No. 10 SQUADRON RAAF An Overview of its role in World War II



Sunderland Mk.I N9048, the first of type to join No.10 Sqn on 11 Sep 1939. The aircraft was destroyed at Mount Batten on 27 Nov 1940 in a hangar fire, as a result of an air raid.

INTRODUCTION

No. 10 (General Reconnaissance) Squadron, Royal Australian Air Force (RAAF) was formed at RAAF station, Point Cook, Victoria on 1 July 1939. By mid-July, two small but separate groups of pilots and airmen had departed for England to commence training on Mk.I Short Sunderland flying boats. The aircraft would then be ferried back to Australia to patrol and reconnoitre the nation's maritime environs. Such was the plan. However, ongoing political uncertainty finally erupted into World War II on 1 September 1939. The upshot was that No.10 Sqn remained in the United Kingdom (UK) following an appeal from Britain to the Australian Government. Thus, not only did No. 10 Sqn become the first Dominion squadron to commence active service, it was the only RAAF squadron to be on continuous active service throughout the war.

PREPARING FOR WAR

To bring No. 10 Sqn up to unit strength, a further group of 185 RAAF personnel departed Australia on board RMS *Orontes* in mid-November 1939, arriving at Pembroke Dock, Wales on 26 December 1939. The squadron establishment now numbered 16 officers and 197 airmen, with the first Sunderland accepted on 11 September 1939. The full

complement of nine aircraft had been delivered by 21 December 1939 and would be followed by another 70+ Sunderland Mk.I, Mk.II and Mk.III aircraft throughout the war.

To familiarise themselves with the Sunderland, the small nucleus of No.10 Sqn pilots initially carried out a series of training flights with two Royal Air Force (RAF) Sunderland squadrons also based at Pembroke Dock. As numbers of both aircraft and personnel built up, No. 10 Sqn was tasked with consolidation flights to destinations further afield, such as the Shetland Islands, Cairo (Egypt) and Bizerta (Tunisia), uplifting military personnel or various aircraft spares. In early 1940, it was announced that, in addition to pilots/navigators, a Sunderland crew would consist of two fitters (later reclassified as flight engineers), two W/T (wireless/telegraphy) operators, one fitter rigger, one armourer and one aircraft hand. During the war, No.10 Sqn Sunderlands normally operated with 11-12 crew members. Those who volunteered to fill the above positions were known as the Operations Flight. The remaining personnel tasked with servicing the aircraft were known as the Maintenance Flight.



"The bridge" of a Sunderland. The aircraft normally operated with three pilots, made up of Pilot/Captain, 1st
Pilot and 2nd Pilot.

Following this build-up, No.10 Sqn was officially incorporated into No.15 Group, RAF Coastal Command on 3 January 1940 and declared operational from 1 February 1940. Effective 1 April 1940, No.10 Sqn transferred from Pembroke Dock to Mount Batten (near Plymouth), Devon.²

GOING TO WAR

Operations in April 1940 were of a more "routine nature", as all German U-boats had been ordered to return to Germany to prepare for the Norwegian campaign, from 9 April until 10 June 1940. German forces successfully invaded Holland, Belgium and France on 10 May 1940, leading to an allied evacuation from Dunkirk, France later that month. As with other RAF squadrons, No.10's operational tempo increased dramatically; all nine aircraft and crews were flying up to four sorties a day, carrying out anti-submarine and reconnaissance patrols. To maintain aircraft serviceability, ground crews worked up to 18 hours a day.

No.10 Sqn was tasked with several "special flights" in June 1940. The initial operation resulted in the first fatalities while on active service for both No. 10 Sqn and the RAAF since the latter's foundation in 1921. Flight Lieutenant John Bell, pilot, from Farina, South Australia (SA) and Sergeant Charles Harris, observer, from Windsor, New South Wales (NSW), plus two other non-squadron members were lost on 18 June 1940. Their Supermarine Walrus amphibian crashed in France when attempting to rescue the wife and children of General Charles de Gaulle. Fortunately, she and her children escaped on the last ship to sail from Brest to England. Two additional flights took place in June, when No.10 Sqn Sunderlands flew high-ranking British military and government delegations to Bordeaux, France and Rabat, Morocco. The purpose of both missions was an attempt to persuade

French forces to continue fighting on from North Africa. Neither diplomatic mission proved successful, possibly influenced by France signing an armistice with Germany on 22 June 1940.

from Apart "special flights", the remaining aircraft of No.10 Sqn were constantly engaged in patrolling the South-Western Approaches, an area bordered to the north by the Irish Sea, to the southeast by the English Channel and to the west by the Atlantic Ocean. Crews often sighted lifeboats, some empty, others survivors, to which they would direct rescue vessels. This period of June-October 1940



An excellent photograph showing various No.10 Sqn maintenance personnel servicing a Mk.III Sunderland between ops at Mount Batten.

was known in the *U-boatwaffe* as *die gluckliche zeit*, the "happy time", during which 274 vessels, totalling 1,390,000 tons, were sunk for the loss of only six U-boats. One of these was U-26, which had previously been damaged in a depth charge attack about 300 mi/485 km west of Brest. On 1 July 1940, a No.10 Sqn aircraft patrolling the area located U-26 on the surface. The submarine had already dived when the Sunderland attacked, dropping 4x250lb/113kg anti-submarine bombs slightly ahead of the U-boat's projected course. Shortly after, U-26 surfaced and was again attacked, the bombs falling near the conning tower. At this point, the U-boat commander ordered his crew to scuttle and then abandon the boat. All 41 crew were rescued by a Royal Navy (RN) corvette. The sinking was shared between the Royal Navy and No.10 Sqn. The squadron's next submarine sinking would not occur until almost three years later. This proved to be the case with most Coastal Command squadrons during this period, with limited "kills" being attributed to aircraft until more sophisticated weapons and tactics were developed.

With the German occupation of France, the *U-boatwaffe* gained access to Bay of Biscay ports from July-August 1940, cutting transit times to the Atlantic by half and allowing U-boats to remain longer on station. Brest, Lorient, Saint Nazaire, La Rochelle and Bordeaux became home for eight flotillas, each with a nominal strength of 25 U-boats, plus one Italian flotilla of 23 submarines.

Due to heavy shipping losses being experienced at this time in the South-Western Approaches, from August 1940 all convoys were routed around the north of Ireland to the ports of Glasgow and Liverpool. To provide additional air cover over this area, between August 1940 and April 1941, a detachment from No.10 Sqn composed of four aircraft and their crew, plus a maintenance party, were based at Oban on Scotland's west coast. Despite the lack of U-boat sinkings, constant patrolling over and around convoys was beneficial in warding off attacks. Otto Kretschmer, Germany's top scoring U-boat commander, reported that on one occasion in July 1940 a patrolling Sunderland forced him to dive four times over a four hour period as he tracked a convoy; on surfacing a fifth time, both Sunderland and convoy had disappeared.



Sunderland Mk.III W4004 being pulled up the slipway at Mount Batten. Note the ASV Mk II radar antenna array both atop and on the side of the rear fuselage. Also visible are the effects of exposure to harsh Atlantic weather. The aircraft joined No.10 Sqn in February 1942 but failed to return from an anti-submarine patrol in the Bay of Biscay in May 1943.

The war's momentum was gathering pace when Mount Batten experienced its first air raid warning on 1 July 1940; by month's end, the Luftwaffe had revisited the base surrounding areas with another 40 raids. Patrolling Sunderlands were beginning to encounter French-based Luftwaffe aircraft, fortunately without loss. Reconnaissance flights over

Biscay ports were carried out to report on the build-up of German shipping and barges in preparation for an expected cross-channel invasion. Two squadron aircraft were

dispatched to the western Mediterranean to reconnoitre Vichy French activities along the North African coast. Both No.10 Sqn aircraft were then deployed in an air-sea rescue role when 12 Hurricane fighters and two Blackburn Skuas ferried to Malta from the carrier HMS *Argus*, all aircraft arriving safely. The Sunderlands, which were also carrying RAF personnel to service both Hurricanes and Skuas on Malta, then returned to Mount Batten.

The majority of No.10 Sqn's flying for August 1940 was operated by the Oban detachment, with aircraft cycled through Mount Batten due to its superior maintenance facilities. Mk.I ASV (Air to Surface Vessel) radar, although with limited capability, became available round this time and squadron members commenced both ground and air training in its operation. September 1940 was pivotal when RAF Fighter Command denied the Luftwaffe air ascendancy over Britain. Before this victory became assured, however, it was necessary to maintain a reconnaissance watch on a massive build-up of naval craft assembled in Dutch, Belgium and French ports to transport Germany's invading army across the English Channel. No.10 Sqn flew a number of patrols around the Brest peninsula during the month to report on the disposition of German naval traffic that might lend itself to any invasion attempt. During this period, the squadron lost its first aircraft. On return to Oban at night following a convoy escort, poor weather conditions encountered when alighting led to a wing striking a rock outcrop and the Sunderland sinking. All crew members managed to escape. On 25 September 1940, another No.10 Sqn aircraft on patrol from Oban was responsible for the rescue of a lifeboat with survivors from the sinking of the liner City of Benares (11,000 tons) on 17 September 1940. Among the 400 plus crew and passengers were 90 children being evacuated from Britain, of whom only 13 survived, with six in the lifeboat rescued by a destroyer summoned by the Sunderland's crew.

Poor weather conditions during October-November 1940 restricted flying operations, with night patrols being abandoned and flights being recalled before dusk. Uboat attacks continued unmolested, with 61 vessels, totalling 352,000 tons, sunk in October 1940 for the loss of one U-boat. With the coming of winter, Luftwaffe tactics also changed:

daylight raids were replaced by nocturnal attacks. On the night of 27-28 October 1940, Portsmouth and Mount Batten were subjected to staggered bombing raids lasting several hours. No.10 Sqn lost two aircraft in this attack; one was destroyed in the hangar where it was undergoing maintenance, the second at its mooring. As a consequence of damage suffered during the raid, remaining squadron aircraft were repositioned to Pembroke Dock, not returning to Mount Batten until 5 December 1940.



Two No.10 Sqn aircraft riding out rough weather in Plymouth Sound. Normal procedure required a skeleton crew to be on board to run the outer engines to prevent the aircraft breaking free from its mooring

Flying Mk.I Sunderlands at low level for some 12-14 hours, particularly during the winter months, would have been physically demanding. Initially, the flat windscreens were not fitted with wipers although they did eventually become standard on later models. When forward vision was degraded by ice or rain, the pilot would slide open a side window to peer forward. Neither was there anti-icing for wing leading edges or propellers as, at this stage, only the carburettors received hot air anti-icing.

Air raids over and around the Plymouth area continued into 1941, resulting in three No.10 Sqn aircraft being damaged on 13 January, leaving only one serviceable Sunderland at the end of the month. The efforts of No.10 Sqn maintenance crews deserve recognition at this time as they managed to keep four Sunderlands available for the Oban attachment and an aircraft available for a two to three week Mediterranean detachment. These exigencies required a high standard of maintenance to be carried out under extremely trying conditions. As an example, during a black out period lasting several hours, a team of squadron engineers removed and replaced an engine, which was then successfully ground run. Moreover, No.10 Sqn engineering personnel operated independently from the RAF maintenance system, carrying out their own major overhauls and parts procurement, thus avoiding squadron aircraft having to be positioned at a RAF facility to undergo major engineering work.

In February 1941, Coastal Command underwent a structural change. No.15 Group became responsible for operations covering the North-Western Approaches. A new group, No.19, was established at Plymouth, in effect taking custody of the former group's area, i.e. South-Western Approaches and the Bay of Biscay. No.10 Sqn remained at Mount Batten.

AND THE WAR GOES ON

Convoy escort, anti-submarine patrolling, reconnaissance flights and two to three week Mediterranean attachments constituted No.10 Sqn's ongoing workload. Sighting and sinking of U-boats occurred neither frequently nor with positive results in the period 1939-1942. Although Admiral Donitz, German C in C submarines, had wanted to begin the war

with a fleet of 300 submarines, of which 100 would always be at sea, on 1 September 1939 he had only 57. He did not to achieve his overall goal until August 1942. Even so, the U-boats' dominance and the limited success against them can be attributed to Britain's and her allies' lack of preparation prior to 1939. The sinking of approximately 2,200 allied vessels up to the end of 1942 for the loss of only 154 U-boats encapsulate the inadequacy of western naval forces to counter the threat posed by the *U-boatwaffe*.

A broad picture of No.10 Sqn activities during the middle months of 1941 are shown below:

| 29 April 1941 | Sunderland and six crew lost while attempting to land in poor weather at Milford Haven. |
|---------------|---|
| 06 May 1941 | Four patrols around Brest to observe any movement of the battle cruisers <i>Gneisenau</i> and <i>Scharnhorst</i> . |
| 10 May 1941 | Sunderland sunk at its mooring at Malta by a strafing Messerschmitt Bf-109. |
| May-June 1941 | Squadron aircraft begin receiving updated ASV Mk.II radars. The first of several Mk.II Sunderlands joined No.10 Sqn. |
| 27 May 1941 | Two No.10 Sqn aircraft engaged in searching for the German warships Bismark and Prinz Eugen. |
| 25 June 1941 | Sunderland and two crew lost in a night landing at Milford Haven. |
| 30 June 1941 | Sunderland and a Focke-Wulf Fw.200 Condor engaged in an aerial duel. The Sunderland's port outer oil tank was hit, with the loss of a large amount oil. Leading Aircraftman (LAC), Milton Griffin, volunteered to crawl into the wing to investigate. Over the next two and a half hours, in four separate trips, he repaired the holed tank and twice hauled 2gal/9lt cans of oil, pouring the contents into the tank. For his actions, which enabled the safe return of his aircraft and crew, he was awarded the Distinguished Flying Medal (DFM). |
| July 1941 | Over 650 hours flown both day and night, with only two sightings of U-boats. |
| 09 Jul 1941 | The impact of alighting on the open sea to rescue a downed RAF crew resulted in the Sunderland's outer port engine and nacelle separating from the wing and the port float being severely damaged. A RN destroyer rescued all personnel and then sank the aircraft with gunfire. |
| August 1941 | Limited operations. Numerous engine problems resulted in the cancellation of a number of sorties. |
| Sep-Oct 1941 | Ongoing patrolling including anti-shipping, anti-submarine and convoy escort. |

With the coming of the northern winter months in 1941-1942, harsh weather conditions once again restricted flying operations. Gales, low cloud and reduced visibility were the usual suspects. Apart from the north Atlantic's seasonal characteristics, pressing matters had arisen in the Mediterranean theatre as Germany's Afrika Corps pressed hard towards the Suez Canal. Admiral Donitz was directed to dispatch a number of U-boats to the Mediterranean via the Straits of Gibraltar to attack allied naval and merchant shipping. Several



10 May 1941, Malta. When on detachment to the Mediterranean, No.10 Sqn Sunderland N9049 was sunk at its mooring by a strafing Messerschmitt, Bf-109.

No.10 Sqn aircraft began a number of lengthy deployments to the Mediterranean, operating out of Gibraltar through to Alexandria and Cairo. Apart from anti-submarine patrols, Sunderlands ferried military personnel between various bases. The latter part of 1941 saw a large turnover of No.10 Sqn personnel, with the majority of air and ground crew, who had commenced their tours in December 1939, now returning home. Squadron numbers during the war were made up by RAAF drafts from Australia.

Improved weather conditions saw No.10 Sqn clash several times with Axis naval vessels during May-June 1942. On 8 May 1942, *Munsterland*, a 6,000 ton/5,440 tonne blockade runner, was caught returning to occupied France. Attacked in the Bay of Biscay with depth charges and severely damaged, she limped into Bordeaux two days later.³ On 28 May 1942, a surfaced Italian submarine was assessed as being damaged following an attack in the western Mediterranean. On 5 June 1942, west of Bordeaux, U-71 was depth charged by a squadron aircraft and forced to surface. The aircraft's gunners then fired on the submarine before it submerged again, trailing a large oil slick. Substantially damaged, U-71 eventually reaching La Pallice. As the Sunderland turned for home, a Focke-Wulf Fw.200 Condor engaged it in a running fight lasting 75 minutes. After returning to Mount Batten, examination revealed the aircraft had received over 85 hits from the Condor.

On 7 June 1942, two No.10 Sqn aircraft depth charged a surfaced Italian submarine, *Luigi Torelli*, off the northern Spanish coast, forcing her to run aground on a sandbar at the port of Santander. On 11 June 1942, damage sustained to U-105 in the Bay of Biscay from a No.10 Sqn Sunderland's depth charges forced her to return to Lorient. Subsequent repairs to U-105 did not allow her to resume service until November of that year.

Unfortunately, the increase in operational tempo led to the loss of the squadron's first Sunderland and crew due to enemy action on 21 June 1942. Attacked by an Arado Ar-196 floatplane, the Sunderland was forced to alight but exploded shortly after to coming to a halt. None of the 11 crew members survived. Another Sunderland and her crew of 12 were lost on 30 July 1942 while operating an anti-shipping patrol. Less than a fortnight later, on 9 August 1942, a further loss of an aircraft and 12 crew occurred while carrying out an anti-submarine patrol in the Bay of Biscay.

From early in 1942, U-boats reported a number of daylight attacks from aircraft in the Bay of Biscay. Irrespective of weather conditions, conning tower lookouts were not sighting their attackers until too late, due to the updated ASV Mk.II radar that was now installed in most Coastal Command aircraft. To counter this threat, Admiral Donitz ordered

the installation of the French designed Metox radar search receiver, with the first U-boats being equipped in August 1942. Despite being of basic design and capability, its early warning detection capability afforded the *U-boatwaffe* respite from Coastal Command aircraft. U-boats could once again surface to recharge their batteries as Metox would alert them of an approaching aircraft and allow sufficient time to dive. As a result, the allied air offensive against the U-boats in the bay had, by October 1942, led to a marked reduction in both sightings and attacks. This situation continued until February 1943 when the muchimproved 10cm ASV Mk.III radar began appearing in limited numbers. By mid-year, the majority of Coastal Command aircraft were equipped with this latest ASV variant, which could accurately detect surfaced submarines at a range of 12 mi/ 19km. Importantly, whereas Metox was tuned to pick up the 1.5m Mk.II ASV radar, it was unable to detect the new 10cm radar wavelength. Within a few months of its introduction, the 10cm ASV radar would prove to be a decisive factor in defeating the *U-boatwaffe*.

In September 1942, Admiral Donitz secured 24 Junkers Ju-88C long-range, twinengine fighters from the Luftwaffe to provide additional protection for U-boats transiting through the bay. The aircraft of V/KG40 (V.Gruppe/Kampfgeschwarder 40) were based near Lorient and Bordeaux. At the same time, returning U-boats were equipped with 4 x 8mm machine guns to increase their defensive firepower when being attacked from the air. Despite some early successes against attacking aircraft, Air Vice Marshal John Slessor, C in C, Coastal Command, stated to his crews, "the cost of fighting back may cost us a few aircraft, but persisting will result in greater U-boat losses".⁴

Flying conditions during the winter of 1942-1943, combined with the advantage gained by the Metox search receivers, resulted in only one attack on a U-boat in February 1943. However, better weather and the widespread installation of the improved ASV Mk.III radar led to an increase in sightings and attacks on U-boats in the bay during March-April 1943. In several instances, U-boats remained on the surface, engaging the aircraft with gunfire. Choosing to remain on the surface in daylight when recharging batteries, at least gave U-boat crews a better chance of sighting an aerial predator. As a counter measure, some U-boats were equipped with up to 6 x 20mm cannon and a 3.7cm semi-automatic, quick firing cannon. Although intended as "aircraft traps", these U-boats were only marginally successful when Allied tactics negated their potency.

TURNING POINT AGAINST THE U-BOATS

May 1943 is regarded as the turning point in the war at sea, when Allied forces gained a decisive victory over the U-boats. A gradual build-up of superior weaponry and tactics, used collectively, was responsible for ensuring Germany's submarine fleet never again posed a serious threat. Primarily fought in mid-Atlantic, both naval and air assets combined to hunt down numbers of U-boats attempting to attack allied convoys. Admiral Donitz's son, Peter, was one of those lost in this period. Air power, either land-based Very Long Range (VLR) Liberator bombers from Iceland or aircraft operating from small escort carriers, were involved in over 20 U-boat sinkings. When the month ended, a total of 41 U-boats had been lost. The upshot of these disastrous losses led Admiral Donitz to withdraw his Atlantic submarines to recover and regroup.

Six of May's losses were in the Bay of Biscay, two of them attributed to No.10 Sqn. On 7 May 1943, No. 10 Sqn aircraft observed U-465 on the surface approximately 240 nautical miles

northwest of Cape Ortegal, Spain. The watch crew seemed unaware of the Sunderland's approach as the aircraft dived out of cloud cover, making two depth charge attacks, with the submarine taking no action to defend itself. U-465 was lost along with all 48 crew.

The Bay of Biscay, 31 May 1943: after two previous air attacks that had left U-563 damaged, a No.10 Sqn Sunderland was directed to locate the U-boat. Following a successful sighting, two depth charge attacks were made; the first brought U-563 to a standstill, the second left her sinking by the bow. A RAF Sunderland then dropped further depth charges on the submarine, producing a violent explosion, which destroyed both U-563 and her 49 crew.

"Flak Trap". From mid-1943 in an attempt to give added protection against increasing numbers of aircraft attacks, U-boats were often armed with up to six 20mm quick firing canon in twin and quad mountings.

U-boat sightings and sinkings for June 1943 tapered off substantially following May's heavy losses. In July, however, Admiral Donitz ordered his U-boats to resume their Atlantic offensive and, despite sinking approximately 50 allied vessels, 38 of their own number were lost. Again, in August 1943, the ratio of sinkings worsened for the *U-boatwaffe*; 25 U-boats sunk against only 26 allied vessels.

U-454, was claimed by No.10 Sqn on 1 August 1943. The submarine had departed from La Pallice on 30 July 1943, enroute for the Mediterranean, when sighted crossing the Bay of Biscay. The Sunderland was under the command of Flight Lieutenant Bob Fry, a 29 year old South Australian. During the low level attack, defensive canon fire from U-454 badly damaged the aircraft's two starboard engines and then ruptured the starboard main fuel tank. With the Sunderland's cockpit awash with fuel and fumes and even though its three pilots were believed wounded, the attack was pressed home. Six depth charges were dropped, three falling each side of U-454 which resulted in her sinking in 30 seconds and taking 32 of her 46 crew with

her. The crippled aircraft was observed turning towards a Royal Navy Escort Group, before finally impacting the sea. Unfortunately, Bob Fry and five of his 12 crew members did not survive. Despite the gallantry he and his crew displayed in carrying out the attack, Bob Fry's only recognition was a Mentioned In Despatches (MID), protocol decreeing this award correct due to the posthumous circumstances.

In August 1943, No.10 Sqn suffered the loss of a further two aircraft and their 24 crew members. On 6 and 18 August, both Sunderlands were reported as shot down in the bay by Ju-88s. In a running fight lasting over an hour on 3 August, a squadron aircraft was attacked by seven Ju-88s. Despite damage from machine gun and cannon fire, the aircraft made a safe return to base. This particular Sunderland was the first in the squadron to be fitted with four fixed nose mounted .303 Browning machine guns. The concept of additional nose armament arose in earlier discussions at No.10 Sqn where personnel first produced technical drawings and then followed up with the practicable installation of the weapons. The whole process was deemed so successful that Short Brothers immediately incorporated the new design into all new-built Sunderlands. The additional firepower not only increased the ability to suppress U-boat gun crews, but also allowed the pilot to eliminate line error when carrying out a depth charge attack.

On 21 September 1943, a brief transmission from a squadron aircraft over the bay mentioned a number of Ju-88s. No more was heard from the aircraft or her II crew members. On 3 October 1943, another aircraft and II crew failed to return after departing from Mount Batten at 2315 the previous night on an anti-submarine patrol. Although a later report advised the aircraft was returning with engine problems, nothing further was heard. Subsequent advice suggested the aircraft might have ditched south of the Scilly Islands. Again, on 17 November 1943, another squadron aircraft and II crew members were lost without trace while carrying out an anti-submarine patrol.



8 Jan 1944, U-426 sinking North West of Cape Ortegal, Spain following a depth charge attack by a No.10 Sqn Sunderland. There were no survivors from the U-boat's 51 crew members.

The winter months of 1943-1944 brought their usual inclement weather conditions resulting in limited sightings and attacks on U-boats. On looking back, however, 1943 had seen the allies gain a decisive victory over the *U-boatwaffe*. A combination of tactics, technology and increasing numbers of naval vessels and aircraft were eliminating any former advantages held by Germany's underwater fleet. To illustrate the point: in the period 1 September 1939 and 31 December 1942, a total of 154 U-boats were lost as opposed to 241 in 1943 alone.

January 1944 brought another U-boat sinking for No.10 Sqn, this time U-426. The submarine was sighted on the surface, in the bay, west of Nantes. Her commander elected to engage the Sunderland with the vessels heavy, anti-aircraft battery. Descending to 50ft/15.25m on the run in, the Sunderland's four fixed nose guns had a devastating effect on U-426's gun crews. The depth charge attack resulted in U-426 stopping and then beginning to sink by the stern, followed by a large explosion. There were no survivors from U-426's crew of 51. The Sunderland's captain was awarded

a Distinguished Flying Cross (DFC).

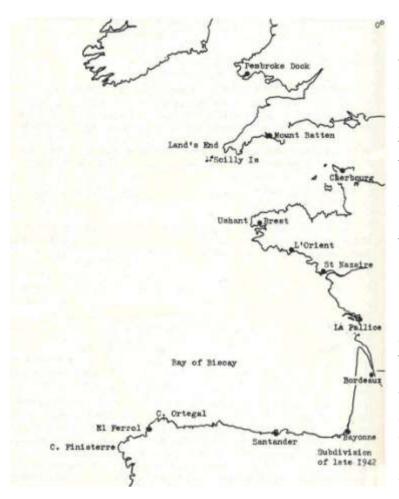
For some time, No.10 Sqn had, like other squadrons in Coastal Command, recognised the need to increase the Sunderland's performance. From the aircraft's maiden flight in October 1937 until the end of 1943, the MTOW (Maximum Take Off Weight) had increased from 45,000 lbs/20,400 kg to 70,000 lbs/31,700 kg. Bristol Pegasus engines had been used constantly since the aircraft's introduction and a change seemed quite justified. Approval had been given for the squadron to install Pratt and Whitney, R1830-90 Twin Wasp engines on one aircraft, commencing in early 1944. At the same time, Short Brothers began their own conversion work on a similar prototype. Following successful test flights by both aircraft in March-April 1944, the modification was incorporated into production as the Sunderland Mk.V.

Although the U-boat war had turned against Germany, Admiral Donitz believed that keeping his submarine fleet at sea until hostilities ended would tie down large numbers of allied naval and air assets. Throughout 1944, this mantra was to cost Germany almost 240 U-boats, plus many crew, for the loss of only 208 merchant ships. No.10 Sqn continued its operational tempo throughout the first half of 1944 and, despite no U-boat sightings, there were several encounters with JU-88s, fortunately with no loss. The limited observation of U-boats may be attributed to their now widespread use of *schnorkel* that allowed diesel engines to run continuously as the boat proceeded below the surface at periscope depth.

During the latter half of D-Day, 6 June 1944, approximately three quarters of the 50 odd U-boats stationed at Biscay ports were ordered to attack the allied invasion fleet. Only five were to return, the majority sunk by the massive air and sea covering forces. During this period, No.10 Sqn made their final U-boat kill of the war. U-243 had originally departed from Norway, sailed around England and was patrolling the entrance into the English Channel before being ordered to proceed to a Biscay port. On 8 July 1944, south west of Brest, U-243 was sighted travelling on the surface. As the Sunderland attacked at a low height, the U-boat opened fire. The accurate return fire from the aircraft's front gunner had a devastating effect on the exposed gun crew and mortally wounded the captain. Six depth charges were dropped. U-243 came to a standstill and appeared to be settling by the stern, with some crew taking to life rafts. Following the attack, the Sunderland then directed a destroyer to the scene, enabling 37 of the submarine's crew to be rescued. In recognition of their actions, the aircraft captain and front gunner were awarded a DFC and DFM, respectively.

After breaking out from Normandy, by mid-August 1944 the US army had reached the outskirts of U-boat bases along the Brittany coast. The 22 remaining U-boats were then ordered to sail for Norway. The voyage was completed successfully as all boats were schnorkel equipped. Included in the Wehrmacht units withdrawing from France were the remaining elements of the Luftwaffe's KG40 that had proven a deadly adversary to No.10 Sqn. The former U-boat bases of Lorient, La Rochelle and St Nazaire remained in German hands until May 1945. In effect, they became garrison towns, not contributing a great deal to the German war effort but tying down large numbers of allied assets to monitor their control. No.10 Sqn's role in this siege warfare centred on reconnaissance of either seaborne movements between the scattered bases or attempts to escape to Spain.

In mid-September 1944, a No.10 Sqn crew sighted MV *Rostock* (2,500 ton/2,540 tonne) west of Lorient, wearing the livery of a hospital vessel, sailing to a Spanish port. Two RN Motor Torpedo Boats (MTBs) were summoned and boarded the vessel, which was later escorted to Plymouth Sound. With *schnorkel*-equipped submarines producing fewer sightings, oddities did occur, such as when a squadron aircraft attacked a whale, believing they had sighted a "snorting" U-boat.



No.10 Sqn's main area of operations during WWII. Initially with No.15 Group and from February 1941, with No.19 Group, Coastal Command.

Published figures vary regarding losses on both sides. Yet, what is quite clear is the startling drop off in allied shipping losses compared to those suffered by the U-boatwaffe in the last four months of 1944. In the waters surrounding Britain, 24 allied merchant vessels were sunk against the destruction of 55 U-boats. Admiral Donitz continued to promulgate his mantra, exhorting his crews to maintain the offensive keeping as many submarines as possible at sea, thus tying up allied resources. At this stage of the war, however, life in a Uboat was virtual suicide. Herbert Werner, an experienced officer and U-boat commander, encapsulated the futility of Donitz's decree in his bestselling memoir, Iron Coffins.

By January 1945, No.10 Sqn was one of 48 squadrons that comprised the offensive arm of Coastal Command. In

addition, there were another dozen squadrons operating photo-reconnaissance, meteorological and air-sea rescue aircraft. No. 10 Sqn made a number of sorties over the Irish Sea in January 1945 in response to the loss of several vessels in a burst of U-boat activity. Although the sorties continued in February, suspicious contact was reported on only two occasions, albeit with no resolution. Even so, further loss of aircraft and crew still occurred despite the war winding down. In early February, a Sunderland departing Mount Batten did not become airborne, striking the boom defences. The aircraft was written off and unfortunately two of the II crew lost their lives. In a March incident, a Sunderland's inner starboard propeller separated, cannoning into the outer starboard propeller, resulting in a successful ditching in the Irish Sea. The aircraft was later towed to Pembroke Dock for repair. Between these two in-

cidents, No.10 Squadron's Badge gained royal approval. The badge depicted a chimera fish pierced by an Australian Aboriginal fishing spear, with the motto "STRIKE FIRST".

With Germany rapidly losing ground on both eastern and western fronts, U-boats were still putting to sea in April 1945. Destined primarily for English coastal waters, 48 were lost. Until the end, No.10 Sqn and Coastal Command's high sortie rates continued. On 4 May 1945, the same day Admiral Donitz signalled all U-boats to cease fighting, a No.10 Sqn aircraft dropped depth charges on an oil slick while on convoy patrol in the English Channel. The squadron flew its final wartime sortie on 7 May 1945.



Following on from discussions in 1943, No.10 Sqn's badge was officially given Royal approval in February 1945. The badge depicts a chimera fish being pierced by an Australian Aboriginal fishing spear.

In mid-May, No.10 Sqn disposed of their Mk.III Sunderlands and took on charge 12 Mk.V Sunderlands previously operated by No.461 Sqn RAAF. The plan was that No.10 Sgn would ferry these aircraft to the Pacific Theatre to engage the Japanese. Rumour and counter rumour over the squadron's future and the end of the Pacific war saw No.10 Sgn disbanded at Mount Batten on 26 October 1945. The squadron justifiably feel proud of its record. It had the distinction of being the first RAAF squadron posted overseas and remaining on active service for the duration of the war. Numerous squadron members of all ranks were rewarded with military honours in recognition of their service or gallantry. No.10 Sqn was credited with sinking six Uboats and damaging another destroying six enemy aircraft and damaging nearly 30 others, as well as the capture of one merchant vessel and damage to several others. These achievements were made on the back of flying over 3,200 sorties totalling approximately 43,000 flying hours.

Conflict, unfortunately, comes at a cost for all, including the victors. No.10 Sqn lost a total of 26 aircraft during the course

of the war, nine by direct enemy action and four listed as Failed To Return (FTR) following patrols over the Bay of Biscay. The others were written off due to various circumstances, such as landing in marginal weather on return to base, being sunk by the RN after sustaining significant damage following a difficult landing in the open sea, or being sunk at their moorings due to gales. Sadly, for those 151 members of No.10 Sqn who lost their lives, the majority lay in unknown graves in the Bay of Biscay.

ACKNOWLEGEMENTS

Baff, Kevin C, Flt Lt, *Maritime Is Number Ten: The Sunderland Era*, Griffin Press, Adelaide, South Australia, 1983

Brennecke, Jochen, The Hunters and The Hunted, Transworld Publishers, London, 1960

Dimbleby, Jonathan, *The Battle of the Atlantic: How the Allies Won the War*, Penguin Random House, London, 2016

Kaplan, Philip & Currie, Jack, Wolfpack: U-Boats At War 1939-1945, Aurum Press Ltd, London, 1997

Preston, Antony, U-BOATS, Arms & Armour Press, London, 1978

Robertson, Terence, The Golden Horseshoe, Evans Brothers Limited, London, 1956

uboat.net: https://uboat.net/

Wilson, Stewart, Anson, Hudson & Sunderland In Australian Service, Aerospace Publications, Weston Creek, A.C.T, 1992

Werner, Herbert, Iron Coffins, Pan Books Ltd, London, 1972

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SHORT S.25 SUNDERLAND I and V

Powerplants: (I) Four Bristol Pegasus XXII nine cylinder single row air cooled radial engines with single speed superchargers each rated at 1,010hp for takeoff and 865hp at 6,500ft; de Havilland three bladed two-pitch metal propellers of 12ft 9in (3.89m) diameter; fuel capacity 2,025imp gal (9,206 I) in six wing tanks.

(V) Four Pratt & Whitney R-1830-90 Twin Wasp 14 cylinder two row air cooled radial engines with two speed superchargers each rated at 1,200hp for takeoff and at 4,900ft and 1,050hp at 13,100ft; de Havilland three bladed constant-speed and feathering propellers of 12ft 9in (3.89m) diameter; fuel capacity 2,552imp gal (11,601 I) in ten wing tanks.

Dimensions: (I/V) Wing span 112ft 9.5in (34.38m); length 85ft 4.1in (26.01m); height (on beaching trolleys) 32ft 2in (9.79m); wing area 1,487sg ft (138.14sg m).

Weights: (I) Empty 30,600lb (13,880kg); normal loaded 45,210lb (20,507kg); max overload 49,000lb (22,226kg); max wing loading 32.95lb/sq ft; max power loading 12.12lb/hp.

(V) Empty 36,900lb (16,738kg); max takeoff 60,000lb (27,216kg); max wing loading 40.34lb/sq ft; max power loading 12.5lb/hp.

Armament: (I, defensive) One (or two) 0.303in Vickers machine gun(s) in Frazer Nash FN11 nose turret; two 0.303in Vickers machine guns in open dorsal positions; four 0.303in Browning machine guns in FN13 rear turret with 500rpg.

(V, defensive) Two 0.303in Browning machine guns in Frazer Nash FN11 nose turret with 500rpg; two 0.50in fixed Browning machine guns in nose with 2,000rpg; two 0.303in Browning machine guns in FN7 dorsal turret with 1,000rpg; four 0.303in Browning machine guns in FN4A rear turret with 1,000rpg; one 0.50in Browning machine gun per side in beam position with 400rpg.

(I/V, offensive) Maximum load of 2,000lb (908kg) comprising depth charges, mines and bombs.

Performance: (I) Max speed 209mph (336km/h) at 5,000ft; cruising speed 170mph (274km/h) at 5,000ft; time to 5,000ft 7.2min at normal loaded weight; service ceiling 15,000ft (4,572m); range with max load 1,790 miles (2,880km); range with max fuel 2,110 miles (3,396km) at 170km/h, 2,500 miles (4,023km) at 136mph.

(V) Max speed 207mph (333km/h) at sea level, 213mph (342km/h) at 5,000ft; long

range cruise 133mph (214km/h) at 2,000ft; initial climb 814ft (248m)/min; service ceiling 17.900ft (5.456m); max range 2.690 miles (4.329km) at 133mph.

Note: Sunderland III performance: Max speed 210mph (338km/h) at 6,500ft; economical cruise 178mph (286km/h) at 5,000ft; initial climb 720ft (219m)/min; service ceiling 16,000ft (4,877m); normal range 1,780 miles (2,864km), max range 2,900 miles (4,667km).

FOOTNOTES

Munsterland then began her return journey to France ending at Bordeaux. Following repair, she was sunk by the Dover long-range battery in January 1944 when attempting to return to Germany via the English Channel.

¹ Coastal Command's No. 15 Group area of coverage in 1940 ranged from the North-Western to the South-Western Approaches of the North Atlantic to the United Kingdom (UK.

² No. 10 Sqn remained at Mount Batten until May 1941 and then returned to Pembroke Dock from May-December 1941 and again to Mount Batten from December 1941-October 1945. From August 1940-April 1941, a detachment of four No. 10 Sqn aircraft and crew with an accompanying maintenance party were stationed at Oban, Scotland to provide cover for shipping routed to the north of Ireland.

³ The blockade runner, *Munsterland*, had originally set out from Formosa (Taiwan) and proceeded to Japan, before positioning to re-provision the disguised German merchant raiders *Orion* and *Atlantis* in the Pacific.

⁴ Flt Lt KC Baff, RAAF, Maritime is Number Ten, 276.

⁵ Wehrmacht is the collective title of the united armed forces of Nazi Germany, incorporating the Heer (army), Kriegsmarine (navy) and Luftwaffe (air force).