



U. S. Marine Corps Research Findings: Where is the Case for Co-Ed Ground Combat?



Interim CMR Special Report
Part II
December 2015

The statement excerpted below was previously posted on the personal Facebook page of a highly-decorated Marine combat veteran and non-commissioned officer who participated in the 2015 Ground Combat Element Integrated Task Force (GCEITF)

“We selected our best women for this test unit, selected our most mature female leaders as well. The men (me included) were the most progressive and open minded that you could get. The commander of this unit was a seasoned and successful infantryman . . .

“No one went in to this with the mentality that we did not want this to succeed. No Marine, regardless of gender would do that. With our limited manpower, we cannot afford to not train everyone to the best of their abilities.

“This was as stacked as a unit could get with the best Marines to give it a 100 percent success rate if we possibly could. End result? . . . [The data showed women] are slower on all accounts in almost every technical and tactical aspect and physically weaker in every aspect across the range of military operations . . .

“Make no mistake. In this realm, you want your fastest, most fit, most physical and most lethal person you can possibly put on the battlefield to overwhelm the enemy's ability to counter what you are throwing at them and in every test case, that person has turned out to be a man. There is nothing gender biased about this, it is what it is.

“You will never see a female Quarterback in the NFL, there will never be a female center on any NHL team and you will never see a female batting in the number 4 spot for the New York Yankees. It is what it is.”

-- Quoted by Hope Hodge Seck, Marine Corps Times, “Marine War Hero: SecNav ‘Off Base’ on Women in Combat,” September 14, 2015.

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US Marine Corps Research Findings

Abstract

The Interim CMR Special Report – Part II is the second of what will likely be a three-part analysis of comprehensive research done by the **U.S. Marine Corps** as part of the **Women in Services Restrictions Review (WISRR)**. **Part I**, published in October 2014, analyzed preliminary results of proxy strength tests and challenges such as the **Infantry Officer Course (IOC)**. **Part II, Section A**, analyzes extensive data resulting from the **Ground Combat Element Integrated Task Force (GCEITF)** field tests conducted at west-coast bases for nine months in 2014. **University of Pittsburgh** researchers monitored individual and group performances by all-male and gender-integrated teams in tasks common to direct ground combat units such as the **infantry, armor, artillery, and combat engineers**.

GCEITF exercises were designed to test the hypothesis that a gender-integrated under gender-neutral standards would perform equally as well as a gender-restricted unit. The data produced, however, **disproved the hypothesis**. All-male task force teams outperformed mixed gender units in **69 percent (92 of 134)** ground combat tasks. Significant disparities in physical size, strength, endurance, injury rates, and early onset of fatigue were found to affect women’s speed, marksmanship, and ability to march under heavy loads.

Part II, **Section B** highlights attempts to downplay the impact of gender-integration on unit **cohesion, discipline, recruiting, retention, deployability, and overall readiness** in the combat arms. This section also analyzes numerous flaws in misguided proposals to “**mitigate**” the damage done when “**gender-neutral standards**” collide with **Defense Department** mandates for “**gender diversity metrics**,” another name for quotas.

According to the **General Accountability Office (GAO)**, the **Department of Defense** has no plans to monitor results of women-in-land-combat experiments, which are expected to go into effect in January 2016. Absent congressional intervention, harmful consequences that make combat arms missions more difficult and more dangerous would escalate without public knowledge or understanding of their impact on national security.

Part III of this series will review information withheld from public view to date, despite multiple **Freedom of Information Act (FOIA)** requests and litigation. CMR will analyze the response of **Congress**, which so far has failed to conduct diligent oversight or to exercise constitutional responsibilities to make sound policy for the military. It will also challenge the next President of the United States to order full disclosure of the consequences of recent social change in the military, and to take appropriate action to restore sound priorities in the American armed forces.

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Interim CMR Special Report – Part II
December 2015

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- Table of Contents -

Executive Summary	v
Section A. Marines Set Sound Priorities: “Survivability and Lethality” in Battle	1
A. Background & Overview	1
B. Ground Combat Element Integrated Task Force	2
Definition of Direct Ground Combat	2
Methodology of Task Force	3
Minimum Standards Cannot Reduce Risks	3
Physiology Matters	3
Combat Performance & Effectiveness.....	4
Cumulative Impact of Injuries.....	4
U.S. Research Confirms British Findings	5
High Standards Would Produce Tokenism	5
Potential Loss of Talented Women	6
C. Statements of Principle.....	6
Policy Implementation	7
Long-Term Assessment	8
Need for Diligent Oversight.....	8
Section B. <i>Marine Corps Research & Mitigation Myths</i>	11
A. Background & Overview	11

B. Mitigation Myths.....	12
Negative Consequences Over Time.....	12
Unit Cohesion	13
Infantry Summary Comparison of Percentage Change of All Tasks (Fig. 12).....	14
Gender Diversity	15
Small Numbers Won't Matter.....	15
Disciplinary Issues	16
Effect on Recruiting.....	16
Selection Process & Graduation Rates	17
Tolerance of Higher Levels of Risk	19
Effects of Gender Integration on Task Execution	20
Small Unit Dynamics	21
Unit Readiness	21
Previous Gender Integration Efforts	22
Experiences of Other Nations	22
Gender Integration & Deployability Rates	22
RAND Predictions on Cohesion	23
Long-Term Monitoring & Assessments	24
C. Conclusion.....	24

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Interim CMR Special Report – Part II December 2015

US Marine Corps Research Findings: Where is the Case for Co-Ed Ground Combat?

Executive Summary

Section A: Marines Set Priorities: “Survivability and Lethality” in Battle

Comprehensive **Marine Corps** research results clearly show that the case for women in direct ground combat still has not been made. In fact, tests have produced highly credible, reality-based, empirical data that discredits theories about gender equality in the combat arms.

Brig. Gen. George W. Smith, Jr., Director of the **Marine Corps Force Innovation Office** at Quantico, VA, conveyed compelling information in an August 18, 2015, [memorandum](#) highlighting key findings resulting from **Ground Combat Element Integrated Task Force (GCEITF)** operations at west coast Marine bases in 2015.

For nine months in 2015, the Task Force conducted scientifically-monitored field exercises that simulated wartime requirements for direct ground combat units such as the **infantry, armor, artillery, and combat engineers**. Some of the volunteer Task Force teams were all-male, while others included women Marines who met physical fitness and combat fitness test (PFT/CFT) requirements on an equal basis and received formal MOS training in advance.

The Task Force was designed to test a simple **Research Study Hypothesis: “[A]n integrated unit under gender-neutral standards will perform equally as well as a gender-restricted unit.”** Despite positive expectations, **Task Force data and findings disproved the hypothesis.**

- **“All-male task force teams outperformed their mixed-gender counterparts in 69 percent (93 of 134) ground combat tasks . . .”**
- **“The well-documented comparative disadvantage in upper and lower-body strength resulted in **higher fatigue levels** of most women, which contributed to **greater incidents of overuse injuries such as stress fractures.**”**

In his memorandum, General Smith affirmed that factors such as **“speed and tempo, lethality, readiness, survivability, and cohesion [are] critical components to fighting and winning in direct ground combat.”** In this environment, Smith added, **“speed is a weapon.”**

The Smith Memo continued, “The primary consideration throughout has been to understand any impact [of gender integration] on the **combat effectiveness** of Marine ground combat units. . . [T]he benchmark of achieving the **most combat effective force** has remained the **unwavering focus**.”

That unwavering focus identified many realities that would detract from combat effectiveness. These include the following findings, which are supported by empirical evidence:

- “The assessment across all occupational specialties revealed that gender-integrated teams, squads, or crews demonstrated, with very few exceptions, **degraded performance** in the time to complete tasks, move under load, and achieve timely effects on target as compared to all-male teams, squads, or crews”
- “[Levels of risk] will remain in the infantry and special operator MOSs that **I do not believe can be fully mitigated by simply applying a minimum standard**.”
- “[A] Marine infantry unit **must be fully capable of regularly moving dismounted for extended distances with heavy loads**.”
- “The associated risk is directly linked to the physiological differences between males and females. Simply, **size matters when executing a dismounted movement under load**.”
- “On average, females possess **significantly less lean body mass, a slighter build that affects stride length and stride frequency as loads increase, less absolute V02 max production, and less power and anaerobic/aerobic capacity than males**.”

In the 69 percent (93 of 134) ground combat tasks where all-male units excelled, physical differences were more pronounced in “**specialties that carried the assault load plus the additional weight of crew-served weapons and ammunition**.”

- “All-male squads were faster than integrated squads on **hikes, gorge crossings, and cliff ascents** during the assessment in different environmental settings at MWTC.”
- “Male provisional infantry (those with no formal 03xx school training) had **higher hit percentages** than the 0311 (school trained) females.”
- “All-male squads, teams and crews and gender-integrated squads, teams and crews had **a noticeable difference in their performance of the basic combat tasks of negotiating obstacles and evacuating casualties**.”
- “**Numerous cases of compensation were observed** during physically demanding tasks, in which males shifted positions to **take over certain aspects of tasks from females**.”

General Smith added, “[T]he risk lies in the **cumulative impact** of [women’s physiological disadvantages] over the course of regular, recurring and increasingly more challenging dismounted movements under load in the operating forces.”

- “During the GCEITF assessment, musculoskeletal injury rates were **40.5%** for females, compared to **18.8%** for men.”
- “Within the research at the **Infantry Training Battalion (ITB)**, enlisted females undergoing that entry-level training were injured at more than six-times the rate of their male counterparts.” (**13%** vs. **2%**)
- [Concurring with the **British Ministry of Defence**] “Among the three factors that would negatively impact combat effectiveness without known mitigation strategies are **survivability** and **lethality**. This conclusion was reinforced in our own research . . .”

“The **Marine Corps risks losing a number of highly talented female Marines prematurely** due largely to the often extreme physical demands of these infantry, reconnaissance and special operations occupations.”

- “Service in these . . . occupations will place the majority of female Marines at a **competitive disadvantage** relative to their male peers.”
- “Simply, any loss of [recruiting] momentum, or worse, a downward trend in retaining our top female Marines, would be a **tremendous loss for the Corps.**”

Defense Secretary **Ashton Carter** should not disregard the best professional advice of the U.S. Marine Corps. As stated by General Smith in his Memorandum:

“Those who choose to turn a blind eye to . . . immutable realities do so at the expense of our Corps’ warfighting capability and, in turn, the security of our nation.”

Section B: Marine Corps Research & “Mitigation Myths”

Data produced by Marine research make a convincing case for retaining women’s exemptions from direct ground units such as the infantry. However, a number of outside public policy contractors and academic consultants were involved. Some sections of the research report, therefore, include inconsistent passages, unworkable ideas for “mitigating” expected problems, or recommendations that reflect administration mandates.

The armed forces should not be forced to rely upon unsupported theories, convoluted calculations or “best case scenarios” that disregard known high risks. It is necessary to analyze mitigation ideas that would make life in the combat arms more difficult and more dangerous. There would be no benefits, in terms of military effectiveness, to offset the risks.

For purposes of comparison and clarity, **CMR** has prepared a two-section analysis titled the **Interim CMR Special Report – Part II**. This **Section B** analyzes questionable proposals offered to downplay or “mitigate” problems evident in **Ground Combat Element Integrated Task Force (GCEITF)** tests. Examples are paraphrased in italics below:

Negative consequences will decline over time. **Response:** There is no evidence to support this theory. Extra training and nutrition can narrow physical strength disparities between men and women, but ten times more androgenic hormones make men even stronger. Even the most athletic women experience double-and-higher rates of injury and fatigue that affect speed, ability to march under load, and combat marksmanship.

Training and leadership can mitigate harmful effects on unit cohesion. **Response:** Military cohesion is not about liking others or working on tasks. **Cohesion is properly defined as mutual trust for survival and mission accomplishment in battle.** Mandates that disregard physical differences would severely degrade both **horizontal (unit)** and **vertical (leadership) cohesion.**

University of Pittsburgh data showed that all-male task force units outperformed gender-mixed ones in **69 percent (93 of 134) ground combat tasks**, particularly in “**specialties that carried the assault load plus the additional weight of crew-served weapons and ammunition.**” Ignoring obvious physical differences would degrade both horizontal and vertical cohesion.

Gender diversity will bring workplace benefits. **Response:** Unity of purpose in war is far more important than gender diversity, which has nothing to do with combat effectiveness. **President Harry Truman’s 1948 Executive Order** outlawing racial discrimination strengthened the armed forces and advanced equal opportunity, but its primary purpose was military necessity.

Small numbers of women in the combat arms won’t matter. **Response:** This disregards administration pressures to achieve gender diversity quotas of **25% or more**. To achieve what **Army Gen. Martin Dempsey** called a “critical mass,” the “**Dempsey Rule**” will “validate” standards that are “gender-neutral” but lower than before.

Gender Integration might improve discipline. **Response:** The claim disregards inappropriate male-female relationships, both voluntary and involuntary, which have increased despite countless hours of leadership training. There is no compelling reason to extend complicated male-female disciplinary issues into small combat arms teams.

Effects on Recruiting Likely Would be Neutral or Positive. **Response:** The report adds, “[I]f females were to be involuntarily ordered into combat arms units, this **could actually lower propensity and female enlistments.**” **Marine Lt. Gen. Robert Milstead** confirmed in 2013 congressional testimony, that women would be assigned on the same involuntary basis as men. According to recent surveys, proposed combat changes would make **12%** of male respondents and **20%** of females **less likely to join the military.**

Improved screening of students before entry to combat FLCs (formal learning centers) would substantially improve female graduation rates. **Response:** The paper admits: “The downside of such screening is that we would **drastically reduce the number of females eligible** for these [FLC] schools.” The services also would lose great numbers of men who, in all likelihood, would have graduated. Based on previous experience, such a plan would not survive criticism from recruiters and Pentagon feminists attacking “barriers” to women’s careers. The convoluted screening plan would use questionable data correlations to reduce failures, forgetting that high failure rates are built into tough training for infantry officers and special operators to prepare them for extreme battlefield demands. Gender-neutral standards based on minimal fitness tests would leave men less prepared for combat, while setting up women for disproportionate injuries and undeserved resentment.

The Marines should balance risks against the benefits of gender integration. **Response:** Gender-related deficiencies in tasks such as **casualty evacuation, surmounting rough terrain obstacles, speed while carrying heavy loads, and marksmanship accuracy** while fatigued would endanger lives, missions, and ultimately national security. In tests women had **40% of upper body strength** and **60% of lower body strength**. “Tolerance” of these deficiencies, which cannot be mitigated, would directly affect **survivability and lethality** in battle.

Gender-mixed units performed better in some tasks. **Response:** Such results often occurred because men did the heavy work. In **16 of 18** casualty evacuation tests, for example, men in gender-integrated groups performed **single-man fireman’s carries**. Other men moved more quickly to lift heavy artillery rounds. These “**male compensations**” masked female deficiencies that could cost lives in battle.

Some gender-mixed groups were better at problem solving. **Response:** These assessments involved **non-fatigued** Marines. The **British Ministry of Defence** reported in December 2014 that even “**physically elite**” women were more susceptible to injuries and early onset of fatigue that affected marksmanship. These factors increased with heavier loads, resulting in a “**distinct cohort with lower survivability in combat.**”

Injury prevention programs will increase readiness over time. **Response:** This statement lacks supporting data or combat arms experience. The report adds, “Historically, the **non-deployability** rate for female Marines is significantly higher than male Marines (up to **4 times higher**) . . . predominantly due to medical reasons.” **Injury rates** were twice as high in Task Force units; six times higher in enlisted infantry training.

Previous gender-integration efforts were successful. **Response:** The claim refers to career opportunities and lack of bias against women, which is nothing new. It also refers to previously-opened MOSs, primarily logistics and aviation, which are not comparable to direct ground combat units that attack the enemy on land.

In other allied nations, harmful consequences have not materialized. **Response:** Documents available so far do not discuss reasons why **Great Britain** and **Israel** do not assign women to

infantry or armored forces, or significant cultural differences in **Canadian and Israeli Defense Forces**. Nor do they discuss policies of potential adversaries such as **North Korea, Iran, or jihadist ISIS and Al Qaeda**.

Israeli Defense Forces mitigated risks of injury with proper training. **Response:** The report added, “[T]hese techniques would be **unsuitable for the Marine Corps.**” Female IDF load carriage limits, which are half those of men (**33%** compared to **60%** of body weight) would violate gender-neutrality mandates. Task Force injury rates were much higher in hiking MOSs, compared to vehicle-borne units. Predictable personnel losses would be more disruptive in small units such as infantry squads and tank crews.

Detrimental effects on cohesion can be mitigated with good leadership. **Response:** The comment, attributed to a RAND researcher, is unsupported, speculative, and contrary to Task Force findings. Surveys found that during the 9-month Task Force program, perceptions of combat effectiveness declined from generally positive to medium, trending to poor.

Gender-integration policies will be monitored and assessed. **Response:** In July 2015 the **General Accountability Office (GAO)** reported that the **Department of Defense** has no plans to evaluate the results of this social experiment – the most consequential since the Vietnam-era **Project 100,000**. Absent independent scrutiny, Pentagon officials and professional consultants will impose policies known to increase injuries and endanger lives. The same advocates will selectively withhold or disclose information evaluating their own work, and spinning the results as a complete “success.”

Conclusion: Advocates of women in combat have tried to discredit the results by raising smokescreen arguments. Navy Secretary **Ray Mabus**, for example, criticized the GCEITF research methodology because test results reported numerical averages and percentages, instead of individual performances. “The Marines have never been about being average.”

Either the play on the word “average” was pure sophistry, or Secretary Mabus seriously misunderstands statistical analyses that University of Pittsburgh experts used in scientifically measuring individual male and female task force performances. Data points that determine statistical averages and percentages are derived from the scores of multiple research participants. Conclusions should not be drawn based on the best or worst performances alone.

Members of Congress should assume their constitutional responsibility to conduct responsible oversight *before* harmful policies go into effect. Major decisions regarding military women should be rooted in reality, not wishful thinking or mitigation myths.

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U.S. Marine Corps Research Findings: Where is the Case for Co-Ed Ground Combat?

Section A Marines Set Sound Priorities: “Survivability and Lethality” in Battle

“To move forward in expanding opportunities for our female service members without considering the timeless, brutal, physical and absolutely unforgiving nature of close combat is a prescription for failure. Our future enemies will be the ultimate arbiter of such decisions – when lives of our Marines are in the balance.

“Those who choose to turn a blind eye to those immutable realities do so at the expense of our Corps’ warfighting capability and, in turn, the security of the nation.” (Memo to the Commandant from Brig. Gen. George W. Smith, Jr., August 18, 2015, p. 14)

A. Background & Overview

In 2012, the Marines initiated scientific research on the physical and operational consequences of assigning women to combat arms units such as **infantry, armor, artillery, and Special Operations Forces**. The various Marine Corps research projects since 2012 were conducted as part of the 3-year **Women in Services Restriction Review (WISRR)**.¹ The tests have produced highly credible, reality-based, empirical data that discredits theories about gender equality in the combat arms.

None of the research done by the American military or allied forces has produced evidence that women can or should be considered interchangeable with men in the combat arms. Nor is there any evidence that gender-integration would improve deployment readiness or effectiveness in direct ground combat units that attack the enemy with deliberate offensive action.

Members of Congress, who have the constitutional responsibility to make policy for the military, should obtain and analyze all data in the course of hearings with independent experts. A careful, objective review of this issue is long overdue.

National security ultimately depends on the morale, discipline, deployment readiness, and combat effectiveness of well-prepared troops that fight the enemy on the ground. Sound policies should support these troops, instead of imposing burdens that make their lives more difficult and more dangerous.

B. Ground Combat Element Integrated Task Force (GCEITF)

Hundreds of male and female Marines volunteered to participate in nine months of tests with the **Ground Combat Element Integrated Task Force (GCEITF)**. During field exercises simulating ground combat at the **Marine Corps Air Ground Combat Center**, the **Mountain Warfare Training Center** and in the waters off of **Camp Pendleton, University of Pittsburgh** experts used body-monitoring and other scientific methods to gather empirical data reflecting actual experience, not theory.

On August 18, 2015, the **Marine Corps Force Innovation Office (MCFIO)** submitted to the **Commandant of the Marine Corps** a memorandum signed by **Brig. Gen. George W. Smith, Jr.**, Director of the **Marine Corps Force Innovation Office**.² The 33-page memo and attached documents, including briefing slides, presented significant facts from the **Marine Corps Test and Evaluation Activity (MCOTEA)** report on the Task Force research.

Elements of the Task Force research project were designed to evaluate collective performance and unit standards in simulated combat tasks. As the Smith memo stated, this was done because “Marines fight as units.” (p. 3)

Like other government-produced analyses, this one shows signs of being written by individuals and factions with different views. This Interim CMR Special Report – Part II (Section A) presents excerpts of the most compelling, consistent views, which are supported by scientific data. A separate analysis (Section B) will address conflicting opinions in the same document, which were largely based on theory and speculations that have been discredited elsewhere.

The following excerpts from the Smith report, and from a 4-page Summary of research results released on September 10, reconfirm results of many previous studies and reports on the subject. Emphasis is added throughout.

Definition of Direct Ground Combat: There is no doubt that women served with courage and distinction in harm’s way in recent wars. The missions of direct ground combat units such as the infantry, however, involve seeking out and attacking the enemy with deliberate offensive action.³

A 4-page Summary of the full body of research, released on September 10, established sound priorities: “In analyzing the results of the research and analysis, the primary consideration throughout has been to understand **any impact on the combat effectiveness of Marine ground combat units**. Based on the unique role the Marine Corps fulfills within the Joint Force and in the security of the nation, the benchmark of achieving the ‘most combat effective’ force has remained the unwavering focus.” (Sept. 10 Summary, p. 2)

The Smith Memo listed a number of realities that would detract from that focus: “Female Marines demonstrated that they were capable of performing the physically demanding tasks, but **not necessarily at the same level as their male counterparts in terms of performance, fatigue, workload, or cohesion.**” (p. 4)

- “The assessment across all occupational specialties revealed that gender integrated teams, squads, or crews demonstrated, with very few exceptions, **degraded performance in the time to complete tasks, move under load, and achieve timely effects on target as compared to all male teams, squads, or crews.**” (p. 4)
- “[These] shortfalls . . . were **magnified in like units with a higher-density gender integration.**” (p. 4)

Methodology of Task Force: Contrary to claims that less-prepared women were involved in the Task Force research over nine months, “[F]emale volunteers within the GCEITF were universally considered to be an **above-average to well-above-average representation of the PFC-Sergeant female population** throughout the Marine Corps . . . The **male volunteers** were considered by their unit leaders and research observers as being an **average** representation of their male peers...” (p. 4)

Minimum Standards Cannot Reduce Risks: “. . . [D]espite vastly improved and codified individual standards, **some level of risk will remain in the infantry and special operator MOSs that I do not believe can be fully mitigated** by simply applying a minimum standard.” (p. 5)

- “That risk is associated with the **unique physical demands of service in the infantry, reconnaissance and special operations occupations** that place a premium on the ability to conduct dismounted movements under load.” (p. 5)
- “[A] **Marine infantry unit must be fully capable of regularly moving dismounted for extended distances with heavy loads.** This has been the coin of the realm for Marine infantry throughout history, and the requirement for more distributed operations with **less reliance on external logistics support** reflected in **Expeditionary Force 21** now places even greater demands on the individual infantry Marine.” (p. 5)

Physiology Matters: “The associated risk is directly linked to the physiological differences between males and females. Simply, **size matters when executing a dismounted movement under load.**” (p. 5)

- “The physiological differences in **body fat** between males and females – body fat being synonymous with ‘dead weight’ to be added to whatever external equipment load is already being carried . . . **places females at a significant disadvantage from the start in infantry-related tasks.**” (p. 5)
- “On average, females possess **significantly less lean body mass, a slighter build that affects stride length and stride frequency as loads increase, less absolute V02 max production, and less power and anaerobic/aerobic capacity than males.**” (p. 5)

- “The combination of these factors constitutes a **potential risk to combat effectiveness** for a force that must be **self-sufficient for movement** and fully capable of extended dismounted operations within the highest intensity portion of the combat spectrum.” (pp. 5-6)

Combat Performance & Effectiveness: “All-male task force teams outperformed their mixed-gender counterparts in **69 percent (93 of 134)** ground combat tasks.” (Briefing Slide #1)

- “Physical differences were more pronounced in **“specialties that carried the assault load plus the additional weight of crew-served weapons and ammunition.”** (Slide #2)
- “All-male squads were faster than integrated squads on hikes, gorge crossings, and cliff ascents during the assessment in different environmental settings at MWTC.” (Slide #2)
- “Male provisional infantry (those with no formal 03xx school training) had higher hit percentages than the 0311 (school trained) females.” (Slide #3 & Sept. 10 Summary, p. 3)
- “All-male infantry crew-served weapons teams engaged targets quicker and registered **more hits on target** as compared to gender-integrated infantry crew-served weapons teams, with the exception of M2 accuracy.” (Slide #3 & Sept. 10 Summary, p. 3)
- “All-male squads, teams and crews and gender-integrated squads, teams, and crews had a noticeable difference in their performance of the **basic combat tasks of negotiating obstacles and evacuating casualties.**” (Sept. 10 Summary, p. 3)
- “Depending on the unit, male GCEITF volunteers perceived that **combat effectiveness declined** with female Marines’ presence . . . Numerous cases of compensation were observed during physically demanding tasks, in which **males shifted positions to take over certain aspects of tasks from females.**” (Slide #4)

Cumulative Impact of Injuries: “The well-documented comparative disadvantage in upper and lower-body strength resulted in **higher fatigue levels** of most women, which contributed to **greater incidents of overuse injuries** such as stress fractures.” (Sept. Summary, p. 4)

- “These realities are clearly not insurmountable nor are they always manifested **during a one-time march under load** that reflects an entry-level performance standard. Rather, the risk lies in the **cumulative impact of this physiological disadvantage over the course of regular, recurring and increasingly more challenging dismounted movements under load in the operating forces**” (p. 6 - Note: Some media reports changed the context by putting in quotes only the first part of this sentence, “*These realities are clearly not insurmountable.*”)

- “This is exacerbated by other **physiological factors** that, in concert, make females much more susceptible to injuries, **either caused by a specific event or through the cumulative impact of repetitive dismounted movements under load.**” The **disparity in injury rates** between males and females at the **Infantry Training Battalion (ITB)** and during the conduct of the GCEITF assessment, due principally to multiple marches under load, provides **an early indicator to that effect.**” (p. 6)
- “During the GCEITF assessment, **musculoskeletal injury rates** were **40.5%** for females, compared to **18.8%** for men”. (Slide #7 & Sept. 10 Summary, p. 4)
- “Within the research at the Infantry Training Battalion, enlisted females undergoing that entry-level training were injured at more than six-times the rate of their male counterparts.” (**13%** vs. **2%**) (Slide #5 & Sept. 10 Summary, p. 4) ⁴

U.S. Research Confirms British Findings: “The **United Kingdom** review on ‘Women in Ground Close Combat’ . . . highlighted **21 factors** likely to change based on the integration of women into ground combat arms specialties, **11** of which would have a negative impact; **three of those 11 negative impacts . . . could not be mitigated.** (p. 6) ⁴

- Among the three factors that would negatively impact combat effectiveness without known mitigation strategies are **survivability and lethality**. This conclusion is based on the analysis that ‘a woman who is performing to the same physical performance standards as a man **will be working closer to her maximum** performance standards capacity when carrying the same absolute combat load, and **will fatigue sooner than her male counterpart.**’ ”(p. 6 & Slide #2)
- “**This conclusion was reinforced in our own research** during the GCEITF assessment that highlighted the disparity between males and females in **relative movement rates and lethality** with various individual weapons within the infantry occupations.” (p. 6)
- “In particular, the **overall accuracy of the female 0311 infantry volunteers declined** and the **disparity in accuracy** relative to their male counterparts **increased** as the weight of the individual weapon system increased.” (p. 6 & Slide #2)

High Standards Would Produce Tokenism: There is no reason to believe that if positions are opened, significant numbers of women will want them.

- “Based on individual propensity and the ability to meet minimum standards, it is **difficult to project a number of female infantry Marines that does not exceed what could be viewed as tokenism.**” (p. 6)
- “After a quarter century of integration and with unquestionably much lower physical standards than the U.S. Marine Corps, the **Canadian Army** has **.4%** female enlisted infantry.” (p. 6)

Potential Loss of Talented Women: “[T]he Marine Corps risks losing a number of highly talented female Marines prematurely due largely to the often extreme physical demands of these infantry, reconnaissance and special operations occupations.” (p. 7)

- “Service in these uniquely physically demanding occupations will place the majority of female Marines at a **competitive disadvantage** relative to their male peers...” (p. 7)
- “We need to continue to attract, develop, and retain our female Marine talent to meet future challenges across the range of military operations. The likelihood of a female Marine being less competitive in these significantly more physically demanding occupations may **adversely impact the Marine Corps’ ability to retain top female talent** and enable their progression into more senior ranks.” (p. 7)
- “Simply, any loss of this MCRC-established momentum, or worse, a downward trend in retaining our top female Marines, would be a tremendous loss for the Corps.” (p. 7)

C. Statements of Principle

The 1992 **Presidential Commission on the Assignment of Women in the Armed Forces** conducted a thorough, year-long study of women in combat policies in all service branches. The Commission’s review was guided by over-arching principles quoted in the Smith report:

“A military unit at maximum combat effectiveness is a military unit least likely to suffer casualties. **Winning in war** is often only a matter of inches, and **unnecessary distraction or any dilution of the combat effectiveness puts the mission and lives in jeopardy**. Risking the lives of a military unit in combat to provide career opportunities or accommodate the personal desires or interests of an individual, or group of individuals, is more than bad military judgment. It is morally wrong.” (p. 13)

Brig. Gen. Smith added a passage from the Marine Corps Warfighting Doctrinal Publication **Warfighting**:

“Of all the consistent patterns we can discern in war, there are two concepts of universal significance in generating combat power: **speed and focus**. Speed is rapidity of action. It applies to both time and space. Speed over time is tempo – the consistent ability to operate quickly. Speed over distance, or space, is the ability to move rapidly. Both forms are genuine sources of combat power. In other words, **“speed is a weapon.”** (p. 13)

The Smith report also quoted from the Presidential Commission report a “fundamental tenet that is as relevant today as it was nearly a quarter century ago.”

“Service members are encouraged to pursue opportunities and career enhancements in the Armed Forces, limited only by the needs and good of the Service. But when it comes to

combat assignments, **the needs of the military must take precedence over all other considerations**, including the career prospects of individual service members.” (p. 13)

“With this primary consideration, the Marine Corps has analyzed factors such as speed and tempo, lethality, readiness, survivability, and cohesion — **critical components to fighting and winning in direct ground combat.**” (Sept. 10 Summary, p. 2)

Policy Implementation: Additional sections of the Smith MCFIO report failed to recognize the constitutional responsibility of **Congress** to make policy for the military, including the question of whether civilian women should become eligible for **Selective Service** obligations. Administration mandates have essentially precluded discussion of what the data suggests would be the best option: **retention of sound policies that do not attempt to treat women like men in the combat arms.**

None of this is necessary, since Defense Department data have shown for decades that military women are promoted at rates equal to or faster than men. Should women become eligible for the combat arms,⁵ assignments will have to be involuntary, just like men. This could create serious problems with recruiting and retention. A 2013 survey of **Army** women found that **92.5%** of **30,000** respondents would reject combat arms assignments if they were offered.

Sections of the report also were flawed by the inclusion of many presumptions that are largely unsupported by empirical evidence or actual experience. For purposes of clarity, inconsistent passages that attempt to cushion the impact of reality-based data will be analyzed separately.

- In the meantime, it should be noted that the plan calls for “leadership,” defined as full support for gender-integration, without which “this integration effort will very likely be fraught with friction and unduly protracted – potentially a greater drain on combat effectiveness and unit readiness.” (p. 8)
- Military personnel are subject to civilian orders, but this statement pre-emptively precludes informed discussion of the consequences of implementation. This would allow unresolved problems to worsen, while exempting Pentagon policy makers, including current leaders, from responsibility for their actions.
- “Successful integration” was defined as “Combat effectiveness and readiness are enhanced.” (p. 8) This expectation is contradicted by voluminous evidence that gender-integration in the combat arms would have many negative consequences without benefits measured in terms of combat effectiveness.
- In addition, the implementation plan recommended “Developing assignment policies and practices that discourage gender-favoritism, discrimination, and/or exclusion.” (p. 9) This expectation cannot be met as long as the Navy Department continues to mandate “**gender diversity goals,**” including a **25%** quota of women on each Navy ship.⁶

- Pressures to accept "**equal but lower**" standards would be accelerated by political and ideological demands for "**gender-diversity metrics**" (read, quotas) recommended by the Pentagon-endorsed **Military Leadership Diversity Commission (MLDC)**.

Long-Term Assessment: This section of the Smith report may have been written or influenced by consultants or contractors who benefit from government grants. Two-and-a-half pages of bullets recommended "Long-Term Assessment" projects that would involve millions in Defense Department contracts, stretching out for **twenty years**. (pp. 10-12) The list amounts to a job-guarantee program for **RAND** and other contracting organizations that are not independent, objective, or likely to challenge the administration's monolithic group-think on military/social issues.⁷

Costly long-term plans to subsidize professional group-thinking would guarantee semi-annual (for four years) and then annual biased reports and even more problematic "solutions" to problems that the social-policy contractors helped to create with ideological recommendations.

Some of these expenditures would duplicate resources already available. For example, the recommendation for an "assessment" of **Joint Advertising, Market Research, and Studies (JAMRS)** data on female and male propensity and reasons to serve or not serve in the Marine Corps disregarded what is already known.

- According to JAMRS surveys done between January 2013 and March 2014, which were not service specific, the announced change in policies affecting women caused **12%** of male respondents and **20%** of females to say they would be less likely to join the military. Since only **4%** of females say they are "definitely or probably" inclined to be Marines, direct ground combat eligibility would reduce propensity even more.
- The JAMRS survey also found that **19%** of male and **17%** of female "influencers" would be less likely to recommend military service.

Bullets on the wish list did not provide estimates of costs or analyses of which items in the Marines' scarce budgets should be sacrificed to pay for them. Congress has yet to review or

authorize projected expenditures, both direct and indirect, which could be avoided by retaining current sound policies in the combat arms.

Need for Diligent Oversight: Congress should review all research closely, and intervene to stop implementation of the administration's plans before members have sufficient time to consider research already done. Attention must be given to the many unresolved controversies that were barely mentioned in current research. For example:

- Military women's opposition to being treated like men in the combat arms

- Readiness implications of non-deployability and health-related personnel losses
- Impact on unit cohesion, properly defined as mutual trust for *survival* in battle
- Complicated dynamics of male and female relationships in the military "workplace"
- Distractions and tensions leading to sexual misconduct, both voluntary and involuntary
- Consequences for recruiting, retention, and reassignment costs ⁸
- Cultural ambivalence about combat violence against women
- Eligibility for Selective Service obligations, tied to direct ground combat assignments

In the process of exercising diligent oversight, Congress should challenge all assumptions and theories, political mandates, media bias, public misperceptions, and misguided group-think in academia and the administration. Respect for military women, which is greater than ever, demands nothing less.

* * * * *

*Prepared by the **Center for Military Readiness (CMR)**, an independent, non-partisan, public policy organization that reports on and analyzes military/social issues. More information is available at: www.cmrlink.org.*

¹ Starting in 2012, the Marines began multiple phases of research involving both enlisted women and officers. At the **Marine Corps Recruit Depot at Parris Island, SC**, a mandatory requirement of three pull-ups for female recruits had to be withdrawn because more than half of the women could not meet that male minimum standard. Over 100 women passed the Infantry Training Battalion (ITB) **School of Infantry-East at Camp Geiger, NC** – a course that is not as demanding as the **Infantry Officer Course (IOC)** at **Quantico, VA**. The Marines sought 100 women to attempt the Infantry Officer Course, but of **29** who tried, none were successful.

In 2013, the **USMC Training and Education Command (TECOM)** collected data from **409** male and **379** female volunteers performing five "**proxy**" tests simulating **ground combat element (GCE)** tasks. These tests confirmed that gender-related disparities are most significant in events measuring upper-body strength and endurance. See Interim CMR Special Report, Sept. 2014, [U.S. Marine Corps Research Findings: Where Is the Case for Co-Ed Ground Combat?](#) TECOM research, among other things, reported the following findings:

In a **Pull-up** test of upper-body strength used in the PFT, women averaged **3.59** pull-ups, compared to **15.69** for the men – more than four times as many.

The **Clean & Press** event involves single lifts of progressively heavier weights from the ground to above the head (**70, 80, 95, 115 lbs.**), plus **6 reps** with a **65 lb.** weight. In this event **80%** of the men passed the **115 lb.** test, but only **8.7%** of the women passed.

In the **120 mm Tank Loading Simulation**, a gunnery skills test, participants were asked to lift a simulated round weighing **55 lb.**, **5 times**, in **35 seconds** or less. Quoting the report, "*Less than 1% of men . . . [compared to] 18.68% of the women . . . could not complete the tank loading drill in the allotted time.*" The report added, "*It would be very likely that failure rates would increase in a more confined space [such as a tank].*"

In the **155 mm Artillery Lift-and-Carry**, a test simulating ordnance stowing, volunteers had to pick up a **95 lb.** artillery round and carry it **50 meters** in **under 2 minutes**. Noted the report, "*Less than 1% of men, compared to 28.2% of women, could not complete the 155 mm artillery round lift-and-carry in the allotted time.*" If trainees had to "*shoulder the round and/or carry multiple rounds, the 28.2% failure rate would*

increase."

□ On the **Obstacle Course Wall-with-Assist-Box** test, a **20"** high box, (used to simulate a helping-hand) essentially reduced the height of the **7 ft. wall** to approximately **5'4."** Quoting the report, "*Less than 1.2 % of the men could not get over the obstacle course wall using an assist box, while wearing [protective equipment] . . . [compared to] 21.32% of women who could not get over the obstacle course wall . . .*"

² This document was covered by a "[Memorandum for the Commandant of the Marine Corps,](#)" from Brigadier General George W. Smith, Jr., Director, Marine Corps Force Innovation Office, Subject: United States Marine Corps Assessment of Women in Service Assignments, dated August 18, 2015, and marked "Pre-Decisional – Not Releasable Under FOIA." The 33-page report listed seven enclosures that were not made available. It is possible that the 4-page Summary that was released on September 10, 2015, referred to information in those enclosures. A September 23, 2015, article by *San Diego Union-Tribune* reporter **Gretel C. Kovach**, titled [Marines on Women in Combat: It's Complicated](#), included a link to the document. On the same day Military.com re-published the Kovach article, omitting the link to the actual Smith report, and adding a new, highly-misleading headline: [Marines See Benefits to Women in Combat, As Well as Risks](#). The only "benefit" mentioned from gender-integration was "general diversity," a dubious goal at best.

³ "Female Marines earned **422 Combat Action Ribbons in Iraq and Afghanistan.**" The decorations recognized their courageous service 'in harm's way' in a war zone. "However, none of those awards reflected a female Marine having to 'locate, close with and destroy the enemy' in deliberate offensive combat operations." (pp. 1-2, Smith report)

⁴ See [CMR Policy Analysis: New British Ministry of Defence Review Paper Shreds Case for Women in Ground Close Combat \(GCC\)](#), February 2015.

⁵ In July 2013 congressional testimony before the **House Armed Services Committee**, in response to a question from **Rep. Loretta Sanchez**, Marine **Lt. Gen. Robert Milstead** confirmed that assignments would have to be on the same involuntary basis as men. "*That's why they're called orders.*"

⁶ In May 2015 **Navy Secretary Ray Mabus** announced that he wants [1 in 4 Marine recruits to be women](#), and Vice Chief of Naval Operations **Adm. Michelle Howard** wants to see [25% of Navy ship crews to be women](#).

⁷ On several occasions since the 1990s, RAND has provided to the Defense Department reports that misstate issues and declare "success" for the consequences of their own policy recommendations, despite contrary evidence.

⁸ According to Army documents CMR obtained by FOIA, when inappropriate assignments make it necessary to change specialties, reassignment and retraining cost over \$30,000 per person. Decisions to drop out add over \$17,000 in basic training costs, not counting individual recruitment expenditures that are higher for women.

Interim CMR Special Report – Part II

U. S Marine Corps Research Findings: Where is the Case for Co-Ed Ground Combat?

Section B Marine Corps Research & “Mitigation Myths”

A. Background & Overview

Since 2012, the **U.S. Marine Corps** has been conducting extensive research on the consequences of assigning women to direct ground combat (DGC) units such as the infantry. Hundreds of military personnel and civilians -- including training and education commands, external advisors, consultants, think-tanks and academics -- have been engaged in various phases of the **\$39 million** research program coordinated by the **USMC Force Innovation Office** at **Quantico, VA**.¹

The full results of the Marines’ **Women in Service Restrictions Review (WISRR)**, reportedly over 900 pages, have not been revealed publicly. In 2014 CMR nevertheless obtained and analyzed preliminary results in a 54-page **Interim CMR Special Report – Part I**.²

In September 2015, more information about Marine field research results came to light.³ A 4-page summary and 29 additional pages highlighted abundant empirical evidence that mixed-gender units do not perform as well as all-male units performing **69% (93 of 134)** tasks common in the combat arms.⁴ In October, the *San Diego Union-Tribune* and the *Washington Post* obtained and reported on approximately 100 more pages of research results.⁵

The data shown in these documents make a convincing case for *retaining* sound policies that recognize physical differences and combat realities. There is no compelling reason why the armed forces should be ordered to include women in the infantry and other combat arms units.

With so many participants, consultants, and contractors involved in the three-year research program, it is not surprising that the documents include some passages, reflecting administration mandates, which are inconsistent with others. Some suggest theoretical ways to “mitigate” problems that are based on speculation or unrealistic scenarios that would not be workable.

For purposes of comparison and clarity, the **Center for Military Readiness (CMR)** has prepared a two-section analysis titled the **Interim CMR Special Report – Part II**.⁶ Section A provides analysis of major findings,⁷ while this Section B analyzes inconsistent information set forth in the most recent phases of Marine research.

On October 2 Secretary of Defense **Ashton Carter** promised, “My ultimate decision regarding any exception to policy request will be based on the analytic underpinnings and the data supporting them.” If Secretary Carter honors that promise, he will assign greater weight to Marine Corps empirical evidence than he does to speculations and mitigation myths.

B. Mitigation Myths

Unless the military services ask for and justify exceptions, the Obama Administration intends to assign women to direct ground combat (DGC) arms units such as the **infantry, armor, artillery, Special Operations Forces**, and **Navy SEALs**, starting in January 2016.

Women have served with distinction “in harms’ way” in war zones and their courage is beyond dispute. But the direct ground combat units targeted for gender-integration today are trained to *seek out and attack the enemy with deliberate offensive action*. At the point of the bayonet, survivability and lethality often depend on physical strength, endurance, and speed – qualities needed to apply lethal force under fire.

This analysis highlights some of the questionable proposals that have been offered to “mitigate” problems in order to make the administration’s policies “work.” Relying upon unsupported theories, convoluted calculations or “best case scenarios” that disregard known high risks, most mitigation ideas would make life in the combat arms more difficult and more dangerous.

Regardless of how they are presented, these proposals would harm both military women and men in the combat arms. The “gentlemen” of **ISIS, al-Qaida**, and other potential adversaries will not go easy on our troops because they are disadvantaged by flawed “gender diversity” policies.

In July 2015 the **General Accountability Office (GAO)** reported that the **Department of Defense** has no plans to evaluate the consequences of this social experiment. The administration has ordered implementation of the biggest social experiment imposed on the military since the Vietnam-era **Project 100,000**, but members of Congress have shown little or no inclination to conduct responsible oversight and hearings with independent experts.⁸

Under the **U. S. Constitution, Congress** has the duty to conduct responsible oversight. Absent congressional attention or independent scrutiny, Pentagon officials and professional consultants will proceed with plans to implement policies known to elevate risks and endanger lives. The same advocates will evaluate their own work and spin the results as a complete “success.”

Given the depth and quality of the USMC research, members of Congress should objectively consider the quality of its findings, taking care to separate credible information from speculation. Lives and national security are at risk, and support for our troops demands nothing less.

Negative Consequences Over Time: “[S]ome of the initial negative impacts are likely to diminish over time...attrition rates...when compared to male attrition rates...are also likely to diminish over time.” (Summary & Conclusions, p. iv)

Response: This is speculation and wishful thinking. Physical differences between men and women can be narrowed with extra training and better nutrition, but since men have ten times more androgenic hormones than women, the same efforts make men even stronger.⁹

- a.) More than 20 years of studies and reports in the **United Kingdom** and the United States have found **no empirical evidence** that women’s comparative strength disadvantages can be diminished over time.¹⁰
- b.) Nor is there any evidence to support the notion that women will be more likely to forego personal and family choices in order to stay in the military while eligible for the combat arms. An official Army survey suggested that the opposite would be true.¹¹
- c.) It is more likely that gender-integration issues would persist and trigger even more complicated problems such as sexual misconduct. Despite untold millions in dollars and time spent to mitigate these problems, incidents continue to escalate.

Unit Cohesion: “[A]ny initial detrimental effects on cohesion can eventually be mitigated with good training and solid leadership.” (Summary & Conclusions, p. iv)

Response: This speculative comment mis-defines military cohesion in terms of social relationships or task accomplishment. However, experts who testified before the 1992 **Presidential Commission on the Assignment of Women in the Armed Forces** explained that military cohesion is not about liking others socially or working together on tasks. **Cohesion is properly defined as mutual trust for survival and mission accomplishment in battle.**¹²

Horizontal cohesion exists between members of a combat team. **Vertical cohesion** is properly defined as **mutual trust** between the Commander-in-Chief, officials in the chain of command, and subordinate troops that they lead. Superior strength and endurance are directly related to unit cohesion, which is built on mutual trust for survival in battle.

- a.) Marine research found that all-male task force units outperformed gender-mixed ones in **69% of ground combat tasks**, especially in **“specialties that carried the assault load plus the additional weight of crew-served weapons and ammunition.”**
- b.) In addition, “All-male squads, teams and crews and gender-integrated squads, teams, and crews had a noticeable difference in their performance of the basic combat tasks of **negotiating obstacles and evacuating casualties.**”¹³

Gender diversity mandates that disregard obvious physical differences between men and women would severely degrade both horizontal and vertical cohesion. Such policies would be inherently demoralizing since subordinates at all levels will witness their leaders assigning highest priority to “gender diversity” goals even at the expense of high standards, survivability, and superiority in battle.

One of the graphs illustrating these differences in physical performance is reproduced below.

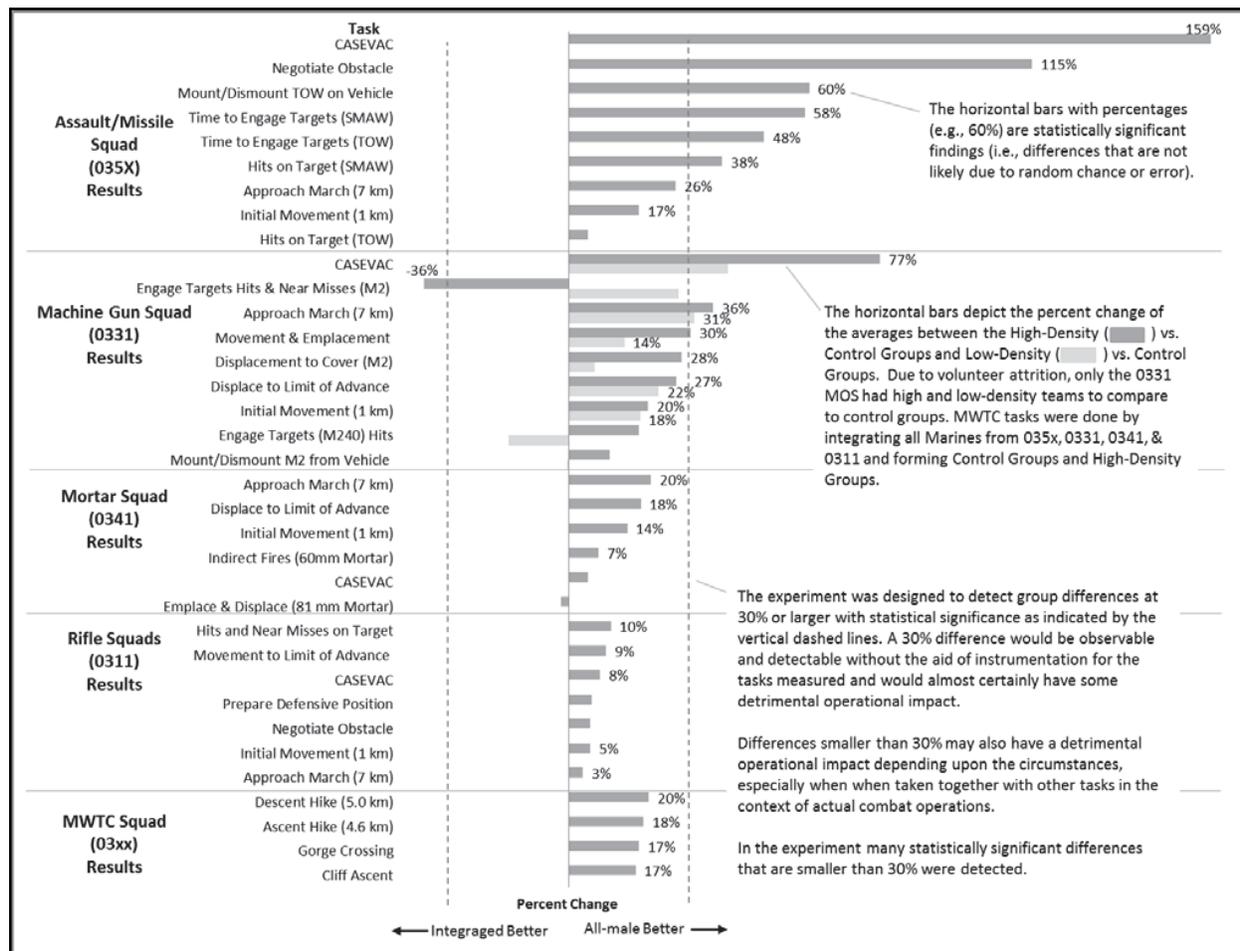


Figure 12. Infantry Summary Comparison of Percentage Change of All Tasks

Figure 12 presents a summary of the differences observed when comparing all-male infantry squads to integrated task force squads. The horizontal bars depict the percentage change observed when comparing the average all-male squad result to an average gender-integrated squad result on common infantry tasks such as casualty evacuation (CASEVAC). The numerical percentage presented adjacent to the bar is indicative of statistical significance, which is related to the size of the difference, variation, and the number of trials for that task. When a bar shifts to the right of the centerline the all-male group’s average is better than the integrated group’s, and vice versa. (Darker bars indicate “high density” units with more than two women; lighter bars represent “low density” units with two women or less.) (pp. 9-10)

Machine Gun Squad (0331) results were better for gender-mixed units in the “Engage Targets” category, but high-density squads took significantly longer to displace from the firing line compared to both the all-male and low-density integrated 0331 squads. (p. 25)

(Source: Marine Corps Operational Test & Evaluation, Activity Report, 14 August 2015, Ground Combat Element Integrated Task Force Experimental Assessment Report – For Official Use Only – p. 29)

Gender Diversity: “Further integration of females into the combat arms brings with it many of the general benefits of diversity that we experience across the spectrum of the workspace, both within the military as well as the private sector.” (Summary & Conclusions, p. iv)

Response: Unity of purpose in war is far more important than gender diversity, a quality that has little or nothing to do with combat effectiveness. Potential adversaries of the United States do not waste time on social engineering and mandates for “gender diversity metrics.”

- a) **President Harry Truman** strengthened the armed forces when he confronted irrational prejudice in the military with his 1948 **Executive Order** outlawing racial discrimination. The Order advanced equal opportunity, but its primary purpose was military necessity.¹⁴
- b) Racial differences are not consequential in battle, but gender differences are profound and relevant to ground combat realities. Assigning highest priority to gender diversity will not alleviate reality-based concerns about combat survivability and lethality in battle. There is no military need to assign women to combat arms units that attack the enemy.
- c) The Pentagon has enthusiastically embraced recommendations of the **Military Leadership Diversity Commission (MLDC)**, which instigated the drive for women in land combat in its 2011 Final Report.¹⁵ The Defense Department and military services are enthusiastically implementing MLDC recommendations for “gender diversity metrics,” another name for quotas. The MLDC also called for a “**Chief Diversity Officer**” (**CDO**) to enforce diversity quotas through the promotion process.
- d) The MLDC report admitted that the new “diversity management” would *not* be about “treating everyone the same,” adding, “This can be a difficult concept to grasp, especially for leaders who grew up with the EO-inspired mandate to be both color and gender-blind.” This concept, if implemented, would be a radical departure from the military’s honorable tradition of recognizing individual merit.

Small Numbers Won’t Matter: “[T]he number of females entering these combat arms MOSs and units likely will be a very small percentage – significantly lower than the current **7%** female Marine Corps population overall. Thus, the overall impact on unit readiness will be buffered by the dominant numbers of male Marines, and should not show a significant difference.” (Summary & Conclusions p. vii)

Response: This comment disregards the consequences of intense Defense Department pressure to achieve gender diversity quotas of **25%** females or more.

- a.) At a January 2013 Pentagon briefing, then-Joint Chiefs Chairman **Gen. Martin Dempsey** called for a “*critical mass*” or “*significant cadre*” of women in the combat arms. Gen. Dempsey added that if “*a particular standard is so high that a woman couldn’t make it, the burden is now on the service to come back and explain ... why is it that high? Does it really have to be that high?*”

- b.) Over time in actual practice, this would become known as the “**Dempsey Rule,**” meaning that a standard too high for women will be deemed too high. These changes would affect not just a few people, but the entire culture of the military. In a single generation, gender-neutral minimum standards could replace high, maximum standards needed to achieve combat superiority and lethality in battle.

Disciplinary Issues: “We also see benefits to integrated units in areas in which females traditionally have better outcomes than males; e.g., incidents pertaining to disciplinary issues.” (Summary & Conclusions, pp. iv-v)

Response: Aggressive traits in boys and men sometimes lead to disciplinary problems, but the statement ignores the consequences of inappropriate male-female relationships, both voluntary and involuntary. To state the obvious in gender-neutral terms, human beings are not perfect, and combat arms personnel are no more perfect than anyone else.

- a) Despite countless hours devoted to sensitivity and leadership training, various types of misconduct, both voluntary and involuntary, persist in gender-mixed units at all levels and in all communities. If “training and leadership” could eliminate these problems, male/female disciplinary issues would have declined long ago.
- b) The question is whether disciplinary issues that have a profound effect on discipline, morale, and unit cohesion should be extended into the combat arms. These would include sexual misconduct of all types, accusations of same, distractions that weaken concentration, deterioration of mutual trust and cohesion, personnel losses during legal proceedings, and other types of turbulence. There are no benefits that would compensate for the extension of complicated male/female issues into the combat arms.
- c) A 2013 Defense Department study survey of 13,000 women found that those who had served in close combat situations reported **twice as many sexual assaults** by male colleagues. (**4%** compared to **2.1%**)¹⁶
- d) In an official 2012 survey about moving women into combat units, many male Marines listed being falsely accused of sexual harassment or assault as a top concern. Thousands of men indicated that the change would prompt them to leave the service altogether.¹⁷
- e) **Disciplinary problems reportedly occurred during GCEITF operations.**¹⁸ A baseline survey done among task force volunteers “identified negative opinions towards social cohesion, disciplinary actions, unit readiness, and the overall success of individual Marines.” (p. 17) Officials should release the full results of all task force surveys.

Effect on Recruiting: “From a recruiting and propensity perspective, the opening up of these formerly closed MOS/units would likely have a neutral to positive effect, based on survey data.” (Summary & Conclusions, p. v)

Response: The next sentence continues: “However, **this presumes a voluntary assignment process**, if females were to be involuntarily ordered into combat arms units, this **could actually lower propensity and female enlistments.**” (Summary & Conclusions, p. v)

- a.) What if assignments are not voluntary? While testifying before the **House Armed Services Personnel Subcommittee** in June 2013, Marine **Lt. Gen. Robert Milstead** confirmed that women would be assigned on the same involuntary basis as men. ¹⁹
- b.) According to non-service specific **Joint Advertising, Market Research, and Studies (JAMRS)** surveys done between January 2013 and March 2014, the announced change in policies affecting women caused **12%** of male respondents and **20%** of females to say they would be **less likely to join the military**. (CMR has requested 2015 JAMRS survey results but officials are withholding them.) ²⁰
- c.) An official 2012 survey found that about **22%** of male Marines and **17%** of female Marines said they would be likely to leave if women move into combat positions. ²¹

Selection Process & Graduation Rates: “While we have seen **FLC [formal learning center]** graduation rates that range from comparable to considerably lower for females . . . by better screening [of] students before entry, we can substantially improve female graduation rates.” (Summary & Conclusions, p. vi)

Response: The next sentence continues: “The downside of such screening is that we would **drastically reduce the number of females eligible** for these [FLC] schools . . . We would also slightly **reduce the number of males eligible;**”

These statements summarize a 27-page section of the USMC Force Integration Plan, which may have been prepared by a consultant or contractor who used complex formulas to suggest ways to increase female graduation rates from MOS schools. ²² The mitigation plan is based on questionable data correlations, speculations, and misplaced priorities.

- a.) The suggested plan for boosting women’s MOS formal school graduation rates is based on an analysis of known performance scores and graduation rates of volunteer men and women in several **Infantry Training Battalion (ITB)** experiments in 2013-2014. Under the questionable presumption that performance scores would be similar among non-volunteers in the future, the plan would use basic physical fitness and combat fitness tests (PFT/CFT) to screen potential candidates for the combat arms MOS schools.
- b.) Officials would impose gender-neutral standards, such as 6 pull-ups instead of the current minimum 3, thereby excluding many women and some men who could not meet that mark. These recruits would be **“removed”** from the group sent to formal learning centers for combat arms MOSs.

- c.) By deliberately shrinking the pool of potential applicants to individuals most likely to succeed, such a system, in theory, would increase graduation rates, reduce injuries, and minimize **T2P2** personnel losses (transients, transfers, prisoners, and patients). The plan also is supposed to reduce expensive retraining and transfer costs when heavy MOS assignments do not work out. ²³

The plan is problematic for several reasons, starting with misplaced priorities.

- a.) In tough ground combat MOS training for infantry officers, Special Operations Forces and Navy SEALs, high failure rates are built into the program. Rigorous training excludes the majority of aspirants while finding and preparing the few remaining who really do have what it takes to be a Special Operator under extreme land combat conditions. The primary goal should be excellence and combat superiority, not gender diversity goals.
- b.) According to **Dr. William Gregor**, an expert in military physiology, screening programs based on gender-neutral PFT/CFT scores could cause the services to lose hundreds of potential graduates by excluding large numbers of men who very likely would have graduated. ²⁴
- c.) Recruiters who work hard to find qualified, willing recruits are sure to oppose an arbitrary plan to screen out significant numbers of male and female prospects, in exchange for a few female trainees who might, in theory, succeed.
- d.) The proposed screening plan also would exclude great numbers of female prospects who want to serve their country and would otherwise become fine Marines. In a 2013 test, female Marine Corps boot camp recruits were required to perform three pull-ups, the male minimum. The mandate was suspended indefinitely because **55%** of the female trainees could not do the three pull-ups. (Flexed-arm hangs are permitted instead.)
- e.) In addition to these pre-emptive losses, talented female Marines would be more likely to leave early due to what **Brig. Gen. George Smith** described as the “often **extreme physical demands** of infantry, reconnaissance, and special operations occupations.” ²⁵

Even if adopted, the screening plan probably would meet the same opposition as the **Military Entrance Physical Strength Capacity Test (MEPSCAT)** -- a detailed plan to match individual capabilities to MOS assignments that the Army proposed in 1982.

- a.) Initially, the **Defense Advisory Committee on Women in the Services (DACOWITS)** supported the MEPSCAT, but later opposed it for being a “barrier” to women’s careers. As a result, the plan was never implemented as planned. ²⁶
- b.) PFT and CFT exercises, which are gender-normed and different for men and women, measure and help to maintain physical fitness; they were never intended to evaluate or prepare individuals for direct ground combat assignments.

- c.) A perfect pullup PFT score is 20 for men, 8 for women. If requirements for men are made gender-neutral, there would be no incentive to do 20 pull-ups or more. Over time men will emerge less strong and less prepared for the violence of direct ground combat.
- d.) Many studies in the U.S. and Britain have shown that men are more likely to sustain strength, endurance, and deployability during a full military career.²⁷ Replacing otherwise qualified men with women who meet minimal PFT/CFT requirements would exclude men who have a greater potential for training up to standard in MOS schools,²⁸ and for staying in the military for a full career.

These negative impacts on recruiting and retention, which are essential for maintaining the **All-Volunteer Force**, cannot be justified.

Tolerance of Higher Levels of Risks: “This decision [by Marine Corps leadership] will clearly be influenced by the levels of risk described, and the ability to mitigate those risks, balanced against the beneficial aspects of integration.” (Summary & Conclusions, p. viii)

Response: There are no “beneficial aspects of integration” that would justify elevated risks in direct ground combat operations. The Assessment noted that for measured tasks in the GCE-ITF field tests, “[I]ntegrated teams typically performed significantly (statistically) worse than all-male teams, especially within the infantry MOSs and the casualty evacuation (CASEVAC) tasks.” (p. 13)

- a.) The report provided detailed evidence, related to each MOS, in support of this statement: “Females have less strength than males in both upper and lower body, leading to **lower levels of performance on physically demanding tasks.** (p. 13) Subsequent pages provide brief summaries of detailed data presented in the **GCEITF Experimental Assessment Report** produced by the **Marine Corps Occupational Test and Evaluation Activity** cited in footnote #5. (Also see **MCOTEA** graph reproduced on page 12 of this report.)
- b.) In addition to infantry and CASEVAC performance differences, MCOTEA data highlight physical strength differences, target accuracy with weapons, ability to negotiate obstacles, and occupational-related injuries. In comparison to men, female participants were found to have **40% of upper body strength** and **60% of lower body strength.**
- c.) In addition, the report listed factors affecting survivability, lethality, and mission accomplishment, such as handgrip strength, marching speed under load, VO2 capacity (measuring endurance,) muscle mass, and body size.

In all of these factors, women clearly are disadvantaged. Increasing their numbers, therefore, would elevate risks for all personnel and combat missions. The Marines and other services should not be forced to “tolerate” levels of risk such as this.

Effects of Gender Integration on Task Execution: During task force personnel evacuation (CASEVAC) testing, “the 0341s (mortarmen) showed no differences in evacuation times . . . There was no significant difference between the integrated 0341 squad and the all-male 0341 squad with respect to emplacement and displacement times.” In addition, “During the destruction of captured munitions, integrated combat engineer squads showed no significant differences in times for loading, digging, unloading, or rigging for detonation.” (p. 16)

Response: The Assessment goes on to explain how “**male compensation** enabled integrated teams to complete at the same level as their all-male counterparts.” In squads with one or more women, **male Marines almost always did the heaviest work.** (pp. 16-17)

- a) For example, during CASEVAC testing, “the 0341s [mortarmen] primarily used a single-Marine **fireman’s carry** to move the casualty; in **16 of 18 trials**, a male Marine did this . . . The top one-third of the 0331 [machine gunner] results of the low-density [few women] squads was **almost exclusively male fireman’s carry results.**” (p. 16)
- b) With regard to 0341 [mortarman] squads, a “**masking effect that occurred within the emplacement portion is not captured by the current results.** It was observed that when slower members of the squad fell back during the initial movement, **their delay was hidden by the fact that the rest of the team began emplacing the 81-mm mortar system concurrently.** By the time the weapon system was fire capable, all members had arrived at the mortar firing position.” (p. 16)
- c) In the most demanding portion of the combat engineer testing, “**male engineers were responsible for picking up, moving, and lifting 155 mm artillery rounds onto a 7-ton truck**, whereas **females would position themselves on the truck** and only be responsible for receiving the round and preparing it for onward movement.” (p. 16)
- d) The Assessment also noted that when researchers compared integrated 0311 [rifleman] squads to all-male 0311 squads, there were no significant differences in times, but there was an issue with getting assault packs over the wall. “Prior to negotiating the wall, 0311 Marines removed their assault packs and individually threw them on top of the 8-foot wall prior to climbing. Females . . . were often noted as **requiring assistance from male squad members** in order to get their packs onto the wall.” (p. 17)
- e) Gender-integrated teams showed levels of achievement comparable to all-male units in some exercises, under controlled, limited conditions. As stated above, however, “**male compensations**” to make up for female strength deficiencies were needed to accomplish common heavy MOS tasks.

It would be unwise to rely upon “male compensations” under battlefield conditions – particularly in battles where there are no extra personnel to replace casualties.

Small-Unit Dynamics: “During the MSU research, all-male teams perform better at tasks requiring low-levels of problem solving skills; however, integrated teams with one female perform as well or better at tasks requiring a high degree of problem solving.” (p. 17)

Response: The Assessment continues: “Of note, these live tests were completed with **non-fatigued Marines**; i.e., Marines were not required to conduct any physically demanding tasks prior to performing the live testing. Therefore, **the impact of fatigue was not a factor in this assessment.**” (p. 17)

- a.) **Fatigue matters.** According to the December 2014 report of the **British Ministry of Defence**, “Survivability in combat is, in part, predicated by physiology . . . There will be some women, amongst the **physical elite**, who will achieve the entry tests for GCC roles. But **these women will be more susceptible to acute short term injury than men** . . . [W]omen have a **twofold higher risk of musculoskeletal (MSK) injury.**”²⁹
- b.) The British Ministry of Defense report also found, “[Qualitative studies] suggest that the relative strength of women, configured to men, when carrying the combat load are likely to result in the **early onset of fatigue. This is likely to result in a distinct cohort with lower survivability in combat.**”
- c.) In addition, “Similar research points to a **reduced lethality rate**; in that **combat marksmanship degrades as a result of fatigue** when the combat load increases in proportion to body weight and strength.”

Claims that women’s undefined “problem-solving” capability would be a suitable trade-off for the physical realities described above are not credible – especially when higher rates of injury and non-deployability due to other medical reasons are factored in.

Unit Readiness: “University of Pittsburgh research indicates that injury prevention programs would eliminate the preponderance of time-loss injuries suffered by ITF [integrated task force] females . . . While there may be higher attrition among female Marines in newly opened occupational fields, in previous integration efforts these differences faded over time.” (p. 18)

Response: The statements above, which are not supported by examples or data, cannot disguise findings on the previous page: “Historically, the **non-deployable rate for female Marines is significantly higher than male Marines (up to 4x higher)**, and non-deployability is predominantly due to **medical reasons.** (p. 17)

“Further, gender integration may increase the rate at which female Marines become non-deployable – an effect that might be felt at the company/battery level . . . **training events injured ITF females at approximately twice the rate of their male counterparts.**” (pp. 17-18)

Previous Gender Integration Efforts: “A thorough review of previous gender-integration experiences, in particular the opening of Marine Corps logistics and aviation occupational fields, suggested that unit and personnel readiness do not change significantly following gender integration. . . Ultimately, the effect of gender integration, at both the unit and individual Marine level, was largely determined by leadership and training.” (p. 18)

Response. The information provided to support the claim primarily relates to military women’s careers and lack of bias against them. This is nothing new. For decades, Defense Department reports have indicated that military women are promoted at rates equal to or faster than men.

In addition, Marine logistics and aviation MOSs are not comparable to infantry and other direct ground combat battalions that seek out and attack the enemy with deliberate offensive action. The issue is combat effectiveness, not career opportunities.

Experiences of Other Nations: Marine Corps Force Innovation Office personnel conducted several visits to exchange information with commanders of gender-integrated units in allied armies. “[A] thorough review of the experience of **NATO** and **Allied nations** was conducted. The review of these studies indicated that concerns about the detrimental impact of women on military readiness and cohesion have not materialized.” (p.19)

Response. Report pages released so far do not provide details of what MCFIO personnel found when they visited armies of **Israel, Britain, Canada, and Australia.** ³⁰

- a.) Nor do the pages released explain why the allied nations in question do not use women in direct ground combat units comparable to DGC units in the United States. There are no discussions of gender-integration policies of potential adversaries, such as **North Korea, Iran,** and jihadist forces such as **ISIS** and **Al Qaeda.**
- b.) The final sentence in this section is footnoted to a person associated with RAND Corporation, which has been a strong advocate for women in direct ground since the early 1990s. ³¹ The comment is an opinion, not a fact supported by evidence.

Gender Integration & Deployability Rates: “Research conducted by Allied nations indicates that female Marines will be at great risk of overuse injury, but this risk can be mitigated with proper training.” (p. 21)

Response: There is no evidence to support assurances about proper training substantially mitigating risks of debilitating injury.

- a.) The same paragraph notes, “Historically, female Marines become non-deployable at approximately **three to four times** the rate of male Marines.” (p. 21)
- b.) The paragraph refers to efforts by the **Israeli Defense Forces (IDF)** to reduce overuse injuries, adding, “However, due to differences in operating environments, force

composition, public law, and employment patterns, it appears these techniques would be **unsuitable for the Marine Corps.**” (p. 21)

- c.) “[S]ome aspects of the IDF policy equate to **gender-normed standards**. For example, based on their load carriage index (LCI) for tactical movements, female IDF personnel are limited to **33% of their body weight**, while males are limited to **60% of their body weight**. Such standards violate the gender-neutrality requirement established by the SecDef, and the law prescribed in the NDAA 2014 mandate.” (p. 25)
- d.) “During the GCEITF, there were **significantly higher injury rates** for hiking MOSs . . . compared to riding MOSs.” (p. 21) “In the U-Pitt data set, the injury rate for Hiking MOSs is **45.3%** (63/139); the injury rate for Vehicle MOSs is **11.1%** (6/54). (p. 23)
- e.) Over a four year period (FY08-12), female Marines became **medically non-deployable (MND)** at rates four times greater than men’s. (**20.2% - 5.4%**) (p. 21) Disproportionate rates of MND losses among women likely would increase even more in the physically demanding combat arms. Personnel losses would be far more disruptive to others in small teams, such as infantry squads and tank crews, than they would be in larger combat support groups.

RAND Predictions on Cohesion: “In the end, meta-analysis of prior gender integrations efforts found that the detrimental effects on cohesion can be mitigated through good leadership, cohesion-building activities, and a shared sense of identity among men and women.” (p. 21)

Response: This unsupported comment is footnoted to RAND National Defense Institute researchers and a February 2015 paper that is unavailable for review. The comment inaccurately describes cohesion in civilian terms such as getting along socially or working together on tasks, not mutual trust for survival in combat.

- a.) The report continues, “Analysis suggests that **lowering standards or giving women preferential treatment would be detrimental to cohesion and morale.**” (p. 30)
- b.) Surveys of GCEITF personnel were conducted during the forming period, the training period, and the research period. The surveys found that “**Volunteers’ perceptions regarding the effect of women on combat effectiveness declined over time.**” (p. 30)
- c.) “Volunteers were divided by gender regarding their support for female Marines in combat roles, with females strongly supporting. Post-training, cohesion levels averaged **medium to good** across the ITF, with **31%** males and **36%** reporting very good cohesion. Post-assessment, the average cohesion levels dropped to **medium, trending to poor.**” (p. 30)

These findings, observed during a short-term, controlled experiment, suggest that cohesion would decline even more during overseas deployments and direct ground combat conditions.

Long-Term Monitoring & Assessments: The **General Accountability Office (GAO)** reported in July 2015 that **the Defense Department has no plan to monitor or evaluate the WIC social experiment.** ³² (p. 32)

Response: GAO recommends that the Defense Department devise such a plan, which will very likely involve outside contractors such as RAND. ³³

- a. Since the 1990s, RAND has produced a series of liberal polemics advocating for causes such as women in combat and gays in the military. ³⁴
- b. If RAND or other organizations that advocated for women in the combat arms are invited to evaluate the results of their own recommendations, and to withhold problematic information, all social experiments will be declared “successful,” no matter what.

C. Conclusion

When multi-phased research projects began in 2012, officials expected that results would prove the research study hypothesis: *“An integrated unit under gender-neutral standards will perform equally as well as a gender restricted unit; hypothesis will be tested via operational evaluations.”* Instead, scientific data resulting from the unprecedented research program have disproven the hypothesis.

Advocates of women in combat have tried to discredit the results by raising smokescreen arguments. Navy Secretary **Ray Mabus**, for example, criticized the GCEITF research methodology because test results reported numerical averages and percentages, instead of individual performances. Said Mabus, “The Marines have never been about being average.”

Either the play on the word “average” was pure sophistry, or Secretary Mabus seriously misunderstands statistical analyses that University of Pittsburgh experts used in scientifically measuring male and female task force performances in the field.

Data points that determine statistical averages and comparative percentages are derived from the performances of multiple research participants. Policy-making conclusions should not be based on the best or the worst individual performances alone. Strong military forces depend on core values and unity of purpose that puts national security first. These qualities must not be compromised in pursuit of “gender diversity metrics” or any other politically motivated goal.

The Center for Military Readiness calls on members of Congress to shoulder the constitutional responsibility to conduct responsible oversight *before* harmful policies go into effect. In view of empirical evidence produced in the past three years, the administration’s plans to proceed with gender integration in the combat arms should be objectively reassessed. Major decisions regarding military women should be rooted in reality, not wishful thinking or mitigation myths.

¹ In addition to six Marine Corps organizations, the following external agencies participated in the WISRR research: **University of Pittsburgh Warrior Human Performance Research Center (U-Pitt)**, **Center for Naval Analyses (CNA)**, **RAND Research & Development Corporation**, **Naval Health Research Center (NHRC)**, **Michigan State University (MSU)**, **Center for Strategic & International Studies (CSIS)**, and **George Mason University**.

² For more information on earlier stages of the USMC research, see various articles posted on the CMR website, www.cmrlink.org. Part I in this series is posted here: [Interim CMR Special Report, Sept. 2014, U.S. Marine Corps Research Findings: Where Is the Case for Co-Ed Ground Combat?](#) This is an [Executive Summary](#).

³ CMR: [Memo to Secretary Mabus: Marines' Lives Matter](#), September 2015.

⁴ [Analysis of the Integration of Female Marines into Ground Combat Arms and Units](#), marked "Pre-Decisional – Not Releasable Under FOIA. These pages were covered by a [Memorandum for the Commandant of the Marine Corps](#) from Brigadier General George W. Smith, Jr., Director, Marine Corps Force Innovation Office, Subject: United States Marine Corps Assessment of Women in Service Assignments, dated August 18, 2015.

⁵ [Ground Combat Element Integrated Task Force Experimental Assessment Report, Marine Corps Operational Test and Evaluation Activity, K. M. Moore, Col., USMC](#), Director (MCOTEA), Approved August 14, 2015, marked Pre-Decisional – Not Releasable Under FOIA. It appears that two activists for women in combat obtained these pages and provided them to selected newspapers.

⁶ CMR: [Marines Set Sound Priorities: Survivability and Lethality in Battle](#), October 2015.

⁷ [Interim CMR Special Report – Part II, Section A: USMC Research Findings: Where is the Case for Co-Ed Ground Combat?](#) October 2015. This report is posted on CMR's website, www.cmrlink.org.

⁸ Kelly M. Greenhill, *New York Times*, [Don't Dumb Down the Army](#), February 17, 2006. During the **Vietnam War**, Defense Secretary **Robert S. McNamara** created Project 100,000 to help approximately 300,000 men who annually failed Army aptitude tests. Many "**Category IV**" recruits, known as "**New Standards Men**," were relegated to "soft skill" jobs or the infantry, where they were 2 ½ times more likely to die in combat. Eleven times more had to be re-assigned, and 9 to 22 percent required remedial training. New Standards Men involved in the failed experiment fared no better than non-veteran counterparts, and many suffered post-combat psychological problems.

⁹ Letter from **Rear Adm. Hugh P. Scott, MC, USN (Ret.)**, Letter to **House Armed Services Committee** Chairman **Howard P. "Buck" McKeon**, June 22, 2012. Excerpt: "While men and women have an equal number of muscles and muscle fibers, the strength difference relates exclusively to muscle size that is determined by testosterone levels. Because women have less testosterone than men, they have smaller muscle fibers that result in the development of small-size muscles; in effect, women have less muscle to activate. That also is the reason why women develop less muscle when training with weights and exercising."

¹⁰ Interim CMR Special Report, Part I, [Partial List of Studies and Reports Relevant to Research on Women in Direct Ground Combat](#).

¹¹ AP and *USA Today*: [Few Women Want Combat Jobs, Survey Says](#), Feb. 24, 2014. Among Army women surveyed, **92.5%** said they would not accept land combat assignments if they were offered.

¹² Report of the Presidential Commission on the Assignment of Women in the Armed Forces, November 15, 1992, CF 2.5.1, p. C-81.

¹³ See CMR Interim Report Part II, Section A, endnote #7 *supra*, for specific references. The MCOTEA report (Endnote #5, *supra*) provides detailed comparisons of the performances of all-male and gender-integrated units.

¹⁴ Presidential Commission, Endnote #18 *supra*, CF 1.33 and CF 1.33A, p. C-40.

¹⁵ [From Representation to Inclusion, Diversity Leadership for the 21st-Century Military](#), Final Report, March 15, 2011. Instead of being blind to racial and gender differences, the MLDC report recommends race and gender consciousness. It repeatedly pushes for "diversity metrics," which are supposed to enforce race- and gender-conscious "inclusion" that goes beyond EO, and "needs to become the norm." (p. 18, 97)

¹⁶ Andrew Tilghman, *Navy Times*, [Female Combat Vets Report More Assaults](#), Oct. 14, 2013, p. 10. Researchers found that women in a high-stress, life-threatening combat setting may find it more difficult to identify, diffuse, or avoid high-risk settings for sexual assault and harassment.

¹⁷ Julie Watson, AP, [Marine Survey Lists Concerns on Women in Combat](#), Feb. 1, 2013.

¹⁸ Hope Hodge Seck, *Marine Corps Times*, [Grunt Life: Marines Dish on the Corps' Women in Combat Experiment](#), Sept. 7, 2015.

¹⁹ **Rep. Loretta Sanchez** (D-CA) asked Lt. Gen. Milstead about women who aren't interested in "that combat thing." Could such assignments be a matter of "choice?" Gen. Milstead responded by noting that military assignments are not voluntary. "That's why we call them orders," he said.

²⁰ USMC Recruiting Command presentations titled [Female Enlisted Marine Accessions Brief to DACOWITS](#), Col. Smitherman, March 2014, p. 7; and Col. T. D. Trenchard, [Efforts to Influence Propensity to Serve and Increase Female Accessions](#), 19 September 2014, p. 7. CMR obtained additional data regarding propensity to serve in the Marine Corps from June 2011 through Spring 2014.

²¹ CMR: [Survey of Marines Fails to Show Support for Women in Direct Ground Combat Units](#), posted on www.cmrlink.org, February 2, 2013.

²² Pages referenced appear the USMC Analysis linked in Endnote #4, *supra*.

²³ Army documents obtained under the Freedom of Information Act indicate that the estimated re-assignment cost for each individual would be **\$30,697** per soldier, with an additional **\$17,606** being lost for individuals leaving the Army, not counting higher recruiting costs for women. See CMR Policy Analysis, [Co-Ed Combat Tests Hazardous to Women's Health](#), Aug. 2015.

²⁴ In an October 22 email on file with CMR, Prof. William J. Gregor, an expert in military physiology, explained how the losses might occur. "To understand the effect of screening you need to keep track of the changes in populations; i.e., how many are screened out and how many graduates are screened out. Table 4-4 through 4-7 will serve as an example. In Table 4-4: women 124 grads/359 started. If I require all women and men to do 6 pull-ups, Table 4-5 tells me that only 184 women start and 70 graduate. Thus, requiring 6 pull ups means 175 women are not permitted to start (359-184) and I lose 54 women graduates, 30% of women excluded would have graduated. However, requiring 6 pull ups for men means only 1620 start but I only exclude 19 from starting (1639-1620) and I lose 18 male graduates; 95% of the excluded males would have graduated. In other words, applying this screening criteria to men is unwise because it only screens out men who actually will succeed. Applied to women this screening criteria avoids training 121 women who will not graduate at the cost of 54 women who would; a potentially reasonable trade-off. The criteria is not gender neutral because it does not identify men who would fail and, thus, is unwise."

²⁵ [Statement of Brig. Gen. George Smith, Jr.](#), Director Marine Corps Force Innovation Office, p. 7.

²⁶ **Brian Mitchell**, *Women in the Military: Flirting with Disaster*, 1998, p. 109. Also see paper by William J. Gregor, footnote #26 *infra*, pp. 5-6. MEPSCAT was recommended as part of the 1982 **Women in the Army Policy Review**.

²⁷ Interim CMR Special Report, Part I, [Partial List of Studies and Reports Relevant to Research on Women in Direct Ground Combat](#)

²⁸ William J. Gregor, PhD, Professor of Social Sciences, School of Advanced Military Studies Fort Leavenworth, KS, [Why Can't Anything Be Done? Measuring Physical Readiness of Women for Military Occupations](#), a paper on physiology presented at the 2011 International Biennial Conference of the Inter-University Seminar on Armed Forces and Society. Excerpt: "The data clearly reveals a very large gap between the physical strength, aerobic capacity and size of Army men and women. Training men and women correctly improves the performance of both groups but it also widens the gap in performance."

²⁹ CMR Policy Analysis: [New British Report Shreds Case for Women in Ground Close Combat \(GCC\)](#), p. 3.

³⁰ Neither Britain nor Israel use female personnel in DGC units comparable to those in the United States. See CMR Policy Analysis: [New British Report Shreds Case for Women in Ground Close Combat \(GCC\)](#), and CMR: [Israeli Defense Force Decides: Armored Tanks Will Stay All-Male](#). The Canadian Forces are allied with the U.S., but their primary mission is peacekeeping, not offensive warfare. In a 1989 decision by the **Canadian Human Rights Tribunal**, all combat positions in the **Canadian Forces (CF)**, except submarines, were opened to women. The primary purpose was equal opportunity. No attempt was made to consider the impact on operational readiness or unit effectiveness. (Presidential Commission Report, CF 1.129, P. C-67) The Australian push to assign female soldiers to land combat units was the direct result of a sex scandal at the nation's military academy. Even though Australia offered various incentives, interest among women has been low. The culture of the Australian military is not comparable to that of the United States.

³¹ Several times since the early 1990s RAND has produced papers advocating for women in combat and other liberal military/social policies. In 1997, RAND removed negative information from their own report on women in combat. See [CMR Analyzes 1997 RAND Study](#), Oct. – Nov. 1997. RAND also ignored a congressional mandate in the National Defense Authorization Act (NDAA) for 2006 to produce a report on *de facto* repeal of the 1994 Department of Defense collocation rule. RAND produced what CMR called the [Rubber Stamp RAND Report](#) 17 months (and two congressional cycles) beyond the legal deadline.

³² U.S. Government Accountability Office (GAO) Report, Military Personnel: [DoD is Expanding Combat Service Opportunities for Women, but Should Monitor Long-Term Integration Progress](#), July 2015. A section of BG General George Smith's memo cited in Endnote #11 *supra*, supports a "Long-term Assessment" of the results of gender integration. It mentions RAND and/or CNA (Center for Naval Analysis) to do the assessments, for as long as 10-20 years. (Sec. 5, p. 10)

³³ Appendix II of the GAO report cited above lists many outside organizations that have been working on various phases of the **Women in Services Restrictions Review (WISRR)**. The Defense Department Office of the Under Secretary for Personnel & Readiness lists RAND as the primary contractor. RAND also has been primarily responsible for a still-undisclosed study for **Special Operations Command (SOCOM)**, which considers RAND to be an objective organization.

³⁴ See Endnote #30, *supra*.