DIRECT COMBAT PROBABILITY CODING AND ITS EFFECT ON OFFICER LEADERSHIP IN THE SIGNAL CORPS.

BY

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US ARMY WAR COLLEGE, CARLISLE BARRACKS, PA 17013
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May 1986

The Army instituted Direct Combat Probability Coding (DCPC) as a method of distributing female soldiers in such a way as to conform to the will of Congress concerning women in combat. The combination of DCPC and increased female accessions has led to a problem in the Signal Corps. Specifically, female officers, who comprise approximately one third of the company grade Signal Corps officers, are not eligible to be assigned as combat arms battalion Communications-Electronics Staff Officers. In addition, the number...
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AN INDIVIDUAL STUDY PROJECT

by

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ABSTRACT

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CHAPTER I
INTRODUCTION

Women fought for and won an expanded role in virtually every aspect of American life in the 1960s and 1970s. Their struggle has been both praised and damned as resulting in many significant changes in the traditional American way of life. Perhaps no victory was so surprising at the time as that which opened the Armed Forces to increased numbers of females in a greater number of jobs and occupational specialties. Their place in the services is now guaranteed as a result of legal interpretations and official policies. Thousands of women have served admirably, making valuable contributions essential to the military's meeting both quality and quantity goals in the all-volunteer, post-Viet Nam, peacetime era with its dwindling manpower pool. In a practical sense, the fact of women in the Armed Forces is a dead issue for the foreseeable future, barring tragic events which would cause the American people and their representatives to re-examine the entire range of issues regarding women in combat. However, it may be appropriate to examine current Department of the Army (DA) practices regarding the accession and assignment of female officers to assess those policies which, in practice, if not in intent, may have detrimental effects in certain areas. Specifically, the impact of Direct Combat Probability Coding (DCPC) on Signal Corps officer assignments,
development, and career progression should be revisited.

Background

Direct Combat Probability Coding is the Army solution to the two laws which specifically address women in combat. The Women's Armed Services Integration Act of 1948, in Title 10, United States Code, specifies in Section 8549 that "female members of the Air Force, except those designated under section 8067 of this title [Medical, Dental, Veterinary, Medical Service, Nurses, Women Medical Specialists, Judge Advocates, and Chaplains], or appointed with a view to designation under that section, may not be assigned to duty in aircraft engaged in combat missions." The same act, in Section 6015, states that "the Secretary [of the Navy] may prescribe the kind of military duty to which such women members [Regular Navy and Regular Marine Corps] may be assigned.... However, women may not be assigned to duty on vessels or in aircraft that are engaged in combat missions nor may they be assigned to other than temporary duty on vessels of the Navy except hospital ships, transports, and vessels of a similar classification not expected to be assigned combat missions."

There are no specific provisions in law regarding the assignment of Army women to combat zones or combat positions. Under Title 10, USC, Section 3012, the Secretary of the Army has the authority to establish assignment policies for all soldiers. The specific issue
of women in combat did not become an issue for the Army until 1977, "pending the disestablishment of the Women's Army Corps. Because the Corps existed since 1942 as a separate entity and had its own exclusion, Congress had no need to include the Army when it passed combat exclusion laws for the Air Force and Navy."1

"The pending integration of women into the mainstream of the Army encouraged its leadership to interpret the intent of Congress as reflected in the Air Force and Navy statutes and to develop an Army policy."2 In 1977, "the Secretary of the Army issued the Army's Combat Exclusion Policy which provided that 'women are authorized to serve in any officer or enlisted specialty except those specified at any organizational level, and in any unit of the Army except Infantry, Armor, Cannon Field Artillery, Combat Engineer, and Low Altitude Air Defense Artillery Units of battalion/squadron size or smaller. Women may not serve on Scout or Attack helicopters'."3

This policy, however, did not exclude women from combat, except perhaps within the narrow definition of the Department of Defense's (DOD) Close Combat or DA's Direct Combat. The former is defined as "engaging an enemy with individual or crew served weapons while being exposed to direct enemy fire, a high probability of direct physical contact with the enemy's personnel, and substantial risk of capture". The Army subscribed to this definition but added that "direct combat takes place while
closing with the enemy by fire, maneuver, and shock effect to destroy or capture him or while repelling his assault by fire, close combat, or counterattack."4

The confusion and dissatisfaction with this policy came to light at the 1980 Army Commander's Conference. "The Army's senior field commanders began to express serious concern that women would be on the battlefield where the most frequent and violent combat would take place. Although the women would not possess a combat specific specialty, commanders still felt their direct combat involvement would be the same as male combatants because of battlefield location. In sum, the combat exclusion policy did not adequately identify all positions in the Army with the highest probability of participation in direct combat."5

As a result, "women in combat" was one of nineteen issues analyzed by the Women in the Army Policy Review Group (WITAPRG) from May 1981 to November 1982. The Group's task was to conduct a "comprehensive review of all policies and programs relating to women in the Army ... to determine the effect these policies had on providing an environment conducive to the continual growth and meaningful service of all soldiers while improving combat readiness of the Army."6

To solve the previous ambiguities of DA policy, the WITAPRG "developed a combat probability coding system for personnel distribution on the battlefield."7 The WITAPRG
concluded that "to determine the relative risks of a service member in a given position routinely engaging in direct combat, four major variables must be reviewed:

(1) Duties/tasks required by the MOS/Special Skill Identifier (sic).
(2) Unit mission and employment.
(3) Battlefield location.
(4) Tactical doctrine."8

Direct Combat Probability Coding classified each position in the Army "according to the probability of participating in direct combat." Seven codes were developed, P1 through P7, representing the highest to lowest probability of engaging in direct combat. The four variables mentioned above were then applied by Table of Organization and Equipment (TOE) proponents in analyzing each position, with WITAPRG then checking the results for compliance with their guidance.9

Although there are seven DCPC codes, only those positions coded P1 are closed to women. For officers, those include the officer specialties in the Combat Exclusion Policy, plus those positions where the incumbent is "required to be routinely (original underlined) located forward of the brigade rear boundary."10 Currently excluded under the Combat Exclusion Policy, as specified in Army Regulation 611-101 Update of 30 January 1986, are Infantry (SC 11), Armor (SC 12), Special Forces (AOC 18A), Cannon Field Artillery (AOC 13E), SHORAD [Short Range Air
Defense Artillery, Artillery (AOC 14B), Combat Aviation (AOC 15B), and Combat Engineer (AOC 21J) in B, C, and D Companies of the Combat Engineer Battalion. NOTE: SC is the abbreviation for Specialty Code; AOC for Area of Concentration.

Statement of the Problem

As a result of assignment restrictions resulting from the DCPC process, a significant number of Signal Corps SC 25 lieutenant and captain position are closed to females. Male officers go "down range" as combat arms battalion Communications-Electronics Staff Officers (CESO) and Communications Platoon Leaders. Female officers tend to be cloistered in division, corps, or higher level Signal battalions. Given current accession rates and assignment policies, the development of the potential of both is diminished, but for different reasons and with different effects on each group and on the Signal Corps. The problem then is how to access Signal Corps officers in a politically acceptable manner which will insure equal opportunity for professional development of both male and female officers while maintaining or increasing the quality of officers in the Corps.

Organization of the Paper

This paper will trace the history of the DOD and DA policies regarding women in combat, with emphasis on the development of Direct Combat Probability Coding. It will then discuss the results of a US Army Signal Center study...
regarding the problems of professional development under the current policies, and offer a personal opinion on the value of rotating junior officers between and among various types of jobs and units. The paper will address the hypothesis that female officers somehow gain an advantage over males in preparing for company command, and look at the future for the Corps under today's situation. The study will conclude with a discussion of alternatives to current policies, and recommendations for future policies and actions.
CHAPTER I

ENDNOTES


2. Ibid., p.1.


7. Ibid., p.8.

8. Ibid., p.4-8.

9. Ibid., pp.4-11, 4-12, 4-16.

10. Mortensen, p.3.
CHAPTER II
THE EFFECT OF DCPC ON THE SIGNAL CORPS

Signal Corps Concerns

At the same time that the Direct Combat Probability Coding process was supposedly opening job opportunities for females, it was having the opposite effect on Signal Corps officer positions. This was due to a combination of the "forward of the brigade rear boundary" criteria, and the fact that Signal Corps female accessions were increasing. The result was that field commanders, primarily division signal battalion commanders, began to sound the alert that they were having personnel management problems. Specifically, given DCPC and a distribution reflecting female percentages throughout the corps, commanders faced a situation in which the division signal battalion was officered predominately by females, while other division signal positions, those in the combat arms battalions, were predominately male.1

As the US Army Training and Doctrine Command (TRADOC) proponent for SC 25, the US Army Signal Center studied the various aspects of the problem in late 1984 and early 1985. Two aspects which the Signal Center highlighted in a report to the Commanding General of the US Army Combined Arms Center at Fort Leavenworth, KS were career progression/professional development and the maximum female content of SC 25.2

In analyzing career progression/professional
development opportunities, the Signal Center used the J-series Mechanized Infantry Division TOE as a base, and assumed a 35% female content of SC 25 captains in the division. The model further assumed that, in order to fulfill professional development goals, an officer should have two assignments while in a division, with at least one of those assignments in the signal battalion. After combining the male-only positions and the set-aside positions required to permit an officer rotation that would meet the goal above, the Signal Center concluded that "at least 67% of the SC 25 male officers assigned to a division will not be afforded the opportunity to serve in the Signal Battalion." Thus, concluded the Center's Commandant, Major General T.D. Rodgers, "this becomes a significant problem since the majority of command opportunities for SC 25 officers are found in the Signal Battalion. It follows that the male officer's inability to serve within the battalion decreases command opportunities and inhibits branch qualification."3

In a second analysis, the Signal Center concluded that "the maximum female content SC 25 can support is 20%." This is the female captain content which would permit an officer rotation within a division sufficient to meet professional development goals. The study assumed that male and female officers would be assigned to major units in a percentage equal to their percentage in the entire SC 25 captain population. The Signal Center
elected to use the 20% figure as the maximum-content figure for all grades because it was the lowest figure computed for any of the grades considered (lieutenant-major). However, in order to have a 20% female content at, for instance, the 6-7 years-of-service point, the Signal Corps could absorb an accession rate of 25% for females due to their higher rate of attrition than males in their early years of service, according to attrition rates provided by the Signal Branch, US Army Military Personnel Center (MILPERCEN).

For the sake of comparison, it should be noted that the Center performed two additional maximum-content analyses using different models. In the first, using the Women Officer Strength Model (WOSM), the maximum content computed for SC 25 captains was 27%. This model provided for set-aside positions for rotation equity, casualty replacement, and career progression. In the second, using the MI Model developed by the US Army Intelligence Center, the maximum content was computed as 18%. These figures would support female accession rates of 33% and 25%, respectively.

In forwarding the results of the Signal Center study, Major General Rodgers concluded that the combination of "DCPC and the female officer content... now inhibit the career opportunities of male officers." Furthermore, "the inability to serve in the Signal Battalion... decreases a male's command opportunities, which... drives him away
from division assignments." The Chief Signal Officer found this "distressing since division experience has historically provided the foundation for senior Signal Corps leadership."6

Comparison of Signal and Combat Arms Battalion Positions

There are two interrelated considerations not mentioned by the Signal Center study which exacerbate the problem under discussion. The first is that, often, SC 25 lieutenants are assigned as combat arms unit Commo Platoon Leaders or CESOs. The second is that officers often are assigned to repetitive tours in divisions, where they face the same problem again--how to get to the signal battalion. Both circumstances tend to deny male officers the experience so valuable in later company command and battalion staff positions.

Furthermore, assuming that most SC 25 captains want to command and will eventually find the chance to do so, the Signal Corps may face another problem related to, but more serious than the problem of rotation within the division Signal battalion. That is, given the possible pattern of assignments described above, will female officers have developed more skills and have been exposed to more experiences valuable to successful company command than their male contemporaries who have spent an excessive amount of time as a CESO or a Commo Platoon Leader? (Successful company command is selected as a criterion based on my assumption that that is a gate through which
captains must pass for promotion to major. "Excessive" CESO time is defined for discussion purposes as more than 18 months in a 36 month tour.)

To answer the question of female advantages over males in the preparation for command, we should analyze the general skills and knowledge acquired and required in both CESO/Commo Platoon Leader and Signal battalion positions. The following is a subjective look, based on personal experience and observation, at the general advantages and disadvantages of assignments in both types of unit.

The CESO/Commo Platoon Leader is the Chief Signal Officer for his unit. As such, he is forced to learn very early the way the ultimate customer, the combat arms officer, thinks about communications and his particular requirements. The CESO is responsible for all communications-electronics in his unit. He learns tactical skills often overlooked or de-emphasized in signal units. On the negative side, the equipment and systems he must master are on the low end of the sophistication spectrum and rarely a major part of his duties once he leaves the combat arms unit. Perhaps the most significant drawback is the lack of daily, or even routine, professional interaction with peers or senior officers in his branch.

Officers assigned to TOE signal battalions for the majority of their pre-company command development would
appear to have several clear advantages in preparing for that critical job. First, they will be in a position to familiarize themselves with equipment, techniques and operating principles with which they will be associated throughout their careers. Second, they have more resources and professional associations on which to call when faced with technical problems. Third, their professional development will be monitored and encouraged by more senior officers in their chain of command.

Making a Statistically Provable Case

If the foregoing opinions about the value of CESO versus Signal battalion time are true, then they ought to be subject to proof. For example, if females do not go "down range", but stay in the Signal battalion and gain all the supposed advantages thereof, then shouldn't females do better in company command? And, can't we prove it?

According to the Chief, Signal Branch, MILPERCEN, the current system has not been in place long enough to provide meaningful data to prove or refute the contention that female officers have an advantage over a significant number of males. This answer seems reasonable on the surface inasmuch as officers coming on active duty since DCPC are still junior captains. There is no standard automated program to compare male/female performance in key positions such as company command.

At the same time however, in April 1986, there was
available a list of 519 Signal Corps former company
commanders not yet in a promotable status. This roster
included all Signal Corps specialty codes, although the
number of SC 27 and SC 72 officers was not statistically
significant, according to the branch chief. Slightly more
than 17% of those officers were considered "promotion
risks" by the branch. That is, they were in danger, for
one reason or another, of failing to be selected for
promotion to major. Although a number of factors could
influence this label, branch personnel felt that company
command was the major discriminator. While females
comprised 12.7% of the list of officers, they comprised
only 4.4% of the promotion risks.

It would be tempting to stop at this point and claim
victory for the contention that females perform better in
command and, therefore, a) are better officers as a group,
or b) have an advantage over males-- preferably the latter.
However, such definitive statements are not warranted by
this necessarily superficial analysis. Nor is a more in-
depth analysis within the scope of this paper. Indeed,
there is enough variation in background, reason for
failure, and type of position where problems were
encountered to make any advocate feel satisfied. For
example, several officers did well in command, but did not
perform well as CESOs; several had all CESO experience and
did well in command; and several commanded poorly in the
same battalion in which they had been platoon leaders.
CHAPTER II

ENDNOTES


3. Ibid.

4. Ibid.

5. Ibid.

6. Ibid.
CHAPTER III

ALTERNATIVES AND RECOMMENDATIONS

There should be little doubt that the combination of DCPC and a female officer accession rate nearing 35% is having an adverse impact on career progression and professional development in the Signal Corps. There is less certainty about the extent of the problem, and what it portends for the future. At the very least, according to the Signal Center study, Signal Corps male captains assigned to divisions are affected. At any one time, this group comprises 30% of the male Signal Corps captains and lieutenants on active duty. To what extent they are disadvantaged is open to question, and probably cannot be measured, although there must certainly be some advantage to having served in a type of unit before commanding one. Logic would seem to argue against the contention that some males will be unfairly denied company command. Company command tends to be a competitively secured position. Officers who deserve to command will generally have the opportunity to command.

As for the future, it is reasonable to assume that females, for whatever reasons, will continue to do well vis-a-vis their male contemporaries. However, the Signal Corps is in no danger of becoming a matriarchy. Females begin from a smaller base, and have tended in the past to leave the service at a faster rate than males. What is troubling, therefore, is not that the Signal Corps will
have too many female officers, but that it may be losing its most experienced and most competitive officers.

In any event, the system as it exists currently has enough problems that alternatives to it should be examined.

Alternatives

One alternative to the current policy would be to open more Signal Corps positions to women. This would have the advantage of alleviating the log jam which strands many male officers in combat arms units with little hope of getting out after a reasonable (18 month) period. All officers would have the opportunity to serve in both the combat arms units and the Signal battalion. If more positions were opened to women, it would be easier to reconstitute during wartime. While the advantages seem to be obvious with this alternative, it will probably never be implemented because it would require changing Army policies which are based on the clear will of Congress.

A second option is to reduce the number of female Signal Corps officers assigned to a division. Given the current accession rate of female officers, this would put more female officers in corps and echelon-above-corps (EAC) Signal units. While this solution would solve the male rotation/professional development problem, it would be a case of substituting one inequitable practice for
another by reducing the female officers' opportunity to
gain valuable division experience.

The third alternative for solving the male/female
professional development problem is to put a limit or cap
on the number of female officers accessed into the Signal
Corps. This option could be exercised in one of two ways.
Either the total female officer accessions of the Army
would remain the same as it is currently, with the excess
female officers resulting from the Signal Corps cap being
distributed among the other branches, or the total female
accessions would be reduced by a number equal to the
reduction in Signal Corps female accessions. Using the
Signal Center study cited previously as the middle ground
of all the study recommendations, the cap would have to be
set at 25% accessions to meet the 20% female captain
criteria required to insure equitable rotation and
professional development opportunities. Based on the
estimated 1985-6 school year accessions of 400, the
reduction in female accessions would be from 140 to 100. A
cap based on the Signal Center study would be less
arbitrary than the current method of setting accession
rates, and would better serve the officers involved, as
well as the Army. In addition to the benefits to the
individuals mentioned above, the Army should realize an
increase in morale among affected officers, and an
improved ability to reconstitute on the battlefield. The
one obvious disadvantage is that, given the state of
female officer performance, we may be sacrificing some quality for equity.

Recommendations

Although the Signal Center has raised the issue of maximum female content, I recommend that the Center's position be refined and the issue kept in the forefront in order to overcome current problems and forestall a future worsening of the problem as a result of increased female accessions.

I further recommend that the Signal Branch of MILPERCEN begin to monitor performance in key positions in order to determine the real impact of excessive time spent in CESO and Commo Platoon Leader positions to the exclusion of duty in a Signal battalion.

Lastly, I recommend that the Signal Center assess the impact of the current male/female mix and assignment policies under DCPC to determine the best mix to support fielding of the Mobile Subscriber Equipment.


