

No. 423 SQUADRON

Part 1 of 4

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May 1942. All goes well for the Nazi enemy. His zenith has been reached. Not the least of his successes have been at sea, where the underwater wolves of one of Hitler's chief lieutenants, Doenitz, have been ripping and slashing the America-to-Britain lifeline, inflicting shipping losses much in excess of the figure deemed prohibitive. If this carnage is not checked, the enemy bids fair to end the fight by a knock-out at sea in the third round. Convoy escort by surface vessels alone has failed to cut down losses. The answer to the U-boat is more and more aircraft of the type that can fly long hours on close escort and anti-submarine patrol in co-operation with naval craft, seek out the raiders visually or with special radar, and either destroy them or keep them beyond attack-range of their intended victims. The hunter will then be the hunted, an offensive weapon will be forced back on the defensive, and a major step will have been taken toward winning the vital battle of supply.

One of the units, which were equipped with such aircraft and added to the counter-punch against the U-boat, was No. 423 Squadron, the first R.C.A.F. *Sunderland* squadron to come into existence in the United Kingdom. Ordered to form on 18 May 1942, it went into action eleven weeks later, and from then on, for nearly three years, was to scan the Atlantic from Reykjavik to Gibraltar. Its first haven was at Oban, Argyll, on the west coast of Scotland, and its parent formation was No. 15 Group, of Coastal Command.

Leading the influx of squadron members was Squadron Leader J. D. E. Hughes, D.F.C., an R.A.F. officer posted to Oban as flight commander on No. 423's birthday. His dubious privilege it was to organize something out of nothing, for the unit was almost completely lacking in facilities and equipment, and, but for himself, totally lacking in personnel. This situation went on for another eight days, until the unit's first C.O., Wing Commander F. J. Rump, also of the R.A.F., arrived from Gibraltar to lend support to the one-man squadron. For two days after that nothing but officers, all of them section leaders, arrived. Then, on the 29th, there finally appeared an airman, and No. 423 Squadron was no longer all Indian Chiefs and no Indians.

Although a steady flow of personnel followed, that bugbear of all budding formations — shortages — continued to hamstring the squadron in virtually every department. The first aircrew to arrive, other than the above officers, did not do so until exactly a month after its formation, and they had nothing of their own to fly until 17 July, when the squadron's first aircraft, a *Sunderland Mark 77*, was ferried to Oban. Arrangements had, however, been made for aircrew to be attached to No. 228 (R.A.F.) Squadron for flying experience, and several had already flown on operations with that squadron in the capacity of "spare". Within a couple of days after the arrival of a second *Sunderland* on the 18th, flying training and test flights, including local night details, had begun.

On 3 August, two flights (one of 9 hours, the other of 12 ½) were logged by the crews of Pilot Officer I. R. A. ("Moose") Mills and Flight Sergeant R. S. Long. Though referred to in the unit diary

as "training flights", these actually had all the aspects of coastal operations. The duty performed was "A/S Patrol" (anti-submarine) and both interrogation reports contained the words "No sightings or contacts made", which unquestionably indicated that the purpose of each flight was to search a given area of the sea for U-boats.

The arrival, before mid-August, of two more *Sunderlands* brought the unit's aircraft strength to four, and one of the latest acquisitions carried a crew on 423's first official operation on 23 August. It was an anti-submarine search flown by a Rhodesian captain, Flying Officer J. Musgrave, and his crew of ten — Pilot Officers A. J. Finucane, W. B. Everton, and R. D. Woltman, Sergeants A. Hayden, R. Harrison, E. J. Garden, G. R. Elliot, J. H. Wright, and A. C. W. Heath, and Leading Aircraftman G. Wright. The search incorporated the "creeping line ahead" method and the flight lasted roughly thirteen hours. There was no sign of the enemy.

After this operational beginning, training held sway for four weeks. Then, on 20 September, the same skipper and an eleven-man crew carried out a twelve-hour sweep off the Outer Hebrides. Again no contacts, visual or radar, were made.

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When, on 23 September, "Moose" Mills took off with two other aircraft to escort a convoy, he had every intention of returning to alight on the placid inshore waters of the Firth of Lome, harbour for No. 423's flying-boats. But double engine-failure on the port side while over the open sea made him change his plans. It happened a few minutes after leaving the convoy, and as the wave-tops were only 500 feet below, there was no time to investigate the trouble and possibly rectify it in the air. Mills had to make a forced landing on a heavy sea while carrying a full load of depth charges. While far from being impossible to get away with, an ocean landing by a flying-boat was recommended only when special emergency and the experience of the pilot made the operation both necessary and advisable. As for the first requirement, this was no doubt a special emergency; as for the second, "Moose" was in no position to reflect on his qualifications. Down he set the *Sunderland* in the approved stall fashion, and with surprising gentleness. No damage was done either to floats or hull.

Once the kite was waterborne, the top-priority item on the drill was to jettison the dynamite to bring down the all-up weight for the hoped-for take-off. Even though the D.C.s were "on safe", the crew kept their fingers crossed for some time after the cans had been dropped, for, as Pilot Officer N. V. Martin, the second navigator, put it, "if anything had decided to go wrong, we sure were sitting on an awful lot of h.e.!" Nothing went wrong.

Meanwhile the wireless operator was pounding out an S.O.S. and the flight engineer was succeeding in his attempts to restart the offending engines. Now having four engines to taxi with, Mills decided to head toward a small island off in the distance. But this was a far cry from the Firth of Lome. Whenever the *Sunderland* was turned out of wind, the starboard float submerged and the starboard outer prop bit deep into the sea. As the 'boat struggled through 30-foot waves, water was pouring through the front turret, the pilots' windows, and the astro-hatch. After about half an hour of this it was realized that the *Sunderland* was shipping water faster than the pumps could handle it, and that sooner or later it was going to sink. Clearly it was time to get airborne. The first take-off attempt, along the length of a swell, was unsuccessful. The second try was good, and, in Mills' own words, this is how it went: "... A bucking broncho had nothing on our *Sunderland* on that take-off. One second we were surf-boarding down the backside of a swell and ploughing the trough with our nose, and the next we were temporarily airborne. The floorboards were buckling and the navigators were frantically pursuing cups and saucers flying about the galley. With each bounce the 'boat picked up a little more

airspeed, and finally, at a speed of 65 knots, it was airborne to stay. In two hours we were back at base."

The rugged appearance of the *Sunderland* quite belied its seaworthiness. For all its ark-like proportions, when compared with even the smallest fishing smack as a sea-going craft it was scarcely more than an eggshell shaped like a boat. It was essentially an aircraft that could float, not a ship that could fly. Small wonder, then, that this particular one, during its take-off struggle, had taken a bit of a beating. The bows were stove in, the sides of the hull were creased, the longerons were strained, the tail-plane was dented and warped, the propellers were pitted and bent, and who knows how many rivets had popped. The aircraft was, in fact, so badly damaged that it was not again used on operations by this squadron. Mills and his crew were congratulated by the Air Officer Commanding-in-Chief Coastal Command, Air Chief Marshal Sir Philip B. Joubert, for having effected a successful forced landing and then taken off again "in extremely hazardous circumstances."

One of the more interesting of the unit's early flights might well have been called "Operation Kelp". Actually a non-operational flight, it was made on 24 September by Pilot Officer A. B. Howell and crew, accompanied by a scientist from the Ministry of Supply, and it involved a photographic survey of certain seaweed areas along the west coast of Scotland and the coastline of the Outer Hebrides. There was no truth to the rumour that the "man from the Ministry" was planning to cultivate a belt of impenetrable kelp around the British Isles for the purpose of fouling the propellers of U-boats.

Throughout the last six days of October the unit was operating while on the move. On the 26th it had undertaken its own wholesale transfer to Castle Archdale, located on Lough Erne in Northern Ireland, to which on more than one occasion its aircrew had been attached on operations with other squadrons. The big *Sunderlands* airlifted all its 292 personnel and gear (except the rear party and its accoutrements) in exactly a week, carrying loads consisting in some cases of 10,000 lbs. of passengers and freight plus the nine-man crew. The date of the move's completion (3 November) also marked the end of an exceedingly busy fortnight of operational training. Intensive navigation, bombing, and air-firing exercises were carried out in that period, the intensity of the armament training being evidenced by the 346 practice-bombs that were dropped and the 31,000 rounds of .303 that were fired.

Although the confusion following the move might reasonably be expected to hamper the operational output temporarily, such was not the case. The young squadron, still not over-endowed with aircraft and spares, operated on twenty of the thirty days of November, a month not noted in the U.K. for its fair-weather propensities. The 45 sorties and 532 operational hours for the month were to compare favourably with totals for any month up to and including May 1944.

It was on 12 November 1942 that a crew of No. 423 Squadron first sighted a real live German submarine. What must have been the surprise and excitement felt by Flt. Lt. Jack Sumner and his crew when they saw a U-boat, fully exposed, six miles away! What must have been their disappointment to see it crash-dive a minute or so later!

Forty seconds after the raider disappeared, the flying-boat swept over its approximate position, but the rough sea obscured the sub's wake, leaving no trace on which to base an accurate attack. Resisting the temptation to bomb by instinct, the captain dropped only smoke flares, then circled the marked area for thirty minutes, daring the U-boat to reappear. The waiting was in vain, for obviously the submarine was having no part of the *Sunderland*. By this time it was probably hugging the ocean floor.

On its many reconnaissance flights the squadron was not always concerned primarily with submarines. On 20 November, for example, a four-day aerial search for a lifeboat by numerous Coastal Command aircraft culminated in success when a 423 crew, skippered by Flt. Sgt. S. H. E.

Cook, spotted the tiny craft and its dozen or more survivors. Details of its position, course, and speed, which were radioed to land, enabled a surface vessel to effect a quick rescue.

The squadron's first contact with the enemy came the following day. Rather surprisingly, this did not take the form of an offensive action against the seaborne foe; it materialized out of a defensive action against an aerial attacker. *Sunderland* "D"-Dog had been airborne scarcely two hours and had yet to reach its convoy when Flying Officer J. R. Matthews spotted from his mid-upper turret a Junkers 88 approximately 800 yards off the starboard beam. It was flying a parallel track on a reciprocal heading, and it had a height advantage of about 500 feet. Swinging behind the *Sunderland* in a wide arc, it came in on the port quarter and let go with its cannon and machine-guns from directly astern at 400 yards, closing to 200 yards before breaking away to starboard below. Tracer passed under "Dog" and a little to port. Meanwhile, tail-gunner Flying Officer Ray Harries had opened up at 250 yards' range and fired several hundred rounds, some of which were thought to have found their mark.

The *Sunderland's* captain, Flt. Sgt. Long, then headed into a patch of cloud, and, when he emerged from it, the 88 was seen on the starboard quarter down. Positioning itself at two o'clock low about 500 yards away, it now made a climbing bow-attack, opening fire at 400 yards and maintaining it up to 200 yards before breaking away. The *Sunderland's* armament replied with 50 rounds from Sgt. R. B. O'Connor in the nose-turret, 200 rounds from Matthews, and another good burst from Harries. All three were confident that hits had been scored, and their opinions were strengthened when the Junkers went into a steep dive that took it to within 50 feet of the sea. Appearing to recover, it turned for home and climbed into cloud cover, not to be seen again. Thanks to the alertness of its gunners and to the manoeuvring skill of its skipper, the big 'boat was damaged to the extent of only four harmless bullet-holes in the mainplane.

The combat had its humorous side. While Oerlikon and Browning slugs were criss-crossing only a few yards away, there drifted through the *Sunderland* the tantalizing aroma of sizzling steak. The Scottish flight-engineer cook, Sgt. R. B. W. Clegg, was busy with his frying-pan in the galley, and, come hell or high water, he was not going to waste it! He stuck doggedly to his skillet, occasionally peering through the port-hole to check on the progress of the battle, and when the Junkers packed up, the steak was done to a turn.

On the same day the squadron made its second fruitful search in two days, this one being part of the war's biggest rescue operation to date. At briefing, the searchers had been given "lat. and long." position hundreds of miles out at sea. To hit that position on the nose would leave little room for error on the part of the pilot-navigator team of Flt. Lt. S. Baggott, D.F.C., a New Zealander, and Pilot Officer N. Martin. But hit it they did, and after a short search in fast-fading daylight, their *Sunderland* swept over a little craft crammed with waving, cheering seamen. A Thornaby bag was dropped and the *Sunderland* stood by while homing signals were sent to the destroyer *Clare*, which was seen to reach the lifeboat some four hours later. Separate notes of thanks from Group Headquarters and the rescued personnel were subsequently received by the crew, but their greatest reward had been the sight of the actual rescue.

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The following description of an operation by Flt. Lt. Sumner's crew may be considered typical, in most aspects, of No. 423 Squadron's activities . . .

The time: 0030 hrs.

The batman taps the sleeping skipper on the shoulder.

"Time to get up, Sir. Briefing's at one-thirty, take-off three-thirty." (Batmen could seldom tell the time in Service officialese.)

A few hours before, the weather had looked anything but promising. The sky was heavy with a low overcast, and rain was pelting down — real "scrub" weather. Bed felt especially comfortable and warm to Sumner as he watched the batman shuffle off to wake the other officers. None the less . . .

Sleepy-eyed aircrew stumble through a drenching downpour to their messes. Breakfast consists of porridge, bacon and egg, tea or coffee, and "lashings of toast and marmalade".

"Looks like a really long stooge this time", some pre-informed flight engineer remarks. Engineers had a talent for ferretting out information about forthcoming ops before anyone else. "Almost seven hundred miles out! They'd better have those petrol-tanks good and full or there'll be a lot of us in the drink waiting for the air-sea rescue types."

By briefing-time the clouds have gone and the sky is a mass of stars. A strong wind has picked up, which means headwinds on the way out.

Covering one wall of the briefing-room is an Atlantic area-map, which itself looks as big as an ocean. Lines of ribbon run out from British ports to code-lettered sea positions that represent the latest reported positions of convoys inbound from America. Just beyond 25°W. is a miniature submarine.

"That's where you're going", announces the Operations Officer, pointing to the U-boat marker. "Americans patrolling that area yesterday came on a pack of subs. They attacked them but we don't know what the results were. As you can see from the chart, there's a convoy in the vicinity. But your job is those submarines. You'll get the weather conditions from the met. man."

The weather-merchant is far from happy. Only the urgency of the situation, he admits, permits the operation in the first place. The weather overhead is purely a local condition. Information from the Atlantic is so vague that he cannot predict with any accuracy. There are several fronts out there, but their movements are indefinite.

"If you're lucky you may return under conditions just as they are now" — and he adds — "or it may get thick."

After a few words from the Squadron Commander, the aircrew leave the briefing room. Sumner's navigator, Warrant Officer Harry Parliament, is loaded down with maps and charts. The second pilot, Pilot Officer George Holley, carries two orange-coloured metal boxes housing Gertie and George, homing pigeons which will be released if the *Sunderland* is forced down at sea. At the docks, crews board motor-boats which take them to their flying yachts moored well out in the lake. There the rest of the crew of "J" awaits them — Pilot Officer Art Mountford, Sgts. Jack Kelly, Hal Hutchinson, Phil Marshall, J. B. Horsburgh, and A. J. Lunn. They have been in the aircraft all night, having slept aboard. Mountford is busy making tea in the galley. There is still some time before take-off, and crew sit around the table in the wardroom, chatting the minutes away.

Suddenly the skipper looks at his watch, heaves himself to his feet, and gives the order to douse cigarettes and the oil heater. It's time to start up.

In quick succession four *Pegasus* power-plants kick to life, then merge into an unsynchronized roar. The big "boat moves toward the flare-path (a row of lights bobbing on the water), guided by a dinghy-borne airman flashing an Aldis lamp. The pilots make their pre-take-off checks, the crew get into their take-off positions, and presently the ship is trimmed and ready to go. Then, throttles opening wide in an angry crescendo, the *Sunderland* gathers momentum, pulls itself up on to the step, and is soon moving over the lake at express-train speed. Suddenly Sumner brings back the control column with a slight jerk, and "J"-Jig is airborne.

But the operation isn't yet under way. Before reaching its patrol area, "Jig" is recalled because of threatening weather at base. It returns to the mooring-place and the crew awaits another order to go.

The order comes sooner than expected, and the routine begins all over again. This time it's a convoy-escort. The briefing is very much like the previous one, except that one of the U-boats has been definitely sunk and another two have probably been destroyed by escort surface-vessels. But a pack of them are still shadowing the convoy and it must have aerial protection. It's that simple.

Taking off again in darkness, the *Sunderland*, soon after first light, reaches the area where it is to pick up the convoy. Sumner and Holley scan the ocean for a sign of a ship, Mountford is glued to his wireless set, Parliament checks and rechecks his navigation, Kelly swings his mid-upper turret slowly back and forth. The wireless operator calls the captain on the inter-com and gives him a radio bearing on the convoy. A course alteration is made to starboard and soon the long lines of ships are in sight. Then the *Sunderland* begins to circle the convoy just within visual range. (The armament of those ships carried quite a sting, and it was considered unwise to venture too close to them until they'd sent out a recognition signal. It was not unusual for such ships to shoot first and ask questions afterwards.)

The message of recognition is received, followed by a second message giving a bearing on a suspected submarine well to starboard of the convoy. Everybody aboard the *Sunderland* perks up. Even if they don't see one, at least they'll have the satisfaction of knowing that their presence is keeping one of the foe out of striking-range. The circling goes on and on ...

A welcome break in the monotony comes with the call to lunch. The crew retire in shifts to the wardroom to partake of thick steaks with potatoes and turnips, and a dessert of bread and jam. The next meal, tea, will feature fried egg sandwiches.

Times passes, the monotony grows. Everyone wishes the patrol would hurry up and end. As if in deference to their wishes, the alarm siren shrieks and red warning-lights flash.

"The skip's spotted something!" Hutchinson shouts as he heads toward the bomb-racks.

As he and another chap pull down the side flaps of the bombbay and press the button that moves the depth charges out on a track to their position on the lower surface of the wing, Sumner banks as tightly as possible and dives at full throttle in the direction of something long and black in the distance. The thing — it's a submarine, all right — appears to be about five miles away, but distances are deceptive over water. Uppermost in everyone's mind is the question: "Will it see us and submerge before we can attack?"

The answer comes only seconds later, when the alarmed enemy crash-dives to safety. Though such an eventuality is one of the occupation's accepted hazards, disappointment clouds every face. The vicinity around the sub's vanishing-act is carefully scrutinized, but any attempt to depth-bomb now would be nothing but the wildest stab in the dark. The raider may have "beetled off" in any direction.

"Bring in the bombs", orders the captain, and the load of H. E. returns to its stowage in the fuselage.

Now the circling begins anew, but the patrol period is soon over. A signal to that effect is sent to one of the escorting destroyers. The *Sunderland* turns for home . . .

Toward the end of January 1943, word was received that four crews and aircraft were to be prepared for a special assignment. Because of the exercises in bombing and fighter affiliation that were laid on, there was much speculation as to its nature. Things crystallized on 1 February, when a detachment consisting of a party of four aircrews and a groundcrew departed for R.A.F. Station Pembroke Dock, located on the inlet of Milford Haven, the first sizable indentation in Britain's west coastline north of the Bristol Channel's mouth.

The Pembroke Dock detachment was introduced to a zone of operations that was new to No. 423 Squadron — the Bay of Biscay. Its duty was to help protect *convoys* proceeding from England to Gibraltar, convoys that were carrying troops, equipment, and supplies to reinforce Operation "Torch", the invasion of North Africa.

While not lucky enough to surprise any U-boats in the Bay, the detachment's crews saw many an agent of the *Luftwaffe*. On one particular patrol, Flt. Sgt. Cook and his team counted 17 "hostiles". Acting on orders, however, they did not go looking for trouble and were not drawn into combat. All in all, the unit's *debut* in the usually truculent Biscay region was surprisingly devoid of eventualities. Even the weather was tame, for more than once the visibility was described as unlimited and the sea as calm, adjectives that were almost unheard of in met. reports concerning the North Atlantic.

Before the middle of February the detachment personnel had returned to Castle Archdale.

AT Castle Archdale, the weather alone was enough to let No. 423 know that it was back at the old stand. Patrols were being flown in conditions that were at times the vilest imaginable. Served up on the meteorological menu were patches of sea fog mixed with cloud so low that it was difficult to tell where the cloud ended and the fog began; blizzards accompanied by 75-knot winds, in which the visibility fell off to a negligible value; and, occasionally, hail. In such conditions crews could only go through the motions of searching; but that they did, over a period of more than a month.

Almost daily for more than three months the "fog-hogs" of No. 423 had been patrolling without as much as smelling a U-boat. Though loath to admit it, some of them probably despaired of ever seeing such a thing. Most of their airborne time during this stretch had been logged in weather that favoured their elusive enemy. Whether poor weather or poor luck was largely responsible for the lack of sightings, it cannot with certainty be said; but on 19 March 1943, with a change in the weather pattern, there came a change in the pattern of events affecting the squadron.

The 16th of March had found convoy SC-122 feeling its way across the most dangerous area of the North Atlantic, closely followed by convoy HX-229. At dawn that morning a U-boat, belonging to the *Raubgraf* pack, discovered SC-122. Others of its kind were summoned to the scene, and by midnight most of the pack were in a position to make an all-out assault. By the early hours of the 19th they had torpedoed and sunk 8 ships of the leading convoy and 11 of the other.

Shortly after 0700 hours on the 19th, No. 423's *Sunderland* "E"-Easy, detailed for a parallel-track sweep to cover the harassed convoys, was eased off Lough Erne by its skipper, Flt. Lt. Clare Bradley. Two and a half hours later, course was set on the first leg of the patrol. After an hour or two of patrolling, "Easy" picked up a report of a U-boat attack not far away, and the *Sunderland* was headed full out for the spot. Within thirty minutes its crew saw the telltale periscope and wake some ten miles off the port bow. But already the periscope was fast disappearing, and an attack was out, of the question. Ten minutes later a tanker hove into view, to which visual signals were promptly sent advising it of the enemy's presence and last known position. "Easy" then left the tanker to continue on patrol, but returned to its aid an hour or so later when a U-boat was seen near it in the act of surfacing. (The enemy had probably been shadowing the tanker for some time.) An attack was made, and, although four depth charges failed to release, two did drop, one exploding about 40 feet ahead of the swirl. The tanker, identified as the straggler "Roman", was then informed of the attack and given the position of its convoy. After dropping another four D.C.s to give the U-boat a final scare, "Easy" went off patrol. For Bradley and crew, that constituted the day's action. Though they might not have scored a kill, they possibly inflicted damage, and, more important, they did save a precious tanker from almost certain destruction.

Results even more tangible were achieved the next day. While covering the same convoys, the crew of "F"-Freddie, skippered by Flying Officer Howell, were greeted by the rare sight of a fully-surfaced U-boat approximately eight miles away. As the *Sunderland* was positioning itself for an attack, four

of the submarine's crew were clearly seen scrambling along the deck toward the conning tower. Only partially submerged when depth-bombed, the raider was straddled with five D.C.s, and when "Freddie" again swept over the position where it had disappeared, an oil slick about 100 yards square marked the spot.

The first sighting had been made in mid-morning. A second was made in mid-afternoon. This enemy was also fully surfaced and remained at least partially visible long enough to make an attack possible. Two depth charges were trundled out, but only one dropped, the other having "hung-up". When the lone D.C. exploded, the tip of the U-boat's stern still protruded.

This U-boat had had something to say about being depth-bombed. Its gunners had begun a continuous fire on the flying-boat from the time it had come within effective range. They were still hammering away as little as 45 seconds before their craft submerged, and if they reached the conning tower in time, they got their feet wet doing it. Their fire was returned by the *Sunderland's* gunnery team of Sergeants D. J. ("Doc") Proudlock, G. Howard, and G. A. Buckenham. A post-bombing reconce of the attack position, together with photographs, failed to reveal any evidence of damage. Nevertheless, Howell's leadership in these two actions, coupled with his high sense of responsibility and his eagerness to fly under all conditions, were mentioned in the citation that accompanied his award of the D.F.C. in July.

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On 5 April, spirited action again spiced the escort mission of Clare Bradley's team. Exactly an hour after setting course on the track of convoy TA-39, Bradley himself saw, ten miles away, a fully-surfaced U-boat. He manoeuvred his *Sunderland* to attack "down sun" on roughly the reciprocal of the raider's course, and it was probably this strategy that prevented the enemy from spotting him until he was only two miles away and beginning to set himself for the attacking run. When the *Sunderland* tracked over the now-diving U-boat to drop its cargo, the entire outline of the vessel was clearly visible just below the surface, its propellers churning the water in desperation. Four D.C.s, set to release 30 feet apart and to explode 25 feet below the surface, straddled the U-boat from bow to stern. The fourth charge detonated "immediately ahead of the propellers", and Bradley's gunners stated that at least a dozen chunks of solid, tubular-shaped debris were thrown into the air and above the spray produced by the second and third explosions. Reconnaissance of the attack's aftermath revealed a variety of objects floating on the surface, some of which appeared to be bodies. Forty-five seconds after the attack an underwater explosion occurred followed by a violent eruption and much boiling and frothing on the surface. A minute or so later, great quantities of oil began bubbling to the surface. In the light of such evidence the crew would appear to have been quite justified in believing that a kill had been scored. But despite the evidence and their opinion, their claim of a kill never became official. The pronouncement of the Admiralty Assessment Committee (which had the final say in such matters) was: "seriously damaged".

When Bradley and company alighted at base, after being airborne for 17 hours and 20 minutes, a scant hundred gallons were sloshing around in the fuel tanks. By virtue of his crew leadership in this action and on the previous occasion when his attack on a U-boat was considered instrumental in saving a tanker, Flt. Lt. Bradley earned the award of the D.F.C. As his award was effective on the same date as Flying Officer Howell's, the two captains shared the honour of being the first of No. 423 Squadron personnel to be decorated.

The squadron's next opportunity arrived three days later, and it had all the requirements for success except one very important item. It seems that in the stress of the moment the captain had omitted from his pre-bombing check the fusing of the bombs.

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A little more than a month later, or five days before the squadron's first birthday, came its first kill. Airborne a few minutes before midnight on 12 May, Flt. Lt. Musgrave's crew, manning "G"-George, required eight hours to reach their assigned convoy approximately 800 miles south-west of base. Once having found it, they needed less than thirty-minutes to spot a U-boat. There the thing was, about ten miles from the convoy, cruising on the surface. Taking advantage of cloud cover, Musgrave closed in and achieved virtually complete surprise. The U-boat made no attempt to submerge but instead opened fire when the range was scarcely a mile. When it became obvious that his opposite number had no intention of submerging, for the time being at least, skipper Musgrave postponed the attack but continued to shadow the enemy at a convenient distance. Abiding by the latest Command instructions, he immediately contacted the convoy, and presently a corvette was seen in the distance heading full out for the fray. Meanwhile the *Sunderland's* armament was being put to effective use. For twenty minutes the flying-boat traded slugs with the more heavily armed U-boat. A full 2000 rounds of .303 were thrown at the vessel, and hits were observed on and around the conning tower. "George" stopped a cannon shell, but its operation was not affected in any way. When within range, the corvette opened fire, and that was too much for the submarine, which was soon on its "down" elevator.

Musgrave, who had been waiting for precisely this, now closed to attack. When the gap had narrowed to a half-mile, the U-boat vanished, but not before it was seen to take violent evasive action to port. The *Sunderland* tracked over the pronounced wake and dropped two depth charges which exploded slightly ahead and to starboard of the swirl some thirty seconds after the submarine's disappearing act. The explosions produced nothing but the usual depth charge scum, into which bubbles were rising. A marine marker was dropped from the *Sunderland*, followed by a smoke-float from a *Swordfish* newly arrived on the scene. Six minutes after the U-boat's disappearance the corvette, "Drumheller", assisted by H.M.S. "Lagan" began to drop a pattern of depth charges. "George" reconnoitered the area for fifteen minutes, then, apparently noting nothing of significance, returned to the convoy. Five minutes later it was recalled to base. The Senior Naval Officer was signalled accordingly, and a reply came back: "Many thanks. Good work."

The above action showed how disproportionate to results achieved, and therefore how misleading, the visual aftermath of an attack could be. Initially the results of this particular attack were considered disappointing. It was, however, later confirmed that the submarine, U456, had been destroyed. So, then, had No. 423 Squadron scored its first official kill—in co-operation with a ship of the Royal Canadian Navy.

An attack delivered later in the month was given an assessment of "no damage". But there was no doubt as to the productivity of a sortie flown on the 15th. A search for a lifeboat, which had been in progress for more than a week, fell that day to Flying Officer A. H. Russell and company, who were but one of many Coastal crews detailed to comb specified areas of the North Atlantic. Their search was nearly three hours old when lookouts discerned something tiny and white bobbing on the ocean. It proved to be the sail of a lifeboat carrying twelve men; the position was nearly 500 miles out at sea. First, two Thornaby bags were dropped, one containing an emergency transmitter. Then the captain gained altitude, a radio fix was obtained, and the position was transmitted to Command. Also, permission to land on the (calm) sea and pick up the survivors was asked and granted. Russell then

circled down to where he thought the boat was, but, in the reduced visibility caused by haze, he was unable to find it. (The crew were handicapped by the action of those in the lifeboat, who, in preparing to pick up the Thornaby bags, had lowered the sail which had made the boat so much easier to keep in sight.) Despite a square search that lasted over an hour, contact was not regained, and the *Sunderland* was by then obliged to set course for base. All the way home, and for some time after, the crew members asked themselves the same question: "Did they get the transmitter?"

For another four days, despite bad weather, the search went on without success. Then, on the fifth day, a listening radio-telegraphist picked up faint S.O.S. signals. Too weak at first to give a good bearing, they gradually increased in strength, and were soon loud enough to allow a destroyer to home on them. Their source proved to be a lifeboat fitted with a white sail and containing twelve men. Eventually Russell and crew had the answer they wanted. That marked the third time the squadron had been instrumental in rescuing shipwrecked seamen.

* * *

The squadron's "anniversary month" of May had been one of significant improvements in matters of equipment and training methods. It had seen the beginning of extensive modification of aircraft in the interests of greater endurance. An all-out weight-reduction programme, begun earlier with but two aircraft, had, in May, been extended to include all twelve *Sunderlands* on establishment. Permission had been granted to remove all mid-upper turrets and heating systems, and an increase in endurance of at least one hour was anticipated. In an attempt to add more punch to their *Sanderlands'* noses, the unit's gunnery and engineering officers designed an improved fire-mounting for a .5-calibre machine-gun to be installed in the snout position. Other valued acquisitions were the recently installed navigation aids, which had allowed the unit to operate in more adverse weather conditions than before. An improvement in the squadron's training scheme came with the addition of a newly instituted and completely independent training flight commanded by a squadron leader posted to the unit for that very purpose. The squadron's most valuable acquisition of all had nothing to do with aircraft. It was a baby girl introduced by the wife of the squadron commander.

A change in the location of major U-boat activity resulted in the seconding, at the end of June and early in July 1943, of several of the unit's crews and aircraft to No. 19 Group for anti-submarine patrol over the western approaches to the Bay of Biscay. One consequence of this was a rather drastic change in tactical planning. Hitherto Command's every effort had been directed toward lightening its aircraft to increase their range and endurance. In the case of the *Sunderland*, this paring of weight had been accomplished by eliminating all unessential bric-a-brac but the proverbial kitchen sink, or, more accurately, the galley stove. Having appreciably lengthened the periods of convoy coverage, these tactics had forced a temporary withdrawal from the North Atlantic upon most of Doenitz' co-workers, and furthermore had induced them to move through Biscay and its approaches in packs to allow mutual support and more concentrated fire-power. Now, therefore, armament was a factor of greater importance than before. The *Sunderland* simply needed more punch with which to reply to the increased and heavier armament of the U-boats. The squadron's current attempts in this direction (its proposed modifications entailed the addition of two .303s and one .5 to the nose) were therefore particularly well timed.

To at least one Coastal crew, that led by Flying Officer H. C. Jackson (R.A.A.F.), of No. 423 Squadron, the importance of armament on aircraft patrolling the Biscay region became apparent during a sweep on 3 July. At exactly 1400 hours that afternoon they came upon not just one U-boat, but three. Two were abreast of each other and about a half-mile apart, while the third trailed a mile or

so astern. They apparently soon saw the aircraft, for suddenly their course and speed changed noticeably. All three opened fire with their heaviest armament, but, despite their formidable barrage, somehow failed to damage the *Sunderland*. By 1402 hrs. they were crash-diving, and, by the time Jackson was in a position to attack, no trace of them remained on the heavy sea.

The matter of the *Sunderland* and its armament must have been nothing less than a top-priority item to Johnny Musgrave and his crew after an experience of theirs on 22 July. Early in their sweep over "the Bay" area that day, the cloud base was down to 500 feet. Presently it lifted to 1500 feet. Nature thereby played into the hand of a prowling Focke Wulf *Kurier*, which was no doubt looking for a fat convoy. It found something else when the ceiling lifted, revealing a plodding *Sunderland*. The *Kurier*, with its maximum speed of well over 200 m.p.h. at sea level, soon overtook the flying-boat. The latter's rear gunner saw the enemy closing in from two miles astern. At 2000 yards, or well beyond the effective range of the *Sunderland's* .303s, the *Kurier* opened up with its heavy-calibre stuff, consisting of a 20-mm. cannon slung in the bomb-bay and a salvo of rockets mounted under the wing.

That F.W.'s skipper should have been a fighter pilot. At that long range he clobbered the *Sunderland* with his very first burst. The 'boat's rear gunner, who could get away only 50 rounds before his turret packed up, received slight splinter wounds in the face, while the second pilot and the front gunner were slightly wounded in the arm and knee, respectively. Numerous holes were made in the hull, both above and below the water-line; the trimming control, port carburettor cock, and port jettison control were shot away; and two depth charges were hit by rockets, but co-operated by refusing to detonate for anyone except their owners. During the attack the *Sunderland's* second pilot was at the controls, spelling his skipper. The latter took over as soon as possible, and his first action was to head for the cloud cover above. Remaining in the protective soup, he turned for home, which he reached without further molestation. Mindful of the holes in the hull, he landed as near as possible to the slip and quickly taxied to it. The *Sunderland* was hauled ashore considerably perforated, somewhat water-logged, and with certain of its systems damaged; but it had lived to fight another day. The score between No. 423 Squadron and the *Luftwaffe* now stood at one "damaged" apiece.

The squadron continued to operate almost daily in the Bay region until the end of July, but saw no more enemy craft, aerial or sea-going.

* * *

In July the squadron had undergone a change in leadership, an official handing-over ceremony on the 9th having seen Wing Commander L. G. G. J. Archambault take over from Wing Cdr. Rump. Having led the squadron for nearly fourteen months, Wing Cdr. Rump was heading for a new appointment at Coastal Command Headquarters. Also posted from the unit in July were two squadron originals, Squadron Leader Jack Sumner and Flt. Lt. Clare Bradley, D.F.C., both having completed tours of operations.

On or about 30 July, elements of the unit were again "borrowed", this time by No. 18 Group. Despite the fact that trade was slack in the so-called Northern Transit Area, regular sweeps were being carried out over this stretch of water north-west of the Hebrides and south-west of the Faeroes. Through this area passed U-boats en route from their Baltic ports to the Atlantic battle-zone. Though their numbers of late were thought to have been comparatively few, business was expected to pick up soon, and Command wanted to be ready for an increased flow of undersea customers. Therefore its patrols in that area were, if anything, being stepped up.

The specific section covered by No. 423 Squadron in these northern operations was called the "Mooring Area". It lay astride an imaginary line extending from the northernmost island of the

Hebrides to Reykjavik, being about mid-way between the two. A shuttle system was adopted whereby, depending on the vagaries of the wind, crews could proceed on to Reykjavik after completing their patrols rather than make the longer haul back to base. Later, while returning from Reykjavik to base, they could work in another patrol. Nearly half the unit's sorties from the end of July to the middle of August were logged as "Moorings" patrols.

One of these operations, on 4 August, produced the squadron's second kill. Flying Officer A. A. Bishop and crew took off early that morning with the encouraging words of the intelligence officer still ringing in their ears. A U-boat had been sighted the day before in the very area they were to patrol. But even then they expected nothing more than "the usual dull stooge". For more than four hours after take-off that was precisely what they got. All was smooth and peaceful aboard the *Sunderland* cruising at 4000 feet, so boringly "routine," in fact, that "George"* was doing the flying. It was at this point that "action stations" was sounded. There was actually a submarine sitting out there about five miles to port. As the *Sunderland* dived, the depth charges were run out, the wireless operator pounded out his first-sighting report, and the decks were cleared for action.

* The automatic pilot.

The enemy was trying out new tactics. Instead of crash-diving, it began to take evasive action by weaving in such a way that its stern was always toward the aircraft. Accordingly Bishop did not attack immediately but manoeuvred at 600 feet about half a mile away, deliberating as to the best method of attack. After circling the U-boat twice and being shot at while doing so, he resolved to attack "down sun" regardless of the enemy's reaction. When some three-quarters of a mile from the sub and 300 feet above the water, he turned to attack, and simultaneously the Browning .5 in the nose began to chatter. Throughout most of the approach he jinked his aircraft to make things tougher for the German gunners. But in practically every bombing run, no matter what the target or theatre-of-war, there came a time when, for accuracy's sake, jinking had to be abandoned in favour of straight-and-level flight, and during that eternity everybody not otherwise employed just had to sit and sweat it out.

This unpopular period began when the *Sunderland* was 500 yards from its target. Also at this point the U-boat's artillery, hitherto off the mark, began to find the range. Its Oerlikons played a steady tattoo on the *Sunderland*, and both the second wireless operator, Sgt. H. E. Finn (operating the nose gun) and the second pilot, Flying Officer D. M. Wettlaufer, were wounded. One particularly heavy jolt, which made the aircraft shudder violently, was thought to have been caused by an exploding shell from the sub's 4.7-inch gun. The zeroed-in *Sunderland* nevertheless bored straight ahead and dropped six D.C.s along the U-boat's track from dead astern. By the time of release, however, the enemy guns had taken their toll. Fires were raging in the bomb-room, galley, and port wing, and the aileron controls and trimming tabs were shot away. Realizing that the fires were out of control, and apprehensive of an explosion, Bishop warned the crew to prepare for ditching. His description of what happened in the next few moments goes something like this:

"... We bounced once, twice, three times on the swell, and after the third bounce the port wing dropped . . . The float was torn off, the wing-tip dug in, and the kite cartwheeled into the sea. One second there was a crash and the next we found ourselves in the water . . . The port wing had disappeared and a fire blazed where it should have been. The starboard wing (now also on fire) and the fuselage were still afloat. One of the boys sat on the tailplane for a while but soon had to swim for it as the *Sunderland* went down within five minutes of hitting."

Upon abandoning the aircraft, Bishop immediately swam to the wounded Sgt. Finn, a non-swimmer with no life-jacket, whom he helped to support until rescue came. Meanwhile Flying Officer Mountford assisted the wounded Flying Officer Wettlaufer. Sgt. P. McDonnell (R.A.F.) had suffered

internal injuries but was unaware of this at the time. The third wireless operator, Flt. Sgt. J. A. V. Richard, was managing to stay afloat despite a leak in his Mae West. Four crew members — Pilot Officer H. B. Parliament, Flt. Sgts. J. S. Kelly and J. B. Horsburgh (R.A.F.), and Sgt. H. Gossop (R.A.F.)—were missing. All four were subsequently presumed dead. The eleventh crew member, Sgt. F. Hadcroft (R. A.F.), was later taken from the water dead. He was buried at sea. These were the squadron's first casualties in its 352 operational sorties to date.

After being in the water for some 25 minutes, the group saw, approaching "stern down", their erstwhile opponent. In an effort to right the vessel, all the crew were gathered on the forward deck. The U-boat stopped about 200 yards away and the crew took to their rafts. Both parties watched from a safe distance as the drama of a doomed submarine unfolded. The stern settled lower and lower while the bow projected at a steadily increasing angle. When the angle approximated 30 degrees, the U-boat was broken by an ear-shattering explosion. Its almost instantaneous disappearance was followed by two underwater blasts. Even more dramatic than this scene was its sequel, as the crews of the *Sunderland* and the U-boat, now separated by less than a hundred yards of water, eyed each other. The Germans sat comfortably in their rafts and seemed totally unconcerned about the fate of the less fortunate men who had put them there.

In the meantime, guided by the smoke from the burning *Sunderland*, the Royal Navy's destroyer "Castleton" had been hurrying to the scene. Presently it launched a whaler, which picked up the 6 survivors of the flying-boat and 58 crewmen of the U-boat. While the "Castleton" ploughed full speed ahead for Iceland and the nearest hospital, its medical officer operated on Wettlaufer and Finn. McDonnell was made a stretcher case but was off the "seriously ill" list some six weeks later.

For his part in this action Flying Officer Bishop was given an immediate D.F.C. The accompanying citation made specific mention of his "gallantry and determination of a high order" both during and after the attack.

ON 26 August 1943 the squadron switched temporarily to the area west of "the Bay," which, for the next three weeks or so, was the scene of most of its operations. No sightings were made during that period. "Caution" had become the watchword of the U-boats in this area. They were now giving more thought to avoiding our aircraft than to attacking our ships.

But the enemy's long-range aerial wolves were still very much in evidence over Biscay. On 14 September the squadron had its third and final meeting with the Luftwaffe. While overflying the northern Biscay area, Flying Officer H. C. Jackson and crew suddenly learned they were sharing the sky with a *Focke Wulf Condor*. First noticed about three miles ahead and a little above them, it cagily ducked into the overcast, then re-appeared some 3,000 yards behind the *Sunderland*. Steadily closing in, it opened fire with its cannon at 1500 yards, but missed.

The *Sunderland's* guns replied with 800 rounds, which also missed. That was the extent of the action, as the *Condor* quickly vanished into the cloud, not to be seen again. The rubber match between 423 Squadron and the *Luftwaffe* was therefore a no-decision contest. While purely anti-submarine patrols were very important, the most valuable function of an aircraft like the very-long-range *Sunderland* was convoy escort. On this duty it could range to mid-ocean to meet convoys, give them direct protection from U-boats for a useful period, and, in the process, also destroy U-boats. Its double utility was well demonstrated on 8 October, when the squadron registered its third kill. A description of the attack (which occurred two hours after the convoy had been met) was furnished by Wing

Commander J. R. Frizzle, who was attached to the unit for a brief period prior to taking over 422 Squadron:

"I was flying with the crew of 'J'-Jig as air escort to convoy SCI43 . . . We were carrying out a 'Frog' patrol as ordered by the SNO. * I was piloting. For several hours the weather had been very poor, there being much low cloud and continuous light and heavy rain. At our height of 500 feet we could see the water about fifty per cent of the time, visibility varying from zero to a mile. Flying had to be done mostly on instruments, and as pilot I was unable to act as lookout to any great degree.

* Senior Naval Officer

"As we came out of a cloud, I noticed the second pilot, Flying Officer Menaul, lean forward for a better look at something. I looked, too, and saw a prominent wake ahead, its source being hidden from my view by the nose of the aircraft. The wake was scarcely 200 yards away and almost immediately Menaul yelled, 'It's a submarine.' There was a very strong port wind, and in a matter_of seconds we had drifted to starboard enough for me to identify the conning tower of a fully-surfaced U-boat. I continued on approximately the same course until far enough past the sub to allow for a good attacking run. Then I began a turn to port and told the second pilot to get the captain (Flying Officer A. H. Russell) to take over ... In the meantime the skipper had instructed the w/op to send out a '465'* and ordered the depth charges to be rolled out. * Sighting Report

"When Russell took over," continued Wing Cdr. Frizzle's report, "we were 500 feet above the water and not more than 700 yards from the sub. I stood between the two pilots to watch as Russell partially closed the throttles and dived at a fairly steep angle because of our proximity to the target. . . The U-boat had opened fire as we turned, but the shots were wild and well below us. On the other hand, our nose gunner's .5's were ricocheting off the hull and conning tower in all directions, and, before the range had been reduced to 200 yards, the enemy's 4.7-inch gun was silenced.

"We passed over the U-boat at a hundred feet, and as we climbed to port, the galley lookout advised that three depth charges had dropped and a fourth had failed to release. Numbers 1 and 2 had fallen to port and number 3 to starboard abreast of the conning tower, which lifted 15 to 20 feet as No. 2 exploded. We turned in for a second attack, but there was no longer a submarine. Instead, there were 15 or more Germans, surrounded by debris, swimming about in a rapidly spreading patch of oil. My instantaneous impression was that the U-boat had been definitely destroyed. The depth charges were rolled back into the fuselage ..."

Having ended the career of U610 (and having extended their time of coverage by fully 33 minutes after being recalled), the crew of "J"-Jig headed back to base. In January 1944 there appeared in the London Gazette a promulgation of Flying Officer Russell's award of the D.F.C.

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For some ten weeks the squadron had been engaged in arduous patrolling, mostly over the "Moorings" area. During that period, other than Bishop's, there had been no attacks or sightings in the region. Disappointed though the crews undoubtedly were, their spirits probably picked up when a Command communique informed them that their efforts were contributing greatly to successes achieved farther west. Their vigilance was forcing the enemy to use caution tactics in the transit area at the expense of his batteries and physical well-being. Captured U-boat crewmen confirmed that, when past this area, they had been obliged to surface; and, when sighted by Iceland-based aircraft, they were unable to resubmerge, both crews and batteries being exhausted.

A good proportion of the unit's patrols since late September had been done in other than broad-daylight hours, because it was thought that during the hours of poorest light some U-boats were slipping through the "northern gate" unnoticed. Though its night flying time was sharply increasing, the squadron's total airborne time had been declining of late, mostly because of bad weather.

In November the weather became stubborn with a vengeance. Simultaneously, aircraft unserviceabilities began to pop up regularly, and for a considerable period four of the unit's twelve operational aircraft were off the Station undergoing major overhauls. Small wonder, therefore, that 423's operational output fell into its deepest decline since the previous February. Only 19 sorties were flown, four of these being cut short by recalls. Aside from these detractions, the month of November 1943 was the blackest in squadron history. It saw the only occasion whereon a 423 crew took off on operations and, in toto, was never seen again. It also saw an aircraft crash upon returning from operations, killing five of its crew. The setbacks occurred within 48 hours of each other. As if the missing crew, the fatal accident, the foul weather, and the unserviceabilities were not a strong enough morale-sapping mixture, frustration became a fifth ingredient in the course of an escort mission on the 22nd. Pilot Officer L. B. ("Mike") Pearson, one of the squadron's newest captains, could only stand by helplessly when confronted with the grim sight of seven enemy aircraft—four *Heinkel 177*'s and three *F.W. Condors*—in the act of attacking convoy S.L.139 (which he was escorting) with radio-controlled glider bombs. Unable to offer effective resistance, he ordered a message sent to base stating the whereabouts and type of the attack. Presently a message from Command ordered him to return to base immediately. Reluctantly he turned away, leaving the convoy to the doubtful mercies of the *Luftwaffe*.

* * *

December was less than five days old when bad fortune again assailed the squadron. Nine crew members were lost and another seven were injured when a *Sunderland*, en transit to Wig Bay to be exchanged for another aircraft, flew into Knocklayd Mountain, near Bally-castle. The unit's fatal casualties accruing from all causes now stood at thirty. Twenty-five had accumulated in a period of less than one month, representing over half the number suffered by the squadron in its entire operational span of over three years.

The most interesting part of December's operations began on Christmas Day, when a search was initiated for a suspected blockade runner. Nothing was seen on this date or on Boxing Day, but on the 27th the bold enemy was found by Flight Lieutenant Jackson and crew, less than an hour after they had begun their patrol. The heavily-armed ship opened fire as soon as the *Sunderland* ventured within range. Having established its identity the hard way, Jackson ordered a sighting report to be sent to Control and homing signals to be transmitted to attract other aircraft. Then, for three hours, the *Sunderland* shadowed the blockade runner while the aircraft captain looked for sufficient cloud cover to make an attack somewhere near feasible. Finally, an approach was made through cloud to within a half-mile of the ship, and then the *Sunderland* was brought into the open and an attack was begun. The flak was so intense, however, that the attack had to be broken off. Subsequently, the *Sunderland*'s homing transmissions brought three other aircraft to the scene and it was possible for them to attack almost simultaneously from different directions, in which case the flak screen was not nearly as concentrated or effective as before. A late-arriving *Liberator* added the finisher. When last seen, the ship was in flames and some 70 of its crew had taken to their lifeboats.

For the 423 Squadron crew the action had a sequel in a diversion to the Scilly Islands, where the *Sunderland* was landed in conditions of half-a-mile visibility and a cloud base of less than 200 feet,

also in darkness and without the use of a flare path. A float was damaged but the aircraft was beached safely on St. Martin's Island.

Throughout the first three months of 1944 the enemy, as far as 423 Squadron was concerned, might as well have been nonexistent. His U-boats simply did not make themselves apparent to this unit's crews, whether the latter's duty was patrol or convoy escort. In point of fact, but for an incident on 12 March, the squadron's 90 completed sorties during the period would have been bereft of "events" of any kind. On that date the squadron suffered its fourth aircraft loss attributable to operations—a setback that was not, however, accompanied by loss of life. While *Sunderland* "H"-How was returning from its patrol area several hundred miles west of Ireland, trouble developed in one engine, then another, and still a third, in rather quick succession. Eventually, the stage was reached where one engine had to be switched off and two others were not delivering full power. Still 150 miles or so at sea, and sensing that a ditching was imminent, navigator-captain Flying Officer J. B. Donnett decided to head for three ships about 20 miles away as indicated by blips on the radar screen. With only two engines serviceable, Pilot Officer D. R. Hemming, the pilot (who was soon to become a crew captain), needed all his skill to bring "How" safely down. The *Sunderland* alighted without incident about a mile from the frigate H.M.C.S. "St. Catharines". The crew were presently taken aboard the vessel, but salvage of their aircraft was impossible, as attempts to take it in tow were unsuccessful. Subsequently, after removing the camera, logs, and secret documents aboard the sinking *Sunderland*, Donnett, Hemming and company had to undergo the unusual and unpleasant experience of witnessing their aircraft being blown to pieces by gunfire from a Canadian ship.

* * *

A sighting in April was the squadron's first in more than six months. It came early in a creeping-line-ahead search by Flight Lieutenant F. G. Fellows and his crew of "A"-Able on the afternoon of the 24th. Visibility was unlimited when skipper Fellows saw what he thought was a wake. He increased the airspeed to 140 knots while the second pilot trained his binoculars on the spot and confirmed the discovery. A U-boat was ploughing along on the surface about sixteen miles dead ahead. The first phase of the struggle was one of jockeying for position, as the U-boat, now five miles away, began trying its utmost to outmanoeuvre and remain "stern towards" the *Sunderland*, meanwhile popping away ineffectually with its heavy artillery. Fellows kept turning with the U-boat until he came between it and the sun, whereupon he began his more-or-less straight-in attacking run. At a range of 1200 yards the bristling snout of the *Sunderland* went into action with its four fixed and two turret guns. Some 1500 to 1600 rounds were directed to such good effect that the enemy batteries were silenced for the final 300 yards of the bombing run. Up to this point "Able" had taken numerous hits, but its captain, concentrating on an accurate attack, held his evasive action to a minimum, making only slight deviations of course.

The *Sunderland* tracked directly over the still-surfaced U-boat, dropping six depth charges at 60-foot intervals. As the rear gunner, with his guns fully depressed, saw the U-boat enter his sights and pressed the firing buttons, there was a violent explosion. (It was later presumed that the blast had originated from the premature detonation of No. 4 depth charge, which had possibly struck the submarine's hull.) The force of the upheaval was enough to render airborne everything in the kite that wasn't nailed down. Floorboards, I.F.F. set, crockery, crew— and eggs—were the ingredients of a new and messy kind of omelette. The rear gunner was knocked unconscious, while the wireless-operator-mechanic was thrown from his perch in the astrodome and momentarily dazed. All electrical circuits were made unserviceable, the R/T cable was severed, wing seams were opened, and the port

flap was made useless. Also, as was later learned, the airframe was twisted and the rear turret damaged. The principal damage, however, was to the elevators, which were now functioning so poorly that all the strength and skill of the captain and the second pilot were needed to counteract the aerodynamic forces affecting the aircraft. Extremely tail-heavy, the *Sunderland* favoured a climbing attitude, and "even though trimmed fully nose heavy, still required pressure on the control column to remain straight and level. The entire crew had eventually to be stationed forward of the main spar in order to effect the desired balance.

While the aircraft was being brought under control, the results of the attack were being watched as closely as circumstances would allow. Several seconds after the drop, a brownish pool appeared just behind the U-boat, which was stern down and listing somewhat. Of the U-boat itself nothing more was seen, as it took two or three minutes for the damaged *Sunderland* to climb to a convenient reconnoitering altitude and turn back to the position of the attack; in that interval the enemy had disappeared, leaving a sizeable patch of oil but no wreckage. Both visual and photographic confirmation of the attack's accuracy and immediate aftermath were precluded by the blast from the premature explosion, which had severed the rear-facing camera leads after the second exposure and knocked out the only crew members who could otherwise have seen the results. Consequently, the assessors' initial verdict was "damaged" only. Evidence was later brought forward, however, which offered conclusive proof that the submarine, U311, had been destroyed in this attack.

Lately, the North Atlantic arena had been comparatively quiet. The lull continued into May, in the first half of which 423 Squadron was required to go out on sweeps only four times. Anticipating, however, that the enemy would try to reinforce his dwindling numbers in the Atlantic and sub-Arctic waters, Command launched an offensive on 16 May, concentrating on the west coast of Norway. The squadron began to contribute to this campaign on the 17th, when four of its crews took their aircraft to R.A.F. Station Sullom Voe, in the Shetlands, from which they operated until almost the eve of D-Day. They were joined by three more of their crews a few days later. During the Sullom Voe period the squadron made three sightings of surface U-boats and one sighting of a periscope, but in every case except one the enemy got wind of the aircraft's presence and ducked from sight well before an attack could be mounted. Also, unfortunately, no claim arose out of that lone attack. While on his bombing run the skipper was subjected to the unnerving experience of passing over the remains of an aircraft which had been brought down only moments before by the very submarine he was about to attack. A feature of these patrols by Sullom Voe-based crews was the fact that some of them were carried out almost within sight of enemy fighter aerodromes in Norway.

* * *

During the history-making month of June 1944 the work of the squadron assumed its greatest importance since the critical months of 1942-43. Personnel were reminded of this in a special order of the day from the AOC-in-C Coastal Command on 6 June, part of which was worded as follows:

"The great day we have all been waiting for has arrived. The invasion of the Continent has started. In this operation Coastal Command has a vital part to play. Our job is to 'hold the ring,' that is, to prevent the enemy from interfering with our invasion convoys and to ensure the safe passage to the Continent of our troops and their supplies. Without this, the invasion cannot succeed ..."

The squadron went to work to do what it could to "hold the ring". Before the month was out it was to run up totals of 89 sorties and 1206 operational hours, both of which far eclipsed any previous month's output. Six of the operations involved incursions over Norwegian waters, while the remainder covered patches of sea in either the south-western approaches to the English Channel or the Upper

Biscay area. Many patrols, beginning at the position or "datum point" of 5040N:-0520W, overflowed the mouths of the Bristol and St. George's Channels and the inner approaches to west-coast ports such as Bristol, Liverpool, and Cardiff. On their sweeps over the upper approaches to the Bay of Biscay, crews were watching for U-boats returning to or setting forth from their lairs at Brest, St. Nazaire, Lorient, and La Rochelle. Several times they landed at Pembroke Dock in lieu of comparatively distant Castle Archdale. On only one day of "invasion month" did they not operate, and many of their sorties were flown in spite of adverse weather and sea conditions. Though they saw hundreds of our merchant ships, large numbers of Allied warships, and a considerable number of friendly aircraft, not once did they see a U-boat or even a suggestion of one in the June period after D-Day.

Before the end of June the unit had received two long-awaited items of equipment — the "Gee" set, which was installed in eight aircraft, and the 1.7-inch flare, with which all aircraft were fitted. Both were especially welcome. "Gee" was to simplify navigation to a marked degree, while the flare system was considered the best yet devised for producing illumination for night attacks.

* * *

In the first half of July a record 53 anti-submarine sweeps were despatched by the unit. This was all the more remarkable in view of the wretched weather conditions so often prevalent. A combination of sea fog and low stratus made patrols very hazardous, not to mention extremely laborious. Only twice, however, were operations cut short by weather, and each time the ceiling was so low (it forced aircraft to patrol at 50 feet) and the visibility so restricted (intermittently nil) that discretion eventually overruled all else and the patrol was discontinued.

From a weather standpoint, one of July's better days was the 12th, on the morning of which Flying Officer C. M. Ulrich and crew were sweeping an area some 200 miles west of the Outer Hebrides. The visibility varied from one mile under low cloud at 100 feet to 15 miles under strato-cumulus at 1500 feet. The sea was smooth. Conditions were favourable enough to allow a good pair of eyes to pick out, at a considerable distance, an object as small as a few feet of projecting periscope. Ulrich saw the periscope "feather" first, about four miles off, then, at closer range, identified the 'scope itself. Several feet of the thing remained visible until the gap had closed to 6-700 yards, at which point the enemy was completely submerged. The *Sunderland* tracked over the small swirl left by the periscope and dropped eight depth charges, which straddled the swirl neatly. Checking results about a minute later, the crew saw, just inside the rim of the disturbance caused by the explosions, a patch of greenish froth. Beside the froth and nearer the centre of the disturbance, a triangular black object estimated at five feet in length was seen to break the surface momentarily, then disappear. Also near the froth were two long, parallel oil streaks. Half an hour later two torpedo-like objects, each 12-15 feet long and of a light-brown hue, were seen a half-mile away. The evidence prompted Coastal Command's official scorer to credit the crew with a "damaged".

On 13 July Wing Cdr. Archambault took his crew out over the North Atlantic on his last operation as O.C. 423 Squadron. Having led the squadron for just over a year, he was about to be posted to 15 Group Headquarters. As of the 16th, the squadron commander was Wing Cdr. P. J. Grant, an ex-"flying mountie" who had been a flight commander with the unit for eleven months.

Some time after the war Wing Cdr. Archambault was heard to sum up his flying experiences with 423 Squadron by grumbling, "I flew like a son-of-a-gun, never saw anything, never shot at anything; nobody ever shot at me, not even my friends, and I never saw a German".

Despite the intensive operational pace being set by Coastal Command as a whole, by far the majority of 423's flying time during the latter half of July was devoted to training. The reason for this was the squadron's conversion to Mark III A.S.V.* homing equipment. The training period, which

began on 20 July and continued through the first five days of August, was the squadron's first lengthy respite from operations in almost two years.

* Air – to – Surface Vessel

In August the squadron apportioned its sub-hunting effort mainly among three areas—the South-western approaches, the North Atlantic, and a strip of the North Sea along the coast of Norway. While so doing, it was once more dividing its talents among Nos. 19, 15, and 18 Groups, respectively. Some patrolling was also done in the English Channel proper. In this area one crew made two sightings in two sweeps, both less than 35 miles off Lizard Point, the southernmost extremity of the English mainland. In neither case was an aerial attack possible, but surface escorts were summoned to the position, and they undoubtedly made things thoroughly miserable for the enemy for at least the next couple of hours.

In September, when Allied ground forces were making a habit of overrunning French ports, all the U-boats in those ports which were able to put to sea did so, and headed for new shelters in Norwegian and Baltic harbours. Once re-established there, and now compelled by the pressure of events on land to continue the close investment of the British Isles, they began to operate with renewed intensity in or near such waters as the North Channel, the Irish Sea, and the Bristol and St. George's Channels. This attempted comeback by Doenitz probably accounted for the fact that, in point of sorties despatched by 423 Squadron, September was the top month of all. Operating on every day but one, the squadron piled up an even 100 over the period.

* * *

Coincident with the U-boats' stepped-up activity early in September, 423 caught its first glimpse of an enemy gadget which, its owners hoped, would enable them to regain the initiative at sea. That was the "schnorkel", a breathing device that permitted U-boats to charge their batteries without having to surface. Like many a German war-time invention, however, the schnorkel had a weak point. This was the fact that the ejection of Diesel exhaust through one of its tubes during the recharging process gave away the U-boat's position. The escaping exhaust appeared as a cloud of vapour on the water, and, in the hours of light, was readily visible to sharp-eyed crews.

On the morning of 2 September Flying Officer P. B. C. Pepper and his crew of "N"-Nuts were engaged in a routine search over the Atlantic less than 50 miles north of the entrance to famed Donegal Bay and within 25 miles of the Irish mainland. They were cruising at 2000 feet under a layer of 5/10ths strato-cumulus. The visibility was unlimited. At 1026 the navigator, Flying Officer D. G. Steuart, noticed an incongruity in the expanse of blue-green. About eight miles away a cloud of what looked like white smoke was rising from the water, the volume of which was several times that normally given off by a smoke float. With the use of binoculars Pepper was presently able to see, on the far side of the cloud, a dark-coloured object of indeterminate size and shape. Suddenly the "smoke" stopped issuing, having obviously been choked off at the source. The squadron had seen its first schnorkel, but was unable to follow up with an attack.

But for a wretched turn of Fate it could have been a far different story the following day, when schnorkel smoke was sighted by Flt. Lt. J. K. Campbell and crew during a patrol over the same waters. The snout was still a good two feet out of the water when the *Sunderland* roared over it, 50 feet above. Unfortunately, when the skipper pressed the release button nothing happened. Before another run could be made, the breathing apparatus had disappeared.

An early-morning patrol on the 6th off the north-west point of Ireland ended prematurely and in disaster for one of the squadron's senior crews. Three hours after take-off "B"-Baker crashed into the sea after double engine failure. An R.A.F. flight engineer was the only survivor. The accident occurred after 427 consecutive casualty-free sorties.

On 11 September 1944 a crew was able to follow up a schnorkel sighting with an honest-to-goodness attack. Flying Officer J. N. Farren and crew, who had reached operational status with the unit only late in August, were sweeping the approaches to the North Channel when the captain spotted with binoculars the characteristic white cloud. Approaching to investigate, he had still two miles to go when the vapour production stopped. But a slight wake remained, and, fixing his point of aim 700 feet ahead of its apex, Farren attacked with four depth charges (four others were "hang-ups"). As the wake was barely noticeable, the position of entry of the depth charges relative to the apex was not established. A marker was dropped, attack reports were sent out, and homing transmissions were begun. Eventually three R.C.N. escort vessels appeared, and began to sow a pattern of depth charges. Although by the time their endurance limit was reached they had been orbiting in the vicinity of the marker for nearly six and a half hours, Farren and company had seen nothing to suggest damage to a U-boat. Later, however, came irrefutable evidence of the destruction of the submarine, U484. Jointly credited with the kill were the *Sunderland* and two of the escort vessels, H.M.C.S. "Dunver" and "Hespeler". Thus 423 Squadron achieved its fifth and final victory in a manner similar to the first—with an assist from the Royal Canadian Navy.

ON 18 September 1944, a new twist was added to No. 423 Squadron's operations. At 2000 hours that evening, and at approximately the same hour every evening up to the 29th, a single aircraft was sent out on anti-submarine patrol carrying a load of flares in addition to depth charges. In each case the area covered was along the approaches to the North Channel. The aircraft would patrol back and forth over a narrow rectangle of water perhaps 20 miles long and only a very few miles wide. A flare would be dropped every four minutes until 0630 or 0700 hours the next morning, when the patrol would be discontinued. As many as 150 flares were dropped in a single night, and assigned areas were covered up to 16 times. Since the patrol area was little more than an hour's flying time from base, crews could stay on patrol for anywhere from 10 to 11 hours. Rather surprisingly, not one sighting was made during these flare-dropping expeditions. In point of fact, it was never learned just what effect they had on prowlers in the area.

In the last quarter of 1944, by far the greater percentage of the unit's 160-odd completed sorties led again to the North-Western Approaches. Its *Sunderlands* were often to be seen over the North Channel bottleneck, or only a few miles off Ireland's northern shore. But they also covered more distant ocean reaches, some patrols stretching as far as 500 miles out, a few beginning 100 miles or so west of Malin Head and running westward, and yet others being farther north—almost equidistant from the nearest islands of the Faeroes, Outer Hebrides, and Shetlands. Visual sightings of any kind were rare, consisting of five schnorkels and/or periscopes. Even radar contacts were few and far between, the reason being that U-boats, when battery-charging just below the surface with their schnorkels, were now much more difficult to pick up on radar than before, when completely exposed.

Having already proven its value as a protector of convoys, a hunter of U-boats, and a discoverer of shipwrecked seamen, the squadron was able, on 30 October, to perform the role of mine detector. While patrolling over rather widely separated areas, two crews, both led by skippers named Grant, came upon floating mines. At 1012 hours, "while investigating a puff of greyish-white smoke", Flight Lieutenant F. J. Grant's team detected a deceptively innocent-looking mine bobbing about on the calm sea. After a thorough marking of the position with flame floats and marine markers, the position was

passed to a nearby escort group and homing assistance was also provided. Eventually, an escort vessel was seen to deal with the mine in its own effective way. At 1600 hours, an escorting *Sunderland* skippered by Wing Commander P. J. Grant was swung around to allow the captain "to investigate bluish-grey smoke ten miles ahead of convoy." A few minutes later a mine was sighted. The wingco reported its presence to the SOE (Senior Officer Escort), then marked its position prominently with flame floats as an unmistakable warning both to merchantmen and men o'war. The discoveries of the mines under identical circumstances (i.e., in areas in which schnorkel smoke had been seen immediately before) was probably no mere coincidence. The enemy, now largely balked in his attempts to sink our shipping by orthodox means, may have been trying new tactics with his 1600-ton minelayer submarines. Their usual haunts were the immediate approaches to harbours rather than shipping lanes in the open sea.

Two sightings of schnorkel smoke in November led to attacks on surface "disturbances," considered fresh enough to indicate the presence in the immediate vicinity of U-boats. Neither attack was thought to have resulted in damage.

* * *

It was three days after Christmas before the squadron next smelled a U-boat. *Sunderland* "B"-Baker was scarcely five miles from Achill Island, off the west coast of Eire, when Flying Officer C. Strobl (second pilot) indicated to his captain, Flying Officer J. N. Farren, a cloud of schnorkel smoke some 20 miles to the south. As the *Sunderland* approached the phenomenon, a second materialized a little closer. Realizing that one U-boat might well have been the source of both clouds, Farren chose the nearer one. The cloud had all but dissipated before the gap was reduced to a half-mile. In its place there remained a foot or so of periscope. Periodically, the seeing eye dipped into the swell, but front gunner Flight Sergeant C. E. Goebel could still perceive a gradual turning of the thing, which suggested that the U-boat was still unaware of the attack to come. Eight depth charges were dropped, and the splash of one engulfed the periscope. The explosions' immediate aftermath was the bubbling of much heavy oil to the surface, which, 20 minutes later, covered an area at least 300 yards across. This evidence was strong enough to elicit an official assessment of "damaged." This partial victory, coupled with the kill of the previous September, made Farren and company top dogs on the squadron. Members of the crew who took part in both attacks were, in addition to those already mentioned, Flt. Lieut. R. A. W. Simpson (nav.), Flying Officer S. B. Hawthorne (first wop/ag), Warrant Officer S. Semenchuk (second wop/ag), Flying Officer R. B. Cope (wop/mech), and Flt. Sgt G. F. Tait (fitter).

Although three schnorkels and certain suspicious phenomena were manifest to the squadron in the first three weeks of 1945, no opportunities for accurate attack presented themselves, the targets being in every instance too vague to permit effective action. Three attacks were delivered, however, one being made over what was for this squadron a new hunting-ground—the Irish Sea itself.

But for a rare and completely unforeseen unserviceability, the next sighting, over these same waters, might well have had its sequel in a victory. During a late-morning CLA (Creeping Line Ahead) search, "E"-Easy's crew spotted a schnorkel. As they closed to within half a mile, the breathing apparatus was still visible; a potential kill was at hand. At this point the unexpected happened. With the depth charges still inside the aircraft, the port bomb door jammed half open. The attack was unavoidably abortive, only a marker being dropped. A second attempt was made 75 seconds later, using the marker as a bombing reference, but there was no sign of a hit. Cold comfort was derived from the fact that, on the first run, nose gunner Flt. Sgt. G. McDonald had directed 600 rounds at the schnorkel, a good number of which had found their mark. So even if the U-boat had

avoided destruction by depth charge, the wishful thinkers aboard the *Sunderland* at least dared to hope it had taken enough water down the wrong pipe to choke to death.

After this sortie, adversity got the upper hand and held it for 18 days. The elements put on a show of fog, low cloud, and snow showers, adding a final touch that produced perhaps the most serious problem of all for a flying boat unit. The attendant low temperature (extremely low for Ireland) caused ice to form first on the hulls of aircraft and then on sections of Lough Erne itself. In four or five days, extensive areas of the lake were covered by ice four inches thick. Through 23-25 Jan. 1945, briefings alternated with cancelled operations; then all ideas of operations were temporarily abandoned as the problem of preventing serious ice damage to precious aircraft was given top priority.

Nineteen aircraft were water-borne, of which 14 were bombed up and fuelled for operations. Speed in their beaching was most important, but it was limited by factors such as the number of beaching legs available, the number of personnel experienced in beaching operations, the existence of but a single slipway, and confined marshalling space ashore. In order to make beaching possible, and to protect those aircraft still waterborne, the water in the mooring area had to be kept free of ice and approach lanes to the slip had to be maintained. Stout, iron-clad craft of the Marine Section, such as refuellers and bomb scows, were conscripted for this purpose. Before beaching operations could be started, 8000 gallons of fuel and 105 depth charges had to be removed from the aircraft. The de-bombing was done in the record time of six hours, under anything but ideal conditions. The effect of the precautionary measures was to limit ice damage to only six punctured floats and one dented hull.

The fourth operational take-off after the freeze-up was followed by engine failure and a crash that took the lives of the five officers and six NCOs aboard. These were the squadron's first losses in more than five months. They were also its last.

In its final four months of operations, almost 90 percent of the unit's sorties were over the Irish Sea, the North Channel, or the North-Western Approaches thereto. The rest were over the South-Western Approaches and were concerned mostly with convoy escort duties. The first action of the period came during an Irish Sea patrol on 22 February, when Flt. Lieut. Grant and crew made two attacks in nine minutes, having only stale schnorkel smoke to use as a bombing reference. Neither attempt produced any evidence of damage, but other aircraft were successfully homed to the position and put on the scent. Another attack on schnorkel smoke, under somewhat similar circumstances, was made by the same crew on 5 March. Apparently unsuccessful in doing damage themselves, they summoned a *Liberator* to continue the attack. Equipped with sonobuoy, that aircraft soon tracked down the U-boat again, and attacked it twice. The second attack was believed to have scored a kill.

Obsessed as they were by a feverish urge to "sight a sub and sink same", crews could be excused for occasionally waxing over-enthusiastic or acting prematurely. Once "a moving stream of white smoke" turned out to originate from an innocent pyrotechnic. But the latter discovery came a little too late to prevent an over-eager skipper from atomizing the poor marker with eight depth charges. On another occasion, a destroyer circling tightly at high speed brought a 423 *Sunderland* roaring to the scene, its crew sensing a possible kill. All aboard the flying-boat felt a distinct let-down when the ship signalled, "My steering gear is jammed. That is all." Whales were fair game, too. More than once Jonah's nemesis, initially mistaken for a U-boat, came near incurring a prodigious headache before his true identity was established. He could even carry the masquerade a step further, releasing a streak of blubber oil when excited. On the other hand, crews were especially alert to spot a blinking light emanating from a submarine. If it flashed "the letters of the day", the sub was one of ours. One such vessel, encountered on 17 March, was the first surfaced submarine, friendly or enemy, seen by the squadron since the previous August.

The squadron's next attack on a real or imagined enemy took place on 7 April. In squadron scuttlebutt it came to be associated with "the mystery of the moving oil slick." Skipper Flying Officer W. W. Moody was first to see the slick, barely visible just below his starboard wing. He followed it for eight miles before it abruptly ended, in an active, bubbly patch. It was soon noticed that the streak was developing slowly (one to two knots) in an east south-east direction. Its well defined development in a set direction convinced Moody that an attack was in order, and he forthwith dropped six DCs (Depth Charges) just ahead of the bubbling. Shortly after the explosions, the still-moving slick "changed course" to starboard, and its continued movement and change in direction was considered suspicious enough to warrant further investigation. (Its source could well have been a damaged U-boat.) The *Sunderland* stayed with it for another two hours, the crew watching the bubbling thing change its heading through south to west, on which course it appeared to settle down. Then another pair of DCs were dropped on it, but it continued on as before. After reports were sent out on the phenomenon's position and behaviour, the *Sunderland* was recalled to base. The case of the wandering oil slick was never solved.

The unit's last attempt to blast a submarine occurred on 24 April. That was the only time it was able to use its recently acquired sonobuoy equipment in conjunction with an attack. It was just past dawn when Flt. Lieut. A. R. Finder's team began its patrol, working north-east over the Irish Sea. Some four hours later, the rear gunner reported schnorkel smoke a half-mile away. An attack was delivered only seconds after the smoke stopped issuing. No immediate results were seen as the *Sunderland* circled low over the point of attack. Then four sonobuoys—orange, blue, yellow and red—were dropped in what was referred to in the trade as a "basic high tea pattern." About a half-hour later, the first wireless operator heard "on blue" a succession of hollow thumping noises. After another minute or two, the second wop/ag picked up loud clangings, followed by a rhythmic and rapid succession of loud hammerings (such as might be produced by a pneumatic drill) lasting for ten seconds. Then the first wop/ag again heard thumping noises "on blue", but fainter than before. Ten minutes later, five vessels of the Second Escort Group arrived and began a search. After briefing the SOE on the situation, Finder began to fulfil the naval gentleman's request to search parallel to the west coast of the Isle of Man and eight miles out. The search was fruitless. Having been on actual patrol for nearly 12 ½ hours, the *Sunderland* was steered for base. Though used several more times by the squadron, sonobuoy never did become a prime factor in its operations.

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V-E Day was just another working day to 423 Squadron, which continued its convoy escort and patrol duties through 8 May and on to the 12th without experiencing anything out of the ordinary. On the 13th, a new team, skippered by Flt. Lieut. J. F. Magor, was airborne in time to watch dawn break over the North-Western Approaches. An hour or so later they came upon a fully surfaced U-boat. Another was discovered, and challenged, four minutes later. As much as he would have liked to despatch both of them, Magor was prevented from doing so by two pieces of black cloth. No doubt in compliance with orders from the grand admiral, each was flying the black flag of surrender, probably fashioned from the captain's old sweater or second best trousers.

Later in the day, still another surrendering submarine was reconnoitred by Flt. Lieut. H. D. Hughes and crew. In every case, to guard against possible treachery, photographs were taken, full particulars were forwarded to Control, and nearby convoys were informed accordingly.

The above U-boats may have been among several which, shortly after, arrived at the Londonderry naval base to undergo the formalities of surrender. Late in May, a group of squadron personnel

journeyed to the port to inspect the decommissioned raiders at close range. Photographs of their visit occupy two pages of the unit scrapbook, and the picture series is aptly headed "Jerry comes to 'Deny'". Clearly showing in some of the picture series is the same formidable armament with which the vessels had so often slugged it out on the surface with our aircraft.

Even as late as the end of May, all precautions were being taken to prevent treacherous acts by Nazi fanatics who might be in command of U-boats still at large. The squadron flew 28 sweeps after the cease-fire had been declared.

At 0449 hours on 31 May, Sunderland "F"-Freddie was lifted off a tranquil Lough Erne by Flt. Lieut. Magor. His crew companions were Flt. Lieut. E. L. Hughes, Flying Officers F. W. Gorse, S. Solmundson, and J. Ross, Warrant Officers S. McKimm and R. H. Pierce, and Flt. Sgts. H. V. Kidd and J. R. Todd. They carried out 423's last sweep, a CLA search to the south-west of Ireland. The unit's operational effort came to an end at 1845 hours, at which time "Freddie" touched down at Castle Archdale.

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A statistical rundown of 423 Squadron's aerial accomplishments reveals that its crews flew 1,401 operational sorties, of which 41 were rendered abortive by bad weather or in-flight unserviceabilities. More than 300 times, convoys were entrusted to its protection, and only eight times were they denied that protection through not being located out there on the broad Atlantic. (The reason was nearly always poor weather, but it was by no means uncommon for a convoy to be quite far removed from the position given at briefing.)

Of far greater significance, however, considering the nature of the squadron's work, was its total time logged on operations.

Actually operating over a period of two years and nine months, 423's accumulated operational flying time was very nearly two years, while its grand total was just over two and a half years. For those many long hours of scanning and squinting over the rolling sea, more often than not in dirty weather, the unit was rewarded with 25 sightings of actual submarines, periscopes, or schnorkels, ten sightings of schnorkel smoke and six sightings of "disturbances", swirls, or suspicious oil slicks. Its crews delivered 26 attacks, or an average of one every 648 operational hours. Out of those, they scored five official kills (one, and possibly two, shared with escort vessels), added an unofficial kill, assisted a *Liberator* in scoring still another, damaged three U-boats, and possibly damaged one.

Their record stamped them as the foremost sub-killers among R.C.A.F. squadrons based in the U.K. It is, of course, impossible to estimate how many of the enemy were frightened away from their would-be victims by the mere presence of 423's *Sunderlands*, but the number must have been considerable. In addition to its hunting expeditions, the squadron also contributed to several search and rescue operations, and three times was instrumental in saving the lives of seamen whose ships had been torpedoed from under them. Finally, it should not be forgotten that one of 423's mighty "Sunderbolts" sent a *Ju. 88* packing in a damaged state.

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Considering its large number of operational hours logged in near zero-zero weather and its several attacks on U-boats that chose to shoot it out on the surface with their superior armament, the squadron's losses were surprisingly light. Two aircraft were classified as missing on operations, one was shot down into the sea, two more crashed when setting out on patrol, and a sixth crashed when

returning from patrol. Operational casualties amounted to 40 killed or missing, two wounded by enemy fire, and one seriously injured. Non-operational casualties totalled nine killed and five seriously injured.

Listed among the squadron's honours and awards were four D.F.C.s, one D.F.M., and several Mentions in Despatches.

June was still young when the squadron was affected by its first major change respecting parent formations, being transferred on 5 June from Coastal Command to 301 Wing, Transport Command. Even at the end of June, aircrew were still being posted in, but flying was at a standstill—the change in function having made the *Sunderlands* no longer useful. All ranks, therefore, concentrated on preparations for the unit's move to Bassingbourn, Hertfordshire, which began on 25 July and ended on 8 August.

Before V-J Day ended, the unit was ordered to commence conversion training and give all possible assistance in returning personnel and equipment from the Pacific Theatre. As it turned out, however, the projected conversion (to *Liberators*) programme was to no avail, for within a week after its first take-off (21 August) in a *Liberator*, the squadron was ordered to cease flying. Thenceforth, as a cohesive unit, it was grounded, pending further instructions regarding its dissolution.

It developed that when the time came to choose between repatriation and continued flying duty with Transport Command, a sizeable proportion of 423 Squadron's aircrew, 65 in fact, decided on the latter. Thus, though the unit was officially disbanded on 4 September, many of its ex-personnel remained overseas and were active in their aerial trades for a considerable period.

It has been seen that the work of the wartime 423 Squadron's crews was mostly unspectacular, mostly devoid of visible returns. Theirs was not the exhilaration of pulverizing an oil plant, downing an *Me. 109*, strafing a column of "Tiger" tanks, or carpet-bombing the dug-in *Wehrmacht*. Yet, how seemingly inordinate were the demands for vigilance, patience, and perseverance which were made of them. Perhaps their sole reward was a special satisfaction derived from the knowledge that they were, after all, manning the first line of defence: they were guarding the materials and sustenances of war without which the struggle could not be continued and the long-awaited offensives could not even be contemplated.

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For nearly eight years the designation "423" lay dormant. Resurrected on 1 July 1953, it was applied to a squadron being formed at St. Hubert. Equipped with the *CF-100*, this second edition of 423 was also the second of our all-weather fighter squadrons to be organized. Now, though the trespasser of the air had replaced the prowler of the sea as the very reason for its existence, its official motto, "Quaerimus et Petimus" ("We Search and Strike") was every bit as meaningful and appropriate as before.

For some three and a half years, 423 Squadron was an important link in the chain of Canada's air defence. In the fall of 1956 it learned of its selection, along with other R.C.A.F. all-weather units, for duty overseas. As part of a programme to bolster N.A.T.O.'s air defences, these squadrons were to help establish a condition of 24-hour readiness in Western Europe by flying the night watch, thereby sealing any possible chink in the N.A.T.O. armour between darkness and dawn. Accordingly, on 12 February 1957, Operation "Nimble Bat II" began, the squadron taking off that day from St. Hubert on the first leg of the long flight to 2 (F) Wing, Gros Tenquin. Its 18-ton jets needed but nine and a half hours of air time to make the entire hop. 423 was the second *CF-100* squadron to fly the Atlantic and take its place with the air forces of N.A.T.O. in Europe.

THE END