

FOREIGN MILITARY SALES AND U.S. WEAPONS COSTS

Staff Working Paper

May 5, 1976



CBO-1106

CONGRESS OF THE UNITED STATES
Congressional Budget Office
Washington, D.C.

Report Documentation Page

Form Approved
OMB No. 0704-0188

Public reporting burden for the collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to a penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number.

1. REPORT DATE 05 MAY 1976		2. REPORT TYPE		3. DATES COVERED 00-00-1976 to 00-00-1976	
4. TITLE AND SUBTITLE Foreign Military Sales and U.S. Weapons Costs				5a. CONTRACT NUMBER	
				5b. GRANT NUMBER	
				5c. PROGRAM ELEMENT NUMBER	
6. AUTHOR(S)				5d. PROJECT NUMBER	
				5e. TASK NUMBER	
				5f. WORK UNIT NUMBER	
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) Congressional Budget Office, Ford House Office Building, 4th Floor , Second and D Streets, SW , Washington, DC, 20515-6925				8. PERFORMING ORGANIZATION REPORT NUMBER	
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)				10. SPONSOR/MONITOR'S ACRONYM(S)	
				11. SPONSOR/MONITOR'S REPORT NUMBER(S)	
12. DISTRIBUTION/AVAILABILITY STATEMENT Approved for public release; distribution unlimited					
13. SUPPLEMENTARY NOTES					
14. ABSTRACT					
15. SUBJECT TERMS					
16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT	18. NUMBER OF PAGES	19a. NAME OF RESPONSIBLE PERSON
a. REPORT unclassified	b. ABSTRACT unclassified	c. THIS PAGE unclassified			

PREFACE

Although the U.S. foreign military sales program has been justified chiefly on security and foreign policy grounds, recent debate has emphasized its economic advantages in reducing U.S. weapons costs and requirements. The foreign military sales program was discussed in the international affairs section of the CBO report, **Budget Options for Fiscal Year 1977**. This paper, which was prepared at the request of the Senate and House Budget Committees, examines in greater detail the program and its implications for savings in U.S. weapons costs.

This report was prepared by Sheila Kean Fifer of the National Security and International Affairs Division of the Congressional Budget Office. She wishes to acknowledge the research and analytical assistance provided by Robert E. Schafer and James R. Capra of CBO's Budget Analysis Division and the helpful suggestions of Robert B. Mantel of the Senate Foreign Relations Committee staff.

A companion CBO staff working paper, Budgetary Cost Savings to DoD Resulting from Foreign Military Sales, examines and projects the cost savings from the foreign military sales program on the basis of data analysis of 35 major weapons systems.

Alice M. Rivlin

(iii)

CONTENTS

Summary	vii
Background: Process and Participants	1
Savings in DOD Weapons Costs	5
Sources of Savings	6
Profile of Savings by Weapons Systems	10
International Aspects of FMS Savings	13

TABLES

Table 1: Foreign Sales Categories	11
Table 2: Major Recipients of U.S. Foreign Military Sales	14

SUMMARY

Until recently, evaluation of the foreign military sales (FMS) program has depended chiefly on security and foreign policy judgments. The program's goal has been assumed to be promotion of these policies, and its success measured by how well they are served. Recent debate has, however, extended to the economic consequences of foreign sales--particularly their secondary effects in reducing U.S. weapons costs and requirements. These savings have been considered as a valuable attribute of the FMS program, as compensation for faults in the program, and as reason for not restraining the program with additional Congressional regulation.

This study finds that some individual cases do produce substantial savings against a given weapon's total program costs. These cases are, however, exceptional. Large savings do not seem to be generally characteristic of FMS. Similarly, it is difficult to identify consistent savings resulting from reduced requirements on U.S. military resources as a result of FMS' strengthening recipient states. Certain sales--such as those to NATO allies--may reduce pressures on U.S. resources. The majority of sales, however, go to the Middle East, where more important policy concerns, such as the distribution of U.S. weapons technology, complicate and overshadow military costs evaluations.

Other findings of this study are:

- For a few, selected weapons systems, the savings from foreign sales are substantial, ranging up to 15 percent of a weapon's procurement costs in a given fiscal year and 8 percent of its total research and development (R&D) costs. R&D cost recoveries appear to be the single largest source of FMS savings.¹
- These savings are primarily from sales of recently developed "high-technology" systems--particularly new fighter aircraft and missiles. Savings are, then,

1. The savings discussed in this paper are approximate illustrations, and are based largely on data provided by the Office of the Secretary of Defense (OSD) and the services. A more detailed discussion of the relationship between procurement costs and FMS savings can be found in Budgetary Cost Savings to DoD Resulting from Foreign Military Sales, a CBO staff working paper.

The examples given here, 15 percent of procurement costs and 8 percent of R&D costs, are for the TOW missile launcher and F-14 fighter, respectively. They are the single largest examples of savings of their kinds among FMS data CBO has collected thus far.

.....

directly tied to the transfer, at cost, of recent and sophisticated U.S. weapons **technology**.²

- For most **sales--ship**, ammunition, **artillery**, military equipment, and services for which early R&D and other costs have **already** been absorbed--there appear to be little or no cost savings.
- The relationship between restrictions on FMS and increased Department of Defense (DoD) **weapons'** costs **will** depend less on how many **total sales dollars** are approved than upon how many sales of **newly developed**, high-technology systems are permitted.
- Reduced U.S. weapons **requirements--because** FMS strengthens the recipient **states--is** a **potentially** far more important source of savings. It is difficult, however, to **define** clear savings, particularly since a majority of recent **sales** have gone to three **regional powers**: Iran, Saudi Arabia, and **Israel**.

2. The term "**high-technology**" is used here to refer to major new weapons systems which employ sophisticated and specialized technology.

BACKGROUND: PROCESS AND PARTICIPANTS

The processes for approving and **delivering** foreign military sales (FMS) have changed little since security assistance programs were first organized at the **close** of World War II. Then the intention was that the existing units in each armed service which procured weapons and equipment should also be used for foreign arms transfers. Procurement for foreign governments was managed on a case-by-case basis as a **small** side account to U.S. procurement.

FMS is still managed that way. The fragmented and ad hoc pattern continues even though **sales** have grown to **15** percent of U.S. procurement, involve considerably more negotiation than the grants of the earlier period, and now deal in highly sophisticated weapons systems. Foreign sales are **still** largely administered **along** three separate but roughly **parallel** lines in the Army, Navy, and Air Force. It is in the services that most negotiations with foreign governments and manufacturers are **initially** processed.

The Army, Navy, and Air Force each maintain a security assistance division which oversees weapons sales and grants to foreign governments. To the extent that there is any **working-level** center in the fragmented FMS process, it is these divisions. They are the **link** between foreign purchasers and weapon-program managers who negotiate and oversee U.S. procurement. The **services'** program managers **also** provide the costing and pricing figures used by security assistance in offers to foreign governments and by the **services'** comptrollers for budgeting and appropriations. The three **services'** **international logistics** divisions also **simultaneously** provide transport, servicing, and training to foreign purchasers and to the Army, Navy, and Air Force.

With the rapid growth in foreign sales, the Office of the Secretary of Defense (OSD) has come to take a more active role in overseeing the FMS function. In 1971 the Defense Security Assistance Agency (DSAA) was formed as the primary agent responsible for administering **all** Department of Defense (DoD) security assistance programs.¹ (The **Director** of DSAA reports directly to the Secretary of Defense.) With personnel totaling **approximately** 90, DSAA is authorized to direct, supervise, and administer **all** security assistance plans and programs. While much of the administration may, out of necessity, be **delegated** to the services, it is still the responsibility of DSAA.² DSAA **does**, in fact, become **involved** in the

1. DoD Directive 5105.38 (August 11, 1971; amended May 10, 1973).

2. Geri M. Riegger (White House Fellow), Security Assistance Administration in the Department of Defense, an unpublished manuscript (July, 1975), p. 15. Much of the **following** section is drawn from this manuscript.

majority of approved **sales** cases. It reviews any sales requests for Iran and Saudi Arabia, **all** requests which involve major weapons systems, **all** cases with a value of over \$5 million, **coproduction** proposals, and sales to restricted **countries**.

The Director of DSAA, General H. M. Fish, is also Deputy Assistant Secretary of Defense for International **Security** Affairs (ISA). ISA is the other major OSD **organization primarily** involved in security assistance management. ISA is responsible for forming security **policy** for sales, assistance, and credit programs. As a **result** of his two positions, **General** Fish is charged with both forming and executing security assistance policy.

The Military Assistance Advisory Groups (**MAAGs**) are stationed in 45 countries to represent DoD and to aid foreign governments in developing security programs. The MAAGs were originally **established** to guide and administer the Grant Aid (or MAP) programs. With the transition from **military** aid to **military sales**, the majority of MAAG effort worldwide has come to be expended on FMS rather than on MAP. Although the MAAG units have been reduced in recent **years**, there is **still** some debate on whether their **1,800 personnel** may be excessive for their responsibilities.

The MAAGs are often the first point of contact in the three-part FMS **process**: pricing and **availability**, letters of offer, and **delivery**. A **sales** inquiry may come through the MAAG, the State Department, or **directly** to the Army, Navy, or Air Force. The services respond with a pricing and **availability** statement. This report requires a review of all costs involved in procuring and **delivering** the specified item; it is also intended to prevent the diversion to foreign purchasers of materials needed by the services. After pricing and terms are negotiated (these discussions are normally **handled** by the security divisions), a formal letter of offer is signed. Once the item **has** been procured, **responsibility** for delivery falls upon the **services'** international logistics divisions.

This process varies considerably from case to case, and many more offices take part in the process than have been indicated in this brief overview. **Almost** every major organization in DoD takes at least some minor role in the **sales** and assistance function.

In fact, the expanding portion of DoD personnel involved in this function has led to concern over manpower **strains**.³ FMS personnel (other than MAAGs) are allocated under the DoD manpower **ceiling** set each year

3. DoD does not have ready access to the total number of personnel in OSD and the services who participate in the FMS function. DoD identifies personnel involved in the FMS program in terms of **man-years**, and excludes **MAAG/Mission** personnel and other personnel whose costs are recovered as part of the price of a material or service **item--personnel** who nonetheless remain under the total DoD **ceiling**. With these exclusions, the Defense Security Assistance Agency estimates that 4,800 man-years, both **military** and civilian, were devoted to the FMS program in fiscal year 1975.

by Congress. While DoD tries to recover full costs for the personnel effort in FMS, foreign governments' payments for manpower costs do not translate into additional manpower. Over the last five years, the ceilings have been steadily lowered, while at the same time the FMS personnel burden has dramatically increased. Most observers agree that there is a consequent personnel shortage in the FMS area, and many believe that other Pentagon functions also feel an increased burden because of the large numbers of DOD personnel giving some portion of their time to FMS.⁴ If FMS is consuming personnel and administrative skills needed in other activities, this use of limited Pentagon resources might be considered as part of the costs of the FMS program.⁵

4. Riegger, Security Assistance Administration, p. 30.

5. DoD supports legislation which would remove security assistance from the manpower ceiling. If Congress wished to increase manpower available to FMS, one alternative would be to allocate a manpower ceiling which includes an approved FMS personnel number.

SAVINGS IN DoD WEAPONS COSTS

Through foreign **military sales**, the Pentagon provides military **materials** and accompanying services to foreign governments. These sales are estimated to **total** \$8.2 billion for **fiscal year 1976**.⁶ Assuming recent patterns continue, approximately **\$6.15** billion, or 75 percent of total sales, will pay for **military materials**, ranging (in order of sales values) from airplanes and missiles through ships, to vehicles and ammunition. The remaining 25 percent of total sales, or approximately \$2 billion, will buy the various services that accompany the weapons. These include training, servicing, constructing (of ports, **minestrips**, and roads), and the administrative processing necessary to **complete** the transaction.

By **law and policy**, all weapons and services sold through the Pentagon are to be provided at cost; DoD **should** incur no burden or profit in its role as middleman between foreign governments and U.S. **manufacturers**.⁷ The price charged foreign purchasers is the sum of the contract price to the service for the equipment, **plus** the costs of any accompanying services, plus **administrative** and other **miscellaneous** costs. **Calculating** costs is one of the more difficult and uncertain aspects of FMS management. The intention is, however, that there should be no net effect upon the DoD budget as a direct result of the FMS program.

The Department of Defense **can**, however, garner indirect savings from sharing U.S. development and production costs with foreign purchasers. Foreign purchasers can be charged, as part of the equipment price, a proportion of the research and **development** (R&D) costs which the Pentagon would **normally** have to pay in **full**. Foreign purchasers can also **lower** unit costs to the service by increasing the production volume. Such savings mean that the FMS **program's** ultimate impact on the DoD budget should be a reduction of weapons program costs.

6. This figure represents the **sales** contracted during fiscal year 1976, not the sales delivered. As of February, **1976**, \$4.2 billion had been contracted. The **fiscal year 1977** projection of \$8.9 billion has also been reduced to \$7.4 billion.

7. FMS terms are subject to negotiation. Reductions in weapons prices and surcharges can be granted when such concessions are judged to be in the national interest. See DoD Military Assistance and Sales Manual--Part III, Chapter B, and DoD Instruction 2140.1: Pricing of Sales of Defense Articles and Defense Services to Foreign Countries and International Organizations. DoD receives authority to administer these aspects of FMS under Executive Order 10973 (Executive Orders and Delegations of Authority **Relative** to Foreign Assistance).

U.S. procurement savings are claimed as a major economic benefit of the program. Testimony of Pentagon officials on the FMS program repeatedly lists lower U.S. weapons costs as a **valuable** by-product of the program. **General** Fish, Director of the Defense Security Assistance Agency, has cited procurement cost savings as an aspect of FMS which "offsets the risk of temporary reductions in selected weapons **stockpiles.**"⁸ industry spokesmen have also used this aspect of FMS to argue against restraints on sales; they have held that proposed FMS restrictions would cut sales and result in significantly higher weapons costs for DoD. This relationship between sales and costs **would** seem, however, to apply in significant dimensions to only a small minority of the weapons **sold** under FMS. Given the composition of the fiscal year 1976 \$8.2 **billion** sales program, total savings have been estimated to range from \$200 million to no more than \$900 **million.**⁹

Sources of Savings

The two primary sources of savings from foreign **military** sales are **recovery** of research and development costs and **lowered** per unit production costs.¹⁰ Both types of savings seem to be derived **primarily**, though not exclusively, from recently developed, sophisticated weaponry.

8. Department of Defense Appropriations for Fiscal Year 1976 (H.R. 9861), Hearings before the U.S. Senate Appropriations Committee, 94th **Congress**, 1st Session (1975), Part 5, p. 211.

9. This estimate was derived from sales and production data provided to the CBO Budget Analysis Division by the services and OSD. See Budgetary Cost Savings to DoD Resulting from Foreign Military Sales, a CBO staff working paper.

10. Maintenance of a production base is a third potential source of savings which is not treated here. It is, **unfortunately**, quite **difficult** to identify since it **relies** upon various assumptions about the timing of U.S. procurement **requirements**. These savings arise when a break occurs in orders from the U.S. services for specific weapons and equipment. Although these items **will** be required in the future, U.S. stocks are temporarily full. Under such **conditions**, it may be necessary to close production **facilities** and to later reopen them when U.S. orders are needed again. Both the closing and reopening of the production base involve expenses which add to U.S. procurement costs. If foreign orders for these items can be interspersed with U.S. orders, production is maintained and the **closing** and opening costs are saved. Unlike R&D recovery and **per-unit costs**, these savings can apply to any system. They are **also** less likely to **apply** to the major cost items, such as **planes** and **missiles**, which have a definite and continuous **production** program. Maintenance of a production base would seem to be the most **speculative** source of savings **associated** with the FMS program. Accordingly, it is not included in the following discussion of the **overall** savings derived from FMS.

Recovered Research and Development Costs

Recoveries of research and development costs are the most direct and the **largest** source of savings. These are also the most easily identified: Savings are **equivalent** to the amount of an R&D surcharge added to the purchase price of a weapon. The surcharge represents R&D expenses which otherwise would have been borne by the United States **alone**. Once paid by the foreign government, these monies pass through the FMS trust fund receipts and are repaid to the Army, Navy, or Air Force as credit against the R&D appropriations requested for the **following** year. Thus, each of the **service's** R&D appropriations **should** be reduced by the amount of R&D receipts coming into the trust **fund**.¹¹

R&D savings vary according to a weapon's development costs and the length of time the system has been in production. The largest recoveries come from **sales** of weapons systems which have been in production for less than five **years**.¹² Under official DoD procedures, R&D charges for these systems can be **prorated**.¹³ The estimated ratio of foreign **sales** to the total production is the proportion of total R&D expenses that can be distributed to foreign sales. R&D expenses are distributed to each foreign purchase on a per unit basis. If the estimated production or **sales** numbers change, the distribution is revised. For systems which have been in production for longer than five **years**, DoD regulations require that a flat percentage charge, up to 4 percent, be added to the purchase **price**.¹⁴ These guidelines are not rigid; purchasers can negotiate a lower than **prescribed** surcharge. Although a complete waiver of R&D costs is **normally** granted **only** to NATO **allies**, it **should** be noted that these **allies** account for **nearly** a third of **total sales dollars**.

Among the kinds of weapons **sold** under FMS, new aircraft and missile systems **would** appear to generate the most consistently high R&D recoveries. This is in large part because they tend to have comparatively high research

11. In the **annual** DoD budget, requested R&D appropriations for each of the services is reduced by the FMS R&D receipts estimated to be received during that **fiscal** year. R&D receipts can **only** be drawn against R&D **expenditures**.

12. An Iranian fiscal years 1974-75 purchase of 80 F-14s which recovered **\$160.6 million** in R&D expenses represents a relatively high recovery. See discussion below.

13. DoD Instructions 2140.1 (June 17, 1975) and 2140.2 (January 23, 1974).

14. Nonrecurring R&D or **tooling** costs which are **peculiar** to the foreign purchase are **fully** paid by the foreign government. This **is**, however, not a savings to the United States. It is a charge for additional expenses from special production for foreign sales.

and development **expenses**, and R&D recoveries are **potentially** a more significant savings against their **overall** costs to the **United States**. Items such as vehicles, tanks, and ships seldom have equally large R&D expenses relative to their total program costs.

Given DoD pricing **regulations**, however, the largest R&D recoveries occur with the sales of newer aircraft and **missiles--those** under five years in production. Given the Pentagon's two methods of apportioning costs--pro rata or 4 percent of purchase **price--the** five-year distinction can make a substantial difference. The **sale** of 80 **F-14s** to Iran recovered one of the larger R&D surcharges reported in recent **years**. Since the **F-14** was in production less than five years, Iran paid a total prorated surcharge of \$160.6 million, or **slightly** more than 9 percent of the contract price to Iran. Had the F-14 been in production for more than five years, the recovery would have been **substantially less**: no more than \$70.3 million, or 4 percent of the purchase price. The **F-14's** estimated total program cost (not adjusted for inflation) is \$8,512.5 million, and Iran is thus far the only foreign purchaser.¹⁵

Lowered Production Unit Costs

The second major source of **FMS** savings is lowered per unit production costs. Production savings can amount to as much as the 15 percent of annual procurement costs estimated for the **TOW launcher**.¹⁶ Many of the articles provided by **FMS--such** as ammunition, artillery, and ships--however, generate **little** or no savings. Like R&D recoveries, production savings also vary widely among kinds of weapons and **circumstances** of the individual sales.

Lowered per unit production costs result from the increased volume which **FMS** orders add to U.S. procurement. Under certain production circumstances, increased volume can mean a lower unit cost. The difference between the actual per unit cost to the United States and the higher cost which **would** have been paid in the absence of foreign orders is the estimated savings. These savings can be the result of economies of **scale** or of increased production experience: The foreign orders may increase a contract order to a volume that can be manufactured more efficiently, or they may provide more production learning and reduce the costs for subsequent U.S. purchases. In both cases, the **marginal** benefits will diminish after a given **volume** or level of experience has been reached.

15. These costs and savings estimates have not been deflated to a base-year comparison.

16. The estimate of 15 percent savings refers only to procurement during fiscal year 1976. It excludes procurement costs in other production years and R&D costs.

Like R&D recoveries, production savings also vary substantially according to the size and timing of foreign orders in relation to U.S. procurement. The greatest savings tend to come from sales which place large foreign orders early in production. The least savings seem to occur when foreign orders come near the end of U.S. procurement, are too small relative to U.S. purchases to affect production costs, involve items which do not become cheaper with greater volume, or are filled out of U.S. stocks.

Of the various categories of weapons sold to foreign governments, newer aircraft and missiles seem to most often fulfill the conditions for high production savings. Their characteristically small production runs and high unit costs make the added orders from foreign sales a source of exceptionally high savings; added foreign orders are most likely under these conditions to increase efficiency, and even a small percentage saving can be substantial in absolute dollar terms. The Navy predicts, for example, that in fiscal year 1976 Harpoon sales will save \$18.6 million, or 12 percent of annual procurement costs.¹⁷ While the anticipated savings from Harpoon sales are higher than most aircraft and missile savings--the Phoenix, estimated at 5.6 percent, and the TOW missile, at 3 percent, are more representative--these systems as a group are still substantially above other major sales items.

Unlike R&D recoveries, however, production cost reductions do not always represent a clear savings. Additional costs, which should be offset against estimated savings, are sometimes associated with foreign orders. The intervention of foreign orders can, for example, mean that U.S. procurement is delayed. Delayed U.S. purchases can mean additionally inflated budgetary costs, although not necessarily higher real costs.¹⁸ More important, the presumed delay in procurement means that U.S. forces are temporarily denied a needed resource and required to expend additional maintenance on the systems to be replaced. The F-14 case illustrates another kind of offsetting cost: production readjustments. The Navy reports that while the Iranian order initially saved \$60 million in production expenses, additional costs associated with closing the order--while continuing procurement for U.S. orders--totaled \$120 million.¹⁹ Although circumstances

17. These figures are a proportion of only the given fiscal year's procurement costs. Weapons development and production in other years are not included. These production cost-savings estimates were provided by OSD and have not been independently confirmed.

18. Inflation also increases the absolute amount of tax receipts, and this gain is generally sufficient to finance the additional costs of government purchases. The real cost of the weapon to the government does not necessarily, therefore, increase.

19. Department of Defense, Selected Acquisition Report, F-14A (December 31, 1975), p. 5F. No itemization is provided in the report for these additional costs.

such as this may be rare, it demonstrates the necessity of **including** any additional costs in final assessments of the total production savings generated by FMS.

Profile of Savings by Weapons Systems

The overall savings effect of the FMS program would appear to depend far less upon the dollar volume of sales than upon the composition of sales. Hypothetically, a \$10 billion program composed primarily of ammunition and ships--which generate neither substantial R&D nor per-unit production savings--could produce little savings, while a \$5 billion program composed primarily of missiles and aircraft might produce substantial savings. Furthermore, a program exclusively of missiles and aircraft established in full production would tend to yield far less savings than a program of newer items--which could recover R&D expenses and use FMS to move into full production.

In fact, a realistic program must be a mixture **falling** somewhere between these extremes. The needs of customers require that both high- and low-savings weapons and accompanying services be made **available**. The existing program is such a mixture (see Table 1), with cost savings represented by a minority of **sales:**²⁰

- Between 25 percent and 30 percent of total sales dollars represent payments for various services, such as repair, training, administrative work, **overhauling**, construction, and supply operations. These activities, of course, do not create savings. They may, in fact, generate some indirect, non-monetary costs by straining limited resources which the services draw upon for support to their own programs.
- Approximately another 11 percent represents the **sale** of ships--submarines, destroyers, landing craft, and various other small craft. While some cost savings may be derived from procurement of ship components needed for both U.S. and foreign purchases, overall savings tend to be small or **nonexistent.**²¹

20. This categorization is based on DoD descriptions of the 1975 orders in Foreign Military Sales and Military Assistance Facts (November, 1975), pp. 8-11. Estimates of savings characteristics are **also** based on DoD data.

21. For **example**, OSD estimates that by **simultaneously** procuring components used for both the CGN-41 and the Iranian-purchased DDS destroyer, \$4 million in fiscal year 1976 procurement costs were saved on parts for the **Navy's** CGN-41 cruiser. This would mean a **1.14** percent savings in **annual** CGN-41 procurement costs. The **landing** and other **smaller** craft which composed the majority of ship sales would be expected to yield **considerably** less savings.

TABLE 1
FOREIGN SALES CATEGORIES^a

<u>Categories^b</u>	<u>Foreign Military Sales Orders Fiscal Year 1975 Percentage of Total Dollars</u>
Aircraft	19%
Ships	11%
Vehicles and Weapons	5%
Ammunition	7%
Missiles	10%
Communications Equipment	2%
Other Equipment	5%
Undefined^c	16%
Subtotal, Equipment	75%
Services	25%
Total	100%

a. This table is taken from total sales dollars as given by these **categories** in the Foreign Military Sales and Military Assistance Facts (November, 1975), Data Management Comptroller, DSAA, p. 8.

b. For weapons systems, the percentage estimates are **inclusive** of spare parts and administrative fees.

c. This is a residual category used by DSAA to denote those funds which they cannot attribute to any given weapon category. In fiscal year 1975, undefined sales dollars were considerably **larger** than in previous years. If these **sales** dollars were distributed in equivalent proportions among the weapons and hardware categories, the percentage categories could rise to the following: aircraft, 27 percent; missiles, 14 percent; **vehicles** and weapons, 7 percent; ships, 15 percent; and communications equipment, 2 percent.

- Roughly another 7 percent of sales **dollars** is derived from **ammunition**, which typically generates little R&D recovery or production **savings**.
- Vehicles, tanks, and artillery constitute approximately 5 percent of sales. Vehicles and tanks **reportedly** can yield savings; DoD cites high per-unit savings for the M-60 tank and M-113 personnel **carrier--although** this does not seem consistent with their production characteristics.²² As a **general** case, **artillery** and such weaponry do not yield significant savings.
- Somewhat less than 2 percent of sales **dollars** represents communications equipment which most **likely** does create savings.
- A remaining 29 percent of **total** sales dollars comes from **foreign** purchases of **aircraft** and **missiles--weapons** which produce the most R&D recoveries and the most production savings. As discussed above, not **all** aircraft and missiles, but only those with a high proportion of sales early in the production run, generate **substantial** savings. Also, some of the production savings may later be diminished by **inflation** and other costs associated with integrating the foreign purchase into U.S. production programs.

What savings are produced by **FMS** appear to be largely dependent on sales of recent, high-technology weapons. Whether or not these weapons continue to be **sold** in the same volume is **probably** the most important single factor affecting **FMS** savings. If Congress decides to restrict these **sales**, it seems **likely** that, even with increased sales dollars elsewhere, total savings **will** be reduced. Here, however, savings considerations would seem to be outweighed by **policy** questions. Is it in the U.S. interest to make this technology available, at cost, to foreign purchasers? Does the United States gain more by **holding** exclusive control of its weapons technology or by sharing it with selected customers? Like so many aspects of **FMS**, answers to such questions **will** vary with the **circumstances** of individual sales. Some of the more important of these **circumstances** involve the **international** aspects of **FMS**.

22. Sufficient data is not presently **available** to appraise these DoD savings estimates.

INTERNATIONAL ASPECTS OF FMS SAVINGS

FMS savings in the numbers and kinds of weapons the United States must procure and maintain are **potentially** far more important than savings in the production and R&D costs of weapons. The primary justification for the FMS program is, of course, its promotion of U.S. foreign **policy** and security interests. These sales are intended to strengthen **allies** and stabilize regions important to the United States. Substantial savings would **result** from **sales** which strengthened recipient states, decreased the probability of U.S. active **involvement** and, subsequently, the Pentagon's military requirements.

From this viewpoint the question of who is receiving these weapons becomes relevant: What **allies** are strengthened and what regions stabilized? For fiscal years 1973-75, NATO members purchased **approximately** one-third of foreign **sales**. More than **half** of the total sales, however, went to three Middle East powers: Iran, Saudi Arabia, and Israel (see Table 2). Iran and Israel have also been leading recipients of the high-technology, cost-savings systems described above. The remaining sales **dollars** were divided among Latin American, African, Asian, other Middle Eastern countries, and the **Commonwealth** states.

Any assessment of the security **gains--and** consequently reduced **requirements--from** sales depends upon the **probability** that the weapons will be used consistently with U.S. interests. For the NATO recipients, the **probability** is presumed to be quite high. Long-standing commitments and **policies** have assumed Western European and U.S. security to be interdependent. Weapons bought by NATO **allies** may be judged to substitute or to **supplement** the United States' own military resources to some degree.

To a somewhat lesser degree, the same benefits might be seen in sales to allied, less **developed** countries (LDCs) and Commonwealth states. Of course, no formula is available to calculate by how much sales may actually reduce U.S. military requirements. Still, for states with which the United States has a clear defense commitment, FMS may be considered to reduce indirectly the numbers and, therefore, the costs of weapons the United States must procure and maintain.

For the majority of U.S. arms sales, however, such judgments are not so **easily** made. Any of the three primary Middle Eastern recipients could, for **example**, use FMS-acquired **weapons**, technology, and skills to pursue goals conflicting with the United States' or with each other's. Although conditions are **less volatile** and consequences less severe, the same potential exists with many other LDC purchasers. Once delivered, the United States **has**, at best, very tenuous **control** over FMS resources. There can be no assurance that these weapons **will** not be used against U.S. interests, thus increasing, rather than reducing, the pressures upon

TABLE 2

MAJOR RECIPIENTS OF U.S. FOREIGN MILITARY SALES^a
 (Percentage of total sales orders by
 purchasing state and fiscal year)

State	1973	1974	1975
Iran	48%	36%	27%
Saudi Arabia ^b	14%	23%	14%
Israel	4%	23%	9%

a. Given the average 2-3 year lag between FMS orders and deliveries, many of these purchases have not yet been delivered.

b. These figures do not necessarily reflect comparative levels of U.S. armament, since Saudi purchases are only approximately 20 percent weaponry. The other 80 percent of Saudi FMS dollars buy services and military materials. Iranian and Israeli FMS dollars are invested primarily in weaponry.

military requirements. Under such **circumstances**, it becomes **difficult**, but essential, to estimate whether **sales--such** as the Iranian purchase of 80 **F-14s--do**, in fact, reduce U.S. **military** requirements. At this point, however, an **evaluation** of FMS returns to the level of policy judgments: Do these sales serve U.S. foreign policy? If in a given case the answer is no, it seems **unlikely** that cost savings **would** be sufficient to serve as a counterbalance.

○