



## John Laming.

### Four Engines have Stopped

On the 29th May 1955, our crew took part in an anti-submarine exercise in the Arafura Sea. On board that night were navigators Warren Agnew, Ash Clarke and Len McTaggart. Peter Hays was second pilot, while Alf Harrison, Des Barratt, John Nicholson, Nat Thompson and John Edmonds were the signallers. With the exception of Warren "Bunny" Agnew, we were all non-commissioned officers (NCO's). Bunny had previously flown in Beaufighters on operations against Japanese forces in Timor during the war.

Two RAN submarines and three frigates also took part in the exercise which was code named Operation Anzex. Our job was to hunt the submarines, while their job was to attack a convoy of ships escorted by the frigates. Our search pattern took us within 50 miles of Timor.



There were several Lincolns involved, one of which was flown by Flight Lieutenant Ricky Tate. These aircraft were equipped with additional fuel tanks hung in the bomb bay, giving the aircraft 14 hours endurance. These bomb bay tanks required fancy plumbing and it was the job of the duty signaller to keep an eye on the fuel tank contents gauges. He would then manipulate the various cross-feed cocks under the wing spar near his radio operator position. On this occasion, due to an oversight by the ground staff at Darwin, and unknown to the crew, the bomb bay tanks had not been filled up.

When flying at low level, it was considered good airmanship to climb to at least 1500 feet before changing fuel cocks to a fresh tank. This would give more time to cope with any engine failure caused by air in the fuel lines, or simply because of mis-handling of the fuel tank selectors. For this reason at midnight during the anti-submarine patrol, Ricky Tate increased power to the four engines and climbed to 1500 feet prior to fuel transfer. That action was to save the lives of the crew. The duty signaller was then directed by the captain to commence fuel feed from the bomb bay tanks.

Shortly afterwards one engine stopped, quickly followed by the remaining three engines. Tate called that all four engines had failed and ordered his crew to take up ditching stations. Meanwhile the Lincoln had rapidly become a 30 ton glider and began to lose height towards the sea. Sergeant Jim Chataway (the second pilot), who had been on rest next to the signaller, leapt to his feet and headed for the cockpit where Rick Tate was preparing for ditching.

Behind the pilot was the navigator and radar operator positions. The radar screen was viewed from under a canvas cover similar to that used by photographers in the old days. Ray Parkin was the radar operator and as he attempted to take up ditching positions he found his face being un-ceremoniously pushed into the radar screen by Chataway's size 10 boot.

Chataway managed to turn off the high pressure fuel pump switches situated out of reach of the captain. Meanwhile Rick Tate attempted to re-start the engines. Once the fuel pump switches were turned off, each engine slowly came back to life - the last one at 500 feet above the waves. No one knew why the engines had failed and it was a relieved crew that finally touched down at Darwin two hours later. An inquiry revealed that the two bomb bay fuel tank contents gauges were unserviceable with their needles stuck at full. When the ground staff went to fill the fuel tanks prior to the flight they first checked the fuel gauges in the cockpit. On seeing that both tanks indicated full capacity, they decided the tanks must have already been filled. In fact, both tanks were empty, and the engines had failed when air from these tanks was drawn into the fuel system by the high pressure pumps.

### **The Mysterious "Goblin".**

On patrol 200 miles to the west of the stricken Lincoln, we were blissfully unaware of this drama. We were however, about to be involved in a farcical, if less frightening situation of our own making. We had flown for several hours throughout the night without incident. The sea was calm and the coast of Timor was visible on radar. Suddenly, we were aroused from our collective torpor, by the radar operator excitedly announcing that he had a goblin on his radar screen. The navigator ducked under the canvas blind to have a look and confirmed that it was indeed a "Goblin" (code name for submarine). We were now 25 miles from the coast of Timor with the RAN ships some 150 miles to the north of us. This meant that our contact was unlikely to be an Australian submarine. That left the prospect of a foreign submarine, possibly a Russian. That it could have been from any other country never occurred to me. In fact we were indoctrinated that the "Threat" was always from Russian ships - rightly or wrongly. The Cold War was on and it was not unknown for foreign submarines to watch Allied fleet exercises to gather intelligence.

I announced "Action Stations" over the intercomm system. This dramatic term instantly got everyone's attention with the crew taking up allotted positions. Two signallers slid lizard like under the second pilot's rudder pedals to the nose compartment - accidentally jogging the tactical navigator causing him to spill coffee over his chart. Sonarbuoys were readied by another signaller near the tail of the aircraft. Sonarbuoy are hydrophones dropped by small



parachute around the suspected area of the submarine. They listen for propeller noise which can signify a surface or underwater vessel. Some are directional and can give a bearing on the noise. The code word for a directional sonobuoy was 'Fencepost'. Once the speed and direction of travel of the submarine is known, a homing torpedo is launched from the Lincoln and hopefully in a real war, the submarine is destroyed. But this was peacetime and dummy torpedoes were too expensive to waste - not that we carried any that night.

I couldn't believe our good fortune. The size of the contact on the radar indicated the strong possibility that we had caught a submarine on the surface. The signaller quickly transmitted a contact report to Darwin while another crew member prepared to drop a pattern of sonarbuoys around the last known position of the goblin. I held the Lincoln in a gentle dive at high power hoping to get a sighting before the submarine crash-dived.

I was surprised that it was still surfaced because the sound of our Rolls Royce Merlin engines would have been heard from several miles away on a still night.



The Lincoln was not equipped with a searchlight and without one, it would be impossible to see our target. We did have a landing light on the left wing, but it would not extend at high speeds. As a last resort we could try the hand-held Aldis light whose main purpose was to signal messages in morse code to ships.

With the radar operator now steadily counting down the miles to the submarine (or whatever it was) both the second pilot and myself turned down the cockpit instrument lighting in order to see better in the dark. With one mile to run by radar the object was still on the surface. I switched on the landing light but it failed with a flash of sparks. The Lincoln was now going like the clappers and the airspeed was far in excess of the limit speed for landing light extension. As a last resort I ordered the front turret observer to aim the Aldis light at the submarine. It was vital to confirm the identity of the vessel on the surface - especially as some weeks earlier one of our aircraft dropped a pattern of sonarbuoys around a suspected submarine at night, only to find out that they had nearly hit a fishing boat.

The Aldis lamp lit up the cockpit with a blinding reflective glare. I was temporarily dazzled and immediately went on to instruments to level out at 300 feet above the water. At first I thought we had been caught by a searchlight, but then quickly realized the Aldis light beam was reflecting from the angled glass windows of the bomb aimer's turret. Too late, our night vision was wrecked. Blind at 300 feet, I called for the Aldis light to be switched off. Controlling the aircraft safely at low level had more priority than chasing a submarine.





This fiasco meant that there was no positive sighting of the vessel before it disappeared. We were now certain it was a submarine and we dropped a pattern of sonobuoys around its last known position. To our delight the sonarbuoy operators began to pick up propeller sounds. After 15 minutes of circling we had enough information to deduce that the submarine was heading steadily north-east at a speed of 7 knots. We hung around for another hour before getting low on fuel and then returned to Darwin.

By the time we landed the Navy frigates knew about our sighting. They said that our submarine was not one of theirs, and rather cruelly suggested that what we had tracked was not a submarine, but a herd of copulating whales! We didn't mind the joke but their assessment was nonsense. Our radar was old wartime vintage hardly capable of picking up a submarine on the surface at 20 miles, let alone a soft skinned mammal. What we had in our sights was a ship - submarine or otherwise.

Shortly after sunrise, a relieving Lincoln held another radar contact at short range, followed by a visual sighting of the schnorkel of a submarine. Its wake showed the submarine was heading north at 7 knots. A quick calculation revealed that its position was not far from the last known position of our sighting. The chances were it was our submarine. We never knew its true nationality.



## OOOPS.

NEW DELHI, June 2017: Air India has grounded two pilots who forgot to retract the aircraft landing gear after take-off and then flew all the way from Kolkata to Nagpur (1,200 km) with the wheels out. While the flight's destination was Mumbai, flying with the wheels out meant flying low and burning more fuel due to which the plane had to land at Nagpur after running low on fuel.





The pilots only realised that the wheels had been out all the time while preparing to land at Nagpur. The lapse happened on AI 676 that took off from Kolkata last Saturday (July 22) with 99 Mumbai-bound passengers on board.

"After take-off, both the women pilots forgot to retract the landing gear. As a result, the brand-new Airbus A-320 continued to ascend at a very low climb rate. The plane finally gave up climbing after reaching an altitude of 24,000 feet as the extended landing gear meant very heavy drag. It then levelled out and continued flying at 24,000 feet as opposed to the usually assigned level of 35-37,000 feet and flew at 230 knots (426 kmph) for the next 1.5 hours," said a source.

Aircraft are designed to fly with minimum drag for enhanced fuel efficiency and extended range. Since AI 676 was flying at a much lower than the optimal level and that too with wheels out, it meant more fuel burn due to extra drag.

By the time the A-320 was near Nagpur, it was very low on fuel and the pilots decided to divert there as the plane could not have made it to Mumbai. "When preparing to land, they decided to lower the landing gear. At this point they realised that the wheels had been out all the while from Kolkata," said the source.



This is puzzling, because typically an A320 would cruise at more than 24,000 feet. Furthermore, there's no way the plane was cruising at maximum speed if the landing gear was out. So, if the above description is accurate, it sounds like they knew there was something wrong, but between the two of them they really couldn't figure out that the problem was that the landing gear wasn't retracted? It's especially shocking when you think of the amount of noise and vibration that occurs when the landing gear "doors" are open. Ouch!

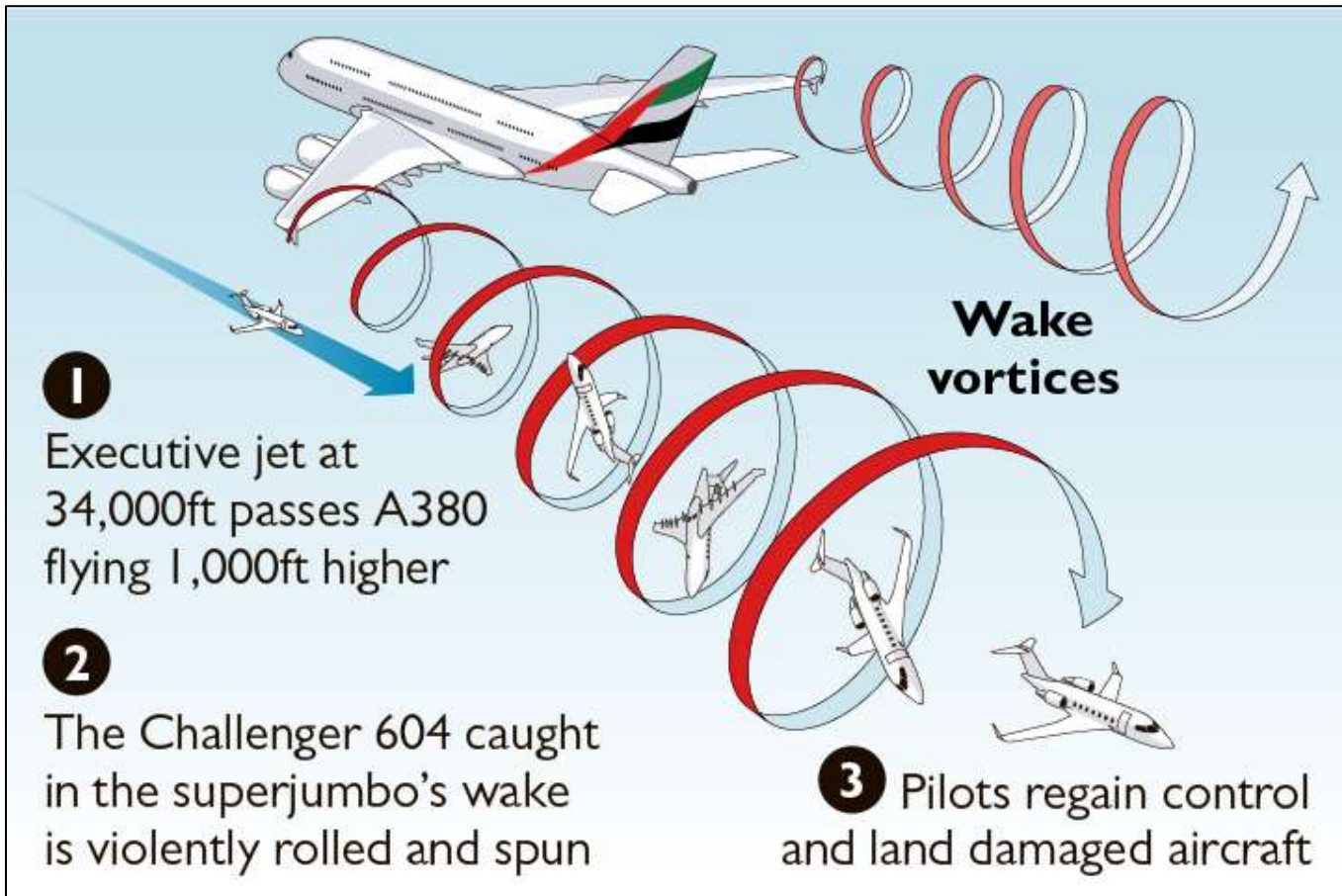
You know you're getting old when you bend down to tie your shoelaces and start wondering what else you could do while you're down there.





## Caution – Wake Turbulance!!

The [Aviation Herald](#) is reporting that the European Aviation Safety Agency is about to issue a safety information bulletin about high-altitude wake turbulence after a Challenger 604 business jet was written off after flying 1,000 feet below an A380. According to the Aviation Herald, the incident happened on the 7<sup>th</sup> Jan over the Arabian Sea. The vortices from the Emirates super jumbo jet reportedly caused the big business jet to roll three to five times as it went out of control and lost 10,000 feet before the pilots wrestled it under control and restarted the engines. The Challenger headed for an emergency landing in Oman and there were serious injuries to some of the nine people aboard. The G forces on the airframe damaged it beyond repair.



The Aviation Herald, which says it has had some trouble verifying some details, said German authorities are leading the investigation because the Bizjet was registered there. Canada's Transportation Safety Board is also taking part because the plane was built there by Canadair, which was taken over by Bombardier. EASA is preparing its safety bulletin because reduced vertical separation minimums (RVSM) make 1,000-foot separations standard in most of the

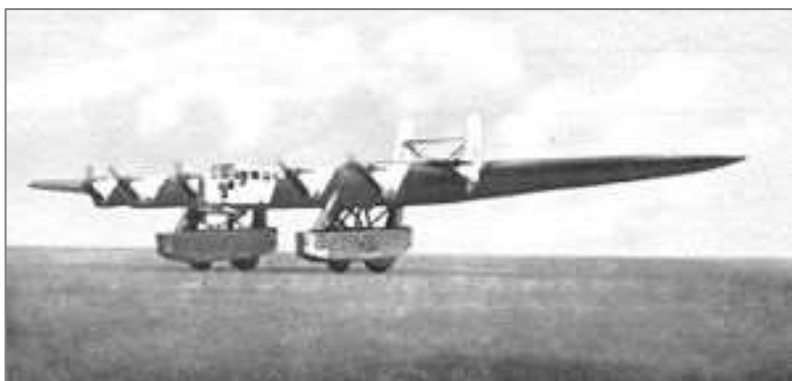
world and the airspace is getting more crowded. High-altitude wake turbulence lasts longer than the landing and take-off variety and can affect aircraft up to 25 NM away.

The advice to pilots hit by wake turbulence is also counterintuitive in that it says the best immediate reaction is none. "Be aware that it has been demonstrated during flight tests that if the pilot reacts at the first roll motion, when in the core of the vortex, the roll motion could be amplified by this initial piloting action," EASA says in the draft. "The result can be a final bank angle greater than if the pilot would not have moved the controls."

I only need glasses when I'm driving the car - and trying to find where I parked it.

## The Russian Kalinin K-7

The Kalinin K-7 was a heavy experimental aircraft designed and tested in the Soviet Union in the early 1930s. It was of unusual configuration with twin booms and large underwing pods housing fixed landing gear and machine gun turrets. In the passenger version, seats were arranged inside the 2.3metre thick (7ft 7in) wings. The airframe was welded from KhMA



chrome-molybdenum steel. The original design called for six engines in the wing leading edge but when the projected loaded weight was exceeded, two more engines were added to the trailing edges of the wing, one right and one left of the central passenger pod.

Designed by World War I and civil war pilot Konstantin Kalinin at the aviation design bureau he headed in Kharkiv, with a wingspan close to that of a B-52 and a much greater wing area, the K-7 was one of the biggest aircraft built before the jet age. It had an unusual arrangement of six tractor engines on the wing leading edge and two engines in pusher configuration at the rear.

In civil transport configuration, it would have had a capacity for 120 passengers and 7,000kg of freight. As a troop transport it would have had capacity for 112 fully equipped paratroopers. In bomber configuration it would have been armed with 8 x 20mm autocannons, 8 x 7.62mm machine guns and up to 9,600kg of bombs.



The K-7 was built in two years at Kharkiv starting in 1931 and first flew on 11 August 1933. The very brief first flight showed instability and serious vibration caused by the airframe resonating with the engine frequency. The solution to this was thought to be to shorten and strengthen the tail booms, little being known then about the natural frequencies of structures and their response to vibration. The aircraft completed seven test flights before a crash due to structural failure of one of the tail booms on 21 November 1933. The existence of the aircraft had only recently been announced—by Pravda, which declared it was "victory of the utmost political importance," since it had been built with USSR steel rather than imported steel. The accident killed 14 people aboard and one on the ground. Flight speculated that sabotage was suspected as the investigating committee had representation by the state security organization, the Joint State Political Directorate (OGPU).

However, there appeared recently some speculation in the Russian aviation press about the role of politics and the competing design office of Andrei Tupolev, suggesting possible sabotage. Although two more prototypes were ordered in 1933, the project was cancelled in 1935 before they could be completed.

You would wonder why anyone would want to build something so huge, it must have flown and handled like a brick. See [HERE](#).

You know you're getting old when it takes longer to rest than to get tired.

## Spitfire "Special " Vehicle!!

In the lighter moments of World War II, the Spitfire was used in an unorthodox role: bringing beer kegs to the men in Normandy.

During the war, the Heneger and Constable brewery donated free beer to the troops. After D-Day, supplying the invasion troops in Normandy with vital supplies was already a challenge. Obviously, there was no room in the logistics chain for such luxuries as beer or other types of refreshments. Some men, often called "sourcers", were able to get wine or other niceties "from the land" or rather from the locals. RAF Spitfire pilots came up with an even better idea. The Spitfire Mk IX was an evolved version of the Spitfire, with pylons under the wings for bombs or tanks. It was discovered that the bomb pylons could also be modified to carry beer kegs. According to pictures that can be found, various sizes of kegs were used. Whether the kegs could be jettisoned in case of emergency is unknown. If the Spitfire flew high enough, the cold air at altitude would even refresh the beer, making it ready for consumption upon arrival.



A variation of this was a long range fuel tank modified to carry beer instead of fuel. The modification even received the official designation Mod.. XXX. Propaganda services were quick to pick up on this, which probably explains the "official" designation.



As a result, Spitfires equipped with Mod XXX or keg-carrying pylons were often sent back to Great-Britain for "maintenance" or "liaison" duties. They would then return to Normandy with full beer kegs fitted under the wings. Typically, the British Revenue of Ministry and Excise stepped in, notifying the brewery that they were in violation of the law by exporting beer without paying the relevant taxes. It seems that Mod. XXX was terminated then, but various squadrons found different ways to refurbish their stocks. Most often, this was done with the unofficial approval of higher echelons.

In his book "Dancing in the Skies", Tony Jonsson, the only Icelander pilot in the RAF, recalled beer runs while he was flying with 65 Squadron. Every week a pilot was sent back to the UK to fill some cleaned-up drop tanks with beer and return to the Squadron.. Jonsson hated the beer runs as every man on the squadron would be watching you upon arrival. Anyone who made a rough landing and dropped the tanks would be the most hated man on the squadron for an entire week.

*(Although a "nice" story from WW2, we find it a bit hard to believe, afterall, the aerodynamics of a beer keg is similar to that of a barn door and how it would stay put tied under the wing of a Spitty at 400kph is a bit beyond me – tb)*



You know you're old when you have more fingers than real teeth.

## Caribou.

HARS Pilot, Douglas Haywood and Loady/Engineer Bob StJohn explain the history of the aircraft.

See [HERE](#)