## WAR ON THE FRONT DOORSTEP

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DURING the two World Wars the attention of the Canadian public was generally focussed on the major battles that raged far from home. However, it should not be forgotten that during World War II a serious enemy threat developed on Canada's doorstep in the form of German U-boats. The Canadian Home War Establishment was deeply involved in the Battle of the Atlantic, with the brunt of the fighting in Canadian waters being borne by the Royal Canadian Navy and the RCAF's Eastern Air Command.

Canada had had previous experience with anti-submarine warfare. During World War I Canadian fliers had taken part in such operations as members of the Royal Naval Air Service and the Royal Air Force. In August 1918 a German U-boat had actually operated off the coast of Nova Scotia. With enemy submarines probing the western Atlantic, the U.S. Navy established flying units at Dartmouth and Sydney, N.S., while Canada undertook to establish the Royal Canadian Naval Air Service. The war ended before the submarine menace could become more acute. In 1919 the Americans returned home and the RCNAS was disbanded.

For several years thereafter military flying in the Maritimes was restricted to aerial photography, transportation, and general reconnaissance, particularly in the suppression of rum runners. In 1936 the *Fairchild* seaplanes of No. 5 Sqn. took part in a number of exercises with the RCN. Thereafter the emphasis on military flying increased. In 1938 Eastern Air Command was created with G/C N. R. Anderson (A/V/M ret.) as its first AOC. The command was intended to administer a variety of units in the Maritimes, and when the war broke out it became responsible for training as well as operational establishments in the region.

On the eve of war EAC's Order of Battle reflected the general state of unpreparedness that marked the Allied forces at that time. No. 2 (Army Co-operation) Sqn. at Saint John, N.B. was flying *Wapitis*. No. 3 (Bomber) Sqn., enroute to Halifax, was equipped with Atlas aircraft, while No. 8 Sqn. at Sydney, N.S. had Northrop *Deltas*. The only aircraft available which were not obsolete were the *Stranraers* of No. 5 Sqn. at Dartmouth. The first patrols were flown by No. 5 Sqn. on 2 Sep. '39, one day before Britain declared war, and eight days before Canada followed suit. On 14-15 Sep. aircraft shadowed the German steamer "Franz Klazen" until ships of the RCN could intercept her.

The pattern of flying escort patrols for convoys and single ships was established quickly, but there was no sign of German U-boats. In fact the German Navy had entered the war in a very disorganized state, with few U-boats, half a surface fleet, and no naval aviation. It was only in the latter half of 1940, with more submarines at their disposal and with bases in Norway and France, that the U-boat threat became serious. Even then the enemy concentrated on the areas closest to their bases - the Bay of Biscay and around the British Isles. As British defences stiffened the U-boats moved westward, to the south of Iceland and then Greenland. Hitler, however, had no wish to antagonize America, and the

U-boats were kept out of the western Atlantic on his orders lest an incident should arouse the ire of the United States.

During this period EAC disposed of most of its obsolete aircraft. No. 3 Sqn. was redesignated No. 10 (bomber-reconnaissance), and in March 1940 it began to receive Douglas *Digbys*. A *Hudson* squadron, No. 11 (BR), was formed in November 1939. To enable aircraft to reach further into the Atlantic a detachment of five *Digbys* was established at St. John's, Nfld. under the command of S/L H. M. Carscallen (A/V/M ret.). This move, carried out on 17 Jun. 1940, was the first step towards the setting up of a major anti-submarine establishment on the island.

Although U-boats were not in evidence, EAC was haunted by German surface raiders which operated in several instances just beyond the range of the *Hudsons* and *Digbys*. In February and March 1941 the battleships "Scharnhorst" and "Gneisenau" sank 21 merchant ships some 350-500 miles from Newfoundland. Unfavourable weather, insufficient range, and not enough *Digbys* prevented EAC from locating the raiders. This led the AOC, A/C A. E. Godfrey (A/V/M ret.) to move the remainder of No. 10 Sqn. to St. John's while requesting AFHQ to obtain *Catalinas* for his command. Canadian production of these aircraft was only then beginning, while American production was being absorbed by RAF and USN contracts. In May 1941 the British consented to diverting nine *Catalinas* to EAC. These were not available in time to take part in the hunt for the German battleship "Bismarck", but they did constitute the first truly long-range aircraft to serve in EAC.

The *Catalinas* were initially sent to No. 5 Sqn. but, on 28 June, No. 116 Sqn. was formed at Dartmouth, and the new unit took possession of all nine "*Cats*". It was several weeks before No. 5 was able to re-equip with *Cansos (Catalinas* built to RCAF specifications) and to send its reliable old *Stranraers* to Western Air Command. The procurement of long-range aircraft did not solve all the problems facing EAC. On 22 July 1941 F/L N. E. Small (S/L dec.) of No. 116 Sqn. attacked what was believed at the time to be a U-boat near Halifax. His two 250-Ib general purpose bombs failed to explode. There was, in fact, no U-boat in the vicinity, and Small's intended victim was probably a whale or a porpoise. The incident, however, dramatically illustrated the armament shortages in the command.

The 250 and 600-lb general purpose bombs then in use were fused to explode on impact, rather than for hydrostatic detonation (i.e. to explode when water pressure triggered the fuse). Dropped at low altitude, they skipped along the water. Attempts were subsequently made to drop 250 and 450-lb navy depth charges. These were fused for hydrostatic detonation, but frequently broke up on hitting the water. The answer finally evolved was a depth charge similar to the RCN's 250-lb model, stressed for an air drop, with its ends rounded to improve its ballistics.

As these events were occurring, the Germans shifted their U-boats. In mid-October 1941 four U-boats moved into the Cape Race area, near Newfoundland. Weather was unsatisfactory, but three *Catalinas* were held in readiness at Botwood. No. 10 Sqn. got in the first blow, however. On 25 Oct. a *Digby* piloted by S/L C. L. Annis (now A/M) attacked U-573 100 miles east of Hare Bay. Unfortunately the bombs had been put on "safe" by a crewman who had not informed Annis, and they splashed harmlessly into the sea.

The U-boats remained long enough to sink five ships before pulling back to the North Atlantic. They were still under orders not to become involved with American ships. In spite of these instructions, several incidents occurred involving German submarines and American destroyers escorting convoys to Iceland, where an American garrison was stationed. Gradually the American navy was becoming more and more involved in an undeclared war on the U-boats. However, it was not until Japan attacked Pearl Harbour that the Germans, coming to the support of their ally, were able to unleash the full fury of their submarine fleet in the western Atlantic.

EAC entered 1942 with a mixed bag of aircraft - one squadron of *Digbys* (No. 10), two of *Cansos* (Nos. 5 and 116), one of *Hudsons* (No. 11), and one of *Bolingbrokes* (No. 119). In addition there was one fighter squadron, No. 118, at Dartmouth flying *Kittyhawks* and *Goblins*. These forces were increased during the first three months of the year by the formation of No. 113 Sqn., flying *Hudsons*. Several *Ansons* of the maritime reconnaissance schools were also fitted with bomb-racks, though they could serve as little more than scarecrows. The Germans began their campaign in the western Atlantic by sending six picked U-boats to North American waters, followed by others in the first half of 1942. A few raided shipping around the Maritimes and New England, but the bulk of the enemy subs operated south of New York. There, thanks to American unpreparedness, they took a huge toll of Allied shipping.

The battle moved into the Canadian zone on 12 Jan. when a U-boat torpedoed the SS "Cyclops" 180 miles south of Halifax and another sank the SS "Frisco" 100 miles east of Dartmouth. In the first month of the year 22 ships were sunk in the area north of 40° N and west of 40° W, including eight ships sunk within 150 miles of St. John's. The tempo slackened as the enemy shifted southwards, but losses in the Canadian zone from February through May totalled 33 ships sunk.

EAC reacted with vigour. In January it flew 1400 hours, and made five attacks on U-boats. Flying times increased to 1883 hours in February, 2898 hours in March, and 3752 hours in April. The first attack was on 12 Jan. when Sgt. R. L. Parker (FS dec.), in a *Bolingbroke* of No. 119 Sqn., caught U-130 on the surface. His bombs fell close but did no damage. On 16 Jan. two *Kittyhawks* attacked what may or may not have been a U-boat. Next came an attack by F/L J. M. Young (W/C dec.), flying a *Digby* of No. 10 Sqn. on 19 Jan. On the 21st F/L N. E. Small of No. 116 Sqn. jumped a U-boat. Oil and bubbles came up for 45 minutes following his attack, but the U-boat was able to continue its patrol. Finally, on 22 Jan., F/L E. M. Williams (W/C dec.), of No. 10 Sqn., bombed a U-boat. One depth charge exploded alongside the conning tower, and a second attack was inconclusive. The assessment was "must have shaken up the crew".

Another job, equally important but more grim, was that of searching for survivors from torpedoed ships. On 24 Jan. F/L Small and F/L J. E. Martin (F/L rel.) of No. 116 Sqn. flew patrols lasting more than 11 hours, searching for the survivors of the SS "Wildbeast" which had been sunk 600 miles southeast of Halifax. Two lifeboats were spotted and the aircraft dropped messages, food, cigarettes, and a rubber dinghy. Next day the seamen were picked up by two freighters. Another notable sortie was flown by F/L J. E. Martin (F/L rel.) of No. 5 Sqn., who located survivors from the SS "Empire Seal" off Liverpool, N.S. More frustrating were those searches which turned up only wreckage and empty lifeboats -mute testimony to the struggle at sea.

Such was the pattern for the next few months, as EAC aircraft carried out their duties of attack and rescue. In March USN *Hudsons* flying from Argentia sank two U-boats, but such successes were denied EAC. The *Bolingbrokes*, indeed, proved to be of limited value. Though capable of carrying four 250-lb depth charges, their range was small, and a meaningful range could be obtained only by cutting the load in half. This undoubtably robbed Sgt. C. S. Buchanan (F/L rel.) of No. 119 Sqn. of success. On 23 Mar. he attacked a diving U-boat 150 miles south of Cape Race. His two depth charges were enough to blow it to the surface but not to damage it. The submarine submerged again and escaped.

The lack of visible success did not rob the aircrews of their sense of humour. On 28 Apr. F/L Small dropped two depth charges 15 seconds after a U-boat had submerged. Oil and bits of wood, probably from a catwalk on the deck of the submarine, swirled to the surface. The report of the attack noted the following :

"The captain of the aircraft feels that though the possibility of a clean kill is not very strong, he is certain that he definitely made their back teeth rattle."

May was a slack month, with only two or three sightings of U-boats and no attacks. A U-boat slipped into the Gulf of St. Lawrence and sank two ships off Fame Point on 11 May, but the enemy eluded all aircraft despite many sweeps by *Cansos, Ansons,* and *Hudsons*. Meanwhile the strength of EAC continued to grow. No. 118 Sqn. with its *Kittyhawks* was sent to Western Air Command, but four *Hurricane* squadrons were formed to guard against possible enemy air attack. This was deemed necessary as the Germans' HE-177 was potentially capable of carrying out reconnaissance flights as far as North America, while the aircraft carrier "Graf Zeppelin" represented another threat. (In fact, construction of the carrier was never finished). In addition, another *Canso* squadron, No. 117, was formed at North Sydney on 27 Apr. and No. 145 Sqn., flying *Hudsons*, was formed on 18 May. Next day No. 162 Sqn. was formed at Yarmouth, but until late in 1943 it was so short of equipment that it was little more than a squadron on paper.

A few U-boats operated between Nova Scotia and Bermuda during the summer of 1942. In June EAC carried out four attacks on enemy subs. The only one which enjoyed any success was on 23 Jun. when P/O W. Graham (F/L rel.) in a *Hudson* of No. 11 Sqn. caught U-87 on the surface. The conning tower was still out of the water when Graham's depth charges straddled the sub and blew it to the surface. U-87 submerged again amid a hail of bullets from the *Hudson*. She had been so badly damaged that she was forced to return to port. Early in July U-132 broke into the Gulf of St. Lawrence and sank three ships. Subsequently she escaped from attacks by HMCS "Drummondville" and a *Hudson* of No. 113 Sqn. Six other attacks were carried out by EAC aircraft in July, the last one paying off in spectacular success.

On 30 Jul. P/O Graham of No. 11 Sqn. attacked a U-boat 120 miles south of Halifax. Next day S/L N. E. Small AFC, who now commanded No. 113 Sqn., was sweeping the area where Graham had carried out his attack. At a range of three miles he spotted a U-boat on the surface with crewmen running for the hatches. The sub was still on the surface when four 250-lb depth charges exploded around the hull, just forward of the conning tower. The U-boat submerged, resurfaced, then submerged again. Oil and debris swirled up. Fifty-five minutes later a heavy underwater explosion occurred. It marked the end of U-754, a 740 ton U-boat commanded by Kapitanleutnant Volmar Schwartzkopf. On 2 and 5

Aug. the redoubtable "Molly" Small attacked U-89. Neither attack damaged the sub sufficiently to force her to abandon her cruise, but Small's record was remarkable. Before the year was out he would make six attacks on U-boats, and in January 1943 he would be awarded the DFC, only to die in an air crash six days later.

The fighting went on around Newfoundland and further eastward, while EAC continued its grim work. In September and October 1942 U-boats made several attacks in Conception Bay, the Strait of Belle Isle, and the Gulf of St. Lawrence. U-517, which penetrated the Gulf in company with U-165, sank 12 ships totalling more than 33,000 tons. During September, aircraft of EAC had numerous sightings of U-165 and U-517, and carried out seven attacks against them. At least four of these attacks appeared damaging at the time, but U-517 at least escaped unharmed, although on one occasion a depth charge landed on her deck without exploding. It was thrown overboard by her captain and some crewmen. U-165 was mined off Lorient while returning home, and reports of any damage she may have suffered in Canadian waters were lost with her.

The first attack on these submarines was carried out by F/O J. H. Sanderson (S/L rel.) in a *Digby* of No. 10 Sqn. on 3 Sep. The remaining six attacks were the work of a *Hudson* detachment of No. 113 Sqn. based at Chatham, N.B. Three of these attacks were carried out by F/O M. J. Belanger (F/L rel.), two of them on the same day. P/O R. S. Kettley (F/L rel.) made two attacks and Sgt. A. S. White (F/L dec.) made one. Belanger was awarded the DFC in January 1943. He subsequently served overseas in No. 425 Sqn. and was awarded a Bar to the DFC.

As the submarine campaign faded out in the Gulf of St. Lawrence and along the American seaboard, it flared up again in the north Atlantic. Sinkings in this area rose sharply from the number recorded during the summer of 1942, and the escorts, both air and sea, sank 18 U-boats in October and November. An indication of the increasing role of air power was the fact that 11 of these were sunk by shore-based aircraft of the RAF, RCAF, USN, and USAAF. A twelfth U-boat was sunk by an *Albacore* of HMS "Victorious". It was U-517, which had only recently caused such havoc in the Gulf of St. Lawrence.

On 30 Oct. 1942 fortune was clearly with EAC. That day two *Hudsons* of No. 145 Sqn. were on an antisubmarine sweep 280 miles northeast of Torbay. They were nearing the limit of their endurance when a submarine's conning tower broke surface two miles away. It was the ideal situation. The enemy, with no men on deck, were blind to the presence of the aircraft.

Flying Officer (later F/L) E. L. Robinson immediately attacked. The four 250-lb depth charges dropped cleanly and accurately, all exploding within 15 feet of the hull. The U-boat was lifted partly out of the water, then began to settle. The stern rose until one-third of the submarine was visible. Then, it slid under, leaving an oil slick which spread rapidly. U-658, Kapitanleutnant Hans Senkel commanding, had been part of a wolf pack preparing to attack convoy SC.107. After this bombing she never surfaced again. F/O Robinson was awarded the DFC and two of his crewmen were mentioned in despatches.

The same day (30 Oct.) a *Digby* of No. 10 Sqn. was returning to base after covering an inbound convoy. At a range of two miles the crew spotted a U-boat starting to dive. The pilot, F/O (later F/L)

D. F. Raymes, turned sharply to port and came up on the stern just as the U-boat went under. Four 450-lb depth charges exploded in the swirl left by the sub, probably all around the stern as they were spaced at only 20 foot intervals. A few minutes later a dark object shaped like the end of a cigar bobbed up in the turbulent water and then disappeared. This was followed by a huge bubble of air, and then more bubbles and oil, all concentrated in one spot.

U-754, commanded by Kapitanleutnant Hans Oestermann, had followed her sister U-658 to destruction. It is a measure of the difficulty of assessing these actions at the time that during the war the results of this attack were put down as "probably damaged". F/O Raymes was awarded the AFC in January 1943. When post-war analysis showed that he had, in fact, sunk U-754, he was awarded the DFC.

This rough handling of the U-boats gave considerable support to the convoy. Next day, 31 Oct., a *Hudson* of No. 145 Sqn. piloted by P/O (later F/L) L. T. Ross, jumped a fully surfaced U-boat ahead of the convoy, but without inflicting any damage. On 1 November a *Canso* of No. 5 Sqn. attacked another U-boat but the depth charges refused to drop. That night, convoy SC.107 sailed beyond the range of the Newfoundland-based aircraft. While crossing the Atlantic Gap - that area outside the range of aircraft based in Newfoundland and Iceland - the convoy took a brutal beating, losing 15 ships. When it came under air cover from Iceland, a *Liberator* sank U-132, and the wolf pack was called off.

Something should be said concerning the tactics used by EAC and the problems encountered by the command. Late in 1942 a staff officer in RAF Coastal Command pointed out that EAC employed mainly defensive tactics, giving convoys close escort. He advocated the use of offensive measures, with sweeps carried out further from the convoys to force the subs down and keep them submerged in daylight so that they could not close on the ships before nightfall. He also pointed out that many pilots on operations had little training in anti-submarine warfare.

Both these problems could be explained by the chronic shortage of aircraft in EAC, which made it difficult both to provide close escort and to undertake independent sweeps. As of 24 Nov. 1942 EAC had an establishment for 135 reconnaissance and strike aircraft, but had only 85 on strength. Crews arriving from the Service Flying Training Schools obtained most of their operational training in the squadrons whose aircraft were already hard-pressed to provide adequate support for the convoys. A meeting of RCN and RCAF staff officers held early in November 1942 recommended that a greater proportion of Canada's war effort be directed to the war at sea. These officers also recommended closer co-operation between the RCN and RCAF, and steps were taken to implement these recommendations.

Thus closed 1942. It had seen the enemy's most destructive thrusts into Canadian waters, and EAC had responded with all the power of its limited resources. The command had carried out 42 attacks, sunk three U-boats, and forced at least one to return to base. The fact that 38 attacks did little or no damage did not indicate any slackness or lack of skill on the part of the RCAF crews. Many times the enemy had submerged before the depth charges were released, and aiming was little more than a guess. The four depth charges carried by most EAC aircraft were a minimal load pitted against the finest German construction. Laying the depth charges close enough to damage the enemy's hull required extremely high accuracy.

EAC embarked upon 1943 with a force of 201 operational aircraft. The actual strength of the command was far less, however, as many of these were *Lysanders*, *Ansons*, *Harvards*, and other types with little or no destructive capacity, while 72 *Hurricanes* represented a fair defensive force which could play no effective role against the U-boats. The heart of the command lay in only 85 patrol bombers - ten *Digbys*, 43 *Hudsons*, and 32 *Cansos*.

The German U-boat force, expanding since the outbreak of war, reached its peak strength in April 1943, with 240 operational subs and 185 more in training and trials. Following a crisis in command, Grand Admiral Doenitz became Commander-in-Chief of the German Navy. Doenitz had previously commanded the submarine arm, and he retained personal control of the U-boats after his elevation to the top command post.

Fierce Atlantic storms restricted the activities of both sides in January, but further south, near the Azores, the convoys were badly mauled. February brought a series of bitter convoy battles on the northern runs, and 63 ships were sunk, including 41 in convoy. The enemy lost 16 U-boats. March was even worse. Twelve U-boats were sunk in exchange for 108 ships. In mid-March a ferocious battle raged over HX.229 and SC.122, two east-bound convoys. The result was a disaster -21 ships sunk in exchange for one U-boat. At that moment, more than any other time of the war, it appeared that the convoy system was inadequate, and that the enemy was about to win on the North Atlantic routes.

Then, with the course of the war hanging in the balance, a number of factors came together and in dramatic fashion the bleak picture changed, with the U-boats being beaten in a period of two months. It would be well to discuss these factors. To begin with, the Allies put all their faith in the convoy system and the number of unescorted vessels, the easiest prey of the U-boat, declined. The Allies had been building increasing numbers of escort vessels. These were deployed in the spring of 1943, some in independent hunting groups, and soon made their presence felt. "The Wizard War" - the battle of scientific brains - was won by the Allies. New weapons systems, depth charges, explosives such as torpex, ten-centimetre radar which was undetected by German equipment; all these came into play to defeat the U-boat.

In the air, long range Liberators based in Iceland and Newfoundland finally closed the Atlantic Gap. Thereafter the whole of the Atlantic became a hunting ground for the aircraft rather than for the enemy. The Germans made mistakes that contributed to their own defeat. Ignoring the possibility that the aircraft were using ten-centimetre radar (which had already been noted by Luftwaffe scientists), the German naval authorities adopted a haphazard approach to radio counter-measures which delayed the development of any means to detect the emissions of the Allied radar. From March 1943 onwards the enemy adopted new tactics of staying on the surface and fighting it out with attacking aircraft. Though several aircraft were lost through these methods, U-boat losses soared.

Finally, the German advantage of a single, unified command under Doenitz as opposed to the many Allied and service commands was largely wasted in the manner in which that command was exercised. The German U-boat commanders were required to make daily radio reports to headquarters. These reports became known as "Papa Doenitz' Bedtime Stories". As Allied radio monitoring improved it became possible to pinpoint the submarines and send ships or aircraft to the scene while routing convoys away from the dangerous areas. Only on rare occasions did the enemy maintain a strict and comprehensive radio silence. This tight, centralized system of command persisted throughout the war.

During the campaign leading to the climax of the spring the main enemy strength was concentrated south of Greenland, beyond the reach of most RCAF aircraft, and the brunt of EAC operations fell on the *Cansos* of No. 5 Sqn. These aircraft were sturdy and had a long range, but that was not enough. On sweeps their radius of action was 750 miles, but the maximum range for a convoy escort patrol was only 450 miles. Their flying characteristics deteriorated as the all-up weight increased with radar, aerials, and additional fuel. Their large profile and relatively slow speed enabled U-boats to spot them and dive in time to escape a salvo of depth charges. Nevertheless, until improved long-range aircraft became available the *Cansos* were all that EAC had to reach into the mid-Atlantic.

*Cansos* of No. 5 Sqn. made four attacks in February 1943, including two by F/L (later S/L) F. C. Colborne and one by F/O (later F/L) D. G. Baldwin. In March Baldwin carried out another attack. On 22 Apr. F/L J. W. C. Langmuir homed on a sub using his radar and bombed it. The attack was so promising that it was assessed as "probably sunk". This was subsequently downgraded to "insufficient evidence of damage". The climax came in May during the fierce battle over convoy ONS.5 S/L (now G/C) B. H. Moffit AFC was sweeping in the vicinity of the convoy on 4 May. He was 750 miles northeast of Torbay when the radar picked up a blip seven miles away. Moffit homed on the blip and at a range of two and a half miles the first engineer, Sgt (later P/O) W. Bedwell spotted the sub. Perhaps the enemy felt secure so far north and under 10/10 cloud. At any rate, the attack achieved complete surprise. Four 250-lb torpex depth charges blasted U-630 along her length and she sank with no forward motion, leaving a large oil slick to mark her grave.

Half an hour later the *Canso* turned for home, sighting another U-boat enroute. S/L Moffit was awarded the DFC, as was WO2 (later F/L) C. E. Spence, one of the gunners. Sgt. Bedwell was later commissioned and awarded the DFC. The second engineer, Cpl. H. Knelson, was awarded the DFM, and the three remaining crewmen were mentioned in despatches. Three hours after the sinking of U-630 F/L Langmuir attacked a U-boat (his second) in the face of intense AA fire, the first such incident for EAC. The depth charges shook the sub but did no damage. The crew then mounted the nose gun in the aircraft and engaged in a gun battle with the U-boat. Three German sailors were seen to fall. While manoeuvering for another attack the *Canso* crew lost sight of the U-boat, which apparently dived.

The convoy battles of that month in which No. 5 Sqn. was participating were as fierce and decisive as any engagement between surface ships. In the struggle over ONS.5 the enemy sank 12 ships but lost seven U-boats. Shortly afterwards in another convoy battle the enemy sank five ships but was made to pay with five U-boats. In two further actions the Germans lost seven U-boats without sinking a single merchantman. Doenitz was beaten, and on 22 May he admitted it by recalling all but a token force of U-boats from the North Atlantic. He had lost 15 subs in April but a whopping 41 in May.

THE battles of May 1943 marked the end of one campaign and the next series of actions, four months later, were of a very different nature. To understand the changed conditions one must go back to the

Atlantic Convoy Conference, held in Washington in March 1943. It was attended by representatives of the RAF, USAAF, RCAF, RN, USN, and RCN. The purpose of the conference was to review all antisubmarine operations in the Atlantic with the aim of improving the organizational system and defining responsibilities. At the same time operational and technical matters were considered.

The result was that Canadian responsibilities were increased. The operational control of air commands was extended to the limits of endurance of their aircraft. All anti-submarine aviation in Newfoundland, including American units, came under the control of No. 1 Group HQ, St. John's. This made the AOC of EAC, A/V/M (A/M retired) G. O. Johnson, MC, the overall commander, a situation recognized by his being given the new title of Air Officer Commanding in Chief. However, American units ceased operations in August and were sent to other theatres. To increase inter-service cooperation the USAAF Anti-Submarine Command staff moved into No. 1 Group HQ, while in July a joint RCAF/RCN HQ was established in Halifax.

Above all loomed the need for very long range (VLR) aircraft for EAC. The finest type available was the Consolidated B-24 *Liberator* which was in great demand. It was pointed out that the RCAF had some 200 aircrew trained in VLR operations but had no suitable aircraft. The outcome was that 15 *Liberators* were earmarked for the RCAF.

The logical unit to receive these aircraft was No. 10 Sqn., which had been flying *Digbys* for three years. On 2 April the first aircrew and maintenance personnel were posted to Dorval to take delivery of the "Libs." and to start operational training under the eye of W/C (now A/M C. L. Annis, OBE. The aircrew first made a few flights on *Mitchells* to acquaint themselves with a tricycle undercarriage. A "hack" *Liberator* from Nassau was used for training until the new aircraft could be delivered from Fort Worth. By the end of April six *Liberators* were at Gander, although training was still in progress. In May and June the remaining aircraft arrived. The first *Liberator* sweeps were flown on 10 May by F/Ls (later S/Ls) J. F. Green and A. L. Imrie. From that date forward the Atlantic Gap was no more.

The presence of the *Liberators* remained a closely guarded secret until 3 July when P/O (later F/O) R. R. Stevenson attacked a U-boat that was shadowing a convoy. Stevenson detected and tracked the sub by radar, then broke through the clouds three miles from the enemy and made three attacks in two minutes. Only after the aircraft had dropped its last depth charge did the U-boat submerge in a swirl of debris. U-420, the object of this attack, was heavily damaged and forced to return to France. Curiously, the Germans reported that they had been attacked by a *Halifax*.

During the summer one or two U-boats continued to haunt the Western Atlantic, but there were few sightings and fewer attacks. Doenitz was waiting for a relaxation of the vigil in the North Atlantic. His U-boats were being equipped with heavier AA batteries and with "Zaunkonig" homing torpedoes. Later in August he despatched nine U-boats and a supply sub to the North Atlantic, followed by 19 more early in September. All the submarine commanders knew the importance of this operation, for on their departure Doenitz had signalled to them, "The Fuhrer is watching every phase of your struggle. Attack, follow up, sink!"

The Fuhrer may have been watching, but so was the British Admiralty. The presence of so many Uboats could not be hidden, though their exact dispositions was unknown. Even as the Germans were forming their patrol line, the Admiralty reinforced the escort for convoy ONS.18, which had sailed from Milford Haven on 12 September. Three days later a fast convoy, ON.202, left Liverpool. The characters were in motion and another Atlantic battle was about to begin.

On 15 September No. 10 Sqn. sent three *Liberators* to Goose Bay. Next day these aircraft proceeded to Iceland, escorting HMS Renown en route. Renown was taking Mr. Winston Churchill home following the Quebec Conference among allied leaders. Once in Iceland the aircraft were held to escort ONS.18. On 19 September F/Ls C. M. Harper and R. F. Fisher took off to screen the convoy and return home. Fisher was cruising at 3,000 feet, just under cloud base, when his copilot, F/O (later F/L) J. Dale, spotted a U-boat two miles away. Fisher dived to attack. On his first pass he was too high and he swept over the sub while the German gunners blazed away. The enemy was choosing to fight it out on the surface - a fatal mistake. In a second attack six depth charges straddled the sub and blew the bow out of the water. The gunners vanished and the sub began to submerge. As soon as the conning tower slipped under the waves Fisher attacked again. Four depth charges exploded in the swirl. Oil and bubbles appeared and spread out. After checking for damage (one wingtip had been hit by flak) and waiting for 25 minutes, Fisher set course for Gander. He had sunk U-341, and two of his crewmen, F/O Dale and F/O (later F/L) B. A. Murray, the navigator, were awarded the DFC. Fisher was killed in a flying accident before any award for him could be approved, and he was accorded a posthumous mention in despatches.

Fisher's attack indicated that the U-boats were deployed further north than had been anticipated, and so convoys ONS.18 and ON.202 were run together to combine their escort forces. By day the ships were covered by *Liberators* from Iceland which sank U-338, but by night a number of escorts were sunk or damaged. On the morning of 22 September the ships came under cover of *Liberators* from Gander, and for two days No. 10 Sqn. waged a spectacular battle with the German subs. Warrant Officer (later F/O) J. Billings was patrolling near the convoy on the 22nd when he sighted a U-boat on the surface and attacked in the face of intense and accurate AA fire. One engine was knocked out and his co-pilot was wounded, but the depth charges ruptured the hull of U-270 which was forced to break off the action and return to port. Billings called for assistance, but the escorts were running down "fixes" on subs, and another Liberator, piloted by F/L J. R. Martin, radioed, "Have a sub of my own."

Martin had detected a U-boat by radar at almost the same time as Billings made his visual contact. He also attacked in the face of heavy AA fire and dropped four depth charges, one of which exploded near the bow. When the U-boat began to submerge Martin attacked with two new Mk. 24 acoustic torpedoes, but these weapons were inefficient and did not score a hit. U-377 had been damaged but remained in the fight. Shortly afterwards the *Lib* engaged U-402, but having expended all its depth charges it could do nothing more than try to drive the sub under with gunfire.

Flying Officer (later F/L) A. Cirko arrived over the convoy after dark and homed onto a radar contact. He could not attack in the dark, and the surface escort refused him permission to drop flares. Had his aircraft been fitted with a Leigh Light, such as was used by many RCAF aircraft, he would have been able to follow up his contact. Next day S/L J. F. Green attacked U-422, but his depth charges fell short. For half an hour he traded bullets with the sub until it finally dived. On board the *Lib* was the Deputy Inspector General, A/V/M A. E. Godfrey, MC, AFC During the action Godfrey acted as a gunner, and by so doing became the most senior RCAF officer to fire on the enemy during the war.

Four hours later F/L (W/C retired) R. R. Ingrams surprised a U-boat, but his attack was spoiled when the depth charges failed to explode. Ingrams then dropped two Mk. 24 torpedoes which had no visible effect. He marked the area with flame floats and turned for home. It had been a very frustrating sortie.

At that point the U-boats broke off the action and were sent to other areas where they fared no better than before. Late in October they attempted to engage convoy ON. 207. On the 26th F/L (now A/C) R. M. Aldwinkle of No. 10 Sqn. was patrolling 750 miles northeast of Torbay when he located a sub. Using the sun and clouds to hide him he attacked, dropping six depth charges. They undershot and five failed to explode. The U-boat remained on the surface, throwing up intense AA fire. After an hour of this the German began to dive. Aldwinkle came in, dropped two Mk. 24 torpedoes, then added four depth charges for good measure. A black, oily eruption boiled up. It marked the end of U-420, commanded by Oberleutnant Jurgen Reese, which had been damaged by P/O Stevenson on 3 July. Aldwinkle then flew on to join the convoy and forced another U-boat to dive before he turned for home. He and two of his crew were subsequently awarded the DFC, and the remaining crewmen were mentioned in despatches.

Doenitz had suffered appalling losses, so he split up his wolf packs into smaller hunting groups. These were more difficult to track but were less formidable. The *Cansos* of No. 5 Sqn. had several encounters with U-boats in November, making three attacks. Thereafter the U-boats disappeared from the northwest Atlantic, a tacit admission of defeat.

As the U-boat menace subsided it was decided to reduce the RCAF's Home War Establishment. Number 162 Sqn. was brought up to full strength and sent to Iceland where it began operations in January 1944. At the same time six fighter squadrons, including three from EAC, were sent to the U.K. During the spring and summer of 1944 two bomber reconnaissance squadrons, Nos. 113 and 119, were disbanded. To offset these reductions, No. 11 Sqn. was re-equipped with *Liberator* VI aircraft.

On 14 Feb. 1944 F/O (later F/L) A. P. Cheater of No. 10 Sqn. was patrolling far out in the Atlantic when the wireless operator detected radio jamming. In the dusk Cheater saw a wake and then a U-boat which became alive with gun flashes. The nose gunner opened fire as the *Liberator* closed in, but a fault developed in the ventilation system and the nose became filled with smoke. This hindered the bomb aimer, F/O (later F/L) P. C. E. La-fond. The first salvo of depth charges fell short. A second attack was more promising. U-845 dived, leaving an oil slick. She had not been heavily damaged, but withdrew from the area temporarily. She was sunk on her way home by ships of the RN and RCN.

Throughout most of 1944 the Germans were preoccupied with the threat of invasion and they kept many submarines back to deal with it. At the same time the U-boats were fitted with Schnorkel breathing devices. Those U-boats which did enter Canadian waters were able to sink a few ships and slip away without being spotted. On 14 October HMCS Magog was torpedoed 50 miles from Sept Isles and her stern was blown off. F/O (later F/L) W. M. Peters of No. 161 Sqn. landed his *Canso* on the water and picked up the most seriously wounded sailors, then flew them to hospital. The weather was very bad at the time, and his action won praise from the RCN.

Once the invasion of Europe had been accomplished by the Allies, Doenitz switched his boats back to the Atlantic. The closing months of the war were as bitter as the days of 1942, for the U-boats

torpedoed several freighters and escort vessels around Nova Scotia. EAC crews were confronted with the difficult task of trying to spot Schnorkel tubes in the wastes of the Atlantic. If the U-boat were to retract the Schnorkel there was no way to track the enemy except by sonobuoy. Bombing sonobuoys was one means of frightening the enemy, but as they gave no indication of the depth at which the submarine was lurking there was little chance of achieving results.

In April 1945 the Germans, who had been relatively quiet the previous month, suddenly launched a pointless last-minute campaign in Canadian waters. On 16 April U-190 torpedoed HMCS Esquimalt as she approached Halifax harbour. The ship sank before an SOS could be sent. Several hours passed before she was missed. An air search was then started which soon located life rafts and survivors. Two brief Schnorkel sightings were made by EAC aircraft, but no opportunity for an attack presented itself. On 3 May a *Canso* of No. 5 Sqn. spotted a possible Schnorkel in the Gulf of Maine and attacked with depth charges. This was the last occasion when an aircraft of EAC dropped its ordnance in anger, and the incident was so inconclusive that the object of the attack might have been a piece of driftwood.

On 8 May Germany surrendered and the German Naval Headquarters began broadcasting orders to the U-boats to surrender. Seven appeared near the Canadian coast, of which five gave themselves up to American forces. U-190 sailed into Bay Bulls, Nfld. Eastern Air Command aircraft continued to fly patrols in case any U-boat should turn rogue and attempt to continue operations.

On 10 May F/L G. F. Clement of No. 10 Sqn. was on a convoy patrol when he saw a U-boat on the surface, heading west. Clement turned in to attack, then saw that the sub was flying the black flag of surrender. He signalled in German and then in international code for the sub to halt, but the only reply was a waving of arms by Germans in the conning tower. The *Liberator* homed HMCS Dunvegan and Rockcliffe to the scene, and they escorted U-889 to Shelburne, N.S. F/L Clement had previously done much flying with the squadron, and in December 1945 he was awarded the DFC.

On 3 June F/O W. W. Adshead of No. 10 Sqn. escorted U-190 from Bay Bulls to St. John's. This time the sub was flying the white ensign of the RCN. Thus closed the Battle of the Atlantic.

VE-Day brought the rapid disbandment of the squadrons in EAC. No. 10 Sqn. disbanded at Torbay on 15 August. Number 11 Sqn. took its *Liberators* to Patricia Bay, B.C., where it disbanded on 15 September, the last of the old bomber reconnaissance squadrons to do so. Eastern Air Command had fought long and well. Almost invariably it had received less publicity and lower priorities than other commands overseas, yet it had performed its arduous duties with skill and determination, despite shortages, weather, boredom, and the enemy himself.

The Germans had never thrust into the northwest Atlantic with the same forces that were concentrated in the North Atlantic and along the American seaboard. Had they done so, or if EAC had been able to employ *Liberators* a year earlier, it is quite possible that the command would have been able to play a more prominent part in the Battle of the Atlantic, and to run its score of sinkings higher than the six which were credited to its crews. An indication of what might have been is provided by the case of No. 162 Sqn. which sank five U-boats, shared in the sinking of one, and heavily damaged one more in less than four months while stationed in Iceland and Scotland, astride the enemy's northern transit routes.

Statistics concerning hours flown and convoys escorted during the Battle of the Atlantic would fail to illustrate how great was the effort put forward by EAC. Perhaps one set of statistics will help to convey some idea of the job undertaken by all personnel. For services during the war, EAC personnel were awarded 75 DFCs, 14 AFCs, nine DFMs, two AFMs, three OBEs, eight BEMs, three MBEs, two CBEs, one GM, and 127 mentions in despatches. These figures give some indication of the gallantry and devotion to duty which characterized those who fought on Canada's front doorsteps.

(the end)