# JTI²V: THE FORMULA FOR MARINE CORPS ACQUISITION SUCCESS

## *Says Commander, MarCorSysCom*

*Program Manager* recently interviewed Major General Carol A. Mutter, USMC, Commander, Marine Corps Systems Command (MARCORSYSCOM). General Mutter assumed command of the Quantico, Virginia-headquartered organization, which is responsible for developing and producing Marine Corps ground acquisition systems and equipment, in June 1994. Her biographical sketch follows this interview.

***Program Manager***. What guidance and vision are you giving the people of the Marine Corps Systems Command?

**Maj Gen Mutter**. I have come up with an acronym. You can't be in this business for more than 30 minutes without having an acronym. Mine is the acronym JTI²V, or JTI-squared-V. The "J" stands for Joint, jointness from two different aspects. The first is the perspective that we want to work with the other Services and be joint in developing our programs and systems. The other is that we must remember that Marine Corps systems need to work in the joint environment once they're deployed. We don't do anything that isn't joint these days.

Program Manager *thanks DSMC professors Wilbur D. Jones, Jr., Acquisition Policy Department, and Lt Col Philip A. Young, USMC, Principles of Program Management Department, for conducting this interview.*

Photos by Richard Vigue

*Major General Carol A. Mutter, USMC, Commander, Marine Corps Systems Command (MARCORSYSCOM), makes a point as she is interviewed by Program Manager's representative, Lt Col Philip A. Young, USMC.*

The "T" stands for teamwork. There are a lot of dimensions of teamwork. First, I emphasize teamwork internal to the command because we are somewhat matrixed in our organization; we rely on each other and are trying to lessen the stovepipe effect which can lead to "reinventing the wheel." Teamwork also plays heavily with the requirements folks over at the Marine Corps Combat Development Center (MCCDC). Because we are co-located here at Quantico with the Marine Corps' requirements command, we have an advantage the other Services don't have. Also, the Marine Corps Operational Test and Evaluation Activity, MCOTEA, is here. So, the synergy of being able to work as a team throughout the whole development process gives us a tremendous advantage.

The requirements people at MCCDC are the spokesmen for the Fleet Marine Force (FMF), the users of our systems and equipment. We work as a team with them and also with the FMF directly. MCCDC brings the mission area people in to find out what the fleet needs. We are also closely connected with the Deputy Chief of Staff for Installations and Logistics (DC/S (I&L)) at the Headquarters Marine Corps and with the logistics base at Albany, Georgia. Albany is heavily involved in life cycle management of our systems and

equipment. So there are a lot of dimensions to our approach to teamwork.

The "I"-squared stands for inventiveness and innovation. It gets to the crux of total quality leadership (TQL). TQL empowers our people to do the things they need to do to get the job done, and helps us identify roadblocks and get them out of their way. We encourage not doing the same old thing in the same old way, because it's a different world now. We have different requirements. We have less money, less people. We have to invent new, innovative ways of doing the job.

The "V" stands for value. There are a couple of dimensions to value: getting the best value for the dollars we spend, and also emphasizing core values. Our Marine Corps values of honor, commitment and courage apply to all Marines whether we wear civilian clothes or a uniform, whether we are in garrison or the field, whether we are in wartime or peace. Those core values apply equally across the board; they require a basic integrity in how we go about our business.

***Program Manager***. What are the biggest challenges facing Marine Corps acquisition?

**Maj Gen Mutter**. Certainly the biggest is budget constraints. Another is keeping up with advancing technology. Technology is moving so quickly, and changing so fast. Our traditional way of doing business was taking 5-10 years or more to develop a system, which nowadays would be two or three generations behind technology by the time it's fielded. Our challenge now is in the acquisition reform arena to come up with ways of developing our software and computer systems faster, but also do them in a structured way to ensure we are making the right decisions, and can support the systems in the long term. We need to continue to look at streamlining. We have transitioned almost all our programs to evolutionary programs, but the rules for going through the milestone decision process are not well suited for evolutionary development.

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Another big problem is commercial off-the-shelf items. We are going to have a lot more off-the-shelf systems, equipment, software, etc. Our programs then become more integration programs than development programs, integrating various pieces and maybe developing a small portion to customize it for a particular application. However, the defined DoD acquisition process doesn't necessarily lend itself to that, especially the operational testing rules and regulations. We need to relook at those things and come up with a more streamlined way of doing business adapted to the new ways of systems development.

***Program Manager***. Do you see the Marine Corps' required participation with other Services on many of its programs as a constraint?

**Maj Gen Mutter**. No, not at all. The Marine Corps manages no Acquisition Category I (ACAT) programs itself, except for the Advanced Assault Amphibious vehicle (AAAV) program. The AAAV Program Manager reports directly to the Assistant Secretary of the Navy (Research, Development and Acquisition) (ASN(RDA)), Ms. Nora Slatkin. All our other major programs are either joint- or other Service-led.

An aspect with the "J" in JTI²V, which overlaps into the "T," is that we always work closely with other Services. The Marine Corps is small. We rely very heavily on the other Services: on the Army for the development of tanks and vehicles, for example. We work closely with the Navy for many computerized command and control systems. And, on occasion the Marine Corps is designated as the lead Service in some joint programs. Some examples include the Tactical Air Operations Module (TAOM), the Air Force is follow Service; the Anti Personnel Obstacle Breaching System (APOBS), the Army is follow Service; and the Position Locating Reporting System Communications Enhancement (PLRS-CE), the Navy is follow Service.

***Program Manager***. Regarding amphibious warfare and the basic Marine Corps mission of "from the sea," and the continuing talk and studies and reviews about roles and missions, how would you answer the question of why the Marine Corps needs a separate air force?

**Maj Gen Mutter**. The Marine Corps is unique because of our role in operational maneuver from the sea. We have to operate in a naval envi-

ronment and be able to transition from sea to shore and then operate in a land environment. That takes a very special kind of air capability, or air wing, to be able to practice and operate on a routine basis in a multitude of settings. We must be able to operate on board ship as well as in an amphibious assault or any other operation ashore using dedicated close air support. Probably the most complex of combat operations is the amphibious operation. That close relationship of working with our own aviation assets has always been important.

***Program Manager***. Is the Army's role in prepositioning overlapping with the Marine Corps' role in prepositioning? Is there a paradigm shift?

**Maj Gen Mutter**. Don't forget the Army has their mission to worry about as well, and that both the Army and Marine Corps have complementary missions. The Army needs a way to get their very large amounts of equipment and supplies to wherever they might be employed. In the past the most likely places of employment were few and well known. They could preposition things in those few places. Now that the world is looking a little more dangerous in a larger number of places, and not knowing where we might have to go, everyone recognizes the need for a different approach on how the Armed Forces get their supplies and equipment where they need it quickly. The Marine Corps does not pretend to be a large ground army. We are the enabling force that may go in first and secure the airport or port facilities where a larger force could go in later.

The Marine Corps' mission for over 200 years is probably even more relevant in today's world than in the past because of the likely places of employment: in the littorals and danger spots of the world. Operational maneuver from the sea and global forward presence is right up our alley, and involves the same kinds of things that we have been doing for many years.

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***Program Manager***. Given that our roles and missions are secure, what are the Marine Corps' acquisition priorities to support them?

**Maj Gen Mutter**. Our two big acquisition priorities are the V-22 Osprey aircraft and the AAAV program. The V-22 is run by the Naval Air Systems Command (NAVAIR), and I have no responsibilities for it. Of course, we have Marines over there working with NAVAIR. I do provide matrix support to the AAAV for contracting, logistics support and various other things. So, I do get involved with the AAAV.

Those two programs are our key capabilities to execute our operations from the sea. They replace systems that are very old and very obsolete, the CH-46 helicopter and the LVT amphibious tractor. We need not only to replace those platforms, but also to upgrade and update them with new technology that will be around a while. We are having some real budgetary difficulties getting the V-22 and AAAV on board quickly enough in order to replace those old systems.

On the AAAV, the discussion has centered around the current vehicle's age. If we slip the AAAV and start it after the current POM [program objectives memorandum] cycle, the new AAAV system would be in place at about age 47 for the current vehicle. Then you're talking about stretching something out to a point where it becomes almost nonsupportable — you're looking at 1950s, Korean War technology to take the Marine Corps with amphibious operations into the battlefield of the 21st Century. This does not seem like a prudent thing to do. The other primary thing is that the AAAV is not that expensive. We're talking on the average of about $60-80 million a year in R&D funds. So cutting out or stretching that program, or delaying it, doesn't save DoD that much money.

***Program Manager***. The Marine Corps' reputation is one of being resourceful. Where is the Marine Corps now with downsizing of personnel and restricted budgets?

**Maj Gen Mutter**. It reminds me of the saying "We've done so much with so little for so long that pretty soon we can do everything with nothing." We are seeing some tremendous challenges in being able to meet the minimum requirements with the numbers of people and the available budgets. It is getting to be extraordinarily difficult, which is why the innovation of new ideas and jointness, and cooperation and teamwork, are so important.

In the POM-96 prioritization process, it was primarily C$^4$I systems that came to the top of the procurement list. That is a legacy from Southwest Asia

where a lot of lessons learned have been fed into the process. And for the last several years we've been emphasizing the C⁴I area to try to get more interoperability communications-wise, the ability to talk to one another, and more automated intel battlefield information dissemination to decision makers at the various levels.

***Program Manager***. We understand you have a background in computers and data systems.

**Maj Gen Mutter**. Yes, I do have experience in computers and the data systems world as far as how our data systems support our command and control, decision making, intelligence systems and communications systems. I've been involved in computer systems off and on for 11 years, both on the business and tactical sides.

I know Mrs. Colleen Preston [Deputy Under Secretary of Defense (Acquisition Reform)] and the acquisition reform folks are looking for ways to streamline. This is a candidate.

The biggest problem in computer software is that technology is moving so fast. You know how fast we've come from a 286 to a 386 to a 486 to a pentium computer. If we are not developing a system with open systems architecture so we can put it on a different piece of hardware to take advantage of the faster processing time, use reusable code, and keep our systems flexible, then our systems will be irrelevant and incapable for what the user needs in a timely fashion. We are working with the ASN(RDA) and others providing recommendations on ways we can streamline. The end result is doing things in a timely but structured way, looking at real alternatives, making the right decisions, and getting the system on the street.

***Program Manager***. Other than the AAAV, an ACAT I program, all Marine Corps acquisition programs are ACAT IIs, IIIs and IVs. Is the

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Marine Corps tailoring its programs, or is the DoD 5000 Series of directives restrictive?

**Maj Gen Mutter**. The way we interpret the DoD 5000 Series can be restrictive. Some of our problems are self-inflicted within the Marine Corps.

When you go through the milestone process, you have to answer to all of the staff people and decision makers who are going to ask if you've done things a certain way to make sure they are legal, defensible, make sense, and that we are not wasting money. In answering those questions a certain amount of rigor has been put into the process for even the ACAT II-III-IVs. I believe that rigor is good up to a point. But, Mr. [R. Noel] Longuemare [then Acting Under Secretary of Defense (Acquisition and Technology)] recently signed out a memo emphasizing the tailoring process. The Marine Corps is small enough so that we can get our arms around a lot of things the other Services cannot. We have some good ideas on how to tailor.

Back to technology again. Technology is moving so fast, it's difficult to move quickly enough with ideas at the same time we're trying to develop your systems. We have a unified build program where all our command and control systems are being looked at for potential reusable code. For example, why have every system develop its own mapping system for its display, or buy separately off the shelf? We have come up with one or maybe two standard mapping, message handling, and database management systems. We have found that from 45 to 82 percent of the code in each of our command and control systems is functionally similar to other Marine Corps command and control systems. There is a tremendous amount of opportunity for reusability of code with life cycle management support implications. We are fielding so many automated systems that to pay internally or on contract for someone to maintain the code becomes very expensive. A large amount of reusable code would cut back on the money required for post-deployment software support.

***Program Manager***. Do you think changing the requirements for using military specifications and standards will help the Marine Corps field systems quicker?

**Maj Gen Mutter**. There is a lot to be gained by relooking at specs and standards and getting rid of those which are out of control. We have tied

the hands of contractors, and the red tape requiring hundreds of CDRLs [contract delivery requirements lists] on every contract, adding unnecessary costs not in the government's best interests. I have seen a lot of computer systems developed where we produced documentation that is ten feet high, and nobody ever looks at it. It's of little benefit in getting us to where we want to go. Standards are usually developed because something went wrong somewhere, or somebody wasn't smart enough to catch it or didn't have the expertise on the evaluation team, or the contractor took advantage of the government. There's a certain amount of risk you must accept.

But, we may not have the technical contract expertise to evaluate contractor proposals. Specs and standards help us bound that problem. We need to keep some specs and standards, while getting rid of the ones that tie the hands of government and contractor in coming up with cheaper, more reliable solutions.

***Program Manager***. How is the health of the Marine Corps acquisition workforce?

**Maj Gen Mutter**. We have looked at what the acquisition workforce should be, both on the military and civilian sides, and how we want people to progress in their careers. We have made great strides since I was here two years ago.

We assign a "specialty" to Marine officers as an additional duty, not as a primary duty. One of the strengths of the Marine acquisition workforce is that we have people who rotate out into the FMF and are actual users of the equipment and systems we develop. They come back with a good operational perspective and contacts so they can stay in touch with the needs of the users. That's a tremendous advantage to our process, but it does make it difficult for a person who rotates in and out of acquisition business to be able to get back to the FMF

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to progress in his or her primary specialty. This is not an impossible task. We have had people who have done this, both on the aviation and ground sides, but it is getting harder to do because of the experience and education requirements.

We see the emphasis being placed at the highest levels of the Marine Corps, recognizing the importance of the work acquisition people do. There is every reason to believe both the military and civilian members of the workforce will continue to progress and have an important niche in the Marine Corps.

***Program Manager***. What is your strategy for training the workforce across functional lines?

**Maj Gen Mutter**. We have a heavy emphasis on education and training. It's the key element to the work force. Because we have so many ACAT IV programs, we have as project managers many junior majors, captains and in some cases warrant officers or staff NCOs filling captains' billets. We have had to be aggressive to get them into schools, because some school houses believe their classes should be for field grade officers or above. I had a good conversation recently with Colonel [Claude M.] Bolton [Commandant] of DSMC about this. DSMC has had to emphasize ACAT I programs because of the law requiring all ACAT I PMs to cycle through the school to operate legally in major program billets. They have had to concentrate on getting everyone educated across the Services. Now the schools are seeing they can change their education and training to include folks working the ACAT III and IV as well as continuing to focus on the ACAT Is and IIs.

We have overcome that initial bow wave of training. That's something we fought for a long time because the Marine Corps didn't have too many people in that initial bow wave. Now we are able to get our folks into training much easier. We have also brought instructors in and trained a large number of folks at one time in areas that are important to us.

We also developed our own project managers course, so that every one who reports aboard gets a 4- to 5-day course at Quantico that says how the Marine Corps does business. We include the Marine Corps requirements folks and test and evaluation personnel. We have programmed instruction texts on computer with a manual that people can use to come up to speed and pick and choose the areas they need. Those coming into matrix jobs can choose those areas they wish to specialize in. This has been under development for the last three years.

***Program Manager***. What is your relationship to the ASN(RDA), the

DC/S(Aviation), and the Commander, MCCDC?

**Maj Gen Mutter**. I answer to the Commandant for the things that I develop, and to the ASN(RDA) for how I develop them and in making sure we go through the right processes. I have two bosses.

My relationship with MCCDC is very close. [Lieutenant] General [C. E.] Wilhelm [Commanding General, MCCDC] and I try to set aside at least an hour a week to discuss whatever has come up. Things happen on a daily basis. We schedule time to talk routinely. We work on a co-equal plane. His people provide the requirements, the doctrine, the training, the studies, etc., to support what we develop. They give us the requirements document and we develop the equipment solution. But it's usually never just a single solution. The equipment solution also requires training and doctrine, always a combination. Our folks are working together constantly.

We have the same kind of relationship with DC/S for Aviation. Aviation works through NAVAIR with regard to aircraft and associated equipments, but there are support equipment and engineering equipment associated with aviation that we are responsible for. There is some overlap and interface with communications equipment that goes into both air and ground systems, such as the JTIDS. Some air systems are the sources of intelligence information to our ground systems.

The MARCORSYSCOM has high-level quarterly program reviews which my predecessor Lt Gen [James A.] Brabham set up where our different Marine Corps claimants, such as DC/S(Aviation) and DC/S (I&L), at the general officer level participate in program reviews. We ask, which systems would you like to talk about? We can't review hundreds of programs every quarter; so we focus on those where there is current interest and need.

**Maj Gen Carol A. Mutter**, upon advancement to her present grade in June 1994, assumed command of the Marine Corps Systems Command, Quantico, Virginia, responsible for developing and producing Marine Corps ground acquisition systems and equipment.

U.S. Marine Corps photo

*Maj Gen Carol A. Mutter, USMC*

General Mutter was commissioned a second lieutenant in the Marine Corps upon graduation from Northern Colorado University in 1967. Her early career spanned a wide range of assignments, including Project Officer for Marine Corps Air Command and Control Systems; Financial Management Officer at the Quantico Development Center; Assistant Chief of Staff, Comptroller, 1st Marine Aircraft Wing; Deputy Comptroller, Headquarters, Fleet Marine Force; and Deputy Program Manager/Program Manager for the development of new Marine Corps pay and personnel systems for active duty, retired, and reserve Marines.

After assignments at the U.S. Space Command and III Marine Expeditionary Force, General Mutter was selected for promotion to Brigadier General. In June 1991, she assumed duties as the Deputy Commanding General, Marine Corps Systems Command at Quantico. She was also the Program Manager for Marine Air Ground Task Force Command and Control ($C^2$). On June 25, 1992, she assumed command of the 3d Force Service Support Group, III MEF, U.S. Marine Forces Pacific.

In addition to holding a B.A. degree in Mathematics Education, General Mutter attained an M.S. degree in general management from Salve Regina College (1985) and an M.S. degree in business management from the Naval War College (1985). General Mutter has attended the Amphibious Warfare School, the Marine Corps Command and Staff College, and the Naval War College.

Her medals and decorations include the Defense Superior Service Medal; Navy Commendation Medal; Navy Achievement Medal; Meritorious Unit Commendation; National Defense Service Medal with bronze star; and the Sea Service Deployment Ribbon with four bronze stars.

General Mutter is married to Colonel James M. Mutter, USMC (Ret).