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OPERATIONAL RESEARCH AND ANALYSIS ESTABLISHMENT DIRECTORATE OF MANPOWER ANALYSIS

PROJECT REPORT 581

STATUS OF TRAINED WOMEN IN THE CANADIAN FORCES

by

Leesa M. Tanner

April 1992

OTTAWA, CANADA

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FOREWORD

In the past the employment opportunities of women in the Canadian Forces (CF) were limited by such restrictions as enrolment in exclusively non-combat roles, recruitment of only single women and the requirement to resign if they became pregnant. However within the last 20 years progressive policy changes have had a positive effect on encouraging women to select a broader career with the CF.

This study analyzes the impact of such employment policy changes by examining the status of women in the CF from 1980 to 1992. This study focussed on five areas: enrolment, experience distributions, occupational preferences, attrition rates and rank distributions. The question of whether there is a barrier for entry into the senior ranks for women in the CF, i.e. a "glass ceiling" effect, has also been addressed.

The results of this study provide a valuable synopsis of the issues concerning the integration of women into the CF. For example, although it is too early to draw definitive conclusions, there is evidence that, overall, there is no "glass ceiling" effect. The knowledge base underlying this type of conclusion is particularly useful in examining behavioural patterns as the recruitment of women continues to shift toward non-traditional roles. During current personnel reductions, it is important that a focus on the progression of women in the CF be maintained. I recommend that this report be given wide distribution, since it has implications for monitoring of mixed gender integration trends well into the future.

D.E. Munro

Director General Personnel Policy

ABSTRACT

This study examines the status of women in the Canadian Forces (CF), looking at such factors as enrolment figures, experience distributions, occupational preferences, attrition rates and lastly rank distributions. In the past, the CF has limited the employment opportunities of women. However, over the last 20 years, progressive policy changes have had a positive effect on encouraging women to select a career with the CF.

RÉSUMÉ

Cette étude examine le statut des femmes dans les Forces Canadiennes (FC). On a étudié les facteurs tels que: les taux de recrutement, les distributions d'expérience, les occupations préférées, les taux d'attrition et finallement les distributions de rangs. Par le passé, les FC avaient restreint les opportunités d'emploi pour les femmes. Cependant, depuis les derniers 20 ans, des changements de politique ont eu l'effet positif d'encourager les femmes à choisir une carrière dans les FC.

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STATUS OF TRAINED WOMEN IN THE CANADIAN FORCES

EXECUTIVE SUMMARY

STUDY AIM AND METHODOLOGY

1. The aim of this study is to examine the status of women in the Canadian Forces (CF) by looking at such factors as enrolment figures, experience distributions, occupational preferences, attrition rates and lastly rank distributions. These analyses are based on the trained effective strength of the CF between 1980 and 1992, with the exception of the attrition statistics which were based on total strength. Since the trained effective strength excludes personnel with such status as Terminal Leave, Medical Patients Holding List, Leave Without Pay, Detention or Absent Without Authority, the numbers shown in this report may not directly correspond with numbers quoted in other literature. (paras 1-3)

RESULTS

2. <u>Growth of the CF.</u> The number of women in the military has grown significantly over the last 12 years, but women still only account for approximately 8% of the officers and 10% of the non-commissioned members (NCMs). The growth rate for women in the CF is such that these numbers will change slowly over time. (paras 4-8, Figures 1-4)

3. <u>Experience Distributions.</u> Women have stayed in the CF longer and have gained more years of experience over the last 12 years, but they are still found predominantly in the lower experience levels. Approximately 76% of female officers have less than 10 years of commissioned service and 89% of female NCMs have less than 15 years of service. (paras 10-12, Figures 5-8, Tables I-II)

4. <u>Occupational Analysis.</u> Women are still choosing traditional roles, such as medical and administrative occupations, but more women are beginning to take advantage of the career opportunities open to them now that occupational restrictions have been lifted. In 1980 only slightly more than half of the officer and NCM occupations had women in

them, however, by 1992, women were found in 82% of the officer and 86% of the NCM occupations. (paras 13-15, Tables III-IV)

5. <u>Attrition Rates.</u> The attrition rates for female officers are significantly higher than those for their male counterparts, whereas the attrition rates for female NCMs are similar to those for male NCMs. The attrition patterns for male and female officers, as for male and female NCMs, were found to be identical. (paras 16-18, Figures 9-10, Tables V-VI)

6. <u>Rank Distributions.</u> The rank distributions of CF personnel were examined to see if there is any evidence of a "glass ceiling" for women. ("Glass ceiling" is a term which refers to an invisible yet impassable barrier that prevents women from advancing to senior management levels or, in the case of the military, to the senior ranks.) However, with 76% of the female officers having less than 10 years of commissioned service and 89% of female NCMs having less than 15 years of service, women are just reaching the "middle management" levels of the CF. Therefore, it is too early to determine whether there is a "glass ceiling" for women because it will take several more years before significant numbers of women become eligible for promotion to the senior ranks.

7. There appears to be no significant difference in the rank distributions for male and female officers up to the 10 years of commissioned service point. There is a large difference between the percentage of men and women at the rank of Major or above, however, this difference is not statistically significant because sufficient numbers of women are just becoming eligible for promotion to Major. (paras 20-24, Figures 11-16)

8. On the contrary, there is a statistically significant difference between the rank distributions for male and female NCMs, with women progressing faster than their male counterparts up to the 15 years of service point. This trend, though, is dependent on the type of occupation in which the female NCMs are employed. Whereas women are progressing faster in the dental trades and some of the administrative and support occupations, men are progressing faster in the communications trades. (paras 25-30, Figures 17-24)

STATUS OF TRAINED WOMEN IN THE CANADIAN FORCES

INTRODUCTION

1. In the past the Canadian Forces (CF) limited the employment opportunities of women by taking such actions as restricting them to non-combat roles and requiring them to resign if they became pregnant. However, within the last 20 years, progressive policy changes have had a positive effect on encouraging women to select a career with the CF. In the late 60's and early 70's the first of the occupational restrictions began to be lifted, although women were still not allowed to undertake combat duty. Subsequent changes in policy included the enrolment of married women, continued service after pregnancy and the provision of maternity benefits. Today the CF is required to admit women to all occupations including those involving combat duty, with the exception of submarine service, due to a 1989 ruling by the Canadian Human Rights Tribunal.

2. This paper examines the status of women in the CF, looking at such factors as enrolment figures, experience distributions, occupational preferences, attrition rates and finally rank distributions. The analyses for this paper were conducted on the trained effective strength of the CF between 1980 and 1992, with the exception of attrition statistics which were based on the total strength. The trained effective strength excludes personnel on Terminal Leave, Medical Patients Holding List, Leave Without Pay, Detention or Absent Without Authority, therefore, numbers in this report may not correspond directly with numbers quoted in other literature.

3. There are three companion papers which discuss various issues concerning women in the CF in greater detail. Reference 1 examines the distribution of women across the various occupations in the CF; Reference 2 considers marital status and its effects on the experience distribution and attrition patterns of women in the CF; and Reference 3 analyzes the rank distributions of men and women in various occupations in the CF to see if there is any evidence of a "glass ceiling" for women. ("Glass ceiling" is a term which refers to an invisible but impassable barrier that prevents women from advancing to senior management levels or, in the case of the military, to senior ranks.) A follow-on study will examine the subject of intra-service married couples.

GROWTH OF THE CANADIAN FORCES

4. As of 1 January 1992, the trained effective strength of the CF was made up of more than 77,000 men and women. Broken down into officers and non-commissioned members (NCMs), there were more than 14,000 officers and almost 63,000 NCMs by 1992.

5. The number of officers in the trained effective strength has grown by 17% over the last 20 years, increasing from a little more than 12,000 in 1972. When the officer population is broken down according to gender, there is a significant difference in growth rates between the two sexes, as seen in Figures 1 and 2. Whereas the number of male officers has grown by only 12% in the last 20 years, the number of female officers has grown by 172%. The rapid growth rate for women, though, was not really seen until the early 1980's when employment policy changes began to have a positive effect on the enrolment of female officers. Prior to 1983 the number of female officers has increased by approximately 13 women per year, whereas the number of female officers has increased by an average of 63 women per year during the last 10 years. This growth rate is similar to the growth rate for male officers, which has averaged an increase of 67 men per year for the last 20 years.

6. Despite this dramatic increase, women still only account for 8.4% of the officers in the CF. This percentage is an improvement over 1972, though, when women only accounted for 3.6% of the officers. If the almost even gender split in the growth rate continues, it will take years before women form a significant portion of the officers in the CF.

7. The number of NCMs in the trained effective strength has fluctuated over the last 20 years, actually decreasing from a little over 64,000 in 1972 to almost 63,000 in 1992. When the NCM population is broken down according to gender, there are significantly different growth rates for men and women, as seen in Figures 3 and 4, just as there were for officers. Whereas the number of male NCMs has decreased by 11%, the number of women has increased by 627% over the last 20 years. The more rapid growth rate for female NCMs occurred during the 70's and early 80's, when the trained effective strength increased by an average of 385 women per year. The growth rate over the last 10 years has dropped to approximately 158 women per year. The growth rate for male NCMs has

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Figure 1: Number of Male Officers in the CF



Figure 2: Number of Female Officers in the CF



Figure 3: Number of Male NCMs in the CF



Figure 4: Number of Female NCMs in the CF

fluctuated over the last 20 years, decreasing during the 70's and then increasing slightly since 1982.

8. Although the number of women is growing at a more rapid rate, they still account for only a small percentage of the NCMs in the CF - 10.4%. This, however, is an improvement over 1972 when women only accounted for 1.4%. The shift in the gender split of NCMs will occur more rapidly than for officers since the growth in the number of women is occurring at the expense of men. However, placing the current growth rate in perspective, women would be expected to form only 13% of the NCM effective strength in 10 years if it remains at 63,000.

9. Although employment policy changes began in the late 60's and early 70's, the effects of these changes were not felt until the mid to late 70's for NCMs and the early 80's for officers, as shown in the preceding figures. Therefore, the analyses in the remainder of this paper are not taken any further back than 1980 because there were not sufficient numbers of women.

EXPERIENCE DISTRIBUTIONS

10. As a result of restrictions on occupational choices being lifted and more progressive employment policies being implemented, women have stayed in the CF longer and have gained more experience over the last 12 years. Experience is defined here in terms of years of commissioned service for officers and in terms of years of service for NCMs. Years of commissioned service (YCS) is the length of time a person has served as a commissioned officer. Commissioning itself can happen at different times during a career, depending on whether a person joined the CF as an officer or a person was commissioned from the non-commissioned ranks. Years of service (YOS) is simply the length of time a person has been enrolled in the CF.

11. The experience distributions for male and female officers are shown in Figures 5 and 6. As seen in Table I, which summarizes these figures into five-year intervals of YCS, the experience distribution for men has been relatively stable, whereas the experience distribution for women has shifted over the last 12 years. Women are staying in the military longer, as indicated by an increase in the representation of the more experienced



Figure 5: YCS Distribution for Male Officers in the CF



Figure 6: YCS Distribution for Female Officers in the CF

female officers and by a decrease in the percentage of female officers in the zero to five YCS band.

	MALE C	FFICERS	FEMALE (OFFICERS
	1980	1992	1980	1992
0-5 YCS	29%	31%	58%	48%
6-10 YCS	21%	25%	23%	28%
11-15 YCS	23%	16%	9%	11%
16-20 YCS	14%	12%	6%	9%
21-25 YCS	9%	9%	3%	3%
26-30 YCS	4%	6%	1%	1%
31-35 YCS	0%	1%	0%	0%

Table I: YCS Distribution of Officers in the CF

12. The experience distributions for male and female NCMs are shown in Figures 7 and 8. As seen in Table II, which summarizes these figures into five-year intervals of YOS, the experience distribution for men has also been relatively stable whereas the experience distribution for women has shifted significantly over the last 12 years. Just as for female officers, female NCMs are staying in the CF longer and as a result there has been an increase in the percentages of more experienced female NCMs. For example, by 1992, 36% of the female NCMs had more than 10 YOS compared to only 8% in 1980.

	MALE	NCMS	FEMAL	E NCMS
	1980	1992	1980	1992
0-5 YOS	33%	27%	77%	34%
6-10 YOS	15%	24%	15%	30%
11-15 YOS	15%	22%	5%	25%
16-20 YOS	16%	12%	2%	9%
21-25 YOS	15%	8%	1%	2%
26-30 YOS	6%	6%	0%	0%
31-35 YOS	0%	2%	0%	0%

Table II: YOS Distribution of NCMs in the CF







Figure 8: YOS Distribution for Female NCMs in the CF

OCCUPATIONAL ANALYSIS

13. Just as the experience level is increasing for women in the CF, the type of experience is also changing. Women still predominantly choose traditional roles such as medical and administrative occupations; however with occupational restrictions now lifted, women are beginning to pursue less traditional roles. In 1980 slightly more than half of the officer and NCM occupations had women in them, but by 1992, women were found in 82% of the officer and 86% of the NCM occupations. The shift in career choices by women is illustrated in the next two tables where the occupations for officers and NCMs have been divided into six groups: air, sea, land, communications and military engineering (COMM), medical and dental (MED), and administrative and support (ADMIN) occupations. The specific occupations in each of these groups are listed in Annex A, which was reproduced from Reference 1.

14. As seen in Table III, the distribution of male officers by occupation has remained relatively stable while the occupational distribution for female officers has changed significantly over the past 12 years. Although there has been a historical dominance of women pursuing medical careers, particularly as nurses, a larger percentage of female officers are now pursuing careers in the air, communications and administrative occupations. Even a small percentage of women can now be found in the male bastions of the sea and land occupations, which were only recently broken down by the 1989 Canadian Human Rights Tribunal decision.

	MALE O	MALE OFFICERS		OFFICERS
	1980	1992	1980	1992
AIR	35%	33%	4%	13%
SEA	11%	14%	0%	1%
LAND	17%	19%	0%	2%
COMM	12%	12%	1%	8%
MED	6%	4%	67%	37%
ADMIN	19%	18%	27%	39%

Table III: Occupational Distribution of Officers in the CF

15. The occupational distributions for NCMs have been more stable. As seen in Table IV, there has been little change in the occupational distributions for men and women. The majority of women still pursue administrative careers, while the majority of men are found in the air, land, and administrative occupations.

	MALE	NCMS	FEMALE	E NCMS
	1980	1992	1980	1992
AIR	20%	20%	14%	16%
SEA	11%	11%	3%	3%
LAND	21%	24%	2%	1%
COMM	17%	16%	10%	11%
MED	3%	3%	10%	9%
ADMIN	27%	25%	61%	60%

Table IV: Occupational Distribution of NCMs in the CF

ATTRITION RATES

16. Attrition is defined as the number of people who leave the CF. Attrition rate is the attrition for a particular year divided by the total strength at the beginning of that year.

17. The attrition rates for female officers have been generally higher than those for male officers, as seen in Figure 9. Despite the existing differences in attrition rates, it is interesting to note that the attrition patterns are similar for men and women, as seen in Table V which breaks down the average attrition rates for the last 12 years into specific experience bands. Regardless of gender, the highest attrition rates are for those officers with more than 20 YOS, which is not surprising since this group includes those who are reaching the compulsory retirement age. On the other hand, the lowest attrition rates are for those officers with at least 10 YCS but no more than 20 YOS, i.e. those who are making the CF a career.



Year





Figure 10: Attrition Rates for NCMs in the CF

	MALE OFFICERS	FEMALE OFFICERS
0-3 YCS	2.8%	5.8%
4-9 YCS	5.6%	9.8%
10 YCS-20 YOS	2.2%	4.0%
>20 YOS	10.7%	13.8%
OVERALL	5.9%	7.6%

Table V: Average Attrition Rates for Officers in the CF

18. The attrition rates for female and male NCMs are similar, as seen in Figure 10. As for officers, despite the slight differences in attrition rates for men and women, the attrition patterns are similar, as seen in Table VI which breaks down the average attrition rates for the last 12 years into specific experience bands. Regardless of gender, the attrition rates are highest for those NCMs with more than 20 YOS, a band which again includes those who have reached the compulsory retirement age; and the lowest attrition rates are for those NCMs with less than four YOS is actually lower than that for their male counterparts.

	Table `	VI:	Average	Attrition	Rates	for	NCMs	in	the	CI
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	MALE NCMS	FEMALE NCMS
0-3 YOS	11.2%	10.7%
4-9 YOS	5.6%	7.4%
10-20 YOS	2.8%	4.5%
>20 YOS	13.2%	13.5%
OVERALL	7.3%	7.7%

RANK DISTRIBUTIONS

19. As a final analysis, the rank distributions of CF personnel were examined to see if there is any evidence of a "glass ceiling" for women. In a simple examination of the rank distributions of men and women in the CF, it becomes apparent that there is a significantly

higher percentage of men at the higher ranks. The immediate conclusion is that there must be a "glass ceiling" for women, however this observation may not necessarily be true.

20. If one were to look at the rank distributions of officers as a whole, as seen in Figures 11 and 12, one might think there must be a "glass ceiling" because there are so few high-ranking female officers - only 0.4% of women, as compared to 3.6% of men, are Colonels or above by 1992. However, it must be remembered that the Canadian military is a front-end loaded system; one in which everyone is recruited into the bottom of the rank pyramid, from which they must work their way up. After all, there is no such thing as a public service competition for a General!

21. Despite the fact that there are more women in the CF and that they are staying in the military longer, only 4% of female officers have more than 20 YCS. Therefore, there are very few women who are eligible for promotion to the senior ranks. Consequently it is not yet possible to determine whether there is a "glass ceiling" for female officers since the "glass ceiling" is considered to be a barrier to the senior ranks. Since 76% of women still have less than 10 YCS, it will be some time before it is known whether a "glass ceiling" exists for female officers. Note, however, that while the rank distribution for men has been relatively stable with very little change over time, the rank distribution for women has shifted more over the last 12 years, as seen in Figures 11 and 12. Since the mid 80's, there has been an increasing percentage of female officers at the higher ranks.

22. Although it is not possible to determine whether there is a "glass ceiling" for female officers, one can analyze how women are progressing up to the 10 YCS point and whether there are any significant differences in the rank distributions for men and women thus far. For officers with less than six YCS there is very little difference in the rank distributions for men and women, as seen in Figures 13 and 14. The rank distribution for women in this band has begun to stabilize and in fact has been almost identical to that for men over the last few years. In this experience band the rank distribution is affected more by recruitment rates than by promotion rates since promotion from Lieutenant to Captain is based on time in service.

23. For officers with between six and 10 YCS there are some differences in the rank distributions for men and women - approximately 18% of the men are Majors or above by 1992, whereas only 11% of the women have reached these ranks, as seen in Figures 15 and 16. However, female officers are only just becoming eligible for promotion to Major,







Figure 12: Rank Distribution for Female Officers in the CF

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Figure 14: Rank Distribution for Female Officers with 0 - 5 YCS







Figure 16: Rank Distribution for Female Officers with 6 - 10 YCS

as they are just reaching the eight YCS point in substantial numbers. Therefore the rank distribution for women should begin to resemble the rank distribution for men over the next few years. The situation will have to be carefully monitored because continued differences could indicate significantly different career progressions for male and female officers.

24. When the officer population was broken down into the six occupational groups described earlier to see if there are any significant differences between the rank distributions for men and women in different occupational groups, it was found that only the administrative and support group had sufficient numbers of female officers to support a comparative analysis. The details of this analysis can be found in Reference 3, but suffice it to say that the results were very similar to those for officers as a whole, i.e. there is no statistically significant difference between the career progression of male and female officers.

25. It should be noted here that for the analysis of the rank distributions of NCMs in the CF, those in the sea and land occupations have been excluded. These occupations distorted the results due to their higher promotion rates and the low number of women in these trades. Whereas 35% of men are found in the sea and land occupations by 1992, only 4% of women are employed in these trades, as seen in Table IV. Of the 178 women in the sea trades, 96% have less than five YOS and of the 98 women in the land trades, 66% have less than 10 YOS. Therefore it will be some time before women in these trades will benefit from the higher promotion rates. Consequently the following discussion will pertain to only those NCMs that are not in the sea or land occupations.

26. The rank distributions for these remaining NCMs as a whole, seen in Figures 17 and 18, seem to indicate a "glass ceiling" since by 1992 only 19% of women are Sergeants or above, whereas 32% of men have reached these ranks. However, looking at the experience distributions in Figures 7 and 8, sufficient numbers of female NCMs have not really progressed past the 15 YOS point. Therefore it will be some time before significant numbers of women are eligible for promotion to the senior ranks and before it can be determined whether there is a "glass ceiling" for female NCMs. Figure 18 does illustrate the effect of more women staying in the military longer as an increasing percentage of women are reaching the higher ranks over time.

27. However, just as for officers, one can analyze how women are progressing up to the 15 YOS point and whether there is any significant difference in the rank distributions







Figure 18: Rank Distribution for Female NCMs in the CF (Excluding Sea and Land Occupations)







Figure 20: Rank Distribution for Female NCMs with 0 - 5 YOS







Figure 22: Rank Distribution for Female NCMs with 6 - 10 YOS







Figure 24: Rank Distribution for Female NCMs with 11 - 15 YOS

for male and female NCMs thus far. For NCMs with less than six YOS there has been some fluctuation in the rank distributions over the last 12 years, as seen in Figures 19 and 20. However, over the last few years, the rank distributions for men and women have been similar. This YOS band is influenced more by recruitment rates than by promotion rates since the promotion from Private to Corporal is based on time in service.

28. For NCMs with between six and 10 YOS there have been some differences between the rank distributions for men and women, as seen in Figures 21 and 22. Although the rank distributions do not appear radically different for 1992, they are statistically different due to a greater than expected number of female Sergeants. Therefore, there is some indication that women are progressing faster than their male counterparts in this experience band.

29. This trend in favour of female NCMs continues in the 11 to 15 YOS band, as seen in Figures 23 and 24. Whereas only 25% of men in this experience band are Sergeants or above by 1992, 34% of women have reached these ranks. These rank distributions are significantly different and therefore it may be concluded that female NCMs are progressing faster than their male counterparts up to the 15 YOS point.

30. Such a trend, though, is not apparent in all occupational groups for NCMs in the CF. There is no significant difference in the rank distributions for male and female NCMs in the air occupations or the medical occupations. Women appear to be progressing faster than their male counterparts in the dental occupations and the administrative and support occupations other than the administrative clerk, finance clerk or supply technician trades. These three specific trades showed no significant difference between the rank distributions for men and women. On the contrary, male NCMs appear to be progressing faster than female NCMs in the communications trades. Details of this analysis can be found in Reference 3.

SUMMARY

- 31. To summarize the findings of this study:
 - a. the number of women in the military has grown significantly over the last
 20 years, but by 1992 women still only account for 8% of the officers and

REFERENCES

- "Women in the Canadian Forces", by L. Tanner, D Man A Staff Note 1/91, April 1991.
- "Marital Status of Women in the Canadian Forces", by L. Tanner and C. Walters, D Man A Staff Note 7/90, December 1990.
- 3. "Rank Distribution of Women in the Canadian Forces", by L. Tanner, D Man A Research Note (Draft).

ANNEX A TO ORAE PROJECT REPORT 581 DATED APRIL 1992

MILITARY OCCUPATIONAL GROUPS

1. This annex lists the military occupations (MOCs) in each of six occupational groups for officers and non-commissioned members (NCMs) in the CF: air, sea, land, communications and military engineering, medical and dental, and administrative and support occupations. These occupational groups have been reproduced from Reference 1 of this paper.

AIR OCCUPATIONS

2. In this study, the air occupations for officers include the following trades:

- a. Air Navigator (MOC 31);
- b. Pilot (MOC 32);
- c. Aerospace Engineer (MOC 41);
- d. Air Traffic Control (MOC 63);
- e. Air Weapons Control (MOC 64); and
- f. Flight Engineer (MOC 65).

3. The air occupations for NCMs encompass the fields of Aircraft Electronics (ACE), Aircraft Technical (ACT1 and ACT2) and Air Operations (AOPS). The ACE field includes the following trades:

- a. Integral Systems Technician (MOC 521);
- b. Communication and Radar Systems Technician (MOC 524);
- c. Avionics Technician (MOC 525); and
- d. Instrument Electrical Technician (MOC 551).

- 4. The ACT1 and ACT2 fields encompass the following trades:
 - a. Aero-Engine Technician (MOC 511);
 - b. Airframe Technician (MOC 512);
 - c. Aviation Technician (MOC 513);
 - d. Safety Systems Technician (MOC 531);
 - e. Photographic Technician (MOC 541);
 - f. Metals Technician (MOC 561);
 - g. Machinist (MOC 562);
 - h. Refinisher Technician (MOC 563);
 - j. Weapons Technician (Air) (MOC 571); and
 - k. Air Weapons Systems Technician (MOC 572).
- 5. The AOPS field is comprised of the following trades:
 - a. Airborne Electronic Sensor Operator (MOC 081);
 - b. Flight Engineer (MOC 091);
 - c. Meteorological Technician (MOC 121);
 - d. Search and Rescue Technician (MOC 131);
 - e. Air Traffic Controller (MOC 161);
 - f. Air Traffic Control Assistant (MOC 162); and
 - g. Air Defence Technician (MOC 171).

SEA OCCUPATIONS

6. In this study, the sea occupations for officers in the CF include the following trades:

- a. Maritime Engineering (MOC 44); and
- b. Maritime Surface and Sub-Surface (MOC 71).

7. The sea occupations for NCMs encompass the fields of Sea Operations and Sea Technical. The Sea Operations field includes the following trades:

- a. Naval Weapons Technician (MOC 065);
- b. Boatswain (MOC 181);
- c. Oceanographic Operator (MOC 191);
- d. Naval Signalman (MOC 262);
- e. Naval Acoustics Operator (MOC 273);
- f. Naval Radio Operator (MOC 274);
- g. Naval Combat Information Operator (MOC 275);
- h. Naval Electronic Sensor Operator (MOC 276);
- j. Naval Electronic Technician (Acoustics) (MOC 283);
- k. Naval Electronic Technician (Communications) (MOC 284);
- m. Naval Electronic Technician (Tactical) (MOC 285);
- n. Naval Electronic Technician (Systems) (MOC 286);
- o. Clearance Diver (MOC 341); and
- p. Clearance Diver Technician (MOC 342).
- 8. The Sea Technical field encompasses the following trades:
 - a. Marine Engineering Mechanic (MOC 312);
 - b. Marine Engineering Technician (MOC 313);
 - c. Marine Engineering Artificer (MOC 314);
 - d. Hull Technician (MOC 321);
 - e. Electrical Technician (MOC 331); and
 - f. Marine Electrician (MOC 332).

LAND OCCUPATIONS

- 9. In this study, the land occupations for officers include the following trades:
 - a. Armour (MOC 21);
 - b. Artillery (MOC 22);
 - c. Infantry (MOC 23); and
 - d. Land Electrical and Mechanical Engineering (MOC 43).

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10. The land occupations for NCMs encompass the fields of Combat Arms and Land Electrical and Mechanical Engineering. The Combat Arms field includes the following trades:

- a. Crewman (MOC 011);
- b. Artilleryman (Field) (MOC 021);
- c. Artilleryman (Air Defence) (MOC 022); and
- d. Infantryman (MOC 031).

11. The Land Electrical and Mechanical Engineering field encompasses the following trades:

- a. Vehicle Technician (MOC 411);
- b. Weapons Technician (MOC 421);
- c. Electro-Mechanical Technician (MOC 431);
- d. Fire Control Technician (Electronic) (MOC 432);
- e. Fire Control Technician (Optromic) (MOC 433);
- f. Fire Control System Technician (Land) (MOC 435); and
- g. Materials Technician (MOC 441).

COMMUNICATION AND MILITARY ENGINEERING OCCUPATIONS

12. In this study, the communications and military engineering occupations for officers include the following trades:

- a. Communications and Electronic Engineering (MOC 42); and
- b. Military Engineering (MOC 45).

13. The communications and military engineering occupations for NCMs encompass the fields of Communication and Electronic Operators (CELO), Communication and Electronic Technicians (CELT) and Canadian Military Engineers (CME). The CELO and CELT fields include the following trades:

- a. Radio Operator (MOC 211);
- b. Teletype Operator (MOC 212);

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- c. Communications Operator (MOC 213);
- d. Communicator Research (MOC 291);
- e. Radio Technician (MOC 221);
- f. Terminal Equipment Technician (MOC 222);
- g. Teletype and Cypher Technician (MOC 223);
- h. Communications Technician (MOC 224);
- j. Radar Technician (MOC 231); and
- k. Performance Oriented Electronics Training (MOC 490).

The Lineman trade (MOC 051) has also been included in this group.

- 14. The CME field encompasses the following trades:
 - a. Field Engineer (MOC 041);
 - b. Field Engineer Equipment Operator (MOC 042);
 - c. Topographical Surveyor (MOC 141);
 - d. Map Reproduction Technician (MOC 151);
 - e. Construction Engineering Technician (MOC 611);
 - f. Structures Technician (MOC 612);
 - g. Plumber Gas Fitter (MOC 613);
 - h. Electrician (MOC 614);
 - j. Construction and Maintenance Technician (MOC 615);
 - k. Refrigeration and Mechanical Technician (MOC 621);
 - m. Electrical Generating Systems Technician (MOC 622);
 - n. Stationary Engineer (MOC 623);
 - o. Water Sanitation and POL Technician (MOC 624);
 - p. Mechanical Systems Technician (MOC 625);
 - q. Construction Engineering Procedures Technician (MOC 631); and
 - r. Firefighter (MOC 651).

MEDICAL AND DENTAL OCCUPATIONS

15. In this study, the medical and dental occupations for officers include the following trades:

- a. Dental Officer (MOC 51);
- b. Dental Associate (MOC 52);
- c. Pharmacy (MOC 54);
- d. Medical Officer (MOC 55);
- e. Medical Associate (MOC 56);
- f. Nursing (MOC 57); and
- g. Social Worker (MOC 58).

16. The medical and dental occupations for NCMs include the following trades:

- a. Medical Assistant (MOC 711);
- b. Operating Room Assistant (MOC 713);
- c. Medical Laboratory Technician (MOC 714);
- d. X-Ray Technician (MOC 715);
- e. Preventive Medicine Technician (MOC 716);
- f. Aeromedical Technician (MOC 717);
- g. Dental Clinical Assistant (MOC 722);
- h. Dental Laboratory Technician (MOC 723);
- j. Dental Equipment Technician (MOC 724); and
- k. Dental Hygienist (MOC 725).

ADMINISTRATIVE AND SUPPORT OCCUPATIONS

17. In this study, the administrative and support occupations for officers include the following trades:

- a. Physical Education and Recreation (MOC 53);
- b. Pastoral Associate (MOC 59);
- c. Chaplain (Protestant) (MOC 61);
- d. Chaplain (Roman Catholic) (MOC 62);

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- e. Public Affairs (MOC 66);
- f. Legal (MOC 67);
- g. Personnel Administration (MOC 68);
- h. Logistics (MOC 69);
- j. Personnel Selection (MOC 72);
- k. Meteorology (MOC 73);
- m. Training Development (MOC 74);
- n. Music (MOC 75);
- o. Postal (MOC 76);
- p. Personnel Development (MOC 77);
- q. Personnel Support (MOC 79);
- r. Security (MOC 81); and
- s. Intelligence (MOC 82).
- 18. The administrative and support occupations for NCMs include the following trades:
 - a. Intelligence Operator (MOC 111);
 - b. Military Police (MOC 811);
 - c. Administrative Clerk (MOC 831);
 - d. Finance Clerk (MOC 841);
 - e. Physical Education and Recreation Instructor (MOC 851);
 - f. Cook (MOC 861);
 - g. Steward (MOC 862);
 - j. Musician (MOC 871);
 - k. Postal Clerk (MOC 881);
 - m. Supply Technician (MOC 911);
 - n. Ammunition Technician (MOC 921);
 - o. Traffic Technician (MOC 933); and
 - p. Mobile Support Equipment Operator (MOC 935).

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This study examines the status of women in the Canadian Forces (CF), looking at such factors as enrolment figures, experience distributions, occupational preferences, attrition rates and lastly rank distributions. In the past, the CF has limited the employment opportunities of women. However, over the last 20 years, policy changes have had a positive effect on encouraging women to select a career with the CF.

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