STRATEGY RESEARCH PROJECT

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JOINT EXPERIMENTATION: A STRATEGIC MODEL

BY

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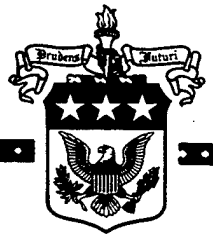

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USAWC STRATEGY RESEARCH PROJECT

JOINT EXPERIMENTATION: A STRATEGIC MODEL

by

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The views expressed in this academic research paper are those of the author and do not necessarily reflect the official policy or position of the U.S. Government, the Department of Defense, or any of its agencies.

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ABSTRACT

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In the fall of 1997, the Chairman of the Joint Chiefs of Staff coined the phrase "Joint Experimentation" to operationalize Joint Vision 2010 (JV 2010). General Shelton stated, "joint experimentation will be the true engine for exploring concepts contained in JV 2010." The United States Special Operations Command already has the capability to implement joint experimentation.

In 1987, Title 10 of the FY87 Defense Authorization Act gave the Commander in Chief, United States Special Operations Command (USCINCSOC) responsibility and authority to develop and acquire Special Operations peculiar equipment. In order to facilitate this task, Title 10 also provides USCINCSOC the responsibility and authority to prioritize requirements, recommend programs, and propose budgets. These are all the tools necessary for USCINCSOC to unilaterally conduct combat development and joint experimentation to meet the urgent operational needs in rapid-changing situations common to Special Operations and expected for the Joint Vision 2010 environment.

This report presents a process that addresses validation, funding, experimentation, and follow-on acquisition in a timely fashion. This process is applicable for SOF as well as the Joint Staff and the Interagency Process.

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JOINT EXPERIMENTATION: A STRATEGIC MODEL

THE CHALLENGE

During a briefing to the Undersecretary of the Army for Research and Development on special operations acquisition programs, the Honorable Mr. Decker remarked, "How can you do this so fast?" After close examination of the special operations acquisition process, the obvious answer was the intimate relationship between the program manager and the user. Both organizations had an objective in mind. The user and acquisition expert worked closely together to quickly design and develop a product that met the requirements.

Additionally, the products on display were not examples of leap-ahead technology, but incremental technology. In other words, much of what special operations organizations procure, specifically Special Mission Units (SMU), are a result of a continuous developmental program or experimentation process. Some development was necessary because the operators wanted items significantly lighter and delivered faster. The no-fail mission mentality kept the continuous developmental process from being cost prohibitive. Therefore, the real answer to the Undersecretary's question was an adequately funded developmental process called experimentation.

Much of this acquisition process is informal and peculiar to selected units in the United States Special Operations Command (USSOCOM). This paper develops a similar acquisition process that captures this informal capability currently utilized in the Command and applies it to all USSOCOM units. The first proposal is a generic model for joint experimentation specific to USSOCOM's organization. The model focuses on expediting the requirement and acquisition process throughout this Command. Additionally, this paper discusses the applications of the joint experimentation model for the Joint Staff and the interagency process.

Today, the desire to quickly develop and procure products for the warfighter is still being researched. In JV 2010, Genéral Shalikashvili mentions the need to leverage technology in order to achieve new levels of effectiveness in joint warfighting. He states, "we will need a responsive research, development, and acquisition process to incorporate new technologies."[1] Although JV 2010 falls short of providing any answers for developing a responsive acquisition process, it does mention a general direction: leverage technology and management innovations in the private sector. The challenge is to develop management techniques that quickly incorporate emerging technologies into equipment and doctrine for the joint warfighter at an affordable cost.

Shortly after assuming the position as Chairman, Joint Chiefs of Staff, General Shelton provided a more definitive strategy toward "operationalizing" JV 2010. He stated that "Joint experimentation will be the true engine for exploring concepts contained in JV 2010."[2] The strategy incorporated three approaches that specifically addressed experimentation. First, he established a joint headquarters element responsible for monitoring CINC and Service experiments, battle labs and other activities while it

conducts JV 2010 warfighting experiments. The establishment of the United States Joint Forces Command (USJFCOM) will hopefully consolidate and manage the ongoing efforts in joint warfighting experiments. However, many CINCs are skeptical of USJFCOM's charter and its ability to capture the warfighting CINCs' requirements.

The second approach covered information superiority experiments to explore test concepts and monitoring capabilities using information technology. With the increasing capability of automation and the rapid improvement of information transfer, a distributed net could link all battle labs, testing agencies, and experimentation activities.[3] This vehicle should prove to be the greatest benefit for not only for managing experimentation but also for avoiding duplication of effort.

Lastly, the Chairman requested that the Services conduct various experiments focused on the tenants of JV 2010, culminating in a large-scale experiment to test the effects of full spectrum dominance. To support the 2005 QDR process, the initial milestone for the large-scale experiment is 2004. The large-scale experiment should capture the synergistic effect of all on-going joint experiments and inform the decision-makers of progress in order to prepare the future force for 2010.

The underlying agenda to General Shelton's focus on using information technology to link experimentation efforts is to save time and money. The need to capture rapid technological improvements will be necessary for survival on the future battlefield. The quicker equipment can be provided to the user, the better we prepare the warfighter to react to changes on the battlefield. This is made possible by the collaborative efforts of the user and the acquisition manager. First, the acquisition manager and user observe first hand current technological capabilities and potential applications. Second, if the user conducts the testing or experimentation, less time is taken transferring this capability from the acquisition system to the warfighter. This must be balanced against the user's primary requirement of training and the decrement of available time to that end. Third, the sharing of research projects saves manpower, consolidates efforts, and reduces costs.

As Defense dollars become tighter, the requirement to avoid duplication of efforts and enhance commonality of equipment between Services become paramount. Examples of consolidation efforts are in the development of small arms, ammunition, demolition, communications, and information operations. Numerous organizations are competing against each other for funding that ensures their subject matter experts remain relevant in current technology. Redundancy in the developmental process is an area that the joint and interagency process needs to address. The final chapters of this paper will address potential processes at the joint and interagency level.

As requirements and funding come under increasing scrutiny and testing and experimentation databases become fully interactive, the necessity for responsive programs will become more essential. No-fail, mission focused organizations will still continue to drive requirements for rapid prototyping, quick experimentation, and immediate utilization. However, the definition of no-fail will no longer be specific to the national mission. Even now, information technology can instantaneously thrust any military unit into the limelight. Information technology coupled with persuasive media, immediately place small unit

leaders into politically sensitive situations that could potentially have a disastrous impact on national policy. Concealing military mistakes will be impossible. Today's, and especially tomorrow's peacekeepers and warfighters must have the precise tools at the precise time to be successful.

Problems with the current acquisition process frustrate the conventional forces. The process has been, and still is extremely slow and unresponsive. The Honorable Paul Hoeper, Assistant Secretary of the Army (RDT&E) remarked, "the problem is that we take an average of twelve years to field a major system, while the power of the computer chip on which the commercial digital technology depends doubles every eighteen months."[4] Conventional weapon systems usually take 16-20 years for their development. By the time the military fields these weapon systems, they are largely obsolete.

An example of the numerous slow, cumbersome, and bureaucratic acquisition programs is the Comanche helicopter. The Mission Need Statement for the Comanche helicopter was written before 1983 as a Light Helicopter Family (LHX). The intent of the aircraft was to develop a common reconnaissance and lift airframe to replace the aging Cobra and Huey helicopter fleet. The aircraft has yet to go into production and is not expected to begin full development until after 2006. Additionally, the aircraft meets only one of the original purposes, and the Army is procuring only a portion of the original buy.

A drastically changing budget, a reduced market influence, and layers of rules and regulations plague the acquisition process of the Department of Defense.[5] Funding for programs is undependable because many programs are either not fully funded or are cancelled later in the programming and acquisition process based on new priorities. A current example of inconsistent programs is the second order of effect from the Chief of Staff of the Army's new vision. The cost to afford this vision has already cancelled the acquisition of two new Engineer vehicles and endangers the Comanche program.[6]

This unreliable acquisition process has had a direct impact on the industrial base. The state of the current US defense industrial base finds an industry with extremely high costs that is isolated from advancing technology because of defense unique procurement practices. The industrial base is also unresponsive to changes in technologies or threats, lacks appeal to long term investment capital because of the absence of future growth potential, and is unable to keep up with the state of the art in many critical defense areas.[7]

Finally, the unpredictable global situation impacts the acquisition process. With the lack of a super power confrontation, our National Military Strategy is leaning more toward smaller contingencies and asymmetrical threats. The impact is a reduction in force structure. The Army's manpower alone has decreased from 780,000 to 480,000 in less than eight years. Additionally, the overall budget has been reduced 40 percent over the past ten years.[8] The reduction of the defense budget has overstrained the flexibility of our acquisition process.

To further exacerbate the slow response of the acquisition system, many rules and regulations have been imposed on the process over the years. Concerns over fairness of competition; adequate profit making; proper costing of services; and prevention of waste, fraud, and abuse, have created

numerous bureaucratic barriers to rapid acquisition. However, the Department of Defense has identified some of these challenges and is trying to overcome them.

On 29 June 1994, Secretary of Defense William Perry began the initial step for acquisition reform that opened the door for conventional organizations to rapidly acquire equipment. Reform initiatives included allowing nongovernmental standards for specifications, increasing small purchase thresholds, and using Process Action Teams for identifying further recommendations.[9]

Since the start of acquisition reform, numerous approaches to optimize technology changes have been introduced. Several examples of experimentation include Army Warfighting Experiments (AWE), Technology Demonstrations (TD), Advanced Technology Demonstrations (ATD), Battle Labs, Advanced Concept Technology Development (ACTD), Warfighter Rapid Acquisition Program (WRAP) and Fast Track. Each of the above experimentation capabilities has increased the speed of acquiring equipment for the warfighter. The latter programs rapidly improved the research and development time lines by leveraging Commercial-off-the-Shelf (COTS) technology and Industrial Research and Development (IR&D). In other words, the contractor is funding the technological development and not the user.

The focus of the TD and ATD was to reduce the concept exploration phase stage and develop a technical base. TDs and ATDs demonstrate the feasibility and practicality of technologies for solving specific military deficiencies. TDs are conducted in a non-operational environment. ATDs are conducted in operational or simulated operational environments rather than laboratories. These capabilities began to decrease the overall testing time in the acquisition process.[10]

ACTDs accelerate the application of mature technologies in response to a critical military operational need. Jointly planned by the user and technology developer, the experiments are conducted in the field to further develop a concept of operation for this new capability. ACTDs are a continuation of the progress that TDs and ATDs have made in decreasing the developmental testing timelines. Also, ACTDs became the first experiments that the actual user became involved in testing and developing equipment.

Fast Track is the newest method of rapid experimentation. This model moves programs from ATD to Engineering and Manufacturing Development without a Program Definition Risk Reduction Phase. This method is unique because the traditional acquisition process allows the acquisition manager to take risk to decrease time during development. Acquisition Executives must continuously look for areas in the program development process that can be removed. The user and the acquisition manager must take risk in the process in favor of expediting experimentation completion and equipment delivery.

Finally, the WRAP links the development of programs to the procuring of equipment. The WRAP shortens the acquisition cycle by reducing the time between experimentation and systems acquisition. This process fences funding in the budget that allows the moves the procurement of a designated WRAP into the budget cycle. In order to be successful, the joint experimentation process must capture the advantages of this program. The experimentation process is useless without procurement funding to immediately purchase the results of successful experimentation.

However, these new experimentation processes are still too slow and cumbersome. TDs and ATDs have durations of three to five years and test agencies usually enter the results in a technical database. The Concept Experimentation Process, used by Battle Labs to determine potential technology candidates, has a one-year decision-making process just for project development and approval. The bureaucracy of the Army's Training and Doctrine Command (TRADOC) dedicates time in the system for several reviews for correct format, a "general validity check", and resubmission of resume sheets. The WRAP may help in the procurement process, but the requirement process is still extremely competitive and slow. The agencies for testing, acquisition, and requirements continue to protect their interests and ensure they have sufficient oversight for their respective functional areas. All these factors slow the process and reduce the affordability.

From the Chairman's policies to the unique levels of experimentation, acquisition reform is being emphasized. Service Acquisition Executives are attempting everything to acquire equipment relatively quickly. However, the most archaic and bureaucratic procedures are in the requirement process. As an example, TRADOC PAM 71-9, the Army's manual for determining requirements, documents the inefficiency of the requirement process. In the program development phase, a sponsor must prepare a resume sheet. HQ TRADOC reviews the sheet for correct format, conducts a general validity check, consolidates the results, and forwards suggestions back to the sponsor for improvement, correction and resubmission. Along with acquisition reform, the requirement process must be reformed.[11]

The quickest and cheapest method to provide the user what he needs to fulfil his requirement cannot be resolved by stove-piped improvements to an antiquated system. A modified process must be developed. The requirement tools, experimentation procedures, and acquisition vehicles, however, are already available.

The overall process is to rapidly validate requirements, procure commercial off the shelf items for experimentation by the user, and provide acquisition vehicles to meet the user's immediate material requirements. This demands full integration, participation, and teamwork from the warfighting, the requirement, the budgetary, and the acquisition personnel. The objective is to make the requirement process quicker for the user, while making the experimentation and acquisition processes easier on the program manager.

THE USSOCOM MODEL

The USSOCOM chartered under Title 10 for developing and acquisition of special operations-peculiar equipment, has the capability to conduct Special Operations Special Technology (SOST) and Special Operations Technology Development (SOTD). SOTD programs target initiatives designed to advance technologies that could potentially meet Special Operations Forces (SOF) needs. This program conducts develops laboratory prototypes for applied research and advanced technology development. The SOST program uses available technology to rapidly prototype equipment that meets time-sensitive

SOF-peculiar missions. This program puts field-ready prototypes into the hands of the operators to evaluate before the commitment to further develop or buy the item.[12]

Like conventional technology programs, SOTD and SOST are not as rapid as the special operations community would like. The USSOCOM holds a panel, chaired by the Deputy Acquisition Executive and the Deputy for Requirements and Resources, to nominate SOTD programs with technology capabilities to be incorporated into a technology database. The USSOCOM's Strategic Planning Process must still validate and submit SOTD programs for inclusion to the Program Objective Memorandum (POM). The same nomination panel must also validate SOST programs; however, funding in the POM is not as specific since the programs are not clearly defined at this early stage. This process still requires several years from identification of the program to equipping the operator. Funding for these programs must still compete in the POM.

The first step is for the user to send a letter of request for validation to the staff agency of the first operational headquarters that has acquisition authority. In special operations the first headquarters that has acquisition authority is USSOCOM. The staff agency that validates operational requirements for this command is called the Directorate of Operations and Plans or SOOP. (See USSOCOM structure slide below)

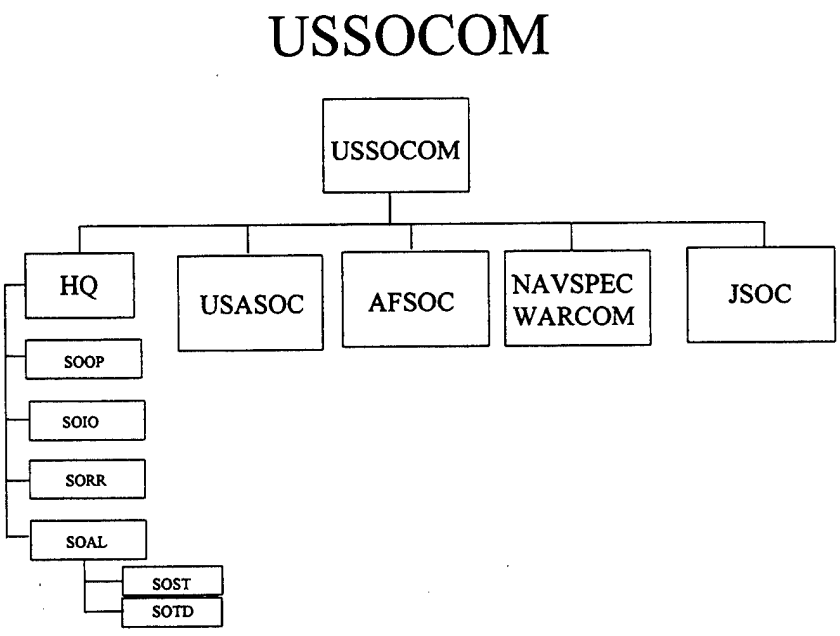

FIGURE 1: USSOCOM ORGANIZATION

The "user" is a term referring to the actual operator. The user or operator is fully trained on the unit's mission essential tasks. The term user is also applicable for the immediate headquarters of the operator's unit only if this organization also trains to the user's mission essential tasks. This phrase is generalized as a component headquarters or a warfighting CINC; however, the user is the actual operator. Understanding the use of this term is critical because the requirements, testing results, and equipment procurement must ultimately meet the need of the actual user. The user is also the agent responsible to develop the key parameters, conduct the actual experiment and accept the resulting equipment.

The format for the requirement letter must be short, simple, and modified to at least cover the essential information required in a Mission Need Statement (MNS)/Operational Requirement Document (ORD) format. The letter is identifying a requirement and should describe the need or deficiency. The user should comment on the immediacy of the need and identify Key Performance Parameters (KPP) that orient and facilitate measurable results.[13]

The requirement letter is important for several reasons. First, this is the only piece of paper that captures the intent of the user. The letter also serves as the formal documentation of a requirement necessary for an acquisition process. Third, it must provide enough information in order for an approving authority to assign a priority. See Figure 1 below for an outline of the process.

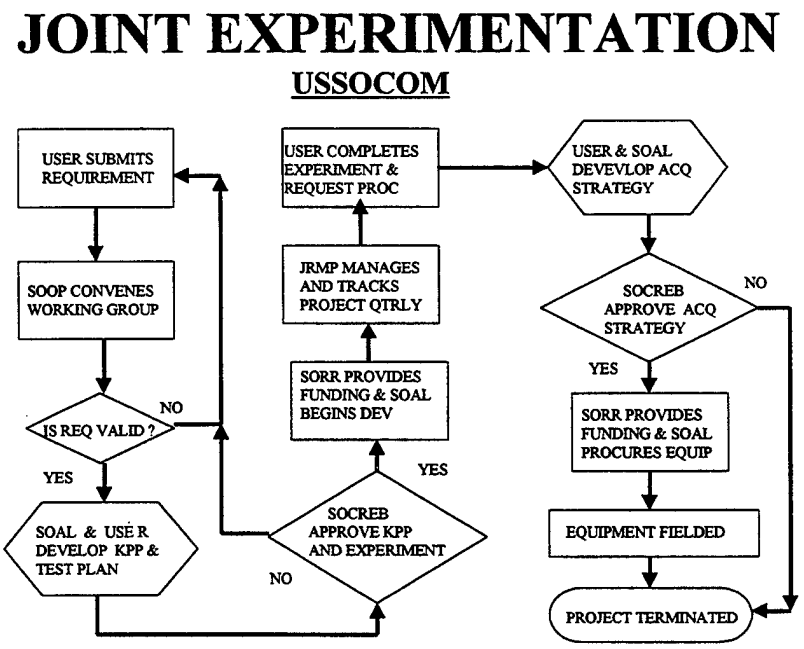

FIGURE 2: USSOCOM ACQUISITION PROCESS

The operational staff agency will quickly form a working group to validate the requirement, assesses the importance and complexity, and assigns a priority. About 72 hours is sufficient time to form the group. The Command must give this requirement immediate attention because it came from a CINC or a component commander, who has already expended critical resources (manpower and time) and deserves a response. The working group will comprise all the functional staff members and a representative from each component. The working group for USSOCOM should consist of operations, acquisition/logistics, requirements, budgetary, programming, force development, intelligence, and communication staff agencies. Additionally, to make this process a team product, the operations staff agency should inform all component commands and request them to participate. Every component has a vested interest because they are also competing for these joint experimentation funds. Absentee members can respond by e-mail or Video Teleconference. The lessons learned during the discussion of funding priority are constantly developing and will benefit all organizations involved.

The end product from this working group is a validated program that can be executed. The validation authority is the operational staff agency; however, this program should be in agreement with the command's staff agency responsible for material requirements. For USSOCOM, the Directorate of Force Structure, Requirements, Resources, and Strategic Assessments (SORR) and the Directorate of Acquisition and Logistics (SOAL) are critical players. Although operational staff agency is the validation authority, the SORR and SOAL may have information on previous and ongoing requirements and acquisition programs that could impact on the conduct and timeliness of this experiment. If the working group disapproves this experiment, a letter of disapproval is drafted for the command group to the appropriate component command or CINC. For USSOCOM, the command group consists of the CINC, the DCINC, and all subordinate component commanders. This letter includes specific instructions for the submitting component citing the reason for disapproval and restrictions on further development of this program.

The next critical step is the development of the KPP and experimentation plan for the approved program. The responsibility for developing this plan to meet the KPP is the acquisition representative or, in USSOCOM's example, the SOAL. However, as the primary executor of the experimentation plan, the user is essential in its development and must fully concur with the overall plan. The user is responsible to furnish the manpower, time, and training events to adequately test the ability of the purchased equipment to meet the test objectives. The KPP are user driven and any failure or change to the established KPP will require the notification/approval of the user and oversight chairman of the appropriate management process.

Once the test plan has been developed, the user and acquisition manger will brief it to the USSOCOM's Requirements Executive Board (SOCREB), which is responsible for validation of all USSOCOM requirements. The SOCREB includes the directors from the USSOCOM staff and component representatives. The Deputy Commander in Charge (DCINC) of USSOCOM chairs the SOCREB. The

user and its appropriate component command have the responsibility to accurately and adequately inform the SOCREB on the benefits of this experiment and the urgency for combat experimentation.

The approval by the SOCREB authorizes the release of funding in the proper appropriation, or "color of money," to procure the equipment and conduct the experiment. The proper appropriation is important during this phase. Operations and Maintenance (O&M); Research, Development, Test and Evaluation (RDT&E); and Procurement funds will be used throughout the combat experimentation process. Although RDT&E funding is the appropriate category of money for this phase, this appropriation is intensely scrutinized at the Office of the Secretary of Defense (OSD). The OSD is conditioned to see a program attached to this appropriation and is very sensitive to allowing undesignated RDT&E money to exist without sufficient explanations. Although O&M funds are more flexible and readily available, sufficient oversight of proper expenditures is extremely difficult to enforce. Therefore, "preparing the battlefield" with OSD will be required as this experimentation program is established.

The RDT&E funding is the correct category of money to assist the user in accomplishing combat experimentation. The RDT&E funding brings an appropriate level of oversight by this command. The SOAL is the staff agency that has the responsibility and authority to ensure the proper commitment, obligation, and execution of RDT&E funds. The SOAL, as part of the briefing to the command group, ensures that each program has an expenditure plan. This funding is for the procurement of the prototypes, the expense of any TDY of the user and acquisition authority incurred while testing, and the cost of any modifications to the system/program.

Once the SOCREB makes the decision to procure the requirement, SORR fences Procurement and O&M funds for the purchase of the system. Procurement cost is the total cost to buy the number of systems to meet the requirement and initial stocking of repair parts. The O&M funding pays for training and sustaining forces with this new capability. The SOAL has the capability to execute procurement and RDT&E funding as rapidly as O&M funding.

The SORR programs and budgets a sufficient level of funding for the execution of the command's combat experimentation program. Currently about $150M is USSOCOM's annual funding for RDT&E. Based on the level of importance and flexibility combat experimentation provides, at least 2% ($3M) of the budget should be reserved in this appropriation for this process. Experience and time will refine the level of funding that USSOCOM will need to spend. Initially, this process will receive many requests, however, the user's workload and the command's ability to properly manage this process will regulate the number of ongoing projects. If the intent is to experiment on equipment for rapid procurement, then USSOCOM should fence ten times the RDT&E amount (i.e., $30M) for procurement.

The decision for follow-on procurement is a consolidated brief from the combat experimentation working group to the SOCREB. Procurement funding is relatively more limited than testing funding; therefore, the intent of the brief is to successfully convey the importance of this equipment to the overall mission of SOF and the impact on the Desired Operational Capabilities (DOC). The brief presents the total agreement of the rapid requirement and experimentation process by the user, the acquisition

program manager, the requirement action officer, and the comptroller. If the command group disapproves the strategy and decides the experiment is not affordable, the program is terminated. Additionally, the user is the focus of this experiment and can also disapprove the acceptance of the equipment at any time during this process.

Once the SOCREB approves the transition from experimentation to procurement, the SORR and SOAL ensure sufficient funding. SOAL procures the approved number of items and appropriate initial stockage level of repair parts with procurement dollars. SORR provides applicable O&M funds to the component command to accomplish the necessary changes to doctrine, training, sustainment, and facilities. Doctrinal changes include publications and academic courses. Changes to training involve funding for new training manuals and TDY for training teams or operators to training sites. Sustainment is the purchase of repair parts to maintain an appropriate operational readiness level. If the item is a weapon, sustainment would include training ammunition to develop and maintain the user at a high level of proficiency. Facilities would include minor modifications to arms rooms, maintenance buildings, and ranges if required.

EXPERIMENTATION OVERSIGHT

Oversight of the validation, combat experimentation, and follow-on acquisition process is an essential responsibility to this whole process. Credibility, to ensure proper supervision, is important to future funding of this fragile, yet agile process. The command group and OSD will review these programs to determine whether the process is not only beneficial but also reliable and responsive. A process that has purview over acquisition and budgetary process is an excellent vehicle for management of the combat experimentation process.

Currently USSOCOM has such a three tiered process called the Joint Resource Management Process (JRMP). The JRMP was initially set up as a quarterly review to monitor the expenditures of execution funding for USSOCOM. The JRMP receives the full cooperation from the acquisition and resourcing action officers to ensure USSOCOM properly spends each Major Force Program 11 (MFP 11) dollar. Since the JRMP already meets quarterly and includes the essential components to effectively make combat experimentation function, this is an excellent vehicle to manage this process.

Again, the JRMP is a three tiered process. The first tier is the Joint Resource Working Group (JRWG), which is attended by all component comptrollers and equivalent SOCOM staff members. This is the most likely forum to fully address the issues and challenges within each program in the Joint Experimentation process. The next level is the Joint Resource Management Board (JRMB). Attendees to the JRMB include the chief of staffs from each component command and all staff agencies within the command. The JRMP touches the high points and issues that need a decision. The third level is the Joint Resource Executive Council (JREC), which is also chaired by the DCINC. The JRMB convenes the

JREC only if the JRMB cannot resolve the issue or a component command wants a program raised to that level.

The JRMP (specifically during the JRMB) can track the progress of each program from conception to completion. Once a component identifies a program sent to USSOCOM for validation, SORR adds the program to the list of on-going joint experiments for proper management and oversight. Programs are managed by critical milestones e.g., validated date, start test date, approval date, and final operating capability date. The JRMP will track all funds by appropriation, commitment, obligation and expenditure. The combat experimentation working group representative is responsible to the JRMP for the brief and immediate notification of any issues.

THE JOINT PROPOSAL

This combat experimentation process has further application at the Joint Staff level. Under Title 10, United States Code, the Chairman of the Joint Chiefs of Staff (CJCS) is responsible to the President of the United States and the Secretary of Defense for providing strategic direction of the Armed Forces and assessing military requirements for defense acquisition.[14] However, the CJCS does not have the near term flexibility to effect strategic direction nor the funding to implement any changes.

The CJCS has three instruments to effect strategic direction: the Chairman's Program Recommendation (CPR) to the Defense Planning Guidance, the Chairman's Program Assessment (CPA) to the budget, and the control of the joint requirements process through the Joint Requirements Oversight Council (JROC) process. These instruments are proactive in the long term and reactive in the short term. In other words, under the current acquisition strategy, the Chairman cannot affect the acquisition direction in the short term. Short term refers to budget and execution years (1-2 years). Since the CJCS's term of office is two years and limited to four years, he will not see any effect on the acquisition process. As stated earlier, the acquisition process takes over ten years. If the CJCS wants to ensure the strategic direction he imparts has substance, he needs a rapid acquisition and experimentation process. General Shelton, while serving as USCINCSOC, stated "Authority over programming and budget formulation and execution is essential in fielding a preeminent force."[15]

The Theater CINCs are also severely hampered by the lack of flexibility in developing preeminent forces. Currently, the Service Chiefs are singularly responsible to provide the forces and respective equipment to the Warfighting CINCS. The Theater CINCs do not have an acquisition executive nor acquisition authority to implement immediate warfighter requirements. The only formal feedback mechanism the CINCs currently have to critique the force capability provided by the Service Chiefs is the Integrated Priority List (IPL). The CINCs send the IPLs to the Secretary of Defense. They also send them to the CJCS to be incorporated into his Chairman's Program Review (CPR) and the Chairman's Program Assessment (CPA). This process has been identified as long and unresponsive.

Neither the CJCS nor the warfighting CINCs have the acquisition authority to develop, experiment, or procure items that meet their immediate joint warfighting requirements and accomplish their vision. The CJCS and CINCs react to the efforts of the Service Chiefs. However, the implementation of the USSOCOM joint experimentation model would resolve much of the CJCS' and Warfighting CINC's acquisition inability.

The organization and structure to manage the requirement process for this capability at the joint level is already available. The Joint Warfighting Capabilities Assessment (JWCA) will continue to identify the mission needs for the warfighter at the joint level. The JROC, which advises the CJCS and prioritizes joint requirements, will serve as the management tool to validate all joint experimental requirements, to prioritize each program, and to manage the process. A warfighting/supporting CINC, a Service Chief, or specifically, the CJCS will submit a requirement to the JROC for the immediate development and experimentation of equipment/software that necessitates rapid acquisition.

As part of the JWCA, a working group convenes to discuss a candidate for joint experimentation. Again, the working group needs to be responsive to the timelines and determine quickly if the requirement is valid. The J3 of the Joint Staff will review the results of this validation and submit to the JROC for approval.

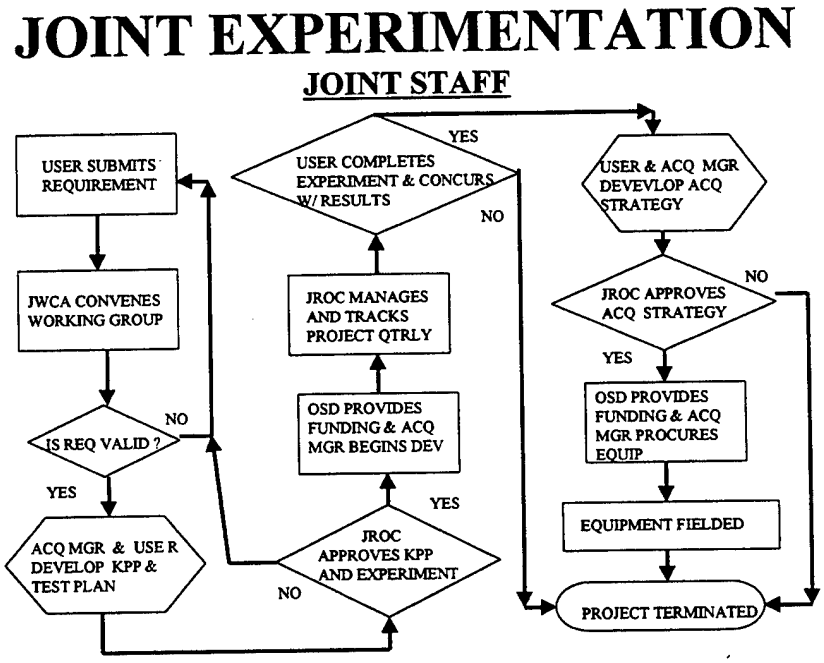

FIGURE 3: PROPOSED JOINT PROCESS

Upon validation, The JROC will select a Service component as lead agency. The acquisition executive of the respective Service will select an appropriate program manager. The program manager and the submitting user will develop the KPP and test plan. The program manager and user will brief the KPP and test plan to the JROC.

As in the USSOCOM model, a team approach is essential to ensure fairness and jointness. Each warfighting CINC (to include United States Joint Forces Command) should provide a representative (at least a general officer equivalent) to also sit on the JROC. However, the JROC must avoid bureaucracy. An effective joint experimentation process must have quick validation, focussed experimentation, and rapid acquisition.

Funding levels for the joint experimentation process will depend on the requirements of the CJCS and the Warfighting CINCS. The Chairman should control the source of funding, and the Vice Chairman, president of the JROC, should have release authority. The intent is not to counter the Service Chiefs efforts, but to provide a rapid response to the CJCS and CINC's immediate equipment requirements. The USSOCOM model used a 2% RDTE funding level and an appropriate ratio of Procurement funding to commence the process. As the process matures, the CJCS can adjust the reserved funding based on the Office of the Secretary of Defense (OSD) and Service concerns. OSD would be responsible to the Chairman to fence RDT&E and Procurement funds for Joint Experimentation.

As mentioned earlier, the JROC could also manage the progress of the experimentation. Quarterly reports to the Vice Chairman should indicate the programs status, milestone level, and expenditure rates. Cross leveling of technology and implementation of acquisition reform initiatives between Services will be greatly enhanced. In order to avoid any misuse of the process, the JROC will provide oversight for requirements and the OSD will provide oversight for funding.

The Chairman's visibility will emphasize the level of importance to the warfighting unit, the Service's acquisition executive, and programming and budgetary personnel at the OSD. The JROC will approve the warfighting unit's and the appropriate program manager's plan to develop and experiment on this capability. OSD will stay abreast of the progress and participate in the JROC updates on the joint experiments. The CINCs and Chairman must apply a level of scrutiny because the outcome of this experiment is the acquisition of follow-on equipment that respective Services must procure and sustain.

THE INTERAGENCY PROPOSAL

A further application of the joint experimentation process is in the interagency process. The Department of Defense (DOD) is currently involved in several acquisition programs that involve other agencies within the federal government to include; intelligence, information, communications, and weapons. As resourcing becomes scarcer, the greater the need for common technological and experimentation programs. However, several underlying issues exist.

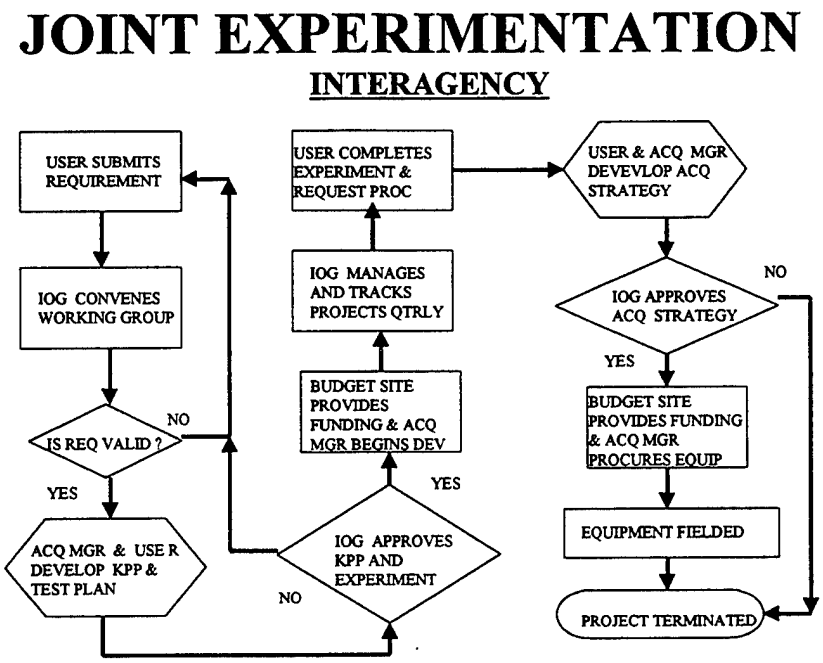

FIGURE 4: PROPOSED INTERAGENCY PROCESS

First, this process would require the establishment of an independent oversight council to provide an unbiased review of the requirement and validation process. The Interagency Oversight Council would have a representative from each agency and receive interagency experimentation proposals for validation and prioritization. A common format for this submittal would have to be determined; however, speed and clarity should remain the focus. The DOD already has a usable format.

The next challenge is the acquisition manager. The Interagency Oversight Council would select a specific agency as lead for the development of the equipment and the conduct of the experiment. The selection of the appropriate acquisition manager would be based on the agency having the most users or the greatest need. The lead user and selected acquisition manager would develop the KPP and test plan. This selected acquisition manager would receive funding from a fenced fund site to conduct the experiment and procure the Council's approved quantity. The Interagency Oversight Council would track the programs' timelines to include; validation, priority, experimentation status, and ultimately acquisition approval.

A third issue is funding. The Office of Management and Budget at the interagency level would program and budget a fenced fund site for interagency experimentation. The Interagency Oversight Council would also provide the proper oversight. The initial funding levels for RDT&E and Procurement should be the same as the joint experimentation model. A relationship between the Interagency Oversight Council for validation and the agency controlling funds would necessitate a formal agreement.

Finally, the Interagency Oversight Council that approves the requirement would also serve as approval for rapid acquisition of the interagency experimentation. Currently, no such organization exists. The interim solution is to follow the proposed CJCS's joint experimentation process and fund on an as needed basis.

SUMMARY

Regardless of the level of implementation of combat or joint experimentation, to effectively provide strategic direction to an organization, a leader must implement an expeditious requirement process coupled with a rapid acquisition process. The time period that a strategic leader is able to implement a plan to effect a direction is extremely short. Usually this period is about two to four years. In the Federal budgetary process, programs must enter directly into the execution phase and the first two years of the POM. This requires fenced or readily available RDT&E and procurement funding, coupled with a flexible requirements and acquisition process.

As previously discussed, the users and warfighting CINCs are frustrated with a slow and unresponsive acquisition process. However, the acquisition community has made many reforms to expedite this area. Many vehicles now exist for rapid prototyping, experimentation, and follow-on procurement. The requirement validation process is now the critical process whereby streamlined procedures result in larger acquisition performance gains. Procedures to quickly identify, describe, validate, and prioritize requirements are essential to meeting the warfighters' immediate needs and the future strategic leaders' ability to affect direction during their span of control. USSOCOM's combat experimentation and the CJCS's joint experimentation process is available now to meet this desire.

This paper has developed a joint experimentation process for the USSOCOM, with applications to the Joint staff and the interagency process. The USSOCOM staff can quickly validate requirements, conduct experiments, and field equipment within two years. Likewise, the Joint staff can use the JWCA to validate the requirement, the JROC to manage the experiment, and field the equipment to any DOD organization within two years. The Chairman could then affect his acquisition strategy. The interagency process, with the establishment of this joint experimentation model, could also validate, manage and field equipment to any agency with near term results.

Word Count: 6103

ENDNOTES

[1]U.S. Joint Chiefs of Staff, Joint Vision 2010, (Washington, D.C.: U.S. Department of Defense), July 1996, 34.

[2]General Henry H. Shelton, "A Word from the New Chairman," Joint Forces Quarterly, AUT/WIN 1997, 6.

[3]Ibid.

[4]Honorable Paul J. Hoeper, Assistant Secretary of the Army (RDT&E), "Acquisition and Logistics Initiatives: The Journey to Reduce Operation and Support Costs," Washington, D.C. 16 November 1998. Available from http://www.sarda.army.mil/speeches/journey 111698.html. Accessed on 2 November 1999.

[5]Colleen A. Preston, Deputy Under Secretary of Defense for Acquisition Reform, "Re-engineering: DOD's Procurement System," Defense 95, issue 2, 1995, 19.

[6]Greg Jaffe, "Spending Limitations May Lead Army to Scale Back Helicopter Purchases", Wall Street Journal, 2 March 2000. Available from https://ca.dtic.mil/cgi-bin/ebird. Accessed on 3 March 2000.

[7]Jacques S. Gansler, "Modernizing Hinges on Acquisition Reform, Outsourcing, Industry Rehab," National Defense, January 1997, 20.

[8]Preston, Defense 95,19.

[9]Gansler, National Defense, 22.

[10]U.S. Army Training and Doctrine Command, Pamphlet 71-9: Requirements Determination, (Fort Monroe, VA: Headquarters, Training and Doctrine Command), 1 August 1998, 30

[11]U.S. Army Training and Doctrine Command, Pamphlet 71-9: Requirements Determination, 27.

[12]United States Special Operations Command, Directive Number 70-4: USSOCOM Technology Programs, (MacDill Air Force Base, FL: United States Special Operations Command), 8 October 1998, 2.

[13]CJCS Instruction 3170.01A, 10 August 1999, "Requirements Generation System," C-A-1

[14]Title 10, United States Code, sections 167.

[15]General Henry H. Shelton, "Special Ops Crafting Strategy for Varied, Future Challenges," National Defense, February 1997, 24.

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