THE U.S. SECURITY ASSISTANCE PROGRAM

[The following represents an extract from pp. 85-90 of the United States Military Posture for FY 1986, an annual report prepared by the Organization of the Joint Chiefs of Staff.]

Security assistance programs contribute to U.S. objectives by assisting allies and friends to meet their defense needs and by supporting collective security efforts. Security Assistance is an essential element of foreign policy and a way to build positive government-to-government relations. By sharing costs and effort, many countries can achieve a level of mutual security unattainable independently. By strengthening U.S. allies and friends, security assistance programs also serve as an economy-of-force measure which allows the United States to concentrate its available forces in areas of greatest threat. For these reasons, security assistance is an integral part of U.S. military strategy.

Security Assistance Objectives

The primary military objectives of security assistance are to assist countries in preserving their independence; promote regional security; help obtain base rights, overseas facilities, and transit rights; ensure access to critical raw materials; and to provide a means to expand U.S. influence.

Elements of Security Assistance

The major components of security assistance are the Foreign Military Sales (FMS) Program, which includes the FMS Credit (FMSCR) Program; Military Assistance Program (MAP); and International Military Education and Training Program (IMETP).

-- Foreign Military Sales Program. The FMS program enables eligible governments to purchase defense equipment, services, and training from the United States on a cash or credit basis. This year, the FMSCR Program has been included in the budget and all loans will be made directly by the U.S. Government to recipient countries instead of through commercial banks. For selected countries, a portion of this credit will be available as low-interest loans. The amount of the proposed FY 1986 security assistance budget allocation to FMSCR is 85 percent.

-- The Military Assistance Program. This grant program provides an account for designated countries that may be used to obtain defense equipment and selected services. MAP funds allow certain economically disadvantaged countries to improve their security and ability to contribute to collective defense. The FY 1986 MAP proposal of $949 million represents 14 percent of the total security assistance program budget request and an

increase of 18 percent over the FY 1985 approved program. This increase will allow the United States to assist certain needy countries more effectively in improving their security and ability to contribute to collective defense.

-- The International Military Education and Training Program. The IMETP provides training to foreign military and certain foreign government-sponsored civilians on a grant basis. IMETP training consists of formal courses, orientation tours, and on-the-job training. This program has greatly expanded U.S. contacts with foreign governments, whose representatives are trained by U.S. personnel. IMETP students frequently assume leadership and management roles in their armed forces and elsewhere in their governments. The FY 1986 IMETP proposal is about 1 percent of the total military security assistance program. Chart 1 depicts expenditures and numbers of student that have attended U.S. military-sponsored training under IMETP over the past 5 years. In FY 1984, modernization programs required that an increased percentage of IMETP funds be used to support the training of pilots and similarly skilled technical personnel. This requirement has resulted in a higher average cost per student. This program enhances collective defense at relatively low cost to the United States by providing urgently required training to foreign forces.

CHART 1

Worldwide IMETP Expenditures
Students Trained in U.S.

FY	Expenditures* (in millions)	Students Trained	Cost per Student
80	24.9	3545	$6996
81	28.7	4836	5935
82	46.2	6317	7314
83	46.0	6861	6705
84	52.8	5967	8855

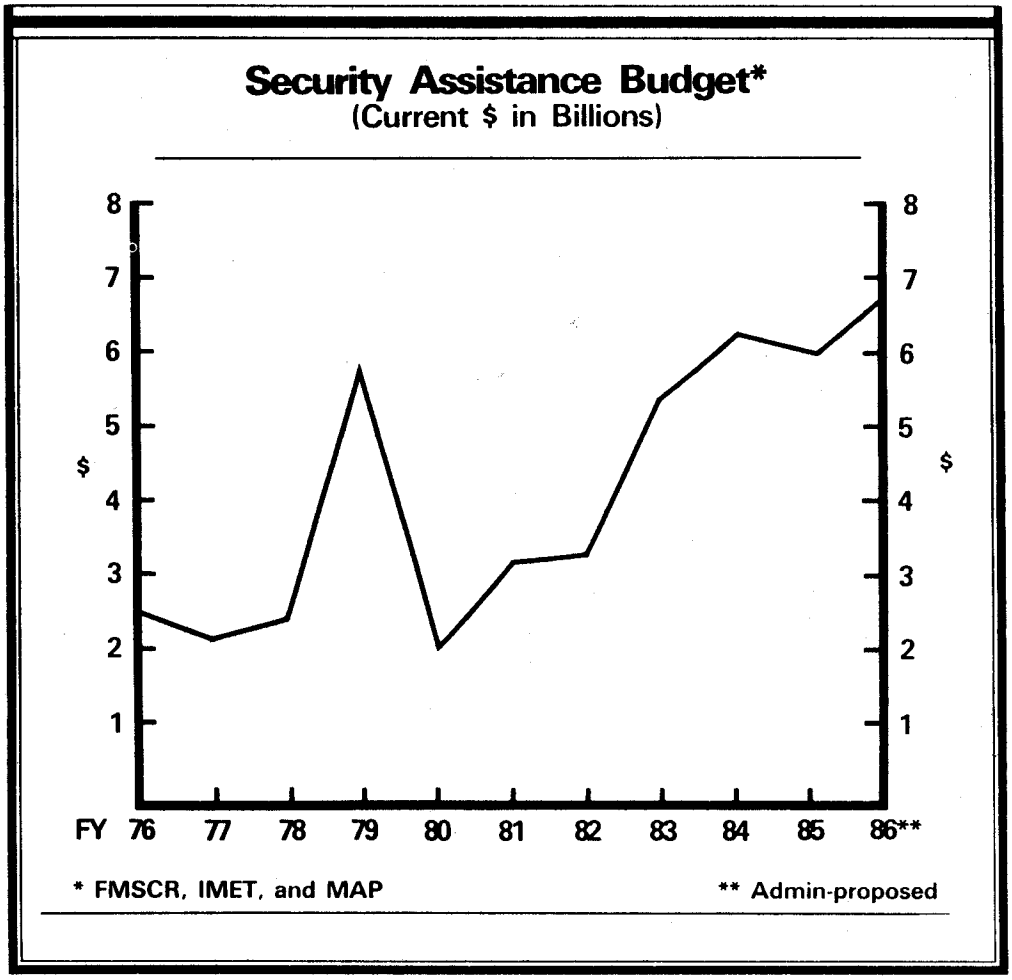
*Actual dollars/not adjusted for inflation.
(As of 1 January 1985)

Security Assistance Initiatives

Over the past few years, legislative initiatives have been introduced to increase the effectiveness of the security assistance program. These initiatives were designed to provide more flexibility in planning, production, and delivery in order to allow the United States to be more responsive to nations suddenly threatened by overt hostilities, e.g., Chad, Lebanon, and El Salvador. One initiative that has been proposed is to increase the capitalization level for the Special Defense Acquisition Fund. This fund was established to improve U.S. responsiveness to anticipated FMS needs by ordering in advance high-demand items that have long-lead-time procurement schedules. Such an increase would allow more timely acquisition of these items.

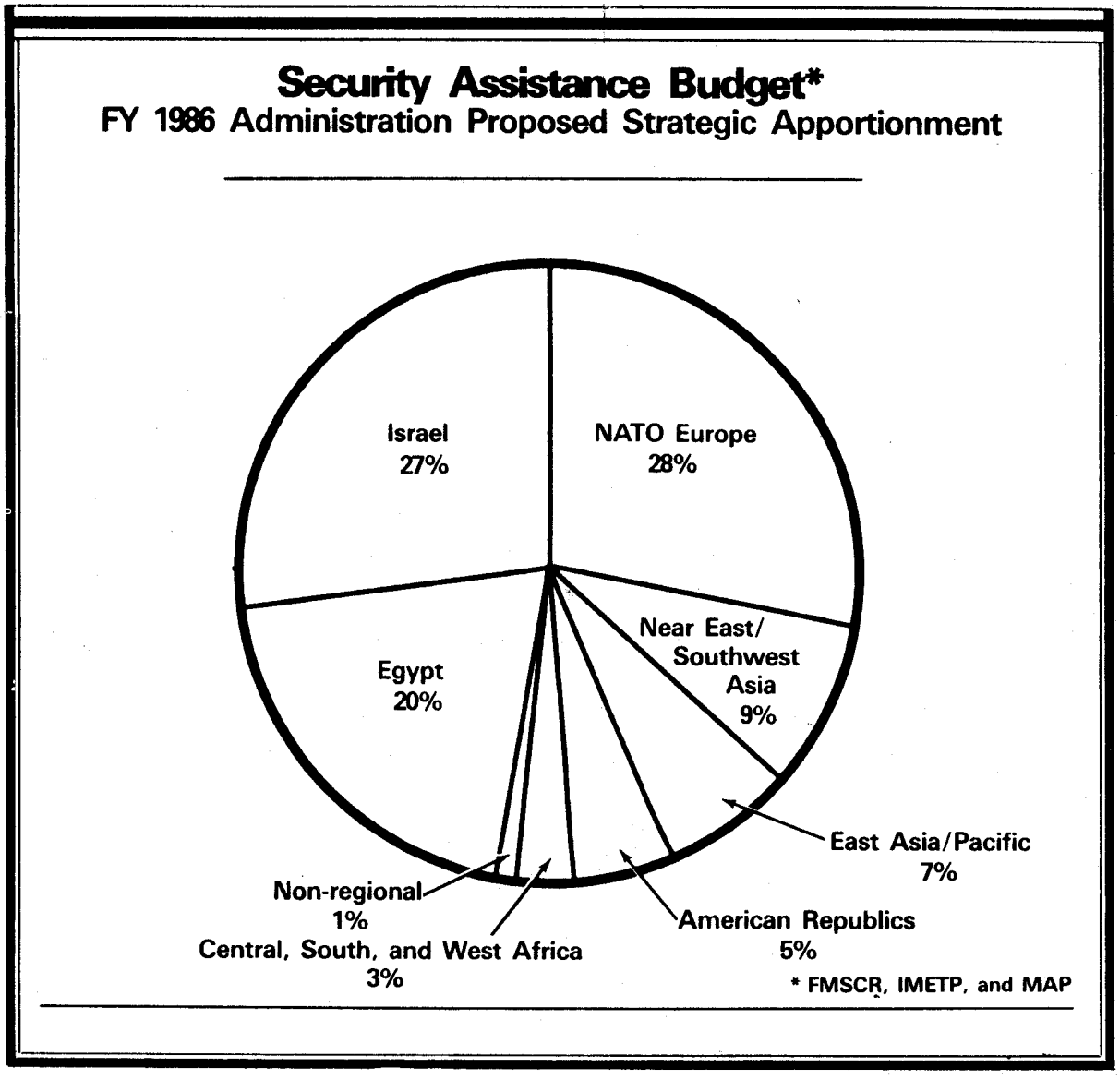
The FY 1986 security assistance budget represents an increase over the FY 1985 budget as a result of requirements in areas of the Third World where the Soviet presence has increased (Chart 2). The budget request reflects a balanced consideration of U.S. objectives and the needs of friends and allies (Chart 3).

CHART 2



(As of 1 January 1985)

CHART 3



(As of 1 January 1985)

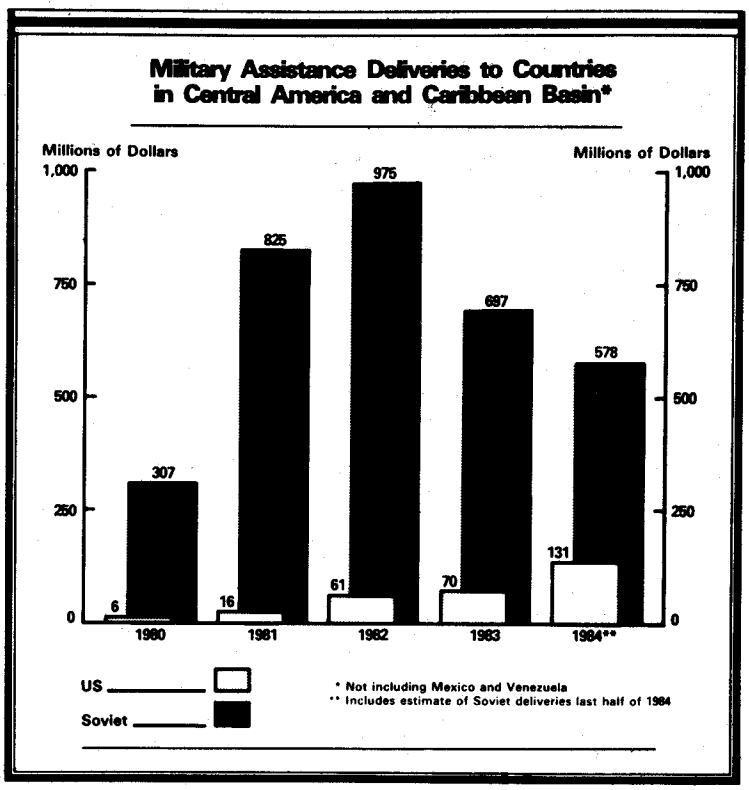
Soviet Security Assistance

Weapon transfers continue to be an important means of projecting influence and disrupting regional security. Over the past 5½ years, Soviet arms sales agreements with the Third World have totalled over $55 billion. Recipients have been attracted by favorable financial terms, quick delivery, and, in some cases, advanced weaponry. In recent years, the sale of military equipment has become a more important source of hard currency and commodities for the Soviet Union. In several instances, Soviet weapon transfers have provided a means of acquiring base access rights abroad. Weapon transfers also provide an entree for Soviet advisors into the recipient's military establishment, allowing them to exert influence over local leaders and policies through the control of training, maintenance and spare parts, and the sale of newer equipment.

Since 1955, over 69,000 military personnel from less-developed countries have been trained in the Soviet Union and Eastern Europe. In 1984, approximately 19,000 Soviet and East European military personnel were stationed in nearly 40 non-Warsaw Pact countries (excluding Afghanistan and Cuba), where they played a central role in organizing, training, and influencing client armed forces.

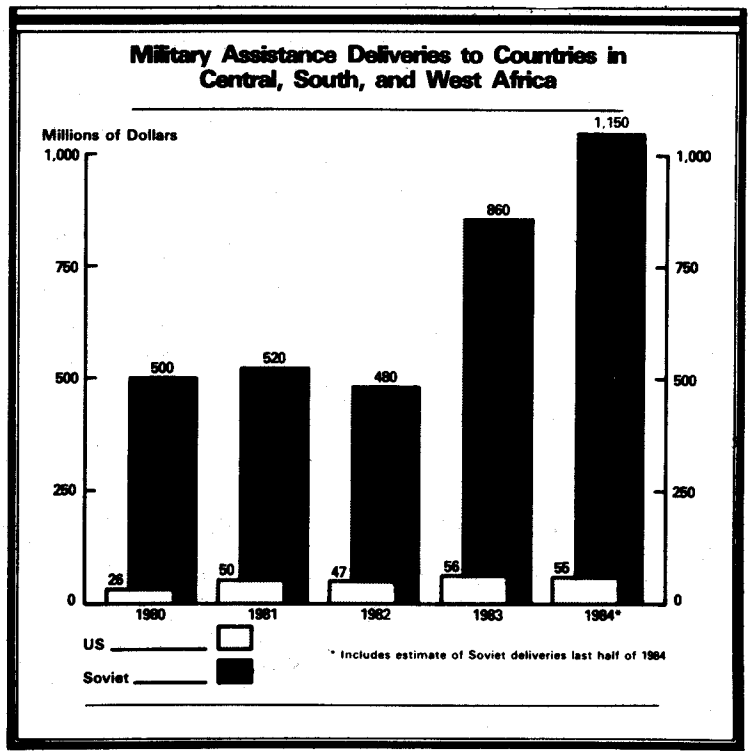
The Soviets continue to provide a significant amount of military aid to countries in Central America and the Caribbean Basin (Chart 4), as well as Africa (Chart 5). The Soviets also view the Middle East, northern Africa, and Southwest Asia as areas of great strategic importance and have maintained an especially high level of military assistance there (Chart 6). These charts compare deliveries with U.S. programs.

CHART 4



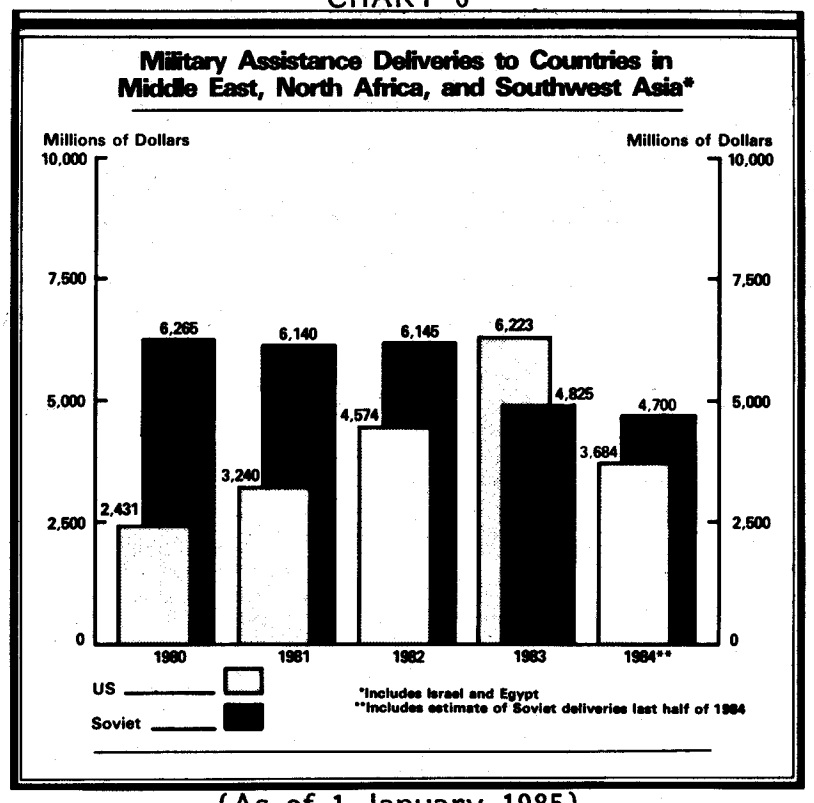
(As of 1 January 1985)

CHART 5



(As of 1 January 1985)

CHART 6



(As of 1 January 1985)

COLLABORATIVE PRODUCTION OF DEFENSE EQUIPMENT WITHIN NATO

By

DR. JAN FELDMAN

[The following article was originally published in the Journal of Strategic Studies, September, 1984, pages 282-300, and subsequently reprinted in a Special Edition of Current News, 18 April 1985.]

NATO is composed of countries which are military allies and economic competitors. This makes the production and procurement of military equipment fundamentally a political, rather than simply a military or engineering problem as it is treated by the U.S. Defense Department and the military services.

Collaborative production of weapons within NATO, under the banner of "Rationalization, Standardization, and Interoperability" (RSI), has been official policy for accomplishing not only the militarily desirable goal of standardizing equipment and harmonizing logistical procedures, but also the politically desirable goal of alliance solidarity, which is in short supply these days. The RSI program, like NATO, is built upon a contradiction between cooperation and nationalism. RSI has often floundered on the opposition between the need to re-arm as cheaply as possible (which points to the collaborative production of standardized weapons), and competition over national shares of production.

NATO is slipping into a state of increasing disarray as forces promoting competition threaten to overpower forces promoting cooperation. Some of the conflicts arise out of conditions which may be temporary, such as economic recession, while others reflect structural disintegration along more enduring fault-lines. Such divisive issues as nuclear strategy, the deployment of Pershing II and cruise missiles, the expansion of national peace movements, detente, arms control, burden sharing, and the use of trade sanctions as leverage against Soviet foreign policy, have the potential to swamp the alliance unless the underlying commitment to common defense remains strong enough to weather the storm.

The tension between NATO pluralism and unity, competition and cooperation, [and] stability and disintegration is manifest in the NATO RSI program. Collaborative production of weapons is subject to the same sorts of centrifugal forces that afflict NATO generally.

RSI has been something of a barometer of NATO relations. Although other acute and dramatic issues customarily eclipse RSI in the eyes of government officials, political scientists, and the public, RSI projects involve the continuous nitty-gritty, day-in and day-out contacts between allied negotiators which make apparent the most basic sub-structural problems of the

alliance. The US's inability to register and respond to the economic needs of the Europeans reveals a more significant failure to perceive that economic and political solidarity is not peripheral to military effectiveness, but essential to its achievement. The military efficiency of NATO is predicated upon the resolution of many non-military issues, such as those raised in the RSI context.

The allies' complaint that they are not treated as full partners, nor their needs given full consideration, is at the heart of most NATO conflicts. Breaking the RSI impasse presupposes a change in the US's treatment of its NATO allies, a change which would redound to the benefit of not only RSI, but the alliance as a whole. Therefore, it is safe to say, as goes RSI, so goes the alliance.

European and US positions on collaboration under RSI are currently diametrically opposed. The Reagan Administration has proposed the creation of a structure for trade--a common market in defense goods, relying on the market principles of cost and quality to determine what is produced and procured. The Europeans, convinced that the market place already heavily favors American firms, argue for a policy of allocating production on the basis of negotiated national shares. The latter strategy clearly requires political solutions and, therefore, heavy government involvement, whereas the Reagan approach rejects government-to-government negotiation in favor of industry-to-industry arrangements.

Relying on private arrangements between international firms will likely not achieve the goals of RSI, since the major historical obstacles to RSI arose out of insufficient political negotiation, rather than an excess of government-to-government dialogue. Reagan's strategy fails to recognize the depth of European chagrin, and the pluralistic nature of the alliance in general. While early RSI programs presented many complicated and novel management problems for participating NATO governments, the major impediment, like the major rationale, was usually political. Management and engineering problems always seemed to iron themselves out once the major political agreements on the distribution of production shares were in place. The US-European F-16 program is a case in point.

The problematic histories of both RSI and NATO evince the strong conclusion that political negotiations and compromises between governments are the only way to preserve alliance solidarity. The military effectiveness of NATO is strongly dependent on the economic well-being of its members. In most NATO countries, where the political authority is civilian rather than military, "it will be jobs and affordability that will dominate many decisions in the next decade."[1] The failure to recognize this fact stands behind the current US proposals to let the goals of RSI emerge as spin-off effects of private industry ventures. But RSI will only be achieved if member governments do what is necessary to garner domestic and alliance-wide political support for the concept and programs.

The lack of commitment on the part of the United States is evidenced by the difficulties RSI programs have encountered in Congress as well as by US failure to create a unified organizational infrastructure for implementing RSI. Asking where and why previous efforts to achieve RSI went wrong, and how, or if, it can be made a viable policy, reveals something about the RSI concept

and program, and also something about the nature of the NATO alliance--in particular, the US commitment to it.

The Evolution of the RSI Concept

Almost ten years after the doctrine was formulated, what is RSI? It is simultaneously a philosophy, a policy, a program, an objective, a political mechanism, a means, an end, a banner, and a collection of vague concepts. Most simply, "rationalization" is defined as any action which increases the effectiveness of NATO by improving the command-support structure and consolidating the various national logistical systems. It includes standardization, specialization, interoperability, cross-servicing, and general cooperation on military and non-military matters.

"Standardization" refers to the achievement of the closest practical cooperation among forces, sharing of systems designs, agreement on operational, administrative, and logistic procedures, and common tactical doctrine and organization.

"Interoperability" consists of making different weapons systems work together by using common or compatible components, fuel, and ammunition.

The traditional justification for collaboration has been its ability to promote standardization. NATO currently fields over two dozen antitank weapons, a variety of tanks, approximately 100 different tactical missiles, and over 50 kinds of ammunition. Its communications systems are incompatible. There are over two dozen families of combat aircraft, each with a different radius and ordnance capability. When they land, they need different fuel nozzles in order to refuel.[2] Procurement nationalism has resulted in the US's belt not fitting the Europeans' buckle.

The Warsaw Pact does not share this problem. It has achieved a high level of standardization. National diversity is not manifest, nor are national economic interests placated. The complete military coherence of the Warsaw Pact is neither possible, nor necessarily desirable, but it serves to highlight the haphazard diversity that characterizes NATO defense systems. Two themes which have dominated discussions about NATO in recent years are its severe deficiency of military readiness and its squandering of resources through needless duplication. NATO's ability to fight a protracted conventional war is generally agreed to be almost non-existent. In 1981, US Secretary of Defense Harold Brown reported to Congress that:

> The US cannot match the output of the Warsaw Pact Military-Industrial base by its resources alone. Nor can any other allied country. Nor can we or our allies continue to find comfort in the technological hubris that somehow Allied quality can overcome Warsaw Pact quantity.[3]

The need for some level of standardization and cooperation was recognized as early as 1941, when the US and Canada committed themselves to the mutual acquisition of defense hardware in the Hyde Park Agreement. Standardization in Europe, meanwhile, was being achieved by the fact that during the thirty-year period following the Second World War, the US provided more

than $21 billion in military assistance to NATO nations. This aided the recovery of the European military base and also led to a high level of standardization of weapons systems, for the simple reason that most of them came from a single source--the US. As European economies recovered, outright military assistance from the United States was gradually replaced by sales. Standardization did not diminish since the donor was now the salesman.

By the late 1950s European industry was sufficiently recovered to permit the independent development of exclusively European weapons systems. NATO standardization suffered as system designs proliferated. NATO was fielding a large variety of equipment for essentially equivalent purposes.

In the late 1970s, concern over a Warsaw Pact modernization drive provided the impetus behind the enunciation of a new formal doctrine of standardization. NATO RSI became part of a policy to combat the estimated 30 to 40 percent loss of combat effectiveness and the $10-15 billion wasted by NATO each year due to its failure to standardize production.[4] Military logic may have dictated alliance-wide procurement of standardized weapons, but logic alone could not determine which among a variety of techniques for achieving this goal should have been adopted. The US could buy a European weapon, the Europeans could buy a US weapon; and between these polar alternatives, weapons could be co-assembled, co-produced, or co-developed. The production and procurement of weapons created many opportunities for cooperation, but also for competition, in light of the economic and political implications of these choices. Ideally, the re-arming of NATO would satisfy the demands of all members, not only for national security, but for economic prosperity as well. Most NATO leaders found it increasingly difficult to convince their parliaments to spend large amounts of foreign exchange on the purchase of weapons from abroad, because of their fear of generating domestic unemployment. Therefore, most NATO members began in the 1970s to demand economic compensation in the form of "offsets" such as co-production or counter-trade as a condition of purchase. These demands, it was felt, could most easily be met in the context of collaborative programs negotiated by NATO governments.

The first legislative mandate for RSI was issued in 1974 in the form of an amendment (Sec. 302, PL 93-365) to the US Defense Appropriation Authorization Act of 1975. It directed the Secretary of Defense to assess the cost of failure to standardize equipment within NATO, and to develop proposals for common research, development, and procurement.

The next year, the Department of Defense's Appropriation Authorization Act stated that:

> It is the sense of Congress that equipment, procedures, ammunition, fuel and other military impedimenta for land, air, and naval forces . . . under the terms of NATO should be standardized or made interoperable.[5]

Organizational responsibility for implementing RSI was lodged in a variety of federal agencies including the Departments of State, Commerce, Treasury, and the Office of Federal Procurement Policy. But the primary responsibility for policy and program was vested in the Department of Defense's Policy Office, its Undersecretary for Research and Engineering, and the

military services. Over 50 Department of Defense (DOD) Directives were prepared to provide guidance for implementing RSI.

A succession of amendments to DOD appropriations acts in subsequent years strengthened the language of previous years' legislation calling for the use of co-production and licensing arrangements as well as the creation of a "two-way street" in defense trade between North America and Europe.[6] The concept of a two-way street in which Europe and the U.S. would form a common defense market was introduced to the Europeans by President Ford at the 1976 NATO summit. Ford stressed that if the Europeans hoped to participate on an equal footing with US firms, they would have to pool their resources. The Europeans responded by forming a new coalition, this time including France (and later Portugal), in addition to the nations already participating in the European Program Group (EPG). In February 1976 the Independent European Program Group (IEPG) was formed.

During the May 1977 NATO Summit, President Carter offered the strongest Presidential statement in support of RSI to date, and promised improvements in the balance of traffic on the two-way street. This was the most active period in RSI history. Carter's Under Secretary of Defense for Research and Engineering, William Perry, believed that RSI should be strongly promoted by governments and militaries. He was the author of the most significant policy regarding RSI, Directive 2010.6., "Standardization and Interoperability of Weapons Systems and Equipment within NATO," which established his three-pronged approach to RSI.[7] First, the general and reciprocal procurement Memoranda of Understanding (MOUs), usually negotiated bilaterally, were to be used to create a "two-way street" in defense trade. Each country would agree to remove domestic obstacles to the mutual penetration of defense markets. Each country would obtain exemptions from the other's customs, duties, tariffs, and protectionist legislation. In addition, each country would ideally give equal consideration to all qualified bidders regardless of the firm's nationality. MOUs were relatively easy to negotiate without involving the complex machinery of NATO or IEPG. The first MOU was signed between the US and Britain in 1975, and ten others have been signed to date.

The second prong of Directive 2010.6 was called "Dual Production," and attempted to avoid redundant research and development (R&D) expenditures by encouraging nations to produce a system already developed by another member. Both DOD and US industry favored this method because it approached standardization by relying on competitive R&D followed by licensed production or co-production. This avoided the need for relinquishing technological innovations and know-how in their development stage.

The third and most controversial of the strategies for achieving RSI was called the "Family of Weapons" approach. It was unpopular with US industry because it began collaboration at the R&D stage, requiring complete sharing of technology and know-how. It called for the complementary development of weapon systems in a particular mission area to be allocated to different countries, sequentially produced, and then made available to other members for production or co-production.

Richard DeLauer, who holds the same office under the Reagan administration that Perry held under Carter, is in the process of reversing the

Perry approach, promoting instead a "major leadership role for private industry." [Editor's Note: Mr. DeLauer resigned in November 1984, from the position of Under Secretary of Defense for Research and Engineering; the position is now held temporarily by Dr. James T. Wade as Acting Under Secretary.] The Glenn-Roth-Nunn Amendment to the current [FY84] Defense Appropriations Authorization Act restates the commitment to RSI, but intends to achieve it by creating an open, competitive market in defense equipment--a trading structure that is hoped will accomplish more than the "piecemeal" government MOUs of past administrations.

Problems Arise: Convincing the Folks at Home

From the standpoint of defense contractors on both sides of the Atlantic, RSI theoretically provides benefits in addition to those that accrue to the NATO alliance in general.

RSI is a vehicle for the transfer of technology. It holds the promise of growth for small firms, and preserves or strengthens the industrial bases of small European countries (and countries such as Japan and Turkey, which engage in co-production with the explicit intention of entering the world market as aircraft exporters in the future). RSI allows for economies of scale, or the lower unit costs associated with larger and longer production runs, and takes advantage of learning curves. Eliminating duplication promotes more efficient allocation of resources and encourages national specialization along lines of comparative advantage. RSI also holds the promise of new sources of profit from the sales of components and spare parts, and royalties from the sale of licenses. It often permits access to otherwise closed foreign markets by eliminating the "buy national" obstacles that so frequently confront foreign firms. The Europeans would theoretically be the greatest beneficiaries of RSI collaboration given the magnitude of US defense procurement relative to even the combined market of all European nations.

With all the asserted benefits of RSI to the alliance, participating nations, and firms, implementation has been so big a problem as to lead William Perry ruefully to comment "with the exception of US industry, US Congress, European Industry and European Parliaments, we have a groundswell of support [for RSI]."[8]

In spite of the widespread intuitive appeal of the RSI doctrine in its simplest forms (common doctrine, equipment, and procedures across the alliance), achievement of even the practical concept of interoperability has been difficult, suggesting that management, engineering, and conceptual problems are not the only ones that need resolution. Perhaps the biggest problem is that support for RSI has always been strongest in the civilian hierarchy of the Defense Department and even in this stronghold of support, the administrative infrastructure is fragmented and dispersed. RSI never became a "national decision," its proponents having failed to win the blessing of Congress, the military services, industry, and labor. This failure to build consensus behind the doctrine has proved disastrous for the program. Each group, for a variety of reasons, has at one time or another obstructed or resisted RSI.

Consequently, while the Europeans continue to hear speeches about the importance of RSI and the two-way street in defense trade, they also continue to witness the sudden and unexplained termination of joint programs such as the Roland Missile. Roland was intended to prime the two-way trade pump but, instead, demonstrated the vagaries of the United States' annual budget process on which RSI is dependent.

RSI seems to be one of those doctrines that everyone supports in theory and rejects in practice. Every year since the mid 1970s, without fail, the Secretary of Defense and the President, regardless of party or platform, restate their commitment to RSI, and every year, without fail, obstructions arise to hinder its implementation.

Four major obstacles to RSI have grown out of the military, industry, labor, and Congress. They can be classified as (1) the "not invented here" syndrome, (2) economic protectionism, (3) technological isolationism, and (4) the NATO burden-sharing controversy.

The "Not Invented Here" Syndrome: Criticism from the Military

The military advantages of pursuing RSI are more often assumed than proved, and the appeal of RSI among military officials is not universal. Service rejection has often been a strong reason for the failure of the US to acquire weapons from "offshore" sources. This is a particularly significant roadblock since it is the military services which are the customers for defense hardware, and thus are in a position to veto the procurement of weapons or components from foreign sources. The desire for military self-sufficiency has generated opposition to any collaborative program which would leave the US dependent on a foreign source for any component of its defense needs. There is well-established federal statutory authority for this preference shown towards domestic procurement. In addition, there is some rationale for supposing that a variety of non-standardized defense systems would be more likely to thwart Soviet countermeasures than a few standardized systems would. Finally, military officials have expressed fear that, under RSI, the political goal of achieving cooperation might be attained by sacrificing the quality of the weapons that US soldiers take into battle. The fear that we might "standardize to the point of the lowest common denominator" was expressed by Alexander Haig in testimony before the House Armed Services Committee in 1978.[9]

The view that European manufacturing and technological capabilities are universally deficient, and that their products are incapable of meeting exacting US specifications and procurement standards should be recognized as no longer universally true. In some areas, European capabilities are surpassing those of the US. Britain's AV/8B/V/STOL (Harrier Jump Jet) is a good example. Moreover, the performance of many top US defense contractors has been less than inspiring. The newly appointed Chief of the Army recently assailed US industry for its deficient quality control after five of sixteen Pershing II missiles failed on test launches.[10]

Ambivalence of Congress: The Protectionist Response

Congress has been ambivalent about RSI for different reasons, and its recurrent enactment of protectionist measures have been a major impediment to RSI and the two-way street. Programs have often been held hostage by Congressmen from districts whose own defense contractors feel themselves even slightly threatened. The "Buy America" Act of 1933 has traditionally been an obstacle, but more recently, the "Speciality Metals" rider to the Department of Defense Appropriations Act--introduced every year since fiscal year 1973--has been particularly irksome. The rider seeks to ban the import of titanium and certain composite steels and alloys, and therefore has been the major obstacle to procurement of foreign components since almost all weapons contain some specialty metals. While the Department of Defense has so far succeeded each year in obtaining special waivers for imports from NATO countries, the rider can be reinstated at any time.

Congress is also sensitive to labor's claim that US employment will suffer because of RSI, as the US commits itself to the procurement of weapons from allies for political reasons. The Aerospace Industries Association (AIA) and the Electronics Industries Association (EIA) feel especially threatened and have testified before Congress repeatedly that RSI is a form of "affirmative action" for the Europeans, tantamount to political horsetrading. The implications for US jobs are great, according to the AIA, which estimates that for every $1 billion in export sales lost, 70,000 US jobs disappear as well.[11]. Moreover, collaborative production implies technology transfer. The US's NATO allies are especially desirous of co-producing weapons which contain the US's most sophisticated technologies, causing many US firms to fear that through RSI we are creating future competitors in the world market--"shooting ourselves in the foot" economically to achieve some vague political goals.

Influenced by this sort of testimony, the Special Subcommittee on NATO Standardization, Interoperability and Readiness complained in 1977 that the main goals of arms cooperation are economic and political as opposed to military.[12] The report advised that the Defense Department selected equipment competitively, not on a quid-pro-quo basis, and not so as to achieve a perfect balance of trade in both directions on the two-way street. "It is still to be demonstrated that NATO can eliminate competition without lowering technical standards.[13] The Committee recounted what it considered to be an exemplary abuse of RSI by the German government, which made participation in the AWACs program conditional on the US adoption of the German 120mm tank gun, as well as German equipment and labor for the installation of the new US-European telephone system and the purchase of non-tactical vehicles.[14] Clearly, US procurement of these items had nothing to do with economic efficiency or military superiority. The explicit rationale was to create "good feelings" and solidarity between two countries. Arrangements like this left members of the Committee with the uneasy feeling that the whole concept of RSI was a departure from the free enterprise system. They had not been persuaded that the benefits of RSI outweighed the potential economic costs to the US of achieving it.

The Technology Transfer Issue

Another front has recently opened against RSI, spearheaded by several members of Congress and the Defense Department. The attack is really a variation on the protectionist theme but, unlike the traditional version, it is not intended to protect declining industry from foreign economic competition, but rather to shelter US "cutting-edge" technologies for reasons of national security. This move toward technological isolationism is based on the fear that the US's free and open trade policies and cooperative weapons programs have provided avenues for the Soviets to acquire sophisticated technology from the US and its allies, and thus enhance their military capabilities at the expense of NATO.

The hemorrhage of technology to hostile nations is being called one of the most serious problems facing the US by the DOD's Assistant Secretary for International Security Policy, Richard Perle. He and his supporters feel that the US is in the midst of "a quiet war for technological supremacy" and that "at no previous time in history has one nation [the USSR] been able to prey so deeply and systematically on the fruits of its adversary's genius and labor."[15] On the basis of this assessment, Perle has launched a campaign to restrict the flow of US technology to adversaries and allies alike.

Concern over the leakage of technology to the US's enemies is nothing new, though it has lately reached an all-time "critical mass." From 1949 to 1960, the Export Control Act allowed the President to compile a list of controlled technologies, but by the mid-1960s the emphasis shifted from trade control to promotion, as commercial ties began to be seen as a way of lessening Cold War tensions. Johnson spoke of "building bridges" with the USSR and Nixon talked of "cooperation rather than confrontation." Accordingly, the Export Administration Act (EAA) of 1969 declared that US policy was to "encourage trade with all countries with which we had diplomatic relations."

However, Soviet actions in Angola, Afghanistan, and Poland gave rise to the perception that detente had backfired and the US had been "had"--all the while the USSR was acquiring western technology to boost its own military capability.

Unquestionably, the USSR has acquired or would like to acquire US technology with potential military applications, such as high speed computers, microprocessors, semi-conductors, inertial navigation systems, fiber optics, and precision machine tools. Yet the extent to which arms cooperation with Europe under RSI has acted as a conduit to the USSR is not clear. Nonetheless, policies currently proposed to counteract this putative problem, by making it harder to export technology, have strong backing in Congress and the Defense Department.

A profusion of mechanisms for technology control already exist. In a large number of weapons projects or transfers, the US government is party to the deal, or an intermediary between US contractors and foreign governments, and therefore can regulate the transfer of technology though MOUs. In private international transactions to which the US government is not a direct party, all exports of sophisticated technology must be licensed by the Department of State or Department of Commerce. Statutory export regulations include the International Traffic in Arms Regulations (ITAR), authorized

under the Arms Export Control Act (AECA), and administered by the State Department. In addition, federal classification standards and stringent Defense Department standards regarding the industrial security of contract recipients, combined with internal protection of proprietary information by private firms, afford significant protection for defense-related technologies. A new area of concern, however, regards the safety of unclassified technologies, which, either because they are still in the emergent R&D phase, or are intended primarily for non-military use, do not meet the "damage standard" that would immunize them from the Freedom of Information Act.

The nebulous category of "dual-use" technology is particularly troublesome for proponents of stiffer regulations who cannot forge a consensus on which technologies must be afforded a greater level of protection. Dual-use technologies are those items or technologies which, while intended for commercial use, have potential military application. The internal mechanism of an innocuous teaching toy such as "Speak-and-Spell" contains components not all that different from those housed in the Pentagon's computer, yet it seems absurd to restrict its export. On the other hand, as Khrushchev liked to point out, even the buttons on a soldier's trousers are militarily strategic since, without them, he would be forced to hold his pants up with his hands in battle.

To deal with the problem of dual-use technology, the Export Administration Act of 1969 directed that a list be compiled of specific technologies and manufacturing processes to be afforded strict protection. The Military Critical Technologies List (MCTL) which emerged is a three-volume nightmare of complexity--tantamount to a modern technologies shopping list, not surprisingly still classified, and therefore, almost useless as a guide for Commerce and Customs officials. But the other major problem with the MCTL is that, while intended to regulate the transfer of technology to the Eastern Bloc, it will [also] restrict the flow of sophisticated technology to our NATO allies and almost certainly have a negative impact on RSI collaboration.

In addition to the Export Administration Act's proposed controls on technology exports, the Defense Department has enacted its own tough policy to govern all of the mechanisms of technology transfer which come under the aegis of DOD, including RSI. In a highly irregular action, Directive 2040.XX became operative immediately after it was signed on 29 December 1982, prior to its having been circulated for comment within DOD or having been published in the Federal Register. This extraordinary action testified to the importance which certain Defense Department officials attach to it. The directive expresses the attitude of DOD Undersecretary for Internal Security Policy Richard Perle, stating:

> It shall be DOD policy to treat defense-related technology as a valuable and limited national resource to be husbanded and invested prudently in the pursuit of national security objectives.[16]

The directive caused a power struggle in the Pentagon between the Office for Policy and the Undersecretary for Research and Engineering. One official predicted that if the attitude expressed in 2040.XX prevailed, "RSI will be dead in the water."[17] In fact, on January 17, 1984, Defense Secretary Weinberger signed into effect a more stringent final version, Directive 2040.2, which slates for restriction technology deemed to be "sensitive" as

well as that which is "military critical." While fears that RSI will be killed may be overstated, it is probable that RSI will be inhibited by the fact that Directive 2010.6 and 2040.2 are somewhat at cross purposes. If RSI threatens to give away the store, 2040.2 threatens to close it down.

The Europeans have not failed to recognize the implications of these export control policies for RSI and the two-way street in trade. In spite of recent expulsions of Soviet diplomats by several European nations as part of a drive against the illegal acquisition of technology, most US allies do not share the magnitude of current US concern, partly because they perceive the USSR differently, and partly because they in principle reject linking foreign policy and trade policy. Commented one French official referring the the resumption of US grain sales to the USSR in the wake of US pressure over the European-Soviet oil pipeline, "I don't think the US can make up its mind on its own sales and foreign relations policies, let alone begin to dictate policies for its allies."[18]

The EEC [European Economic Community] recently registered a formal complaint with the US government over proposed amendments to the EAA, which would give the President authority to terminate imports from countries that failed to comply with US restrictions or embargoes. Such punitive measures are seen as an extra-territorial attempt by the United States to define other nations' sales territories and foreign policies, and thus an infringement of national sovereignty, as well as a statement of US distrust of its allies.

Unmoved by the complaints of the Europeans, proponents of tougher restrictions on technology transfers unabashedly acknowledge their intention of using trade sanctions to "help the Europeans learn their lesson."[19] For better or worse, the lesson that the Europeans seem to be learning is that they must, at all costs, avoid technological dependence on the United States. If the United States wants to keep RSI alive, it must first make sure of its commitment to collective security as a policy engaged in among equals. It must be resolved that sharing technology with US allies will be more of a boon to the collective defense than would be an approach that would attempt to keep the technology out of the hands of the Soviets, by refusing to collaborate with the US's NATO partners.

The NATO Burdensharing Controversy

A final obstacle to Congress' whole hearted support of RSI is the divisive issue of NATO burdensharing. Securing public and governmental support for increased defense spending has been difficult in recent years for all NATO members. The agreement which emerged from the 1977 NATO Summit, committing all members to an increase in annual defense spending of three percent, has not been met by all allies, prompting Defense Secretary Weinberger to complain that:

> The failure of our allies collectively to achieve at least the 3 percent judged necessary to keep the East/West balance from tipping further against NATO could be seen by Moscow as a weakening of our collective resolve.[20]

Meanwhile, US increases for 1981-82 were on the order of five percent. An indication of the spending differential can be seen in the fact that the US Air Force flies 29 percent more aircraft than all NATO air forces combined, the US Navy has two times the combat aircraft of the largest European air force, and the Marines possess more aircraft than all but three European air forces.[21] These sorts of figures raised the question in Congress: "Why should we take the defense of Europe more seriously than the Europeans do?" American critics point to the tendency of European governments to concentrate on social welfare programs to the detriment of defense spending because they perceive these problems as more politically salient and immediate than the Soviet threat. It is incomprehensible to some Americans that Europeans tend to perceive a conventional war with the USSR as either unlikely or unwinnable. On deeper reflection, it is not that surprising that having "played the home game" before, Europeans are reluctant to become the battleground between the US and the USSR, or to sacrifice economic well-being to achieve a better state of military preparedness. The salience of economic well-being is expressed even by European military officials. According to the Belgian National Director of Armaments:

> It is not only the Soviet threat which constitutes our number one preoccupation; it is the security and well being of our democratic country that must be insured.[22]

For their part, the Europeans have good reason for scepticism about the firmness of the US commitment to RSI and the "two-way street," which often appears to be a thinly disguised version of the "buy American" policy. Notwithstanding the series of Memoranda of Understanding signed by the US government, RSI projects will always be at the mercy of the annual budget process and Congressional ambivalence.

> What interests the Europeans is the persistence of the American protectionists and the uncertainty concerning the reduction of legal exceptions [waivers], which place in doubt the credibility of the American project to increase cooperation with the allies.[23]

The cancellation of the Roland Missile prompted many indignant complaints and threats of retaliation. German industry officials complain that the Specialty Metals clause effectively closes the US market to foreign arms manufacturers and provides proof that the two-way street is dead. Germany's Defense Minister Manfred Worner announced early this year that he had begun "to investigate which of the defense equipment required and planned for procurement [from the US] can--should the need arise--be replaced by defense material produced in Europe."[24]

Perhaps the clearest example of the failure of the two-way street from the European perspective is the case of the Martin-Baker [M-B] ejection seats. The US Navy has traditionally used and preferred British M-B seats for its fighter aircraft and had selected them for its F/A-18 combat aircraft after open, competitive bidding. In spite of the Navy's conviction that the M-B seats were superior, a Congressman had the Navy's decision overturned on the grounds that offshore procurement would cause erosion of the US industrial base. This objection did not arise "from any consideration of pilot safety or productive efficiency, but from murky machinations of American

politics".[25] It undercut the US-UK Memorandum of Understanding on defense purchases, which the British view as a violation of a moral obligation.

The Europeans are bitter that in spite of the series of MOUs pledging an improved balance of trade, the ratio of European to US trade has further deteriorated. Even though in this ratio the European accounting method considers only trade in arms, while the US includes all defense-related transactions--i.e., repair, construction, supplies, training, and consumption by US servicemen in Europe--(thus reducing the Europeans' shortfall in the balance of trade), no one tries to refute the contention that the two-way street is a super-highway over, and a dirt road back.

Many American officials find European demands for parity unrealistic, claiming that the "two-way street" doctrine was never intended to create a perfect numerical balance of purchases in both directions,[26] or else they fault ineffective European marketing tactics. Whether or not the current ratio of US-European trade is the result of political chicanery, the balance of trade is emphatically in the US's favor. From the European perspective, current US policy which aims simply to remove obstacles to the operation of the free market would not be a good basis for enhancing cooperation. Free market principles would merely perpetuate the advantages enjoyed by US firms. Opening European markets to US firms would only "relegate Europe to the status of permanent subcontractor."[27]

The differential capabilities of the US and European industries make the industry-to-industry approach supported by the Reagan Administration impractical from the European perspective. Only government-to-government agreements can guarantee a significant role for European producers.

> In effect, the difference in industrial dimensions between Europe and America, practically speaking, make an orderly relationship between [European] industry and [American] industry impractical--it is important that governments play a regulatory role between the two.

The Europeans cannot convince their parliaments to sacrifice the political and economic benefits they receive via domestic employment in weapons production. Long-term work force stability is important to them. If "Americans fit the workforce to the program--Europeans fit the programs to the workforce."[29] The defense industry is a large employer with close relations to government in several European countries. In Germany, approximately 200,000 are employed in defense-related industry; in France and Britain, the figures are 275,000 and 300,000 respectively.

Europeans feel that in an open defense market, they would lose these jobs to US firms. In addition, removing barriers to participation in the US market would not guarantee European success in competing with US firms on their turf. But if this sounds like a demand for special privileges that would undercut US firms, Ambassador Komer, Advisor to the Department of Defense on NATO Affairs, countered that:

> The Administration's effort to promote the two-way street is not a give-away program. In fact, it's designed to protect our own export position. We are kidding ourselves if we think Europe will

keep buying as much from us if we don't buy more from them. The handwriting is on the wall . . . either we're going to give the Allies a somewhat bigger share of our market or they're going to increasingly go for their own equipment, even if ours is better and cheaper.[30]

If the shift away from a government-to-government approach is accomplished, demands for a more equal sharing of economic benefits will not cease; instead, they are likely to intensify. The burden will fall on US industry in the form of demands for offsets. US manufacturers are willing to satisfy these demands as a short-term expedient, but they express dissatisfaction over the "offset auction" that is developing in the international defense market, and will likely press for a political solution if the situation continues out of control.

Assessment and Recommendations

The track record of RSI is full of small successes and major failures. The Defense Science Board's evaluation that "all things being equal, there has been a lot of progress in expanding cooperation between the US and NATO" does not refute the contention that RSI has not fulfilled its promise. Some attribute this to the fact that, while international commitment on the policy level has been strong, transient economic conditions have created setbacks for RSI. But even in better economic times, consensus on RSI at the policy and program level has been elusive.

Congress, industry, and labor have not been consistent allies of the doctrine. RSI can only work if its proponents forge the necessary consensus. The first step is to tailor the ideal to the possible. A realistic redefinition of the concept which focuses on interoperability and cross-servicing of components, logistical support, standardized communications, and harmonized procedures for the deployment of forces, is more likely to gain universal support.

While reluctant explicitly to redefine the concept and theory of RSI because of its symbolic import, the current administration has quietly and subtly scaled down RSI programs. When its supporters use the term "RSI", they are now generally referring to "interoperability." There is widespread feeling that:

> The dividends that accrue from a capability to cross-service essential consumables between allied forces are obvious. Beyond that, realism indicates that there is little to be gained from standardization.[31]

While some military and government officials still consider interoperability a short-term, low-order goal, it is generally agreed to be the most achievable one. As early as 1978, Ambassador Komer, Advisor to the Defense Department on NATO Affairs, cautioned that:

> . . . standardization, however theoretically desirable . . . is not militarily feasible in an alliance of sovereign states . . . the escalating rhetoric about standardization and the two-way street has

> spawned a lot of simplistic and often misleading mythology . . . standardization is not a panacea.[32]

Different national tactical concepts and production methods trip up the process of standardization. A good illustration is the case of Northrop's F-5 aircraft, a standard production model which has been acquired by more than a dozen countries and therefore provided a perfect opportunity for standardization. Yet, in the end, nine versions had to be designed to respond to varying conditions, climates, and mission-types.[33] (It is not surprising that nations should be stubborn about their individual specifications. In this respect they are behaving very much like the military services in the US.)

In his 1983 report to Congress on RSI, Secretary of Defense Weinberger acknowledged that the goal of complete standardization is difficult to attain, and that it is necessary to settle for interoperability when no more is possible. [34] In the spirit of this tacit reappraisal, the Office of the Undersecretary for Research and Engineering recently released a pilot program to NATO allies based on projects in the R&D stage solicited from the military services.[35] The prototype projects submitted included: the US Air Force's pyrophoric flare, the Navy's mine-neutralizer system, and the Army's improved conventional mine system. The bidder selection process will "incentivise" RSI collaboration by making cooperative arrangements between US and European firms a significant selection factor in awarding contracts.

The outstanding feature of this pilot program is the unambitious nature of the projects under consideration, scaled down with the aim of reducing friction and, therefore, government involvement. However, the positive side of this program is its potential achievability. Relatively small, uncomplicated weapons and components, which minimize the managerial problems that have plagued past programs, could be used to set precedents and patterns of negotiations that would galvanize future projects of a more sophisticated sort.

After reformulating the currently vague and over-ambitious concept of RSI, the second step toward building consensus should be the creation of a consolidated apparatus for administering RSI. Authority over RSI, technology transfer, and munitions export licensing should be lodged squarely in an invigorated version of the current Department of Defense Office for Research and Engineering. A clear mandate and cohesive organizational infrastructure would make it more difficult for the military services to countermand RSI programs. The conflicts which now occur between DOD's Office for Research and Engineering, and the Services, or DOD's Policy Office, can easily be exploited by Congressional opponents.

The third step towards making RSI viable should be the determination of the proper division of labor and responsibility for RSI between governments and firms, or the public and private sectors. Governments must be responsible for setting the policy goals and negotiating country shares of production and procurement. These issues are too delicate and potentially sensitive to be left to industry. Once the policy goals are established by the participating governments, the military should establish technical specifications and logistical requirements to be met by the manufacturers. These two prerequisites achieved, management of the projects can then be delegated to private contractors.

Conclusion

The Reagan administration would like private industry to shoulder the burden for achieving RSI collaboration. Ironically, this policy is not so much creating as following a new trend. Recently, something of a momentum has developed behind private multi-national teaming ventures, but not with the goals of RSI in mind. US firms are finding themselves in the position of responding to increased pressures from European governments. The burden of responding to these escalating demands for offsets has created a rationale for joining a team venture with what would otherwise be hostile competitors, demanding purchasers, or protectionist governments. Moreover, teaming with their European counterparts allows US firms to keep a foothold in what has the potential to become an Independent European Program Group cartel.

Similarly, it was not the exhortations of three successive American presidents that lit the fire under European collaboration. Teaming arrangements allow European nations with narrow or shallow industrial bases to keep their defense industries alive. At the same time, intra-European collaboration promises that European firms can retain their independence vis-a-vis US manufacturers against which, as individuals, they could not compete.

Disregarding causes and focusing on superficial effects could lead to the false conclusion that this emerging form of collaboration is the functional equivalent of, and even indistinguishable from NATO RSI programs. In the context of sluggish economies which prompt NATO members jealously to guard their own economic welfare, bypassing the necessarily tedious government-to-government negotiations which RSI requires may appear to be the path of least resistance. The privatization of defense production is being welcomed by many who complain that RSI has evolved into a form of barter rather than trade, or that cooperation has become a political goal, an end in itself, rather than a means of strengthening NATO's conventional deterrent. (In this group can be counted Thomas Callaghan, the "father of RSI," whose influential 1974 report paved the way for the formulation of the official RSI doctrine.)[36]

But if NATO collaboration is desirable for a number of reasons of which economics is only one, then it is unrealistic to expect private firms, motivated by economic expediency, to achieve as spin-off effects of their ventures the political and military goals which comprised the original rationale behind RSI collaboration. A real consideration is the likely loss of NATO's industrial breadth and depth, as the national industries of smaller, weaker NATO members collapse under the competition of larger foreign firms. Allowing market shares to be divided among the few toughest competitors has some economic advantages, but there is more to the alliance than economic rationality.

Left to the unimpeded operation of the market, a structure for trans-Atlantic trade may emerge, but European objections that the preponderant balance of trade will continue in the US's favor will go unmet. The current US approach to collaboration is simply assuming the problem away. The value of alliance solidarity should not be underestimated. The cooperative spirit that the United States demonstrates, through such good faith measures as the two-way street, is worth some economic sacrifices if it determines that RSI is a valid military and political goal.

The future of NATO is integrally linked to the future of RSI. Both hang in the balance, because both test the ability of NATO members to put cooperation before competition. Unless the underlying commitment is stronger than the pluralist tendencies of its individual members, NATO as well as RSI, will fail to survive future shocks to the alliance which promise to be as plentiful as they are inevitable.

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