



TCA'S BRISTOL FREIGHTERS (1)

Contributed by: **L. Murray Wallace**

In tidying up the archives, I recently came across a letter dated March 1991, from Mac McIntyre, the late secretary of the Canadian Aviation Historical Society. In it, he asked me, as well as several other pilots, for any details we might have about TCA's operation of the Bristol 170 Freighter. He was contemplating an in-depth story on the Bristol's career in Canada.

Mac passed away before he was able to complete this project. Hopefully, someone will carry on where he left off. However, finding this correspondence caused me to review my own rather minor involvement, and it occurred to me that there are many of our CALPA-R members who were connected with the operation, and many others who will remember it as a dim bit of forgotten history. Perhaps my reminiscing will be of interest to everyone.

To understand the reasoning behind the purchase of these aircraft, one has to think back to the political climate of the early fifties. CP AIR was growing by leaps and bounds, and threatening the dominance of TCA on Canada's domestic routes. Among other things, they stated that TCA was doing nothing to further the nation's need for air cargo service. At that time, TCA was an entirely DC-3 and North Star operation, with no cargo capacity other than what was available on our passenger aircraft. In an effort to overcome these accusations, the airline had a quick look at all the cargo aircraft then quickly available, and found the Bristol 170 leading the list.

The Freighter was designed late in World War II as a heavy-duty transport, capable of carrying tanks and military vehicles; hence the location of the clamshell nose doors and the flight deck perched on the roof (all you young guys thought Boeing devised this arrangement!). It was evolved from a dual-purpose bomber/transport called the Bristol 130 Bombay of around 1935. Powered by two Bristol twin-row Hercules sleeve-valve engines of just under 2000 HP and weighing around 44,000 lbs MTO, with a max payload of around 10,000 lbs, it had a performance which belied it's ugly looks.

TCA ordered three aircraft, and they were duly ferried to Montreal. As they were not in many ways suitable for a North American operation, the airline set about modifying them to suit our purposes. The 12-volt electrical system was ripped out, and replaced with a 24-volt system, complete with an inverter to power the first AC instruments and radios we had ever seen. The entire instrument panel was re-designed to our specifications and included the first VOR/DME equipment as standard (prior to then, the North Stars had a makeshift installation which was plugged in when an aircraft was assigned to a USA route, as there were still no operating VOR/DME's in Canada). The basic design of large clamshell cargo doors in the nose, operated by a huge crank, bicycle chains, and a "system of suitable linkages", was retained. The aircraft were registered CF-TFX, TFY and TFZ, and designated 501, 502 and 503 by the Company.

At that time, Flight Operations had a rather peculiar organization. The Montreal base was a very small entity, with the DC-3 crews flying east coming under the administrative wing of Eric Jokinen and Cliff Seddon's Eastern Region in Moncton, while the North Star and now the Bristol crews were den-mothered from the Central Region operation of Al Edwards and Rube Hadfield in Toronto.

Bing Davis, in Montreal, was designated as the Bristol chief pilot, and Kent Davis became the Toronto-based check pilot. The flight crews were split between the two bases.

We were still on a flat-salary pay scale at that time, and as the Bristol paid about 50 dollars a month more than the DC-3, when it became operational it looked like a good deal and went to fairly senior Captains who couldn't quite reach the North Star. My memory fails me as to who the original crews were, but I do remember that Johnny Poulain and Jack Barclay were among the Montreal Captains.

However, a year of the operation (the time they had signed up for) became a little much for the original group, and they resigned at the end of their tenure. Lindy Rood, fearful that the same thing would keep happening, decided to force-move the three most junior Montreal-based DC-3 Captains to the Bristol and at the same time replace the F/O's with senior co-pilots with a view to promoting them on the equipment. So began my personal involvement, in the spring of 1954. My fellow Captains were Roy Cartwright and Garth Dundas, with Gord Jones, Ron Walker, Ron George, and Buzz Gauthier as F/O's. The extra F/O provided holiday relief etc. while Bing Davis did the same for the Captains.

We took the usual "nuts and bolts" ground school of that era in the old No.5 Hangar at Dorval. If my memory serves me, the instructors were Dal Woodard (medically grounded at the time), Ron Peel, and Tom Truscott from maintenance. By the time it was over, we could build a Bristol Freighter and a sleeve-valve Hercules, but had yet to see either, as they were all out flying somewhere!

Flight training followed. No simulator, of course - Bing took Roy, Garth and myself together. My log book shows a total of around seven hours left seat, plus a couple of "Solo" practice flights with Roy and Ron George (can you imagine solo practice flights on the B-747?) before Kent came up from YYZ to put us through the "fiery hoop". MOT was not involved, as TCA considered it none of their business in those days! We were profoundly impressed by the performance of the Bristol - on one engine; despite the hard-wired landing gear, it ran rings around the DC-3.

The next item on the agenda was a familiarization flight to visit all the alternates involved in the New York operation, a company requirement at that time. On May 27, 1953, Bing took the three of us to make approaches to Burlington, Albany, Windsor Locks, Philadelphia, Newark, LaGuardia and Idlewild. It was during this trip that the legendary "Did you build it yourself?" comment came from the tower at Bradley Field.

The Montreal operation covered a thrice weekly "around the triangle" night operation YUL-YOW-YYZ-IDL (JFK to you kids) YUL and several weekly flights YUL-YYR in support of the under construction DEW LINE radar chain, as well as the odd charter to mostly Maritime destinations. We worked on a "first in- first out" basis, which pretty well meant you were on reserve all the time. However, this wasn't as bad as it sounds, as there were only three aircraft, and you always knew where they were. We were required to maintain dual competency at the time, and my logbook shows several DC-3 flights during this period.

Although a staunch performer, the Bristol had a few weak points. One of the strangest was the tail-wheel lock, which was operated electrically and failed in the "locked" position if it overheated, which it did after about ten minutes. Switching it off was part of the after take-off check, but everyone forgot it at least once. I managed to do it on a flight to IDL, and couldn't turn off runway 31L! The ATC people were not amused!

It was also blessed with pneumatic brakes operated by rubber expander tubes inside the drums on each wheel, a standard British feature of the day. If you used the brakes too much while taxiing, the tubes would overheat and blow out leaving you brakeless at a most inopportune moment. The cockpit was reached by a vertical ladder, which led up through a hatch behind the F/O's seat. The rearmost part of the seat tracks was actually on the top surface of the hatch. If by chance the hatch wasn't closed and the F/O slid his seat back, he did an emergency descent about halfway down the hole and spent the rest of the flight getting the seat back on its tracks.

Despite its shortcomings, it was a very pleasant aircraft to fly, light on the controls, lots of power, and basically very reliable. In a little over a year of flying it, I only had one engine shutdown, and that precautionary because of a fuel leak.

It's biggest Achilles heel was operating in icing conditions, which you all remember was most of the time in Eastern Canada. The anti-icing system (NOT DE-ICING) consisted of porous leading edge strips (they looked like unbaked ceramic) on the wings and tail, which oozed glycol from a 55-gallon tank in the right wing. The same glycol went to the props through the usual slinger ring. The problem was that you could run out of glycol long before you ran out of fuel. The designers had also artfully placed two little air scoops about halfway down each undercarriage leg to cool the generators. These of course were the first things to ice, and had no protection, resulting in dual generator failures on more than one occasion. To crown it all, the leading edge of each tire would ice up, the unbalanced wheels would begin to rotate faster and faster, and it didn't matter if the generators failed because you couldn't see the instruments anyway due to the vibration!

The crews became very independent compared to our normal TCA operation. We wore a distinctive battle-dress style uniform jacket, as it was hard to crawl out on the wing and refuel at an off-line station in a double-breasted suit. We also learned to carry a screwdriver, pliers etc. in our flight bags. I remember one trip where we were stuck overnight in Seven Islands in the dead of winter. In the morning, the battery was dead, and although we had ground power, it required aircraft power to trip the relay, which engaged the ground unit. I wouldn't have known a relay if shown one, but Ron Walker found it above the cargo door in the nose, borrowed a broom stick from the control tower, and tripped it manually to get us on our way!

On one memorable flight, the TCA people at Goose Bay loaded a GMC van to return it to Montreal for servicing. About half way between Seven Islands and Mont Joli, Gord Jones and I tried to fly under a line of CB's (remember? - that's how you did it in those days!)

In the turbulence, we heard a lot of thumping going on down below. Fearing that the van was breaking loose, I waited for a calm spell and went down the ladder to investigate. The van was secure, but loose on the tie-down cables, allowing it to move about a foot in all directions, which was all the clearance it had. While I was there, I squeezed past it to visit the chemical toilet by the rear door, and while I was in the act, Gord flew under another CB! Aside from peeing all over myself, I couldn't get past the van, which was thrashing all over the place. There was a phone by the rear door, so I called Gord to tell him I was still alive - he advised me that right at the moment he didn't care - he had more to do than talk to me on the phone! TCA didn't believe in autopilots at the time. They were grudgingly accepted on the North Star, and several years later were a retrofit on the Viscount in a huge modification including a flight director, a PA system, and weather radar, but that's another story.

The cargo we carried varied depending on the route. Between Montreal and Goose we were normally loaded heavily with such things as trucks and trailers for Bell Telephone, and believe it or not, telephone poles! In a part of Canada consisting of nothing but trees, none of them were big enough for this purpose! This generally

required an enroute stop at Seven Islands, as we were too heavy to carry a full fuel load. As there was no TCA ground crew there, we had to refuel the aircraft ourselves - the first and only situation where I ever got my hands dirty as a Captain!

On the Inter-City and New York routes we carried just about anything that sales could find, and compared to what could be squeezed into the holds of a DC-3 or North Star we found some strange objects on board.

On the return flights from Goose we were generally empty except for small amounts of Comat etc. One memorable flight just before Christmas of 1954, while waiting for the cargo to be unloaded, we walked across the ramp at Goose with the fire axe and cut down enough little pines to supply everyone connected with the operation in Montreal with beautiful Christmas trees.

I managed to escape the "Blunt Instrument" as Ron Peel called it, by bidding back to YYZ in the spring of 1955, to return to the DC-3 and soon the Viscount.

Around the end of 1955, as the Viscounts came into service, some North Stars were converted to cargo liners, and the Bristol became redundant.

The three 170's were sold late that year to Central Northern Airways, which shortly became Transair. Their Flight Operations VP was Geoff Northcott, who had left TCA to run their operation. He recruited Stu Thompson and others from TCA, although Stu later returned to the fold. Perhaps he can tell us more about this stage in the lives of the Freighters.

As far as I can ascertain, 502 was lost when it went through the ice on a lake airstrip, and 503 in Pacific Western Service had its left undercarriage go through the ice on Beaver Lodge Lake, damaging the aircraft beyond repair. 501 (CF-TFX) was sold to Wardair, and later became the first wheel-equipped aircraft to land at the North Pole. It can be seen today mounted on a pedestal in Yellowknife as a tribute to it's historic past, and to the role the Freighters played in bringing big cargo aircraft operations to the bush.

Although I hated the operation at the time, and couldn't wait to get back to the "Big Airline", I can now look upon it as one of the greatest and most rewarding experiences of my flying career.

