Developments in Transatlantic Armaments Cooperation

By

Lieutenant Colonel Willie E. Cole, USAF

CATCHING THE "EUROPHORIA BUG"

Throughout the 12 European Community nations, Western Europeans are stepping out a little smarter and holding their heads just a little higher these days. The Europe 1992 program, with its remarkable potential for uniting the EC nations toward a common goal, has sparked a sense of hope and pride that has been missing from the European psyche since economic "Eurosclerosis" set in during the '70s. Now, Eurosclerosis has been tossed aside by improving economies, and a new password has emerged. "To speak of Europhoria is right," says Italian Foreign Minister Geanni de Michalis. "There is a change of perception, not just among governments but among the people." Bitten by this Europhoria bug, Europe's leaders are pointing with pride to their larger, more competitive corporations, their newly emerging technologies, and their soon-to-be-united markets, and they are declaring that Japan and the United States must begin dealing with them as equals in the world market place.

TIRED OF BEING LITTLE BROTHERS

Nowhere is this burgeoning pride more evident than in Europe's defense acquisition community. During more than 30 interviews with European ministry of defense personnel and defense industry executives, the message of a stronger, more self reliant European acquisition community came through loud and clear, especially when discussions turned to transatlantic cooperative programs. Europeans, with their improving industrial base and emerging technologies, are no longer satisfied with being treated as little brothers in transatlantic cooperative programs. If relations don't change soon, they seem intent upon accelerating a trend that has been years in the making—pan-European programs instead of transatlantic programs. As one European defense industry executive put it, "Your idea of cooperative programs has been, 'The U.S. builds and we Europeans buy.' We're no longer interested in that. We want true partnership now."

EUROPE GOES IT ALONE

This determination to be more than just customers will come as no surprise to those familiar with European weapons development. European willingness to put up with the trials and tribulations of the European Fighter Aircraft (EFA) program indicates the premium Europeans are willing to pay to establish independence. Despite the fact that it would have been less expensive for participating EFA nations to buy a United States fighter aircraft (for example an improved F-16 Agile Falcon or F-18 Hornet would have cost $20-30 million per copy versus $40-60 million per copy for the EFA), no serious consideration was given to such an alternative. When it became clear that the United States would not discuss stealth technology, creating yet another issue with technology transfer, Europeans resolved to go it alone. The EFA participants accepted that EFA would cost more and have less stealth capability, and then proceeded to independently develop their own fighter aircraft. Another example is the French/German PAH-2 helicopter program. Despite the lower costs and comparable performance of the available U.S. Army Apache helicopter, France and Germany chose to develop their own helicopter, demonstrating that where major weapon systems are concerned, Europeans are willing to pay more and accept a little less rather than resort to a buyer relationship with the United States.
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Not only are Europeans willing to spend more for their programs, but there's some evidence that Europeans are willing to abandon existing transatlantic cooperative programs for programs internal to the European community. One example currently under examination by the U.S. General Accounting Office is the United Kingdom's switch from the NATO Anti-air Warfare System program to the Family of Anti-air Missile Systems, a competing Franco-Italian program. Similarly, Lockheed, which was originally involved in the now-defunct Future International Military Airlifter program, saw first-hand evidence of this trend in the summer of 1989 when the involved European organizations decided that instead of pursuing a transatlantic program, they would establish an all-European program called the European Future Large Aircraft.

These trends, fueled by disappointments over failed transatlantic programs and resentment over past imbalances in defense trade between Europe and the United States, can be expected to accelerate as the provisions of the Europe 1992 program go into effect. National barriers that have been an irritant to cooperation between European nations will be disappearing as movement of goods, people, and capital is made easier. When faced with a choice between a deregulated environment for European cooperative programs and a frustrating regulated environment (to be discussed later) for cooperative programs with the United States, Europeans will naturally take the path of least resistance.

ECONOMIC PRESSURES ARE PUSHING EUROPEANS CLOSER

Further evidence of a European move away from transatlantic programs to pan-European programs is provided by the ascent of the Independent European Program Group (IEPG), a thirteen-nation group dedicated to opening European defense markets and promoting cooperative European weapons programs. Aside from the Group's obvious goal of integrating European defense markets, the growing strength of the IEPG demonstrates a European desire to be less dependent on the U.S. defense industry and a U.S. dominated NATO.

Economic incentives of avoiding duplication of R&D programs and improving European production economies-of-scale are also prime motivators in the trend toward pan-European programs. Recently, at a seminar on "European Defense Research and Procurement after 1992," Sir Peter Levene, chief of Defence Procurement in the United Kingdom and chairman of the IEPG, recognized these "economic pressures which are pushing Europeans toward closer cooperation on defence research and procurement." Just as members of the European Community on the civilian side have recognized the problems of fragmented markets, Europeans on the defense side have recognized that fragmented, duplicative efforts keep them from meeting their goal of a stronger, more efficient European defense industry.

A DASH OF PROTECTIONISM

Clearly, some of the factors encouraging this trend toward an independent European solution to weapons procurement are protectionist in nature. The European defense industry is undergoing a tremendous restructuring that will cause some companies to fold and unemployment to increase. With such changes, it should not be surprising to hear views like the one expressed by French Defense Minister Jean-Pierre Chevenement who called for a European preference in military procurement to protect European defense industries. This attitude, however, does not seem to dominate. For each protectionist statement, two declarations can be found from European leaders that the European defense market should evolve into an open market. Members of the IEPG have stated, in fact, that the IEPG process should open European defense markets to the United States and Canada, as well as to participating nations.
EUROPE'S NEW TECHNOLOGY—MAKING IT ALL POSSIBLE

If this European movement toward self reliance is being powered by such forces as "Europhoria," the IEPG, and those few favoring some degree of protectionism, then it is all being made possible by Europe's improving technology base. Twenty-five years ago, some European nations bought the F-104 Starfighter because their industries weren't ready to produce a supersonic fighter. Only 15 years ago, four small European nations turned to the United States to buy the F-16. That has changed, and it is now technically and cooperatively possible for Europeans to rely on their own programs in the high technology area of fighter aircraft development.

Indeed, fighter aircraft technology is not the only area where Europe's technology base is becoming stronger. Europe, like Japan before it, has been working toward reaching and, wherever possible, surpassing the U.S. technology base. The March 15, 1990, Department of Defense Critical Technologies Plan points out that in 13 of the 20 DOD critical technologies, NATO Europe is capable of making major contributions toward future U.S. technology challenges, while in 3 of the 20, Europe is significantly ahead in some niches.

GETTING THEIR RESEARCH ACT TOGETHER

To encourage further improvements in European technology, the European Community is sponsoring $5.2 billion worth of dual use research and development through such programs as EURAM, ESPRIT, and BRITE; for its part, the IEPG has begun a program called European Cooperation for the Long-Term in Defense (EUCLID) designed to coordinate previously disjointed national defense research programs. The combined result of these research programs should improve even further the technology base available to European weapons producers.

U.S. APPROACHES—DISINCENTIVES CONTRIBUTING TO THE TREND

One factor that seems to have contributed as much as any to this European trend toward pan-European programs is the way the United States approaches cooperative programs. It has long been a U.S. goal to encourage transatlantic cooperative programs, but when yesterday's concepts are combined with today's realities, the opposite is happening. From the U.S. viewpoint, transatlantic programs are desirable because they decrease development costs, increase allied economies-of-scale, and strengthen political, commercial, and economic ties with our Allies. Strengthening ties with Allies is becoming increasingly important as Europe wonders if it should still be marching to the beat of the NATO drum, and Americans wonder about the protectionist nature of a stronger and more united Europe. Economic benefits of reducing the costs of development and increasing economies-of-scale of production have increased in importance with spiraling costs of weapons development and declining defense budgets. Instead of recognizing the newly increased importance of these benefits and taking advantage of them in a planned fashion, the United States clings to policies and management practices that prevent full realization of these benefits.

From the European viewpoint, there are three areas that create problems: technology transfer, third country sales, and administrative relations. Every European interviewed mentioned these same three areas as economic disincentives to cooperating with the United States. One even wondered if U.S. approaches in these areas had been designed to separate the European defense acquisition community from the U.S. acquisition community.

TECHNOLOGY TRANSFER—A CONTINUING PROBLEM

When discussing technology transfer, Europeans quickly pointed out that they understood and agreed with the U.S. policy of denying technology to our common enemies, but they were frustrated by the apparent lack of trust on the U.S. side. Another common complaint centered
around the bureaucratic system used by the United States to review and approve technology transfer. Examples were cited where a cooperative program Memorandum of Understanding had been signed by DOD only to find that the Commerce or State Department would not allow technology transfer and would deny approval of the export licenses needed to execute the cooperative program. Fortunately, DOD has taken notice of such problems and is working more closely with the Commerce and State Departments in a promising effort to expedite government-to-government licenses for cooperative programs.

One of the more embarrassing cases cited of the U.S. attitude toward technology transfer to allied countries, was of a U.S. briefing to the French and British on a planned radar improvement to the U.S. E-3A aircraft. Despite the fact that the information in the briefing had been covered in a weeks-old *Aviation Week and Space Technology* article, the British and French could not be given copies of the slides because they weren’t approved beyond oral and visual release. Many others mentioned U.S. no-foreign-disclosure (NOFORN) documents, and the meetings on cooperative programs (programs, by the way, that European money is supporting) that Europeans were not allowed to attend.

**U.S. INDUSTRY CHIMES IN**

Europeans are not the only ones frustrated by the U.S. approach to technology transfer. Interviews with U.S. defense industry executives revealed a frustration level that is as high or higher than the Europeans. Complaints about lost sales and opportunities because of delays for export licenses were common. One U.S. industry executive said that because of such delays, European firms normally have a 90-day head start on competition for new defense business. Most U.S. industry executives were adamant that the system for export licenses for technology transfer was too complicated; so complicated, in fact, that they hire specialists to massage the bureaucracy to get timely approval on even outdated, low-level technology.

Two European companies have gone further than hiring specialists. To buy U.S. products in a timely manner, one European defense firm formed a U.S. subsidiary dedicated to advising small U.S. companies how to get export licenses. Another has set up a company in the United States that buys U.S. products from U.S. companies and then uses their experts to walk the halls of the Defense, State, and Commerce Departments to obtain export licenses to ship the products to their parent corporation. Clearly, the U.S. approach to technology transfer puts U.S. companies at a competitive disadvantage and creates an extra cost for our Allies to do business with the United States. [Editor’s note: for a related item, see the article, “Defense Policy Advisory Committee on Trade—1989 Year End Review,” which follows.]

**THIRD-PARTY SALES: ROOM FOR IMPROVEMENT**

Another economic disincentive to cooperating with the United States from the European viewpoint is the U.S. policy on third party sales. The European willingness to enter into any agreements that restrict third-party sales is rapidly diminishing. The case of the Airbus A320 is an example of how far Europeans are willing to go to ensure they can sell to whom they want. A few years ago, the United States blocked a sale of the Airbus to Libya because the Airbus contained U.S. engines. As a result, the Airbus consortium went to great cost and effort to design out any U.S. content in the Airbus A320 to prevent such future occurrences.

Not only does the U.S. position on exporting goods to third party nations cause our partners aggravation, but our method of imposing this policy creates mistrust and puts U.S. firms at a disadvantage. Fueling this mistrust is the U.S. policy on Memorandum of Understanding (MOU) content concerning third party sales: MOUs must contain a provision requiring written approval from the United States before a third-party transfer can be affected. This approach adds economic risk to the program from the European viewpoint. Without a large, coherent defense market like...
the one enjoyed by U.S. firms, Europeans turn to export sales to increase their economies-of-scale. With no up-front guarantee from the United States that they will be able to do this, Europeans, like all good businessmen, consider this an added risk to doing business with the United States and are thus encouraged to turn to pan-European programs. Perhaps it would be more appropriate for the United States to pre-approve selected third-party sales in MOUs and, thereby, somewhat reduce the risk perceived by our transatlantic Allies.

ADMINISTRATIVE PROBLEMS: AMUSING OR EMBARRASING?

How Europeans feel about the third area, U.S. administrative relations with Allies, became obvious during an interview with Philippe Roger, Deputy Director of International Relations for the Delegation Generale pour l'Armament (the French centralized military procurement agency), when he presented the chart shown in Figure 1 below. Mr. Roger uses the chart to gauge the difficulties and rewards of French participation in cooperative programs. To use the chart, one would go along the bottom until hitting upon the type of cooperative project being considered and then go up the appropriate column until coming to the national relationship being considered. The chart shows that as you go up the columns, the more administratively difficult the program becomes. It is worth noting that bilateral cooperative programs with the United States are considered more difficult than multilateral programs with European nations. Most difficult of all are multilateral programs involving the United States.

FIGURE 1
The French View of the R&D Cooperation Domain

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<tr>
<th>Increasing Administrative Complexity</th>
<th>Multilateral with U.S.</th>
<th>Bilateral with U.S.</th>
<th>Multilat. with Europe or Can.</th>
<th>Bilateral with Europe or Can.</th>
<th>National Tri-Service</th>
<th>National Gvt./Industry</th>
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<td>Exchange of Engineers</td>
<td>DEAs NATO WGs</td>
<td>Cooperative Research Studies</td>
<td>Cooperative Exploratory Development</td>
<td>Cooperative Full Scale Development</td>
<td>Off the Shelf Purchases</td>
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<td></td>
<td>Keep Scientist Honest</td>
<td>Prepare Cooperations</td>
<td>Saves R &amp; D Money</td>
<td>Structures Industry</td>
<td>Zeroes R &amp; D Forces Industry to Restructure</td>
<td>Increasing Scope &amp; Rewards</td>
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</table>
When asked for specifics concerning administrative relations with the United States, Mr. Roger and other interview subjects told stories of U.S. contracting officers insisting that foreign contracts have a Vietnam veterans clause (most of France's Vietnam veterans have long since died or retired). Another example given was the case of a U.S. contracting officer holding up a Foreign Weapons Evaluation Program because the "Buy America Act" prohibits purchasing foreign made materials. While such tales may be amusing or embarrassing depending on one's viewpoint, they demonstrate that the U.S. acquisition community is not set up for dealing effectively with cooperative programs.

EXPENSIVE DELAYS

Another area of concern associated with the administrative interfaces between the United States and its cooperative partners involves delays which are a result of ponderous U.S. review and decision making processes. One example given involved the Multinational Information Distribution System (MIDS) program. The schedule for development of this avionics system was critical so that it could meet development schedules for the French Rafael and EFA fighter aircraft. Originally, the United States announced that MIDS would be installed in the U.S. F-16. Later, when the U.S. Air Force lost interest in the program, it took more than a year for the United States to regroup and decide to put the system in the U.S. Navy F-18. This indecision and delay not only affected other programs' schedules, but resulted in a significant amount of money being wasted by the participating nations to keep the program going during a year of inactivity.

PROBLEMS IN DOD GUIDANCE

Seeing such problems between the United States and its Allies, one naturally wonders whether internal DOD documentation and management structure contribute to these problems. Considering that DOD policies and DOD's management structure for armaments cooperation have resulted from unplanned reactions to outside pressures, primarily from the Congress and our Allies, it is not surprising to find four basic problems that cause internal DOD mismanagement of cooperative programs: outdated directives, no powerful central authority and control, no overall plan, and "onerous review and approval processes," as they have been termed by Mr. Frank Cevasco, former Assistant Deputy Under Secretary of Defense (International Development and Production Programs).

Concerning the first problem, outdated directives, a review of Department of Defense directives revealed there is no single directive governing international cooperative programs. Instead, there is a 1980 DOD Directive, 2010.6, "Standardization and Interoperability of Weapons Systems and Equipment with the North Atlantic Treaty Organization," and a 1967 instruction on "U.S. Participation in Certain NATO Groups Relating to Research, Development, Production and Logistics Support of Military Equipment." Aside from their ages (which means they assign responsibilities to no-longer existing offices due to reorganizations), they have other problems. The first directive concentrates on co-production programs, virtually ignoring cooperative development programs. The second covers the administrative procedures of supporting the NATO Conference of National Armaments Directors. Neither consider important developments on cooperative programs that have occurred within the last ten years like the Nunn Amendments to the Arms Export Control Act, established to encourage cooperative programs. The second instruction gives insight into the state of cooperative programs policy and management within DOD when it directs that cognizant OSD offices will, "Coordinate proposed U.S. policy positions with interested Defense offices." Read carefully, that instruction shows there is no established policy guidance, and that coordination within all "interested" offices would be difficult. The difficulty of such an action will be seen later when DOD management structure is discussed.

You might think that if the above instructions are out-of-date, then the most recent draft of the DOD directive on acquisition programs, 5000.1, might give guidance policy on cooperative
programs. After all, international cooperative programs are essentially acquisition programs executed in partnership with our Allies. A review of the most recent draft 5000.1 reveals it does not mention international cooperative programs. Whether international programs must go through the same acquisition reviews and procedures as domestic programs is unanswered. In lieu of policy, most organizations assume that international acquisition programs must jump through the same hoops as domestic acquisition programs. This question then naturally arises: are internal U.S. reviews of cooperative programs redundant with nearly duplicate go-no-go reviews by a cooperative program's international steering group? It could be argued that because the United States is involved in the steering group reviews, some internal U.S. reviews of cooperative programs could be abolished thereby streamlining the management of cooperative programs.

PLENTY OF INDIANS, BUT NO CHIEF

The lack of up-to-date directives directly reflects the second internal DOD problem: no powerful central control and authority for cooperative programs. As mentioned, management of international cooperative programs within DOD has been scattered throughout the Department because of unplanned growth. No one office has full control of international armaments collaboration. In terms of DOD policy implementation, the Deputy Under Secretary of Defense (Trade Security Policy) currently works the licenses for technology transfer on cooperative programs, and the Defense Security Assistance Agency is responsible for security assistance sales (e.g. Foreign Military Sales) and co-production programs resulting from Foreign Military Sales. Also, included within the Under Secretary of Defense (Policy) office is the Assistant Secretary of Defense (International Security Affairs) who, among other duties, works economic issues associated with armaments cooperation.

While the policy offices work these areas, the acquisition office under the Deputy Under Secretary of Defense (International Programs) is responsible for cooperative development and production programs, and for coordinating their activities on international cooperative programs with the above policy offices. It is no wonder that during interviews, a frustrated U.S. Office of Defense Cooperation (ODC) officer said that on some issues he often is not sure to whom he should send messages, policy or acquisition, so he sends messages to both. The fact that dual-addressed messages do not create more problems than they do is a tribute to current relationships between individuals working cooperative programs rather than to clearly defined lines of authority and responsibility.

In an October 1989 report, *Defense Industrial Cooperation with Pacific Rim Nations*, the Defense Science Board labeled the current DOD organization for international cooperation "cumbersome and outmoded . . ." and recommended *for the third time* that a new agency be formed to put the above offices under a central office responsible for international collaboration. Recently, the General Accounting Office has developed a concern along the same line and is considering a recommendation to the Congress that DOD be directed to take action to reorganize its cooperative program offices. In 1985, Secretary of Defense Weinberger recognized this problem and issued a policy letter creating a DOD Steering Group for NATO Armaments Cooperation, chaired by the Deputy Secretary of Defense. This group had some successes in solving problems on transatlantic cooperative programs but it has, unfortunately, fallen into disuse, apparently due to lack of interest by the various offices of the Under Secretaries for Defense that were involved.

ARE SERVICES ALLERGIC TO COOPERATIVE PROGRAMS?

Lack of a powerful Department of Defense central control and authority to act as an advocate and protector of international programs often means it is the individual Services that drive decisions regarding cooperative programs. The Services perceive cooperative programs from a different strategic perspective than either the Congress or the civilian leaders of DOD. They view cooperative programs as peripheral objectives and equate them with problems and delay—never
mind strategic, economic, and political benefits. In addition, loss of some control on cooperative programs runs contrary to the Services’ desires for full program control and autonomy. This naturally leads to the Services supporting cooperative programs that are “nice to have.” There is also a deeply rooted conviction in the Services that only their requirements are appropriate. Services are generally not enthusiastic about compromising on requirements to ensure interoperability among sister Services, much less to ensure interoperability or economic and political benefits through international cooperative programs.

WANTED—A HYMN BOOK

Out-of-date directives and no powerful central authority leads to the third problem related to internal DOD management of cooperative programs. There is no master plan for international cooperative programs; this is none too surprising considering the condition or, more accurately, the lack of up-to-date policy and goals. In the January 1989 Annual Report to Congress, Secretary of Defense Frank Carlucci announced that a master plan for international cooperation was in the works. More than a year later, the plan has not been produced. Indications are that the concept has been changed to a group of plans dealing with individual nations. An individual plan for each nation may be a reasonable idea, but this concept will not provide what the defense community needs—an overall plan with a clear set of goals telling how all DOD organizations are to execute DOD policy on international cooperative programs.

Those who work on international cooperative programs often use the 1985 Secretary Caspar Weinberger memo on cooperative programs as a guide. The outdated nature of this memo points out the pressing need for an up-to-date plan. Such problems caused another frustrated Office of Defense Cooperation (ODC) officer to say: “I’ll preach the gospel, but I don’t know what it is. Give me a Bible, or at least a hymn book so I’ll know what tune to hum.” Currently, the acquisition office of the Assistant Deputy Under Secretary (International Development and Production Programs) is working on a guide book for international programs, but understaffing and the limited range of responsibility and authority of this office will undoubtedly affect the timeliness and breadth of this much needed guidance.

EVERYBODY’S A CRITIC

No up-to-date directives, or plans, and no high level advocates are available to exacerbate problem number four—Mr. Cevasco’s aforementioned “onerous review procedures.” Because there is no high-level advocate of cooperative programs, all organizations involved feel they can say “no” during reviews of cooperative programs. Worse, individuals in these organizations have automatic, institutionalized excuses, such as industrial base impact, foreign dependence and control, balance of trade, technology transfer, data disclosure, and so on, all of which impede progress on international cooperative programs; never mind that global conditions have changed to affect the reasoning behind some of these preconceived ideas. This aspect of Mr. Cevasco’s onerous review procedures makes Secretary Weinberger’s idea of a central committee for review and oversight of international cooperative programs seem indeed appropriate.

DO WE HAVE ATTITUDE PROBLEMS HERE? OR WHY DOES 3 + 4 = 8?

That brings us to another serious problem with international cooperative programs. Although it is not one of those disincentives mentioned by Europeans, or one of the four problems causing internal DOD mismanagement, it is a problem that makes all of them worse. This is the mind-set of many Americans against internationalism. From the time we begin grammar school, we are taught America is the biggest and best of all countries. As adults and leaders within the defense community, that mind-set remains and leads to a thought process which automatically underestimates the value and contributions of foreign technology and methods. Some call this “technological arrogance,” others call it the “not-invented-here-syndrome.” The world has
changed and there are areas where others surpass us in technology, but our cultural attitude has not changed. Many insist the United States must always be the head of international cooperative programs, leading to the earlier European complaint that they are not true partners on cooperative programs. Americans just cannot seem to put aside their spirit of competition, even when cooperation, not competition, would benefit them.

Evidence of European feelings about this cultural mind-set was seen in the June 1989 French language *Air and Cosmos*. An article, "Cooperation, the Pros and Cons," reported that unanimity in favor of collaboration exists in Europe but, with few exceptions, the opposite is true in the United States. The article criticized a high-ranking U.S. Army general visiting the French Ministry of Defense who said he couldn't see what cooperation would do for him. With such statements from high-ranking Service members, it is not surprising that a cultural mind-set against cooperative programs flourishes in DOD.

**THAT OLD DESIRE'S STILL THERE**

Tie this negative cultural attitude to the four problems causing internal DOD mismanagement and the three disincentives mentioned by the Europeans, and one is amazed at how many transatlantic cooperative programs there have been. Despite problems, however, every European interviewed desired to continue working with the United States, albeit on changed terms. They are drawn to the United States’ strong portfolio of programs and its overall technology lead. Most of all, Europeans are drawn to the large U.S. defense market and the chance to share in that market through cooperative programs.

**DO MONEY PROBLEMS STIFLE DESIRE?**

If handled properly, the desire to remain involved in cooperative programs with the United States could benefit both parties. For that to happen, however, the United States must establish goals and restructure its approach to cooperative programs; otherwise, it risks an acceleration of European independence and a resulting separation of the two acquisition communities. With the U.S. defense budget declining (see Figure 2) and the U.S. Services desiring to maintain maximum programs, the time is ripe within DOD to exploit the benefits of international cooperation.

**FIGURE 2**

*Free World Defense Budgets*

**CONSTANT 1987 $, 1984 EXCHANGE RATES**

$BILLIONS

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Sources: ACDA, DOD, EIA, and DSMC Forecast
Unfortunately, declining defense budgets can be a two-edged sword for cooperative programs. Rapidly escalating development costs and declining budgets tend to encourage cooperation. On the other hand, when defense budgets decline, nations, including the United States, lean toward protectionism and hoard defense budgets for their industries. Figures 3 and 4 which reflect the decline in funds for cooperative programs hint that this protectionism trend is developing in the U.S. This trend, coupled with other frustrating problems, must cause those who are working armaments collaboration, and who see cooperative programs’ possibilities first hand, to feel like the comic strip character, Pogo, when he said: “We are surrounded by insurmountable opportunities.”

FIGURE 3
Foreign Weapon Evaluation/NATO Comparative Test/Foreign Comparative Test Funding (Combined) Then Year Dollars

FIGURE 4
Nunn Amendment Cooperative R&D Funding Then Year Dollars
A NEW PHILOSOPHY ARISES

An alternative theory gaining in popularity postulates the inevitability of the globalization of world industries and worldwide declines in defense budgets (Figure 5). It argues that due to globalization, interdependence among allied defense industries is here now; and due to declining defense budgets, no single nation will be able to sustain a fully independent defense industrial base.

FIGURE 5
Real Defense Budget Authority


While total national defense self sufficiency is a laudable goal, it is unrealistic. The global nature of today's international marketplace and the realities of flattening or decreasing defense budgets dictate a more interdependent and streamlined approach to how and what we buy, with other nations participating in a greater share of development and production.

Further evidence that some in the Department of Defense feel that withdrawal should not be the posture the United States adopts is contained in a February 1989 DOD report to the Congress, *Standardization of Equipment within NATO*, which says:
The development of stronger European defense industries, however, must not become an obstacle to improved cooperation and should not become an excuse for the U.S., or any other nation, to pursue restrictive trade practices.

**CHANGES REQUIRED IN FUNDAMENTAL PROGRAM MANAGEMENT PROCEDURES**

It is clear from both statements there are benefits to be gained from cooperative programs. If these benefits are to be realized, fundamental changes to the way the United States and Europe manage cooperative programs will be necessary. Studies have shown that cooperative programs do not generally result in expected cost savings or shorter schedules. (See for example the Rand Corporation Report, Multinational Co-production of Military Aerospace Systems, October, 1981, or "European Acquisition and the U.S.," *Defense Diplomacy*, Vol. 7, No. 6, June 1989.) Other studies suggest that these problems have been caused by not adhering to successful program management principles (See *The Management of International Cooperative Projects*, C. Michael Farr, a research report compiled for the Defense Systems Management College in support of the Advanced International Management Workshop).

This basic failure of cooperative programs to realize their full potential has led to a negative reputation for cooperative programs, putting them thereby in a kind of Catch 22. If more successes occurred on cooperative programs, attitudes would change; and if attitudes would change, more successes would occur. The same could be said about European attitudes and transatlantic programs. Obviously, the way to break this logjam is to change not only the aforementioned DOD policies and procedures that lead to problems on cooperative programs, but the fundamental program management principles that Europeans and Americans use once it is agreed that a cooperative program should be pursued.

One program management principle used to help avoid problems on domestic programs could be applied to cooperative programs. Through years of trial and error, managers of DOD acquisition programs have found that a combination of "up-front and early-on" definitions of roles and responsibilities between contractor and government, combined with stern discipline during the acquisition process, are essential. The same principles should be followed between participants of cooperative programs. Schedules, funding, and technical performance expected from a cooperative program should be agreed to before nations sign up for cooperative programs. Cooperative programs have even greater potential for "requirements creeps" or for "funding slips" than domestic programs due to the greater number of participants, so this concept is especially important.

Once an agreement on schedule, technical performance, and funding has been established, it should be documented; authority to execute the plan should be given to a single program office, composed preferably of an international staff to alleviate national concerns about protection of national interests. Full authority for the program office to execute the program is absolutely essential, for rapid choices are necessary during the management of any program to ensure that schedules and costs are not effected. Periodic reviews of program progress should be held by nations, but micromanagement must not be the rule. Too many cooperative program offices spend their time reporting to their many "bosses" rather than managing the program.

National objectives must be subordinated to program objectives if success is expected from cooperative programs. While such national concerns as work share, national technology enhancement, and industrial base improvement can often be accommodated within cooperative programs, such a program will not be successful in terms of cost, schedule, and technical performance if these objectives are pursued at program expense. A "total-package" concept of armaments cooperation (involving the exchange of benefits or obligations outside a program's
immediate area to balance program participation) should be preferred over letting national objectives drive program objectives.

Cooperative programs should be pursued for the full potential they provide. Production and support concepts should be agreed upon and documented before development begins. Too often, potential cost savings during production and support (along with interoperability and standardization benefits) are ignored and not realized when nations go their own ways after development is complete.

Cooperative programs should be pursued between two, or at the most, three nations. As the number of participants increases, the difficulty of managing rises exponentially with a corresponding decrease in the likelihood of success.

Finally, cooperative programs should be entered into only if the above principals can be agreed upon and adhered to.

CAN WE AFFORD NOT TO CHANGE?

Perhaps it is time to take seriously the arguments of Ambassador William Taft, Permanent Representative to NATO. At a conference sponsored by The French Center of Studies and Prospective Strategies in January 1990, he argued that global factors are inexorably driving individual nation’s defense acquisition communities toward cooperation. He pointed out that, first, declines in defense budgets will create a downsizing in each nation’s defense industrial base to the point that no nation, not even the United States, will have a “full scope” defense industrial base. Second, due to economies-of-scale of closed defense markets, these same declines in defense budgets will drive up the cost of weapons. Third, when combined with spiraling costs of new technologies, these lowered economies-of-scale will result in weapon systems that no nation can afford. Finally, the globalization of industries created by the ongoing international mergers and acquisitions will result in a Western technology base rather than separate national technology bases. Ambassador Taft called for a recognition of these global changes; a broader, more open Western arms market; and increased cooperation to negate these serious impacts and ensure the collective defense of Western allies.

PROACTIVE, NOT REACTIVE THIS TIME?

To lessen such impacts, the United States must change many approaches to cooperative programs. The three frustrating economic disincentives mentioned by the Europeans, the four problem areas of internal DOD management, the cultural attitude toward cooperative programs, U.S. protectionist tendencies concerning allied cooperative programs, and fundamental program management principles of cooperative programs must change. Realities beyond DOD control are dictating change. Rather than ignoring reality and resisting change, DOD should take a proactive approach to provide the greatest overall benefits for future United States security. Necessary changes will be difficult. DOD policies, management structure, and thought processes do not change easily. Without changes, economic structural disarmament will run rampant, and United States and allied security will decline. The price of change will be high, but the price of not changing will be higher.

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