SOUTH AFRICAN SOLDIER

African Aerospace and Defence Expo

Special Edition
From the Editor’s desk

Letters to the editor

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African Aerospace and Defence organisers partner with Gauteng businesses

Unlocking Africa’s defence and aerospace potential

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Enhancing good relations between South Africa and the Republic of Uganda

Denel showcasing the capabilities of the Rooivalk and SA Regional Aircraft

CONTRIBUTIONS:
Although all possible care is taken with articles, the editorial staff cannot accept any responsibility for lost articles and photographs.

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Defence Reserves Chief hosts businesspersons at the African Aerospace and Defence exhibition

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Youth Development Programme creates awareness about careers in the defence and aviation sector

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FRONT COVER: An Agusta Westland AW109 helicopter getting ready to land and drop soldiers to demonstrate combat readiness during a simulated mini war at the SA Air Force Capability Demonstrations at Makhado Air Force Base in Limpopo. (Photo by Mr Witney Rasaka)

For the latest news on defence matters in South Africa, visit our website at: www.dod.mil.za
A Soldier dedicates this special edition to the 2016 African Aerospace and Defence (AAD) Exhibition. The 9th edition of the AAD, the largest land, sea and air exhibition on the African continent, was held at Air Force Base Waterkloof in Pretoria.

The Minister of Defence and Military Veterans, Ms Nosiviwe Mapisa-Nqakula, officially declared the 2016 AAD Exhibition opened.

As the AAD should also represent the interest of Africa, it was with this in mind that for the first time in the history of the AAD that an African (Union) Pavilion was established this year to display the potential of African countries to the world.

Addressing the esteemed guests at the official opening of the AAD, Minister Mapisa-Nqakula said: “True to the theme for the 2016 AAD “Unleashing Africa’s Defence and Aerospace Potential” – we have, for the first time, been honoured by the establishment of an African (Union) Pavilion. In this no less than six of our continental partner nations are exclusively exhibiting. It goes without saying that we are very proud of this show which continues to cement its place among global aerospace and defence exhibitions. This year we have more than 440 exhibitors from 34 countries as well as no less than 95 display aircraft from several countries.”

The Minister also mentioned: “It is pleasing to note the upsurge of international interest in our defence industries and for them to participate and exhibit in the AAD. This augurs well for our economy. It is also particularly gratifying to note that part of the exhibition also offers a comprehensive youth programme, which exposes our young people to engineering and technology, entrepreneurial skills, youth development and career opportunities. For people to engineering and technology, entrepreneurial skills, youth development and career opportunities. For

Nelda Pienaar
Editor SA Soldier


Minisita wa mmbi na vhupileli na maswale a kale, vho-Mme Nosiviwe Mapisa-Nqakula ndi chone vho vudaho 2016 AAD tana itshofoyi.

Sa izwi tano la AAD litshi sumbedza moelaphanda ya Afrika, ndi ngazwo no pho na muhumbulo va urala u thuma kha diba za kuhumbulana kha za ina lusungalela kha za muhumbulo. As we celebrate the appointment of Lt Gen Derick Mgwebi as the Force Commander for the United Nations Stabilisation Mission in the Congo (MONUSCO) as well as the successes that have been attained by our Rooivalk attack helicopter in that mission, we cannot rest on our laurels.

"Ri pembelela u vheva ha Vho Lt Gen Derick Mgwebi sa mumanga phanda va United Nations Stabilisation Mission ngei Congo (MONUSCO) no uwova bupo-murutshe la Rooivalk kha nyama mishini. Arongo tea u avela, re tea ushuma vhukona unokuthoza ukuqhefinifhunzidwa ngimvolo."

Nelda Pienaar
Munwaleli SA Soldier

*Translation into Luvenda by Mr Lufuno Netshirembe."
ABOVE: Curious students visit the career exhibition stall of the SA Navy.

ABOVE: The Minister of Defence and Military Veterans, Ms Nosiviwe Mapisa-Nqakula, interacting with some soldiers at the SA National Defence Force career exhibition.
LEARNERS VISIT THE AFRICAN AEROSPACE AND DEFENCE EXHIBITION

At least 46 learners in Grade 10 and 11 with maths and science from 13 schools across Limpopo Province, while accompanied by two educators, Ms Tsammy Mahlaule (Tshiitwa High School) – Mashamba - Elim and Mr Tshitereke Eric Malakano (Tshiitwamatembele High School) Dzimalwini-Mutale visited the 2016 African Aerospace and Defence Exhibition held at Air Force Base Waterkloof, with the purpose to explore various careers within the aviation industries.

During the two-day visit the following schools were represented, namely Tshiitwamatembele, Vhafamadi, Ndalama, Raluombe, Tshiitwa, Lishavhana, Muthuhadini Combined School, Kutama High, Fedile High, Sofoloko, kgati ya Moshate, Mosedi and Phutinare in Mandaagshoek Burgersfort. According to Mr Malakano, an educator from Tshiitwamatembele High School, the learners benefited a great deal from the visit at the AAD.

The visit was informative yet fascinating at the same time and the learners were exposed to various career fields of aviation and military aspects. Takalani Muhali (16), a Grade 11 learner from Vhafamadi School (Mashau), wishes to become an engineer when finishing school, and said the visit treated him well.

The exposure he and his team gained from day one when they arrived at Air Force Base (AFB) Swartkop taught him a lot about self-discipline, time management, cleanliness and team work. “I felt like I was a king when motor bikes escorted us from AFB Swartkop to AFB Waterkloof while other vehicles were stopped for us to pass by.”

According to Nakisani Mashamba (16), a Grade 10 learner from Tshiitwa School (Mashamba, Elim), the visit came at the right time. She learned a lot regarding the behaviour of soldiers. She wants to take medicine as her career of choice (doctor) or a (pharmacist) and if not she will join the engineering department. She loves the military life because it teaches one discipline. She added: “I enjoyed the trip, especially the presentation by the military at Hangar 7.” Lt Thomas Mulaudzi, Air Force Base Makhado

COMPLIMENTS AND SALUTES

Compliments, including saluting are formal marks of respect and courtesy in the SA National Defence Force (SANDF). Failure by an officer to return a salute or compliments shows a lack of respect and courtesy on his part. There is indeed a tendency among senior officers in the SANDF not to return compliments to junior officers.

Then in line with military philosophy or etiquette, senior officers should show respect to the military culture by returning compliments (salutes) to their junior rankings.

This is important if they are to hand over what is best in leadership to their juniors. It is also important for all to praise, admire and maintain the values of the SA National Defence Force.

This letter is inspired by the core values of the SA Air Force such as, integrity which entails: “respect and adhering to the SANDF Code of Conduct”; human dignity which entails: “allowing members to express themselves”.

The values of the SA Air Force are, however, not exclusive to SA Air Force members. Since the SA Air Force is a Service of the SANDF, there is no reason why the same values cannot be appropriated and cultivated by junior officers in the other Services to express themselves regarding the same issue and/or the status quo.

Finally, this letter is inspired by Cpl P.N. Nyasenga whose emotional support has always been beyond measure helping me to complete my entire task. Cpl Modiri Mothibi, Air Force Base Waterkloof: 504 Squadron

BETTER WAYS OF GOING TO WORK

BETTER AND HEALTHIER WAYS OF GOING TO WORK, SAVES MONEY AND THE ENVIRONMENT, IT FRESHENS THE MIND FOR MORE POSITIVE THOUGHTS AT WORK. CYCLE, JOG, RUN, OR WALK TO WORK.

By: David Mabusia Tshivhula 2016/09/19
South Africa is a water scarce country, water availability is a critical component of development and is central to all forms of life. To find solutions to current water challenges the Armament Corporation of South Africa (Armscor) has come up with innovative approaches and techniques for water quality management and supply of safe water.

During the 2016 AAD expo Armscor explored various development initiatives. One such initiative is the Water Provisioning System (WPS). The system provides for the purification of fresh water by means of filtration.

The impressive water provisioning system is a mobile containerised water provisioning system that incorporates the following: surface water exploitation, water purification, water storage and water packaging (sachets and bottles). Future developments includes ground water exploitation, base water reticulation and efficient water reclamation.

Water storage module provides water storage tanks for raw and potable water in self-supporting tanks and bladder tanks and the capacity quantities are 10 000 litres up to 40 000 litres self-supporting tanks and 3000 litres up to 10 000 litres bladder tanks.

There are two different water packaging systems namely sachets and bottles. The water sachet is able to package up to 1200 sachets per hour from purified water and the water bottle is able to produce up to 1200 x 1 litre bottles per hour from purified water.
The South African Air Force (SAAF) hosted its annual Air Capability Demonstration (ACD) at Roodewal Weapon Range at Makhado in Limpopo Province recently.

The annual ACD is designed as a training exercise for security and Defence Studies Programme (SDSP), and Senior Command and Staff Course (SCSC) members to see air power at the strategic and operational levels of war and showcase how air power is applied.

The ACD affords members of the public an opportunity to experience SAAF’s air capabilities and roles during peace support operations. ACD provides the SAAF with an opportunity to display its collaboration and interoperability capabilities with other South African National Defence Force (SANDF) Arms of service.

The Deputy Chief of the SAAF, Maj Gen Gerald Malinga, who delivered the keynote address, stated that the event was an ideal opportunity for the Air Force to promote itself through training and demonstration. He remarked that, in this world that is dynamic, complex and often unpredictable, it definitely requires realignment and the creation of a national view on air and space operations. This will provide a cohesive and decisive air power capability for the Republic of South Africa under the stewardship of the SANDF. It’s for this reason, that training, education and development of its people is very important.

Furthermore, he highlighted that training is very key in the Air Force, suggesting that they train as they fight and they fight as they train. As guided by the Air Force mandate, Maj Gen Malinga stated that the SAAF will keep its Air Force-relevant, fast, flexible, versatile, effective and efficient. He went on to say that they will keep faith in the airman, military families and our beloved country – for theirs is to serve with discipline, dignity, professionalism and patriotism.

Maj Gen Malinga said: “Given the government’s focus on peace, security and stability on the African continent, the SANDF is increasingly undertaking functions aimed at addressing conflict and instability on our continent. This means that the SANDF has to provide forces and personnel to fulfill the spectrum of support for these tasks.”

He paid a special tribute to the bravery of deployed airmen and soldiers who are consistently performing their duties internationally and externally with honour.

In conclusion he said that the
SAAF is determined to support the South African aviation industry, by ensuring that essential sovereign and strategic capabilities are retained and that industry is afforded every opportunity to achieve international competitiveness.

After Maj Gen Malinga’s address the skies over Roodewal bombing range witnessed the sound of various aircrafts preparing for the air power demonstration. The spectacular air display took place towards sunset.

The display included SAAF’s fighter jets, the Gripens and Hawks, a selection of helicopters including the Rooivalk attack helicopters firing live rounds, BK 117 and Oryx and the spectacular dropping of 120 Kg and 250 Kg bombs onto a target site called Charlie Coke.

The display opened with a scene comprising a Hawk performing a low-level tactical reconnaissance mission, accompanied by a Gripen fighter which released flares.

Two Hawks then performed a close air combat mission, firing at ground targets with their 30mm Aden cannon, followed by pop-up maneuver and the firing of flares. Thereafter, two Oryx demonstrated the use of Bambi buckets extinguishing the fire.

To end a two hour-long event, spectators were treated to tight 8-ship formation fly-pasts from both the Gripens and Hawks, as well as a sky-full of helicopters stretched across the horizon coming in a most spectacular display releasing flares.

**AIR CAPABILITY DEMONSTRATION PREPARATIONS AND BUDGET**

Although the ACD used to be presented twice a year, it is now an annual event to coincide with the yearlong SDSP and SCSC courses.

Planning an ACD is a two month long exercise, but planning for this particular ACD has been ongoing since January this year to ensure a safe event. The ACD is also an expensive undertaking; a single MK81 general-purpose bomb costs a couple of thousand rands as well as Rooivalk 70mm rocket. The budget for the ACD is contained within the Force Preparation budget, which includes weapons and other operational camps within the training budget.

Thus, the SAAF tries to extract the maximum benefit from the ACD. In the latest iteration, young Hawk pilots underwent their final competency tests and as a result, are now regarded as fully fledged fighter pilots.

It is not just the aircrew that benefits, but the training and experience gained by ground and support crews are also of tremendous value.
African Aerospace and Defence Exhibition

African Aerospace and Defence organisers partner with Gauteng businesses

By Sgt Itumeleng Makhubela
Photos by Mr Whitney Rasaka

The 2016 African Aerospace and Defence (AAD) Exhibition got off to a promising start when organisers of the event signed a cooperation agreement with the Gauteng Growth and Development Agency and the Gautrain Management Agency. The agreement led to a joint marketing of the AAD 2016 to attract more visitors and exhibitors to the five-day event and facilitate access through the Gautrain rail and bus network.

The Deputy Chairperson of the Armcoscor Board, Ambassador Thuli Skweyiya, said the Memorandum of Understanding that was signed is the first of its kind and gives an opportunity to open doors for potential investors. She said the partnership strengthens relations with other government agencies and said they will continue to forge relations and fulfil government mandate to deliver services to people of the country.

ABOVE: The Deputy Chairperson of Armcoscor Board, Ambassador Thuli Skweyiya signing the Memorandum of Understanding to give opportunity for potential growth.
**African Aerospace and Defence Exhibition**

Ambassador Skweyiya said: “Central to the theme of the event; Unlocking Africa’s Aerospace and Defence Potential, we have forged strategic partnership with the United Nations to assist with peacekeeping mission in the African continent.

“The promotion of peace and stability in the continent and region is one of the key aspects of South Africa’s foreign policy. This year for the first time, we are co-hosting international guests with our African counterparts.”

The Armscor Chief Executive Officer, Mr Kevin Wakeford, said the 2016 AAD had a huge commitment particularly from the SA National Defence Force, the SA Air Force and the defence industry. He said they were excited about showcasing Africa, as a number of African countries which were hosted exhibited their defence hardware and technology.

Mr Wakeford mentioned that the focus is on the continent as it would be a way of extending their role in Africa. He explained that it would be an opportunity to exhibit alongside some of the world’s best armed forces. He added: “There is a direct correlation as articulated by the Defence Minister at the launch of the National Defence Industry Council between peacekeeping, GDP growth in peacekeeping areas and export growth for South Africa.”

He said the industry needs to create relations with other countries including the African Union and the United Nations and also take business people on the ground to establish economic linkages. Mr Wakeford commented that, “As we need to have conflict resolution capabilities, we also need to have economic relations to ensure that peace is not only left and maintained, but also for peace building. Government always speaks of partnerships and we are trying to work with key economic partners in Gauteng and national economy.”

Mr Wakeford said the cooperation will add to the success of the show and promote Gauteng as Africa’s top destination for investment and tourism. He indicated that the 2016 AAD is widely regarded as one of the world’s top five defence shows and now extends its reach through joint marketing with the Gauteng province. He said: “Our partnership with Gauteng enables us to cast the net wider and highlight the benefits for international companies who want to expand their operations in Africa’s premier growth region and partner with the local business sector for manufacturing and engineering services.”

The Group Chief Executive Officer Gauteng Growth and Development Agency, Mr Saki Zamxaka, said the Gauteng Growth and Development Agency was delighted to be part of the delivery of a world-class aerospace and defence show that showcases African technology, expertise and services.

Mr Zamxaka mentioned that there is potential for growth in manufacturing, technology and knowledge-based enterprises in Gauteng and the AAD will showcase what they have already achieved, but also lead to new partnerships with companies in the aerospace and defence sectors.
Unlocking Africa’s defence and aerospace potential

By Mr Lufuno Netshirembe
Photo by Mr Witney Rasaka

Minister of Defence and Military Veterans, Ms Nosiviwe Mapisa-Nqakula, with the Secretary for Defence, Dr Sam Gulube, and defence industry experts held a media breakfast recently at Waterkloof Air Force Base. The media briefing served as a precursor to the official opening of the 2016 Africa Aerospace and Defence (AAD) Exhibition under the theme “Unlocking African’s defence and Aerospace potential”.

The media briefing further served to inform the media what to expect from this year’s AAD and to highlight exhibitors that would be joining the AAD for the first time. Minister Mapisa-Nqakula indicated to the media that she was quite happy and proud with the fact that the AAD, the biggest aerospace and defence show in Africa and arguably among the top aerospace and defence shows in the world, drew the interest of no less than 500 exhibitors from approximately 35 countries. These exhibitors displayed and marketed their civilian and military aircrafts, military ware and day to day products to improve the socio economic and the overall wellbeing of the human race.

The AAD should not only be about South Africa, it should represent African interest, it was with this in mind that for the first time in the history of AAD that the African Union Pavilion was established this year to expose African countries’ potential to the world. Minister Mapisa-Nqakula said: “True to the 2016 AAD theme ‘Unlocking African’s defence and Aerospace potential’ we have for the first time been honoured by the establishment of an African Union Pavilion. In this no less than six of our continental partner nations are exclusively exhibiting. It goes without saying that we are very proud of this show which continues to cement its place among global aerospace and defence exhibitions.”

The Minister talked about envisioned sustainable AAD growth and its influence. She informed the media: “In March this year we successfully launched our National Defence Industry Council (NDIC) as prescribed by the Defence Review of 2015 and in support of our National New Growth Path (NGP) which seeks to support the National Industrial Policy Framework (NIPF) and the Industrial Policy Action Plan (IPAP). Both the NIPF and the IPAP are intended to support employment creation in various sectors.”

She alluded to the formation of a Transformative Enterprise Development Programme through the Council for Science and Industrial Research (CSIR), through this initiative we are currently incubation five black companies and intend to support them from research and development to industrialisation in various technology areas ranging from photonics, ICT and radar technologies.

The Minister emphasised the need for all government departments and the defence industry to contribute to deepening industrialisation and partnerships aimed at growing black defence entrepreneurship, growth in small, medium and micro enterprises (SMME’s) and promotion and empowerment of women.
The 9th African Aerospace and Defence (AAD) Exhibition, Africa’s largest premier exhibition of air, sea and land capability, recently took place at Air Force Base (AFB) Waterkloof in Pretoria bringing together all the captains of defence and aviation industries. The AAD had more than 440 exhibitors from 34 countries which showed growth from previous AAD exhibitions that had 419 exhibitors from 29 countries.

The purpose of the event is to showcase the latest technological innovations in defence and aviation sector. It was also an opportunity that enabled exhibitors to access the international purchasing and supply chain in aerospace and defence, as well as providing a platform to market both their products and brands. Several military and commercial aircraft and combat vehicles from different countries were on display and five new SA black owned companies showcased their products for the first time.

Minister Nosiviwe Mapisa-Nqakula informed the public of what to expect from this year’s AAD and highlighted which exhibitors would for the first time exhibit their products, especially the African countries.

African countries. She emphasised the potential of growth for AAD. She also said that the AAD should not be only for South Africa, but it should represent African interest.

The Defence Minister said: “This year’s AAD will alter negative perceptions. A number of people have the impression that South Africa is the only country on the continent which can provide this kind of service, but there are actually a couple of countries on the continent which can provide this service and which are part of the arms industry. I am also excited that I visited their stores, I have been to Namibia, Zimbabwe, Nigeria and I am told that Nigeria is partnering with our own defence industry companies in South Africa.”

The Minister further said that it’s uplifting to learn that the defence industries are producing and managing equipment relevant to assisting in international peacekeeping missions. She said that the industry is a highly skilled and competitive industry but South Africa has managed to be a major global player. She said the industry keeps coming up with innovative, creative and cutting edge designs that keep us up there.

Minister Mapisa-Nqakula officially opened the AAD during the official ceremonial parade that was held at AFB Waterkloof. She said that it goes without saying that she is proud of the AAD which continues to cement its place among global aerospace and defence exhibitions. She noted the upsurge of international interest in the defence industries and for them to participate and exhibit in the AAD.

“The South African Defence Industry is intensively and predominantly earning its position to international recognition for their continuous new innovations in aerospace and defence technologies. True to the theme for this edition of “Unleashing Africa’s Defence and Aerospace potential”, for the first time the 9th AAD revealed the African Pavilion where six of our continental partner nations exclusively exhibited their products.”

The Defence Minister also announced that the National Defence Industry Council (NDIC), which was launched in March 2016, has just published a draft transformation charter intended to bring more small and medium enterprises into the defence sector and encouraged all industry players to constructively and meaningfully engage with the broad consultative process to ensure
that they produce a robust Charter for the SA Defence Industries (SADI) that will ensure true transformation of the sector.

Minister Mapisa-Nqakula said: “We successfully launched the NDIC as prescribed by the Defence Review of 2015 and in support of our National New Growth Path, which seeks to support both the National Industrial Policy Framework (NIPF) and the Industrial Policy Action Plan (IPAP). Both the NIPF and the IPAP are intended to support employment creation in various key sectors, including the manufacturing sectors that aerospace and defence are an integral and key part of.”

The Defence Minister added she is gratified to note that part of the exhibition also offers a comprehensive youth programme, which introduces young people to engineering and technology, entrepreneurial skills, youth development and career opportunities. Minister Mapisa-Nqakula said: “For us in the SA National Defence Force (SANDF), a skilled youth is key to the future of the SANDF, particularly as we work towards satisfying the requirements of the Human Resources Strategy and Defence Review 2015.”

In conclusion the Defence Minister expressed her joy and celebrated the appointment of Lt Gen Derick Mgwebi as the Force Commander for the United Nations Stabilisation Mission in the Congo (MONUSCO) as well as the successes that have been attained by the Rooivalk attack helicopter in that mission.
2016 AAD unleashing Africa’s defence and aerospace potential

By Sgt Ally Rakoma
Photo by S Sgt Lebogang Tlhaole

Following the formal opening ceremony of the 2016 Africa Aerospace and Defence (AAD) exhibition at Air Force Base (AFB) Waterkloof, the Minister of Defence and Military Veterans, Ms Nosiviwe Mapisa-Nqakula, officially opened the first African (Union) Pavilion situated in Hall 1.

The biennial event has become the most admired premier event, showcasing technological innovations in landward, sea and air capabilities on the African continent. It is the first time that defence companies from various African countries have exhibited under the African Unity banner.

The Chairperson of Armscor, V Adm (Ret) Johannes Mudimu, said that Africa must take ownership of the initiative. Talking about the five none South African countries exhibiting under the African Unity banner, he said that “these low-hanging fruits” can be leveraged and built upon, with the hope that the number of countries exhibiting at the pavilion at AAD in 2018 will increase.

This was the 9th edition of AAD jointly hosted by the SA Department of Defence, Armscor, SA Aerospace, Maritime and Defence Industry Association, Denel and the Commercial Aviation Association of South Africa (CAASA). It was held under the theme: “Unlocking Africa’s Aerospace and Defence Potential”.

The AAD presents a more coherent face to African partners relating to building confidence, trust among States and cross-country collaborations, government agencies, military and civilians, interacting and sharing information, and working together from across the spectrum on defence collaboration and security to achieve development, peace and stability across national borders.

Being the real game changer on the African continent on the current defence industry trend, AAD had a huge range of offerings with the largest systems on display in support of mission profiles of many African countries on peacekeeping missions, countering terrorism, piracy and poaching.

With a number of developments taking shape around Southern African Development Community (SADC) region and the African continent, one of the highlights for the 2016 AAD was the expansion of the Armscor’s footprint with the impressive Mobile Containerised Water Provisioning System that incorporates surface water exploitation, water purification, water storage and water packaging (sachets and bottles).

The establishment of the African Unity Pavilion showcased innovation technologies of Uganda based supply company Impala Services and Logistics, armoured vehicle manufacture Proforce Defence of Nigeria, Safat Aviation Group of the Sudan which manufacture and service civil and military aircraft, project implementer Twiga Namibia, arms manufacturing and procurement company Zimbabwe Defence Industries.
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The Department of Defence high echelon visit to various exhibitors stalls

By Mr Lufuno Netshirembe
Photos by Cpl Jonathan Mogano, Pte Paul Mpangala and Mr Witney Rasaka

The Minister of Defence and Military Veterans, Ms Nosiviwe Mapisa-Nqakula, the Deputy Minister of Defence and Military Veterans, Mr Kebby Maphatsoe, the Secretary for Defence, Dr Sam Gulube, and the Chief of SA National Defence Force, Gen Solly Shoke, visited various African Aerospace and Defence (AAD) exhibitor stalls at the 2016 Expo at Air Force Base (AFB) Waterkloof.

The AAD, the biggest aerospace and defence show in Africa and arguably among the top aerospace and defence shows in the world, drew the interest of no less than 500 exhibitors from approximately 35 countries. Turkey, Pakistan, Russia, India, Jordan, the United States of America (USA) and China (to mention just few countries) were some of the countries that saw and took

ABOVE: The Minister of Defence and Military and Veterans, Ms Nosiviwe Mapisa-Nqakula, doing food tasting of the Special Force survival meals.

RIGHT: A member from SA Army Engineer Formations explaining the role and functions of the SA Army Engineer Corps to the Minister of Defence and Military Veterans, Ms Nosiviwe Mapisa-Nqakula, accompanied by the Secretary for Defence, Dr Sam Gulube, and the Chief of the SA National Defence Force, Gen Solly Shoke.
African Aerospace and Defence Exhibition

LEFT: The Deputy Minister of Defence and Military Veterans, Mr Kebby Maphatsoe accompanied by Chief of the SA Navy, V Adm Mosiuoa Hlongwane visited one of the exhibitor stall.

LEFT and BELOW: It was during these stall walkabouts that the Minister of Defence and Military Veterans, Ms Nosiviwe Mapisa-Nqakula, appreciated and thanked exhibitors from various local and international companies.

BELOW: The Deputy Minister of Defence and Military Veterans, Mr Kebby Maphatsoe, visited different pavilions at the African Aerospace and Defence (AAD) Exhibition.

In a rarely seen occurrence, superpower countries, such as the USA, Russia and China assembled in one place (Waterkloof AFB) for a full week to display their military wares. For the USA and Russia to be on African soil together at the same time sharing the display space was something that was special that only the AAD can boast to have achieved. It is historically well known that Russia and America have always had tension and therefore for these two countries to display and explicitly expose their latest weaponry technology was something unique and indeed phenomenal.

advantage of the marketing value and magnitude of clientele base that AAD show has to offer. The AAD takes place every two years and therefore it is absolutely important to exploit the marketing opportunity presented by the AAD.
Walking with her entourage (the Deputy Defence Minister, the Chief of the SANDF and the Secretary for Defence) Minister Mapisa-Nqakula indicated that she was impressed with the stalls and display thereof. The Minister said: “The AAD organisers left no stone unturned inviting exhibitors this year and these exhibitors indeed heeded the call to the opportunity to display their product at the AAD.” As the Minister visited different exhibitor stalls, the exhibitor explained the length and breadth of the product on display. Minister Mapisa-Nqakula showed keen interest in some of the displayed products that boast highly advanced technology.

It was during this walkabout that the Defence Minister, the Deputy Defence Minister, the Chief of the SANDF and the Secretary for Defence appreciated and thanked exhibitors from various local and international companies. During this visit companies had an opportunity to present and market their products to the Department of Defence high echelon.

In an indication of the advancement of the African continent for the first time in the history of AAD, the 2016 AAD had an African (Union) pavilion where for the first time companies from countries, such as Nigeria, Uganda, Namibia and the Sudan exclusively exhibited. Minister Mapisa-Nqakula said: “This goes without saying that we are very proud of this show which continues to cement its place among the global aerospace and defence exhibitions.”

Not only did the AAD attract foreign exhibitors, a plethora of local but internationally known aerospace and defence industry companies, such as Denel had a strong presence and impact on the 2016 AAD.
Financial misconduct, fruitless and wasteful expenditure can bring the National Defence Force to a halt!

“Prevention of Irregular and Fruitless Expenditure: Starts with me”
Enhancing good relations between South Africa and the Republic of Uganda

By Sgt Ally Rakoma
Photos by Mr Witney Rasaka

With a view to forge alliances, strengthen mutual and beneficial relations as well as consolidating ties with the international community in line with our country’s foreign policy is a clear indicator of South Africa’s growing significance in driving regional, continental and global solidarity.

At the recent African Aerospace and Defence (AAD) Expo held at Air Force Base Waterkloof in Pretoria, the Deputy Minister of Defence and Military Veterans, Mr Kebby Maphatsoe, hosted the Minister of State for Defence of the Republic of Uganda, Mr Charles Okello Macodwogo, and the Minister of State for Defence of the Republic of Uganda, Mr Charles Okello Macodwogo, exchanging gifts during a courtesy call at the African Aerospace and Defence Expo.

The Minister of State for Defence of the Republic of Uganda, Mr Charles Okello Macodwogo, and the Deputy Minister of Defence and Military Veterans, Mr Kebby Maphatsoe, after the courtesy call.

ABOVE: Fltr: Lt Col Makhaya Nkobo, Military Liaison Officer, Mr Sparks Motseki, a Board member of Denel, the Minister of State for Defence of the Republic of Uganda, Mr Charles Okello Macodwogo, and the SA Deputy Minister of Defence and Military Veterans, Mr Kebby Maphatsoe, after the courtesy call.

ABOVE: The Deputy Minister of Defence and Military Veterans, Mr Kebby Maphatsoe (left), and the Minister of State for Defence of the Republic of Uganda, Mr Charles Okello Macodwogo, exchanging gifts during a courtesy call at the African Aerospace and Defence Expo.

During the walkabouts
at the AAD, Deputy Minister Maphatsoe said that the AAD helps in creating market opportunities for small, medium and micro enterprises (SMMEs) and unlocking their growth potential for the future. He added that the Government is fully supportive of the SMMEs as one of the economic pillars that unlock economic opportunities, inclusive economic growth, sustainable employment and deterrent to the scourge of unemployment and poverty.

LEFT: The Deputy Minister of Defence and Military Veterans, Mr Kebby Maphatsoe, hand held an antitank grenade launcher RPG-7V1.

BELOW: The Deputy Minister of Defence and Military Veterans, Mr Kebby Maphatsoe (middle), and the Minister of State for Defence of the Republic of Uganda, Mr Charles Okello Macodwogo, showing some of the self-heating L’chesa instant hot beverages from ThabiSol Business Enterprise with staff members at the African Aerospace and Defence Expo.

ABOVE: The Deputy Minister of Defence and Military Veterans, Mr Kebby Maphatsoe, visited the Chinese defence stand at the African Aerospace and Defence Expo.

ABOVE: The Deputy Minister of Defence and Military Veterans, Mr Kebby Maphatsoe (middle), visited the Russian stand showcasing its defence industry’s capability.
The Secretary for Defence, Dr Sam Gulube, while doing his walk-through at the hangers and stalls during the African Aerospace and Defence (AAD) Exhibition, paid a visit to the Denel stall to hear about the capabilities and the design of the Rooivalk and the SA Regional Aircraft (SARA) model. Rooivalk Programme Manager, Mr Malusi Shezi from Denel, welcomed Dr Gulube as he presented the capabilities and the design of the Rooivalk.

The Denel Rooivalk (previously designed AH-2 and CSH-2) is an attack helicopter manufactured by Denel. The SA Air Force (SAAF) ordered 12 Rooivalks, designated the Rooivalk Mk 1 in SAAF service, the first of was officially handed over in April 2011. The helicopters are flown by 16 Squadron, which is based at Air Force Base Bloemspruit near Bloemfontein.

Mr Shezi said: “Owing to the SAAF’s decades of helicopter experience in the harsh African environment, the Rooivalk has been designed to operate for prolonged periods without sophisticated support. All that is needed to keep the Rooivalk flying is a medium transport helicopter equipped with a basic spares supply plus four ground-crew.”

He added that the Rooivalk carries a range of weapons depending on the mission profile. It is generally fitted with a nose-mounted 20 mm cannon and can also carry air-to-air missiles, anti-armour missiles and unguided rockets. The Rooivalk has a fire control system for target acquisition and tracking, as well as an advanced navigation system using Doppler radar and GPS. Also incorporated is an electronic countermeasures suite coupled with chaff and flare dispensers.

Notable features include a tandem cockpit, starboard tail rotor with a port tail plane, a fixed wheeled undercarriage as well as wire cutters above and below the cockpit and on the undercarriage. When the Rooivalk first came out, it was the only...
African Aerospace and Defence Exhibition

The Rooivalk attack helicopter at the African Aerospace and Defence Expo showcasing its capabilities.

African Aerospace and Defence Exhibition

ABOVE: Fltr: The Deputy Chief Executive Officer (CEO) of Denel Aero-structures, Mr Victor Xaba, and the Denel Aviation CEO, Mr Mike Kgobe, showcasing the SA Regional Aircraft interior to the Secretary for Defence, Dr Sam Gulube.

helicopter in the world that could do a backflip.

The following types of missions are foreseen for the Rooivalk: Reconnaissance, heliborne escort, close air support, deep penetration and anti-armour.

Showcasing the SA Regional Aircraft

The Deputy Chief Executive Officer (CEO) of Denel Aero-structures, Mr Victor Xaba, and the Denel Aviation CEO, Mr Mike Kgobe, presented the SA Regional Aircraft (SARA) model. The SARA has been initiated to provide an aircraft that can be used on short, low density routes, in particular to link destinations in areas where the road and rail infrastructure is poor.

Mr Kgobe stated that the seeds of the project were planted around four years ago, as Denel looked for projects that could harness the expertise residing in the company and its suppliers, while at the same time ensuring that new skills were developed. SARA is seen not just as a Denel project, but as a wider scheme to develop South African infrastructure and technical capability as part of the national objective. Following market analysis, Denel identified the point-to-point small aircraft niche as being underserved, with a gap in the market for a modern 15- to 24-seat aircraft.

Mr Xaba remarked that currently three versions of the SARA are planned. An airliner version would carry 24 passengers. A combi version would be able to carry 12 passengers and one LD2 cargo pallet. A freight version would be able to transport three LD2 pallets.

It would have a maximum take-off weight of 8 400kg, a ferry range of 1 500 nautical miles (nm) but a typical operating range of 500nm and be pressurised, so it could fly high and above the weather. Powered by two turboprops, it would have a designed cruising speed of more than 300 knots (kts – 556 km/h) and an economical cruising speed of 280kts (519km/h).

Take-off distance, under hot and high conditions, would be less than 900 m. It would have a length of 15.3 m, a height of 5.7 m and a wingspan of 20.9 m. The cabin would be 6.02 m long, 1.91 m high and 2.93 m wide. In the passenger version, the seating would be 2 + 2 with a central aisle and a block of four seats together at the rear. There would also be a toilet and a seat for a flight attendant. It would be flown by a pilot and co-pilot.
The Secretary for Defence fortifying relations

By AB Samuel Ramonyai, an Intern at SA Soldier
Photos by Pte Paul Mpangala

While the primary focus of the African Aerospace and Defence (AAD) Exhibition is to allow defence and security companies the opportunity to showcase their products, it is the array of static and flying aircraft that draws the crowds on the open days.

The Secretary for Defence, Dr Sam Gulube, grasped an opportunity to sincerely welcome Secretaries for Defence from various sociable countries who adorned the 2016 AAD at Air Force Base (AFB) Waterkloof in Pretoria.

It was during the proceedings of this event on the first day, when Dr Gulube had various courtesy calls with Secretaries for Defence from countries, such as Namibia, Swaziland, Zambia, Zimbabwe, Lesotho and the United States of America.

The purpose of these courtesy calls was to build relations, to recognise all the secretaries who have made it in person and thank them for their presence and support.

Dr Gulube showed his gratitude for the positive response of the aforementioned secretaries by presenting gifts to each one of them after every courtesy call. He then took his day further by giving a brief joined between Russia Federal Industry and the Federation Industry of the Republic of South Africa.

When presenting the relationship between the two countries, he remarked that the Defence Corporate Committee resolved to establish four working groups, namely for education and training, the second for military cortical corporation, the third for protection of intellectual property and the exchange of joined military exercises and the fourth for sharing of working experience.

In terms of a military cooperation agreement signed between South Africa and Russia in 2013, the two countries agreed to "enhance military cooperation, including military and military-technical cooperation on a long term basis and other forms of interaction between the armed forces of the two countries".

An outcome of this agreement was the news that about ten South African Air Force pilots from 2 Squadron at AFB Makhado have been selected for further training in Russia. Originally 18 pilots were supposed to go to Russia but this was trimmed down due to the low number of pilots in the SA Air Force and cost. The majority of those going to Russia are qualified pilots but are short of flying hours to build their experience base.

ABOVE: The Secretary for Defence, Dr Sam Gulube, showing his gratitude to the Deputy Permanent Secretary for Defence (Swaziland), Ms Dorcus Dlamini, by presenting a gift to her after a courtesy call.

ABOVE: The Secretary for Defence, Dr Sam Gulube, with the Lesotho Secretary for Defence, Dr Mampho Kotelo-Molaoa, during a courtesy call.

LEFT: The Secretary for Defence, Dr Sam Gulube, welcoming the Deputy under Secretary of Air Force (US), Ms Heidi Grant, with a gift during the courtesy call.
In pursuing the example of the African Union initiatives and the New Partnership for Africa’s Development as the path for sustainable growth. The Africa Aerospace and Defence (AAD) Exhibition provides possibilities of building strategic partnerships, mutual and beneficial relations and contribute to the establishment of the economic, social relations and forge common interest across the regional and global spectrum. This was evident during the three trade days of the 2016 AAD Expo when the Chief of the SA National Defence Force (SANDF), Gen Solly Shoke, warmly received high level delegations, senior international military and civilian counterparts from various friendly countries who came to grace the event at Air Force Base Waterkloof in Pretoria. During the courtesy visits Gen Shoke engaged his visitors on issues of development, exchanged views on peace and security, and shared matters of mutual interests and cooperation to bring solutions to the advancement of the continent.


LEFT: The Chief of the SA National Defence Force, Gen Solly Shoke (right), exchanging gifts with Gen Spoon Phiri, the Chief of the Malawian Defence Force.

ABOVE: The Chief of the SA National Defence Force, Gen Solly Shoke (right), welcoming the Vice Air Marshall Mohammed Usman from Nigeria.

ABOVE: The Chief of the SA National Defence Force, Gen Solly Shoke (right), presenting a token of appreciation to Maj Gen Muhoozi Kainerugaba from the Uganda People’s Defence Force.
General Shoke toured the various pavilions at the African Aerospace and Defence Expo

**Article and photos by S Sgt Lebogang Tlhaole**

High level government officials, military delegations, as well as senior corporate executives around the world attended the 9th edition of the African Aerospace and Defence (AAD) Exhibition that was held recently at Air Force Base (AFB) Waterkloof in Pretoria to forge partnerships, seal deals in this region and to showcase their latest achievements and technology innovations in the defence and aviation sectors. It provided a diverse range of exhibitors from core sectors of the aerospace and defence industry.

The 9th AAD Expo has continued in keeping with the reputation of attracting some of the world’s biggest names in aerospace and defence sectors that are keen to do business. The AAD is recognised as an international exhibition and one of the largest and most successful exhibitions in the world. A technology showcase and a business platform connecting aerospace professionals across all areas of the industry to facilitate successful global trade.

As Africa’s largest exhibition, this was the place to be for leading aerospace and defence companies and budding players eager to make their mark in the international aerospace and defence market. During the event the latest achievements in defence technology, including fighter and transport aircraft, helicopters as well as unmanned aerial vehicles (UAV) and combat vehicles were put on display.

The event offered a unique platform for defence and aviation industry thought leadership through its high level conference, forums and co-located events. Leading industry players, government and military chiefs gathered to contribute to dialogues, exchange ideas and seek solutions and strategies to advance the interest of the global aerospace community and key commercial, government and military delegations at Africa’s largest aerospace and defence event.

The Chief of the SA National Defence Force (SANDF), Gen Solly Shoke, toured the different pavilions and saw the latest developments in the field of defence and aviation sector.

**ABOVE:** The Chief of the SA National Defence Force, Gen Solly Shoke, touring the different pavilions during the African Aerospace and Defence Exhibition.

**ABOVE:** The Chief of the SA National Defence Force, Gen Solly Shoke, touring the different pavilions during the African Aerospace and Defence Exhibition.
and saw the latest developments in the field of defence and aviation sector. After his tour, Gen Shoke said that he had the opportunity to visit some of the exhibitions and said that he found the general levels of organisation and high quality of products and services very impressive.

Gen Shoke added: “I am particularly proud that the South African defence industry has continued to grow in placing itself at the forefront of innovation and research. The exhibition is growing, because it grows, so do the prospects of achieving its goals for enhanced partnerships and benefit for all our participants. Clearly the importance of this exhibition is unquestionable. Most importantly I was encouraged by the fact that, in its innovations, the defence industry does not seem to be limited only to developing weapons of war, but that these innovations can be used for the advancement of technology in general.”

Gen Shoke said: “This is something we want to encourage and support, in order to ensure that the large amounts of resources invested in defence, continue to be used for the advancement of society in general. Our defence industry plays an important role in our economy as well as in our human development strategies. It has been essential in stimulating new sectors of investment and development of new markets.”

In recent years South Africa has made major breakthroughs in its defence sector and attained self-sufficiency in producing important military equipment and systems. South Africa has also conducted other major military drills to enhance the defence capabilities of its defence forces and to test modern military tactics and state-of-the-art military equipment.

ABOVE: As Africa’s largest exhibition, this was the place to be for leading aerospace and defence companies and budding players eager to make their mark in the international aerospace and defence market.

LEFT: Exhibitors showcasing their latest achievements and technology innovations in the defence and aviation sectors to the Chief of the SA National Defence Force, Gen Solly Shoke (second from right).
South Africa is part of the global family of nations to advance the continent’s aspirations and interests in terms of the maintenance of peace and security in Africa and elsewhere,” said the Chief of the SA National Defence Force (SANDF), Gen Solly Shoke, when engaging with reporters of Cable News Network (CNN).

 Asked what the African Aerospace and Defence (AAD) Exhibition means to South Africa and the African continent.

General Shoke pointed out that the AAD is able to draw high-level attendees, e.g. government representatives, diplomats, representatives of agencies, researchers, academics, defence and security experts and present a unique opportunity for potential investors investing in large-scale manufacturing projects. Through the exhibition, South Africa aims to use it to expand industrial growth and economic development. He added that the event improves strategic relations and partnership between nations and provide more impetus to the vibrant relationship both at bilateral and multilateral levels that South Africa enjoys with other countries.

The Chief of the SANDF highlighted some of the milestones that add depth to the 2016 AAD Expo such as the establishment of the African Union Pavilion, the launch of the Africa Truck by Denel and the Armscor Water Provisioning System.

General Shoke said that through the biennial event of AAD, South Africa is looking forward to deepening relations through various projects in innovation, industrial technology, research, development, education, energy, tourism, trade and investments, information and communication technology, defence and security solutions and various projects on the domestic as well as continental front with various international players from the African continent and beyond.

### Asked how important is the AAD to stakeholders and South Africa’s local defence industry?

General Shoke replied that the event brings together Captains of Defence Industry, experts, decision-makers, international stakeholders, local industry, academia, small, micro and medium enterprises (SMMEs) and the general public to showcase and witness the latest technological innovations and it also promotes economic and social development. He stated that the AAD’s position in local defence industry to be world-class competitive and enhance their products that are relevant to defence and security industries. He highlighted that a National Defence Industry Council (NDIC) is established and added that it is also based on government’s stated objective of assisting local defence industry to develop a footprint in global defence market.

The Chief of the SANDF emphasised the importance of South Africa’s role in partnership with other developing nations in various multilateral forums that constitute key efforts to consolidate mutual, beneficial relations and strategic partnerships as well as identifying areas of cooperation and working together as equal partners with emphasis on development, security, peace and stability.

General Shoke also indicated the collective effort of the African states towards realising the African Standby Force and making firm commitments to consolidate the operational capabilities, to be efficiently deployed in peace support operations, its employment, deployment and capacity for immediate response to crisis.

He said that the SANDF is an effective partner with fellow African Armed Forces on a variety of military issues and continues to render peace support operations in the continent through the United Nations and the African Union missions to help create a safe and stable continent for a better Africa and a better world.
Unveiling of the Africa Truck at the African Aerospace and Defence Expo

By Sgt Ally Rakoma
Photos by S Sgt Lebogang Tlhaole

One of the attractions at Africa’s biggest Aerospace and Defence Expo was the official unveiling of the Africa Truck. The truck is regarded as a technology demonstrator and logistic support vehicle to meet different mission requirements.

A new generation military truck is designed and developed by Denel to provide logistic support and transport cargo to deployed South African troops. Denel is the largest manufacturer of wheeled armoured fighting vehicles and logistic support vehicles in South Africa.

The truck is a proven mine protection technology designed and it was built in ten weeks by Denel Vehicle Systems. It has a gross vehicle weight of 28 ton of which the payload is 12 ton and is the 6x6 configuration carrying a standard 20x8x8ft ISO container. The truck is powered by a 269kw diesel engine.

The unveiling of the truck is in line with the Military Command Council’s request to Armscor, Denel Vehicle Systems and the Council for Scientific and Industrial Research (CSIR) to investigate a project to restore the SANDF’s logistic support capability.

According to Mr Zwelakhe Ntshepe, the Acting Group Chief Executive Officer of the Denel Group, the Africa Truck is based on Denel Vehicle Systems’ proven mine protection technology.

ABOVE: Fltr: The Deputy Minister of Defence and Military Veterans, Mr Kebby Maphatsoe, and the Chief of the SA National Defence Force, Gen Solly Shoke, attended the unveiling of the Africa Truck.
SA Army shows its might while forging new ties at the African Aerospace and Defence Expo

By Lt Marumo Machete, SA Army Corporate Communication
Photos by Mr Frans Setlau

The Chief of the SA Army, Lt Gen Lindile Yam, embraced the opportunity presented by the 2016 African Aerospace and Defence (AAD) Exhibition to share ideas on modern military hardware and harness army-to-army relations with his counterparts across Africa and other parts of the world.

Lt Gen Yam interacted with a number of his contemporaries from other armies across the world during this year’s AAD and highlighted the need for like-minded militaries to share best practices on the ideal equipment that the modern landward battle space demands.

As testament to the SA Army’s friendly relations with other armies from across the world, Lt Gen Yam received a courtesy visit from representatives of his counterparts from Angola and Pakistan at the SA National Defence Force (SANDF) chalet at Air Force Base (AFB) Waterkloof, he reciprocated by inviting them to the SA Army’s AAD evening farewell function at the SA Army College, two days before the culmination of the exhibition.

Earlier during the week, Lt Gen Jorge Goncalves, representing the Chief of the Angolan Army, and Lt Gen Omar Mahmood Hayat, representing the Commander of the Pakistan Land Forces, paid a courtesy call to Lt Gen Yam at his SANDF chalet office at AFB Waterkloof to discuss issues of mutual interest and opportunities that Africa’s premier Aerospace and Defence exhibition presents.

The two General Officers accepted Lt Gen Yam’s invitation to be guests at the SA Army’s AAD farewell and highlighted the need for like-minded militaries to share best practices on the ideal equipment that the modern landward battle space demands.

ABOVE: The Minister of Defence and Military Veterans, Ms Nosiviwe Mapisa-Nqakula, in the prone position simulating with a R4 Rifle.

ABOVE: SA Army Armour assets that included the Olifant Tank and Rooikat at the Mobility Track as well as other elements of the country’s landward forces.
RIGHT: The Chief of the SA Army, Lt Gen Lindile Yam, was upbeat about the wide array of possibilities that Africa’s premier defence and aerospace exhibition.

ABOVE: The SA Army Artillery, Intelligence, Engineers and Training Formations also added their capabilities to the static displays at the expansive Air Force Base Waterkloof.

function hosted in Thaba Tshwane. Speaking at the function, Lt Gen Yam highlighted his appreciation of the fact that a number of African countries also showcased their capabilities and hardware at this year’s AAD, an occurrence that augurs well for the continent’s push towards the design, manufacture and acquisition of state-of-the-art defence and aerospace technology.

“This year’s AAD pools together state-of-the-art technologies from across the globe and it was reassuring to see a number of African states exhibiting their impressive catalogues on defence and aerospace equipment that are designed to mitigate the battle space challenges that our militaries face,” the Chief of the SA Army stated.

He thanked his two guests for gracing the SA Army with their presence and indicated that it was a noted gesture of friendship which he does not take for granted.

Lt Gen Yam said: “I am delighted that amidst the hustle and bustle at the show at AFB Waterkloof, we managed to steal a few quiet moments to plot the way forward as armies and see how best to leverage the showcased technological capabilities towards the fulfillment of the mandates our principals expect from us.”

The Chief of the SA Army was upbeat about the wide array of possibilities that Africa’s premier aerospace and defence exhibition presents and said: “As we mingle and converse during AAD, I am filled with a sense of pride and hope for a better world where we create opportunities to trade in military hardware and equipment that are conceptualised, designed and put together specifically for real-time challenges in our operational theatres.”

He added that there was a need to “tap into the existing pool of knowledge that abounds on aerospace and defence matters and try to expand further and invent user-friendly hardware that adds
value to humanity”. Lt Gen Yam took the time to remind everyone at the farewell function that AAD was “a marketplace of world-class Aerospace and Defence turnkey solutions under one roof” that the African continent should take advantage of.

And back at the airshow and exhibition still with two more days before it reaches closure, the highly trained men and women in uniform from the SA Army impressed the thousands of military enthusiasts at AFB Waterkloof with their field craft, tactical maneuvers, paratroopers’ aerobatic acumen and superior weaponry for the duration of the show.

SA Army paratroopers descending from SA Air Force platforms from the beautiful African skies were the feature and attraction of the exhibition and their coordinated skill and precision was a marvel to watch for both uniformed participants and visitors. Adding to the impressive paratroopers’ mass jump from the C130 was the battle prowess of the SA Army Armour assets that included the Olifant Tank and Rooikat at the Mobility Track as well as other elements of the country’s landward forces who executed a mini war to the delight of enthusiasts. The SA Army Artillery, Intelligence and Training Formations also added their capabilities to the static displays at the expansive AFB Waterkloof. This year’s AAD also saw the inaugural African Union Pavilion being a feature which is believed to form part of the exhibition going into the future.

Military chiefs, attachés, company executives, members of the diplomatic corps and defence industry experts rubbed shoulders at the event. AAD is a biennial defence industry event that showcases diverse capabilities in military hardware and aerospace technology hosted by South Africa and billed as Africa’s premier aerospace and defence exhibition. It has left a lasting impression on the international defence community regarding the capability of Africans to contribute their expertise in the design, manufacture and upgrade of state-of-the-art military hardware widely used in the defence and security fraternity across the world.

The Armaments Corporation of South Africa (Armscor) was the lead partner for this year’s event, supported by the SA Aerospace, Maritime and Defence Industries Association (AMD) and the Commercial Aviation Association of Southern Africa (CAASA), with the Department of Defence and Military Veterans as the lead state department.
The SA Air Force’s Oryx helicopter gets life extension

By Capt Ntokozo Ntshangase, Editor Ad Astra
Photo by Cpl Mabelina Mokoatle

The SA Air Force (SAAF) has recently received 39 newly modified Oryx medium transport helicopters from the Chief of Defence Matériel, Mr Mthobisi Zondi, during the symbolic hand-over ceremony held at Air Force Base Waterkloof. The modification, which saw the Oryx helicopter fleet being fitted with new dynamic components, engines and avionics systems, was conducted under Project DRUMMER.

The Project was initiated to address the decline in the lifecycle of the Oryx helicopter, which was caused among other things by the obsolescence of major avionics systems. In an attempt to address the state of decline, the SAAF registered the mentioned project for modifications thereof.

Speaking during the ceremony, the Deputy Chief of Air Force, Maj Gen Gerald Malinga, noted that the completion of Project DRUMMER provides the SAAF with a rejuvenated platform, which will allow the organisation to improve its availability and operational effectiveness. According to him, the project “has bridged the technology gap between the old analogue to digital systems in order to achieve greater and better performance. It allowed the organisation to redefine and refine production and assembly in terms of processes within the industry”.

The Project allowed for locally based skills transition and transfer, which saw “more than fifteen sub-contractors on the project proving beyond reasonable doubt the significance of exploiting local capabilities before looking for solutions elsewhere”, said Mr Zondi, while reiterating the importance and economic relevance of the project. Both Maj Gen Malinga and Mr Zondi believed that the project left a lasting legacy in terms of capacity building.

They posited that the teams that worked on the project did not only “hone and sharpen their talents, bringing in current best practices, but provided the South African Defence Industry with the opportunity to introduce and expose the next generation of technically talented and competent personnel to the aerospace environment”.

The Director Air Force Acquisition, Brig Gen Khaya Mtirara, commended the level of professionalism and commitment displayed by various teams towards the successful completion of Project DRUMMER. He mentioned that the project recruited core technical teams, which “gained knowledge and skills from the Cheetah, Rooivalk and other associated programmes”. There was a consensus from various speakers that the life extension of the Oryx helicopter has a “direct and positive impact on the processes of production and maintenance” as the project has created additional skill sets across the value chain. Notwithstanding the recorded achievements, Brig Gen Mtirara acknowledged that there were challenges and mistakes committed during the upgrade. However, they saw them as a learning curve that will assist with future projects.

Project DRUMMER was divided into two phases. Phase one was primarily focused on the dynamic components upgrade and engine overhaul. The second phase dealt with communication and navigation system as well as the obsolescence management of the Oryx fleet. The last upgraded aircraft was delivered to the SA Air Force in July 2016.
African Aerospace and Defence Exhibition

African Aerospace and Defence Expo ranks among the top five exhibitions in the world

By SLt Doreen Oosthuizen, SO3
Communication Naval Base
Simon’s Town
Photo by SLt Obed Medupe

Air Force Base (AFB) Waterkloof in Pretoria, the administrative capital of South Africa, was home to the 9th African Aerospace and Defence (AAD) Expo, the biggest show of its kind on the Africa continent.

The AAD Expo was organised and managed by the successful partnership of the Department of Defence, Armaments Corporation of South Africa (Armscor), South African Aerospace Maritime and Defence Industries Association (AMD) and Commercial Aviation Association of Southern Africa (CAASA).

This year the AAD not only catered for more than 440 national and international aerospace and defence exhibitors from 34 countries but included popular elements such as the major air show and a “mini war” demonstration over a total span of 43 000 sqm exhibition space, both indoor and outdoor. The AAD, which is a combination of military, civilian and aerobatic aircraft under “one sky”, hailed from the Aerospace Africa civilian exhibition (previously known as the Lanseria Air Show) and the DEXSA military exhibition.

The Minister of Defence and Military Veterans, Ms Nosiviwe Mapisa-Nqakula, emphasised at a media briefing prior to the opening of AAD the need for government and the industry to promote representation of women in the defence industry, as well as small, medium and micro enterprises. The Minister also referred to an upgrade of the Rooivalk platform which will lead to collaborative defence programmes, risk-sharing co-development and co-production. Exhibitors’ displays ranged from the latest weapon systems, heavy to light, armoury, field kitchens with a mass feeding system, tracked and wheeled armoured fighting vehicles, high intensity searchlights for border control, satellite communication systems, re-deployable camps, navigation and security surveillance systems for submarines, to name only a few.

The AAD trade days allowed company executives, military commanders, military attachés and other business and diplomatic staff to network, exchange ideas and commit to deals. Trading days play an important role in the growth of any country’s economy because it is directly linked to job creation for the local industry and jobseekers abroad. The trade days were followed by two open days for the public.

Aircraft never seen before in South African skies, as well as everything from the spectacular Gripens to parachute drops and the popular “mini-war”, featuring armoured vehicles and the Denel Rooivalk attack helicopter were on display.

After spectacular parachute jumps by the SA Air Force’s Golden Eagles parachute team, they presented the scroll to the Chief of the SA Air Force, Lt Gen Zimpande Msimang. Whereafter he addressed the public.

Many foreign countries showcased their military air capabilities as well as civilian aviation joined the runway to put up an impressive combination of skill, precision and aerobatics stunts. The weekend saw a SAFAT 02 and 03 aircraft from the Sudan Aviation, the Pakistani trainer, the Super Mushak, Pitts Specials and aircraft of the SA Air Force Museum. Other entities such as the South African Police Service gave an impressive demonstration.

The Gripen display and Silver Falcons of the SA Air Force’s aerobatic team attracted a lot of attention from the crowds holding their breath during each dangerous SOTI.

45 South African “parabats” jumped from a C130 in the late afternoon followed by the Silver Falcons aerobatics team. The multiple-ship Gripen formation ended the show on a high note.
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a challenge, a commitment, a future
The Chief of Defence Reserves hosts businesspersons at the African Aerospace and Defence Exhibition

By Col Shuping Motswadira, Senior Staff Officer Corporate Communication Defence Reserves
Photos by Sgt Niko Malatji and Mr Witney Rasaka

The Chief of Defence Reserves, Maj Gen Roy Andersen, utilised the AAD as a platform to promote and market the concept of the Defence Reserve System, and briefed over one hundred members of the Defence Provincial Liaison Councils and Captains of Industry regarding the development of and other strategic issues regarding Defence Reserves.

On the Saturday the Chief of Defence Reserves hosted a briefing session on Reserve Force matters for the Defence Reserves Board members, Reserve Force Council members, Defence Provincial Liaison Council members (Gauteng and Limpopo) and Captains of Industry. The Defence Reserves Division team and Provincial Office Gauteng had an indoor exhibition stand in a prime spot to promote and market the Reserve Force System and all services. The Reserve Force Volunteer magazines and branded promotional items were distributed among the public. Stakeholders and visitors came in their numbers to obtain more information about the South African Reserve Force and its operation.

ABOVE: The Chief of Defence Reserves, Maj Gen Roy Andersen, giving a brief overview of the SA National Defence Force Reserve Force to the delegates before they were escorted to the Air Force Base Waterkloof.

ABOVE: A Gripen in action showing its air prowess at the African Aerospace and Defence Exhibition.

Centenary Commemoration of the SS Mendi

21 Feb 1917 - 21 Feb 2017
The SANDF thrills the public by demonstrating its air superiority and landward capabilities

ABOVE: Mbombe Infantry Fighting Vehicle showing its high mobility during the mobility track demonstration.

RIGHT: Husky mine detection vehicle demonstrating route clearance.

ABOVE: Badger Infantry Fighting Vehicle showing off its sting.

BELOW: Rooikat armoured vehicle in action.

LEFT: The SANDF showing a variety of engagement scenarios combining ground forces and aircrew.
African Aerospace and Defence Exhibition

LEFT: Rooivalk attack helicopter providing aerial protection.

ABOVE: Hawk lead-in fighter aircraft performing aerial stunts and making starring appearance.

BELOW: Ground troops firing mortars.

ABOVE: A demonstration of rapid medical evacuation during the execution of a battle scenario.

LEFT: A demonstration of air and landward protection.
The African Aerospace and Defence (AAD) Exhibition also presented the Youth Development Programme (YDP) which is an integral component of the AAD show. The YDP was first introduced in 2002 to mobilise the youth of today in order to sustain the aerospace and defence capability for tomorrow.

The YDP is aimed at supporting the Government through promoting and improving results in Mathematics, Science and Technology related subjects at schools. The key aspect of YDP is to nurture the potential of Africa’s dynamic youth by supporting human capital development efforts within the Aerospace and Defence industry. Over the years the programme has seen a steady growth through the support of numerous partners and industry players.

However, the main objectives of the YDP was to create awareness about careers in the defence and aviation sector among the youth of South Africa, provide a platform for the youth to interact with defence and aviation sectors, assist learners to identify bursary opportunities in defence and aviation sectors, support the promotion of Mathematics, Science and Technology related subjects and lastly to assist graduates in the fields of Engineering and Science to interact with defence and aviation sectors to identify vacation work and internships.
The YDP played a key part in “Unlocking Africa’s Aerospace and Defence potential”. In particular, the sole focus was to widen the footprint and creating awareness to previously disadvantaged youth. The Programme invited 3 000 learners consisting of Grade 9, 10 and 11 learners and few selected Grade 12 learners from Dinaleli High Schools of the Department of Basic Education in selected Provinces.

Included in the AAD, the YDP was a youth programme of the Military Skills Development System (MSDS) which is aimed at creating awareness of career opportunities in the SA National Defence Force (SANDF). The MSDS functions as a recruitment service for the SANDF and the reserve forces. The MSDS is a two-year progra which consists of training and skills development during the first year and in the second year acquired skills are put to test, upon completion, the candidate exists the system to serve in the Defence Reserves or stays on for medium term career opportunities.

The SANDF provides a complete and committed soldier with an unquestionable patriotism through the MSDS.

The SANDF’s youth programmes such as the Young Lions (SA Army), Siyandiza (SA Air Force) and Izivunguvungu (SA Navy) Programmes were all presented at the AAD as part of the YDP. The Young Lions (SA Army) is a skills development programme which was initiated in 2009 with the intention of involving selected youth in an adventure of military discipline, skills development and a training programme which will help support the annual recruitment of the SANDF.

Whereas, the concept of Siyandiza and Young Falcons (SA Air Force) are aviation awareness programmes to introduce the youth of the country and expose them to the military aviation and the airborne might of the SA Air Force and to strengthen its recruitment. Siyandiza and Young Falcons play a significant and a leading role in grooming Mathematics and Science in high school learners so that they can make informed decisions when selecting a career path that is aviation related. While the Izivunguvungu Programme (SA Navy) is part of a larger social outreach programme, which was instigated by the SA Navy in 1996.

Prior to AAD 2016 the YDP committee completed activities such as take a girl child to work in partnership with Denel Land Systems, Youth Programme in partnership with Denel, CSIR, ATNS, the SA Air Force and Armscor and 67 minutes on Mandela Day. These activities benefitted over three hundred learners from township schools in Gauteng Province. The YDP was also enhanced with a comprehensive flying display programme, encompassing military, civilian, sport and recreational aircraft.
The SA National Defence Force inspires youth with its career possibilities

Photos by Sgt Ally Rakoma

LEFT: S Sgt Livhuwani Mashawana from SA Army Gymnasium in Heidelberg, orientates Botshelo Maamogwa on the R4 simulator elac system.

ABOVE: Cpl Matome Mawasha from 1 Tactical Intelligence Regiment assisting a learner with the Sophie Thermal Imager (day/night capability for surveillance).

LEFT: 120mm mortar and highly explosive bombs catch the youngsters imagination, fltr: L Bdr Lungani Dlongolo, Tshwarelo Shabalala, Sijabulile Ndlovu, Thoriso Bodibe and L Bdr Kgwale Makgwale from 4 Artillery Regiment.

ABOVE: Learners impressed by the SA Military Health Service surgical post displaying a mock injured patient. Seen here is Grade 11 learners, Boikanyo Songo and Remember Rasakanya from Molebatsi Secondary School in Hammanskraal, with S Sgt Maria Maifadi and 2Lt Adel-Tami Maumela from the School for Military Health Training.

ABOVE: A member of the SANDF briefing the young ones on the R4 rifle. (Photo by Mr Witney Rasaka).
LEFT: Learners impressed by the military high-tech combat hardware exhibits and technology based long range weapon firing system.

BELOW: DEFENCE WORKS CAPABILITY: S Sgt Samson Zita and PO Leon Stigling, electricians from Defence Works Formation, showing the direct online star-delta forward/reverse motor control panel to young technical enthusiasts.

ABOVE: Young people inspired to join the military.

ABOVE: The SANDF sparks the curiosity of the public. (Photo by Mr Witney Rasaka).

ABOVE: A youngster having a feel of the Military Police motorcycle. (Photo by Mr Witney Rasaka)
The Chaplain Services has an important role to fulfil at Defence exhibitions. For the last few years the Chaplains Division has been part of a broader movement to expose an element of the SA National Defence Force (SANDF) to the public. This is done by means of displays and exhibitions at the different national shows. The Chaplain Service has made use of this opportunity to create a bigger awareness of the role of the clergy in the SANDF. This past year alone the Chaplains have been part of the exhibitions at the Armed Forces Day, Rand Show, Rustenburg Show and the 2016 African Aerospace and Defence (AAD) Exhibition.

The experiences remain the same when it comes to finding pastors as part of a Defence display. The public’s reaction remains one of surprise to the fact that clergy of different faith groups have found a home and a purpose with the SANDF. With every surprised look and curious stare, there comes question of clarity, doubting the role that as pastors and reverends and their true functional role as role-players within the SANDF.

Some stop to retrieve a free gift, some stop and stare, some stop an dare not even afraid to ask a question, while other just ask what are your Morutis doing here. The surprise is soon replaced with wonder and understanding, followed by: keep up the good work and keep up the moral. The experience has made the chaplaincy aware that it is a great opportunity to create awareness and give information access that can truly expose the public to the face of the comprehensive work that the chaplains to every day.

The role of a chaplain is one with so many different aspects that allows its members to be more effective in the allocated work. We provide spiritual guidance and support; stand by our members in times of death and mourning. Uplifts moral and stand as a mirror to ethical behaviour. We are confidants to our commanders and shoulders to lean on for our members. We are chameleons with a profound purpose.

Explaining this to the public makes them aware that the SANDF have the welfare, spiritual and emotional needs of its member at heart. The chaplaincy has become the caring/compassionate face of the broader SANDF. The chaplaincy is an embedded service that strives to improve the lives and conditions of the members of SANDF.

At the recent AAD the public was once again delighted to find religion in all its forms and denominations represented as part of the SANDF. The interaction with the public is one that can only enhance the service we offer. By exposing our services to the public we make them aware of career opportunities and improve the work that we do. We are accountable to the public and stand in defence of our nation by caring for our soldiers.

It is our duty to appeal to those who in future will volunteer their service and lives for this wonderful country as dedicated soldiers of the SANDF. We need to show them that their sacrifice will be met by our dedication and commitment to care for them. That is the opportunity that every expo presents and as a Chaplains Service we grab this baton with both hands and take it to the limits of our calling.
Meet our very own martial arts fighter

By Sgt Ally Rakoma
Photo by Pte Paul Mpangala

Tae kwon do is the technique of unarmed combat for self-defence that involves the skilful application of various martial arts. It has grown into an international art and sport practiced all over the world. It is a recognised sport of the International Sport Federations and the International Council of Military Sport (CISM).

The SA Air Force martial arts fighter, Sgt Collen “Ninja” Ledwaba, quoted Bruce Lee: “If you always put limits on everything you do, whether physical or anything else, it will influence your work and your life. There are no limits, there are only plateaus, and you must not stay there, you must go beyond them.”

Sgt Ledwaba says this statement from the man he idolised as a youngster has always stuck with him because it holds truth for all areas of life, including this sport.

The 34-year-old martial arts fighter and Kyokushin karate black belt holder was born and raised in Mabopane, north of Pretoria. He joined the SA Air Force in 2004 and now works at Air Force Mobile Deployment Wing.

During an interview with SA Soldier he explained that karate is a pattern of life that requires strict discipline, develops moral character and is part of one’s identity and a way of life and an art that teaches discipline.

Through his dedication and passion for the martial arts, he is today a sensei (teacher), and with Lt Col Gerhardus Jansen van Rensburg has spread the art by training others in this sport every Wednesday at 68 Air School.

Sgt Ledwaba said that the sport had taught him certain life skills and the courage to rise above whatever challenges or setbacks he had experienced. He highlighted that the sport included physical fighting skills such as kicks, punches, open-handed blows, blocks, sweeps, throws, take-downs, parrying actions with hands and feet and fundamental movements combining many different techniques and styles of Kung Fu.

He was asked how an athlete can stay positive in sport when he or she is defeated in a competition.

“Defeat is a state of mind. A lot of people become discouraged too soon. The name of the game is, you have to be relentless, fight for your territory and, once you give up, what you do not want will automatically take over.

“It was more important to heed the lessons of a defeat or setback. Just tell yourself that if it’s hard, I’ll do it hard and I am unstoppable. Then you will triumph.”

How do you conquer fear when you get into the ring?

“As a competitor I apply various techniques of the sport in the ring even when I am facing a stronger opponent. A fight in the ring is unpredictable. Everything is in the mind and it takes a lot of training and preparation. I always make sure that I am prepared and maintain all round fitness. It requires endurance, tenacity and stamina. You must have an indomitable spirit. It was the ultimate goal of any fighter who joined martial arts to be graded to the level of black belt. It’s a journey that encompasses training for many years, days and nights of hard work and sweat. It is the culmination of knowledge learned along the way and experiences gained that makes this journey so special. There are belts of various colours that one has to obtain in this order: white, yellow, green, blue, orange and black.”

Sgt Ledwaba has won a wide range of accolades and bagged various awards. His achievements include, among others, the 2011 SA National Defence Force (SANDF) Martial Arts Championship (Gold) in Cape Town and the 2013 SA Air Force Sport Merit Award for achieving Protea Colours in martial arts. He was the SANDF Kickboxing Welterweight Champion in 2014, the Gold trophy overall winner against his Canadian opponent during the Canada versus RSA Competition in 2013 and the winner of SAAKA/WAKO Kickboxing gold and silver medals in 2013. His ultimate goal is to become a Shihan (Master instructor). (The literal Japanese translation for shihan is to be a model).
Medicinal myths and a lack of care for our natural environment will be the forces behind the extinction of this magnificent animal.

The South African National Defence Force is a pillar in the reactive physical campaign being fought against poaching on the ground and in the skies. We also engage in proactive educational campaigns to spread awareness about the intrinsic value of this magnificent animal.

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