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THE SOUTH AFRICAN ARMY

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In twelve years the South African Army has grown from a small, poorly equipped and under-manned semi-part time organisation to a highly effective force, well housed, well trained and with a host of new vehicles, weapons and equipment. The arms embargo, the threat on the South West Africa/Namibia border and the collapse of the Smith regime in Zimbabwe have greatly increased the proportion of the gross national product spent on defence. The increase in the length of National Service to two years, the extension of the number of days full time service which the reservist must carry out and the length of time he must spend on a reserve have improved the training and readiness of the Army and reserves.

Major General G I. Meiring, the Deputy Chief of the Army, told the writer that the threat of a conventional attack upon the Republic was always present but the principal concern in 1983 is that of "insurgent and terrorist operations", some of them on the borders being on a considerable scale. The army is therefore organised so that conventional brigades and divisions could be put into the field at short notice by calling up Citizen Force units. Border operations are carried out by national service white units and by coloured, black and indian units carrying out voluntary national service assisted by a number of called-up Citizen Force units. Local defence is the task of the home based Commando units supported by Citizen Force or national service units if required.

At the HQ SADF it was stressed that in 1983 the army is much more of a national force than ever before; all colours, races and creeds are now involved in the defence of the Republic. Universal national service for the white population, the enlistment of large numbers of non-whites and the increasing enlistment of women as volunteers has ensured that most of the population has some interest in the army.

According to *The Military Balance 1982/83* the total army strength on active duty is about 67,400 of which some 4,500 are non-white. Approximately 15,500 are members of the Permanent Force (long term regular officers and NCOs); there are 2,000 women and about 50,000 National Servicemen. Call-ups take place twice a year (January and July) although the majority of conscripts report in January. The forces are administered, and in some cases controlled for local security purposes, by nine Territorial Commands but the field forces operational

battalions and regiments, mainly Citizen Force, are organised into fighting formations. The IISS Military Balance lists one corps headquarters, two divisional HQs (one armoured and one infantry) and seven brigade HQs. The latter comprise one armoured brigade of two tank and two MICV (Ratel) carried infantry, one mechanised brigade of one tank and three MICV carried infantry battalions and four motorised infantry brigades each of three infantry battalions and one armoured car battalion of Elands. All the brigades have their own supporting artillery, engineers and logistic units. There is also one parachute brigade which has one Permanent Force/National Service battalion, itself part of the Parachute School, and two Citizen Force battalions. A third is being formed. These CF battalions are manned by NS men who have carried out their national service with the PF battalion and by Volunteers. The brigade is supported by parachute trained artillery and other supporting units.

The army also has a special recce unit, nine field and four medium artillery and seven light anti-aircraft regiments, one AD missile regiment with Crotale missile batteries and, according to IISS, some Tiger-cat SAM, fifteen field engineer squadrons and three signal regiments. There are school and training establishments for all the corps and regiments; these are concerned with the training of junior leaders, always a problem in a conscript army.

The basic training at these schools, in the ten NS infantry battalions, and other training units is rugged and tough. The spartan accommodation provided is clean and adequate. Much time is spent on drill and on the inculcation of soldier like qualities; the basic recruit course lasts 12 weeks and for the first three weeks NS men are not allowed out of barracks or to drink alcohol. After that period they have limited passes. Normally at the end of the 12 weeks the men are streamed into suitable trades; then as the courses progress, a Leader Group is selected. These men continue their instruction in their regimental and military duties but with the emphasis on leadership. Finally those selected for commissions are sent on special officer courses at the appropriate School. The others will become junior NCOs, L/Cpls or Cpls.

This training includes a period of about three months on active service on the Border and lasts about one year. For the second year of his full time national service the man will be employed on the Border in the units which are permanently based there or, if an officer or NCO will perhaps act as an instructor to the following intakes of NS men. This system of employing NS Cpls as instructors for the new intake has its disadvantages because such instructors have not normally had sufficient service in the 'rough and tumble' of an active battalion or regiment; they can only pass on what they themselves have been taught.

However, it is a necessary system because of the lack of long service PF members.

During the NS training period the men spend time on arduous field exercises including survival and initiative in difficult country. The heat is considerable and men have to be exceptionally fit to succeed. The method of combination of training establishment with operational responsibilities is somewhat unique to South Africa. The 1st South African Infantry Battalion (ISAI) was established in 1951 and is said to be the 'mother' of all the other battalions. From 1979 it took over the training for the mechanised infantry using the Ratel MICV. Every year the unit trains four mechanised companies and two mechanised support companies for operational employment in the following year. It is also responsible for all leader courses and for promotion courses for all officers.

Such courses are a feature of the SA Army: before being eligible for promotion to the next rank every officer, PF, or CF, must first complete his promotion course. This system has caused the Force to become somewhat 'course bound' in that officers spend too much time away from their troops and unit, especially those, like the CF officers, who only have limited training time. The system is being reviewed to try to give more stability to units and to make them 'Mother units'.

The companies trained by the ISAI are allocated to the 61 Bn which has a permanent leadership cadre in the operational area. The mechanised infantry equipped with Ratel 20s are trained to operate with the armoured car squadrons in COIN operations and with the tank regiments in conventional warfare.

The 1 Special Service Bn is 50 years old. Today it is an armoured car training regiment responsible for the provision of trained squadrons for employment on the Border with the 2 SS Bn. There are three training squadrons each consisting of five recce troops, each with four Eland 90 armoured cars, five support troops with Ratel 20s and an administration troop. The training lasts one year but because only limited numbers of armoured car squadrons are required the intake takes place every second year. Squadrons from this battalion have taken part in the major incursions into Angola to destroy SWAPO bases; they were extremely successful and during one raid immobilised and captured five Soviet made T-34 tanks plus vast quantities of weapons and ammunition.

The first members of the 1 Bn The Parachute Regiment were trained in 1961. Today it is a Training Centre which includes an operational battalion, this has been employed in total or in part in many Border operations. Most of these operations have been heliborne cut-off operations but others have necessitated jumping. Today the Battalion

has a training wing of four parachute companies, a support company and a parachute training wing which is mainly concerned with courses for other arms and for leaders. A trained parachute battalion forms a part of the School and has a standard infantry organisation. There are the usual staff sections and the HQ company. The training is thorough and so far there has not been a parachute accident. All the members of the Parachute Regiment are volunteers; a selection board visits each NS call-up centre during the first week of the NS men's service and chooses the men required. They then carry out a pre-para course of two weeks physical training and six battle tests to weed out many applicants. Parachute training follows, the wings being granted after eight successful jumps, two with full equipment and one at night. The attrition rate is about 60%. Dakota aircraft based nearby are used for training jumps, for as many who served 40 years ago will recollect, these aircraft are spacious and allow plenty of room for the instructors and despatchers to check and re-check. A flight with a stick of parachutists proved the safety of the checks and the dedication, stamina and efficiency of the members of this battalion and of some non-White Special Forces in the Group.

The School of Armour, like the other units already mentioned, is located at Tempe, Bloemfontein; it is the School responsible for the training of all PF, CF and NS leaders, of specialists for the armoured units and instructors, for the running of armoured corps promotion courses and for the instruction of drivers for all SAA B vehicles. For the teaching of advanced battle handling the School has an armoured squadron at the SAA Battle School. The armoured corps is equipped with Olifant tanks, a development and up-date of the British Centurion, and with Ratel armoured cars although there is much older equipment such as the Saracen and Ferret armoured cars still about or in store.

The Artillery School is at Potchefstroom. This also is a true School for the instruction of officers and NCOs, for specialists, for meteorology support and for the development of artillery tactics and equipments. The SA Artillery is converting virtually all its field regiments to medium guns; at present the ex-British 5.5 inch towed gun is being used but, as they become available, will be replaced by the new SA towed and SP 155 mm G5 and G6s; a number of the towed G5 have been produced and are in service at the School and with regiments. The G6 prototypes have been tested and are about to enter production. It appears that the SA Army took note of the effectiveness of the Soviet BM 21 MM multi-barrelled rocket launcher when used against semi-trained troops and have therefore developed the excellent Valkiri, a 24 tube model mounted on a 4 tonne four wheel drive truck. The solid fuel rockets can be fired singly or in ripples of 2 to 24, are easy to

reload and only require a crew of two.

The range is from 8 to 22 km. The rockets are fitted with varying sized ring discs to increase wind resistance and so decrease the range; it is these rings that cause the screaming effect after launch. The warhead is packed with small metal balls which are exploded by the HE charge and a proximity fuze is fitted. The vehicle has a standard canvas hood which covers the rocket launcher when on the move. The artillery have already retired their Sexton 25 pdr SPs and are now retiring or placing in reserve their towed 25 pdrs. It is believed that the SA Artillery also man 120 mm mortars but this is not confirmed.

Experience on the borders, it is stated, shows that there is still a place for the mounted infantryman both on horse and on motorcycle. The Equestrian and Motor Cycle Centre near Potchefstroom is charged with the training of these personnel. Established in 1974 with the aim of training mounted personnel for COIN operations, the Centre promotes the image of the SADF by providing display teams and taking part in mounted sports, so as to enhance the standard of riding in the SADF. The Centre now has a training company, a courses company, a horse and motor cycle company each of six platoons. Each platoon has a 60 mm mortar section and an equestrian or motorcycle section. The training usually takes about one year and all the personnel are carefully selected. Once trained, platoons are attached to infantry units in the operational areas for their final year of service. The training company comprise the general riding platoon whose task is to train remounts, the display platoon and an advanced riding platoon. The courses company trains the riding instructors.

The Centre has its own stud farm at de Aar in the Karoo, the best blood line for these horses is said to be Arab and British thoroughbred. These cross-breds have the stamina required to carry a fully equipped man up to 80 km a day. The normal operating speed is the walk and men are trained to fight on their feet. However, they do carry their assault rifles in the ready position and surprise actions have taken place at the gallop for the men are trained to fire from the ground or from the saddle. The section commander carries a lightweight radio.

The motor cycle company is equipped with machines designed for cross country, trials work and each has a radius of about 150 km; the rider has a A53 manpack radio with 16 km range, the pressel switch being mounted on the handlebar with a second one on the chest. The rifle is carried slung and the men fight from the ground.

Captured SWAPO prisoners are reported as having said they are worried by these motor cycle units because they can follow raiding and ambush parties rapidly over the roughest tracks.

The equestrian and MC platoons operate with tracker personnel,

black and white, who are trained at a special section of the Infantry School at Outshoorn. Dogs are also used for this task and for the locating of mines and other explosives; the animals are trained at a special centre at Bergslag in the East Transvaal.

The Army Gymnasium, a traditional name for the establishment at Heidelberg south of Johannesburg, is the Signal Training Centre for the SA Army. The Centre accepts all NS and PF men allocated to the Corps; again each man has his normal 12 weeks basic training before continuing to the various signal trades. Selected personnel are trained as junior leaders at the Centre. The Signal Corps in general divides into two branches, the telecommunication operators (Command Centres) who operate all tactical communications and the telecommunicator operators (Systems) who are responsible for manning long distance and strategic systems. All are trained in driving and maintenance of signal corps vehicles. Courses are run for promotion and for Citizen Force and Commando personnel. Many of the prospective officers in the Corps hold a degree or technical qualifications before they join; a special syllabus is designed for such qualified recruits. The Signal Corps man the rear links of the teeth arm units and normally train the unit regimental or battalion signal officers.

The continuing COIN operations in Namibia have increased the demand for engineer services. The intake to the School of Engineers at Kroonstad has therefore been increased and about 50 courses are now held there each year. These include the basic training, junior leaders and young officers courses. The School teaches all forms of military engineering and emphasises the need to use local resources. Minewarfare is given particular attention because of the extensive use of these weapons by all armies.

The SA Army has its own Staff College and there is also a Battle School. The latter teaches the tactical handling of brigade and battalion groups and also gives intensive training to some Citizen Force units before they go to the Operational Area.

The SADF has three joint service training/educational establishments which serve all the arms of the force. These are the Military Academy, the SA Defence College and the SADF College for Educational Technology. The Academy caters for selected young officers and conducts a degree course. The SA Defence College prepares selected officers for senior command and staff appointments. The third College caters for the training of instructors and media centre co-ordinators and prepares training material for other colleges.

It should be mentioned that the SA Medical Service is a fourth Service and is responsible for the health and hygiene in the Army, Navy and Air Force. The members wear a special uniform and run hospitals,

medical centres and are attached to Army units.

Although most of the army is white increasing use is being made of the other races who, it is said, volunteer in large numbers, particularly for the army.

The oldest non-white corps in the South African Defence Force is the Cape Corps which can trace its history back to 1795. Designed to train and employ coloured, that is mixed race personnel, today it consists of the 1 SA Cape Corps Battalion which is about 2,000 strong, 1,000 being fully trained men who serve in the operational area; the other 1,000 are under training. There is also the Cape Corps Training School, a logistic unit and a maritime unit. Coloured Permanent Force members of the Corps carry out their training at the Cape Corps School and at other establishments of the SA Army and Navy; coloured officers have reached the rank of Kommandant which is equivalent to Lieutenant Colonel and have the same rights and privileges as white officers.

Indians in South Africa are not interested in joining the Army, it appears. The vacancies for the Navy are oversubscribed, applicants are trained at SAS Jalsena at Durban. After training they are appointed to ships and shore establishments and to the marines, a recently formed branch of the Navy employed on harbour protection and as naval infantry. Companies of these marines have successfully served with the army in an operational area.

Black Permanent Force members are trained with the 21 Battalion, in reality a Training School, at Lenz near Johannesburg. This unit was formed in 1975 and since then has trained large numbers of men, leaders and specialists, many who, having completed their initial two year engagement, have signed on as career soldiers. The calibre of the junior leaders up to Staff Sergeant is said to be very high. General Constand L Viljoen, the Chief of the SA Defence Force, told the writer that "the black units have been a great success, their loyalty and steadiness in action has been most impressive and the Army is pressing on their efforts to train more junior leaders, including officers."

The expansion of the black forces is continuing; ten battalions are being formed in various regions of the Republic with the leaders being trained with 21 Bn. Major General Meiring said that the training of these personnel for the 'Armies of the Homelands' has delayed the training and formation of more black units for the SADF. However, there are five black battalions in the new South West African/Namibian Army who take their turn like the black units of the SA Army, in the operational area. There are also a number of indigenous battalions raised in the Border areas of Kavango, Ovambo and in the Captivi Strip. One of these is composed of Bushmen, many of them refugees

from Angola. The 32 Bn, a part of the Army itself, is also permanently located in that operational area. This is composed of all races, a number of them being Portuguese from Angola. It is a tough and hardy unit said to be feared by the members of SWAPO.

There are about 26,000 troops deployed on the Border; because manpower and economics does not permit the use of a fully regular army the Army has developed a workable tour of duty system using company sized units. A number of PF staffed brigade, battalion and regimental headquarters are permanently located in the area and, they, with a small leader group down to company commander, remain for full tours of duty of about two years and provide the continuity and expertise.

Companies of NS men, Citizen Force, blacks and coloured personnel are sent from the Republic and SW Africa to serve under these HQs. The Citizen Force units normally spend about 120 days on duty of which a part is spent on intensive training before being committed to action. All companies from whatever source pass through a short intensive training period at a battle school located south of the Border where they must be passed 'fit for operations'. Non-CF companies spend about one year in the area depending upon the time the NS men still have to serve.

The company rotation system seems to work in practice although it does mean units lack some cohesion and must suffer from a lack of tradition and internal continuity, factors which make for high morale in a regular unit. It is also a little discouraging, one is told, for the battalion and company commanders who train their men back in the Republic not to lead them into action.

Recent legislation has altered the Reserve Commitment of National Servicemen. The new system is somewhat complicated but it is designed to give every white person a full commitment to defend his country and to involve the non-whites to a greater extent than before. In future every white male will carry out his two years NS in the SADF; he will then have to join the Citizen Force for 12 years during which time he will spend a maximum of 720 days on duty but will not have to give more than 120 days continuous service in any two years. After this service he goes onto the Active Citizen Force Reserve for five years and may, if necessary, be called up with permission of the Minister. After completing his term with the ACFR he transfers to the Commandos until he is 55.

The Commandos are a home defence force mainly of volunteers and there are non-white and multi-racial units. In effect the units are lightly armed infantry and are to be found in nearly every town and village and in all major industrial undertakings. Until 1983 they could

volunteer for service on the Border but this is no longer so. It is stated that Commandos are to be given more responsibility and such people as farmers in remote areas are being encouraged to form Commando units for local defence from their own workforce of all races. The strength of the Commandos is estimated to be about 90,000. Former national servicemen who, for some special reason are allocated to the Commandos must serve a maximum of 50 days a year for ten years. Others must serve for 12 days a year until they are 55. Many volunteers carry out extra service.

The South African Army in 1983 is well equipped with vehicles and weapons specifically designed for use in the Southern African environment. ARMSCOR, the Armaments Corporation of South Africa, who are responsible for defence research projects and for the development, procurement and manufacture of all armaments, have made considerable progress in the last ten years. The local armament industry can now provide virtually all the Army's requirements and have entered the export market with some of their products.

The writer saw Kommandant P E Marais, Chairman of ARMSCOR, who said "In 1960 the South African Government saw the inevitability of an embargo against the country. This was one of the reasons that led to the establishment of the Armaments Production Board in 1964. In 1977 after several changes of title the organisation was called ARMSCOR and given a mandate to meet the Republic of South Africa's armament needs in an efficient and economic manner and by the maximum utilisation of the private sector. Today our assets are 1,500,000,000 rand (£811 mn) and ARMSCOR provides employment for 28,000 people of all races."

The largest industrial organisation in SA, ARMSCOR wants to sell warships — fast missile boats — missiles, armoured cars and troop carrying vehicles to overseas markets. A number of countries have expressed an interest in the new G5 Gun.

Weapons produced in SA include the Valkiri rocket launcher, the G5 and G6 artillery pieces and artillery fire control and meteorological systems, the 60 mm M 4 mortar, the Ratel MICV, the SAMIL range of vehicles, MG 4 machine gun and various anti-tank and anti-personnel mines.

The Valkiri has already been described; the G5 is a towed 155 mm gun mounted on a stable wheeled carriage and an auxiliary motor is fitted to drive the gun while the gun positions. The maximum range at sea level is 30 km with normal ammunition but 37.5 km with a special base bleed projectile. The top traverse is 84 deg and the elevation of -5 deg to +75 deg enables it to be used in the high or low trajectory. The rapid rate of fire is 3 rpm; the trail, wheels and firing platform are

powerised which permits the gun to be brought into action in two minutes. The gun is towed by a SAMIL 10 tonne vehicle at speeds of up to 90 kph. A mechanical electronic gun monitor with an automatic EFC counter, recoil length indicator and round counter is fitted. The engine mounted on the gun is a 68 hp diesel with hydraulic drive for the main and trail wheels. The gun fires all normal types of ammunition of the 155 mm calibre and three different charges are used for the various range zones.

The G6 is the SP version of the G5 and uses the same gun and has the same range. It is mounted on a six wheeled armoured car type vehicle and has a good cross country performance: 44 projectiles are carried in the vehicle, the road speed is 90 kph, the overall length with the gun is 10.2 m, the engine is an air-cooled diesel with a five speed gearbox and 4 x 4 or 6 x 4 drive. A 12.7 mm anti-aircraft gun and grenade launchers are also fitted. The G6 is described as a somewhat revolutionary SP design giving plenty of room for the crew. Again reports, not surprisingly, state it is cheaper to run and maintain than a tracked vehicle.

The AS80 Artillery Fire Control System is designed to handle the computations for a fire unit of up to eight guns and can handle four simultaneous engagements. Display units are provided at each gun.

The S700 Meteorological Ground Station is a self contained mobile system built into a container for providing information for the artillery. The Station automatically tracks, receives and processes radiosonde data from launch until flight termination. The received data is converted into actual met data, this is recorded on tape and directly onto a chart recorder.

The 60 mm M4 mortar weighs 7.8 kg complete, the Mk 4 model has a lanyard operated trigger whilst the earlier Mk 1 has the normal fixed firing pin. The 60 mm has been used extensively by patrols in Namibia, being said to deliver a heavy weight of fire rapidly and effectively.

The cross-country performance of the six-wheeled armoured Ratel vehicle, powered by a 6 cylinder diesel and with an 11 man crew is supposedly exceptional: the Ratel 90 gun has a reported range of 2,200 m. The armoured infantry and the armoured car units that use it, are said to believe that it has proved more than a match for the Soviet Armoured vehicles. The 20 mm gun on the Ratel 20 combines with the medium machine gun gives the infantry section fire support capability.

The SAMIL range of vehicles have been designed to meet the needs of the Forces in the rugged terrain of SW Africa being so built that about 85% of the components are interchangeable. The vehicles fall into the three categories of the SAMIL 20, 50 and 100. The SAMIL 20 is a light weight vehicle used for troop carrying, stores, command posts,

communications and general duties. The 50 is the standard tactical truck with many body variants from pantry wagon to tanker and command post, the 100 is the heavy duty truck again with many variants.

The MG 4 (7.62 x 51 mm) machine gun has as a rate of fire, 800 rpm. The effective range is 1,200 m and the total weight is 15 kg. The MG 4 is similar to a Browning. The SA Army has converted to the smaller 5.56 mm for its future small arms and is manufacturing the R 4 assault rifle for use by all arms which weighs 5 kg complete with a loaded 35 rd magazine; the length with butt unfolded is 1.005 m. It has a 'unique spring controlled' firing pin system.

The SA anti-personnel mine can be laid in the ground or in water up to one metre deep. The moulded plastic body contains 57 g RDX TNT explosive, the weight is .09 kg and 40 mines are carried in a plastic box. The HE anti-tank mine impacts on a load of 150 to 220 kg. It is filled with 7 kg of RDX TNT and two mines are packed into a box. Except for the striker mechanism the mine is entirely non-metallic.

The South African army today is tough, well trained and well equipped in the opinion of many observers. The war in Namibia has given the officers and men the operational experience to back up their theoretical training. Actual operational use has caused the development of many of the weapons and vehicles at present in service. The arms embargo has been a 'blessing in disguise' to the Armed Forces say South Africans who add that it has back-fired upon those nations who agreed to take part. It is suggested that not only have they lost the South African market but now the South African armament and vehicle manufacturers are capturing some of the West's other traditional overseas markets.

After some ten years of operations a new generation of leaders is emerging who have a wide experience of semi-conventional operations.

The emergency, it is alleged, has also provided the opportunity for an increasing number of non-whites to become involved in the defence forces which must in the future have a profound affect upon economic and social developments in the Republic.

The Army, supported by the SA Air Force, considers it is winning the war on the Angolan border but it can never entirely defeat the SWAPO guerrillas unless they lose the support of the Angolans, Cubans and the Soviet Bloc. A spokesman at the SADF HQ said in February 1983 "that the military efficiency of the remaining SWAPO fighters was decreasing although they still have a hard core of fighters." He added "that even these trained men have less 'stomach' for the fight than in previous times because the successes of the SA raids have much reduced their capability and strength."

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The SA Forces do their best to avoid engagements with the Angolan Army and the latter do the same. However SWAPO tries to involve them, and when they do, the Angolan Army personnel fight well if cornered although they prefer to disengage. The Cubans have not fought the SA Army, although they are employed against the UNITA rebel forces as a back up to the Angolan Army. Their fighting efficiency is not high but has not yet been fully tested. The SA Government insist they are not supplying UNITA; without this support they are doing well and becoming stronger as the economy of Angola continues to decline; they control much of the south east of the country and are usually able to keep the railway to Benguela out of action.

A settlement of the civil war in Angola, the granting of independence under a democratically elected government to Namibia/South West Africa and the removal of the Cubans from Angola is in the interests of all concerned and of the free world. It would remove a burden on the South African tax payer and on their armed forces but South Africans state it is not one which cannot be borne for a long time to come if this proves necessary. The Army supports the Government in insisting that Namibia should not be handed over to SWAPO unless they win "an honest and properly conducted election."

BOOK NOTICE

Up The Falklands Cartoons from the Royal Marines (Blandford Press, Poole) 95p.

Left behind when the SBS and landing craft Marines left Poole in April 1982, fellow Marines, Warrant Officer Carr, Colour Sergeant Huddart and Sergeant Webb, got to work to portray humorously in cartoons some of the many aspects of the Falklands enterprise in a style which is uniquely 'marine' in character.

There are some splendid cartoons and at 95p the book provides an inexpensive 'flavour' of the lighter side of the campaign.

1982. 64pp. Paperback.