THE DISAM JOURNAL OF INTERNATIONAL SECURITY ASSISTANCE MANAGEMENT

Our cover feature this quarter discusses the missions and functions of the U.S. Army Security Assistance Command. With 35 years service to the international community, USASAC is the Army organization devoted to the broad range of security assistance materiel programs. It provides total security assistance program management, including planning, delivery and life cycle support of equipment provided to our international partners. In addition USASAC negotiates and implements armaments cooperation agreements, manages export licenses for the Army, and supports emergency assistance and humanitarian relief operations. Our lead article describes in greater detail USASAC's involvement across a wide spectrum of international programs as the command leads the Army toward allied strength in cooperation.

Each year we publish extracts from the Congressional Research Service's publication on conventional arms transfer to the developing nations. This annual offering looks at the world trade in arms for the preceding year and puts it into the perspective of the last five years. Containing an analysis of both suppliers as well as purchasers, the report places the U.S. arms transfer program in the context of world trade in weapons.

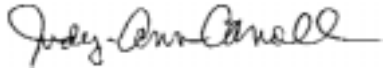
The security assistance organizations produce their engagement plans consistent with other strategic plans prepared by the military and the Department of State. In order that this planning effort not become a sterile drill but a useful aid in conducting business within the SAO, we offer a proposal for the planning process that will institutionalize strategic thinking.

Although the U.S. has long provided resources for the professional education of the militaries of our strategic partners, conditions are often such that the effect of our efforts are not easily discernible. However, in the Balkans we can point to a success story that has demonstrable links to our military assistance effort. Aid to Croatia since 1995 has sent a total of 550 Croatian officers and senior foreign and security policy officials to American schools, especially to the Marshall Center in Garmisch, Germany. During the contentious election in early 2000, the military chose to remain on the sidelines, thus passing its first test as a peacetime army. This outcome assuredly was a result, at least in part, of the exposure to democratic principles emphasized in their coursework in U.S. schools.

In the same vein, we have a personal testimonial from a Danish officer who notes how his attendance at the U.S. Army Command and General Staff College resulted in contacts that facilitated his dealings in a multinational military environment.

The Defense Systems Management College recently co-hosted the Third International Acquisition/Procurement Seminar-Pacific in Singapore. The College has kindly let us reproduce some of the speeches presented at the seminar which are especially relevant to understanding the defense environments in which our allies in Asia are operating today.

Finally, we wish to congratulate two of our adjunct faculty members for recently receiving some singular honors. We are proud to have them on our DISAM team.



JUDY-ANN CARROLL
Colonel, USA
Commandant

THE DISAM JOURNAL

of International Security Assistance Management

Fall 2000

Cover Feature 1

Major General Bruce K. Scott, USA and Ken Spalding, U.S. Army Security Assistance Command,
"The U.S. Army Security Assistance Command" 1

Legislation and Policies 27

Richard F. Grimmett, Congressional Research Service The Library of Congress,
"Conventional Arms Transfers to Developing Nations, 1992-1999" 27

Perspectives 61

Captain Robert C. Rubel, USN, Center for Naval Warfare Studies,
"Security Assistance Engagement Plan Development" 61

Major Kristan J. Wheaton, USA, U.S. Embassy, The Hague,
"Success! Security Assistance and Its Impact in Croatia 1995-2000" 67

Charles G. Jameson, Northrop Grumman Corporation,
"The Technology Transfer Pyramid and How to Climb It" 74

Michael Swansburg, Defense Security Service
"Technology Control Plan" 77

Gil Watters, Capital Equipment Program Department of Defence, Australia
"Affordable Acquisition" 80

Chinniah Manohara, Director Defence Science and Technology Agency, Singapore
"Defence Procurement in Singapore" 86

Robert E. Hammond, Vice President, South Asia Region Lockheed Martin Global, Inc.
"Challenges and Opportunities for U.S. Defense Companies in South Asia" 95

Education and Training 99

Richard Kwatnoski, Defense Systems Management College,
"How Defense Security Management College Supports the National Security Strategy of Engagement" 99

Commander Pat Hawkins, USN, Defense Institute of Security Assistance Management,
"Training Officer Survey Results" 103

Nels E. Berdahl, Information Spectrum, Inc.,
"Update: Defense Security Assistance Management System (DSAMS)" 108

"German Army Hosts Multinational DISAM Foreign Purchaser Courses in Historic Hammelburg" 112

Security Assistance Community 115

Constance Hale, U.S. Army Command and General Staff College Fort Levenworth, Kansas,
"International Hallway Dedication Ceremony" 115

Colonel Jørgen Jelstrup, Danish Army
"Chief of Staff/Nordic-Polish Brigade on NATO Mission in Bosnia, June 1998 - January 1999: The Leavenworth Link" 120

"Dr. Benjamin N. Muego Becomes the Newest Member of the DISAM Family" 122

"DISAM Adjunct Faculty Receive Honors" 124

Security Assistance Calendar 127

Research and Consultation 129

FEATURE ARTICLE

The U.S. Army Security Assistance Command

By

Major General Bruce K. Scott, USA

and

Ken Spalding
U.S. Army Security Assistance Command

This article discusses the missions and functions of the U.S. Army Security Assistance Command (USASAC), focusing on current procedures for program management in the international arena.

Celebrating its 35th anniversary this year, USASAC continues a proud tradition of service to the nation, the U.S. Army and their international partners. Over the years, dedicated soldiers and civilians have successfully performed our worldwide mission supporting our nation's security strategy and foreign policy objectives through development, execution, and world-class management of Army security assistance (SA) programs.

As the U.S. Army's focal point for foreign military sales (FMS), we support more than 120 allied countries, friendly nations and multinational organizations. The value of our current worldwide caseload exceeds $48 billion, with more than $3.2 billion in new cases added this fiscal year. The mission we perform is unique to the Army. We are the only Army organization that executes approved security assistance materiel programs, including technology security and management, business management, export license management, country program management, and coproduction of Army materiel.

USASAC Organization

The USASAC, whose elements were first consolidated at New Cumberland, Pennsylvania, in 1965, is a major subordinate command (MSC) of the Army Materiel Command (AMC), which manages one-half of the Army's procurement dollars and is the Army's main supplier of weapons and equipment. The Army Materiel Command commander, as the Army executive agent for security assistance, has assigned the security assistance mission to USASAC. Under this assignment, we in USASAC view ourselves and are viewed as "Army Materiel Command's Face to the World."

The USASAC commanding general also serve as the AMC Deputy Chief of Staff for Security Assistance on the Army Materiel Command Headquarters staff. The USASAC has a civilian principal deputy, who is a member of the senior executive service.

United States Army Security Assistance Command

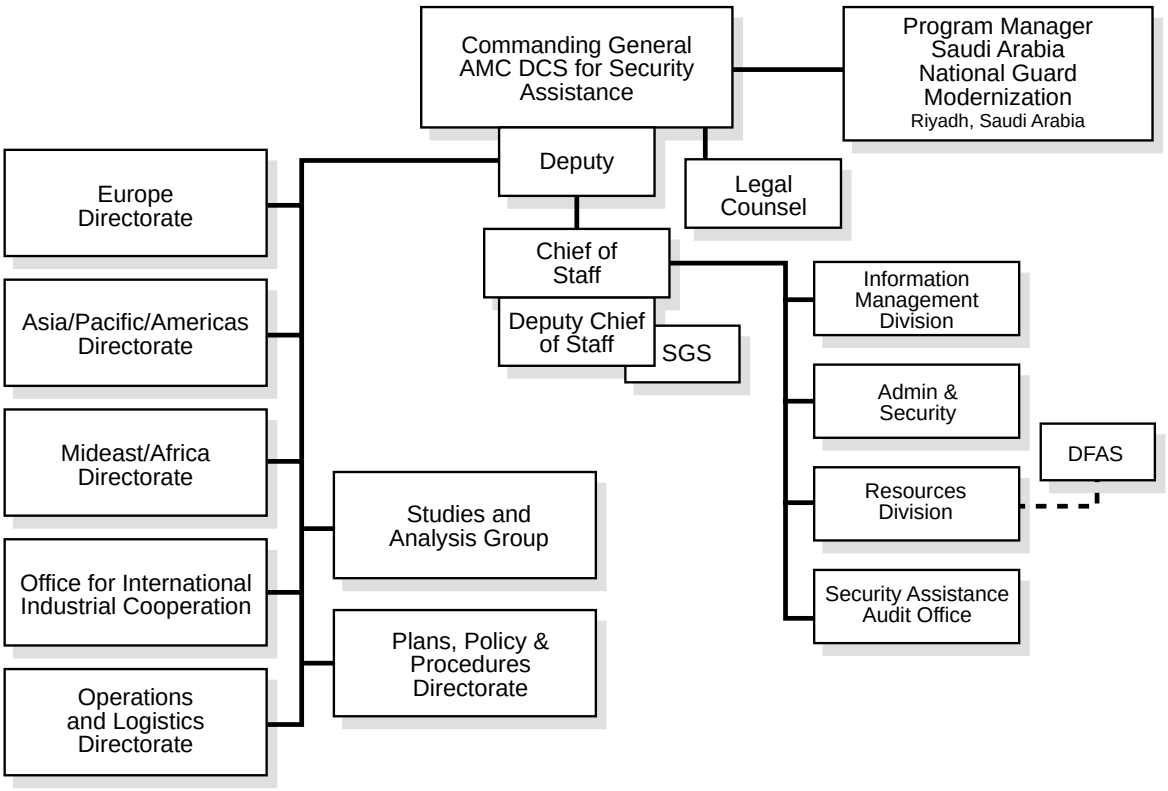


Figure 1

The USASAC organization is depicted in Figure 1. The command's operating centers are located at Alexandria, Virginia, New Cumberland, Pennsylvania, and Saudi Arabia.

Three regional directorates at Alexandria manage the FMS case workload: Europe; Asia, Pacific and Americas; and Mideast/Africa. At Alexandria, country program managers (CPMs) work directly with representatives of foreign governments to plan, develop and execute international sales agreements. Under the command and control of the regional directors, teams of country case managers (CCMs) at New Cumberland help ensure that each customer's cases receive the intense management required for total customer satisfaction.

The command's other directorates are Operations and Logistics, and Plans, Policy and Procedures. Additionally, the Resource Management Division, Information Management Division, the Office for International Industrial Cooperation, and the Office of the Program Manager, Saudi Arabian National Guard (OPM-SANG) Modernization round out USASAC's management team. Additionally, a legal counselor and a semi-independent audit office help us to ensure sound stewardship of resources. The USASAC also has one employee in Cairo, Egypt, who serves as an automation advisor to the Egyptian Land Forces.

Personnel from the Office of the Program Manager, Saudi Arabian National Guard (OPM-SANG) Modernization assist in antitank weapons training of SANG soldiers.

The USASAC, including OPM-SANG, is staffed by 621 men and women, of whom 104 are military. These professionals are guided by USASAC's strategic vision:

> The international partner of choice for U.S. Army programs, leading DoD in security assistance management with a dedicated, highly skilled workforce. A high performance command, partnered with industry and characterized by a climate of excellence, fairness and accessibility in a global environment.

USASAC and Foreign Military Sales

Foreign military sales comprise the Army's principal security assistance program. FMS, which are government-to-government sales of defense articles and services, not only enhance the defensive capabilities of our allies, but also promote interoperability of materiel, logistics, and training all areas vital to the success of coalition security. In addition, on the domestic front, FMS help the U.S. economy, maintain jobs, and sustain the industrial base for crucial weapon systems.

The USASAC is responsible for life cycle management of FMS cases, from development to execution, financial management and accounting, and closure. Each sale of equipment to overseas customers comprises the same total package of quality materiel, spare parts, training, publications, technical documentation, maintenance support, and other services that Army Materiel Command provides to U.S. Army soldiers.

The USASAC commanding general and his staff operate within policy and guidance furnished by the Office of the Deputy Under Secretary of the Army for International Affairs (DUSA-IA) and interface with the Defense Security Cooperation Agency (DSCA), other military departments

and U.S. government agencies, private industry, and representatives of foreign governments and international international organizations.

Mission

Simply stated, the command fulfills its core purpose to enhance national security strategy and foreign policy through the following primary mission areas:

- Providing total security assistance program management, including planning, delivery and life cycle support of equipment, services, and training to, and coproduction with, U.S. allies and international partners.

- Negotiating and implementing coproduction agreements.

- Managing export licenses for the U.S. Army.

- Serving as the proponent for Army security assistance information management and financial policy.

- Providing logistics procedural guidance to the Army security assistance community.

- Supporting U.S. government emergency assistance, humanitarian relief and operations other than war.

Quest for Quality

We at USASAC believe that to provide quality products and services, we have to be a quality, customer-oriented organization. Our customers include not just our international FMS partners, but also the American taxpayer, the State Department and other U.S. agencies, Army Materiel Command and the major subordinate commands, and U.S. industry. In serving all our customers, we constantly reevaluate and strive to improve the way we do business expanding and enhancing automation, management, administration, training, and teamwork and continuously improving our processes. Employing quality management coupled with quality leadership, working with the Army Materiel Command and other U.S. organizations, USASAC provides its customers with superior equipment, service, and support.

Security Assistance Budget

The USASAC manages programs and budgets for the general and administrative support provided by Army Materiel Command to the security assistant program. The budgets are developed at USASAC, with input from the Army Materiel Command major subordinate commands that are commodity commands, and submitted through Headquarters, Department of the Army (HQDA) to the Defense Security Cooperation Aagency. See Figure 2 for an illustration of this process. The Defense Security Cooperation Agency, in turn, provides FMS administrative funding through Headquarters, Department of the Army to Army Materiel Command from funds collected by a 2.5 percent surcharge levied on most FMS cases.

AMC Commodity Commands

Aviation and Missile Command (AMCOM), Redstone Arsenal, Alabama, manages aviation and missile systems from R&D through procurement, production and fielding.

Communications-Electronics Command (CECOM), Fort Monmouth, New Jersey, cradle-to-grave acquisition and management of community and electronics equipment.

Operations Support Command (OSC), Rock Island, Illnois, world-class logistics support through materiel manufacturing and maintenance.

Simulation, Training and Instrumentation Command (STRICOM), Orlando, Florida, development, evaluation, and support of distributive interactive simulation systems.

Soldier and Biological Chemical Command (SBCCOM), Aberdeen Proving Ground, Maryland, life cycle support of everything the soldier wears, carries or consumes.

Tank-automotive and Armaments Command (TACOM), Warren, Michigan, management of R&D, production, fielding and support of mobility and armament systems.

Figure 2

Approximately 90 percent of the FMS administrative funding received by the Army is managed by USASAC for logistics support services provided by the Army Materiel Command to the FMS program. Funds are used for services such as case preparation and management, requisition processing, procurement, case closure and financial case management.

Functions such as technology transfer, export license processing and coproduction are funded through the Operation and Maintenance, Army (OMA) appropriation. The OPM-SANG, which is solely dedicated to the support of the Saudi Arabian National Guard, is funded under FMS from Kingdom of Saudi Arabia funds.

Business and Sales

U.S. Army security assistance is conducted largely on a reimbursable basis at no cost to the American taxpayer. The total value of open USASAC-managed FMS cases, over 4,200 of these are more than $49 billion, of which $14 billion is undelivered. The $14 billion undelivered posture suggests a considerable workload requirement for USASAC in the foreseeable future (an annual delivery estimate of between $3 and $4 billion is considered reasonable). The lineup of top ten customers, with Saudi Arabia and Egypt leading, accounts for more than eighty percent of the value of open cases.

For fiscal year 2000, new FMS cases totaled $ 3.235 billion, a significant increase from the fiscal year 1999 total of $2.7 billion. In fact, it is our best year since fiscal year 1993. The largest FMS in fiscal year 2000 (having a case value of $100 million or more) included the sale of AH-64D Longbow attack helicopters to Israel; Alpha Apache helicopters to the United Arab Emirates; CH-47 Chinook helicopters to Egypt; and Avenger air defense systems to Israel.

The overall value and viability of the Army security assistance program is more accurately reflected in areas in addition to FMS:

- Support of the U.S. defense industrial base for critical weapons. The majority of new production for the M1 Abrams tank, Apache helicopter, and TOW and Patriot missile systems are ticketed for foreign sales that sustain U.S. jobs.

- Thirty-one coproduction programs, which help promote a forward U.S. Army presence, interoperability with allied systems, and sustainment of U.S. depot maintenance capabilities.

- Foreign sales for modernization save OMA costs for demilitarization, transportation and disposal, and provide dollars directly to Army systems procurement and modification programs.

Customer countries continue to express significant interest in acquiring major U.S. Army systems, including the Multiple Launch Rocket System (MLRS), Black Hawk helicopter, and TOW missile upgrades. This projection is tempered, however, by increasing global competition in the international sales community, typified in fiscal year 2000 by intense competition for main battle tanks, attack helicopters, and tactical missile systems.

FMS - What is the Process?

When an eligible foreign country or international organization requires defense articles or services, the country's defense organization conveys the requirement in a Letter of Request (LOR). If the request originates within the foreign country, the LOR is submitted through its diplomatic representative in the U.S. or to the Department of Defense (DoD) representative in the U.S. Embassy. The request is then forwarded for action to USASAC, with copies to the State Department and the DSCA. If the LOR originates from a foreign embassy in the U.S., it is sent directly to USASAC, with information copies to the State Department and DSCA.

Upon approval by the appropriate offices, USASAC requests a Letter of Offer and Acceptance (LOA) from the appropriate Army Materiel Command commodity command major subordinate command. Once the LOA has been developed, countersigned, accepted, and funded, the customer's requirement is fulfilled by the commodity command, either by procurement or from U.S. stocks, or both.

The USASAC works with the DoD's major systems acquisition community including the program executive officers and program managers to coordinate procurement and fielding of defense articles under FMS programs.

Each AMC commodity command, where the LOAs are initiated and administered, has a security assistance management directorate (SAMD) that performs the FMS function. Materiel specialists in these offices work closely with USASAC to handle the hardware end of the business, ensuring total package service.

Country Programs

As mentioned, Army security assistance programs for more than 120 countries and multinational organizations are managed by USASAC's three regional directorates. Headed by a

colonel and staffed with CPMs and CCMs, the regional directorate's principal responsibilities include:

- Managing defense agency-wide participation in developing and executing approved security assistance programs for assigned countries and international organizations, including aid programs.

- Providing central case management of Army FMS cases.

- Providing command case management of blanket order cases, publication cases and defined line cases for the Defense Logistics Agency (DLA), General Services Administration, and excess U.S. Army managed Class IX (repair parts), Secure Electronic Procurement Office, and non-standard materiel.

Additionally, the directorates participate with DoD and Defense Agencies in determining initial country requirements; provide overall program management guidance based on directives from HQDA and the Office of the Secretary of Defense (OSD); provide, as assigned, overall guidance and direction for the management and logistics support of disaster relief, drug interdiction, and other special State Department and Presidential programs; interpret and disseminate security assistance policies and procedures applicable to their regional areas of responsibility; and provide special supply-logistics systems analyses.

Following are highlights of each directorate's area of responsibility, business volume, and significant items for the past calendar year.

Asia, Pacific and Americas

Like USASAC's two other regional directorates, Asia, Pacific and Americas is divided into two divisions: Country Program Management Division, Alexandria, VA, and the Case Management Division, New Cumberland, Pennsylvania, which executes the requirements of each case and closes individual cases when complete.

The Asia, Pacific and Americas Directorate is responsible for programs in the Caribbean basin, Central and South America, the South Pacific nations and Southeast Asia, plus the North Asian countries, the Philippines and Taiwan. Managing programs in fifty-two countries, four international narcotics matters programs and one international organization. The Organization of American States, the directorate's CPMs are responsible for a total program value of more than $7.2 billion in over 1,500 cases. The division's country program managers also handle Joint Task Force-Full Accountability and demining operations in Cambodia and Thailand.

In the last twelve months, the division hosted country program management reviews for a number of countries. Many of the programs focus on providing major defense equipment as well as follow-on support of tracked and wheeled vehicles, Apache and Black Hawk helicopters, weapons and smaller items purchased through FMS. Historically, many of the countries in the region have used excess defense articles to leverage limited defense budgets. The limited amount of EDA materiel that is now available is altering that pattern somewhat.

Although a number of country programs assigned to the directorate are politically sensitive, the past year has seen the hosting or chairing of a number of security assistance and specific weapon

system program management reviews. In this region, we support programs involving coproduction and indigenously designed materiel, as well as significant military equipment, such as the Apache helicopter, MLRS and the Patriot air defense missile system.

Because of our significant national commitment to Korea, in addition to supporting FMS sales, our program involves support of end items purchased through direct commercial sales, war gaming and the war reserve stock for allies (WRSA) program.

Europe

The Europe Directorate manages over 1,800 security assistance cases, valued at more than $10.2 billion, for 60 countries and international organizations. The directorate is responsible for the Special Defense Acquisition Fund (SDAF), which procures high demand defense equipment for FMS.

Geographically, the directorate's area of responsibility is spread across the globe, managing country programs for Canada and Israel, in addition to countries located in Europe proper. The directorate also supports three major international organizations, the United Nations, NATO, and the NATO Maintenance and Supply Agency (NAMSA).

The directorate is responsible for the northern tier of Europe ranging from Belgium, Netherlands, Denmark, and Luxembourg to the Scandinavian countries to Germany, Austria and Greece to the newly recognized Baltic countries of Estonia, Latvia, and Lithuania. In addition, it manages programs for Switzerland, Russia and a number of newly former independent Soviet republics such as Armenia, Azerbaijan, Moldova, Belarus and the Republic of Georgia and Ukraine.

Europe Directorate manages a number of former Warsaw Pact countries, such as Bulgaria, Romania, Poland, Hungary and the Czech Republic, and Slovakia, and is assisting the former Soviet Bloc and Warsaw Pact countries in force development, modernization, and training. These efforts in engagement are aimed at forging lasting professional military relationships with the U.S. The directorate also manages programs for NATO members Canada, United Kingdom, Portugal, Spain, France, Italy, and Turkey, plus the entire multi-billion dollar program for Israel and is responsible for all Secure Electronic Procurement Office cases.

In recent months, directorate staffers assisted in the successful initiation and execution of the first ever U.S. Army FMS reengineering effort involving the potential sale of the Javelin missile system to the government of the Netherlands. These initiatives included establishment of cooperative teaming with both the joint venture group (Raytheon and Lockheed-Martin), the primary contractor for the Javelin system, and teaming efforts within the DoD acquisition community, the DUSA-IA and the Defense Security Cooperation Agency. These cooperative efforts have paid off and will serve as a model for future FMS programs.

Additionally, cases for language labs, infrastructure, simulation, and training cases have increased in a number of Eastern European countries.

The directorate has also been involved in managing defense review and assessment requirements for several Partnership for Peace countries, including efforts in Hungary, Slovakia, Romania, and Macedonia. Several other countries in this region are also in the process of

developing requirements for these reviews. The aim of the assessments is to provide a top-to-bottom review of each country's existing defense posture and to make recommendations on how to move their military from the old eastern style military structure to a more modern and western style military. Several countries have undertaken these reforms because of their stated desire to eventually gain full NATO membership. The directorate is also involved in advanced technology systems, such as the Tactical High Energy Laser (THEL), which is being jointly developed by the United States and Israel. In anticipation of the transfer of the THEL to Israel, an FMS case is being processed which will fund the site design and contractor training in Israel.

Mideast/Africa

The Mideast/Africa Directorate manages a $ 25.5 billion program consisting of forty countries, two international organizations and over eight hundred seventy-six active FMS cases. Four directorate countries, Saudi Arabia, Egypt, Kuwait, and United Arab Emirates, rank among the top ten of the U.S. Army's largest FMS programs. Potential sales for the directorate in fiscal year 2001 total $ 5.8 billion.

Saudi Arabia is the largest FMS program managed by USASAC. Today, the FMS program for Saudi Arabia is one of sustainment and modernization. The USASAC, in conjunction with other U.S. agencies, works closely with our Saudi counterparts to ensure the systems procured from the U.S. are sustained well into the twenty-first century.

The majority of the major programs that were implemented in the early 1990s, including the M1A2 Abrams tank, M2A2 Bradley tank, tactical wheeled vehicles, air defense systems, and AH-64 aircraft, have transitioned from fielding to a sustainment phase. The Patriot air defense system is the one exception, as fielding continues on the last remaining battalion.

The Egyptian FMS program is another success story for the USASAC. The government of Egypt became eligible for the purchase of U.S. defense articles and services by presidential determination on 1 August 1977, which states that this action would strengthen the security of the U.S. and promote world peace. The commitment made by Congress, which provides Foreign Military Financing (FMF) will ensure the continued modernization of the Egyptian armed forces.

Egypt has continued to make significant strides to modernize and enhance its helicopter fleet. This was evidenced by the purchase of four new Chinook CH-47D helicopters, coupled with Egypt's request to upgrade six of the Chinook CH-47C models to the CH-47D configuration. Additionally, the government of Egypt has requested to upgrade thirty-five of the AH-64A Apache helicopters to the AH-64D model. The estimated value of the aviation modernization effort is $400 million.

The Egyptian M1A1 Tank coproduction program expanded from its initial 555 tanks with the additional sale in March 1999 of one hundred M1A1 tank kits and M256 cannon and gun mounts, totaling $514 million. Discussions are ongoing for the second one hundred additional M1A1 tank kits and gun mounts.

Kuwait's desire to rebuild its military is another significant area of focus. Kuwait's acquisition of major weapon systems such as the Patriot missile and the M1A2 tanks continues to dominate our efforts. Planned purchases of the Apache Longbow, TOW IIB missiles, and large quantities

of various types of ammunition will provide needed support for our industrial base, and will ultimately enhance the readiness of Kuwait's defenses.

A U.S. Department of Defense Technical Assistance Team, including USASAC personnel, help upload an M901A1 TOW carrier at Sunny Point, North Carolina, as part of a presidential determination drawdown transfer and deliver of materiel to the Hashemite Kingdom of Jordan.

Kuwait's Hawk program is expanding with a planned acquisition, under the EDA program, of five assault fire units ($46.6 million), missiles and ground support equipment. Additional missiles are also being purchased via the Special Defense Acquisition Fund. The United Arab Emirates has also indicated a continued interest in the Patriot missile system.

The United Arab Emirates security assistance program includes two major systems, AH-64A Apache helicopter and the Hawk missile system. As a member of Task Force Falcon, the United Arab Emirates is actively operating six of its Apache helicopters in support of coalition operations in the Kosovo theater of operations. Price and availability data was recently provided to the United Arab Emirates for the remanufacture of the AH-64A to the D model.

In recent years, Jordan has received a variety of equipment through various presidential drawdowns. In fiscal years 1998 and 1999, we delivered M901A1 TOW carriers, night sights, TOW II launchers, a variety of Hawk PIP-II components, missiles and rocket motors, AN/PRC-127 radios, several million rounds of ammunition, M35A2 trucks and a variety of spare/repair parts. In fiscal year 2000, deliveries are scheduled for AH-1F attack helicopters and Hawk PIP-II assault fire units.

As a result of Jordan's efforts in the Mideast peace process, supplemental funds were provided for its modernization efforts to procure HMMWVs, TOW IIA missiles, additional spare and repair parts, as well as repair and refurbishment of AH-1 Cobra helicopters and components.

Program Manager - Saudi Arabian National Guard Modernization

The availability of FMF funds for Africa has been very limited. Most African countries do not have national funds with which to finance new and existing purchase requests. USASAC is working with the customers to identify excess money on current cases which can be pooled together to finance new programs and continued support for existing programs. This allows continuous security assistance support, even when new funding is not available.

The Office of the Program Manager, Saudi Arabian National Guard Modernization, has the mission of developing within the Saudi Arabian National Guard the capability to unilaterally initiate, sustain, and operate modern military organizations and systems, in conjunction with other Kingdom of Saudi Arabia forces. Support provided by the program manager includes materiel acquisition and delivery and intensive training programs. The current program manager is Brigadier General (P) Buford Blount. Country program management, program liaison and CONUS representation are provided by the director, Washington Field Office, program manager, Saudi Arabian National Guard Modernization, located at USASAC Alexandria.

The Saudi Arabian National Guard modernization program is a multi-billion dollar program which dates to a 1973 memorandum of understanding between the United States and Saudi Arabia. The program is a fully Saudi Arabian funded, cash sales program. The program manager is chartered by the Secretary of Army and reports to the USASAC Commanding General. The program manager is a direct advisor to the crown prince and regent of Saudi Arabia who is also the commander of the SANG.

The Saudi Arabian National Guard modernization program includes a staff of approximately 300 U.S. Army military and civilians. In addition, there are over 1,500 personnel under contract to program manager providing specific training and support for the program.

The Saudi Arabian National Guard is a full-time, standing, defensive land-based force of approximately 100,000 men. The Saudi Arabian National Guard is recognized as having distinguished itself in the Gulf War, conducting and prevailing in the only land engagement with Iraqi forces on Saudi soil. After that conflict, Crown Prince Abdullah, Saudi Arabian National Guard Commander, approved a plan to further expand and accelerate the Saudi Arabian National Guard force modernization program.

A robust and complex acquisition for the fielding and training of the light armored vehicle manufactured by General Motors Defense Systems continues as the centerpiece of the modernization program. The total package light armored vehicle program, currently valued in excess of $3.6 billion, includes 1,117 vehicles in ten mission role variants, associated facilities, training devices and simulators, logistical support and spare parts, new equipment training and ammunition.

To highlight another element of the modernization program, the Saudi Arabian National Guard has requested and purchased through U.S. Army security assistance, a very significant quantity of SINCGARS VHF and Harris Corporation high frequency communications radios and associated

equipment. The Saudi Arabian National Guard is the single largest user of SINCGARS equipment outside of the United States. These procurements have had a very positive and lasting impact on the U.S. defense industrial base and reduced life cycle costs to the U.S. for this equipment.

The continuation of this long-term very successful program is a priority for the U.S. Army, the Commander in Chief Central Command, and the Department of Defense. The program has a significant role in the national defense strategy and theater engagement plan for the region.

Operations and Logistics

This New Cumberland-based directorate's scope and functions cover all facets of integrated security assistance logistics support to customers both internal to the Department of the Army and the 120-plus foreign countries and international agencies supported by USASAC. The Logistics Systems Division oversees branches for systems/procedures and for customer support, while the Product Assurance Division fields a world-class team of technical advisors that our international customers. The directorate's myriad missions include security assistance systems management and analysis; transportation policy; publications management; cooperative logistics supply support arrangement (CLSSA) program guidance; Defense Logistics Agency liaison; system and procedures development; product assurance management and execution; customer service; case preparation, management and closeout oversight; security assistance liaison officer management; and logistics staff functions. In addition, this staff acts as the USASAC operational element for mobilization, Joint Chiefs of Staff exercises, and emergency planning. The two divisions implement these mission elements.

Logistics Systems Division

This division develops the internal policies and procedures required by the CCMs; analyzes and designs functional systems for cataloging, supply, procurement, supply discrepancy reports, maintenance and obsolete and nonstandard items; writes the FMS cases for CLSSAs, blanket orders, publications, Defense Logistic Agency/General Services Administration defined line and unique/nonstandard cases, modifications and amendments (comprising approximately 38 percent of the Army's FMS cases); manages the USASAC emergency operations center at New Cumberland and all related emergency and mobilization plans and exercises; conducts continuous functional reviews and analyses to improve performance of USASAC systems; and trains USASAC systems users. Other major functions include:

- Designing and maintaining functional logic for automated interface with other DoD/Defense Agency/customer country case management systems, including; Commodity Command Standard System; Standard Depot System; Defense Automated Addressing System; Defense Security Assistance Management System; Program Budget Accounting System; Defense Integrated Financial System; and the Standard Operation and Maintenance and Research and Development System.

- Achieving effective customer support as the Army's focal point for the Supply Tracking and Reparable Return System-Personal Computer (STARR-PC); participating in improving the Military Standard Requisitioning and Issue Procedures (MILSTRIP) and Military Standard Transportation and Movement Procedures (MILSTAMP).

• The CLSSA is the avenue used by the country to "buy-into" the U.S. supply system. The inventory control points buy and prestock in anticipation of participating security assistance customer requirements so that when requisitions are received, shipment can be made. Our CLSSA customers receive the same support we provide our U.S. forces given the same priority designator.

Costs for CLSSA are between 25 to 30 percent of the value of the foreign military sales Order I (FMSO-I) plus the security supporting agency charge (5 percent of the Part A, FMSO-I). However, this initial, one-time investment (except for the security supporting agency charge which is a sunk cost) is returned when after five or twenty years the customer decides his equipment will be phased out or replaced.

Traffic management and management of the security assistance liaison officer program at New Cumberland are also prime areas of responsibility.

Traffic management entails providing consultation, advice, and training to the DoD transportation community, CPMs, CCMs, command case managers, freight forwarders, and advising DoD, Defense Agency, the Military Traffic Management Command, Air Mobility Command, and Army Materiel Command transportation officials on security assistance implications of the policies for which they are the proponent.

Under the security assistance liaison officer program, foreign liaison officers have available to them on-line access to the data base pertaining to their own FMS cases, direct access to the USASAC case managers and other key personnel in the U.S. FMS/logistics community. The program has enjoyed great success through its efforts to improve communication and cooperation between USASAC and foreign liaison officers representing Australia, Canada, Israel, Korea, Taiwan, Turkey, and the United Kingdom. It is anticipated that Greece and Kuwait will join the program. USASAC is assisting HQDA and the Major Army Commands (MACOMs) in the development of a defense agency-wide liaison officer program, based on the USASAC model. USASAC briefed representatives of the office of the DUSA-IA and the office of the Defense Agency Deputy Chief of Staff for Intelligence on the management of the USASAC security assistance liaison officer program.

Product Assurance Division

The essence of this division's mission is to develop and manage the Department of the Army executive level security assistance product assurance program. This tasking is accomplished through continuous process improvements in USASAC's Total Army Management environment. Key functions include:

• Conducting reviews and evaluations of significant problems, providing technical assistance support; developing management studies for system improvements and problem resolution; and initiating, planning, and monitoring/providing technical staffing for quality assurance teams, technical assistance teams, quick reaction teams, and customer satisfaction support teams.

• Developing and managing policies, procedures in order to maintain an effective Army level product assurance program, including providing service to security assistance customers at every tier; whether internal or external to USASAC. The divisions goals are to assure that

equipment and services are in accordance with the provisions and terms of FMS cases or tasking execute orders (i.e., presidential determinations). Recent examples include providing:

•• Freight forwarder liaison to resolve misdirected freight marking and packaging problems; and providing security assistance training to Defense Logistic Agency shipping activities and Defense Contract Management Area Office representatives.

•• Support in the selection, delivery, and fielding of materiel in support of presidential determination programs to Jordan. For four consecutive years deliveries to Jordan were directed by the president to help modernize the Jordan armed forces. These were highly visible deliveries received by Jordan royalty and U.S. ambassador-level personnel in rollout ceremonies attended by the media.

•• Technical assistance support in the excess defense supply of "as is–where is" to various countries, for example, Egypt, Greece, Argentina, Jordan, Croatia, Macedonia, and Lithuania.

Plans, Policy, and Procedures

This directorate at Alexandria provides expertise and command guidance in technical and managerial programs. It helps create a knowledgeable and efficient work force by developing and promulgating accurate, concise and clear security assistance policies and procedures as well as evaluating new and ongoing programs to ensure their effectiveness. Directorate personnel conduct periodic evaluations and continuing surveillance of security assistance activities within Army Materiel Command for compliance with DoD, Defense Agency and Army Materiel Command policy directives. The following are some key ongoing initiatives.

Bringing Policy to the Users

Security assistance policies and procedures are now at the users' fingertips. With the use of links, the Army's and Defense Security Cooperation Agency's policies are accessible through the USASAC web page at: www.amc.army.mil/amc/sac/index.htm. In the future, we will expand information on the web site to include requests for price and availability and letters of requests. We continue to upgrade our web site to support our customers with the tools they need to perform security assistance functions and transactions.

Letter of Offer and Acceptance (LOA) Policy

A LOA quality review of all Army cases (except those of the U.S. Army Corps of Engineers and the U.S. Army Training and Doctrine Command) is conducted to reduce the number of rejections by the DSCA. The daily review is comprehensive and focuses on key elements of the LOA such as line item data, mathematical calculations and notes. In fiscal year 1999, 2,067 LOAs, amendments and modifications were reviewed.

Excess Defense Articles

The USASAC manages the Army's excess defense articles program, which makes systems being phased out of Army service available to foreign military services. Economic reasons or technical capabilities of potential threats may dictate retirement of these systems from the U.S.

Army. However, these systems generally have considerable utility remaining and can serve effectively in the armed forces to which they are transferred. In addition to responsibilities for the administrative and contractual procedures and the physical transfer of this materiel, USASAC manages the collection of country requirements for excess defense articles systems and participates in the process of allocation of available excess assets.

International Air and Trade Shows

USASAC is the HQDA designated lead agency for the operational planning and coordination of total Army participation in international air and trade shows. Participation is based on the approval of the Under Secretary of Defense for Policy when that office determines that either direct or indirect participation by the DoD is in the national security interest of the United States. The shows are conducted to show our support for regional security and to contribute to interoperability of equipment with coalition partners. Most shows are held every other year.

USASAC is responsible for arranging for helicopters and ground based weapon systems to attend these shows for both static and dynamic displays. Additionally, USASAC partners with AFSAC and Navy International Program Office to present a DoD technology booth at air shows to showcase service aviation technologies. In preparing for air shows we work closely with Defense Security Cooperation Agency, the Aerospace Industries Association and its member companies to have U.S. industry sponsor aircraft and fund helicopter transportation and crew support costs. The inability of Army helicopters to self-deploy to many of the distant locations requires us to work closely with the U.S. Air Force Reserve components to arrange a lift via C-5 and C-17. Our participation in many shows is dependent upon the excellent support we receive from the U.S. Air Force Reserve.

Army aviation and technology displays have been demonstrated in numerous air shows in Singapore, Seoul, Korea, Paris, France, Berlin, Germany, Vancouver, Canada, Farnborough, England, Dubai, UAE, and Melbourne, Australia.

We also participate in ground equipment trade shows in Paris, France and Abu Dhabi, UAE. We present static equipment displays and a booth to showcase Army weapon systems. In executing these shows we work closely with Defense Security Cooperation Agency, the Association of the United States Army member companies who provide funds for equipment transportation and crew support.

Systems Management and Computer Based Training (CBT)

Security assistance business process management involves oversight of the myriad systems supporting the security assistance mission of USASAC and Army Materiel Command. We accomplish this by:

- Providing leadership of a security assistance business process group.

- Sustaining security assistance legacy business applications in the Commodity Command Standard System.

• Providing functional support for the development of the new Defense Security Assistance Management System.

• Providing consultation services to process action teams or similar groups on computer systems.

• Developing CBT courses on security assistance systems and processes.

• Providing subject matter expertise for the development, implementation, and interfacing of DoD standard logistics systems that will support security assistance.

• Developing unique systems to support USASAC and the other major subordinate commands of Army Materiel Command, such as a recently completed tracking system for maintenance support arrangements.

The USASAC computer base training program supplements existing security assistance training opportunities by offering courses specific to Army processes and realistic system simulation. Eight courses have been developed and are available to interested individuals. The course topics are, security assistance overview, reports of discrepancy, transportation, security assistance management acquisition program, requisition preparation and processing, M204 system case development (includes a hard copy job aid), supply/shipment status processing and security assistance logistics data.

Defense Security Assistance Management System

In December 1998, the Army implemented the DSAMS case development module, the first portion of the DSAMS project. The DSAMS allows the FMS process to be standardized among the three services. The first module permits the online preparation of the basic LOA and any amendments or modifications. Case writers, country program managers and the central case manager can now use the same database to prepare and manage their cases.

The implementation of report distribution software into the USASAC automated computer environment significantly reduces the requirement for hardcopy reports and FMS documents. This effort enables system users to view reports and LOAs from their desktop terminal screen, manipulate the information into various formats and, if hardcopy was absolutely required, print only those portions of data that were needed in lieu of the entire report. The case implementation module was deployed in August 2000. This module provides capability for lease preparation, management flags/alerts and financial implementation for FMS cases.

The Iran Special Project Office

Iran's FMS program began in 1963 with only five cases. Throughout the late 1960s and early 1970s, Iran's purchases escalated and by 1972 Iran had opened over 800 FMS cases. Between 1972 and 1978, Iran opened almost 1,800 FMS cases, an average of more than 255 cases a year. When the government of Iran took U.S. hostages in February 1979, all diplomatic relations were broken. The government of Iran filed a claim against the U.S. in November 1981 to dispute 505 Army cases.

USASAC is providing assistance to the Department of State in defense of the U.S. position supporting the Iran Tribunal in the Hague, Netherlands. Currently, there are four logistics management specialists dedicated to the project. They provide logistical expertise in record searches, data compilation, Defense Finance and Accounting Service billing lines and imaging and encoding of logistical forms used to process Iran's FMS cases. The U.S. Army has also allocated a Judge Advocate General officer who works in conjunction with the Department of State lawyers. Their main focus is to compile and submit the claim rebuttal to the tribunal of judges. There is a full tribunal which includes judges from various countries that preside over the case. To facilitate the amount of time it consumes to inventory retired record collections, USASAC has three contractors to assist with the process.

Resource Management and Financial Support

The Resource Division at Alexandria, Virginia, provides security assistance financial policy and procedures and, manages the Army Material Command security assistance budgets and manpower. Primary responsibilities include the following:

- Develops, implements, interprets and evaluates financial security assistance policy and procedures. Ensures that DoD new financial policy and procedures are acceptable to current systems. Serves as the focal point for presidential drawdowns and peacekeeping operations funding requirements.

- Reviews and process nonrecurring costs and other pricing requests and, reports collections of nonrecurring costs to higher headquarters.

- Reviews, analyses, summarizes, consolidates and defends Army Materiel Command activities' budgetary data and program requirements to ensure essential requirements are included in the Army budget. Monitors budget execution to ensure proper and efficient use of funds.

- Reviews and analyses security assistance manpower data and reports security assistance manpower data to higher headquarters.

- Serves as the Army Materiel Command resource integration committee member and resource advisory committee member to address Army Materiel Command security assistance resources issues and matters.

The Financial Support Office at New Cumberland, Pennsylvania, provides important financial support to USASAC's FMS case and other security assistance program management missions through:

- Management of security assistance life cycle financial processes, including case implementation, funds distribution-order control, order processing, and case closure.

- Centralized control of billing and delivery reporting on Army FMS cases.

- Execution of financial operations for special presidential drawdowns, International Military Education and Training programs and FMS cases.

- Providing financial guidance and assistance to USASAC case managers.

• Providing financial systems support for accounting and other financial systems used by USASAC.

• Execution of a financial quality assurance program.

• Maintenance, augmentation and improvement of financial sectors of FMS automated data bases.

• Serving as the management accounting office representing USASAC with Department of the Army and Army Materiel Command on accounting issues.

Information Management

The command's information management programs are hailed throughout the DoD security assistance community as the pacesetters in FMS customer support. The Information Management Division provides Army Materiel Command, USASAC, and foreign countries with automation support for the information areas of automation, communications, visual information, and records management.

The division is organized in two information management teams, one each at Alexandria and New Cumberland. Their major functions include:

• Maintaining an auditable, accountable, and accurate U.S. Army FMS database containing logistical, case management and financial data.

• Providing the automation necessary for the real-time update of the Army FMS database, the on-line development of FMS cases, the electronic transmission of cases from the major subordinate commands and the ad hoc querying of the database information.

• Providing the automation, communications and system interfaces linking USASAC, the major subordinate commands, minor implementing agencies, SALOs, security assistance organizations and other DoD agencies.

• Acquiring all computer hardware, software and services for USASAC, the major subordinate commands and minor implementing agencies.

• Supporting the automation efforts of the total USASAC family of users by managing the office automation systems, providing customer support through training, problem identification and resolution.

• Providing full visual information and records management support services to the command.

• Managing the automation functions of the STARR-PC, which is a system developed to provide the USASAC country customer with an automated database for requisition submission and tracking. Through STARR-PC, customers have the ability to establish requisitions in their local database and transmit them to USASAC on a daily basis. USASAC in turn provides daily status changes to requisitions to the customer. The STARR-PC provides real-time visibility of requisition status. The International Logistics Communication System (ILCS) through the

Defense Automated Addressing System Center is the communication link for the STARR-PC System. The latest version of STARR-PC2 was released for distribution to FMS customers beginning in June 1999.

Information Management Environment

The current USASAC information technology (IT) environment consists of a wide range of technologies and processes. Which designed, tested, implemented and supported by the division. The most visible component the Information Management Division provides is personal computer support. However, the division also supports a wide range of other information technology systems.

The Information Management Division at USASAC supports approximately 400 users on two client-server based Windows NT server local area networks at Alexandria and New Cumberland, that are connected in a wide area network configuration via dedicated high-speed links. The wide area network uses 100MB Ethernet and 1GB fiber cabling internally at each office.

The typical USASAC user has a desktop computer using the Windows NT Workstation 4.0 operating system. The Information Management Division has standardized on Microsoft Office 97 Professional for word processing, spreadsheet, graphics and stand-alone database applications. Lotus Notes 4.6.6b is used for e-mail at this time. A suite of other applications are used by country case managers and human resources professionals. In addition to desktop computer support, the Information Management Division configures and distributes IBM ThinkPad laptop computers to users who require the ability to compute remotely. The Information Management Division supports remote e-mail capability for these users via dial-up connections with TSACS.

Users have access to the world wide web via a T-1 line connected to the NIPRNET. This allows the USASAC user to communicate with co-workers and business partners throughout the world. Several applications used by country case managers and human resources professionals are hosted at remote sites at various commands. USASAC users connect to these applications via the NIPRNET with the TCP/IP protocol stack (the language of the Internet).

Our goal is to provide 100-percent uptime so that USASAC employees have computing tools at their ready access. A second, and no less important, goal is that the USASAC employee has a user-friendly computing environment and world-class support when needed. The division includes a help desk staffed by six professionals. The USASAC user has access to a customized Lotus Domino application to submit help desk requests. The help desk requests are typically acted on within one hour. A tracking system is used to identify trends. This allows the Information Management Division to plan training for users and to consider upgrades and enhancements.

The command seeks to keep USASAC's network up to date with current technology. At the same time, however, the Information Management Division seeks to maintain a reliable network. Thus, when planning for the future, all upgrades or technology changes must go through a rigorous screening and testing process. To assure reliability, the division hosts a test network that mirrors the command's production environment. That is used to test and evaluate new technologies. When upgrades or technology changes are considered or implemented, how this affects the user's ability to perform his/her duties is always considered. Additionally, the Information Management Division maintains a network knowledge base indexed by keyword. Engineers in the division are able to query the network knowledge base for configuration and

historical data. The division also maintains a server work log. Every modification to the USASAC network is entered into the server work log, thus tracking of all changes to the network so that changes can be reversed if needed.

Other duties of the Information Management Division include supporting an integrated services digital network video teleconferencing system in both offices. The video teleconferencing system provides USASAC's customers with remote meeting capabilities, reducing travel costs and increasing employee productivity. The video teleconferencing system is used extensively.

Recent Initiatives

The command recently purchased eight high-capacity, high-speed, scalable network servers. Of the eight servers, four have been installed, configured and tested and are currently in production. The installation of these new servers will increase the speed and capacity of USASAC's LAN.

To ensure reliability, and as part of an overall disaster recovery program, the division recently purchased high-speed, high-capacity tape backup units, along with tape backup software that can track and manage multiple tapes. The new tape backup system has been tested and implemented. In the event of a catastrophe with USASAC's network, the new tape backup system will allow restoration of data, and the lifeblood of any data-intensive organization such as USASAC in a compressed time frame. The tape backup solution is monitored daily and to ensure data survivability, several test restores are performed weekly.

The USASAC provides technology solutions for users with disabilities such as vision and hearing impairments. Recently, the Information Management Division implemented the Job Access with Speech (JAWS) vision enhancement software to be used by USASAC employees with low vision. A USASAC help desk professional evaluated the JAWS software solution and implemented it in the New Cumberland location. Job access with speech provided a marked improvement compared to the solution that had been in use. For USASAC users with hearing difficulties, the Nexttalk software solution is used.

Messaging (e-mail) is a mission-critical application at USASAC, and the Information Management Division expends significant resources supporting messaging. The DoD is revamping messaging by requiring all commands to implement the Defense Messaging System (DMS). Slated to replace AUTODIN, the Defense Messaging System provides for encrypted, guaranteed-delivery, time-priority messaging.. The Information Management Division is currently preparing its environment for deployment of Defense Messaging System, which is being deployed on Microsoft Exchange 5.5 Server, Defense Messaging System Version. The USASAC user will receive a Defense Messaging System version of Microsoft Outlook to serve as the desktop e-mail client. USASAC has installed the Defense Messaging System version of Exchange in both locations and is currently testing the system.

For USASAC and the Information Management Division, security of information technology systems is the most important issue. At present, USASAC is involved in the DoD Information Technology Security Certification and Accreditation Process (DITSCAP). USASAC is operating under an document of interim approval and is in the process of meeting the certification for DITSCAP. This establishes a standard process, set of activities, general task descriptions, and a

management structure to certify and accredit information technology systems within DoD. The process is designed to certify that the information technology system meets the accreditation requirements and that the system will continue to maintain the accredited security posture throughout the system life-cycle. Every software and hardware item used in USASAC's network must meet DITSCAP.

In the area of asset management, the division is currently implementing Microsoft System Management Server 2.0. This solution will be used to inventory all hardware and software on the USASAC network. In addition to SMS, a Lotus Domino application is being created that will track warranties, purchase information, system inventory, and other key management tools for all hardware and software. The application is being written so that it can automatically notify a designee when a warranty is scheduled to expire, plus when a USASAC employee contacts the help desk, the staff is able to locate the caller's asset records.

Egyptian workers perform welding operations on two M1A1 tank hulls. Under this coproduction program, all operations necessary to complete the vehicles are performed by trained Egyptian tank plant workers.

International Industrial Cooperation

Coproduction Programs

Coproduction enables an eligible foreign government to acquire the know-how to manufacture or assemble weapons, communications or support systems for its own forces. The USASAC currently has thirty-one active government-to-government coproduction programs with fourteen countries plus NATO with an estimated program value of over $26 billion. Examples of weapon systems involved in successful coproduction programs include the Multiple Launch

Rocket System, the M109 self-propelled howitzer, M1A1 Abrams tank and the Patriot, Hawk, Stinger, Hellfire, TOW and Dragon missile systems.

Over the last two years, USASAC's Office for International Industrial Cooperation concluded thirteen coproduction agreements, including new memoranda of understanding (MOU), amendments to existing agreements, and implementing arrangements. These agreements included many of the weapon systems mentioned above plus the Black Hawk helicopter, Air-to-Air Stinger (Block I) launcher, Hydra 70 rocket system and Modular Forward looking Infrared common modules. In addition to these concluded agreements, we are also currently working on fifteen other coproduction requests and agreements in various stages of evaluation, development, staffing and negotiation. The more significant of these requests/agreements include major upgrades and improvements to the Patriot missile system and the acquisition-coproduction of main battle tanks.

Coproduction is becoming a more popular alternative, as well as a requirement, of foreign governments acquiring U.S. weapon systems. Coproduction not only strengthens the armed forces of our allies through the acquisition of U.S. weaponry, but also increases their technology base and industrial defense capabilities. At the same time, coproduction promotes standardization and interoperability of weapon systems with U.S. forces, thereby benefiting the U.S. as well as our allies.

Export License Review Program

Export licenses authorize U.S. industry to export defense articles and services as specified by the State Department's International Traffic in Arms Regulation. Those exports often complement government-to-government foreign military sales via the security assistance program. The Office of Defense Trade Controls in Department of State has overall U. S. government responsibility for approving export licenses. Selected licenses are referred to DoD, the Defense Threat Reduction Agency, and, if related to Army weapon systems, to the Army for a releasability recommendation. USASAC serves as the Army's executive agent for managing development of the Army's recommended position.

The DUSA-IA has management oversight of the application of Army policy regarding the Army's munitions control program, including dual-use cases. The DUSA-IA has assigned responsibility for the responsibility to the USASAC for managing development of the Army's recommended positions. In fiscal year 2000, USASAC reviewed about 4,000 licenses.

The proposed Army position for direct commercial exports is developed using numerous considerations (same as those used for assessing a FMS offer), e.g., security classification, level of technology, previous releases, foreign availability, potential applications, impact on the industrial base, and potential interference with U.S. Army requirements. In addition, if the proposed export is for technical data, it is reviewed to determine the ownership and rights of the technical data to be transferred. If coproduction or licensed production is involved, the extent to which the U.S. defense production base would be affected by transferring production to foreign firms is assessed.

Foreign Disclosure Program

The USASAC, through its foreign disclosure officer, assesses the releasability of classified military information, and controlled unclassified information for all Army foreign military sales programs. In order to ensure that an accurate disclosure review of each potential security assistance program is accomplished, the foreign disclosure officer follows a consistent set of procedures:

- A review of national disclosure and Army export policies begin the procedure. This review is performed by country or system using the appropriate delegation of authority letter for specific guidance.

- The review continues by an analysis of the appropriate security classification guides, and if required, the military critical technology list, DoD Directives, and Army regulations. A review of data bases in the DoD Foreign Disclosure and Technical Information System, and the Army's Technology Transfer Decision Support System, assist in the decision making process for most disclosure issues.

The foreign disclosure officer continues to monitor advances of U.S. technology through the maintenance of security classification guides, attendance in meetings with industry, and a constant dialogue with all agencies involved in international relations. Through these efforts, USASAC is able to manage the transfer of technology to allies and friends for its FMS programs.

Partnering with Industry

An additional positive aspect of FMS is support of the U.S. defense industrial base. The production lines for many critical Army systems are almost solely dedicated to FMS; for every $1 billion dollars in sales generated, about 22,000 U.S. jobs are created or sustained.

Partnering agreements are a tool to further strengthen communications, resolve conflicts at the lowest levels, and streamline materiel acquisition and FMS processes to pave the way for international sales of U.S. products. And as we enter the twenty-first century, there are very few nations that can afford unique, independent defense industrial capability. International armaments cooperation, admittedly a complex and challenging business, represents a great opportunity for U.S. business.

We know that the U.S. defense industry is a key, indispensable partner in America's security assistance program. The top five U.S. defense firms, Lockheed-Martin, Boeing, Raytheon, United Defense, and General Dynamics, were formed from more than fifty different firms after the fall of the Berlin Wall. In the wake of consolidation, the security assistance community is working to ensure competition and affordable pricing in FMS. Security assistance managers at the commodity commands, such as the U.S. Army Aviation and Missile Command and the U.S. Army Communications-Electronics Command, are striving to obtain the best price for our allies and coalition partners. We believe that it is incumbent upon us to achieve significant cost savings for our FMS allies including the best initial cost, the best case management and the best follow-on support which are all hallmarks of U.S. assistance.

News media cover drive-off of HMMWV from C-5 aircraft by U.S. Ambassador to the Republic of Uzbekistan, Joseph Presel. The “Hummer” was among 12 delivered in February to the Uzbekistan Ministry of Defense by a team of U.S. security assistance specialists.

Industry–Defense Trade Dialogue

In addition to reaching out to international customers and to the government organizations to increase feedback and ultimately improve customer satisfaction, USASAC has an active outreach program with U.S. industry. The USASAC management frequently meets with industry representatives to identify any areas and issues where either party can take action to improve defense trade.

We participate in the National Defense Industrial Association’s U.S. Industry Committee for Army International Programs. The bimonthly meetings of this industry-led committee serve as a valuable source of feedback from industry on real-time issues. In addition, the commander speaks on the vital role of security assistance to our national security and foreign policy objectives at association-sponsored and industry-sponsored conferences around the world.

Other government-industry forums in which we participate include quarterly AMC-chief executive officer industry meetings and the annual “Atlanta Conference,” both of which bring senior government and industry executives together to discuss a wide variety of topics, including international defense trade issues.

Conclusion

USASAC today is more important than ever, as post-Cold War downsizing continues to erode the defense budgets of our traditional NATO and Western allies, reducing their ability or desire to support large-scale modernization programs. Emerging nations, including former Soviet Bloc

countries, lack the economic wherewithal to build modern equipment and technologically advanced weapon systems.

Most Third World nations are constrained even further by economic and political factors that limit the amount of money they can spend on defense. As we enter the twenty-first century, the United States stands alone in its capability to modernize its armed forces with increasingly sophisticated weapons. Our efforts in security assistance leadership are aimed at strengthening our allies' defensive capabilities, developing viable economies and building democratic governments the bedrocks of prosperity and freedom. Moreover, security assistance serves America's soldiers by reducing the need to deploy to fight regional conflicts. And FMS helps sustain our industrial base by generating economic production rates, which make our systems affordable for our Army and for our allies.

We at USASAC have assessed these challenges, and we know that to be successful in our competitive environment we must remain true to our vision as the pacesetter in DoD security assistance and our customers' choice in support and satisfaction. The key to these goals is our professional work force, focused on increased efficiency, continuous process improvement, operational streamlining, and functional consolidation. This is our survival guide. We will, with our partners in AMC and industry, strive to offer our customers imaginative and creative foreign sales agreements the total package aimed at total customer satisfaction. Security assistance and FMS remain effective and indispensable instruments of U.S. foreign policy far more so than in 1965.

Today, as we reflect and build upon a superb legacy of patriotism, professionalism, and dedication, the U.S. Army Security Assistance Command continues to lead America and its friends toward allied strength in cooperation.

About the Author

Major General Bruce K. Scott is the Commanding General, U.S. Army Security Assistance Command. Prior to assuming command of USASAC in October 1999, he was the Chief of Legislative Liaison on the Army Staff. He is a graduate of the United States Military Academy and holds master's degrees from Harvard University and the Universität Freiberg, Federal Republic of Germany.

Ken Spalding is the USASAC Public Affairs Officer. He is a graduate of Towson University, Towson, Maryland.

LEGISLATION AND POLICY

Conventional Arms Transfers to Developing Nations, 1992-1999

By

Richard F. Grimmett
Congressional Research Service
The Library of Congress

[The following are extracts from an unclassified report of conventional arms transfers to developing nations as published under the above title by the Library of Congress on August 18, 2000. Macro data on worldwide arms transfer agreements and deliveries are also included. The selections included herein begin with a discussion of major research findings regarding the dollar value of both arms transfer agreements and arms deliveries to the developing countries from 1992 through 1999. These findings are all cross-referenced to comparative data tables which are presented following the textual material. Special attention is given to the roles of the United States, the former Soviet Union, and China as arms suppliers, and to identification of the leading Third World arms recipient nations. The report concludes with a listing of the type and quantity of weapons delivered to developing nations by major arms suppliers from 1992-1999. Copies of the complete document are available from the Foreign Affairs and National Defense Division, Congressional Research Service, The Library of Congress, Washington DC 20540].

Introduction

This report provides unclassified background data from U.S. government sources on transfers of conventional arms to developing nations by major suppliers for the period 1992 through 1999. It also includes some data on world-wide supplier transactions. It updates and revises the report entitled *Conventional Arms Transfers to Developing Nations, 1991-1998*, published by the Congressional Research Service (CRS) on August 4, 1999 (CRS Report RL30275).

The data in the report illustrate how global patterns of conventional arms transfers have changed in the post-Cold War and post-Persian Gulf War years. Relationships between arms suppliers and recipients continue to evolve in response to changing political, military, and economic circumstances. Despite global changes since the Cold War's end, the developing world continues to be the primary focus of foreign arms sales activity by conventional weapons suppliers. During the period of this report, 1992-1999, conventional arms transfers to developing nations have comprised 68.3 percent of the value of all international arms transfers. In 1999, arms transfer agreements, which represent orders for future delivery, with developing countries rose significantly from 1998 totals, comprising 68 percent of the value of an such agreements globally. The portion of agreements with developing countries constituted 66.4 percent of all agreements globally from 1996-1999. Deliveries of conventional arms to developing nations, from 1996-1999, constituted 77.9 percent of all international arms deliveries. In 1999, arms deliveries to developing nations constituted 66.8 percent of the value of all such arms deliveries worldwide.

The data in this new report completely supercede all data published in previous editions. Since these new data for 1992-1999 reflect potentially significant updates to and revisions in the underlying databases utilized for this report, only the data in this most recent edition should be used. The data are expressed in U.S. dollars for the calendar years indicated, and adjusted for inflation. U.S. commercially licensed arms exports are incorporated in the main delivery data tables, and noted separately. Excluded are arms transfers by any supplier to subnational groups.

Calendar Year Data Used

All arms transfer and arms delivery data in this report are for the calendar year or calendar year period given. This applies to both U.S. and foreign data alike. United States government departments and agencies publish data on U.S. arms transfers and deliveries but generally use the United States fiscal year as the computational time period for these data. (A U.S. fiscal year covers the period from October 1 through September 30). As a consequence, there are likely to be distinct differences noted in those published totals using a fiscal year basis and those provided in this report which use a calendar year basis for its figures. Details regarding data used are outlined in footnotes at the bottom of Tables 1, 2, 8, and 9.

Constant 1999 Dollars

Throughout this report values of arms transfer agreements and values of arms deliveries for all suppliers are expressed in U.S. dollars. Values for any given year generally reflect the exchange rates that prevailed during that specific year. In many instances, the report converts these dollar amounts (current dollars) into constant 1999 dollars. Although this helps to eliminate the distorting effects of U.S. inflation to permit a more accurate comparison of various dollar levels over time, the effects of fluctuating exchange rates are not neutralized. The deflators used for the constant dollar calculations in this report are those provided by the U.S. Department of Defense and are set out at the bottom of Tables 1, 2, 8, and 9. Unless otherwise noted in the report, all dollar values are stated in constant terms. Because all regional data tables are composed of four-year aggregate dollar totals (1992-1995 and 1996-1999), they must be expressed in current dollar terms. Where tables rank leading arms suppliers to developing nations or leading developing nation recipients using four-year aggregate dollar totals, these values are expressed in current dollars.

Definition of Developing Nations and Regions

The developing nations category, as used in this report, includes all countries except the United States, Russia, European nations, Canada, Japan, Australia, and New Zealand. A listing of countries located in the regions defined for the purpose of this analysis–Asia, Near East, Latin America, and Africa–is provided at the end of the report.

Major Findings

General Trends in Arms Transfers Worldwide

The value of all arms transfer agreements worldwide (to both developed and developing nations) in 1999 was nearly $30.3 billion. This is a clear increase in arms agreements values over 1998. This total, however, is substantially lower than those reached in the early 1990s, the period of post-Persian Gulf War rearmament. (Chart 1) (Table 8A).

In 1999, the United States led in arms transfer agreements worldwide, making agreements valued at nearly $11.8 billion (38.9 percent of all such agreements), up from $10.3 billion in 1998. Russia ranked second with $4.8 billion in agreements (15.9 percent of these agreements globally), up notably from $2.6 billion in 1998. Germany ranked third, even as its arms transfer agreements worldwide dropped from $5.1 billion in 1998 to $4 billion in 1999. The United States, Russia and Germany, collectively made agreements in 1999 valued at nearly $20.6 billion, 68 percent of all international arms transfer agreements made by all suppliers (Tables 8A and 8B).

For the period 1996-1999, the total value of all international arms transfer agreements (about $115.3 billion) has been notably less than the worldwide value during 1992-1995 ($150.4 billion), a decline of 23.3 percent. As the worldwide arms transfer agreement totals have declined, those with the developing world have declined to a smaller degree. During the period 1992-1995, developing world nations accounted for 69.7 percent of the value of all arms transfer agreements made worldwide. During 1996-1999, developing world nations accounted for 66.4 percent of all arms transfer agreements made globally. In 1999, developing nations accounted for 68 percent of an arms transfer agreements made worldwide (Table 8A).

In 1999, the United States ranked first in the value of all international arms deliveries, making $18.4 billion in such deliveries or over 54 percent. This is the eighth year in a row that the United States has led in global arms deliveries, reflecting, in particular, implementation of arms transfer agreements made during and in the aftermath of the Persian Gulf war. The United Kingdom ranked second in worldwide arms deliveries in 1999, making $4.5 billion in such deliveries. Russia ranked third in 1999, making $2.7 billion in such deliveries. These top three suppliers of arms in 1999 collectively delivered $25.6 billion, 75.3 percent of all arms delivered worldwide by all suppliers in that year. (Tables 9A and 9B).

The value of all international arms deliveries in 1999 was nearly $34 billion. This is a decrease in the total value of arms deliveries from the previous year ($36.4 billion), and the second lowest total of the last eight years. The total value of such arms deliveries worldwide in 1996-1999 ($150.3 billion) was an increase in the value of arms deliveries by all suppliers worldwide from 1992-1995 (about $145.9 billion). (Tables 9A and 9B).

Figure 1. Worldwide Arms Transfer Agreements, 1992-1999 and Suppliers' Share with Developing World (in millions of constant 1999 U.S. dollars)

Supplier	Worldwide Agreements Value 1992-1995	Percentage of Total with Developing World
United States	72,803	59.40
Russia	17,529	73.90
France	28,834	90.90
United Kingdom	6,968	88.70
China	2,047	100.00
Germany	4,898	34.80
Italy	2,581	78.60
All Other European	8,877	70.70
All Others	5,857	71.30
TOTAL	**150,394**	**69.70**

Supplier	Worldwide Agreements Value 1996-1999	Percentage of Total with Developing World
United States	41,683	61.70
Russia	16,080	89.10
France	12,326	72.80
United Kingdom	8,513	55.50
China	5,261	92.00
Germany	9,876	36.90
Italy	2,269	45.70
All Other European	12,519	70.50
All Others	6,818	66.00
TOTAL	**115,345**	**66.40**

Supplier	Worldwide Agreements Value 1999	Percentage of Total with Developing World
United States	11,768	68.60
Russia	4,800	85.40
France	900	44.40
United Kingdom	Soo	62.50
China	1,900	100.00
Germany	4,000	50.00
Italy	600	66.70
All Other European	4,600	56.50
All Others	900	66.70
TOTAL	**30,268**	**68.00**

Figure 2. Worldwide Arms Deliveries, 1992-1999 and Suppliers' Share with Developing World (in millions of constant 1999 U.S. dollars)

Supplier	Worldwide Deliveries Value 1992-1995	Percentage of Total to Developing World
United States	65,539	69.53
Russia	12,663	89.40
France	8,964	57.70
United Kingdom	24,022	96.20
China	3,980	97.10
Germany	6,538	41.10
Italy	1,254	44.60
All Other European	14,946	57.40
All Others	8,252	59.00
TOTAL	**145,888**	**72.60**

Supplier	Worldwide Deliveries Value 1996-1999	Percentage of Total to Developing World
United States	68,503	66.20
Russia	10,800	79.80
France	19,238	90.70
United Kingdom	22,508	87.50
China	2,609	96.10
Germany	4,871	33.80
Italy	1,045	70.50
All Other European	13,017	72.80
All Others	7,670	43.60
TOTAL	**150,261**	**77.90**

Supplier	Worldwide Deliveries Value 1999	Percentage of Total to Developing World
United States	18,351	61.90
Russia	2,700	74.10
France	2,400	91.70
United Kingdom	4,500	86.70
China	300	100.00
Germany	1,200	50.00
Italy	100	0.00
All Other European	2,400	75.00
All Others	2,000	25.00
TOTAL	**33,951**	**66.80**

Developing nations from 1996-1999 accounted for 77.9 percent of the value of an international arms deliveries. In the earlier period, 1992-1995, developing nations accounted for 72.6 percent of the value of all arms deliveries worldwide. Most recently, in 1999, developing nations collectively accounted for 66.8 percent of the value of all international arms deliveries Tables 2A, 9A and 9B.

There continues to be intense competition among major weapons suppliers. Yet, the limited resources of most developing nations to expend on weapons, and the need of many selling nations to secure cash for their weapons, also places constraints on significant expansion of the arms trade. Developed nations are likely to continue to seek to protect important elements of their own national military industrial bases, and, as a result, are likely to limit their weapons purchases from one another. In these circumstances, those nations that effectively restructure and consolidate their defense industries seem most likely to be the key players in the emerging international arms marketplace. Some traditional arms supplying nations may further deem it necessary to engage in more joint production ventures or in multinational mergers, such as some German and French defense firms did in forming EADS (European Aeronautic, Defense and Space Company) in 1999, to sustain the competitiveness and viability of their national defense industrial sectors.

Various weapons exporters are seeking to maintain and expand arms sales to nations and regions where they have competitive advantages due to prior political/military ties to the prospective buyers. New arms sales opportunities may yet develop with some European nations in the new century due to the expansion of NATO. To date, this has not occurred to any notable degree. The limited financial resources of the new NATO members has been an important impediment to significant new arms purchases by them. Consequently, these nations are likely, in the near term, to focus on upgrades of existing weapons systems in ways that require fewer major expenditures by their governments.

As individual nations in the Near East, Asia, and Latin America attempt to replace older military equipment, it is possible that additional notable arms sales may result. Nonetheless, a large part of the developing world has not recovered fully from recent international financial problems. The 1997-1998 fall in the price of crude oil, now reversed, created great financial difficulties for some Persian Gulf states. Saudi Arabia found itself in significant financial straits, in light of the various obligations it undertook during and after the 1990-1991 Persian Gulf War, its domestic spending programs, and the magnitude of the costs associated with its weapons procurement program. Although since 1999, the price of crude oil has risen significantly, that fact does not necessarily mean that most major oil producing nations in the developing world will soon launch new, expensive, weapons procurements. The United Arab Emirates (U.A.E.) has made measured and significant purchases of advanced military hardware, particularly combat aircraft. The U.A.E. has been in sound financial condition, and this circumstance has made it a prime client for major arms suppliers, while giving it significant leverage in bargaining over final weapons contracts.

The financial crisis in Asia in 1997 led to a major curtailment of planned weapons purchases by several nations in that region, and had the additional effect of reducing the income of other developing countries dependent on trade with Asia. While the economic situation in Asia appears to have stabilized, the improved financial environment has not resulted in full restoration of arms procurement plans underway in key Asian nations at the time they fell into financial difficulties. Although some Latin American countries have expressed interest in modernizing older items in their military inventories, domestic budget constraints have so far curtailed implementation of

these programs. A lack of necessary national funds and the paucity of financing credits has also led many developing nations to curtail or defer purchases of additional weaponry. Given the present international economic environment, it seems likely that major weapons purchases will be made by more affluent developing countries, and that the remainder of the arms trade will be based on the support and maintenance of existing weapons systems and related equipment, and/or significant upgrades of these systems and equipment, where feasible.

General Trends in Arms Transfers to Developing Nations

The value of all arms transfer agreements with developing nations in 1999 was nearly $20.6 billion. This was the highest total, in real terms, since 1996. The total value of new arms transfer agreements with developing nations has generally declined since 1992 (Chart 1) (Table 1A). In 1999, the value of all arms deliveries to developing nations ($22.7 billion) was a substantial decrease from the value of 1998 deliveries values ($26.5 billion), and the lowest total of the last eight years (Table 2A).

Recently, from 1996-1999, the United States, Russia, and France have dominated the arms market in the developing world, with the United States ranking first each of the last two years in the value of arms transfer agreements. From 1996-1999, the United States made $25.7 billion in arms transfer agreements with developing nations, 33.6 percent of all such agreements. Russia, the second leading supplier during this period, made $14.3 billion in arms transfer agreements or 18.7 percent. France, the third leading supplier, made nearly $9 billion or 11.7 percent of all such agreements with developing nations during these years. In the earlier period (1992-1995) the United States ranked first with nearly $43.3 billion in arms transfer agreements with developing nations or 41.3 percent; France made $26.2 billion in agreements or 25 percent. Russia made nearly $13 billion in arms transfer agreements during this period or 12.3 percent (Table 1A).

Throughout the 1990s, most arms transfers to developing nations were made by two to three major suppliers in any given year. The United States has ranked either first or second among these suppliers every year from 1992-1999. France has been a consistent competitor for the lead in arms transfer agreements with developing nations, ranking first in 1994 and 1997, and second in 1992, 1993, and 1998, although Russia has ranked second or third during the 1996-1999 period. As competition over the international arms market intensifies, France seems more likely to rank higher in arms deals with developing nations than Russia. As a supplier nation, Russia has more significant limitations in its prospective arms client base than other major western suppliers. Arms suppliers like the United Kingdom and Germany, from time to time, may conclude significant orders with developing countries. At the turn of a new century, however, the United States seems best positioned to lead in new arms agreements with developing nations. Furthermore, it seems likely that very expensive weapons orders from individual developing countries will be sporadic in the near term. Consequently, the overall level of the arms trade is likely to remain generally flat for the foreseeable future, with annual sales totals well below those of the Persian Gulf War period.

Suppliers in the tier below the United States, France, Russia, and the United Kingdom, such as Germany, China, other European, and non-European suppliers, have been participants in the arms trade with developing nations at a much lower level. They are, nonetheless, capable, of making an occasional arms deal of a significant nature. However, most of their annual arms transfer agreements totals during 1992-1999 are at comparatively low levels. Few of these countries are likely to be major suppliers of advanced weaponry on a sustained basis. With a few

exceptions, most of them are more likely to make sales of less sophisticated and less expensive military equipment (Tables 1A, 1F, 1G, 2A, 2F, and 2G).

United States

In 1999, the total value, in real terms, of United States arms transfer agreements with developing nations rose to about $8.1 billion from $6.4 billion in 1998. The U.S. share of the value of all such agreements was 39.2 percent in 1999, a slight increase from 38.3 percent in 1998 (Chart 1), and (Tables 1A and 1B).

The high value of U.S. arms transfer agreements with developing nations is attributable to major purchases by key U.S. clients in the Near East, and to a lesser extent in Asia, together with continuation of well established defense support arrangements with such purchasers. U.S. transactions with these buyers in 1999 included not only the sale of new weapons systems, but the upgrading of existing ones, and provision of various spare parts, ammunition, ordnance, training, and support services. Among major weapons systems sold in 1999 by the United States were fifty F-16D fighter aircraft to Israel for over $2 billion and 24 F16C/D fighter aircraft to Egypt for about 1 billion. Egypt also purchased an MlAl Abrams main battle tank package for co-production of 100 tanks. In Asia, the United States sold Singapore 8 AH-64D Apache helicopters for about $400 million. Taiwan also purchased CH-47SD Chinook helicopters and two E-2 Hawkeye AEW aircraft. Although such sales of new weapons systems were an important element of the U.S. sales totals for 1999, the sale of spare parts, upgrades to existing systems, munitions, training, and support services still accounted for a very significant part of overall U.S. arms orders, reflecting the large number of nations in the developing world that have acquired and continue to use American military equipment.

Russia

The total value of Russia's arms transfer agreements with developing nations rose notably from about $2.3 billion in 1998 to $4.1 billion in 1999, placing it second in such agreements with the developing world. Russia's share of all developing world arms transfer agreements increased as well, rising from 13.4 percent in 1998 to 19.9 percent in 1999 (Chart 1), (Figure 1), (Tables 1A, 1B and 1G).

Russia's arms transfer agreements totals with developing nations declined every year from 1995 through 1998, although during this four-year period it actually ranked second among all major suppliers to developing countries, making over $14.3 billion in agreements. Its arms agreement values ranged from a high of $5.8 billion in 1995 to a low of $1.4 billion in 1993 (in constant 1999 dollars). Russia's arms sales performance reflects the continuing effect of the economic and political problems stemming from the breakup of the former Soviet Union. Many of Russia's traditional arms clients are less wealthy developing nations that were once provided generous grant military assistance and deep discounts on arms purchases. After the dissolution of the Soviet Union in December 1991, Russia did not resume those practices. Russia now actively seeks to sell weapons as a means of obtaining hard currency. Although some former arms clients in the developing world continue to express interest in obtaining additional Russian weaponry, they have been restricted in doing so by a lack of funds to pay for the armaments they seek.

In its efforts to make lucrative new sales of conventional weapons, Russia has confronted significant difficulties as most potential cash-paying arms purchasers have been longstanding

customers of the United States or major West European suppliers. These prospective arms buyers have proven reluctant to replace their weapons inventories with unfamiliar non-Western armaments when newer versions of existing equipment are readily available from their traditional suppliers, even in an era of intense competition. The difficult transition Russia has been making from the state supported and controlled industrial system of the former Soviet Union has also led some potential arms customers to question whether the Russian defense industries can be reliable suppliers of the spare parts and support services necessary for the maintenance of weapons systems they sell abroad.

Nevertheless, because Russia has had a wide variety of weaponry to sell, from the most basic to the highly sophisticated, and despite the internal problems evident in the Russian defense industrial sector, various developing countries still view Russia as a potential source of their military equipment. Accordingly, Russia has made strong efforts to gain arms agreements with developing nations that can pay cash for their purchases, and Russian sales since 1995 indicate that Russia has had varying degrees of success in doing so. During this period, Russia made smaller arms deals with Kuwait and the United Arab Emirates for armored fighting vehicles and with Malaysia for MiG-29 fighter aircraft. Iran, primarily due to its own economic difficulties, as well as U.S. pressure on Russia, recently ceased to be a major purchaser of arms from the Russians. Iran had been a primary purchaser of Russian armaments in the early 1990s, receiving such items as MiG-29 fighter aircraft, Su-24 fighter-bombers, T-72 tanks and Kilo class attack submarines. Iraq was once a major purchaser of advanced weaponry from Russia, but has been a lost source of orders since the Persian Gulf war.

Russia's principal arms clients since 1994 have been China and India. Among Russia's notable arms deals during the most recent years have been the sale of 40 new Su-30MK fighter aircraft to India, a major longstanding client. Various elements of a longer range plan for procurement as well as co-production of a number of advanced Russian weapons systems were agreed to with India in 1999, which are likely to result in significant aircraft, missile, and naval craft sales to the Indian government in the near future. Russia's arms supplying relationship with China began to mature in 1994. By 1996 Russia had sold China at least 72 Su-27 fighter aircraft as well as four Kilo class attack submarines. Subsequently, a licensing agreement was finalized between Russia and China, permitting the Chinese to co-produce at least 200 Su-27 aircraft. Russia also sold China two Sovremenny-class destroyers. In 1999, the Chinese purchased between 40-60 Su-30 multi-role fighter aircraft for an estimated $2 billion, and other deals for future procurement of other weapons systems were agreed to in principle. Thus it appears likely that China and India will continue to figure significantly in Russia's arms export calculus for the foreseeable future.

China

China emerged as an important arms supplier to developing nations in the 1980s, primarily due to arms agreements made with both combatants in the Iran-Iraq war. During the period of this report, the value of China's arms transfer agreements with developing nations reached its peak in 1999 at $1.9 billion. Its sales figures in 1999 resulted generally from several smaller valued weapons deals in Asia, Africa, and the Near East, rather than one or two especially large sales of major weapons systems. Pakistan continues as a key Chinese client. From 1992 through 1999, the value of China's arms transfer agreements with developing nations has averaged $860 million annually. China, more recently, has become a major purchaser of arms, primarily from Russia (Tables 1A and 1G.)

Since the late 1980s, few clients with financial resources have sought to purchase Chinese military equipment, much of which is less advanced and sophisticated than weaponry available from Western suppliers and Russia. China does not appear likely to be a major supplier of conventional weapons in the international arms market in the foreseeable future. However, reports persist in various publications that China has sold surface-to-surface missiles to Pakistan, a traditional client. Iran and North Korea have also reportedly received Chinese missile technology. These reports raise important questions about China's expressed commitment to the restrictions on missile transfers set out in the Missile Technology Control Regime (MTCR). With a need for hard currency, and with products (especially missiles) that some developing countries would like to acquire, China can present an important obstacle to efforts to stem proliferation of advanced missile systems to some areas of the developing world where political and military tensions are significant.

Major West European Suppliers

The four major West European suppliers (France, United Kingdom, Germany, and Italy), as a group, registered a significant decrease in their collective share of all arms transfer agreements with developing nations between 1998 and 1999. This group's share fell from 30.5 percent in 1998 to 16 percent in 1999. The collective value of this group's arms transfer agreements with developing nations in 1999 was $3.3 billion compared with a total of over $5.1 billion in 1998. Of these four, Germany was the principal supplier with $2 billion in agreements, an increase from $1.5 billion in 1998. The German agreement total in 1999 was primarily attributable to the sale to South Africa of four MEKO A200 patrol corvettes and three Class 209 diesel-electric submarines. France registered a significant decline in arms agreements from $2.6 billion in 1998 to $400 million in 1999. The United Kingdom also registered a notable decline in arms agreements from over $1 billion in 1998 to $500 million in 1999. Italy, meanwhile, registered an increase from essentially nil in 1998 to $400 million in 1999 (Tables 1A and 1B).

The four major West European suppliers, collectively, held a 30 percent share of all arms transfer agreements with developing nations during the period from 1992-1999. Since the end of the Persian Gulf War, the major West European suppliers have generally maintained a notable share of arms transfer agreements. For the 1996-1999 period, they collectively held 24 percent of all arms transfer agreements with developing nations ($18.4 billion). Individual suppliers within the major West European group have had notable years for arms agreements, especially France in 1992, 1993, 1994, and 1997 ($10.1 billion, $4.5 billion, $9 billion, and $4.8 billion respectively). The United Kingdom also had large agreement years in 1992, 1993, and 1996 ($2.1 billion, $2.6 billion, and $2.1 respectively). Germany's agreement total in 1999 of $2 billion was its highest over the last eight years. For each of these three nations, large agreement totals in a single year have reflected the conclusion of a few very large arms contracts with one or more major purchasers in the particular year (Table 1A and 1B).

The major West European suppliers have had their competitive position in weapons exports enhanced by traditionally strong government marketing support for foreign arms sales. Since they can produce both advanced and basic air, ground, and naval weapons systems, the four major West European suppliers have proven capable of competing successfully with the United States and Russia for arms sales contracts with developing nations. The relative decline in overall demand in the global arms marketplace does, however, create a more difficult environment for individual West European suppliers to secure large new contracts with developing nations on a sustained basis. Consequently, some of these suppliers may chose not to compete for some sales

of certain types of weapons systems, even reducing or eliminating some categories of items they have been producing. Instead, they may embrace increasing numbers of joint production ventures with other key European weapons suppliers or even purchasers in an effort to sustain major sectors of their individual defense industrial bases. The recent trend toward mergers of various European defense firms may encourage more joint ventures of this kind.

Regional Arms Transfer Agreements

The Persian Gulf War from August 1990-February 1991 played a major role in stimulating high levels of arms transfer agreements with nations in the Near East region. The war created new demands by key purchasers such as Saudi Arabia, Kuwait, the United Arab Emirates, and other members of the Gulf Cooperation Council (GCC), for a variety of advanced weapons systems. These demands were not only a response to Iraq's aggression against Kuwait, but concerns regarding perceived threats from a potentially hostile Iran. In Asia, efforts in several countries focused on upgrading and modernizing defense forces have led to important new conventional weapons sales in that region. Russia also, in the 1990s, developed a significant role as the principal supplier of advanced conventional weaponry to China. The data on regional arms transfer agreements from 1992-1999 continue to reflect the primacy of developing nations in the Near East and Asia regions as customers for conventional armaments.

Near East

The Near East has generally been the largest arms market in the developing world. In 1992-1995, it accounted for 52.1 percent of the total value of all developing nations arms transfer agreements ($48.1 billion in current dollars). During 1996-1999, the region accounted for 46.3 percent of all such agreements ($34.3 billion in current dollars).

The United States has dominated arms transfer agreements with the Near East during the 1992-1999 period with 50.9 percent of their total value ($41.9 billion in current dollars). France was second during these years with 26.6 percent ($21.9 billion in current dollars). Recently, from 1996-1999, the United States accounted for 49.3 percent of arms agreements with this region (over $16.9 billion), while France accounted for 20.4 percent of the region's agreements ($7 billion in current dollars), representing most of the arms transfer agreements by the major West European suppliers with the Near East.

Asia

Asia has generally been the second largest developing world arms market. In the earlier period (1992-1995), Asia accounted for 40.4 percent of the total value of an arms transfer agreements with developing nations ($37.3 billion in current dollars). During 1996-1999, the region accounted for 37.6 percent of all such agreements ($27.9 billion in current dollars).

In the earlier period (1992-1995), the United States ranked first in the value of arms transfer agreements with Asia with 30.6 percent. Russia ranked second with 22.3 percent. The major West European suppliers, as a group, made 32.2 percent of this region's agreements in 1992-1995. In the later period (1996-1999), Russian ranked first in Asian agreements with 37 percent, on the strength of major combat aircraft sales to China and India. The United States ranked second with 23.9 percent. The major West European suppliers, as a group, made 20.8 percent of this region's agreements in 1996-1999.

Leading Developing Nations Arms Purchasers

Saudi Arabia has been, by a clear margin, the leading developing world arms purchaser from 1992-1999, making arms transfer agreements totaling $28.9 billion during these years (in current dollars). In the 1992-1995 period, the value of its arms transfer agreements was high ($21.8 billion in current dollars). From 1996-1999, however, the total value of Saudi Arabia's arms transfer agreements dropped significantly to $7.1 billion (in current dollars). This decline resulted from Saudi debt obligations stemming from the Persian Gulf era, coupled with a significant fall in Saudi revenues caused by the notable decline in the market price of its oil. The total value of all arms transfer agreements with developing nations from 1992-1999 was $166.1 billion in current dollars. Saudi Arabia alone was responsible for 17.4 percent of all developing world arms transfer agreements during these eight years. In the most recent period, 1996-1999, Saudi Arabia ranked third in arms transfer agreements by developing nations behind the United Arab Emirates ($7.7 billion in current dollars) and India ($7.3 billion in current dollars), yet still accounted for nearly 10 percent of the value of all developing world arms transfer agreements ($7.1 billion out of $73.9 billion in current dollars) (Table 1 and 1I).

The values of the arms transfer agreements of the top ten developing world recipient nations in both the 1992-1995 and 1996-1999 periods accounted for the major portion of the total developing nations arms market. During 1992-1995, the top ten recipients collectively accounted for 76.3 percent of all developing world arms transfer agreements. During 1996-1999, the top ten recipients collectively accounted for 64.3 percent of all such agreements. Arms transfer agreements with the top ten developing world recipients, as a group, totaled $15.9 billion in 1999 or 77.3 percent of all arms transfer agreements with developing nations in that year. This reflects the continued concentration of major arms purchases by developing nations within a few countries (Tables 1 and 1I.)

South Africa ranked first among all developing world recipients in the value of arms transfer agreements in 1999, concluding $3.3 billion in such agreements. Egypt ranked second in agreements in 1999 at $2.6 billion. Israel ranked third with $2.3 billion in agreements.

Saudi Arabia was the leading recipient of arms deliveries among developing world recipients in 1999, receiving $6.9 billion in such deliveries. Saudi Arabia alone received 30.4 percent of the total value of all arms deliveries to developing nations in 1999. Taiwan ranked second in arms deliveries in 1999 with $2.6 billion. Israel ranked third with $2 billion (Table 2).

Arms deliveries to the top ten developing nation recipients, as a group, were valued at $18.2 billion, or 80.3 percent of all arms deliveries to developing nations in 1999. Six of these top ten recipients were in Asia (Table 2).

Weapons Types Recently Delivered to Near East Nations

Regional weapons delivery data reflect the diverse sources of supply of conventional weaponry available to developing nations. Even though the United States, Russia, and the four major West European suppliers dominate in the delivery of the fourteen classes of weapons examined, it is also evident that the other European suppliers and some non-European suppliers, including China, are capable of being leading suppliers of selected types of conventional armaments to developing nations (Table 3).

Weapons deliveries to the Near East, the largest purchasing region in the developing world, reflect the substantial quantities and types delivered by both major and lesser suppliers. The following is an illustrative summary of weapons deliveries to this region for the period 1996-1999.

United States

- 393 tanks and self-propelled guns
- 1,576 APCs and armored cars
- 4 minor surface combatants
- 91 supersonic combat aircraft
- 62 helicopters
- 799 surface-to-air missiles
- 57 anti-ship missiles

Russia

- 290 tanks and self-propelled guns
- 510 APCs and armored cars
- 1 submarine
- 20 supersonic combat aircraft
- 60 helicopters
- 140 surface-to-air missiles

China

- 5 guided missile boats
- 10 supersonic combat aircraft
- 300 surface-to-air-missiles
- 160 anti-ship missiles

Major West European Suppliers

- 270 tanks and self-propelled guns
- 390 APCs and armored cars
- 2 major surface combatants
- 15 minor surface combatants
- 8 guided missile boats
- 2 submarines
- 30 supersonic combat aircraft
- 10 anti-ship missiles

All Other European Suppliers

- 120 tanks and self-propelled guns
- 110 artillery
- 1,230 APCs and armored cars

- 2 major surface combatants
- 5 minor surface combatants
- 20 supersonic combat aircraft
- 30 helicopters

All Other Suppliers

- 3 minor surface combatants
- 20 surface-to-surface missiles

Large numbers of major combat systems were delivered to the Near East region from 1996-1999, in particular, tanks and self-propelled guns, armored vehicles, minor surface combatants, artillery pieces, supersonic combat aircraft, helicopters, air defense and anti-ship missiles. The United States made significant deliveries of supersonic combat aircraft to the region. Russia, the United States, and European suppliers in general were the principal suppliers of tanks and self-propelled guns. Three of these weapons categories–supersonic combat aircraft, helicopters, and tanks and self-propelled guns–are especially costly and are an important portion of the dollar values of arms deliveries of the United States, Russia, and European suppliers to the Near East region during the 1996-1999 period. The cost of naval combatants is also generally high, and suppliers of such systems during this period had their delivery value totals notably increased due to these transfers. Some of the less expensive weapons systems delivered to the Near East are deadly and can create important security threats within the region. In particular, from 1996-1999, China delivered to the Near East region 160 anti-ship missiles, while the United States delivered 57. China also delivered 5 guided missile boats to the Near East, while the major West European suppliers collectively delivered 8 guided missile boats. Other non-European suppliers delivered 20 surface-to-surface missiles.

United States Commercial Arms Exports

The United States commercial deliveries data set out below are included in the main data tables for deliveries in this report. They are presented separately here to provide an indicator of their overall magnitude in the U.S. aggregate deliveries totals for the world and for developing nations. The United States is the only major arms supplier that has two distinct systems for the export of weapons: the government-to-government foreign military sales (FMS) system, and the licensed commercial export system. It should be noted that data maintained on U.S. commercial sales agreements and deliveries are incomplete, and not collected or revised on an on-going basis, making them significantly less precise than those for the U.S. FMS program–which accounts for the overwhelming portion of U.S. conventional arms transfer agreements and deliveries involving weapons systems. There are no official compilations of commercial agreement data comparable to that for the FMS program maintained on an annual basis. Once an exporter receives from the State Department a commercial license authorization to sell–valid for four years–there is no current requirement that the exporter provide to the State Department, on a systematic and on-going basis, comprehensive details regarding any sales contract that results from the license approval, including if any such contract is reduced in scope or cancelled. Nor is the exporter required to report that no contract with the prospective buyer resulted. Annual commercial deliveries data are obtained from shipper's export documents and completed licenses returned from ports of exit by the U.S. Customs Service to the Office of Defense Trade Controls (PM/DTC) of the State Department, which makes the final compilation of such data. This process for obtaining commercial deliveries data is much less systematic and much less timely than that

taken by the Department of Defense for government-to-government FMS transactions. Recently, efforts have been initiated by the U.S. government to improve the timeliness and quality of U.S. commercial deliveries data. The values of U.S. commercial arms deliveries to all nations and deliveries to developing nations for fiscal years 1992-1999, in current dollars, according to the U.S. State Department, were as follows:

Fiscal Year	Commercial Deliveries (Worldwide)	Commercial Deliveries (to Developing Nations)
1992	$2,667,000,000	$1,522,000,000
1993	$3,808,000,000	$2,921,000,000
1994	$3,339,000,000	$2,155,000,000
1995	$3,173,000,000	$1,804,000,000
1996	$1,563,000,000	$696,000,000
1997	$1,818,000,000	$1,141,000,000
1998	$2,045,000,000	$797,000,000
1999	$654,000,000	$321,000,000

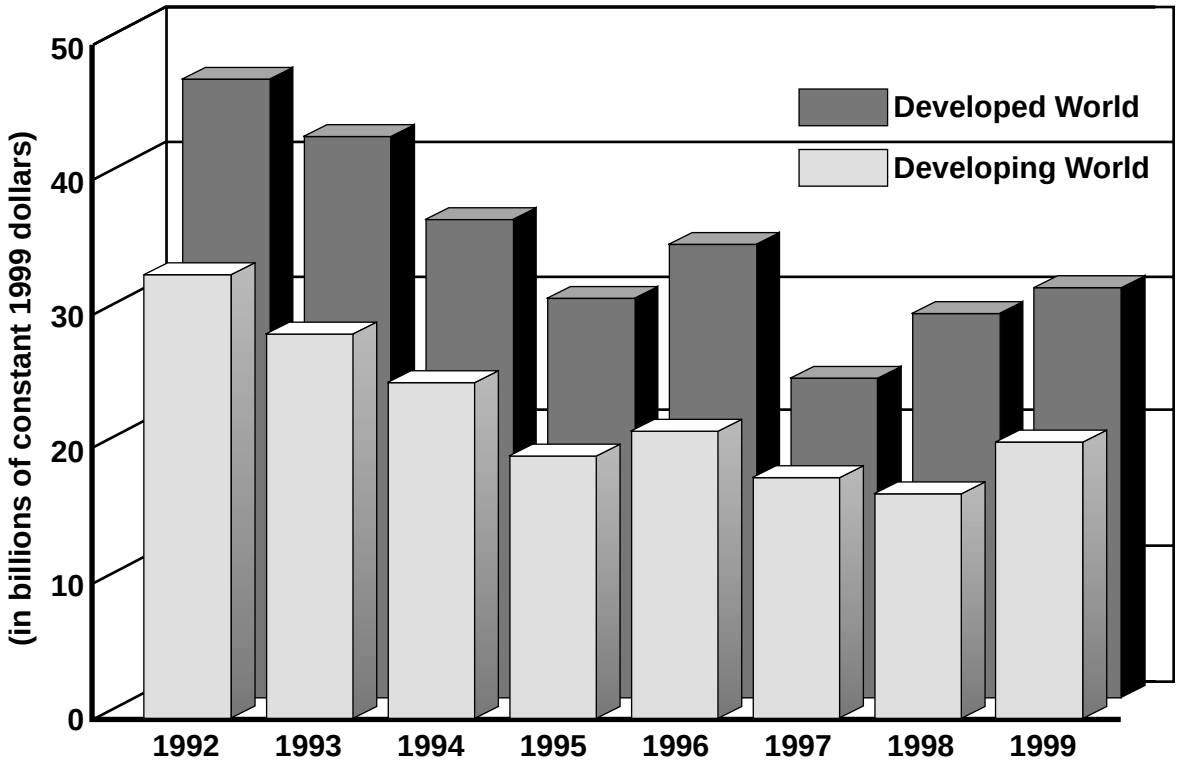


Chart 1. Arms Transfer Agreements Worldwide, 1992-1999
Developed and Developing Worlds Compared

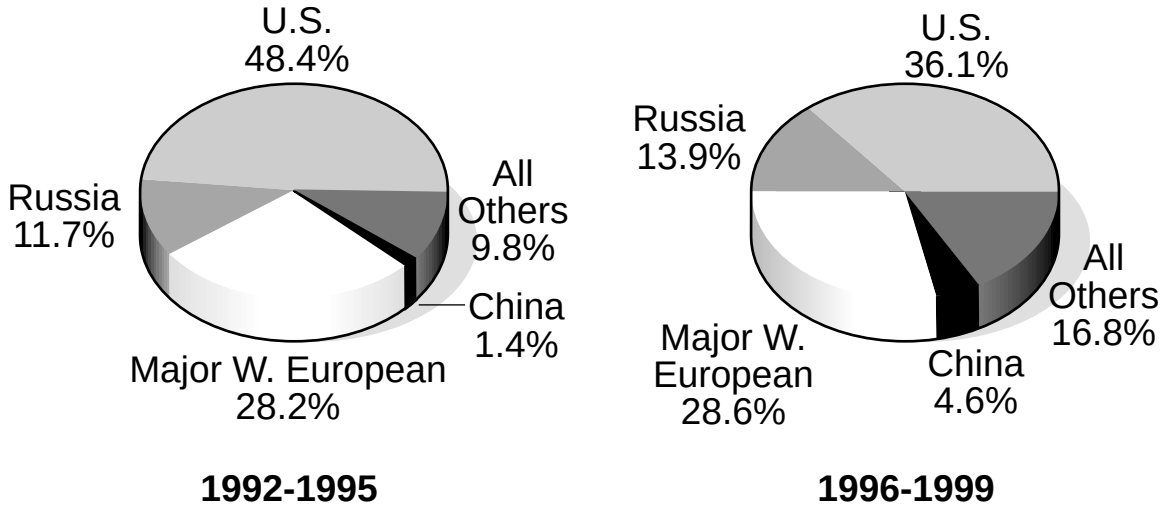


Chart 2 - Arms Transfer Agreements Worldwide
(supplier percentage of value)

Table 1. Arms Transfer Agreements With Developing Nations, by Supplier, 1992-1999
(in millions of current U.S. dollars)

	1992	1993	1994	1995	1996	1997	1998	1999	1992-1999
United States	12,444	14,436	6,748	4,235	6,900	3,635	6,273	8,072	62,743
Russia	1,400	1,200	3,700	5,300	4,200	3,300	2,200	4,100	25,400
France	8,600	3,900	8,100	2,400	1,100	4,600	2,500	400	31,600
United Kingdom	1,800	2,300	700	600	2,000	1,000	1,000	500	9,900
China	600	500	600	200	800	1,300	700	1,900	6,500
Germany	200	1,000	0	300	0	100	1,500	2,000	5,100
Italy	500	300	200	800	300	300	0	400	2,800
All Other European	1,100	500	1,600	2,400	2,900	1,700	1,300	2,600	14,100
All Others	1,100	600	500	1,500	1,700	1,100	900	600	8,000
TOTAL	**27,644**	**24,736**	**22,148**	**17,735**	**19,900**	**17,035**	**16,373**	**20,572**	**166,143**
Dollar inflation Index: (1999=1.00)	0.8516	0.8761	0.8957	0.9135	0.9329	0.953	0.973	1	

Source: U.S. government.

Note: Developing nations category excluded the U.S., Europe, Canada, Japan, Australia and New Zealand. All data are for the calendar year given except for U. S. MAP (Military Assistance Program), IMET (International Military Education and Training), and Excess Defense Article data which are included for the particular fiscal year. All amounts given include the values of weapons, spare parts, construction, all associated services, military assistance, excess defense articles, and training programs. Statistics for foreign countries are based upon estimated selling prices. All foreign data are rounded to the nearest $100 million.
*Based on Department of Defense Price Deflator

Table 1A. Arms Transfer Agreements with Developing Nations, by Supplier, 1992-1999
(in millions of constant 1999 U.S. dollars)

	1992	1993	1994	1995	1996	1997	1998	1999	TOTAL 1992-1999
United States	14,612	16,478	7,534	4,636	7,396	3,814	6,447	8,072	68,989
Russia	1,644	1,370	4,131	5,802	4,502	3,463	2,261	4,100	27,272
France	10,099	4,452	9,043	2,627	1,179	4,827	2,569	400	35,196
United Kingdom	2,114	2,625	782	657	2,144	1,049	1,028	500	10,898
China	587	571	670	219	858	1,364	719	1,900	6,888
Germany	235	1,141	0	328	0	105	1,542	2,000	5,351
Italy	587	342	223	876	322	315	0	400	3,065
All Other European	1,292	571	1,786	2,627	3,109	1,784	1,336	2,600	15,104
All Others	1,292	685	558	1,642	1,822	1,154	925	600	8,678
TOTAL	**329461**	**28,234**	**24,727**	**19,414**	**21,331**	**17,875**	**16,827**	**20,572**	**181,443**

Table 1B. Arms Transfer Agreement with Developing Nations, by Supplier, 1992-1999
(expressed as a percent of total, by year)

	1992	1993	1994	1995	1996	1997	1998	1999
United States	45.02 %	58.36 %	30.47 %	23.88 %	34.67 %	21.34 %	38.31 %	39.24 %
Russia	5.06 %	4.85 %	16.71 %	29.88 %	21.11 %	19.37 %	13.44 %	19.93 %
France	31.11 %	15.77 %	36.57 %	13.53 %	5.53 %	27.00 %	15.27 %	1.94 %
United Kingdom	6.51 %	9.30 %	3.16 %	3.38 %	10.05 %	5.87 %	6.11 %	2.43 %
China	1.81 %	2.02 %	2.71 %	1.13 %	4.02 %	7.63 %	4.28 %	9.24 %
Germany	0.72 %	4.04 %	0.00 %	1.69 %	0.00 %	0.59 %	9.16 %	9.72 %
Italy	1.81 %	1.21 %	0.90 %	4.51 %	1.51 %	1.76 %	0.00 %	1.94 %
All Other European	3.98 %	2.02 %	7.22 %	13.53 %	14.57 %	9.98 %	7.94 %	12.64 %
All Others	3.98 %	2.43 %	2.26 %	8.46 %	8.54 %	6.46 %	5.50 %	2.92 %
[Major West European*	40.15 %	30.32 %	40.64 %	23.12 %	17.09 %	35.22 %	30.54 %	16.04 %]
TOTAL	**100.00 %**	**100.00 %**	**100.00 %**	**100.00 %**	**100.00 %**	**100.00 %**	**100.00 %**	**100.00 %**

*Major West European category includes France, United Kingdom, Germany, and Italy.

Table IF. Arms Transfer Agreements with Developing Nations, 1992-1999: Leading Suppliers Compared (in millions of current U.S. dollars)

Rank	Supplier	Agreements Value 1992-1995
1	United States	37,863
2	France	23,000
3	Russia	11,600
4	United Kingdom	5,400
5	China	1,800
6	Italy	1,800
7	Germany	1,500
8	Israel	900
9	Spain	900
10	Netherlands	700
11	Ukraine	700
Rank	**Supplier**	**Agreements Value 1996-1999**
1	United States	24,880
2	Russia	13,800
3	France	8,600
4	China	4,700
5	United Kingdom	4,500
6	Germany	3,600
7	Belarus	1,500
8	Ukraine	1,500
9	Israel	1,500
10	Italy	1,000
11	Sweden	1,000
Rank	**Supplier**	**Agreements Value 1992-1999**
1	United States	62,743
2	France	31,600
3	Russia	25,400
4	United Kingdom	9,900
5	China	6,500
6	Germany	5,100
7	Italy	2,800
8	Israel	2,400
9	Ukraine	2,200
10	Belarus	1,700
11	South Africa	1,500

Source: U.S. government.
Note: All foreign data are rounded to the nearest $100 million. Where data totals are the same, the actual rank order is maintained.

Table 1G. Arms Transfer Agreements with Developing Nations in 1999: Leading Suppliers Compared (in millions of current U.S. dollars)

Rank	Supplier	Agreements Value 1999
1	United States	8,072
2	Russia	4,100
3	Germany	2,000
4	China	1,900
5	Sweden	700
6	Belgium	600
7	United Kingdom	500
8	Italy	400
9	France	400
10	Ukraine	300
11	Canada	200

Source: U.S. government.

Note: All foreign data are rounded to the nearest $100 million.
Where data totals are the same, the actual rank order is maintained

Table 1I. Arms Transfer Agreements of Developing Nations, 1992-1999: Agreements by the Leading Recipients (in millions of current U.S. dollars)

Rank	Recipient	Agreement Value 1992-1995
1	Saudi Arabia	21,800
2	Taiwan	13,300
3	U.A.E.	7,300
4	China	7,000
5	Kuwait	6,100
6	Israel	3,300
7	Egypt	3,100
8	Malaysia	3,000
9	Pakistan	2,800
10	South Korea	2,700
Rank	**Recipient**	**Agreements Value 1996-1999**
1	U.A.E.	7,700
2	India	7,300
3	Saudi Arabia	7,100
4	Egypt	6,700
5	Israel	4,500
6	China	3,900
7	South Africa	3,400
8	South Korea	2,700
9	Taiwan	2,100
10	Pakistan	2,100
Rank	**Recipient**	**Agreements Value 1992-1999**
1	Saudi Arabia	28,900
2	Taiwan	15,400
3	U.A.E.	15,000
4	China	10,900
5	Egypt	9,800
6	India	8,600
7	Israel	7,800
8	Kuwait	7,200
9	Malaysia	4,900
10	Pakistan	4,900

Source: U.S. government.

Note: All foreign data are rounded to the nearest $100 million. Where data totals are the same, the rank order is maintained.

Table 2. Arms Deliveries to Developing Nations, by Supplier, 1992-1999
(in millions of current U.S. dollars)

	1992	1993	1994	1995	1996	1997	1998	1999	TOTAL 1992-1999
United States	9,564	10,804	8,531	11,401	9,872	11,565	10,974	11,366	84,077
Russia	2,600	2,100	1,400	2,700	2,200	2,200	1,900	2,000	17,100
France	1,100	800	700	2,000	2,900	5,700	6,000	2,200	21,400
United Kingdom	5,400	3,800	4,700	4,900	5,800	5,900	3,300	3,900	37,700
China	1,000	1,100	600	700	600	1,000	500	300	5,800
Germany	200	600	800	800	400	100	500	600	4,000
Italy	100	0	200	200	100	600	0	0	1,200
All Other European	1,800	1,300	2,200	2,300	2,300	3,100	1,900	1,800	16,700
All Others	1,100	1,100	1,000	1,100	1,100	900	700	500	7,500
TOTAL	**22,864**	**21,604**	**20,131**	**26,101**	**25,272**	**31,065**	**25,774**	**22,666**	**195,477**
Dollar inflation index (1999=1.00)*	0.8516	0.8761	0.8957	0.9135	0.9329	0.953	0.973	1	

Source: U.S. government. Note: Developing nations category excludes the United States, Russia, Europe, Canada, Japan, Australia, and New Zealand. All data are for the calendar year given, except for U.S. MAP (Military Assistance Program), IMET (International Military Education and Training), Excess Defense Articles, and commercially licensed deliveries, which are included for the particular fiscal year. All amounts given include the values of weapons, spare parts, construction, all associated services, military assistance, excess defense articles, and training programs. Statistics for foreign countries are based upon estimated selling prices. All foreign data are rounded to the nearest $100 million.
*Based on Department of Defense Price Deflator.

Table 2A. Arms Deliveries to Developing Nations, by Supplier, 1992-1999
(in millions of constant 1999 U.S. dollars)

	1992	1993	1994	1995	1996	1997	1998	1999	TOTAL 1992-1999
United States	11,231	12,332	9,524	12,481	10,582	12,135	11,279	11,366	90,929
Russia	3,053	2,968	2,345	2,956	2,358	2,308	1,953	2,000	19,940
France	1,292	913	782	2,189	3,109	5,981	6,166	2,200	22,632
United Kingdom	6,341	6,164	5,247	5,364	6,217	6,191	3,392	3,900	42,816
China	1,174	1,256	670	766	643	1,049	514	300	6,372
Germany	235	685	893	876	429	105	514	600	4,336
Italy	117	0	223	219	107	630	0	0	1,296
All Other European	2,114	1,484	2,456	2,518	2,465	3,253	1,953	1,800	18,043
All Others	1,292	1,256	1,116	1,204	1,179	944	719	500	8,211
TOTAL	**26,848**	**27,056**	**23,257**	**28,573**	**27,090**	**32,597**	**26,489**	**22,666**	**214,576**

Table 2B. Arms Deliveries to Developing Nations, by Supplier, 1992-1999
(expressed as a percent of total, by year)

	1992	1993	1994	1995	1996	1997	1998	1999
United States	41.83 %	50.01 %	42.38 %	43.38 %	39.06 %	37.23 %	42.58 %	50.15 %
Russia	11.37 %	9.72 %	6.95 %	10.34 %	8.71 %	7.08 %	7.37 %	8.82 %
France	4.81 %	3.70 %	3.48 %	7.66 %	11.48 %	18.35 %	23.28 %	9.71 %
United Kingdom	23.62 %	17.59 %	23.35 %	18.77 %	22.95 %	18.99 %	12.80 %	17.21 %
China	4.37 %	5.09 %	2.98 %	2.68 %	2.37 %	3.22 %	1.94 %	1.32 %
Germany	0.87 %	2.78 %	3.97 %	3.07 %	1.58 %	0.32 %	1.94 %	2.65 %
Italy	0.44 %	0.00 %	0.99 %	0.77 %	0.40 %	1.93 %	0.00 %	0.00 %
All Other European	7.87 %	6.02 %	10.93 %	8.81 %	9.10 %	9.98 %	7.37 %	7.94 %
All Others	4.81 %	5.09 %	4.97 %	4.21 %	4.35 %	2.90 %	2.72 %	2.21 %
[Major West European*	29.74 %	24.07 %	31.79 %	30.27 %	36.40 %	39.59 %	38.02 %	29.56 %]
TOTAL	**100.00 %**	**100.00 %**	**100.00 %**	**100.00 %**	**100.00 %**	**100.00 %**	**100.00 %**	**100.00 %**

*Major West European category includes France, United Kingdom, Germany, and Italy.

Table 2F. Arms Deliveries to Developing Nations, 1992-1999: Lending Suppliers Compared (in millions of current U.S. dollars)

Rank	Supplier	Deliveries Value 1992-1995
1	United States	40,300
2	United Kingdom	18,800
3	Russia	8,800
4	France	4,600
5	China	3,400
6	Germany	2,400
7	Sweden	2,000
8	Israel	1,800
9	Canada	1,000
10	South Africa	700
11	Spain	600
Rank	**Supplier**	**Deliveries Value 1996-1999**
1	United States	43,777
2	United Kingdom	18,900
3	France	16,800
4	Russia	8,300
5	Sweden	2,500
6	China	2,400
7	Germany	1,600
8	Ukraine	1,500
9	Israel	1,000
10	Belarus	1,000
11	Netherlands	900
Rank	**Supplier**	**Deliveries Value 1992-1999**
1	United States	84,077
2	United Kingdom	37,700
3	France	21,400
4	Russia	17,100
5	China	5,800
6	Sweden	4,400
7	Germany	4,000
8	Israel	2,800
9	Ukraine	1,800
10	Canada	1,600
11	South Africa	1,500

Source: U.S. government.

Note: All foreign data are rounded to the nearest $100 million. Where data totals are the same, the rank order is maintained.

Table 2G. Arms Deliveries to Developing Nations in 1999: Leading Suppliers Compared (in millions of current U.S. dollars)

Rank	Recipient	Deliveries Value 1999
1	United States	11,366
2	United Kingdom	3,900
3	France	2,200
4	Russia	2,000
5	Germany	600
6	Sweden	500
7	Ukraine	400
8	Belarus	300
9	China	300
10	Israel	200
11	Bulgaria	200

Source: U.S. government.

Note: All foreign data are rounded to the nearest $100 million. Where data totals are the same, the actual rank order is maintained.

Table 2I. Arms Deliveries to Developing Nations, 1992-1999:
The Leading Recipients
(in millions of current U.S. dollars)

Rank	Recipient	Deliveties Value 1992-1995
1	Saudi Arabia	31,300
2	Egypt	5,800
3	Taiwan	4,400
4	South Korea	4,100
5	Kuwait	3,300
6	U.A.E.	3,300
7	Iran	3,000
8	China	2,800
9	Israel	2,700
10	Malaysia	2,000
Rank	**Recipient**	**Deliveries Value 1996-1999**
1	Saudi Arabia	34,800
2	Taiwan	16,200
3	South Korea	4,700
4	U.A.E.	4,500
5	Israel	4,500
6	Kuwait	4,300
7	Egypt	3,900
8	China	3,100
9	Pakistan	2,400
10	India	2,000
Rank	**Recipient**	**Deliveiies Value 1992-1999**
1	Saudi Arabia	66,100
2	Taiwan	20,600
3	Egypt	9,700
4	South Korea	8,800
5	U.A.E.	7,800
6	Kuwait	7,600
7	Israel	7,200
8	China	5,900
9	Iran	4,700
10	Pakistan	4,200

Source: U.S. government

Note: All foreign data are rounded to the nearest $100 million. Where data totals are the same, the actual rank order is maintained.

Table 3. Numbers of Weapons Delivered by Major Suppliers to Developing Nations

Weapons Category	U.S.	Russia	China	Major West European	All Other European	All Others
1992-1995						
Tanks and Self-Propelled Guns	1,623	540	310	90	610	170
Artillery	260	480	410	270	1,150	280
APCs and Armored Cars	2,091	1,460	40	450	2,150	270
Major Surface Combatants	0	0	5	43	0	2
Minor Surface Combatants	44	13	11	53	29	50
Guided Missile Boats	0	0	14	4	0	2
Submarines	0	4	0	7	0	0
Supersonic Combat Aircraft	265	70	110	0	60	40
Subsonic Combat Aircraft	92	0	0	100	0	0
Other Aircraft	43	20	70	80	260	80
Helicopters	283	210	0	140	100	20
Surface-to-Air Missiles	1,619	1,600	330	3,260	750	350
Surface-to-Surface Missiles	0	0	30	0	0	110
Anti-Ship Missiles	439	20	140	60	0	0
1996-1999						
Tanks and Self-Propelled Guns	869	370	240	320	1,260	50
Artillery	183	200	50	110	300	160
APCs and Armored Cars	1,705	690	120	810	1,540	80
Major Surface Combatants	3	0	1	17	3	0
Minor Surface Combatants	33	3	22	30	41	49
Guided Missile Boats	0	0	9	12	0	3
Submarines	0	4	0	7	0	2
Supersonic Combat Aircraft	375	130	80	110	110	30
Subsonic Combat Aircraft	2	0	0	50	30	30
Other Aircraft	45	30	60	50	180	160
Helicopters	159	220	0	40	110	30
Surface-to-Air Missiles	907	1,910	790	560	2,060	250
Surface-to-Surface Missiles	0	0	0	0	0	30
Anti-Ship Missiles	220	70	190	70	0	10

Source: U.S. government.

Note: Developing nations category excludes the U.S., Russia, Europe, Canada, Japan, Australia and New Zealand. All data are for calendar years given. Major West European includes France, United Kingdom, Germany, and Italy totals asan aggregate figure. Data relating to surface-to-surface and anti-ship missiles by foreign suppliers are estimates based on a variety of sources having a wide range of accuracy. As such, individual data entries in these two weapons delivery categories are not necessarily definitive.

Worldwide Arms Transfer Agreements and Deliveries Values, 1992-1999

Tables, 8, 8A, and 8B and 9, 9A and 9B, provide the total dollar values for arms transfer agreements and arms deliveries worldwide in the same format and detail as do Tables 1, 1A and 1B and Tables 2,2A and 2B for arms transfer agreements with and arms deliveries to developing nations.

Total Worldwide Arms Transfer Agreements Values, 1992-1999

Table 8 shows the annual current dollar values of arms transfer agreements worldwide. Since these figures do not allow for the effects of inflation, they are, by themselves, of limited use. They provide, however, the data from which Tables 8A (constant dollars) and 8B (supplier percentages) are derived. Some of the more notable facts reflected by these data are summarized below. Unless otherwise noted, dollar values are expressed in constant 1999 U.S. dollars.

- The United States ranked first among all suppliers to the world in the value of arms transfer agreements from 1996-1999, and first for the entire period form 1992-1999 (Figure 1).

- Russia ranked second among all suppliers to the world in the value of arms transfer agreements from 1996-1999, and third from 1992-1999.

- France ranked third among all suppliers to the world in the value of arms transfer agreements from 1996-1999, and second from 1992-1999.

- The United Kingdom ranked fourth among all suppliers to the world in the value of arms transfer agreements from 1996-1999, and fourth from 1992-1999.

In 1999, the value of all arms transfer agreements worldwide was nearly $30.3 billion. This is the highest total for arms transfer agreements in any year since 1996, and an increase over 1998 which totaled $28.3 billion.

- In 1999, the United States was the leader in arms transfer agreements with the world, making about $11.8 billion in such agreements, or 38.9 percent of all arms transfer agreements. Russia ranked second with $4.8 billion in arms transfer agreements, or 15.9 percent of all arms transfer agreements. Germany ranked third with $4 billion or 13.2 percent. United States agreements increased from $10.3 billion in 1998 to about $11.8 billion in 1999. France's arms transfer agreements fell significantly from about $3.4 billion 1998 to $900 million in 1999.

- The United States, Russia and Germany, the top three arms suppliers to the world in 1999–respectively-ranked by the value of their arms transfer agreements-collectively made agreements in 1999 valued at nearly $20.6 billion, 68 percent of all arms transfer agreements made with the world by all suppliers.

- The total value of all arms transfer agreements worldwide from 1996-1999 ($115.3 billion) was notably less than the value of arms transfer agreements by all suppliers worldwide from 1992-1995 ($150.4. billion), a decline of 23.3 percent (Figure 1).

- During the period from 1992-1995, developing world nations accounted for 69.7 percent of all arms transfer agreements made world wide. During 1996-1999, developing world nations accounted for 66.4 percent of all agreements made worldwide (Figure 1).

- In 1999, developing nations were recipients of 68 percent of all arms transfer agreements made worldwide (Figure 1).

Total Worldwide Delivery Values 1992-1999

Table 9 shows the annual current dollar values of arms deliveries (items actually transferred) worldwide by major suppliers from 1992-1999. The utility of these data is that they reflect transfers that have occurred. They provide the data from which tables 9A(constant dollars) and 9B (supplier percentages) are derived. Some of the more notable facts illustrated by these data are summarized below. Unless otherwise noted the dollar values are expressed in constant 1999 U.S. dollars.

- In 1999, the United States ranked first in the value of arms deliveries worldwide, making nearly $18.4 billion in such deliveries. This is the eighth year in a row that United States has led in such deliveries, reflecting implementation of arms agreements concluded during and immediately after the Persian Gulf War (Figure 2).

- The United Kingdom ranked second in arms deliveries worldwide in 1999, making $4.5 billion in such deliveries.

- Russia ranked third in arms deliveries worldwide in 1999, making $2.7 billion in such deliveries.

- In 1999, the top three suppliers of arms to the world, the United States, the United Kingdom, and Russia, collectively delivered nearly $25.6 billion, 75.3 percent of all arms deliveries made worldwide by all suppliers.

- The U.S. share of all arms deliveries worldwide in 1999 was 54.1 percent, up from its 46.9 percent share in 1998. The United Kingdom's share in 1999 was 13.3 percent up from 10.7 percent in 1998. Russia's share of world arms deliveries in 1999 was 8 percent, up from 5.9 percent in 1998 (Table 9B).

- In 1999, the value of all arms deliveries worldwide was nearly $34 billion, a decline in the total value of deliveries from the previous year ($35.4 billion in constant 1999 dollars), and the lowest deliveries total since 1994 (Table 9A).

- During the period from 1992-1995, developing world nations accounted for 72.6 percent of all arms deliveries received worldwide. During 1996-1999, developing world nations accounted for 77.9 percent of all deliveries worldwide (Figure 2).

- In 1999, developing nations as recipients of arms accounted for 66.8 percent of an arms deliveries received worldwide (Figure 2).

• The total value of all arms deliveries by all suppliers worldwide from 1996-1999 ($150.3 billion) was an increase of 3 percent from the value of arms deliveries by an suppliers worldwide from 1992-1995 ($145.9 billion in constant 1999 dollars) (Figure 2) (Table 9A)

Table 8. Arms Transfer Agreements with the World, by Supplier, 1992-1999
(in millions of current U.S. dollars)

	1992	1993	1994	1995	1996	1997	1998	1999	TOTAL 1992-1999
United States	20,644	21,524	12,792	8,872	11,111	7,341	10,024	11,768	104,076
Russia	1,800	2,400	4,000	7,500	4,700	3,500	2,500	4,800	31,200
France	9,000	5,000	8,700	2,600	2,600	5,000	3,300	900	37,100
United Kingdom	1,800	2,800	700	800	4,300	1,000	2,000	800	14,200
China	500	500	600	200	1,000	1,300	900	1,900	6,900
Germany	1,300	1,300	1,200	500	100	600	5,000	4,000	14,000
Italy	500	400	200	1,200	400	300	900	600	4,500
All Other European	1,700	900	2,400	2,900	3,800	2,000	1,700	4,600	20,000
All Others	1,200	1,100	800	2,100	3,000	1,400	1,200	900	11,700
TOTAL	**38,444**	**35,924**	**31,392**	**26,672**	**31,011**	**22,441**	**27,524**	**30,268**	**243,676**
Dollar inflation index (1999=1.00)*	0.8516	0.8761	0.8957	0.9135	0.9329	0.9530	0.973		

Source: U.S. government

Note: All data are for the calendar year given except for U.S. MAP (Military Assistance Program) and IMET (International Military Education and Training), and Excess Defense Articles, which are included for the particular fiscal year. All amounts given include the values of weapons, spare parts, construction, all associated services, military assistance, excess defense articles, and training programs. Statistics for foreign countries are based upon estimated selling prices. All foreign data are rounded to the nearest $100 million.
*Based on Department of Defense Price Deflator.

Table 8A. Arms Transfer Agreements with the World, by Supplier, 1992-1999
(in millions of constant 1999 U.S. dollars)

	1992	1993	1994	1995	1996	1997	1998	1999	TOTAL 1992-1999
United States	24,241	24,568	14,282	9,712	11,910	7,703	10,302	11,768	114,486
Russia	2,114	2,739	4,466	8,210	5,038	3,673	2,569	4,800	33,609
France	10,568	5,707	9,713	2,846	2,787	5,247	3,392	900	41,160
United Kingdom	2,114	3,196	782	876	4,609	1,049	2,055	800	15,481
China	587	571	670	219	1,072	1,364	925	1,900	7,308
Germany	1,527	1,484	1,340	547	107	630	5,139	4,000	14,773
Italy	587	457	223	1,314	429	315	925	600	4,839
All Other European	1,996	1,027	2,679	3,175	4,073	2,099	1,747	4,600	21,397
All Others	1,409	1,256	893	2,299	3,216	1,469	1,233	900	12,675
TOTAL	**45,143**	**41,004**	**35,047**	**29,198**	**33,242**	**23,548**	**28,288**	**30,268**	**265,738**

Table 8B. Arms Transfer Agreements with the World, by Supplier, 1992-1999
(expressed as a percent of total, by year)

	1992	1993	1994	1995	1996	1997	1998	1999
United States	53.70 %	59.92 %	40.75 %	33.26 %	35.83 %	32.71 %	36.42 %	38.88 %
Russia	4.68 %	6.68 %	12.74 %	28.12 %	15.16 %	15.60 %	9.08 %	15.86 %
France	23.41 %	13.92 %	27.71 %	9.75 %	8.38 %	22.28 %	11.99 %	2.97 %
United Kingdom	4.68 %	7.79 %	2.23 %	3.00 %	13.87 %	4.46 %	7.27 %	2.64 %
China	1.30 %	1.39 %	1.91 %	0.75 %	3.22 %	5.79 %	3.27 %	6.28 %
Germany	3.38 %	3.62 %	3.82 %	1.87 %	0.32 %	2.67 %	18.17 %	13.22 %
Italy	1.30 %	1.11 %	0.64 %	4.50 %	1.29 %	1.34 %	3.27 %	1.98 %
AJI Other European	4.42 %	2.51 %	7.65 %	10.87 %	12.25 %	8.91 %	6.18 %	15.20 %
All Others	3.12 %	3.06 %	2.55 %	7.87 %	9.67 %	6.24 %	4.36 %	2.97 %
[Major West European*	32.77 %	26.44 %	34.40 %	19.12 %	23.86 %	30.75 %	40.69 %	20.81 %]
TOTAL	**100.00 %**	**100.00 %**	**100.00 %**	**100.00 %**	**100.00 %**	**100.00 %**	**100.00 %**	**100.00 %**

*Major West European category includes France, United Kingdom, Germany, and Italy.

Table 9. Arms Deliveries to the World, by Supplier, 1992-1999
(in millions of current U.S. dollars)

	1992	1993	1994	1995	1996	1997	1998	1999	TOTAL 1992-1999
United States	13,309	15,177	13,501	16,000	14,713	16,487	16,620	18,351	124,158
Russia	2,600	3,400	1,700	3,500	2,900	2,700	2,100	2,700	21,600
France	2,100	1,500	1,300	2,800	3,600	6,100	6,400	2,400	26,200
United Kingdom	6,100	4,600	5,200	5,300	6,500	6,800	3,800	4,500	42,800
China	1,000	1,200	600	700	600	1,000	600	300	6,000
Germany	1,000	1,600	1,600	1,600	1,300	700	1,500	1,200	10,500
Italy	400	300	200	200	100	700	100	100	2,100
All Other European	3,900	2,400	3,400	3,500	3,400	4,000	2,700	2,400	25,700
All Others	1,700	1,800	1,900	1,900	1,700	2,100	1,600	2,000	14,700
TOTAL	**32,109**	**31,977**	**29,401**	**35,500**	**34,813**	**40,587**	**35,420**	**33,951**	**273,758**
Dollar inflation index (1999=1.00)*	0.8516	0.8761	0.8957	0.9135	0.9329	0.953	0.973	1	

Source: U.S. government

Note: All data are for the calendar year given. All data are for the calendar year given except for U.S. MAP (Military Assistance Program), IMET (International Military Education and Training), Excess Defense Articles, and commercially licensed deliveries, which are included for the particular fiscal year. All amounts given include the values of weapons, spare parts, construction, all associated services, military assistance, excess defense articles, and training programs. Statistics for foreign countries are based upon estimated selling prices. All foreign data are rounded to the nearest $100 million.
* Based on Department of Defense Price Deflator.

Table 9A. Arms Deliveries to the World, by Supplier, 1992-1999
(in millions of constant 1999 U.S. dollars)

	1992	1993	1994	1995	1996	1997	1998	1999	TOTAL 1992-1999
United States	15,628	17,323	15,073	17,515	15,771	17,300	17,081	18,351	134,043
Russia	3,053	3,881	1,898	3,831	3,109	2,833	2,158	2,700	23,463
France	2,466	1,712	1,451	3,065	3,859	6,401	6,578	2,400	27,932
United Kingdom	7,163	5,251	5,806	5,802	6,968	7,135	3,905	4,500	46,529
China	1,174	1,370	670	766	643	1,049	617	300	6,589
Germany	1,174	1,826	1,786	1,752	1,394	735	1,542	1,200	11,408
Italy	470	342	223	219	107	735	103	100	2,299
All Other European	4,580	2,739	3,796	3,831	3,645	4,197	2,775	2,400	27,963
All Others	1,996	2,055	2,121	2,080	1,822	2,204	1,644	2,000	15,922
TOTAL	**37,704**	**36,499**	**32,825**	**38,862**	**37,317**	**42,589**	**36,403**	**33,951**	**296,149**

Table 9B. Arms Deliveries to the World, by Supplier 1992-1999
(expressed as a percent of total, by year)

	1992	1993	1994	1995	1996	1997	1998	1999
United States	41.45%	47.46%	45.92%	45.07%	42.26%	40.62%	46.92%	54.05%
Russia	8.10%	10.63%	5.78%	9.86%	8.33%	6.65%	5.93%	7.95%
France	6.54%	4.69%	4.42%	7.89%	10.34%	15.03%	18.07%	7.07%
United Kingdom	19.00%	14.39%	17.69%	14.93%	18.67%	16.75%	10.73%	13.25%
China	3.11%	3.75%	2.04%	1.97%	1.72%	2.46 %	1.69%	0.88%
Germany	3.11%	5.00%	5.44%	4.51%	3.73 %	1.72%	4.23%	3.53%
Italy	1.25%	0.94%	0.68%	0.56%	0.29%	1.72%	0.28%	0.29%
All Other European	12.15%	7.51%	11.56%	9.86%	9.77%	9.86%	7.62%	7.07%
All Others	5.29%	5.63%	6.46%	5.35%	4.88 %	5.17%	4.52%	5.89%
[Major West European*	29.90%	25.02%	28.23%	27.89%	33.03%	35,23%	33.31%	24.15%]
TOTAL	**100.00%**	**100.00%**	**100.00%**	**100.00%**	**100.00%**	**100.00%**	**100.00%**	**100.00%**

*Major West European category includes France, United Kingdom, Germany, and Italy.

Description of Items Counted in Weapons Categories, 1992-1999

Tanks and Self-propelled Guns: This category includes light, medium, and heavy tanks; self-propelled artillery; self-propelled assault guns.

Artillery: This category includes field and air defense artillery, mortars, rocket launchers and recoilless rifles-100 mm and over; FROG launchers-100mm and over.

Armored Personnel Carriers (APCs) and Armored Cars: This category includes personnel carriers, armored and amphibious; armored infantry fighting vehicles; armored reconnaissance and command vehicles.

Major Surface Combatants: This category includes aircraft carriers, cruisers, destroyers, frigates.

Minor Surface Combatants: This category includes minesweepers, subchasers, motor torpedo boats, patrol craft, motor gunboats.

Submarines: This category includes all submarines, including midget submarines.

Guided Missile Patrol Boats: This category includes all boats in this class.

Supersonic Combat Aircraft: This category includes all fighter and bomber aircraft designed to function operationally at speeds above Mach 1.

Subsonic Combat Aircraft: This category includes all fighter and bomber aircraft designed to function operationally at speeds above Mach 1.

Other Aircraft: This category includes all other fixed-wing aircraft, including trainers, transports, reconnaissance aircraft, and communications/utility aircraft.

Helicopters: This category includes all helicopters, including combat and transport.

Surface-to-air Missiles: This category includes all ground-based air defense missiles.

Surface-to-surface Missiles: This category includes all surface-surface missiles without regard to range, such as Scuds and CSS-2s. It excludes all anti-tank missiles and all anti-ship missiles.

Anti-ship Missiles: This category includes all missiles in this class such as the Harpoon, Silkworm, Styx and Exocet.

Regions Identified in Arms Transfer Tables and Charts

ASIA
Afghanistan
Australia
Bangladesh
Brunei
Burma (Myanmar)
China
Fiji
India
Indonesia
Japan
Kampuchea (Cambodia)
Kazakhstan
Kyrgyzstan
Laos
Malaysia
Nepal
New Zealand
North Korea
Pakistan
Papua New Guinea
Philippines
Pitcairn
Singapore
South Korea
Sri Lanka
Taiwan
Tajikistan
Thailand
Turkmenistan
Uzbekistan
Vietnam

NEAR EAST
Algeria
Bahrain
Egypt
Iran
Iraq
Israel
Jordan
Kuwait
Lebanon
Libya
Morocco
Oman
Qatar
Saudi Arabia
Syria
Tunisia
United Arab Emirates
Yemen

EUROPE
Albania
Armenia
Austria
Azerbaijan
Belarus
Bosnia/Herzegovina
Bulgaria
Belgium
Canada
Croatia
Czechoslovakia/ Czech Republic
Cyprus
Denmark
Estonia
Finland
France
FYR/Macedonia
Georgia
Germany
Greece
Hungary
Iceland
Ireland
Italy
Latvia
Liechtenstein
Lithuania
Luxembourg
Malta
Moldova
Netherlands
Norway
Poland
Portugal
Romania
Russia
Slovak Republic
Slovenia
Spain
Sweden
Switzerland
Turkey
Ukraine
United Kingdom
Yugoslavia/Federal Republic

AFRICA
Angola
Benin
Botswana
Burkina Faso
Burundi
Cameroon
Cape Verde
Central African Republic
Chad
Congo
Côte d'Ivoire
Djibouti
Equatorial Guinea
Ethiopia
Gabon
Gambia
Ghana
Guinea
Guinea-Bissau
Kenya
Lesotho
Liberia
Madagascar
Malawi
Mali
Mauritania
Mauritius
Mozambique
Namibia
Niger
Nigeria
Réunion
Rwanda
Senegal
Seychelles
Sierra Leone
Somalia
South Africa
Sudan
Swaziland
Tanzania
Togo
Uganda
Zaire
Zambia
Zimbabwe

LATIN AMERICA
Antigua
Argentina
Bahamas
Barbados
Belize
Bermuda
Bolivia
Brazil
British Virgin Islands
Cayman Islands
Chile
Colombia
Costa Rica
Cuba
Dominica
Dominican Republic
Ecuador
El Salvador
French Guiana
Grenada
Guadeloupe
Guatemala
Guyana
Haiti
Honduras
Jamaica
Martinique
Mexico
Montserrat
Netherlands Antilles
Nicaragua
Panama
Paraguay
Peru
St. Kitts & Nevis
St. Lucia
St. Pierre & Miquelon
St. Vincent
Suriname
Trinidad
Turks & Caicos
Venezuela

PERSPECTIVES

Security Assistance Engagement Plan Development

By

Captain Robert C. Rubel, USN
Center for Naval Warfare Studies

Introduction

After reviewing many security assistance organization (SAO) engagement plans in the course of conducting joint general inspections, I have found there is no consistent approach to the practice of developing them. Security assistance organizations generally devote considerable time and effort in crafting a plan that describes their efforts, whether or not there is any interest from the rest of the country team. In some cases, development of the SAO engagement plan, like the embassy's mission program plan, is primarily an exercise in compliance with regulations that require it to be prepared. This tends to be a rather sterile drill that wastes man hours and results in a piece of paper that is stuck in a safe until it is dragged out and modified the next time a submission is due. Some SAOs put greater store in their engagement plans, and try to use them as navigation aids as they conduct day-to-day business. However, even when the engagement plan occupies a central position in the functioning of an SAO, certain aspects of the way the staff approaches the development process and the articulation of goals and objectives limits the plan's usefulness and influence. This article will set forth some ideas and tips that can help the SAO produce an engagement plan that is more than just a piece of paper.

The Process of Strategy

The first thing to understand about the engagement plan is that it constitutes a piece of strategy. In terms of the host nation, the SAO engagement plan is aimed at having national level effects. The engagement plan is therefore fundamentally different than the tactical operations plans military officers are used to dealing with. Most engagement plans cover at least a year, and their main goals tend to be very broad. They frequently aim at political outcomes rather than military objectives. All of these characteristics clearly denote engagement plans as strategic documents, and their development should be treated accordingly.

One of the first principles of strategy is that the process is more important than the product. Analysis of why powers such as Germany and Japan went down to defeat reveals a defective process of developing strategy. The right people did not talk to each other; barriers to communication kept critical information from key decision makers, and plans, once developed, were not subject to periodic and objective review. Any strategy or plan is only valid until the next engagement. It must then be reexamined and modified if necessary.

What this means for the SAO is that the engagement plan should be considered the result of a process and not an end in itself. First, the SAO should be closely involved in the preparation of the embassy's mission program plan. The SAO should look for ways it can support each of the embassy's goals, whether they have an obvious connection with the military or not. In an ideal world, the ambassador and country team would regard the SAO as a flexible and responsive resource that could contribute to policy goals in a wide variety of ways. "Staying in your lane" is a fine principle to follow on the battlefield to prevent friendly fire casualties, but that mentality can inhibit the creative approach to strategy development that is necessary for optimum integration with the country team. This, to be sure, is not a prescription to break other agencies' rice bowls in a way that creates animosity and tension. Instead, it is a call to broaden the SAO perspective on how it can contribute to the ambassador's strategy.

Another aspect of the strategy process is the interchange with the host nation military and ministry of defense. In some cases, the SAO will be developing its engagement plan in the context of a host nation that has a viable national security strategy of its own. If this strategy, and the individual service strategies are acceptable to the U.S., then the engagement plan process is simply a matter of knowing and understanding their strategy and developing realistic ways to support it. However, many nations do not have a well-developed national security strategy process, and the engagement plan will be developed in a sort a vacuum with respect to the host nation. In either case, the SAO must work closely with the DAO to develop an understanding of who the right people are to listen to in the host nation.

Writing the Plan

Once the SAO's place in the mission program plan is solidified, and constructive relations with key country team members and host nation officials are established, development of the engagement plan can move forward. The plan must support both the mission program plan and the CINC theater strategy. These two documents do not normally conflict, so this should present few difficulties. Moreover, SAOs do a consistently good job of deciding what elements should compose that engagement strategy. What seems to be more problematic is being able to articulate the strategy in a way that provides useful guidance over the course of the plan's life. Most SAOs develop a set of specific objectives that are subordinate to and support the overall goals of the mission program plan. These objectives are almost exclusively couched in "process language", the use of verbs that do not indicate an end state, only an action. For example, engagement plans commonly contain one or more objectives related to professionalizing the host nation's military forces. The following is a generic example of such an objective: Promote the development of a highly trained and motivated professional non-commissioned officer corps. There is nothing wrong with the substance of this objective, but the way it is stated keeps it from being of much use as a guidepost as the months go by. "Promote the development of..." offers no clue as to when the objective has been attained. Even if it is followed by a list of specific activities, there is no readily discernable end point to aim for. How do you know when you are winning? Does the fact that 15 percent of the planned host nation NCO student quotas at the School of the Americas were not filled for various reasons represent a serious setback?

It is not just a matter of picking different words. There has to be a logic process that forms the basis for the articulation of strategy. One of the most powerful tools that has been developed is the vision statement. The vision statement says what you want your world to look like at the end of your planning horizon. Let us take a shot at articulating a vision statement for the military establishment of the mythical country of El Dorado:

An El Doradan defense establishment that is under the command of a fully functional ministry of defense, and not subject to inappropriate influence of military officers whose formal responsibilities exclude such influence. An El Doradan military that is professional and not corrupt, committed to protecting the constitutional process, capable of protecting the rights of its members and exerting sovereign control over the borders and territory of El Dorado.

This is by no means a template vision statement, but it does provide a feel for how things should be said. Clearly, this vision cannot be attained overnight, and will probably never be completely achieved; but it does provide us with a pole star to check the azimuth of our actions. Cascading vision statements concerning more specific elements of the main statement could be derived, like a vision statement for the El Doradan NCO corps. Specific objectives can devolve from the vision statements. However, you can not just jump to writing objectives. There is more to consider.

Here are some examples of specific objectives couched in terms of the final results desired:

- Passage of a law placing the El Doradan ministry of defense in the operational chain of command of the military.

- An operational El Dorandan counter-terrorism unit capable of conducting hostage rescue, terrorist capture, site security surveys and training additional units.

- A cadre of civilian officials who are capable of executing the functions of a ministry of defense and whose credentials inspire confidence on the part of the military.

Sometimes process language is unavoidable in cases where the objective cannot be made more specific, such as "promote understanding and respect for human rights, the rule of law and democratic processes." On-going objectives should be supported by either a specific series of periodic actions, such as participation in symposia, or a list of indicators that reveal whether progress is being made, such as the appointment of a human rights council in the host nation army.

Once a set of specific objectives, couched in results-oriented language, have been crafted, concrete actions can be identified to achieve them. The set of objectives, along with their attendant actions, constitute the meat of the engagement plan.

Classifying Events and Actions

Military events in a campaign will have certain relationships to each other that have implications for strategy. This is also true with regard to objectives, actions and events prescribed by an SAO engagement plan. These relationships can be categorized as follows:

- Decisive Event. These are events such as major battles that have a decisive effect on strategy. Loss of a major battle may mean the war is lost, or at least that the loser must change his strategy. The main thing about a decisive event is that the commander must tightly orchestrate all elements necessary for success so that when the battle is finally joined, he has maximized his chances for victory. This means close focus on intelligence to assess, as the event draws closer, whether the various elements are lining up properly. The commander must know what conditions are required for a successful outcome and ensure those conditions are created before engagement.

In SAO terms, objective (1) listed above calls for the achievement of a decisive event: the passage of a key law. The engagement plan would then proceed to outline the various factors, such as overt support by key army officials, that need to be lined up in order for the bill to pass. Periodic checks of these factors would reveal how things were going and provide insight into what kinds of actions and additional support would be necessary in the future.

- Sequential Series of Events - In this relationship, Event A precedes and is prerequisite to Event B, and so forth until the last event brings about strategic success. Objective (2) described above might need a specific sequence of events to occur in order to assure success. For instance:

Task 1: Obtain approval from the Ministry of Defense for creation of a counterterrorist (CT) unit (to be completed by Jul 2002).

Task 2: Create, in conjunction with the host nation military, a set of criteria and characteristics of the proposed CT unit (Sep 2002).

Task 3: Send six students to CT/ related training at the School of the Americas (SOA) (Oct 2002 - Feb 2003).

Task 4: Schedule two Joint Combined Exercises for Training to conduct initial stand-up training for the unit (Apr 2003)

Task 5: Obtain participation by the newly formed host nation CT unit in a SOUTHCOM multinational CT exercise (Jul 2003).

Failure or delays in one task would have a cascading effect on following tasks and replanning would be necessary.

- Cumulative Series of Events - In this case, events are only related insofar as their effects are additive. This is normally what SAOs generate in their engagement plans, when they have any specific measures of effectiveness at all. For instance, Objective (3) might be supported by taskings that call for specific numbers of Extended International Military Education and Training (E-IMET) students in the coming year and participation in a certain number of symposia by university or think-tank civilians. What is important is the total number over time in order to achieve some kind of “critical mass” of education or opinion.

Another cumulative objective might call for the increase in professionalism in the host nation NCO corps. There is nothing wrong with this as far as it goes, but the numbers should not just be pulled out of a hat or be based on what appears feasible. There should be an identifiable cause-and-effect relationship between the numbers and projected achievement of the objective.

If, for instance, the objective is to develop a corps of NCOs who are capable of assuming at least platoon command in the absense of an officer, and there are about 2000 NCOs in the host nation army, then in lieu of any other training, an SOA quota of 5 students per year is too small to make a difference. It is not that sending five host nation NCOs to SOA is a bad thing; it is just not going to achieve the objective. The SAO would have to look at a “train the trainer” approach to establishing a host nation NCO academy. The other challenge is to decide when not making numbers affects strategy. If you can establish a cause-and-effect linkage between the numbers and

the objective, then the significance of a certain number of no-shows or drop outs may become apparent.

Executing Strategy

Once the engagement plan is complete, just remember, it is not complete; it never is. What it has done is given the SAO a clearly defined destination and a road map to get there. However, as the SAO gets caught up in the "tyranny of the in box," it is easy to introduce drift into its navigation system, so periodic azimuth checks are in order. It is probably sufficient to perform a major strategy review once or twice a year; doing it more frequently would not allow enough events to transpire to give visibility to long term trends. However, quarterly assessments of how effectively and efficiently the SAO is executing its strategy are a good idea.

Another benefit to this way of operating is that it promotes good communications within the embassy, and the country team is more likely to become an organism that is capable of learning. Periodic formal or informal discussions have more utility, and information that previously might have been ignored or dismissed will now be seen for its true significance. Also, it is simply more fun and intellectually more satisfying to operate this way.

The whole point of this article is to urge SAOs to make strategic thinking an institutionalized way of doing business. The engagement plan is simply a pivot point for this process. If we remain slaves to our in-box, if we do not form the habit of discussing our potential plans and objectives with people who count, if we do not take the time to figure out exactly where we want to go, and if we do not periodically assess our azimuth and rate of advance, we inevitably become opportunists who walk blindly into unknown territory. We may experience success or we may suffer setbacks, but either way it will not be because we knew what we were doing.

About the Author

Captain Rubel, a native of Rockford, Illinois, is currently Deputy Dean, Center for Naval Warfare Studies. He received his commission from the NROTC Unit at the University of Illinois, where he graduated in 1971 with a bachelors degree in psychology. He earned his Naval Aviator wings in 1973 and reported to Attack Squadron 66 at Cecil Field, Florida after six months of A-7 Corsair II training. On this tour he participated in 6th Fleet operations aboard USS Independence (CV-62) during the 1973 Yom Kippur War and the Cyprus Crisis in 1974. In 1976 he became an instructor pilot in Attack Squadron 174.

Reporting to Commander, Carrier Air Wing SEVEN as the staff Landing Signal Officer, he made two cruises aboard USS Dwight D. Eisenhower (CVN-69). During the second cruise, the ship-air wing team was deployed to the Indian Ocean for eight months in support of U.S. policy in the 1980 Iranian Hostage Crisis.

Selected to attend the Spanish Naval War College in Madrid, Spain, Captain Rubel attended the Defense Language Institute for seven months of Spanish instruction and subsequently spent a year in Spain studying the Spanish way of war.

After A-7 refresher training, Captain Rubel reported to Attack Squadron 86 as a department head. Deploying to the Mediterranean aboard USS Nimitz (CVN-68), he participated in naval operations in conjunction with the TWA Flight 847 crisis.

In 1985 Captain Rubel began a year of study at the U.S. Naval War College in Newport, Rhode Island. After graduation, he remained on the faculty until June, 1988.

Selected for command, Captain Rubel underwent six months of F/A-18 training at NAS Cecil Field and reported as Executive Officer, Strike Fighter Squadron 131. He assumed command in June, 1990. Again embarked in USS Eisenhower, his squadron participated in the early deterrent operations during Operation Desert Shield. He relinquished command in September 1991 and again reported to the Naval War College faculty, where he served until June, 1996.

From June, 1996 to June, 1998 he served as Inspector General, U.S. Southern Command. Upon completion of that assignment he returned to the Joint Military Operations faculty of the Naval War College where he holds the Colin Powell Chair of Joint Warfare.

Success!
Security Assistance and
Its Impact in Croatia, 1995-2000

By

Major Kristan J. Wheaton, USA,
U.S. Embassy, The Hague,

In January, 1996 the Croatian military clearly and overwhelmingly supported former Croatian President Franjo Tudjman and his monolithic party, the Croatian Democratic Union (HDZ). From the average Croatian soldier's point of view, there were good reasons for this support. Through its near total control of the press, the HDZ had managed to convince most of the military and many of the civilians in Croatia that the HDZ, and only the HDZ, could efficiently govern Croatia and effectively represent its interests abroad. It was, at that time, nearly unthinkable that, in the event of a crisis, the HDZ would not be able to count on the support of the Croatian military.

By January 2000, the situation had changed dramatically. The economy, damaged early by the loss of the large free market represented by the former Yugoslavia, and continually over the years by a lack of capital investment and the mismanagement of both the government and of the so-called Croatian "Tycoons", was in crisis[1]. Internationally, Croatia had been excluded from Partnership for Peace and the World Trade Organization. It found itself at constant odds with the International Criminal Tribunal over war crimes issues and with the rest of the international community over its failure to completely fulfill its obligations under the Dayton Accords. Foreign businessmen considered Croatia one of the most corrupt places in the world.[2]

With the death of former President Tudjman in December, 1999 and the onset of regularly scheduled parliamentary elections in January and February, 2000, the Croatian people found themselves with an historic opportunity to disown the isolationist and nationalistic policies of the past decade and to move towards integration with other western democracies. It was an opportunity they took. Polls prior to the election consistently showed the HDZ falling from favor (even while Tudjman was alive). By the time of the elections, an overwhelming HDZ defeat seemed imminent and this time, at least, the polls did not lie: HDZ representation in the Sabor (Croatia's parliament) fell from 59 percent to 29 percent of the available seats.[3] The newly elected president, Stipe Mesic, came from the Croatian People's Party (HNS) and, for the first time in ten years, the opposition, with the Social Democrat Ivica Racan as Prime Minister, took control of the government. The HDZ has continued to disintegrate. Three HDZ members of parliament recently joined the Democratic Center (a splinter group of the HDZ) and in recent municipal elections in Zagreb the once ruling party garnered only 11 percent of the vote.[4]

Before, during and after this crisis in the then ruling party, the Croatian military did a remarkable thing: nothing. Despite calls from some right wing extremists for a coup[5], the Croatian military stayed on the sidelines and refused to get involved in domestic politics. While this sort of behavior is expected in western democracies, it is not the norm in countries transitioning from authoritarian rule. In fact, the exact opposite is commonly true. Generally speaking, an accommodation with the military is one of the essential pre-conditions for a successful transition[6], making the Croatian military's professional respect for the political process even more remarkable.

This significant achievement was not accidental. In fact, the U.S., along with some NATO allies and, interestingly, the Croatians themselves, have devoted substantial resources to the professionalization of the Croatian military since 1995. It is clear that the Croatian military's lack of a role in the recent elections was due to a number of factors, including diplomatic pressure by the international community. It is equally clear, however, that security assistance activities sponsored by the U.S. and its allies designed to educate and de-politicize the Croatian military contributed materially to the success of a conscious policy of positive military engagement. The rest of this article will be devoted to examining the resources contributed and the way in which those resources were used to help support this environment of change.

The United States was the first to provide resources to the Croatian government for the professional education of its military and remains by far the largest single contributor of resources and full time personnel to security assistance and other engagement activities.

The U.S. has a broad definition of "engagement". Ship visits to Croatian ports, visits by senior officers and admission to U.S. service academies[7], among others, are all considered to be part of a comprehensive strategy designed to promote regional stability and democratization.[8] More specifically, these efforts are designed to "support U.S. efforts to ensure self-sustaining progress from the Dayton Process" and "develop military institutions in the Former Yugoslavia adapted to democratic civilian control".[9]

The United States efforts in country were focused by Ambassador William Montgomery's "Road Map to Partnership for Peace".[10] More importantly, however, the U.S. defense attaché's office was made responsible for synchronizing the entire U.S. engagement effort in Croatia.[11] While the U.S. attaché's office only managed a few of the U.S. engagement activities directly, it significantly influenced the success of all of the activities. The presence of a high-level engagement "czar", the attaché, both protected the programs (by building a successful working relationship with Croatian senior leaders) and multiplied their impact (through careful coordination).

Direct U.S. to Croatia military training assistance grew from $65,000 in fiscal year 1995 to $500,000 in fiscal year 2000. This money was provided to Croatia through the Congressionally authorized International Military Education and Training (IMET) fund. The U.S. trained over 190[12] Croatian military and civilian personnel at military training facilities during this time frame in the U.S. and trained several hundred others during one-two week training seminars conducted in Croatia. IMET money also paid for the establishment of three sophisticated language laboratories. The Croatian Military School of Foreign Languages is now capable of producing nearly 150 fluent English speakers annually. The total cost of the IMET program in Croatia to the U.S. since 1995 has been nearly $2 million.[13] The Defense Security Cooperation Agency, in collaboration with the U.S. European Command, supported two full-time personnel to assist the Croatian military with scheduling and executing IMET funded training since 1997.

In addition to IMET funded activities, the U.S. European Command sponsored a four person Military Liaison Team (MLT) in Croatia under the Joint Contact Team Program (JCTP). The team began operations in 1996 and has conducted nearly 300 events to date[14] designed to present the U.S. armed forces as a role model of a capable military under effective civilian control.[15] Joint contract team program events differ substantially from IMET funded training. The JCTP is prohibited from conducting training and must restrict its activities to familiarization and orientation type events. Participants are not required to be fluent in English, and the events

normally last less than a week (versus IMET funded courses which normally last several months). That said, JCTP funded events played an important role in exposing a large number of Croatian military personnel to democratic norms and expectations.[16]

The U.S., along with Germany, also supported the Marshall Center in Garmisch, Germany. The Center is designed to support higher security and defense learning for foreign and security policy officials.[17] Croatia sent over forty members of its Ministry of Defense and General Staff to the Marshall Center for training since 1995.[18] According to the U.S. State Department, this effort cost the U.S. nearly $350,000 in 1999 and 2000 alone.[19]

In addition to the Marshall Center, Germany began providing direct training opportunities to Croatia in its military schools in 1999. Since then twenty-three officers have been educated in German military schools and thirty officers have completed familiarization or orientation events, making Germany the second largest provider of western style training to the Croatian Ministry of Defense. Total aid, paid out of the defense budget of Germany to Croatia, has been approximately $2 million. Finally, Germany, as well as all other NATO attachés, participated in monthly meetings of the NATO attaché corps in Zagreb. While these meetings covered a broad range of topics, they provided a regular opportunity to plan and de-conflict engagement activities of the various NATO allies.

France also provided a significant level of training. Beginning in 1998 with the signing of a bilateral cooperation agreement, the French established a program which saw thirty-one[20] officers graduate from schools such as the French War School as well as international courses in a variety of subjects.

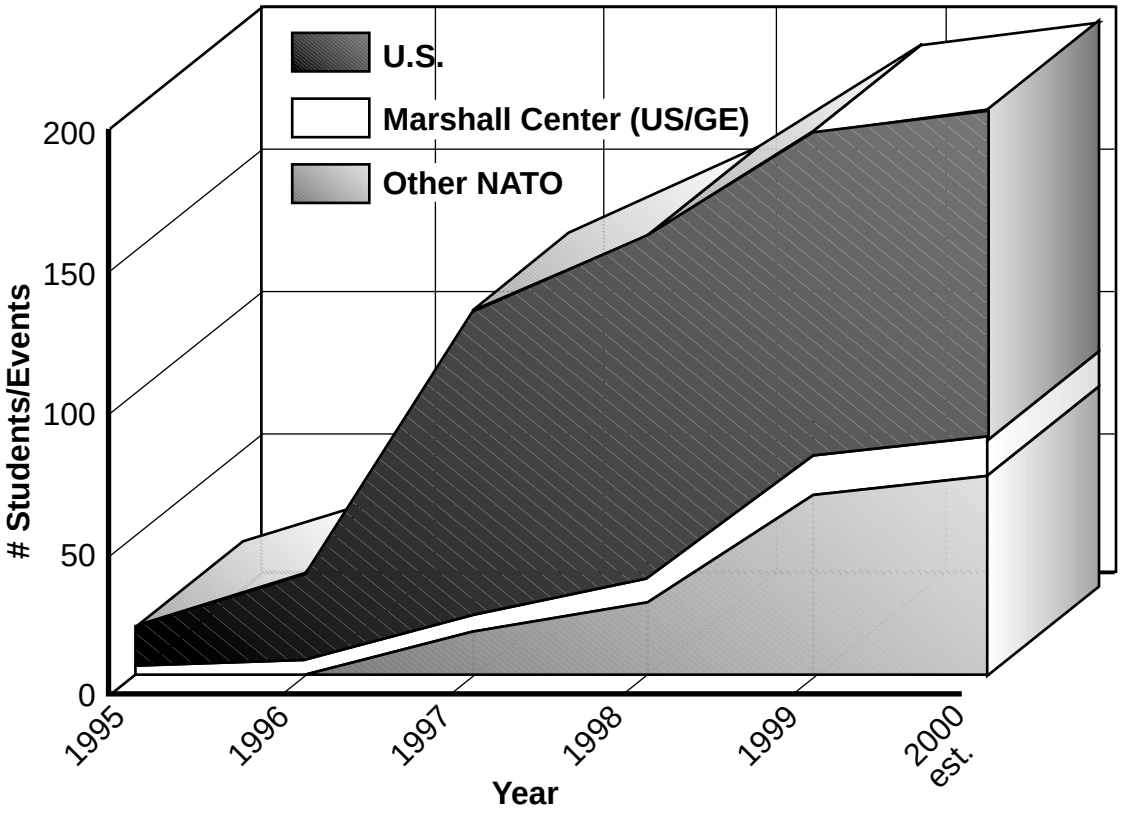
In line with previous agreements between Turkey and Croatia, twelve Croatian officers have attended Turkish schools since 1999. The United Kingdom has also supported the Croatian military. Since 1997, when the United Kingdom began working with the Croatian military on arms control (in particular in relation to the Dayton Accords), some forty-five Croatian students have been sent to the United Kingdom for English language instruction. In addition, the U.K. has sponsored seminars on a broad variety of topics, including the arms-control provisions of Dayton, military law, and the military and the media.

Italy has limited its training opportunities to one person per year at the Italian Naval Academy and to an exchange of observers during national exercises but expects, due to its May 19, 2000 signing of an agreement on defense cooperation, to increase the level of activities. Italy is currently the lead nation for implementing Partnership for Peace with Croatia.

Other NATO allies have also provided exposure to Western military practice to the Croatian military through direct training and other activities. According to the Office of International Peacetime Engagement Activities within the Croatian MOD, Poland, Hungary, Spain and Norway also provided limited support to the Croatian military.

Interestingly, between 1995-2000, Croatia itself dedicated a significant level of resources to professionalizing and modernizing its military. For example, Croatia has had a policy of paying for the travel and living allowance of all students sent abroad. In the case of the U.S. IMET program, this had the effect of tripling the money available for training in the U.S. According to the Croatian Office of International Peacetime Engagement, Croatia will spend over two million dollars in 2000 of its own money supporting training activities abroad. Over eighty percent of that

money will be spent supporting U.S. training and other engagement activities. Croatian Minister of Defense, Jozo Rados, recently recognized the value to the Croatian military of education in U.S. sponsored schools. He also confirmed his commitment to continue Croatia's support for U.S. training in the future.[21]



Such a large degree of support would seem counterproductive to a regime intent on maintaining absolute control over its military. However, in 1995, when the first, very modest, U.S. program began, Croatia had a political need to confirm its relationship with the West and a military need to train the largest number of officers possible.[22] According to the Plans and Policy Department of the Ministry of Defense, the military budget at that time was nearly $1.4 billion[23] and the investment of approximately $130,000 was likely viewed as politically prudent.

By the late 1990s, however, this policy was in the process of quietly backfiring. The Tudjman regime was at odds with the international community on virtually every point except military to military cooperation. Reducing the level of support at that time would have sent an extremely negative political signal. At the same time, the rapid growth of the programs coupled with a strict adherence to entrance standards[24] effectively de-politicized the process of selection of candidates for training. Even in those cases where "politically correct" candidates met the rather stringent entrance criteria, the exposure offered by schooling abroad clearly widened their perspectives and deepened their understanding of western expectations. Finally, upon return, over 95 percent of those trained at U.S. military institutions remained in the military (due primarily to the nearly twenty percent unemployment rate in the Croatian economy) allowing these new perceptions to be rapidly transferred throughout the military.

As a critical mass of trained officers and NCOs began to return from training abroad, U.S. military personnel began to find common ground with an increasing number of Croatian soldiers. Every major command, every sector of the general staff, every directorate in the Ministry had, by the end of 1999, someone who had attended training abroad.

Beginning in 1997, the United State's security assistance office was also able to evaluate the impact of all engagement programs (not just IMET). Areas where the U.S. believed it had provided adequate resources for Croatia to move in the direction that it had said it wanted to go were clearly identified as a result of this evaluation process. More importantly, Croatia was then held accountable for using those resources efficiently. Not only were officers trained in the U.S. expected to be used in positions commensurate with their new skills, but also systems in transition were expected to move towards western norms, a goal the Croatian MOD stated publicly and consistently but which it had often ignored in practice.

An example of where detailed accountability made a clear difference occurred in late 1998. At that time the U.S. was able to state unequivocally to the MOD that it had trained over 100 Croatians in modern defense resource management techniques[25]. It was clear to both Croatian and U.S. officers that this was sufficient for the MOD to move forward towards a more efficient and transparent budgeting process - a goal that the MOD had publicly espoused but which had met with considerable resistance from within. Faced with this accounting (as well as significant diplomatic pressure), the hard-liners were forced to acquiesce. Shortly thereafter the MOD issued its most transparent and detailed budget to date.

By the time of the elections in early 2000, the Croatian military was well on its way towards mentally transforming itself, with bilateral assistance from the U.S. and others, into a modern, civilian controlled, democratically oriented military. By seeking no role and by having no impact on the Croatian national elections, the Croatian military passed its first great test as a peacetime army.

It is clear from the Croatian example that security assistance activities can provide a powerful lever for change. The Croatian example also demonstrates that it is not enough to merely "do" security assistance. The process must be coordinated with other engagement activities. Furthermore, an evaluation process that identifies areas where a country has received sufficient resources to move in a direction it has publicly (if not internally) decided it wishes to go is also plainly crucial to success. Equally important, however, is a willingness and an ability to hold a country accountable for the efficient use of the resources provided. It is the presence of these critical factors, among others, that has helped make the Croatian story a success story.

About the Author

Major Kristan J. Wheaton is a Foreign Area Officer for the United States Army currently stationed at the U.S. Embassy, The Hague where he works on war crimes issues. Before his current assignment he was the Chief of the Office of Defense Cooperation in Zagreb. The opinions expressed in this article, however, are his and do not reflect the official position of the U.S. Department of Defense, Department of State or any other department or agency of the United States government.

End Notes

1 R Lang, "Privatization, Market Structure and Competition: A Progress Report On Croatia", *Ekonomski Pregled* (Zagreb: Hrvatsko Drustvo Ekonomista, 1994), No. 11-12, p.780. Also see the Business Central Europe website on Croatia at http://www.bcemag.com.

2 Croatia placed 74th of 99 countries in Transparency International's 1999 Corruption Perception Index. See Transparency International's web site at http://www.transparency.de.

3 "Triumf Hrvatskih Gradjana", *Nacional* (Zagreb, February 5, 2000), p. 2.

4 Goran Vezic, "Croatian Extremists on the March", *Balkan Crisis Report* (Institute of War And Peace Reporting) May, 16 2000: http://www.iwpr.ac.psiweb.com/index.pl5?archive/bcr/bcr_20000516_1_eng.txt.

5 Drago Hedl, "Tudjman's Deputies at War", *Balkan Crisis Report* (Institute of War and Peace Reporting), October 18, 1999: http://www.iwpr.ac.psiweb.com/index.pl5?archive/bcr/bcr_19991018_1_eng.txt.

6 Guillermo O'Donnell and Phillippe C. Schmitter, *Transitions from Authoritarian Rule: Tentative Conclusions About Uncertain Democracies* (Baltimore: Johns Hopkins Press, 1986), p. 25.

7 12 students have been admitted to the U.S. service academies. The first graduated in May 2000.

8 See http://www.state.gov/www/budget/fy2001/fn150/forops_full/index.html for further details of the objectives for international assistance from the U.S. to Croatia.

9 *Strategy of Readiness and Engagement* (Stuttgart, Germany: U.S. European Command), April 1998, p.2.

10 For the full text of the speech, see http://www.usembassy.hr.

11 One of the best examples of this coordination process was the establishment of the Military Engagement Council. Jointly chaired by the U.S. Defense Attaché and the Croatian officer in charge of strategic plans and policy, the council consisted of all Croatian and U.S. officers directly involved in planning and coordinating engagement activities.

12 1995 - 11; 1996 - 14; 1997 - 37; 1998 - 45; 1999 - 48; 2000 - 35 (to date).

13 1995 - $65,000; 1996 - $200,000; 1997 - $325,000; 1998 - $425,000; 1999 - $425,000; 2000 - $500,000. The numbers here represent only the original allocation of funds. End of year re-allocations have been excluded from the data for simplicity.

14 1996 - 13; 1997 - 68; 1998 - 74; 1999 - 67; 2000 - 60 (to date).

15 For additional information on U.S. EUCOM's JCTP Program see http://www.eucom.mil/programs/jctp/index.

16 According to the Croatian International Programs Office in the Ministry of Defense, nearly 5000 individuals (including senior MOD officials, personnel from several other ministries and members of Parliament) have attended JCTP sponsored events.

17 For more information on the Marshall Center see http://www.marshallcenter.org/table_of_contents.htm.

18 1995 - 2; 1996 - 5; 1997 - 6; 1998 - 9; 1999 - 15; 2000 - 3 (to date).

19 Full details concerning U.S. training activities in Croatia are available online from the U.S. Department of State at http://www.state.gov/www/global/arms/fmtrain/cta_af_a2gam.html.

20 1998 - 14; 1999 - 17.

21 Vesna Pintaric, "Priznanje - Rezultat uspjesne suradnje", *Velebit* (Zagreb: Ministry Of Defence), 6 April 2000, p. 8.

22 Interestingly, while the money for the programs was allocated for FY 1995, the first graduate did not return from the U.S. until 8 December 1995 - after Dayton had been negotiated.

23 *Republic of Croatia: Annual Exchange of Information On Defense Planning 1999*. Vienna: Organization for Security And Cooperation in Europe 1999), Annex 8.

24 Students applying for admission to U.S. military training institutions, for example, must take a test of English language ability and must meet rank, education and medical requirements before he or she can be sent to the U.S.

25 Over 80 were trained in Croatia through two resource management seminars conducted by the Navy Postgraduate School's Defense Resource Management Institute (DRMI). The remainder were also trained by DRMI but at their much more detailed courses offered in the U.S.

The Technology Transfer Pyramid and How to Climb It

By

Charles G. Jameson,
Northrop Grumman International

[The following is an excerpt from *The Export Bulletin*, published by Northrop Grumman International, Export Management Department, from the July 2000 edition.]

International business accounts for a substantial and growing portion of Northrop Grumman's overall revenues. Many of our company's international initiatives tend to involve the higher end of the technology spectrum, as demonstrated by programs such as Directional Infrared Counter Measures (U.K.), and Wedgetail (Australia). During the past decade the importance of technology transfer as a key discriminator for winning international programs has become increasingly significant. Major international programs initiated during the period 2000-2010 are expected to focus largely on the sale and/or joint design and development of non-U.S. inventory end items, including software. Such programs will involve significant levels and amounts of U.S. technology transfer together with increasing use of high-end foreign technologies in products designed for use by U.S. as well as foreign forces. Accordingly:

> Our ability to obtain the export licenses and other authorizations necessary to support required levels of technology transfer in major international programs is a dey determinant of Northrop Grumman's ability to compete effectively in the global marketplace.

All major international programs involve a range of information and know-how applicable to each of the elements of hardware and software included in the program. These may be illustrated by a pyramid based upon an ascending degree of sensitivity, as follows:

To successfully "climb" the technology pyramid requires a thorough understanding of the complex interrelationships between each of the depicted categories and the program's hardware and software elements, along with a sound comprehension of applicable U.S. government releasability policies and guidelines.

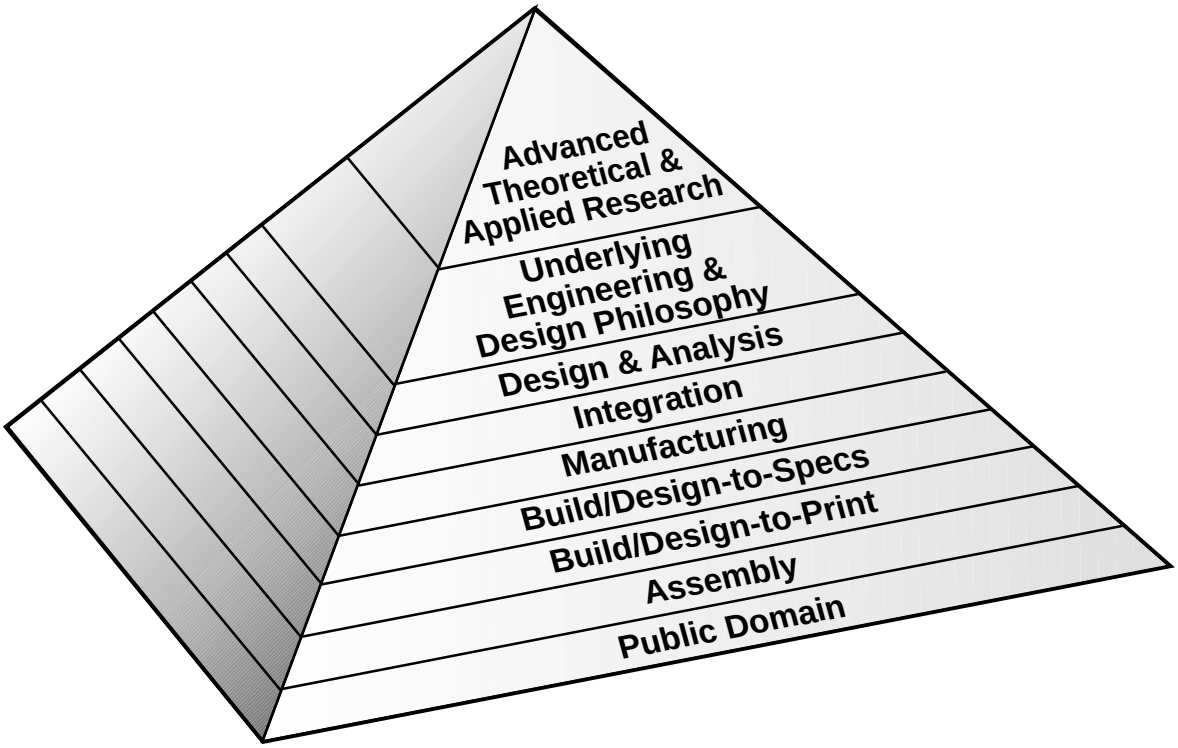
In climbing the technology pyramid adherence to the following principles will result in:

- Faster processing
- Fewer limitations and provisos
- Avoidance of returns without action or outright denials:

Principle #1: Divide the technology into portions appropriate to program phases.

For example, release of sensitive classified information during a program's marketing phase normally will not be supported by DoD. Following source selection, technology transfer may be accelerated to an extent consistent with several factors, including the recipient country's degree

of program commitment, its status as friend or ally of the United States, and its capability and willingness to provide necessary protection against technology diversion.



Principle #2: Break up the technology flow in a manner designed to protect those elements of greatest concern to the U.S. government.

For example, weapons systems can be broken down into assemblies, sub-assemblies, components, parts, etc. In proceeding along this descending order of aggregation items may be segregated according to their sensitivity/releasability. Those deemed less sensitive (based on proprietary and/or national security considerations) may be appropriate candidates for a suitable level of technology transfer. Clearly state in applications what is being proposed for transfer and what is not.

Principle #3: Anticipate U.S. government limitations and provisos and pre-empt them.

How? By providing clear and compelling justification. Note that the ability to do so presupposes thorough and accurate knowledge of U.S. government perceptions of technology sensitivities, as reflected in the Militarily Critical Technologies List (MCTL) and system-specific releaseability guidelines.

Principle #4: Prepare a quality license/agreement application.

Explain clearly what you intend to do and with whom you wish to do it.

Explain why you wish to do it (benefits to the United States, e.g., interoperability, supports NATO DCI, supports Joint Vision 2020 objectives; benefits to the customer, e.g., interoperability,

enhanced capability, R&M improvements; benefits to Northrop Grumman, e.g., technology acquisition, jobs, income).

Avoid vague language (leads to question: What are they trying to hide?)

Make the application as reviewer-friendly as possible by avoiding unexplained acronyms and use of poor grammar.

Provide all information required by the ITAR.

Consider up front the need for an exception to the National Disclosure Policy.

Consider up front the need for Congressional notification (required for all programs involving foreign manufacture of Significant Military Equipment; also must consider dollar value thresholds applicable to Major Defense Equipment and all other defense articles and defense services).

Pre-brief U.S. government officials responsible for reviewing application for export authorization.

Prepare, as necessary, a Technology Control Plan and a Technology Transfer Control Plan, and discuss them with ODTC and DTRA, respectively.

About the Author

Charles G. Jameson is the Corporate Director of Export Management for Northrop Grumman Corporation, located in the Company's Washington Office.

Prior to his employment by Northrop Grumman in 1997, Jameson served in the Defense Security Cooperation Agency's Weapons Systems Division as Manager, Technology Programs, IMET Program Coordinator, and Country Director for numerous countries in the Far East and Latin America regions. From 1972-1975, he served as an assistant director of the U.S. military assistance program and also participated in managing the Military Assistance Service Funded program for the Republic of Vietnam.Other major projects Mr. Jameson was responsible for managing during his tenure at DSCA included military support for Cambodia's armed forces and friendly forces in Vietnam, several major coproduction programs, emergency support for Israel during the 1973 war, and the Japanese FS-X aircraft development program.

From 1968-1971, he served as a U.S. Navy officer aboard the USS Sacramento (AOE-1) during three deployments to Southeast Asia.

Mr. Jameson attended Cornell, Adelphi and Princeton Universities. His civilian awards included the Secretary of Defense Medal for Meritorious Civilian Service and the Republic of Korea's Order of National Security Merit.

Technology Control Plan

By

Michael Swansburg,
U.S. Security Professional

[The following article is a reprint from the *Counterintelligence News and Developments*, Volume 1, March 2000.]

Introduction

As more U.S. contractors are expanding from their traditional roles in the U.S. government arena into commercial ventures, they are increasing their contacts with foreign entities. These contacts take the form of joint ventures, joint research, hiring foreign national employees, and hosting foreign visitors. In addition, international inspections associated with agreements such as the chemical weapons treaty and the international standards protocols can expose companies to visits by foreign technology experts. By expanding their contacts with foreign entities, U.S. government contractors are increasing their vulnerability to the potential loss of classified, proprietary, and export-controlted information. The implementation of a technology control plan can significantly mitigate this increased vulnerability.

Technology Control Plan

A technology control plan (TCP) stipulates how a company will control its technology. The plan establishes procedures to protect classified, proprietary, and export-controlled information; to control access by foreign visitors; and to control access by employees who are non-U.S. persons. A TCP is a type of security countermeasure frequently overlooked by companies in the rush to secure business in the international marketplace. The *National Industrial Security Program Operating Manua*l (NISPOM) and the *International Traffic in Arms Regulations* (ITAR) may require a TCP under certain circumstances. Thus, your TCP should contain procedures to control access for all export-controlled information.

What should be in a TCP?

A TCP should consist of the following six parts:

- Description of information to be protected. All employees of a company should know what they are required to protect. Although classified information is marked with classification caveats on each page, proprietary information, trade secrets, and export-controlled information are not always well marked or otherwise identifiable to company employees. This could result in the loss of valuable information or an export violation simply by not knowing what to protect.

- Specific measures to control access within the facility. These measures may include badges, escorts, segregated work areas, etc.

- Procedures for control of access to equipment. The act of physically removing classified, proprietary, or export-controlled information from company facilities presents the greatest risk of getting caught by someone who may be attempting espionage. To limit personal

risk, unscrupulous individuals may attempt to use electronic processing and communications devices to facilitate the transfer of massive amounts of data in a short period of time. For this reason, access to equipment such as fax machines, copiers, and automation information systems should be controlled.

- Indoctrination. Once a TCP has been approved, company personnel, including non-U.S. employees, should be trained in their responsibilities. Remember, the definition of a trade secret under the Economic Espionage Act of 1996 states that the owner thereof has taken reasonable measures to keep such information secret. Therefore, as an additional measure, the company imposed penalties for loss of protected information by noncompliance, negligence resulting in compromise or actual theft should be included in the training session and spelled out in a company document.

- Certification signed by non-U.S. persons. Once non-U.S. employees have been briefed about their responsibilities, they should sign an agreement with the company that they will comply with the security requirements imposed by the company. The agreement should also state what the implications are for not complying with the security requirements. This will eliminate any argument by the individual if caught doing something wrong and using "I didn't know" as an excuse for their actions.

- Designate a company employee responsible for monitoring TCP activities. Finally, someone in the company needs to be responsible for TCP oversight. If a specific employee is not made responsible for monitoring the TCP, it will probably not be adhered to and become an ineffective security countermeasure.

Requirements

Situations involving foreign visitors, foreign employees, joint ventures, and research in which a U.S. government contractor may be required to implement a TCP are listed below:

- Foreign visitors. The contractor shall establish procedures to ensure that foreign visitors are not afforded access to classified information and other export-controlled technical data except as authorized by an export license, approved visit request, or other exemption to the licensing requirements (NISPOM Paragraph 10-507d).

- Foreign employees. A TCP is required to control access by foreign nationals assigned to, or employed by, cleared contractor facilities unless the cognizant security agency (CSA) determines that procedures already in place at the contractor's facility are adequate. The TCP shall contain procedures to control access for all exportcontrolled information. A sample of a TCP may be obtained from the CSA (NISPOM Paragraph 10-509 and ITAR Section 126.13(c).

A TCP approved by the CSA shall be developed and implemented by those companies cleared under a voting trust agreement, proxy agreement, special security agreement, and security control agreement or when otherwise deemed appropriate by the CSA. The TCP shall prescribe all security measures determined necessary to reasonable foreclose the possibility of inadvertent access by non-U.S. citizen employees and visitors to information for which they are not authorized. The TCP shall also prescribe measures designed to ensure that access by non-U.S. citizens is strictly limited to only that specific information for which appropriate federal government disclosure authorization has been obtained - for example, an approved export license

or technical assistance agreement. Unique badging, escort, segregated work area, security indoctrination schemes, and other measures shall be included, as appropriate (NISPOM Paragraph 2-310).

- Joint ventures and joint research. Extended visits and assignments of foreign nationals to contractor facilities shall be authorized only when it is essential that the foreign national be at the facility pursuant to a contract or government agreement (for example, joint venture, liaison representative to a joint or multinational program, or direct commercial sale) (NISPOM Paragraph 10-508a).

The applicable CSA shall be notified in advance of all extended visits and assignments of foreign nationals to cleared contractor facilities. This notification shall include a copy of the approved visit authorization or the U.S. government export authorization arid the TCP (NISPOM Paragraph 10-508c).

Conclusion

Access by foreign nationals to U.S. government and commercial contractor facilities greatly increases the risk of losing classified, proprietary and export- controlled information. The security countermeasures a company puts in place should be tailored to its operations and to the specific threats identified. Counterintelligence organizations can help identify specific threats. A TCP is a good security countermeasure for mitigating vulnerabilities associated with these increased risks. In many cases, a TCP will be required and in other cases it is just sound business practice for the company to implement a TCP. Whenever you feet a TCP is either require or right for your company, a trained security professional can help you develop the right plan.

About the Author

Michael Swansburg is a security professional with over twenty years of counterintelligence and industrial security experience as a military intelligence officer and government civilian.

Affordable Acquisition

By

Gil Watters
Department of Defence of Australia

[The following is a reprint of Gil Watters speech presented to the Third International Acquisition/Procurement Seminar-Pacific in Singapore, September 18, 2000. This conference was co-hosted by the U.S. Defense Systems Management College and Singapore's Defence Science and Technology Agency. Watters based his speech on information from a public discussion paper published by the Australian Department of Defense: *Defence Review 2000 - Our Future Defense Force*, June 2000.]

In reflecting on my previous presentations to earlier conferences I now realise that over the last three years I have made them in the wrong order starting with the specific and now focusing on the strategic. I will deliver today the presentation that I should have made at the start, because what I want to talk about today is the essential first step in all acquisition. I have titled my presentation *Affordable Acquisition*. It is about the process by which governments, as both the owner and customer, determine the sorts of defence forces that they require their materiel organisations to build to meet future challenges.

I am fortunate to have a case study. What I will use to assist me is the review of defence policy that is now occurring in Australia ahead of the release of a new Defence Policy Paper towards the end of this year.

The Australian government is conducting a fundamental review of its defence policy. Such reviews are published every three or four years, but a review of the current depth has not occurred since the mid 1980s. In the intervening decade and a half there have been fundamental changes in our strategic environment, increasing cost pressures on the defence organisation and important changes in military technology. The government has embarked on a new approach to making defence policy the government has decided that all Australians should have an opportunity to contribute their views on the important defence choices that we face. In the past, input into such cabinet level decisions had been confined to ministers and a select group of defence experts. The aim this time is to be more open about the business of making defence policy and for the Australian community that pays for defence to have its say. The government has set about to encourage a vigorous, challenging and constructive discussion.

On 27 June the Prime Minister and the Minister for Defence released a public discussion paper *Defence Review 2000 - Our Future Defence Force*. The discussion paper is being presented to the community by a team chaired by the Hon. Andrew Peacock, a former Minister for Foreign Affairs and ambassador to the United States, two retired senators, one from each of the main political parties, and the Chair of the Returned Services League's Defence Committee.

The discussion paper and consultation program being coordinated by Mr Peacock will play a valuable role in informing the community about our defence needs and assist the government in producing the Defence Policy Statement towards the end of this year. The review will focus on the big issues and the key choices that shape our military capabilities. It will take into account

financial and strategic realities. Given that there are limits to what any government can realistically afford to spend on defence, some difficult policy choices have to be made.

The discussion paper asks:

- What do we want our armed forces to be able to do?
- Where do we want our forces to be able to operate?
- What is the best way to structure the defence force?
- What is the best way to spend the defence budget?

In the remaining time that I have available I would like to rehearse with you some of the main themes of the discussion paper. While I am talking of the Australian experience, I am sure that the questions I have just posed are equally applicable to defence planning in other countries.

First, the strategic fundamentals, what is happening globally and in our region?

The discussion paper starts by questioning whether war is a thing of the past. I will deal with that quickly by observing that long-term trends in international affairs are making wars less likely, especially major wars between nations. While the international system works in many ways to reduce the risk of problems degenerating into wars, the discussion paper encourages us not to assume that major wars are passé. Whatever we think about the likelihood of wars between nations, there is no doubt that over the past few years the unique capabilities of armed forces have increasingly been used in operations other than war. This is a worldwide trend, and Australia's experience is typical.

In the fifteen years between 1972 and 1987, Australia's only substantial operational deployment overseas was to the Multinational Force and Observers in the Sinai. Between 1987 and 2000, we deployed to Fiji, Namibia, the Gulf, Somalia, Rwanda, the Western Sahara, Papua New Guinea including Bougainville, Cambodia, Indonesia (drought relief in Irian Jaya), and East Timor. In these places we have undertaken many different types of operations, including famine relief and other forms of humanitarian assistance, peacekeeping and combat operations. The pace of activity has been especially hectic in the last few years.

I know that other countries have shared our experience. Since the end of the Cold War, the range of tasks for which defence forces have been used has widened significantly, and the demands on their resources have increased. This reflects a growing willingness by governments of many countries to join collective action to address problems affecting the lives and welfare of people in distant parts of the world.

Some experts believe these trends constitute a major long-term change in the nature of warfare. Those who see a move away from large-scale wars between states suggest instead that the key tasks of armed forces in future will be a range of smaller scale operations, often against non-state adversaries. They include operations that do not necessarily involve direct conflict, such as peacekeeping, evacuations, and disaster relief.

Whether or not we believe that old-style wars have become a thing of the past, it is clear that lower-level military operations are going to be an important part of our future. It is likely that the Australian Defence Force will continue to be tasked for a wide range of demanding operations, as we have done over the past few years. This is the era of the come as you are crisis, whether anticipated or unforeseen.

Having addressed the strategic fundamentals, the next question is how to design our defence force. What do we want our defence force to be able to do? What defence capabilities do we need?

The aim of our defence planning is to select a set of capabilities that gives Australia the widest range of military options to support our strategic interests, at an affordable cost. For the defence of our own territory, we need air and naval capabilities that could deny our approaches to an adversary. For defence of our regional and global interests, we need capabilities that could contribute to a coalition with the particular circumstances deciding the nature of our contribution.

In planning our defence we start with the realisation that our defence force is only one part of Australia's wider approach to ensuring our security and prosperity. Our national security, including security from armed attack, depends in the first instance on the quality of our international relationships. Our foreign relations are, in this sense, the foundation of our national security.

Most importantly, it must be clear that Australia has a defence force determined and able to defend the country, so that we can deter any thought of attack. But it is also important to make sure we do not look threatening to others.

The discussion paper emphasised that Australia's security is closely tied to the stability and well being of our broader region. An unstable region would complicate our security by expanding the range of possible threats.

By contrast, a stable Asia-Pacific region where we can trade and cooperate with other countries will reinforce the peace. A return to economic growth in the Asia-Pacific is a positive development. But it also means that regional defence spending will start growing again.

In shaping our defence policy, no responsible Australian government could afford to plan on the basis of optimistic scenarios alone. The discussion paper highlights the need to develop policies and build a defence force that will serve us well in the widest range of eventualities.

The discussion paper concludes that we do not expect to be attacked by anyone and cannot readily foresee the circumstances under which an attack might occur, or where it might come from. Our defence planning is not based on any pre-existing threat. A fundamental decision is the weight that needs to be given in our defence planning to the remote possibility that our strategic circumstances could significantly change for the worse. If that were to happen, any Australian government would want options that gave it the best chance of ending conflict, quickly and decisively. The priority for quick resolution would favour a proactive, rather than a reactive, campaign.

This discussion on our strategic interests lends to some key choices for defence planning.

To keep defence spending affordable, considered risks and tough choices are required. I would like now to outline the main areas for those choices:

- Alliance versus self-reliance.
- Independent action versus coalition operations.
- Defending Australia versus regional commitments.
- Quality versus quantity. Current capability versus future capability.

What defence capabilities might we want?

In addressing these major issues the discussion paper examines the combination of military capabilities that give Australia the widest range of military options to support our strategic interests at affordable cost.

Capability and budget issues - how much does Australia spend on defence?

Throughout this presentation I have emphasised planning and setting the priorities. The level of defence funding is an important national choice. It needs to be balanced against other social objectives and priorities because any change in the level of defence funding affects the level of taxes or the amount of money available for other government programs. Defence receives about the same level of funding as education, but much less than health and social security.

Defence budgets are often expressed as a percentage of national wealth, or gross domestic product. Using this measure, funding for defence has declined from around 2.5 percent of gross domestic product in the mid 1980s to about 1.9 percent in 1999. This relative decline reflects the growth of the national economy at a time when defence spending has been kept relatively static. The use of gross domestic product alone can be useful for describing spending trends and making some international comparisons, but it is a poor indicator of how efficiently the money is spent. We need to take a closer look at how defence spends its budget.

Efforts to re-direct costs from the personnel area of the budget have been a hallmark of defence financial management strategies for nearly a quarter of a century. During the 1990s efficiencies worth hundreds of millions of dollars have been made from a range of reforms and put back into enhancing the combat force. These efficiency measures have helped to maintain military capability and increased readiness within a budget held constant in real terms.

The future defence force: what are the options?

Having looked at our strategic outlook, the capability choices that face us, and the resource environment, what are the options? There are three important areas in our defence spending that will influence future cost pressures. They involve judgements about the military capabilities we invest in, the number of people the Australian Defence Force should have and the priority the government puts on the tasks it wants the Australian Defence Force to be able to perform and the readiness levels required.

The trend towards increasing costs for military equipment is not new, nor is it confined to Australia. It is increasingly difficult to manage without real increases in the budget. One of the biggest challenges we face is managing the investment in a number of key capabilities over a relatively short period. As I mentioned briefly earlier, a number of our key warfighting capabilities will become technically unsupportable or no longer cost effective to maintain within a few years of each other. It may not be necessary to replace all the platforms the Australian Defence Force currently maintains, and the revolution in military affairs may present innovative capability solutions that could yield financial savings. So while we face replacement decisions, it is too early to be definitive about the total cost.

The high cost of recruiting, training and retaining our personnel will continue to present resource challenges to defence. The cost of recruiting, training and retaining our people accounts for a major slice of the defence budget. At present we spend in the order of 42 percent of our funds on personnel. This figure is not surprising. Our military capability is most critically dependent on our highly skilled and professional workforce. Personnel costs are rising each year despite a workforce considerably smaller now than a decade ago. Although there are now considerably fewer people employed in defence than a decade ago, the reductions have often been made at the lower skills end of the workforce and per capita costs have risen as a consequence.

The other major cost drive is readiness. While the immediate prospect of major war fighting operations is low, there is a prospect that the need to undertake lower level operations will add new and significant cost pressures because of the need for maintaining higher levels of readiness.

In examining these cost pressures the discussion paper concludes that if Australia is to maintain the current range of military capabilities, longer term funding would need to grow, at a rate higher than inflation. Some level of real growth would be required, at least after the scope for further efficiencies was exhausted.

The discussion paper that I have outlined for you today will raise the level of community understanding of the options. Public discussion and input is now underway. It will assist government in evaluating the options and making deliberate decisions about what is important to Australia's defence. That will depend on judgements about Australia's strategic environment and the likelihood of different contingencies occurring.

Few national activities are as consequential for a nation's long-term stability and prosperity. The planning required is extremely complex and the time frames defence strategists must consider are measured in decades rather than months. My presentation today leaves the big issues unanswered. The answers will be available when the policy paper is released towards the end of this year.

About the Author

Gil Watters entered the Commonwealth Public Service in 1973 after completing a commercial traineeship with BHP. He joined the Department of Defence in 1983 and has been a member of the Senior Executive Service since 1988. Prior to joining Defence, Gil worked in the Departments of Treasury, the Senate and the Department of Industry, and Commerce.

Watters has worked on acquisition issues for the last five years and currently occupies the position of Director General Acquisition Finance and Reporting in the Defence Materiel Organisation.

Previous SES level appointments in Defence have been in the Force Development and Analysis and International Policy Divisions. In 1990 and 1991, Gil worked as an exchange officer in the Office of the Assistant Secretary of Defence (Program Analysis and Evaluation) in the Pentagon.

On returning from the Pentagon in 1991, he worked on the Review of Higher Defence Management Arrangements. In 1996, he worked on capability development aspects of the Defence Efficiency Review.

Watters is a Fellow of the Australian College of Defence and Strategic Studies which he attended in 1995. He holds a Commerce degree with honors in economics and a post graduate qualification in Business Studies from the University of Newcastle. Watters is an Associate of the Australian Society of CPAs.

Defence Procurement in Singapore

By

Chinniah Manohara,
Director, Defence Science and Technology Agency

[The following is a reprint of Chinniah Manohara speech presented to the Third International Acquisition/Procurement Seminar-Pacific in Singapore, September 18, 2000. This conference was co-hosted by the U.S. Defense Systems Management College and Singapore's Defence Science and Technology Agency.]

Introduction

For the benefit of those who are new to Singapore, let me first introduce you to Singapore. Singapore is a small country in South East Asia, comprising about forty-nine islands and we have a land area of about 650 square km (and growing) and four million people according to a recent census report. We lack natural resources, but despite our size and resource constraints, Singapore has enjoyed government domestic product (GDP) growth rates of about 8 percent to 10 percent per annum over the past years until the regional economic downturn a few years ago. However, economic recovery is in sight and Singapore is expected to register an economic growth of about 7 1/2 percent to 8 1/2 percent this year. For the long-term, we hope to maintain a sustainable GDP growth of about 6 percent.

We operate an open economy plugged into the global market system. In line with our open policy, Singapore is also a member of the 1994 World Trade Organization (WTO) plurilateral agreement on government. We provide an environment favourable to foreign investors. We have a well-educated and trained workforce, complemented by well-developed information technology, communications and transportation infrastructure, to support business. Singapore is ranked amongst the most competitive economies in the world. Such economic progress is possible because of peace and stability, which are underpinned by a firm national security foundation. And the cornerstone of our security is a strong Singapore armed forces (SAF). Our government is therefore committed to invest up to 6 percent of our GDP in defence, and I might add that this commitment did not weaken during the economic downturn.

Given our limited resources and space constraints, the use of technology is therefore critical in giving the Singapore armed forces a qualitative edge. We acquire weapon systems that give us the same or more firepower but require fewer men (to operate the systems). To overcome the constraint of limited training resources, simulators are used extensively for training our troops, in addition to training overseas. We automate and computerise as many processes as possible to enhance efficiency and to reduce the manpower required to undertake the processes. In short, we use technology as a force multiplier.

We have adopted an approach called integrated defence development. Integrated defence development recognises that there are synergies among parts that when integrated promote better utilisation of resources. It encompasses integration of operations and technology; and integration over people and organisations in ministry of defence, SAF, the local defence industry and the academic and research institutions.

The Technological Edge

How does DSTA provide SAF with the technological edge? This is achieved through a number of different but complementary approaches.

- Customisation. We customise acquired equipment and systems and develop our own strategic equipment and systems. Customisation is both necessary and critical as off-the-shelf solutions are usually designed for other armed forces and may not fully meet local conditions and requirements. Customisation requires us to fully understand and exploit the performance limits of existing equipment and systems, and therefore enables us to maintain a strategic edge.

- Life Cycle Management (LCM) Methodology. We ensure that we spend our defence budget prudently and maximise the value of the money spent. We are concerned not only with the initial costs of acquisition, but also with the total costs of operation and maintenance over the entire life cycle. We have institutionalised a systematic life cycle management approach to weapon systems acquisition from the identification of a need to the retirement of the system. Trade-off decisions between cost, schedule and performance are made at appropriate checkpoints to ensure that the most cost-effective solution is acquired and implemented. Underlining this approach, we always consciously consider the alternative of upgrading an existing system as opposed to replacement, that is, acquiring a new system.

- Smart Buying and Systems Engineering. To the extent possible, we buy whatever meets our requirements from the market to exploit the efficiency of the marketplace. We can then improve on them at incremental effort for greatly enhanced performance. Thus, in order to be a smart buyer, we must be able to clearly define our requirements and specifications, and select the most appropriate technological solution. This requires a strong systems engineering capability. Systems engineering and integration involves the harmonisation of many state-of-the-art sub-systems into platforms, and the final weapon system is tailored to meet our requirements. Through synergistic effects, the final weapon systems' capability is more than the sum of its parts. We work closely with our strategic industry partner, the Singapore Technologies (ST) group of companies, to build up such technological capability. Examples of successful programs include the upgrade of the A-4 and F-5 aircraft and the AMX-13 tanks. Other indigenous programmes include the Patrol Vessel Programme which was undertaken without the help of external consultants. New ideas were incorporated in the application of computational techniques for whole ship-shock analysis, design of the hull, and the use of water-jet propulsion.

- Operations-Technology Integration. The tight operations-technology integration between defence engineers and scientists and their users at all levels is our competitive advantage. Defence engineers and scientists participate in SAF exercises to appreciate operational problems and provide more effective procurement and engineering support and has resulted in a shorter development cycle for complex systems.

Such close partnership has seen the successful development and introduction of several weapon systems. Recent examples include the Bionix infantry fighting vehicle which was completely conceived, designed and constructed in Singapore with our industry partner, ST Kinetic. The SAR21 assault rifle was the result of a successful collaborative effort between the SAF, DTG (now DSTA) and industry. The locally built landing ship tank is another case in point.

Procurement System

We source internationally for our weapon systems and support. We work within public sector procurement guidelines. and our procurement system is ISO-9000 certified. We subscribe to an open and transparent tender system. Our rules and objectives are clear with adequate checks and balances. We have a policy of dealing and contracting directly with all manufacturers and suppliers in the procurement of defence equipment. There is no need to use intermediaries to do business with us although some suppliers may feel more comfortable with some form of presence or representation in Singapore.

In procurement, we are guided by a simple principle to seek the most cost-effective system that meets our requirements. We encourage competition to secure the best package the market can offer. Contractors should try to understand our needs and expectations as a customer. Through our acquisition projects, we seek technology and capability to assure future support. We expect the contractor to commit to long-term support on spares and service, including prices, through blanket ordering agreements.

For major programmes, tender proposals are subject to rigorous evaluation using the analytical hierarchical process (AHP). Technical, schedule, financial, and commercial aspects of each proposal are assessed in a two-envelope system to ensure that the most cost-effective system is selected. The assurance for our contractors is that every offer is evaluated on its own merit. There is no preference for any country or source.

Defence procurement is inherently complex. Over the years, we have continuously sought to find innovative ways in our acquisition and procurement. Let me illustrate with four examples.

- Use of Commercial-Off-The-Shelf (COTS) products. Many COTS products, particularly computer hardware and software, are technologically advanced and readily available. We therefore leverage on COTS technologies and equipment for military use. The use of COTS allows systems to be regularly updated to enjoy the benefits of emerging technologies. Such applications reduce the need for customisation and shorten development cycles. They also provide better supportability and help reduce overall life cycle costs.

- Tapping on the internet. In recent years, we have witnessed the explosion of the internet and dot.com fever and the exponential growth of electronic commerce. In April 1998, we launched the ministry of defence internet procurement system (MIPS) to enable the purchase of recurrent spare parts over the net. With MIPS, the ministry of defence is able to tap directly into the international marketplace. The MIPS is a secure system that employs public key encryption technology. Suppliers who register as trading partners in MIPS are issued smart cards. The smart card serves as an identity card and fulfils confidentiality and non-repudiation requirements. With the smart card, trading partners can submit their bids and invoices directly to us. The system allows easy access and presents equal opportunity to both local and overseas suppliers to do business with us.

The MIPS is integrated into the supply chain. It is integrated with our procurement, logistics and finance systems. This facilitates a seamless process from requisition to sourcing; to placing of orders, to delivery and inventory management, to invoicing. In developing MIPS, we had taken the opportunity to streamline and re-engineer our processes. We looked beyond the internal processes to include interfaces with our suppliers. The end result was a more efficient and

effective supply chain. The challenge with e-commerce is in keeping pace with technology and maintaining its relevance and user-friendliness to our trading partners. We have already implemented three new versions since April 1998, to incorporate new and better functionalities. But we can do more. To date, we have only implemented MIPS in Singapore and the U.S. Efforts to launch MIPS in Europe have unfortunately been hampered by export licensing issues over the encryption technology till early this year. MIPS is in line with our government's drive to make Singapore an e-commerce hub. It will spearhead public procurement in cyberspace as MIPS is currently being adapted for use across the civil service of Singapore by early next year. Meanwhile we are currently deliberating how to take it to the next plane. (The MIPS website is http://www.mips.mindef.gov.sg)

- Lease-to-Own Arrangement. A lease-to-own arrangement is by itself not a novel idea. Such an arrangement confers obvious advantages to the buyer in terms of financial loading and at the same time allows the operator to enjoy use of the equipment. However, it is not a commercial practice to use such an arrangement for procurement of military equipment, especially if we are talking about fighter aircraft.

That did not stop us from exploring the option for our F-16C/D's. As expected, there were a number of issues to resolve. For a start, the U.S. government did not handle such deals before. Although significant military equipment are customarily purchased through the foreign military sales (FMS) program, special approval was given to allow us to work out a package directly with the contractor. Besides avoiding payment of the 3 percent FMS admin fee then (it is 2.5 percent currently), a commercial deal also puts MINDEF in a position to secure terms which were more favourable than under the FMS LOA. We also managed to get the aircraft earlier than would have been the case under FMS. The F-16C/Ds lease-to-own arrangement was a first in many ways. With perseverance and effort by everyone involved, the outcome was very satisfactory. For the aircraft manufacturers, they received their payments in a timely manner and for the ministry of defence, we avoided huge capital outlay up-front and trained our pilots earlier than we would have via outright purchase. We have since entered into a similar arrangement for our Chinook helicopters.

- Partnership Agreements. In the past, our relationship with our contractors had tended to take an adversarial customer-supplier relationship. Our view of our suppliers was that there were still areas for improvement in cost and quality. Our suppliers' view of us was that there were unstable workload, unreasonable price expectations, excessively tough contractual terms and inadequate funding or sharing of risks in ventures requiring capital investments. Period contracts were of relatively short duration, typically up to three years at best then. Much time was spent negotiating for renewal of these contracts. In 1993, ministry of defence decided to put in place long-term contracts for strategic requirements which addressed these issues. The first contract was for aircraft maintenance with ST Aerospace. Under the contract, we agreed to a specific baseload to enable the company to plan its resources better. Work tasks were re-packaged to facilitate better management, and mechanisms were put in place to motivate the contractor to exceed performance requirements. The results were encouraging. Among other things, turn-around times improved by about 12 percent (or about 2 months) and annual cost savings estimated at two million Singapore dollars were generated. We have since implemented many more such agreements in various areas of platform, systems and software maintenance.

We have continued to fine-tune and find ways to enhance the partnership approach. In a recent contract for design-build-and-operate mode of a central warehouse, we have adopted an open-

book approach. An external auditor will be engaged to audit the costs for the program. The contractor commits to deliver a given service level at a certain pre-agreed price. If the audited costs are lower than the projected costs, the contractor gets a share of the savings.

A mechanism is also put in place to jointly identify initiatives which would bring about better solutions and/or cheaper ways of doing things. Increasingly, we find benefit in working in partnership with contractors to address mutual concerns and arrive at a superior outcome for the end-user.

Defence Science & Technology Agency (DSTA)

Now I would like to talk about our new entity Defence Science and Technology Agency (DSTA) which I briefly spoke about during the Second IAPS(P) Seminar in Seoul, Korea.

The Ministry of Defence is by all accounts a very large ministry in Singapore. Technology is one of the three broad functional areas in MINDEF the other two being defence policy and administration. The scope of defence technology is very wide and covers policy, planning as well as implementation. While this structure had served us well in the past, it was not nimble and responsive enough to meet the challenges of the future. A decision was therefore taken to separate the core functions of policy formulation, planning and resource allocation from the service provider functions, the latter being given added flexibility and autonomy to make implementation decisions.

As a result, Defence Science and Technology Agency, which evolved primarily from the former Defence Technology Group (DTG) was formed on 15 Mar 2000. Defence Science and Technology Agency is a separate legal entity legislated as a statutory board by an act of parliament. Simply put, DSTA is an executive agent of Ministry of Defence and empowered by the *DSTA Act* passed by parliament to act on the ministry's behalf. And it retains flexibility and autonomy for its business operations, thereby positioning itself to better anticipate and respond to the changes in trends and technologies and be more effective in providing the Singapore armed forces with the strategic edge.

Mission

Defence Science and Technology Agency's mission as enshrined in the *DSTA Act* is "To harness science and technology to meet the defence and national security needs of Singapore."

Roles and Functions

Broadly speaking, DSTA has four main roles and functions. It is the procurement agency for MINDEF. It will implement the technology plan of MINDEF, and this includes the following activities as shown in the figure. Defence Scientific and Technology Agency is also the adviser to MINDEF on science and technology matters and is also responsible to promote defence science and technology in Singapore.

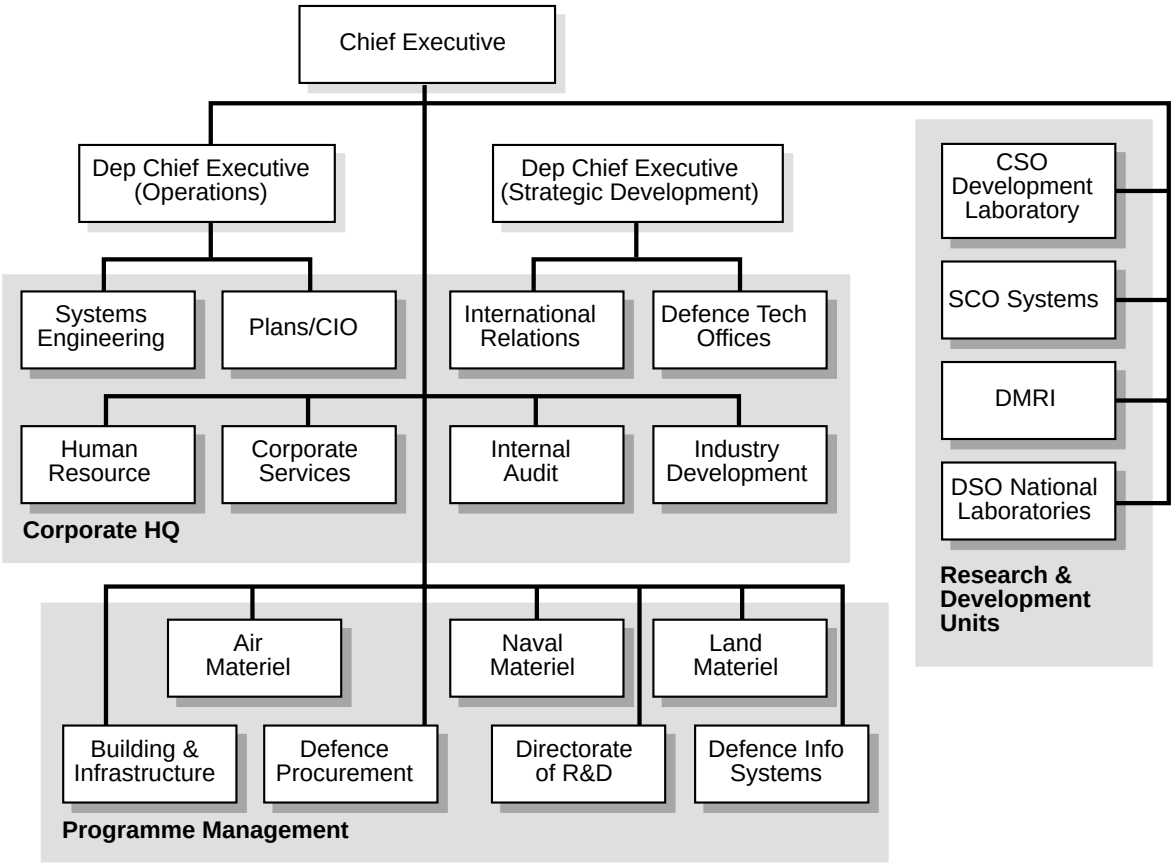
Organisation Structure

Let me now highlight some of the salient points of the DSTA organisation structure. First, there are two groups of line entities in DSTA. Program management entities and design and

development entities. This allows for a better alignment of functions ie it clearly demarcates the project acquisition management role from the "developer cum doer" or producer role especially in the C4 and IT domains.

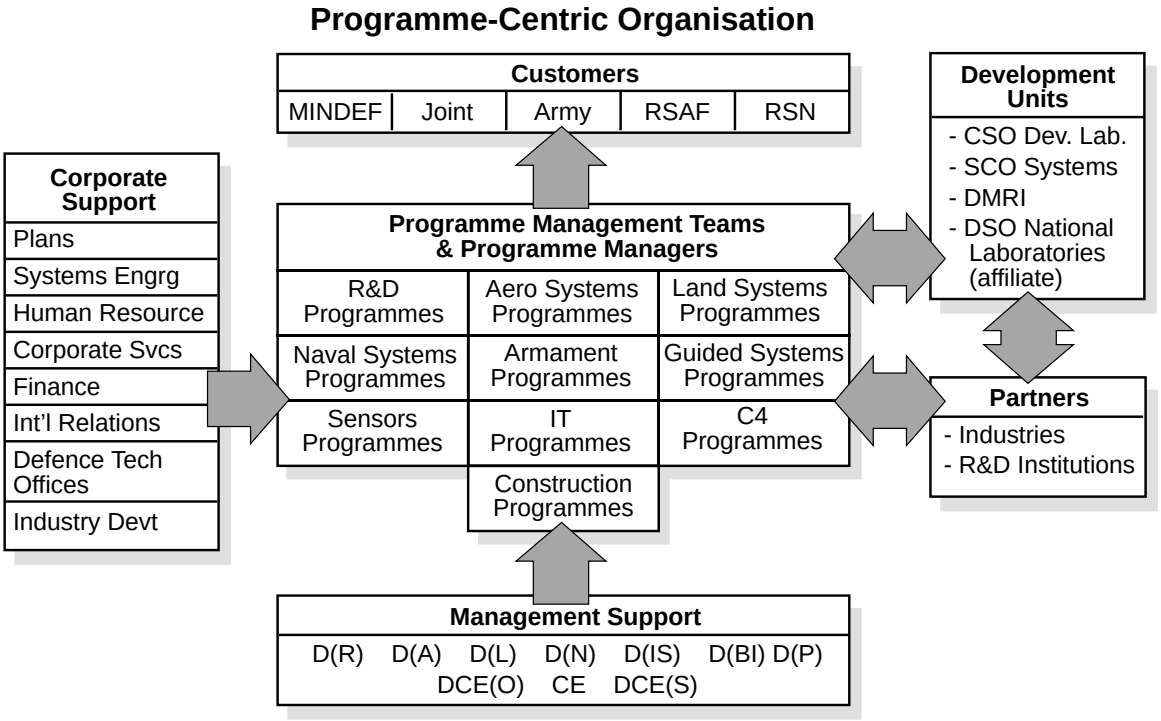
Second, we now have a flat organisation structure, though it may not be fully evident from this chart.

Organisation Structure



Third, the defence research and development (R&D) arm of MINDEF and Defence Scientific Offices National Laboratories, which was corporatised in April 1997, is now brought under the ambit of DSTA as an affiliate company. This will ensure that DSO's defence R&D remains closely integrated with the work of DSTA and facilitiate the smooth transition of technologies from R&D to full-scale development.

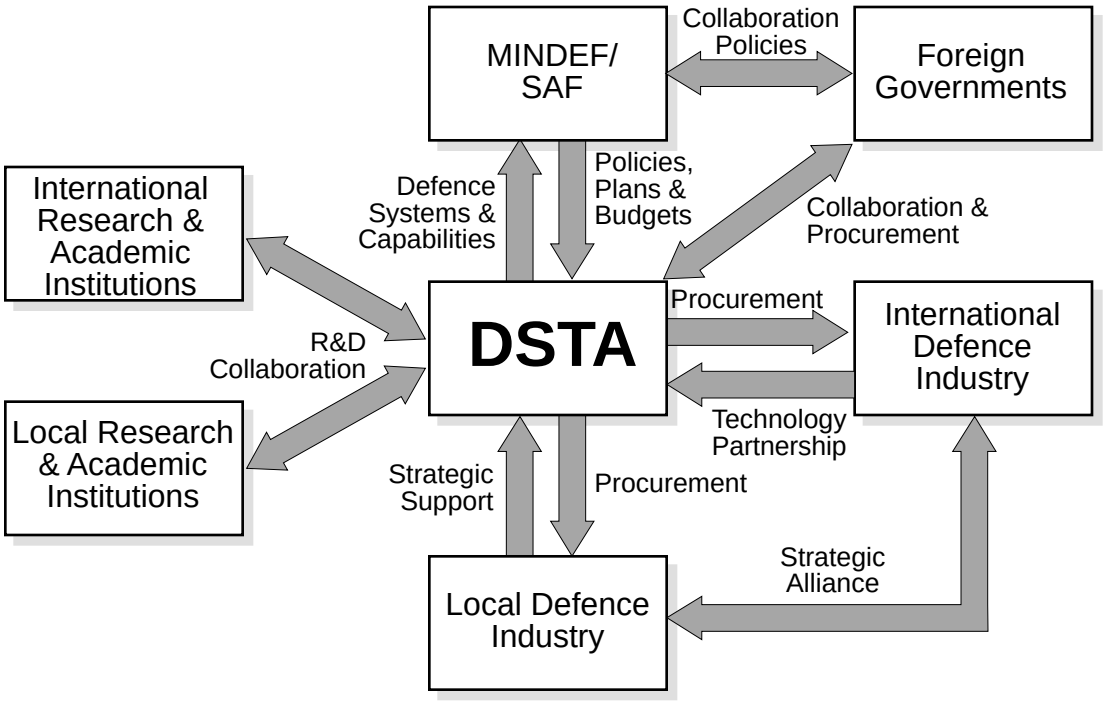
At the operational level, our structure is programcentric i.e., organized around programs and it looks as shown in the chart on the next page. The programs within the various programcentric entities shown are managed by program management teams led by program managers. These program managers are like "front-line entreprenuers" delivering products and services to their customers. They have been given greater authority to manage their programmes, and they will be directly accountable to their customers. The program management teams will also draw on the required expertise from the support organisations, e.g., contracting specialists from procurement who will be an integral part of the program management teams. Senior management's role is essentially to provide guidance and support to the program managers.



To ensure better focus and responsiveness to our principal customers, i.e., MINDEF and the joint staff and the three services, top executives have been designated as account managers or focal points for the respective customers and they are director (land), director (air), director (navy) and deputy chief executive (operations) for the Army, Air Force, Navy and MINDEF and Joint Service respectively. The development cum producer units and industry partners and research and development institutions will also interact with the program management teams as shown. I would like to draw your attention to three new entities, viz industry development whose role is to promote and foster the build-up of technological capability with strategic local industry partners and they also have a secondary role to facilitate defence export, and international relations and defence technology offices. Defence Science and Technology Agency has two overseas defence technology offices, one in Paris, France (to cover Europe) and the other in Washington, D.C. Collectively along with international relations, their role is to promote, closer technological cooperation with foreign governments and suppliers by facilitating the establishment of linkages with them. The DTOs will also assist in the coordination and resolution of project management's issues.

The chart on the next page shows Defence Science and Technology Agency's linkages with the various parties. MINDEF/SAF defines the policies and plans and also provides the resources, i.e., budgets, and Defence Science and Technology Agency delivers defence systems and capability. Defence Science and Technology Agency is the procurement arm of MINDEF and will act for MINDEF on defence procurement matters, such as tendering, equipment selection, contracting and follow-on project management activities like design reviews and acceptance. In this respect Defence Science & Technology Agency will continue to work within government procurement guidelines, and shall continue to act in the best interests of MINDEF. Defence Science and Technology Agency also supports MINDEF in the implementation of technology collaboration agreements with local and overseas partners, including foreign governments.

DSTA Linkages with External Parties



In conclusion, I would just like to say that the formation of Defence Science and Technology Agency presents us with a unique opportunity to forge and create a new dynamic and creative organisation for the defence and security needs of Singapore. With the added flexibility and autonomy, we in Defence Science and Technology Agency look forward to an environment that promotes greater initiative, innovation and entrepreneurship. Our permanent secretary, Mr. Peter Ho, in his keynote address has already outlined his vision for MINDEF in the new economy. The restructuring is only the beginning of our journey.

About the Author

Chinniah Manohara has been the Director of the Defence Procurement Division, Ministry of Defence (MINDEF), Singapore since June 1991. With the formation of Defence Science and Technology Agency in March 2000, he continues to hold the appointment of Director Procurement and is also concurrently Director Land Materiel in Defence Science and Technology Agency.

Manohara has over 29 years of experience in the full spectrum of defence acquisition i.e., technical evaluation, technical modification, logistics management, project management, contract negotiations, and contract establishment. His career in MINDEF began in March 1971 when he returned from the University of Western Australia, Perth, where he had studied mechanical engineering under the Colombo Plan Scholarship.

His early years were spent mainly in the Republic of Singapore Air Force (RSAF) where he was part of a group of engineers responsible for the engineering management of the RSAF fleet. He gradually progressed into logistics management and then project management. He

successfully managed the RSAF's E-2C program in Bethpage, New York during which he worked closely with the U.S. Navy and Grumman.

Upon his return from New York, he spent a year in the Defence Materiel Organization as assistant director, land systems, managing army projects, before taking up the Assistant Director, Defence Procurement Division appointment in July 1988, and later as director from June 1991. Since then, he has been involved in all major procurements undertaken by the Singapore armed forces and MINDEF, Singapore.

Challenges and Opportunities for U.S. Defense Companies in South Asia

By

Robert E. Hammond,
Vice President, South Asia Region Lockheed Martin Global, Inc.

[The following is a reprint of Robert E. Hammond's speech presented to the Third International Acquisition/Procurement Seminar-Pacific in Singapore, September 18, 2000. This conference was co-hosted by the U.S. Defense Systems Management College and Singapore's Defence Science and Technology Agency.]

I am here today to provide the viewpoint of an American businessman actively involved in defense procurement. Although I work for Lockheed Martin and serve on the Board of the American Chamber of Commerce here in Singapore, my views and comments are my own. With those caveats out of the way, I will proceed with what I see as the *Challenges and Opportunities for U.S. Defense Companies in South Asia*.

My overall view is one of optimism. For the most part, South Asia and particularly the ASEAN Region have weathered the economic storm, which began in 1997. Major defense modernization programs and procurements to support them, which were put on hold, are again underway. Some nations in the region, particularly Indonesia, continue to face significant challenges but they are the exception.

The military modernization in Asia is driven by the similar factors, which have been underway in the U.S. and Europe. Military forces are faced with continued and some times increasing commitments, which recently also coincided with declining budgets. The result is a desire to modernize with new equipment, which is more reliable, maintainable and requires less manpower to operate. I do not subscribe to the argument that we are seeing a blossoming arms race in the region. I believe that our customers are trying to face national security challenges with modern cost-effective solutions. The only way you can do "more with less" is by working smarter and going for reliable high technology solutions.

The United States defense industry continues to demonstrate the quality and price competitiveness of our products. On a truly level playing field, we win a vast majority of the time. Our desire is that we be allowed to compete in a fair and open market.

Factors, which affect our ability to fairly compete, are basically in three areas:

- Corruption and bribery.
- A lack of visibility as to customer requirements.
- U.S. government-imposed obstacles.

First, corruption continues to exist although to a much lesser degree than in the past. All of us, both industry and government alike, need to push for its total elimination. Internationally accepted rules need to be established that punish not reward companies that pay bribes.

Additionally, some supplier countries need to end the practice which allows bribes to be considered a tax-deductible business expense. The key to solving this is concerted international action.

Second, U.S. industry has developed practices that grew from supporting our U.S. government customer. We are in tune with open and systematic procurement systems. As a result, we are much more successful when we have a formal RFI/RFP system. We are also more successful in gaining early U.S. government support for systematic procurements. Our paradigm is often in conflict with the sensitivity of defense procurements in the region.

One of the major reasons that U.S. companies employ agents and consultants is to help us gain a clearer understanding of both the nature and timing of your defense programs. If you are as opposed to agents, as you often indicate, helping us understand your requirements directly mitigates the need for agents.

I fully understand the customer's need to keep their defense planning confidential. I suggest that we, both industry and U.S. government, have the means to protect that information. The more completely we can work with both customers and the U.S. government, the more likely we are to be able to develop cost effective solutions. The earlier we are involved in defining and refining your requirements, the better able we are to provide cost-effective high technology solutions that meet those requirements.

A third major area, which impacts our ability to compete are the U.S. government controls placed on export of defense articles by U.S. companies. This is a reality which will not go away. Our major challenge has been the time it takes to gain export license approval, which often makes U.S. industry appear unresponsive to our customers.

A recent change to the U.S. government *International Traffic in Arms Regulations* should go a long way in solving the problem. The change significantly relaxes the rules for NATO countries, for Australia and for Japan. The benefit to our other customers is that the system will now be able to deal with a much smaller number of applications. We hope for, and expect a major improvement in both industry and U.S. government responsiveness.

The defense industry, through our trade associations, has consistently opposed one element of U.S. export policy unilateral sanctions. We do not think they are effective other than to cost U.S. industry business. Internationally supported sanctions can put the truly bad actors in the penalty box. Independent action by the U.S. government just does not work.

My bottom line message to our international customers today is that U.S. industry can provide cost-effective, technically superior solutions to meet your modernization requirements. We will work to gain U.S. government approval for sales to meet those requirements but we are better able to gain that approval when we have a more complete picture of what you need. The earlier we understand those requirements, the better.

My message to the U.S. government participants is that industry understands the rules and we work within them. But we will continue to press to find better ways to make the system work. The recent changes to the *International Traffic in Arms Regulations* and organizational changes within the Department of Defense system are great steps forward.

About the Author

Bob Hammond is the Vice President - South Asia of Lockheed Martin Global, Inc. He has supervision responsibilities for all Lockheed Martin corporate activities in ASEAN and India. He has direct business development responsibilities for all Lockheed Martin product lines for Singapore, Brunei and Thailand.

He completed a thirty-year career as a Colonel in the United States Air Force (USAF). His last posting, from 1993 - 1996 was as the Senior USAF Commander in Singapore and as the United States Commander-in-Chief Pacific Command Representative, Singapore (USCINCPACREP, Singapore).

From 1989 to 1993, Bob Hammond served at the Headquarters, Pacific Air Forces (PACAF), first as Director of Command and Control and then as Assistant Deputy Chief of Staff, Operations. From 1987-1989, he commanded the 5th Tactical Air Control Group in Korea. In that position, he managed the Korean Tactical Air Control System (TACS) and directed all TACS units in PACAF.

He was a Command Pilot with over 3,900 hours in fighter attack and forward air control aircraft including 788 combat hours. In the USAF, he commanded flying units at flight, squadron and group levels. He was an Exchange Instructor Pilot with the Royal Thai Air Force and was awarded Thai Air Force Pilot Wings.

Bob Hammond is a graduate of USAF Pilot Training, Thai Language School, Squadron Officers School, Air Command and Staff College and is a 1987 graduate of the U.S. Army War College.

Mr. Hammond completed a Bachelors Degree in economics from the State University of New York at Buffalo. He earned a Master of Arts with distinction in national security affairs from the United States Naval Post Graduate School.

EDUCATION AND TRAINING

How Defense Security Management College Supports the National Security Strategy of Engagement

By

Richard Kwatnoski
Defense Systems Management College

> "Our strategy is founded on continued U.S. engagement and leadership abroad. The United States must lead abroad if we are to be secure at home."
>
> *A National Security Strategy for a New Century*, The White House, December 1999.

What do Defense Security Management College's (DSMC) educational activities have to do with this?

In December 1999, the White House issued the latest version of *A National Security Strategy for a New Century*. The strategy stated that "International cooperation will be vital for building security in the next century because many of the challenges we face cannot be addressed by a single nation. ... durable relationships with allies and friendly nations are critical to our security." The strategy goes on to note the crucial role of the U.S. military in protecting and promoting U.S. interests, but that it is not a substitute for other forms of engagement. Other forms of engagement are diplomatic, economic, scientific, technological, cultural, and educational activities. DSMC's engagement activities consist mostly of educating those in the DoD acquisition workforce that will engage the allies as a part of their official activities, along with some educating of the allies directly.

How does DSMC support the policy of engagement?

Courses

Our primary educational engagement activity is our family of international acquisition courses. DSMC offers three one-week international courses, which are for the most part for those in the DoD acquisition workforce that will engage the allies directly.

- Multinational Program Management Course (PMT 202): The introduction to international cooperative acquisition programs, concentrating mostly on program management in the international environment.

- International Security and Technology Transfer/Control Course (PMT 203): As the course title conveys, this is about the transfer and control of information and technology in international projects.

Advanced International Management Workshop (PMT 304): This is a workshop in international project agreements, often referred to as Memoranda of Understanding or Agreement.

Seminars, Forums, Symposiums and Special Offerings

Secondary in importance only to our international acquisition courses are the various seminars, forums, symposiums, and special offerings that DSMC conducts regularly or occasionally. DSMC has formed strategic arrangements with Atlantic and Pacific partners. With Atlantic partners, we have been conducting an annual international acquisition/procurement seminar with defense acquisition educational institutions in the United Kingdom, Germany and France for twelve years on a rotational basis. The thirteenth Atlantic Seminar is scheduled for June 2001 in Berlin, Germany. In the Pacific we have a similar arrangement with defense institutions and Ministries in Australia, South Korea, Singapore and New Zealand. The third annual seminar was held in Singapore.

Another engagement activity in the Pacific Theater is the Defense Cooperation in Acquisition Course that we conduct biennially for Pacific Command in Singapore or Canberra, Australia. At DSMC we host a biannual International Acquisition Forum for Office of the Secretary of Defense (OSD) and the services to present and exchange views on contemporary, and sometimes contentious, international acquisition topics. DSMC has hosted all eight of these forums since 1996, which are chaired by the OSD Director, International Cooperation.

Over the years DSMC has partnered with other organizations for some one-time engagement activities, such as the "European and Transatlantic Armaments Cooperation Symposium" in 1996 sponsored by the French, German, Italian and British Embassies, and endorsed by the Under Secretary of Defense Acquisition and Technology. Another example would be the U.S.–Japan Project Management Seminar conducted in 1998 at the request of the Director, Pacific Armaments Cooperation in the Office of the Director for International Cooperation. The University City Science Center, a consortium of educational institutions, and the Strategic Management Group, a private contractor, conducted the Seminar with educational oversight by DSMC international faculty.

Research

The Defense Security Management College has produced many research products to support international engagement activities, some of which are unique resources for the acquisition community. International studies were completed in the following areas:

- Comparative acquisition practices (Atlantic and Pacific).
- Cooperative acquisition projects–factors for success (Atlantic and Pacific).
- National cultures and practices in international projects
- Ethics in international projects
- International negotiation case study
- Role of Congress in international agreements
- Military Research Fellows studies

• Case studies of international projects (*Rolling Airframe Missile* and *The Multifunctional Information Distribution System*).

The Military Research Fellows have chosen an international topic three times over the years. The most recent report of the Military Research Fellows, *Transatlantic Armaments Cooperation*, was published in August 2000. DSMC has pursued research in comparative acquisition practices for nearly eight years. Recently DSMC published *Comparison of the Defense Acquisition Systems of France, Great Britain, Germany and the United States*, September 1999. A similar effort is underway with the Pacific nations of Australia, Japan, South Korea and Singapore. A separate, but similar effort was completed on the comparative *Test and Evaluation Policy of the United States, France, Germany, and the United Kingdom*. Additional research publications include a three-volume U.S.–German comparison, *Effects of a Scale-Down in Defense Budgets*, as well as *Standards and Trade in the 1990s*, and *Workforce Education Privatization The U.K. Experience*.

Consulting

Most consulting on international topics is conducted by the two DSMC international faculty. While clients are too numerous to list, significant efforts in the recent past have included Assistant Deputy Under Secretary of Defense, Armaments Cooperation, Director, International Security Programs in the Office of Secretary of Defense (Policy), the Joint Strike Fighter International Program Office, PM Arrow, HARM PMO, the Defense Microelectronics Activity, the DoD Inspector General, and the Partnership for Peace Information Management System. The Defense Security Management College international faculty has provided lectures to allied customers overseas in Australia, Japan, Spain, and the United Kingdom. They have consulted often on acquisition training and education possibilities with many nations. They maintain contact with defense industry through associate committee membership in the National Defense Industrial Association. Often there are consulting opportunities for other DSMC faculty for allied nations on U.S. specific topics, such as software management for Australia, and acquisition practices for Israel and South Korea, project management for Estonia (with DoE), contracting and acquisition reform with Japan, and a long-term security assistance assignment in the Czech Republic.

Information Dissemination

Defense Security Management College maintains an international website containing information about international acquisition courses, annual Atlantic and Pacific seminars, information dissemination, consulting, and overseas travel. Numerous articles related to international acquisition have been published in *Program Manager and Acquisition Review Quarterly*. Over fifteen of these articles published in the last five year are posted on the DSMC website. From the five years prior, another fifteen articles were published in *Program Manager* and *The DISAM Journal of International Security Assistance Management*. DSMC publishes two international guidebooks: *Guidebook for Preparation and Negotiation of International Armaments Cooperation Memoranda of Understanding, Volumes 1* and *2*. In addition, over twenty-five formal presentations on international topics were delivered in a variety of forums upon request. The DSMC Library maintains a contemporary collection of international periodicals and books relating to international programs; the learning resource center maintains a collection of video and audiotapes on international subjects.

Foreign Visits and Students

During the past decade, DSMC has hosted over eighty formal foreign visits from twenty-eight nations. These have been from the following nations, listed in alphabetical order: Argentina, Australia, Belgium, Brazil, Bulgaria, Canada, China, Colombia, Croatia, Czech Republic, France, Germany, Hungary, Italy, Israel, Japan, NATO Working Group, Netherlands, New Zealand, Poland, Romania, Saudi Arabia, Spain, Sweden, South Africa, South Korea, Taiwan, Turkey, and United Kingdom.

Foreign nationals attend many DSMC courses, including the fourteen-week Advanced Program Management Course. While twenty-one nations have sent students to DSMC in the last four years, Japan sends far and away the most students. South Korea and Turkey provided the second greatest number of students.

Defense Security Management College also has an International Chair, complementing the DoD, services and industry chairs of the executive institute. South Korea provided the first chair in 1998. France recently filled the international chair.

How are we doing?

A detailed, internal DSMC analysis indicates that there are strengths and weaknesses in our international engagement program. We are very strong in courses and forums, and reasonably strong in international research and consulting activities. Our engagement program begins to weaken with special offerings and continuous learning. Our support to the commanders-in-chief could be improved, and we are weakest in our industry partnerships and supporting allied educational activities. The DSMC will pursue a philosophy of taking advantage of our strengths to correct our weaknesses.

What should we be doing?

To expand the College's engagement program will require meeting with the commanders-in-chief's representatives, industrial associations, selected defense companies, our allied partnering educational institutions, and other U.S. government organizations with active international engagement programs. We are thinking about hosting a joint European and Pacific Command conference on defense cooperation in acquisition. Special offerings conducted biennially for Pacific Command should be expanded to the European Command. A joint seminar with defense industry would be another engagement activity worthy of consideration. Better supporting our allies acquisition education programs is also under consideration. While DSMC is in the planning stage of expanding our international engagement program, we would appreciate hearing the views of the readers. Please contact the author with any suggestions that you might have.

About the Author

Richard Kwatnoski is currently the Director of International Acquisition courses for the Defense Systems Management College (DSMC), Fort Belvoir, Virginia, USA. He is a member of the Defense Acquisition Corps and certified level III in the program management career field. Richard Kwatnoski holds a masters degree in engineering sciences from the Pennsylvania State University, and a bachelor degree in mathematics from St. Francis College, Loretto, Pennsylvania. He has published thirteen technical reports for the Department of Defense. Since

coming to DSMC, he has published nearly thirty articles on international acquisition in national journals and magazines, including *Acquisition Review Quarterly, Program Manager, The DISAM Journal of International Security Assistance Management, a*nd *National Defense Magazine.* Richard Kwatnoski's e-mail address is Kwatnoski_rich@dsmc.dau.mil

Training Officer Survey Results

By

Commander Pat Hawkins, SC, USN
Defense Institute of Security Assistance Management

Introduction

In early April 2000, the Defense Institute of Security Assistance Management (DISAM) established a datalink on the DISAM webpage to allow training officers in the field to respond to a survey on the quality and adequacy of training. Initially, the survey was designed for the International Military Student Officers (IMSO) regardless of whether they had attended the Defense Institute of Security Assistance Management Training Officer Course.

DISAM collected data from respondents using a commercially available software program, Perseus Survey Solutions for the web V2.0, a product of Perseus Development Corporation. This program allows for the creating and distributing survey information by collecting, analyzing and reporting results. A hyperlink was established between the survey file and the DISAM Training Officer syllabus to assist the respondent in providing meaningful data on value and adequacy of the training topics. The program allows for establishment of a collection file on any designated server and as survey data is collected a notification message is sent to the data manager. Periodically, the data file was downloaded and an interim data set was analyzed for trend analysis. In late July, the final data were analyzed.

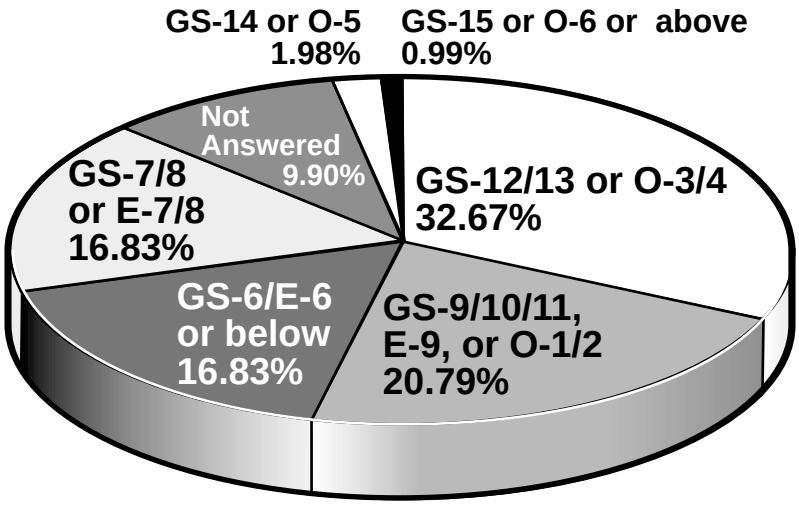
Data Collection

One hundred one training community personnel responded to the survey from a broad spectrum of activities. Initially, it was hoped that a larger sample population of the training community consisting of approximately 1200 personnel would respond to the survey. Even though a small percentage of the training community responded, the data represent a cross section of the training community with a confidence level of 95 percent and a confidence interval of plus or minus 10 percent. The first part of the survey requested grade and rank and service affiliation followed by two questions on classroom topics. The respondent was to quantity the benefits of various subject topics to the performance of the International Military Student Officer (IMSO). Another question required the respondent to quantify the adequacy of the time spend in class in any particular topic area. Both questions required the respondent to quantify each topic area by grading using a graduated scale with 1- Not at all; 2- Slightly; 3- Moderately; 4- Substantially; 5- Completely. By assigning a numerical value to the degree of satisfaction numerical data could be obtained. Finally, a number of questions allowed the respondent to provide explanatory comments about the formal training received at DISAM and any other information that the individual thought needed to be addressed.

Results

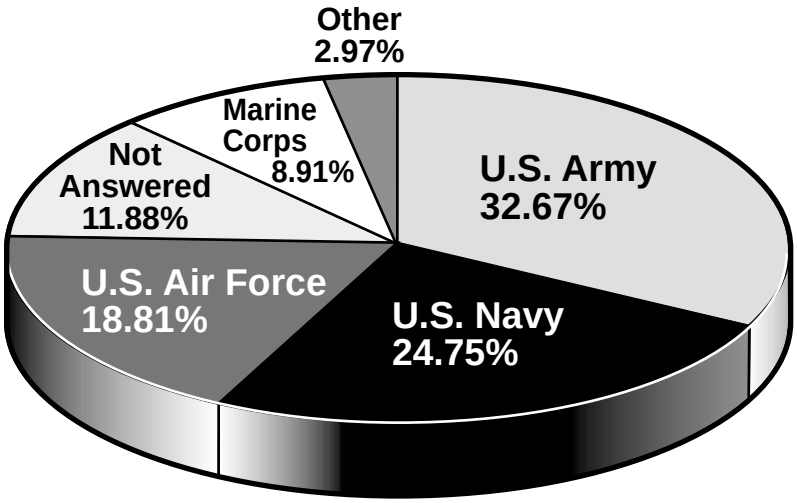
The first question in the series was to determine the grade and rank level of the respondent (Graph 1). This enabled DISAM to determine if any correlation existed between responses in the follow-on questions. By reviewing the graph, the majority of respondents (53.46 percent) were in the GS-9/O-1 through GS-13/O-4. We could further define the data by comparison of the rank or grade to the service.

Graph 1: Grade and Rank Comparison of Respondents
Sample Size: 101 Responses



The second graph (Graph 2) allows for a correlation to be made between rank/grade and service affiliation. We could further define the data by comparing the rank or grade to the military department. This resulted in establishing that the majority of the data was collected from the GS-9/10/11 (E-9 or O-1/2) and GS-12/13 (O-3/4) across the military departments which is representative of the overall IMSO community despite the relatively low number of respondents. The following table synopsizes the findings (Table 1).

Graph 2: Service Affiliation of Respondents
Sample Size: 101 Responses



Respondents were requested to evaluate 12 topic areas in the Training Officer course and the applicability to their individual assignments and the benefit derived. Using a scale of 5.0 as completely satisfied with the topic to 1, not at all satisfied, a determination of quality may be obtained. Table 2 tabulates the results. (Overall average: 3.56). Table 3 is the result of the

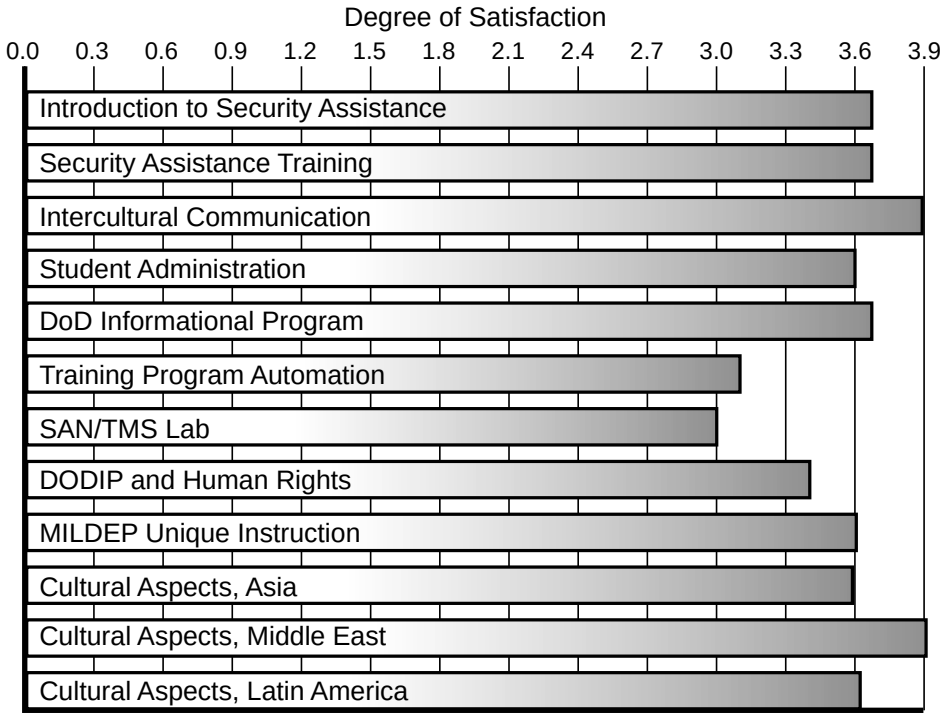
respondents to evaluate the adequacy of time between the 12 topic areas previously addressed in Table 2.

Table 1 Comparison of Respondents Paygrade to Service Affiliation

	Respondent						
Service	**GS-6 E-6**	**GS-7/8 E-7/8**	**GS-9/10-11 E-9 or O-1/2**	**GS-12/13 O-3/4**	**GS-14 O-5**	**GS-15 O-6**	**Other**
Army	8	7	10	8	0	0	
Air Force	3	4	5	4	0	0	
Navy/MC	6	6	5	15	0	0	
Other							3
Totals	**17**	**17**	**20**	**27**	**0**	**0**	**3**

The numbers for GS-14/15 and O-5/6 were intentionally left blank due to the low number of respondents and desire to keep idenity of respondents anonymous. Totals do not match total respondents (101) due to some respondents not answering grade and service affiliation.

Table 2 Level of Benefit of Topics in Performance
Sample Size: 101 Responses



Sample Size: 101 responses

Conclusion

Key topic areas scored lower than others as demonstrated in Tables 2. The "Training Program Automation" and "SAN/TMS" topic acceptance score (3.1 and 3.0 respectively) was significantly lower overall and indicates a need to focus on these two areas for refinement. Both "Training Program Automation" and "SAN/TMS" topic areas scored lowest in degree of satisfaction and time adequacy. If a topic area scored low in acceptance then some correlation would be expected in the time adequacy of the topics. This correlation exists with both areas scoring lowest in Table 3. (3.2 and 3.3 respectively). To suggest that additional emphasis needs to be directed in this area may be premature. Other reasons outside of the scope of the survey may be driving the results. For example: U.S. Navy personnel utilize STATIS in place of TMS which may distort the data. If TMS is not used by the respondent then a low score would be reported distorting the overall value of the instruction. Further research needs to be conducted to determine cause of the low value. Overall average is high for usage and adequacy with an overall grade of 3.58 on a scale of 1 to 5. Improvements could be made and many of the respondents felt more emphasis should be focused on the regional cultural aspects of the course and a realistic in-house exercise that would mirror actual events in the life of the IMSO. Common throughout the responses was the stated need to emphasis more time on cultural differences and dealing with foreign students. Based on interim findings conducted during the survey period and members of the curriculum review, DISAM has added an additional JSAT exercise, a legal block of instruction, eliminated the European Seminar, and refocused the cross cultural communication areas in an initial attempt to meet the needs of the customer.

About the author

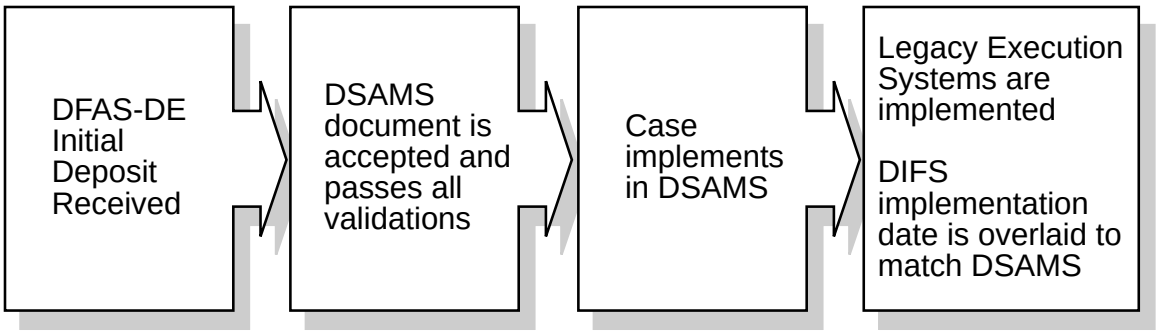
Commander Hawkins is an Assistant Professor and has been at DISAM since December 1995. He is a graduate of the California Polytechnic State University, San Luis Obispo, California and holds a Master of Science in materiel acquisition management from the Florida Institute of Technology. He is the Deputy Director of Research and the functional coordinator for contracting and acquisition topics in all DISAM courses.

Update: Defense Security Assistance Management System (DSAMS)

By

Nels E. Berdahl
Information Spectrum, Inc.

The feature article of the summer *DISAM Journal* of 1998 discussed the background and development methodology of the Defense Security Assistance Management System (DSAMS). This article describes some of the new features of DSAMS and also provides an update on changes to case processing that were delivered when Release 6 was deployed to all DSAMS sites in August 2000.



DSAMS was first used by some Navy activities to write foreign military sales (FMS) cases in February of 1998. This first module was called the Case Development Module or CDM and is represented by DSAMS Releases 1 through 5. Army went live with DSAMS CDM in December of 1998, and Air Force began use of DSAMS CDM in July of 1999. The initial use of DSAMS presented a number of challenges for both users and developers. Case data had to be converted from the old systems, some business processes (and jobs) had to be redesigned, software installation problems had to be resolved, and the initial group of users had to be trained. Since the implementing agencies moved into DSAMS over a period of time, there were adequate resources to address and solve problems. Release 6 deployment, however, was the first deployment of significant new functionality to all users at one time. Release 6 represents the Case Implementation Module or CIM, although it also builds considerably on CDM.

The DSAMS team tested and deployed DSAMS Release 6 (R6) in August 2000 following a year of intensive programming, testing, program fixes, and training. Implementing agencies, the development team at the Defense Security Assistance Development Center in Mechanicsburg, Pennsylvania, the DSAMS Program Management Office, and DSAMS contract personnel all contributed to a successful launch of Release 6. Because of the nature of Release 6 functionality, the Defense Finance Accounting Service (DFAS) also became actively engaged in Release 6 deployment. Defense Finance Accounting Service-Denver users received training and the software is now part of the DFAS software environment.

Release 6 - New Functionality

Leases

New DSAMS functionality deployed with Release 6 includes the ability to write leases. Leases can now be developed, tracked, and printed using DSAMS. A link can be made between

the lease and the related support FMS cases. Leases may be authorized under the AECA, Chapter 6, when it is determined that there are compelling foreign policy and national security reasons for providing such articles on a lease, rather than a sale, basis and that the articles are not currently needed for public use.

Processing of leases in DSAMS is similar to the processing of an FMS case in terms of recording milestones and changing document status. The lease detail window is similar to the case detail window in structure, and is linked to a DSAMS customer request. Lease lines are alpha characters, and all line information including pricing is entered into a single lease line window.

Both leases and lease amendments can now be produced in DSAMS, in addition to:

- Lease Certificate of Determination - The certificate of determination is included with the draft lease when it is forwarded for Defense Security Cooperation Agency (DSCA) coordination and countersignature. The certificate provides the detailed rationale for leasing the proposed items versus selling them.

- Lease Certificate of Delivery - The certificate of delivery is often included with leased items when they are delivered to a foreign customer. The certificate lists the name and quantity of items being delivered for the specified lease.

- Summary Lease Report - This report lists the number of all leases by country.

- Summary of Leases Expiring in (..) Days - This report lists all leases (by country) that are scheduled to expire in the number of days specified by the user. Only implemented leases are included in this report. Any leases where the material has been returned or the lease renewed will not be included.

- Summary of Expired Leases - This report will list the summary of all leases (by country) that have expired as of the date entered by the user.

- DSCA Quarterly Lease Report - This report lists significant information about all open leases (including expired leases that have not been closed). This report is submitted to the DSCA Operations Directorate Management Division (with a copy to DFAS-DE) no later than thirty days after the end of each quarter. The leases printed will be selected based on a date entered by the user upon initiating report generation from the menu. Only leases that have not been closed out by this date will be printed.

Before R6 deployment, these documents (lease, lease amendments and required lease reports) were prepared “off line” and tracked manually or with manual input to a spreadsheet. Each implementing agency with open leases indicated an intent to “retrofit” open leases to DSAMS to consolidate and simplify the tracking and reporting of leases.

Letters of Intent

DSAMS now provides for the development and tracking of Letters of Intent (LOI). Letters of Intent are used on an exceptional basis to authorize expenditures for a relatively small portion of a major Letter of Acceptance (LOA), which has not yet been implemented. Examples of use

might include early purchase of castings or start of training to allow a program to proceed on schedule.

The process of developing an LOI within DSAMS is similar to the process of developing and processing a normal case. The LOI will be linked with the corresponding LOA so that validations can occur between the two.

DSAMS can be used to create both the LOI and an amendment to the LOI. There are two versions of the LOI:

- If the LOI is offered to the customer prior to the LOA offer, the first page will indicate when the LOA is expected to be offered to the customer.

- If the LOI is offered to the customer after the LOA is offered to the customer, the first page will indicate when the LOA was offered to the customer.

Implementation

With Release 6 deployment, most implementation of documents is now performed in DSAMS using an overnight batch process, although the manual change case status process is still available.

Upon determining that financial requirements have been met, DFAS-DE sends a CG transaction to DSAMS. DSAMS posts a milestone (FINIMP) indicating that the initial deposit requirements for the case have been met and the case is subsequently implemented based on a set of implementation requirements, which vary by implementing agency.

Validations to ensure the case is ready for implementation are performed prior to implementing a case via the change case status window (manual method) or through the nightly batch processing. If the validations fail during the nightly batch processing, the case will not be automatically implemented.

Functionality has also been added to DSAMS to permit DSCA to direct emergency implementation, use one document to fund another (concurrent document funding), and to limit obligation authority.

Management Flags

Management flag is a new DSAMS feature designed to assist designated users in monitoring case progression or case events in DSAMS. Management flags are triggered based on the recording of certain milestones. Each night, a batch program is run to look for cases in certain conditions, e.g., the presence or absence of a specified milestone. A DSAMS-generated management flag is created to notify pre-defined sets of users about case conditions that may require intervention/action.

A generic e-mail notification is then sent to the appropriate recipient indicating they have management flags. When user logs into DSAMS, they are presented with a list of the specific cases that have management flags. One example of the use of the management flag functionality is to notify case managers when a case fails the batch implementation process.

Waivers and Suspensions

New waiver functionality has been added to DSAMS that provides the ability to waive initial deposit requirements of a document at country or case level. Waiver functionality is also used to approve no-cost leases at the case level and to approve concurrent document funding at country or case level.

DSAMS now provides the ability to hold or suspend a case. When a hold or suspend milestone is recorded, the case manger (or designated user) will be notified that the case is in hold status via a notification and a message on the case detail document tab.

When a case hold milestone has been posted, the user may continue with normal processes but may not change the status of that case version. If a suspend milestone is recorded, the system will prevent edit capability on all windows related to that case version. Remove hold and remove suspend milestones must be recorded by an authorized user to release the hold or suspend on the case.

Enhancements

Several technical changes were made in Release 6 of DSAMS to improve processing times and speed up data retrieval. There also have been numerous functional changes that previous users of DSAMS will find helpful. My favorites are the automatic generation of default (required) milestones and the linkage of certain milestones to the change case status window. The expired note feature will be popular with case writers, as it greatly simplifies replacing an expired standard note. Logisticians will appreciate the ability to record separate freight/forwarder or mark For codes at the line or subline level, not to mention having ready access to the MAPAD addresses. Financial types will like the year-end roll over and revision (Navy) functionality. Who could not fall in love with the ability to re-calculate all line pricing from the line list window with a single click? Then again, two new reverse pricing options give pricing personnel more flexibility than ever before. And if the improved assign task functionality doesn't get your RAM heated up, then the 100+ management reports will simply make your day! It is great to see so many of the recommendations made by DSAMS users come to life in DSAMS Release 6.

More Information

More information about the DSAMS project is available on the DSAMS project web site: http://dsams.dsca.osd.mil. Current and back issues of the *DSAMS Dialogue*, a monthly project update, are posted on this page. The DSAMS dialogue provides timely and meaningful information for DSAMS users at all organizational levels.

About the Author

Nels E. Berdahl, has been employed by Information Spectrum, Inc. since December 1998 to provide DSAMS training and field support under contract to the DSAMS PMO. He is a former DISAM professor and has been involved in the DSAMS project since the fall of 1996. You can contact Nels at DSN 430-9041 or (717) 604-9041 or by e-mail to nels.berdahl@dsadc.dsca.osd.mil

German Army Hosts Multinational DISAM Foreign Purchaser Courses in Historic Hammelburg

On December 20, 1907, President Theodore Roosevelt launched the Great White Fleet to cruise the world's seas and oceans and further the foreign policy of the United States. The Fleet spent much of 1908 at sea, cruising 46,000 nautical miles that year. In fiscal year 2000, DISAM faculty members topped the 46,000 miles traveled by the Great White Fleet, conducting courses in nine countries, and educating students from over 13 countries.

Major Joanne Hawkins presents Lieutenant Carsten Kossack of the German Infantry School a memento in appreciation for his efforts in hosting the DISAM team and the NATO students.

In July, 2000, Dr. Craig Brandt, Director of Research and team leader, and faculty members Stephen Wentworth, MAJ Joanne Hawkins, and LT Paul Dougherty traveled to the quaint northern Bavarian town of Hammelburg, Germany, to offer the DISAM Foreign Purchaser (SAM-F) and Foreign Purchaser Executive (SAM-FE) courses at the storied German Infantry School (*Infanterieschule*). Germany had agreed to host the course for the NATO allies, and consequently participants came from Denmark, Netherlands, Norway, and Turkey as well as the German forces to learn about U.S. security cooperation programs.

Colonel Jürgen Sengespeik, Director of Purchasing of the Infantry School, conducted the graduation ceremony for the 24 students who had attended the DISAM courses.

Students were welcomed to the course by Brigadier General Löser, Commanding General of the Infantry School. He provided a brief history of the school and surrounding community, including some interesting tidbits about the use of the school as a prison camp during World War II. He also pointed out the particular appropriateness of holding the course at the Infantry School, given that multinational training such as the United Nations Military Observer Course is hosted at the Infantry School. In addition to classroom instruction on topics of security assistance and international armaments cooperation

programs, First Lieutenant Carsten Kossack, the Infantry School liaison officer, demonstrated the German infantry's modern training techniques with a tour of the German Army's unique and historic Bonnland urban combat training facility. The Infantry School also offered an informational program focusing on German and regional culture. Students and faculty learned about Bavarian customs and Franconian viticulture.

On 11 August 2000, twenty-four students were graduated from the Foreign Purchaser and Foreign Purchaser Executive courses. Colonel Jürgen Sengespeik, Chief of Procurement at the Infantry School, presided over the closing ceremonies, congratulating the students for their accomplishments. During the ceremonies, Lieutenant Colonel Klaus Waterholter, a student and representative of the German Air Force Logistics Command, presented certificates of appreciation to the Infantry School support staff. Afterward, the students were awarded their graduation certificates and DISAM commemorative badges.

Craig Brandt thanks Lt Col Karlheniz Mink and Staff Sergeant Dieter Schander of the German Military Logistics Office for their work setting up the DISAM Met.

While the courses were only two and one weeks in duration respectively, nearly six months of careful preparation and coordination were required on the part of DISAM, Mona Jessen of ODC Bonn, and Lieutenant Colonel Karlheinz Mink and Staff Sergeant Dieter Schander of the German Military Logistics Office (*Logistikamt der Bundeswehr*) to ensure its success. Based on student feedback and critiques, the effort was not in vain.

SECURITY ASSISTANCE COMMUNITY

International Hallway Dedication Ceremony

By

Constance Hale,
U.S. Army Command and General Staff College

On the September 14, 2000, Lieutenant General William Steele, Commandant, United States Army Command and General Staff College (CGSC), hosted the dedication ceremony for the new International Hallway in Eisenhower Hall at Fort Leavenworth, Kansas. General Alfonso Pardo de Santayana Coloma, Chief of Staff, Army of the Kingdom of Spain, became the 195th inductee into the International Officer Hall of Fame on this day. General Pardo is a graduate of Centennial Class of 1980-1981.

General Pardo gave an impromptu speech praising the sponsor program and his individual sponsors. Among the participants at the ceremony were Dr. and Mrs. Joseph Kanarek, General Pardo's Kansas City civilian sponsors.

General Pardo distinguished himself as a member of the International Class of 1980-1981 as the officer with the most children seven. On his trip to America, he questioned his decision to bring such a large family. He had no reason to worry. He was greeted at the airport by then Lieutenant and Mrs. Thomas Loyd who announced to him that they had eight children. General Pardo recalled that exceptional meeting and the wonderful surprise of food in the refrigerator upon his arrival.

This new hallway also is the home of a new section that honors all the International Officer sponsors plus memorabilia from local sponsor pioneers, Dolly Gordon and Mary Kalhorn. These two distinguished ladies and their husbands, Ed Gordon and Robert Kalhorn, served as sponsors for international officers for over forty years. Dolly Gordon and Mary Kalhom also chaired the Operation International Committee of the Leavenworth-Lansing Area Chamber of Commerce for many years, recruiting and assigning Leavenworth civilian sponsors for each international officer.

Robert Kalhorn, husband of Mary Kalhorn, and Ryle Roberts, daughter of Ed and Dolly Gordon, cut the ribbon formally opening the International Hallway.

Mary Kalhorn was fondly referred to by the international officers as *Mom*, She was a second mother to many international officers and their families. They would return to Leavenworth after graduation and stay with the Kalhorns for a visit.

Robert (Bob) and Mary Kalhorn

Among the 105 International Officers from forty-one countries the Kalhorns sponsored, three were later inducted into the International Officer Hall of Fame: General Hagglund (Finland), Class of 1973; General Pucci (Italy), Class of 1974; and LTG Sunde (Norway), Class of 1974. Mary Kalhorn passed away in July 1998.

Among the many international officers that Ed and Dolly Gordon sponsored was former President Mohammed Zia of Pakistan. When President Zia and his wife visited Washington, D.C., they were asked who they wanted to invite to the White House during their official visit. Their response was of course, Ed and Dolly. Among the memorabilia on display is a picture of Ed and Dolly with then President Ronald Reagan and President Mrs. Zia. General Colin Powell mentions this in his autobiography, *My American Journey*.

Ed and Dolly Gordon were the sponsors for three International Officers who were later inducted into the International Officer Hall of Fame: General Zia (Pakistan), Class of 1963; General Jehangir (Pakistan),

Class of 1974; and BG Carl A. Alfonso (Trinidad and Tobago), Class of 1986. Ed Gordon passed away in February 1998 and Dolly in April 1999.

Ed and Dolly Gordon

Thanks to the contributions made by Robert Kalhorn and the children of Ed and Dolly Gordon, a special section was dedicated to these two outstanding civilians.

The sponsor program for the international officer is part of the U.S. Army Security Assistance Training Program (SATP) authorized by the *Joint Security Assistance Training (JSAT) Regulation, AR 12-15*. The SATP is a vital element of U.S. foreign policy. The training received provides our international officers throughout the world the knowledge and skills to improve their own military forces, promote military professionalism and work effectively in coalition with U.S. forces. At CGSC the International Officer Student Division (IOSD) manages and conducts the SATP. Part of the IOSD mission is to set up and manage military sponsorship and facilitate and coordinate civilian sponsorship programs. Sponsors volunteer to spend one year with the international officer and family and help them feel welcome in this country. They invite the students into their homes and provide opportunities for students to learn first-hand about the American way of life. Sponsors gain rare insights into other cultures and have a chance to act as informal U.S. ambassadors. Many of these relationships last a lifetime and historically many of these officers go on to achieve high positions in their governments. The Sponsor Recognition Program recognizes sponsors who have contributed 1, 3, 5, 10, 15, 20, 25, 30, and 35 years of service. Section IV, Chapter 6, *CGSC Staff and Faculty Handbook* sets up the awards procedures.

International Officer Hall of Fame second floor, Eisenhower Hall (North Wing).

Military Sponsor Organization

The first formal military sponsor program began in 1947. A CGSC policy was started to encourage U.S. officer personnel to take an interest in the international officers and to invite them into their homes and become better acquainted. Since 1947 an international staff element has operated continuously to provide support to international military officers. Today the IOSD manages the military sponsorship program and provides overall responsibility for the entire sponsorship program.

Leavenworth Sponsor Organization

The Leavenworth Sponsor Organization is conducted by Operation International, a committee of the Leavenworth/Lansing Chamber of Commerce which traces its origin to 1952 when it was first constituted within the Junior Chamber of Commerce. The Operation International committee first provided civilian sponsors to the CGSC class of 1952-1953. In the mid 1960s responsibility for the program shifted to the Chamber of Commerce where it remains today.

Operation International's clear and uncomplicated mission statement is the same today as originally conceived in 1952: "To welcome and assist the international officer and his family on arrival and provide ongoing assistance and friendship during his stay in the Leavenworth/Lansing community." The program has proven over time to create good will that will outlive the officer's tenure in the U.S.

Among the annual programs and events sponsored by Operational International is the American Orientation Course conducted for the international officers' wives and children soon after their arrival and at the beginning of their academic year. At the conclusion of the course each participating wife is presented with a certificate at a special coffee hosted in their honor. Leavenworth sponsors also host a picnic for their international guests which provides an old fashioned community welcome and an opportunity for them to informally socialize with all their sponsor families.

Operation International continues to prosper with sponsors coming from every neighborhood in the Leavenworth/Lansing community. These volunteers appreciate the richness and diversity of sharing cultural heritage afforded them through the Operation International program.

Kansas City Sponsor Organization

This program is operated by a local chapter of the People to People International organization. People to People International is a cultural and educational exchange organization dedicated to advancing international understanding and friendship through the direct exchange of ideas and experiences among peoples of different countries and cultures. Founded by Dwight D. Eisenhower in 1956, People to People was removed from the government and placed in the private sector in 1961. The international headquarters is in Kansas City, Missouri.

The Greater Kansas City Chapter of People to People (GKCPTP) was founded in 1960. The chapter is incorporated as a not for profit organization in the state of Missouri, but has members from all across the Kansas-Missouri bi-state metropolitan area. Chapter activities include enrichment programs for the members, hosting international visitors - a single meal through a multiple day home stay - and the year long international military host program.

The Chapter began sponsoring international officers attending the Command and General Staff College in 1964; this has become a flagship program for the chapter that allows GKCPTP members to enlarge the cultural enrichment of the officer and his family. The relationship also enriches the GKCPTP member's lives and the GKCPTP are proud that their participation in the program has created many lasting international friendships.

More information on the establishment of the International Officer Hall of Fame (IHOF), Criteria for Induction, nomination process, and a legend of current IHOF members is posted on CGSC IOSD Internet site at: http://www.cqsc.army.mil/dsa/iosd/GRADUATES/index.asp.

To find out more about the Sponsor Program and the Sponsor Recognition Program at Fort Leavenworth, go to http://www.cqsc.army.mil/dsa/IOSD/SPONSORS/index.asp.

About the Author

Constance Hale is the director of the Assistant International Officer Student Programs at the International Officer Student Division, U.S. Army Command and General Staff College in Fort Leavenworth, Kansas.

Chief of Staff/Nordic-Polish Brigade on NATO Mission in Bosnia, June 1998 - January 1999 The Leavenworth Link

By

Colonel Jørgen Jelstrup
Danish Army

[This article highlights on a personal level the value of security assistance training. Such anecdotes from officers around the world who have attended courses in the U.S. clearly show the value of the foreign training dollars expended.]

I graduated from Command and General Staff College at Ft. Leavenworth in 1982 as a newly promoted major. After having served in many NATO related commands and postings, I was selected to be chief-of-staff in the Nordic Polish Brigade which for the first time in NATO history was to be commanded by a Polish general in June 1988.

The brigade of some 3000 men and women was composed of five national battalions, from Poland, Sweden, Finland, Norway, and Denmark. There was also a Swedish medical company, a multinational military police company, a multinational headquarters company and brigade staff.

This truly multinational formation was in the NATO mission Stabilization Force (SFOR) in Bosnia commanded by a truly national division, the U.S., 1st Armor Division (from Germany) commanded by Major General Ellis.

This chain of command, with a U.S. major general with his national staff with its own traditions and training, commanding national brigades from the U.S., U.K., and Turkey, and a multinational Nordic Polish Brigade with its own traditions and training in peace support operations and under the command of a Polish general with his Warsaw Pact training, had a lot of potential for misunderstandings and conflicts.

Luckily, however, Major General Ellis had a chief of staff, Colonel Peterson who in many respects was a tough customer, but he was a Leavenworth graduate from 1983. I took the very first opportunity to establish The Leavenworth Link with the chief of staff of the Armor Division at a meeting face to face.

After the usual exchange of old stories from CGSC, it was agreed between the two of us that with our common background we would solve any problems that might appear in the division-brigade relations on a bilateral basis by means of only a phone call!

And so it functioned very well to the benefit of both formations and for the future peaceful settlement in Bosnia.

When the 1st Cavalry Division from Fort Hood in Texas took over from 1st Armor Division in late 1988, similar good relations were established with Major General Byrnes and his team.

One of the deputy commanders graduated in 1982 from Section 21, just across the hall from my section.

Throughout my service, my Leavenworth experience has served me, my units and commands well.

At present, I am the commanding Military Region South in Denmark and formations with a wartime strength of some 1200 men and women establishing the link between Denmark and Germany and onwards to Poland.

By the way, I got to know my Polish commander very well, and we often discussed his previous wartime missions in Denmark which were in my current area of responsibility.

Dr. Benjamin N. Muego Becomes the Newest Member of the DISAM Family

By

Thomas Dop
Defense Institute of Security Assistance Management

Over the past three years Dr. Benjamin N. Muego has been leading discussions on Southeast Asian political-military issues in the Asia-Pacific regional studies seminar for the DISAM Overseas Course. His extensive in-country experience and in-depth knowledge of the cultural and political-military issues in this area of the world is an invaluable resource for DISAM's students. His ability to communicate this knowledge and provide DISAM students with an overall understanding of the current issues in Southeast Asia have played a major role in the preparation of students to assume their security assistance duties. Dr. Muego has also been a dedicated and consistent supporter of DISAM. Even though he lectures at several other institutions, he has always given DISAM priority on selection of dates and on numerous occasions has rearranged his schedule to meet DISAM's requirements. Based on these accomplishments he was appointed to the academic rank of Adjunct Professor of Security Assistance Management in July of this year.

Dr. Benjamin N. Muego

Dr. Muego is currently a professor of political science and member of the graduate faculty in the Department of Natural and Social Sciences of Firelands College of Bowling Green State University. In addition to his service to DISAM, he is an adjunct professor of Southeast Asia studies at the Department of State's Foreign Service Institute, at the U.S. Air Force Special Operations School, and at the Center for Southeast Asia Studies at Ohio University. He has been a Fellow in the Fulbright-Hays Scholar Program, a Research Fellow at the Institute of Southeast Asian Studies in Singapore, a Continuing Fellow of the Inter-University Seminar on Armed Forces and Society at the University of Chicago, and a East-West Center Fellow in International Relations.

Dr. Muego has also published numerous works on politics, economics, and ethnic diversity in Southeast Asia. A specialist on the Philippines, he has written widely on the country's political, military, and social matters, and he was invited to testify before Congress on the Marcos regime and American foreign policy. He has a bachelor's degree in political science from the University of the Philippines, a master's degree from Kansas State University, and a Ph.D. from Southern Illinois University.

The DISAM faculty is pleased to welcome a scholar of Dr. Muego's stature to its ranks. Our programs are immeasurably enhanced by Dr. Muego's willingness to share his knowledge with our students going to Asia.

DISAM Adjunct Faculty Receive Honors

Dr. John Duke Anthony

In June Moroccan King Muhammad VI knighted Dr. John Duke Anthony, bestowing on him one of Morocco's highest awards for civil excellence, the Order of Ouissam Alaouite. Dr. Anthony is currently chairman of the U.S.-Morocco Affairs Council. The award was presented at a special ceremony following a meeting between the Moroccan king and Dr. Anthony at Blair House, the U.S. official residence for visiting heads of state. At the presentation were members of Congress, the administration, the diplomatic corps, and the press. This ceremony was the culmination of the king's first official state visit to the United States.

Dr. John Duke Anthony

Established in 1913 by Moroccan Sultan Moulay Youseff, the award is the premier Order of Morocco and is awarded in five classes in recognition of exceptional civil and military accomplishments. Previous American recipients of the award include General George S. Patton.

One of the very first guest lecturers at DISAM, Dr. Anthony has been a fixture in the Middle Eastern seminar in the Overseas Course since 1978. In 1983, Dr. Anthony was appointed an adjunct faculty member. In 1993, he received the Department of State's Distinguished Visiting Lecturer Award, one of three awarded over a span of 25 years, in recognition of his preparation of American diplomatic and defense personnel assigned to the Arabian Peninsula and the Gulf states. In 1994, he received the Stevens Award for Outstanding Contributions to American-Arab Understanding.

Dr. Anthony is founder, president, and chief executive officer of the National Council on U.S.-Arab Relations, a non-governmental educational foundation dedicated to enhancing American awareness of Arab culture and heritage and U.S.-Arab bilateral relations, a member of the Council on Foreign Relations, the founding president of the Middle East Educational Trust, a founder of the Commission on Israeli-Palestinian Peace, the founding president of the Society for Gulf Arab Studies, a founder and board member of the National Commission to Commemorate

the 14th Centennial of Islam, founder of the annual U.S. Mideast Policymakers Conference, a founder of the U.S.-Gulf Cooperation Council Corporate Cooperation Committee.

He received masters and doctoral degrees from Georgetown's School of Foreign Service (with distinction), and the Johns Hopkins School of Advanced International Studies. A consultant to the U.S. Departments of Defense and State for the past 25 years, he has taken more than 200 members of Congress and their chiefs of staff on familiarization visits to Arab, Middle Eastern, and Islamic countries.

Dr. Donna Schlagheck

Annually in New York City, universities from all over the world participate in the National Model United Nations conference. Each university represents a country or an organization in mock proceedings of the real U.N. Professor Donna Schlagheck, chair of the political science department and director of international studies at Wright State University in Dayton, along with her colleague Professor Laura Luehrmann, were the faculty advisors for the Wright State team that won the conference's three top awards this year. Dr. Schlagheck, who has been a lecturer at DISAM since 1989, was named a DISAM adjunct faculty member in 1994. This year, she led a team of 37 Wright State students who represented Germany and the Inter-Parliamentary Union in the deliberations. Their top prizes keep alive the school's 21-year winning streak at the conference, marking the university as one of the nation's top performers in this competition. The secretary general of the conference noted that Wright State is always a force to be reckoned with and is well known for its thorough preparation and willingness to exert leadership in the conference.

Dr. Donna Schlagheck

Dr. Schlagheck, a recognized expert on terrorism who has published widely on the subject, offers this expertise to DISAM's Overseas Course. In addition, she lectures on events in Europe and the Middle East in our regional seminars. At Wright State, Dr. Schlagheck has compiled a superlative record of teaching excellence. She was named four times as the Robert J. Kegerreis Distinguished Professor of Teaching, and has been the Honors Teacher of the Year, the Student Government Faculty member of the year and the winner of the Trustees Award for Faculty Excellence. She attended the Japan Studies Institute at San Diego State University in 1989 and was a Fellow, Japan Center for International Exchange in 1992. Dr. Schlagheck received a B.A. and a Ph.D. in political science from the University of Minnesota.

Interestingly, Dr. Schlagheck's success in the Model U.N. continues along the path set by her predecessor at Wright State, Dr. Jim Jacob, who is also an adjunct faculty member at DISAM. In

the early years of Wright State's participation in the conference, DISAM supported the team through its own library of resources on international affairs.

In both of these cases, DISAM salutes our colleagues for their accomplishments. We are proud to count them among our faculty, and our educational program is clearly enriched by their participation.

SECURITY ASSISTANCE CALENDAR

28 November-1 December 2000	USEUCOM Training Seminar, Stuttgart, Germany
4-8 December 2000	U.S. Army IMSO Conference, Hampton, Virginia
10-15 December 2000	USCENTCOM SA Conference, Orlando, Florida
13-19 January 2001	U.S. Pacific Command Security Assistance-Defense Cooperation in Armaments Program Conference (PACSAC-DCA 2001)
22-26 January 2001	USEUCOM Budget Conference, Denver, Colorado
22-30 March 01	USPACOM TPMR, Thailand
22-27 April 2001	USSOUTHCOM TPMR, Miami, Florida

RESEARCH AND CONSULTATION

Is there a security assistance procedure, requirement and/or program guidance which is (or has been) presenting a significant problem in accomplishing your security assistance function? If so, DISAM would like to know about it. If you have a specific question, we will try to get you an answer. If it is a suggestion in an area worthy of additional research, we will submit it for such research. If it is a problem you have already solved, we would also like to hear about it. In all of the above cases, DISAM will use your inputs to maintain a current "real world" curriculum and work with you in improving security assistance management.

Please submit pertinent questions and/or comments by completing the remainder of this sheet and returning it to:

DISAM/DR
2335 Seventh Street
Wright-Patterson AFB OH 45433-7803
or
Data Facsimile Number: DSN 986-4685 or Commercial: (937) 656-4685
or via internet: research@disam.wpafb.af.mil

1. Question/Comment: (Continue on reverse side of this page if required.)

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2. Any Pertinent References/Sources:

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3. Contact Information:_____
Name _____
Address _____
Telephone Number _____

4. Additional Background Information: _____
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