The Future of Fires
The Branches Remain Separate Specializations
By Lt. Col. (ret.) William Veitch

As a retired Air Defense Artilleryman I read the recent article by 1st Lt. Taylor Maroni entitled “The future of Field Artillery, merging with air defense,” as one can imagine, with some interest. My point of view is more positive, in that I do not believe Fires, the Field Artillery or air defense branches, and the United States military as a whole face an uncertain future. What we may face are threats that are yet to be defined, threats more of a peer nature, and perhaps organizational and materiel shortfalls due to funding constraints. We must first look at the threat(s) and then structure our military forces accordingly, within the constraints imposed by Congress, against a prioritized list of missions.

With respect to air defense, I have seen the branch’s history traced back to the coast artillery regiments within the Field Artillery. At the turn of the last century and through the First World War, coast artillery performed the mission of homeland defense, much as air defense has done since the 1950s. During the Second World War coast artillery became obsolete and units morphed or transformed into the anti-aircraft artillery (AAA). AAA units provided force protection to fixed assets and maneuver elements alike. It was units such as these that were the genesis of short range air defense (SHORAD) forces in the modern Army. Corps and above force and asset protection had its genesis in the NIKE Ajax and Hercules units of the 1950s. These later became our High to Medium Altitude Defense (HIMAD) forces; eventually including HAWK, Improved HAWK (IHAWK) and Patriot (before Patriot achieved an anti-missile capability just prior to Desert Storm). Today Patriot and Terminal High Altitude Area Defense (THAAD) units perform force and asset protection in the corps and above role, and C-RAM (soon to be Improved Force Protection Capability) performs protection of fixed assets.

Before there is an adjusting of Field Artillery and Air Defense Artillery job specialties, merging of missions, assigning additional missions, or creating hybrid/composite battalions one needs to have a clear
understanding of air defense concepts and control measures. In simple terms, an air defense unit detects, classifies (aircraft, cruise missile, unmanned aircraft systems, tactical ballistic missile, intercontinental ballistic missile), and identifies (friend, foe or unknown) an airborne object. However, depending on the rules of engagement for a given state or stage of alert, engagement authority does not necessarily exist at the firing platoon or battery level.

Air defense units, especially those such as Patriot and THAAD do not operate within an Army-only chain of command. More often than not, these units are under the command and control of either an Air Force or Naval commander in a multi-domain operational setting. From my days as an IHAWK firing platoon leader in NATO during the Cold War, engagement authority was held at the U.S. Air Forces Europe Sector Operating Center. Our missiles were under Centralized Command-Centralized Control. In practicing for wartime, this command and control (C2) relationship could be reduced to Centralized Command-Decentralized Control. An air defense unit was pushed to a lower echelon while higher echelons still held override authority. As communications networks overloaded or failed, or threats came in massive waves, the C2 relationship could go to Decentralized Command-Decentralized Control where engagement authority was held at the firing platoon or battery level.

With the advent of hypervelocity rounds on the battlefield, I remain unconvinced we are at a point of making any decisions going forward concerning combining the branches within the Fires community. Theoretically speaking, the advent of hypervelocity rounds may provide the potential for increasing the number of launch platforms available to counter an air and missile defense threat. However, as I have described above, engagement of such threats is seldom accomplished in a vacuum, or at the line unit level. More often, engagement is a coordinated Multi-Domain effort with decisions made at higher echelons. What I can see as a potential future outcome is hypervelocity equipped 155 mm air defense units interspersed across the battlefield with Patriot and THAAD reserved for countering missile threats.

In the very near, immediate future, after an almost 50 year estrangement of the branches, we must develop a true Fires community. I do not envision a time where a 155 mm conventional artillery battery commander rises to command a Patriot battalion. This is entirely two different skill sets and is not a good use of personnel, education, training and investment. My vision is more oriented on Basic Officers Leaders Course and Captain’s Career Course (what I knew as the officer basic and advanced courses). In both of these courses I am certain there are many common classes. In order to build community, I would combine all incoming 13 and 14 MOS personnel into these courses and teach all the common core to everyone in this integrated environment. Only after the core material was taught would I split the 13 and 14 MOS personnel out into their “specializations”. I would follow the same methodology with NCO schools. And who knows? At some point that hybrid officer or NCO capable of straddling both specializations may actually develop!

The article stated the rationale for splitting the branches was “Combat in Vietnam required the officer to arrive as a proficient Field Artilleryman and not a hybrid field and Air Defense Artilleryman. Army commanders in Vietnam simply did not have the time to train an Air Defense Artilleryman to be competent in Field Artillery [...]” who had had insufficient training in the basic techniques.” The same can be said for any of the conflicts that have followed, and that may follow. I would maintain that specialization is a plus, not a minus in our contribution to the Army fighting where it is told to fight, and winning where it fights. The main argument for splitting the branches was trying to teach officers both kinds of artillery prevented them from attaining the proficiency necessary in order to carry out basic functions in either specialty. That argument remains valid to this day. Fire direction and control of surface-to-surface assets is entirely different (terms, tactics, rules, procedures) than fire direction and control of surface-to-air assets. The current Multi-Domain Operations literature, including TRADOC Pamphlet 525-3-1 and Multi-Domain Operations RIMPAC 2018, stresses the need for modernized and layered air and missile defense. This leads me to believe we are still two branches going forward.

In closing, Maroni stated “A core tenant of the Field Artillery has always been the ability to perform degraded operations if the situation required it. As things currently stand, it is already a challenge for new fire control Soldiers to learn manual gunnery as they do not learn it at advanced individual training (AIT), and now they will have to learn the rocket side as well.” Her point is well taken and it is a shame manual gunnery is no longer taught in AIT. My final point, to the community at large, is we should learn and practice our degraded (manual) operations frequently in all branches. In a head-to-head battle with a peer, or near-peer competitor, we must expect to operate in a cyber and electromagnetic contested and degraded environment. Proficiency in manual operations is the key to winning in combat in degraded environments. An over reliance on our digital systems will prove fatal in such an environment. Innovate for the future, but remember your roots (past)!

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