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PILOT SHORTAGE AND RETENTION IN THE ROYAL CANADIAN AIR FORCE

AIM

1. This paper aims to analyze pilot shortage and retention, identify and assess the Canadian and American commercial airlines' attraction activities (financial incentives, guaranteed employment, and cadet programs). Moreover, evaluate how these activities are competing with military pilot and workforce recruiting and retention within the Royal Canadian Air Force (RCAF). Furthermore, will look on the best practices within other militaries around the world and finally recommend to the Directorate of Air Plans on the possible measures to counter the situation.

INTRODUCTION

2. The challenge of pilot shortage defines capability-commitment gap as a concerning perennial issue. The decrease in number of pilots in the RCAF has been attributed by several factors, which is a welcome sign that some retention measures are having an impact¹. Staffing challenge has been not only in the military's air forces but also in the commercial airlines where this problem created a staffing dilemma which ended in struggle for pilots to fill gaps that increasing every day. The problem is becoming critical as the Canadian and American commercial airlines attraction activities lures military pilots who are quitting from air forces looking for incentives and a supposed best working environment in the commercial air lines².

3. Despite of initiatives to reducing the pilot shortage and retention, the Royal Canadian Air Force (RCAF) still need more efforts in increasing recruitment and improved retention arrangements. To achieve this goal, the government of Canada through the Department of Defense to review the recruitment policy and set a special strategy to improve incentives which are missing or improving the working environment.

4. Recently the aviation industry has been experiencing a huge growing demand for new pilots all over the world³. This demand might be caused by the increased number of commercial airlines because of globalization and unfortunately the important aspect of training and preparation of new pilots was not given appropriate attention. It is believed that, in the next 20 years, airlines in North America alone are going to need around "130,000" new pilots⁴. The big staffing gape in the commercial airlines has triggered a competitive pilot's job market resulting in different initiatives taken by different organizations including attraction activities as a strategy to lure trained, skilled and experienced pilots from all in order to overcome this challenge.

5. This paper will discuss the possible reasons why pilot shortage has become a crisis in both commercial and military also assessing the recruitment, training, and retention process in the CAF. Pilot as other unique profession like health and alike are perennial challenge in staffing

¹ RCAF reports personnel 'plateau' Avatar by Chris Thatcher- March 5, 2020

² As pilots quit the services in droves: U.S. News and World Report Vol. 85, (December 4, 1978)

³ Transportation & Logistics 'Aviation, The pilot shortage - statistics & facts Published by E. Mazareanu, Sep 16, 2021

⁴ Ibid

organizations which requires review in career retention and job satisfaction for the members of the CAF⁵.

CONTEXT

5. The report of recruitment and retention produced by the Canadian Auditor General in 2016, highlighted the shortfalls on the general recruitment of new CAF members. “For the 2014–15 and 2015–16 fiscal years, the Military Personnel Command’s recruiting targets were significantly lower than the levels that had been recommended by the Regular Force through its occupation reviews⁶.” The possible shortage of pilots might be falling under this primary problem of recruitment and training.

6. Considering fulfilling the government’s requirement, the Department of National Defence identified that, “it had only 64% of the trained CF-18 pilots it needed but the required goal is yet to be attained.” moreover, Auditor General recommended that, it would need to considerably increase the number of trained pilots to ensure effectiveness of the RCAF.⁷ However this effort is unlikely to be able to do so because pilots have been leaving the fighter force faster than new ones could be trained⁸. According to the National Defence, “between April 2016 and March 2018, the Royal Canadian Air Force lost 40 trained fighter pilots and produced only 30 new ones. Since then, an additional 17 fighter pilots left or stated their intention to leave⁹.”

7. Commercial airlines have encountered the same pilot shortage challenge and their quick option to settle the problem is the initiative of attracting trained and experienced pilots by using glittering incentives proposals that everybody can wish to have. These attractive activities do not exclude military pilots, therefore good salaries and other incentives including favorable working environment in civilian enterprises have a negative impact in the military air force including RCAF.

8. The pilot shortage crisis decodes the increased job market competition between military and commercial airline which is mostly affecting military air forces. It is important to realize that good training, competence, enough flying ours, are the key factor attracting the external market.¹⁰ “Without action to stabilize the levels of experienced personnel, the RCAF’s operational output will be further impacted. Increasing number of intake and training capacity is not enough. It must nurture an environment where the RCAF’s quality of life and quality of service make it more attractive for the members to stay than to leave¹¹.”

⁵ Education as a Determinant of Career Retention and Job Satisfaction Among Registered Nurses Rambur, Betty, McIntosh, Barbara, Mary Val Palumbo, Kyndaron Reinier Journal of Nursing Scholarship; Second Quarter 2005; 37, 2; ProQuest pg. 185

⁶ 2016 Fall Reports of the Auditor General of Canada Report 5—Canadian Armed Forces Recruitment and Retention.

⁷ Ibid

⁸ Ibid

⁹ Ibid

¹⁰ Scherrer, Eric A, Ramthun, A, Jack, Marine Corps Gazette; Quantico Vol. 101, Iss. 5, (May 2017) - Proposed Solutions to Marine Corps Aviation's Fixed-Wing Pilot Shortage

¹¹ RCAF reports personnel ‘plateau’ by Chris Thatcher | March 5, 2020

ANALYSIS

Military recruitment attraction vs commercial airline attraction activities

9. Assessment shows that, the best way of increasing and maintaining number of skilled and experienced military pilots is to train more new pilots, equipping them with skills and exposing them to the experienced ones for capability improvement. The process of recruitment is the key factor of achieving this goal. As the report of Auditor General of Canada highlighted in their report (2016), the authority of the Military Personnel Command, the Canadian Forces recruiting group is responsible for attracting, processing, selecting, and enrolling all Regular Force recruits.¹² Although it might seem contradictory to the initiative of reducing staffing gap, “the air force has reduced the number of pilots entering the training system in an attempt to minimize delays as pilot candidate’s transition through the various phases of flight training, and to reduce the backlog at the Operational Training Units (OTUs), where they acquire aircraft type training before transition to operation squadrons¹³.”

10. The shortage is more impacted by the civilian job market which is mostly influences fixed wing jet pilots from the military because they generally possess the qualifications especially that of flying hours for the major airlines. This factor enables them to be employed immediately or in a short period of time after exiting from the air force.¹⁴ It has been assessed that, fixed wing pilots in the air force view a commercial airline lifestyle as better than in the military environment¹⁵.

Effects of information technology

11. Today’s young generation is quickly connected through the effective information technology which facilitates the quick exchange of ideas through modern media environment and growing relevance of social media platforms compare to the past decades. The point is not to condemn technology but the way it influences quick changes within the community whether positively or negatively.

12. The key aspect of social media is that it enables direct communication between news media houses and citizens not excluding military members, allowing media actors to by-pass traditional news outlets¹⁶. Experience shows that, it was very difficult to access military pilots or socializing with military members in civilian environment, but technology can connect them with other community circles without following traditional procedures. This might be a key driving factor the increased number of exiting pilots from the air force. This is a signal of the impact of the growing information technology that may to some extent be harmful to the members of military. It is a call for the need of protecting military members from harmful uncontrollable media news.

¹² 2016 Fall Reports of the Auditor General of Canada Report 5—Canadian Armed Forces Recruitment and Retention.

¹³ RCAF reports personnel ‘plateau’ by Chris Thatcher- March 5, 2020

¹⁴ Proposed Solutions to Marine Corps Aviation's Fixed-Wing Pilot Shortage- Scherrer, Eric A; Ramthun, A Jack. Marine Corps Gazette; Quantico Vol. 101, Iss. 5, (May 2017).

¹⁵ Ibid

¹⁶ Franziska Marquart, Jakob Ohme and Judith Möller Media and Communication, 2020, Volume 8, Issue 2, Pages 196–207

Pay and allowances

13. Good pay and allowances have a big administrative measure to promoting and creating a comfortable working environment. However, if it is not timely reviewed, pay and allowances may be a key factor affecting motivation and relationships at work¹⁷. Salaries contributing to success of an organization because of its impact on morale and good relationship between employee and employers, in this perspective timely review and improving pilot's welfare is paramount obligation¹⁸. It is a fact that salaries of commercial pilots may be more improved than those of many military's pilots but looking only on the salary may not be the solution of the problem instead, it may be more effective to increase bonus packages as well as retirement benefits to motivate pilots remain to serving up to the end of their contracts.

14. Good salary has been a factor used by civilian job market, "commercial pilot's payment have sharply increased over the past few years, accompanied by attractive contract agreements between pilot's unions and the airlines which was projected to increase pilot pay by 17 percent by 2018, this was before Covid 19 pandemic¹⁹". For the military pilots, salary growth is most drastic when leaving at the end of their initial active-duty service commitment; these opportunities decrease for those leaving later, such as after a 20-year military career. Look deep on this factor salary does not seem to be bigger for pilots but civilian pilot lifestyle may be the key factor.

15. In view of the data offered by the Bureau of Labor Statistics (BLS), "pilots looking for jobs at the major airlines will have to face strong competition with those from the militaries who are mostly qualifies because of the advantages of frequent flying opportunities available in the military." Major international airlines require "1,500 to 3,000 flight time hours and about 300 to 500 hours of multi-engine time for application acceptance.²⁰" These attractive initiatives may be one of the factors lures military pilots to have more convenient incentives and working environment²¹.

16. Flying hours determines pilot's salary, the higher the flying hours the bigger the salary although there are other factors, example "the annual salary of a captain or a co-pilot may vary depending on industry, company size, location, years of experience, and level of education²²". So, looking only on a salary as a reason for the pilots to exit from military may not hold water, but perhaps requires more research on the attractions offered by commercial airlines although it is good that the airlines are serving the same countries. It is important to improve a frequent educational seminar for pilots concerning their welfare and strategic advantages for serving in the militaries.

Civilian lifestyle vs working environment in the military

17. Traditionally the working environment for pilots in the military is busy and unpredictable. This phenomenon crates an environment of unforeseen activities to some extent on the required

¹⁷ Equality and Human Rights Commission. www.equalityhumanrights.com/en/advice-and-guidance/why-equal-pay-matters

¹⁸ Ibid

¹⁹ Wages and hours of labor in air transportation, 1931. [U.S. Bureau of Labor Statistics Bulletin No. 575. Wages and Hours of Labor Series. January 1933.]

²⁰ Ibid

²¹ Ibid

²² Ibid

operational time for military pilots. According to flight time limitations and rest requirements, “No program manager may assign any flight crewmember, and no flight crewmember may accept an assignment, for flight time as a member of a one- or two-pilot crew if that crewmember's total flight time in all commercial flying will exceed, 500 hours in any calendar quarter; 800 hours in any two consecutive calendar quarters and 1,400 hours in any calendar year²³.” These rest requirements need enough pilots, otherwise the required air force capabilities may be highly affected.

CONCLUSION

18. This analysis concludes that, the market completion for pilots between commercial airlines and militaries benefits much the commercial airlines because the market accepts already experienced and certified pilots most of them from military and public service entities²⁴. Militaries have been the best place where competent and experienced pilots are prepared but it has been the area that working environment may not offer satisfactory motivation to compete with civilian environment.

19. “It is not evident that all military trained pilots are principally better than all civilian trained pilots, but the odds of getting a high quality professional pilot are a lot better with military training, because there is a much tighter pre-selection process, they wash out anyone who doesn't progress according to plan, they have a very regimented procedures, oriented style of flight training, and lot of quality control checks of both trainees and the training process²⁵.”

20. Since pay and allowances look to be the key factor of attraction strategy used by commercial airlines, it signals lack of timely review of motivation strategy and culture of grouping and tasking of pilots ensuring accomplishment of mission for the national interest in regard to the human factors and welfare.

21. Training gap stands to be the main reason of pilot shortage within militaries, pilot training takes not less than one year a pilot who had basic flying from recognized flying schools²⁶. “The RCAF has no problem attracting prospective aircrew, between 1,000- 1,200 candidates continue to go through aircrew selection but air force has reduced the number recruited to the basic training list of 780 by about 40, helping to decrease the wait times in some fleets²⁷.” There is a need to review the requirements and number of trainees to have many pilots per intake as other allied militaries do, for example U.S. Air National Guard (ANG) has the minimum requirements for undergraduate pilot training, which requires trainees between the ages of 17-30²⁸.

22. Increasing number of intake and training capacity may not be enough to solve the pilot shortage challenge, but it may be the best option to practice. However, if no strategic action to stabilize the levels of experienced personnel, the RCAF's operational output will be further

²³ Electronic Code of Federal Regulations (e-CFR) CFR § 91.1059 - Flight time limitations and rest requirements

²⁴ Scherrer, Eric A; Ramthun, A. Jack. Marine Corps Gazette; Quantico Vol. 101, Iss.5, (May 2017): 28-35.

²⁵ <https://www.pilotsofamerica.com/community/threads/civilian-vs-military-training>. Nov 21, 2013.

²⁶ Becoming A Pilot in the Air National Guard: 5 Steps .www.operationmilitary.org/becoming-a-pilot-in-the-air-national-guard-5-steps

²⁷ RCAF reports personnel ‘plateau’ by Chris Thatcher- March 5, 2020

²⁸ Ibid

impacted. Moreover, the strategy must nurture an environment where the RCAF's quality of life and quality of service make it more attractive for members to stay than to leave²⁹.

RECOMMENDATIONS

23. It is recommended that;
 - a. Pay and allowances are reviewed to motivate pilots
 - b. Pilots' contracts should be reviewed with regard to the policy.
 - C, Improving working environment for pilots attracting them to stay, not to leave.
 - d. The Royal Canadian Air Force should develop and implement a three- to five-year target with an action plan for recruitment and retention to meet the required number of pilots

²⁹ Ibid

BIBLIOGRAPHY

RCAF reports personnel 'plateau' by Chris Thatcher - March 5, 2020

As pilots quit the services in droves: U.S. News and World Report Vol. 85, (December 4, 1978)

Transportation & Logistics 'Aviation, The pilot shortage - statistics & facts Published by E. Mazareanu, Sep 16, 2021

Education as a Determinant of Career Retention and Job Satisfaction Among Registered Nurses
Rambur, Betty, McIntosh, Barbara, Mary Val Palumbo, Kyndaron Reinier. Journal of Nursing Scholarship; Second Quarter 2005; 37, 2; ProQuest pg. 185

2016 Fall Reports of the Auditor General of Canada Report 5—Canadian Armed Forces Recruitment and Retention.

Scherrer, Eric A, Ramthun, A Jack, Marine Corps Gazette; Quantico Vol. 101, Iss. 5, (May 2017) - Proposed Solutions to Marine Corps Aviation's Fixed-Wing Pilot Shortage

2016 Fall Reports of the Auditor General of Canada Report 5—Canadian Armed Forces Recruitment and Retention.

Risk Factors Associated with Sexual Misconduct in the Canadian Armed Forces: Does It Vary by Sex and by Hajizadeh, Mohammad; Aiken, Alice; Cox, Chelsea

Proposed Solutions to Marine Corps Aviation's Fixed-Wing Pilot Shortage Scherrer, Eric A; Ramthun, A. Jack. *Marine Corps Gazette*. Quantico Vol. 101, Iss. (May 2017).

Franziska Marquart, Jakob Ohme and Judith Möller Media and Communication, 2020, Volume 8, Issue 2, Pages 196–207

RCAF reports personnel 'plateau' by Chris Thatcher | March 5, 2020

Equality and Human Rights Commission. www.equalityhumanrights.com/en/advice-and-guidance/why-equal-pay-matters

Wages and hours of labor in air transportation, 1931. [U.S. Bureau of Labor Statistics Bulletin No. 575. Wages and Hours of Labor Series. January 1933.]

Electronic Code of Federal Regulations (e-CFR) CFR § 91.1059 - Flight time limitations and rest requirements

Scherrer, Eric A; Ramthun, A, Jack. Marine Corps Gazette; Quantico Vol. 101, Iss. 5, (May 2017): 28-35.

<https://www.pilotsofamerica.com/community/threads/civilian-vs-military-training>. Nov 21, 2013

Becoming A, Pilot in the Air National Guard: 5 Steps

<http://www.operationmilitarykids.org/becoming-a-pilot-in-the-air-national-guard-5-steps>