

Canadian  
Forces  
College

Collège  
des  
Forces  
Canadiennes



## Return to the Central Flying School

Major Michele Pistilli

**JCSP 49**

**Service Paper**

**Disclaimer**

Opinions expressed remain those of the author and do not represent Department of National Defence or Canadian Forces policy. This paper may not be used without written permission.

© His Majesty the King in Right of Canada, as represented by the Minister of National Defence, 2023.

**PCEMI n° 49**

**Étude militaire**

**Avertissement**

Les opinions exprimées n'engagent que leurs auteurs et ne reflètent aucunement des politiques du Ministère de la Défense nationale ou des Forces canadiennes. Ce papier ne peut être reproduit sans autorisation écrite.

© Sa Majesté le Roi du Chef du Canada, représenté par le ministre de la Défense nationale, 2023.

CANADIAN FORCES COLLEGE - COLLÈGE DES FORCES CANADIENNE

JCSP 49 - PCEMI n° 49  
2022 - 2023

Service Paper – Étude militaire

## **RETURN TO THE CENTRAL FLYING SCHOOL**

Major Michele Pistilli

“This paper was written by a candidate attending the Canadian Forces College in fulfilment of one of the requirements of the Course of Studies. The paper is a scholastic document, and thus contains facts and opinions which the author alone considered appropriate and correct for the subject. It does not necessarily reflect the policy or the opinion of any agency, including the Government of Canada and the Canadian Department of National Defence. This paper may not be released, quoted or copied, except with the express permission of the Canadian Department of National Defence.”

« La présente étude a été rédigée par un stagiaire du Collège des Forces canadiennes pour satisfaire à l'une des exigences du cours. L'étude est un document qui se rapporte au cours et contient donc des faits et des opinions que seul l'auteur considère appropriés et convenables au sujet. Elle ne reflète pas nécessairement la politique ou l'opinion d'un organisme quelconque, y compris le gouvernement du Canada et le ministère de la Défense nationale du Canada. Il est défendu de diffuser, de citer ou de reproduire cette étude sans la permission expresse du ministère de la Défense nationale. »

# RETURN TO THE CENTRAL FLYING SCHOOL

## AIM

1. This service paper aims to demonstrate the utility and requirement of the Royal Canadian Airforce (RCAF) to return to pilot training and standards management under the Central Flying School (CFS). This paper will address this argument by incorporating lessons from past RCAF mistakes, past iterations of the CFS, and the author's 12 years of extensive experience at the highest levels of pilot training as an "A" Category instructor, chief of Standards, and Standards and Evaluation Team (SET) staff officer for the NATO Flying Training in Canada (NFTC) program.

## INTRODUCTION

2. The origins of CFS are deeply rooted in the RCAF's commonwealth history. CFS first appeared in 1912 in the Royal Air Force (RAF), and its current mission statement states, "On behalf of Defence, CFS develops, delivers and promotes the highest standards of flying and flying instruction, in the synthetic and live environments, on fixed, rotary wing and relevant remotely piloted air systems."<sup>1</sup> The RCAF adopted the CFS name and relationship for its flying instructor school with the declaration of war in 1939 and stood up CFS in 1940 with the start of the British Commonwealth Air Training Plan (BCATP). CFS had a dual purpose "the production of instructors for the BCTAP and monitoring of the quality of the BCTAP graduates."<sup>2</sup>

3. Throughout the RCAF's history, CFS was the sole source for flying instructor standards, and wings graduate standards for both pilots and navigators (Air Combat Systems Officers, ACSO) until its disbandment. These standards were shared across commonwealth CFS units where experience, best practices, and common standards were shared between members through exchange positions and conferences. At one time, the RCAF was world-renowned for the quality of the pilots it produced and its flying instruction. In the 1950s, many NATO members sent their pilots to train in Canada because of the reputation and success of the BCTAP program.<sup>3</sup> This cooperation has continued with the modern version of NFTC. However, the past decade has seen the international contingent of up to ten international partners training in NFTC dwindle to just two and zero by the end of 2023. Program management and quality issues with instructors, quality control, and the training delivered have affected its decline.<sup>4,5,6</sup> Flying training was one of Canada's niche military strengths since World War II, taking our vast airspace and our pilots' quality as an advantage over other smaller countries. With a contingent as small as the RCAF and the ever-increasing demands put on it, the quality of its pilots should be first and foremost in a world of ever-decreasing risk tolerance and the need for perfection.

---

<sup>1</sup> "Royal Air Force," Royal Air Force, accessed February 19, 2023, <https://www.raf.mod.uk/>.

<sup>2</sup> "Central Flying and Navigation School," Brochure RCAF August 1968, p.3

<sup>3</sup> Holman R.F, Best in the West, 1995, p.105

<sup>4</sup> "2 CAD AOT SET", Flying Training Evaluation 2 CFFTS, Maj. M. Pistilli, 2018

<sup>5</sup> "2 CAD AOT SET", Flying Training Evaluation, 2 CFFTS, Maj M. Pistilli, 2021

<sup>6</sup> "2 CAD AOT SET", Training Standardization Visit, 419 Sqn, Maj M. Pistilli, 2022

## DISCUSSION

4. RCAF pilot training saw its first dramatic shift to civilian partnership in 1992 with Phase I flight training in Portage La prairie. Then in 1999, the NATO Flying Training in Canada (NFTC) program in Moose Jaw, SK, started, and subsequently, phase III in Portage la Prairie, MB, was contracted to a civilian contractor. During this time, the focus on producing some of the best pilots in the world shifted to a shared focus on the output metric of production numbers and contractor profitability, vice a sole responsibility and focus for RCAF pilot training. This mindset and way of managing flying training set the stage for the eventual shift to current policies seen today. There were and are advantages to civilian partnerships with the military. Cost savings and return of investment to the local economy are significant and have become priorities for the Government of Canada; however, the need to be more focused on the purpose of pilot training is still of paramount importance, which has gotten lost in the ether of the profitable business practices for the contractor. The importance of a quality pilot now entered a balance of priorities, where priorities can quickly shift to sustain the contractor vice the institution.

5. Since the activation of 2 Canadian Air Division (2 CAD) as the A7 for the RCAF in 2009<sup>7</sup>, many changes to the training and standardization of all RCAF trades have occurred. All training was to be “pigeonholed” under the structure of the Canadian Forces Individual Training and Education System (CFITES) under a fixed organizational format and administrated by training development officers (TDO). The CFS headquarters in Winnipeg was directed to cease operations and disband, including its detachments at the flying training schools in Moose Jaw and Portage la Prairie. Its duties and functions were to be split between a system of flying standards administered at the flying schools by a wing standards section under the command of the Wing Commanders (WCMD), and the administrative duties were to be retained in Winnipeg under 2 CAD headquarters in the Air Operations Training (AOT) section.<sup>8</sup>

6. Initially, the CFS detachments remained under 2 CAD AOT; however, in 2014, it was converted to wing standards under the command of the WCOMD. The Wing standards and AOT relationship worked in theory; however, when disagreements over standards arose, there needed to be a clear central command for training decisions. The Director of Airforce Training controlled qualification standards, orders and regulations at 2 CAD in Winnipeg. However, the training standard resided at the Wing standards and WCMD level at 15 Wing Moose Jaw, and the training plans at the unit level Commandant. As a result, they were creating two different chains of command (sometimes three), with both having, at times, conflicting priorities on how to administer training decisions or make judgements. This directly resulted from the CFITES model of the Qualification standard (QS) being held at the headquarters operational level, and the Training Plans (TP) held at the unit tactical levels. This created overlapping command structures instead of a clear top-down command, resulting in a dual location split and

---

<sup>7</sup> “2 Canadian Air Division - Royal Canadian Air Force,” not available, April 10, 2013, <https://www.canada.ca/en/air-force/corporate/2-canadian-air-division.html>.

<sup>8</sup> “2 Canadian Air Division - Royal Canadian Air Force.”

interpretation differences from two commands instead of under the control of a single command and interpretation, as was the case when CFS was in operation.

7. In 2011, a directive from higher headquarters, NATO Flying Training in Canada (NFTC) was to be re-organized to a structure that would support an increased output of student pilot graduates on the CT156 Harvard II platform and minimize time on the CT155 Hawk due to the latter's record of engine trouble and continuous groundings causing delays to pilot training. This re-organization was to be completed without additional resources, including aircraft or instructor pilots<sup>9</sup>. At the time, the CFS detachment in Moose Jaw headed the working group with an objection from the senior pilots to reducing the standard to achieve these goals. This was highlighted in an investigative flight safety crash report, where a new instructor pilot who went through the updated training was involved in a crash with a student where the skill and proficiency of the instructor played a significant role; some of the findings observed the following:

The modifications to the 2012 TP involved significant changes to the design of the course. The TP changes included the participation of CFS, which included a Training Development Officer (TDO) to ensure that CFITES and AFTEMS formal processes were followed. Also included in the process were experienced QFIs from 2 CFFTS. Unfortunately, neither the expertise that developed the new TP nor the application of these processes highlighted the significant 45% reduction in in-flight PFL training that was created when the new TP was developed. As a result, some experienced QFIs involved with the process claimed that too much was being cut from the prior syllabus. This accident possibly supports the validity of these claims.<sup>10</sup>

Although the CFS detachment was still in operation during this incident and was involved in the changes to the TP, the main headquarters of CFS was disbanded and was under 2 CAD and AOT. The detachment was CFS in name only then and no longer under the command of an Officer in Charge (OC) CFS.

8. In early 2018, the then-15 WCOMD disbanded the Wing Standards section to utilize the positional line numbers to create a 15 Wing operational support squadron (OSS) to make the wing more in line with other Wing command structures. This shift of positional allocations and vice creation removed direct oversight of the training schools and left that to the AOT section located in Winnipeg, which was already involved in many other projects and duties related to flying training across the RCAF. This dramatically increased the physical flying obligations of the section and less time for administrative tasks relating to the flying programs under its administration. In addition to a below-required staffing level due to lack of experience and human resources. This situation removed any direct layer of oversight of the flying schools.

9. The TPs are directly under the control of the school Commandants of the training schools and could be altered to reach short-term priorities under the CFITES structure. One such change was made to attempt to produce more instructors in a shorter time frame so that production numbers could be sustained at the level the higher headquarters had

---

<sup>9</sup> "CT156102-Harvard-II-Epilogue-Flight-Safety-Investigation-Report.Pdf," accessed February 20, 2023, <https://aerossurance.com/wp-content/uploads/2018/01/CT156102-Harvard-II-Epilogue-Flight-Safety-Investigation-Report.pdf>.

<sup>10</sup> "CT156102-Harvard-II-Epilogue-Flight-Safety-Investigation-Report.Pdf."

initially demanded. This change changed the flight instructor school output qualifications by reducing the sequences required to attain certification. Qualifying instructors to a lower standard initially and to make up the higher-level requirements as they gained experience on the job. On January 27, 2017, another accident occurred where a pilot who graduated under this new system put a student in a flight envelope which was unfamiliar to the student or himself and resulted in the aircraft being placed in a situation where significant engine damage occurred and required ejection, and thus the destruction of the plane. Recommendations were made from the investigation to improve instructor and student training.<sup>11</sup> The change to the flight instructor school was quickly reversed after this crash to the original standard, but student training still needs to be altered<sup>1213</sup>.

10. Flight instructor qualification standards and winged pilot standards were the core functions of CFS. Its purpose was to manage those standards and ensure that they were kept, met and updated as the structure and duties of the RCAF pilot changed. CFS members were staffed with experienced, qualified flight instructors whose expertise was in flying training. In the past decade, the RCAF has shunned that expertise, as the increased competition for human resources has been skewed to the operational side and not training. A complete and impartial auditor is the key to any successful business, where the auditor keeps the corporation honest in their reporting and business dealings, which is required by law for publicly traded companies.<sup>14</sup>

11. In the SET position since 2018, the author conducted several Training standardization visits (TSV) as the NFTC SET in the RCAF. Three TSVs were conducted on the NFTC program, two in Moose Jaw (2018 & 2021) and one at 419 Squadron in Cold lake in 2022. In those reports, several common deficiencies kept re-occurring and being reported. Failure to rectify past recommendations and administrative updating and following the TPs were frequent and constant delinquencies committed by the School and squadron. In both cases, leadership was held accountable for failing to enforce standards and practices to record correct changes through the proper chains of command and approvals.<sup>151617</sup> These deficiencies continue today due to the need for more direct oversight of the flying units instead of the sporadic visits from the 2CAD headquarters staff.

12. The lack of direct oversight and central management of standards, processes and TPs in the training schools, in conjunction with operational pressure from the higher headquarters, has caused a shift to protectionism and careerism in leadership. Lack of leadership direction is highlighted in the latest FTE report.<sup>18</sup> Commandants who often

---

<sup>11</sup> Royal Canadian Air Force National Defence, "CT156105 Harvard II - Epilogue - Flight Safety - Royal Canadian Air Force," not available, January 27, 2017, <https://www.canada.ca/en/air-force/corporate/reports-publications/flight-safety-investigation-reports/ct156105-harvard-ii-epilogue.html>.

<sup>12</sup> "2 CAD AOT SET" Flight Training Evaluation, Maj M. Pistilli, 2021

<sup>13</sup> "2 CAD AOT SET" Flight Training Evaluation, Maj M. Pistilli, 2018

<sup>14</sup> Industry Canada Government of Canada, "Corporate Records and Other Corporate Obligations" (Innovation, Science and Economic Development Canada), accessed February 20, 2023, <http://www.ic.gc.ca/eic/siTe/cd-dgc.nsf/eng/cs06645.html>.

<sup>15</sup> "2 CAD AOT SET", Flying Training Evaluation 2 CFFTS, Maj. M. Pistilli, 2018

<sup>16</sup> "2 CAD AOT SET", Flying Training Evaluation 2 CFFTS, Maj. M. Pistilli, 2021

<sup>17</sup> "2 CAD AOT SET", Training Standardization Visit, 419 Sqn, Maj M. Pistilli, 2022

<sup>18</sup> "2 CAD AOT SET", Flying Training Evaluation 2 CFFTS, Maj. M. Pistilli, 2021

have little experience in flight training make decisions that benefit the immediate short-term pressures without considering long-term effects and for the greater good of the RCAF. Examples of those situations were given above when standards were changed to make production targets, resulting in crashes and, luckily, no fatalities. 431 Demonstration squadron has been facing the same issues with the need for more oversight from an independent standards body. Recommendations from the fatal Crash over Kamloops, BC are similar to the CT156 crash with the removal of training to ensure a quicker product: “The investigation also recommends further training on engine-related emergencies be practiced in the takeoff/low-level environment.”<sup>19</sup> Reduction in standards to meet higher headquarters pressures by commanding officers or commandants places them in a position of bias. CFS was an independent chain of command that held control of the standards, backed by experience and lessons from the RCAF and the commonwealth; its only bias was to ensure the maintenance of standards and that pilots who graduated were the best the RCAF could produce.

## CONCLUSION

13. The results of this method of pilot training management over the past decade are evident. RCAF pilot training is in crisis, with flying rates and standards lowered to meet production targets. This results in failures later down the training pipeline requiring post-wing graduation career review boards and, in worst-case scenarios, loss of life. As of the date of this paper, a nearly 3-year wait in Phase II pilot training in Moose Jaw is being experienced due to the school’s inability to achieve production targets, with rising pressure being exerted by an RCAF in reconstitution mode. These delays add to an already long and complex occupational pilot stream. These frustrations experienced by all have follow-on effects that will affect retention once the initial contract of the pilot is up for renewal, as well as for identified Instructor pilots to be retained with the Training Air Group. These identified potential instructor pilots are essential to the RCAF pilot training system's continued growth, maintenance and modernization.

14. A new Future Aircrew Training model will be implemented as NFTC winds down operations by the decade’s end.<sup>20</sup> This time with an even more significant focus on the civilian contractor component, with a large percentage of the future instructor pilots being contracted civilians. This will reduce the RCAF’s direct control and oversight of the output product. A more hands-on, direct oversight approach will be necessary to maintain a hold of the output standard. A re-emerging CFS would be ideal, as the RAF has already undertaken an updated civilian-military pilot training process. Knowledge shared between CFS, as previously done, could be essential to minimize repeated mistakes and bad practices. Centralized management of the complex, ever-evolving and challenging tasks of military pilot training must be re-engaged to ensure the required attention is given. This will be essential for the future of pilot training arriving in 2028/29

---

<sup>19</sup> Royal Canadian Air Force National Defence, “CT114161 Tutor - Epilogue - Flight Safety - Royal Canadian Air Force,” not available, January 29, 2021, <https://www.canada.ca/en/air-force/corporate/reports-publications/flight-safety-investigation-reports/ct114161-tutor-epilogue.html>.

<sup>20</sup> Public Services and Procurement Canada Government of Canada, “Future Aircrew Training Program - Air - Defence and Marine Procurement - Buying and Selling - PSPC Services - PSPC,” March 12, 2018, <https://www.tpsgc-pwgsc.gc.ca/app-acq/amd-dp/air/snac-nfps/ffpn-fact-eng.html>.

and for the continued success of the RCAF. Finally, the CFS reinstatement would send the world a powerful message about Canada's commitment to aviation excellence and leadership. The RCAF has a long and proud history of innovation and excellence in aviation, and the reinstatement of the CFS would demonstrate that this commitment is as strong as ever. This would help maintain Canada's position as a leader in the aviation industry and attract top talent from around the world to the RCAF.

## **RECOMMENDATION**

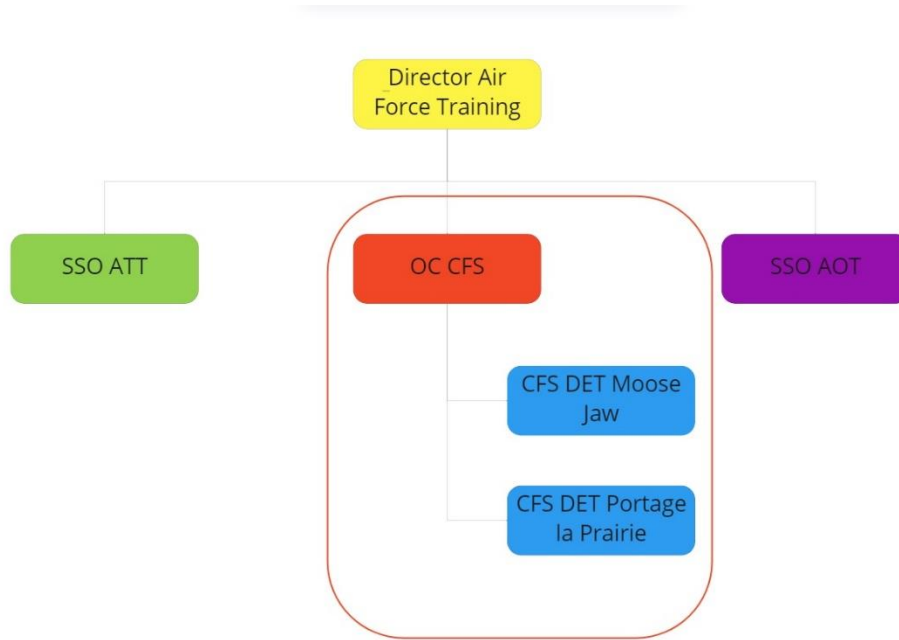
15 CFS to be re-stood up as a separate section under the Director of Airforce Training at 2 CAD as a stand-alone section beside AOT and Air Technician Training (ATT). (Annex A) Re-activation of the detachments present on-site at all 2 CAD flying schools to ensure direct oversight and application of standards. CFS would manage instructor pilot and pilot graduate standards and the added task of contractor monitor and performance relations.

**Annex A:** Proposed CFS Command Structure

**Annex B:** Bibliography



**Annex A**



## **Annex B**

### **Bibliography**

- 1.** "2 Canadian Air Division - Royal Canadian Air Force." Not available, April 10, 2013. <https://www.canada.ca/en/air-force/corporate/2-canadian-air-division.html>.
- 2.** "2 Canadian Air Division - Air Operations Training." Flying Training Evaluation 2 CFFTS. Maj M Pistilli. October 2021
- 3.** "2 Canadian Air Division - Air Operations Training." Flying Training Evaluation 2 CFFTS. Maj M Pistilli. December 2018
- 4.** "2 Canadian Air Division - Air Operations Training." Training Standardization Visit. 419 Squadron. Maj M Pistilli. May 2022
- 5.** "Central Flying and Navigation School," Brochure RCAF August 1968, p.3
- 6.** "CT156102-Harvard-II-Epilogue-Flight-Safety-Investigation-Report.Pdf." Accessed February 20, 2023. <https://aerossurance.com/wp-content/uploads/2018/01/CT156102-Harvard-II-Epilogue-Flight-Safety-Investigation-Report.pdf>.
- 7.** Government of Canada, Industry Canada. "Corporate Records and Other Corporate Obligations." Innovation, Science and Economic Development Canada. Accessed February 20, 2023. <http://www.ic.gc.ca/eic/siTe/cd-dgc.nsf/eng/cs06645.html>.
- 8.** Government of Canada, Public Services and Procurement Canada. "Future Aircrew Training Program - Air - Defence and Marine Procurement - Buying and Selling - PSPC Services - PSPC," March 12, 2018. <https://www.tpsgc-pwgsc.gc.ca/app-acq/amd-dp/air/snac-nfps/ffpn-fact-eng.html>.
- 9.** Holman R.F. "Best in the West". Big 2 Fund, 15 Wing Moose Jaw, 1995
- 10.** National Defence, Royal Canadian Air Force. "CT114161 Tutor - Epilogue - Flight Safety - Royal Canadian Air Force." Not available, January 29, 2021. <https://www.canada.ca/en/air-force/corporate/reports-publications/flight-safety-investigation-reports/ct114161-tutor-epilogue.html>.
- 11.** National Defence, Royal Canadian Air Force. "CT156105 Harvard II - Epilogue - Flight Safety - Royal Canadian Air Force." Not available, January 27, 2017. <https://www.canada.ca/en/air-force/corporate/reports-publications/flight-safety-investigation-reports/ct156105-harvard-ii-epilogue.html>.
- 12.** Royal Air Force. "Royal Air Force." Accessed February 19, 2023. <https://www.raf.mod.uk/>.