In another article on the present website, we already have described the development of Canadian weather services in Gander, in support of the Royal Air Force Ferry Command. That article explains that the history of the Newfoundland Weather Centre in Gander dates from November 30, 1938, basically by a team who previously had been building up its theoretical and practical forecasting experience during the flying boat operations in Botwood. However, even before the installation of a formal weather office, weather observations had actually begun a year and a half earlier, in February 1937, during the Gander airport construction.

Newfoundland being broke due to the Great Depression, the pre-war deal between Canada, the UK and the US gave the responsibility for meteorological services in Gander to the Canadian government. A group of highly qualified Canadian meteorologists whose specialty at that time was transatlantic forecasting was therefore sent to Newfoundland. With the outbreak of the Second World War, meteorological staff in Gander increased significantly and their expertise in transatlantic forecasting was used in support of RCAF anti-submarine patrols and the RAFFC delivery of planes to Europe.

Because these services were Canadian and were maintained and developed after the war, it is natural that their history is fairly well known or at least fairly easy to investigate through existing archives.

But it is pretty much unknown or at least quite forgotten that the Americans forces had their own parallel system of excellent quality operating in Gander at the same time. As well, archival information is fairly difficult to access.

The first American weather personnel to arrive at “Gander Field” on 09 March 1941 were six enlisted men from the 21st Reconnaissance Squadron; Dunlop, Peters, Cooper, Parr, Weiberg and Lewis. They came by boat to St. John’s and thereby had the great honour of being the first American military personnel to officially use the
“Newfy Bullet” (Newfoundland narrow-gage railway) to get to Gander. There is a rumour that a medal was applied for!

Their job was to support the 21st Reconnaissance Squadron, which had just initiated anti-submarine patrols over the Eastern Atlantic. These men were the initial members of what became a larger unit which was designated “8th Air Corps Squadron, Weather” on 18 November 1941. It then became “8th AAF Squadron, Weather” in March 1942, and finally “8th Weather Squadron” on 05 October 1942.

In April of that year (1941), American weather operations started very timidly and used the Canadian weather office in the Administration building until American equipment became available. Sgt Dunlop was the NCO in charge for this initial set-up stage. This group was shortly attached to the 71st Air Base Squadron which ran the overall American operation in Gander. Three other enlisted men arrived on 02 July.

It was on 24 July that the first US weather officers arrived in “Gander Field”, namely Capt Clark L Hosmer and 2Lts Lynn T Irish and Bob A Jessup. Capt Hosmer was a West point graduate and himself a B-17 bomber pilot. This photo supplied by daughter Gay shows him as Major or LCol, since the colour of the oak leaves can not be seen.
It would appear that these Americans had never really been informed that there was already an experienced Canadian weather office in Gander. And some say that the American military in general did not care one way or the other. In the US, military and civilian weather services were completely separated - with the former perhaps at times looking down their noses at the latter. As well, American pilots tended to insist on being briefed by someone - preferably male - in uniform. However, given the urgent task of supporting air operations over the Atlantic, to McTaggart-Cowan, chief Canadian forecaster, this sort of nonsense was to be ignored. Until the Americans were able to set up shop in a hangar across the runway, he therefore gave them quarters and work facilities next to his offices in the Administration Building and did what he could to help them along.

The major problem was requisitioning equipment, which was basically unavailable until mid-1942. A note from Pfc Thomas Sullivan, sent to Stephenville, gives a good example of this in a report of 08 Feb 1942.
The report below on the potbelly stove is even better:

2. It might have been noticed that the barometric pressures on the forms #94 are inconsistent. This is due to the fluctuating air temperature in the meteorological tent. Since the tent is heated by a small pot-belly stove, it is extremely difficult to maintain a constant temperature. Therefore the correction for temperature is not always accurate. We hope to get an oil burner which will do away with the heating problem. I would suggest, sir, that if we could have forms mimeographed, similar to the one attached to this report, we could keep a record of the variations. These forms will help the men making observations, and also give us some means of checking their work.

The second problem was that the weather group was still basically a "gaggle" of individuals attached to the Base Squadron. Having a formal organization was becoming urgent for two reasons. Firstly, weather observation posts were being set up in Greenland, Northern Canada and around Newfoundland and some structure was needed to coordinate it all. Secondly, for the enlisted personnel, being organizational orphans, there was no way of being promoted.

On 15 August 1941 the first official weather organization was created as "Air Corps Detachment, Weather" under the command of Captain Hosmer, who was also named commander of the "AC det, Communications". The designation "8th" came into use was around 15 December.
In an order dated 31 December 1941 Clark Hosmer is shown as "Major", his promotion probably having coincided with the formation of the squadron two weeks earlier.

All US squadrons have a "flash" or "patch" related to the unit to which they belong and the 8th Weather Squadron was no exception.

I have been fortunate enough to acquire a set of generic shoulder flashes for the US Army Air Force weather units:
But the 8th Weather Squadron also had its own “North Pole” unit patch.

However, 8th Weather Squadron was integrated not only into a network of land-based stations. By 1943 three B-25 aircraft operated from Presque Isle (Maine), Goose Bay, and Gander on weather flights, while three B-17s provided coverage from 500 to 800 miles eastward over the Atlantic.
Starting in very early 1944, three specially equipped C-54's flew from North America and Britain to cover the mid-ocean gap. Each C-54 carried two weather officers, specially trained to observe weather from the air. US Navy and Coast Guard vessels stationed along air routes also provided additional coverage.

The extent of the 8th squadron “empire” can be seen from the texts below (may have been originally published in Fortune circa 1943.)

**THE NORTH ATLANTIC SHUTTLE**

Since the beginning of the war the North Atlantic has been flown thousands of times by various types of aircraft. The number of ocean crossings this year may well double those of last. Fighting planes from points all over the U.S. are pouring in great numbers through Army fields at New York; Manchester, New Hampshire; Bangor, Houlton, and Presque Isle, Maine; on their way to two big continental take-off points—Goose Bay, Labrador, and Gander, Newfoundland. From there they are dispatched either to Prestwick, Scotland, and the European theatre, or—via the Azores—to Casablanca and Marrakech for routing through Africa to the Italian and Chinese theatres. At the same time fleets of cargo planes carrying high-priority equipment, personnel, and supplies are shuttling from points along the eastern seaboard to the same battle fronts via Stephenville, Newfoundland, and Bermuda. Their return cargoes consist of seriously wounded soldiers evacuated from combat zones. To provide weather service for these vital A.T.C. operations, the Eighth Weather Squadron has thrown out a network of forty-six weather stations, including twenty forecasting points. Supplementing the U.S. installations are over a hundred foreign civilian stations scattered throughout the territory covered by the Eighth Weather Region. So vital to both the Axis and Allies is advance information on North Atlantic weather that there have been various German attempts to seize outlying stations (see key below).
During all this period, the 8th squadron headquarters remained co-located with the Canadian weather office in the Administration building. Records are not clear but it would appear that the squadron HQ stayed there until it moved to Presque Ile, Maine. The movement order below gives the date for the change of location as 20 June.

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HEADQUARTERS
Newfoundland Base Command, U. S. Army.

June 25, 1942.

SECRET

AUTH. CS, U.S.A., *

Dato: 6-25-42 12 R.M.

SPECIAL ORDERS

NUMBER 143

1. Pursuant to instructions contained in Confidential Letter, Headquarters Eastern Defense Command and 1st Army, file 376.5-G-3, Subject: Transfer of Headquarters of the 8th Weather Squadron, dated June 20, 1942, the Headquarters of the 8th Weather Squadron is transferred effective June 20, 1942 from present station at Gander Lake, Newfoundland to Presque Ile, Maine.

This is a permanent change of station. Travel necessary will be via military aircraft. TDR F'D 31 F-02 and 0425-23.

By command of Major General BAILEY.

ROBERT J. HOOD,
Major, U. S. A.
Adjutant.

In an order dated 03 June, Clark Hosmer, now a LCpl, was designated Regional Control Officer, Northeast region and Commanding Officer, 8th Air Corps Squadron, Weather. An order dated 20 June shows 2 officers and 17 enlisted men remaining in Gander.
During this same period the squadron had finally received the equipment necessary for normal operations. It was consequently able to moved to the “American Side” with its first independent location in Hangar 7. It moved very shortly after to its permanent location in hangar 9.

The map below shows a number of key buildings on the “American Side” in about mid-1943. Hangar 9 which housed the weather services in marked in red. The Canadian / RAFFC weather office was directly north across the runway.

The following photo shows the relative locations of the American (on the left) and Canadian weather operations (on the right).
It would appear that there were basically four reasons why the USAAF decided to set up its own shop in Gander:

- Firstly, the volume of air traffic was greatly increasing by the end of 1941 and the corresponding volume of weather briefings to pilots required more staff.

- As well, British and American aviation staff procedures were not always compatible and a source of some degree of confusion.

- Weather information security was also a subject of contention. Because Britain was within range of German bombers, the British were determined that the enemy get no hint as to weather moving eastward across the Atlantic. They insisted that except in dire emergencies, no un-coded weather information should be sent out. The USAAF took a directly opposite stand. They figured that it was better to take such risks than to deprive friendly forces of needed weather intelligence. This was never quite settled until very close to the end of the war when Germany had no air force worth talking about.

- As mentioned, US forces had already set up and were further developing a large network of weather stations across the north Atlantic (notably Labrador, Baffin Island, Greenland and Iceland) and felt that the integration of all these stations was a priority matter.
It is to noted however that this was not a unilateral American decision but also a recommendation of a joint USAAF – RAF board.

Though the Headquarters of the 8th Weather Squadron moved to mainland US, the local post carried on with its normal activities. It is not easy however to follow its structural organization because it varied constantly, depending on volume of overseas traffic and the relative importance of the overall American base. In many cases it would appear that the weather office had disappeared, while in really it had only been attached to a different unit or changed names. Here are some of the dates from the unit history.

° 01 April 1943 – personnel detached from 71st Air Base Squadron and assigned to Det 8th Weather Squadron

° 14 June 1943 – unit attached to 71th ABS for rations, quarters and supply

° 31 August 1943 - detached from Newfoundland Base Command to the control of North Atlantic Command, ATC

° 21 April 1944 - Detachment inactivated by Newfoundland Base Command. The order transfers all personnel to “8 Weather Squadron, Manchester, New Hampshire. But the key phrase in the order is the following ; “All personnel will remain on duty at present station until relieved by competent authority”.

° 27 April 1944 - Detachment inactivated and personnel attached to 1001st Signal Company for general support.

On 12 April 1943 there was a staff of three officers, one warrant officer and 30 enlisted men. By 18 June this was increased to six officers.

But regardless of all these changes in organization, the American weather detachment continued on with its work. A typical problem for the commander was the continuing equipment deficiencies as shown in this note from January 1944:
The main difficulty encountered was with the inadequate hydrogen shelter in use at the station at that time. Plans were drawn for an enlarged shelter, three times the floor area of the old shelter with a center inflation section. The plans for the new building were approved by the base commander, Col. F. D. Lynch, and the building was constructed by the Post Engineers at this base. Operation in the new building began early in January of 1944. The building has three rooms, a generator room heated by steam heat, an inflation room and a storage room.

Here is a snap of the new building:
Capt LT Irish conducted the first American briefing of trans-oceanic American B-17 crews on 16 April 43 when 54 aircraft were dispatched. There were Europe-bound flights every day but below are given the largest batches of B-17s for 1943.

<table>
<thead>
<tr>
<th>Date</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>16 April</td>
<td>54</td>
</tr>
<tr>
<td>27 May</td>
<td>52</td>
</tr>
<tr>
<td>05 June</td>
<td>60</td>
</tr>
<tr>
<td>24 July</td>
<td>55</td>
</tr>
<tr>
<td>06 November</td>
<td>76</td>
</tr>
<tr>
<td>21 November</td>
<td>63</td>
</tr>
</tbody>
</table>

The cooperation between the Canadians and Americans was not limited to the weather departments as such. In November 1943 the Canadian anti-aircraft batteries were called upon because the US Army Costal Artillery was unable to help. The idea was to use radar to track balloon-lifted targets and thus follow wind speed at different altitudes ("rawin" technique). The story is told below.

In November 1943, Lt. Dean A. Holdizen, radar officer of the 8th Weather Region, came to this station enroute to St. Johns where he planned to initiate rawin operations jointly with radar units of the U.S. Army Coast Artillery Units stationed there. Finding the radar sets at St. Johns unsatisfactory, he returned to this base; and with the cooperation of the Canadian Meteorological Station and Commanding Officer of the 19th Ack Ack Regt. of the Canadian Royal Artillery, he was successful in starting regularly scheduled rawins at this station. The arrangement was made that the Canadian radar operators would track two rawin targets daily, the 0400 and 1600 runs. This first rawin successfully made was the 1600 report on 29 November 1943. Only one station in the entire region had made rawins before this, namely Keel Iceland.
The US weather office in Gander was one of those units which helped the big B-29 Superfortress bombers make their way to frontline destinations, such as Russia and bases in the Pacific. A grand total of 150 B-29s crews were briefed in April - May 1944.

(It was an aircraft of this type, named the Enola Gay, that dropped the first atomic bomb on Horoshima, Japan, on 06 August 1945. From a search of US aircraft records, it would appear that there is possibly a 15–20 percent chance that Enola Gay transited via Gander. It is however much more likely that it used a departure airport in the western US.)

But the stay in Gander of the 8th Weather Squadron or elements thereof was not all work and war.

One such case was the “air raid” on 21-22 December 1941, just two short weeks after the attack on Pearl Harbour. From the text below, it would appear that Base Gander was very lucky it was just a recalcitrant weather “pibal” (balloon with a light) that was circling Gander and not an enemy plane!
This was all the same a number of social activities. Weather personnel had access to good mess and recreation facilities, numerous sports and especially Deadmans Pond, about 1 ½ kms from the runway center point, which boasted an all-ranks shore-side club, built by the Americans soon after their arrival.
This spot was a focus for fishing, canoeing, sailing and plain everyday sunbathing. The photo below presumably shows part of the goodbye activities when the squadron HQ left Gander for Presque Ile, Maine, in 1942. From the wood panelling, it appears to be the Deadmans Pond cabin.

And the highlight of any social calendar would have to be a marriage! This happy occasion occurred on 22 September 1944, the first of its kind on the US air base. The happy couple was 2\textsuperscript{nd} Lt Anabel E Archer and 1st Lt LaVerne T Beneke of the weather service. For those like to read about all the marriage details (which also puts light on life at the base) can be read in an annex to this article.

Lt Beneke also wrote an excellent summary of Gander weather activities in the Winter 1945 edition of the base magazine "The Propagander".
While weather personnel in Gander were quite at ease helping airplanes fly through the winter storms over the North Atlantic, they were, shall we say, less adept getting around Gander under the same storm conditions. The weather “report” made on 31 January 1942 by the Officer of the Day explains it all quite well.

By spring of 1945 activities had slowed noticeably, which much more emphasis on aiding aircraft on return flights from Europe. The air base itself was consolidated into three small squadrons, with all weather personnel in Flight 4 of Squadron C. This included the 8th Weather squadron detachment and the weather personnel flying with the Reconnaissance squadrons.

During this same period, the enlisted men of the weather detachment moved from building 70 to building 68, the ninth move in 26 months – but at least they were closer to the gymnasium and their enlisted men’s mess hall! Very shortly after the war, building 68 became civilian quarters for Imperial oil, while building 70 was used by American Overseas Airlines and slightly later by Allied Aviation.

It would appear, perhaps as a result of the Cold-war situation, that USAAF weather operations in Newfoundland did not close down immediately at the end of the war. There is evidence that in late 1946 or early 1947, an AAF lieutenant and a radar/weather tech flew to Newfoundland to draw up the plans for an 8th Weather Squadron antenna tower and radar site which was completed shortly after. One source suggests that in the summer of 1952 it moved to Pepperrell AFB just north of Quidi Vidi pond in St. John’s and was de-activated in early February 1954.

Both the USAAF and Canadian/RAF services were considered top-notch for the period and better than that of their German equivalent.

But the Allies had a secret weapon – the rotation of Earth. As weather patterns generally travel west to east, the Allies could follow the progress of a weather front as it travelled across the Atlantic. The Germans, on the east side of the ocean, had only a small number of haphazard, hit-and-miss observation facilities such as boats, a few airplanes and fewer clandestine stations. One very interesting story is that of a short-lived German weather station in Labrador. They needed a lot of luck to detect a weather front before it reached Europe.
As they say in Bonavista Bay, when you got a steady sail and a good wind in your back, you are a hard man to beat. Weather folk have always known that.

by Robert Pelley ©

Links:
° DOT / RAFFC in Gander
° Marriage Lts Archer and Beneke
http://bobsganderhistory.com/Marriage1944.pdf
° Lt Beneke’s Gander weather summary
° The funny story of a big storm
http://bobsganderhistory.com/storm.pdf
° Clandestine German weather post in Labrador
http://www.heritagedaily.com/2014/06/nazi-weather-station-kurt-2/103568