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 VO2 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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