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# International Armaments Cooperation: A Test and Evaluation Perspective

By

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[The following is a reprint of a presentation by Colonel McArthur at the Common Defense Forum 89 at the Omni-Shorham Hotel, Washington DC on 11 October 1989.]

During my presentation to this audience last year I focused on outlining the criteria for a DOD Foreign Weapons Evaluation (FWE) or NATO Comparative Test (NCT) project. I made a point of explaining the mechanics of these programs and we walked through the steps I would take, if in the position of either a foreign manufacturer or manufacturer's representative, to bring an item to the attention of a potential user. Accompanying that presentation was a full-page article that I penned in the 12 September 1988 issue of *Defense News* which further explained the FWE/NCT review and selection process. Both my comments last year and my recent *Defense News* article remain current.

Today, however, I am going to give you my perspective of the major impediments to both the FWE and NCT programs and explain why, as a soldier, I believe these impediments must be removed. When I am finished you may find that many of the points I raise are true for a broad range of international programs, not only FWE and NCT. You may be correct; however, I must confine my remarks to the FWE/NCT arena to which I believe I can speak with some experience. I recognize that I may risk sounding like the individual who is always focusing on the "half-empty part of the glass;" however, unless we surface these issues, we cannot fully discuss them or initiate remedies. That's what Common Defense is all about, isn't it?

As most of you are aware, the FWE and NCT programs are primarily test and evaluation (T&E) efforts. We staff and approve for OSD, and conduct oversight of approved projects out of the Office of the Deputy Director, Defense Research and Engineering, Test and Evaluation (DDDR&E(T&E)). Potential future acquisition is the goal of both programs; testing for its own sake is of little value. For a variety of reasons, the success of these programs will likely continue to be measured in terms of the number and value of the items tested that are eventually procured. All FWE/NCT efforts yield some positive results. As a result of 33 evaluations we have made sizeable off-shore direct purchases of 36 items at a cost of approximately \$2 billion. Other tests have led to foreign subcomponents or software being recommended for integration into ongoing U.S. development efforts. In other cases, we have learned that an ally's test article was not fully developed, or simply could not meet the critical performance parameters stated in a requirement. There have also been occasions where we have modified a requirement to allow a foreign item a realistic opportunity to compete. There are other examples where we have fully qualified an item for competitive procurement or source selection. Even if the item loses out, the addition of another competitor may have had a favorable impact on costs to the taxpayer.

The true measure of these programs, therefore, is that foreign acquisition options were examined, proponents of the equipment had an opportunity to make their case, and that procurement was made on the basis of full and unbiased competition.

Now to those of you in the audience who think that what I have just said makes me a foreign "cheerleader," I can assure you that you are mistaken.

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I work within OSD acquisition, but I am first, and foremost, a U.S. soldier. As such, I share the frustrations of my peers when we have difficulty fielding modern equipment in a timely matter, at a cost effective price. From that aspect, *I am a proponent of whatever process will facilitate that end.* I believe that there are some major shortcuts and cost savings to be found when and where we are willing to accept an already developed item that may provide a solution to a Service requirement. That was exactly the intent when Senators Nunn, Roth, and Warner fostered the so-called "Nunn Amendment."

"OK" you say, "What's the problem?" "Glad you asked," I say. Lets talk first about what I refer to as the "generic" problems.

There have always been challenges endemic to consideration of foreign items for use by U.S. forces. Notwithstanding the challenges, there are too many examples of where we have benefited from an ally's development. The British Harrier "jump jet" in service with the Marines, the German 120mm gun we mount on our M1A1 tank, and the French Durandel runway cratering bomb in service with the USAF are notable "big ticket" items.

Those worried, as we all should be, about the U.S. trade imbalance, should also recognize that accepting a foreign item doesn't necessarily mean a loss of U.S. jobs or major off-shore purchases. Foreign and U.S. defense contractors appear to be increasingly sensitive to the potential advantages of "teaming" arrangements that may lead to co-production. There is nothing magic as to why such teaming has become popular: It simply makes economic sense. Therefore, procurement of data rights or production by a U.S. partner may make many joint ventures more palatable to all.

Has the environment that once allowed us to evaluate and eventually field such "foreign" equipment changed during the past few years?

First, there is, of course, some natural, expected, inbred reluctance within the U.S. RDT&E base to become involved with anything "foreign." In addition, I believe that concerns voiced on Capitol Hill during the past year or two regarding the erosion of the U.S. technology base, technology transfer (i.e., the FSX issue), dependence on foreign technology, etc., are reinforcing an already well-entrenched "NIH" (not invented here) lobby and are having an increasingly negative effect on international armaments cooperation initiatives such as the FWE and NCT programs.

There is a dichotomy and some confusion here. It is a widely held view that we simply don't have the technological lead in all the areas we had 20 or 30 years ago. New ideas, shortcuts, and revolutionary concepts are emerging within our NATO allies, as well as within Israel, Sweden, Japan, and others. Some allies are focusing on "value engineering," the use of new or evolving technologies to significantly reduce production costs for traditional items such as ordnance. The competition is not about to go away; it's simply getting tougher and better organized (e.g., the industrial reorganizations and consolidations taking place within the European defense community). Proponents of technological isolationism, whether in Europe or the U.S., can only help to speed further deterioration of our respective technological bases.

The point here is that those who are really concerned with degradation of the domestic technological base, trade imbalances, protectionism, etc., should be actively encouraging *support* for initiatives such as the FWE/NCT program, not "slow rolling" them. Although not "exploitation" programs by any means, these programs do encourage the Services to investigate existing free-world hardware and some emerging technologies. In fact, they assist in the "importing" of technology.

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Unfortunately, due primarily to long-standing vacancies within OSD this year, no "champion" of international defense armaments cooperation has yet emerged within the current administration, a role taken on largely by Deputy Secretary of Defense Taft, Dennis Klosky, and to a large degree, Ev Greinke, during the past few years. I am confident, however, that a senior "international" DOD defense spokesman will soon emerge and that he will reinforce the fact that the U.S. remains committed to working closely with our allies.

A larger problem is that the Services, in many cases, believe consideration of alternative systems will jeopardize ongoing developments. This is a difficult issue, and in my view, will only be overcome by more honest brokering of our R&D establishments. Development agencies need savvy "Red Team" competition advocates inside those organizations that actively survey the international "state-of-the-art" in the functional areas for which they are responsible. I believe this fear of publicly demonstrating more fully developed foreign systems against early U.S. developments is one of the primary reasons the FWE and NCT programs have been under-subscribed for the past two years.

Let us face it, no one who works within an R&D establishment is going to win any friends by recommending that we take a serious look at a foreign system as a competitor to an internal development effort. This fact makes it all the more important that Service operators, the users in the field, stay abreast of what is emerging off-shore.

There are, of course, the more traditional impediments: cost variations due to fluctuating exchange rates; schedule delays attributable to language and distance; lack of "Mil Standards;" the desire to avoid potential Congressional criticism in home districts; customs delays; and certainly not least of all, difficulties in contracting. During the past two years I have probably heard every imaginable horror story concerning the difficulties of importing a foreign military item for evaluation. But the facts are that if a project has promise and captures the interest of a Service proponent willing to dedicate the time and effort to make it happen, it will. However, when a project languishes for almost two years or more before a contract is signed for lease or procurement of the test item, we must question the Service resolve for commitment to that evaluation. There have been too many such examples.

So much for "generic" problems.

There are specific problems with the FWE and NCT programs that rest with the Services themselves as well as with those of us within the OSD.

All three Services have "international" offices within their Pentagon Headquarters which tend to serve as clearing houses for international efforts of all kinds. In fact, these offices have an important, sensitive, and extremely difficult mission. Although generally understaffed, these offices have major responsibilities in regard to NATO fora, Senior National Representative (SNR) meetings, International Cooperative R&D programs, reciprocal procurement MOUs, Data Exchange Annexes (DEAs), Scientist and Engineer Exchange, responding to all visit requests to the Service Acquisition chiefs regarding discussions of international issues, international contracting issues, special Security Agreements (e.g., situations such as when U.S. contractors doing classified work are bought out by foreign corporations), issues in regard to End User Certifications, DFAR Council Service Representation, preparing for Conferences of National Armaments Directors (CNAD) or NATO Industrial Advisory Groups (NIAG), and, of course, Service Headquarters focal point responsibilities regarding FWE and NCT projects.

Simply stated, there is frequently little more than a cursory review of new FWE/NCT proposals at the Service headquarters level. Most projects are properly initiated by field activities but with little or no programmatic integration with the Service agency responsible for moving a good idea to the Program Objective Memorandum (POM) [budget submission] process. Without a

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critical review by the Services at the start of any such evaluation, marginal projects are forwarded for OSD to make the tough “approve/disapprove” decision.

We, within the OSD staff, must then determine if a proposal is really one to which the Service is committed. We frequently find incomplete market surveys, lack of realistic acquisition strategy (pending successful T&E), poor or missing test plan outlines, poorly documented T&E funding requirements, a tendency to want to procure rather than lease equipment for T&E, etc. Many such candidates appear as nothing more than “technical assessments, proof-of-principles, or concept evaluations.” Such efforts are more properly funded by the Service R&D centers or through the Defense Advanced Research Projects Agency (DARPA). They do not comply with DOD guidance regarding FWE/NCT project. This, of course, leads to rejection of many candidates.

Many approved projects soon show characteristics of typical “back-burner management:” decentralized management, slow execution of contracts, limited (or no) involvement of higher echelons, rapid cost escalation after initiation, unwarranted duplication of foreign testing already accomplished, and late formal test plans, Quarterly Status Reports, final reports, etc. Too frequently there is a obvious failure to resolve problems in a timely manner.

The solution is simple: Service headquarters must become pro-active in FWE/NCT project selection and T&E program management.

For all of the above reasons, it is apparent that, at the OSD level, the only way we can ensure Service commitment is to closely scrutinize all new proposals and reject all but those that meet most, if not all, of the criteria recommended in DOD Directive 500.3-M-2, the *Foreign Weapons Evaluation and NATO Comparative Test Procedures Manual*.

This Spring I attended a two-month Senior Officer National Security Course at the JFK School, at Harvard University. I was able to hear, absorb, and discuss many timely defense issues with some of our most knowledgeable and widely recognized scholars and DOD members of past administrations. Defense acquisition sessions were highlighted by a number of case study discussions led by Jacques Gansler, whom many of you may know. Jacques has recently published his book, titled *Affording Defense*, which I highly recommend to you. This book is not a rambling diatribe on the ills of the current system so popular among today’s self-proclaimed acquisition “experts.” It is full of facts, clear charts and graphs, and presents some excellent thoughts regarding change.

Although I wish the book had spent more time addressing “non-major system” procurements and potential cost savings, two of Gansler’s conclusions and recommendations are consistent with those of the Packard Commission and the recently completed National Security Review 11: (1) expand the use of commercial products (i.e., NDI—Non-developmental Items), and (2) increase competition.

Unfortunately, the Services may seriously investigate potential savings of off-shore NDI only when the budget axe forces them to look at “last resort” alternatives. If so, the FWE and NCT programs may become increasingly popular in the next few years.

I would like to say a few words about European Community-92 (EC-92) and its possible impact on the FWE and NCT programs. Many in the U.S. defense community believe that formation of a united European defense market may result in new barriers for U.S. industry. In their view, the way to retaliate would be to terminate programs such as FWE and NCT. I do not share those opinions. I believe that the goal of FWE and NCT is the same as envisioned by the European community—namely, a more efficient and competitive marketplace. In such an environment, U.S. manufacturers should be able to obtain fair and open access, just as we have

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been trying do do for their foreign counterparts in FWE and NCT. In my view, rather than fading away as EC-92 becomes reality (more likely in the 1995-2000 timeframe), these programs should thrive. FWE and NCT would continue to demonstrate U.S. commitment to free and open access across national borders and would serve as a model for initiation of such programs within the European community.

The FWE and NCT programs remain viable, highly visible programs that send the right message. It simply makes no sense to spend the time and money developing a system or equipment in one country when an acceptable alternative is already operational with an ally. That statement should be as palatable in the U.S. or Germany as it is in the U.S.

We have passed the time when we can justify armaments cooperation with meaningless rhetoric outlining an idealized picture of the good things that will magically accrue with cooperation. Each project must be judged on its own merits. Potential advantages must be weighed against costs. We must support programs that make economic sense. We believe that FWE and NCT do just that.

#### **ABOUT THE AUTHOR**

Colonel Colin L. McArthur, USA, is an armor officer who has held numerous command and staff positions during his 24 years of service. He has an extensive research and development background and has served since 1987 as the DOD Manager of International Test and Evaluation Programs in the Office of the Deputy Director, Defense Research and Engineering (Test and Evaluation).