mozambique from 29 to 30 July 2005, where he won a bronze medal. Between 1 and 6 August he competed at the SANDF championships in Bloemfontein where he won the men open kata division, as well as the under-80 kg black belt kumite division. He was also selected as captain of the SANDF team. We are proud of him and wish him good luck for the world championships tournament!



Sgt Dennis Bogenhagen, a Firefighter at AFB Overberg, was selected to compete in the World Firefighter Karate Games in Hong Kong

Langebaanweg, Ysterplaat and Overberg

combined sports day

Information supplied by AFB Overberg

Compiled by CO Maryke Lynn









"Sports" of all kinds, between the three Air Force Bases of the Western Cape, AFB Langebaanweg, AFB Ysterplaat and AFB Overberg, were set in motion on a prestigious sports day held on 16 September 2005 at the beautiful AFB Overberg.

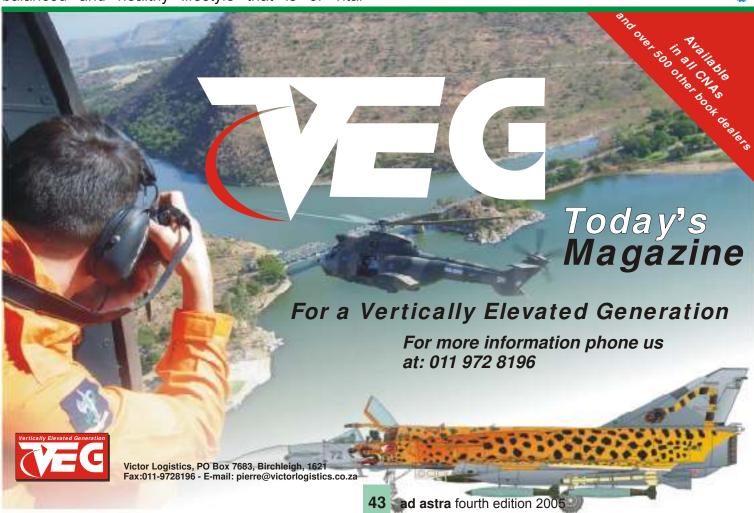
The focus of this day was people and, as an element of air power, physical training, sport and recreation were once again recognised as a necessary priority. In his opening address the Officer Commanding AFB Overberg, Col T. Cross, said that he hoped that all members present on the day would make use of the opportunity to make working in the SAAF an even more rewarding and fulfilling experience. "I believe that sport plays an important and vital role in the members' sense of well-being, thus promoting a balanced and healthy lifestyle that is of vital

importance to the "people" element of Air Power," he said.

At the end of the day, the hosts of this fun-filled day, AFB Overberg, triumphed over the visitors with 26 points, and the Officer Commanding AFB Ysterplaat (the previous winner of the sports day), Col Butler, presented Col Cross with the Langeplaat/Overberg trophy.

AFB Langebaanweg was the runner-up with 22 points and AFB Ysterplaat came third with 18 points, but made up for it by walking away with the Base Command Council Trophy for volleyball.

All members who participated in the sports day were presented with medals for their contribution to making a success of this most enjoyable experience.



electronic warfare camp

Compiled by CO Maryke Lynn

Photographs by WO2 Christo Crous



The "war games" commenced on 19 September 2005 and continued for two excruciating weeks, during which electronic warfare (EW) operators faced the elements and the penetrating high-pitched drone of thousands of cicadas with boldness. However, no amount of dust, wind or scorching sun could dissuade them from performing their duty on this venture at the Roodewal Bombing Range, which was strongly reminiscent of something out of the wild, wild West.

Numerous air campaigns since the 2nd World War have proven that EW is an essential aspect of modern warfare that no Air Force can neglect. Therefore the main purpose and aim of these exercises were force preparation of our aircrew and command and control ground forces in the very important art of Electronic Warfare.

The systems deployed throughout this undertaking included a Tactical Mobile Radar (TMR), an Automated System for the Capturing and Analysis of Radar Information (ASCARI), the manual annexure (MANEX) from which debriefings took place, the SA-8, Flapwheel, ZSU 23/4, Cactus AU and FU, an

Open Loop Tracker and a Mobile Communication Unit (MCU).

A typical day consisted of several air defence scenario simulations, and started with an essential high-level target reconnaissance sortie by a Cheetah C for accurate mission planning of attacks on the different weapon and radar systems. The actual strikes took place a few hours later and started with a 2-ship Impala or Cheetah advance. The first priority of such a strike is to take out the Surface-to-Air Missile (SAM) sites, after which the command post can be disenabled.

On the ground the Tactical Mobile Radar, used for the provision of an accurate air picture, "paints" the aircraft from about 40 miles out and acts as an early warning system that gives controllers the direction, airspeed and number of aircraft in formation. A controller inside ASCARI would subsequently warn the different weapon systems about the incoming bogeys and imminent attack. Weapon systems like the SA-8 SAM then go into a search mode in order to detect the target, get a lock-on and launch a missile. Pilots avoid detection for as long as possible by flying

Roodewal Bombing Range

"Numerous air campaigns since the 2nd World War have proven that EW is an essential aspect of modern warfare that no Air Force can neglect.".



nap-of-the-earth or by making use of stand-off radar jamming, effectively "clouding" the radar scopes, ostensibly rendering their presence a myth. As soon as the aircraft detects weapon systems on the ground, it is able to identify what mode they are in. A shrill audio tone, together with a flashing light inside the cockpit, warns the pilot as soon as lock-on occurs or a SAM is fired. The pilot is then expected to make use of electronic countermeasures such as self-protection jamming and chaff dispensing, evasive manoeuvres and making use of his/her flying skills and tactics to ultimately outwit the ground-system operators. The well-known saying, "chaff is king", demonstrated it's truth when it once again lent a helping hand in getting pilots out of tight spots when missiles had their unrelenting eyes on them.

All information captured by the weapon systems during these mock strikes is sent to ASCARI by means of optic fibres. There it is recorded by the EW evaluators of air crew and ground forces for later analysis and debriefing of pilots and EW operators with regard to their performance during the attacks.

The pilots, on the other hand, had to play back their Heads-Up-Display (HUD) camera to claim a kill. Debriefing was made possible by means of video conference technology, which connected the EW command post at Roodewal with the different bases from which the pilots operated.

Various squadrons and units were involved in this complex deployment, including the Air Force Mobile Deployment Wing (TMR and MCU), the EW Centre (Evaluation and Foreign Weapon Systems), 2 Sqn (Cheetah C & D), 35 Sqn (C47-TP), 17 Sqn (Oryx Radar Jammer), and 85 CFS (Impala MK I & II), who all contributed to making a success of this operation. This camp also ushered in a new era in which women will actively participate in EW operations. Capt

will actively participate in EW operations. Capt Catherine Labuschagne and her husband, Maj Jaco Labuschagne, wing-by-wing proved their mettle in their Impalas with numerous victorious missions.

"Our aircrew, our aircraft, our future", is the proud motto and driving force behind these very skilled Electronic Warfare operators, and in future they will continue to play an extremely important role in the defence of South African airspace!

For better or for worse?

When we say these words on our wedding day, do we fully understand the implications? Do we even think about it? No, probably not priorities are the wedding arrangements, the honeymoon, and the excitement of setting up a new home. You and your partner will be embarking on a new and thrilling journey together. A journey which will take many twists and turns, with many highs and lows. Having a solid financial foundation will ensure that you make good decisions along the way and be in a position to cope with life's adversities.

But what is a solid financial foundation? Some of the issues you need to consider:

- 1. Spending money on a lavish wedding, when perhaps you have more urgent priorities such as furniture for your new home, or even a deposit on a home. A big wedding can easily set you back R100 000, and you need to consider the benefit of having a large wedding which you will enjoy for a day, compared to having money to buy some material assets which you will enjoy for many years to come.
- 2. Going into debt to furnish your new home. This is very tempting, and you may feel under pressure to "get it all" straight away. Steer clear of debt as far as you can, and take things one step at a time. If you try to do everything at once, you could find yourself caught up in a debt trap, where the bulk of your income is going towards debt, and not for other things which may be important to you. Once you are deep in debt it's tough to dig yourself out.
- 3. Deciding upfront who pays for what each month. Get into the discipline of doing a monthly budget, and decide on what each partner will be responsible for. It is also important for each partner to have money left at the end of the month to spend on themselves.
- 4. Set savings goals for big joint purchases, and decide jointly on how to achieve these goals. This may include the purchase of your own home, or a new car. You also need to consider saving for future needs, such as education funding for your children. The earlier you start, the less you will need to set aside each month to achieve your desired goal.
- 5. Updating your Will and beneficiaries on any policies you have.
- 6. Each partner should have their own retirement plan. Retirement may seem like light years away, but it creeps up on all of us, and the earlier we start, the more we benefit from compound interest.
- 7. There are many things that can impact on you or your partner's ability to earn an income. These include death, disability, or contracting a severe illness. Both of you need to have sufficient cover for these events, to ensure that your life is not negatively impacted.
- 8. Each partner needs to have their own financial plan. Some women leave financial issues and decisions to their husbands, but this can leave them vulnerable, and unable to make decisions in times of crisis. Each partner, both husband and wife, needs to have their own financial plans in place, not only to protect themselves, but also to ensure their future financial security.

As you start your journey together, make sure it is with a solid financial base. Old Mutual financial advisers are trained and experienced in assisting you with your financial planning, and guiding you as your needs change along the pathway of life.





For advice contact your Personal Financial Adviser, or your Broker, or call 0860 101 233.

Licensed Financial Services Provider

The SA Air Force connected

intranet / internet

By Capt J.P. van Vuuren, SAAF Intranet Content Manager, and WO2 Wynand Koekemoer, SAAF Intranet Webmaster

If you are a user on the Department of Defence computer network you should be able to log onto the SAAF Intranet with ease. If you do not have access, contact your Local Area Network (LAN) administrator for help. If you are a regular Internet user you can access our Internet site at any time.

The SAAF currently has a functional electronic computerised communication tool in two fields, namely the DOD Intranet and the SAAF Internet (world wide web). The SAAF was one of the first divisions to comply with the new Department of Defence (DOD) regulations and policies as prescribed and promulgated by the Chief of Command and Management Information Systems Divisions (CMIS). Since the appointment of a full-time Intranet/Internet Content Manager and with the dedicated effort of a fulltime Webmaster, the SAAF offers clients up-to-date news and information on a huge range of topics and events.

Easy enough, you may think, but the daily update and maintenance of the Intranet is a full-time commitment and riddled with obstacles.

The most important factor in the development and maintenance of any Intranet/Internet facility is that of the *human* element, whether of individual participation or involvement as a group - this is also the most difficult element to move and manage. Human nature in its current form sees us getting more criticism than compliments, and it is a phenomenon that the individual who criticises, seldom, if ever, gives guidance or help in the form of the right information or data to remedy the grey areas.

Yes, we admit that we are human, too, but as we strive to achieve "zero defect" level, we are constantly amazed by the unwillingness of those who have the knowledge and access to information, as well as the expertise, to supply us with the correct data! It can also be mentioned as a compliment to our dedicated staff that only two individuals, the SAAF Intranet Content Manager and the Web Master, maintain and update the complete Intranet / Internet effort. What, then, are the primary challenges that we encounter in trying to perform our task?

The lack of participation by Directorates, Bases and Units in the regular supply of information, news articles and photographs of events, current and past. Squadron and Unit data is often outdated and incomplete, and this is the

most serious challenge.

The Intranet Work Team does not have the manpower or resources to look for or initiate news or articles, and the only internal information pool exists in the form of the AD ASTRA staff members as a news source. the SAAF Year Calendar as a reference to upcoming events and a few dedicated individuals who supply us with bits and pieces.



News received is usually of events that occurred long in the past or that is irrelevant by the time it is received. The Intranet is preferably a current information database. Data received is often by facsimile or on paper and the Intranet staff members do not have sufficient time to re-type text and information.

Receiving data accurately and timeously in electronic format, as well as good quality photographs, still remains the biggest threat and challenge. It seems that members are unaware of or ignorant about the availability of Lotus Notes, the Intranet e-mail system and the good old-fashioned postal services, internally and nationally.

Photographs are sometimes of poor quality (cellular phone photographs are a big NO!) and do not reflect the actual events. Photographs without captions also defy their purpose in many ways.

The truth is that only a handful of SAAF members participate at Directorate and FSE level in supplying us with worthwhile and newsworthy contributions. Since the availability of the Intranet/Internet, only eight out of thirty-two (8/32) Directorates have responded to the request to participate. Out of fifty-four FSEs listed on the Intranet only twenty contributed (20/54)!

Our plea to you as the reader is: Get up from your desk and support us - it's not only our problem! Share with us your expertise and other information like history, technical data, news, upcoming events, etc. This article is in many ways a desperate plea to you, the reader, to get involved and give a little help. Our e-mail address is: adastra@metroweb.co.za or adastra@webmail.co.za.





The AD ASTRA magazine

photographic tips

The purpose of this article is to give a few tips and guidelines on how we would like to have photographs prepared and taken for publication in AD ASTRA magazine. We do not wish to offend photographers, professional or amateur, nor instruct them in how to take photographs. Photographs used herein are for instructional purposes only and are not intended to offend or critisise any individual.

t is true that the digital era has in many respects given us the freedom to "click" to our hearts desire, and people do nowadays click away relentlessly. We at the *AD ASTRA* magazine have a commitment, like all other publications, to produce a high-quality product with high-quality visual information.

We do, however, want to achieve a special look and standard with the photographs we publish, and we would like to give guidelines as to our preferences.

When we look at the picture in front of us we want to experience the following (and these are just the basics): For an individual - the reader must be able to communicate with the person in the photograph by looking into his/her eyes and communicating with the "soul".





For an individual with his/her machine or tools of trade the reader must be able to see the person in his/her natural working environment holding or showing the tool of trade, without losing sight of the first guideline.





aroup / ook

For a group / achievers photo - rather crop the group by getting up close and cutting up to the hips than having the people in the distance so that their features are

unrecognisable.





No - avoid or make three rows to get closer

For aircraft / vehicles on the move - must preferably be done by professionals with zoom lenses and high speed equipment, unless you can get really close.





Yes

No - too far

Sport events and other functions - taking photographs of the backs of people is as bad as photographing a group with glasses in hand, drinking. Rather get couples to pose on a dance floor or get an athlete to stage a move or action. Do not try to photograph him/her from far off whilst in action.









The following are important tips to take note of:

Digital photographs should not be taken at low quality settings. Photographs taken with cellular phones are unacceptable and of poor quality.

- ■35mm analog photographs sent for publication and to be scanned must not be bent or folded or written on!
- Digital and analog photographs must be accompanied by a relevant caption and a date of capturing, if possible.
- Do not photograph a person/group with a bright light or sunlight at their backs - you will get a dark image, period!
- Never photograph people with drinking glasses filled with liquor in hand it's always a bad choice!
- Always try and connect with a person's soul by capturing their eyes looking towards or into the camera, even if he/she is working on or next to vehicles or machines.

Should you at any time need additional information or guidance, do not hesitate to contact us at (012) 312-2317 / 2713.

The perfect holiday destination eden wids

Information supplied by SAAF Fund Management

ery few members of the SAAF Fund, old and new, have been to the two holiday flats near Port Edward on the banks of the Umtamvuma River, "the river that cleans", named for the force that flows after good rains. This lovely resort set in lush tropical vegetation offers holidaymakers wonderful outdoor adventure activities such as scenic walks, freshwater fishing, boating and canoeing up and down the

A cruise on the resort ferry takes you to the Wild Coast Sun where golfers can tee off at one of South Africa's top golf courses. For gambling fanatics the Wild Coast Casino has plenty to offer. Also not to be missed are the magnificent beach and splash rock at Port Edward, only a few kilometers away.

The two apartments are equipped for self-catering and provide all home essentials required. The rates offered are affordable for each and every member. Contact the SAAF Fund on (012) 312 2281 and make your booking now. You will not regret your decision.



An Old Hand at the SA Air Force Fund

Mrs Delport started working for the SAAF Fund on 17 October 1977, at the former SAAF Headquarters in Church Street, 28 years ago, and she is still going strong. When she first started, the Secretary of the Fund was the late Colonel Samuels (Oom Sam), with the Controlling Authority, Lt Gen Mike Muller.

In August 1980 the Fund was established in its present form. Membership was voluntary and membership fees were collected through the Chief Paymaster. For those members who can still remember the Ananda Hotel, the hotel was purchased by the Fund in 1984 as an investment and for members to be near Sun City, one of the most famous holiday destinations in South Africa. Col Piet Pieterse (Pots and Pans) played a major role in the management of the hotel. Mrs Delport was responsible for the bookkeeping and had to travel to Ananda on a two-weekly basis to pay salaries and to do stock taking.

Early in 1988, under the guidance of the Board of Trustees, Brig Gen Louis Cadle and Col Pieterse recommended the purchasing of holiday flats for members of the Fund. Surfside, Club Mykonos, Mtunzi Park, Villa Sering and Eden Wilds were then purchased.

Mrs Delport's office moved to the present AFHQ building, first floor, in August 1994, and then to the present location. Her highlights during these years were the purchase of the SA Air Force Fund holiday flats and being able to be of service to the Fund members.

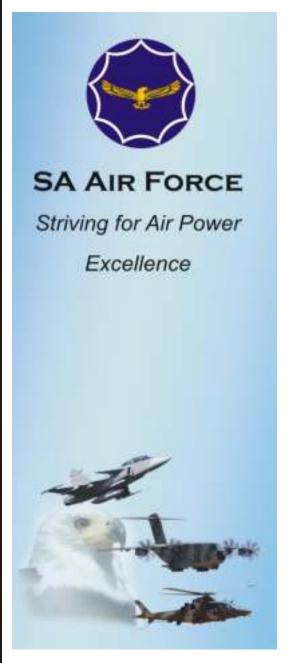
Sadly, Mrs Delport has suffered the unexpected illness of her husband, Lt Col Waldo Delport. Although these are difficult times, she still manages to find a way to deal with her SAAF Fund responsibilities and her family's circumstances. We wish her and her family well in the years to come.

Mrs Delport joined the SA Air Force **Fund on 17 October** 1977, at the former SAAF Head **Quarters in Church** Street, 28 years ago, and she is still going strong





The Department of Defence (SA Air Force) is an equal opportunity and affirmative action employer. The candidature of persons whose appointment will promote representivity will receive preference.



CLOSING DATE: 03 January 2006

Applications are invited for PILOT and NAVIGATOR
Training in the SA Air Force for Matriculants and/ or Grade
12 qualified persons with the following minimum
requirements:

- SA Citizen
- Must be between 18 yrs and 24 yrs (maximum age 26 yrs if graduate)
- Must obtain Grade 12 Maths and Physical Science [HG(D) or SG (C) or N4 with 60% and N5, N6 & 1st year University/Technicon with 50% or higher] and English (pass).
- Must comply with medical fitness requirements for Pilot/ Navigator training in the SA Air Force
- -6/6 Eye vision
- Must not have any criminal record

Applicants need to submit a cover letter, CV, copy of ID, statement of symbols and the coupon below to the address below:

ENQUIRY COUPON
Full Name: Postal Address:
Postal Code:
Contact telephone No:

Department of Defence Human Resource Support Centre (Directorate Personnel Acquisition) Private Bag X994 Pretoria 0001

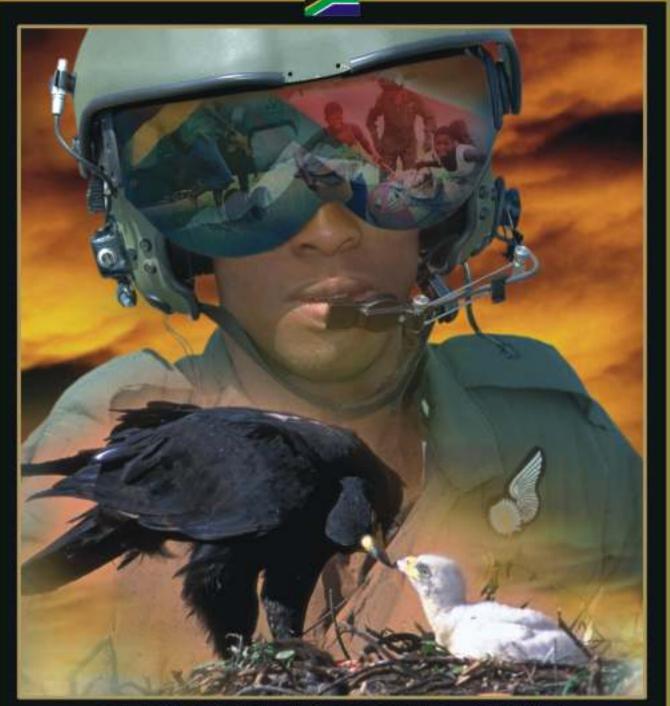
Enquiries: Tel: 012-339 5772/ 5769

Fax: 012-339 5722

CONTRACTUAL OBLIGATIONS:

Applicants will be required to fulfil contractual obligations on Successful completion of the Pilot and Navigator course.

Designed by Capt J.P. van Vuuren - AD ASTRA



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Loyalty Love for country Commitment Sacrifice Devotion Faithfulness Pride Courage Military discipline







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