

The Pentomic Division

A Cautionary Tale

by LtCol Thaddeus Drake, Jr.

“The American Army did not respond to the massive destructive firepower of tactical nuclear weapons as it historically and logically should have—with measured, conservative improvements to the formations that had brought it success in its recent major wars, modifications that might have focused on incorporating technologically advanced equipment. Instead, the Army implemented a completely new and untried organization that relied on a fleet of Air Force transport planes that did not exist.”¹

—Kalev I. Sepp

By most measures, the latter half of the 1950s was not a good time for the U.S. Army. The Korean War concluded with an unsatisfying whimper in 1953, the budget battles were beginning again with the Army sure to be the primary target for reductions, and there was wild speculation about the future of warfare—most of which did not include a robust ground force composed of conventional infantry, artillery, and tanks.² Fast forward 70 years, and a similar feeling exists for the Marine Corps. Although the Marine Corps was heavily involved in Operations IRAQI FREEDOM and ENDURING FREEDOM, decision makers within the halls of Congress and the Pentagon have largely relegated those conflicts to the status of ancient history. The *National Defense Strategy*, national security think tanks, and the military services all believe that

>LtCol Drake will assume command as Inspector-Instructor, 1/24th Mar on 3 September. He is a graduate of Marine Corps Command and Staff College and the School of Advanced Warfighting.

so-called great power conflict has replaced limited conflict again.³ Today, as the Marine Corps explores what that phrase actually means, it has quickly decided that the previous way it conceived of contributing to great power conflict—World War II style forcible entry operations, augmenting the Army to serve as a second land army when necessary, and large scale amphibious strikes and raids on enemy positions—is neither desirable nor workable. Thus, the thinking and planning for how to best configure the Marine Corps for an

assumed future war has begun again. What was old is new again; just as the Army found itself in search of a mission in the late 1950s, the Marine Corps is now searching for the same. In response to the pressures of the late 1950s, the Army restructured itself to fit the unique context of the time; however, this context led to a number of dangerously flawed assumptions and decisions. As the Marine Corps moves forward with redesigning the force for future war in the 21st Century, we should look backwards to this time that “rhymes” with our own; we must recognize and beware the pitfalls of the “Pentomic Division.”

The Context: Then and Now

The geopolitical context of the 1950s was a fraught one. Although the United States emerged from World War II a victor, the broad specter of international communism rapidly emerged from the specific threat of the Soviet Union in the late 1940s. By the early 1950s, the threat was clear across the globe—and most obviously in the form of the Korean War. In the myopia of the present moment, the emergence of the Cold War often appears as a singular event on the historical timeline. At the time, it was nothing of the sort. There were contentious debates about the place of the United States in the world, which nations we should ally with, and how to best constrain what appeared to be the unrestrained ambition of the Soviet Union to spread its ideology.⁴ Although the specific substance of these debates is obviously different from modern discussions, there is nonetheless a background drumbeat of similarity to our current



The “Pentomic Era” saw U.S. Army development of tactical nuclear weapons systems like the M28/29 “Davy Crockett” recoilless gun with M-388 sub-kiloton fission warhead to arm novel infantry formations. (U.S. Government DOD/DOE photograph.)

moment. Indeed, just as ongoing limited conflicts as well as large scale ideological competition shaped the geopolitics of the time, there are shadows of the same today. These include China’s maritime insurgency in the East and South China Seas, overt conflicts on many of the contested regions around its borders, extensive gray zone activities in both physical and cyber domains, extensive “lawfare,” and a multitude of other actions that appear focused on competition with the United States, for example.⁵

Within the geopolitical context of the 1950s, the United States was also developing a rapidly changing and emerging technology based military strategy. Despite—or perhaps because of—the conclusion of the Korean War, the national strategy for the use of force that emerged from the Eisenhower administration in the mid-1950s was one focused almost entirely on the employment of nuclear weapons. The Army leadership and rank and file alike rapidly began to understand that this emerging strategy involved massive employment of these weapons—with platforms and systems that had little to do with the massed infantry, armored, and artillery divisions that won World War II and fought to a stalemate in

Korea.⁶ The Army realized that national leadership had neither the desire nor intent to employ large formations of ground combat forces. In order to contribute (and indeed, in order to retain a large share of the defense budget), there would need to be a fundamental change in the structure and mission of the Army. This strategic reality again parallels the current Marine Corps’

the structure and mission of the Marine Corps.⁷

Inside the 1950’s Army, the realization of the strategic need for change combined with a very new emerging tactical environment. Whereas the Army of World War II and Korea employed large massed formations to create local superiority, the emergence of tactical nuclear weapons turned this entirely on its head. Indeed, given the incredible destruction associated with a nuclear battlefield, massed formations fighting this sort of war would be a major liability.⁸ Dispersion thus became a new watchword across the service, and this new reality aligned with new technology and manpower changes as well. There was a fervent belief across the Army that new communications capabilities would enable exactly the sort of dispersion that the nuclear battlefield would require. The Army also recognized that to be successful on this new, technologically advanced and dispersed battlefield, it would need better trained, older, and more intelligent soldiers in its front-line units. It rapidly became “bigger, smarter, better paid, and more reliant on machines.” Concomitantly, it also became more specialized and fragmented.⁹ Many of these same issues appear in a slightly different guise in the current force design efforts within

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emerging force design changes as the Corps reconfigures itself to exist in a world of new technology shaped by the modern geopolitical context described above. Indeed, the emerging consensus within the Corps is that our previous methods of supporting the Joint Force (and therefore national strategic interests) are no longer viable, and thus there must be a fundamental change to both

the Marine Corps (and throughout the larger defense establishment). Indeed, the belief in a need for dispersion almost over everything else has renewed vigor, although it is now comes from the broad proliferation of precision munitions and more capable enemy reconnaissance-strike complexes instead of ubiquitous tactical nuclear weapons.¹⁰ The need for more robust and capable communica-

tions enabling dispersion is still present (although the exact capabilities have obviously changed), and finally, there is again a plan to bring in older, more intelligent, more mature service members—although the retention problems associated with such an enlisted population were only ever partly solved by the Army and will be exceptionally difficult for the Marine Corps to solve as well.

Finally, in this era, the Army dealt with significant issues within the service regarding roles, responsibilities, and its mission. There were many debates regarding specific weapons and the thinking of the Eisenhower administration,¹¹ but ultimately, the key question that Army leaders and the rank and file asked themselves was, “in a world where the strategic position of the U.S. government is massive retaliation—thus ensuring that any conflagration immediately turns into a nuclear exchange—then what role does the Army have?” The mere fact that this question existed led to dissatisfaction within the ranks, unsure senior leadership, and lack of a clear narrative for the employment of the Army. Ultimately, the Army latched on to three things as the savior of the organization: tactical nuclear weapons, missile forces, and a massive reorganization that prized their employment within the context described above: the “Pentomic Division.” The modern Marine Corps has made a similar assessment; as the Marine Corps has searched for a mission in the context of the re-emergence of great power competition in the past several years, many Marines have asked, “what, exactly, do we do here?”¹² The Commandant has focused the Marine Corps toward solutions that in many ways resemble the efforts of the 1950’s Army; to succeed in implementing them, we must ensure we do not make the same mistakes with the “roll-out” and continued development of this new organization.

The Pentomic Division

Ultimately, the geopolitical, strategic, and bureaucratic context described above combined with technological changes that drove key leaders within the Army to perceive the imperative for the Pentomic Division. The over-



M142 High Mobility Rocket System could provide Marine “stand-in” forces with the range and lethality needed to contribute to a naval campaign. (Photo by Cpl Aaron James Vinculado.)

all concept was developed and forced on the Army in a “top-down” manner based on several flawed and incompletely tested assumptions.¹³ The Pentomic reorganization, officially known as the “Reorganization of the Current Infantry Division (ROCID),” focused around the idea of flattening the command structure, providing combined arms at lower echelons than the Army had previously attempted, and creating a capability for decentralized units to rapidly aggregate and mass firepower at the critical point on the battlefield.¹⁴ Although President Eisenhower originally directed Army Chief of Staff, GEN Maxwell Taylor, to treat it as an experiment and minimize public fanfare, the concept moved forward to a full organizational redesign long before the institutional Army was able to collect and refine the results of the “experiment.”¹⁵ The redesign scrapped the proven structure of existing divisions for a more modern structure believed to enable the sort of decentralized action necessary in a nuclear fight. The new organization replaced the regiment and battalion echelons with five “battle groups,” each commanded by a colonel. Each battle group, in turn, was comprised of five combined arms companies commanded by captains.¹⁶ Although the removal of the battalion-level ech-

elon of command and some associated subordinate support units resulted in significantly smaller divisions, the reorganization greatly expanded the span of control for the division and battle group commanders. Despite the size reduction and expanded span of control, the Army somewhat disingenuously suggested that this provided a net *increase* in firepower due to increased flexibility and mobility of the formations and a redistribution of manpower to provide more “frontline strength.”¹⁷ Although it was a key planning assumption, the Army only sometimes directly stated that tactical nuclear weapons would be the key “gap filler” for these now understrength infantry and armor formations that would have to fight Soviet or Chinese armored and infantry divisions and corps. Several other key assumptions remained unstated and largely unexamined—mostly key tactical elements related to mobility, dispersion, and flattened command. Finally, there were significant issues with institutional “buy in” and further refinement.

Perhaps the most pernicious element of the transition to the Pentomic Division was the manner in which Army leadership pushed it onto the force. GEN Maxwell Taylor “announced [it] by fiat” at a public meeting without in depth consultation with his staff or

those Army organizations tasked to plan for and develop new concepts for future war.¹⁸ GEN Taylor based this decision on incomplete testing in Korea by a single division, scripted “experiments,” and limited wargaming efforts.¹⁹ The result of this effort was a force that neither believed in nor actively worked to support the success of the concept. Had it been developed and instituted with bottom up feedback and institutional buy in throughout much of the Army, it is entirely plausible that the units tasked with developing it could have facilitated iterative improvements and refinements. Instead, the rank and file did as they were told. They created the required Pentomic units but did not wholeheartedly accept the wisdom or utility of the change. At the first available opportunity, the Army declared the Pentomic Division a mistake and returned to something better—essentially the organization and structure that it used in World War II and Korea.²⁰

Although many of the changes in design and doctrine might have been executable and possibly even beneficial, the Army never had the opportunity to truly test them in large scale conflict. There were, nonetheless, many issues that the Army did not solve at the time and remain issues for units that intend to operate in this decentralized and dispersed manner even today. Communications while dispersed and at range, logistics support for dispersed units that could be easily isolated, the firepower necessary to execute the concept, and the right culture and personnel to execute such a difficult and decentralized mission were all either obviously missing or remained outstanding questions throughout the 1950s.²¹ Many of the solutions the Army proposed for these issues relied on either technology that did not yet exist or capabilities that the military was simply unlikely to acquire. In this sense, the Pentomic Division really was more of a marketing strategy than a realistic reorganization.²²

There are many elements of the Pentomic Division story that the Marine Corps should keep in mind as it proceeds with sweeping reorganization focused on the next war. The importance of institutional buy-in and

bottom-up refinement simply cannot be overstated. In a time of sweeping change inside the service, there must be room for debate, discussion, and iterative improvements on this sort of concept. We must also proceed with intellectual humility and remember that despite our current focus; we must also be ready for the unexpected. Indeed, in the case of the 1950’s Army, less than a decade after the sweeping changes that were intended to prepare it for nuclear war against the Soviet Union, it instead found itself fighting a very different war in South Vietnam—one for which its force redesign and assumptions about the future had left it entirely unprepared. The Army of the 1950s also spent insufficient time and effort on the most important piece of the reorganization it attempted—the manpower required to execute the concept. Although the concept itself was flawed, with the right people it may have evolved into something more useful. Instead, the real problems of the 1950’s Army were “the far more mundane challenges of acquiring, training, and retaining the skilled labor and managers necessary to function during peacetime.”²³ As the Marine Corps moves forward with *Force Design 2030*, it would serve us well to look backwards toward a time with similar context and use it as a cautionary tale.

Notes

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23. *Elvis’s Army*

