# JEALOUS REGARD for REPUTATION



# MOOSE JAW CIVIL-MILITARY RELATIONS AFTER the AIR COLLISION of 8 APRIL 1954

AS THE DAWN BROKE OVER MOOSE JAW, SASKATCHEWAN, ON 8 APRIL 1954, THE CLEAR AND BRIGHT MORNING SEEMED TO USHER IN A LOVELY SPRING DAY. Children went off to school while toddlers stayed home to play in the yard. Breadwinners went off to work as mothers tackled the laundry or hustled off to appointments and other commitments. People went about their normal lives, thinking nothing was out of the ordinary as Harvard trainer engines could be heard above, flying from the Royal Canadian Air Force (RCAF) school located four miles south of the city. The day had begun as any other day for the prairie town of 27,000 people, peaceful and uneventful.

Little did anyone suspect that by 10:03 am local time, two aircraft would have collided overhead, one house would be entirely destroyed by fire, with two others severely damaged, and thirty-seven people would have perished in the crash. April 8th would be unlike any other day. People on the ground watched helplessly while a Trans-Canada Air Lines (TCA) North Star passenger liner and an RCAF Harvard Mark II trainer collided and fell to the city below.

by Dr. Rachel Lea Heide

# The RCAF and Moose Jaw, part 1

The residents of Moose Jaw were well aware of the risk of having an air training base located nearby. The city had hosted No 32 Service Flying Training School (SFTS), a part of the British Commonwealth Air Training Plan, during the Second World War. Nonetheless, the magnitude of this accident was unprecedented and alarmed some residents considerably. City Council reiterated the complaints it had made over reckless air force flying practices. Pilots' associations severely criticised the behaviour of military pilots and the location of air force bases near urban areas and civilian airways. Editorial writers from across the nation suggested that air force training stations should be moved to remote areas of the country. With TCA, pilots, and Moose Jaw residents vocalizing their complaints, concerns, and dissatisfaction, the RCAF was put on the defensive.

The tragedy over Moose Jaw appeared to be a likely catalyst for bitter civil-military relations. Indeed it was, but surprisingly not between the anticipated parties. Some Moose Jaw residents had grown to resent the presence of air trainees during the Second World War, and in 1956, the Commanding Officer of No 2 Flying Training School (FTS) felt compelled to experiment with the "two dollar payday" to prove the base's economic worth to the city. Nonetheless, the April 1954 collision did not result in acrimonious relations between the base and the city, and nor did it lead to calls for the base's closure or relocation. The city knew the risks of air training - and the economic benefits of air force patronage; hence, citizens were willing to keep the base open. The tense relations did not exist between politicians in the House of Commons and the air force – where clashes of vision often occur. The tainted civil - military relations were located in the skies above Canada, between the civilian pilots and the RCAF

Moose Jaw residents' first clash with intruding air trainees occurred in 1944, less than four years after the opening of the SFTS for the Royal Air Force (RAF). Residents had been proud to welcome the young men into

their community, greeting them at the train station with chocolates and coffee, inviting them to local dinners, parties, and dances. The airmen easily assimilated with the local populace, as the British boys went into town in civilian attire after work. With the arrival of a new station commander in September 1943, this practice changed, and a wedge was driven between the airmen and the city. New orders were instituted that all service personnel must wear their uniforms at all times when in the city. The new station commander also decided to break the precedent, set by his predecessor, of living in the city. Instead, he remained aloof and took up residence on the base. An undeniable barrier had been created by the commander's actions - actions that silently stated there was civil - military Canadian civilian city and the British military station.1

Hostility toward the airmen in their smart uniforms grew in the hearts of some local young men, who resented the foreign intruders attracting the attention of local young women. One particular group, quite noticeable in their colourful suits, baggy pants, and long chains (known as the Zoot Suiters) decided to take matters into their own hands and put the RAF airmen into their "proper place". As a group of trainees left the Temple Gardens Dance Hall on 12 September 1944, the group of Zoot Suiters attacked with fists and clubs. The street fight was repeated the following evening, and people flocked to watch the spectacle. The police report noted the cause to be the fact that members of the "feminine gender appear to favour men in uniform preferably to those in civilian dress." The riot did not continue into a third night, but national coverage had already been attracted, and the mayor had to publicly call for the RAF airmen to be given the respect and courtesy they deserved as guests of Canada.2

Accounts of the two dollar payday also seem to suggest that relations between the city and the air base were tense after the Second World War as well. With the advent of the Cold War, European countries asked Canada's government if the RCAF would train

pilots and navigators in Canada, far away from the probable theatre of war, as had been done in the Second World War. The Canadian government agreed and, in 1953, the air training school in Moose Jaw was opened again, this time upgraded and ready for RCAF and North Atlantic Treaty Organization (NATO) trainees. By 1956, the station had become a small, self-sufficient town in the area of recreation. It now had a full gymnasium, pool and sports centre, theatre, curling rink, and a nine-hole golf course. Local businesses saw the base facilities as competition, and citizens began to assume that the station was no longer an economic stimulus for Moose Jaw. Rather, it was perceived that "the base was actually drawing potential money out of the city's downtown core."3

The station commander decided to put the speculations to rest once and for all. He decided to pay station staff in two dollar bills and let the city of Moose Jaw see for itself how much effect the air force personnel had on the local economy. The two dollar bill was the ideal mode for tracking the RCAF's impact. The bill was otherwise unpopular in the city, for it had once been associated with payments for prostitution; hence, people shunned this denomination, and it was rare to find it in Moose Jaw - that is until the RCAF personnel spent their wages after the two dollar payday. "An almost instant proliferation of the currency throughout the city was a clear and ringing indication of the breadth and depth [of the effect that] the air force had on the local economy." Complaints died away as fears had been resoundingly dispelled.4

After the Zoot Suiter Riot in 1944, and with the city's complaints bringing about the two dollar payday in 1956, it is natural to believe that Moose Jaw had a history of tense civil-military relations with the local air training school. The tragic consequences of the North Star - Harvard collision, the tone of the City Council's emergency meeting the day following the crash, and the proliferation of editorials supporting Moose Jaw's complaints suggest that the accident on 8 April 1954 naturally created a great divide between the station and the city.

Opposite: Recognisable portions of the tails of both aircraft involved in the collison over Moose Jaw Saskatchewan, 8 April 1954; TCA North Star CF-TFW (above) and RCAF Harvard Mk.II 3309 (main).

LIBRARY AND ARCHIVES CANADA (LAC) photos E 700123 (North Star) & E 700117 (Harvard)

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Left: An abundance of Harvards and other training aircraft at Trenton circa 1941-42. Due to Canada's role as the flagship *terra firma* "aircraft carrier" of the British Commonwealth Air Training Plan, and in fulfilling the RCAF's own Home War Establishment training needs during the Second World War, such scenes were common at numerous locations coast to coast.



# Over Moose Jaw - 8 April 1954

TCA Flight 9-7 was actually seven and a half hours behind schedule. Bad weather and high winds had grounded the Vancouverbound plane in Winnipeg. Instead of passing over Moose Jaw late at night, North Star CF-TFW arrived in broad daylight, just as local RCAF training activity was picking up momentum for another day. Harvard 3309 took off at 9:57 am for a solo cross-country navigation exercise which would take the pilot trainee from Moose Jaw to Raymore, then Hanley, Beechy, and back to Moose Jaw. Being Thursday, aircraft were to take off using a right-hand circuit. Flying in this direction made it very easy to pass over Moose Jaw by mistake before corrective action could be taken to set the plane on track again.5

This is precisely what happened to the Harvard pilot, Acting Pilot Officer Thomas Andrew Thorrat, a twenty-two year old native of Scotland. Being a member of the RAF, he was in Canada learning to fly as part of the NATO Air Training Plan. He was also engaged to Donna Brodie, daughter of a city councillor. His flight over Moose Jaw was in contravention of local flying orders for No 2 FTS which stipulated that air force aircraft were not to fly over the city. Nonetheless, citizens hearing the Harvard engine and seeing the vellow plane in the sky above was not out of the ordinary. Nor was it uncommon for Moose Jaw residents to see passenger liners, like the TCA North Star 223, flying overhead, for the Green One airway passed directly over the city. What was out of the ordinary was to see the two aircraft in the same part of the sky at the same time.6

Many witnesses to the crash thought at first that the Harvard was flying higher than the North Star, and they assumed – or rather hoped – that the trainer would fly safely over the passenger liner. In reality, the RCAF aircraft was flying at the same altitude as the TCA plane – 6000 feet (ft, or 1830 metres) above sea level, 4000 ft (1220 m) above Moose Jaw. The inconceivable occurred before the

very eyes of stunned viewers below. The Harvard's nose and engine struck the North Star behind one of the port engines, and almost simultaneously, the starboard wing of the Harvard collided with the port wing of the North Star. Momentum kept the Harvard moving, and it then plowed into the fuselage at the cabin door and finally sheared off the North Star's tail. Two explosions occurred, but it was not until the second explosion that the TCA aircraft lost any semblance of control and began to spiral toward the northeast residential section of Moose Jaw below.<sup>7</sup>

It was the two explosions that alerted many people on the ground to the fact that something was amiss. The principal of Ross School thought that the first explosion was simply an eruption in the school's oil furnace. The second explosion dispelled that belief. The falling fuselage missed the school and its 380 pupils by only hundreds of feet as it fell to the earth. One mother thought that a car had struck her house; when she went to investigate, much to her horror and disbelief, she found a burning aircraft fuselage wafting down, its spiralling motion threatening to land first on one of her children playing in one corner of the yard, and then on the other child digging in the dirt in the other corner. Mothers ran frantically to collect their children from play, hoping to find some safety before the aircraft landed. Witnesses said it took as long as twenty seconds for the fuselage to finally reach the ground, and during those twenty seconds of terror, the people below did not know whether or not their houses would be struck, for the possible resting spot changed continuously as the North Star hulk traced a circular path as it spiraled down.8

The North Star struck one house, located at 1324 3<sup>rd</sup> Avenue, directly. It hit the back of the house at the dining room bay window, and then it burrowed itself into the basement. The already burning gasoline showered the house, igniting the 250 gallons (950 litres) of fuel oil in the basement of the home

of Gordon and Betty Hume. The house was engulfed in flames and burned completely to the ground. All that remained was the charred brick entrance and the white picket fence. The house to the south, belonging to Doctor Keith Yonge, was also covered in burning gasoline. Although not demolished like the Hume home, 1314 3rd Avenue suffered extensive damage from fires in the basement, dining room, kitchen, attic, and one bedroom. All windows were either blown out or melted from the heat. Murray Brown's home to the north of the crash site also had windows blown out or melted, and the south side of 1330 3rd Avenue was scorched.



Above: A Canadair photograph illustrating the full complement of cutlery and other food services pieces typically carried on North Star passenger airliners. This set features a British Overseas Airways Corporation logo engraved on the handles, but the TCA set would have been similar. Forks and knives became projectiles embedded in a golf course during the fall of North Star CF-TFW.

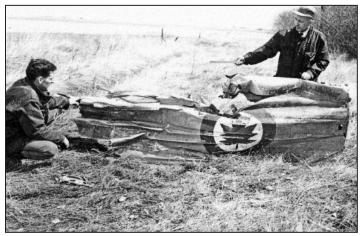
CANADAIR photo, via the BILL LINN collection

Top: North Star CF-TFV, TCA 222. This aircraft is very similar to CF-TFW, and was one ahead of it off the Canadair production line (construction numbers 149 and 150, respectively). It is configured as a freighter in the photo. By the early 1960s, c/n 149 had become YV-C-LBT on the Venezuelan Civil Register. Both aircraft had started as new aircraft with Canadian Pacific Airlines.

CANADAIR photo, via the TERRY HIGGINS collection

Fortunately, Mrs. Hume and her children were not home when the two aircraft collided at 10:03 am. Just twenty minutes before, she had departed for a dentist appointment, taking her two daughters with her. Not wanting to bother the housekeeper with having to keep an eye on the girls, Mrs. Hume had arranged for a friend in town to look after the children while their mother went to the dentist. This arrangement and appointment saved all three of their lives, much to the relief of the frantic father and husband who assumed they all had been home at the time of the tragedy. Unfortunately, housekeeper Martha Hadwen was in the house when the crash occurred, and she consequently perished. Her usual day at the Hume home was Wednesday, but she had changed her day that week to watch her children while her husband - unemployed at the time - finished a oneday job. Her son was in the school just barely missed by the falling aircraft. Miraculously, Mrs Hadwen was the only casualty on the ground, leaving a very deep absence for her husband and three children.10

In total, thirty-seven people died in the North Star - Harvard collision: the NATO trainee Harvard pilot, the TCA crew of pilot, co-pilot, and two stewardesses, the thirty-one North Star passengers, and Martha Hadwen in the Hume house. Emotional impact of the crash spread beyond the witnesses and the Hume, Yonge, Brown, and Hadwen families. Wreckage and debris, luggage, and bodies fell over a three mile radius, for unsuspecting citizens to view. People knew what the white sheets were covering. One TCA engine fell into the main street, and airline cutlery could be seen driven into the ground of the Willowdale golf course. The sights and sounds of the Thursday morning in April 1954 brought home, first hand, to a large number of Moose Jaw residents the dangers of flying and of mixing military and civilian air activities.<sup>11</sup>



Above: Wreckage from Harvard 3309's wing.

LAC photo E 700116

# Below and right: Wreckage from North Star CF-TFW's fuselage.

LAC photos E 700115 & E 700122



### **Early Reactions**

Opinions expressed at the emergency meeting of the city council clearly intimated that many people immediately held the RCAF responsible for the tragedy. News reports announcing the meeting quoted Mayor Louis Lewry as saying that the meeting was being held to consider planes flying over Moose Jaw and to protest this continued occurrence by military training aircraft. The Mayor told reporters that the accident would not have happened if the city's persistent requests had been obeyed. Moose Jaw residents had complained before – on numerous occasions – about the noise of trainers flying over the city, especially at night. On behalf of disgruntled residents, city council had written official letters of complaint on two occasions – 29 June 1953 and 16 March 1954. The RCAF had replied with "assurances that the practice of flying over the city would be avoided as much as possible." <sup>12</sup>

These struck many city aldermen as being empty assurances, as they met at 5:00 pm, Friday 9 April 1954. Mayor Lewry opened the meeting with the statement that "a portion of our city was threatened by disaster as a result of the accident, and I am sure members of council wish to know what steps have been taken to prevent a recurrence."  $^{\scriptscriptstyle{13}}$  Alderman W.C. Davies was astounded that the RCAF had not complied "with requests to not fly noisily and dangerously over the city centre." He had seen stunting - not just by single aircraft, but by aircraft in formation – and he had received reports of a hospital being buzzed. Alderman Vic Secret felt that if restricted areas existed for military aircraft, then these areas were obviously not large enough.<sup>14</sup> Statements from RCAF and Department of Transport observers were not overly reassuring. Speaking off the record, and not as the president of the RCAF Board of Inquiry into the accident, Wing Commander W.B. Hodgson noted that "the city of Moose Jaw is located on a Department of Transport run, and we must expect that airplanes will be flown over the city." He also stated that although the likelihood of recurrence was remote, it was still possible since "human and mechanical elements [are] involved." When asked for the Department of Transport's view on the possibility of a similar accident happening again, Charles Travers, chair of Transport's Board of Inquiry, acknowledged that "no system of regulation affords any absolute guarantee that accidents will not occur." Mr Travers also rejected any thoughts of moving the civilian airway, for although this was possible, it would be "at a very considerable expense as the whole line of flight would have to be rebeamed."15

Some members of council were uncomfortable with discussing the accident before the three investigations (by TCA, the Department of Transport, and the RCAF) had been completed, the cause had been determined, and recommendations had been made. Alderman G.R.



Baskwill (formerly of the RCAF) felt that the council was blaming the RCAF when it had not even been determined what the cause was and if the point of collision had even occurred over Moose Jaw. Alderman O.B. Fysh believed that questioning the RCAF and Transport observers was inappropriate at this time (only one day after the accident). He also reminded the meeting attendees "that the citizens of Moose Jaw had pressed the Department of National Defence to reopen the RCAF station here, and that we took a calculated risk in doing so." He was also of the opinion that "there had been a reasonably fair compliance with local regulations and that flights over the city were only made when circumstances required the same." 16

Views having been vented, but not much else accomplished, the councillors ended the meeting with the motion to urge the Boards of Inquiry to "give consideration in their reports to measures which will adequately safeguard the lives and property of citizens from falling aircraft." <sup>17</sup>





Above: Wreckage of the Hume home at 1324 3<sup>rd</sup> Avenue and fire damage to a neighbouring house.

LAC photos E 700124 & E 700129

Below: The front brick structure was all that remained of the Hume home.

LAC photo E 700131



# Others Weigh In - Opinions and Conclusions

Just as the citizens of Moose Jaw were trying to come to terms with the crash and waiting to hear the verdict on various rumours that the Harvard pilot was intercepting the North Star, carrying out unusual maneuvers, or flying under the hood on instruments, the managing director of the Canadian Air Line Pilots' Association, A.R. Eddie of Winnipeg, had scathing remarks about the RCAF published in newspapers across the country. Although the Association had written the RCAF on previous occasions, protesting the interception of civilian aircraft and protesting the establishment of air force stations along the civilian airways, the crash of 8 April seemed to prove that these protests had been ignored. Buzzing of passenger liners was reported all too frequently. Captain Eddie represented pilots "who have long been irate about military planes encroaching on airways", and these pilots firmly believed that military and civilian pilots did not mix well:

Airline pilots are not a light-hearted lot; they take a professional approach to, and a sober view of, their responsibilities. This is frequently not the case with the air force student. By this, I do not mean to imply that commercial pilots are any better than air force pilots, but the fact is that the two types under discussion are at different stages in their career [sic], and they don't mix well in the air.... There is no question but that ambitious student pilots are subject to the normal tendencies of headstrong, carefree, youth... and I don't think the air force would wish to have them any other way. After acquiring a smattering of elementary flying technique, they are given high-powered toys in which some of them roar about unpredictably in the atmosphere. In doing so, they are definitely out of place on the airways.

Captain Eddie called the location of military airports on civilian airways a "tragic and expensive mistake", which could only be solved by moving "air force training establishments to areas remote from the airways. This will be expensive, but how can public safety be balanced against the money?" <sup>18</sup>

Although circumstances appeared to be leading to a rift in peaceful relations between the city of Moose Jaw and the local RCAF air training station, the arena of most studies of civil - military relations – the government and its dealings with the military – was rather quiet. C.D. Howe, Minister of Trade and Commerce and minister responsible for TCA, gave an interim report of the accident to the House of Commons on 5 May 1954. Ensuing discussions in Parliament about aviation safety focused less on the Moose Jaw collision and more on the need to move RCAF pilot training "away from Vancouver's international airport – the busiest airport in Canada – before there is a duplication of the recent Moose Jaw tragedy." In addition to encouraging that RCAF bases be moved away from civil airports, various ministers supported suggestions that civilian flight schedules



Wreckage in the back yard at 1330  $3^{rd}$  Avenue. This house also sustained fire damage. Note the investigator's tent erected on the property. LAC photo E 700130

should be posted at RCAF bases, and that air regulations should be changed to prescribe greater altitude separation for aircraft, especially when flying at night. The subject of Vancouver's airport came up again in late June when a complaint was raised over RCAF planes deliberately buzzing the city on Easter weekend. The Minister of National Defence elaborated on the incident, noting that the planes were part of the naval air arm returning from exercises: "on the way back from Patricia Bay to the east, they, as a way of celebrating the Queen's birthday, did a flypast over Vancouver. They understood that this had been advertised and cleared with the local people, the newspapers, and so on. Apparently, it was not, and it was a surprise." 22

Far from being a forum of condemnation in the aftermath of the Moose Jaw collision, the House of Commons hardly raised the issue of aviation safety. Announcement of the crash was made in April, the interim report was given in May, and discussion of possible preventions to such air collisions occurred only twice in June. Apart from another close call over Moose Jaw being raised on 10 and 31 January 1955, the 1954 collision came to a close in the House of Commons on 13 January 1956 when the Minister of National Defence announced that all the claims from passenger deaths had been settled for just under one million dollars. It had been impossible, though, despite three detailed investigations, to ascertain the responsibility for the accident.

The House was in the process of trying to determine the cause of the 1954 collision when the most acrimonious of civil - military relations were revealed, and these were between TCA and the RCAF. From the beginning of the investigation process, the president of TCA and the company's board of directors were unwilling to have responsibility for the collision placed on their pilots. After speaking with the Deputy Minister of National Defence on the evening of 8 April, the president of TCA, G.R. McGregor, made a note in his file that during the telephone conversation, "the impression was gathered that Mr. [C.M.] Drury was inclined to jump at the conclusion that the RCAF aircraft was responsible for the accident."26 On 12 April, the president spoke with Air Marshal C.R. Slemon, the Chief of the Air Staff (CAS), and, after this telephone conversation, Mr. McGregor found that he "formed the impression that the CAS had made a close study of the pertinent facts available up to that time and was inclined to the opinion that the RCAF aircraft was entirely responsible, although nothing was said to confirm that impression."27 The president's impressions did not change once the accident investigation report conducted by his company was complete.

### **Investigation Findings and Debate**

The investigation teams concluded that both pilots had been adhering to their respective flight plans; hence, both the Harvard and the North Star were in the positions they should have been at the time of the collision. The Harvard was just commencing Navigation Exercise No 9, which would provide the RAF trainee experience in map reading, navigation, flight operation, and log reading. He was climbing to an altitude of 7,500 to 9,000 ft (2,300 - 2,750 m) at the rate of 800 ft per minute (240 m/min). The TCA flight had contacted the Regina tower to report its position, but the pilots were not required to do so over Moose Jaw since the plane would not be stopping in the city. Captain I.H. Bell (age 37) and First Officer Guthrie (age 25) simply flew over Moose Jaw at 6000 ft (1850 m) above sea level (ASL), the planned altitude.  $^{\rm 28}$ 

Since there was no evidence of unusual manoeuvers or aerobatics on the part of the RAF trainee, and since suicide and sabotage were dismissed based on all three pilots' character, reputations, and career accomplishments, 29 the only reasonable explanation for the collision was that the pilots of both aircraft either did not see the oncoming aircraft at all, or did not see the impending collision until it was too late to take successful evasive action. TCA officials could accept this, but they were unwilling to accept that this meant that their pilots were negligent in maintaining an adequate lookout. TCA ar-

gued that the RAF pilot was clearly to blame. The young pilot, with only 117 flying hours, of which only 37 hours were solo, was deemed careless for letting himself become distracted by take-off duties while crossing a busy civil airway. He was also negligent for not giving the North Star the right-of-way, since the Air Regulations stipulated that aircraft on the right must be given the right-of-way. (The North Star, travelling west, was on the right-hand side of the Harvard flying north). Furthermore, the Harvard was more manoeuverable than the North Star; hence, it could more quickly and easily take successful evasive action to avoid the collision.<sup>30</sup>



H.J. Symington, president of TCA (left) and C.D. Howe at Dorval, Québec, on the occasion of the record non-stop flight from Vancouver, 13 October 1947. As Minister of Trade and Commerce, Howe was responsible for TCA and gave an interim report on the accident to the House of Commons on 5 May 1954.

CANADAIR photo, via the BILL LINN collection





Brooke Claxton (left in the above photo) ostensibly inspecting RCAF electronics equipment during the latter part of his ministry – note the sign which reads "100% training makes expert RCAF pilots" above the equipment bench. Claxton was the Minister of National Defence at the time of the Moose Jaw accident.

ALEXANDRA STUDIO / LAC photo PA 052490

Ralph Campney (left) succeeded Claxton, becoming the twelfth Canadian Minister of Defence on 1 July 1954.

ALEXANDRA STUDIO / LAC photo PA 052493

TCA officials also believed there was ample evidence to suggest that the TCA pilots had been maintaining an adequate lookout. The fact that the pilots' bodies were found entangled in control cables in the wreckage was interpreted to prove that they both were in the cockpit and not, for example, visiting with passengers, at the time of the collision. Remaining in the cockpit while flying over military training areas was TCA practice. Also substantiating this was the fact that the pilot was not a "mixer" type and hence would not be likely to leave the cockpit to socialise with the passengers. This flight crew, like all flight crews, was cautioned "to be on the lookout for service [i.e. military] aircraft while in the vicinity of Moose Jaw and other points at which service flying training stations were located." Both pilots were considered experienced. The steady and ambitious first officer had 1,955 flying hours. The reserved, serious, and conscientious captain had 11,717 flying hours and 2 million miles (3.2 million km) of experience, and his wife called him the most careful man in the world, even when driving his car. TCA officials felt that "both pilots flew easily and possessed the skill and experience required to maintain the aircraft in level flight effortlessly without interfering with lookout."31

Why, then, did the two pilots fail to see the Harvard aircraft? Firstly, the Harvard would be hard to see against the background of Moose Jaw; with the irregular outlines, bare ground, and snowy patches, the yellow paint of the trainer would not necessarily stand out. Secondly, there was the possibility that the Harvard, at its angle of ascent and approach, was "obscured in whole or in part by the North Star windshield division posts." Consequently, TCA officials concluded "that the TCA pilots would be absolved from negligence in not having ascertained the position and course of the Harvard until shortly before the collision occurred." Furthermore, if the pilots had seen the Harvard but chose to maintain course since they expected to be given the right-of-way, this was excusable because changing the North Star's altitude could have increased the risk of collision since the intention - and evasive action - of the Harvard was unknown.32

After meeting with the Vice President Operations, the administrative assistant to the president, the Director of Public Relations, the general counsel, the general attorney, and a solicitor on 19 April, President McGregor noted in the file that "from the information so far available, it was apparent that the RCAF aircraft involved was entirely to blame for the air collision. It was also pointed out that, "while the facts might clearly point to this conclusion, the investigations other than those conducted by the company could not necessarily be depended upon to arrive at the same conclusion." Indeed, the RCAF in-

vestigation arrived at a very different conclusion, one unacceptable to TCA: the pilots of both aircraft were jointly responsible since they all failed to maintain an adequate lookout.<sup>34</sup>

The RCAF investigation countered with attention on the RAF pilot's character, which fellow trainees and instructors found to be exemplary. He was described as capable, sincere, pleasant, agreeable, steady, and mature for his age. Thomas Thorrat's classmates were happy with his leadership, having just elected him as Cadet Officer Commanding. His instructors thought he made good use of his spare time, referring specifically to his membership in the St. Andrew's United Church choir and his participation in the church's Youth Club Operetta. Thorrat, whose psychological testing rated him wellmotivated for aircrew, was planning to make the RAF his career. He was already undertaking additional studies to advance this career. He had placed fourth in the class of thirtytwo on the mid-term exam, and one instructor called him "the smartest lad on course." When flying, he had no outstanding faults, just "the normal little ones," just "the average number of little problems." He was keen, worked hard, and listened to instructions. Although he sometimes kept his head in the cockpit and needed occasional prompting, this was not considered dangerous.35

The RCAF Board of Inquiry did not deny that the RAF pilot held some responsibility for the accident. He had contravened local flying orders for No 2 FTS that stipulated no base aircraft should fly over the city of Moose Jaw. Nonetheless, this error was mitigated somewhat by the fact that right hand circuits (the custom on Thursdays) in combination

with the track to Raymore for the navigation exercise often resulted in students flying over the northeastern portion of the city if they were slightly off course. The Board recommended that the cross country navigation exercise "be rerouted so that the tracks required will pass well clear of the city of Moose Jaw." Investigators recognised that "the first leg of Navigation Exercise No 9 passes too close to Moose Jaw to ensure practical application of No 2 FTS Pilots Orders P1/2." The Harvard pilot had been following his flight plan, set by the air station, and he had every right to be crossing the Green One airway at that time. The only other regulation with which he failed to comply was yielding the right of way to the aircraft on the right (CAP 100, 2<sup>nd</sup> Edition, Paragraph 150(3), and Air Regulation 5.2.19). He apparently failed to do so because he had not seen the North Star, either because it was difficult to see against the backdrop of the bright sky or because he was distracted with post-take-off instrument checks, course setting, map reading, or log keeping. The Board of Inquiry did not deny that the RAF pilot was still required to maintain a constant lookout.36

Nonetheless, the air force Board's investigation of the facts and circumstances did not absolve the TCA pilots of all responsibility for the accident. Actually, the Board concluded that the greater portion of blame should rest on the two TCA pilots. The fact that there were two pilots in the North Star increased the commercial pilots' probability of noticing the Harvard trainer, if an adequate lookout had been maintained. Taking into consideration the angles of approach and the closing speed of 289.7 mph (466.2 km/h), investigators concluded that the two



A North Star cockpit. This photograph was taken inside an early example of the aircraft at the Canadair plant.

CANADAIR photo, via the Terry Higgins collection

aircraft should have been visible to each other for a minute and a half before the collision. Hence, some negligence must be attributed to the two pilots who did not see the oncoming aircraft during this window of opportunity. The two TCA pilots were experienced, and they were familiar with the western route and its hazards. Having flown the Green One airway many times before, they knew of the air training base at Moose Jaw, and the RCAF Board felt the TCA pilots had the greater responsibility of keeping a watch for inexperienced pilots in the area (Air Regulation 5.2.16). According to TCA reports, the crew had been warned to watch for student pilots in the vicinity of Moose Jaw. This knowledge of No 2 FTS training activities led investigators to question why the North Star pilot had set his flight plan for 6,000 ft (1,850 m) ASL, rather than 12,000 ft (3,650 m). It was common knowledge at the time that Harvards did not fly above 10,000 ft (3,000 m) because they were not equipped with oxygen masks. Harvard 3309 was scheduled to go no higher than 9,000 ft (2,750 m). One explanation for the low altitude of the North Star was that a strong westerly airflow discouraged the pilot from flying any higher. Nonetheless, the pilots were then taking a calculated risk to fly at 6,000 ft, where it was known that RCAF planes crossed the airway just when the trainee pilots were settling in, doing post-take-off checks, consulting navigation logs, reading the compass, as well as attending to myriad other chores for flying exercises. Hence, the TCA pilots should have been more vigilant in the vicinity of Moose Jaw.<sup>37</sup>

RCAF investigators were perplexed at TCA's insistence that their pilots had kept an adequate lookout. What, then, accounted for the reason that the two pilots did not see the Harvard in the last ninety seconds of the collision course? TCA tried to argue that the fact that eye witnesses on the ground did not see either plane steer from their respective courses and take evasive action did not necessarily mean that the TCA pilots had not seen the Harvard. TCA officials argued that the North Star crew, upon seeing the trainer, may have deliberately maintained level flight and waited to be given the right of way because this was deemed the safest response at the time. The RCAF countered that such a scenario would mean that the TCA crew was negligent in not taking evasive action to avoid the collision (Air Regulations 5.2.18 and 5.2.20). The RCAF believed that neither pilot saw the Harvard for no change in course was seen, and even involuntary avoiding action would have been likely if the TCA pilots had seen the oncoming aircraft. In reaction to this argument, TCA President Mc-Gregor claimed that the air commodore making this case was using doubtful logic and was "motivated more by a jealous regard for the reputation of the RCAF than by the facts of the case."38



The front cockpit main instrument panel of an RCAF Harvard Mk.II, circa 1941. That for the same mark in 1954 was practically identical.

DND photo, via the Terry Higgins collection

# **Reputations and Regards**

Jealous regard for reputation was more applicable to TCA than the RCAF. As early as 23 April, the air force and airline decided on how to proceed with settling claims so that victims and their families and estates did not have to wait until the final investigations were complete before being compensated. Although the RCAF would settle claims arising from damage on the ground and TCA would handle passenger-related claims, TCA officials made it very clear that this division of labour was in no way to be interpreted as a division of responsibility. In negotiations with the RCAF later in the summer of 1954, TCA officials refused a more lucrative financial settlement because the fifty-fifty division of cost also required a fifty-fifty division of responsibility. President McGregor noted:

the Board was unanimous in rejecting the idea of such an agreement, pointing out that in its opinion, TCA was not responsible for the accident, and that any acceptance of such responsibility, either inferred or otherwise by the company, would, in the first place, not be in accordance with the Board's understanding of the facts, and in the second would be extremely damaging to public confidence in TCA, and therefore to its future earnings.<sup>39</sup>

Despite the fact that C.D. Howe, Minister of Trade and Commerce, believed that the airline could not escape some liability, TCA officials pressed on, even threatening to publicly embarrass the Department of National Defence and the Crown by appearing as witnesses against the Crown in any third party claimant's law suit. The Minister of National Defence at one point refused to provide settlement funds from the department's budget because he did not believe that the RCAF was "entirely to blame for the accident, and [he wished] that the technical reputation of the RCAF not be besmirched by any inferred acceptance of complete responsibility." President McGregor was correct in perceiving that "the deadlock which had occurred appeared to stem almost entirely from the question of the flying reputations of the two organisations concerned, with monetary considerations playing a very secondary role." TCA even refused to privately accept an undeclared portion of responsibility.

In the end, TCA absorbed the cost of the lost North Star, valued at \$440,000, and its lost revenues for the year of 1954, which totalled \$840,000. The RCAF was willing to absorb the cost of the Harvard and pay for all third party claims. As to responsibility, the Minister of National Defence announced in the House of Commons on 13 January 1956 that "it has been impossible, in spite of the most careful and painstaking investigations by technical and legal experts of the Department of Transport, the Department of National Defence, and Trans-Canada Air Lines, to ascertain responsibility for the accident."

TCA's dislike for the RCAF did not end with the final agreement to settle claims from the Moose Jaw crash, nor had it begun with the collision of 8 April 1954. Nevertheless, the accident was the perfect opportunity for TCA to express – in detail – its displeasure with air force practices. TCA officials searched its files and brought to light a myriad of reports airline pilots had made against RCAF pilots - both trainees and experienced - between 1 February 1950 and 14 April 1954. Complaints included being buzzed by CF-100s, seeing seven Harvards doing loops and rolls on the airway, being intercepted by Vampire jets, having a Harvard do a loop toward the airliner and pull out too close for comfort, and meeting a Beechcraft Expeditor headon at 3,000 ft (900 m).42 TCA also voiced its complaints over the location of air force bases, feeling that too many were too near urban centres and civilian airways. The Board of Directors passed a resolution that no new plans should be made by the Department of Transport and Department of National Defence to create new joint airports; the same resolution also called for the rapid elimination of all existing airports where both military and civilian flying were conducted.43 TCA officials protested in writing when it was learned that the RCAF was installing high intensity approach and runway lighting at some terminals shared with the airline. TCA feared this meant

"extensive training operations are planned under adverse weather conditions" and, once again, it appeared as though "the air force have proceeded with their plans more or less oblivious to the likely effect on the civilian operators. [sic]" 44 Airline officials simply wanted "air force schools established at off-the-airway points as much as possible." 45

Although TCA had only been flying since 1937, and although air force pilot training in Canada dated back to the First World War, was conducted during the inter-war years, and filled the skies freely during the Second World War, the civilian airline was using rhetoric that elevated itself to being part of the country's national interest: "while it is recognized that the air force has an extremely important role to



Above: Canadian Forces Base (CFB) Moose Jaw circa 1982 with the Canadair CT-114 Tutors of No 2 Canadian Forces Flying Training School in attendance. Equipment and location notwithstanding, the image and atmosphere are not unlike those illustrated in the photo of trainers at Trenton on page 143.

A. Hunt photo via WIKIPEDIA COMMONS

A composite satellite view of CFB Moose Jaw / Air Vice Marshal C.M McEwan Airport, circa 2012. The facility has been substantially expanded compared to its wartime RCAF Station Moose Jaw incarnation. Civil aircraft also use the airport.

NOKIA MAPS image, retrieved 22 OCTOBER 2013

perform, the importance of the role to be performed by the scheduled airlines in a national emergency cannot be over emphasized." In another statement, TCA officials said, "since our main line is apparently considered an essential service to the country, it would seem that plans affecting the efficiency of the service should be considered in the national interest, along with those of the RCAF." TCA did not seem to understand that air training bases had been located near urban centres (and hence subsequent civil airways) because these sites were once British Commonwealth Air Training Plan airfields. These offered suitable flying conditions (the reason why they were selected during the Second World War), and they could easily be upgraded. The Korean War and the Cold War had both intensified the necessity of quickly and economically increasing the air training tempo for the defence of the nation and the NATO alliance.

The solution for accommodating the burgeoning civil passenger service, according to TCA, was to keep the air force and the airlines separate by banishing the air force to remote locations. Ironically, in the summer of 1954, TCA requested if it might use the Trenton air base as an alternate landing field for commercial and civil carriers. The air force initially refused, not being able to guarantee air separation of civil and military traffic. With reassurances from TCA that this would not be a problem, because the site was only needed in emergencies caused by adverse weather, the air force agreed to allow the mixing of civil and military air traffic at Trenton.<sup>47</sup>

Relations between TCA and the RCAF were not improved with two reported near misses over Moose Jaw again in January and February 1955. On 6 January, a North Star – TCA Flight 3-6 – was three minutes west of Moose Jaw while flying at an altitude of 6,000 ft (1,850 m). At 8:50 pm, the TCA pilot saw flashing lights and realized that a Harvard trainer was climbing and converging on his North Star. The airliner, carrying thirty-eight passengers, banked to the right at thirty-five degrees, disturbing none of the sleeping passengers. One passenger, who had seen the other aircraft, was quite alarmed, and the pilot later agreed that the aircraft had come very close, scaring him too. The Minister of Transport dismissed the media reports as "grossly exaggerated and misleading." The aircraft kept 500 ft (150 m) apart – the prescribed amount by the Air Regulations: the Harvard climbed

to 5,500 ft (1,700 m) while the North Star was travelling at 6,000 ft. Furthermore, since the North Star was traveling twice as fast as the Harvard and was overtaking the trainer from behind, it was the passenger liner's responsibility to give way to the Harvard. Both aircraft were conforming to pre-authorised flight plans. Nevertheless, the TCA plane was, like the April 1954 passenger liner, four and a half hours late in its scheduled flight over Moose Jaw.<sup>48</sup>

Less than a month later, on 4 February, TCA Flight 151-4 encountered a Harvard at 4,000 ft (1,200 m) altitude, flying west of Moose Jaw. Visibility was unlimited at 12:20 pm, and the aircraft never came within five miles (8 km) of each other. The Department of Transport deemed that no serious threat had existed, and it was determined that the Harvard had the right-of-way. The TCA liner had been traveling 2,000 ft (600 m) below its normal altitude because of bad weather, and this put the passenger liner at the Harvard's designated flying level.49







Additional views of the wreckage on 3<sup>rd</sup> Avenue, Moose Jaw in the aftermath of the fatal 8 April 1954 mid-air collision.

Left: A man holding up a portion of the North Star fuselage.

LAC photo E 700119

Far left: Wheels of the North
Star's landing gear in amongst
the rubble of the destroyed
house.

LAC photo E 700120

### The RCAF and Moose Jaw, part 2

The crash of TCA North Star CF-TFW and RCAF Harvard 3309 on 8 April 1954 did not have a negative impact on the relations between the city of Moose Jaw and No 2 FTS. As noted by one of the city councillors, Moose Jaw residents had lobbied for the re-opening of the air training base when the NATO Air Training Plan was being instituted. The city knew the accident risk associated with student pilot training, since the city hosted No 32 SFTS during the Second World War. When reactivation of the base began in May 1951, no complaints were submitted to the RCAF. Citizens knew what kind of economic benefits could accrue from the presence of the air force base and, even after the crash, there were no calls to close the base.<sup>50</sup> After the near miss over Moose Jaw in February 1955, the president of TCA noted in a letter to C.D. Howe that "it seems the citizens of Moose Jaw are beginning to become seriously frightened over the possibility that this succession of incidents in that vicinity could result in a shut down of the air force station, with consequent serious financial losses to the community."51 Some air force children were given a hard time by classmates, and some Moose Jaw residents resented air force personnel holding down civilian jobs as well. Nonetheless, overall, the air station was seen as an important part of the community, and the collision of April 1954 was seen as an unfortunate accident that hopefully would never happen again.52

Two important changes to flying routes were made to decrease the possibility of civil and military flights interfering with each other in such a fashion again. No 2 FTS moved its flying routes to the south of the city of Moose Jaw, where the population was more sparse. No longer did the exercise routes take pilots north of the base and toward the city. The Department of Transport also changed the civil airway route over Moose Jaw, moving it twenty miles to the north. Instead of passing over the city, the diverted airway proceeded from Broadview to Lumsden, and then passed over the Tuxford area as it followed a straight line to Swift Current. With the city's safety now more greatly ensured against a reoccurrence of such a collision, life was able to resume normality in Moose Jaw. Normality arrived on 1 April 1955 for the Hume family when they moved into their new home, rebuilt on the same spot as their original house. Life would never be fully normal again for the children of Martha Hadwen, who still today wonder what life would have been like if their mother had gone to work on Wednesday, as per usual, rather than Thursday that week.53

The crash of 8 April 1954 did have a negative impact on civil - military relations, but this was not between the city and the air force, nor the government and the military. Instead, acrimonious relations existed between the civil airlines – TCA in particular – and the RCAF. TCA's concerns were valid: deliberate dangerous flying by RCAF pilots endangered the lives of people growing increasingly dependent on air travel, and mixing civil and military operations at airports had become unwieldy and cumbersome as both civil and military air traffic increased, and as both civil and military aircraft became faster, larger, and more powerful machines. Nonetheless, the full story of civil - military relations between the airline industry and the air force has not been told. How did RCAF officials view the rise of commercial airlines and the competition for air space? When exactly did airline companies begin using the terminology of 'national interest', and was the collision of April 1954 the beginning of the decline of the RCAF's national importance in the public's eyes across Canada? Did the rise of civil aviation finally triumph over military aviation?

The competition between civil and military aviation did not end in 1936 when the Department of Transport was created and civil aviation was finally released from the auspices of the RCAF and its struggle to survive the Depression by undertaking civil government operations. The struggle appears to have continued into the post-war period. The civil - military relations between the air force and airlines appears to be the story of an airlines' coming of age and an air force's struggle to survive. The civil - military relations between the air force and airlines appears to be the story of an industry, a service, and a country coming to terms with changing technology, increased aviation activity, and sharing air space. The co-existence and regulations of today had their roots in the trials, errors, and growing pains of the air force and airlines' early post war period.<sup>54</sup>

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February 1953 Letter from JL Rood (Director of Flight Operations) to R Dodds (Controller Civil Aviation, Department of Transport); 15 December 1953 Letter from WF English (VP Operations TCA) to R Dodds (Controller Civil Aviation, Department of Transport); 29 March 1954 WF English (VP Operations TCA) to R Dodds (Controller Civil Aviation, Department of Transport).

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