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CANADIAN FORCES COLLEGE / COLLÈGE DES FORCES CANADIENNES
CSC 31 / CCEM 31

EXERCISE/EXERCICE NEW HORIZONS

**ADDRESSING THE CANADIAN AIR FORCE RECRUITMENT AND TRAINING
ISSUES WITHIN THE CONSTRAINTS OF A 'DEGREED' OFFICER CORPS**

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Term One, Syndicate 7

29 April 2005

ABSTRACT

This paper argues that officers recruited without a degree, for operational occupations in the Canadian Air Force (CAF), should complete occupation training before completing a degree. It opens with a discussion of the problems and limitations of the CF officer recruiting programs. It then outlines the impact that the CF directive known as MND 10 had on the Air Force, when it cancelled the Officer Cadet Training Program and required that all officers have a degree. A presentation of the changing demographics of the recruiting base demonstrates that the Air Force cannot recruit and train enough officers to fulfill the shortages in operational occupations. The Canadian education and officer entry programs are then compared with the United States Air Force (USAF), and the Royal Air Force (RAF) programs. Finally, a hybrid of the RAF, USAF, and CAF programs, is discussed and recommended as a solution to the operational recruiting, education and training problems, by enabling occupation training to be completed before university training.

Many young men and women join the Canadian Air Force (CAF) with aspirations to become a pilot, navigator or aerospace controller (AEC) but fail to achieve their dreams due to the demanding training program. Before 1997, it was possible for an individual to join the CAF as an officer, go directly into training for one of these occupations, and never obtain a university degree.¹ In 1997, the Minister of National Defence (MND), under a directive referred to as MND 10, directed that all Canadian Forces (CF) officers require an under-graduate degree, unless commissioned from the ranks.² As a result, all officers enter the CF under the Direct Entry Officer (DEO) program (for those with a university degree), or under the Regular Officer Training Plan (ROTP) (for those without a university degree).³ ROTP officers spend their first four years in the military at university, paid by the CF, before they start occupation training.⁴ DEOs start occupation training immediately.⁵ Of the DEO and the ROTP officers that started occupation training over the past three years, 43 percent of the pilots, 20 percent of the navigators, and 27 percent of the AECs failed to graduate.⁶ With a 30 percent average failure rate in these occupations, the CF is paying a large education bill for

¹ Department of National Defence, *CFAO 6-1: Enrolment Regular Force*, available from http://adminfincs.mil.ca/admfincs/subjects/cfao/006-01_e.asp; Internet; accessed 25 October 2004.

² Colonel R.T. Wakelam, "So What's in a Degree," *Canadian Military Journal*, vol. 4, no 2 (24 Sep 2003) [journal on-line]; available from http://www.journal.forces.gc.ca/engraph/Vol4/no2/wats_e.asp; Internet; accessed 02 February 2005.

³ DND, *CFAO 6-1: Enrolment Regular Force*....

⁴ Department of National Defence, *CFAO 9-12: Regular Officer Training Plan*, available from http://adminfincs.mil.ca/admfincs/subjects/cfao/009-12_e.asp; Internet; accessed 25 October 2004.

⁵ DND, *CFAO 6-1: Enrolment Regular Force*

⁶ Air Force Military Occupation Review Board (AMOR) Presentation slides from January 2005 provided by email from Captain George Trattner, CAS D Air PPD 2-2, 4 April 2005.

ROTP officers to attend university first, before determining that they cannot do the job that they were hired to perform. With the loss of the Officer Cadet Training Program (OCTP), which recruited approximately 50 percent of the officers for these military occupation codes (MOC, i.e. pilot etc), the CF lost a consistent source of recruits that could be trained quickly and for a relatively low cost compared to ROTP.⁷ This paper will argue that officer candidates recruited without a degree, for operational occupations in the Canadian Air Force, should complete basic officer training and occupation training before completing a degree.

This paper will start with a short introduction to the current CF officer recruiting programs and their limitations, followed by a discussion of the repercussions that MND 10 had on the Air Force. The paper will then outline the impact that social, demographic, training, and manning trends are having on recruiting and training programs for operational air force occupations. A brief description of the entry and education programs for the United States Air Force, the Royal Air Force, and the Canadian Air Force (CAF) will then be compared. Finally, this paper will introduce a proposed recruiting and training program that will mitigate the CAF recruiting and training problems by enabling occupation training before university training for operational air force occupations.⁸

⁷ Department of National Defence, *Air Personnel Research Report 04/01:- Investigating the Volume of Applications to the 32 Pilot MOC since 1987* (Ottawa: Chief of the Air Staff, 2004), 11.

⁸ The air force operational MOCs are Air Navigator (ANav), Pilot, and Aerospace Control (AEC). AEC is an amalgamation of Air Traffic Control (ATC) and Air Weapons Control (AWC).

Current CF Officer Recruiting Programs

ROTP is for high school graduates that do not have a university degree and will attend either Royal Military College (RMC) or an approved Canadian university for a maximum of five years at CF expense. ROTP candidates receive a salary while attending university and graduates must serve an obligatory period of service for the education they received. ROTP recruiting capacity is restricted by an annual budget and the availability of RMC or civilian university training positions, and course loading for follow on occupation training courses to meet a vacancy four to six years later.

ROTP university failures have the option of repeating up to two academic years at their own expense, requesting release, or becoming a non-commissioned member (NCM). Release without incurring a financial obligation is only an option at or before completion of the first year of a Baccalaureate program. If repayment is not feasible, the candidate performs administrative duties until reaching the end of obligatory service.⁹ These failures represent a training delay if they repeat a year or a loss if they release or become a NCM. Either way the scheduled training slot allocated for them when they were hired may not be filled.

ROTP occupation training failures are slightly different from academic failures. These officers have already completed four years of paid military service and received a university education at CF expense. For a pilot candidate it could take two or more years after university graduation before a candidate fails out of the program. A 30 percent average failure rate, from operational MOC training, represents a large education expense for university training that these MOCs will not be able to put to use. After an MOC

⁹ DND, *CFAO 9-12: Regular Officer Training Plan*

training failure, the first step is to attempt to salvage the officer by finding an agreed upon occupation that meets the needs of the CF and the desires and interests of the individual. If an appropriate occupation transfer (OT) is not achievable and the repayment of money owed for obligatory service is not feasible, similar to academic failure, the officer performs administrative duties until the end of obligatory service, which can be for four years or more. This solution, although not ideal, is a compromise that allows the CF to regain some of the money invested but it still leaves a vacancy that must be hired and trained. Many training failures do provide suitable candidates for many other occupations, some of which are happy with the change and others are not. Data was not available reflecting the numbers of compulsory occupational transfers that put in their release immediately or after completing obligatory service. However, the number of ROTP officers in general that released immediately following their obligatory service is higher than that of DEOs.¹⁰ Also of note is the fact that officers that enrolled under OCTP had better retention than ROTP and DEO.¹¹

DEOs already have a degree from a recognized university and enter into the CF training system as soon as there is a course available. The number of DEOs recruited depends upon the maximum annual MOC manning requirements and training capacity. DEO obligatory service is occupation dependant, which is relative to the cost of training provided.¹² Since DEOs already have a degree, they commence basic officer training

¹⁰ Department of National Defence, *Project Report 649: An Examination of Officer Retention and Career Progression According to different Commissioning Plans Within the Canadian Forces, Vol. I*, (Ottawa: DND Canada: Dec 1993) 42.

¹¹ Ibid, xvi.

¹² Department of National Defence, *CFAO 6-1: Enrolment Regular Force*

(BOTC), language training and then MOC training immediately after being recruited. Their training schedule is efficient unless affected by a backlog in the system.

Impact of MND 10

Before MND 10, the OCTP was the primary recruiting method for the Air Force to recruit operational MOCs officers.¹³ This recruiting program exclusively targeted high school graduates who had the potential but did not plan to go to university in the immediate future.¹⁴ Between 1988 and 1992, the OCTP accounted for about 50 percent of the applicants, followed by the DEO program and the ROTP.¹⁵ Similar to the DEO recruiting process, OCTP recruiting capacity was set at the maximum annual MOC manning requirements and training capacity. The loss of the OCTP was a significant loss to the Air Force recruiting capability and has contributed to current personnel shortages.¹⁶ In February 1998, Dr. J.L. Granatstein a professor from York University, who wrote one of the studies used to draft MND 10, discovered that his work had contributed to the demise of OCTP. In a letter he wrote to the MND, he stated it was not his intention for the CF to eliminate OCTP and that some of the very best officers he knew joined under OCTP. He also emphasised that the CF should not close off entry to

¹³ Department of National Defence, *CFAO 9-26: Officer Candidate Training Plan*, available from http://adminfincs.mil.ca/admfincs/subjects/cfao/009-26_e.asp; Internet; accessed 25 October 2004.

¹⁴ Ibid.

¹⁵ DND, *Air Personnel Research Report 04/01 ...*, 11.

¹⁶ Department of National Defence, *DOR (Corp) Research Note RN 2004/14 Impact of Recruit Age Distribution on the Probability of Reaching Senior Ranks*, (Ottawa: DND Canada, December 2004), 12.

bright high school educated candidates that do not have an immediate desire to continue with university education.¹⁷

OCTP recruiting standards were very similar to existing ROTP recruiting standards. Candidates required a minimum of a high school leaving certificate that could lead to university, with the potential to complete a four-year basic baccalaureate degree.¹⁸ Before MND 10, many OCTP officers never acquired a university degree. However, because of MND 10, many have now become university graduates through either CF home study programs or CF sponsorship programs. This demonstrates that it is possible to acquire a degree after MOC training, if the recruiting standard is maintained. It also shows that a similar program to the OCTP could still meet the intent of MND 10.

Obligatory service for the OCTP gave the CF flexibility and provided adequate payback to the CF for training received.¹⁹ Unlike ROTP, the ability to easily transfer an OCTP officer to a new occupation or release them for unsatisfactory performance did not represent a large financial expense because less time and money was invested in their training. This program ensured that only those with the required skills and potential for advancement received a paid education and further training. If occupational training occurred before university, the recruiting group could quickly respond to training failures by immediately recruiting replacement candidates and occupationally transferring others to MOCs that are short of personnel. This process reduces the costs of educating candidates that release as soon as they are able. This also leads to a more consistent flow

¹⁷ Dr. J.L. Granatstein of York University, letter to Honourable Art Eggleton, Minister of National Defence, 26 Feb 1998. Copy provided by email from LCol Donald Albert CAS D Air PPD, December 2004.

¹⁸ DND, *CFAO 9-26: Officer Candidate Training Plan*

¹⁹ *Ibid.*

of trainees, as the training system could be more responsive to surpluses, shortages, and the annual requirements of these MOCs.

From 1996 to 2000 and from 2002 to 2003 the Continuing Education Officer Training Plan (CEOTP) replaced the OCTP program as an interim solution until recruiting could catch up with demand. "... the CEOTP provided the option for applicants to join as an officer with the understanding that they would complete their degree on their own over a nine-year period."²⁰ CEOTP was eliminated in 2003. Nevertheless, if a revised recruiting program similar to CEOTP had been implemented, it would have the flexibility to deal with the problems discussed above. CEOTP required officers to get a degree, which met the objectives of MND 10. What it lacked was a more formalized and dedicated process with an incentive program to make it work.

The Impact on the CAF by Social, Demographic, Training, and Manning Issues

From 1990 to 2002, the number of CF job applicants has been decreasing for operational MOCs.²¹ With ROTP and DEO as the only two recruiting programs for Air Force officers, there is a problem in attracting and signing officers as Pilots and AECs.²² From 2003 to 2005, the AEC and Pilot MOCs were understaffed by 10-15 percent.²³ The quotas for DEO and ROTP are determined annually at the Air Force Military Occupation Review (AMOR) and are set at levels designed to fill the training slots available and to reduce the overall shortages in each MOC. Even with large numbers of OTs into these

²⁰ Major P.J. Johnston and Major Larry Green, CAS D Air PPD, "Statement of Operational Requirement – Air Officer Education Plan," received by email, 1 February 2005.

²¹ DND, *Air Personnel Research Report 04/01* ..., 15.

²² *Ibid*, 20.

²³ D Mil C 4 - Career Manager Briefings, 2004 and 2005.

MOCs, the overall numbers are still deficient (See Appendix 1). Compensating for recruiting shortages by exceeding the quota of OTs is increasing the average age of these MOCs due to the extra time OTs spend retraining. This also upsets the normal even distribution to other MOCs.

For the 2004/2005 training year, 12 percent of the CF flying training seats will be vacant.²⁴ At the same time there are 125 pilots backed up in the training system, available for training, but cannot get the prerequisite courses to fill the empty seats.²⁵ Without the flexibility provided by the OCTP, the CF is struggling to fill the vacancies and is having trouble due to the inconsistent student flow. The limited number of 'on the job' (OJT) training opportunities in flying squadrons, requires that many pilot trainees spend months performing administrative tasks at non flying units as they wait for training. For example, one individual decided to stay in RMC for OJT and complete a Masters degree before starting pilot training. This delayed him from pilot training even further because he completed his Masters program even though a training slot became available for him.²⁶ Delays in training can de-motivate the trainee or lead to failure due to the amount of time between courses. These delays also cost the CF in extra flying hours and classroom instruction required to re-establish proficiency to an appropriate level for follow-on courses.

²⁴ DND, *Air Personnel Research Report 04/01 ...*, 6.

²⁵ AMOR slides from January 2005 provided by email from Captain George Trattner, 4 April 2005.

²⁶ Maj Carlow, D Mil C 4 pilot career manager, discussion with writer and other Career Managers January 2004.

In 2003, two reports were prepared for the CF concerning social attitudes and interest in the CF. These studies demonstrated that only 13 percent of potentially employable Canadians (15-39 years old) were interested in a career in the CF and only 26 percent of them selected the Air Force over the other two services.²⁷ In the 15-29-age bracket (the primary target age for recruiting), only eight percent were interested in having a full time career in the CF (12 percent with offers of paid education and 15 percent with signing bonuses).²⁸ Only 12 percent of those were interested in operational MOCs.²⁹ Given these statistics, the body of potential candidates from the Canadian civilian population for a full time military career in operational MOCs is small and recruitment attempts via ROTP and DEO are not working. Therefore, based on this information DEOs cannot reliably make up for the short falls of ROTP.

Many ROTP officers, while at university, request or are mandated to accept an OT. Normally ROTP pilots do not request OT however, course failure and loss of medical category results in compulsory OT. Over the past four years, AEC and ANav have both had an average of four voluntary OTs per year.³⁰ This represents approximately one quarter of the ROTP officers recruited for ANav and AEC each year that do not start the originally planned and allocated training. This makes it difficult to forecast the potential numbers for follow-on training slots as students may change MOC

²⁷ CROP Inc (2003) "The Canadian Forces and Social Change in Canada," Presentation for NDHQ, August 2003, available from http://dgpapp.mil.ca/eng/cs_e.asp?w=b; Internet; accessed 7 April 2005, Slides 16, 18.

²⁸ Les Etudes de Marche Createc, *Tracking Receptivity Toward Joining the CF – Wave 3 – Final Report*, Prepared for National Defence ADM (PA), (Montreal: June 2003) 21-27.

²⁹ Ibid, 21-27.

³⁰

more than once. The frequency of OT for ROTP students is high enough for the recruiting group to consider recruiting ROTP applicants to an element rather than a declared MOC until after the second year.³¹

Officer recruits are also getting much older. In 1982, 90 percent of all officers recruited were under 26. However, by 2003, almost 50 percent were over 25 and 10 percent are over 37 years old.³² This affects both DEO and ROTP recruits, however the impact on ROTP is low. The loss of OCTP is the major reason for this aging trend.³³ Since the air force requires an equitable balance of junior officers as operators and seniors officers as leaders, a process must be developed that identifies young officers early in their careers that are destined for higher rank and ensure they get the training and education required exactly when they need it. Young ROTP officers have traditionally had higher potential to reach senior officer ranks. However, because the four years in school count towards a pension, ROTP officers reach 35 years of service and retire before compulsory retirement age of 60 years old (CRA 60). The time spent in training does not guarantee earlier promotions because credit for mandatory time in rank does not start until after MOC qualification. Therefore, with the addition of CRA 60, DEOs have gained potential for higher rank as their time to serve can go to age 60.³⁴ With older recruits and delays in training that affect both DEO and ROTP, it is possible that fewer officers from operational MOCs will be competitive for promotion to General. It is likely

³¹ DND, *CFAO 9-12: Regular Officer Training Plan....*

³² DND, *DOR (Corp) Research Note RN 2004/14*, 3.

³³ *Ibid*, 7-12.

³⁴ *Ibid*, 7-32.

that they will run out of time to serve because they reached 35 years of service or CRA before they can be promoted.

United States Air Force (USAF) / Royal Air Force (RAF) / Canadian Air Force (CAF) Education Programs

All USAF officers have university degrees gained either through the Air Force Academy or through civilian universities and a Masters Degree is required for promotion to major.³⁵ However, the USAF also has a very large population base from which to recruit, allowing them to be more selective. The USAF is now starting to realize that just having any Masters Degree is not an indicator of potential and they are changing their assessment and development process to one of deliberate development and not on ‘square filling.’ The USAF has gone so far as to conceal officer civilian education from promotion boards and only officers sent for a post graduate degree by the air force, related to their job, will be recorded as part of their service history.³⁶ This indicates that the USAF takes an enlightened view that acquiring knowledge pertinent to the MOC is more important than just having a degree.

One benefit the USAF has for its officers is an education program designed to facilitate the completion of postgraduate degree programs. Each USAF Air Force base has an education office that is run by a mixture of civilians and military personnel. The education office has representatives from local universities that provide counselling, enrol students, manage teachers and schedule classes for military personnel on base, or in

³⁵ Department of National Defence, *Minister’s reports: Granatstein - The CF Education System*, available from <http://www.forces.gc.ca/site/Minister/eng/Granatstein/gra2engsech.html>; Internet accessed 2 February 2005.

³⁶ Rod Hafemeister, “A New Degree of Anonymity – Civilian Education to be Hidden from Promotion Boards,” *New York Times*: 14 February 2005.

nearby areas. USAF Officers can have face to face counselling to determine the best options for degree completion at any stage during their program. Having classes on base in the evenings and on weekends, managed by the education office, enables flexible class scheduling to accommodate base exercises. It is much easier for students to go to class on base immediately after work with their co-workers than to go downtown or take classes by correspondence. The use of an education office on Air Force bases in Canada would similarly allow for the management and delivery of military continuing education such as Officer Professional Military Education (OPME) and university courses as well.³⁷

The Royal Air Force (RAF) does not require all its officers to have degrees upon enrolment. The RAF has an education and enrolment program called “Open University” which is designed to attract high school graduates directly into the Air Force to train as pilots, ANavs, and ATC.³⁸ This program allows enrolees to learn to fly and acquire credits towards a degree from RAF training. Enrolees will finish their degree later on in their career as time permits. Study needs adjust around professional training and operational commitments, which provides flexibility for the enrolee and the RAF. “This strategy is very much a part of the RAF’s commitment to recruit, train and retain the best.”³⁹ Credits recognized by the ‘Open University’, include the Junior Officer Command Course and Command and Staff College, Pilot, Navigator, and ATC training (outlined in Appendix 2).

³⁷ Information gathered by author through interaction with the Education Office at Tinker Air Force Base Oklahoma City, Oklahoma, 1999-2001.

³⁸ Royal Air Force News, “The RAF In-Service Degree Scheme,” available from <http://www.learning-forces.org.uk/21-30/isds.htm>; Internet; accessed 2 February 2005.

³⁹ Ibid.

The Canadian Air Force individual training and education goal is to create officers that are capable of critical thinking, managing change, and allowing the CF to develop its capabilities, thus creating a force ready for operations. The CF system is an organized sequential process of training, education, self-development, and work experience, with timed delivery to provide the required training at precisely the right time for job execution. This includes formal training, continuation training and academic upgrades, both military and civilian.⁴⁰

Unlike the USAF and RAF, the CAF has created a series of development periods numbered one through four. In the first two periods, there are three programs for Air Force officer development after basic MOC training. They are the Officer Professional Military Education (OPME) program⁴¹, the Air Force Officers Basic Course (AFOBC)⁴² and the Air Force Officer Advanced Course (AFOAC)⁴³. OPME consists of four university level courses and two professional level courses. These courses are part of the RMC curriculum for all ROTP students and are required to be completed by all DEOs. As of September 2004, OPME courses are available at the Management Development

⁴⁰ Department of National Defence, *DAOD 5031-2: Learning and Professional Development*, available from http://www.forces.gc.ca/admfincs/subjects.daod/5031/2_e.asp; Internet; accessed 25 October 2004.

⁴¹ Department of National Defence. "Air Force Officer Professional Military Education (AF-OPME) Residential Program," available from http://airforce.mil.ca/Canairens/2004/121225Zjul04_e.htm; Internet; accessed 25 October 2004.

⁴² AFOBC is for junior officers with 3 years operational experience and is designed to expand upon the basics learned from BOTC for the subjects of leadership, resource management, doctrine, history, staff skills, and the planning and conduct of aerospace operations.

Department of National Defence, "Air Force Officers Basic Course (AFOBC)," available from http://airforce.mil.ca/Canairens/2003/040900Zjun03_e.htm; Internet; accessed 25 October 2004.

⁴³ AFOAC is a carry on from the basic course and is designed for newly promoted Majors. It will focus on joint operations along with aerospace planning, operations, critical thinking and teamwork.

Department of National Defence, "Air Force Officer Advanced Course (AFOAC)," available from http://airforce.mil.ca/Canairens/2004/121221Zjul04_e.htm; Internet; accessed 25 October 2004.

School in St Jean, Quebec, or as in the past by correspondence from home station. This program is organized and managed by RMC.⁴⁴ The last two development periods are for senior officers to assume the next level of command.⁴⁵

A Proposed Recruiting and Training Program

Air Force leaders need to be provided with a range of experience and professional development over their career with which to acquire the breadth and depth of aerospace knowledge required to effectively develop and employ aerospace power across a spectrum of activity and conflict. Air Force leaders who acquire this complete understanding of aerospace power will become the thinkers, leaders and visionaries that the Chief of Defence Staff describes as the foundation that will give the Canadian Forces future operational advantage. The Air Force aims to develop these personal qualities and abilities in Air Force commanders and leaders, and expects that they will apply them to Air Force transformation as well as operations.⁴⁶

In keeping with the Air Force vision, if Air Force officers from operational MOCs are to be competitive for promotion to senior rank, they need to gain both experience and education as early and efficiently as possible. The current ROTP program treats everyone as equal, thus education and lengthy operational training time is approximately the same for all, regardless of potential. If MOC training was completed first, those with high potential for advancement to senior officers could be identified early and sent to school after their first tour. This would leave those with less potential for promotion to maintain the operational capability as the line flyer. A proposed Air Force Regular Officer Training Plan for Operational MOCs (AF-ROTP-OMOCs) and initial career path is outlined in Appendix 3. Like the RAF program, it is based on credit for military

⁴⁴ DND. AF-OPME.

⁴⁵ D Mil C 4 Career Managers Brief at CFCSC, March 2005.

⁴⁶ Department of National Defence. CFP A-GA-007-00 AF-004 *Strategic Vectors: The Air Force Transformation Vision*. (Ottawa: DND Canada, 2004), 49.

training and starts with MOC training before university. Unlike the RAF, those with initiative and potential can be sent to school at the end of a first tour. This program does not mean that the line flyer could not attain a degree; it just means it may take them longer.

If training for the Air Force operational MOCs followed this model, responsive and timely recruiting would be possible and would not be restricted by the current ROTP university training capacity or budget. Course loading and scheduling would be easier as all recruits (including DEOs) would follow the same program thus reducing delays between courses, which would eliminate the need and cost of refresher training. Pilot training phase I is only 10 weeks and Phase II is 29 weeks with a variable phase III based on aircraft type selected. In theory, completing pilot training within two years is attainable, rather than the four years it takes now, in addition to the four years for university for ROTP pilots. This program would be responsive to the immediate needs of the MOCs and would eliminate the problems associated with forecasting requirements four years in advance.

Given the problems resulting from current hiring rules and practices, demographics, and high failure rates, the operational MOCs are at risk of not being able to provide an operational and combat capable expeditionary force in accordance with the Air Force vision.⁴⁷ As the baby boomers in the CF start to reach retirement age, the CF needs to find ways to attract more suitable candidates and to find a way to encourage them to have a full career, thus minimizing the training bill and ensuring sufficient manning to perform the tasks required by the government. It requires a lot of time, money and effort to train an officer for one of these operational MOCs. Although each

school is attempting to reduce the failure rate by looking for new and more effective training methods, the skills that are required for these occupations require a combination of spatial intelligence and bodily-kinesthetic intelligence.⁴⁸ These abilities and the level of proficiency required are not readily attainable for all candidates, which has resulted in high failure rates. The CF already recognizes the problem of baby boomer retirements and has extended compulsory retirement age to 60 from 55, to try to mitigate this problem, but this alone is insufficient.

The CF and the CAF already offer a number of degree completion programs that allow those who do not have a baccalaureate diploma or a post graduate diploma to further their education. The Canadian Defence Academy (CDA) is working hard to expand the opportunities for CF members to obtain higher education. The CF University Program (CFUP) and Campus Canada are two programs where agreements have been made with universities in every Canadian Province to facilitate CF enrolment and recognition of credits for military courses. Campus Canada is an online service. CFUP has agreements with universities for conventional courses as well as correspondence courses.⁴⁹ The CF currently subsidizes serving officers, without a degree, to complete their degree part time and then fulltime under the Initial Baccalaureate Degree Program

⁴⁷ Ibid, 41.

⁴⁸ “Spatial intelligence: the ability to accurately perceive and think in terms of the visual qualities of the world and its dimensions ...[and] Bodily-kinesthetic intelligence: the ability to control one’s bodily motions, the capacity to handle objects skilfully....”

Robert G. Owens, *Organizational Behavior in Education: Adaptive Leadership and School Reform*, (Boston: Pearson Education, Inc., 2004), 58.

⁴⁹ (Appendix 4 is a two page description of the program from the CDA web site)

Department of National Defence, “CDA – Member Support Services: CF Continuing Education Program (CFCEP),” available from http://www.cda.forces.gc.ca/er/engraph/MSS/CFCEP/cfcep_e.asp; Internet; accessed 15 March 2005.

(IBDP) for up to 16 months fulltime schooling in a 20 month time period.⁵⁰ The Air Force does the same thing under the Air Force Degree Completion Program (AF DCOMP). RMC offers a Bachelor of Military Arts and Sciences (BMASC) under this program and provides credit for military courses already completed.⁵¹ For those officers with an undergraduate degree there are subsidized programs called the Advanced Degree for Regular Force Officer – Part-Time Program and Full Time Program.⁵² These resources could easily be used to support this new AF-ROTP-OMOC program.

The Canadian Air Force “*Strategic Vision*” already recognizes the value of operational experience to achieve a high level of competency in the air force mission.

While a general understanding of aerospace power can be derived academically, a more in depth understanding is gained through first-hand operational experience and professional development. To this end, the Air Force will expose a greater number of personnel to operations through its expeditionary focus and increase its emphasis on aerospace power execution for all of its personnel.⁵³

By focusing on operational training first and academic upgrading second, recruits will follow a process of indoctrination, training and life style adjustment. Gaining operational experience and skills will provide a level of understanding that can lead to a motivated and focused individual, which can be applied to university education.

⁵⁰ Department of National Defence, *DAOD 5031-7, Initial Baccalaureate Degree Program*, available from http://www.forces.gc.ca/admfincs/subjects.daod/5031/7_e.asp; Internet; accessed 25 October 2004.

⁵¹ Department of National Defence, *Air Force Degree Completion Program (AF DCOMP) – Selection for Academic Year 2003-2004*, available from http://airforce.mil.ca/Canairgens/2004/121221Zjul04_e.htm; Internet; accessed 25 October 2004.

⁵² Department of National Defence, *Advanced Degree for Regular Force Officer – Part-Time Program*, available from http://vcds.mil.ca/vcde-exec/pubs/canforngen/2002/064-02_e.asp; Internet; accessed 25 October 2004.

⁵³ DND CFP A-GA-007-00 AF-004 *Strategic Vectors* ..., 50.

Using the AF-ROTP-OMOC concept, BOTC will be the first step in the vetting process followed by second language training and then MOC training. The new officers will be at their youngest age and normally their reflexes will be at their best. This puts all ROTP and DEO in the same class where the more mature officers could aid the young and vice versa. If recruits joined the Air Force to fly, then it is important to prove that they are capable, before too much time and money is spent on them. There is also synergy to be attained by being able to recruit all year long rather than just in time for the school year. This also means that there will be no large flood of graduates in May each year all waiting for course loading.

The proposed AF-ROTP-OMOC solution will be a hybrid of the USAF continuing education program and the RAF program. Like the RAF, the Canadian Air Force wants to recruit, retain and educate the best of the best. Like the new USAF initiative, the priority will be to provide an education that is pertinent and timely to an operational MOC career⁵⁴. Similar to the USAF base education office, the CAF could establish an education office at each base supported by the RMC or CDA. Since these MOCs would not be attending RMC or civilian universities upon initial entry, there would potentially be money and extra personnel available to support this program at the bases. Along with running the OPME program, the base education office could schedule, run, administer, or arrange classes, etc with local universities or the RMC. A combination of courses taught on base, supplemented by self-study courses if required, could produce great results in a short time. These education offices could also run

⁵⁴ Since any degree program is allowable for these MOCs, it would be beneficial to have a more pertinent and focused education by including a few core courses in the program of study like OPME and military history.

language training for personnel on base. Like the RAF, credits achieved for actual MOC training could be used towards related degrees with a military focus. Regular ROTP can be reserved for non-operational MOCs; their basic training requires that they have a specific type of degree, before they can start MOC training (i.e. Aeronautical Engineers). However, DEOs from these MOCs could benefit from the OPME program on base.

Rather than have OPME with only four university credit courses, all six should be at the university level, starting at a first year level and progressing to higher levels. Since some universities provide three year degrees, those candidates that do not plan on doing a post graduate degree could obtain a three year degree with the option to upgrade to a four year program with a few additional requirements such as thesis development, research methods and an honours paper, which all could be pursued at a later date. This would streamline the degree process and provide a more useful education that could meet the needs of the individual, the MOC and the Air Force.

To implement this initiative the Air Force would need to build the time into weekly schedules for newly qualified ANavs, Pilots or AECs to attend classes. Since AF-ROTP-OMOC will be working with DEOs, there is already a requirement for both of them to do OPME. DEOs are currently recruited under a higher pay scale due to their degree. AF-ROTP-OMOC promotion and pay system could be designed to commence at a basic level at the completion of MOC training and increase as education increases to eventually be the equivalent of DEO pay upon completion of a degree. A system like this would provide additional incentive and motivation to complete a degree. Completion of a degree also makes them competitive for promotion under the current promotion system,

which would then put them on par with the DEOs, only younger and possibly with more potential.

Junior officers need to start their careers by establishing good work habits and study habits thus developing the skills that will benefit them as they advance. It would not be too hard to arrange for junior officers to attend classes on base for two afternoons a week unless there was an exercise or an operational deployment. With an education office on base, a councillor would be better able to anticipate, plan and adjust for major operational events such as deployments and exercises. Correspondence type courses might also be a solution based on the individual's interest and ability. Those MOCs that work shifts could easily put some of their quiet hours to use. By starting this process as early as possible after MOC training, candidates would be in the routine of studying in the evenings and on weekends to meet the demands of MOC training. Highly motivated officers may even apply more time to study early in their careers before they have to worry about the demands of a family. Moreover, starting MOC training first, would encourage candidates to adapt to the demands of an Air Force life style and dedicate themselves to the program from day one, if they want to succeed.

The objective of the AF-ROTP-OMOC is not just to get a degree but also to acquire the correct type of knowledge and experience required of an Air Force officer. DEOs will also have to acquire similar knowledge despite the fact that they already have degrees. Doctors and other professional occupations have regulating bodies that ensure continuing education is done on a yearly basis. An established Air Force education office could run a similar continuing education program in the CAF, which may lead to sponsored postgraduate training. The main idea is to set up a training plan that is

interesting and would expose Air Force officers to air force doctrine and history once they have an MOC, thus reinforcing their ability to relate to operational events rather than trying to visualize it from a book. Those officers that have the core qualities of military leadership such as integrity and dedication (listed in Appendix 5) will excel under a system like this. Those who have the potential to reach senior ranks will be able to do so because they will have more time left to serve after completing training, before having to retire.

The size of the USAF makes on base education offices a financially viable option. In Canada, with the proposed AF-ROTP-OMOC program, the numbers would be sufficient to justify the expense on a smaller scale. In addition, other occupations on base, including DEOs, would benefit from this resource. It could also become a forum for dispersing new professional education for all officers. For example, it could distribute the new doctrine designed by the Air Warfare Centre.

Conclusion

The demographics of the recruiting base in Canada have changed and the CAF cannot recruit and train sufficient quantities of suitable officers in an efficient manner for operational MOCs. This is having a negative impact on the trained effective strength of these MOCs and will eventually affect the combat capability of the Air Force. With an average MOC training failure rate of 30 percent, the Air Force cannot afford the time and money to pay officers to attend university before the validation of their occupational skills. Most of the subsidies and processes already exist to be able to create a new proposed recruiting and training program. This program will send all Air Force operational MOC officers to MOC training before providing a university education for

those who do not have one. After MOC training the Air Force will provide time for university courses on base, on a part-time basis, facilitated by an Air Force base education office to manage the program. Under its own mandate, CDA is already establishing agreements with universities and arranging for the granting of equivalencies for military training. Similar to the RAF, the CAF needs to recruit the best officers available, identify those with high potential early, and provide opportunity for them to receive special coursing after MOC training and a first operational tour. All officers including DEOs will have to accomplish OPMEs but officers requiring a degree will get university credit for completing OPME and can continue their studies on base as time permits. This program introduces these officers to a life style of training, learning and development. Officers that possess the CF core qualities of military leadership will excel and become the leaders of the future. The Air Force needs highly competent officers to maintain an operational combat capability and have the potential for promotion to high levels of leadership and responsibility. The Air Force already recognizes the value of experience. If the Air Force is to continue to be a viable force, it must capitalize on the advantages of recruiting officer candidates without university degrees for operational occupations, and have them complete basic officer training and occupation training before completing a degree.

Appendix 1**MOC – Recruiting Deficiencies**

MOC – Recruiting Deficiencies over the past 2 years	DEO Quota	ROTP Quota	OT Quota	Overall Shortage after adding DEO, ROTP and OT.	Failure Rate over the past 2 years
AEC	19 of 50 = 38 % (-31)	30 of 35 = 85 % (-5)	33 of 12 = 2.8 % (+21)	-3	27 %
ANAV	19 of 20 = 95 % (-1)	20 of 29 = 69 % (-9)	12 of 8 = 1.5% (+4)	-5	20 %
PILOT	120 of 340 = 50 % (-120)	62 of 60 = 1.03 % (+2)	29 of 30 = 97% (-1)	-119	43%

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⁵⁵ Summary of data from the AMOR slides from January 2005 provided by email from Captain George Trattner, 4 April 2005.

Appendix 2**RAF COURSES ACCREDITED WITH THE OPEN UNIVERSITY -
CREDIT ACCUMULATION TRANSFER (CAT) POINTS**

The Open University has awarded a General Credit Rating the courses listed below. The CAT Points are available for courses that started on or after the date shown, the first courses to qualify for the award of CAT points are indicated in brackets.

COURSE TITLE CREDIT POINTS FROM DATE/ COURSE NO.**Officer Training**

The Initial Officer Training Course	30 Level 1	Jul 98 (No 181)
Individual Staff Studies Course (Single Course)	15 Level 2	Jul 00 (No 62)
Individual Staff Studies Course (Module 1)	15 Level 2	Feb 99 (No 60)
Individual Staff Studies Course (Module 2)	15 Level 2	Feb 99 (No 60)
Junior Officer Command Course	15 Level 2	Jul 98 (No 230)
Intermediate Command & Staff Course	10 Level 2 10 Level 3	Jul 98 (No 214)

Pilot Training

Joint Elementary Flying Training Course	30 Level 1	Jan 99 (No 25)
Basic Fast Jet Flying Course	30 Level 1	Jul 95 (No 146)
Advanced Fast Jet Flying Course	40 Level 1	Mar 94 (No 8)
Single Engine Rotary Wing Course	35 Level 1	Jan 99 (No 29)
Multi-Engine Rotary Wing Course	35 Level 1	Jan 99 (No 15)
Multi-Engine Advanced Flying Training (Long) Course	30 Level 1	Nov 99 (No 137)
Multi-Engine Advanced Flying Training (Short) Course	30 Level 1	Nov 99 (No 137)

ANav and ATC are on the next page.

Appendix 2**Navigator Training**

Basic Navigator - Tutor/Bulldog and Tucano Courses Together	30 Level 1	Jan 92 (No 420)
Basic Navigator - Dominie Course	20 Level 1	Oct 99 (No 458)
Advanced Navigator - Low Level Dominie Course	25 Level 1	Jan 99 (No 458)
Advanced Navigator - Hawk Course	25 Level 1	Jan 97 (No 441)
Navigator Rotary Wing Training Course	40 Level 1	Jan 99 (No TBN)
Advanced Navigator - Maritime Dominie Course	20 Level 1	Oct 99 (No 458)

The following courses have a Specific Credit Rating with the Open University.

Air Traffic Control Training

Joint Air Traffic Controller Course	30 Level 1	Jan 01 (No 324)
Area Radar Training Course	10 Level 1	Nov 99 (No 206)

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⁵⁶ RAF News, "The RAF In-Service Degree Scheme,".

Appendix 3**Proposed ROTP Operational MOC Training Plan and Career Path**

<u>MILITARY TRAINING</u>	<u>EDUCATION - Courses and Credits</u>
<ul style="list-style-type: none"> • BOTC 	<ul style="list-style-type: none"> • Credit for BOTC – Course in leadership and resource management
<ul style="list-style-type: none"> • Second Language Training 	<ul style="list-style-type: none"> • Language Course credit – University level dependent upon language ability
<ul style="list-style-type: none"> • MOC Training • When complete promoted to 2Lt 	<ul style="list-style-type: none"> • Credits similar to RAF plan Appendix 2
<ul style="list-style-type: none"> • First Operational Tour • Promoted to Lt and Capt based on time in rank 	<ul style="list-style-type: none"> • OPME 6 courses • University courses as able / available** • Second Language Training credits throughout career • Officers Basic Course (AFOBC)
<ul style="list-style-type: none"> • Second Operational Tour • NOTE: High potential officers go to school to complete a min of a 3-year degree, remainder continue with second tour and work on a degree part-time. 	<ul style="list-style-type: none"> • University courses every semester.** • Officer Advanced Course (AFOAC)
<ul style="list-style-type: none"> • Staff Tour • Promoted to Major before or during tour. 	<ul style="list-style-type: none"> • CF Command and Staff College • Basic degree should be complete by this time and MDS or other Masters degree could be started
<ul style="list-style-type: none"> • Follow-on Career development as it exists in each MOC 	<ul style="list-style-type: none"> • Masters degree or PhD based upon MOC requirements, potential, and desires of the individual.

**Note: civilian Universities offer a number of summer compressed courses, which limits the number that can be done during the summer semester but would shorten the time spent at school. RMC will also have to offer summer courses in this manner.

Appendix 4

“CFUP - Canadian Forces University Program

Members of the Defence Team looking to pursue university studies have a variety of options through the **Canadian Forces University Program (CFUP)**. The benefits of applying for academic courses through the CFUP at either the University of Manitoba or Télé-université include:

- on-going academic counselling;
- simplified transfer of academic credits from other institutions; credits for certain military courses;
- waiving of normal residency requirements;
- timetable allowances for operational commitments; and
- a variety of different teaching methods.

Each university has a coordinating office to answer enquiries and to provide assistance. CFUP credits are obtained through correspondence courses, regular day or evening classes at some bases, on-site weekend workshops, summer sessions, audio/video assisted distant learning courses.

University of Manitoba in Winnipeg, Manitoba and Télé-université in Quebec City, Québec offer services in English and French, respectively, under the CFUP. Courses may be taken through correspondence or by attending classes at one of the member universities. Similarly, students may request permission to take correspondence or on-campus courses from other universities as a visiting student, and have these accredited toward a University of Manitoba or University of Quebec degree program.

In addition, the Royal Military College of Canada (RMC)/Division of Continuing Studies in Kingston, Ontario, offers members of the military, their spouses and civilian employees of the Department of National Defence degree programmes. These are designed to permit students to acquire a university degree regardless of where they live or work, or their commitments to families or careers. The degrees are thoroughly grounded in the elements of the military profession, integrating in-service training and experience with special and standard university courses. Courses are offered in English and French and students can complete assignments and exams in the official language of choice.”⁵⁷

A list of Universities in the CFUP is on the following page.

⁵⁷ DND, “CDA – Member Support Services: CF Continuing Education Program (CFCEP)....

Appendix 4**Universities in CFUP**

Alberta	Saskatchewan
Athabasca University University of Alberta University of Calgary University of Lethbridge	First Nation University of Canada University of Regina University of Saskatchewan
Ontario	Nova Scotia
Brock University Carleton University Laurentian University Lakehead University McMaster University Queen's University Royal Military College of Canada University of Guelph University of Ottawa University of Toronto University of Waterloo Univeristy of Western Ontario University of Windsor York University	Acadia University Dalhousie University Mount Saint Vincent University Saint Francis Xavier University Saint Mary's University Technical University of Nova Scotia Université Saint-Anne University College of Cape Breton University of King's College
P.E.I.	Newfoundland
University of PEI	Memorial University of Newfoundland
Manitoba	New Brunswick
University of Manitoba University of Winnipeg Brandon University	Mount Allison University Université de Moncton University of New Brunswick
Québec	British Columbia
Bishop's University Concordia University McGill Université de Sherbrooke Université de Québec à Chicoutimi Université de Québec à Montréal Université de Québec Université Laval Université de Montréal	Royal Roads University Simon Fraser University University of British Columbia University of Victoria University of Northern British Columbia

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⁵⁸ DND, "CDA – Member Support Services: CF Continuing Education Program (CFCEP)

Appendix 5**Leadership Qualities, Attributes, and Performance Factors**

The Core Qualities of Military Leadership	Other Necessary Attributes	Indicative Performance Factors
<ul style="list-style-type: none"> • Integrity • Courage • Loyalty • Selflessness • Self-discipline 	<ul style="list-style-type: none"> • Dedication • Knowledge • Intellect • Perseverance • Decisiveness • Judgement • Physical robustness 	<ul style="list-style-type: none"> • Sets the example • Disciplines subordinates • Accepts responsibility • Stands by own convictions • Analyzes problems and situations • Makes decisions • Delegates and directs • Supervises (checks and rechecks) • Accounts for actions • Performs under stress • Ensures the well-being of subordinates

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⁵⁹ Department of National Defence, *Somalia Inquiry Report*, available from http://www.forces.gc.ca/site/reports/somalia/vol10/VOS1_e/asp; Internet; accessed 14 March 2005.

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