The New 2012 Model Army MARS: Overhauled for Cyber Competition

By Bill Sexton, N1IN

The odds of it happening are infinitesimal, but ponder this narrative anyway. There’s a message for the Military Auxiliary Radio System (MARS) in it. The script is imaginary, but the message is not.

Just as January blizzards hit the U.S., enemy hackers launch a rolling cyber assault on the nation’s most vital computer networks. One day, electric power interconnections are the target. The next, it’s the pipeline and rail dispatcher circuits controlling fuel transport. Then food distributors. Intermittently, state EMA (emergency management agency) channels to Washington black out.


There are no lethal weapons needed, for this enemy’s strategy is to fracture public order and bleed the economy. How many days could the U.S. withstand it? Even if the electronic aggressors were ultimately thwarted, as surely they would be, what would the cost of recovery do to:

- The national debt?
- To unemployment?
- To the public’s faith in government?

The Army MARS leaders’ conference held in Dallas September 11-13 dealt primarily with administrative issues. One session, however, took up the Army auxiliary’s responsibility in what might be called “national” events like this month’s

Posing for a September 2012 class photograph in Dallas are, from left: William Gable, AAM6LA; John Hudman, AAA6TX; Bill Sexton, AAA9PA; Bob Mims, AAA1RD; Carmin Griffin, AAA9M; Dick Corp, AAA2RD; David McGinnis, AAA9O; Jim Hamilton, AAA4RD; John Halladay, AAA7RD; Al Melito, NETCOM; Steve Carver, AAA8RD; Larry Smith, AAA0RD; Mike Itnyre, AAA9RD; Steve Klinefelter, AAA9A; Dave Bock, AAA5MI; (representing Region 5); and Al Hardin AAA6RD.
scenario. The discussion was off the record, but it left no doubt that national contingency on such a scale is getting serious study in Washington and Army MARS is included in the planning.

In fact, recent exercise scripts sent down from the Department of Defense overtly test the ability of Army MARS to provide “Continuity of Government” communication.

Creating a ‘New Model’
MARS

The chief, Stephen Klinefelter, had only been in office four months when he summoned his 10 stateside region directors — all radio amateurs, all volunteers, and all holdovers. It was the first such meeting in MARS history. Until the Dallas session, most field leaders had never met him face to face, nor each other.

Some jaws dropped when Klinefelter opened the conference announcing that their traditional form of military control from above was over. Instead, the region directors (RDs) would have full responsibility for day-to-day operations in their bailiwicks. MARS Headquarters’ task would be scaled back to providing training and resources.

Moreover, the previously-announced “MARS Governance Executive Board” would actually be equivalent to the board of directors controlling a civilian corpo-

Looking back on his Dallas experience, one RD from the west called it “the dawn of a new Army MARS.”

With that matter settled, the opening session was turned over to a civilian staffer from the Department of Defense. His briefing, which was “for official use only” (a form of classification), added significant detail to the “contingency support” mission set forth so vaguely in the public documentation governing MARS. That, too, was without precedent.

He also discussed interoperation and security and some important new technology — new to MARS. And all that was before lunch on Day One. Such was the pace.

Why the Conference Now?

There’s a lot more to report from the three busy days at Klinefelter’s U-shaped conference table — complete with a video screen for displaying policy language as it evolved. However, it’s important to understand the context so let’s set the stage first:

- President Obama, in an Executive Order dated July 6, tightened up the administration’s to-do list for protecting essential communications against cyberattack, including control of radio spectrum and Internet access. Defense Secretary Leon Panetta’s task at DoD: “implementation and sustainment of [National Security/Emergency Planning] communications that are directly respon-

Jim Hamilton, right, from Florida, leads Region 4, which covers the largest number of states — eight. After retiring as an Army helicopter pilot, Hamilton took up a second career flying for a commercial airline. He’s working here with MARS Headquarters Public Affairs Officer Bill Sexton on a policy homework assignment.
sive” to the needs of the national leadership. (NOTE: See the sidebar “Executive Order — Assignment of National Security and Emergency Preparedness Communications Functions.” — N1IN.)

- Ten weeks later, Panetta announced the last of the “surge” troops sent to Afghanistan two years ago were back at their U.S. bases. Planning was already well under way to reshape the returned Army for postwar missions ranging from DSCA (Defense Support for Civil Authorities) in the homeland to readiness for rapid deployments overseas. Of course, DSCA is what MARS is mostly about.
- The Pentagon and its joint commands were hammering out an updated response to cyber warfare. With no major power looming as the imminent enemy, the altered mission would surely require shifting budget and clout on a tectonic scale. Washington would need a coalition unlike anything since World War II: A tight alliance of business and industry alongside the military, all patrolling their digital defenses against surprise attack from any quarter.
- And all this as Army MARS, which has been starved for resources at least since the first Gulf War, had finally caught the Pentagon’s attention. It was more or less accidental — or so it seemed — as the result of a misinformed investigation into the Winlink 2000 system’s vulnerability to hacking. (NOTE: Previous columns covered that fiasco in great detail. — N1IN)

Represented at Dallas were nine of the auxiliary’s 10 stateside regions. Another covers Europe, Africa, and Southwest Asia and was not included.

From the Fort Huachuca, Arizona headquarters of the Network Enterprise Technology Command (NETCOM, to which MARS is attached), the chief was joined by Al Melito, head of NETCOM G3’s long-haul communications section; David McGinnis, Army MARS operations chief; and Administrative Officer Carmin Griffin. Klinefelter and McGinnis alternated in the chair.

**Knowing Your Neighbor**

On the afternoon of Day 1, the RDs got a close-up briefing on operations of Region 6, one of the biggest and busiest Army MARS regional commands. RD Al Hardin, the conference host, brought along state officers from Arkansas, Louisiana, Oklahoma, Texas, and New Mexico.

The Chief’s plan is to rotate these twice-yearly conferences among the 10 regions in the U.S. so all the states can familiarize the governing board with their activities and ideas. This is yet another first.

By day’s end, the RDs had bonded into a real team: The former Vietnam helicopter pilot sitting next to a music teacher; the ex-Navy non-com facing a retired Army colonel across the table — all equals, and now in command.

The heavy lifting came on Days Two and Three, reviewing existing policies and carving out some new ones.

- Should the new software honcho be dubbed IT coordinator or chief technology officer?
- Who would have final responsibility for coordinating with state agencies? ... And so on.

Some issues were postponed for further discussion via teleconference.

Chief Klinefelter’s assessment a couple of weeks afterward: “The Dallas conference greatly exceeded my expectations. "This one being our first, there were no guarantees that the board would work together, solve problems, or make policy decisions,” he added. “All indications were good, but until you do it, you don’t know. Now, we are all looking forward to the future of the program, not just the next meeting.”

Interestingly, the larger strategic and tactical questions got precious little attention. Considering the sheer weight of organizational decisions at this first gathering, that shouldn’t be surprising. Even so, these questions still need to be asked.

For instance: What is to be MARS’s role in cyber-defense?

My guess: No different than in any other national-level calamity. We do high-frequency communications. We’re...
everywhere and we’re organized, as Klinefelter put it last winter, and that seems to have resonated up the chain of command.

But, to update a cliché, there’s still the crocodile in the closet: It is having three branches with roughly identical missions but no central coordinating mechanism. A genuine emergency before that’s fixed could result in having three quarterbacks on the field simultaneously calling plays nobody can hear through the interference.

Some Speculation on Alternatives

Unless all three MARS branches are severed from their current umbilical cords as part of a unification plan, Army MARS would probably remain attached to NETCOM, which likes the connection.

On the other hand, if reconstructive surgery is deemed necessary, the three-some’s net operations might be merged, and deployments spun off to pre-organized, self-sufficient, tri-service response teams each assigned a specific response area based on risk.

The three MARS headquarters (Army, Air Force, and Navy-Marine Corps) would maintain their separate administrative functions. That’s pretty much the model of today’s Special Operations in the uniformed forces — not to mention Army MARS.

Viewed from the high-up strategic angle, Klinefelter’s innovative region-centric architecture really lights up. Rather than being just an administrative shakeup, it positions Army MARS as a survivable last-resort communications tool in any calamity that has wiped out the homeland’s usual interconnections.

A regional command that is accustomed to operating on its own in normal times is unlikely to be paralyzed if cut off from MARS Headquarters in time of crisis.

The foregoing speculation is just that: the figment of a writer’s imagination and in no way attributable to anything heard at Dallas.

The official write-up would follow later from Fort Huachuca. However, I did come away from the RD meeting with great respect for the self-healing nature of Klinefelter’s autonomous regions concept. Also with a firm expectation that its go-it-alone capability will be put to use on some grim day in the future.

You’ve heard it here before: Remember Pearl Harbor?

— Bill Sexton, N1IN

Why Reorganize Army MARS?

“The program was always dependent on what the volunteers brought to the ‘table’ which the government felt was valuable enough to cultivate and organize if possible. Those valuable things on the table are:

• “That they are already integrated into communities and states throughout the country.
• “That they are already sharing a common interest, equipped, interoperable, and trained to a certain extent, and finally,
• “That they are a self-motivated and patriotic group perhaps willing to take on a little more training and organization for a common purpose.

“It is only fair that they have great say in the operations of the organization since they bring so much.”

— Chief Stephen Klinefelter

Chief Stephen Klinefelter

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Executive Order -- Assignment of National Security and Emergency Preparedness Communications Functions

**Policy.** The Federal Government must have the ability to communicate at all times and under all circumstances to carry out its most critical and time-sensitive missions. survivable, resilient, enduring, and effective communications, both domestic and international, are essential to enable the executive branch to communicate within itself and with: the legislative and judicial branches; State, local, territorial, and tribal governments; private sector entities; and the public, allies, and other nations. Such communications must be possible under all circumstances to ensure national security, effectively manage emergencies, and improve national resilience. The views of all levels of government, the private and nonprofit sectors, and the public must inform the development of national security and emergency preparedness (NS/EP) communications policies, programs, and capabilities.

The **Director of the Office of Science and Technology Policy** (OSTP) shall advise the President on the prioritization of radio spectrum and wired communications that support NS/EP functions.

The **Assistant to the President for Homeland Security and Counterterrorism and the Director of OSTP** shall make recommendations to the President with respect to the exercise of authorities assigned to the President under section 706 of the Communications Act of 1934, as amended (47 U.S.C. 606).

The Assistant to the President for Homeland Security and Counterterrorism and the Director of OSTP shall also jointly monitor the exercise of these authorities, in the event of any delegation.

The **Secretary of Defense** shall: (a) oversee the development, testing, implementation, and sustainment of NS/EP communications that are directly responsive to the national security needs of the President, Vice President, and senior national leadership, including: communications with or among the President, Vice President, White House staff, heads of state and government, and Nuclear Command and Control leadership; Continuity of Government communications; and communications among the executive, judicial, and legislative branches to support Enduring Constitutional Government;

The **Secretary of Homeland Security** shall: (a) oversee the development, testing, implementation, and sustainment of NS/EP communications, including: communications that support Continuity of Government; Federal, State, local, territorial, and tribal emergency preparedness and response communications; non-military executive branch communications systems; critical infrastructure protection networks; and non-military communications networks, particularly with respect to prioritization and restoration;

- incorporate, integrate, and ensure interoperability and the necessary combination of hardness, redundancy, mobility, connectivity, interoperability, restorability, and security to obtain, to the maximum extent practicable, the survivability of NS/EP communications under all circumstances, including conditions of crisis or emergency.

The **Secretary of Commerce** shall:
- (a) provide advice and guidance to the Executive Committee on the use of technical standards and metrics to support execution of NS/EP communications;
- (b) identify for the Executive Committee requirements for additional technical standards and metrics to enhance NS/EP communications;
- (c) engage with relevant standards development organizations to develop appropriate technical standards and metrics to enhance NS/EP communications;
- (d) develop plans and procedures concerning radio spectrum allocations, assignments, and priorities for use by agencies and executive offices;
- (e) develop, maintain, and publish policies, plans, and procedures for the management and use of radio frequency assignments, including the authority to amend, modify, or revoke such assignments, in those parts of the electromagnetic spectrum assigned to the Federal Government; and
- (f) administer a system of radio spectrum priorities for those spectrum-dependent telecommunication resources belonging to and operated by the Federal Government and certify or approve such radio spectrum priorities, including the resolution of conflicts in or among such radio spectrum priorities during a crisis or emergency.

The **Federal Communications Commission** performs such functions as are required by law, including: with respect to all entities licensed or regulated by the Federal Communications Commission: the extension, discontinuance, or reduction of common carrier facilities or services; the control of common carrier rates, charges, practices, and classifications; the construction, authorization, activation, deactivation, or closing of radio stations, services, and facilities; the assignment of radio frequencies to Federal Communications Commission licensees; the investigation of violations of pertinent law; and the assessment of communications service provider emergency needs and resources.

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*(IN DEPTH: For the full text of President Obama’s executive order, visit [http://1.usa.gov/SqeZlp](http://1.usa.gov/SqeZlp). – NIIN.)*