



Military Despatches

Vol 47 May 2021

That wasn't very clever

10 wars started for really stupid reasons

Tanks for the info

Some interesting trivia about tanks

Falklands Air War

The aircraft used in the conflict

Paddy Mayne

Ireland and British Lions rugby international and a founding member of the Special Air Service

For the military enthusiast



Military Despatches YouTube Channel



Click on any video below to view



Paratrooper Wings Quiz

Most military paratroopers are awarded their jump wings after they have qualified.

In this quiz we show you 15 different wings and you tell us where they are from.

Army Speak 101

The SADF had their own language. A mixture of English, Afrikaans, slang and techno-speak that few outside the military could hope to understand.

Most armies around the world also had their own slang terms. In this video we look at some of them.



New videos each week

We will be uploading new videos to our YouTube channel each week.

So remember to bookmark the channel and keep an eye out for new content.



Military Firearms Quiz

This quiz is all about military firearms. We show you 15 firearms, you tell us what they are.



Elite Military Units Quiz

Most military forces have an elite unit or regiment or a special forces component.

In this quiz we show you 15 and you tell us who they are and where they are from.



Who said that?

Throughout history military leaders and politicians have had some interesting things to say about war.

We give you 15 quotes, you tell us made them.

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Please remember to subscribe to our channel.

Feel free to leave a comment, and share this video.



Editor's Sitrep

April has been one of those really weird months. Although it seems that these days we tend to have quite a few of those.

Down in Cape Town we've had a fire that destroyed a lot of our historic buildings. Then there is talk of the Proteas no longer being the official cricket team of South Africa. As I sit writing this on 20 April there are again rumours that the Rainbow Cup (rugby) is going to be cancelled. It's enough to make me consider taking up serious drinking as an occupation rather than just a hobby.

As you can see from the above the date is 20 April and I've basically finished the May edition of the magazine. This doesn't mean that I can now sit back and relax. Far from it.

I'm currently busy working on a YouTube channel for the magazine. Getting together material for a video, then editing it, is a lot of work. But hopefully they will be something that people will watch.

Once the channel is up and running there are a few things that I would like you, the reader, to do for me.

First up I would like you to actually take a look at the videos, then share them with your friends. Lastly I would love it if you would subscribe to the channel. And I will know exactly who has subscribed to the channel. Come on, it's not a big ask.

If enough people view the video then it may even bring in a few cents to Military Despatches. And believe me when I say that I could use it.

As most of you know, I'm Irish. So you can understand why I am not a big fan of the royal family. Yet I must confess that I had a certain admiration for Prince Philip. I always enjoyed his sense of humour and the fact that he would often say what was on his mind. He was, of course, also a veteran of World War II.

Above all, Prince Philip was a character. And there are far too few of them around these days in our woke, politically correct world.

I trust that you will all have a good month. Stay safe.

Until next time.

Matt

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Front Cover

Members of the Danish Jaeger Corps carry out an exercise on the coast of Denmark.

The Jaeger Corps can trace its origins to all the way back to 1785.



10 Wars started for stupid reasons

Wars have often been started for really crazy reasons. We look at ten of them.

According to many people, all wars are started for stupid reasons. And rest assured, those that start wars are usually not the people that fight in them.

Yet often there are valid reasons for a war. It is known as a 'Just War'.

A war is only just if it is fought for a reason that is justified, and that carries sufficient moral weight. The country that wishes to use military force must demonstrate that there is a just cause to do so.

Some wars, however, have been started for really stupid reasons. Wars that, with a bit of common sense, could easily have been avoided. Here are ten examples.

The Pastry Wars

This war, if you pardon the pun, really takes the cake.

In 1821 Spain finally granted independence to Mexico. As is usually the case this was followed by a certain amount of civil unrest.

In the years that followed there was often fighting between government forces and rebels. And, as is common in civil unrest, it was the neutral people that were caught in the middle.

The civil unrest led to numerous deaths and resulted in damage to the properties of the

Mexican people. One of those properties, near Mexico City, belonged to a French pastry chef known only as Monsieur Remontel.

Not only had his bakery been ransacked, but they had also had the cheek to eat all his cakes and pastries. Naturally he was none too happy about it.

He approached the Mexican government and demanded compensation. They, however, had bigger problems to worry about than his buns and sent him packing.

The chef, however, was not about to concede defeat. He decided that as he was a French citizen he would appeal directly to the King of France for help.

As it happened, the French government was not all that pleased with Mexico over some trivial matter and saw this as a perfect opportunity to stir the pot.

The demanded that the Mexican government pay hefty compensation to the French baker. They in essence told the French to "ve a relleñar" (Go get stuffed). It was exactly what France wanted to hear.

In 1838 the French navy began to blockade ports all along the Gulf of Mexico. The United States, who had a bone or two of their own to pick with the Mexicans, lent a hand.

When the blockade failed to produce the desired results the French began to bomb Mexico.

Mexico declared war on France and ordered that all able men be conscripted.

The French were far more organised and within days they had captured the entire Mexican navy. Mexico rallied and began to drive the French troops from Mexican soil, back to their ships and the fight went on.

The war lasted four months until Britain stepped in and brokered a truce. Mexico finally agreed to pay compensation to the chef and the French forces withdrew.

The French suffered casualties of 64 killed and wounded, while the Mexicans had 224 killed and wounded.

The Pig and Potato War

Among other things the Oregon Treaty of 1846 marked the boundary of America along the 49th parallel.

This caused something of a problem for the islands around Vancouver. And none more so than the island of San Juan.

It lay at the mouth of the channel and was therefore of strategic importance to both America and Britain. Obviously both countries laid claim to the island.

For a while the British and American settlers on the island



YOU'RE SITTING IN MY SPOT: The Golden Stool of the Ashanti that led to a war.

co-existed peacefully. There was an unofficial border that separated the two sides.

Then one day in 1859 a pig was to change all of that. The pig wandered over from the British side of the island and helped himself to some potatoes planted by a neighbouring farmer on the American side.

The American farmer shot the pig and probably had visions of some roast pork.

The British farmer, who was an employee of the powerful Hudson Bay company, was outraged and demanded justice.

The American farmer offered him \$10 but the British farmer was not satisfied. He reported the 'murder' to the British authorities and they in turn threatened to arrest the American farmer.

Then things really got weird.

The Americans set up a petition demanding the protection of the US Military and a company of the 9th Infantry Battalion was sent to the island.

The British countered by sending three warships with a total of 84 cannons as well as 2,140 troops to take up a position just off the island.

After a stand-off that lasted a month the governor of the Colony of Vancouver Island, James Douglas, ordered the British to land their troops on San Juan island and engage the Americans in battle. This would have basically been a declaration of war.

The Americans had 461 troops and 14 cannon and would probably not have lasted long against the British.

Thankfully common sense prevailed. Admiral Robert Baynes, in command of the British forces, refused to obey orders, saying he would not "involve two great nations in a war over a squabble about a pig".

Local commanding officers on both sides had been given essentially the same orders: defend yourselves, but absolutely do not fire the first shot.

For several days, the British

and U.S. soldiers exchanged insults, each side attempting to goad the other into firing the first shot, but discipline held on both sides, and thus no shots were fired.

When news about the crisis reached Washington and London, officials from both nations were shocked and took action to calm the potentially explosive international incident.

War of the Golden Stool

The Ashanti Kingdom is now part of modern-day Ghana. Yet it was once coveted by the British Empire.

In 1896 King Prempeh, leader of the Ashanti, refused to become part of the British Protectorate. Not used to take 'no' for an answer, the British forcibly 'protected' his island.

The Ashanti people did not give up easily however, and fought bitterly against their invaders.

In 1900 the Ashanti staged an uprising. The British suppressed the violence and captured the city of Kumasi. Ashanti's traditional king, the Asantehene, and his counsellors were deported.

The Golden Stool had long symbolized governing power for the Ashanti people. It was supposed to have descended from the sky to land at the feet of the first King of Ashanti, and was believed to hold the soul of the Ashanti nation.

Made from solid gold, the stool was only 45 centimetres high and 60 centimetres long, and was considered so sacred, that no one was allowed to sit on

it. It was an artefact of immense cultural significance.

Then in 1900, the British Governor of the Gold Coast, Sir Frederick Hodgson, decided that he wanted to sit on the stool.

He travelled to Kumasi with a small British force where he was accorded traditional honours upon entering the city with children singing “God Save the Queen” to Lady Hodgson. However the good will shown by the Ashanti did not last long.

Hodgson made a speech to the assembled Ashanti leaders. He informed them that King Prempeh I was in exile and would not return to Ashanti. His power and authority would be taken over by the Representative of the Queen of Britain, namely himself.

If this wasn’t enough of a slap in the face, he went on to say that the Queen is entitled to the stool and she must receive it.

The Ashanti people were outraged, and a fierce war broke out, during which 2,000 Ashanti people and 1,000 British troops died.

The war raged for six months until Yaa Asantewaa, the Queen Mother and Gate Keeper of the Golden Stool, was captured.

Hodgson was not granted his wish to sit upon the Golden Stool. The Ashanti had spirited it away and hidden it from the British.

It was only many years later before it was finally restored to its ceremonial home.

The War of the Bucket

In 1325 Italy was a divided country. This was due to some-

thing that has led to more than one war - religion.

The Emperor of the Holy Roman Empire claimed that he was the leader of the Catholic Church. The Pope, however, claimed that it was actually he who led the Church.

The struggle about who was and who was not the leader of the Catholics had been going on for almost 200 years, and outbreaks of violence between the two sides often started over trivial matters.

The clash of 1325 was particularly notable because it all began over a wooden bucket.

The neighbouring towns of Modena and Bologna, held opposing views in the Emperor vs Pope debate.

The ruler of Modena encouraged attacks on Bologna and this led him to being declared an enemy of the church by the Pope.

There were several border skirmishes, where each side would raid an area, slaughter the inhabitants, burn fields and crops and retreat back to their own side.

Then, in one attack, Modenese soldiers were heading straight for the centre of Bologna. Fearing that they would be over-run, the people of Bologna took all of their valuables and placed them in a large wooden bucket next to the well. They intended to lower it into the well where it would be hidden from the invaders.

The Modenese soldiers arrived before the bucket could be hidden and they took the bucket and its contents back to Mode-

na and displayed it next to their own well.

This was the final straw for the Bolognans and they immediately declared war on Modena. Both the Pope and the Emperor were quick to jump in.

The Pope sent 30,000 soldiers and 2,000 knights to support Bologna. In turn the Emperor sent 5,000 soldiers and 2,000 mounted knights to Modena.

The war lasted for six months and claimed more than 2,000 lives before Modena finally won. The bucket was displayed in the Cathedral at Modena, as a symbol of their victory.

Skirmishes would continue to break out for another 200 years.

The Football War

Many people are very passionate about sport. In South America one of the biggest sports is soccer. Local rivalries are often intense.

When the World Cup is held every four years the rivalry between countries can become heated. None more so than in 1969 when Honduras and El Salvador were both trying to qualify for the 1970 World Cup to be held in Mexico.

The first leg was played in Honduras and the home side went on to win 1-0. The second leg was held in El Salvador and once again it was the home side that won 3-0.

The Hondurans didn’t take defeat well and the large Salvadorian communities in Honduras came under attack with shops being ransacked and people dragged from their homes and



WHO'S THE BOSS: These days the Pope is recognised as the head of the Catholic Church. This, however, was not always the case.

beaten up. Similar incidents had occurred in El Salvador against the Honduran communities. It was obvious that both sets of supporters bore a grudge.

A play off match was due to take place in neutral Mexico and tensions were running high. At the final whistle the scores were tied and the match went into extra time which El Salvador won 3-2.

That should have been that. Alas it was not. El Salvador, angry that Honduras “has not taken any effective measures to punish these crimes which constitute genocide” severed diplomatic ties and on 14 July 1969 attacked several Honduran targets via their Air Force. And, for good measure, they invaded Honduras.

After four days of fighting the Organization of American States (OAS) negotiated a cease-

fire which took full effect on 20 July. Salvadoran troops were withdrawn in early August.

It is estimated that each side had around 2,000 dead and injured and some 300,000 of the Salvadorans who had been living in Honduras had been displaced in the unrest following the match.

The Basus War

Let’s face it, some neighbours just don’t get on. Take the tribes of Taghlebe and Bakr, for example. They fought The Basus War for 40 years.

And what was the cause of this drawn-out war? Was it over oil, gold, territory? Actually it was over a camel.

It began when the leader of the Taghlebe tribe killed a camel which strayed onto its land. Unfortunately it was no ordinary camel. It belonged to the wife of

the leader of the Bakr.

A small matter that should have been quickly sorted out. But pride and honour were at stake and things got out of hand.

The Taghlebe leader was killed in retaliation and the two tribes were instantly at war. The Bakr leader realised that things were perhaps getting a bit out of hand. He sent his son to negotiate a truce. The Taghlebe promptly killed him. A sure sign that they were not interested in any truce.

The Bakr leader swore vengeance and, neither side trusting the other, the fighting continued for 40 years. Talk about someone getting the hump.

The Kurukshetra War

This war goes back a few years. Rough estimates give the date as being around 3000 BC.

Although we don’t know exactly when it happened, we do know exactly what happened. This was because it was recorded in one of the most famous Hindu epic poems.

The Pandavas and the Kauravas were not only neighbours, they were also fierce rivals.

The trouble began over a game of dice between the sons of the reigning tribe leaders, a recipe for disaster at the best of times.

It was no ordinary game of dice as there was a lot riding on the outcome. Whoever won the game would get to rule the other tribes kingdom for 13 years.

The problem was that the Kauravas boy was using loaded dice. According to the poem the Pandavas honoured the dodgy bet and went into exile for the

next 13 years.

When they returned 13 years later the Kauravas refused to hand back the territory to them, denying all knowledge of any bet and the agreed terms.

The Pandavas had no choice but to declare war on their rivals. And, according to the poem, what a war it was.

It lasted only 18 days at the end of which there was almost no one left.

The two sides drew up detailed Rules of Engagement to ensure fair play, which included, no fighting after dark, only one-on-one fighting allowed, and both fighters having equal weaponry.

There was also some hogwash about not killing women, the wounded, or animals, but it was all pretty irrelevant because neither side stuck to the code.

To make matters worse, the Kauravas insulted Lord Krishna who had condescended to try and mediate the dispute. Annoying a deity is always good for pushing up the death toll.

According to the poem there were more than two million casualties during the 18 days of war. This is possibly a bit over inflated, but still. And it wasn't just soldiers that died. There were, apparently, also 390,000 elephants and over a million horses killed.

At the end of the day the Pandavas, with the help of Lord Krishna, technically won, though by that time it must have all looked a bit moot.

Although not all the details of the war can be verified, and

some are almost certainly exaggerated, it is generally accepted that some sort of war took place between the two tribes, and quite possibly as a result of the crooked game.

War of the Stray Dog

Greece and Bulgaria have always had a historically difficult relationship, and in the early 1920s tensions were at their height. Gangs of men from both countries would cross the border to steal property and livestock from their neighbours, and these raids would often end in bloody violence.

Sometimes it is difficult to identify a single inciting incident in a conflict, but in October 1925, there could be no doubt. The ensuing war was caused by a stray dog.

At a border crossing, a playful dog, oblivious of nationality, managed to get off his leash and went for a run around. His owner, a Greek soldier, took a few steps into Bulgarian territory to catch his dog, whereupon a Bulgarian sentry shot him.

Both sides immediately opened fire, before a Greek officer waving a white flag, crossed into no-mans land to appeal for calm. The Bulgarians shot him too.

The skirmish was the first test of strength for the new Greek military dictator, and he responded decisively. He gave Bulgaria 48 hours to apologize, arrest the snipers and compensate the families of the victims. Then, without waiting the 48 hours, he went ahead and invaded

Bulgaria.

The Greek army were not restrained. They looted and pillaged their way across Bulgaria, burning villages in their path. Bulgaria pushed back.

Greece decided to call on its allies, and invited Serbia to join them in defending the honor of the dog. Bulgaria went to the League of Nations for protection.

The war escalated quickly, and at least 50 people were killed as a result.

The League of Nations judged Greece to be the aggressor and demanded that they pay compensation.

The Greek dictator was humiliated and soon found himself overthrown. The entire incident served to demonstrate how a small incident can have unintended and far reaching consequences.

The moral of the story: Keep your bloody dog on a leash.

A rather crappy war

When thinking about precious commodities you would be forgiven for thinking about things such as gold, diamonds, oil, uranium and other precious metals. Bird poop would normally be the furthest thing from your mind. But think again.

In 1864, Spain attacked Peru (not for the first time), in order to get their hands on Peruvian bird poop.

This particular bird poop, or guano as it was also called, was discovered to be excellent fertilizer, and 30 times more potent than cow manure.



WHO'S A GOOD BOY: Can you believe that a stray dog was able to cause a war between two countries.

However, the Peruvians had been beaten by the Spanish before. They may have lost the gold, but they were determined to keep the dung. They knew all about its miraculous growing properties.

Spain decided to occupy the Chinca Islands, where the roads were, literally, paved with guano, until they could come to an agreement. Peru called in its navy, and its neighbour, Chile, joined in the fight, which lasted two years, after which Peru managed to take back control of the Poop Islands.

Family feud

War doesn't always have to be between two countries. Sometimes two families can go to war.

The Hatfields and the McCoys were two families who lived along the border between West Virginia and Kentucky around the time of the civil war. To say that they didn't like each other would be an understatement.

The Hatfields and McCoys

did not like each other. The families had been on opposite sides during the war and it is probably fair to say that both families were as bad as each other. The real trouble, however, began with the murder of a McCoy by, it was suspected, a Hatfield.

The feud simmered on, and a McCoy claimed that a Hatfield had stolen his pig. The McCoy claimed to be able to identify the pig by the markings on his ear. The Hatfields claimed that the mark was, in fact, a Hatfield mark. A judge ruled in favor of the Hatfields.

Then a witness who had testified at the pig trial was found murdered. Two McCoys were tried, but acquitted, of murder on the grounds of self-defence.

Then one of the McCoy women went to live with a Hatfield, but the woman soon returned to her own family. When the two lovers tried to reconcile in secret, the Hatfield boy was arrested on the say-so of the McCoys on a bootlegging charge.

The McCoy woman, distraught at losing her lover, rode through the night to warn the Hatfields, who rescued him from the McCoys.

Despite the McCoy woman's courage in rescuing her lover, the lover turned out to be not worth the effort, and he abandoned her when she became pregnant. Then he took up with her cousin, also a McCoy. And so, it went on.

A Hatfield was stabbed 26 times, his McCoy assailants were tied to a tree and shot. Another McCoy killed another Hatfield. Another Hatfield returned the favour.

Then, on New Year's Eve 1888, several members of the Hatfield clan surrounded the McCoys' cabin and opened fire on the family while they slept. They set the cabin on fire, killing 2 of the children, and they beat a woman almost to death.

Some McCoys escaped into nearby woods, only to succumb to frostbite. By this time, no one knew the score. A posse, which included some of the few remaining McCoys, set out to track down the Hatfields. They shot and killed one Hatfield and several supporters before cornering the rest of them at Grapevine Creek.

But the Hatfields were prepared. A vicious battle ensued, and at its conclusion, the few Hatfields and McCoys who had survived the battle were arrested. Some were sentenced to life in prison, and one was hanged.

Special Forces - Denmark

Part twenty-six of a series that looks at Special Forces around the world. This month we feature the Danish Jaeger Corps.

The Jaeger Corps also known as the Huntsmen Corps (Danish: *Jægerkorpset*) is an elite special operations force of the Danish Defence part of Special Operations Command, formerly of the Royal Danish Army, based at Aalborg Air Base.

The Special Operations Command (Danish: *Specialoperationskommandoen*; SOKOM) is a command of Danish Defence part of the Defence Command. SOKOM was established in 2014

to bring the Jaeger Corps and the Frogman Corps under one command.

History

The Jaeger Corps traces its origins to 1785 when the corps was first formed as the "Jaeger Corps of Zealand".

Facing emerging threats from Sweden, Prussia, and Great Britain, Denmark created a light infantry force from hunters and woodsmen.

The corps exist-

ed in various forms until it was remade in its current form in 1962 when Major P.B. Larsen and First Lieutenant Jørgen Lyng became the first two to complete the training.

Throughout the Cold War, the Jaegers' primary tasking was that of a long-range reconnaissance unit, with wide renown for their skills in parachute operations.

In the post-Cold War era, the Jaegers deployed for the first time in 1995 to Sarajevo with a six-man counter-sniper team.

Following the advent of the post-9/11 Global War on Terror, the Jaegers were modernized to better meet the developing

threat of global terrorism. As such, the Jaegers increased their proficiency in counter-terrorism skills, while still maintaining their excellence at reconnaissance operations.

In 2002, the Jaegers were deployed to Afghanistan as part of the Danish contribution (Task Group Ferret) to Task Force K-Bar, along with the Frogman Corps. During these operations, the Jaegers took part in reconnaissance, observations, capturing of high-value targets, and direct-action raids on Taliban and al-Qaeda positions.

As part of Task Force K-Bar, the Jaeger Corps was awarded the Presidential Unit Citation on 7 December 2004 for its effort as part of the joint special operations task force in Afghanistan.

The first Jaeger to be killed in combat was in 2013 when a Jaeger was killed by an explosion in Afghanistan.

Four Jaegers had previ-

ously died during training accidents.

Roles and tasks

The Jaeger Corps is required to perform the following roles and tasks:

- Special Operations
- Unconventional Warfare
- Covert Ops
- Combat Search And Rescue
- Direct Action
- Counter-terrorism
- Hostage Rescue
- Humanitarian missions
- Arctic Warfare
- High-value targets
- Intelligence gathering
- Close protection
- Special reconnaissance
- Quick Reaction Force

Selection and training

The selection course to become a Jaeger is very demanding, both mentally and physically. To be accepted into the Corps, a candidate must complete the follow-

ing:

Pre-course 1

This last five days and introduces the candidate to the subjects covered in the patrol course, and identifies the areas in which the candidate must improve (orienteering, swimming, etc.).

Pre-course 2

More training and evaluation in the above covered subjects continues for another two days.

Pre-course 3

Another two days of training and evaluation in the above covered subjects with tougher requirements.

Patrol Course

This lasts for eight weeks and covers basic medical, demolition, and marksmanship using basic direct-action and special



reconnaissance training events to assess candidates.

This course must be completed at a satisfactory level to continue to the aspirant course.

Selection Course

The selection course lasts eight weeks. Candidates receive training in advanced breaching, close-quarters battle, demolition, and sniping.

If passed the candidate is awarded his or her “bugle” for the beret.

Basic parachuting course

This takes place over two week and the candidate must complete the required number of static-line parachute jumps.

Combat Swimming Course

This lasts for two weeks and candidates must pass all the requirements.

Approximately 10% of candidates successfully complete the program and receive the burgundy beret to become a full member of the Jaeger Corps.

The successful Jaeger candidates report to the unit and receive both team and individual training during their first (probationary) year.

During this time they will receive High Altitude Parachute Operations (HAPO) training in High Altitude Low Opening (HALO) and High Altitude High Opening (HAHO), environmental training (desert and winter), advanced infiltration training (mountain, nontactical vehicle, ski and rotary-wing), attain Joint Terminal Attack Controller (JTAC) certification, and gain additional communications skills.

New Jaeger Corps members are also taught a hand-to-hand combat system called MTM (man-to-man) combat, which was devel-

oped in 1992 by Peter Hedegaard in collaboration with two of the Corps’s own close-combat instructors.

International Joint Training

Like most western Special Operations Forces, the Jaegers regularly take part in joint training operations with other NATO and Coalition SOFs.

These exercises include reconnaissance patrols throughout Europe, arctic survival training, helicopter insertion techniques, parachute insertion techniques, hostage rescue training, Close Air Support training, medical training, and other SOF-specific skills.

The Jaegers regularly practice with the following units.

- US Army Special Forces
- US Navy SEALs
- US Army Delta Force
- 22nd Special Air Service Regiment (UK)
- Forsvarets Spesialkommando (Norway)
- SASR (Australia)
- Särskilda operationsgruppen (Sweden)
- Kommando Spezialkräfte (Germany)
- Army Ranger Battalion (Sweden)
- Netherlands Special Operations Command (Netherlands)
- Special Operations Regiment (Belgium)

Insignia and status

The Jaeger Corps wear a maroon beret with a brass emblem depicting a hunter’s bugle on a black felt liner. After one year of satisfactory service and training in corps the wearer is issued the shoulder patch “JÆGER” and



**Jaegerkorps
Coat of Arms**

may call himself by this name. The unit’s insignia features a hunting horn from their origin as hunters and woodsmen.

The Jaeger Corps is composed of around 150 highly trained soldiers with special expertise in counter-terrorism, demolitions, parachuting, and combat swimming, HAHO and HALO parachuting, infiltration, sabotage, reconnaissance and more.

The corps regularly trains with similar units from different countries, such as the US Navy SEALs, US Army DELTA, British SAS and the Danish naval special forces group, the Frogman Corps. The corps is based on the structure and modus operandi of the British SAS.

Their slogan, which is Latin, *Plus esse, quam simultatur* translates to *Hellere at være, end at synes* (“Rather to be, than to be seen”) in Danish, meaning that the soldier’s capabilities do not have to be widely recognized or boasted - they are only more effective if unknown.

Weapons used by the Jaegerkorps



H&K USP



H&K MP5



M/95



M85



MSG-90

Famous jaegers

Jørgen Lyng

Jørgen Lyng is a retired Danish general and a former Chief of Defence of Denmark.

As a young soldier Lyng received training from SAS, this training among other, enabled him to help establish and complete training for Jægerkorpsset.

He was made Chief of Defence in 1989, only a week before the fall of the Berlin wall.

In 1990, he ordered HDMS Olfert Fischer to the Persian Gulf, in order to participate in the First Gulf War, thereby starting Denmark’s more active foreign policy.

This led to the creation of the Danish International Brigade in 1993 and participation in the NATO led in Bosnia and Herzegovina, where the Operation Bøllebank became the first combat operation conducted by Danish Armed Forces since World War II.

B. S. Christiansen

Bjarne Slot Christiansen (mostly known as B. S. Christiansen) (born September 27, 1952) is a former professional soldier from the Danish special force army unit Jægerkorpsset, who is currently working with coaching and team building. His many television appearances and a popular book called *Et liv på kanten* (A Life on the Edge) have made him a celebrity in his home country.

B.S. Christiansen is one of the few Danes who have completed the American Ranger course, he completed with his buddy Carsten Mørch who was “Distinguished Honour Graduate” Ranger School class ‘78.

Tanks for the info

RYAN MURPHY looks at some interesting trivia about tanks.

I must confess to being a bit of a philomath. And, just in case you don't know what that is, it means someone who greatly enjoys learning and studying.

My good mate Matt Tennyson (editor of Military Despatches) on the other hand is more of a polymath. This is someone who possesses great and detailed knowledge and facts from a variety of disciplines. While he's pretty clued up about military stuff, it's his knowledge of music that scares me.

Not only will he tell you the name of a song but also which singer or band performed it, what album it was from, what year it was released, who wrote and produced the song, where it was recorded, and probably what colour the drummer's toenails were painted.

Recently I was reading up about the Battle of Kursk during World War II - the largest tank battle ever to have taken place. It sparked an interest in tanks and I decided to see how much info I could dig up.

Here are some facts and trivia that I thought may be of inter-

est to readers of Military Despatches.

- Tanks first saw action in September 1916 at the Battle of the Somme during World War I. Seen by the British as a way of breaking the deadlock of trench warfare, most of the tanks broke down and their effect on the enemy was more psychological than physical.
- Tanks got their name from the British. They were originally called 'Land Battleships'. When they were crated and shipped across to France, the crates were marked as 'Water tanks' to confuse any German spies. The name tank stuck and was adopted.
- The first tank to roll off the production line was nicknamed 'Little Willie'. It was a Mark I and weighed 26 tonnes. It was armed with

two Hotchkiss 6 pdr QF main guns and three 303 inch Hotchkiss machine guns. It had a top speed of 6 kilometres per hour.

- By comparison a modern American Abrams M1A2 tank weight 68.7 tonnes, is armed with a 120 mm cannon, and has a top speed of 66.8 kilometres per hour.
- During World War I tanks were categorised by gender, depending on their armament. A male tank was armed with both cannon and machine guns while a female tank had only machine guns.
- Despite their terrifying presence on a battlefield early tanks were not really that effective. By the end of the fourth day of the Battle of Amiens in 1918 the British Tank Corps, which had consisted of more than 500

tanks was left with only six that were still in operational condition.

- During World War I Britain and France produced a total of 6,506 tanks. By comparison the Germans produced a total of 20 between 1916 and 1918.
- The smallest tank ever produced was the French Renault UE Chenillette. It was only 2.7 metres long and 1.2 metres high.
- The largest tank battle in history was the Battle of Kursk between the Germans and the Russians from 5 July 1943 to 23 August 1943. An estimated 23,000 tanks and four million men took part in the battle. While the result was a victory for the Russians, they lost 800 tanks compared to Germany that lost 350 tanks.
- The world's most expensive tank is the French Army's AMX-56 Leclerc with an estimated cost of \$12.5 million.
- With more than 22,000 tanks, Russia commands the largest battle tank force in the world.

- The United States, with 9,000 tanks, is second to Russia in the biggest number of tanks.
- The Battle of the Golan Height between Israel and Syria in 1973 is considered one of the greatest tank battles in terms of military success. Syria launched an assault to take back the Golan Heights with 28,000 troops, 800 tanks, and 600 artillery pieces. Facing them were 3,000 Israeli troops with 180 tanks and 60 artillery pieces. The Syrians were brought to a dead standstill and the assault failed badly.
- Russia's T-54 and T-55 tanks are the most widely produced tanks in the world. Making their debut in 1947, over 100,000 have been built. The T-55 was still being used in combat during the Yemeni Civil War (2015–present) and by Azerbaijani Land Forces in the 2020 Nagorno-Karabakh conflict.
- The most technologically advanced tank in the world is considered to be the US M1A2 Abrams. It has a host

of communication, surveillance and electronic counter-measures.

- Russia's T-90 tanks is equipped with the largest tank cannon in the world, a 2A46M 125 mm smooth-bore gun. The Russian T-14 Armata also has a 2A46M 125 mm smoothbore gun but could be upgraded to a 152 mm cannon in the future.
- The Battle of 73 Easting during the First Gulf War in 1991 was considered the last great tank battle of the 20th Century. It pitted Iraq's elite Republican Guard against the American 1st, 2nd, and 3rd Armoured Divisions.
- The Battle of 73 Easting turned out to be completely one-sided. The Iraq's suffered 1,000 troops killed or wounded, 1,300 troops taken prisoner, 160 tanks destroyed, 180 APC's destroyed, 12 artillery pieces destroyed, and 80 wheeled support vehicles destroyed. The Americans, on the other hand, lost six men killed in action, 19 wounded, and one Bradley IFV destroyed.
- The stunning outcome of



the Battle of 73 Easting led to Russian designers rethinking several elements of the T-72 tank's design, as the T-72 had been the tank most in use with Iraqi forces. Russian military leadership concluded after the battle that the only way to stop and American armoured advance would be the use of tactical nuclear weapons.

- Russia's next generation T-14 Armata is probably the most advanced battle tank in the world. Unfortunately its ballooning costs have forced Russia to scrap plans to build more than 100 of them and they are now looking at upgrading all of their T-72, T-80 and T-90 tanks instead.
- Poland is experimenting with what it calls "the tank of the future." Called the PL-01 the tank is coated with a chameleon type skin that enables it to mimic the infrared signature of its surroundings, making it much harder to detect with infrared sensors.
- The US M1A2 Abrams is considered the best all-around tank in the world with Russia's T-14 Armata challenging it for the top

spot. However the best protected tank in the world is indisputably Britain's Challenger 2 with its state-of-the-art composite Chobham armour, which is still a classified secret.

- During the invasion of Iraq a British Challenger 2 was struck by 14 RPG-7 rockets and one anti-tank missile. The crew survived and the tank was back in operation six hours later.
- Another Challenger 2 was later hit by 70 RPG rockets and also survived. The only Challenger 2 ever destroyed in combat was in 2003 in a friendly fire incident.
- No Challenger 2 has ever been destroyed as a result of enemy fire.
- The fastest tank in the world is the British FV101 Scorpion which has a top speed of 82 kilometres per hour.
- Syrian rebels have developed their own home-made tank, the Sham II. It's equipped with several centimetres of steel and iron armour and a turret-mounted machine gun. Five video cameras surround the tank and the machine gun is operated by a Play Station game

controller.

- During the Korean War, US soldier Eduardo C. Gomez took out an enemy tank single handedly by crawling across a rice field, climbing on to the tank and prying open the hatch before dropping a grenade inside. He was later awarded the Medal of Honour. Remembering to lock the hatch has now become an important part of tank crew training.
- During the Battle of Stalingrad factories in the war torn city continued to produce tanks around the clock. The tanks were unpainted and lacked gun sights. They were driven straight from the factory floor into the battle.
- During World War II a single Russian KV-1 tank stalled the advance of an entire German division for a full day. Facing off against an infantry assault, several German tanks and German anti-tank guns, grenades thrown into the hatches eventually killed the crew inside. After the battle the Russian tank crew were buried with full military honours by the Germans.



TANK MAN: A protester blocks the path of tanks leaving Tiananmen Square on 5 June 1989. The unidentified man was given the nickname 'Tank Man'.

- An Australian Army Mk 3 Centurion Type K, Army Registration Number 169041, was involved in a small nuclear test at Emu Field in Australia in 1953. It was nicknamed 'The Atomic Tank' after surviving a 9.1 kiloton nuclear explosion from 460 metres away. The tank was driven away after the test and served for another 23 years.
- In 1989 as part of a crack-down against pro-democracy protests, the Chinese government used tanks against protesting students in Tiananmen Square, Beijing. The number of deaths and the extent of bloodshed in the Square itself have been in dispute since the events. The Chinese government actively suppressed discussion of casualty figures immediately after the events, and estimates rely heavily on eyewitness testimony, hospital records, and organized efforts by victims' relatives. As a result, large discrepancies exist among various

casualty estimates. Initial estimates ranged from the official figure of a few hundred to several thousand.

- The most famous image of the 1989 Tiananmen Square Protests was that of a single man stopping a column of tanks by standing in front of the lead tank and blocking its path. The column of tanks was leaving Tiananmen Square on June 5, 1989, the day after the Chinese military had suppressed the Tiananmen Square protests. As the lead tank manoeuvred to pass by the man, he repeatedly shifted his position in order to obstruct the tank's attempted path around him. The incident was filmed and shared to a worldwide audience. Internationally, it is considered one of the most iconic images of all time. Rumour has it that the Chinese authorities are said to have apprehended and executed Tank Man, then billed his surviving family for the cost of the pistol round expended to shoot him in the

back of the head. Because of heavy censorship, most people living in China have never seen the image.

- A tank designed by the Swiss military once suffered from a bug where turning on the heater could cause the main gun to fire. That should get things warmed up.
- The longest tank kill in history occurred when a British Challenger 2 destroyed an Iraqi T-62 at a range of 5,100 metres.
- In 2006 Hungarian protesters hot wired a 50 year old Soviet T-34 tank that was part of an outdoor memorial and drove it against riot police.
- In the 1980s the Soviets developed a laser tank equipped with artificial ruby lasers. The 1K17 Szhatie was developed by the Soviet Union in order to disable the optical-electronic equipment of enemy missiles, ground and aerial vehicles. With the collapse of the Soviet Union, the development of the Szhatie was abandoned, as the development and manufacturing of the laser projection system had become too expensive and unnecessary.
- During World War II the US developed a prototype super tank, the T28 Super Heavy Tank. Weighing nearly 100 tonnes, protected by 305 mm of armour and armed with a 105 mm main gun, this monster was supposed to break through the defences of the German Siegfried Line. Only two prototypes were built before the project



During World War II a single Russian KV-1 tank held up an entire German armoured division for a full day.

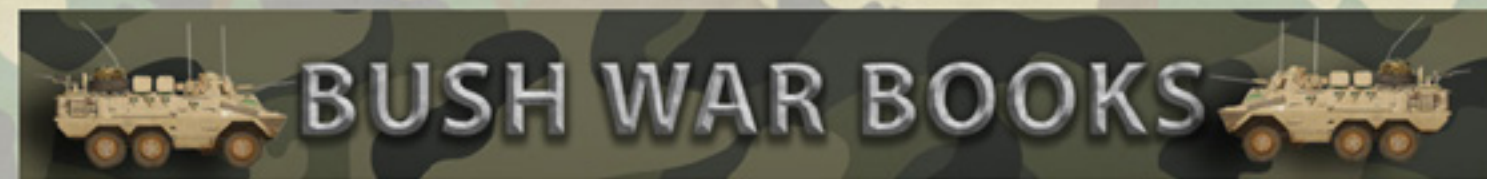
- was terminated.
- The Brad Pitt World War II film 'Fury' featured an authentic fully operational Tiger I tank from World War II. The first time such a vehicle has ever been used in a film.
- Of the 1,300 of Germany's fearsome Tiger I tanks produced during World War II, widely believed to be one of the best tanks of the war, only seven remain intact today.
- As a way to defeat German tanks, the Soviets trained dogs to carry bombs strapped to their backs and crawl under enemy tanks before the bomb was detonated. Unfortunately during training Soviet tanks were used to teach the dogs. When deployed the dogs immediately headed for the nearest Russian tank and crawled under it.
- Drive A Tank, a business in Kasota, Minnesota, is the only place in the United States where civilians are allowed to drive a military tank.
- During World War II German tanks were often coated with a putty-like material known as Zimmerit. This was to prevent magnetic mines from sticking to them.
- Object 269 was a Soviet tank developed in 1959 and was designed to survive a nuclear explosion. All they needed to do was speak to the Australians who had beaten them to the punch six years before.
- Along with the British Challenger 2, no US Abrams tank has ever been de-



THE KING: During his military service with the United States Army, Elvis Presley was a member of the 3rd Armoured Division.

- stroyed in combat by enemy fire. Of the nine Abrams tanks destroyed, seven were destroyed by friendly fire, and two were purposely destroyed to prevent capture after being damaged. Some others took minor combat damage, with little effect on their operational readiness.
- Since World War II all British tanks are equipped with a device, called a boiling vessel, that allows for the heating of water. Rumoured to have been developed because British tank crew used to have to exit their tanks to boil water to make tea, which endangered them and wasted time.
- The Nazis once planned a truly massive tank. Named the P1500 Monster. Weighing 1,500 tonnes was to big to be transported by road or rail and was designed as a land battleship that would have been served by a crew of 100. Despite being endorsed by Hitler, the project was eventually scrapped. Probably because the whole idea was insane to begin with.
- Kurt Knispel is considered to be the world's greatest tank ace. The German war hero had 168 confirmed and 195 unconfirmed kills in World War II. He was considered the tank's equivalent of the Red Baron.
- Arnold Schwarzenegger, actor and former governor of California, served as a tank crew member during his compulsory national service in the Austrian Army in 1965. Later he bought the same tank he served in, an M47. and he now uses it to support charitable causes.
- The King once drove a tank. Elvis Presley was drafted into the United States Army from March 1958 to March 1960. He was eventually stationed with Headquarters Company, 1st Medium Tank Battalion, 32d Armour Regiment, 3d Armoured Division in Friedberg, West Germany. He was given an honourable discharge in March 1960 with the rank of sergeant.

I trust that you found this bit of trivia interesting.



Bush War Books has probably one of the finest collections of military titles available. Especially on the South African Border War.

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“War does not determine who is right - only who is left”

60 Years of Space Exploration

From Gagarin's first flight to the Race to Mars. By Regine Lord.

To appreciate the extraordinary nature of the accomplishments of Gagarin and his fellow cosmonauts and astronauts, it helps to remember that none of the technological advances we take for granted in our modern world existed at the time.

Gagarin's and his compatriots' spaceflights happened when there were no high-performance computing clusters, no geographical positioning systems, no satellites, no high-speed internet, and not even dedicated tracking ships to monitor their flights. Computers were huge databanks using perforated cards, and communication was by telephone, tel-ex and radio.

As I was doing some background reading for these articles, it struck me how much the world has changed since the USSR successfully launched Sputnik 1 into orbit in 1957 – an event that is commonly regarded as the birth of the Space Age. The advances in technology from those early days of flight to today are quite extraordinary.

Many of the things we now use every day were developed during the so-called Space Race and for use in space: The CMOS image sensor in our digital camera, action camera and smartphone, the wireless headset on which we listen to music, the water filtration and air purification systems in our homes and offices, the scratch resistant

lenses of our spectacles, the solar cells that transform light from the sun into electricity, the computer mouse on our desk, the LED lights that illuminate our homes, the memory foam in our comfortable mattresses, the infrared ear thermometers that nurses use to measure our temperature, etc...

I am sitting at my own personal computer at home, which is connected to the internet via an ethernet cable connected to an optical fibre network and linked to the rest of the world via undersea cables that criss-cross the oceans. My smartphone (small enough to fit in my hand, yet hugely powerful) is receiving a wifi signal from a router at the other end of the house, and when I venture outside, it picks up signals from a complex network of cell phone base stations.

This internet gives me access to websites, documents, photos and videos from anywhere on Earth. And, together with millions of viewers around the world, I can watch – live on YouTube – as Elon Musk's company SpaceX delivers astronauts to the International Space Station (ISS) and sends a cluster of Starlink satellites into near-earth orbit. And I can watch NASA live streaming a spacewalk by astronauts on-board the International Space Station, and the nail-biting landing of the Perseverance rover on the Martian surface.

And all this only 60 years

after Gagarin's first flight in space!

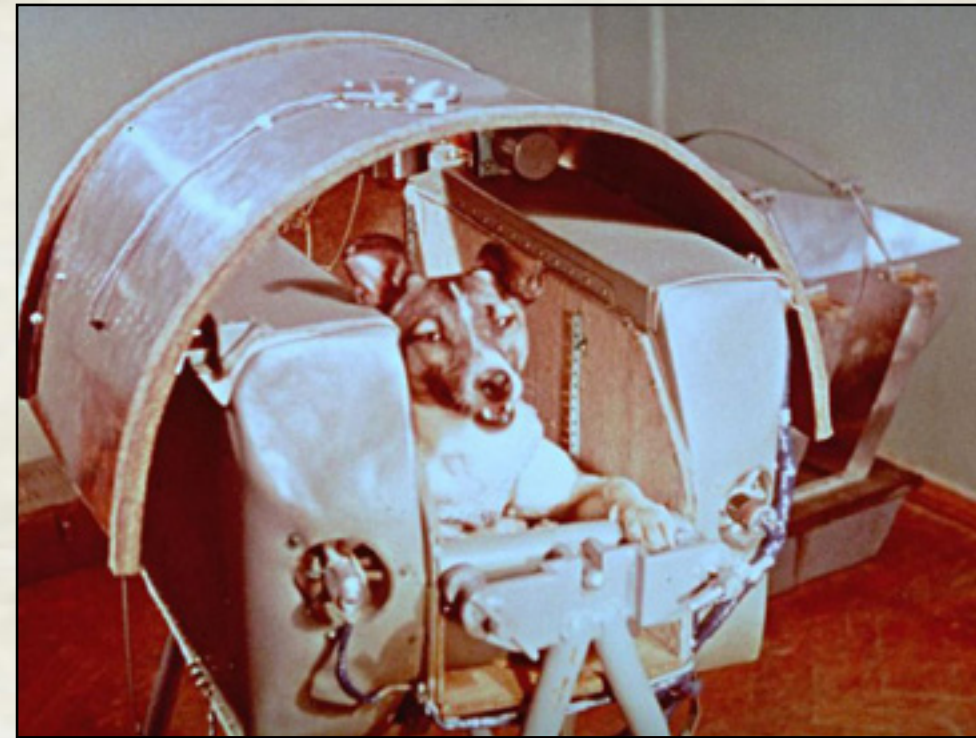
First Aircraft

Turning back the clock to the earlier days of human flight, we only conquered the skies at the start of the previous century. It was in December 1903 that the Wright brothers made the first successful – controlled and sustained – flight of a self-propelled, heavier-than-air, propeller-driven biplane at Kitty Hawk, North Carolina.

Yes, of course, the history of aviation extends even further back – at least two thousand years, with flying kites, ornithopters with flapping wings that mimicked the flight of birds, the use of rotor wings for vertical flight, balloons filled with hydrogen or hot air, various types of gliders, airships and dirigible balloons, and steam-powered aircraft all making an appearance. But it was only after the Wright brothers' successful experiments that aviation really took off... so to speak!

During World War I, a decade later, airplanes were initially used for reconnaissance, until fighter aircraft with synchronised machine guns and bombers capable of dropping bombs on military and civilian targets were developed. After WWI, civilian passenger flights became popular.

By World War II, improvements in aviation led to the establishment of huge military



CANINE COSMONAUT: Laika (also known as Kudryavka or "Little Curly"), before the launch that made her the first living creature in orbit around our planet.

air forces on all sides of the war, with jet engines, rocket engines, avionics systems, aircraft carriers and radar early warning systems all coming into use. After WWII, commercial aviation grew rapidly around the world. By the end of the 20th century, flying had become commonplace, with airline routes criss-crossing the globe and opening up the entire world for tourists and travellers hungry for new experiences.

Sputnik 1

On 4 October 1957, in the midst of the Cold War paranoia after WWII, the Union of Soviet Socialist Republics (USSR) surprised the world by launching Sputnik 1 into space on a modified Soviet R-7 rocket. Following an elliptical low earth orbit, the world's first artificial satellite orbited the Earth for a then-impressive 21 days. The sensational news spread like wildfire.

Its radio signal – a distinctive beep-beep-beep – could even be heard by radio amateurs around the world. After its batteries died, it orbited silently for a further two months until it re-entered the Earth's atmosphere on 4 January 1958 and burnt up. By then it had travelled about 70 million km.

Suddenly, the sky was no longer the limit!

This shiny metal sphere, weighing 83.6 kg and 58 cm in diameter, its four external radio antennas sticking out of the back and broadcasting radio pulses, captured the imagination. With its futuristic look, it was a fitting start to the era known as the Space Age.

Sputnik 1

On 3 November 1957, a month after Sputnik 1, the USSR launched another rocket into space – Sputnik 2; it carried a living payload – a stray dog called Laika. The plan to

send a dog into space had been conceived more than a year before; the Soviets had already placed dogs into high altitude rockets, and so could draw on extensive previous experience with sub-orbital flights. Strays were chosen because they were more likely to endure extreme conditions, such as hunger and cold. Little Laika had been selected because of her sweet, placid temperament.

However, in the rush to finalise the launch, which was, as per Soviet Premier Nikita Khrushchev's 'request', brought forward to coincide with the 40th anniversary of Russia's Bolshevik Revolution on 7 November 1957, no provision had been made for Laika's safe return to Earth. This distressing bit of news was kept secret for quite a while, and understandably caused an uproar when it was finally revealed.

According to sensors attached to her body, the noises and pressures of the launch terrified her. Although she reached orbit alive and – amazingly (and perhaps not entirely accurately) – the telemetry showed normal vital signs for the first three orbits, Laika died soon afterwards. The loss of the heat shield had caused the temperature inside her capsule to rise significantly to 40°C. After 162 days in space and about 2,500 orbits, Sputnik 2 re-entered the atmosphere on 14 April 1958 and burnt up.

The Space Race

More worryingly for the USA, the modified R-7 Semyorka rocket (the nickname 'Semyorka' that is used to refer



“One Small step for man, one giant leap for mankind.”

to this rocket means ‘seven’ in Russian), which had launched Sputnik 1 and Sputnik 2 into orbit, had initially been designed as an intercontinental ballistic missile that could carry a nuclear warhead. It was a two-stage rocket with a maximum range of more than 8,000 km and a payload of 5.4 tons. Not only had the USSR made considerable advances in science and technology, but Soviet missiles now had the capability of carrying a nuclear warhead from St Petersburg to New York. This naturally caused some alarm.

The ensuing Space Race between the USA and the USSR triggered a surge of pioneering work and technological development focused on space exploration and space applications in both countries. Money and resources were poured into technological and scientific research and development, and rapid advances were made in space exploration related fields such as rocketry and materials sciences. The National Aeronautics and Space Administration (NASA) in the United States was created at this time (1958).

A series of ‘firsts’ reflected the intense rivalry between the USA and the USSR between 1957 and the collapse of the Soviet Union in 1991:

- First artificial satellite (USSR – Sputnik 1)
- First dog in orbit (USSR – Sputnik 2 – Laika)
- First lunar flyby (USSR – Luna 1)
- First impact on the moon (USSR – Luna 2)
- First pictures of the far side of the moon (USSR – Luna 3)

- First weather satellite (USA – NASA – Vanguard 2)
- First photograph of Earth from orbit (USA – NASA – Explorer 6)
- First animals returned alive from space (USSR – Sputnik 5 – dogs Belka and Strelka)
- First human in space (USSR – Vostok 1 – Yuri Gagarin)
- First pilot-controlled spaceflight and first complete human spaceflight that landed with pilot still in spacecraft (USA – NASA – Freedom 7 – Alan Shepard)
- First spacewalk (USSR – Voskhod 2 – Alexei Leonov)
- First rendezvous of two rockets in orbit (USA – NASA – Gemini 6A/Gemini 7)
- First soft landing on the moon by a spacecraft (USSR – Luna 9)
- First humans to land on the moon (USA – NASA – Apollo XI)
- First operational space station (USSR – Salyut 1)
- First pictures from the surface of Mars (USA – NASA – Mariner 4)
- First long-duration space station (USSR – Mir), etc.

Astronauts vs Cosmonauts

The distinction between astronauts and cosmonauts dates back to those competitive early days of the Space Race. The use of the word cosmonaut (‘sailor of the universe’) came into common usage in the Soviet Union at the time of Gagarin’s historic flight. Soviet/Russian space travellers are still generally referred to as cosmonauts, while space travellers from other space agencies (NASA,

the European Space Agency [ESA], the Canadian Space Agency [CSA] and the Japan Aerospace Exploration Agency [JAXA]) are usually called astronauts. France now uses the term *spationaute* for its space travellers, while China is calling them *taikonauts*.

There are some practical differences between astronauts and cosmonauts, as the Americans and the Russians have different space programs, with different selection criteria, selection processes, training regimes, spacesuits, equipment used, and missions. Generally, space travellers selected and trained by the Soviet/Russian space programs are referred to as cosmonauts, but the list also includes some individuals from ex-Soviet countries as well as from non-Soviet states, as space travellers from other nationalities sometimes receive training in Russia.

More intangibly, the term ‘cosmonaut’ is a sign of lineage, which connects the daring space traveller to Cosmonaut No. 1 Yuri Gagarin, as well as to the long line of cosmonauts who followed in his footsteps.

Space Exploration

On 5 May 1961, about 3 weeks after Gagarin’s flight, the USA launched Alan Shepard into a suborbital flight aboard Freedom 7. On 20 February 1962, John Glenn orbited Earth aboard Friendship 7, making him the first American in orbit. On their side of the pond, the USSR continued with its Vostok launch program, sending 5 more cosmonauts into space – one of them Valentina

Tereshkova, the first woman in space, aboard Vostok 6.

Slowly, we crept closer to the Moon – until, on 20 July 1969, Neil Armstrong and Edwin ‘Buzz’ Aldrin took man’s first steps – “and one giant leap for mankind” – on the moon as part of NASA’s Apollo lunar landing program. Over the years, ten other NASA astronauts walked on the lunar surface; interestingly, no other nation has landed humans on the moon as yet. In fact, no other planet in the solar system has thus far been visited by humans, although our goal of reaching Mars is coming nearer!

After the Americans had won the race to the moon, the Soviets concentrated their efforts on establishing a more long-term human presence in Earth-orbiting space stations, starting with the first manned orbital space station, called Salyut 1, in 1971. The Salyut [meaning ‘Fireworks’] program consisted of a series of crewed scientific research stations and crewed military reconnaissance stations from 1971 to 1986.

The experience gained was useful for the construction of the first modular space station, Mir [meaning ‘Peace’ or ‘World’], assembled in low earth orbit (LEO). It operated from 1986 until it was deorbited in March 2001, and was occupied for an impressive 12-and-a-half years out of its 15-year life span.

The Americans responded with NASA launching Skylab, an orbital space station that was occupied for 24 weeks between May 1973 and February 1974. Delays in the development of the Space Shuttle meant that

it could not be reused, and Skylab’s decaying orbit led to its re-entry on 11 July 1979. Ground control desperately tried to adjust its orbit so that debris wouldn’t crash into populated areas, but didn’t fully succeed: debris was scattered across the Indian Ocean and Western Australia.

Construction of the International Space Station (ISS) began in 1998, with the first astronauts taking up residence in 2000; it has been continuously occupied for 20 years, with new modules, experiments, robotic arms, solar arrays, docking ports and other components constantly being added and old ones replaced. About 400 km above our heads, the ISS is orbiting Earth at 7,66 km/s – or 27,600 km/h, effectively circling our planet in roughly 93 minutes and thus completing 15.5 orbits per day. It is funded only until 2025, and may be de-orbited in 2030.

The construction and maintenance of the ISS established close collaboration between the USA (NASA) and the Russian Federation (Roscosmos), and more recently also with Japan (JAXA), Europe (ESA) and Canada (CSA).

Since NASA’s space shuttle Atlantis completed its final mission in July 2011, all astronauts wanting to travel to the ISS have been launched in a Soyuz capsule from Baikonur Cosmodrome. The Soyuz [the Russian word Союз means ‘Union’], which has undergone many improvements and changes over the years since the crash-landing of Soyuz 1 resulted in the tragic death of cosmonaut

Vladimir Mikhailovich Komarov, has become the safest and most reliable spacecraft available, a veritable workhorse. The newest and most modernised version used by Roscosmos today is the Soyuz MS.

Interestingly, all astronauts are required to learn Russian, because the instruments and commands onboard the Soyuz are in Russian. In addition, both English and Russian are spoken onboard the ISS, even giving rise to a language mixture referred to as Runglish.

Many NASA astronauts receive several years of training in Russian, and participate in homestays with Russian-speaking families in order to become more comfortable speaking the language. The correct technical lingo poses an additional challenge. Being able to communicate quickly and accurately, both with fellow-astronauts and with ground crews, is essential. If crew members can only speak either English or Russian, communication needs to be relayed through translators, which leads to operational inefficiencies, unnecessary – and potentially dangerous – delays, and the possibility of miscommunication of crucial information.

But this working relationship between the USA and the Russian Federation is already changing.

In May 2020, Elon Musk’s company SpaceX used one of their special Falcon 9 rockets with a Crew Dragon spacecraft to transport two NASA astronauts – Robert Behnken and Douglas Hurley – to the ISS. It was SpaceX’s first crewed flight.

The Falcon 9 rocket is a par-



PEACE: The Soviet Union’s *Mir* space station photographed from Space Shuttle Discovery on 12 June 1998. *Mir* is the Russian word for ‘peace’.

tially reusable two-stage booster rocket designed by SpaceX to transport people and payload into orbit; the first stage is able to re-enter the atmosphere after separation, and to land vertically back on earth. It is an incredible feat of engineering.

SpaceX has built two autonomous spaceport drone ships (ASDS) that act as movable, floating landing sites. They have very quirky names: ‘Of Course I Still Love You’ (OCISLY), and ‘Just Read The Instructions’ (JRTI). The ability to recover stages as well as payload fairings (nose cones) is envisaged to reduce the cost of spaceflight, as well as to reduce the amount of junk left behind in orbit.

On 15 November 2020, another Falcon 9 rocket was

launched from NASA’s Kennedy Space Centre in Florida. This time, the Crew Dragon spacecraft mounted ontop successfully delivered three NASA astronauts (Michael Hopkins, Victor Glover and Shannon Walker) and one JAXA astronaut (Soichi Noguchi) to the International Space Station (ISS) to start their six-month stint in space.

It represented the first time that an international crew has been sent into space on an American commercial spacecraft. For the Americans, it opens up a new route to space with less reliance on cooperation with the Russian Federation. NASA reportedly pays Roscosmos US\$90 million for a seat on the Soyuz, while SpaceX charges US\$55 million

or US\$62 million for flights on the Falcon 9 reusable rocket (the numbers are indicative, not cast in stone). With other commercial space flight options in the offing, NASA seems to be moving away from its collaboration with Roscosmos.

On 1 February 2021, two of the astronauts in their bulky spacesuits conducted a 6-hour long spacewalk to maintain and replace batteries and install high-definition cameras on the outside of the ISS.

.When it comes to non-human space exploration, numerous unmanned space probes have been launched to several planets and moons, asteroids and comets, and even to the furthest reaches of our solar system, from the 1960s to today.

The most recent interstellar probe, the New Horizons spacecraft, performed a flyby of the Pluto-Charon system in July 2015. The Hubble Space Telescope was launched into low earth orbit (1990) and is still capturing amazing images. Its successor, the James Webb Space Telescope currently under joint development by NASA, ESA and CSA, is envisaged to be far more sensitive; projected launch date – October 2021.

Thanks to high-speed internet connections, some of these unmanned missions could be followed online. In 2014, for instance, people from all over the world tuned in to watch ESA’s Rosetta space probe make a rendezvous with comet 67P/Churyumov-Gerasimenko, and the nerve-wracking landing on the rubber-ducky-shaped comet by Rosetta’s intrepid little

Philae lander module on 12 November 2014.

NASA's Cassini spacecraft spent almost 20 years exploring Saturn, its rings and its moons, sending back extraordinary images. Its final fiery end in September 2017, as Cassini passed through the rings of Saturn, slowly spiralling downwards through Saturn's atmosphere, was covered by live commentary from mission control.

Satellite Mega-Constellations

Since the launch of Sputnik 1 in 1957, the number of satellites has – quite literally – skyrocketed.

Currently, there are almost 2,800 artificial satellites in geocentric orbit around Earth at various heights – low earth orbit, medium earth orbit, and high earth orbit (LEO, MEO and HEO). Some are in geosynchronous or geostationary orbit (GEO), which means that they remain in position above the same point on the earth's surface; others are in inclined orbit or elliptic orbit, whizzing around the Earth.

These satellites are used for communication (both military and civilian), telecommunication, satellite television, earth observation, remote sensing, geographical information systems, weather forecasting, global positioning systems and navigation.

Our modern world relies completely on them.

In 2019, Elon Musk's SpaceX started sending thousands of small satellites into LEO in order to establish a vast satellite-based mega-constellation

called Starlink that is projected to cover the entire planet and provide internet access to isolated not-yet-served communities. They want to launch about 42,000 satellites within the next decade or so; the United States Federal Communications Commission, which regulates communications by radio, television, wire, satellite, and cable across the USA, has already given permission for 12,000 of these, with more to follow.

Unfortunately, this ambitious project is also causing significant light and radio pollution and interference for ground-based observations using both optical and radio astronomy telescopes and receivers. The Starlink satellites are closer to the Earth and more reflective than anticipated; even though SpaceX experimented with non-reflective coatings (after complaints were received), it made little difference. Observations of the night sky are already being badly affected by the light streaks, which even amateur astro-photographers have noticed.

The situation will worsen dramatically in coming years, as more and more countries and organisations are developing their own space programs and sending satellite and large-scale constellations into space, such as: Amazon's Project Kuiper (3,200), OneWeb (jointly owned by the UK government and an Indian company Bharti Global) (650 satellites), and Hongyan and Hongyun (320 and 684 satellites respectively) (China).

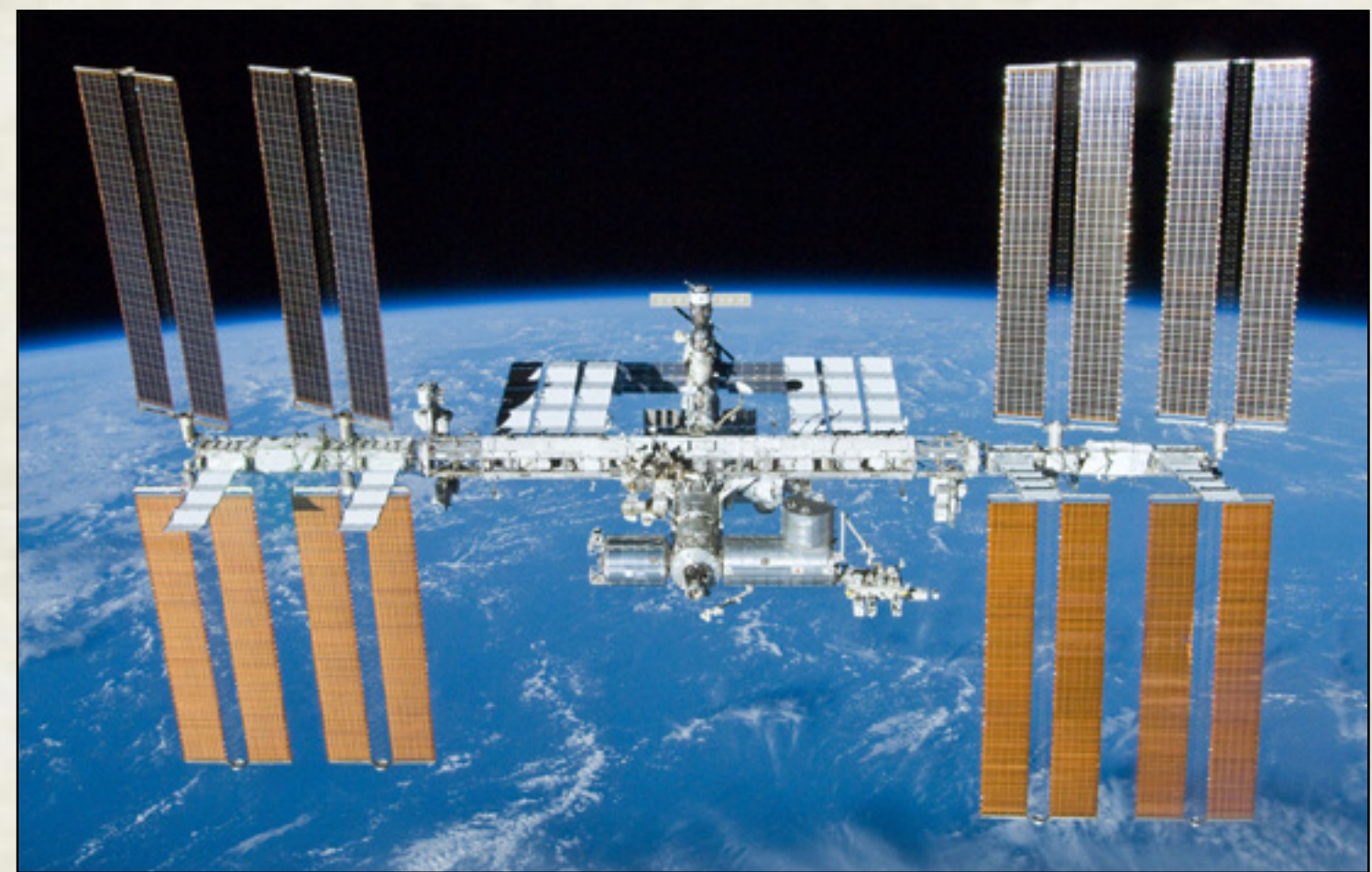
However, over the last decades, billions of dollars have

gone into developing increasingly sensitive, high-tech observation systems in order to see far back in time to the early days of the universe. Optical and radio telescopes are being used to identify and study celestial objects such as comets, galaxies, nebulae, planets, moons, stars, pulsars, quasars, supernovas, and cosmic microwave background radiation... as well as incoming asteroids potentially on a collision course with Earth – all of which requires clear views of the night sky. Ground-based light pollution from cities and urban areas has already forced astronomers to seek ever more remote locations (of which there are fewer and fewer).

And this is quite apart from the fact that humankind has always had a spiritual connection with the stars and the night sky. Who among us has not gazed up at the Milky Way and felt awe and longing and humility and a sense of profound mystery and magic? Perhaps you have memories of camping in remote areas, finding solace and profound healing in sleeping under the stars? Or perhaps you remember sitting around a fire at night, listening to tribal elders weaving stories about the origins of life, or participating in healing rituals under the stars? Sadly, our night skies are changing rapidly and becoming more cluttered.

Space Debris

More worryingly, this cluttering of near-Earth space significantly increases the risk of collision and the danger of debris, which already poses serious



SPACE HOME: The International Space Station, photographed by an STS-132 crew member onboard the Space Shuttle Atlantis after undocking, on 23 May 2010.

problems. Decommissioned satellites, pieces of spacecraft, abandoned launch vehicle stages, fragmentation debris from collisions, explosions and erosion, even items as small as paint flecks or solid rocket exhaust particles are hazardous and have the potential to cause serious damage. That's quite apart from the other hazards associated with space weather, such as solar flares and coronal mass ejections.

In February 2009, two communications satellites (the active commercial Iridium 33 and the retired Russian military Kosmos-2251) collided at a speed of 11,700 m/s – producing over 1,000 trackable fragments and many more too small to be tracked.

In addition, the US, Russia, China and India have all devel-

oped and tested anti-satellite missiles over the last decades, and these too have created space debris; much of it has fortunately burned up on re-entry – but some particles can also be boosted into higher orbits.

As a result of all this human activity in near-Earth space, we sadly now have the space equivalent of the Great Pacific Garbage Patch.

As of 8 January 2021, ESA's Space Debris Office in Darmstadt has identified about 34,000 objects greater than 10 cm, 900,000 objects between 1 cm and 10 cm in size, and 128 million objects (!) between 1 mm and 1 cm in size. Of the 10,680 satellites that have been placed in orbit around the Earth, only about 3,700 are still functioning and about 6,250 are 'dead' but still in orbit. This de-

bris is moving at about 30,000 km/h in various directions. Staggering numbers.

Since the 1970s, scientists have been warning of the increasing likelihood of the so-called Kessler effect: a high density of objects in near-Earth space increases the risk of collisions, with each collision generating more space debris, which in turn increases the likelihood of further collisions. Once triggered, this kind of cascade could make near-Earth space, particularly LEO, unusable for generations.

NASA's space shuttles were repeatedly hit by debris, as has the ISS. A particularly dramatic near-miss was on 28 June 2011, when mission control warned the 6-person crew of the ISS that a small piece of debris was approaching much

closer than anticipated (it eventually passed by at 335 metres). As there wasn't time to change orbit, the crew scrambled into the two Soyuz capsules that serve as 'lifeboats', and braced for impact for a tense 15 to 30 minutes, until they were finally given the all-clear. A close call!

On 2 September 2019, ESA's Aeolus earth observation satellite had to perform a last-minute manoeuvre to dodge a potential collision with Starlink 44, one of the first 60 satellites launched by SpaceX, by firing its thrusters to raise its orbit. Usually, avoidance manoeuvres only result from space debris, but this time the culprit was an active satellite.

Given the expected increase in mega-satellite-constellations and the increase in traffic volumes in the near-Earth environment, these avoidance manoeuvres are going to become more frequent. Compounding the problem is the fact that there are so many operators active in space – military, scientific, commercial, governmental, national – all with different, often conflicting, interests and agendas. There is no single international organisation – whether regulatory body, space agency or science organisation – in charge of what is happening in space. Where guidelines exist, they are non-binding and insufficient, and no enforcement of compliance. All the focus is on launch and in-space operations, but often no provision is made for the safe return or disposal of space tech afterwards.

The Race to Mars

Years ago, the brilliant Ste-

phen Hawking, theoretical physicist, cosmologist and author, began warning that it was increasingly likely that human beings would become extinct – whether as the result of a high-impact event such as an asteroid striking the Earth, or whether as the result of a global pandemic caused by genetically modified viruses, the rise of advanced machines with artificial intelligence, the failure to slow down or reverse climate change, or the outbreak of nuclear war. He repeatedly urged that mankind should find ways of establishing colonies on the Moon and on Mars, within the next 50 to 100 years.

Mars is our nearest neighbour in the solar system; the distance is constantly changing due to our two planets' elliptical orbits, varying between 55 million kilometres and 400 million kilometres. Mars is about half the size of Earth, and although the lengths of our days are similar (24.6 hours for Mars), the length of the year is much longer on Mars (687 days or a 'sol'). Unfortunately, its atmosphere (96% carbon dioxide and only traces of oxygen) makes it uninhabitable by humans. But scientists think it is possible that some form of life may have existed on Mars very long ago, which is why astrobiologists are so fascinated by the planet.

Although there have been several proposed human missions to Mars, no human being has as yet set foot on it. But companies such as SpaceX, Lockheed Martin, Boeing, and Blue Origin, as well as national space agencies (NASA – USA, Roscosmos – Russia, ESA – Eu-

rope, ISRO – India, and CNSA – China) all have their eye on the prize of being first in this Race to Mars.

A few years ago, the bold but unrealistic Mars One project was everywhere in the news; one of the shortlisted candidates was Dr Adriana Marais, a South African theoretical physicist doing research in the field of quantum biology. It was promoted as a kind of televised 'Big Brother' or 'Survivor' program, with participants spending the rest of their lives on the 'Red Planet'. However, Mars One was declared bankrupt in 2019, and the project fizzled.

In February this year (2021), three separate unmanned missions arrived at Mars within days/weeks of each other; they had all been launched in July 2020 during an Earth-to-Mars launch window that only occurs every two years, when the two planets are at their closest distance to each other.

There are currently eight orbiters around the Red Planet, which include three from NASA – Mars Odyssey (2001), Mars Reconnaissance Orbiter (2006) and Mars Atmosphere and Volatile Evolution (MAVEN) (2014), one from ESA (Europe), one from ISRO (Indian Space Research Organisation), and one joint mission from ESA and Roscosmos (Russia). They are now joined by two others:

The Hope orbiter (or 'Al Amal') launched by the United Arab Emirates is the first Arab interplanetary mission; it successfully entered orbit on 9 February 2021, where it will monitor and measure the Mar-



LIFT OFF: SpaceX Falcon 9 rocket carrying the Crew Dragon spacecraft launches on the Demo-2 mission to the International Space Station at Kennedy Space Centre, Florida, on 30 May 2020.

tian atmosphere.

China's Tianwen-1 (or 'Heavenly Questions') mission includes a Mars orbiter, a lander, and a solar-powered rover, that will study the planet's soil and atmosphere for three months, looking for signs of past life; the orbiter is intended to last for a Martian year (687 days). The orbiter successfully entered orbit on 10 February 2021. The lander and rover are projected to land in May or June 2021.

The most ambitious of the three unmanned missions is the USA's Mars 2020 mission, operated by NASA and JPL (Jet Propulsion Laboratory). It consists of the Perseverance rover (the fifth rover to land on Mars since 1997 – with its predecessors being Sojourner, Opportunity, Spirit and Curios-

ity), and includes a small helicopter-drone (called Ingenuity) – which will be the first time that scientists are attempting to fly a helicopter-drone on Mars, whose gravity is about 62% lower than that of Earth!

Due to the 11-minute delay in communications between Earth and Mars, the robotic lander had been programmed to land completely autonomously, with its new AI (artificial intelligence) obstacle avoidance navigation system fine-tuning approach and landing.

The various teams at mission control watched their screens anxiously, as Perseverance went through all the various EDL stages – until the callout 'Tango Delta' – 'Touch Down!' – confirmed that it had landed in exactly the right spot in Jeze-

ro Crater on Mars. Jubilation and cheers erupted, not just at mission control but in homes all around the world.

On 20 February 2021, two days after the dramatic landing, one of the microphones on the Perseverance rover recorded a little flutter of wind on the surface of Mars. This is the first time that a Mars rover has been equipped with a microphone; it is the strangest feeling to know that this sound is reaching us from another planet. It is an epic achievement.

It is absolutely incredible to think that all of this space exploration began with Major Yuri Alekseyevich Gagarin's flight into space onboard the Vostok 1 space capsule, just 60 years ago.

What's in a name?

Churchill, Stalin, Patton, and Cromwell were all famous figures in military history. They were, however, also the names of tanks. So just how many tanks were named after famous military or political figures?

One of the most feared and iconic tanks of World War II was the German *Panzerkampfwagen VI Ausf E*. At least this was its official title.

To both the Germans and the Allies it was better known simply as the Tiger tank.

Most military forces around the world have different methods of doing things. This includes different ways of marching, saluting and training. Different rank systems, uniforms and traditions.

However one thing that they do have in common is their insistence that every weapon or piece of equipment is given an official name.

Often a weapon or piece of equipment will be named after the designer or manufacturer of said item.

Take, for example, what is probably the most recognised weapon in the world - the AK-47.

While it is commonly known as the AK-47 or simply the AK, its official name is the Avtomat Kalashnikova (Machine Kalashnikova). It is named after the person that designed the weapon, Mikhail Kalashnikov, and the number 47 refers to the year it was finished.

Yet often a weapon or piece of equipment will be named after a person, usually a famous military or political figure.

This is especially true when

it comes to tanks and other armoured vehicles. In this article we take a look at some tanks and armoured vehicles that were named after famous figures in history.

United Kingdom

The Brits named two tanks, both produced during World War II, after famous figures in history.

Mk IV (A22) Churchill

The Tank, Infantry, Mk IV (A22) Churchill was a British heavy infantry tank used in the Second World War and named after British wartime Prime Minister Winston Churchill.

Best known for its heavy armour, large longitudinal chassis with all-around tracks with multiple bogies, its ability to climb steep slopes, and its use as the basis of many specialist vehicles. It was one of the heaviest Allied tanks of the war.

It saw service between 1941 and 1952.

Mk VIII, Cromwell

Officially known as the Tank, Cruiser, Mk VIII, Cromwell (A27M), was one of the series of cruiser tanks fielded by Britain in the Second World War.

Named after the English Civil War leader Oliver Cromwell, the Cromwell was the first tank put into service by the British to combine high speed from a powerful and reliable engine (the Rolls-Royce Meteor), and

reasonable armour.

The intended dual-purpose high velocity gun could not be fitted in the turret and the medium velocity dual purpose gun fitted proved inadequate. An improved version with a high velocity gun became the Comet tank.

It saw service between 1944 and 1955.

Russia

Like the British, the Soviet Union produced two tanks during World War II that were named after famous Russian leaders.

KV Tanks

The Kliment Voroshilov (KV) tanks are a series of Soviet heavy tanks named after the Soviet defence commissar and politician Kliment Voroshilov which operated with the Red Army during World War II.

The KV tanks were known for their heavy armour protection during the early stages of the war, especially during the first year of the German invasion of the Soviet Union. In certain situations, even a single KV-1 or KV-2 supported by infantry could halt German formations.

The German Wehrmacht at that time rarely deployed its tanks against KVs, as their own armament was too poor to deal with the "*Russischer Koloss*" – "Russian Colossus".

The KV tanks were practically immune to the 3.7 cm KwK

36 and howitzer-like, short-barreled 7.5 cm KwK 37 guns mounted, respectively, on the early Panzer III and Panzer IV tanks fielded by the invading German forces.

Until the Germans developed more effective guns, the KV-1 was invulnerable to almost any German weapon except the 8.8 cm Flak gun.

The KV series remained in use from 1939 to 1945.

IS Tanks

The IS Tank was a series of heavy tanks developed as a successor to the KV-series by the Soviet Union during World War II.

The IS acronym is the anglicized initialism of Russian leader Joseph Stalin (Iosif Stalin).

The heavy tanks were designed with thick armour to counter German 88 mm guns and carried a main gun capable of defeating Panzer IV tanks.

They were mainly designed as breakthrough tanks, firing a heavy high-explosive shell that was useful against entrenchments and bunkers.

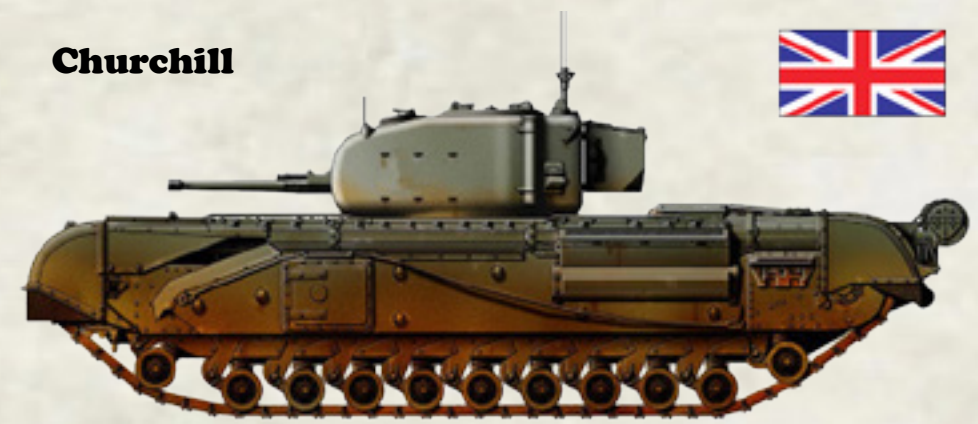
The IS-2 went into service in April 1944 and was used as a spearhead by the Red Army in the final stage of the Battle of Berlin.

The IS-3 served on the Chinese-Soviet border, the Hungarian Revolution, the Prague Spring and on both sides of the Six-Day War. The series eventually culminated in the T-10 heavy tank.

Egypt

The Egyptian Army has one tank that was named after a famous Egyptian Pharaoh.

Churchill



Cromwell



KV-1



IS-2



Ramses II



Ramses II

The Ramses II tank is a heavily modernized T-55 main battle tank designed for and used by the Egyptian Armed Forces. A single T-54 was sent to the United States for upgrading. A primary prototype was sent to Egypt where extensive trials were completed in late 1987. The tank finally entered production in 2004–2005. A total of 425 units have been produced. The tank was originally called the T-54E (“E” stands for “Egyptian”).

It was named after Ramesses II, also known as Ramesses the Great, was the third Pharaoh of the Nineteenth Dynasty of Egypt. He is often regarded as the greatest, most celebrated, and most powerful Pharaoh of the New Kingdom, itself the most powerful period of Ancient Egypt.

France

The French named two of their modern tanks after French generals.

AMX-50

The AMX-50 Foch 155 was a French heavy tank designed in the immediate post Second World War period.

It was named after Ferdinand Foch, a French general and military theorist who served as the Supreme Allied Commander during the First World War.

It was proposed as, in succession, the French medium, heavy, and main battle tank, incorporating many advanced features. It was cancelled in the late 1950s however, due to unfavourable economic and political circumstances after serious

AMX-50



AMX Leclerc



M3 Lee



M4 Sherman



M26 Pershing



delays in development.

AMX Leclerc

The AMX Leclerc, is a main battle tank (MBT) built by GIAT, now Nexter of France. It was named in honour of General Philippe Leclerc de Hauteclocque who led the French element of the drive towards Paris while in command of the Free French 2nd Armoured Division (2ème DB) in World War II.

The Leclerc is in service with the French Army and the army of the United Arab Emirates. In production since 1991, the Leclerc entered French service in 1992, replacing the venerable AMX 30 as the country’s main armoured platform.

United States

Almost all equipment used the the United States Armed Forces is named after a famous military or political figure.

This is particularly true when it comes to tanks and armoured vehicles.

M3 Lee

The M3 Lee, officially Medium Tank, M3, was an American medium tank used during World War II. In Britain, the tank was called by two names based on the turret configuration and crew size.

Tanks employing US pattern turrets were called the “Lee”, named after Confederate general Robert E. Lee. Variants using British pattern turrets were known as “Grant”, named after Union general Ulysses S. Grant.

M4 Sherman

The M4 Sherman, officially Medium Tank, M4, was the

M47 Patton



M60 Patton



M2 Bradley



M1128 Stryker



M1A2 Abrams



most widely used medium tank by the United States and Western Allies in World War II.

The M4 Sherman proved to be reliable, relatively cheap to produce, and available in great numbers. It was also the basis of several successful tank destroyers, such as the M10, 17pdr SP Achilles and M36B1.

Tens of thousands were distributed through the Lend-Lease program to the British Commonwealth and Soviet Union. The tank was named by the British for the American Civil War general William Tecumseh Sherman.

M26 Pershing

The M26 Pershing was a heavy tank/medium tank of the United States Army.

The tank was named after General of the Armies John J. Pershing, who led the American Expeditionary Force in Europe in World War I. It was used in the last months of World War II during the Invasion of Germany and extensively during the Korean War.

The M26 was intended as a replacement of the M4 Sherman, but a prolonged development period meant that only a small number saw combat in Europe, notably in the 9th Armoured Division's dash to take the Ludendorff Bridge during the Battle of Remagen.

Patton tank

No fewer than four American tanks bore the name of famed World War II tank general, George S. Patton.

The M46 Patton was used during the Korean War.

The M47 Patton Tank saw

service with the US Army from 1952 to 1959 and was still used by foreign armies right up until the mid-1990s.

The M48 Patton saw service with the US Army from the mid-1950s and through the Vietnam War. It is still used by quite a few foreign armies.

The M60 Patton was the standard main battle tank of the United States from 1960 until it was replaced by the M1 Abrams in 1991. It is still extensively used worldwide.

M2 Bradley

The Bradley Fighting Vehicle (BFV) is a tracked fighting vehicle platform of the United States.

It was named after Omar Nelson Bradley, a senior officer of the United States Army during and after World War II, holding the rank of General of the Army.

It is armed with a 25 mm M242 Bushmaster chain gun and BGM-71 TOW anti-tank missiles.

It is operated by a three man crew and can carry a variable number of passengers depending on variant.

ICV Stryker

The ICV (Infantry Carrier Vehicle) Stryker is a family of eight-wheeled armoured fighting vehicles derived from the Canadian LAV III. Stryker vehicles are produced by General Dynamics Land Systems for the United States Army. It has 4-wheel drive (8×4) and can be switched to all-wheel drive (8×8).

The vehicle is named for two unrelated U.S. soldiers who

posthumously received the Medal of Honor: Private First Class Stuart S. Stryker, who died in World War II, and Specialist Four Robert F. Stryker, who died in the Vietnam War.

Different variants of the vehicles carry different weapon systems. The M1126 Stryker, for example, carries a 12.7 mm M2 machine gun and 40 mm Mk 19 grenade launcher.

The Stryker Dragoon mounts a 30 mm Mk44 Bushmaster II gun, and the M1128 Stryker is armed with a 105 mm M68A2 gun.

M1 Abrams

The M1 Abrams is a third-generation American main battle tank and named for General Creighton Abrams. He was a United States Army general who commanded military operations in the Vietnam War from 1968 to 1972.

Conceived for modern armored ground warfare and now one of the heaviest tanks in service at nearly 62 metric tons, it introduced several innovative features, including a multi-fuel turbine engine, sophisticated Chobham composite armour, a computer fire control system, separate ammunition storage in a blow-out compartment, and NBC protection for crew safety. Initial models of the M1 were armed with a licensed-produced 105 mm Royal Ordnance L7 gun, while later variants feature a licensed Rheinmetall 120 mm L/44.

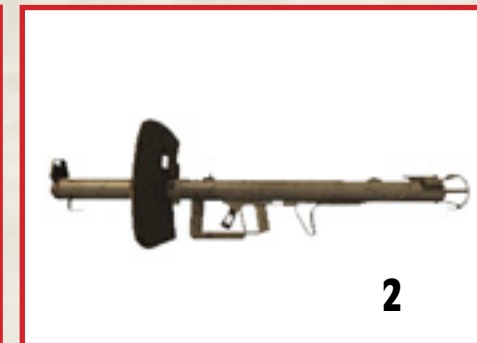


Rocket & Missile Launchers

This month we're looking at rocket and missile launchers, either anti-tank or anti-air. We show you the image, you tell us what it is. Score a bonus point if you can tell us the country of origin. Answers on page 98.



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Did you know?

Regine Lord brings us some facts and trivia about space exploration.

- You have probably heard of NASA, the space agency in the USA – but did you know that South Africa too has a national space agency called SANSA?
- Did you know that three of South Africa's four satellites have been launched from the Russian Federation?
- You are no doubt familiar with weather here on Earth – drought, rain, storms, hail, snow – but did you know that there is something called space weather, which is caused by the behaviour of the sun and its interactions with Earth's magnetic field and atmosphere?
- And that, rather like storms on Earth, solar storms and solar wind in near-Earth space can disrupt and damage modern-day technologies?
- You have probably heard of the International Space Station (ISS), which has been circling Earth since 1998 – but did you know that it was the Soviet Union that sent the first manned space station (Salyut) into orbit as far back as 1971? And that it was also the Soviet Union that constructed the second manned space station, called Mir, in 1986?
- You probably know about NASA's space shuttle program, which operated between 1977 and 2011 – but did you know that the Soviet Union also designed a space shuttle, called Buran, which flew just once, in November 1988?
- Did you know that Soviet/Russian space travellers are generally called cosmonauts, while space travellers from other space agencies (America, Europe, China and Japan) are called astronauts?
- Did you know that from July 2011 until November 2020 the only way for astronauts and cosmonauts to reach the ISS has been onboard a Russian Soyuz spacecraft?
- Did you know that all astronauts need to learn Russian in order to travel into space, because the instruments and commands onboard the Soyuz spacecraft are in Russian? And that communication on the ISS is in both Russian and English, giving rise to a language known as 'Runglish'?
- Of the 12 men that walked on the moon, only two of them were civilians - Neil Armstrong and Harrison Schmitt.
- The other ten men that walked on the moon all served in the military. Colonel Edwin 'Buzz' Aldrin (Air Force), Captain Pete Conrad (Navy), Captain Alan Bean (Navy), Rear Admiral Alan Shepard (Navy), Captain Edgar Mitchell (Navy), Colonel David Scott (Air Force),
- Colonel James Irwin (Air Force), Captain John Young (Navy), Brigadier General Charles Duke (Air Force), and Captain Eugene Cernan (Navy).
- The youngest man to walk on the moon was Charles Duke, 36 years 6 months and 18 days.
- The oldest man to walk on the moon was Alan Shepard, 47 years 2 months and 18 days.
- A devout Presbyterian elder, Buzz Aldrin became the first person to hold a religious ceremony on the moon when he privately took communion.
- When he first stepped onto the moon, Neil Armstrong made his famous speech, "That's one small step for man, one giant leap for mankind." Yet this was not what he intended to say. What he was actually meant to say was "That's one small step for a man, one giant leap for mankind."
- Of the 12 men to walk on the moon, only four of them are still living. Buzz Aldrin (age 91), David Scott (age 88), Charles Duke (age 85), and Harrison Schmitt (age 85).
- David Scott became the first to drive a vehicle on the Moon when he drove the Lunar Roving Vehicle.
- A total of 12 astronauts flew to the moon but never got the chance to walk on the moon. Frank Borman, Jim Lovell, Bill Anders, Tom



MAN ON THE MOON: Neil Armstrong who, at the age of nearly 39, became the first person to walk on the moon. He passed away on 25 August 2012 at the age of 82.

- Stafford, Michael Collins, Dick Gordon, Jack Swigert, Fred Haise, Stu Roosa, Al Worden, Ken Mattingly and Ron Evans all flew to the moon but never landed. All of them previously served in the US Air Force, US Navy, or US Marine Corps.
- Alan Shepard became the first man to 'play' golf on the moon. Shepard took a few moments during the Apollo 14 landing to show off his hobby during a live broadcast from the lunar surface on 6 February 1971. He took two shots, with the second ball going "miles and miles," he said on-camera.
- Apollo 11, 12, 14, 15, 16 and 17 all landed on the moon. Apollo 13, however, did not make it. A routine stir of an oxygen tank ignited damaged wire insulation inside it, causing an explosion that vented the contents of both of the SM's oxygen tanks to space. Without oxygen, needed for breathing and for generating electric power, the SM's propulsion and life
- support systems could not operate. The CM's systems had to be shut down to conserve its remaining resources for re-entry, forcing the crew to transfer to the LM as a lifeboat. With the lunar landing cancelled, mission controllers worked to bring the crew home alive. The astronauts on board were James A. Lovell, John L. Swigert, and Fred W. Haise.
- Two scheduled moon landings, Apollo 18 and Apollo 19, were cancelled.
- As of 2020, there have been 15 astronaut and four cosmonaut fatalities during space-flight.
- Christa McAuliffe (37), Judith Resnik (36), Kalpana Chawla (41) and Laurel Clark (41), are the only women to have died in space. McAuliffe and Resnik were part of the crew of the Space Shuttle Challenger and Chawla and Clark were part of the crew of the Space Shuttle Columbia.
- One of the biggest hindrances to man's exploration of

the solar system is the extortionate cost. It's been estimated that the total cost of the Apollo 11 mission that first put a man on the moon was \$25.4 billion. In today's money, that's around \$135 billion.

- The early astronauts were unable to get life insurance, perhaps understandably, for such a risky venture. So to ensure their families would be taken care of if they failed to return, they would auto-graph pictures of themselves, which could then be auctioned off if needed.
- Ever heard the story of how NASA spent millions trying to create a pen that would work in zero gravity, while the Russians simply used a pencil? It's not true. In fact, pencils are a hazard in space – they are flammable, and if the graphite tip breaks, it could pose a risk to equipment.
- Various astronauts who have been on missions there claim that the moon smells of wet ashes, or spent gunpowder. So it does not smell of cheese. And astronauts have also reported that space itself smells slightly of burned steak.
- Nearly four decades after he became the first American to orbit the Earth, Senator John Hershel Glenn, Jr., launched into space again as a payload specialist aboard the space shuttle Discovery. At 77 years of age, Glenn was the oldest human ever to travel in space.

Job Maseko - World War II Warrior

How does a man not officially allowed to carry firearms go on to win the Military Medal for gallantry? Job Maseko was one of those that achieved this feat.

It is a sad fact that we know very little about the early life of Job Maseko. I have no idea of when or even where he was born.

What we do know is that shortly before World War II he worked as a delivery man in Springs in what was then the Transvaal.

He volunteered for service with the South African Native Military Corps (NMC) and, after completing basic training, was sent to North Africa as part of the 2nd South African Infantry Division.

There was, however, a catch. Members of the NMC were only given non-combat roles. They were used as drivers, cooks, stretcher bearers and so on.

South African race laws at the time provided that serving 'black' men could not carry firearms, they were however issued spears as a 'traditional weapon' for guard and ceremonial duty.

Maseko was not alone. Nearly 40% of the standing army consisted of 'black' South African volunteers. About 128,000 of them in fact.

In June 1942 Tobruk, the port city on Libya's eastern Mediterranean coast, near the border of Egypt, was under siege. The Allied garrison at Tobruk, under the command of South African Major General Hendrik Klopper, had repulsed several attacks by Field Marshal Erwin Rommel's Afrika Korps.

It was in this maelstrom that Job Maseko found himself. He was working as a stretcher bearer, rescuing wounded men, often while under enemy fire.

As the situation became more desperate the restrictions of black troops being given rifles went out of the window. Maseko and other black colleagues were given rifles and expected to fight on the front line with everyone else.

On 21 June 1942 General Klopper surrendered to Rommel and 32,000 Allied troops became prisoners of war. This included 10,722 South Africans of the 2nd Division, of whom 1,200 were members of the Native Military Corps. Job Maseko was one of them.

Maseko and many others were force marched across the desert to an Italian POW camp.

The Italian treatment of POWs was disgusting, especially

ly the treatment reserved for members of the Native Military Corps. German and Italian forces displayed a complete disregard for the rights of coloured or black POWs as they did not view them as regular troops.

At the Tobruk camp black South African POWs were forced "under threat of death" to do war work, which was contrary to the Geneva Convention. More over their food was totally inadequate – they were only given one packet of biscuits per day and water rations were kept to a minimum.

Desperate for food, some of the black POWs would escape from the camp perimeter at night in an effort to scrounge for food in the town. They would sometimes return to the camp with 'acquired' sacks of mielie meal.

Maseko was none to pleased with the treatment of black POWs. He felt compelled to take action against his captors. To quote him, "because of our ill-treatment by the enemy, especially the Italians, and because I felt it a duty in this way to assist my own people".

Part of Maseko's duties was off-loading cargo from ships docked in the harbour.

With the help of fellow prisoners Andrew Mohudi, Sam Police and Koos Williams, Maseko assembled a bomb using a condensed milk tin, cordite taken from bullets and an extremely long fuse.

While off-loading cargo, he placed his home-made bomb deep inside the hold of a German freight ship (probably an 'F' Boat).

He placed the bomb next to fuel barrels, lit the fuse, and left the ship. As he waited and watched, the ship shuddered from a huge explosion and almost immediately sank into the harbour. If he had been discovered Maseko would have been shot, probably after first being tortured.

After the war Maseko was able to point out where the ship had been berthed. When divers went down to investigate the found the ship resting on the sea bed exactly where he said it would be.

Maseko later escaped from Tobruk and spent three weeks walking through the desert, much of the way through enemy lines.

While still a POW he had found and repaired an old German radio. He heard about General Montgomery's epic and tide turning victory at El Alamein. Maseko was heading for El Alamein, intent on joining the battle.

For his actions Job Maseko was later presented with the Military Medal (MM) by Major-General F H Theron. The citation reads:

The King has been graciously pleased to approve the following award in recognition of gallant and distinguished service in the Middle East.

Military Medal

No N 4448 L/Cpl Job Masego [sic] – Native Military Corps Citation

For meritorious and courageous action in that on or about the 21st July, while a Prisoner of War, he, Job Masego, sank a fully laden enemy steamer – probably an "F" boat – while moored in Tobruk Harbour.

This he did by placing a small tin filled with gunpowder in among drums of petrol in the hold, leading a fuse therefrom to the hatch and lighting the fuse upon closing the hatch.

In carrying out this deliberately planned action, Job Masego displayed ingenuity, determination and complete disregard of personal safety from punishment by the enemy or from the ensuing explosion which set the vessel alight.'

For his actions Job Maseko was initially recommended for a Victoria Cross but according to Neville Lewis, the first official war artist for South Africa during the Second World War, Job Maseko was awarded the Military Medal instead as he was 'only an African'.

After being released Lance Corporal Job Maseko returned to South Africa. Shortly after the war ended apartheid was implemented and his legacy slipped away from the general consciousness.

Job Maseko died in 1952 after being stuck by a train. At the time he was so poor that they had to borrow money to bury him.

Today this unassuming hero has a primary school in KwaThema township named after him. The main road of the township has also been named after him.

The South African Navy strike-craft SAS Kobie Coetzee was renamed the SAS Job Maseko.

Job Maseko was a warrior, a hero, and a South African. We will remember him.

INTO THE BAG: 32,000 Allied troops were taken prisoner after the fall of Tobruk.



Rank Structure - Denmark

Over the next few months we will be running a series of articles looking at the rank structure of various armed forces. This month we look at Danish Defence.



Danish Defence is the unified armed forces of the Kingdom of Denmark charged with the defence of Denmark and its constituent, self-governing nations Greenland and the Faroe Islands. The Defence also promote Denmark's wider interests, support international peacekeeping efforts and provide humanitarian aid.

Since the creation of a stand-

ing military in 1510, the armed forces have seen action in many wars, most involving Sweden, but also involving the world's great powers, including the Thirty Years' War, the Great Northern War, and the Napoleonic Wars.

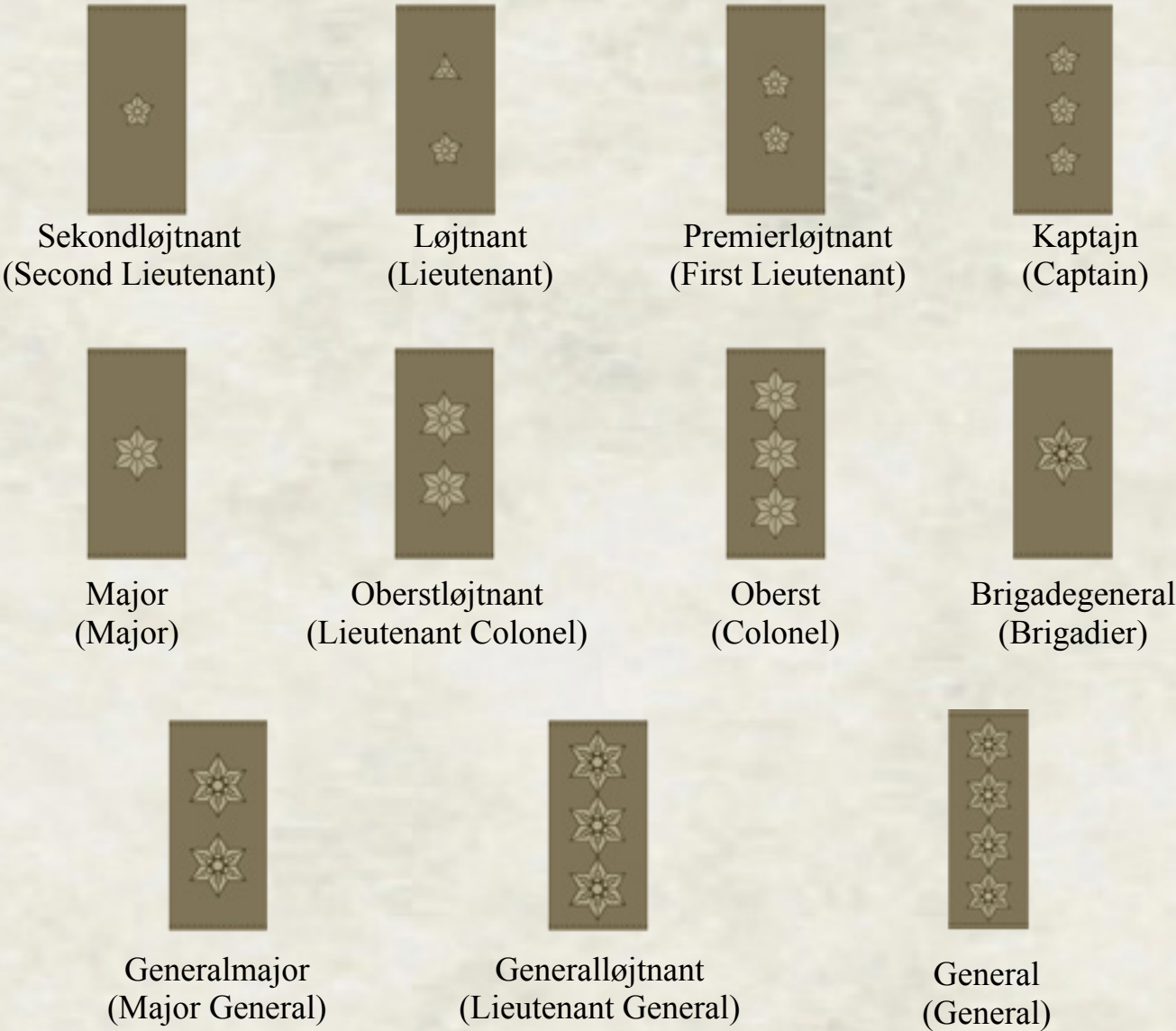
Today, Danish Defence consists of: the Royal Danish Army, Royal Danish Navy, and Royal Danish Air Force. The Defence also includes the Home Guard.

Royal Danish Army

Non-commissioned Officers (NCO)



Officers



Royal Danish Navy

Non-commissioned Officers (NCO)





Sergeant SØ
(Officer Cadet)



Sergeant
(Petty Officer)



Oversergent
(Chief Petty Officer)



Seniorsergent
(Senior Chief Petty Officer)



Chefsergent
(Master Chief Petty Officer)



Søværnschefsergent
(Chief Petty Officer
of the Navy)

Officers



Løjtnant
(Lieutenant
Junior Grade)



Premierløjtnant
(Lieutenant)



Kaptajnløjtnant
(Lieutenant
Commander)



Orlogskaptajn
(Commander)



Kommandørkaptajn
(Commander Senior Grade)



Kommandør
(Captain)



Flotilleadmiral
(Commodore)



Kontreadmiral
(Rear Admiral)



Viceadmiral
(Vice Admiral)



Admiral
(Admiral)

Royal Danish Air Force

Non-commissioned Officers (NCO)



Flyverkonstabel
(Aircraftsman)



Flyveroverkonstabel
(Senior Aircraftsman)



Flyverspecialist
(Lance Corporal)



Korporal
(Corporal)



Værnepligtig Sergent
(Conscript Sergeant)



Sergent
(Sergeant)



Oversergent
(Flight Sergeant)



Seniorsergent
(Technical Sergeant)



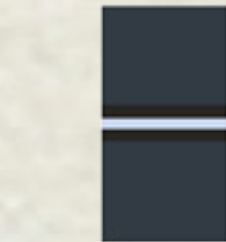
Chefsergent
(Warrant Officer)



Flyvevåbnets Chefsergent
(Warrant Officer
of the Air Force)



Officers



Sekondløjtnant
(Second Lieutenant)



Løjtnant
(Lieutenant)



Premierløjtnant
(First Lieutenant)



Kaptajn
(Captain)



Major
(Major)



Oberstløjtnant
(Lieutenant Colonel)



Oberst
(Colonel)



Brigadegeneral
(Brigadier)



Generalmajor
(Major General)



Generalløjtnant
(Lieutenant General)



General
(General)



Springbok

Journal of the South African Legion
Tydskrif van die Suid-Afrikaanse Legioen



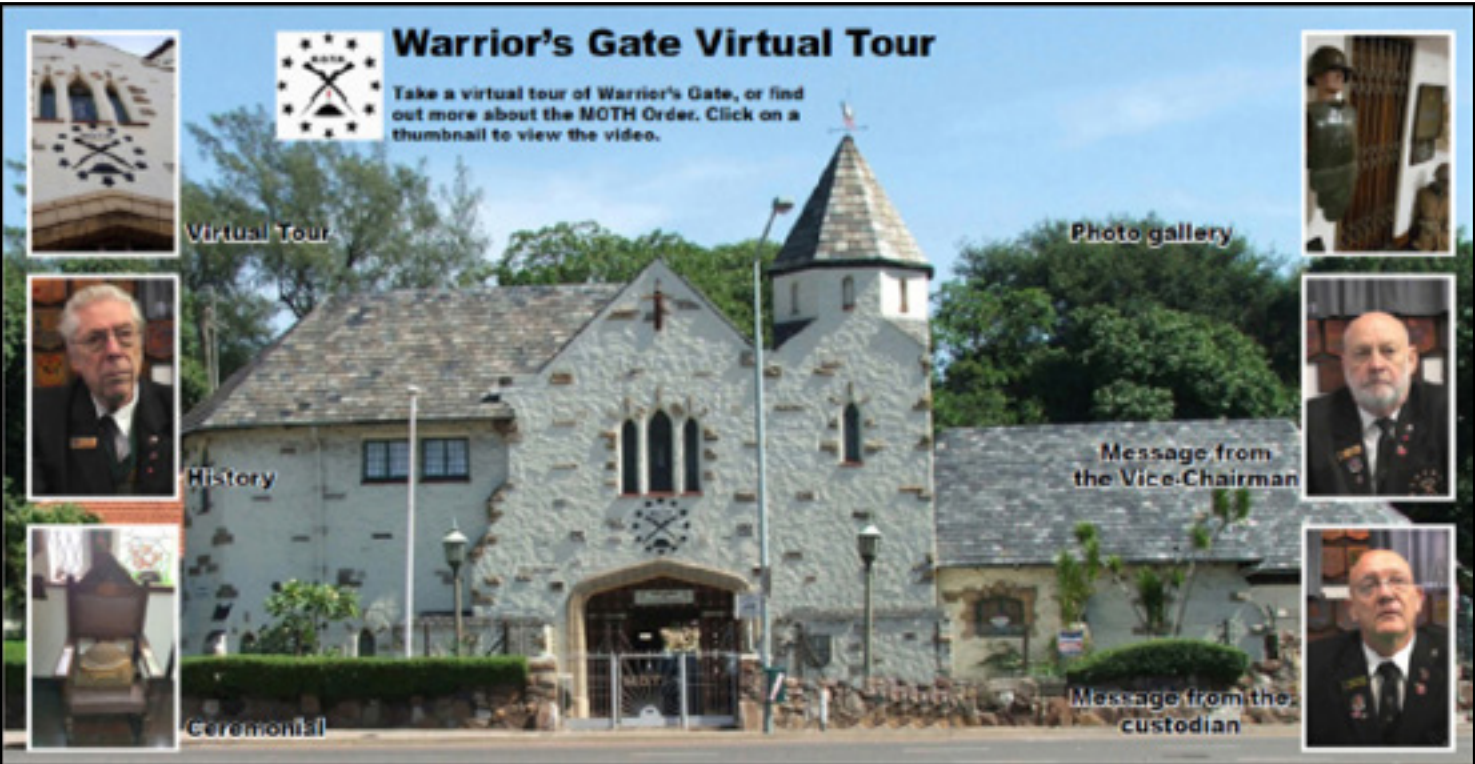
The SA Legion is a national organisation, part of a world-wide family that addresses the needs of ex-service personnel and their dependents by way of housing, pensions, employment and general welfare. It is apolitical, non-sectarian, non-racial, non-sexist and non-partisan.

The Springbok is the official journal of the South African Legion. Read the February issue of Springbok by clicking on the cover to the left.



Memorable Order of Tin Hats

Click on the photograph below to take a virtual tour of Warrior's Gate and find out more about the Memorable Order of Tin Hats.



Weapons & Equipment: Falklands War

This month in the second of a series of three articles we look at the weapons used by the air forces of both Britain and Argentina during the Falklands War.

In this article we will be taking a closer look at the various aircraft used by both Britain and Argentina during the Falklands War.

Despite initiating the war, Argentina had not prepared a plan for the subsequent defence of the islands. The military dictatorship that governed the country at the time regarded the seizure of the Falklands as a political act to obtain a diplomatic bargaining position, and not as an act of war.

Consequently they were taken by surprise when the British responded with a large-scale mobilization, and a task force to retake the islands.

The Argentine Air Force (Fuerza Aérea Argentina; FAA) had never considered the possibility of waging a long-range naval air campaign against a major NATO power. It was not trained or equipped for such a mission.

The FAA had only two tanker aircraft to serve the whole air force and navy, and its fighter-bomber Mirage IIIs and IAI Daggers were not equipped for

aerial refuelling.

The FAA's training, tactics and equipment were focused on a possible war against Chile, resulting from disputes such as the Beagle conflict.

The option to attack Chile was a cause of great concern to the Argentina military during the war. The Chilean armed forces had deployed a significant force to Chile's common border with Argentina, and the FAA was forced to reinstate their retired F-86 Sabres to bolster Argentina's air defences.

In Argentina's favour, Peru immediately offered its support to the Argentine cause, with the Peruvian Air Force even offering to fly combat missions.

This was politely declined by the Argentine government. As the war progressed, Peru and Venezuela sent critical aircraft spare parts to Argentina, urgently needed by the FAA and the Brazilian Air Force leased two EMB111 Bandeirantes maritime patrol aircraft to the

Argentine Navy.

Finally on June 4, ten Peruvian Mirage 5 with AS-30 missiles arrived to Tandil but the war ended before they could be used.

Israel Aircraft Industries technicians that were in the country under the 1979 IAI Daggers contract continued their work during the conflict.

By the best estimates, Argentina had about 240 planes when the war broke out. About half of those were posted in the interior and along the Chilean border.

The long distances from their bases prevented them from using their top speed or they risked running out of fuel.

Although the Argentines had more aeroplanes than the British Task force, a good number of them were Pucara turboprops.

Also, the A-4 Skyhawk force were dependent on the two available KC-130 tankers, limiting the amount of aeroplanes that could attack simultaneously.

Argentina's fleet of A-4 Sky-

hawk attack jets was in very poor condition. The arms embargo placed by the United States in 1976, due to the "Dirty War", had made most airframes unusable.

The involvement of Israel in helping to return the A-4 to full operational status has been alleged, but has never been confirmed.

The small air arm of the Argentine Navy (Armada Republica Argentina; ARA) was in the middle of the transition from the A-4Q Skyhawk to the new Super Etendard.

Only five of the Etendard's anti-ship Exocet missiles had been delivered at the time of the conflict, at which point an arms embargo prevented the delivery of further shipments. Additionally, the required programming for the missiles to interact with the Etendard's computers had not been completed by French engineers when the conflict broke out.

France, being an ally of the United Kingdom, recalled all technicians, which left Argentine scientists and electronic engineers to figure out a way to make the missiles take input from the plane's computers.

Navy pilots, particularly those of the 3rd Naval Fighters Squadron flying A-4Qs, were the only personnel trained in bombing warships.

Air Force pilots trained during April against the two Argentine Type 42 destroyers, similar to those of the British Fleet, and according to the Naval officers all the sorties were shot

down, causing great concern to the High Command until the successful May 1 strikes which proved that aircraft could survive.

Finally, Argentine military aviation had never been involved in an international conflict, indeed the last time the Argentine military had been involved in an international conflict was the War of the Triple Alliance more than a century before.

In spite of these disadvantages, Argentine air units bore the brunt of the battle during the six-week war, and inflicted serious damage and losses to the naval forces of the United Kingdom.

Low-flying jets attacking British ships provided some of the most sobering and dramatic images of the war. By the end of the conflict, the British forces had come to admire the FAA's spirited conduct in the face of an effective air defence network.

Admiral Sandy Woodward, the British Task Force commander said: "The Argentine Air Force fought extremely well and we felt a great admiration for what they did."

British Air Forces

All arms of the British Armed Forces took part in the Falklands War - Army Air Corps, Royal Marines, Royal Air Force (RAF), and the Fleet Air Arm (British Navy).

The problem for the British was that the Falkland Islands were, in a straight line, nearly

13,000 kilometres away from England. Most of the British aircraft would have to be transported via ship.

One advantage that the British did have was RAF Ascension Island, also known as Wideawake Airfield or Ascension Island Auxiliary Field.

It's a military airfield and facility located on Ascension Island in the Atlantic Ocean. The airfield is jointly operated by the Royal Air Force and the United States Space Force. It was 6,361 kilometres from the Falkland Islands. While it was still a long way from the combat zone, it was still half the distance from England.

British air forces included No. 656 Squadron Army Air Corps. Their air power consisted of six Gazelle AH.1 helicopters and six Westland Scout AH.1 helicopters.

The Royal Marines had 3 CDO Brigade Air Squadron with nine Gazelle AH.1 helicopters and six Westland Scout AH.1 helicopters.

The Fleet Air Arm and the Royal Air Force provided the bulk of the air power used by the British during the Falklands War.

Fleet Air Arm

The following squadrons and aircraft were deployed by the Fleet Air Arm.

- 737 Naval Air Squadron (NAS) - two Westland Wessex HAS.3 helicopters. One each on the destroyers HMS Antrim and HMS Glamorgan.



- 800 NAS with 12 Sea Harrier FRS.1 jets. They were based on the Centaur class aircraft carrier HMS Hermes.
- 801 NAS with eight Sea Harrier FRS.1 jets based on the light aircraft carrier HMS Invincible.
- 809 NAS with eight Sea Harrier FRS.1 jets based on HMS Hermes and HMS Invincible.
- 815 NAS with seven Westland Lynx HAS.2 helicopters and seven Westland Lynx HAS.3 helicopters based on Type 42 destroyers, Type 21 and Type 22 frigates.
- 820 NAS with nine Westland Sea King HAS.5 helicopters based on HMS Invincible.
- 824 NAS with three Westland Sea King HAS.2 helicopters and two Westland Sea King HAS.2A helicopters based on Royal Fleet Auxiliary (RFA) fleet replenishment ships RFA Fort Rosalie and RFA Olmeda.
- 825 NAS with 10 Westland Sea King HAS.2 helicopters based on SS Atlantic Causeway and RMS Queen Elizabeth 2. Both ships were owned by Cunard Line and were requisitioned by the British government for service as a troop carriers in the Falklands War.
- 826 NAS with 12 Westland Sea King HAS.5 helicopters based on HMS Hermes.
- 829 NAS with nine Westland Wasp HAS.1 helicopters based on HMS Endurance, HMS Bristol, Leander-class and Type 12 frigates.
- 845 NAS with 15 Westland Wessex HU.5 helicopters based on RFA Tidespring,

RFA Tidepool and RFA Fort Austin. Later some of them would be based at Port San Carlos, the first landing place of British forces.

- 846 NAS with 15 Westland Sea King HC.4 helicopters based on HMS Hermes, HMS Fearless class, HMS Elk, SS Canberrak and Norland. The Norland was a P&O roll-on/roll-off ferry requisitioned by the British government.
- 847 NAS with 24 Westland Wessex HU.5 helicopters based on SS Atlantic Causeway, RFA Engadine and Port San Carlos.
- 848 NAS with 15 Westland Wessex HU.5 helicopters based on HMS Endurance, RFA Olma, SS Atlantic Conveyor & the Astronomer.

Royal Air Force

All four-engined aircraft operated from Wideawake Airfield, Ascension Island, but flew in the war zone.

- No. 1(F) Squadron with 10 Harrier GR.3 jets based on HMS Hermes and at Port San Carlos.
- No. 18 Squadron with four Chinook HC.1 helicopters.
- No. 29 Squadron with three Phantom FGR.2 jets based at Wideawake.
- No. 39 Squadron with two Canberra PR.9 jets performing clandestine operations from Chile.
- No. 42 Squadron with three Nimrod MR.2 aircraft.
- No. 44 Squadron with two Vulcan B.2 high-altitude strategic bombers.
- No. 47 Squadron with three Hercules C.1 transport aircraft.

- No. 50 Squadron with one Vulcan B.2.
- No. 51 Squadron with three Nimrod R.1 aircraft.
- No. 55 Squadron with 10 Victor K.2 strategic bombers.
- No. 57 Squadron with 10 Victor K.2 strategic bombers.
- No. 70 Squadron with three Hercules C.1 transport aircraft.
- No. 101 Squadron with one Vulcan B.2.
- No. 120 Squadron with three Nimrod MR.2 aircraft.
- No. 201 Squadron with three Nimrod MR.2 aircraft.
- No. 202 Squadron with one Westland Sea King HAR.3 helicopter based at Wideawake.
- No. 206 Squadron with four Nimrod MR.2 aircraft.
- No. 10 Squadron with 14 VC10 C.1 aircraft.

Armament

The following weapons and ordnance was used by the British during the Falklands War.

- L4A1 GPMG (General Purpose Machine Gun).
- 30 mm ADEN Cannon with 120–130 rounds - Sea Harrier, Harrier GR.3.
- AIM-9D/G Sidewinder Air-to-air missile (AAM) - Phantom FGR.2.
- AIM-9L Sidewinder AAM - Sea Harrier, Harrier GR.3.
- AGM-45 Shrike Air-to-Surface Anti-radiation missile (ARM) - Vulcan.
- BAe Sea Skua Air-to-Surface anti-ship missile - Lynx.
- Aerospatiale AS.12 Air-to-Surface missile - Wasp.
- Paveway II Laser-guided

- bomb (LGB), 454 kg - Harrier GR.3.
- BL755 Cluster bomb with 147 bomblets - Sea Harrier.
- 1,000 lb General-Purpose Bomb Sea Harrier, Harrier GR.3 and Vulcan.
- SNEB Rockets - Harrier

- GR.3, Gazelle.
- Mk. 46 Torpedo.
- Mk. 11 Depth charge

Casualties

During the Falklands War the British lost the following aircraft.

- 24 helicopters
- 10 fighters
- One Vulcan was interned by Brazil after the aircraft had been forced to make an emergency landing.

Gazelle AH.1

The AH.1 was based on the French Aerospatiale SA342 Gazelle.

- Length: 9.53 metres
- Width: 10.5 metres
- Height: 3.18 metres
- Weight: 999 kg (empty)
- Power: 1 x Astazou IIN2 engine
- Max Speed: 265 kph
- Service ceiling: 467 metres
- Range: 710 kilometres



Scout AH.1

The Scout AH.1 was a land-based general purpose military helicopter

- Length: 9.25 metres
- Height: 2.72 metres
- Weight: 1,466 kg (empty)
- Power: 1 × Rolls-Royce Nimbus 101 turboshaft engine
- Max Speed: 211 kph
- Service ceiling: 5,400 metres
- Range: 507 kilometres



Wessex HAS.3

The Westland Wessex operated as an anti-submarine warfare and utility helicopter.

- Length: 20.07 metres
- Height: 4.83 metres
- Weight: 3,783 kg (empty)
- Power: 2 × de Havilland Gnome H.1200 Mk.110/111 turboshaft engines
- Max Speed: 212 kph
- Service ceiling: 3,700 metres
- Range: 500 kilometres



Sea King HAS.5

The Sea King was primarily designed for performing anti-submarine warfare (ASW) missions.

- Length: 17.02 metres
- Height: 5.13 metres
- Weight: 6,373 (empty)
- Power: 2 × Rolls-Royce H.1400-2 Gnome turboshaft engines
- Cruise Speed: 307 kph
- Range: 1,230 kilometres



Sea Harrier FRS.1

The Sea Harrier is a naval short take-off and vertical landing/vertical take-off and landing jet fighter, reconnaissance and attack aircraft.

- Length: 14.7 metres
- Height: 3.71 metres
- Weight: 6,616 kg (empty)
- Power: 1 × Rolls-Royce Pegasus 106 vectored thrust turbofan engine
- Max Speed: 1,145 kph
- Service ceiling: 16,000 metres
- Range: 740 kilometres



Wasp HAS.1

The Westland Wasp is a small turbine powered, shipboard anti-submarine helicopter

- Length: 12.29 metres
- Height: 2.72 metres
- Weight: 1,566 kg (empty)
- Power: 1 × Rolls-Royce Nimbus 103 turboshaft engine
- Max Speed: 193 kph
- Service ceiling: 3,700 metres
- Range: 487 kilometres



Lynx HAS.2

The Westland Lynx is used in the battlefield utility, anti-armour, search and rescue and anti-submarine warfare roles.

- Length: 13.3 metres
- Height: 3.67 metres
- Weight: 3,277 kg (empty)
- Power: 2 × Rolls-Royce Gem 42-1 engines
- Max Speed: 324 kph
- Range: 528 kilometres



Harrier GR.3

The Harrier was a ground attack and reconnaissance aircraft with vertical/short takeoff and landing (V/STOL) capabilities.

- Length: 14.27 metres
- Height: 3.63 metres
- Weight: 6,139 (empty)
- Power: 1 × Rolls-Royce Pegasus 103 Vectored-thrust high-bypass turbofan engine
- Max Speed: 1,176 kph
- Range: 670 kilometres



Chinook HC.1

- The Chinook HC.1 is a tandem rotor, heavy-lift helicopter.
- Length: 30 metres
 - Height: 5.77 metres
 - Weight: 11,148 kg (empty)
 - Power: 2 × Lycoming T55-GA-714A turboshaft engines
 - Max Speed: 310 kph
 - Service ceiling: 6,100 metres
 - Range: 370 kilometres



Phantom FGR.2

- McDonnell Douglas F-4 Phantom II was used for air defence, close air support, low-level strike and tactical reconnaissance.
- Length: 17.55 metres
 - Height: 4.9 metres
 - Weight: 14,061 kg (empty)
 - Power: 2 × Rolls-Royce Spey 203 low bypass turbofans
 - Max Speed: 2,231 kph
 - Service ceiling: 18,300 metres
 - Range: 2,816 kilometres

Canberra PR.9

- The English Electric Canberra was a high-altitude bomber.
- Length: 19.96 metres
 - Height: 4.78 metres
 - Weight: 9,820 kg (empty)
 - Power: 2 × Rolls-Royce R.A.7 Avon Mk.109 turbojet engines
 - Max Speed: 930 kph
 - Service ceiling: 15,000 metres
 - Range: 1,300 kilometres



Nimrod MR.2

- Nimrod MR1/MR2s were primarily fixed-wing aerial platforms for anti-submarine warfare (ASW) operations.
- Length: 38.63 metres
 - Height: 9.4 metres
 - Weight: 39,009 kg (empty)
 - Power: 4 × Rolls-Royce Spey turbofan engines
 - Max Speed: 930 kph
 - Service ceiling: 13,411 metres
 - Range: 8,336–9,262 kilometres

Vulcan B.2

- The Vulcan was a jet-powered tailless delta wing high-altitude strategic bomber.
- Length: 29.59 metres
 - Height: 8.08 metres
 - Weight: 37,908 kg (empty)
 - Power: 4 × Bristol Olympus Mk.101 / Mk.102 / Mk.104 twin-spool turbojet engines
 - Max Speed: 1,039 kph
 - Service ceiling: 17,000 metres
 - Range: 4,195 kilometres



C-130 Hercules

- The C-130 was originally designed as a troop, medevac, and cargo transport aircraft.
- Length: 29.79 metres
 - Height: 11.66 metres
 - Weight: 34,382 kg (empty)
 - Power: 4 × Allison T56-A-15 turboprop engines
 - Max Speed: 590 kph
 - Service ceiling: 10,000 metres
 - Range: 3,800 kilometres

Victor K2

During the Falklands War, Victor tankers were used to re-fuel Vulcan bombers on their way to and from the Black Buck raids.

- Length: 35.03 metres
- Height: 8.573 metres
- Weight: 40,383 kg (empty)
- Power: 4 × Armstrong Siddeley A.S.Sa.7 Sapphire turbojet engines
- Max Speed: 1,009 kph
- Service ceiling: 17,000 metres
- Range: 9,662 kilometres



Argentinian Air Forces

When the war broke out Argentina had about 240 planes at their disposal.

Another advantage in their favour was the fact that they were a lot closer to the Falkland Islands - 1,521 kilometres.

Organisation

The air units involved in the Falklands War were under the following chain of command:

- Military junta – Brigadier General (Lieutenant General) Basilio Lami Dozo.
- Air Defence Command (*Comando Aéreo de Defensa*) – Brigadier Jorge Hughes was in charge of the radar network, Mirage IIIEA interceptors and anti-aircraft defences on the mainland.
- Strategic Air Command (*Comando Aéreo Estratégico*) - Brigadier Helmuth Weber. Coordinated air assets through all the country. The CAE also had the main role of long range maritime surveillance with Boeing 707s and C-130 Hercules.

- Southern Air Force (*Fuerza Aérea Sur*) – Brigadier Ernesto Crespo. The FAS was the main organisation involved in combat over the conflict zone.
- South Atlantic Military Theatre (*Teatro Operaciones Atlántico Sur*) - Vice Admiral Juan Lombardo. Basically a naval command with the role of coordinating the air, surface and submarine assets in the South Atlantic area. Initially, during the invasion of the islands on 2 April and before hostilities broke out, the islands were supposedly to be under their command and was considered as the only organisation needed to manage the crisis.
- Falklands Military Garrison (*Guarnición Militar Malvinas*) - Brigade General Mario Menéndez (Army).
- Air Component (*Componente Aéreo*) - Brigadier Luis Castellano.

The Argentine Air Force, Argentine Navy, Argentine Army

and Argentine Coast Guard were all involved in the air war.

Argentine Air Force

- 1st Air Brigade with seven Lockheed C-130H Hercules, two Lockheed KC-130H Hercules Tankers, three Boeing 707-320C, six Fokker F-28-1000C, and 12 Fokker F-27-400M.
- 2nd Air Brigade with eight English Electric B.Mk62 Canberra and two Learjet 35A.
- 3rd Air Brigade with 25 FMA IA 58A Pucará.
- 4th Air Brigade with 16 McDonnell Douglas A-4C Skyhawks.
- 5th Air Brigade with 30 McDonnell Douglas A-4B Skyhawks.
- 6th Air Brigade with 27 Israel Aircraft Industries (IAI) Daggers.
- 7th Air Brigade with three Lockheed C-130E Hercules, two Boeing CH-47C Chinook helicopters, and two Bell 212 helicopters.
- 8th Air Brigade with 16

Dassault Mirage IIIEA and one DHC-6-200

Argentine Navy

- 1st Naval Air Attack Squadron with six Aermacchi MB.339A.
- 2nd Naval Air Fighter/Attack Squadron with four Dassault Super Étendard.
- 3rd Naval Air Fighter/Attack Squadron eight McDonnell Douglas A-4Q Skyhawks.
- Naval Air Antisubmarine Squadron with six Grumman S-2E Tracker.
- Naval Air Training Squadron with four Beechcraft T-34C-1 Toubo Mentor.
- Naval Air Exploration Squadron with Lockheed SP-2H Neptune (both retired by end of May due to airframe attrition).
- 1st Naval Air Helicopter Squadron with ten Aérospatiale Alouette AI03 SA361B helicopters, two Lynx Mk.23 helicopters, and one Britten-Norman BN-2A Islander.
- 2nd Naval Air Helicopter Squadron with five Sikorsky S-61D-4 helicopters.
- Naval Air Transport Squadrons with three Lockheed L-188PF Electra, three Fokker F-28-3000C, and two P-95 Bandeirulh.

Argentine Army

- 601 Army Aviation Battalion with two Boeing CH-47C Chinook helicopters, three Agusta A109A helicopters, nine Bell UH-1H Iroquois helicopters, and six Aérospatiale Puma SA330L helicopters.

Argentine Coast Guard

- Aviation Service with one Aérospatiale Puma SA330L helicopter and five Short Skyvan 3M-400.

Escuadrón Fénix

The Phoenix Squadron (*Escuadrón Fénix*) was a volunteers' special unit of the Argentine Air Force established during the 1982 Falklands War.

In April 1982, the unit was deployed to Comodoro Rivadavia and was reinforced with several civilian planes and their civilian pilots who volunteered to fly them.

During the war, the Learjets performed 52 missions including search and reconnaissance flights, communications retransmission flights, and pathfinder flights to guide combat jets with the Learjets' superior navigation systems.

The unit's most difficult missions were 126 sorties in which the Learjets acted as decoys, flying day and night to simulate strike aircraft preparing to attack the fleet.

Many believe that most of the Argentine A-4 Skyhawks and Daggers successes were achieved because the British Sea Harriers had been drawn away from more important targets.

Civilian helicopters were also added to the unit for use in the search and rescue role in the continent. Most notably, Sikorsky S-61N LV-OCN and Sikorsky S-58T LV-OCM.

In total, 77 different

Armament

The following weapons and ordnance was used by Argentina

during the Falklands War.

Machine guns and cannons

- 7.62 mm FM M2-20 - Pucaras
- 20 mm Colt Mk.12 Cannon - A-4s
- 20 mm Hispano-Suiza HS.804 Cannon - Pucaras
- 30 mm DEFA cannon - IAI Daggers and Mirage IIIEA

Unguided rockets

- ZUNI 127 mm - MB.339s
- 70 mm - MB339s
- 105 mm - Pucaras

Missiles - Air-to-Air

- AIM-9B Sidewinder short-range IR - Navy A-4Q Skyhawks
- Rafael Shafrir 2 short-range IR - IAI Daggers and A-4C
- Matra R550 Magic short-range IR - Mirage IIIEA
- Matra R530 short-range semi-active radar and IR: - Mirage IIIEA

Missiles - Air-to-Surface

- Aérospatiale AM.39 Exocet Anti-Ship Missile - Super Etendards
- AS 30 air-surface missiles. Supplied by the Peruvian Air Force and arriving at the Tandil AFB (home base of the FAA Dagger) at the end of May, the war ended before they could be used.

Unguided retarded Gravity bomb

- US built Mark 82 Snake Eye (227 kg) - A-4Q
- British built "1000 lb" (450 kg) - A-4B/C, IAI Daggers and Canberras
- Spanish built Expal BR/BRP 250 kg - A-4B/C and

- IAI Daggers
- Argentine built PG 125 kg - Pucarás
 - Napalm - Pucarás

Casualties

- During the Falklands War the Argentinians lost the following aircraft.
- 25 helicopters



FMA IA 58 Pucarà

The FMA IA 58 Pucarà is an Argentine ground-attack and counter-insurgency (COIN) aircraft.

- Length: 14.25 metres
- Height: 5.36 metres
- Weight: 4,020 kg (empty)
- Power: 2 × Turbomeca Astazou XVIG turboprop
- Max Speed: 500 kph
- Service ceiling: 10,000 metres
- Range: 350 kilometres

Douglas A-4 Skyhawk

The Douglas A-4 Skyhawk is a single-seat subsonic carrier-capable light attack aircraft.

- Length: 12.23 metres
- Height: 4.62 metres
- Weight: 4,469 kg (empty)
- Power: 1 × Pratt & Whitney J52-P-6A turbojet engine
- Max Speed: 1,083 kph
- Range: 1,867 kilometres



- 35 fighters
- Two bombers
- Four cargo aircraft
- 25 COIN aircraft
- Nine armed trainers



Israel Aircraft Industries Dagger

The Israel Aircraft Industries Nesher was the Israeli version of the French Dassault Mirage 5 multi-role fighter. It was named 'Dagger' by Argentine.

- Length: 15.65 metres
- Height: 4.25 metres
- Weight: 6,600 kg (empty)
- Power: 1 × SNECMA Atar 9C after-burning turbojet engine
- Max Speed: Mach 2.1
- Service ceiling: 17,680 metres
- Range: 1,300 kilometres

Dassault Mirage III

The Dassault Mirage III is a single/dual-seat, single-engine, fighter aircraft.

- Length: 15.03 metres
- Height: 4.5 metres
- Weight: 7,050 kg (empty)
- Power: 1 × SNECMA Atar 09C after-burning turbojet engine
- Max Speed: 2,350 kph
- Service ceiling: 17,000 metres
- Range: 1,200 kilometres



Aermacchi MB-339

The Aermacchi MB-339 is a military jet trainer and light attack aircraft

- Length: 10.97 metres
- Height: 3.60 metres
- Weight: 3,075 kg (empty)
- Power: 1 × Rolls-Royce Viper Mk. 632 turbojet engine
- Max Speed: 2,350 kph
- Service ceiling: 17,000 metres
- Range: 1,200 kilometres





Dassault Super Étendard

The Dassault-Breguet Super Étendard is a French carrier-borne strike fighter aircraft

- Length: 14.31 metres
- Height: 3.86 metres
- Weight: 6,500 kg (empty)
- Power: 1 × Snecma Atar 8K-50 turbojet
- Max Speed: 1,205 kph
- Service ceiling: 17,300 metres
- Range: 850 kilometres

Aérospatiale Alouette III

The Aérospatiale Alouette III is a single-engine, light utility helicopter.

- Length: 10.03 metres
- Height: 3 metres
- Weight: 1,143 kg (empty)
- Power: 1 × Turbomeca Artouste IIIB turboshaft
- Max Speed: 210 kph
- Service ceiling: 3,200 metres
- Range: 840 kilometres



Aérospatiale SA 330 Puma

The Aérospatiale SA 330 Puma is a four-bladed, twin-engined medium transport/utility helicopter.

- Length: 18.15 metres
- Height: 5.14 metres
- Weight: 3,536 kg (empty)
- Power: 2 × Turbomeca Turmo IVC turboshafts
- Max Speed: 257 kph
- Service ceiling: 4,800 metres
- Range: 580 kilometres

Bell UH-1 Iroquois

The Bell UH-1 Iroquois (nicknamed “Huey”) is a utility military helicopter powered by a single turboshaft engine, with two-bladed main and tail rotors.

- Length: 17.40 metres
- Height: 2.62 metres
- Weight: 2,365 kg (empty)
- Power: 1 × Lycoming T53-L-11 turboshaft
- Max Speed: 1,205 kph
- Service ceiling: 17,300 metres
- Range: 850 kilometres



It's 10 weeks into the Falklands War, and two British Harriers find themselves protecting damaged ships. Suddenly, Argentine Skyhawks appear on the horizon and a fight ensues. Click on the photograph above to watch actual footage of this battle.

Paddy Mayne

Capped for Ireland and the British Lions at rugby union, a lawyer, amateur boxer and a founding member of the Special Air Service, Paddy Mayne was a legend.

Paddy Mayne was many things. An international rugby player, capped for Ireland and the British Lions at rugby union. An amateur boxer, a more than useful golfer, and a qualified lawyer.

During World War II he would rise to the rank of Lieutenant Colonel, become a founding member of the Special Air Service, and would go on to command the unit.

He would also go on to become one of the British Army's most decorated soldiers, winning the Distinguished Service Order a remarkable four times. He was controversially denied a Victoria Cross.

Early life

Robert Blair "Paddy" Mayne was born in Newtownards, County Down, the sixth of seven children in a Protestant family.

The family was pretty well off. They were prominent landowners and owned several retail businesses in the town.

One of his paternal ancestors was Gordon Turnbull, who led the famous 'Scotland Forever Charge' at Waterloo.

He attended Regent House Grammar School where he soon displayed a talent for sports.

He played for the school 1st XV and, from the age of 16, for the local Ards RFC team. While at school he also played cricket and golf, and showed aptitude as a marksman in the rifle club.

On leaving school he studied law at Queen's University of Belfast, studying to become

a solicitor. While at university he took up boxing, becoming Irish Universities Heavyweight Champion in August 1936. He followed this by reaching the final of the British Universities Heavyweight Championship, but was beaten on points.

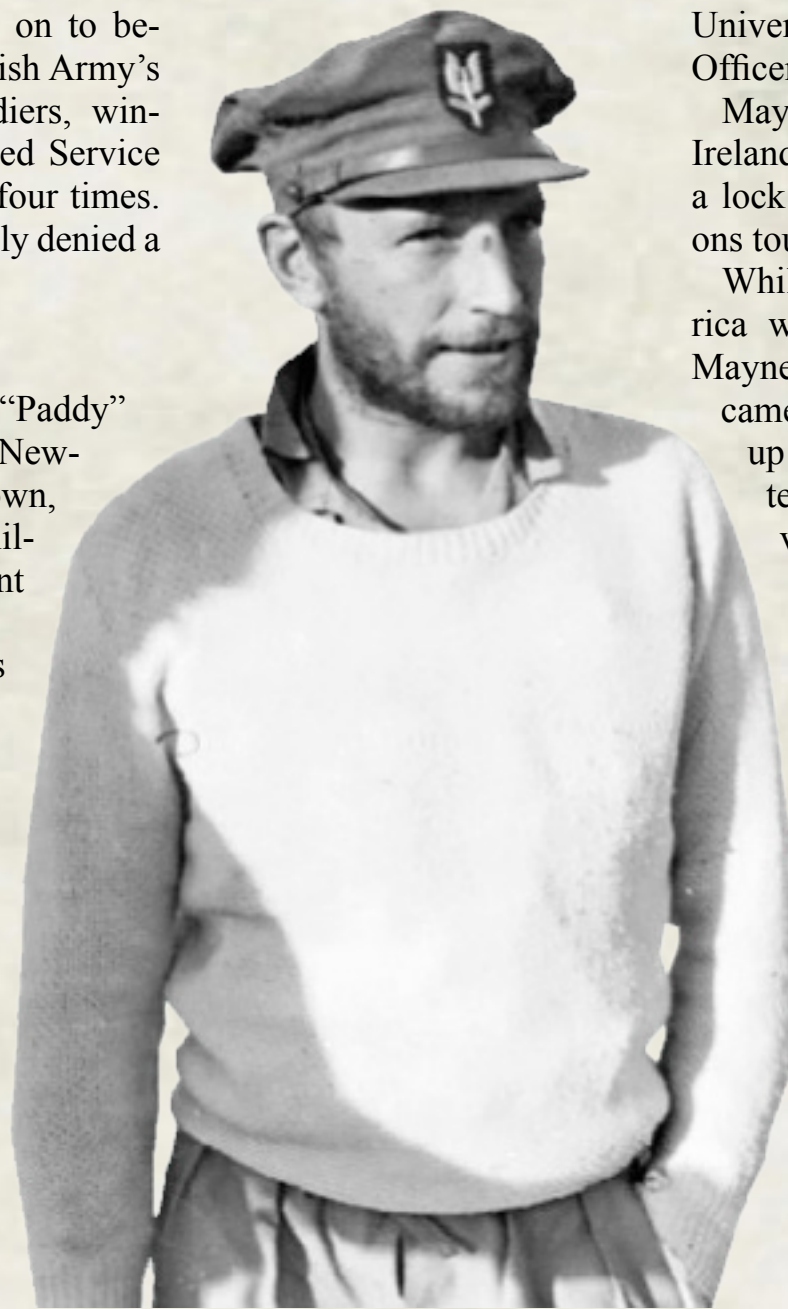
With a handicap of eight, he won the Scrabo Golf Club President's Cup the next year. While at university Mayne was an officer cadet with the Queen's University, Belfast Contingent, Officer Training Corps.

Mayne played five tests for Ireland before being selected as a lock for the 1938 British Lions tour of South Africa.

While on tour in South Africa with the Lions in 1938, Mayne's rather wild character came to the fore, smashing up colleagues' hotel rooms, temporarily freeing a convict he had befriended and who was working on the construction of the Ellis Park Stadium and also sneaking off from a formal dinner to go hunting.

In early 1939 he graduated from Queen's and joined George MacLaine & Co in Belfast, having been articled to TCG Mackintosh for the five previous years.

His legal and sporting careers were cut



short by the outbreak of World War II.

World War II

In March 1939, prior to the outbreak of World War II, Mayne had joined the Supplementary Reserve in Newtownards and received a commission in the Royal Artillery, being posted to 5 Light Anti-Aircraft Battery, in 8th Anti-Aircraft Regiment, later 8th (Belfast) Heavy Anti-Aircraft Regiment.

When the battery was assigned to 9th Anti-Aircraft Regiment (later 9th (London-derry) Heavy AA Regiment) for overseas' service, Mayne was transferred out to 66th Light AA Regiment in Northern Ireland. Then, in April 1940, he was transferred again, this time to the Royal Ulster Rifles.

Following Churchill's call to form a "butcher and bolt" raiding force following the evacuation of Dunkirk, Mayne volunteered for the newly formed No. 11 (Scottish) Commando.

He first saw action in June 1941 as a second-lieutenant with 11 Commando during the Syria-Lebanon Campaign. Mayne successfully led a section of men during the Litani River operation in Lebanon against Vichy French Forces. The operation was commanded by Major Dick Pedder, Highland Light Infantry, who was killed in action. Mayne played a distinguished part in the raid, for which he was awarded a mention in dispatches.

Special Air Service

Lieutenant Eoin McGonigal was a friend of Mayne's and a fellow officer of No. 11 (Scottish) Commando. He was an early volunteer of the Special Air Service (SAS), and he recommended Mayne's name to Captain David Stirling.

Rumour has it that when Stirling interviewed Mayne, the latter was under arrest of hitting his commanding officer. This story, however, is untrue.

What is true is that Mayne was in trouble for assaulting Major Charles Napier, the second in command of his battalion.

Stirling obviously liked what he saw and Mayne was recruited into the SAS.

There is no proof that Mayne was under arrest or in prison when Stirling first met him, nor that Stirling obtained his release so that he could join the newly formed SAS.

From November 1941 through to the end of 1942, Mayne participated in many night raids deep behind enemy

lines in the deserts of Egypt and Libya, where the SAS wrought havoc by destroying many enemy aircraft on the ground.

Mayne pioneered the use of military Jeeps to conduct surprise hit-and-run raids, particularly on Axis airfields. It was claimed that he had personally destroyed up to 100 aircraft.

The top scoring member of the Royal Air Force was James 'Johnnie' Johnson with 38 enemy kills. On one raid alone Mayne destroyed 47 enemy aircraft.

His first successful raid at Wadi Tamet on 14 December 1941, where aircraft and petrol dumps were destroyed, helped keep the SAS in existence, following the failure of the previous initial raid behind enemy lines.

For his part in the Tamet raid Mayne was awarded the DSO. He also received a mention in despatches on 24 February 1942.

Mayne took part in the most successful SAS raid of the Desert war when on the night of 26



PACKING A PUNCH: An SAS Jeep. Note the number of machine guns on it.

July 1942 with eighteen armed Jeeps, he along with Stirling raided the Sidi Haneish Airfield. They avoided detection, destroyed up to 40 German aircraft and escaped with the loss of only three Jeeps and two men killed. The regular Army wanted to disband the SAS but the success helped keep the critics at bay.

Following Stirling's capture in January 1943, 1st SAS Regiment was reorganised into two separate parts, the Special Raiding Squadron (SRS) and the Special Boat Section (the forerunner of the Special Boat Service). As a major, Mayne was appointed to command the Special Raiding Squadron and led the unit in Sicily and Italy until the end of 1943. In Sicily, Mayne was awarded a bar to his DSO.

In January 1944 he was promoted to lieutenant colonel and appointed commanding officer of the re-formed 1st SAS Regiment. He subsequently led the SAS with great distinction through the final campaigns of the war in France, the Netherlands, Belgium, Germany and Norway, often campaigning alongside local resistance fighters including the French Maquis.

In recognition of his leadership and personal disregard for danger while in France, in which he trained and worked closely with the French Resistance, Mayne received the second bar to his DSO.

During the course of the war he became one of the British



RUGBY INTERNATIONAL: In 1937 Paddy Mayne was selected to play for Ireland. He is in the back row, third from right.

Army's most highly decorated soldiers and received the Distinguished Service Order with three bars, one of only seven British servicemen to receive that award four times during World War II.

Additionally, the post-war French Government awarded him the *Legion d'honneur* and the *Croix de Guerre*.

Post war

After a period with the British Antarctic Survey in the Falkland Islands, cut short by a crippling back complaint that had begun during his army days, Mayne returned to Newtownards to work first as a solicitor and then as Secretary to the Law Society of Northern Ireland.

He suffered severe back pain which prevented him from even watching rugby as a spectator. He rarely talked about his war-time service.

On the night of Tuesday 13 December 1955, after attending a regular meeting of the Friendship Lodge, Mayne continued

drinking with a masonic friend in the nearby town of Bangor, before making his way home in the early hours.

At about 4am he was found dead in his Riley roadster in Mill Street, Newtownards, having reportedly collided with a farmer's vehicle.

At his funeral hundreds of mourners turned out to pay their respects and to see him interred in a family plot in the town's old Movilla Abbey graveyard.

After his death his masonic jewel was preserved for many years by an old school friend before it was presented to Newtownards Borough Council where it was displayed in the Mayoral Chamber of the Council Offices.

Reputation

To say that Paddy Mayne had a reputation would be putting it mildly. During the 1938 Lions tour it is said that Mayne relaxed by "wrecking hotels and fighting dockers".

During the war, his men ad-

mired him in battle but were very wary of him during quiet times once he had a few drinks under his belt.

Many urban legends of his post-war years exist in Belfast and Newtownards. These mostly tell of incidents in which, after drinking for several hours, Mayne would challenge every man in the bar to a fight, which he would invariably win. Other accounts describe him as a courageous leader of his men and a ferocious opponent.

Mayne is also described as growing increasingly withdrawn as the war progressed, preferring books to the company of friends.

After separating fact from myth, it is clear that Mayne was an extraordinary war hero, and some of the criticism comes from disbelief that one man could have achieved what Mayne achieved, without injury, although Mayne suffered from long-standing back pain sustained in the Western Desert.

Mayne was inclined to remonstrate with colleagues in the armed services who showed little or no understanding of the complex politics of Northern Ireland.

Controversy

The question of why Mayne was not awarded a Victoria Cross was raised by his contemporaries, and the matter came to a head when brought before British Parliament in January 2006 after a public campaign to re-open the case.

The British Government de-

clined to do so, though the Blair Mayne Association vowed to continue their campaign to have the Victoria Cross retroactively awarded. Mayne's actions were not in doubt and his citation for the VC, approved by Field Marshal Bernard Montgomery, commander of the Allied 21st Army Group, noted that he led two armoured Jeep squadrons through the front lines toward Oldenburg.

However, in a standard practice of the time, the award was downgraded to a lesser award, and Mayne received instead a third bar to the DSO (in other words, a fourth award of the DSO).

An Early Day Motion put before the House of Commons in June 2005 and supported by more than 100 MPs also stated that:

"This House recognises the grave injustice meted out to Lt Col Paddy Mayne, of 1st SAS, who won the Victoria Cross at Oldenburg in North West Germany on 9th April 1945; notes that this was subsequently downgraded, some six months later, to a third bar DSO, that the citation had been clearly altered and that David Stirling, founder of the SAS has confirmed that there was considerable prejudice towards Mayne and that King George VI enquired why the Victoria Cross had 'so strangely eluded him'; further notes that on 14th December it will be 50 years since Col Mayne's untimely death, in a car accident, and this will be followed on 29th January 2006

by the 150th anniversary of the signing of the Royal Warrant to institute the Victoria Cross; and therefore calls upon the Government to mark these anniversaries by instructing the appropriate authorities to act without delay to reinstate the Victoria Cross given for exceptional personal courage and leadership of the highest order and to acknowledge that Mayne's actions on that day saved the lives of many men and greatly helped the allied advance on Berlin."

Honours and Awards



From top to bottom, left to right:

- Companion of the Distinguished Service Order and Three bars.
- 1939–45 Star.
- Africa Star (With 8th Army clasp).
- Italy Star.
- France and Germany Star.
- Defence Medal.
- War Medal 1939–1945 with bronze oak leaf for Mentioned in Despatches.
- Officer of the Legion of Honour (France).
- Croix de guerre 1939–1945 (France).

M1 Abrams MBT

With innovative features such as a multi-fuel turbine engine, sophisticated Chobham composite armour, and a computer fire control system, the M1 Abrams is rated as one of the best main battle tanks in the world.

The M1 Abrams is a third-generation American main battle tank designed by Chrysler Defence (now General Dynamics Land Systems).

Conceived for modern armoured ground warfare and now one of the heaviest tanks in service at nearly 62 metric tons, it introduced several innovative features, including a multi-fuel turbine engine, sophisticated Chobham composite armour, a computer fire

control system, separate ammunition storage in a blow-out compartment, and NBC protection for crew safety.

Initial models of the M1 were armed with a licensed-produced 105 mm Royal Ordnance L7 gun, while later variants feature a licensed Rhein-

metall 120 mm L/44.

The M1 Abrams entered service in 1980 and currently serves as the main battle tank of the United States Army and Marine Corps. The export version is used by the armies of Egypt, Kuwait, Saudi Arabia, Australia, and Iraq.

The Abrams was first used in combat in the Persian Gulf War and has seen combat in both the War in Afghanistan and Iraq War under U.S. service, while Iraqi Abrams tanks have seen action in the war against ISIL and have seen use by Saudi

Arabia during the Yemeni Civil War.

Background

Through the 1960s the US Army and German Army had collaborated on a single design that would replace both the M60 Patton and the Leopard 1.

The overall goal was to have a single new design with improved firepower to handle new Soviet tanks like the T-62, while providing improved protection against the T-62's new 115 mm smooth-bore gun and especially high explosive anti-tank (HEAT) rounds.

The resulting design, the MBT-70, incorporated new technologies across the board. While the design was highly capable, its weight continued to grow, as did its budget. By 1969, the unit cost stood at five times the original estimates.

In August 1969 the Senate halted funding of the program until the Government Accounting Office could under-



take an audit of the program.

As a result of the problems with the MBT-70, the U.S. Army introduced the XM803, using some technologies from the MBT-70 but removing some of the more troublesome features.

This succeeded only in producing an expensive system with capabilities similar to the M60.

Congress cancelled the MBT-70 in November and XM803 December 1971, and redistributed the funds to the XM1 Abrams named after General Creighton Abrams.

Through the period while the initial prototypes were being built, a debate broke out between Germany and US about the use of the 105 mm gun.

The Army was planning on introducing several new types of ammunition for the 105 that would greatly improve its performance, notably, the XM-774 using depleted uranium. These rounds would give it the performance needed to defeat any Soviet tank with ease.

There was some concern that depleted uranium would not be allowed in Germany, perhaps just in peacetime, so improvements to the tungsten cored M735 were also considered.

Through this same period, there was an ongoing effort to improve NATO logistics by standardizing ammunition to the maximum possible degree.

The Germans were moving ahead with their 120 mm gun on the Leopard 2K, and noted that the British had also introduced a 120 mm gun of their own in keeping with their long-range combat doctrine. Although ini-

tially sceptical of the need for a 120 mm gun, at some point the issue was raised that the Soviets might introduce a tank with composite armour.

In this case, the 120 would give them the performance needed to defeat such a development even without depleted uranium.

By 1977 the decision had been made to eventually move the new tank to a 120 mm gun. After head-to-head testing between the Royal Ordnance L11A5 and the Rheinmetall Rh-120, the latter was chosen. The turret designs of the two prototypes were modified to allow either gun to be fit.

Prototypes were delivered in 1976 by Chrysler Defence and General Motors (GM) armed with the license-built version of the 105 mm Royal Ordnance L7. On 12 November 1976, the Defence Department awarded a \$20 billion development contract to Chrysler.

As the Abrams entered service in the 1980s, they operated alongside M60A3 within the U.S. military, and with other NATO tanks in various Cold War exercises which usually in Western Europe, especially West Germany.

The exercises were aimed at countering Soviet forces. However, by January 1991, the Berlin Wall had fallen and the Abrams was deployed in the Middle East.

Adaptations before the Persian Gulf War (Operations Desert Shield and Desert Storm) gave the vehicle better firepower and NBC (Nuclear, Biological and Chemical) protection. Vastly superior to Iraqi tanks,

very few M1 tanks were hit by enemy fire.

Gulf War

The Abrams remained untested in combat until the Persian Gulf War in 1991, during Operation Desert Storm. A total of 1,848 M1A1s were deployed to Saudi Arabia to participate in the liberation of Kuwait. The M1A1 was superior to Iraq's Soviet-era T-55 and T-62 tanks, as well as T-72 versions imported from the Soviet Union and Poland.

The T-72s, like most Soviet export designs, lacked night vision systems and then-modern rangefinders, though they did have some night-fighting tanks with older active infrared systems or floodlights.

A total of 23 M1A1s were damaged or destroyed during the war. Of the nine Abrams tanks destroyed, seven were destroyed by friendly fire, and two were purposely destroyed to prevent capture after being damaged.

Some others took minor combat damage, with little effect on their operational readiness. Very few M1 tanks were hit by enemy fire and none were destroyed as a direct result of enemy fire, none of which resulted in any fatalities.

The M1A1 could kill other tanks at ranges in excess of 2,500 metres. This range was crucial in combat against previous generation tanks of Soviet design in Desert Storm, as the effective range of the main gun in the Soviet/Iraqi tanks was less than 2,000 metres. This meant Abrams tanks could hit Iraqi tanks before the enemy



got in range - a decisive advantage in this kind of combat.

Other conflicts

Further combat was seen during 2003 when U.S. forces invaded Iraq and deposed Ba'athist Iraqi leader Saddam Hussein in the Iraq War's Operation Iraqi Freedom.

Tanks may have limited utility in Afghanistan due to the mountainous terrain, although Canada and Denmark have deployed Leopard 1 and 2 MBTs that have been specially modified to operate in the relatively flat and arid conditions of south-western Afghanistan.

In late 2010, at the request of Regional Command Southwest, the U.S. Marine Corps deployed a small detachment of 14 M1A1 Abrams tanks from Delta Company, 1st Tank Battalion, 1st

Marine Division (Forward), to southern Afghanistan in support of operations in Helmand and Kandahar provinces.

Between 2010 and 2012 the U.S. supplied 140 refurbished M1A1 Abrams tanks to Iraq. In mid-2014, they saw action when the Islamic State of Iraq and the Levant launched the June 2014 Northern Iraq offensive.

During three months, about one-third of the Iraqi Army's M1 tanks had been damaged or destroyed by ISIL and some were captured by opposing forces. By December 2014, the Iraqi Army only had about 40 operational Abrams left. That month, the U.S. Department of State approved the sale of another 175 Abrams to Iraq.

After the start of the Saudi Arabian intervention in Yemen

during the 2015 Yemeni Civil War, Saudi Arabian M1A2 MBTs were deployed near the Saudi Arabian/Yemeni border.

In August 2016, the U.S. approved a deal to sell up to 153 more Abrams tanks to Saudi Arabia, including 20 "battle damage replacements", suggesting that some Saudi Arabian Abrams had been destroyed or severely damaged in combat in Yemen.

Concealment

The turret is fitted with two six-barreled M250 smoke grenade launchers (USMC M1A1s use an eight-barreled version), with one on each side. When deployed, the grenades airburst, creating a thick smoke that blocks both visual and thermal imaging.

The engine is also equipped

with a smoke generator that is triggered by the driver. When activated, fuel is sprayed into the hot turbine exhaust, creating the thick smoke.

However, due to the change from diesel as a primary fuel to the use of JP-8, this system is disabled on most Abrams tanks today because of a slightly elevated risk of fire damage to the engine compartment.

Armour

Similar to most other main battle tanks, the M1 Abrams feature composite armour only on the frontal aspect of the hull. However, the Abrams' turret features composite armouring across both the front and the sides.

In addition, the side skirts of the frontal half of the hull are also made of composite, providing superior ballistic protection against chemical energy munitions such as HEAT rounds.

The composition of the Abrams' composite armour consists of sandwiched plates of non-explosive reactive armour (NERA) between conventional steel plates.

The NERA plates feature elasticity, allowing them to flex and distort upon perforation, disrupting the penetrating jets of shaped charges and providing more material and space for a kinetic round to pass through, thus providing increased protection compared to conventional steel armour of similar weight.

Armour protection was improved by implementing a new special armour incorporating depleted uranium and other undisclosed materials and layouts.

This was introduced into the M1A1 production starting October 1988. This new armour increased effective armour particularly against kinetic energy rounds but at the expense of adding considerable weight to the tank, as depleted uranium is 1.7 times more dense than lead.

In 1998, a program was begun to incorporate improved turret side armour into the M1A2. This was intended to offer better protection against rocket-propelled grenades more modern than the baseline RPG-7. These kits were installed on about 325 older M1A2 tanks in 2001-2009 and it was also included in upgraded tanks.

The Abrams may also be fitted with explosive reactive armour over the track skirts if needed (such as the Tank Urban Survival Kit) and slat armour over the rear of the tank and rear fuel cells to protect against ATGMs. Protection against spalling is provided by a kevlar liner.

Tank Urban Survival Kit

The Tank Urban Survival Kit (TUSK) is a series of improvements to the M1 Abrams intended to improve fighting ability in urban environments.

Historically, urban and other close battlefields have been poor places for tanks to fight. A tank's front armour is much stronger than that on the sides, top, or rear.

In an urban environment, attacks can come from any direction, and attackers can get close enough to reliably hit weak points in the tank's armour or gain sufficient elevation to hit the top armour.

Armour upgrades include re-

active armour on the sides of the tank and slat armour (similar to that on the Stryker) on the rear to protect against rocket-propelled grenades and other shaped charge warheads.

A Transparent Armour Gun Shield and a thermal sight system are added to the loader's top-mounted M240B 7.62 mm machine gun, and a Kongsberg Gruppen Remote Weapon Turret carrying a 12.7 mm calibre machine gun (again similar to that used on the Stryker) is in place of the tank commander's original 12.7 mm calibre machine gun mount, wherein the commander had to expose himself to fire the weapon manually.

An exterior telephone allows supporting infantry to communicate with the tank commander.

Active Protection System

In addition to the armour, some USMC Abrams tanks are equipped with a Softkill Active protection system, the AN/VLQ-6 Missile Countermeasure Device (MCD) that can impede the function of guidance systems of some semi-active control line-of-sight (SA-CLOS) wire- and radio guided anti-tank missiles (such as the Russian 9K114 Shturm) and infrared homing missiles.

The MCD works by emitting a massive, condensed infrared signal to confuse the infrared homing seeker of an anti-tank guided missile (ATGM).

Main armament

The main armament of the M1A1 and M1A2 is the M256A1 120 mm smoothbore

gun, designed by Rheinmetall AG of Germany, manufactured under license in the U.S. by Watervliet Arsenal, New York.

The M256A1 is a variant of the Rheinmetall 120 mm L/44 gun carried on the German Leopard 2 on all variants up to the Leopard 2A5. Leopard 2A6 replaced the L/44 barrel with a longer L/55. Due to the increased calibre, only 40 or 42 rounds are able to be stored depending on if the tank is an A1 or A2 model.

The M256A1 fires a variety of rounds. The primary APFSDS round of the Abrams is the depleted uranium M829 round, of which four variants have been designed.

Secondary armament

The Abrams tank has three machine guns, with an optional fourth: A 12.7 mm M2HB machine gun in front of the commander's hatch, a 7.62 mm M240 machine gun in front of the loader's hatch on a skate mount, a second 7.62 mm M240 machine gun in a coaxial mount (i.e., it points at the same targets as the main gun) to the right of the main gun, and a second coaxial 12.7 mm M2HB machine gun can be mounted directly above the main gun in a remote weapons platform as part of the TUSK upgrade kit.

Aiming

The Abrams is equipped with a ballistic fire-control computer that uses user and system-supplied data from a variety of sources to compute, display, and incorporate the three components of a ballistic solution - lead angle, ammunition type,

and range to the target - to accurately fire the main gun.

These three components are determined using a laser rangefinder, crosswind sensor, a pendulum static cant sensor, data concerning performance and flight characteristics of each specific type of round, tank-specific boresight alignment data, ammunition temperature, air temperature, barometric pressure, a muzzle reference system (MRS) that determines and compensates for barrel drop at the muzzle due to gravitational pull and barrel heating due to firing or sunlight, and target speed determined by tracking rate tachometers in the Gunner's or Commander's Controls Handles.

All of these factors are computed into a ballistic solution and updated 30 times per second. The updated solution is displayed in the Gunner's or Tank Commander's field of view in the form of a reticle in both day and Thermal modes.

The ballistic computer manipulates the turret and a complex arrangement of mirrors so that all one has to do is keep the reticle on the target and fire to achieve a hit. Proper lead and gun tube elevation are applied to the turret by the computer, greatly simplifying the job of the gunner.

The Abrams series of Main Battle Tanks have been tried and tested in combat and have earned the right to be regarded as one of the best MBT's currently available. The have been forged in battle.

M1 Abrams

- Designer: Chrysler Defence (now General Dynamics Land Systems)
- Manufacturer: Lima Army Tank Plant (since 1980)
- Weight: 54 tonnes
- Length: Gun forward: 9.77 metres; Hull length: 7.93 metres
- Width: 3.66 metres
- Height: 2.44 metres
- Crew: 4 (commander/machine gunner, gunner, loader, driver)
- Armour: composite armour
- Main armament: M1: 105 mm L/52 M68A1 rifled gun (55 rounds)
- Secondary armament: 1 × 12.7 mm M2HB heavy machine gun with 900 rounds; 2 × 7.62 mm M240 machine guns with 10,400 rounds (1 pintle-mounted, 1 coaxial)
- Engine: Honeywell AGT1500C multi-fuel turbine engine 1,500 shp (1,120 kW)
- Transmission: Allison DDA X-1100-3B
- Suspension: High-hardness-steel torsion bars with rotary shock absorbers
- Ground clearance: 0.48 metres
- Operational range: Road: 426 km; Cross country: 150-200 km
- Speed: Road 72 km/h (governed); Off-road: 48 km/h

Living up to their motto "Who dares wins", the British Special Air Service launched a raid on Argentinian aircraft based on Pebble Island's airfield during the Falklands War. The raid was reminiscent of their exploits during World War II.

Pebble Island is one of the smaller Falkland Islands, lying north of West Falkland. The site was being used as a forward operating base for T-34 Mentor and Pucara aircraft by the Argentine Air Force.

For the 150 Argentine troops assigned to protect the airfield during the Falklands War, it seemed to be a relatively safe posting. Yet on the night of 14-15 May 1982 they were about to receive some unwelcome visitors that would change their opinion of it being a safe posting.

Background

The Falklands War, known in Spanish as *Guer-ra de las Malvinas*, was a 10-week undeclared war between Argentina and the United Kingdom in 1982 over two British dependent territories in the South Atlantic: the Falkland Islands and its territorial dependency, the South Georgia and the South Sandwich Islands.

The conflict began on 2 April, when Argentina invaded and occupied the Falkland Islands, followed by the invasion of South Georgia the next day, in an attempt to establish the sovereignty it had claimed over them.

The Argentinians were convinced that the British would not send troops nearly 13,000 kilometres to try and recaptured the territory. Yet on 5 April, the British government dispatched a naval task force to engage the Argentine Navy and Air Force before making an amphibious assault on the islands.

The conflict lasted 74 days and ended with the Argentine surrender on 14 June, returning the islands to British control. In total, 649 Argentine military personnel, 255 British military personnel, and three Falkland Islanders died during the hostilities.

Immediately after the Argentinians had seized the Falkland Islands they established a small air-base, *Aeródromo Auxiliar Calderón*, on Pebble Island, known by the Argentinians as *isla Bor-bón*, using the local airstrip on which were based

Argentine Air Force's FMA IA 58 Pucará and some Argentine Naval Aviation's T-34 Mentor light ground attack aircraft.

Reconnaissance by these aircraft could have compromised the Royal Navy's manoeuvres before its intended landing on East Falkland.

Special Air Service (SAS) elements, then embarked on HMS Hermes, were tasked with eliminating the threat, with naval support from the Type 22 frigate HMS Broadsword as Hermes' defensive escort and the County class destroyer HMS Glamorgan to provide naval gunfire support with its Mark 6 4.5 inch guns.

The Naval Gunfire Support Forward Observer (NGSFO) who was responsible for co-ordinating the naval gunfire support was Captain Chris Brown RA of 148 Battery 29 Commando Regiment Royal Artillery.

Planning

The initial plan was a for a squadron from D Squadron, 22 Regiment, SAS to carry out an air insertion from HMS Hermes.

The raiding party would deploy under the cover of darkness, destroy the deployed aircraft, radar site, ground crew, and force protection garrison and return to the deck of HMS Hermes before daybreak.

Reconnaissance for the raid was conducted by personnel from the Boat Troop of D Squadron, conducting an infiltration



GROUNDING FOR GOOD: An Argentinian T-34 Mentor lies destroyed on the ground at Pebble Island airfield.

by Klepper canoe.

The patrol found that strong headwinds would increase the time taken to fly in from Hermes launch point, delaying time on target and reducing the available offensive window to thirty minutes, rather than the planned ninety.

In light of this information the planning emphasised the importance of destroying the aircraft as a priority, with support personnel as a secondary priority.

The Raid

During the night of 14 May, two Westland Sea King HC4 helicopters of 846 Naval Air Squadron, part of the Commando Helicopter Force, departed with 45 members of D Squadron on board. The delivery point was 6 km from the airstrip on Pebble Island. Mountain Troop was tasked with the destruction of the Argentine aircraft, while the remaining personnel acted as a protection force, securing approaches to the airstrip, and forming an operational reserve.

The raiding party unloaded over 100 L16 81mm Mortar bombs, explosive charges, and Rocket 66mm HEAT L1A1

Light Anti-tank Weapons to carry into the engagement zone from the helicopters, with each man in the raiding party carrying at least two mortar bombs. For small arms, M16 rifles were used, some with under-slung M203 grenade launchers. Approach navigation was conducted by a member of the Boat Troop who had carried out the reconnaissance.

As the raiding party approached the target they spotted an Argentine sentry but were not seen, allowing them to enter the target and lay charges on seven of the aircraft.

Once all the aircraft had been prepared the raiding team opened fire on the aircraft with small arms and L1A1 rockets. All of the aircraft were damaged, with some having their undercarriages shot away.

Following this cue Glamorgan began shelling the Argentine positions on the airfield using high-explosive rounds, hitting the ammunition dump and fuel stores.

The defending force did not engage until the entire raiding party had re-grouped and were preparing to move out. One Brit-

ish soldier was wounded by an Argentine IED while the raiding party returned fire using small arms and M203 grenade launchers, resulting in the death of the Argentine commanding officer and the suppression of any defensive effort.

The Argentine version states that their marines remained in shelters during the shelling by Glamorgan, so they were unable to face the SAS in combat. The British wounded was the result of shrapnel from exploding charges settled by the Argentinians under the airstrip in order to deny its use to the enemy. The blasts were triggered in the belief that the operation was a full-scale assault to take over the air base.

The wounded man was hauled back to the recovery site with the raiding party reaching the aircraft by the required time for transportation back to Hermes before daybreak. The decision was made to proceed with ex-filtration rather than returning to attack the defending force.

Assets destroyed during the raid totalled:

- Six FMA IA 58 Pucarás[n 1] (Air Force)
- Four Turbo Mentor trainer/light attack aircraft (Navy)
- One Short SC.7 Skyvan utility transport aircraft (Coast Guard)
- Destruction of the ammunition dump
- Destruction of the fuel dump

The raid was considered a complete success, reminiscent of the type of operation carried out by the SAS in the Second World War.



Hoist the main sail, run out the guns, Admiral Matt 'Horatio' O'Brien is all at sea as he sets out to teach both the French and the Yanks a damn good lesson.

Looking through some of the many games that I have played over the years, I realised that there are not many games that deal with naval warfare. So Ultimate Admiral: Age of Sail is a welcome sight.

Developed and published by Game-Labs, Ultimate Admiral: Age of Sail is a tactical war-game set amidst the epic naval campaigns in the period of the American Revolutionary and Napoleonic Wars.

Game-Labs are no stranger to RTS games and previously brought us Ultimate General: American Civil War and Ultimate General: Gettysburg. Both of which were pretty good games.

Ultimate Admiral: Age of Sail is a unique wargame allowing you to experience the best of the Ultimate Series AI and tactical engine in naval, land, and combined arms landing operations.

Taking the role of a famous commander, you will be at the heart of the historical battles and events.

In the British Campaign, you will follow Horatio Nelson's journey from midshipman on the shores of Central America to the admiral who defeated the great armada in the battle of Tr-

afalgar.

In the American campaign, you will play the role of John Paul Jones, participate in the War of Independence and stand at the origins of the United States Navy winning freedom for your country.

The developers have done a lot of research into the ships and weapons of the time in an effort to make the game as realistic as possible.

Individual wind plans are based on each ship's rigging. Realistic sailing physics replicates the behaviour of actual ships where yard position changes based on the chosen course and direction of the wind.

When at full sail your relative position to the wind can cause your ship to roll and block your guns from firing effectively. Moving with full sails in strong winds can also capsize your ship. When sailing against the wind ships can be pushed backward.

There is a unique aiming system where you can assign a target to focus your gunner's aim on any part of a ship. A detailed damage model allows for the destruction of all ship components. Realistic ballistics and impact physics that account for energy, penetration, obstacles,

and ricochets. Thickness based planking system where protection degrades as the planking is damaged. Planking penetration is also influenced by shot angle and material quality.

They have recreated the beautiful ships of the Age of Sail period from historical or admiralty collections drafts. Accurate hull models, sail plans, guns, internal upgrades, historical speed trials were used in the creation of vessels.

Historical availability has also been implemented. Certain ships and weapons can only be captured by boarding ships or taken from the enemy on the battlefield.

To win battles you will need to master the art of manoeuvring at sea. In the Age of Sail, proper positioning is of the utmost importance. Gain the weather gage, sustain powerful broadsides, and anticipate the lumbering movement of enemy ships-of-the-line. Approach to deliver a broadside at your own peril; even the most experienced captains risk demasting, loss of the ships, or death when engaging the enemy.

When broadsides are not enough; you bring the Marines! Your hardy sea infantry can board vessels, conduct landing operations, and join land forc-



es in assaulting enemy batteries and other fortifications. Manage cover, positioning, and morale to lead your forces to victory!

Control of the seas is only half the battle. Whether on the New World, Europe, or the many islands in-between, once the war at sea is over, an invasion must commence.

Take control of more traditional national armies to combat your enemies on land in major campaigns and where your small force of marines will not do.

Build your fleet: Success on the high seas will earn you promotions. Grow your fleet from a small squadron of unrated ships to a fearsome battle fleet complete with powerful ships-of-the-line. Customize your ships with new technology and weapons, to create a fleet that fits your tactical doctrine.

Manage your crews: With every naval engagement, your crewmen become more effi-

cient and deadly. With every shot, their accuracy and gunnery improve. While sailing they improve their stamina and fine control of their ship. Board enemy ships and land marines to build proficiency in combat. Of course, every veteran's death is a huge blow to the navy.

Gain reputation and promotions: Participating in battles you will receive an experience that will allow you to develop your admiral. Develop your tactical doctrines, build fast and manoeuvrable squadrons, or slow heavily armed ships of the line to control the seas. Receive bonuses to supply, improve relations with the Admiralty, replenish crew, lower equipment prices, and gain other advantages to assist your campaigns.

Fight in the campaigns and participate in 80+ battles from small engagements to massive battles over land and sea. The campaign fully depends on player actions and battle results.

You'll need an Intel Core i3-2100 (3.1 GHz) or equivalent computer with 64-bit Windows 10 / 8.1 / 7 with Service Pack 1.

You will also need 2 GB memory and 11 GB available space.

Ultimate Admiral: Age of Sail is not a bad game at all.



Publisher - Game-Labs

Genre - RTS

Score 7/10

Price - R175 (on Steam)



Movie Review

Das Boot

Released: 1981

Running time: 149 minutes

Directed by: Wolfgang Petersen

Released in 1981, *Das Boot* (The Boat) is a German war film written and directed by Wolfgang Petersen, produced by Günter Rohrbach, and starring Jürgen Prochnow, Herbert Grönemeyer, and Klaus Wennemann. The sound track is in German with English subtitles.

The film is an adaptation of Lothar-Günther Buchheim's 1973 German novel of the same name, the film is set during World War II and tells the fictional story of U-96 and its crew.

It depicts both the excitement of battle and the tedium of the fruitless hunt, and shows the men serving aboard U-boats as ordinary individuals with a desire to do their best for their comrades and their country.

During production, Heinrich Lehmann-Willenbrock, the captain of the real U-96 and one of Germany's top U-boat "tonnage aces" during the war, and Hans-Joachim Krug, former first officer on U-219, served as consultants.

One of Petersen's goals was to guide the audience through "a journey to the edge of the mind". The film's tag line is "*Eine Reise ans Ende des Verstandes*," which means "what war is all about."

The film focuses on war correspondent Lieutenant Werner (Herbert Grönemeyer), who is honest but naive. He is assigned to the German submarine U-96 in October 1941. He has to accompany

the boat on a patrol, taking photographs of them in action and reporting on the voyage.

He meets the submarine's captain (Jürgen Prochnow) in a French bordello where the captain and his crew are celebrating the captain being awarded the *Ritterkreuz* (Knight's Cross of the Iron Cross).

The captain is 30 years old and is openly anti-Nazi, and embittered and cynical about the war.

The next morning the U-96 leaves La Rochelle to a cheering crowd and a band playing. Werner is given a tour of the boat and introduced to the crew.

The next three weeks are spent enduring a relentless North Atlantic gale. As time passes Werner observes the ideological differences between the new crew members and the hardened veterans.

Shortly after the storm ends they encounter a British convoy and launch four torpedoes, sinking two ships. They are spotted by a destroyer and are forced to dive below test depth, the submarine's rated limit.

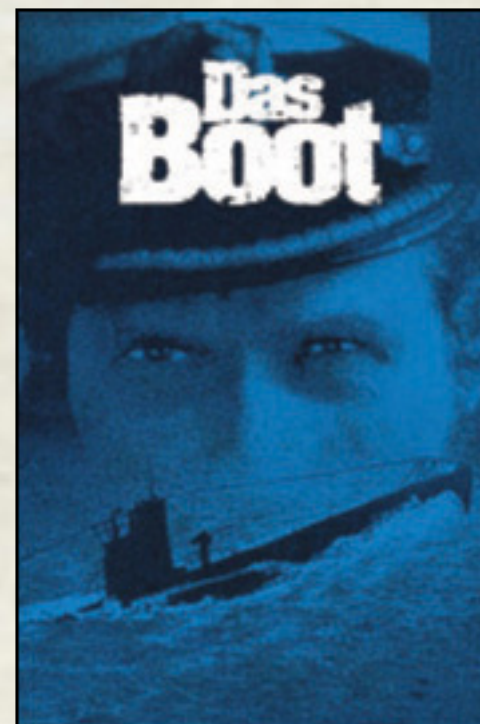
They are depth-charged and sustain heavy damage. The chief machinist, *Obermaschinist* Johann (Erwin Leder), panics and has to be restrained.

After the attack they eventually manage to surface when night falls. One of the British ships they torpedoed earlier, a British tanker, is still afloat and on fire,

so they torpedo it again, only to learn there are still sailors aboard. The U-boat men watch in horror as the sailors leap overboard and swim towards them. Unable to accommodate prisoners, the captain orders the boat away.

The crew, by this time worn out, are looking forward to returning home in time for Christmas. But they are ordered to La Spezia, in Italy. This means passing through the Strait of Gibraltar—an area heavily defended by the Royal Navy.

What follows will keep you glued to the screen. *Das Boot* is an excellent film and was nominated for no fewer than six Academy Awards, including Best Director.



Click on the poster to watch a trailer of the film.

Mobility Conquers

More than two years in the writing, this book is the warts-and-all story of the birth, career and death of the South African Defence Force's 61 Mechanised Battalion Group (1979-2005), generally acknowledged as the best fighting unit in Africa in its time.

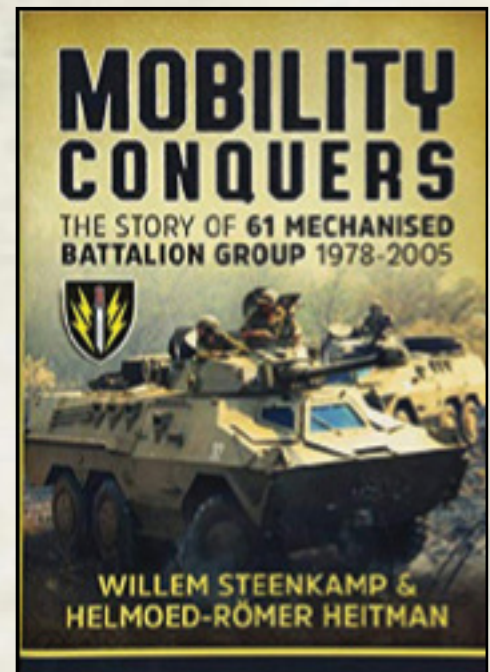
61 Mech was structured as a combined-arms unit with integral infantry, armoured and artillery components the first in Africa and arduously trained in a fast-moving mobile warfare doctrine which was not based on adapted European tactics but was specifically designed for fighting modern bush wars in the forbiddingly difficult African battle-space.

Led by some of the brightest

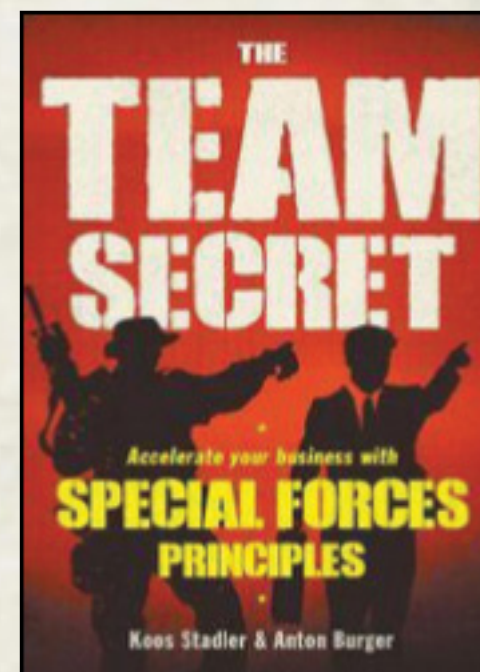
officers in the Army, 61 Mech played a major role in the often hard-fought incursions into Angola between 1978 and 1988 and won all its battles, even though the South Africans were always vastly outnumbered by the armed forces of Angola with their abundant Soviet weaponry and Russian and Cuban advisors, and usually with an unfavourable air situation.

The book includes many personal accounts by 61 Mech's officers and men, some of them in harrowing detail. It is also salted with short snippets of information which help to make it an entertaining read for people from anywhere in the world.

Written by Willem Steenkamp and Helmoed-Römer Heitman, this 1,152 page book with 61



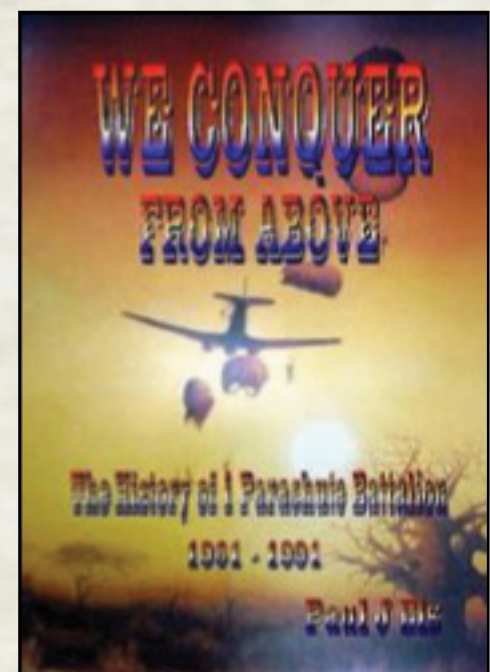
maps and 400+ photos is a must read.



Team Secret
R275



We Fear Naught but God
R395



We conquer from above
R395

All books are available from [Bush War Books](#)

Some of the significant military events that happened in May. Highlighted in blue are the names of those members of the South African Defence Force (SADF) that lost their lives during the month of May.

1 May

- **1915** - A German U-boat sinks the American tanker 'Gulflight', three killed.
- **1936** - Emperor Haile Selassie leaves Ethiopia as the Italians rout his army.
- **1941** - German assault on Tobruk.
- **1947** - Vice Adm Roscoe Hillenkoeter becomes 1st CIA director.
- **1960** - An American U-2 spy plane was shot down over Sverdlovsk in central Russia on the eve of a summit meeting between President Dwight D. Eisenhower and Soviet Russia's Premier Nikita Khrushchev. The pilot, CIA agent Francis Gary Powers, survived the crash, and was tried, convicted and sentenced to 10 years in prison by a Russian court.
- **1962** - First French underground nuclear blast, in the Sahara.
- **1982** - Two members from Infantry School were killed in a private motor vehicle accident between Edenburg and Bloemfontein while on weekend pass. The casualties were: Rifleman Marnes van Jaarsveld (18). Rifleman Jurgen Swaak (18).
- **1982** - Rifleman Hans Jurie Storm from 1 Parachute Battalion was killed in a private motor vehicle accident near Bloemfontein while on weekend pass. He was 19.

- **1984** - Corporal Johannes Gerhardus Terblanche from 1 SAI was killed instantly when his Ratel Infantry Fighting Vehicle overturned during exercises at the De Brug Training Area. He was 20.

2 May

- **1863** - Stonewall Jackson is wounded by his own men at Chancellorsville, he dies on 10 May.
- **1943** - Japanese aircraft bomb Darwin, Australia.
- **1945** - Berlin formally surrenders to the Red Army.
- **1945** - German forces in Italy surrender.
- **1982** - Falklands War: British sub HMS 'Conqueror' sinks Argentine light cruiser 'General Belgrano', 323 members of the crew are killed.
- **1982** - Rifleman Karel Titus from the South African Cape Corps was killed when he was knocked down and run over by a civilian vehicle while carrying road block duties at Eersterivier. He was 29.
- **1982** - Captain Leon van Wyk from 1 Parachute Battalion was Killed in Action east of Otavi during a contact with SWAPO/PLAN insurgents. He was 26.
- **1984** - Special Warrant Officer Benyamen Joseph from the SWA Police Counter-In-

surgency Wing: Ops K Division (Koevoet) was Killed in Action during a contact with SWAPO/PLAN insurgents in Northern Owamboland. He was 37.

- **1985** - Rifleman Piet Defransa from 201 Battalion SWATF was killed in a military vehicle accident. He was 21.
- **1987** - Three members from 5 Reconnaissance Regiment were Killed in Action during a contact with enemy forces at Otchinjau in Southern Angola during Ops Bauwer. They were: Corporal Augusta Fernando (26). Corporal Martin Nyamhunga (24). Corporal Obadiah Malose Sebata (25).
- **1988** - A self-confessed SA spy of the security police in the ANC, Olivia Forsyth, who was held prisoner at ANC Quatro prison camp for seven months and spent another fifteen months under ANC guard in Luanda, evades her guards and takes refuge in the British embassy in Luanda.
- **1990** - Two members from the Cape Regiment were accidentally killed when their Buffel Troop Carrier overturned in Mpumalanga. They were: Corporal Andrew Afrika (23). Rifleman Jan Geduld (36).
- **1990** - Lieutenant Mike Schillings from Group 17

was killed in military vehicle accident at Vereeniging. He was 22.

- **2011** - U.S. Special Operations Forces killed Osama bin Laden during a raid on his secret compound in Abbottabad, Pakistan.

3 May

- **1846** - The Mexican Army invades Texas.
- **1900** - Second Anglo-Boer War: A battle takes place between the British forces under Lord Roberts and the Boers under Gen. De la Rey at Brandfort OFS. De la Rey retreats at nightfall.
- **1900** - Second Anglo-Boer War: General Lord Roberts departs from Bloemfontein and begins the 'March to Pretoria' with almost 44,000 men, 18,000 horses, and 1,200 field-guns. He leaves to the strains of "We are marching to Pretoria" which is heard for the first time.
- **1941** - US supply ships finally reach the British Middle East army at the Suez Canal.



Osama bin Laden

- **1943** - US 1st Armoured Division captures Mateur, Tunisia.
- **1945** - British troops liberate Rangoon from the Japanese.
- **1945** - Polish 10th Armoured Brigade captures Wilhelms-hafen.
- **1945** - RAF sinks several German prison-ships in Lubeck Bay. About 7,500 are killed.
- **1946** - The Allied Military Tribunal in Tokyo begins war crimes trials.
- **1961** - Defence legislation is amended to enable use of the armed forces for the suppression of internal disorder and reorganise the police so as to co-ordinate its command headquarters with that of the military.
- **1969** - Lieutenant Andre Weilbach from 4 Squadron was killed when his AT-6 Harvard failed to recover from a spin and crashed near Hartebeespoortdam during a routine general flying training sortie. He was 25.
- **1976** - Two members of the Kempton Park Commando were killed in a military vehicle accident in Pretoria. They were: Lance Corporal Johannes Petrus Hendrik Barnard (20). Rifleman Lawrence William Custard (24).
- **1978** - Three thousand members of the Congolese National Liberation Front

(FNLC) invade Zaire's Shaba Province from Angola.

- **1979** - Captain Gabriel Johannes Jacobus Basson from 4 SAI accidentally drowned when his boat struck an underwater obstruction and he was thrown overboard by the impact. He was 28.
- **1982** - Falklands War: Argentine Exocet missile sinks HMS 'Sheffield'.
- **1987** - Corporal Cornelius Johannes Du Toit from Regiment Bloemspruit died from a gunshot wound resulting from an accidental discharge of a fellow soldier's rifle while at Fouriesburg. He was 24.
- **1988** - Representatives of South Africa, United States, Angola and Cuba meet in London (3-4 May) in search of a solution to the Angolan war and independence for Namibia.

4 May

- **1860** - The Orange Free State signs a peace treaty with Moshesh at Wittebergen, near Winburg, after the first Basuto war.
- **1902** - General Smuts, on his way to the national delegation at Vereeniging to start peace negotiations, meets with General Lord Kitchener at Kroonstad, OFS.
- **1916** - Germany abandons unrestricted submarine warfare, at the "request" of the US.
- **1945** - German troops in the Netherlands, Denmark, and Norway surrender

- **1965** - Units of the SADF are now being equipped with a rifle made completely in South Africa. It is the R1-7.62 mm rifle, developed from the Belgian FN rifle, with improvements.
- **1970** - At Kent State University, four students were killed by National Guardsmen who opened fire on a crowd of 1,000 students protesting President Richard Nixon's decision to invade Cambodia.
- **1978** - South African airborne attack on a South West Africa People's Organization (SWAPO) military base at the former town of Cassinga, Angola. Conducted as one of the three major actions of Operation Reindeer during the South African Border War, it was the South African Army's first major air assault.
- **1978** - Four members from 2 and 3 Parachute Battalion were Killed in Action during Operation Reindeer and the subsequent assault on Cassinga in Southern Angola. The casualties were: Rifleman Edward James Backhouse (22). Rifleman Martin Kaplan (25). Rifleman Jacob Conrad De Waal (23). Rifleman Andries Petrus Human (29) was reported Missing in Action after jumping from the aircraft at Cassinga. It was later learnt that he had landed in the river and drowned.
- **1978** - Corporal Terence Michael Bridgeman, an Eland
- **1978** - Corporal Herbert Charles Truebody, an Eland
- **1978** - Lance Corporal Hendrik Jacobus Venter (20). Lance Corporal F. Petrus (22). Rifleman L. Haifiku (24). Rifleman H. Haimbodi (22). Rifleman W. Robert (23). Rifleman J. Petrus (20).
- **1978** - South Africa is condemned by the United States of America for its recent raid into Angola (Operation Reindeer).
- **1982** - Lieutenant Raymond Roderick Hughes from 6 Squadron was killed near Port Elizabeth while approaching to land in Atlas MB326M Impala Mk I while returning from a routine training flight. He was 25.
- **1983** - Rifleman Louis Smit from Regiment Westelike Provinsie suffered a fatal heart attack and died while on a foot patrol in the Operational Area. He was 25.
- **1991** - Gunner Phillipus Andries van der Merwe from 25 Field Regiment was killed when his Buffel Troop Carrier overturned at Batavia. He was 18.
- **1992** - Rifleman Ralph Jeffrey Steyn from 3 SAI was killed at Imbali Township near Pietermaritzburg when his Buffel Troop Carrier suffered brake failure and overturned. He was 22.

- 90 Armoured Car Crew Commander from 2 Special Service Battalion "D" Squadron Walvis Bay, was Killed in Action. He was 19.
- **1978** - Corporal Herbert Charles Truebody, an Eland
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Technical Service Corps was captured during this encounter and later taken to Cuba. He was released a few years later. The casualties were: Lance Corporal Hendrik Jacobus Venter (20). Lance Corporal F. Petrus (22). Rifleman L. Haifiku (24). Rifleman H. Haimbodi (22). Rifleman W. Robert (23). Rifleman J. Petrus (20).

5 May

- **1821** - France's Napoleon Bonaparte dies in exile on the island of St. Helena.
- **1941** - Emperor Haile Selassie returns to Addis Ababa.
- **1942** - US begins rationing sugar during WW II.
- **1942** - A combined British military and naval force land on Madagascar and by the afternoon the town of Diego Suarez is captured.
- **1945** - Okinawa: 131 Kamikaze sink 17 ships.
- **1945** - German troops in the Netherlands surrender to the Allies.
- **1965** - First large US ground units arrive in South Vietnam.
- **1969** - P.W. Botha, the Minister of Defence, announces that an air-to-air projectile has been perfected by South Africa.
- **1977** - Rifleman Hendrik Johannes Jordaan from Regiment Westelike Provinsie was Killed in Action when he detonated a landmine while on patrol in the Jati Strip. He was 21.
- **1977** - Willem Johannes Pi-

etersen drowned while on Observation Post duties on the Kavango River. He was 20.

- **1980** - Rifleman Simon Kapuna from (35 Battalion) 101 Battalion SWATF was Killed in Action during a contact with SWAPO/PLAN insurgents in Southern Angola. He was 24.
- **1980** - Two members of 8 SAI were Killed in Action after suffering multiple shrapnel wounds when their TB came under attack from SWAPO/PLAN insurgents using mortars and RPG-7 Anti-Tank Rockets. The casualties were: Rifleman Derek van den Berg (21). Rifleman Andre Johannes Redelinghuys (20).
- **1987** - Lance Corporal Rodney Abraham Scott from Group 39 was killed in a motor vehicle accident at Barkley East. He was 21.
- **2000** - Sierra Leone rebels seize peacekeepers from Zambia, raising to more



Claude Choules

than 300 the number of UN personnel they are believed to be holding captive and dealing another blow to UN peacekeeping efforts in Africa.

- **2011** - Claude Stanley Choules dies in Australia at the age of 110. He was the last combat veteran of World War I and also the last veteran to have served in both World Wars.

6 May

- **1906** - British troops kill over sixty Zulus during a punitive expedition near Durban, Natal.
- **1915** - Gallipoli: Allies attack Cape Hellas.
- **1942** - Corregidor and the Philippines surrender to the Japanese
- **1943** - Allied forces on their way to Tunis wipe out German 15th Panzer Division.
- **1945** - Axis Sally makes her last broadcast.
- **1955** - West Germany joins NATO.
- **1962** - USS 'Ethan Allen' (SSBN-608) fires the first nuclear warhead from a submerged submarine.
- **1976** - Two crew members from 27 Squadron were Reported Missing when their Piaggio P166S Albatross disappeared south of Dassen Island while returning from a long range West Coast Sea Patrol. The crew have no known grave and re-

main unaccounted for. They were: Major Raymond Hall Carter (52). Captain Gideon Machiel Albertus Rossouw (25).

- **1978** - South Africa is condemned by the United States of America for its recent raid into Angola (Operation Reindeer).
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7 May

- **1915** - The British passenger ship Lusitania was torpedoed by a German submarine off the coast of Ireland, losing 1,198 of its 1,924 passengers, including 114 Americans. The attack hastened neutral America's entry into

- World War I.
- **1937** - Germany's Condor Legion arrives in Spain to help the Nationalists.
- **1939** - Germany and Italy announce a military and political alliance known as the Rome-Berlin Axis.
- **1942** - World War II: East Africa. Naval bases on Madagascar are surrendered to the British by Vichy forces.
- **1943** - World War II: Final Allied Offensive, Tunisia. General Sir Harold Alexander's 18th Army Group captures Bizerte and Tunis. All that remains of the German force is General Gustav von Vaerst's 5th Panzer Army on the Cape Bon peninsula.
- **1945** - World War II: Germany signs an unconditional surrender at Allied headquarters in Rheims, France, to take effect the following day, ending the European conflict of World War II.
- **1946** - British Prime Minister, Clement Attlee, announces plans to withdraw British troops from Egypt, dependent upon agreement for a military alliance for the protection of the Suez Canal.
- **1954** - The French Indochina War ended with the fall of Dien Bien Phu, in a stunning victory by the Vietnamese over French colonial forces in northern Vietnam. The country was then divided in half at the 17th parallel, with South Vietnam created in 1955.
- **1982** - Corporal Hercules Petrus Bester from 5 SAI
- **1982** - Private Barry Andre van Tonder from the Technical Service Corps was accidentally electrocuted at Lohatla and could not be revived. He was 22.
- **1983** - Two members from the South West Africa Police Counter-Insurgency Wing: Ops K Division (Koevoet) were Killed in Action during a contact with SWAPO/PLAN insurgents in Northern Owamboland. They were: Special Warrant Officer Lebeus Vilho (36). Constable Nico Johannes Swiegers (22).
- **1984** - Special Sergeant Filupus Matheus from the South West Africa Police Counter-Insurgency Wing: Ops K Division (Koevoet) was Killed in Action during a contact with SWAPO/PLAN insurgents in Northern Owamboland. He was 28.
- **1985** - Gunner Conrad Heathcote from 10 Light Anti-Aircraft Regiment collapsed and died after suffering a fatal heart attack during Junior Leaders Course at Youngsfield. He was 24.
- **1985** - Rifleman A.H. Ambrosius from 101 Battalion SWATF was Killed in Action during a contact with SWAPO/PLAN insurgents near the Cut-Line. He was 19.
- **1987** - Rifleman Christo-

was Killed in Action during a contact with SWAPO/PLAN insurgents at Tsumeb. He was 20.

pher George Docherty from 7 SAI was killed when his Buffel Troop Carrier overturned at Barberton. He was 23.

- **1997** - Former Defence Minister Magnus Malan takes full responsibility for secret apartheid raids into neighbouring countries but says they were all state-sanctioned and legal.
- **2000** - Rebels in Sierra Leone use civilians as shields while fighting UN forces.

8 May

- **1902** - A combined force of British soldiers and armed Blacks attempts to surround General C.H. Muller's commando, commanded in his absence by Col. Trichardt, near Belfast. The attackers are repulsed.
- **1940** - The Cape Corps, consisting of Cape Coloured men, is reformed under Col. C.N. Hoy.
- **1941** - Royal Navy captures 'U-110', with an intact Enigma machine.
- **1942** - During World War II in the Pacific, the Battle of the Coral Sea began in which Japan would suffer its first defeat of the war.
- **1943** - World War II: Final Allied Offensive, Tunisia. Admiral Sir Andrew Cunningham, Commander-in-Chief of the Mediterranean Fleet launches Operation 'Retribution', to prevent Axis forces from evacuating North Africa.
- **1945** - A second German sur-

render ceremony was held in Berlin. Soviet Russia's leader Josef Stalin had refused to recognize the German surrender document signed a day earlier at Reims.

- **1950** - General Douglas MacArthur is appointed commander of the United Nations (UN) forces in Korea, including South Africans.
- **1952** - US conducts the first H-Bomb test at Eniwetok Atoll.
- **1966** - WO1 Louis Matthys Jakobus Pienaar from the Artillery School was killed when his Landrover was involved in a head-on collision with a civilian vehicle near Heidelberg. He was 45.
- **1980** - Rifleman Simon Kanunu from 35 Battalion (Later 202 Battalion) SWATF was Killed in Action during a contact with SWAPO/PLAN insurgents in Northern Owamboland. He was 22.
- **1980** - Two members of 36 Battalion (Later 203 Battalion)

ion) SWATF were Killed in Action during a contact with SWAPO/PLAN insurgents in Northern Owamboland. They were: Rifleman Kumsa Ntamshe (22). Rifleman David Twi (20).

- **1981** - Two members from 2 SAI were Killed in action in a landmine explosion in Northern Owamboland. They were: Lance Corporal Johannes Petrus Botha (19). Rifleman Johannes Willem Hanekom (22).
- **1985** - Rifleman Petrus Johannes Theron from the Germiston Commando was killed in a head-on collision between two Buffel Troop Carriers in the Kathlehong Township. He was 26.
- **1985** - Special Constable Linus Abraham from the South West Africa Police Counter Insurgency Wing: Ops-K Division (Koevoet) was Killed in Action during a contact with SWAPO/PLAN insurgents in Northern Owamboland. He was 24.

9 May

- **1936** - Five days after Italy captured the Ethiopian capital of Addis Ababa, Mussolini annexes Ethiopia and announces that Abyssinia is now part of the Italian Empire.
- **1945** - Czechoslovakia liberated from Nazi occupation.



Joseph Stalin

- **1945** - German troops in the Channel Islands surrender to the British.
- **1975** - Sergeant (Flight Engineer) Jacobus Johannes Crause from 16 Squadron was killed when his Alouette III Helicopter ditched into the sea off Port Elizabeth after suffering engine failure. He was 28.
- **1977** - A Second Defence Amendment Bill passes its final stages in the House of Assembly, with the support of the entire opposition. The existing twelve months' maximum national service will be increased to twenty-four months and the subsequent period of service increased to a maximum of 240 days.
- **1986** - Sapper Jacobus Petrus van den Berg from 25 Field Engineer Squadron was killed at Oshakati after being struck by a bullet resulting from the accidental discharge of a fellow soldiers rifle. He was 19.

10 May

- **1857** - Sepoy uprising at Meerut initiates the Indian Mutiny.
- **1918** - Royal Navy commando raid on Ostend: HMS 'Vindictive' is sunk to block the Harbour.
- **1940** - British form the Home Guard (Dad's Army).
- **1940** - Germany invades France, the Netherlands, Belgium, and Luxembourg.
- **1940** - Kurt Student becomes the first general to make

combat parachute jump, over Rotterdam.

- **1940** - Luftwaffe bombs Freiburg, Germany, by mistake; Goebbels blames the RAF.
- **1940** - Winston S. Churchill becomes Prime Minister of the UK.
- **1941** - Rudolf Hess, Adolph Hitler's deputy, parachutes into Scotland.
- **1946** - Italy's former colonies in North Africa are to be placed under UN control.
- **1956** - France sends 50,000 reservists to Algeria.
- **1968** - Vietnam War: Paris peace talks begin, as does the Battle of Hamburger Hill.
- **1983** - Four members from the South West Africa Police Counter-Insurgency Wing: Ops-K Division (Koevoet) were Killed in Action during fierce engagement with a numerically superior force of SWAPO/PLAN insurgents in Northern Owamboland. They were: Sergeant A. Willem (27). Special Constable U. Maundu (25). Special Constable T. Mben-dura (28). Special Constable J. Musaso (24).

11 May

- **1862** - To prevent its capture by Union forces advancing in Virginia, the Confederate Ironclad Merrimac was destroyed by the Confederate Navy.
- **1914** - Taza, Morocco, is occupied by French troops.
- **1915** - World War I: The force of the Union of South

Africa enters Windhoek, capital of South West Africa.

- **1943** - World War II: Final Allied Offensive, Tunisia. General Gustav von Vaerst's 5th Panzer Army finally surrenders on the Cape Bon peninsula, Tunisia.
- **1943** - RMS 'Queen Mary' arrives at New York with Winston Churchill and the British Chiefs of Staff, en route to Washington, as well as 5,000 Afrika Korps veterans bound for POW camps, and the 300 troops guarding them.
- **1955** - Israeli raid on Gaza.
- **1960** - Israeli agents capture Adolf Eichmann in Buenos Aires.
- **1966** - Lieutenant Ian Pieter Roos from 1 Squadron was killed when his Canadair CL13B Sabre crashed near Waterkloof during a routine general flying training flight. He was 21.
- **1978** - Private Pieter Benade from 84 Technical Stores Depot was killed in a military motor vehicle accident at Grahamstown. He was 20.
- **1982** - Rifleman Jaques Samuae Du Preez from the Army Intelligence Corps was Killed in Action during an attack on the "Kanjimi Marenga" school where he was serving as a teacher. He was 19.
- **1982** - Corporal Don Stoffel Olyn from 911 Battalion SWATF was killed when his Buffel Troop Carrier overturned during a patrol in the Etosha Pan. He was 18.

- **1985** - Corporal Mark Anthony Pond from 905 Special Services Company was Killed in Action during a contact with SWAPO/PLAN insurgents in Southern Angola.
- **1986** - Three members from the South West Africa Police Counter-Insurgency Wing: Ops K Division (Koevoet) were Killed in Action during a fierce contact with heavily armed PLAN insurgents in Northern Owamboland when their Z5S Casspir was hit by a Soviet RPG-7 Anti-Tank Rocket. The casualties were: Constable Ignatius Francois van Zyl (25). Special Constable Simeon Shindele (25). Special Constable Simon Toivo (24).

12 May

- **1900** - Second Anglo-Boer War: Lord Roberts enters Kroonstad. President M.T. Steyn proclaims Heilbron in the Orange Free State as his new capital.
- **1941** - Urgent supplies, including tanks and aircraft arrive at the Egyptian port of Alexandria with the convoy, code-named 'Tiger'. General Wavell can now prepare for operation 'Brevity', and the push against Rommel's forces on the Egypt-Libya border.
- **1949** - Soviet Russia lifted its blockade of Berlin.
- **1973** - 2nd Lieutenant Jacobus Petrus Kolver from 6 Squadron was killed when his AT-6 Harvard spun into

the ground near the Sundays River during a routine general flying training flight. He was 21.

- **1975** - Trooper Pieter Gabriel Eybers from 2 Special Service Battalion was accidentally killed when he fell out of a patrol observation post in the Operational Area. He was 20.
- **1980** - Rifleman Cornelius Johannes Nortje from 1 SAI attached to 61 Mech Battalion was killed when his Buffel Troop Carrier overturned in Northern Owamboland. He was 19.
- **1982** - Lance Corporal Michael Simon Ngoma from 5 Reconnaissance Regiment died from gunshot wounds accidentally sustained. He was 24.
- **1983** - Rifleman Frank Paul Couvelis from 912 Battalion SWATF was Killed in Action in Southern Angola when his convoy was ambushed by a numerically superior enemy force.



Kurt Student

- **1988** - Rifleman Dean Anthony Lones from Regiment Dan Pienaar was killed in a military vehicle accident at Hazyview near White River. He was 25.
- **2000** - Ignoring international pleas to end their two-year border conflict, Ethiopia and Eritrea return to open war with fighting reported on three fronts.

13 May

- **1940** - Churchill promises "blood, toil, tears, and sweat."
- **1940** - Queen Wilhelmina of the Netherlands flees to England to avoid capture by the Germans.
- **1943** - World War II: The Italian commander-in-chief in Tunisia surrenders a day after his German counterpart, with the Allies holding some 250,000 prisoners of war.
- **1946** - US sentences 58 Mauthausen concentration camp guards to death.
- **1964** - Rifleman Paul Jacobus Krogh from 1 Parachute Battalion was accidentally shot dead by a fellow soldier in the Barracks in Tempe, Bloemfontein. He was 20.
- **1981** - Rifleman Mike Williams from the South African Intelligence Corps was killed in a Military Vehicle Accident, at Madimbo. He was 21.

- **1988** - Foreign Affairs Minister Pik Botha and Defence Minister Magnus Malan hold talks in Brazzaville, Congo, with an Angolan delegation headed by Minister of Justice Fernando van Dunem.

14 May

- **1942** - During World War II, an Act of Congress allowed women to enlist for non-combat duties in the Women's Auxiliary Army Corps (WAAC), the Women Appointed for Voluntary Emergency Service (WAVES), Women's Auxiliary Ferrying Squadron (WAFS), and Semper Paratus Always Ready Service (SPARS), the Women's Reserve of the Marine Corp.
- **1943** - Japanese submarine sinks Australian hospital ship 'Centaur' off Brisbane, 268 of 332 persons aboard die; wreck is found in 2009, with the Red Cross still prominent on her sides.
- **1976** - 2nd Lieutenant Lionel John Kidson from 6 SAI was critically injured when his Unimog vehicle overturned on the "Wit Pad", close to Eenhana. He and the other injured were airlifted to the Grootfontein Hospital where he died during the night. He was 19.
- **1978** - Communist-backed Katangan gendarmes, who had been living in neighbouring Angola, invade the region around Kolwezi in southern Zaire. Zairian troops are sent into quell the

violence.

- **1980** - Three members from 8 SAI were killed after receiving multiple shrapnel wounds in an accidental M26 hand grenade explosion at Okalongo in Northern Owamboland. They were: Lance Corporal Andre David Naude (21). Rifleman Frederick Engelbrecht (18). Rifleman Willem Johannes Landman (20).
- **1982** - Rifleman Andre Jodt from the South West Africa Territory Force Gymnasium was killed in a military vehicle accident. He was 29.
- **1986** - Staff Sergeant Jan Carl Bergh from the Soutpansberg Commando was killed in a private vehicle accident while on his way to the Unit Headquarters after being called up for duty during the state of emergency. He was 42.
- **1987** - Rifleman L. Emmanuel from 201 Battalion SWATF was Killed in Action during a contact with SWAPO/PLAN insurgents in Northern Owamboland. He was 24.

15 May

- **1900** - Second Anglo-Boer War: General Buller and Lord Dundonald enter Dundee. Lyttelton's division captures Glencoe.
- **1902** - Second Anglo-Boer War: Vereeniging conference begins. The sixty Boer representatives elect General C.F. Beyers as chairman.
- **1940** - German troops occupy Amsterdam as the Dutch Army surrenders.
- **1941** - World War II: Operation 'Brevity'. British forces regain Halfaya Pass and capture the towns of Sollum and Capuzzo on the Egypt-Libya border.
- **1944** - Eisenhower & Montgomery brief George VI & Churchill on the D-Day plan.
- **1957** - First British A-bomb explosion, Christmas Island, the Pacific.
- **1973** - Private Harry Cornelius Theron from 1 Maintenance Unit was accidentally shot dead by a fellow soldier at the 1 Maintenance Unit weapons store while they were in the process of cleaning and checking firearms. He was 18.
- **1980** - Rifleman Glen Andrew Paul from 8 SAI was critically wounded after receiving multiple shrapnel wounds in an accidental hand grenade explosion at Okalongo in Northern Owamboland on 14 May 1980, he unfortunately succumbed to his wounds on 15 May 1980. He was 20.
- **1981** - Rifleman Willie Elefante from 201 Battalion SWATF was Killed in Action during a contact with SWAPO/PLAN Insurgents in Northern Owamboland. He was 22.
- **1984** - Rifleman Malekudu Johannes Nkada from 113 Battalion was killed when his Buffel Troop Carrier overturned while on patrol near Messina. He was 23.

- **1985** - Special Constable K. Tjindunda from the South West Africa Police Counter-Insurgency Wing: Ops-K Division (Koevoet) was Killed in Action during a contact with SWAPO/PLAN insurgents in Northern Owamboland. He was 27.
- **1986** - Lance Corporal Isaac Londo from 101 Battalion SWATF was Killed in Action in a landmine explosion in Northern Owamboland. He was 26.

16 May

- **1900** - Second Anglo-Boer War: A 'flying' column that has sped its way straight from Kimberley (reinforced further by Canadian troops) comes to the aid of Mafeking who is under siege by Boer forces.
- **1900** - Second Anglo-Boer War: General Hunter occupies Christiana, the first ZAR town to be captured.
- **1941** - World War II: North Africa. Believing that previous day's advance by British forces into Sollum and Fort Capuzzo was the start of an attack on Tobruk, General Rommel attacks and forces the British back to Halfaya Pass.
- **1943** - German troops destroy the main synagogue of Warsaw.
- **1964** - Six members of the SADF were killed when their Military Vehicle was involved in a head-on collision with a Military Recovery vehicle while returning from a sports event at Uniondale. The casualties were: Staff Sergeant Abraham Carel Prinsloo (30). Sergeant Johannes Hendrik August Agenbach (22). Corporal Pieter Johannes Kotze (22). Trooper Izak Sybrand Visagie (20). Bombardier Johannes Adrianas Du Toit (21). Rifleman Johannes Frederick Wepener (18).
- **1981** - WO II Isak Philipus Venter from North West Command Headquarters was accidentally killed at Stilfontein when he was knocked down by a civilian vehicle during the Republic Day preparation festivities. He was 47.
- **1981** - Rifleman Benjamin Buys from 16 Maintenance Unit was killed when his private motor vehicle overturned at Grootfontein. It appears that he had fallen asleep behind the wheel. He was 20.
- **1997** - Mobutu Sese Seko, who has ruled Zaire for more

than 30 years, looting it of billions of dollars, flees the capital city as rebel forces advance. The rebels enter the city the next day and Laurent Kabila declares himself head of state.

17 May

- **1900** - Second Anglo-Boer War: After 216 days Boer forces abandon the siege of Mafeking and Colonel Mahon's relief column enters the town.
- **1940** - Germans capture Brussels.
- **1941** - World War II: North Africa. Rommel is instructed by Berlin to leave Tobruk to the Italians and concentrate his *Deutsches Afrika Korps* on the fight along the Egypt-Libya border.
- **1943** - Operation Chastise: RAF 617 Squadron ("The Dam Busters") destroys the Ruhr Valley dams.
- **1981** - Signaler Albert Peter Jordaans from the Army Signals Training Centre at Heidelberg was killed in a private motor vehicle accident between Heidelberg and Grootvlei, on the N3. He was travelling home on weekend pass after standing guard duty the whole night. He was 18.
- **1987** - USS 'Stark' (FFG-31) hit by Iraqi missiles, 37 sailors die.
- **1988** - Former information officer of the SADF, Brig-



Mobutu Sese Seko

adier J. Bosman, reveals in Parliament that one third of the 3 000 troops involved in SA's operation in south-east Angola are not White. In addition 65% to 70% of the soldiers in the operational area were 'people of colour'.

- **1989** - A military coup fails to remove Mengistu Haile Mariam as president of Ethiopia.
- **1991** - Rifleman Antonio Joao Sampaio from 32 Battalion was Killed in Action after being struck in the neck by an AK-47 bullet fired from an unknown gunman while he was on patrol in Tokoza Township. He was 34.

18 May

- **1804** - Napoleon Bonaparte became Emperor of France, snatching the crown from the hands of Pope Pius VII during the actual coronation ceremony, and then crowning himself.
- **1900** - Second Anglo-Boer War: Boer negotiators, Generals Botha, De Wet, De la Rey, Smuts and Hertzog attend peace talks in Pretoria with Lord Milner and Lord Kitchener. They are still asking for a continued independence of the former republics.
- **1941** - World War II: East Africa. The 5th Indian Division, part of General William Platt's Northern Force, takes Amba Alagi after eighteen days of fighting. The Italian commander, Duke d'Aosta, is the last one to leave the

fortress.

- **1944** - The Polish II Corps storms Monte Cassino.
- **1967** - UN agrees to Egyptian demand to withdraw UN forces from Gaza Strip.
- **1973** - Staff Sergeant Kevin Everitt Potgieter from 1 Parachute Battalion was killed in a parachute accident at Tempe. He was 27.
- **1980** - Four members from 41 Battalion were Killed in Action during a contact with a numerically superior force of SWAPO/PLAN insurgents in Northern Owamboland. The casualties were: Rifleman Hendrik Balie (21). Rifleman Dawid Goliath (29). Rifleman Vincent Sekopomashe (25). Rifleman Joseph Tjipuna (22).
- **1982** - Rifleman Likambo Zecks Maxwell from 701 Battalion SWATF was killed after suffering multiple shrapnel wounds in an accidental mortar bomb explosion at Nkongo Base. He was 21.
- **1994** - Military observers returning to the Rwandan countryside report ethnic killings of at least 200,000.
- **1997** - Rebels led by Laurent Kabila take control of Kinshasa, capital of Zaire now the Democratic Republic of the Congo, after overrunning the country in seven months.
- **1999** - Sierra Leone's government and the country's rebels agree to a cease-fire to end seven years of savage fighting.
- **2000** - The UN Security

Council unanimously approves an arms embargo against Ethiopia and Eritrea following the latest flare-up in their two-year border war.

19 May

- **1931** - "Pocket Battleship" 'Deutschland' launched in Germany.
- **1935** - T. E. Lawrence, better known as 'Lawrence of Arabia', is killed in a motorcycle accident at the age of 46.
- **1940** - Charles De Gaulle's 4th Armoured Division counter-attacks the Germans at Péronne.
- **1951** - UN begins counter offensive in Korea.
- **1958** - The North American Aerospace Defense Command (NORAD) is established.
- **1967** - US bombs Hanoi.
- **1978** - Rifleman Adriaan Adolf Jonker from the Midlands Commando died from a gunshot wound accidentally sustained as a result of an accidental discharge of a fellow soldiers rifle while he was serving in the Operational Area. He was 24.
- **1983** - Lance Corporal Colin Watson Kindness from 4 SAI, attached to 61 Mechanised Battalion Group died from a gunshot wound accidentally sustained as a result of an accidental discharge of a fellow soldiers rifle while the platoon was 'Falling In' during musketry training. He was 22.
- **1986** - South African troops

carry out raids in Botswana, Zambia, and Zimbabwe, killing three people.

- **1987** - Rifleman John Barnard from Regiment Bloemspruit was killed in a military vehicle accident at Van Stakensrus. He was 25.
- **1996** - French troops move into downtown Bangui, Central African Republic, to help quell an army uprising.
- **1998** - The name of the military base, Voortrekkerhoogte is officially changed to Thaba Tshwane.

20 May

- **1900** - Second Anglo-Boer War: A squadron of Colonel E.C. Bethune, under Captain Geoff, runs into a well-placed ambush under Commandant Blignaut at Scheepers Nek, ten km south west of Vryheid. The British lose twenty-seven killed, twenty-five wounded, eleven taken prisoner and twenty-nine horses killed. The Boers capture a machine gun and twenty-six horses, while losing one burgher killed, one wounded and one captured by the British.
- **1902** - US military occupation of Cuba (since June of 1898) ends.
- **1940** - German tanks reach the Channel.
- **1940** - World War II: The 1st SA Infantry Brigade is called up for continuous training, to be followed by other units, including the SA Artillery Corps, Engineer Corps and the newly formed Tank

Corps.

- **1942** - Japanese submarine-borne aircraft reconnoiter Durban, South Africa.
- **1970** - Two members from Flying Training School Langebaanweg were killed when their Atlas MB326M Impala Mk I flipped over on the runway during a landing at Air Force Base Langebaanweg. They were: Major Gabriel Hendrik van Dyk (31). Captain Phillip Spencer Weyer (25).
- **1979** - Special Constable Petrus Mabashe from the South West Africa Police Counter-Insurgency Wing: Ops-K Division (Koevoet) was Killed in Action during a contact with SWAPO/PLAN insurgents in Northern Owamboland. He was 26.
- **1981** - Three members of the SADF were Killed in Action while on a vehicle patrol from Okankolo northeast along the Odilla River bed. The casualties were: 2nd Lieutenant Stephen

Soloman Hansen (19). Sapper Jan Hendrik Smith (19). Sapper Anthonie Christoffel Strydom (19).

- **1982** - Corporal Brian Gerald Peterson from 701 Battalion SWATF was Killed in Action during a contact with SWAPO/PLAN insurgents in Northern Owamboland. He was 19.
- **1983** - A powerful car bomb placed by MK Operatives exploded outside the Air Force Headquarters building in Church Street during the afternoon rush-hour period killing seven members of the SADF and 10 civilians. Another 197 SADF personnel and civilians were wounded in the explosion that also killed the two MK Operatives who had placed the bomb. The SADF casualties were: Colonel Stefanus Sebastiaan Walters (43). Commandant Johan de Villiers (47). Commandant Izak Johannes Henning (60). Captain Rian Hendrik Liebenberg (26). Flight Sergeant Jacob Johannes Ras (38). Corporal Anton Nel (22). Airman Wayne Lawrence Kirtley (19).
- **1983** - Rifleman John Philip Olivier from Regiment Groot Karoo was Killed in Action near Mupa. He was 24.
- **1987** - Chief Petty Officer Jan Johannes Barend Mostert was killed in a military vehi-

cle accident at Nelspoort. He was returning from Simons-town after collecting sports equipment when his vehicle overturned. He was 38.

- **1987** - Private Clifton Brian Kilian from 97 Ammunition Depot was killed in a military vehicle accident at Mokerong. He was 19.
- **1988** - Rifleman Motsemoholo Joseph Mpembe from 5 Reconnaissance Regiment was killed in a parachuting accident at Kenilworth. He was 23.
- **1988** - Rifleman Andre Petrus Prinsloo from 16 Maintenance Unit was killed in a military vehicle accident 10km South of Windhoek. He was 21.
- **1998** - Ethiopia and Eritrea amass thousands of troops along their border, ready to fight over a 640-square km triangle of disputed land.

21 May

- **1902** - Second Anglo-Boer War: The proposed peace proposals agreed on by a commission of five, Botha, De la Rey, De Wet and Hertzog, with Kitchener and Milner, are received in London.
- **1941** - SS 'Robin Moore' is sunk off Brazil, first U-boat kill of an American ship in World War II.
- **1944** - World War II: Allied forces break through the Hitler Line in Italy.
- **1951** - USSR announces it will sell arms to Egypt.
- **1956** - US explodes the first airdropped hydrogen bomb,



T E Lawrence

- Bikini Atoll
- **1974** - The British Prime Minister, Harold Wilson, states in the House of Commons that the export license for a Westland Wasp helicopter to South Africa will be revoked.
 - **1976** - Private Adriaan Johannes van der Merwe from the 4th Provost Company, South African Corps of Military Police was killed in Military Vehicle Accident at Grootfontein. He was 19.
 - **1978** - French and Belgian paratroopers who were flown into Kolwezi, Zaire's main copper producing town, to rescue the 3,000 White residents, have discovered over 150 bodies lying in the town's main streets. Most have been badly mutilated. Communist-backed Katangese gendarmes, who had invaded the region earlier this month, are blamed. Zairian troops, who had been sent in a week ago, appear to have joined with the Katangese gendarmes, getting high on drugs and going on the murder spree.
 - **1980** - Fifteen members from 32 Battalion were Killed in Action during heavy close-quarter fighting against a vastly numerically superior enemy force of FAPLA troops and PLAN insurgents during an engagement to neutralise an enemy base complex at Savate in Southern Angola during Operation Tiro a Tiro. The casualties were: Captain An-
 - **1985** - Three members of the Air Force Base Waterkloof Fire Section were Killed in Action after being called to assist the Pretoria Fire Department in extinguishing a massive fire at the SASOL Bulk Storage Depot in Pretoria West after Soviet SPM limpet mines planted by MK Operatives had exploded and damaged some of the large fuel storage tanks. The casualties were: Sergeant Wynand Jacobus Hawkins (30). Corporal Donald Graham Clench (22). Airman Michael Sydney Knoetze (23).
 - **1985** - A SADF unit is ambushed at the Cabinda oil refinery in Angola and Special Forces Captain Wynand du Toit is taken captive.
 - **1985** - Two members from 4 Reconnaissance Regiment

dre Erasmus (28). Lieutenant Charl de Jongh Muller (23). 2nd Lieutenant Timothy Simmons Patrick (18). 2nd Lieutenant Johannes Mattheus Heyns Muller (19). Corporal Eduard Coetzee Engelbrecht (19). Lance Corporal Andrew Jeremy Falkus (20). Lance Corporal Joao Kaumba (21). Rifleman Rodrigues Alberto (27). Rifleman Benedito Albino (25). Rifleman Sebastiao Angelo (22). Rifleman Manuel Augusto (26). Rifleman Antonio Caliang (31). Rifleman Abel Livingue (23). Rifleman Casto Marcelino (24). Rifleman Joaquim Matamba (22).

- **1985** - Three members of the Air Force Base Waterkloof Fire Section were Killed in Action after being called to assist the Pretoria Fire Department in extinguishing a massive fire at the SASOL Bulk Storage Depot in Pretoria West after Soviet SPM limpet mines planted by MK Operatives had exploded and damaged some of the large fuel storage tanks. The casualties were: Sergeant Wynand Jacobus Hawkins (30). Corporal Donald Graham Clench (22). Airman Michael Sydney Knoetze (23).
- **1985** - A SADF unit is ambushed at the Cabinda oil refinery in Angola and Special Forces Captain Wynand du Toit is taken captive.
- **1985** - Two members from 4 Reconnaissance Regiment

were Killed in Action during a Reconnaissance Operation in Cabinda Province of Northern Angola. Captain Wynand du Toit is captured. The casualties were: Corporal Rowland Ridgard Liebenberg (25). Corporal Louis Pieter van Breda (25).

- **1985** - Three members from 101 Battalion SWATF were killed when their Caspir Vehicle overturned at Ondangwa. They were: Rifleman J Kandjii (27). Rifleman M Domingos (26). Rifleman J Felosiano (25).
- **1986** - Rifleman Gabriel Gerhardus Malan from 7 SAI was killed in a Military Vehicle Accident at Kwan-debele. He was 19.
- **1986** - Corporal D Maurioco from 5 Reconnaissance Regiment was Killed in Action during a contact with enemy forces in Southern Angola. He was 24.

22 May

- **1900** - Second Anglo-Boer War: USA President McKinley says he will not intervene in the war in South Africa despite direct requests by Boer representatives visiting the White House.
- **1915** - Italy declares war on Austria-Hungary.
- **1941** - World War II: East Africa. Caught between a pincer movement of the 11th and 12th African Divisions, the Abyssinian town of Soddu is captured. It was the penultimate point of resistance to the Allied campaign in

East Africa; only Gondar, to the north, still remains under Italian control.

- **1941** - British troops take Baghdad, deposing pro-Nazi Iraqi regime.
- **1942** - Mexico declares war on Nazi Germany and Japan.
- **1945** - The Allies dissolve the "Dönitz Government," and abolish German sovereignty.
- **1945** - After being captured by the British, Heinrich Himmler commits suicide. He was 44.
- **1960** - Israel announces the capture of Nazi Adolf Eichmann in Argentina.
- **1965** - Minister of Defence Jim Fouché announces that R12m. has been spent on the defence radar screen in the Transvaal.
- **1969** - Trooper Hendrik Erlank Pieterse from 84 Technical Stores Depot was killed in a military vehicle accident. He was 19.
- **1983** - Rifleman Johannes Engelbrecht from the Infantry School was critically injured in a private motor



Kat Liebenberg

vehicle accident near Colesburg and later succumbed to his injuries in the Universitas Hospital, Bloemfontein. He was 22.

- **1985** - Major Jan Pen Wesels from 85 Combat Flying School was killed when his Dassault Mirage IID2Z crashed near Pietersburg. He was 36.
- **1994** - Rwandan rebels seize the key government army barracks in Kigali, removing the biggest obstacle in their drive to capture the capital.

23 May

- **1900** - Second Anglo-Boer War: British troops arrive at the Renoster River only to find that the Boers have destroyed the bridge.
- **1966** - The Fort Klapperkop military museum, Pretoria, mainly illustrating the period from the Great Trek to 1902, is opened by President C.R. Swart.
- **1979** - Two members from 5 Reconnaissance Regiment were Killed in Action at Shona Mutamanjamba in Southern Angola while carrying out reconnaissance mission to locate a suspected SWAPO/PLAN Base in the area. The casualties were: Captain Johannes Cornelius van Wyk HC (27). Corporal Johan Kloosterziel (22).
- **1983** - Rifleman Coenraad Jacobus Bezuidenhout from Regiment De La Rey was

killed instantly when a Soviet PG-7 Anti-Tank Rocket was accidentally detonated inside their Buffel Troop Carrier while travelling on the Oshakati-Oshikuku road. He was 24.

- **1983** - 2nd Lieutenant Jacobus Edward Visser from 202 Battalion SWATF was killed in a motor cycle accident at Rundu. He was 23.
- **1983** - In response to a car bomb attack in Pretoria on 20 May, the South African Air Force bombs ANC bases in a Maputo suburb, Mozambique, killing six.
- **1998** - General Andreas "Kat" Liebenberg, ex-chief of the SA defence force, dies of cancer in Pretoria.

24 May

- **1870** - Jan Christian Smuts, who was to become the Union of South Africa's second prime minister, is born on the farm Bovenplaats near Riebeeck West in the Cape.
- **1900** - Second Anglo-Boer War: Britain annexes the Orange Free State. Lord Roberts changes the name to Orange River Colony.
- **1900** - Second Anglo-Boer War: Colonel Robert Baden-Powell occupies Zeerust.
- **1902** - Second Anglo-Boer War: British General Sir Ian Hamilton attends General Jan Christiaan Smuts' birthday party: "I sat between Botha and De la Ray. On Botha's right was De Wet, on De la Ray's left sat Smuts.

I had the most enchanting evening, and never wish to eat my dinner in better company."

- **1916** - Britain introduces conscription.
- **1916** - Germans capture Ft. Douaumont, Verdun, from the French.
- **1921** - The British Legion, now the Royal British Legion, is formed by Great War veterans.
- **1941** - Battle of the Denmark Straits: the 'Bismarck' sinks HMS 'Hood', 1,416 are killed. There are only three survivors.
- **1979** - Private Albertus Mundy from 16 Maintenance Unit was killed in a military vehicle accident at Grootfontein. He was 21.
- **1991** - Corporal Revis Omie Khoza from the Kruger Park Commando was killed after he was attacked and trampled to death by an enraged buffalo while on patrol in the Kruger National Park. He was 35.

25 May

- **1857** - In an attempt to unite the two Boer republics, the commandoes of the Free State and Transvaal (Zuid-Afrikaansche Republiek) confront each other at the Renoster River, but an armed clash is averted through mediation of Paul Kruger and others.
- **1940** - German troops reach the Channel near Boulogne.
- **1977** - US raises concern over the presence of Cuban

military advisers in Ethiopia.

- **1977** - Sergeant William Henry Bernard Gildenhuys HC (Posthumous) from the Cape Town Highlanders was killed after suffering multiple shrapnel wounds while detached to Alpha Company, 1 Parachute Battalion for special duties. He was 28.
- **1981** - Special Warrant Officer Antonio Chiwale from the South West Africa Police Counter-Insurgency Wing: Ops-K Division (Koevoet) was Killed in Action during a contact with SWAPO/PLAN Insurgents in Northern Owamboland.
- **1982** - Rifleman Daniel de Klerk from 4 SAI was Killed in Action during a contact with SWAPO/PLAN insurgents. He was 19.
- **1982** - Private Wayne Peter Lourens from 86 Technical Stores Depot went for dental treatment in Bloemfontein. After receiving a dental injection, he suddenly lapsed into a coma and was rushed to hospital where he later died. He was 21.
- **1982** - Three members from 202 Battalion SWATF were Killed in Action during a contact with enemy Forces in Southern Angola. They were: Rifleman G. Muronga (24). Rifleman A.H. Kudumo (25). Rifleman L. Kudumo (26).
- **1983** - Sergeant Alberto Costa from the South West Africa Police Counter-Insurgency Wing: Ops-K Division (Koevoet) was Killed

in Action during a contact with SWAPO/PLAN Insurgents in Northern Owamboland. He was 25.

- **1984** - Rifleman Craig Rudolph Olivier from the Durban Light Infantry died in 1 Military Hospital after being critically injured in a military vehicle accident. He was 22.
- **1987** - Two members from 111 Battalion were killed in a military vehicle accident on the Carolina Road approximately 30 km from Amsterdam. They were: Rifleman Menzie Albert Moyo (22). Rifleman Passport Johannes Zulu (21).
- **1994** - The UN arms embargo on South Africa is finally lifted following the election of Nelson Mandela as president of the government of National Unity.
- **1997** - Rebels topple the government of Sierra Leone in a violent coup.

26 May

- **1940** - The Dunkirk evacuation began in order to save the British Expeditionary Force trapped by advancing German armies on the northern coast of France. Boats and vessels of all shapes and sizes ferried 200,000 British and 140,000 French and Belgian soldiers across the English Channel by 2 June.
- **1940** - The Crown detains British Fascist Oswald Moseley.
- **1942** - North Africa: Rommel attacks the Gazala Line.

- **1967** - Egyptian premier Gamal Abdel Nasser vows to destroy Israel if war is provoked.
- **1971** - Eleven SAAF members, nine from 21 Squadron and two from 24 Squadron were killed when a formation of three Hawker Siddeley Mercurius HS125 aircraft flew into the side of Devil's Peak during an aircraft formation practice rehearsal for the Republic Day 10th Anniversary celebrations in Cape Town. The casualties were: Major Michael Christiaan de Graaff Genis (37). Captain Daniel du Plessis Lombard (37). Commandant Lourens Adrian Francois Henning (40). Major George Johannes Euvrard (32). Major Nico Beetge (31). Captain Gerald Nicol Snyman (27). Major Herwie Herman Albert Cornelius Lamoral (37). Major Willem Abram Prinsloo (37). Corporal Reiner Nicolaas Grobler (24). Lance Corporal Eugene Hayes (22). Private



Oswald Moseley

Gerhardus Hermanus Waserman (21).

- **1972** - US-USSR sign SALT I (Strategic Arms Limitation Treaty).
- **1973** - Rifleman Jeffrey Gerald Holm from 1 Parachute Battalion was killed in a military vehicle accident, in Eastern Caprivi. Jeffrey was the first SADF soldier to die on service in the Border area after the SADF took over the border area protection role from the South African Police. He was 19.
- **1977** - Rifleman Charles Henry Janse van Noordwyk from 3 SAI was killed after suffering multiple shrapnel wounds in an accidental hand grenade explosion at Potchefstroom. He was 18.
- **1977** - The Shaba War in Zaire comes to an end.
- **1980** - Rifleman Johannes Stephanus van der Merwe from Sector 10 Headquarters was killed when he was struck by a bullet resulting from an accidental discharge of a fellow soldiers rifle while serving at Oshakati. He was 20.
- **1986** - Rifleman Ivan Conradie from the South African Cape Corps, attached to Sector 10 Headquarters, was killed in a military vehicle accident at Oshakati. He was 21.
- **1987** - Corporal Willem Johannes Gysberg Venter from Northern Transvaal Com-

mand was killed in a military motor cycle accident at Cullinan. He was 21.

- **1989** - WO1 Roland Stanley Sheppard from South West Africa Medical Command was killed in a Military Vehicle Accident on the Tsumeb-Ondangwa Road. He was 50.
- **1991** - South African Air Force pioneer Major-General Ken van der Spuy, veteran of both world wars and holder of fourteen decorations from several countries, dies at the age of 99.

27 May

- **1900** - Second Anglo-Boer War: General Lord Roberts crosses the Vaal River and occupies the town of Vereeniging.
- **1918** - Battle of the Aisne: Allies begin pressing back the Germans.
- **1941** - World War II: North Africa. General Erwin Rommel, now reinforced with the 15th Panzer Division, recaptures Halfaya Pass.
- **1941** - The Royal Navy sinks the 'Bismarck'.
- **1956** - The Casbah area of Algiers is sealed off as French troops search for weapons caches.
- **1969** - Two members of 28 Squadron were killed instantly when the private motorcycle they were riding crashed at the notorious "Death Bend" in Johannesburg. They were: Air Sergeant Terence McKelvin (24). Air Mechanic Anthony

- Edward Dwyer (20).
- **1980** - RENAMO denies in Lisbon that the movement is receiving assistance or supplies from South Africa.
- **1981** - Rifleman Terence Rodney le Roux from 5 SAI was Killed in Action while on patrol from Etale base close to the Charlie pipeline. He was 22.
- **1990** - Signaller Alan Vernon Campbell from 2 Signal Regiment was killed in a military vehicle accident on the Pietersburg Highway. He was 21.

28 May

- **1900** - Second Anglo-Boer War: The annexation of the Orange Free State is announced by Lord Roberts, and back-dated to coincide with the Queen's birthday on 24 May.
- **1924** - A serious peacetime air force accident takes place when a 20-lb bomb falls from a military DH9 bomber, which was damaged during a forced landing at Kuruman. The bomb explodes among a crowd of spectators, killing three and injuring thirty-nine.
- **1940** - King Leopold III surrenders Belgium to the Germans.
- **1940** - Norway: Anglo-French forces capture Narvik.
- **1941** - World War II: General Jan Smuts, premier of SA, becomes a field marshal of the British army.
- **1942** - World War II: North

Africa. Colonel General Erwin Rommel begins his third offensive to push the British back into Egypt: Operation 'Venezia'.

- **1970** - Private Bartholomeus Stephanus Diedericks from the Technical Service Corps was killed in a military vehicle accident. He was 18.
- **1978** - Candidate Officer Stephanus Rudolph Strydom from the Infantry School Instructor Group was killed after being struck by a bullet resulting from an accidental discharge of a fellow soldier's rifle while at Grootfontein. He was 20.
- **1979** - Special Warrant Officer David Gabriel from the SWA Police Counter-Insurgency Wing: Ops K Division (Koevoet) was driving from Ondangwa to Oshakati and gave a lift to a man who, unknown to him, was a member of SWAPO/PLAN. Halfway to Oshakati Warrant Gabriel stopped alongside the road to relieve himself, leaving his FN rifle in the vehicle with the passenger. The SWAPO/PLAN passenger took the rifle and shot him dead before successfully making his escape. He was 36.
- **1980** - The first 55 women graduate from the U.S. Naval Academy.
- **1983** - Lance Corporal Frank Pieter Leendert van der Bijl from 101 Field Workshops was killed after he accidentally fell under the wheels of a moving Samil truck. He was 20.

- **1984** - Signaller Daniel Hendrik Klue from the South African Corps of Signals was killed in a military vehicle accident at Olifantshoek. He was 19.
- **1985** - Lieutenant Michael Robert Borthwick from the Personnel Services Corps was killed in a Military Vehicle Accident on the Pietersburg Highway. He was 27.
- **1985** - Two members from the SWA Police Counter-Insurgency Wing: Ops K Division (Koevoet) were Killed in Action during a contact with SWAPO/PLAN insurgents in Northern Owamboland. They were: Constable Johannes Jurgens Vos (20). Special Constable Frans Bajiyu (24).
- **1986** - Trooper Johann Pretorius from 1 Special Service Battalion was Killed in Action when his armoured car detonated a landmine near the Cut-line. He was 21.
- **1991** - Ethiopian rebels seize Addis Ababa.

29 May

- **1900** - Second Anglo-Boer War: General Louis Botha visits Johannesburg two days before British occupation and asks the residents not to resist and not to destroy the gold mines.
- **1900** - Second Anglo-Boer War: The Battle of Klipriviersberg or Doornkop starts.
- **1945** - Okinawa: the 5th Marines storm Shuri Castle.
- **1981** - Lieutenant Jeremy

- John van der Wath from 42 Squadron was killed instantly while flying Atlas AM3C Bosbok, Serial No. 958. The aircraft crashed near Eenhana while flying low level ration drops over a shona. He was 20.
- **1981** - Lieutenant Immo Klaus Kruger from 32 Battalion was killed after suffering multiple shrapnel wounds in an accidental hand grenade explosion in the 32 Battalion training area. He flung himself onto the hand grenade to protect those around him. He was 25.
- **1982** - Lance Corporal Adam Cecil Lennox from 5 Reconnaissance Regiment died at Phalaborwa as a result of an accidentally self-inflicted gunshot wound to the head while playing with a privately owned revolver. He was 18.
- **1983** - Rifleman Noreneus Philipus from 101 Battalion SWATF was Killed in Action during a contact with



Georg Meiring

- SWAPO/PLAN insurgents near the Cut-Line. He was 23.
- **1984** - WO1 Willem de Ruyter Genis from Northern Logistics Command was killed in a military vehicle accident at Grootfontein. He was 48.
- **1990** - Private Charl de Villiers from the Technical Service Corps was accidentally killed in Pretoria when his Ratel overturned on the road in front of Special Forces Headquarters. He was 19.
- **1998** - Accepting a seventeen-gun salute, outgoing South African National Defence Force (SANDF) chief, General Georg Meiring, formally hands over command of the SANDF to Lt Gen. Sphiwe Nyanda in the sports stadium in Thaba Tshwane, Pretoria.

30 May

- **1815** - The British troopship Arniston is wrecked on the rocks at Waenhuiskrans (later called Arniston). 372 of the 378 people on board are drowned.
- **1900** - Second Anglo-Boer War: Lady Edward (Violet) Cecil writes to Lord Salisbury on the conditions in Bloemfontein: "Far more people have been killed in our hospitals than by Boer bullets... Men are dying by the hundreds who could easily be saved."

- **1902** - Second Anglo-Boer War: The officially reported camp population of the White concentration camps is 116,572 and the deaths for May are 196.
- **1902** - Second Anglo-Boer War: The officially reported Black concentration camp population in the sixty-six Black camps reach 115,700. 523 deaths are recorded for May. The total recorded deaths are calculated at a minimum of 14,154 (more than 1 in 10). 81% of the fatalities are children.
- **1941** - The Luftwaffe bombs Dublin.
- **1942** - First Allied air raid on Cologne.
- **1942** - World War II: East Africa. Japanese submarines shell Sydney and Diego Suarez naval bases on Madagascar.
- **1966** - 300 US airplanes bomb North Vietnam.
- **1967** - Egypt's President Gamal Abdel Nasser and Jordan's King Hussein sign a mutual defence treaty, prompting Israel to strike pre-emptively a week later, starting the Six-Day War.
- **1970** - 2nd Lieutenant Johannes Jacobus Theron from 4 Artillery Regiment was killed in a military vehicle accident at Messina. He was 19.
- **1974** - South Africa tells Britain that unless the Wasp helicopter is delivered, the Simonstown Agreement on naval cooperation will have to be reviewed.

- **1982** - Spain becomes the 16th member of NATO.
- **1997** - US Marines evacuate 900 civilians from Freetown, the capital of Sierra Leone, wracked by looting and violence after a military coup.
- **2003** - The UN Security Council votes unanimously to send a peacekeeping force to Congo's north-eastern Ituri province. The European Union approves the force to restore order and security in a region plagued by violence among ethnic militias.
- **1916** - The Battle of Jutland: The British Grand Fleet wins a strategic victory over the German High Sea Fleet, which never goes to sea again.
- **1937** - German ships bombard Almeria, Spain, retaliating for an accidental air attack on a German warship.
- **1943** - World War II: North Africa. Charles de Gaulle and Henri Honoré Giraud set up the Committee of National Liberation in Algiers to represent France until the end of the war.
- **1962** - Adolf Eichmann, war criminal, is hanged in Israel at the age of 55.
- **1966** - The Republic of South Africa celebrates its fifth anniversary with a massive military demonstration in Pretoria. A crowd of more than 500,000 sees nearly 20,000 troops and 200 aircraft take part in the proceedings.
- **1966** - Brigadier Jan Harmse Burger SM OBE from 16 Combat Group collapsed and died after suffering a fatal heart attack while attending a Parade at Voortrekkerhoogte. He was 49.
- **1977** - Salisbury announces that Rhodesian troops have captured and occupied the town of Mapai, 100 km inside Mozambique.
- **1978** - Lance Corporal Yvan Mark L'Hoest from 1 SAI Died of Wounds in 1 Military Hospital after suffering

31 May

- **1900** - Second Anglo-Boer War: British troops under Lord Roberts enter Johannesburg as the Boers withdraw to Pretoria. The British flag is hoisted in Johannesburg.
- **1901** - Second Anglo-Boer War: At Vlakfontein (the present day Derby), General Kemp attacks Brigadier-General Dixon and captures the field guns. Dixon launches a counter-attack and Kemp withdraws.
- **1902** - Second Anglo-Boer War: Boer delegates at the Vereeniging national delegation agree fifty-four to six to accept the British proposals for peace. Representatives of both sides at Melrose House, Pretoria, sign the Treaty of Vereeniging.
- **1915** - Zeppelin 'LZ-38' makes the first airship raid on London, dropping 1.5 tons of bombs, killing seven people

Adolf Eichmann



- multiple shrapnel wounds in an accidental hand grenade explosion in Northern Owamboland. He was 20.
- **1982** - Corporal Mario Jose from 32 Battalion was Killed in Action during a contact with enemy forces in Southern Angola. He was 26.
- **1984** - Rifleman Kevin James Morrow from Regiment Port Natal was killed in a military vehicle accident on the road to Ondangwa. He was 29.
- **1991** - The civil war in Angola ends officially after seventeen years, though fighting still occurs occasionally.

The Sunday Breakfast Zone



Catch Military Despatches editor Matt Tennyson every Sunday morning from 09h00 to 12h00 on the 'Sunday Breakfast Zone' on Zone Radio. Bringing you the best music of the 60s, 70s and 80s.

On Sunday morning at 09h30 you can catch the Retro Top 20 and listen to the Top 20 hit singles on the South African charts for a particular week or even a particular year.

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Click on any of the frequency numbers on the right to go to the relevant page.

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6. Books written by members
7. Donations
8. Events and notices
9. Photo gallery
10. Useful links





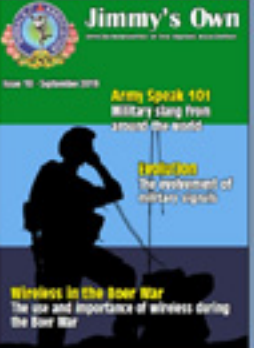
Certa Cito

Certa Cito, Certa Cito, there's the corps for you. Worries over, Jimmy hurry, get the message through. Green and blue your colours, head and sea and air, while your guide ways through the ether take the message there.

Certa Cito, Certa Cito, there's the corps for you. Worries over, Jimmy hurry, get the message through.

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Read the latest issue of 'Jimmy's Own', the Signal's Association official newsletter, by clicking on the cover on the right.



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Rocket & Missile Launchers

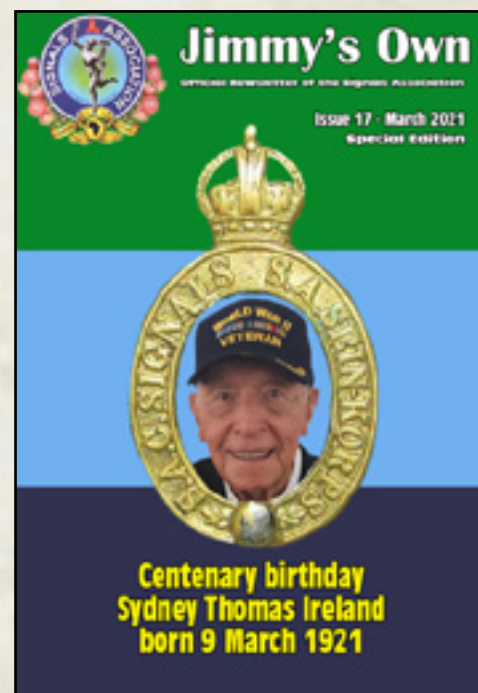
1. M2 Law (USA)
2. Panzerschreck (Germany)
3. SA-7 Grail (Russia)
4. Bazooka (USA)
5. M141 SMAW-D (USA)
6. RPG-7 (Russia)
7. Carl-Gustaf (Sweden)
8. Panzerfaust (Germany)
9. PIAT (Britain)
10. BGM-71 TOW (USA)
11. RPG-29 Vampir (Russia)
12. FGM-148 Javelin (USA)
13. MILAN (France)
14. MATADOR (Britain)
15. FIM-92 Stinger (USA)



Useful links

Every month we will be featuring a few useful links to military websites, newsletters and on-line magazines. Stuff that we think our readers will appreciate.

Here are two of our favourites. The first one is Nongqai, the unofficial police newsletter for veterans of the former South African Police Force and for those interested in Police History. The second is Jimmy's Own, the official newsletter of the South African Signals Association. Click on the magazine covers to go to the respective websites.



Military Despatches Website



"Things don't have to change the world to be important."
Steve Jobs



Our aim is to make the Military Despatches website easy to use. Even more important to us, we want to make the website informative and interesting. The latest edition of the magazine will be available, as will all the previous editions. More over, there will be links to videos, websites, and articles that our readers may find interesting. So check out the website, bookmark it, and pass the URL on to everyone that you think may be interested.



Have you checked out the bookshelf on the website? Here you can open and read individual articles on screen with no need to download anything.

You will find articles on numerous different topics that have been published over the past two years as well as video clips and documentaries.

Hipe!

media

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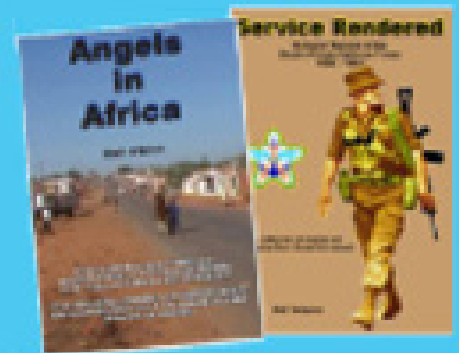
Online Magazines

Flip book magazines with pages that can be turned.



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Produced in any electronic format required.



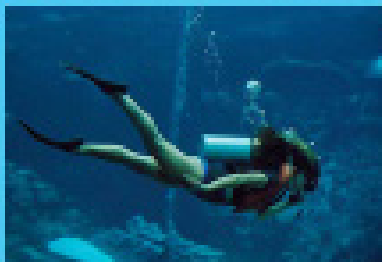
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