

COVER FEATURE

Office of Defense Cooperation, Bonn, Germany, and Life Along the "Two-Way Street"

By

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INTRODUCTION

Most Americans know that the United States is a young country and, thus, a relative new -comer to the world's family of nation-states. Surprisingly, the German nation is younger, having first been united as "Imperial Germany" under Prussian domination in 1871, six years after our own Civil War. The current nation-state of the Federal Republic of Germany (FRG) is even a more recent member in this family of nations. The FRG was created in 1949 by incorporating the post-World War II American, British, and French zones of occupation. However, as young as the FRG may be as a nation, the histories and cultures of its peoples began well before the founding of the Roman Empire. Since as many as 60 million Americans claim German ancestry and since the salient points of Germanic history from Charlemagne to the tragedies of the Third Reich and on through the Cold War and Detente are already generally known to many readers, there is no reason to dwell on a review of the past. Some background, however, may be of interest.

The German nation grew from a number of tribes and clans (Franks, Saxons, Bavarians, Schwabians, etc.). The impact of these population groupings is still seen today where the popula -tion of one locale perceives itself as quite distinct from others, perhaps just a few kilometers away. The post-1945 influx of refugees from Silesia, East Prussia, Pomerania, and Brandenburg, etc., added even more clannish flavor and inter-tribal rivalries to the country's social and political mosaic.

In addition to differing political leanings, customs, and dress, one can also find such distinc -tions in the many German dialects. These regional speech patterns existed long before there was "German"--in fact, written German did not mature until the 18th Century--a process spurred on largely by Luther's 16th Century translation of the Bible from the Latin and Greek. The point is simply this--if a present day Upper Bavarian and a Lower Saxon were to speak to each other in their pure dialects, an interpreter would be needed by both. While all Germans understand and can speak High German (Hochdeutsch), their daily business and domestic activities tend to be carried on in hundreds of local or regional dialects.

Although the Federal Republic's landmass is approximately the same size as our state of Wyoming, its population exceeds 62 million, 4.5 million of which are foreign workers. Since 1974, the FRG's native birthrate has been declining and at present it is the lowest in the world. The average number of children per German marriage is now about 1.8 and the effects of this negative population growth are slowly beginning to be felt. In fact, the Federal Government has

recently extended the period of military service for conscripts. Without taking this step, it would have been impossible for the FRG to meet its military force requirements into the next decade and beyond.

The Federal Republic is politically divided into eight States [Baden-Wuerttemberg, Bayern, Rheinland-Pfalz, Hessen, Saarland, Nordrhein-Westphalen, Niedersachsen (Lower Saxony), and Schleswig-Holstein], two city-states (Hamburg and Bremen), and the "special" state of West Berlin. The capital of the nation is now Bonn, located just to the south of Cologne along the banks of the Rhine River valley. Bonn was originally selected as a "provisional" capital pending the government's move back to Berlin concurrent with German reunification after World War II. This reunification never came about and thus Bonn remains the seat of the Federal German government. Although originally a sleepy university town, known mainly as the birthplace of Beethoven, Bonn has grown considerably since 1949 and now boasts over 300,000 inhabitants and a large and growing contingent of foreign emissaries, missions, and diplomats.



Town Hall and Marketplace in Bonn

The American Embassy is located in Bad Godesberg, one of Bonn's southern suburbs annexed in 1969. The building first opened its doors in 1951 when the U.S. High Commission for Germany moved to Bad Godesberg from its previous offices in Frankfurt. When the FRG was finally granted full national sovereignty in 1955, the Commission was replaced by a fully accredited U.S. Embassy and Mission. Just three miles north of the Embassy itself, tucked away in the small village of Plittersdorf, is the American Housing Area--also completed in 1951. The houses and apartments are situated near the Rhine River and within walking distance are numerous Embassy community facilities: a commissary, sales store, gas station, club and restaurant, movie theater, recreation center, chapel, and a kindergarten through 12th grade American school. Oddly enough, given the American penchant for naming things, this housing area does not have an official name. Originally termed the "Bonn Enclave" by the High Commission, it has also been called the "Golden Ghetto," "Klein Amerika" (Little America) and the "Siedlung" (Housing Project). Today, residents refer to the area simply as "Plittersdorf," the name of the village the area borders.



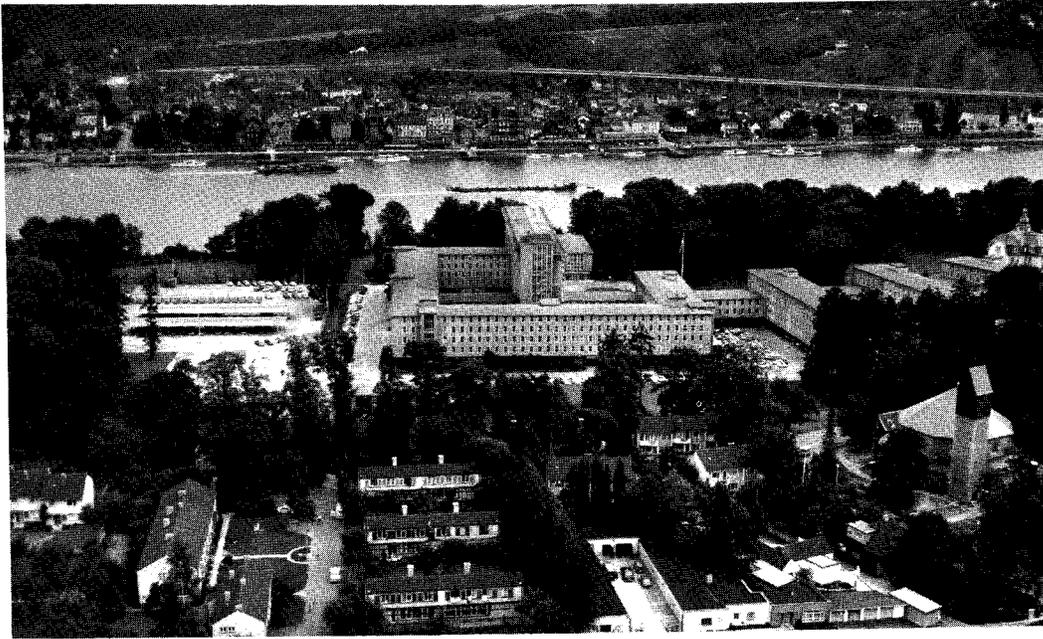
American Embassy, Bonn, Germany



American Embassy Housing Area

The Embassy itself is one of the largest U.S. missions in the world and employs over 350 Americans and 360 foreign nationals. In addition to the Foreign Affairs agencies of State, USIS, Commerce and Agriculture, over 24 other agencies are represented, including the Departments of Justice, Treasury, and Energy. The Department of Defense forms one of the largest contingents, with the Defense Attache Office (Army, Navy, and Air Force), the Marine Security Guards, liaison offices for HQ USAFE, HQ USAREUR, and for the Army and Air Force research and

development communities, to name but a few. The "senior" military office at the Embassy is the Office of Defense Cooperation (ODC), a smaller but no less busy outgrowth of the previous Military Assistance Advisory Group (MAAG) organization.



**Aerial View of the American Embassy (in center of photo)
[Koenigswinter stretching along opposite river bank;
Siebengebirge in the far background]**



Downtown Bad Godesberg

HISTORY OF THE OFFICE OF DEFENSE COOPERATION (ODC)

The history of the ODC parallels that of the Bundeswehr (German Armed Forces) and actually began in the summer of 1954 with the formation of an Advanced Planning Group which was a predecessor to the MAAG, Germany, established the following year on 30 December 1955. Upon activation, the MAAG grew from 89 military and civilian personnel to over 700 by the third quarter of 1956. By 1976, personnel reductions had lowered the MAAG to 44 military and civilian personnel. That same year, the MAAG was restructured and named the Office of Defense Cooperation (ODC). The ODC today consists of five officers, one NCO, and 11 civilian personnel.

EVENTS LEADING TO THE FORMATION OF MAAG, GERMANY

The rebirth of the German Armed Forces, which were totally demobilized after World War II, had its genesis in the tensions aroused by the Korean War which broke out on 25 June 1950. Responsible officials in the FRG discerned a parallel between divided Korea and divided Germany, and asked the Western occupation powers for a security guarantee for the territory of the FRG. In September 1950, the United States, United Kingdom, and France declared that an attack on Germany would be regarded as an attack against themselves. By December of that year, the NATO Council decided to create a European Army, later referred to as the European Defense Community.

From the autumn of 1950 to the summer of 1954, the Federal Government, at the invitation of the Western Powers, was engaged in protracted negotiations for German participation in an integrated European Defense Community. In May of 1952, France, Italy, FRG, and the Benelux countries signed a treaty creating the European Defense Community, which would include 12 German divisions. This treaty failed ratification by all governments.

On 7 April 1953, during the course of the European Defense Community negotiations, the Honorable Mr. Nash, then Assistant Secretary of Defense, stated the willingness of the United States to assist materially in the reconstitution and reequipping of the German Armed Forces. This was reaffirmed by the United States Secretary of State in London on October 3, 1954, after the decision to admit Germany to NATO. On 22 November 1954, an aide memoire was presented to the Federal Republic of Germany transmitting a list of military equipment which the United States was prepared to give to the Federal Republic of Germany and indicating that the United States was also prepared to offer assistance in training and in production, particularly on United States equipment. The aide memoire specified that the United States and the Federal Republic of Germany would have to sign a Mutual Defense Assistance Agreement prior to delivery of the equipment. The equipment proffered was based on United States Tables of Organization and Equipment, since the soon-to-be German Army was not yet established. It was sufficient to equip four infantry and two armored divisions, 24 Air Force squadrons, and a limited number of naval units. This equipment came to be known as the "Nash List" and was to be delivered in accordance with the readiness of the German Forces to accept and utilize it properly. The equipment which was ultimately supplied was valued at approximately one billion dollars.

On 30 June 1955, the United States and the Federal Republic of Germany signed a Mutual Defense Assistance Agreement which provided that the United States would make available equipment, materiel, and services to the Federal Republic of Germany for use in promoting an integrated defense of the North Atlantic Area in accordance with NATO defense plans. This agreement became the frame of reference on which to establish the MAAG, now the ODC, on December 30,

1955. The mission was clear: to equip and train the new West German Army. In essence, the MAAG became the midwife of the German Federal Armed Forces (Bundeswehr).

On January 2, 1956, assisted by the MAAG, the first German units were activated at Andernach on the Rhine. During 1956 the primary function of these units was the forming and training of cadres. On April 1, 1957, the first conscripts were called up and the first NATO-destined units were formed. With massive United States assistance in the form of materiel, MAAG technical and logistical advisory efforts (extending to battalion level), extensive help from United States Army Europe and its military schools, and the full support of CONUS training and logistic resources, the activations proceeded smoothly.

It is significant to note that the Federal Republic achieved its NATO objectives without calling upon the United States for any grant aid assistance beyond that which was initially programmed.

THE BEGINNINGS OF FOREIGN MILITARY SALES (FMS) WITH GERMANY

Deliveries of the Nash List materiel were basically completed by 1958 and the Federal Republic of Germany has since procured all other materiel required from the United States and European sources using its own funds. Grant aid dwindled to \$100,000 per year, devoted to training and orientation visits to the United States. By 1960, Germany was accomplishing its own training by using schools which it had activated, supplemented by students trained in the United States and other NATO facilities, and by using technical representatives. By 1962, Germany no longer received grant aid and became a cash FMS customer. The operating costs of the MAAG and of the ODC today are offset by direct German contributions in accordance with the Mutual Defense Assistance Agreement.

On May 25, 1962 the United States and the Federal Republic of Germany signed an agreement wherein Germany purchased all reversionary rights to the equipment furnished under grant aid for the sum of 75 million dollars, based on the scrap value of 7 1/2 percent of the original acquisition cost. The only controls attached to the sale were a requirement that the FRG obtain United States consent prior to any equipment transfers to third countries, and that, prior to disposal, Germany would offer the United States the opportunity to repurchase the items at 7 1/2 percent of acquisition cost.

By the 1960's, a U.S./FRG agreement (the Strauss/Gilpatric agreement) resulted in the undertaking of the Federal Republic to offset U.S. defense expenditures in Germany by FMS weapons procurement and other purchases from the United States. Between 1961 and 1975, eight separate agreements were signed by Germany to offset a total of 40.27 billion German Marks (DM) of U.S. defense expenditures in Germany. Of this DM 40.27 billion, a total of DM 25.9 billion was spent for FMS weapons procurement and the remainder for other purchases in the United States. Overall, since the 1950's, Germany has purchased roughly \$10 billion worth of defense materiel, services, and training from the United States.

THE TURNING POINT AND THE BEGINNINGS OF A DEFENSE INDUSTRIAL COOPERATION PARTNERSHIP

If the goal of our security assistance efforts is to render a nation self-sufficient, then Germany can be regarded as our most outstanding success. The Federal Republic of Germany has transitioned from a grant aid recipient to an FMS cash customer, and now has the industrial and economic wherewithal to participate in defense industrial cooperative arrangements based upon a balanced partnership.

The turning point began in 1974, by which time the Federal Republic of Germany had become our best European FMS customer. Standardization and interoperability continued to be nearly perfect. As prosperity in Germany increased, she became more self-reliant and shouldered more of the defense burden. It is not surprising, given the robust German economic recovery, that Germany would and did constitute a defense industrial base. Given the small size of its national markets and the high cost of developing new weapon systems, Germany recognized, as did most other West Europeans, that bilateral and multilateral arrangements were virtually essential. Because of this, the Europeans pioneered the development of the transnational cooperation concept, while developing their technology base. Furthermore, they have identified international marketing opportunities and now are able to come to the bargaining table as a full-fledged partner. This means that the ODC Bonn works closely with the Federal Ministry of Defense to bring about future increases in FMS through cooperative, balanced arrangements. An example is the Patriot/Roland Agreement, which includes a 1985 FMS case of over \$1.56 billion and represents a balanced interdependency of barter, industrial participation, and the integration of common military requirements. Germany plans to acquire other U.S. origin items/systems through a cooperative program strategy and will pursue agreements which provide for German participation in a program equal to its share of the program. Compensation, offset, technology transfer, and economic/political tradeoffs are predominant issues.

Over the past four years, the ODC Bonn has played a major role in the following Defense Industrial Cooperation (DIC) mission-oriented activities: Patriot/Roland Agreement, HARM, RAM, Stinger, MLRS, Cooperative C3 MOUs, and programs to include EIFEL, GEADGE, IFF, "Two-Way Street" MOU responsibilities, and US/GE Cooperation initiatives.

The road ahead will require close coordination between major weapons systems developers on both sides of the Atlantic. Secretary of Defense Weinberger charted the future course in his 6 June 1985 Memorandum, Subject: "Emphasis on NATO Armament Cooperation." The memorandum specifies the objectives to be achieved by DOD activities in NATO Armament Cooperation and identifies the specific actions to be taken within DOD. These objectives and actions provide the strategy required to seize the opportunities to enhance international armament cooperation. The following quote from the memorandum sums up the challenge of the future: "We must convince our NATO allies, the U.S. Congress and Executive Agencies that collective security depends upon greater integration of military requirements with alliance-wide defense-industrial cooperation."

ODC Bonn facilitates armaments cooperation by working closely with the German Federal Ministry of Defense, U.S. and German program managers, and responsible agencies within the DOD and service components. To understand how the ODC performs this function, a review of its organization and total mission is in order.

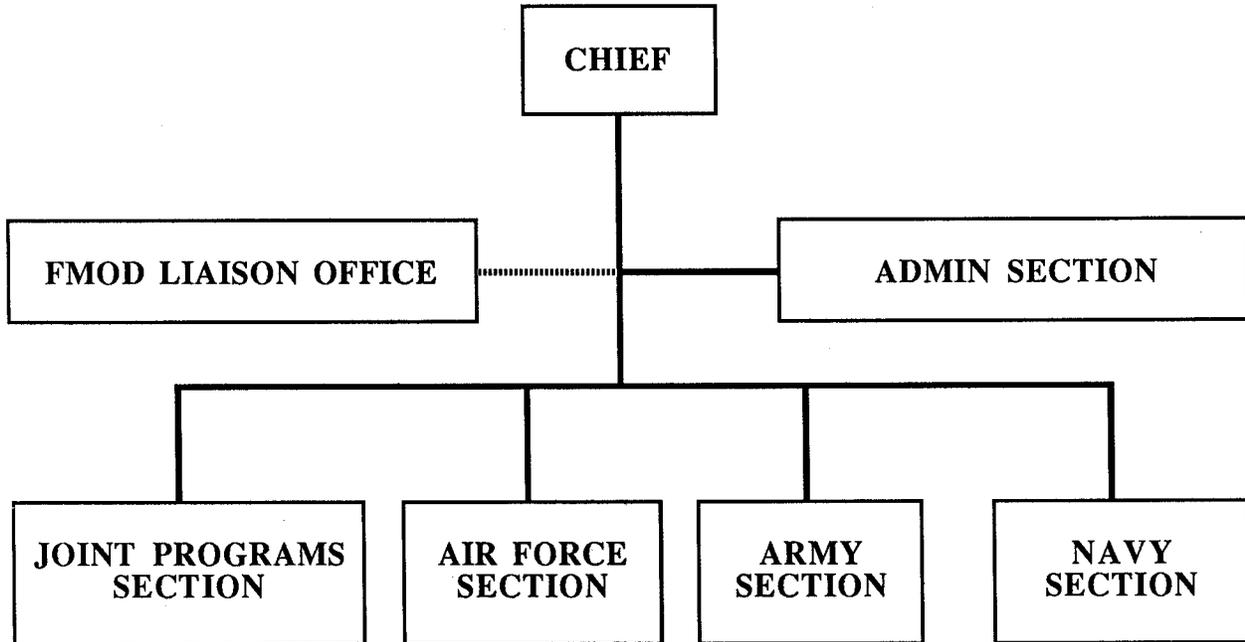
ODC ORGANIZATION

ODC Bonn is organized as shown in Figure 1 on the next page. The Chief of the ODC, Colonel Guenther W. Kaiser, USAF, wears four hats. He commands the Security Assistance Organization (SAO), is the U.S. Defense Representative, the USCINCEUR Contact Officer, and represents the Live Oak Command in Bonn.

As the SAO Commander, he is responsible for planning, formulating, supervising, and implementing the security assistance program in Germany. Colonel Kaiser and his staff advise and assist the German Federal Armed Forces on organizational, administrative, logistical, and training matters as they pertain to U.S. doctrine and procedures. He is also responsible for executing the policies of the Ambassador relating to mutual security in those areas which are the responsibility of the Department of State. Colonel Kaiser is one of the principal officers of the Embassy and as such

is a member of several fora. For example, as a member of the Ambassador's Country Team, Colonel Kaiser keeps this forum advised on all matters pertaining to security assistance. As a member of the Emergency Action Committee (analogous to the military Crisis Action Team), he advises the Ambassador on military matters during periods of crises and contingencies, or while planning for their eventuality.

FIGURE 1
ODC - Germany



PERSONNEL AUTHORIZATION
(Not including FMOD Liaison personnel)

U.S. Military	6
U.S. Civilian	3
Local National	<u>8</u>
Total	17

As the U.S. Defense Representative in Bonn, major activities include Defense Industrial Cooperation projects and meetings, providing a focal point for military-to-military agreements, and the interface among non-combat DOD elements in the host country, the Ambassador and Mission, and the host country defense establishment.

As USCINCEUR Contact Officer, he is the principal representative of the Commander-in-Chief, European Command (EUCOM) in Bonn for dealing with the Government of the Federal Republic of Germany, the U.S. Embassy, and military representatives of other foreign forces in the FRG in all matters relating to the authority, functions, and responsibilities reserved by USCINCEUR.

As the Live Oak Liaison Officer, Colonel Kaiser represents the Live Oak Command in Bonn, and coordinates issues between the Bonn Group and the Live Oak Command, which is headquartered in Mons, Belgium.

Supporting the Chief of ODC and his staff is an all-important Administrative Section consisting of three personnel. They not only handle routine administrative and secretarial tasks, but also manage the ODC's budget and personnel matters. It is this small group, too, that processes the thousands of official visit and country clearance requests that come into the embassy each year.

In order to provide ODC with smooth and timely interface with the German military establishment, a Federal Ministry of Defense Liaison Office, manned by four German personnel, is also at the disposal of the SAO personnel. Their support and knowledge have been historically important to the success of this SAO and this is likely to continue in the future.

The mission of the ODC Bonn is as follows:

- Administer the Foreign Military Sales (FMS) Program:
 - Sales of equipment, services, and training.
 - Management.
 - Evaluation and planning for acquisition of US defense materiel, services, and training.
 - Disposition of excess US defense materiel.
- Promote NATO rationalization, standardization, and interoperability (RSI) and other defense cooperation measures:
 - Coordinate US/FRG "two-way street" reciprocal purchasing projects/activities.
 - Advise defense industry representatives on current political, economic, and military climates.
 - Manage defense industrial security clearance/visit program.
- Execute responsibilities as US defense representative, USCINCEUR contact officer, and Live Oak liaison in Bonn.

FOREIGN MILITARY SALES SUMMARY

Materiel. Total FMS for 1985 was nearly \$1.7 billion which represents the largest in ODC history. This was made possible as a result of the balanced, cooperative U.S./FRG Patriot/Roland Agreement which provided for an FMS case of over \$1 billion.

Training. In 1985, Germany spent \$103 million for the training of 1,129 students in the United States. The majority of the training requirements for the German Federal Armed Forces is conducted by Germany in their own schools. Germany purchases training via FMS for special programs where training in country is limited because of weather and air space (e.g., pilot training), and for U.S. systems Germany has acquired. An interesting aspect of Germany's training capabilities is the training provided to U.S. forces. This is furnished on a reimbursable and a non-reimbursable basis. Although the number of U.S. students attending German schools is minimal (less than 500/year), the training offered is thorough and excellent.

ARMY SECTION

The Army Section is headed by LTC John Peyton, USA, and is organized into a Logistics Branch and a Training Branch, manned by one officer and three civilians. Major FMS projects

include administration of the Patriot FMS case, the Mission Equipment Package (MEP) for the planned French/German anti-tank helicopter, TOW conversion, and dieselization of the M-88 Medium-Range Vehicle. The Army Section manages several hundred other FMS cases devoted to the support of existing U.S. weapon systems. The Army Section is heavily involved in the Stinger and Multiple Launch Rocket System (MLRS) cooperative programs.

The Stinger project is based on a Memorandum of Understanding (MOU) wherein Germany is the lead nation of a NATO Consortium to dual produce the Stinger weapon system. In the MLRS, which is a cooperative development and coproduction program, Germany is a consortium member along with France, the United Kingdom, and Italy. Several FMS cases are being established to provide logistics and maintenance support of the MLRS while it is being tested by Germany.

The Army Section works very closely with its counterparts in the FMOD, which include the German Army Materiel Office, German Systems Managers, and the German Air Force. Since the German Air Force is responsible for Air Defense, ties with the ODC Army Section are very close.

German Army FMS training is comprised mainly of helicopter and missile courses. Rotary Wing Aircraft Pilot training, conducted at Ft. Rucker, Alabama, qualifies German pilots for the award of the U.S. Military Pilot's Certificate and U.S. Army Instrument Certificate.

An interesting aspect of German Army training is the training provided to the U.S. Army. Germany provides training at no charge to the U.S. at the following schools: Combat Arms School, NBC School, Signal School, Psychological Operations School, and the Airborne School.

Reimbursed training is provided for the following courses: Long Range Patriot, Mountain and Winter Warfare, Ranger, and LANCE Maintenance.

AIR FORCE SECTION

The Air Force Section consists of Lieutenant Colonel David Helms, USAF, the Chief, and two civilians--a Logistics Specialist and a Training Manager. Together they support USAF-level management of over 200 FMS materiel, services, and training cases valued at over 100 million dollars annually. The section works daily with various German Defense Ministry and German Air Force (GAF) agencies to provide assistance in the following major current and future programs:

- F-4 Cooperative Logistics Supply Support Arrangement (CLSSA) for 240 F-4/RF-4 aircraft in the German Air Force.
- Maverick-B missile follow-on acquisition aimed at increasing GAF capability against Warsaw Pact armor.
- "Peace Peek"--the modification/support of five Breguet "Atlantik" surveillance/recce aircraft.
- GAF RF-4 radar replacement with APQ-99 which will be in conjunction with a similar USAF buy and which will provide a significantly improved navigational capability to the GAF.
- AMRAAM (Advanced Medium-Range Air-to-Air Missile): paramount to the German effort to upgrade its F-4 air-to-air role. The initial buy is in accordance with the "Family of Air-to-Air Weapons" MOU, wherein Germany and the U.K. will later either produce additional units here in Europe, or continue to buy them from a U.S. source.

- Significant future F-4F modifications to provide AMRAAM capability and fully upgraded avionics and fire control systems. RF-4 upgrades are also a likelihood.

German Air Force pilot training programs are broken into two categories: transport and tactical. All transport training is done entirely within the Federal Republic, while all tactical (i.e., fighter) basic training is done in the United States. Initial flight screening for the tactical program is done in Germany, but the GAF, due to weather and air space considerations, would like to move this program to the U.S. as an "add-on" to Pacific Southwest Airlines' (PSA) training of Lufthansa airline pilots. The desired start date for this new program is 1987-88 and, if finalized, would be conducted via a direct, commercial arrangement with PSA.

The following specific flying training programs are conducted under FMS within the United States:

- F-4 Phantom II Training: a program for German pilots/weapon systems operators to include six fighter weapons instructor course students. This training is accomplished at George AFB, California.

- ENJJPT (Euro-NATO Joint Jet Pilot Training): Formerly the dedicated German Undergraduate Pilot Training Program at Sheppard Air Force Base, Texas. All German fighter pilots-to-be go through this newer ENJJPT course before moving on to advanced programs elsewhere: (1) F-4 program at George, (2) RF-4 program at Bergstrom AFB, Texas, (3) Tornado program at Cottesmore in the United Kingdom, or (4) Alpha-Jet upgrade in the FRG. GAF navigator training, as a part of normal USAF training, is conducted at Mather AFB, California.

Significant air-refueling training for the GAF is also funded via FMS. One program supports intra-theater operations and another makes possible GAF deployment to Canadian training areas. Of late, there has been significant GAF interest in FMS-funded participation in Red Flag Operations at Nellis AFB, Nevada.

Finally, important technical training at various USAF installations is provided via FMS programs, to include a wide variety of professional military training such as Air Command and Staff College, Air War College and Advanced Physiological Training, to name but a few.

NAVY SECTION

Navy Commander David Miller, plus a civilian training manager, and a secretary comprise the Navy Section of ODC Germany. The Section Chief also acts as the logistics manager.

The largest number of Navy FMS cases each year involve continuing logistics and technical support cases for ships, aircraft, and shore-based command and control activities. Most new equipment cases in 1985 were for ammunition and weapons sub-systems, such as missiles and computers, rather than for complete platforms. The largest of these cases was the purchase of the U.S. Navy's High Speed Anti Radiation Missile (HARM) for Tornado fighter-bombers of the Federal German Navy and Air Force. The aircraft itself is produced in Europe, but uses some U.S. components. Typical of large FMS cases involving DIC arrangements with Germany, the HARM FMS transfer was accompanied by a separate industry-to-German Government agreement for industrial offsets. Also, parts of each missile will be produced by German manufacturers. HARM will provide the German Armed Forces with an important, long-range defense suppression capability with NATO.

The Federal German Navy recently decided to build two more new frigates of the Bremen (F-122) Class. These ships have several subsystems of U.S. origin on board. Germany will procure some of those subsystems via FMS and others commercially. The anti-surface missile systems (Harpoon) for these ships are being purchased commercially, but will be supported in the areas of spare parts, technical documentation, and maintenance through an FMS case--an example of the varied and complex nature of U.S. armaments cooperation with Germany.

New radars for the German Air Force's F-4 Phantom jets will likewise be procured through a commercial contract involving offsets and licensed coproduction of components, but with support services, software documentation, and integration work provided through FMS. About 25 percent of the Navy Section's logistics business is in support of the German Air Force.

The Navy Section also participates as a player in other cooperative programs such as the Rolling Airframe Missile (RAM), an antiship missile defense which has been codeveloped by Germany, the United States, and Denmark. Now completing full-scale engineering development, the RAM system is expected to begin limited production in 1987 and achieve initial operational capability by 1990. The missile will be produced in both countries simultaneously and the Navies will install them on destroyers, frigates, patrol boats and auxiliaries. The RAM program has the potential to break new ground in the areas of cooperative armaments agreements and become a shining example of the "two-way street."

Unique among the ODC's sections, the Navy Section is also assigned sole responsibility for U.S. Navy Research and Development (R&D) liaison with the Federal Republic of Germany. The Section Chief maintains contacts in some 26 separate areas of research endeavor, ranging from underwater acoustics to human engineering. He also takes part in the annual bilateral reviews of all R&D data exchange agreements.

The German Navy continually monitors the U.S. Navy's procurement and development programs and is actively considering a number of our Navy's programs for German fleet application. The smallest of the Federal Republic's Armed Forces with only about 40,000 men and a few dozen large ships, the procurement of proven USN equipment makes good economic sense and will likely continue into the foreseeable future. But the terms under which the equipment is to be procured are likely to be increasingly complex, a mixture of FMS and commercial, with ancillary industrial agreements and government-to-government memoranda of understanding regarding technology transfer, licensing, and work-sharing.

The Navy training program for Germany encompasses a wide variety of technical and professional courses for students whose training time in the United States may be as short as two weeks or as long as two years. The technical training includes many courses in shipboard maintenance, electronics, medical, and warfare specialty subjects. Postgraduate education at the Naval Postgraduate School in Monterey in such diverse fields as operations research, underwater acoustics, and electrical engineering, leads to Master of Science degrees for German naval officers. The German defense establishment trains test pilots, flight test engineers, and flight surgeons at U.S. Navy schools. The Federal German Navy is always represented in the Naval Command College course in the Naval War College at the invitation of the Chief of Naval Operations. The attendance of middle-grade officers from all branches of the German Federal Armed Forces at the U.S. Armed Forces Staff College is administered by the Navy Section, as is the program at the Defense Resources Management Education Center in Monterey. About 200 students each year go to the United States under Navy training FMS cases. Like the Army, the German Navy participates in some reciprocal special warfare training with U.S. Navy students, and this program is also administered by the Navy Section.

JOINT PROGRAMS SECTION (JPS)

The Section Chief, LTC(P) Walter Bawell, one secretary, and a translator comprise the Joint Programs Section which is responsible for RSI, DIC, FMS policy, and all joint matters. The JPS prepares the Annual Integrated Assessment of Security Assistance (AIASA), manages the disposition of U.S. origin equipment excess to FRG needs, and assists the Chief, ODC in executing his responsibilities as Defense Representative and USCINCEUR Contact Officer. LTC(P) Bawell also serves as Deputy Chief of the ODC.

The operations of the JPS center around DIC relations with the Federal Ministry of Defense (FMOD), Germany. As it applies to Germany, DIC encompasses bilateral, multilateral armament cooperation, cooperative R&D, coproduction, license production, reciprocal procurement, technology transfer, joint logistics, compensation via the "two-way street," and industrial participation.

The approach to DIC has been that of a triad: the establishment of reciprocal MOUs, coproduction/dual production agreements, and the creation of families of weapons. The most important of these approaches is the reciprocal U.S./FRG MOU called the "two-way street" MOU, which opens up U.S. defense markets within the NATO Alliance to fair competition by removing "Buy National" restrictions. The MOU provides that each government support periodic seminars on how to do business in its defense procurement system. In November 1984, JPS in conjunction with DOD, the FMOD, and the Federation of German Industries, hosted a seminar in Cologne, Germany, on "Doing Business with DOD." The JPS is working with the FMOD in planning another seminar, this time entitled "Doing Business with the German FMOD," which is planned for mid-1986 and will be geared toward U.S. industry. The JPS also participates in other "two-way street" provisions designed to improve the international acquisition process of both countries and to develop a balance of trade ratio which can be used as a yardstick to measure progress and access trends.

Examples of the coproduction and dual production leg of the triad approach to DIC include Stinger, MLRS and AIM 9L air-to-air missile. The latter is an example of reciprocal license production whereby Germany produced the U.S. AIM 9L and the U.S. produced 120 mm smooth-bore gun for the M1 tank.

The last leg of the triad, Families of Weapons, is designed to avoid duplication of R&D costs. An example is the Advanced Short-Range Air-to-Air Missile (ASRAAM) and the Advanced Medium-Range Air-to-Air Missile (AMRAAM). Germany, Great Britain, and Norway are jointly developing the ASRAAM while the AMRAAM is being developed by the United States.

A unique form of armaments cooperation in which the JPS played a key role is the Patriot Roland MOU. In this arrangement, the U.S. provided Patriot fire-units in exchange for Rolands and FRG manning of U.S.-owned Roland and Patriot systems. The harmonization of this agreement generated \$4 billion worth of business; \$2 billion for each nation. For the U.S., this is measured as a \$1 billion FMS case and \$1 billion in the exchange of Patriots for Rolands and German manning. This benchmark agreement could serve as a model for future armament cooperation since it shows that such cooperation need not be limited only to procurement but can also include the exchange of weapons systems to meet valid, open military requirements.

CONCLUSION

There is a consensus in the NATO Alliance that concrete steps must be taken to improve alliance-wide cooperation in order to avoid duplication and destandardization. Germany, as one of the strongest alliance members, plays a key role in the realization of this objective. The momentum has been created, successes are evident, and yet many obstacles remain. Germany and the United

States are at a crossroads in their security assistance relations. The partnership has matured. With this maturity, the FRG has the wherewithal to play a greater role in shaping the destiny of the Alliance. The future mission for the United States is clear: to balance national political, economic, and industrial interests of both nations in order to make the most efficient use of limited resources, enhance coalition combat capabilities, and to preserve the credibility of the Alliance.

ABOUT THE AUTHORS

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