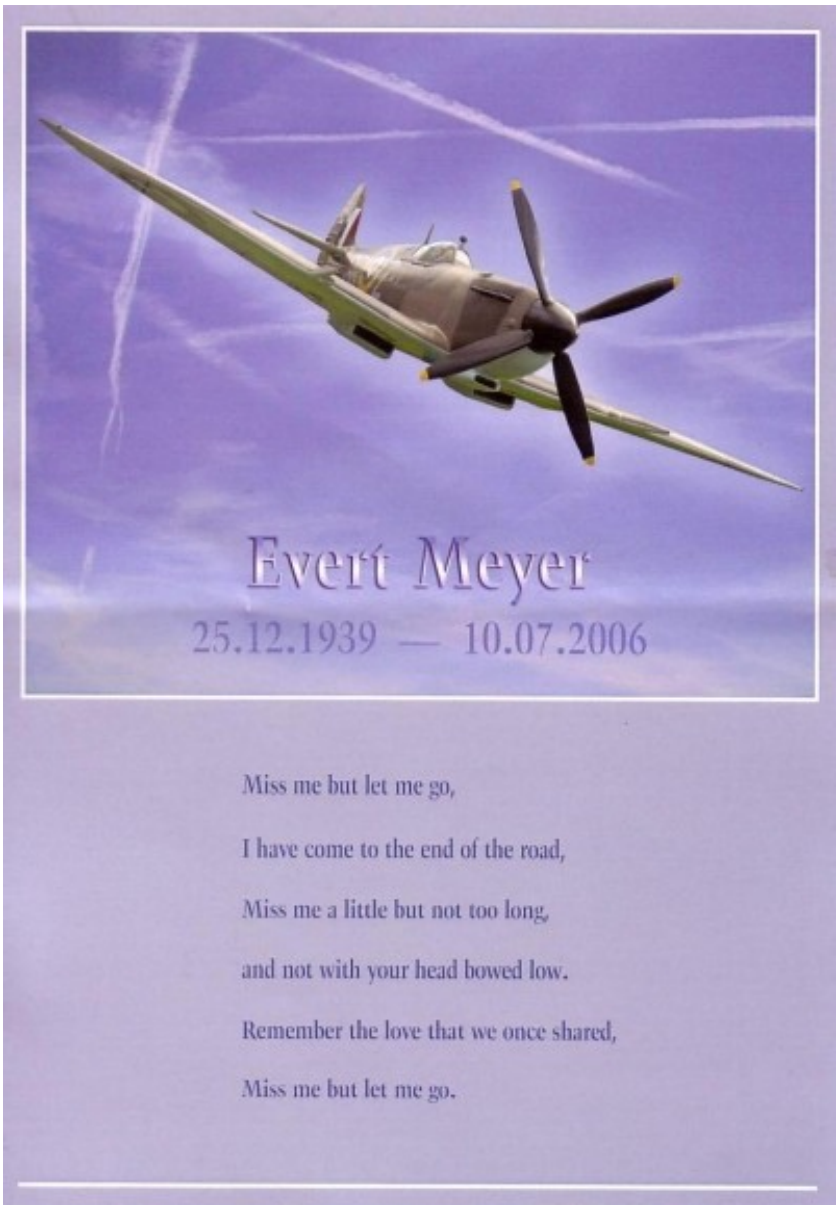
the Stringbag

official magazine of
friends of the SAAF Museum

SEPTEMBER
2006



This issue is Dedicated to
Evert Meyer

2006/7 COMMITTEE MEMBERS OF THE PRETORIA BRANCH OF THE FRIENDS OF THE SAAF MUSEUM

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CONTENTS

Note: All the Artworks fill-ins were done by Evert.

All written contributions for future editions of 'The Stringbag' would be gratefully appreciated— contact the Editors / Gophers: Phil and Wally (Jnr.)

When sending e-mail please specify in Subject Line : "Stringbag Articles"

Issue No. 7 (NATIONAL)

In Remembrance

EVERT MEYER

Born : 25 December 1939
Died : 10 July 2006

A lot of people who knew Evert will read this and may disagree with me.
This is my story of the last two years.
Evert moved in with Michelle and I about two years ago. The reason he moved was of a personal nature and also because we thought that we could look after him better than what he was used to.
Evert lived for the Museum and his Artwork and what he could do to promote the Museum. Once, before he moved in with us, he was supposed to duty one Saturday. He arrived at the plot as sick as a “dog”. He blamed it on some cocktail sausages he had had at his favourite pub the previous evening. He drove through from Jo’burg even though he was so sick that he should not have been behind the wheel of a car. This was an indication of the dedication that he had.
He was someone who would not think of hesitating to charm. Total strangers were no problem . Whoever met him was immediately impressed by him because of his love of what he was doing. He had a special way of treating people which I hope to achieve one day.
During these last two years, he taught all of us how to be human and how to be kind to others. I never once heard him say a bad word about anybody.
During the last months of his life, he never complained once about anything. Today I realise what he must have being going through. I once threatened to kick his butt because of what I perceived to be laziness. Not once did he complain of the pain which he must have been going through. I have mentioned this to friends and family and all agree that in my own Stupid way, I was trying to motivate him to do what he did best. Evert, will be missed by all who knew him and the contribution he made to Pretoria Branch of the Friends will most definitely be missed.
Evert, we will never forget You.
Arthur, Michelle and everyone on the plot.

Condolences

Hello girls (also Angie, Stephi, Brandon and Nicole)

We will miss Evert very much and we feel for you all in your time of loss. The whole family this side is thinking of you in your sadness and will pray for you.
We hope he finds peace at last.
With love and sincere, deep sympathies from
Aunthy Max and Ken (U.K.)

Dear Debby and June

I am very saddened, as you both surely are, at the loss of Evert, (your adoptive father, June) (and grandfather of Stephi and Angie), in the prime of his life. I feel I must ask you to please accept my heartfelt sympathies in your time of bereavement. I can only say, hopefully as a source of comfort to you all, that at least he is now out of harms way and released from all pain and suffering, at peace at last. I know he must have suffered greatly over the past few years, the loss of your mother not helping his strength of mind either.
His artistic talents will be sorely missed and his great sense of humour more so. I hope your memories of him will be coloured with all the beauty he was able to create within your lives, and those of others.
He was a pleasure to know and I wish him peace, now.
Please let me know when his funeral is.
Again, my thoughts are with you in your troubled times.
With love and kind thoughts,
Granddad (U.K.)

Thanks for letting me know about Evert. I was shocked and shed a silent tear for a very dear Friend. Evert was truly a Friend in every sense of the word. A jovial and loyal Friend to all who knew him and a very loyal and conscientious Friend of the Museum. I am sure you will all miss him every Saturday at the Clubhouse. The American Indians believe that the quality of Heaven you go to when you die, is proportional and dependant on how those you have left behind, remember you. Evert is with Wendy and they are in a wonderful place.

Love and regards to all,
Willie and Natie Burger (Velddrif)

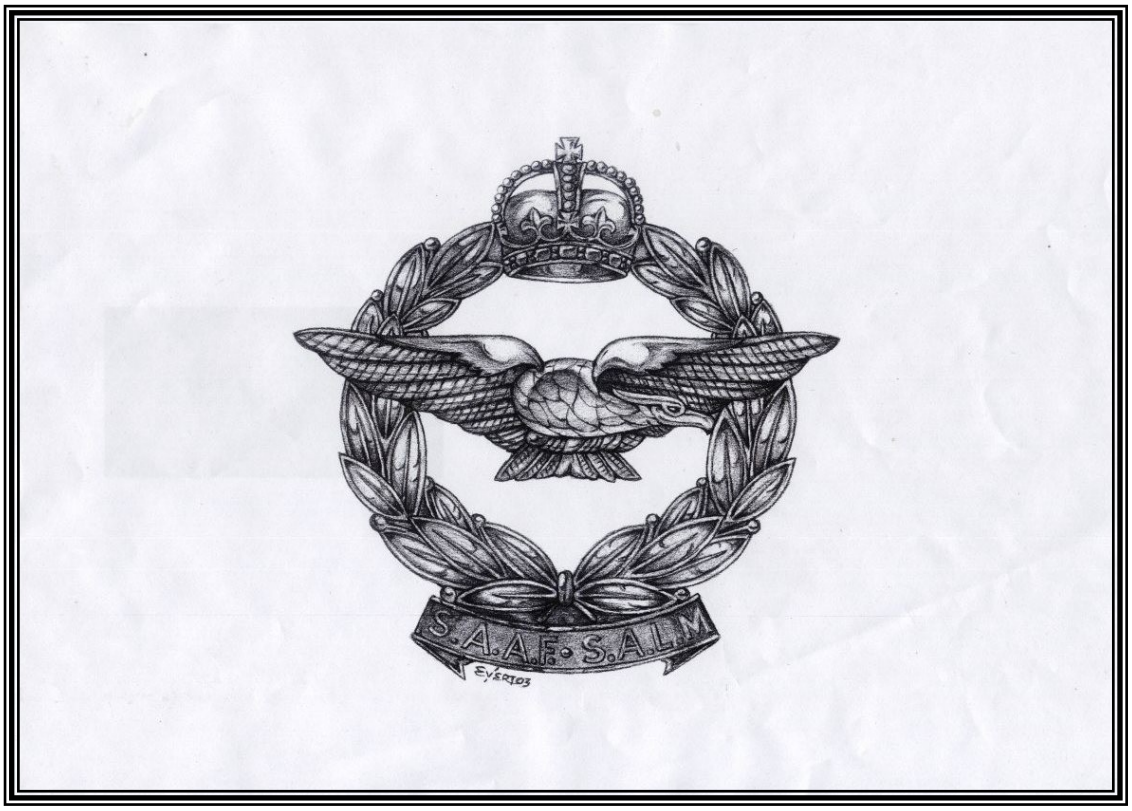
I would be very appreciative if someone would convey our sympathy and prayers to those left behind. We were privileged to know Evert and to spend time with him, however short. His attitude to life and his courage in the face of adversity and sorrow, are an inspiration to all of us. His greatness lies in what he has taught all of us about attitude, and what he passed on to us about attitude, during the relatively few years that he spent on this earth. Thank you Evert for the time! Our lives have been brighter because of your light.

Carol and Neil Thomas (Centurion)

Please give my condolonces to Evert's family.

Kind regards
Greg Pullin—Cape Town Friends)

I was so shocked when Gordon told me of Evert's passing.
I didn't know he was ill, he looked well when I last saw him.
Still cant believe. (Guess that's life)
Thank you so much for the mail.
Will see you Friday.
Roedi Brits (North Riding)


S.A.A.F. S.A.L.M

SQUAWKS

Short Final

Seeing is believing... Overheard while in the pattern at FNT:

Tower: N12345 traffic at your one o'clock.

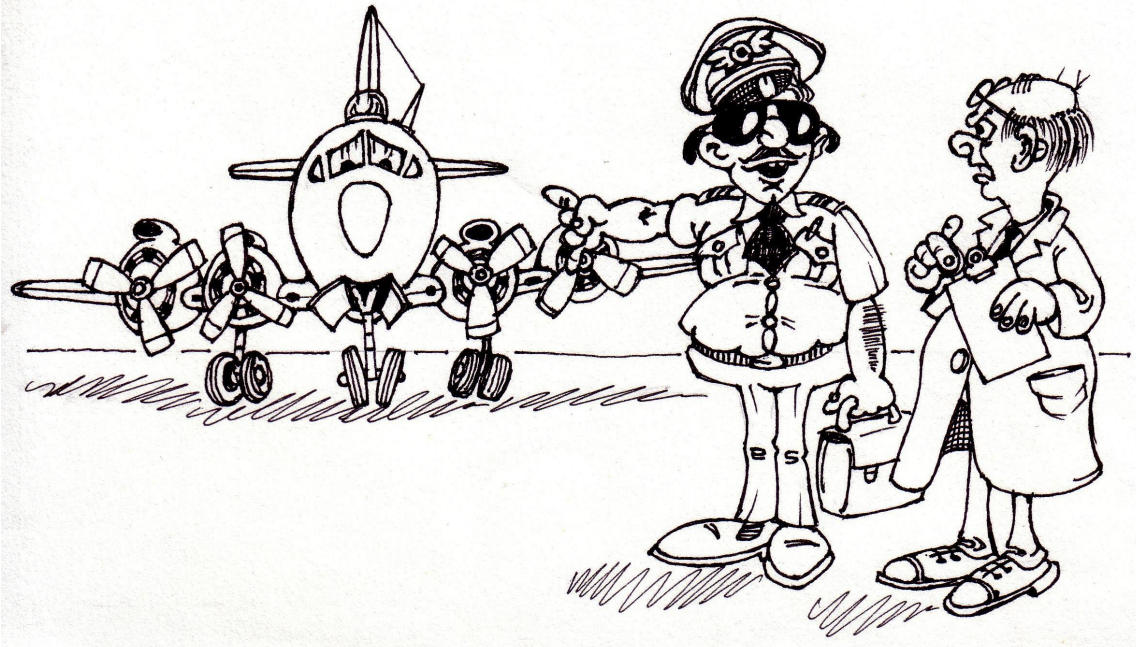
N12345: Looking for traffic.

(long pause...)

Tower: N12345 traffic now ... your traffic at three o'clock.

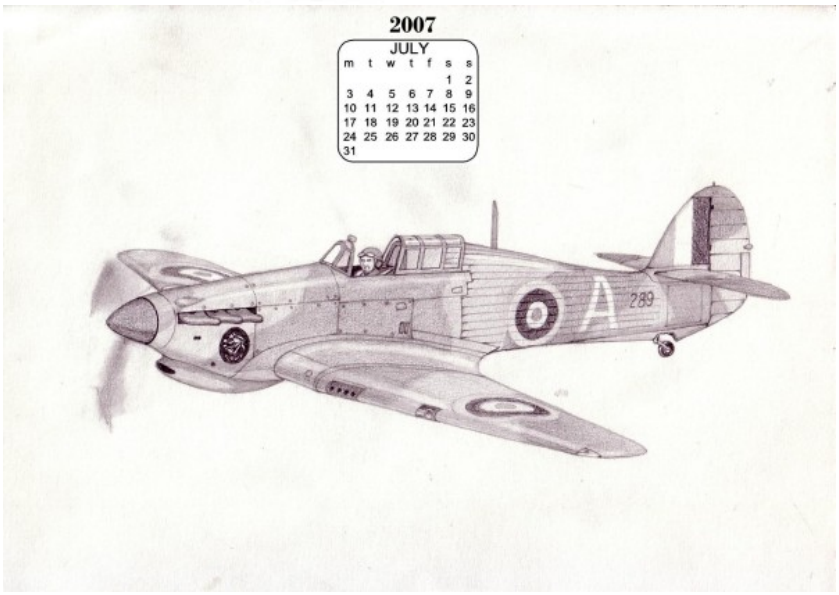
N12345: Still looking. I only see birds over there.

Tower: Well, look close. One of them has a transponder in it.



Club Doings, All Kinds of Everything.

By the time you receive this newsletter the new year's calendars will probably be at the printers. This year we are releasing a Desktop Calendar as well as an A3 bi-monthly calendar. Be sure to place your orders to avoid disappointment.



There will also be a twenty page Aircraft Colouring Book available soon featuring the 'Toons' which were done by Evert for the Clubhouse curtains. This product has the blessing of a newly established website "Webcats" and will be marketed by the site. Here's a preview of one of the pages:

Country of Origin: Great Britain Role: Fighter Max speed: 580 km/h Range: 1360 km (with drop tank)

I Remember Evert.

The passing of a friend of forty year standing, colleague and confidant, well informed on S.A.A.F. knowledge, without having served in the defence force. This was part of the motivation of his being, he will be greatly missed in our midst. He has departed to his Wendy, a new B.M.W. motorcycle and a big American V8 automobile.
Go in peace OuBoet.

George.

Evert sharing his knowledge!

More Club News.

We have had little or no response to the urgent request for helping hands, I am sure a place can be found for your expertise and vast knowledge of fixing, restoring, painting etc. etc.

Yvonne and Terry Cawood have been busy looking after seminars in the auditorium. Bryan Bailey delegating, and working, overseeing projects.

We need to start thinking of our end of year function, any suggestions please.

24/6/2006—Louwtjie Vosloo had a computer air combat demonstration in the lecture room, all via internet. Most of these members had never met in person, only spoken over the internet. It is quite amazing what can be done with modern technology.

Introduction to a Series of Articles by Stan Clarke

Ken Smy brought to my attention that he had located a couple of the late Stan Clarke's files in the Museum's library. The contents pertained to the Friends Finance when Stan was Treasurer in the early late 1980's and early 1990's.

Stan spent a couple of days a week in the library going through the many logbooks gather data re Aircraft serials, locations, dates, etc. Amongst the files I found number of articles meticulously typed-up by Stan about some characters he encountered in these logbooks. I have not edited them, so bear in mind they were written in the early 1990's.

In this issue we present **A MOST UNUSUAL LOGBOOK!!** by Stan Clarke

During mid 1990, retired Combat General JSJ "Sterk Jan" van der Merwe, contacted me to say that he had made a most interesting and unusual find - a Logbook. If I could determine what had happened to the probable owner (and there was no objection), I could have the Logbook to evaluate and then donate same to the SAAF Museum.

Fairly soon after World War II, Gen. Van der Merwe purchased an old work-bench from the then Major or Lt Col (Technical) JOE MAYHEW. Some 45 years later (i.e.: during April 1990), Gen. Van der Merwe found a flying logbook tucked away at the back of one of the drawers of this bench. There is no name in the logbook, but it covers a flying career from October 1924 to June 1938. Could it be that of Joe Mayhew?

I tried to ascertain the position re Joe, but it would appear that he passed away in 1988, leaving no close next-of-kin. This information was passed back to Gen. Van der Merwe who then decided to hand me the Logbook for evaluation and donation to the SAAF Museum.

If this is Joe's logbook, then we have a most unusual situation. In 1924, Joe was a Sgt Major (Technical) and only officers were allowed to fly SAAF aircraft and wear SAAF wings. Joe was taught to fly (unofficially [?]), by Capt. Daniel (Hector it would appear to be). The position was made official in Air Directorate Order No. 24, dated 18 June 1926 and he was granted SAAF wings with effect from 14 June 1926. Was Joe the only PF WO to wear SAAF pilots' wings?

The first flight was at 06:30 on 23 October 1924, in Avro 504K (No. 407), with Capt. Daniel as pilot. First solo (5 minutes duration), was again in Avro 504K No. 407, on 18 December 1924. His last official flight was solo in a Hawker Hartbees (No. 831), at 17:35 on 24 June 1938. The flight lasted 75 minutes. A total of 695 flying hours in SAAF aircraft was recorded at this time.

From October 1929 to June 1932, he was an active member of the Defence Light Aeroplane Club and many flights are recorded. These flights were mainly dual instruction or "flipping." The aircraft being used were DH.60 Moths and Avro Avians. However, he does not give aircraft registration letters for any of these flights. The total flying time with the Club was 310 hours 20 minutes.

His overall total flying time was, therefore, 1005 hours and 20 minutes.

The list of aircraft reflected in the Logbook, shows that he flew all four aircraft types that formed the Imperial Gift (i.e.: Avro 504K, Airco DH.4, Acrid DH.9 and Royal Aircraft Factory SE.5). For some 10 years, he was stationed at the Artillery and Aircraft Depot. During this period, he records flying the re-engined Avro 504 (called the 504N - with the Lynx engine) and the re-engined DH.9 (called the DH.9J - with the Jaguar engine).

He was also one of the first to fly the Avro Avian (with the Genet engine), which replaced the Avro 504 as the SAAF trainer.

He also flew the second generation aircraft types (Avro Tutor, Westland Wapiti and Hawker Fury). He also had an opportunity to fly the Hawker Hartbees and Hawker Hart.

An interesting and somewhat unusual story! If anyone can perhaps add anything or perhaps clear up some aspects of the mystery, I would be most pleased to hear from them

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Important Dates in Aviation History!
(Continued)

1926 Richard E. Byrd and Floyd Bennett of the United States made the first airplane flight over the North Pole.
1926 Private airlines took over carrying airmail from the U.S. Post Office Department.
1927 Charles A. Lindbergh, a U.S. pilot, made the first solo nonstop transatlantic flight. He flew 3.610 miles from Garden City, N.Y., to Paris in 33 ½ hours.
1927 The Lockheed Vega, a single-engine transport, flew for the first time. It became one of the most popular transport planes of the 1920's and early 1930's.
1927 American Railway Express began air-express service.
1928 Charles Kingsford Smith and his crew made the first flight across the Pacific. They flew from Oakland, Calif., to Brisbane, Australia, with stops at Honolulu, Hawaii, and Suva, Fiji.
1929 Richard E. Byrd of the United States and his crew made the first flight over the South Pole.
1930 Trans World Airlines started the first transcontinental airline service. The trip took 36 hours with an overnight stop in Kansas City.
1931 Two U.S. pilots, Clyde Pangborn and Hugh Herndon, made the first nonstop airplane flight across the Pacific. They flew from Tokyo to Wenatchee, Washington.
1932 Amelia Earhart of the United States was the first woman to fly across the Atlantic Ocean alone. She flew from Harbour Grace, Nfld., to Londonderry, Ireland, in 15 hours 18 minutes.
1933 Wiley Post, a U.S. pilot, made the first solo round-the-world flight, covering 23,452 miles in 3 days 22 hours 1 minute.
1936 Douglas DC-3 transport planes entered airline service in the United States. They became the most widely used airliners in history.
1936 United Airlines established the first kitchens for serving meals in flight.
1936 Pan American World Airways inaugurated the first transpacific passenger service.
1938 The U.S. Congress established the Civil Aeronautics Board to regulate airline fares, routes, and schedules.
1939 The first successful flight of a jet-engine airplane took place in Germany.
1939 Pan American World Airways established the first regular transatlantic passenger service from New York City to Southampton, England.
1942 The Bell Aircraft Company built the first jet airplane in the United States. It was flown by Robert M. Stanley at Muroc Dry Lake, Calif.
1946 Airlines established flights for around-the-world passenger service.
1947 Charles Yeager, a U.S. Air Force captain, made the first supersonic flight, in a Bell X-1 rocket plane.

1952 De Havilland Comets, the world's first large commercial jetliners, began service.
1953 British Overseas Airways began the first regularly scheduled service with jet airliners.
1953 The first turboprop transport, the Vickers Viscount, began regular airline service.
1953 The North American F-100 Super Sabre jet fighter made the first level supersonic flight by a jet plane.
1953 TWA began the first nonstop, transcontinental passenger service from Los Angeles to New York City.
1954 Scandinavian Airlines began regular transarctic passenger service from Los Angeles to Europe.
1958 The Boeing 707 began the first U.S. jet transport service between the United States and Europe.
1958 British Overseas Airways began the first jet airliner service between the United States and Europe.
1958 National Airlines began the first U.S. jet airliner service.
1959 American Airlines began the first transcontinental jet airliner service.
1967 United Airlines put into service the first airliners capable of carrying over 200 passengers.
1968 Russian pilots test-flew the world's first supersonic transport plane, the Tu-144.
1968 The first direct airline service opened between the United States and the Soviet Union.
1970 The first jumbo jet, the Boeing 747, entered airline service.
1970 The first giant Boeing 747 went into operation for Pan American World Airways. It carried 362 passengers.
1976 Air France and British Airways put the first supersonic airliners into passenger service.
1978 The U.S. Congress passed the Airline Deregulation Act.
1978 The first balloon flight across the Atlantic Ocean.
1984 Brooke Knapp, a U.S. pilot, flew around the world in a record time of 45 hours 32 minutes 53 seconds.
1984 The Civil Aeronautics Board was dissolved.
1986 Richard Rutan and Jeana Yeager, two U.S. pilots, made the first nonstop flight around the world without refuelling. The flight began and ended at Edwards Air Force Base, Calif.
1999 First flight of a hot-air balloon around the world.

WHY DOES AN AIRPLANE FLY?

Although nothing is mind-boggling or mysterious about flying, there is much, to learn - just as there is in learning to drive a car. As you learn to fly step by step you'll find your training enjoyable and challenging.
Although airplanes have been a part of our society for more than 85 years, most people have only a vague idea of the basic principles of flight. Flight may seem complicated, but in fact it's based on some simple laws of nature.

The principle of lift

When you examine a cross-section of an airplane's wing, or airfoil, you'll notice that the top part is curved and the bottom part is relatively flat. This special shape creates lift, which makes the airplane fly.
As the wing moves forward, the air flowing over the top travels faster than the air flowing beneath, resulting in a lower pressure area above the wing. The relative pressure differential provides the Upward force called lift. Lift is basic to flying.

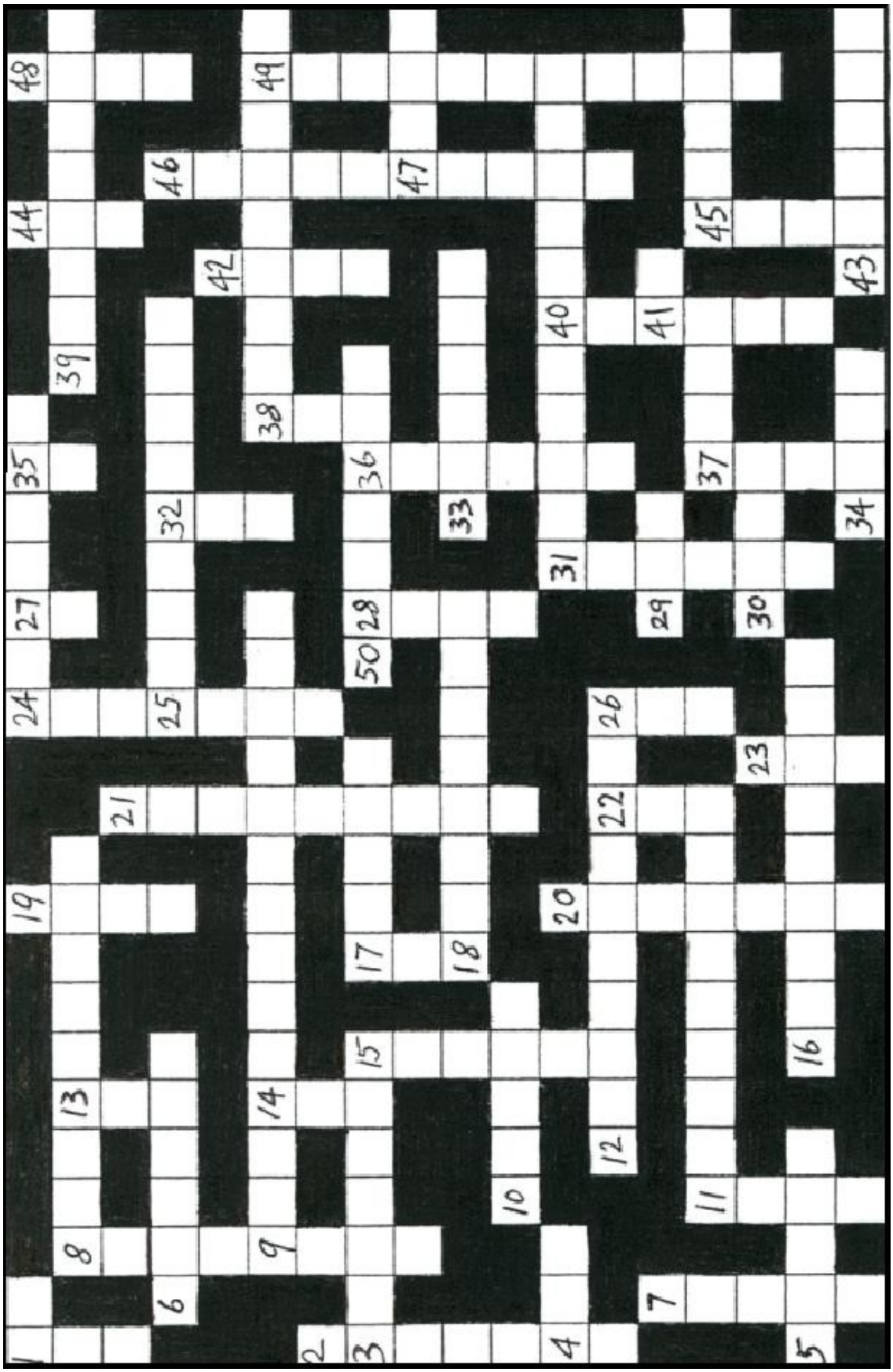
Lift and gravity

In order for an airplane to climb, lift must be greater than gravity, the force that holds objects on the earth. For an airplane to maintain level flight at a particular altitude, lift and gravity must be the same, or in equilibrium. When gravity is greater than lift, the airplane will descend.
An airplane, of course, is more than a wing, a propeller, and an engine. The body of the airplane, which holds the pilot, passengers, and baggage, is called the fuselage. The tail of the airplane is called the empennage, and it consists of the horizontal and vertical surfaces called stabilizers. They create the stability necessary to use the lift and thrust created by the wing and the engine-driven propeller. Parts of the wing, horizontal stabilizer, and vertical stabilizer are moveable to provide the pilot with the means to control the airplane. These control surfaces are called ailerons on the wings, elevators on the horizontal stabilizer, and rudder on the vertical Stabilizer. You'll become as familiar with the workings of these different parts as you are with the operation of a car.

Thrust and drag

As an airplane moves forward, the wing produces lift. The force of forward movement is called thrust, and it's created by the engine-driven propeller or a jet engine.
Like the wing, the propeller is also an airfoil. As it rotates, it creates "lift" in a forward direction that is called thrust. Thrust overcomes drag (resistance of an object toward movement).
When thrust is greater than drag, during takeoff, for instance, the airplane's speed increases. When thrust and drag are equal, the airplane maintains the same speed. Whenever drag is greater than thrust, the plane slows down.
Lift, gravity, thrust, and drag are the four forces acting upon the airplane. You'll learn to understand them thoroughly as you advance in your study of flight.

Frans' Crossword Puzzle



Frans' Crossword Puzzle

ACROSS

1 Chief of museum
3 Old SAAF trainer
4 Aeroplane needs it to fly in
5 Used to talk on without wires
6 SAAF fighter from France
8 Name for DC 4
9 German plane in exhibition hall
10 Twin-engine plane in exhibition hall
11 Twin-engine jet in hangar 3
12 Big four-engine plane standing outside
16 USA fighter used by SAAF in WW 2
17 SAAF jet fighter from USA in hangar 3
18 USA helicopter in hangar 1
24 Jet plane with twin booms
25 Training byplane for beginners
29 Country where our mustang was made
30 Plane used in bush-war
31 Extinct plane- used as trainer during WW 2
33 Mirage standing in hangar 3
34 Moveable leg of the airoplane
37 Not empty
38 Italian twin-engine pusher plane
39 Tail-dragger in front of restaurant
41 First letters of famous British aero engines
43 Shed to store aeroplanes
45 Aeroplane driver
47 Boys like to climb in it
50 SAAF got two of these small German planes

DOWN

1 The operations crew
2 Modified version of the Mirage
7 Used to find aeroplanes in the sky
8 Famous British fighter
11 What you see on a radar screen
13 Russian fighter in hangar 2
14 How to address an Officer
15 Name for DC 3
17 Old emergency call
19 All-round small Militairy vehicle
20 Small French helicopter
21 Byplane in hangar 1
22 The runway is made of
23 Where all the pilots run to after flying
24 Aeroplane standing next to rescue boat
26 Not an Officer
27 Police of the army
28 SA made helicopter
31 You'l find the friends there
32 Air force of England
35 Short for something used with radios
36 SA made jet trainer
37 Liquid- without it no flying
38 You get it in the bar
40 Name of Mustang engine
42 Measurement faster than sound
44 Engine used in modern fighters
45 French helicopter in hangar 1
46 Blue aeroplane in exhibition hall
48 Our airforce
49 French helicopter outside hangar 1

Control

As the pilot, you control the airplane, and you determine how it flies. The different movements of your controls will cause corresponding movements in the airplane. Here are some basic airplane movements.

Pulling the control wheel toward you raises the elevator, which in turn forces the tail down and the nose up. This serves to create more lift than gravity and the airplane will climb. To help produce the extra lift needed in the climb, you usually need additional power from the engine, which you achieve by using the throttle control. Pushing the control wheel away from you lowers the elevator, forcing the tail up and the nose down. This reduces the lift, and gravity makes you descend.

The rudder pedals control the movement of the plane from right to left in much the same way as the rudder of a boat. Pushing the right rudder pedal forces the nose of the airplane to the right, and the left rudder pedal produces the same movement to the left.

Turning the control wheel moves the ailerons in opposite directions, enabling you to raise or lower either the right or left wing, which enables the airplane to turn faster than using only the rudder.

To change the attitude of the airplane, its relationship to the horizon, you simply use the control surfaces and the power of the airplane. It's an exercise in coordination, much like riding a bicycle. Your flight instructor will discuss with you how these simple movements can be combined to manoeuvre the airplane.

The basic flight instruments

Although the instrument panel of an airplane may confuse you at first, you'll soon be familiar with the dials and switches and the valuable information they provide. The basic flight instruments are as follows:

Airspeed indicator- **It shows the speed of the airplane through the air.**

Attitude indicator-This instrument is like the horizon you see looking out from the pilot's seat. It tells you whether the nose of the airplane is pointed above or below the horizon and whether the airplane is turning (banking) to the left or right (left wing down or right wing down).

Altimeter- **This instrument shows the airplane's altitude in feet above sea level.**

Turn coordinator- **When you're turning the airplane, this instrument shows the rate and the direction of the turn. In this way you can adjust to a slower or faster rate of turn.**

Heading indicator (directional gyro) - **This instrument is another compass. It shows the direction that the airplane is flying. It's usually bigger and easier to, read than the magnetic compass, but it requires some source of power to work.**

Vertical speed indicator - **This instrument tells you how quickly you're climbing or descending in feet per minute. When you're in level flight, it reads "O".**

Magnetic compass - **Like the compass you have seen in a car or boat, it tells you the airplane's heading-the direction it's flying. It requires no power source.**

After your first few flights, you'll be thoroughly familiar with these instruments and how they work together with the airplane's control surfaces.

BLUE BLOOD IN THE AIR FORCE (Part 2)

.....FOLLOWED BY THE MEDIUM AND HEAVY WEIGHTS

MARYLAND

The Martin 167 Maryland was designed for the US Army Air Corps (USAAC) as a medium attack bomber. The prototype flew in March 1939 and was rejected by the USAAC. However, France had already ordered 115 and later upped the order by a further 100. By the time France fell in June 1940, 140 had been delivered. The outstanding 75 aircraft were diverted to England, where they were designated the Maryland Mark 1. Britain then ordered 150 Mk 2's and passed 72 on to the SAAF (12, 21 and 24 Squadrons) in North Africa. There were a few Marylands flying here in South Africa as well. When 20 Squadron was renumbered to become 16 Squadron during the Madagascan campaign, it was operating five Marylands. The Maryland had a crew of three; - pilot, observer (ie, navigator/ bomb aimer) and wireless operator/air gunner. It was powered by two Pratt and Whitney Twin Wasp radial engines which enabled it to carry 4 X 500 pound (225 kg) bombs at 450 km/h. It had four wing mounted 0.303 inch (7,7 mm) machine guns, and two more in the mid-upper turret.

Back in 1984, (the late) Sergeant Major Johnnie Goussard related the following incident to me. He had been an armourer in 12 Squadron (in the Desert). In a counter attack, the German forces were rapidly advancing on the airfield occupied by 12 Squadron. The aircrew managed to fly all the serviceable Maryland bombers away to safety. The ground crews had to strike camp, load the trucks and also retreat. Three Marylands were unflyable and should have been destroyed, but the ground crew got the aircraft “roadworthy” by installing one engine in each - and “taxied” them to safety with the road convoy.

BALTIMORE

The Martin 187 was developed from the Maryland as a result of a specific British requirement. It had more powerful Wright Cyclone radial engines and a deeper fuselage, but its armament and bomb-load was identical to that of the Maryland. The British called it the Baltimore and only two SAAF squadrons, numbers 15 and 21, were

equipped with the Baltimore. It was a very effective day and night bomber and 21 Squadron flew it with good effect, while 15 Squadron operated it in the maritime bomber role. The photo shows a 15 Squadron machine.

BOSTON

This all-rounder was one of the most extensively built light/ medium bombers of WW2. The Douglas Boston Mark 3 replaced the Marylands of 12 and 24 Squadrons in the Desert. Two Wright Cyclone radials, rated at 1 600 HP (1 190 kW) each, gave the Boston a top speed of 510 km/h. It could carry a 2 000 lb (900 kg) bomb-load and had four forward firing 0,303 inch (7,7 mm) machine guns in the nose and two more point three-oh-threes in the dorsal turret. It also carried a crew of three and the SAAF Bostons were flown by some well known personalities; among them - Cecil Margo, Kalfie Martin, Peter Atkins and Bert Rademan.

On 4 July 1942, 12 and 24 Squadrons flew more than 100 bombing sorties. Kalfie Martin said that they all aged considerably that day. They pressed home the attacks with such discipline that the German flak gunners nicknamed them "the 18 imperturbables". The two squadrons each put nine Bostons into the air, **six times on that day**. The Axis forces were slowly driven westward until they were "cornered" in Tunisia. Those who were not captured started island hopping towards Italy. The ground crews, and especially the armourers, sweated blood when the three SAAF bomber squadrons, numbers 12 & 24 (Bostons) and 21 (Baltimores), were instrumental in bombing the Germans and Italians on the island of Pantelleria, - between Africa and Italy, - into total submission in less than a week.

MARAUDER

The Martin B-26 Marauder first flew in November 1940 and the first production models were deployed in the Pacific theatre of operations in early 1942. The Marauder made its appearance in North Africa in November 1942. When the SAAF bomber squadrons went from Tunisia to Italy, they were also equipped with Marauders.

Numbers 12, 21, 24, 25 and 30 Squadrons really used this medium bomber to its maximum capability. The Marauder was fast (455 km/h) and carried a crew of seven. Four fixed, forward firing 0.50 inch (12,7 mm) machine guns, a trainable five-oh in the nose and four more in the power-operated upper and tail turrets, plus a 4 000 lb (1 800kg) bomb-load made the Marauder a real mean machine. Many plots disliked the Marauder because it needed a very long take-off run to get into the air, and was sluggish until the fuel load lightened.

LIBERATOR

The Consolidated Vultee B-24 J Liberator was the only four-engined, heavy bomber operated by the SAAF during WW2. Flown by 31 and 34 Squadrons, the Liberator carried 8 000 pounds (3 600 kg) of bombs internally and bristled with 10 point five-oh machine guns; two in the nose, two in the upper turret, one on either side in the waist and four in the tail turret. The two squadrons made up No. 2 (Heavy Bomber) Wing (SAAF) and attacked Axis targets in Italy, Yugoslavia and Poland, and they will always be remembered for their courageous supply dropping operations to the Polish partisans in Warsaw.

CATALINA

In 1942, the war in North Africa was at its peak, and the front moved backwards and forwards, as Allied and Axis forces attacked and counter-attacked. All supplies to the Allied forces in Egypt had to pass round the Cape by sea. The antiquated aircraft operating in the Country, could not cope with the defence of the sea route any more. A Royal Air Force Squadron, number 262, started operating from Durban's Congella Base, using (American) Consolidated Vultee Catalina PBY-5B flying boats for the long flights, to assist shipping against the U-boat threat. Langebaan lagoon was used regularly by the Catalinas, and in 1943 a detachment of Dutch Navy Catalinas was also active in Saldanha Bay.

As the RAF crews returned home after their tours of duty, more and more South Africans were absorbed into 262 Squadron. Number 35 Squadron (SAAF) was born out of 262 Squadron in February 1945, just before the end of the War. The new squadron's Catalinas soldiered on, and anti-submarine warfare remained a priority until the end of the War. The Catalina was powered by two Pratt & Whitney Twin Wasp 14 cylinder radial engines and carried a crew of seven. There were two 0.30 inch (7,62 mm) machine guns in the nose turret and 1 814 kg of bombs and depth charges were normally carried. The Cat had a range of 4 100 km at 288 km/h.

VENTURA

1 B-34 VENTURA Mk 2- 24 Squadron

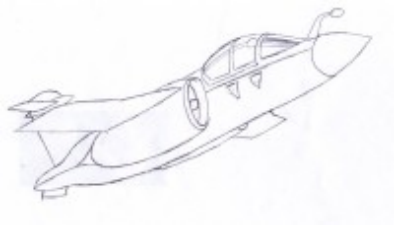
B-34 Ventura Mark 1 and 2 aircraft arrived at Ysterplaat, (then known as Brooklyn Air Station) in 1942. The squadrons which were equipped with Venturas were, No's 22, 23, 25, 27 and 29. Number 22 Squadron moved to the Middle East in 1943, where it and 17 Squadron were equipped with PV-1 Ventura Mk 5's. They operated from bases in Algeria and Sardinia, and eventually together from Gibraltar.

At the Director General-SAAF Conference on 26 November 1946, it was decided to keep 62 B-34 Ventura Bombers and 86 PV-1 Ventura Mk 5 Patrol Bombers. The B-34's were allocated to 21 and 60 Squadrons at Zwartkop, 24 Squadron at Bloemspruit, and the Bombing, Gunnery and Air Navigation School at Langebaanweg. The Coastal Squadrons, 17, 22 and 27 flew the "Peevees."

2 PV-1 VENTURA MK 5 - 27 Squadron

Both types were fitted with 2 000 HP (1 491 kW) Pratt & Whitney Double Wasp 18 cylinder radials and had an internal bomb/depth charge capacity of 4 000 lbs (1 800 kg). On wing pylons it could carry another two 225/450 kg bombs, depth charges or drop tanks. The last B-34 flew from Bloemspruit in 1951 when 24 Squadron closed down - (until 1965). Some PV-1's soldiered on, until final withdrawal at the end of 1959. The VIP Venturas were the last to fly - in 1960.

(To be Continued)



A Uniquely South African Victoria Cross:
The Story of Edwin Swales VC, DFC – Part 2

In 1945, whilst still with the R.A.F. Pathfinder Force (No.582 Squadron), Swales was the captain of an Avro Lancaster, B MkIII, No. PB538 60M. On Friday, 23 February, 1945, sadly, the very same day as his D.F.C. award was Gazetted, Swales led a raid on Pforzheim, Germany not far from Karlsruhe and the Rhine River. As a result of this operation, Swales was killed, and he was posthumously awarded the Victoria Cross – the 3rd and last Pathfinder pilot to be so honoured all of which were posthumous.

Swales primary task on this raid was that of Master Bomber. The log-book records that his crew consisted of the following personnel;
Sqn Ldr Archer
PO Wheaton*
Flt/Lt Dodson*
PO Goodacre*
Flt/Sgt Leach*
Flt/Sgt Bennington*
Flt/Sgt Barron
* The above crew members had flown with Swales when he won his D.F.C.

Chaz Bowyer provides the following account of the raid: 'The outward journey met with little opposition but on arrival over the target, Swales' Lancaster was attacked by a night-fighter whose first onslaught put one of the bomber's engines out of commission and shattered the rear gun turret. Unperturbed by this attack, Swales was determined to complete his mission. Dropping his cascade of target indicators, he proceeded calmly to radio bombing instructions to the following waves of bombers. As he did so the same enemy fighter again attacked; its cannon shattered a second engine and destroying most of the hydraulic and internal lighting systems of the Lancaster. Swales had to use every ounce of skill he knew to regain a modicum of control of the damaged aircraft. Considering his task was not yet completed, he continued to issue instructions to the main bomber stream until he was satisfied that the object of his mission had been accomplished. Only then did he turn the Lancaster's nose homewards. For the loss of 12 bombers the formation had dropped a total of 1,551 bombs on Pforzheim.

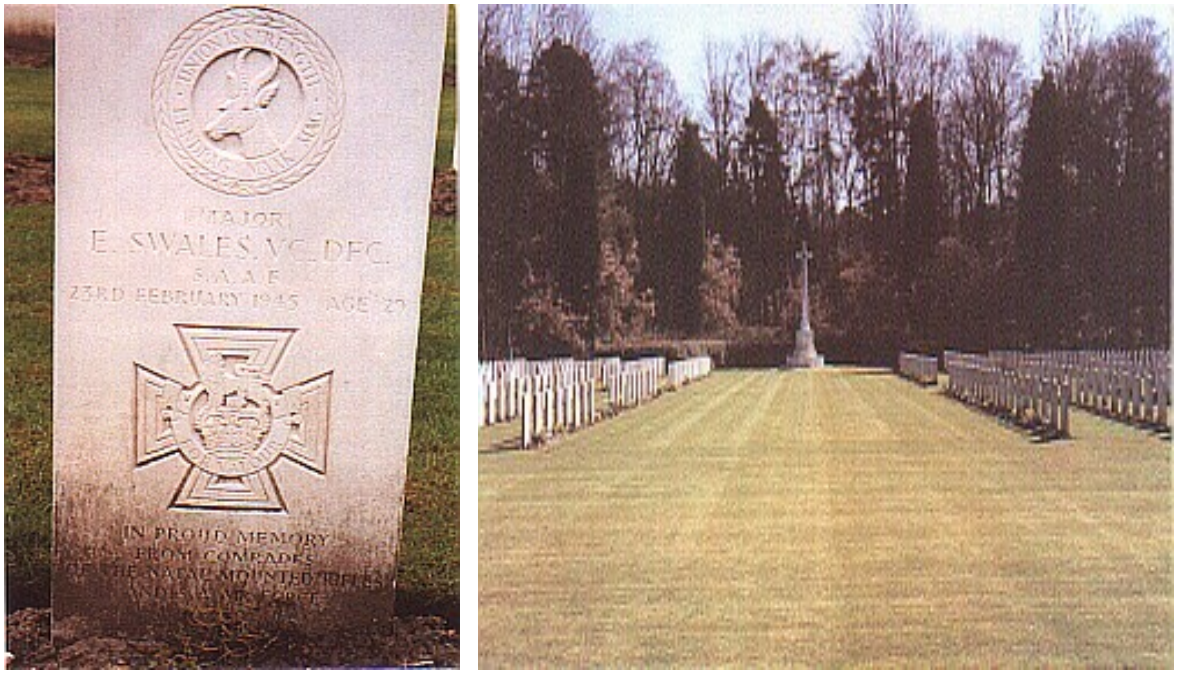
> 'The journey back to base was a flying nightmare. The crippled Lancaster was so reduced in speed that it had it was a minor miracle she was still airborne. With his blind flying instruments useless and two engines ruined, Swales was nevertheless determined to get his aircraft back to base. After an hour, he found himself flying into thin layered cloud but by skilful control managed to fly the Lancaster between the cloud layers. The weather conditions grew steadily worse. Heavy cloud and associated turbulence buffeted the bomber about the sky and gradually she started to lose height. Realising the situation was rapidly becoming desperate and that he was at least over friendly territory, Swales ordered his crew to take to their parachutes whilst he fought with the controls to hold aircraft steady for their

escape. Hardly had the last man left when the Lancaster stalled and dived into the ground. Later Swales was found dead at the controls of his aircraft.'

The aircraft crashed near Valenciennes, west of Pomoy approximately 3.2 km (two miles) SSE of Denham in Belgium.

It had been Swales' 43rd operational flight for 582 Squadron.

He is buried in the War Cemetery at Leopoldsburg, near Limburg, Belgium, Plot No.8, Row C, Grave No.5., although he had originally been buried at Fosse's USA Cemetery.



1 Leopoldsburg Cemetery (Photo: Graeme Wright)

Captain Edwin Swales' posthumous award of the Victoria Cross was published in the *London Gazette* dated 24 April 1944.
The citation reads:

No. 6101V,
Captain Edwin Swales, D.F.C.
South African Air Force
Victoria Cross

"Captain Swales was 'Master Bomber' of a force of aircraft which attacked Pforzheim on the night of February 23, 1945. As Master Bomber he had the task of locating the target area with precision and of giving aiming instructions to the main force of bombers in his wake.
Soon after he reached the target area he was engaged by an enemy aircraft and one of his engines was put out of action. His rear guns failed. His crippled aircraft was an easy prey for further attacks. Unperturbed, he carried on with his allotted task; clearly and precisely he issued aiming instructions to the main force.
Meanwhile the enemy fighter closed the range and fired again.

A second engine of Captain Swales' aircraft was put out of action. Almost defenceless, he stayed over the target area issuing his aiming instructions until he was satisfied that the attack had achieved its purpose.
It is now known that the attack was one of the most concentrated and successful of the war.
Captain Swales did not, however, regard his mission as completed. His aircraft was damaged. Its speed had been so much reduced that it could only with difficulty be kept in the air. The blind-flying instruments were no longer working. Determined at all costs to prevent his aircraft and crew from falling into enemy hands, he set course for home. After an hour he flew into thin-layered cloud. He kept his course by skilful flying between the layers, but later heavy cloud and turbulent air conditions were met. The aircraft, by now over friendly territory, became more and more difficult to control; it was losing height steadily. Realising that the situation was desperate Captain Swales ordered his crew to bale out. Time was very short and it required all his exertions to keep the aircraft steady while each of his crew moved in turn to the escape hatch and parachuted to safety. Hardly had the last crew-member jumped when the aircraft plunged to earth. Captain Swales was found dead at the controls. Intrepid in the attack, courageous in the face of danger, he did his duty to the last, giving his life that his comrades might live"

The reason Swales was determined to keep his plane from falling into enemy hands as his Lancaster being that of a master bomber was fitted with the latest electronic equipment

Pieter Zeeman, gave a ground-up point of view of the Pforzheim raid entitled "*I was under the bombs dropped by Swales*" at the February 2005 meeting of thr KwaZulu-Natal Branch of the South African Military History Society. Mr Zeeman, who now lives in Durban, was born in Holland and after the invasion by the German Forces after the Phony War, he was captured and sent to Germany as a labourer as part of the German forced labour program. He described Pforzheim as being a very pretty town, surrounded by forests and similar in size to Pietermaritzburg. Although geared for war, it was rarely disturbed by passing aircraft until the night of 23 February 1945. He heard the sound of a bomber approaching (Swales' Lancaster) and at about 7.10pm German time he suddenly saw what he described as a "Christmas Tree" descending on the middle of the town and he knew that was the marker of an air raid. As he rushed to the nearest shelter, some phosphorous from the "tree" fell on his overcoat, which he immediately threw away. In the shelter, he heard bombs falling close by and although he knew that this was a serious raid and knew that he had to escape from the shelter, he waited until he heard the planes depart. As he went outside he met some girls he knew and led them away by the banks of the of the local river. On a nearby road the tarmac was on fire. Everywhere they went they saw buildings burning and the wind that was blowing created a firestorm that made the temperature rise sharply, and he believes that he and the girls got away just in time. They slept in the open that night and returned the next day to find the town was almost completely destroyed (post war analysis showed that 83% of Pforzheim was destroyed that night) but the fires lasted for 2-3 days.

The following table is an extract from Swales' logbook and lists 24 raids that Swales flew:

	Date	Target	Comments
1	23 July 1944	Kiel	Crash Landed
2	28 July 1944	Hamburg	
3	12 August 1944	Russelheim	
4	16 August 1944	Stettin	
5	18 August 1944	Bremen	
6	26 August 1944	Kiel	
7	29 August 1944	Kiel	
8	12 September 1944	Frankfurt	
9	15 September 1944	Kiel	
10	3 October 1944	Saarbruken	
11	6 October 1944	Dortmund	
12	19 October 1944	Stuttgart	Lancaster attacked by enemy aircraft
13	2 November 1944	Dusseldorf	
14	5 December 1944	Karlsruhe	
15	6 December 1944	Leuna	
16	12 December 1944	Karlsruhe	
17	17 December 1944	Duisberg	
18	23 December 1944	Cologne	Attacked by 5 enemy aircraft. Led to award of DFC.
19	29 December 1944	Troisdorp	
20	1 January 1945	Dortmund	
21	2 January 1945	Nuremburg	
22	2 February 1945	Ludwigshafen	
23	4 February 1945	Bonn	
24	23 February 1945	Pforzheim	Final VC raid

Air Chief Marshal Sir Arthur 'Bomber' Harris, KCB, OBE, AFC, of Bomber Command, R.A.F., wrote a letter to Swales' mother, saying, "His Majesty the King has been graciously pleased to confer the Victoria Cross upon your son, Edwin. On every occasion your son proved himself to be a determined fighter and resolute captain of his crew. On his last mission he successfully completed a vital task allotted to him with great coolness and courage, despite severe damage to his aircraft. Therefore his only thought was for the safety of his crew. This he achieved at the cost of his own life. His devotion to duty and complete disregard for his own safety will remain an example and inspiration to us all. I send you my heartfelt sympathy in the loss of such a gallant son and trust that this supreme award, so heroically earned, will serve in some measure to comfort you in your great sorrow."

At the time of his death on 23 February, 1945, Captain Edwin Swales was an acting Major and he was only 29 years old. It should be noted that the S.A.A.F. was using the army ranking system, hence the ranks of 'Captain' and of 'Major'. Although often referred to as being a "Captain" at the time of his last flight, Swales was in fact an 'Acting' Major. Ian Uys' research has shown that in 1958, the British Air Ministry wrote to the Commonwealth War Graves Commission informing them that the South African Air Force authorities had confirmed that at the time of his death, Edwin Swales had in fact held the rank of Major. The photograph of his grave also indicates the rank of Major. Indeed, the front page of the program for the opening of the S.A.A.F. Memorial in Pretoria on 31 May, 1950, Mrs. Olive Swales (who opened the Memorial) was described as being the "mother of the Late Major Edwin Swales, DFC, VC".

Edwin Swales was the only S.A.A.F. pilot during 1939-45 to be appointed a Pathfinder Master Bomber and also to have been posthumously awarded the Victoria Cross. Here is the full list of the medals which were awarded to Major Edwin Swales:
The Victoria Cross (1)
The Distinguished Flying Cross (2)
The 1939 -1945 Star (3)
The Africa Star (4)
The France and Germany Star (5)
The Defence Medal, 1939 – 1945 (6)
The 1939 – 1945 War Medal (Victory Medal) (7)
The Africa Service Medal (8)

2 Medal Group On Display at Military History Museum JHB. Photo: Stephen Hill

It is interesting to note that at the time of his death Swales was only entitled to wear the D.F.C. and the Africa Star. The remaining medals were, of course awarded posthumously.

Edwin Swales' full size war medals and some other possessions are held and displayed at the South African National Museum of Military History in Saxonwold, Johannesburg. At his old school, Durban High School (founded in 1866), a school 'House' is named Swales House.

The original set of miniature medals of Swales, and a silver model Lancaster Bomber, are now housed in an exhibition honouring Swales at his old school, Durban High School. Many years ago, the miniature medals and the model had

been sold by a member of the Swales family. After changing hands a few times, the group came up for auction in London, in July 2004, at which time the medals and model were sold to a collector in the U.K. This event came to the attention of medal collector David Bennett, (also a D.H.S. Old Boy), who managed to track them down and convince the collector in the U.K. to sell his recent acquisitions to the School. Through this collector's generosity, the medals and model were finally, after four months of negotiations by David Bennett on behalf of the School, delivered to their new home at DHS, where they were first displayed on Armistice Day, 11 November 2004, much to the proud delight of all those connected with the School.

In the city of Durban, there is a major arterial road named 'Edwin Swales VC Drive'. Barclays Bank DC&O in South Africa is today named First National Bank and, in Durban, one of the Bank's branches is the 'Edwin Swales VC' Branch. The Branch is in fact in Edwin Swales VC Drive. To mark the occasion, a bronze bust of Capt Swales, which was sculpted by Alexander Sasin and stands in the banking hall was unveiled on Friday 14 April 1989. It is the only instance of a bank's branch being named after an employee.

3 Cover released early 2005 signed by Pforzheim Raid crew member

The silver model Lancaster was one of only ten such models which were commissioned by the aircraft's manufacturers, Messrs A.V. Roe and Co. and by Rolls Royce(suppliers of the Lancaster engines) and presented to the ten Victoria Cross winners (or their families) who flew Lancasters in the Second World War. On the base stand of the model is a silver plaque which bears the engraved inscription: "A Tribute from the Directors of A.V. Roe & Company and Rolls Royce Limited. To the Memory of Captain Edwin Swales, V.C., D.F.C., S.A.A.F., who was Awarded the Victoria Cross for his great Gallantry and Self-Sacrifice during Operations Against the Enemy on 23rd February 1945"

Mrs O.M. Swales unveiled the SAAF Memorial at Waterkloof, Pretoria on 31 May 1950.

It is quite clear from the this study, the award of the D.F.C. and Swales' logbook that the posthumous award of the Victoria Cross must not be regarded in isolation but rather, as the climax of an extremely harrowing and arduous flying career. It was a singularly grim, depersonalized and nerve-racking character, in which the presence of the enemy, prior to contact, was mainly reflected in radar impulses. The opposing forces never confronted one another face-to-face. Swales and his crew undertook their operations in the extreme discomfort of the Lancaster bomber, greatly vulnerable to enemy night-fighters in terms of speed and armament, a vulnerability that was greatly enhance in the case of a master bomber. It was, without doubt, the type of war that demanded the highest degree of resilience and fortitude. To this extent, the Victoria Cross awarded to Swales embodies a consistently heroic and courageous character. It is a most justifiable source of pride for the South Africa Air Force that its association with the Royal Air Force bomber offensive should be personified in an officer who rendered such distinguished and memorable service.

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