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WHEN SHOULD YOU TERMINATE YOUR OWN PROGRAM? BAD BUSINESS: THE JASORS DEBACLE

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by

John Dillard

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Acquisition Chair
Graduate School of Business and Public Policy
Naval Postgraduate School
555 Dyer Road, Room 332
Monterey, CA 93943-5103
Tel: (831) 656-2092
Fax: (831) 656-2253
E-mail: jbgreene@nps.edu

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When Should You Terminate Your Own Program? Bad Business: The JASORS Debacle

Presenter: John Dillard joined the NPS faculty in the fall of 2000 with extensive experience in the field of systems acquisition management. His research focuses on defense acquisition policy changes and their implications. Dillard began his career in program and contract management after attaining a MS in Systems Management from the University of Southern California in 1985. He has been involved with myriad technologies and system concepts that have evolved into fielded products, such as the M-4 Carbine, 120mm Mortar, and M-24 Sniper Weapon. He was the Assistant Project Manager for Development of both the Army Tactical Missile System and, later, the JAVELIN Antitank Weapon System at Redstone Arsenal, Alabama. All of these systems incorporate state-of-the-art technologies, are in sustained production and fielding, and are now battle-proven. He was the Product Manager for the Joint Advanced Special Operations Radio System, and in 1998 was appointed to head Defense Department contract administration in the New York metropolitan area. Dillard has consulted for the governments of Mexico and the Czech Republic on achieving excellence in the public sector. As an adjunct professor for the University of California at Santa Cruz, he teaches courses in project management and leadership to Silicon Valley public- and private-industry professionals.

John Dillard
Senior Lecturer
Graduate School of Business & Public Policy
Naval Postgraduate School
Monterey, CA 93943-5197
Phone: (831) 656-2650
E-mail: jtdillard@nps.edu

Preface

The Project Manager (PM) is typically the advocate for his program. He is the champion for his team of government and industry players, the spokesman to higher headquarters for progress in achieving the various parameters of cost, schedule and performance, and the steward of taxpayer funds—on a constant quest for best value.

He must keep the leadership—and sponsors—honestly informed in a timely manner, especially when things don't go as planned. He must continually assess risk and the resources needed to complete the project effort so that he can marshal the appropriate forces against the challenges that invariably arise during the course of execution.

The ultimate goal of a project being to advance warfighting capability, there is little accolade for lesser achievement. It is then perhaps easy for the manager's zeal for success and personal self-worth to become associated with the project. This can allow optimism to reign—and cloud judgment—by unintentionally filtering and distorting information.

A recent article describes the frustration of Congressional stakeholders with program cost overruns—whether from inaccurate early estimates, requirements creep or just poor management. There are even concerns over deliberate deception. On whether acquisition executives might ever consider terminating programs that spin out of control, their statements

affirm that indeed they have and will move to terminate overrunning programs at control gates or cost "trip wires."[1]

An implied question arises from this testimony, "When should a PM advocate his own program's termination?" That is, as ones closest to and perhaps most knowledgeable about their programs, should PMs ever initiate or recommend program termination to their leadership? And if so, under what criteria should this occur, and what should be the methodology?

What follows is a *Personal Experience Monograph* written in 1997 at the US Army War College at Carlisle Barracks, Pennsylvania. It is a reflection upon events during the period 1992 through 1994, seen through the eyes of a PM (this author) who inherited a doomed program, and what actions he took as these events unfolded. It can perhaps serve as a case study for those who might find themselves in similar circumstance.

Several points can be taken from this monograph that might be applied universally:

- Arguably most important is that it is not the PM's decision whether a program can or should be terminated—It is the sponsor's to make.
- Organizational divisions—divided houses of requirers, acquirers, and end-users actually afford checks and balances. So, there is latitude for candor and forthrightness. Above all, PMs are in the position to do what is right, or at least report what they think it to be. Given the ethical dilemma (oft-defined as the choice between two bad outcomes) of termination (with its ugly personal/professional exposure) or almost certain failure, PMs must have the moral courage to elevate the issues to the appropriate level of decision-making.
- From a requirements standpoint, since all programs must compete for scarce resources, it is prudent for systems pursued to be arrayed within a functional area architecture or framework that spans timelines and capabilities. A lucid and coherent commodity strategy should stand the test of time and leader turbulence. The life and death of programs will always hinge upon their validated need.
- From a programmatic standpoint, acquisition rules and policies have evolved toward sensible guidance for the execution of programs. While we seek the removal of bureaucracy and red tape at every opportunity, we must be nonetheless judicious in the application of good management practices and principles. There is no benefit to shortcutting things like rigorous requirements analysis and definition (and documentation thereof), and a thorough analysis of alternatives. Likewise, product lifecycles should be tailored according to technology readiness vis-à-vis timing of need. Rapid results can be obtained without the necessary loss of good sense and discipline. There is no substitute for good staff work.
- All programs must face the periodic and external examination of:

  - Cost and schedule estimates

  - Capability gains over the baseline system being replaced

[1] Cahlink, G. (2005, November 3). House lawmakers ask military services to rein in rising weapon cost. *Defense Daily.*

- Competitive threats and validated need

- Management activities, expenditures, etc.

No individual or organization in the DoD environment is above public scrutiny of these and other aspects of our programs.

- It is not up to the PM to defend requirements, or to tell the end-users what they want. Their job is to provide the solution to a clearly articulated need. PMs manage cost, schedule, and technical performance. Users manage what is needed, how it will be employed, and how many will be procured.
- When it is clear that the necessary ingredients of a healthy program (a motivated and talented team, a contractual vehicle, sponsorship, fully defined requirements, and resources for the proposed solution—time/money/technology) do not exist or will not soon arrive, it is incumbent on a PM to recommend termination up the chain.

It is as important for PMs to innovate as it is for them to tell the truth—whether to ascertain ways of reducing scope, creating palatable solutions for leader decisions, or presenting original ideas for re-scoping. From producing a materiel solution to extricating the teammates from a failed endeavor, PMs must think creatively and keep things moving toward a positive end.

Bad Business: The JASORS Debacle[2]

MY CALL TO ACTION

In October of 1992, my name emerged on the FY93 Command and Product Manager (PM) List. I had been selected to leave Redstone Arsenal's JAVELIN anti-tank missile program office and move to Fort Monmouth, NJ, the home of the Army's Communications and Electronics Command (CECOM)—a two-star commodity command under Army Materiel Command (AMC). I was to be the Product Manager for the Joint Advanced Special Operations Radios System (JASORS)—a set of lightweight, super-secure communications equipment for the Special Operations Forces of Army, Navy and Air Force.

I was surprised at the equipment commodity I was going to. I had been an Infantry officer before learning the acquisition business, with most of my experience in the missiles and armaments arena. I had no signal-type expertise: I had often jumped a PRC-77 radio as a company commander in the 82d Airborne Division, but turning it on and off was about all I knew of communications. I had worked in the ATACMS project office, also at Redstone, during a critical development and testing phase, and at Picatinny Arsenal prior to that—developing advanced technology for small arms and mortar systems. I knew there were no missile or armaments jobs open that year, but I, nonetheless, was excited about making a material contribution to the Special Operations folks with whom I had a long kinship during my days with the conventional paratroopers at Fort Bragg. Many of my good friends served with the Special Forces, and, being Ranger-qualified and a master jumper as well, I understood their roles and

[2] The first draft of this working paper was published 21 February 1997 by Lieutenant Colonel John T. Dillard, USA and Professor Douglas V. Johnson, Project Advisor for the US Army War College (USAWC) Writings Study as a Personal Experience Monograph. The USAWC is located in Carlisle Barracks, Pennsylvania.

missions. To even better prepare myself, I enrolled in the Special Operations Staff Officer Course at Hurlburt Field, Florida.

Before moving up to Fort Monmouth, I wanted to learn all I could about JASORS. I found quite a few articles in the military library at Redstone. It was one of GEN Steiner's (then the Commander) high priority US Special Operations Command (USSOCOM) programs. It was big dollars and complex technology for an aggressive set of size and weight requirements. JASORS was fully ten percent of the entire USSOCOM R&D budget for the year.

A FORETELLING OF TROUBLE

While at Hurlburt, I met the incoming USSOCOM Commander, GEN Wayne A. Downing. As we chatted, he said to me, "So you're the new JASORS PM. Well, I'll tell you, right now I don't know if we still need your system, and if we do, I don't know if we can afford it." A bit surprised, I pledged to him my best efforts as PM, and to advise him on those two issues as soon as possible so he could make an informed decision. I promised a revised threat assessment by NSA and a revised cost estimate within the month. We certainly didn't need to be inventing and buying something we didn't need. But I couldn't help thinking: a very expensive train had already left the station…

The significance of his words could not be overstated. When the requirement for a system, any system, goes "soft"—the program is dead. We just don't have the money, and never did, to keep unwanted programs alive. I knew I'd have to jump on this issue as soon as I took over as PM.

MY WORK BEGINS

I arrived at Fort Monmouth in March 1993 and had 30 days "overlap" with my predecessor to bone up on the program in preparation for taking over on 9 April. I started taking electrical engineering classes and got detailed technical briefings from program personnel. I read all I could get my hands on and had several lengthy discussions with the outgoing PM. I mentioned to him my encounter with GEN Downing. We also received a classified official electronic message from him questioning the need for JASORS in late March. The outgoing PM said he felt it was all "a bunch of smoke" and that I shouldn't fret—the program was alive and well. A few days later, I assumed the PM charter and control of a program office of about nine dedicated government people, and about 100 at contractor facilities. JASORS was my baby now. I was fairly familiar with what this fast-moving train was all about. And I knew I had an immediate crisis on my hands.

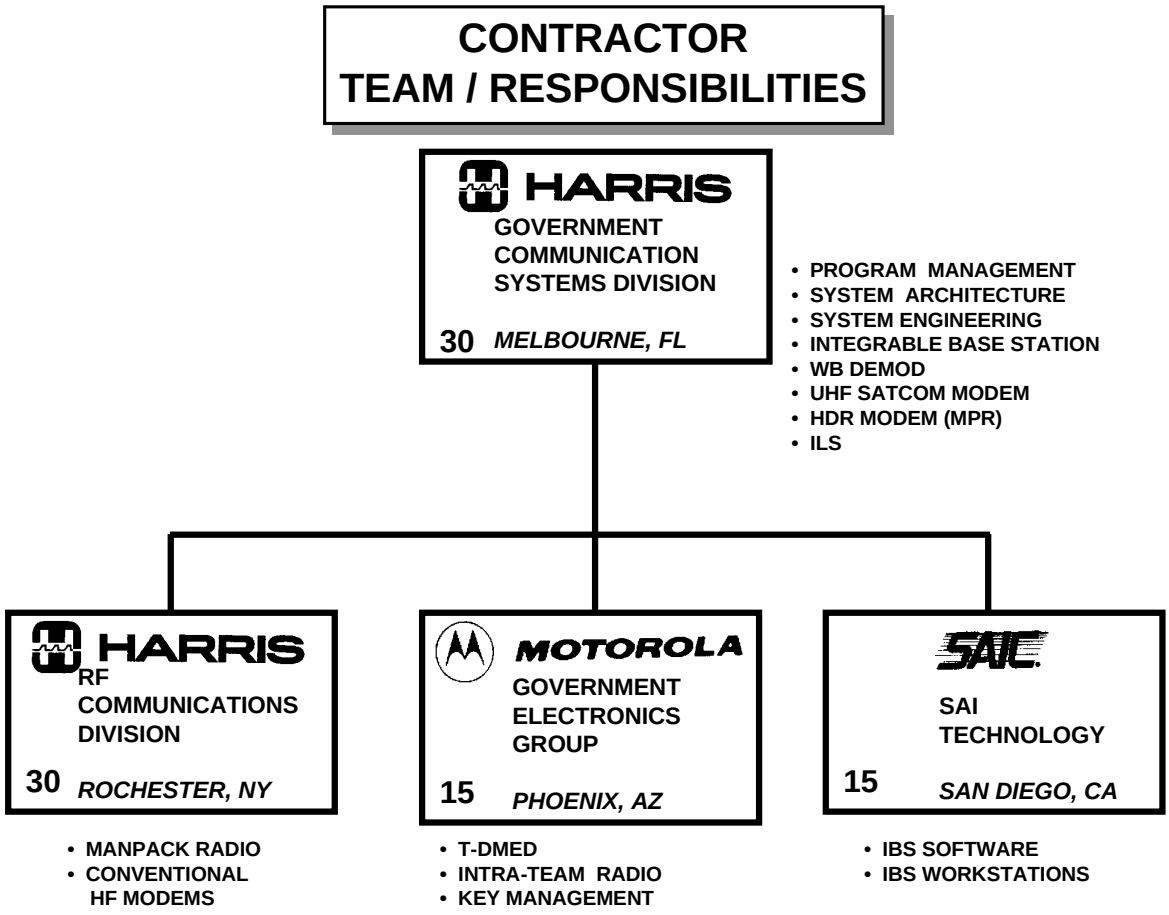
ABOUT THE JASORS PROGRAM

The JASORS program was already three years along in development, and had several unique aspects to it:

a) The program was on a Cost Plus Award Fee Contract, fairly typical for an R&D program, but had combined the period of performance to cover the first two acquisition cycle phases (then of Concept Exploration & Definition and Demonstration/Validation). The prime contractor was Harris Government Systems Division of Melbourne, Florida. They had major subsystem contracts to Motorola in Scottsdale, AZ, SAIC in San Diego, and another subsidiary of Harris in Rochester,

NY. We were very spread out across the US. The chart below illustrates the contractor team relationships. Numbers represent people (staffing).

Figure 1. Contractor Team Relationships



b) The cycle phases were actually misnamed: "CE&D" was really Dem/Val (building prototypes) and "Dem/Val" was really Engineering Manufacturing Development (EMD) (final design & testing for production). The traditional "CE&D Phase" was really skipped. That's the phase where important system-concept studies are usually conducted, and requirements are formalized. The JASORS program was already "bending metal" and building prototypes.

c) The CECOM/SOCOM relationship: I worked for the CECOM Commander, then MG Otto Guenther, though my product was for USSOCOM—a fairly new Command, born after the Goldwater-Nichols Act of 1986, which was still struggling with the complexities of systems acquisition and the critically important roles of the "User" (Combat Developer) and Materiel Developer. Authority for both resided in the same four-star house—unlike the Army's separate Training and Doctrine Command (TRADOC) and Army Materiel Command (AMC).

d) My money was from Major Force Program 11, an appropriation of funds for USSOCOM only—no one else could decrement me or even transfer my money elsewhere.

e) To date, $44 million had been spent, and no Cost Operational Effectiveness Analysis (COEA), Acquisition Baseline, or Operational Requirements Document (ORD) had been written on the program—which I regarded as not just a serious infraction of the DoD acquisition regulations, but a strong indicator that this was a program being conducted "on the fly." System specifications had been written by NSA and CECOM from the USSOCOM Mission Need Statement (MNS), and the PM & contractor had been told to get underway quickly.

f) As a USSOCOM program, I enjoyed total autonomy as PM. Few people at CECOM (except the folks employed on the program) were very concerned about JASORS because of the separate nature of its funding, and my direct supervisor was the Senior Executive Service director of the entire CECOM R&D Center, rather than a typical colonel in a regular program office.

There were also some unique challenges associated with this endeavor:

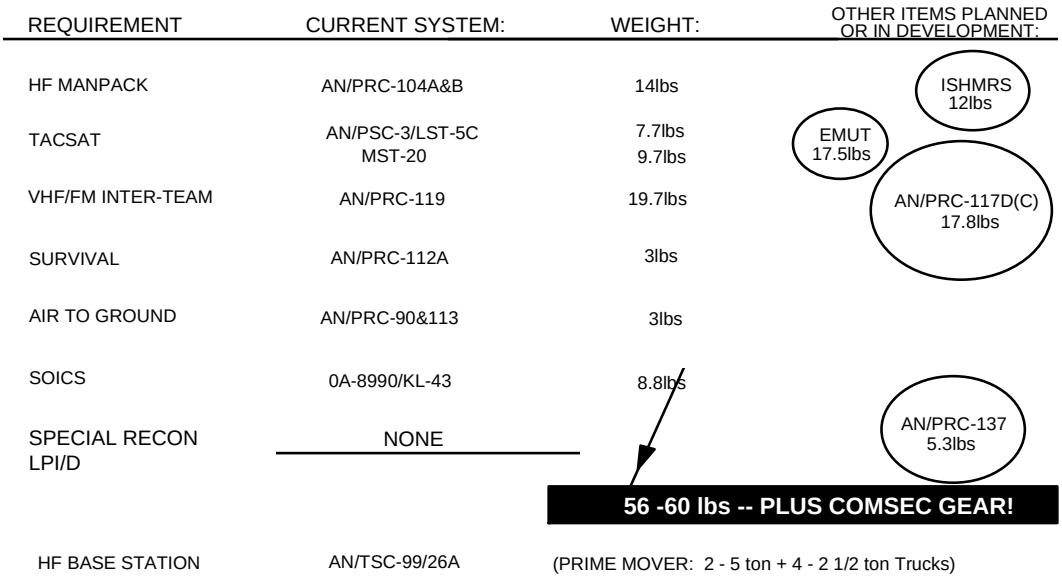
a) The counter-part industry PM had been replaced recently. I would have a new one to work with—he needed to rapidly get aboard a moving train. (And he did. Later I would realize how good a manager, and how professional, frank, and ethical he proved to be.)

b) The schedule was very ambitious. It began as a two-year effort, but unforeseen work had slipped it an additional year. Now rebaselined, I would carry the baton to the next phase in just six months, beginning a new two-year effort (Dem/Val) to field test and produce the equipment.

c) Technical performance was largely undemonstrated as of yet, since the sub-system prototypes were only now being delivered to the prime contractor for integration. Twelve "Staged Integration Tests" were soon to begin, and would prove whether anything of merit had been built in the last three years.

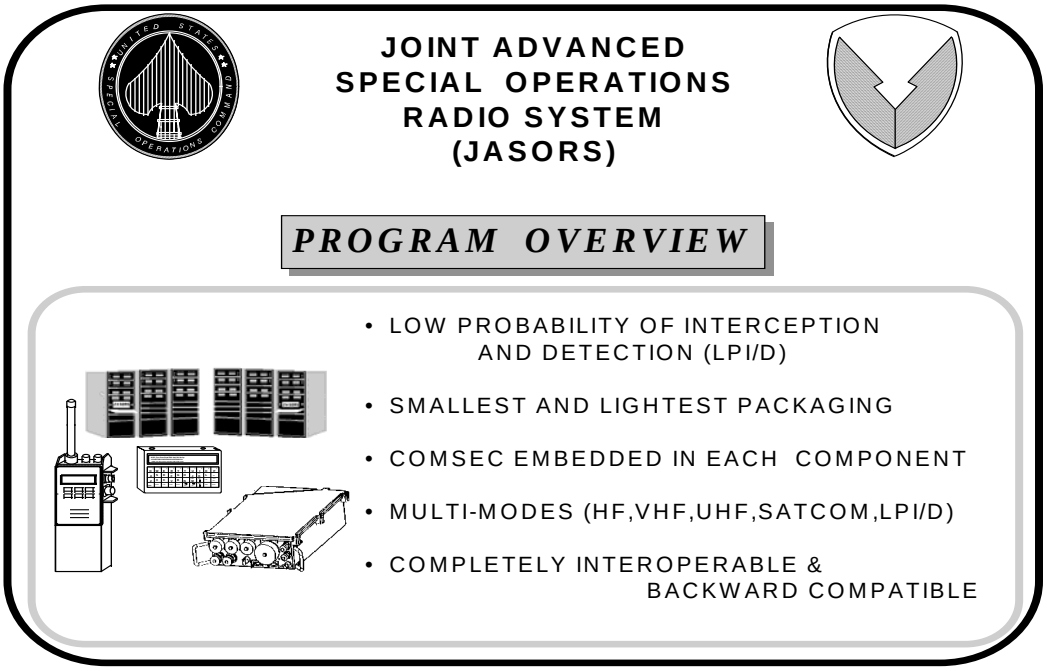
d) In essence, JASORS was to replace everything carried by the SOF A-team in the way of communications gear, with a substantial savings in rucksack weight—our system total was to be only 16 pounds vice 60-100 pounds of baseline capability. But there were some other items also in development or being procured that overlapped with JASORS capabilities.

Figure 2. Current SOF Team Commo Gear



e) We were also seeking to produce several beyond-the-state-of-the-art waveforms to prevent the detection and interception of SOF radio transmissions (Low Probability of Interception/Detection (LPI/D), especially during strategic reconnaissance missions. This requirement had sprung from the Warsaw Pact Threat days. USSOCOM wanted a radio that could only be heard by friendly forces. It was the principal and over-arching requirement of the system. The rest was just added on. A previous staff of energetic USSOCOM and USASOC action officers had outlined capabilities for JASORS to replace every SOF radio in their inventory along with a new, more deployable SOF Base Station (movable by one HMMWV versus six 2 ½- and 5-ton trucks). Thus, we also were seeking every possible facet of backward compatibility and interoperability with conventional radios, covering the entire HF, VHF, UHF, AM/FM and SATCOM spectrum, and in a package that was one-man portable: an incredible enterprise—Multi-band, Multi-mode communications in a small, sixteen pound suite of gear. The figure below minimally portrays the system.

Figure 3. JASORS Requirements



f) System Integration of the subsystems, hardware and software, was a major challenge. We dealt with over 300,000 lines of software code. Interfaces between the pieces were critical.

g) Embedded (NSA Certified) COMSEC was also a requirement in each piece. That agency's process for certification is as secretive and obscure as their cryptic products.

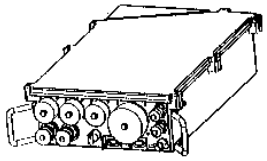
h) Power Management (Battery Life) was a tough area where we wanted more than anyone had ever wrung out of a BA-5590 SINCGARS battery. This chart shows a little more depth of system functionality required by the MNS, as well as size/weight of each of the components.

Figure 4. System Components

INTEGRABLE BASE STATION (IBS)

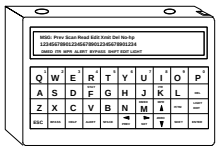
- **Deployable LPI/D C2 System**
- **Mission Planning and Control Via JLE**
- **Transmit and Receive Capabilities**
- **Comprised of JASORS Manpack Radios**

MANPACK RADIO (MPR)



- **BLOS LPI/D Data Communications**
- **HF, UHF SATCOM**
- **Store & Forward - Unattended Operation**
- **10 lbs (8” X 11” X 3”)**

TEAM DIGITAL MESSAGE ENCRYPTION DEVICE (T-DMED)



- **Secure Digital Message Entry, Storage and Display**
- **Intuitive MMI for JASORS Components**
- **MIL STD HF Serial Tone, FSK and Wireline Modems**
- **NVG Compatible Backlighting**
- **512K Secure Scratch Pad/Journal**
- **1.7 lbs (3” X 5” X 2”)**

INTRA-TEAM RADIO (ITR)

- **30-1000 Mhz VHF, UHF, AM & FM**
- **LOS LPI/D Voice and Data Communications**
- **LPC10 and CVSD Vocoding**
- **4 lbs (10” X 3” X 1.5”)**

i) Cost was a horrific story: The program had been rebaselined twice (a seeming contract buy-in situation), and had grown from $17M to $44M for the three-year effort. With the government costs added in, we were to have spent $62M total by the end of the fiscal year (1993).

A HINT AT THE ROOT CAUSE OF CATASTROPHE

If that all doesn’t sound complex or challenging enough, factor in that just as I was taking over as PM, the past cost performance had finally exhausted the patience of the sponsor headquarters (USSOCOM). As well, the next acquisition cycle (Milestone I) decision had been deferred by USSOCOM because of uncertainty of their “new requirements,” meaning documents like the ORD weren't ready. Their uncertainty was that, since the Berlin Wall had fallen and the Soviet Union collapsed—and the Persian Gulf War was won—was there any need to fear enemy signals/communications intelligence? The end of the current phase was scheduled for November.

The contractor needed a Dem/Val statement of work from the government PM as soon as possible to propose his estimate and for a smooth transition to next phase of the contract (but that was of course dependent on the ORD). I was informed the User (USSOCOM) was now drafting a new Mission Need Statement—different from the set of requirements the contractor had been working on—and wanted me to review it. It would have significant technical impact, if adopted. (Being a bit unnerved about all the supposed changes, I took a calm approach about being willing to do things differently—and probably over again: like a building contractor might receive news that the split-level home he's building is really supposed to be a ranch.)

Congressional impatience with USSOCOM's lack of an integrated overarching C4I (Command, Control, Communications, Computers and Intelligence) strategy had triggered a House Appropriations Committee Surveys and Investigations (S&I) Team. They were coming to interview me in four weeks. They were concerned about approximately $108 million spent in various places on SOF communications-electronics programs in recent years, including JASORS, with nothing produced for the troops in the field.

My program analyst greeted me at the change-of-PM ceremony to inform me that cost variance was again growing, and I would be out of money by July at the current spend rate. The most over-spent subcontractor PM had just returned from his Maui vacation, and had me about eight weeks behind schedule with a poor recovery plan. Lastly, the marketing resources for JASORS had been few, and as a result, the field didn't know the program's status.

On the plus side, the FY94 Budget Estimate Submittal (BES) still reflected $30M for the program's next phase, but I knew it would have to survive all the House and Senate Authorizations and Appropriations committee marks throughout the summer.

A CHANCE TO MAKE THINGS RIGHT

Over the next several months, I did all I could to learn my program, meet the government and industry players, and separate the "macro from micro" issues. I examined the cost history to understand what happened and why, and I also confirmed that the new rebaseline of cost and schedule was accurate. I visited the troops of 3rd Special Forces Group at Fort Bragg, traveled to all the subcontractors, met with USSOCOM and rendered my total program assessment to their Acquisition Executive (AE) by my 28th day in the job. I wanted to address all of SOCOM's concerns and show a willingness to do anything we could to produce something for them.

I arranged for an NSA threat briefing to the GEN Downing. (The briefing asserted that American forces were still vulnerable to various enemy capabilities for interception of our communications—but was met without a concerned response from the general, who suggested that an enemy capability didn't necessarily establish its probability of use. After all, Saddam Hussein had not jammed our satellites in the Gulf War.)

We had a contract, funding, and a technical team in place. Those things take sometimes years to get. I knew we had the resources to give something to SOCOM if only they could tell us what they wanted. But a senior officer down the hall from my office had worked some other SOF commo projects at CECOM. He cautioned, "They're like drunks in a liquor store, John—they want to buy every shiny bottle." I understood later what he was trying to tell me. This full-Colonel had spent the rest of that $108 million, with much of what it produced

warehoused in Tobyhanna depot. It seems the User had changed his mind fairly often about requirements.

MAKING REAL PROGRESS

I turned my attention to the Staged Integration tests, which were this phase's Grande Finale.

My best technical experts would spend the summer with Harris Corp. trying to put all the prototypes together and demonstrate system functionality—and the world's first truly Low Probability of Intercept/Detection transmissions via an over-the-air encrypted link from upper New York state to Florida.

I asked SOCOM to reinstate Milestone I to the November schedule—we needed that forum for decision-making—and I registered my concern in writing over the lack of user proponency, ORD, etc. I took my boss's boss, MG Guenther, to Florida for a program review with all key players. We pushed SOCOM's Acquisition Executive for commitment and guidance. The Dem/Val statement of work needed to be written and given to the prime for his proposal ASAP, but I delayed spending the money on that effort (about $1million) in case the new draft MNS was going to dictate changes. I felt it could wait a little longer. We did review the new MNS to assess requirement changes and keep open dialogue, but I also thought it best to hold off incorporation of contract changes until the new requirements were formalized, staffed, & approved. My hunch was later proved to be right—they never were.

I cautioned the prime contractor in writing about his spending rates and published a spend plan that would have him live within our budget through the rest of the fiscal year. I was pleased to find that Harris GCSD in their cost accounting had transcended from simply incurring to actually anticipating costs—an important step few contractors can achieve. When I felt the time was appropriate, I asked for the removal of one of the subcontractor PMs. He had simply not been able to manage the effort successfully, thereby holding up the entire program—and worst of all—I didn't observe that he even cared. He was removed immediately.

Gauging the political winds, I felt the best marketing approach for JASORS was to stay somewhat low-level for a while; though we did take the opportunity to answer press inquiries and take credit for emerging accomplishments.

UP AGAINST A VERY THICK WALL

By the time November rolled around, USSOCOM still had no ORD for Milestone 1. There wasn't even a doctrinal Concept of Operations (CONOPS) for the system. The requirements we had been building prototypes for were never formalized or revised, despite my attempts to bring USSOCOM to the table to create these with all of our assistance. It would be difficult to develop much further with no input from the sponsor. We needed User-specifics for on-screen menus and key management. In the larger picture, USSOCOM did not comply with Congressional language requiring they provide a comprehensive C4I Strategy either. I was amazed at this, and we were definitely programmatically adrift.

The Staged Integration tests had ended successfully—system functionally had been fully demonstrated with long-haul, over-the-air, encrypted LPI/D transmissions from New York to Florida, using only milli-watts of power—without fanfare. We had recovered our schedule to

within two weeks of the planned contract completion date by carefully scrubbing our scope and deleting non-value-added deliverables, plans and reports mostly, from the contract. NSA approved of our progress. A summary of what we built and demonstrated is described in most abbreviated fashion below.

Figure 5. CE&D Achievements

- **A-Spec, System Segment Specification, JSID written and allocated**
- **CE&D-Configuration System Design Completed**
- **Prototype Hardware Built (2 DMEDs, 6 MPRs, Base Station)**
- **CE&D Software Written, Integrated & Tested**
- **JASORS INFOSEC Chip (JIC) FAB, I&T, NSA Certification**
- **Favorable LPI/D Vulnerability Analyses & Mode Tests**
- **System and Sub-System functionality Testing Completed**

OVER-THE-AIR ENCRYPTED, LPI/D, LONG-HAUL LINKS DEMONSTRATED END-TO END
**** A VERSATILE, CAPABLE, TRUE-LPI/D SYSTEM ****

Throughout the summer, I had visited the USSOCOM J-6 offices to apprise them of our status and to help work out the requirement issues. I felt I had their personal trust, but it was clear the action officers and J-6 felt they no longer needed the JASORS they had set out to build just three years earlier. I energized CECOM to form a "Red Team" to see what the cheapest, fastest alternatives would be to the current program, and what technology could be "harvested" from the $62M we had spent. I offered to completely revamp JASORS into anything SOCOM wanted. But to my frustration, their headquarters would not support any down-scoping or restructuring of JASORS. Nor were any prototypes wanted for delivery (though USASOC, the Army's Special Operations component, disagreed—supporting further development of the small Digital Message Entry Devices). At least I had not wasted another $1 million on having Harris propose to our Dem/Val statement of work.

The USSOCOM J-6 was particularly fond of a small radio developed as a classified program. It evolved to be the PRC-137, which offered HF-only, very slow data-rate transmission in an LPI/D mode and non-NSA-certified COMSEC. It didn't have all the multitude of requirements in size, weight, functionality and interoperability required of JASORS in our MNS and system specs. He felt this was all the radio that USSOCOM needed to procure at the time.

It had been fifteen months of contract performance for Harris since their last award fee evaluation. I couldn't have been more proud of the performance of everyone on the industry contractor team. SAIC had finally delivered their all-important Base Station Digital Message Entry Devices; Motorola had produced two nearly-fieldable prototypes of miniature Digital Message Entry Devices (DMED) along with the very first simultaneous COMSEC/TRANSEC functioning information security chip that was soon to become NSA certified (and still being procured today); Harris GCSD had tied it all together with a successful integration effort of HF/UHF manpack radios into a base station. Cost was a flat line on my charts for eighteen months—they had stayed within budget and a neatly recovered schedule under their new industry PM. The award fee board agreed. It was with pleasure that we rewarded their efforts with an appropriate fee out of my management budget.

"JULIE-GATE"

The program was still under FY93 funding; there was no FY94 budget yet. Congressional Authorizations and Appropriations committees had picked up on the softening of the USSOCOM JASORS requirement through quiet conversations on the Hill with the USSOCOM Commander and his staff. One day we had the opportunity to place loaded questions in the mouth of the Senate staffer, who the Commander was summoned to the Hill to visit, via my contractor marketing reps—who are free to visit their representatives anytime they wish. Defense contractors, after all, are powerful constituents and often have communicative links with the legislation writers. Pointed questions to the Commander about what direction USSOCOM communications procurement was taking might reveal a weakness in their strategy. But I would have no part in it, and asked my contractors to back off of this tactic to keep their program funded. They agreed and complied. If JASORS were to live, it would be because we were building what USSOCOM at least thought they wanted. As it was, the USSOCOM clandestine plan for JASORS's "assassination" appeared to be simply having Congress "un-fund" it, rather than providing any direction from USSOCOM headquarters. As expected, the program was used as a billpayer for other wants. When the FY94 budget was finally approved in December 1993, only $7M was appropriated to JASORS vice $30m originally requested by USSOCOM—and insufficient to execute anything.

I had enough funds to retain the government staff on the program for a while, but I was prepared to call for immediate termination of the program and cancellation of the contract if I could just get guidance from USSOCOM. Understandably, people at the contractor facilities began to leave the program anyway. This came as a surprise to some folks at USSOCOM, but not to me. People have a natural tendency toward being productive, and Harris had plenty of other work from serious customers who knew what they wanted. I was forced to give Harris a "stop-work" order.

USSOCOM points of contact told me to "wait-out." A new C4I strategy was forthcoming that would possibly spell out the new direction for JASORS.

WANT A NEW JOB?

It was about this time that I received a strange telephone call from a Major in USSOCOM's SORDAC (Special Operations Research Development and Acquisition Center). He asked if, given JASORS's situation, I would like to be the new PM for an exciting new program for the Improved Special Operations HF Manpack Radio System (ISHMRS), a manportable 12-pound straight-conventional HF radio with Automated Link Establishment

(ALE). He said my decision would be effective immediately. Just take over the program tomorrow.

I thought for a moment about how ridiculous this call was. It was certainly not for me to decide to drop mine and "adopt" a new program. One which, by the way, also had no ORD, but had lots of money and was "on a fast track to build prototypes." Legitimate PMs are formally and centrally selected and chartered by the services. Meanwhile, we were two-thirds complete with something a lot more capable, I felt. And we had spent $62 million on it, and it wasn't quite dead yet. I pleasantly declined the offer.

SEPARATING PERSONAL FROM PROFESSIONAL

I had a tough time throughout the past year separating personal feelings from the program. I knew better than to identify with the JASORS or attach my ego to it. I had seen systems get canceled before, and it didn't necessarily spell professional death. After all, the PM for Sergeant York later became a two-star general, though I had no such ambitions. (Then) BG Gust, the Program Executive Officer for Communications, had also given me wise and comforting counsel—he had been in a similar position with his program as a lieutenant colonel—the Aquila UAV. The important thing was to do what was right. Mostly, I wanted to do right by the soldiers, like those I met of the 3rd SF Group, who were still humping around old technology in the form of large and heavy backpack radios that had single functions only. They augmented their spares with items they bought from Radio Shack.

ENOUGH IS ENOUGH

It was a short meeting in Washington, DC that started things rolling to culmination: On 4 February 1994, the USSOCOM J-6 action officer privately confided to me that the new USSOCOM C4I Strategy was still not complete—one year after Congress demanded it in law—and that there was, in emerging drafts of the strategy, no requirement for JASORS or any of its subsystems. The officer went on to suggest that the JASORS Product Management Office use the $7M to maintain a low-level of staffing and to keep the contract alive as "insurance," in case it was needed later. And maybe to wait for a Command change at USSOCOM. As I gazed out the window of a Crystal City Hotel, I decided enough was enough.

"CONTRACT COMPLETION" VERSUS PROGRAM TERMINATION

Up to that point, we used high-level reviews at USSOCOM and message traffic between general officers to try to alert USSOCOM that valuable resources were dissipating to provide anything to the troops—all to no avail. I rarely got answers to correspondence—even to General Officer message traffic. And I could resolve nothing at the action officer and J-staff level. There seemed to be this tremendous layer of non-communication between Commander-level and his primary staff. No one wanted to approach the upper level for a decision. It was time to terminate my own program.

I was tired of indecision and wasting of the taxpayers' money, and even more tired of wasting the efforts of my own troops: my full-timers in government and almost 100 on my industry payroll. My boss had cautioned me against trying to unilaterally terminate the program, no matter how frustrating it seemed. He was right. He directed that it be a joint recommendation and a USSOCOM decision. On 14 February 1994, I sent the USSOCOM Acquisition Executive a "Valentine" recommending his agreement to terminate the program and

harvest the JASORS INFOSEC chip and whatever technology advancements we could document (the technical data package to date). I emphasized it was our only recourse given no requirement and insufficient funding.

The following day I was asked to fly down to USSOCOM and brief the AE and J-6 one more time. We were into face-saving now. While they did want JASORS to die, no one wanted to be the one to kill it. I came up with an idea. I made it palatable to them by declaring it "contract completion" versus "termination." USASOC wanted the prototype DMEDs and got them, but they weren't suited for much except another iteration of further development to ruggedize them.

All agreed it was finally over, and we could accomplish a close-out of the program without embarrassment to USSOCOM. I walked out of USSOCOM headquarters for what I knew would be the last time as PM JASORS, and I had a tremendous feeling of relief. Placed in charged of a program no longer wanted was emotionally straining. We're known in this life by our works, and when you're working on something no one wants, and you can't disentangle—it's difficult. When *Defense News* later interviewed GEN Downing and asked about JASORS, he simply replied that USSOCOM had to cut many programs due to budget pressures.

I made my way back home to commence termination procedures. It wasn't going to be as simple as just turning out the lights. There were now $62 million worth of contractual documents and hardware to properly dispose of, and people to reassign. In short, I took delivery of all development documents and had them carefully archived at CECOM. Hardware prototypes that CECOM could use in further waveform research were placed in the Space and Terrestrial Communications laboratory. My people were all reassigned throughout the CECOM. It took only fifty-five days total. I served as a Special Project Officer for the CECOM Commander for a short while, and moved on.

NOW THAT IT'S OVER, WHAT HAVE WE WROUGHT?

My time with JASORS progressed at about the same pace as a soap opera. During the story's unfolding, I carefully and continually analyzed what was going on and why. There is little need to look back and examine further. The catharsis of finally putting it all down on paper here helps—and still frustrates.

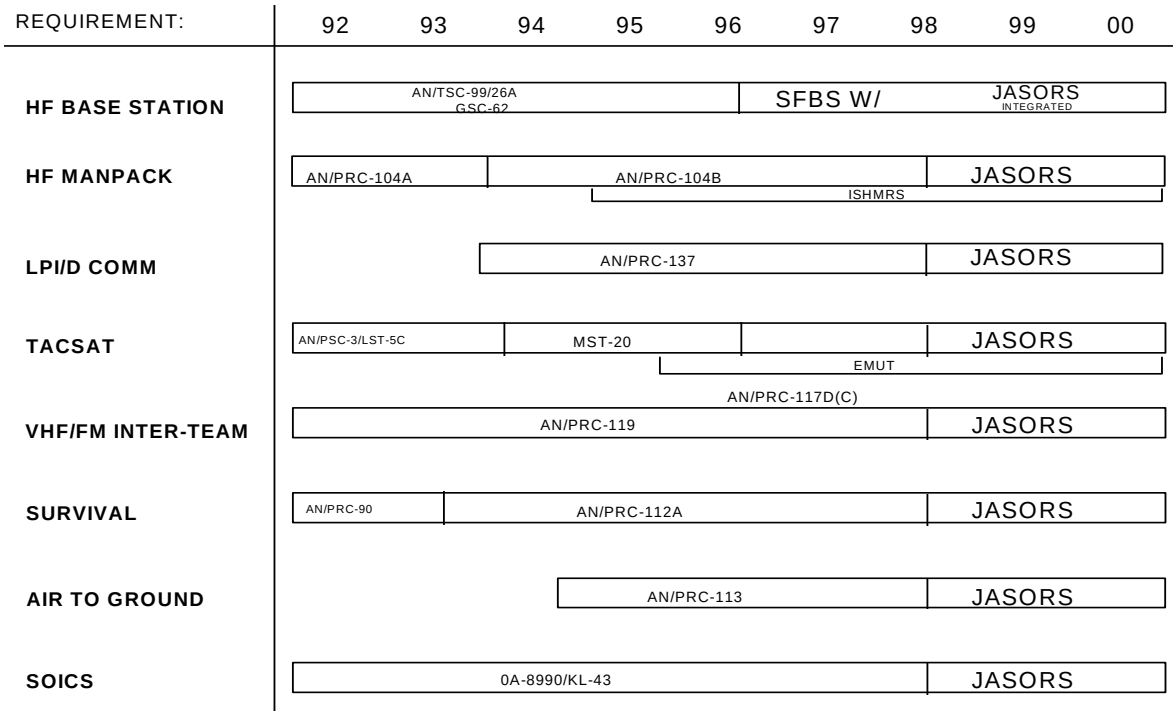
We successfully demonstrated multi-band, multi-mode communications, to include the lowest probability of interception/detection modes ever designed, in smaller, lighter packaging than even now exists commercially. We held program cost and schedule to amounts budgeted, and conducted a smooth contract closure in record time. I personally experienced "life as an autonomous PM," and it was a great education with great interpersonal relationships. Those were the good things.

But from my vantage point, we—corporately—failed the soldiers, sailors and airmen of the Special Operations Forces. We wasted 62 million dollars not because we couldn't build JASORS; not because there was something better, cheaper, or faster out there; not because it cost too much; not because we didn't need it. We failed because we didn't have a mission area *strategy*.

What every educated acquisition officer knows is that a program must fit into a larger architecture—whether it's airplanes, missiles, or communications-electronics. Roles and

missions have to be delineated. A certain amount of redundancy may be needed, but for the most part, each system must technically perform within a doctrinal concept of operations. And it must stand the test of cost-effectiveness through a proper analysis. Every system competes for funds in the budgetary process. Without a strategy, we're doomed to successive false starts going for the next "shiny bottle." The aggregate of these half-finished programs cost much more than one program properly defined and adhered to. Maybe the authority to both require and procure shouldn't reside in just one headquarters. Maybe checks and balances from independent agencies' eyes are good. Through all the time and effort, USSOCOM had never constructed a simple chart such as this to convey a direction and timeline for the communications gear migration they had once desired.

Figure 6. SOF C-E Strategy



"WE NEED A STRATEGY... AND MORE DISCIPLINE"

Spending millions of dollars should not be an amateur sport. It all starts with requirements. "Hooah" only takes you so far in the business world of procuring systems. "This looks good" doesn't cut it. "Let's buy this" is too cavalier. Good staff work requires thinkers who will tackle the mundane, unexciting tasks of requirements formulation and concepts analysis. What Congressional staffers were asking for, a comprehensive C4I Strategy, is exactly what we didn't have and needed most—before embarking on the journey. A fundamental question for USSOCOM was: *multi-band communications capabilities or multi-box communications*? (By ending JASORS they elected multi-boxes—de facto.)

USSOCOM had gone “Ready, Fire, Aim.” Another false start to add to their list of ill-fated acquisition excursions. Sadly, USSOCOM is still pursuing the same technical capabilities via new efforts with new players. It’s now [at the time of this writing], 1997—and no JASORS, no ISHMRS, no *anything* new in the soldiers’ rucksacks. They carry the same LST-5 SATCOM radio, same KY-57 COMSEC device, same PRC-104 HF radio, same PRC-119 VHF-FM radio, same OA-8990 DMED—Low-tech & heavy on their backs.

In 1995, I invited a friend from USASOC to visit the Naval Postgraduate School and talk to my acquisition students. He said a SOF Process Action Team had been formed recently to look inward and examine inefficiencies. When finished, they reported that the headquarters had not been successful in acquisition ventures because they lacked: “guidance from the Commander about his vision or strategy, analysis, integration of the staff’s efforts, and discipline.” I could vouch for that.

A short time later, the world waited to hear whether Air Force Lieutenant Scott O’Grady had survived the shoot-down of his F-16 over Serbian-held territory in Bosnia. But even minimal use of his survival radio might have caused him to be located by his enemy, so he waited for days until he could risk transmitting by voice, and was miraculously rescued. The need for JASORS technology still lives.

EPILOGUE

At the US Army War College, a classmate I had never met and who had been a USASOC action officer during the time I managed JASORS walked up to me at a party and said, “No human could have kept the JASORS program alive. Everyone knows you did all you could.”

I was promoted to the rank of Colonel in 1997, and centrally selected for another command: the Defense Contract Management Command in Long Island, New York. While waiting to take command, I was again offered a job as a PM for USSOCOM, at the O-6 level – I politely declined and took command of the DCMC organization instead. It was consoling that I had not alienated the people at USSOCOM—all you really have in this world is your reputation. And it was another note of closure on the death of my old friend. We have to do our best in the circumstances we inherit—and play with the cards we are dealt.

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