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# SECURITY ASSISTANCE COPRODUCTION STATUS REPORT

AND

## THE STATUS REPORT OF COPRODUCTION PROGRAMS



PREPARED BY

**U.S. ARMY SECURITY ASSISTANCE COMMAND**

AS OF 31 DECEMBER 1993

#614

RCS DD-DR & E (SA) 834  
RCS DSAA (2) 1226

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## FOREWORD

This combined Security Assistance Coproduction Status Report (RCS-DD-DR&E (SA) 834) and The Status Report of Coproduction Programs (RCS-DSAA(Q)1226) is published Semiannually by the U.S. Army Security Assistance Command for the purpose of providing relevant background and status information to personnel associated with the Department of the Army coproduction programs in accordance with AR12-8, Foreign Military Sales Operations/Procedures. Data for this report is based on information provided by Project Managers, Program Managers, SAOs, ODCs, and foreign industries.

The report is divided into the following sections:

Section I - General - Provides summary listings of all coproduction projects in being and under consideration.

Section II - Active Projects - Provides a country summary and a status report for each project having a signed MOU. These projects are in the preproduction phase or production phase.

Section III - Projects Under Consideration - Consists of a country summary and a chronology of events for each project where DOD has authorized preparation of an MOU.

Section IV - Projects Closed or in Close-Out Phase - Provides a country summary and a historical report on projects where authorized production has been completed.

Comments or questions on the material presented in this report may be directed to the Commander, U.S. Army Security Assistance Command, ATTN: AMSAC-MI, 5001 Eisenhower Avenue, Alexandria, VA 22333-0001, DSN 284-8371.

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## TABLE OF CONTENTS

### SECTION I - GENERAL

	PAGE
Summary Total of All Projects	1.1
Summary of Active Projects, Projects Under Consideration and Projects Closed	1.3
SECTION II - ACTIVE PROJECTS	
Country Summary	2.1
Status Reports:	
Egypt	M1A1 Tank (includes 120mm Gun) 2.5 105mm Tank Ammo 2.7
Germany	MOD FLIR 2.10 STINGER 2.13 AAH MEP 2.17
Japan	AH-1S Cobra 2.18 HAWK and Improved HAWK 2.20 M110A2 8" SP Howitzer 2.25 PATRIOT 2.27 HYDRA 70 2.31 Multiple Launch Rocket System 2.34 SH-60J/UH-60J Aircraft 2.36
Korea	K1 Tank 2.38 M109A2 SP Howitzer 2.40 M9 Armored Combat Earthmover 2.42
Multilateral	MLRS 2.44 Tank Thermal Sight 2.47
NATO	HAWK European Limited Improvement Program (HELIP) 2.49
Netherlands	M483A1 155mm Projectile 2.52
Norway	Light Antitank Weapon (LAW), M72 2.56
Pakistan	TOW 2 Missile 2.58 Second Generation Image Intensifiers 2.59
Sweden	HELLFIRE 2.60

UNCLASSIFIED

# UNCLASSIFIED

Switzerland	DRAGON	2.62
	M109A1B Howitzer	2.65
	STINGER	2.68
	TOW 2	2.71
Turkey	MLRS	2.74
UK	TOW/Helicopter Roof Mounted Sight	2.76

## SECTION III - PROJECTS UNDER CONSIDERATION

	PAGE
Country Summary	3.1
Status Reports:	
Egypt	120mm Tank Ammo 3.2
Germany	Air-to-Air Stinger 3.3
Korea	Stinger 3.4
Netherlands	M109A1B SP Howitzer 3.5
Pakistan	AN/TPQ-36 FIREFINDER Radar 3.6
Turkey	ATACMS 3.7

## SECTION IV - PROJECTS CLOSED OR IN CLOSE OUT PHASE

Country Summary	4.1
Historical Reports:	
Germany	UH-1D Helicopter 4.2
Italy	ARGOS-10 Radar System 4.3
	M60A1 Tank 4.4
	M109G SP Howitzer 4.5
	M113 APC Family 4.6
Japan	Air Defense Command and Control System for HAWK and NIKE HERCULES 4.7
	NIKE HERCULES 4.8

# UNCLASSIFIED

## SECTION IV - PROJECTS CLOSED OR IN CLOSE OUT PHASE (cont.)

		PAGE
Korea	Ammunition Production	4.9
	AN/PRC-77 Family of Tactical Radios	4.10
	M16 Rifle	4.11
NATO	AN/TSQ-73	4.12
	HAWK	4.13
Netherlands	Modular Thermal Imaging System (MOD FLIR)	4.14
	M109 155mm Howitzer	4.15
Norway	M109G SP Howitzer	4.17
Pakistan	TOW 2 Nightsight (AN/UAS-12A)	4.18
Philippines	M16 Rifle	4.19
Switzerland	M109 155mm Howitzer	4.20
Taiwan	General Purpose Vehicles	4.21
	M14 Rifle, M60 MG and 7.62 Ammunition	4.22
	UH-1H Helicopter	4.23
Turkey	2.75" Rocket	4.24

## SECTION V - DISTRIBUTION LIST

Distribution	5.1
--------------	-----

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SUMMARY OF PROJECTS

I. PROJECTS (COVERED BY AGREEMENTS)

Active	28
Under Consideration	6
Closed	<u>22</u>
	57

II. FOREIGN COUNTRIES

ACTIVE OR UNDER CONSIDERATION

Egypt	Norway
Germany	Pakistan
Japan	Sweden
Korea	Switzerland
NATO	Turkey
Netherlands	United Kingdom

CLOSED PROJECTS

Germany	Norway
Italy	Pakistan
Japan	Philippines
Korea	Switzerland
NATO	Taiwan
Netherlands	Turkey

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III. AMC COMMODITY COMMANDS

ITEMS ACTIVE OR UNDER  
CONSIDERATION

AMCCOM	9
ATCOM	3
CECOM	4
MICOM	16
TACOM	3

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SUMMARY OF ACTIVE PROJECTS, PROJECTS UNDER CONSIDERATION  
AND PROJECTS CLOSED

BY

COMMAND, ITEM AND COUNTRY

ACTIVE PROJECTS

COMMAND	NUMBER OF PROJECTS	ITEM	COUNTRY
AMCCOM	7	HYDRA 70	Japan
		LAW, M72	Norway
		M109A1 Howitzer	Switzerland
		M110A2 Howitzer	Japan
		M483A1 Projectile	Netherlands
		M109 SP Howitzer	Korea
		105mm Tank Ammo	Egypt
ATCOM	3	SH-60J/UH-60J Aircraft	Japan
		AH-1S Helicopter	Japan
		AAH MEP	Germany
CECOM	3	Modular Forward Looking IR System	Germany
		Second Generation Image Intensifiers	Pakistan
		Tank Thermal Sights	Switzerland
MICOM	13	DRAGON	Switzerland
		HAWK/Improved HAWK	Japan
		MLRS	Japan
		HAWK European Limited Improvement Program	NATO
		MLRS	Multilateral
		MLRS	Turkey
		PATRIOT	Japan
		STINGER	Germany
		TOW 2	Pakistan
		STINGER	Switzerland
		TOW 2	Switzerland
		HELLFIRE	Sweden
		TOW/Helicopter Roof Mounted Sight	United Kingdom
TACOM	3	M1A1 Main Battle Tank	Egypt
		K1 Tank	Korea
		M9 Armored Combat Earthmover	Korea

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UNDER CONSIDERATION

AMCCOM	2	M109A1/A2 120mm Tank Ammo	Netherlands Egypt
MICOM	3	Air-to-Air Stinger Stinger ATACMS	Germany Korea Turkey
CECOM	1	AN/TPQ-36 Firefinder Radar	Pakistan

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## M1A1 TANK COPRODUCTION

1. COUNTRY/INTERNATIONAL ORGANIZATION: Egypt
2. DATE OF MOU/MOA: 1 Nov 88
3. EXPIRATION OF MOU/MOA: 1 Feb 98
4. ITEMS AND QUANTITIES AUTHORIZED FOR PRODUCTION:  
524 M1A1 Tanks
5. ESTIMATED EXPENDITURES IN THE U.S.: \$2,419,600,000.
6. STATUS OF PRODUCTION IN ARAB REPUBLIC OF EGYPT:
  - a. Items in Production: 131
  - b. Quantity Produced in Previous 12 months: Tank No. 1 was completed in Jun 92. 19 (Jun 92-Dec 92). 68 in 93 (Jan-Dec).
  - c. Quantity Produced to Date: 87
7. REPORT OF EXPENDITURES IN U.S.: \$552,000,000
8. THIRD COUNTRY SALES AUTHORIZED: None.
9. SUMMARY/IDENTIFICATION OF NONCOMPLIANCE DURING PREVIOUS 12 MONTHS: None
10. SOURCE OF PRODUCTION, QUANTITIES, AND REPORTS:  
PM Abrams (SFAE-ASM-AB)
11. SUMMARY OF MONITORING ACTIONS: NONE
12. NAME, ORGANIZATION AND TELEPHONE NUMBER OF ASSIGNED PROJECT OFFICER: D.M. Buckbee, PM, Abrams Tank System (313) 795-2285
13. NAME, ORGANIZATION AND TELEPHONE NUMBER OF FOREIGN PROJECT OFFICER: Niranjan Patel, Chief, Coproduction Field Office, 011-202-261-2300
14. SIGNIFICANT EVENTS AND PROBLEMS ENCOUNTERED AND RESOLVED DURING THIS REPORTING PERIOD:
  - a. A successful In-Process Review (IPR) and an Integrated Logistics Support (ILS) review were held in Sterling Heights, Michigan in Aug 93.

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b. The first M1A1 Tank was produced in Jun 92 at the Egyptian Tank Plant (ETP) from a kit supplied from the Lima Tank Plant. To date, 86 M1A1 Tanks have been completed at the ETP and 45 M1A1 Tanks are in various stages of final test and acceptance. Thirty-seven (37) vehicles have been delivered to the Egyptian Land Forces (ELF).

c. Program has been restructured. Funds have been moved within the program budget to insure completion of technical assistance and facilitization to the original total program value.

d. The program will be reduced by 31 tanks to allow Egypt to balance their five-year defense program budget.

e. Successful Coproduction Armor ballistics tests were conducted in Jul 93. The next test is scheduled for Jan 94.

f. Supply action is continuing for Increment No. 3 Concurrent Spare Part (CSP) requisition. Supply action began in Feb 93. The Required Delivery Date (RDD) is Feb 94.

g. USASAC issued CSP requisitions for Increment 4 on 13 Oct 93. RDD is Feb 95.

h. A 500 mile, 50 round test of an ETP produced M1A1 tank, using one tank from Increment 1, was successfully completed in Jul 93. One tank from Increment 2 was successfully tested in Oct 93. The tests were conducted by CSTA personnel.

15. ANTICIPATED FUTURE SIGNIFICANT EVENTS AND PROBLEMS: The next Coproduction Program In-Process Review (IRP) and Integrated Logistics Support (ILS) Review are scheduled for Feb 94 to be held in Cairo, Egypt.

16. LOGISTICAL SUPPORT: The percent of fill for Concurrent Spare Part (CSP) requisitions for the Training Increment is 99.3%. Increment No. 1 is 99.6% and Increment No. 2 is 98.6%. Resolution of backorders (133 requisitions from total requirement of 17,468) are being worked with appropriate supply activities.

17. STATUS/SUMMARY OF TECHNOLOGY FLOWBACK: No technology flowback reported during this period.

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## 105MM TANK AMMUNITION

1. COUNTRY/INTERNATIONAL ORGANIZATION: Arab Republic of Egypt
2. DATE OF MOU/MOA: 21 Oct 79
3. EXPIRATION OF MOU/MOA: 21 Oct 85; program execution has continued under a series of FMS Cases.
4. ITEMS AND QUANTITIES AUTHORIZED FOR PRODUCTION:
  - a. Item: 105mm Tank Ammunition, M456A1, M490, M724A1, and M735.
  - b. Total Program Value: Not available since there is no estimate of GOE production.
5. ESTIMATED EXPENDITURES IN THE U.S.: \$59,000,000.
6. STATUS OF PRODUCTION IN ARAB REPUBLIC OF EGYPT:
  - a. M490 TP-T, 8,000 complete rounds.
  - b. M735 APFSDS-T, 11,000 (LAP utilizing components purchased in U.S.).
  - c. M456A1 HEAT-T, 11,000 (LAP utilizing components purchased in U.S.)
  - d. ND-105 APFSDS-T, 8,500 complete rounds except for projectile which was of Austrian manufacture.
  - e. 105mm HE, 70,000 complete rounds (This round utilizes Egyptian reverse engineered TNT loaded warhead with point detonating fuze).
  - f. M735, M456A1, M490, M724A1, approximately 3,500 rounds each (LAP utilizing components purchased from U.S.).
  - g. M724A1, 10,000 rounds; projectiles were purchased in U.S., all other components produced by GOE factories.
7. REPORT OF EXPENDITURES IN U.S.: Unknown
8. THIRD COUNTRY SALES: None.
9. SUMMARY/IDENTIFICATION OF NONCOMPLIANCE DURING PREVIOUS 6 MONTHS: None

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10. SOURCE OF PRODUCTION, QUANTITY INFORMATION: U.S. Project Officer based on status update from Factory 81 Assistant Chairman combined with data obtained from FMS Cases and export licenses.
11. SUMMARY OF MONITORING ACTIONS: Status of program is monitored through close coordination between U.S. Project Officer, U.S. Officer of Military Cooperation in U.S. Embassy in Cairo, and Egyptian Project Officer.
12. U.S. PROJECT OFFICER: Mr. Calvin M. Klopp, HQ, AMCCOM, AMSMC-PDC, DSN 793-6995, Commercial (309) 782-6995.
13. EGYPTIAN PROJECT OFFICER: Engineer Shawky El-Saadawy, Chairman, Factory 81, Cairo, Egypt
14. SIGNIFICANT EVENTS AND PROBLEMS ENCOUNTERED AND RESOLVED DURING THIS REPORTING PERIOD:
  - a. Final proveout of M737 Projectile line at Factory 99 with technical assistance being provided by Olin Ordnance under contract funded by LOA EG-B-NFA.
  - b. Successful completion of First Article Test and Initial Production Lot Test on M737 Projectile; projectile met all requirements of U.S. specifications.
  - c. Factory 99 purchased and took delivery of raw materials required for production of approximately 2500 M456A1 projectiles.
  - d. October 1993 visit to GOE Factories A.R.E. Proving Ground by U.S. Project Officer for IPR and observation of M737 Projectile testing.
  - e. Amendment 7 to LOA NCC, which adds a line for 4 panels of armor plate, for penetration testing of M456A1 Projectiles, was approved by GOE and implemented 7 October 1993.
  - f. GOE completed installation of the heat treat furnace for the steel cartridge case line at Factory 99 substantially behind schedule (the heat treat furnace was delivered by NI Industries in Jan 88). There is still some building facility work to be completed before GOE is ready for NI Industries to provide technical assistance for start-up of the steel cartridge case line; these delays will require an extension of the period of performance on the NI Industries technical assistance contract and this extension may result in a cost increase.
  - g. Completed delivery to GOE of all raw materials ordered on LOA EG-B-NEN.

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h. Factory 99 purchased 10,000 M489 projectiles and raw materials for production of 10,000 M489 projectiles from U.S. suppliers to support GOE M490 105mm TP-T production schedules.

15. ANTICIPATED FUTURE SIGNIFICANT EVENTS AND PROBLEMS:

a. Start-up and proveout of M456A1 projectile line at Factory 99.

b. First Article Test of M456A1 projectile in mid-1994.

c. Start-up of steel cartridge case line sometime in 1994.

d. Visit to Cairo by U.S. Project Officer in Mid-1994.

e. Delivery of armor plate for projectile testing in early 1994.

16. NAME, ORGANIZATION AND TELEPHONE NUMBER OF ASSIGNED PROJECT OFFICER: Mr. Calvin Klopp, HQ AMCCOM, AMSMC-PDC, DSN 793-6995.

17. LOGISTICAL SUPPORT: NONE

18. TECHNOLOGY FLOWBACK: None

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## MODULAR THERMAL IMAGING SYSTEM (MOD FLIR)

1. COUNTRY/INTERNATIONAL ORGANIZATION: Germany
2. DATE OF MOU/MOA: 10 Jun 91
3. EXPIRATION OF MOU/MOA: 10 Jun 2001
4. ITEMS AND QUANTITIES AUTHORIZED FOR PRODUCTION:

ITEMS	QUANTITY
Modular Thermal Imaging Systems (MOD FLIR)	7000

5. ESTIMATED EXPENDITURES IN THE U.S.: \$200-250 Million
6. STATUS OF FOREIGN COUNTRY'S PRODUCTION:

ITEM	EST # TO BE PRODUCED	# PRODUCED IN LAST 12 MTHS	TOT. PROD. TO DATE	EST # TO BE PRODUCED
Leopard 2 (FRG)	2,175	--	2,175	--
Leopard 2 (NL)	494	--	494	--
LUCHS (FRG)	423	--	423	--
MARDER (FRG)	2,112	--	1,766	346
Leopard 1 (FRG)	1,375	0	1,375	0
Leopard 1 (N)	111	36	93	18
Leopard 1 (DK)	230	77	203	27
APCM 113 (DK)	50	0	50	--
TOTAL	6,970	113	6,579	391

Additional deliveries for the ECR-Tornado Programs of Germany and Italy:

	Splate 1	Splate 2	Splate 3	Splate 4
FLIR D	48	--	48	--
FLIR I	25	--	25	--
TOTAL Carl Zeiss	73	--	73	--

7. REPORT OF EXPENDITURES IN U.S.: \$163.8 Million
8. THIRD COUNTRY SALES AUTHORIZED: According to the MOU between the Department of Defense of the United States of America (USG), the Defense Technology and Procurement Agency of the Government of Switzerland (GOS) and the Federal Republic of Germany (FRG), FRG may transfer up to 500 MOD FLIR systems for EMES-15A1 to GOS for the Leopard 2 tank. No more than one MOD FLIR system per



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tank, plus up to 30% spares. GOS may acquire the Common Modules from FRG or USG either by Foreign Military Sales procedures or on a commercial basis. NVESD received a letter from BUNDESAMT FOR WEHRTECHNIK UND BESCHAFFUNG, dtd 06.07.1993 notifying NVESD that FRG will no longer be able to procure the Technical Data Packages (TDP) and Engineering Change Proposals (ECP) sold through FMS under the MOU. During Jan 93 through Sep 93 NVESD forwarded the ECPs and TDPs as authorized through the MOU, copies of the ECPs and TDPs are available upon request. Since October 1993, NVESD has suspended the mailing of changes.

9. SUMMARY/IDENTIFICATION OF NONCOMPLIANCE DURING PREVIOUS 12 MONTHS: None

10. SOURCE OF PRODUCTION, QUANTITIES, AND REPORTS: The consolidated procurement schedule by fiscal year for all planned German systems is as follows (without Jaguar and AN):

Quantities FRG Only:

FY 79-93	FY 94	FY 95	FY 96	Total
5,750	150	100		6,100

Switzerland: no deliveries at the present time  
Italy: all deliveries for ECR Tornado completed

11. SUMMARY OF MONITORING ACTIONS: Night Vision and Electronic Sensors Directorate personnel have been in attendance for qualification testing. No visits were made during 1993 and at this time, there are no visits planned for 1994.

12. NAME, ORGANIZATION, AND TELEPHONE NUMBER OF ASSIGNED PROJECT OFFICER: Dr. Rudolf G. Buser, Night Vision and Electro Sensors Directorate, (703) 704-1172. Deputy Project Officer is Mr. Donald H. Jenkins (703) 704-1129 and the Associate Project Officer is Mr. Thomas E. Smith (703) 704-1219.

13. NAME, ORGANIZATION, AND TELEPHONE NUMBER OF FOREIGN PROJECT OFFICER: Mr. Arnulf Wallrabe, Project Officer, Bundesamt fur Wehrtechnik und Beschaffung (BWB), Konrad - Ardenauer - Ufer 2-6, 5400 Koblenz, Germany, Deputy Project Officer is Mr. Klaus Gewehr, German Liaison Officer for Defense Material, 11150 Sunrise Valley Drive, Reston, VA, 22091, (703) 715-8100.

14. SIGNIFICANT EVENTS AND PROBLEMS ENCOUNTERED AND RESOLVED DURING THIS REPORTING PERIOD: None

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15. ANTICIPATED FUTURE SIGNIFICANT EVENTS AND PROBLEMS:  
Qualification of any AEG DT 591B Detector for sale to U.S. system  
producer.

16. LOGISTICAL SUPPORT: None

17. STATUS/SUMMARY OF TECHNOLOGY FLOWBACK RECEIVED AND ITS' USE:  
None

2.12

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## EUROPEAN STINGER DUAL PRODUCTION PROGRAM

1. COUNTRY/INTERNATIONAL ORGANIZATION: European Consortium (Federal Republic of Germany (lead nation), Turkey, Netherlands and Greece)
2. DATE OF MOU/MOA: 27 Apr 83, with Amendment 1, 26 Mar 86.
3. EXPIRATION OF MOU/MOA: Upon completion of the dual production program. To be reviewed, at a minimum, in 10 years from date of MOU.
4. ITEMS AND QUANTITIES AUTHORIZED FOR PRODUCTION:

a. Authorized Hardware Quantities:

Item	Quantity
Guided Missile, Intercept Aerial, STINGER-RMP	12,135
Gripstock Control Group, Guided Missile (GM) Launcher RMP (less reprogrammable module)	3,219
Training Set, GM System, RMP (less reprogrammable module)	421
Trainer, Handling, GM Launcher, M60	159
Charger, Battery, PP-7309(XO-1)/T	129
Recharging Unit, Coolant, Training GM System, M80	85

b. Estimated total value of authorized program is \$735 M.

5. ESTIMATED EXPENDITURES IN THE U.S.: Approximately \$140 million.

6. STATUS OF FOREIGN COUNTRY'S PRODUCTION:

a. Items in Production:

<u>Item</u>	<u>Quantity</u>
Guided Missile, STINGER-RMP	120
Gripstock Control Group	0

b. Quantity Produced in Previous 12 Months:

Training Set, GM System, RMP (less reprogrammable module)	60
Trainer, Handling, GM Launcher	69
Power Supply Unit (European design) in lieu of charger, Battery, PP-7309/T	17

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Gas Charging Unit (European design) 20  
in lieu of recharging unit, coolant, M80

c. Quantity Produced to Date:  
Training Set, GM System, RMP 60  
(less reprogrammable module)

Trainer, Handling, GM Launcher 69

Power Supply Unit (European design) 17  
in lieu of charger, Battery, PP-7309/T

Gas Charging Unit (European design) 20  
in lieu of recharging unit, coolant, M80

7. REPORT OF EXPENDITURES IN U.S.: \$73.5 million as of  
31 Dec 93 (implemented FMS cases).

8. THIRD COUNTRY SALES AUTHORIZED: Italy

9. SUMMARY/IDENTIFICATION OF NONCOMPLIANCE DURING PREVIOUS 12  
MONTHS: None

10. SOURCE OF PRODUCTION QUANTITY AND REPORTS: Program  
Manager's Report to the STINGER Steering Committee and Delivery  
Status of STINGER End Items.

11. SUMMARY OF MONITORING ACTIONS: Not applicable

12. NAME, ORGANIZATION, AND TELEPHONE NUMBER OF ASSIGNED  
DOD PROJECT OFFICER: COL Daniel M. Prescott, Forward Area Air  
Defense Project Office, U.S. Army Missile Command, Redstone  
Arsenal, AL, DSN 746-6191.

13. NAME, ORGANIZATION, AND TELEPHONE NUMBER OF FOREIGN  
PROJECT OFFICER: LTC Gert Feyler, Federal Officer for  
Military Technology and Procurement, STINGER Project Group  
(SPG) Management Office, 49-261-400-6345.

14. SIGNIFICANT EVENTS AND PROBLEMS ENCOUNTERED AND RESOLVED  
DURING THIS REPORTING PERIOD:

a. The thirty-third SPG Steering Committee meeting was held  
31 March - 2 April 1993 in Roethenbach, Germany. The thirty-  
fourth SPG Steering Committee meeting was held 12-14 October 1993  
in Koblenz, Germany.

b. Pilot lot retesting of European-build STINGER missiles  
took place at CEDEA test range in Spain 31 May - 7 June 1993  
with eight direct hits and two misses of ten missiles fired. A

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dome/front window problem is suspected to have caused the misses. The dome/front window problem encountered during pilot lot testing in June 1993 was attributed to out-of-tolerance materiel used by the European subcontractor. The project group decided to continue production with domes/front windows purchased from the U.S. until the European problem is overcome. The first 500-1000 missiles will be affected.

c. The thirty-fourth SPG (Ad hoc) Steering Committee meeting, to be held in Huelva, Spain, was postponed. Only the official Steering Committee members were asked to participate. Efforts to convert the U.S. liaison officer's position at the SPGMO to a civilian position proved fruitless. Budget and personnel cutbacks made it impossible. The European project manager was advised that the position could possibly be filled if the project group saw a need and provided the funds.

d. The U.S. liaison officer to the SPG management office was reassigned to the CONUS as of the end of 1992 and currently his position is vacant. Efforts are underway to convert the position to a civilian position. The first lot acceptance (fly-to-buy) firings took place at Huelva, Spain, 30 November - 3 December 1993. Seven direct units of eight missiles fired against drones and fixed targets led to acceptance of the first lot of 120 missiles. They will be delivered to the participating nations during the 1st quarter of calendar year 1994.

## 15. ANTICIPATED FUTURE SIGNIFICANT EVENTS AND PROBLEMS:

a. Beginning this year, each SPG Steering Committee meeting scheduled to be preceded by a meeting of the national program managers. This was initiated at the request of the Netherlands in order to preclude controversial and lengthy discussions of minor importance at the Steering committee meetings.

b. The thirty-fifth SPG Steering Committee meeting is scheduled to be held at the Huelva, Spain firing range in conjunction with the third lot acceptance firing campaign 18-22 April 1994.

c. Deliveries of tactical hardware (missiles and gripstocks) to participating nations is scheduled to commence in February 1994.

d. STINGER reprogrammable microprocessor (RMP) releasability to SPG nations.

e. Draft Amendment 2, for German/Swiss cooperation has been prepared, and is in staffing at DSAA.

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16. LOGISTICAL SUPPORT: Continuing visits by SPG administrative and technical personnel, as well as representatives of the European prime and subcontractors to U.S. installations and the corresponding U.S. contractors are hosted, sponsored and/or monitored by MICOM Security Assistance Management Directorate and the Forward Area Air Defense Project Office. These visits are in support of resolution of problems encountered during production and testing of the European STINGER weapon system.

17. STATUS/SUMMARY OF TECHNOLOGY FLOWBACK RECEIVED AND ITS' USE:

a. Engineering change proposals, requests for waivers and requests for deviations generated by European program contractors and approved by the European Consortium configuration control board, are continuing to be provided to the U.S. Air-to-Air Missile Project Office for information.

b. Problems encountered during start-up of the European production lines is assisting in a scrub of portions of the U.S. technical data package and a better understanding of the design.

c. Upgrading of European test equipment will be incorporated as needed in U.S. test equipment.

d. Representatives of the European STINGER Project Management Office and the prime contractor demonstrated the European-designed gas charging unit and power supply unit at MICOM on 26 October 1993 and at Ft. Bliss, TX on 23 November 1993. The demonstrations at both locations were well received and additional demonstrations are contemplated. The Forward Area Air Defense Project Office's system engineering division has initiated a value engineering proposal for both units. Additionally, the SPGMO has been requested to provide technical data packages and rough order of magnitude costs.

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AAH/MEP

1. COUNTRY/INTERNATIONAL ORGANIZATION: Germany
2. DATE OF MOU/MOA: Date signed 7 Sep 85
3. EXPIRATION OF MOU/MOA: 30 Sep 89
4. ITEMS AND QUANTITIES AUTHORIZED FOR PRODUCTION:  
TADS/PNVS
5. ESTIMATED EXPENDITURES IN THE U.S.: N/A
6. STATUS OF FOREIGN COUNTRY'S PRODUCTION: No production to
7. REPORT OF EXPENDITURES IN U.S.: N/A
8. THIRD COUNTRY SALES AUTHORIZED: None.
9. SUMMARY/IDENTIFICATION OF NONCOMPLIANCE DURING PREVIOUS 12 MONTHS: None
10. SOURCE OF PRODUCTION, QUANTITIES, AND REPORTS: N/A
11. SUMMARY OF MONITORING ACTIONS: N/A
12. NAME, ORGANIZATION AND TELEPHONE NUMBER OF ASSIGNED PROJECT OFFICER: MAJ Robert H. Lee, PM APACHE, DSN 693-3836.
13. NAME, ORGANIZATION AND TELEPHONE NUMBER OF FOREIGN PROJECT OFFICER: N/A
14. SIGNIFICANT EVENTS AND PROBLEMS ENCOUNTERED AND RESOLVED DURING THIS REPORTING PERIOD: None
15. ANTICIPATED FUTURE SIGNIFICANT EVENTS AND PROBLEMS:  
FMS Case GY-B-WJO for transfer of technical data on the TADS/PNVS has been in the process of negotiation to determine a final financial settlement for the case. The USG and FRG have reached a new agreement that will terminate the case and provide a settlement to the USG of approximately \$8 million. The Apache Program Office is coordinating with AVSCOM-IL and USASAC to determine the funds that remain from this case that are available for obligation and is awaiting USASAC concurrence with the Apache Program Office proposal to expend these funds.
16. LOGISTICAL SUPPORT: N/A

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# UNCLASSIFIED

AH/IS COBRA

1. (U) COUNTRY/INTERNATIONAL ORGANIZATION: Japan Defense Agency
2. (U) DATE OF MOU/MOA: 31 Mar 92
3. (U) EXPIRATION OF MOU/MOA: 31 Mar 2002

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

8. (U) THIRD COUNTRY SALES AUTHORIZED: None.
9. (U) SUMMARY/IDENTIFICATION OF NONCOMPLIANCE DURING PREVIOUS 12 MONTHS: None
10. (U) SOURCE OF PRODUCTION, QUANTITIES, AND REPORTS: Fuji Heavy Industries, Japan and reports provided by Japan Defense Agency.
11. (U) SUMMARY OF MONITORING ACTIONS: No problems were encountered during this reporting period.
12. (U) NAME, ORGANIZATION AND TELEPHONE NUMBER OF ASSIGNED PROJECT OFFICER: Arlene Johnson, DOD Project Officer, 314-263-2565.
13. (U) NAME, ORGANIZATION AND TELEPHONE NUMBER OF FOREIGN PROJECT OFFICER: Mr. Hidetake TADA, AH-IS JDA Project Officer

[REDACTED]

[REDACTED]



# UNCLASSIFIED

14. (U) SIGNIFICANT EVENTS AND PROBLEMS ENCOUNTERED AND RESOLVED DURING THIS REPORTING PERIOD: None.

15. (U) ANTICIPATED FUTURE SIGNIFICANT EVENTS AND PROBLEMS: None.

16. (U) LOGISTICAL SUPPORT: None

17. (U) STATUS/SUMMARY OF TECHNOLOGY FLOWBACK RECEIVED AND ITS USE: None

HAWK COPRODUCTION - JAPAN

1. (U) COUNTRY/INTERNATIONAL ORGANIZATION: Japan
2. (U) DATE OF MOU/MOA: A MOU between the U.S. Government and the Government of Japan was signed 13 Oct 67. A follow-on MOU was signed 28 Mar 89 and amendment 1 was signed on 7 Nov 91.
3. (U) EXPIRATION OF MOU/MOA: The expiration date of the MOU is 28 Mar 99.

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

c. (U) Estimated value of HAWK systems/items depicted in 4.a and 4.b above is \$1,359 M.

5. (U) ESTIMATED EXPENDITURES IN THE U.S.: \$559.8M (Basic HAWK \$98.8M; Improved HAWK \$461.0M)

6. (U) STATUS OF FOREIGN COUNTRY'S PRODUCTION:

[REDACTED]

[REDACTED]

[REDACTED]

7. (U) REPORT OF EXPENDITURES IN U.S.: \$574.8M (Basic HAWK \$98.8M; IMPROVED HAWK \$476.0M)

8. (U) THIRD COUNTRY SALES AUTHORIZED: None.

9. (U) SUMMARY/IDENTIFICATION OF NONCOMPLIANCE DURING PREVIOUS 12 MONTHS: None

10. (U) SOURCE OF PRODUCTION, QUANTITIES, AND REPORTS: Embassy of the United States of America, Mutual Defense Assistance Office, Japan, APO San Francisco 96503-0005.

- a. Japan HAWK Delivery Reports (Quarterly)
- b. Japan U.S. Dollar Payment Reports - HAWK (Quarterly)
- c. Japan HAWK Production Schedule (Quarterly)

11. (U) SUMMARY OF MONITORING ACTIONS: N/A

12. (U) NAME, ORGANIZATION AND TELEPHONE NUMBER OF ASSIGNED PROJECT OFFICER: Mr. Roger Comer, Acting Project Manager, HAWK, U.S. Army Missile Command, Redstone Arsenal, AL, Telephone: DSN 746-4715.

13. (U) NAME, ORGANIZATION AND TELEPHONE NUMBER OF FOREIGN PROJECT OFFICER: Major General Kanehiro Mashita, Logistics Department, Ground Staff Office, Japan Defense Agency, telephone; 03-408-5211 (Ext 2560).

14. (U) SIGNIFICANT EVENTS AND PROBLEMS ENCOUNTERED AND RESOLVED DURING THIS REPORTING PERIOD: None.

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15. (U) ANTICIPATED FUTURE SIGNIFICANT EVENTS AND PROBLEMS:  
None.

16. (U) LOGISTICAL SUPPORT: N/A

17. (U) STATUS/SUMMARY OF TECHNOLOGY FLOWBACK RECEIVED AND  
ITS' USE: None

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M110A2 8-INCH SP HOWITZER

1. (U) COUNTRY/INTERNATIONAL ORGANIZATION: Japan
2. (U) DATE OF MOU/MOA: 7 Feb 82.
3. (U) EXPIRATION OF MOU/MOA: Completion of production.
4. (U) AUTHORIZED FOR PRODUCTION:
  - a. (U) Item: M110A2 8-Inch Self-Propelled Howitzer (SPH)

[REDACTED]

[REDACTED]

5. (U) ESTIMATED EXPENDITURES IN THE U.S.: \$27.0M (FMS \$19.0M, Commercial \$8.0M)

6. (U) STATUS OF PRODUCTION IN JAPAN:

- a. (U) Items to be Produced: M110A2 8-Inch SPH

[REDACTED]

[REDACTED]

7. (U) REPORT OF EXPENDITURES IN U.S.

FMS      NRC PAYMENT      COMMERCIAL

[REDACTED]

[REDACTED]

8. (U) THIRD COUNTRY SALES AUTHORIZED: None

9. (U) SUMMARY/IDENTIFICATION OF NONCOMPLIANCE DURING PREVIOUS 6 MONTHS: None

[REDACTED]

[REDACTED]

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10. (U) SOURCE OF PRODUCTION, QUANTITIES INFORMATION:  
Japan Defense Agency (JDA) Project Officer.
11. (U) SUMMARY OF MONITORING ACTIONS: None
12. (U) NAME, ORGANIZATION AND TELEPHONE NUMBER OF ASSIGNED PROJECT OFFICER: Arthur L. Jansen, HQ, AMCCOM, AMSMC-PDC, DSN 793-3581
13. (U) NAME, ORGANIZATION AND TELEPHONE NUMBER OF FOREIGN PROJECT OFFICER: Dr. Matsuo Kobayash, JDA, Ground Staff Office (GSO) 03 408 5211, extension 2114.
14. (U) SIGNIFICANT EVENTS AND PROBLEMS ENCOUNTERED AND RESOLVED DURING THIS REPORTING PERIOD: None reported
15. (U) ANTICIPATED FUTURE SIGNIFICANT EVENTS AND PROBLEMS: None reported
16. (U) LOGISTICAL SUPPORT: M201A1 Cannons/Parts, M110A2 technical data package revisioning service and technical/management assistance through FMS procedures.
17. (U) STATUS/SUMMARY OF TECHNOLOGY FLOWBACK RECEIVED AND ITS' USE: None

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PATRIOT COPRODUCTION PROGRAM - JAPAN

1. (U) COUNTRY/INTERNATIONAL ORGANIZATION: Japan Defense Agency (JDA)
2. (U) DATE OF MOU/MOA: 4 Oct 85 (amendment 4 dtd 4 Oct 92)
3. (U) EXPIRATION OF MOU/MOA: 4 Oct 2007
4. (U) AUTHORIZED FOR PRODUCTION:

[REDACTED]

b. (U) Estimated total program value is \$5.0B.

5. (U) ESTIMATED EXPENDITURES IN THE U.S.: \$1.2B.

6. [REDACTED]

[REDACTED]

[REDACTED]



b. [REDACTED]

[REDACTED]

c. [REDACTED]

[REDACTED]

7. (U) REPORT OF EXPENDITURES IN U.S. \$1.310M as of 31 Dec 93.

8. (U) THIRD COUNTRY SALES AUTHORIZED: None.

9. (U) SUMMARY/IDENTIFICATION OF NONCOMPLIANCE DURING PREVIOUS 12 MONTHS: None

10. (U) SOURCE OF PRODUCTION, QUANTITIES INFORMATION: Japan Defense Agency, Central Procurement Office, Tokyo, Japan.

11. (U) SUMMARY OF MONITORING ACTIONS:

a. (U) Review of semiannual Production Schedule Reports submitted by JDA.

b. (U) JDA briefings conducted during semiannual Program Management Reviews.

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c. (U) Periodic visits to Japan's production facilities.

d. (U) Daily contact with Japanese Liaison Officer assigned to PATRIOT Project Office, MICOM.

e. (U) Meetings/Discussions with Raytheon Company, the U.S. Prime contractor, personnel.

12. (U) NAME, ORGANIZATION AND TELEPHONE NUMBER OF ASSIGNED DOD PROJECT OFFICER: COL James E. Gustine, PATRIOT Program Manager, PATRIOT Project Office, SFAE-AD-PA, U.S. Army Missile Command, Redstone Arsenal, AL 35898-5260, DSN 645-3240.

13. (U) NAME, ORGANIZATION AND TELEPHONE NUMBER OF FOREIGN PROJECT OFFICER: Dr. Y. Tobe, Director, Guided Weapon Office, Japan Defense Agency, Tokyo, Japan, 03-408-5211 Ext 2116.

14. (U) SIGNIFICANT EVENTS AND PROBLEMS ENCOUNTERED AND RESOLVED DURING THIS REPORTING PERIOD:

a. (U) The thirteenth Japanese Coproduction Program Management Review (PMR) was held in Huntsville, AL on 14-16 Jun 93. The fourteenth Japanese Coproduction Program Management Review was held in Tokyo, JA on 7-9 Dec 93.

b. (U) A revision to the IA has been forwarded to Japan for final signature. It is anticipated that revised IA will be in effect NLT 31 Jul 93. A decision was rendered by JDA to participate in the Field Surveillance Program under Engineering Services.

15. (U) ANTICIPATED FUTURE SIGNIFICANT EVENTS AND PROBLEMS:

a. (U) The fifteenth Japanese Coproduction PMR will be held in Huntsville AL, Jun 94.

b. (U) The Annual Service Practice missile firings are scheduled to commence Aug-Dec 94 at McGregor Range, NM.

16. (U) LOGISTICAL SUPPORT:

a. (U) Forty-nine Foreign Military Sales (FMS) cases valued at approximately \$126M are currently active and providing logistical support in the following areas; target flight services/support, missile telemetry kits, tools and test equipment, training scenarios, U.S. Government and contractor technical support, technical documentation, missile fuzes, engineering services and logistical support for lot validation and annual service practice missile firings.

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b. (U) Hardware delivery consisting of fuze sensors, cables, and electronic assemblies and also special tools are in process to Japan.

17. (U) STATUS/SUMMARY OF TECHNOLOGY FLOWBACK RECEIVED AND ITS' USE: Minor Class II Engineering Change Proposals (ECPs) have been received but no significant technology flowback.

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HYDRA 70 COPRODUCTION - JAPAN

1. (U) COUNTRY/INTERNATIONAL ORGANIZATION: Japan
2. (U) DATE OF MOU/MOA: 31 Mar 89
3. (U) EXPIRATION OF MOU/MOA: 31 Mar 99
4. (U) AUTHORIZED FOR PRODUCTION:

a.

[REDACTED]

b.

[REDACTED]

5. (U) ESTIMATED EXPENDITURES IN THE U.S.: \$40.2M
6. (U) STATUS OF FOREIGN COUNTRY'S PRODUCTION:

a.

[REDACTED]

b.

[REDACTED]

[REDACTED]

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c. [REDACTED]

7. [REDACTED]

8. (U) THIRD COUNTRY SALES AUTHORIZED: None.

9. (U) SUMMARY/IDENTIFICATION OF NONCOMPLIANCE DURING PREVIOUS 6 MONTHS: None

10. (U) SOURCE OF PRODUCTION, QUANTITIES INFORMATION: Japan Defense Agency (JDA).

11. (U) SUMMARY OF MONITORING ACTIONS: Reviewed program data provided by the JDA.

12. (U) NAME, ORGANIZATION AND TELEPHONE NUMBER OF ASSIGNED DOD PROJECT OFFICER: Mr. Arthur L. Jansen, Coproduction Office, Production Directorate, U.S. Army Armament, Munitions and Chemical Command, Rock Island, IL 61299-6000, DSN 793-3581, Commercial: 309 782-3581.

13. (U) NAME, ORGANIZATION AND TELEPHONE NUMBER OF FOREIGN PROJECT OFFICER:

a. (U) Rocket Project Officer: COL Masahisa Shigematsu, Chief, Ammunition Section, Ordnance and Chemical Division, Logistics Department, Ground Staff Office, Japan Defense Agency, 9-7-45 Akasaka, Minato-Ku, Tokyo, 107 Japan.

b. (U) Launcher Project Officer: LTC Hiroshi Ohuchi, Chief, Aircraft Section, Aviation Division, Logistics Department, Ground Staff Office, Japan Defense Agency, 9-7-45 Akasaka, Minatoku, Tokyo, 107 Japan.

14. (U) SIGNIFICANT EVENTS AND PROBLEMS ENCOUNTERED AND RESOLVED DURING THIS REPORTING PERIOD: None

15. (U) ANTICIPATED FUTURE SIGNIFICANT EVENTS AND PROBLEMS: The Tenth Program Review Meeting is tentatively scheduled for 20-21 Jun 94.

16. (U) LOGISTICAL SUPPORT: Technical data package revisioning service and U.S. Government technical support.

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17. (U) STATUS/SUMMARY OF TECHNOLOGY FLOWBACK RECEIVED AND ITS' USE:

a. (U) Changing smoke composition to a non-flame type in order to prevent grass fires at training areas.

b. (U) Changing shape of grenade body.

c. (U) Adding an electrical lead to the M231 Fuze for improvement of functional reliability.

Upon completion of the research and development effort, an ECP with all required data will be submitted to the U.S. Project Officer for evaluation and approval. An engineering change proposal submitted by the JDA in Jan 93 concerning the M439 Fuze is expected to be approved in Apr - May 94 time frame. This change should greatly improve reliability /performance.

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MULTIPLE LAUNCH ROCKET SYSTEM

1. (U) COUNTRY/INTERNATIONAL ORGANIZATION: Japan
2. (U) DATE OF MOU/MOA: 8 Jan 93
3. (U) EXPIRATION OF MOU/MOA: 8 Jan 98
4. (U) AUTHORIZED FOR PRODUCTION:

a. [REDACTED]

[REDACTED]

b. (U) Estimated total value of authorized program quantities is \$234.4M

5. (U) ESTIMATED EXPENDITURES IN THE U.S.: \$348.3M

6. (U) STATUS OF FOREIGN COUNTRY'S PRODUCTION:

a. [REDACTED]

[REDACTED]

b. Quantity Produced in Previous 12 Months: None

c. Quantity Produced to Date: None

[REDACTED]

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7. (U) REPORT OF EXPENDITURES IN U.S. \$74.8M as of 31 Dec 93.
8. (U) THIRD COUNTRY SALES AUTHORIZED: None.
9. (U) SUMMARY/IDENTIFICATION OF NONCOMPLIANCE DURING PREVIOUS 12 MONTHS: None
10. (U) SOURCE OF PRODUCTION, QUANTITIES AND REPORTS:  
First Coproduction Program Review Meeting, 29 Jun - 1 Jul 93,  
Tokyo, Japan.
11. (U) SUMMARY OF MONITORING ACTIONS: Semiannual Coproduction  
Program Review Meetings.
12. (U) NAME, ORGANIZATION AND TELEPHONE NUMBER OF ASSIGNED  
DOD PROJECT OFFICER: Mr. Gary A. Trimble, Foreign Systems and  
Coproduction Division, Security Assistance Management Directorate,  
U.S. Army Missile Command, Redstone Arsenal, AL, DSN 746-3819,  
Commercial: 205-876-3819.
13. (U) NAME, ORGANIZATION AND TELEPHONE NUMBER OF FOREIGN  
PROJECT OFFICER: COL Kenji Aridome, Chief, Arms Section, Ordnance  
and Chemical Division, Logistics Department, Ground Staff Office,  
Japan Defense Agency, 9-7-45 Akasaka, Minato-Ku, Tokyo, Japan.
14. (U) SIGNIFICANT EVENTS AND PROBLEMS ENCOUNTERED AND  
RESOLVED DURING THIS REPORTING PERIOD:
  - a. (U) Transfer of the Launcher Technical Data Package (TDP)  
to the Government of Japan was completed during the period.
  - b. (U) A follow-on LOA for continued TDP revisioning service  
and technical support was implemented 22 Oct 93.
15. (U) ANTICIPATED FUTURE SIGNIFICANT EVENTS AND PROBLEMS:  
The Second Coproduction Program Review Meeting is scheduled the  
second week of February 1994 at MICOM.
16. (U) LOGISTICAL SUPPORT: None
17. (U) STATUS/SUMMARY OF TECHNOLOGY FLOWBACK RECEIVED AND  
ITS' USE: None

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SH-60J/UH-60J AIRCRAFT

1. (U) COUNTRY/INTERNATIONAL ORGANIZATION: Japan
2. (U) DATE OF MOU/MOA: 31 Mar 89, amendment 4 Jan 93
3. (U) EXPIRATION OF MOU/MOA: 31 Mar 99

[REDACTED]

5. (U) ESTIMATED EXPENDITURES IN THE U.S.: Royalties to the contractor are unknown.

6. (U) STATUS OF FOREIGN COUNTRY'S PRODUCTION: Maritime Staff Office (MSO) has no information at this time. The MSO is still trying to get data from Mitsubishi Heavy Industries (MHI), Nagoy which produces the SH-60J/UH-60J helicopter.

7. (U) REPORT OF EXPENDITURES IN U.S.: None.

8. (U) THIRD COUNTRY SALES AUTHORIZED: None.

9. (U) SUMMARY/IDENTIFICATION OF NON-COMPLIANCE DURING PREVIOUS 12 MONTHS: None.

10. (U) SOURCE OF PRODUCTION, QUANTITIES AND REPORTS: Mutual Defense Assistance Office (MDAO), U.S. Embassy Tokyo, Japan.

11. (U) SUMMARY OF MONITORING ACTIONS: Monitoring actions are provided by manufacturer's representatives on-site, and through periodic site surveys by any industrial security representative from the Mutual Defense Assistance Office (MDAO), Director NAVAIR Programs, CHMDO, Tokyo.

[REDACTED]

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12. (U) NAME, ORGANIZATION AND TELEPHONE NUMBER OF ASSIGNED DOD PROJECT OFFICER: Mr. Billy Miller, Utility Helicopters Project Manager's Office ATTN: SFAE-AV-BH-B, Program Executive Office, Aviation, 4300 Goodfellow Boulevard, St. Louis, MO 63120-1798, DSN 693-1715.

13. (U) NAME, ORGANIZATION AND TELEPHONE NUMBER OF FOREIGN PROJECT OFFICER:

JMSDF - LCDR Masahiro Azuma, Aircraft Division,  
Logistics Department, Maritime Staff Office,  
3408-5211-2891.

JASDF - Colonel T. Notake, Head Logistics Planning  
Division, Logistics Department, Air Staff Office,  
Japan Defense Agency through MDAO.

14. (U) SIGNIFICANT EVENTS AND PROBLEMS ENCOUNTERED AND RESOLVED DURING THIS REPORTING PERIOD: None

15. (U) ANTICIPATED FUTURE SIGNIFICANT EVENTS AND PROBLEMS: None.

16. (U) LOGISTICAL SUPPORT: ILS provided commercially from Sikorsky Aircraft Division.

17. (U) STATUS/SUMMARY OF TECHNOLOGY FLOWBACK RECEIVED AND ITS' USE: No Engineering Change Proposals (ECPs) have been submitted nor has there been any request for flowback technology.

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KI TANK

1. COUNTRY/INTERNATIONAL ORGANIZATION: Korea
2. DATE OF MOU/MOA: 6 Jul 78. Amendment 4, 18 Feb 87
3. EXPIRATION OF MOU/MOA: Approximately Sep 84 (after two prototype vehicles were built).
4. ITEMS AND QUANTITIES AUTHORIZED FOR PRODUCTION: Type 88 Tanks.
5. ESTIMATED EXPENDITURES IN THE U.S.: \$500M - Contractor, estimated 1M U.S. Government
6. STATUS OF FOREIGN COUNTRY'S PRODUCTION:
  - a. Items in Production: 207
  - b. Quantity produced in Previous 12 Months: 100
  - c. Quantity Produced to Date: 825
7. REPORT OF EXPENDITURES IN U.S. Approx. \$400M
8. THIRD COUNTRY SALES AUTHORIZED: None
9. SUMMARY/IDENTIFICATION OF NONCOMPLIANCE DURING PREVIOUS 12 MONTHS: None
10. SOURCE OF PRODUCTION, QUANTITIES AND REPORTS: GDLS AND APEO International Operations (SFAE-ASM-I).
11. SUMMARY OF MONITORING ACTIONS: None
12. NAME, ORGANIZATION AND TELEPHONE NUMBER OF ASSIGNED PROJECT OFFICER: M. Zapf, APEO International Operations (313) 574-5228 DSN 786-5228.
13. NAME, ORGANIZATION AND TELEPHONE NUMBER OF FOREIGN PROJECT OFFICER: None
4. SIGNIFICANT EVENTS AND PROBLEMS ENCOUNTERED AND RESOLVED DURING THIS REPORTING PERIOD: The TACOM based K1 Tank Support Office (SFAE-ASM-1K) was discontinued in July 1992.

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15. ANTICIPATED FUTURE SIGNIFICANT EVENTS AND PROBLEMS:  
Continued interest expressed in upgrading the K1 Tank to a 120mm gun.
16. LOGISTICAL SUPPORT: ROK preparing to do DMWR Manuals.
17. STATUS/SUMMARY OF TECHNOLOGY FLOWBACK RECEIVED AND ITS' USE: None

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M109A2 SP HOWITZER

1. (U) COUNTRY/INTERNATIONAL ORGANIZATION: Korea
2. (U) DATE OF MOU/MOA: 8 Dec 83 (amended 22 Feb 88, 13 Nov 90 and 15 Oct 92)
3. (U) EXPIRATION OF MOU/MOA: 15 Oct 2002
4. ITEMS AND QUANTITIES AUTHORIZED FOR PRODUCTION:
  - a. (U) Items: M109A2 155mm Self-Propelled Howitzer (SPH)

[REDACTED]

[REDACTED]

5. (U) ESTIMATED EXPENDITURES IN THE U.S.: \$548M
6. STATUS OF PRODUCTION IN KOREA:
  - a. (U) Items in Production: M109A2 155mm SPH

[REDACTED]

[REDACTED]

7. (U) REPORT OF EXPENDITURES IN U.S.
  - a. 1 Jan - 31 Dec 93: \$ 60.7M
  - b. Total amount to date: \$432.2M

8. (U) THIRD COUNTRY SALES: None reported

9. (U) SUMMARY/IDENTIFICATION OF NONCOMPLIANCE DURING PREVIOUS 12 MONTHS: None

10. (U) SOURCE OF PRODUCTION, QUANTITY INFORMATION: Joint U.S. Military Assistance Group (JUSMAG), Seoul, South Korea

11. (U) SUMMARY OF MONITORING ACTIONS: NONE.

[REDACTED]

[REDACTED]

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12. (U) NAME, ORGANIZATION AND TELEPHONE NUMBER OF ASSIGNED PROJECT OFFICER: Arthur L. Jansen, HQ, AMCCOM, AMSMC-PDC, DSN 793-3581.

13. (U) NAME, ORGANIZATION AND TELEPHONE NUMBER OF ROK FOREIGN PROJECT OFFICER: LTC Ko, Kil Ho, Acquisition First Division, Ministry of National Defense. Telephone: (011-82-2) 961-5641.

14. (U) SIGNIFICANT EVENTS AND PROBLEMS ENCOUNTERED AND RESOLVED DURING THIS REPORTING PERIOD: None

[REDACTED]

16. (U) LOGISTICAL SUPPORT: None

17. (U) STATUS/SUMMARY OF TECHNOLOGY FLOWBACK RECEIVED AND ITS' USE: None

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M9 ARMORED COMBAT EARTHMOVER

1. COUNTRY/INTERNATIONAL ORGANIZATION: Korea
2. DATE OF MOU/MOA: 30 May 92
3. EXPIRATION OF MOU/MOA: 30 May 2002
4. ITEMS AND QUANTITIES AUTHORIZED FOR PRODUCTION:  
It is anticipated that 197 M9 ACE units will be authorized.
5. ESTIMATED EXPENDITURES IN THE U.S.: \$134M
6. STATUS OF FOREIGN COUNTRY'S PRODUCTION:
  - a. Items in Production: None
  - b. Quantity produced in previous 12 months: None.
  - c. Quantity produced to Date: None
7. REPORT OF EXPENDITURES IN U.S.: \$42.4M
8. THIRD COUNTRY SALES: None
9. SUMMARY/IDENTIFICATION OF NONCOMPLIANCE DURING PREVIOUS 6 MONTHS: None
10. SOURCE OF PRODUCTION, QUANTITY INFORMATION: PM, M9 ACE (AMCPM-M9), and BMY Corp.
11. SUMMARY OF MONITORING ACTIONS: None.
12. NAME, ORGANIZATION AND TELEPHONE NUMBER OF ASSIGNED PROJECT OFFICER: Karl R. Brobeil, TACOM, AMCPM-M9, DSN 786-6635.
13. NAME, ORGANIZATION AND TELEPHONE NUMBER OF FOREIGN PROJECT OFFICER: NONE.
14. SIGNIFICANT EVENTS AND PROBLEMS ENCOUNTERED AND RESOLVED DURING THIS REPORTING PERIOD: Three complete vehicles shipped to ROKG in 1992 (U.S. content \$2.4M). Forty-eight knockdown kits shipped in 1993 (U.S. content \$40M).

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15. ANTICIPATED FUTURE SIGNIFICANT EVENTS AND PROBLEMS:  
Coproduction to commence in 1994. Thirty vehicles to be delivered in 1994 (U.S. content \$24.5M) and thirty-four vehicles in 1995 (U.S. content \$17M).

16. LOGISTICAL SUPPORT: FMS case for TDP and test reports being priced.

17. STATUS/SUMMARY OF TECHNOLOGY FLOWBACK RECEIVED AND ITS USE: None.



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## MLRS COPRODUCTION - NATO

1. COUNTRY/INTERNATIONAL ORGANIZATION: France, Germany, United Kingdom, and Italy.
2. DATE OF MOU/MOA: An MOU between the U.S. Government and the Republic of France, Federal Republic of Germany and the United Kingdom of Great Britain for a cooperative program for a Multiple Launch Rocket System, was signed 14 Jul 79. The Government of the Republic of Italy became a participant by MOU Supplement, 29 Jul 82.
3. EXPIRATION OF MOU/MOA: This MOU will remain in operation for 25 years (14 July 2004) unless mutually extended by the participants.

#### 4. ITEMS AND QUANTITIES AUTHORIZED FOR PRODUCTION:

	FR	GE	IT	UK
a. Hardware Quantities:*				
MLRS Launcher	57	156	22	63
M26 Tactical Rocket Pod (298MM)	22,680	37,116	5,400	45,024
M28 Practice Rocket Pod (298MM)	4,314	8,524	1,440	3,840
Rocket Pod Trainer	114	6	44	128
Fire Control Panel	0		1	3
b. Est'd Total Value:	\$1,504.0M	\$2,674.7M	\$396.1M	\$2,666.6M

\*Represents quantity of items identified by foreign country to meet their national defense requirement.

5. ESTIMATED EXPENDITURES IN THE U.S.: \$199M
6. STATUS OF FOREIGN COUNTRY'S PRODUCTION:
  - a. Items in Production: (same as paragraph 4)
  - b. Quantity produced in previous six months:

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MLRS Launcher	52
M26 Tactical Rocket Pod (298mm)	2,831
M28 Practice Rocket Pod (298mm)	310
Rocket Pod Trainer	0

c. Quantity produced to Date:

MLRS Launcher	279
M26 Tactical Rocket Pod (298mm)	14,266
M28 Practice Rocket Pod (298mm)	2,537
Rocket Pod Trainer	198

7. REPORT OF EXPENDITURES IN U.S. \$80.4M as of 31 Dec 93.

8. THIRD COUNTRY SALES: None.

9. SUMMARY/IDENTIFICATION OF NONCOMPLIANCE DURING PREVIOUS 12 MONTHS: None

10. SOURCE OF PRODUCTION, QUANTITY AND REPORTS: European MLRS Production Bureau, Koblenz, Germany.

11. SUMMARY OF MONITORING ACTIONS: The MLRS participants, U.S. Government and the European Partners have established Program Management Committees/Working Groups that meet semiannually and provide status of the program.

12. NAME, ORGANIZATION AND TELEPHONE NUMBER OF ASSIGNED DOD PROJECT OFFICER: COL William S. Taylor, Manager MLRS Project, U.S. Army Missile Command, Redstone Arsenal, AL, DSN 746-1195.

13. NAME, ORGANIZATION AND TELEPHONE NUMBER OF FOREIGN PROJECT OFFICER:

France - Mr. Alain Guillon, Bureau of Artillery, Saint Cloud, France, Telephone: 1-47-71-42-41.

Germany - BDIR Ulrich Reinecke, Federal Office of Military Technology and Procurement, Koblenz, FRG, Telephone: 261-400-6525.

United Kingdom - Mr. David Brewerton, Ministry of Defense, London, England, Telephone: 1-921-1790.

Italy - COL TEC. (ARM) Franco Pazzaglia, Ministry of Defense, Rome, Italy, Telephone: 6-4735-4703.

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14. SIGNIFICANT EVENTS AND PROBLEMS ENCOUNTERED AND RESOLVED DURING THIS REPORTING PERIOD: None.

15. ANTICIPATED FUTURE SIGNIFICANT EVENTS AND PROBLEMS: The European Consortium countries (Germany, France, United Kingdom and Italy) will not conduct additional MLRS fly-to-buy or ammunition surveillance testing at White Sands Missile Range; however, on behalf of the German Government, Germany has requested cost estimates for annual surveillance testing (1 pod per year) for the next ten years. Germany and United Kingdom, partners of the MLRS AT2 Program, are considering live ammunition firings at WSMR during CY 94.

16. LOGISTICAL SUPPORT: The European participants have purchased hardware/services to conduct testing of rockets at White Sands Missile Range, NM through the FMS program. They have also purchased hardware/services through the production support order which is a new procedure for co-developed systems in accordance with the amended Section 27 of the Arms Export Control Act that provides for a variance from the FMS procedures. No logistics problems are anticipated.

17. STATUS/SUMMARY OF TECHNOLOGY FLOWBACK RECEIVED AND ITS' USE: The technology flowback from Europe on the MLRS basic system is limited since the system was solely developed by the U.S. and merely produced in Europe. European manufacture started much later than the U.S. production so certain materials and processes have been reviewed, updated and documented by the Europeans as alternatives in the TDP. As part of its' commitment to the program, Germany developed an antitank warhead (phase 2 or AT-2) for the basic MLRS rocket although the U.S. chose not to produce or buy this warhead.

Germany also supplied the program load unit (PLU) for the MLRS that uses first generation bubble mounted storage devices and the United Kingdom has considered a different PLU using CMOS devices which achieves the required reliability/durability. They have shared their findings with the U.S. who are considering making the change also.

The UK have fit a boiling vessel into the cab of their national variant vehicle which allows a crew to heat their own food and drinks. While the U.S. MLRS has not taken up this option, TACOM is considering filling this device in another armored vehicle; this option may not have existed without the coproduction program.

In summary, technology flowback has been limited mainly to inter-industry transfers but the partner governments share data on proposed modifications and national variants to the MLRS.

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## TANK THERMAL SIGHT

1. COUNTRY/INTERNATIONAL ORGANIZATION: Switzerland, Germany
2. DATE OF MOU/MOA: 11 Jul 85
3. EXPIRATION OF MOU/MOA: 11 Jul 2000
4. ITEMS AND QUANTITIES AUTHORIZED FOR PRODUCTION:
  - a. Item and Quantities authorized: Modular Forward Looking Infrared (MOD FLIR) System and Components, 500 units.
  - b. Total program value: Estimated total value of authorized program is unknown.
5. ESTIMATED EXPENDITURES IN THE U.S.: Unknown
6. STATUS OF FOREIGN COUNTRY'S PRODUCTION: No deliveries were made this reporting period.
7. REPORT OF EXPENDITURES IN U.S. Unknown
8. THIRD COUNTRY SALES AUTHORIZED: None under this MOU.
9. SUMMARY/IDENTIFICATION OF NONCOMPLIANCE DURING PREVIOUS 12 MONTHS: None
10. SOURCE OF PRODUCTION, QUANTITIES AND REPORTS: According to the latest report, no deliveries were made for this reporting period.
11. SUMMARY OF MONITORING ACTIONS: Night Vision and Electronic Sensors Directorate personnel have been in attendance for qualification testing under the auspices of the U.S./German MOU. No visit was made during 1993 timeframe.
12. NAME, ORGANIZATION AND TELEPHONE NUMBER OF ASSIGNED DOD PROJECT OFFICER: Dr. Rudolf G. Buser, Night Vision & Electronic Sensors Directorate, (703) 704-1172. Deputy Project Officer is Mr. Donald H. Jenkins (703) 704-1129 and the Associate Project Officer is Mr. Thomas E. Smith (703) 704-1219.
13. NAME, ORGANIZATION AND TELEPHONE NUMBER OF FOREIGN PROJECT OFFICER: Mr. Arnulf Wallrabe, Project Officer, Bundesamt fur Wehrtechnik und Buschaffung (BWB), Konrad - Ardenauer - Ufer 2-6, 5400 Koblenz, Germany. Deputy Project Officer is Mr. Klaus Gewehr, German Liaison Office for Defense Material, 11150 Sunrise Valley Drive, Reston, Virginia 22091, (703) 715-8100 ext. 8160.

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14. SIGNIFICANT EVENTS AND PROBLEMS ENCOUNTERED AND RESOLVED DURING THIS REPORTING PERIOD: None

15. ANTICIPATED FUTURE SIGNIFICANT EVENTS AND PROBLEMS: None anticipated. The 1985 MOU is close to being completed.

16. LOGISTICAL SUPPORT: None

17. STATUS/SUMMARY OF TECHNOLOGY FLOWBACK RECEIVED AND ITS' USE: None under this MOU.

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HAWK EUROPEAN LIMITED IMPROVEMENT PROGRAM (HELIP) - NATO

1. (U) COUNTRY/INTERNATIONAL ORGANIZATION: NATO HAWK Production and Logistics Organization (NHPLO).
2. (U) DATE OF MOU/MOA: An MOU between the U.S. Government and NHPLO was signed 11 Jul 68. Supplements to the MOU include the following:

Supplement 1 dated 6 Aug 69  
Supplement 2 dated 19 Jun 72  
Supplement 3 dated 5 Jun 74  
Supplement 4 dated 9 Jun 80  
Supplement 5 dated 13 May 83  
Supplement 6 dated 22 Sep 86  
Supplement 7 dated 15 Mar 87  
Supplement 8 dated 2 Dec 92

3. (U) EXPIRATION OF MOU/MOA: None

4. (U) ITEMS AND QUANTITIES AUTHORIZED FOR PRODUCTION:

a. (C) Supplements 7 and 8 are currently in effect. Supplement 7 is for the coproduction of 3700 M3 (MEI) Missile Modification Kits. Supplement 8 is for the coproduction of 103 Phase III modification kits. Supplement 9 to add the U.S. Government Version HAWK Launcher Mobility Modification is under consideration by the NHPLO.

b. (U) Estimated total value of authorized program is \$502M.

5. (U) ESTIMATED EXPENDITURES IN THE U.S.:

RAM: \$24.1M  
M3: \$36.4M

6. STATUS OF FOREIGN COUNTRY'S PRODUCTION:

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

7. (U) REPORT OF EXPENDITURES IN U.S.:

RAM: \$24.1M as of 31 Dec 93  
M3: \$30.6M as of 31 Dec 93

8. (U) THIRD COUNTRY SALES AUTHORIZED: None

9. (U) SUMMARY/IDENTIFICATION OF NONCOMPLIANCE DURING PREVIOUS 12 MONTHS: None

10. (U) SOURCE OF PRODUCTION, QUANTITIES AND REPORTS: NHPLO

11. (U) SUMMARY OF MONITORING ACTIONS: No production monitoring is conducted. At the inception of each supplement to the HELIP Agreement, NHPLO states the quantity of items they intend to produce and the U.S. Government either approves or disapproves their request.

12. (U) NAME, ORGANIZATION AND TELEPHONE NUMBER OF ASSIGNED DOD PROJECT OFFICER: Mr. Roger Comer, Project Manager, HAWK, U.S. Army Missile Command, Redstone Arsenal, AL, DSN 746-4715.

13. (U) NAME, ORGANIZATION AND TELEPHONE NUMBER OF FOREIGN PROJECT OFFICER: Major General (Ret) Salvatore Ballassai, General Manager, NATO HAWK Management Office, (NHMO), Paris, France, Telephone 33-1-4708 7557.

14. (U) SIGNIFICANT EVENTS AND PROBLEMS ENCOUNTERED AND RESOLVED DURING THIS REPORTING PERIOD: Supplement 9 to the HELIP MOU was initiated during the previous reporting period. Supplement 9 will provide NHPLO authorization to coproduce the HAWK Mobility Launcher Modification.

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15. (U) ANTICIPATED FUTURE SIGNIFICANT EVENTS AND PROBLEMS: NHMO is conducting a HAWK viability study for NHPLO to determine the modifications required for the HAWK missile system to make it viable until a new replacement missile system can be developed. The study is expected to be completed during the next reporting period.

16. (U) LOGISTICAL SUPPORT: None

17. (U) STATUS/SUMMARY OF TECHNOLOGY FLOWBACK RECEIVED AND ITS' USE:

a. (U) The U.S. Government has not received any Engineering Change Proposals (ECPs) from NATO nor has any recommended changes been incorporated into the U.S. Army HAWK System.

b. (U) The U.S. procured three of the Belgium Launcher Mobility Modification Kits for testing.

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## M483A1 155MM PROJECTILE

1. COUNTRY/INTERNATIONAL ORGANIZATION: Netherlands
2. DATE OF MOU/MOA:
  - a. Memorandum of Understanding (MOU) between the U.S. Government (USG) and the Kingdom of Netherlands (GON), 22 Oct 80.
  - b. Implementation arrangement to MOU between USG and GON, 5 Oct 82.

NOTE: A five-year extension to the present MOU has been granted by Defense Security Assistance Agency, letter, I-00471\13/91, dated 22 Oct 91. A new MOU is presently being staffed to extend the timeframe of the existing MOU for 10 years. It is understood that the GON will ask that the present draft MOU, which adds provisions for production of Projectile, 155mm, M864 Base Bleed Projectile to the present MOU authorized production of Projectile, 155mm, M483A1 and Fuze, MTSQ, M577, be modified by dropping production of the M864.

3. EXPIRATION OF MOU/MOA: 22 Oct 96
4. ITEMS AND QUANTITIES AUTHORIZED FOR PRODUCTION:
  - a. Item: Projectile, 155mm, M483A1 and Fuze, MTSQ, M577
  - b. Quantity: Capacity for 55,000 M483A1 Rounds per year on a 1-8-5 basis. No capacity for M577 Fuze was established under the 1980 MOU. Dual capacity to Load, Assemble, and Pack (LAP) the projectile will exist in Germany and Turkey.
5. ESTIMATED EXPENDITURES IN THE U.S.:

	TOTAL/PERIOD (Millions)	TOTAL/PROGRAM (Millions)
a. Production Equipment	.000	3.276
b. Technical Assistance	.027	1.947
c. Travel and Administrative in U.S.	.017	1.049
d. Projectile Components	14.319	35.600
e. Transportation	.04	1.941
f. Proving Ground Test	.038	1.169
g. Royalty Fees	0	1.681
TOTAL:	14.441	46.663

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## 6. STATUS OF FOREIGN COUNTRY'S PRODUCTION:

a. Items in Production: Projectile, 155mm, M483A1

b. Quantity produced in Previous 12 Months: Approximately 5,000; submunition being loaded.

NOTE: Facilitation capability for LAP of projectiles in Turkey has being established. Eurometaal, Zanden, Holland, the Netherlands system contractor had taken action to purchase projectile, LAP end item equipment in the U.S. and installed it in a production facility established in MKEK, Kirikkale, Turkey. Change in production source from Liebenan, Germany to Kirikkale, Turkey will occur in March 1994.

## 7. REPORT OF EXPENDITURES IN U.S.

	FMS	COMMERCIAL
Amount between 1 Jan and 31 Dec 93	.073	2,525

8. THIRD COUNTRY SALES AUTHORIZED: NATO - None reported

9. SUMMARY/IDENTIFICATION OF NONCOMPLIANCE DURING PREVIOUS 12 MONTHS: None

10. SOURCE OF PRODUCTION QUANTITY INFORMATION: Mr. Al Houweling, Director, U.S. Operations Eurometaal, and LTC Harry Koning, HPB M483A1 Ammunition Department, Royal Netherlands Army on Commercial Expenditures. FMS cost is based on billing history of FMS Case NE-B-VWB, and VWL extended to cover this reporting period.

## 11. SUMMARY OF MONITORING ACTIONS:

a. Prepared and submitted support report covering this coproduction program for the three months period ending 31 March 1993 in accordance with internal command requirements as is required by GON Finance Office on LOA, per FMS Case NE-B-VWB, and VVF extended to cover this reporting period.

b. Support continued on monitoring funding disbursement at and to proving grounds to include Yuma Proving Ground (YPG) in Ballistic Test Program pending closure of Jefferson Proving Ground (JPG). Transfer of test components from JPG to YPG for Ballistic Testing was monitored to resolve potential problems prior to occurrence. Finalization of action in support of surveillance testing of Netherlands stockpile of coproduced Projectile, 155mm, ICM, M483A1, testing in early 1993 was completed.

c. Monitored/attended Configuration Control Board Meetings on components of the M483A1.

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12. NAME, ORGANIZATION AND TELEPHONE NUMBER OF ASSIGNED  
DOD PROJECT OFFICER: Larry D. Randol, HQ, AMCCOM, AMSMC-PDC,  
DSN 793-3379; commercial (309) 793-3379

13. NAME, ORGANIZATION AND TELEPHONE NUMBER OF FOREIGN  
PROJECT OFFICER: LTC H. Koning, HPB M483A1, Royal Netherland  
Army-Staff, Directorate Material and Col K. Tuzcuglu, MSB. Arge  
D. Bskihgi, Yucetepe-Ankara, Turkey. Telephone (31) 70-316-5125.

14. SIGNIFICANT EVENTS AND PROBLEMS ENCOUNTERED AND RESOLVED  
DURING THIS REPORTING PERIOD:

a. Action was taken to finalize, conduct, and observe actions on the CY92 phase of the stockpile reliability testing of Netherlands coproduced inventory of Projectile of Projectile, 155mm, ICM, M483A1. This ongoing test program under FMS Case NE-B-VTX requires firing of four lots of ballistic samples and teardown inspection of samples on a period test schedule.

b. Per the request of the Netherlands project officers in conjunction with Turkey's joining of the consortium, a visit to Turkey was conducted in May 1993. A series of meetings were conducted to establish among other items, the feasibility of air channel shipment of ballistic samples of coproduced M483A1 Projectiles. In this series of meetings, it was established that Defense Contract Management Area Office - Ankara, could act as ACO for acceptance and shipment of ballistic samples and that Incirlik Air Base, 39 MMS-T, could support this effort without interfering with their presently assigned missions. Follow-up action to assign ACO authority to DCMAO-Ankara and letter request through AF-Europe for support of Incirlik AB were sent.

c. Reviews were conducted of Quality Assurance Documentation for Netherlands/Turkey coproduction of Projectiles, 155mm, M483A1 in Turkey per the request of the Netherlands Project Officer letter NU.B1A/183-93. A copy was forwarded to DCMAO-Ankara, Turkey, our ACO for acceptance and shipment of ballistic samples from Turkey.

d. Support to higher headquarters continued on the new MOU to incorporate the 155mm, M864 Projectile into the coproduction program. This subject surfaced in conjunction with the annual review of Netherlands coproduction of the M483A1 Projectile. Technical problems in firing of verification of compatibility of M203A1 Prop Chg/M483A1 Projectile in the Towed Howitzer, M114 RMS occurred. This has led to a zero out of the production of the M864 in the present budget pending review. Action has continuously been taken to establish and provide information on status of the ongoing effort to establish LAP production

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facilities in Turkey. Due to slippage of the facilitation effort effects on the production and its effect on U.S. Transportation and firing of ballistic samples it is critical to AMCCOM, DCMAO-Ankara, Air Force at Incirlik Air Base, Turkey, and YPG. The latest information indicates start of production in Turkey during the 1st quarter of 1994

## 15. ANTICIPATED FUTURE SIGNIFICANT EVENTS AND PROBLEMS:

a. Provide on-site assistance as required by the European Project Officer and higher headquarters on inclusion/integration of Turkey into the European consortium.

b. Continue to provide administrative/technical support on questions on transportation, technical production problems, TDP, procurement of components for M483A1 in U.S., and other questions/problems as they surface.

16. LOGISTICAL SUPPORT: Assistance will be continued in support of setup, and putting into operation the revised transportation system for ballistic samples once the final assembly is transferred to Turkey.

17. STATUS/SUMMARY OF TECHNOLOGY FLOWBACK RECEIVED AND ITS' USE: None during this period.

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## LAW M72 COPRODUCTION

1. COUNTRY/INTERNATIONAL ORGANIZATION: Norway/Canada
2. DATE OF MOU/MOA: 15 Jan 64
3. EXPIRATION OF MOU/MOA: Completion of production
4. ITEMS AND QUANTITIES AUTHORIZED FOR PRODUCTION:
  - a. Item: M72 66mm Light Anti-Tank Weapon (LAW) Rocket.
  - b. Quantity: 170,000 minimum (100,000 by Norway and 70,000 by Canada)
  - c. Total Program Value: Unknown (maximum production quantity not specified in MOU).
5. ESTIMATED EXPENDITURES IN THE U.S.: Unknown
6. STATUS OF FOREIGN COUNTRY'S PRODUCTION:
  - a. Items in Production: M72 66mm LAW Rocket
  - b. Quantity produced between 1 Jan - 31 Dec 93: 13,028
  - c. Quantity Produced to Date: 1,398,532
7. REPORT OF EXPENDITURES IN U.S.
  - a. 1 Jan - 31 Dec 93: \$2,947,166
  - b. Total amount to date: \$124,772,853
8. THIRD COUNTRY SALES AUTHORIZED: (between program inception and 31 Dec 93):

COUNTRY	QUANTITY M72A1
United States	181,848
Norway	177,314
United Kingdom	155,514
Belgium	117,045
Canada	305,659
Netherlands	80,870
Australia	45,400
New Zealand	10,844
Finland (Suomi)	116,240
Portugal	2,730
Denmark	57,450

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COUNTRY	QUANTITY M72A1
Turkey	116,240
Greece	15,200
Luxembourg	2,070
France	53

9. SUMMARY/IDENTIFICATION OF NONCOMPLIANCE DURING PREVIOUS 12 MONTHS: None

10. SOURCE OF PRODUCTION, QUANTITIES AND REPORTS: ODC, American Embassy, Oslo, Norway. POCs are Mr. Locklear, Telephone Commercial (47-22) 448550, ext 2276.

11. SUMMARY OF MONITORING ACTIONS: None.

12. NAME, ORGANIZATION AND TELEPHONE NUMBER OF ASSIGNED PROJECT OFFICER: Arthur L. Jansen, AMCCOM, AMSMC-PDC, DSN 793-3581.

13. NAME, ORGANIZATION AND TELEPHONE NUMBER OF FOREIGN PROJECT OFFICER: Unknown

14. SIGNIFICANT EVENTS AND PROBLEMS ENCOUNTERED AND RESOLVED DURING THIS REPORTING PERIOD:

a. The Government of Norway has decided to permit Raufoss to export to Talley Defense Systems in the U.S. M72 Rocket Motor metal parts and fuses for procurement by the U.S. Government. Accordingly, a final M72 load, assemble and pack line will be set up by Talley in order to produce systems to satisfy the FMS requirements of the U.S. Government.

b. Raufoss received a contract from Talley to load, assemble, and pack M72 E-series weapon systems for Talley's U.S. Army type classification test program.

15. ANTICIPATED FUTURE SIGNIFICANT EVENTS AND PROBLEMS: None

16. LOGISTICAL SUPPORT: None

17. STATUS/SUMMARY OF TECHNOLOGY FLOWBACK RECEIVED AND ITS' USE: None

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## TOW 2 MISSILE

1. COUNTRY/INTERNATIONAL ORGANIZATION: Pakistan
2. DATE OF MOU/MOA: 27 Jan 90
3. EXPIRATION OF MOU/MOA: 27 Jan 2000
4. ITEMS AND QUANTITIES AUTHORIZED FOR PRODUCTION: 7500 TOW 2A, BGM-71E missiles.
5. ESTIMATED EXPENDITURES IN THE U.S.: \$110 million
6. STATUS OF FOREIGN COUNTRY'S PRODUCTION: Program on hold IAW Pressler Amendment. Implementing Arrangement has been prepared but has not been provided to Pakistan.
7. REPORT OF EXPENDITURES IN U.S.: N/A
8. THIRD COUNTRY SALES AUTHORIZED: None
9. SUMMARY/IDENTIFICATION OF NONCOMPLIANCE DURING PREVIOUS 12 MONTHS: None
10. SOURCE OF PRODUCTION, QUANTITIES AND REPORTS: N/A
11. SUMMARY OF MONITORING ACTIONS: None
12. NAME, ORGANIZATION AND TELEPHONE NUMBER OF ASSIGNED DOD PROJECT OFFICER: Vincent I. Gosa, Cooperative Programs and Foreign Systems Division, Security Assistance Management Directorate, U.S. Army Missile Command, Redstone Arsenal, AL, DSN: 746-3819, Commercial: 205-876-3819.
13. NAME, ORGANIZATION AND TELEPHONE NUMBER OF FOREIGN PROJECT OFFICER: MG Sebeerh Quamar-UZ-Zaman, Chairman, POFS Board, Wah, Pakistan, (ATTN: Mr. A. Majeed Khokhar, Secy, POFS Board, Wah, Pakistan).
14. SIGNIFICANT EVENTS AND PROBLEMS ENCOUNTERED AND RESOLVED DURING THIS REPORTING PERIOD: None
15. ANTICIPATED FUTURE SIGNIFICANT EVENTS AND PROBLEMS: None
16. LOGISTICAL SUPPORT: N/A
17. STATUS/SUMMARY OF TECHNOLOGY FLOWBACK RECEIVED AND ITS' USE: None

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## SECOND GENERATION IMAGE INTENSIFIER

1. COUNTRY/INTERNATIONAL ORGANIZATION: Pakistan
2. DATE OF MOU/MOA: 27 Jan 90
3. EXPIRATION OF MOU/MOA: 27 Jan 2000
4. ITEMS AND QUANTITIES AUTHORIZED FOR PRODUCTION:  
1000 AN/PVS-4 Individual Served Weapon, Night Sight Sets  
2050 AN/TVS-5 Crew Served Weapon, Night Sight Sets  
1000 AN/PVS-5 Night Vision Goggles
5. ESTIMATED EXPENDITURES IN THE U.S.: \$42,500,000
6. STATUS OF FOREIGN COUNTRY'S PRODUCTION: Program on hold. Implementing Arrangement has not been prepared.
7. REPORT OF EXPENDITURES IN U.S.: N/A
8. THIRD COUNTRY SALES AUTHORIZED: None
9. SUMMARY/IDENTIFICATION OF NONCOMPLIANCE DURING PREVIOUS 12 MONTHS: None
10. SOURCE OF PRODUCTION, QUANTITIES AND REPORTS: N/A
11. SUMMARY OF MONITORING ACTIONS: None
12. NAME, ORGANIZATION AND TELEPHONE NUMBER OF ASSIGNED DOD PROJECT OFFICER: Director, Night Vision and Electronic Sensors Directorate, ATTN: Juanie Urbie, Ft. Belvoir, VA 22060-5677, (703) 704-1161.
13. NAME, ORGANIZATION AND TELEPHONE NUMBER OF FOREIGN PROJECT OFFICER: Dr. Akram S. Hussain Abidi, Dir Gen, LOP, Chaklala.
14. SIGNIFICANT EVENTS AND PROBLEMS ENCOUNTERED AND RESOLVED DURING THIS REPORTING PERIOD: None
15. ANTICIPATED FUTURE SIGNIFICANT EVENTS AND PROBLEMS: None.
16. LOGISTICAL SUPPORT: N/A
17. STATUS/SUMMARY OF TECHNOLOGY FLOWBACK RECEIVED AND ITS' USE: None

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## HELLFIRE MODULAR MISSILE SYSTEM

1. COUNTRY/INTERNATIONAL ORGANIZATION: Sweden
2. DATE OF MOU/MOA: 13 May 86 Production Supplement 10 Apr 87, Amendment 1 Apr 87
3. EXPIRATION OF MOU/MOA: 10 Apr 97
4. ITEMS AND QUANTITIES AUTHORIZED FOR PRODUCTION:
  - a. Authorized:

Item	Quantity
Missiles (HEAT, DUMMY, and Special Test Missiles)	1,200
  - b. Estimated total value in U.S. Dollars: \$60M.
5. ESTIMATED EXPENDITURES IN THE U.S.: \$48M.
6. STATUS OF FOREIGN COUNTRY'S PRODUCTION (CO-ASSEMBLY):
  - a. Items in production: 0
  - b. Quantity produced in previous 12 months: 0
  - c. Quantity Produced to date: 700
7. REPORT OF EXPENDITURES IN U.S.: \$24M Estimated.
8. THIRD COUNTRY SALES AUTHORIZED: None
9. SUMMARY/IDENTIFICATION OF NONCOMPLIANCE DURING PREVIOUS 12 MONTHS: None
10. SOURCE OF PRODUCTION, QUANTITIES AND REPORTS: Embassy of Sweden, Washington, DC, (202) 944-5646; Rockwell International (Mr. Stephens), Duluth, GA (404) 476-6329.
11. SUMMARY OF MONITORING ACTIONS: None
12. NAME, ORGANIZATION AND TELEPHONE NUMBER OF ASSIGNED DOD PROJECT OFFICER: COL Charles W. Greer, Program Manager, Air-to-Ground Missile Systems, U.S. Army Missile Command, Redstone Arsenal, AL, DSN 746-1365.
13. NAME, ORGANIZATION AND TELEPHONE NUMBER OF FOREIGN PROJECT OFFICER: Jan Bjokman, Defense Materiel Administration, S-15 88 Stockholm, Sweden.

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14. SIGNIFICANT EVENTS AND PROBLEMS ENCOUNTERED AND RESOLVED DURING THIS REPORTING PERIOD: None.

15. ANTICIPATED FUTURE SIGNIFICANT EVENTS AND PROBLEMS: Amendment 2 being prepared.

16. LOGISTICAL SUPPORT: The Government of Sweden (GOS) requested to be included in a Post Production Study conducted for the Air to Ground Missile System Project Office by Rockwell under our Engineering Services contract. This is a 15 month effort. A modification to the case was implemented 30 Dec 91 and the Engineering Services contract was modified allowing for participation in the study.

17. STATUS/SUMMARY OF TECHNOLOGY FLOWBACK RECEIVED AND ITS' USE: There was some technology flowback exchange between the Government of Sweden (GOS) and the U.S. Navy on warhead development. Specific details of the exchange were not provided to this Army.

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DRAGON MISSILE SYSTEM COPRODUCTION - SWITZERLAND

1. (U) COUNTRY/INTERNATIONAL ORGANIZATION: Switzerland
2. (U) DATE OF MOU/MOA: An MOU between the U.S. Government and the Government of Switzerland (GOS), for coproduction of the DRAGON missile system, was signed 5 Aug 81; Amendment I was signed 16 May 83, Amendment II was signed 2 May 84 and Amendment III was signed 27 Aug 87 Amendment IV was signed 11 Jul 91.
3. (U) EXPIRATION OF MOU/MOA: The MOU will remain in effect for 15 years or until completion of the program or termination with cause by either party.
4. (U) ITEMS AND QUANTITIES AUTHORIZED FOR PRODUCTION:

[REDACTED]

b. (U) Estimated Program Value: The estimated total value of the Authorized coproduction program in FY 89 dollars is \$386M.

5. (U) ESTIMATED EXPENDITURES IN THE U.S.: \$40M.

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6. (U) STATUS OF FOREIGN COUNTRY'S PRODUCTION:

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- 7. (U) REPORT OF EXPENDITURES IN U.S.: \$40M
- 8. (U) THIRD COUNTRY SALES AUTHORIZED: None
- 9. (U) SUMMARY/IDENTIFICATION OF NONCOMPLIANCE DURING PREVIOUS 12 MONTHS: None
- 10. (U) SOURCE OF PRODUCTION, QUANTITIES AND REPORTS: Defense Technology and Procurement Agency, Bern, Switzerland.
- 11. (U) SUMMARY OF MONITORING ACTIONS: Monitoring has been through semiannual reports provided by GOS and program reviews in the U.S. The last program review in the U.S. was 2-3 Dec 92 and a 20th Program Review was held in-country, 14-16 September 1993, at Chamblon/Emmen, Switzerland. The 21st Program Review is tentatively scheduled for October 1994.

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12. (U) NAME, ORGANIZATION AND TELEPHONE NUMBER OF ASSIGNED DOD PROJECT OFFICER: Ms. Ruth Prince, Land Combat Systems, WSMD, U.S. Army Missile Command, ATTN: AMSMI-WS-LC-PP, Redstone Arsenal, AL, DSN 746-2183.

13. (U) NAME, ORGANIZATION AND TELEPHONE NUMBER OF FOREIGN PROJECT OFFICER: Mr. Hans Christeller, Defense Technology and Procurement Agency, Bern, SZ, 031/67-55-87.

14. (U) SIGNIFICANT EVENTS AND PROBLEMS ENCOUNTERED AND RESOLVED DURING THIS REPORTING PERIOD:

a. (U) The 20th Program Review Meeting was held in Chamblon/Emmen, SZ, 14-16 September 1993, to discuss the status of the Swiss program.

b. (U) A safety problem with the DRAGON missile resulted in worldwide training suspension of live firings.

15. (U) ANTICIPATED FUTURE SIGNIFICANT EVENTS AND PROBLEMS:

a. The 21st Program Review Meeting is scheduled for Oct 94. Location to be determined.

b. A solution for the DRAGON missile safety problem was developed by Switzerland in June 1993. Missile rework and integration is scheduled to begin in March 1994.

c. (U) It is anticipated that the Swiss safety fix will be retrofitted into United States Missiles to meet FY 93 training requirements.

16. (U) LOGISTICAL SUPPORT: N/A

17. (U) STATUS/SUMMARY OF TECHNOLOGY FLOWBACK RECEIVED AND ITS' USE: The Swiss have developed an improved gas generator that reduces launch signature and have developed a Tandem warhead to defeat reactive armor. Data packaged for these improvements were requested at the 19th Program Review Meeting. The data package for the gas generator was received and considered as a product improvement to the United States DRAGON. However, no requirement has been identified to date. The Tandem Warhead improvement has one version which includes a new more sophisticated Electronic Safe and Arm Fuze (ESAF) with Explosive Foil Initiators. The ESAF was originally presented to the U.S. Army Fuze Safety Review Board in September 1991. The Review Board on 15 January 1993 granted the Swiss Government a conditional safety certification with full certification expected upon the successful completion of First Article Testing (FAT) and the completion of Explosive Ordnance Disposal (EOD) procedures by the ARDEC EOC office. Both FAT and EOD are expected to be completed during the first quarter of calendar year 1994. Certification of the ESAF is the Swiss goal which would permit the use of the ESAF in U.S. Army Systems.

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## M109A1B SP HOWITZER/M109 UPGRADE PROTOTYPE

1. COUNTRY/INTERNATIONAL ORGANIZATION: Switzerland
2. DATE OF MOU/MOA: 18 Jul 88 (amended 14 Aug 92)
3. EXPIRATION OF MOU/MOA: 14 Aug 2002
4. ITEMS AND QUANTITIES AUTHORIZED FOR PRODUCTION:

Item	Quantity
a. M109A1B SP Howitzer	108
b. Selected M109 Items as follows:	
Spades	*
Drain Plugs (Hull Floor)	*
M185 Cannon Tube Assemblies	*
Fender Assemblies	*
Hull Stowage Items	*
Cab Stowage Assembly	*
Fuze Rack	*
Miscellaneous Items	*
c. M284 Cannon Tube Assemblies	2
d. Total Program Value: \$153M.	

\* To be produced in quantities necessary for production of 108 each M109A1B SP Howitzers

5. ESTIMATED EXPENDITURES IN THE U.S.: \$110.8M (\$108M commercial and \$2.8M FMS).

6. STATUS OF PRODUCTION IN SWITZERLAND:

a. Items in production: Authorized production is complete.

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b. Quantity produced in previous 12 months:

M185 Cannon Tubes 30 each

c. Quantity Produced to date:

M185 Cannon Tubes 108 each

Spades 108 pairs

Muzzle Brakes 108 each

Bore Evacuators 108 each

7. REPORT OF EXPENDITURES IN U.S.:

	FMS	COMMERCIAL
a. Amount between 1 Jan - 31 Dec 93:	None	
b. Total amount to date:	\$1.7M	\$87.6M

8. THIRD COUNTRY SALES: Not authorized.

9. SUMMARY/IDENTIFICATION OF NONCOMPLIANCE DURING PREVIOUS 12 MONTHS: None reported.

10. SOURCE OF PRODUCTION, QUANTITIES AND REPORTS: Defense Attache Office, Embassy of the United States of America, Bern, Switzerland.

11. SUMMARY OF MONITORING ACTIONS: None

12. NAME, ORGANIZATION AND TELEPHONE NUMBER OF ASSIGNED DOD PROJECT OFFICER: Arthur L. Jansen, HQ, AMCCOM, AMSAC-PDC, DSN 793-3581.

13. NAME, ORGANIZATION AND TELEPHONE NUMBER OF FOREIGN PROJECT OFFICER: Mr. Peter Wittwer, DTPA, Tel 41 31 675594.

14. SIGNIFICANT EVENTS AND PROBLEMS ENCOUNTERED AND RESOLVED DURING THIS REPORTING PERIOD: The Swiss M109 Upgrade Prototype Program under amendment 1 of the MOU has been terminated by the Swiss Government due to a Swiss defense budget reduction that eliminates funds for a follow-on program to upgrade their entire M109 fleet with M284 Cannons. The FMS case for delivery of the M284 Cannon technical data package (TDP) to the Government of Switzerland has been cancelled at their request.

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15. ANTICIPATED FUTURE SIGNIFICANT EVENTS AND PROBLEMS: The Government of Switzerland plans to upgrade half of their M109A1B fleet with their L47 Cannon Tube and modify their existing U.S. Arsenal manufactured cannon breeches accordingly. Modification of these breeches will involve a workshare agreement with Watervliet Arsenal and requires amendment of the MOU. This amendment, No. 2, is currently in staffing in USASAC.

16. LOGISTICAL SUPPORT:

- a. Technical Data Package revisioning service.
- b. Technical/Management Assistance.

17. STATUS/SUMMARY OF TECHNOLOGY FLOWBACK RECEIVED AND ITS' USE: None

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STINGER COPRODUCTION - SWITZERLAND

1. (U) COUNTRY/INTERNATIONAL ORGANIZATION: Switzerland
2. (U) DATE OF MOU/MOA: An MOU between the U.S. Government and the Government of Switzerland (GOS), for coproduction of STINGER in Switzerland, was signed 25 February 1988. Amendment No. 1 was signed 21 May 90.
3. (U) EXPIRATION OF MOU/MOA: The expiration date of the MOU is 25 Feb 2003.
4. (U) ITEMS AND QUANTITIES AUTHORIZED FOR PRODUCTION:

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

b. (U) Estimated total value of authorized program quantities is \$231M.

5. (U) ESTIMATED EXPENDITURES IN THE U.S.: \$135.3M

6. (U) STATUS OF FOREIGN COUNTRY'S PRODUCTION:

[REDACTED]

b. (U) Quantity produced in previous 12 months:

[REDACTED]

c. (U) Quantity Produced to date:

[REDACTED]

[REDACTED]

[REDACTED]

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7. (U) REPORT OF EXPENDITURES IN U.S.: \$130.3M as of 31 Dec 93.
8. (U) THIRD COUNTRY SALES AUTHORIZED: None
9. (U) SUMMARY/IDENTIFICATION OF NONCOMPLIANCE DURING PREVIOUS 6 MONTHS: None
10. (U) SOURCE OF PRODUCTION, QUANTITIES AND REPORTS: Swiss Progress Report.
11. (U) SUMMARY OF MONITORING ACTIONS: Semiannual coproduction program review meetings.
12. (U) NAME, ORGANIZATION AND TELEPHONE NUMBER OF ASSIGNED DOD PROJECT OFFICER: Mr. Kenneth M. Gwaltney, Foreign Systems and Coproduction Division, Security Assistance Management Directorate, U.S. Army Missile Command, Redstone Arsenal, AL, DSN 746-3802, Commercial 205-876-3802.
13. (U) NAME, ORGANIZATION AND TELEPHONE NUMBER OF FOREIGN PROJECT OFFICER: Mr. A. Nussbaumer, Project Manager, Defense Technology and Procurement Agency, Bern, Switzerland, Telephone 031/675716.
14. (U) SIGNIFICANT EVENTS AND PROBLEMS ENCOUNTERED AND RESOLVED DURING THIS REPORTING PERIOD:
  - a. (U) The 21st Program Review Meeting was held at MICOM 14-16 Jun 93. No significant problems were encountered. The 22nd Program Review Meeting was held in Bern, Switzerland, 9-10 Nov 93.
  - b. (U) Problems continue with Swiss Seeker Head Assembly. Guidance Section with U.S. and Swiss Produced Seeker Head Assemblies were qualified.
  - c. (U) Qualification firings were conducted at WSMR 1 Aug to 18 Oct 93.
  - d. (U) Four-hundred U.S. Seeker Head Assemblies purchased from Hughes with equivalent reduction of Swiss Produced Seeker Heads. Manufacturing and assembly problems were encountered during qualification firings (Environmental Qual).
  - e. (U) Delivery of Swiss Gripstocks well ahead of schedule. The program was delayed 9 months from original schedule due to Seeker Head production problems. (Required rework during assembly.)
  - f. (U) Final Buy-out of Tracking Head Trainer spares ordered through FMS. All Tracking Head Trainers procured through FMS were delivered.

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g. (U) Qualification flight testing at WSMR delayed until third quarter 1993.

15. (U) ANTICIPATED FUTURE SIGNIFICANT EVENTS AND PROBLEMS:

a. (U) The Twenty-third Program Review Meeting is scheduled for 12-13 Apr 94 at Tucson, AZ.

b. (U) All manufactured missiles (172) will be reworked as a result of problems during Qualification Firings.

c. (U) Production Verification firings are scheduled at WSMR Jan-Mar 94.

d. (U) First Fly-to-Buy Firing scheduled 2nd quarter 94.

e. (U) Deliver of first STINGER to Swiss Army scheduled 2nd quarter 94.

16. (U) LOGISTICAL SUPPORT: Not applicable

17. (U) STATUS/SUMMARY OF TECHNOLOGY FLOWBACK RECEIVED AND ITS' USE: None at this point in the program.

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## TOW 2 COPRODUCTION - SWITZERLAND

1. COUNTRY/INTERNATIONAL ORGANIZATION: Switzerland
2. DATE OF MOU/MOA:
  - a. An MOU between the U.S. Government and the Government of Switzerland was signed 17 Jun 85.
  - b. Amendment 1 to the MOU was signed 5 Mar 86.
  - c. Amendment 2 of the MOU was signed 12 Apr 91.
3. EXPIRATION OF MOU/MOA: The expiration data of the MOU is 16 Jun 2000.
4. ITEMS AND QUANTITIES AUTHORIZED FOR PRODUCTION:
  - a. The following hardware quantities are authorized by the MOU for coproduction:

Item	Quantity
TOW 2 Tactical Missile (BGM-71D)	12,000
TOW Missile Practice Round (BGM 71 A-1)	3,000
TOW 2 Ground Launcher System	400
M-233 Vehicle Conversion Kit	400
TOW Vehicle Power Conditioner	400
TOW Battery Charger	161
Boresight Collimator	400
AN/TAM-3 Test Set	10
27-E Tool Kit	40
TOW 2 Missile Guidance Test Set	40
TA-20 Series Equipment	40
M70 Training Set	90
Missile Simulation Round	200
AN/UAS-12A TOW Night Sight Equipment Set	400

b. Estimated total value of authorized program quantities is \$222M.

5. ESTIMATED EXPENDITURES IN THE U.S.: \$92.9M
6. STATUS OF FOREIGN COUNTRY'S PRODUCTION:

- a. Items in production:

Item	Quantity
TOW 2 Tactical Missile	700
TOW 2 Ground Launcher System	0

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TOW Vehicle Power Conditioner	0
Boresight Collimator	0
AN/UAS-12A TOW Night Sight Equipment Set	3

b. Quantity produced in previous 12 months:

Item	Quantity
TOW 2 Tactical Missile	2,062
TOW 2 Ground Launcher System	28
TOW Vehicle Power Conditioner	18
Boresight Collimator	0
AN/UAS-12A TOW Night Sight Equipment Set	48

c. Quantity Produced to date:

Item	Quantity
TOW 2 Tactical Missile	6,498
TOW 2 Ground Launcher System	375
TOW Vehicle Power Conditioner	368
Boresight Collimator	364
AN/UAS-12A TOW Night Sight Equipment Set	368

7. REPORT OF EXPENDITURES IN U.S.: \$91.4M

8. THIRD COUNTRY SALES AUTHORIZED: None

9. SUMMARY/IDENTIFICATION OF NONCOMPLIANCE DURING PREVIOUS 12 MONTHS: None

10. SOURCE OF PRODUCTION, QUANTITIES AND REPORTS: Swiss TOW Coproduction Report dated 31 Oct 93.

11. SUMMARY OF MONITORING ACTIONS:

a. Review of coproduction program data with Swiss at 9-13 Sep 93 Program Review Meeting.

b. Review of Swiss TOW System Coproduction Report, dated 31 Oct 93.

c. Verification of Swiss coproduction missile quantities by monitoring direct sales of flight motors to Swiss by U.S. industry through export license.

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12. NAME, ORGANIZATION AND TELEPHONE NUMBER OF ASSIGNED DOD PROJECT OFFICER: Vince I. Gosa II, Foreign Systems Division, Security Assistance Management Directorate, U.S. Army Missile Command, Redstone Arsenal, AL, DSN 746-5113, Commercial: 205-876-5113.

13. NAME, ORGANIZATION AND TELEPHONE NUMBER OF FOREIGN PROJECT OFFICER: Mr. Markus Zuercher, Project Manager, Defense Technology and Procurement Agency, Bern, Switzerland, Telephone 41-031-676030, Fax No. 41-031-675763.

14. SIGNIFICANT EVENTS AND PROBLEMS ENCOUNTERED AND RESOLVED DURING THIS REPORTING PERIOD: None

15. ANTICIPATED FUTURE SIGNIFICANT EVENTS AND PROBLEMS: The Eighteenth TOW Program Review Meeting is scheduled for April 1994 in Tucson, AZ.

16. LOGISTICAL SUPPORT: None

17. STATUS/SUMMARY OF TECHNOLOGY FLOWBACK RECEIVED AND ITS' USE: Twenty-eight engineering change proposals (ECP) have been received from the Government of Switzerland and have been evaluated by the U.S. None have resulted in any improvement or change to the U.S. system.

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## MLRS COPRODUCTION - TURKEY

1. COUNTRY/INTERNATIONAL ORGANIZATION: Turkey
2. DATE OF MOU/MOA: An MOU between the U.S. Government and the Government of Turkey (GT), for coproduction of MLRS in Turkey, was signed 2 Oct 87.
3. EXPIRATION OF MOU/MOA: The expiration data of the MOU is 2 Oct 97.
4. ITEMS AND QUANTITIES AUTHORIZED FOR PRODUCTION:
  - a. The following hardware quantities are authorized by the MOU for coproduction:

Item	Quantity
M270 Armored Vehicle Mounted Rocket Launcher	180
M26 Tactical Rocket Pod (298mm)	9,180
Tactical Rocket Assembly	(55,080)
M28 Practice Rocket Pod (298mm)	300
Practice Rocket Assembly	(1,800)
  - b. Estimated total value of authorized program quantities is \$938M.
5. ESTIMATED EXPENDITURES IN THE U.S.: Unknown
6. STATUS OF FOREIGN COUNTRY'S PRODUCTION:
  - a. Items in production: None
  - b. Quantity produced in previous 12 months: None
  - c. Quantity Produced to date: None
7. REPORT OF EXPENDITURES IN U.S.: \$601,375.00
8. THIRD COUNTRY SALES AUTHORIZED: None
9. SUMMARY/IDENTIFICATION OF NONCOMPLIANCE DURING PREVIOUS 6 MONTHS: None
10. SOURCE OF PRODUCTION, QUANTITIES AND REPORTS: Not applicable.
11. SUMMARY OF MONITORING ACTIONS: Not applicable.

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12. NAME, ORGANIZATION AND TELEPHONE NUMBER OF ASSIGNED DOD PROJECT OFFICER: Mr. Vince I. Gosa, Foreign Systems and Coproduction Division, Security Assistance Management Directorate, U.S. Army Missile Command, Redstone Arsenal, AL, DSN 746-3819.

13. NAME, ORGANIZATION AND TELEPHONE NUMBER OF FOREIGN PROJECT OFFICER: Mr. Sedat Cilinger, Undersecretariat for Defense Industries, Savunma Sanayii Mustesarligi (SSM), MLRS Program Management Office Kirazlidere Mevkii, Bahcelievler Ankara, Turkey, 011-90-4117-2326.

14. SIGNIFICANT EVENTS AND PROBLEMS ENCOUNTERED AND RESOLVED DURING THIS REPORTING PERIOD:

The IA has been approved by DOD and authorization given to MICOM to conclude the document with the Government of Turkey. To date, efforts to conclude the IA have been unsuccessful. Turkish officials have indicated that because of linkage between the MLRS and ATACMS programs, a final decision on MLRS and signature IA will not occur prior to conclusion of the ATACMS MOU.

15. ANTICIPATED FUTURE SIGNIFICANT EVENTS AND PROBLEMS: It is expected that the IA will be concluded in parallel with the ATACMS MOU.

16. LOGISTICAL SUPPORT: Not applicable

17. STATUS/SUMMARY OF TECHNOLOGY FLOWBACK RECEIVED AND ITS' USE: Not applicable.



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## TOW/HELICOPTER ROOF MOUNTED SIGHT

1. COUNTRY/INTERNATIONAL ORGANIZATION: United Kingdom
2. DATE OF MOU/MOA: 5 Oct 78.
3. EXPIRATION OF MOU/MOA: 5 Oct 93
4. ITEMS AND QUANTITIES AUTHORIZED FOR PRODUCTION:

- a. Basic Program:

A total of fifteen (15) TOW Roof Sight systems (includes three prototypes and twelve preproduction) were built by Hughes Aircraft Company; and delivered by 1980. The U.K. coproduction licensee, British Aerospace subsequently was to build 165 systems, including spares.

- b. Thermal Imaging Enhancement Program:

This contract was let to Hughes in March 1986. The program calls for the modification of existing TOW Roof Sights to install a U.K. common module FLIR built by GEC Sensors of the U.K. Hughes completed the necessary design activities and modified three roof sights into a Thermal Imaging Roof Sight (TIRS).

- c. Electro-Optical Counter Countermeasure (EOCCM) Program:

This program provides the capability to defeat NIR jammers and battlefield obscurants. This effort included the delivery of one hundred two FLIR Missile Trackers (FMT) to British Aerospace.

- d. Fully Enhanced TOW Weapon System (FETWS);

This was the final phase in which Hughes provided only a minor assist role. The program called for the final verification of compatibility of the EOCCM program with the Over-the-top-attack (OTA) program which was developed and implemented by Thorn EMI of the U.K. All of the program goals were achieved and met the U.K. MOD expectations.

5. ESTIMATED EXPENDITURES IN THE U.S.: \$60M

6. STATUS OF FOREIGN COUNTRY'S PRODUCTION: British Aerospace completed delivery of the initial TOW Roof Sight System in 1985. The TIRS Production program for a quantity of 110 is due for

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completion in early 1994. The EOCCM production completion is being delayed due to vendor part complications which have not yet been resolved. The problem is currently under investigation and the recovery date is unknown. There is no production for FETWS.

7. REPORT OF EXPENDITURES IN U.S.: \$60M

8. THIRD COUNTRY SALES AUTHORIZED: None

9. SUMMARY/IDENTIFICATION OF NONCOMPLIANCE DURING PREVIOUS 6 MONTHS: None

10. SOURCE OF PRODUCTION, QUANTITIES AND REPORTS: Program reports generated by U.K. Ministry of Defense/British Aerospace.

11. SUMMARY OF MONITORING ACTIONS: Results of the FETWS flight trails were monitored by Hughes Aircraft Co.

12. NAME, ORGANIZATION AND TELEPHONE NUMBER OF ASSIGNED DOD PROJECT OFFICER: Edward Schwartz, Hughes Aircraft Co., Electro-optical and Data Systems Group, El Segundo, CA, 213-616-5597.

13. NAME, ORGANIZATION AND TELEPHONE NUMBER OF FOREIGN PROJECT OFFICER: Mr. Peter Blight, Anti-Tank Procurement Executive, U.K. Ministry of Defense, 011-44-71-632-6344.

14. SIGNIFICANT EVENTS AND PROBLEMS ENCOUNTERED AND RESOLVED DURING THIS REPORTING PERIOD: None.

15. ANTICIPATED FUTURE SIGNIFICANT EVENTS AND PROBLEMS: None.

16. LOGISTICAL SUPPORT: All Logistics elements are currently being managed by British Aerospace. Earlier in this program Hughes supplied field and depot test equipment, source data for publications, training and initial spares allocations. Currently, Hughes is under contract to deliver spares and provide engineering support services on an as-required basis. Both efforts expired calendar 1993 fourth quarter. However, British Aerospace requested an extension through 15 February 1994 which Hughes granted. They will then issue a new 1-year PDS contract.

17. STATUS/SUMMARY OF TECHNOLOGY FLOWBACK RECEIVED AND ITS' USE: None.

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INTERNATIONAL LOGISTICS COPRODUCTION PROJECTS  
(PROJECT UNDER CONSIDERATION)  
COUNTRY SUMMARY

Egypt	120mm Tank Ammo
Germany	Air-to-Air STINGER
Korea	Stinger Coproduction
Netherlands	M109A1B SP Howitzer
Pakistan	AN/TPQ-36
Turkey	ATACMS

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## 120MM TANK AMMO

1. COUNTRY/INTERNATIONAL ORGANIZATION: Egypt
2. EVENTS TO DATE: Memorandum of Understanding drafted and forwarded to Headquarters, U.S. Army Materiel Command, for staffing in Aug 89. MOU forwarded to Government of Egypt Dec 90 for review and comments. Egyptian comments to draft MOU were received in Apr 91. Revised MOU (incorporating input from USASAC, Egypt, AMCCOM, PM-TMAS, and DSAA) forwarded to Egypt 1 Oct 91. Formal MOU negotiations were scheduled to be held in Cairo Feb 92, but were postponed in late Jan 92 by Egypt.
3. ANTICIPATED FUTURE SIGNIFICANT EVENTS: None. Little to no activity is expected during the next 12-24 months, due to lack of funding. Current requirements are being satisfied by FMS purchases.
4. NAME, ORGANIZATION, AND TELEPHONE NUMBER OF ASSIGNED PROJECT OFFICER: Mr. C. Klopp,, AMCCOM, AMSMC-PDC, DSN 793-6995.

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## AIR-TO-AIR STINGER

1. COUNTRY/INTERNATIONAL ORGANIZATION: Germany
2. EVENTS TO DATE: Discussions on the MOU commenced in Bonn, GE in January 1993 and continued at MICOM in May 1993. MOU is in final staffing in USG prior to signature.
3. ANTICIPATED FUTURE SIGNIFICANT EVENTS: Conclusion/signature of MOU.
4. NAME, ORGANIZATION, AND TELEPHONE NUMBER OF ASSIGNED PROJECT OFFICER: Ms. Heidi Rosso, MICOM, AMSMI-SA-TM-SA, DSN 746-7142.

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STINGER COPRODUCTION

1. (U) COUNTRY/INTERNATIONAL ORGANIZATION: Korea

[REDACTED]

3. (U) ANTICIPATED FUTURE SIGNIFICANT EVENTS: Unknown - MOU is on hold.

4. (U) NAME, ORGANIZATION, AND TELEPHONE NUMBER OF ASSIGNED PROJECT OFFICER: Ms. Heidi Rosso, MICOM, AMSMI-SA-TM-SA, DSN: 746-7142.

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M109A1B SP HOWITZER

1. COUNTRY/INTERNATIONAL ORGANIZATION: Netherlands
2. EVENTS TO DATE:
  - a. MOU to upgrade and overhaul of M109 to M109A2/A3 was provided to Netherlands on 28 Jul 89.
  - b. Meeting with representatives of the Government of the Netherlands was held 10-11 Jan 91 for the purpose of revising MOU submitted 28 Jul 89.
  - c. Revised MOU (incorporating input from USASAC, Netherlands, and DSAA) forwarded to Netherlands Embassy 16 Sep 91. Revised MOU was informally discussed during Jul 92 meeting between U.S. and Netherlands representatives.
3. ANTICIPATED FUTURE SIGNIFICANT EVENTS: Potential cancellation of program under consideration by Netherland MOD.
4. NAME, ORGANIZATION, AND TELEPHONE NUMBER OF ASSIGNED PROJECT OFFICER: Mr. Art Jansen, AMCCOM, AMSMC-PDC, DSN 793-3581.

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## AN/TPQ-36 FIREFINDER RADAR

1. COUNTRY/INTERNATIONAL ORGANIZATION: Pakistan
2. EVENTS TO DATE: MOU has been prepared and forwarded to DA/DSAA for authorization to negotiate. Program on hold.
3. ANTICIPATED FUTURE SIGNIFICANT EVENTS: HQDA authorization to negotiate the MOU.
4. NAME, ORGANIZATION, AND TELEPHONE NUMBER OF ASSIGNED PROJECT OFFICER: Mr. Randy Stanpone, CECOM, AMSEL-LC-SA-A-FD, DSN 992-5653.



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## ARMY TACTICAL MISSILE SYSTEM (ATACMS)

1. COUNTRY/INTERNATIONAL ORGANIZATION: Turkey

2. EVENTS TO DATE: At the direction of DSAA, a draft MOU for licensed production of ATACMS in Turkey was prepared by MICOM/USASAC and was submitted to higher headquarters for review in Jul 91. The MOU was forwarded to the Government of Turkey (GT) for review on 7 May 92. Negotiations were conducted by USASAC on 13-15 April 1993 at the ATACMS Project Office (MICOM). The MOU was too restrictive, according to Turkish Representatives, since it limited the Government of Turkey to an assembly program. At the request of the senior Turkish negotiator, USASAC took an action to revise the MOU to include production (in Turkey) and Turkish contractor involvement wherever feasible. In December 1993, a revised MOU was forwarded to GT.

3. ANTICIPATED FUTURE SIGNIFICANT EVENTS:  
Negotiation/signature of the MOU by the USG and the GT.

4. NAME, ORGANIZATION, AND TELEPHONE NUMBER OF ASSIGNED PROJECT OFFICER: Mr. John Rucki, ATACMS Project Management Office, U.S. Army Missile Command, Redstone Arsenal, AL, DSN 788-0685

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## INTERNATIONAL LOGISTICS COPRODUCTION PROJECTS

(CLOSED OR IN CLOSE-OUT PHASE)

### COUNTRY SUMMARY

COUNTRY	ITEM
Germany	UH-1D Helicopter
Italy	ARGOS-10 Radar System M60A1 Tank M109G SP Howitzer M113 APC Family
Japan	Air Defense Command and Control System for HAWK and NIKE HERCULES NIKE HERCULES
Korea	Ammunition Production AN/PRC-77 Family of Tactical Radios M16 Rifle
NATO	AN/TSQ-73 HAWK
Netherlands	Modular Thermal Imaging System ** M109 155MM Howitzer
Norway	M109G SP Howitzer
Pakistan	TOW 2 Night Sight (AN/UAS-12A)**
Philippines	M16 Rifle
Switzerland	M109 155mm Howitzer
Taiwan	General Purpose Vehicles M14 Rifle, M60 MG and 7.62 Ammunition UH-1H Helicopter
Turkey	2.75 Rocket **

\*\* No production resulted from project.

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## UH-1D HELICOPTER

1. COUNTRY/INTERNATIONAL ORGANIZATION: Federal Republic of Germany.
2. DATE OF MOU/MOA: 30 May 65
3. EXPIRATION OF MOU/MOA: None
4. ITEMS AND QUANTITIES AUTHORIZED FOR PRODUCTION:

ITEMS	QUANTIFY
UH-1D	406
T53 Engine	560
5. STATUS OF FOREIGN COUNTRIES PRODUCTION:

QUANTITY PRODUCED	
UH-1F	352
T53 Engine	496
6. THIRD COUNTRY SALES AUTHORIZED: None
7. SUMMARY/IDENTIFICATION OF ANY REPORTS OF NONCOMPLIANCE DURING PREVIOUS 12 MONTHS: None
8. SOURCE OF PRODUCTION QUANTITIES AND REPORTS: Coproduction Report 1972.
9. SUMMARY OF MONITORING ACTIONS: None
10. NAME, ORGANIZATION, AND TELEPHONE NUMBER OF ASSIGNED PROJECT OFFICER: Kent McQuillen, AVSCOM, AMSAV-IX, DON 693-3732.

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## ARGOS 10 RADAR SYSTEM

1. COUNTRY/INTERNATIONAL ORGANIZATION: Italy
2. DATE OF MOU/MOA: 13 May 74
3. EXPIRATION OF MOU/MOA: None
4. ITEMS AND QUANTITIES AUTHORIZED FOR PRODUCTION: 6 systems
5. STATUS OF FOREIGN COUNTRIES PRODUCTION:

Quantity produced: 6 systems

6. THIRD COUNTRY SALES AUTHORIZED: None
7. SUMMARY/IDENTIFICATION OF ANY REPORTS OF NONCOMPLIANCE DURING PREVIOUS 12 MONTHS: None
8. SOURCE OF PRODUCTION QUANTITIES AND REPORTS: Coproduction Report 1982.
9. SUMMARY OF MONITORING ACTIONS: None
10. NAME, ORGANIZATION, AND TELEPHONE NUMBER OF ASSIGNED PROJECT OFFICER: Bill Wimberly, MICOM, AMSMI-SA-PR, DSN 742-4143.

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M60A1 TANK COPRODUCTION WITH ITALY

1. COUNTRY/INTERNATIONAL ORGANIZATION: Italy
2. DATE OF MOU/MOA: 3 Oct 64, 1 Sep 66
3. EXPIRATION OF MOU/MOA: None
4. ITEMS AND QUANTITIES AUTHORIZED FOR PRODUCTION: 200
5. STATUS OF FOREIGN COUNTRIES PRODUCTION:  
Quantity produced: 200
6. THIRD COUNTRY SALES AUTHORIZED: None
7. SUMMARY/IDENTIFICATION OF ANY REPORTS OF NONCOMPLIANCE DURING PREVIOUS 12 MONTHS: None
8. SOURCE OF PRODUCTION QUANTITIES AND REPORTS: Coproduction Report January 1972
9. SUMMARY OF MONITORING ACTIONS: None
10. NAME, ORGANIZATION, AND TELEPHONE NUMBER OF ASSIGNED PROJECT OFFICER: Alma Seldon, TACOM, AMSTA-BTF, DSN 786-7607.

**UNCLASSIFIED**

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M109G 155MM SP HOWITZER

1. COUNTRY/INTERNATIONAL ORGANIZATION: Italy
2. DATE OF MOU/MOA: 1 Feb 68 (amended 7 Dec 76).
3. EXPIRATION OF MOU/MOA: Completion of the Program
4. ITEMS AND QUANTITIES AUTHORIZED FOR PRODUCTION:
  - a. Item: M109G 155MM Self-Propelled Howitzer.
  - b. Quantity: 258 (original 196 and amended 62).
5. STATUS OF FOREIGN COUNTRIES PRODUCTION: Production of the total quantity (258) of M109Gs is complete.
6. THIRD COUNTRY SALES AUTHORIZED: Not authorized.
7. SUMMARY/IDENTIFICATION OF ANY REPORTS OF NONCOMPLIANCE DURING PREVIOUS 12 MONTHS: None
8. SOURCE OF PRODUCTION QUANTITIES AND REPORTS: AMSMC-PDC-C office records.
9. SUMMARY OF MONITORING ACTIONS: None
10. NAME, ORGANIZATION, AND TELEPHONE NUMBER OF ASSIGNED PROJECT OFFICER: Arthur L. Jansen, HQ, AMCCOM, AMSMC-PDC, DSN 793-3581.

**UNCLASSIFIED**

# UNCLASSIFIED

## M113 ARMORED PERSONNEL CARRIER FAMILY OF VEHICLES

1. COUNTRY/INTERNATIONAL ORGANIZATION: Italy
2. DATE OF MOU/MOA: 12 Feb 63
3. EXPIRATION OF MOU/MOA: 1 year after termination notice
4. ITEMS AND QUANTITIES AUTHORIZED FOR PRODUCTION: 4949
5. STATUS OF FOREIGN COUNTRIES PRODUCTION:

### Quantity produced:

M113 APC	2723
M113A1 APC	930
M113A1 APC Modified	330
M577 Armored Command Post	175
M106 SP Mortar Vehicle	533
M548 Cargo Carrier	208

6. THIRD COUNTRY SALES AUTHORIZED:

Greece	560
Israel	100
Libya	152
Turkey	700
Saudi Arabia	300

7. SUMMARY/IDENTIFICATION OF ANY REPORTS OF NONCOMPLIANCE DURING PREVIOUS 12 MONTHS: None

8. SOURCE OF PRODUCTION QUANTITIES AND REPORTS:  
Coproducton report Jun 84.

9. SUMMARY OF MONITORING ACTIONS: None

10. NAME, ORGANIZATION, AND TELEPHONE NUMBER OF ASSIGNED PROJECT OFFICER: Alma Seldon, TACOM, AMSTA-BTF, DSN 786-7607.

# UNCLASSIFIED

## AIR DEFENSE COMMAND AND CONTROL SYSTEM FOR HAWK & NIKE HERCULES

1. COUNTRY/INTERNATIONAL ORGANIZATION: Japan
2. DATE OF MOU/MOA: 13 Oct 67, 6 Jul 67 Supplement, 22 Dec 72 Supplement
3. EXPIRATION OF MOU/MOA: None
4. ITEMS AND QUANTITIES AUTHORIZED FOR PRODUCTION:  

ITEMS	QUANTIFY
JAN/TSQ-SIB	14
AN/GSA-77	53
5. STATUS OF FOREIGN COUNTRIES PRODUCTION:  

QUANTITY PRODUCED	
JAN/TSQ-SIB	14
AN/GSA-77	48
6. THIRD COUNTRY SALES AUTHORIZED: None
7. SUMMARY/IDENTIFICATION OF ANY REPORTS OF NONCOMPLIANCE DURING PREVIOUS 12 MONTHS: None
8. SOURCE OF PRODUCTION QUANTITIES AND REPORTS: Coproduction Report 1981.
9. SUMMARY OF MONITORING ACTIONS: None
10. NAME, ORGANIZATION, AND TELEPHONE NUMBER OF ASSIGNED PROJECT OFFICER: Bill Wimberly, MICOM, AMSMI-SA-PR, DSN 742-4143.

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# UNCLASSIFIED

## NIKE-HERCULES

1. COUNTRY/INTERNATIONAL ORGANIZATION: Japan
2. DATE OF MOU/MOA: 13 Oct 69
3. EXPIRATION OF MOU/MOA: None
4. ITEMS AND QUANTITIES AUTHORIZED FOR PRODUCTION: 555  
missiles
5. STATUS OF FOREIGN COUNTRIES PRODUCTION:  
Quantity produced: 555 missiles
6. THIRD COUNTRY SALES AUTHORIZED: None
7. SUMMARY/IDENTIFICATION OF ANY REPORTS OF NONCOMPLIANCE  
DURING PREVIOUS 12 MONTHS: None
8. SOURCE OF PRODUCTION QUANTITIES AND REPORTS: Coproduction  
report 1980.
9. SUMMARY OF MONITORING ACTIONS: None
10. NAME, ORGANIZATION, AND TELEPHONE NUMBER OF ASSIGNED  
PROJECT OFFICER: Bill Wimberly, MICOM, AMSMI-SA-PR, DSN  
742-4143.

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AMMUNITION PRODUCTION PROGRAM

1. COUNTRY/INTERNATIONAL ORGANIZATION: Korea
2. DATE OF MOU/MOA: 19 Feb 72
3. EXPIRATION OF MOU/MOA: See 11
4. ITEMS AND QUANTITIES AUTHORIZED FOR PRODUCTION:  
1,000,000,000 rounds
5. STATUS OF FOREIGN COUNTRIES PRODUCTION:  
Quantity produced: 1,416,300,000
6. THIRD COUNTRY SALES AUTHORIZED: None
7. SUMMARY/IDENTIFICATION OF ANY REPORTS OF NONCOMPLIANCE  
DURING PREVIOUS 12 MONTHS: None
8. SOURCE OF PRODUCTION QUANTITIES AND REPORTS: Coproduction  
report 1983.
9. SUMMARY OF MONITORING ACTIONS: None
10. NAME, ORGANIZATION, AND TELEPHONE NUMBER OF ASSIGNED  
PROJECT OFFICER: Arthur L. Jansen, AMCCOM, AMSMC-PDC, DSN  
793-3581.
11. This MOU and its conditions was terminated by the Royalty  
Fees for Production of Defense Articles by Korean Sources MOU  
dated 18 July 1989.

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# UNCLASSIFIED

## AN/PRC-77 FAMILY OF TACTICAL RADIOS

1. COUNTRY/INTERNATIONAL ORGANIZATION: Korea
2. DATE OF MOU/MOA: 14 Aug 73
3. EXPIRATION OF MOU/MOA: See 11
4. ITEMS AND QUANTITIES AUTHORIZED FOR PRODUCTION:

ITEMS	QUANTITY
Basic quantity	16,003
Additional	1,738
5. STATUS OF FOREIGN COUNTRIES PRODUCTION:

Quantity produced:	17,741
--------------------	--------
6. THIRD COUNTRY SALES AUTHORIZED: None
7. SUMMARY/IDENTIFICATION OF ANY REPORTS OF NONCOMPLIANCE DURING PREVIOUS 12 MONTHS: None
8. SOURCE OF PRODUCTION QUANTITIES AND REPORTS: Coproduction report 1981.
9. SUMMARY OF MONITORING ACTIONS: None
10. NAME, ORGANIZATION, AND TELEPHONE NUMBER OF ASSIGNED PROJECT OFFICER: Paul Watson, CECOM, AMSEL-LC-SA-B-SR, DSN 992-8629. David Shuman, DSN 992-5577.
11. This MOU was amended to authorize continued Korean production for its own defense requirements by the Royalty Fees for Production of Defense Articles by Korean sources MOU dated 18 July 1989.

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## M16 RIFLE

1. COUNTRY/INTERNATIONAL ORGANIZATION: Korea
2. DATE OF MOU/MOA: 31 Mar 71
3. EXPIRATION OF MOU/MOA: None
4. ITEMS AND QUANTITIES AUTHORIZED FOR PRODUCTION:  
1,166,000 rifles
5. STATUS OF FOREIGN COUNTRIES PRODUCTION:  
Quantity produced: 1,166,000 units
6. THIRD COUNTRY SALES AUTHORIZED: None
7. SUMMARY/IDENTIFICATION OF ANY REPORTS OF NONCOMPLIANCE  
DURING PREVIOUS 12 MONTHS: None
8. SOURCE OF PRODUCTION QUANTITIES AND REPORTS: Coproduction  
report 1984.
9. SUMMARY OF MONITORING ACTIONS: None
10. NAME, ORGANIZATION, AND TELEPHONE NUMBER OF ASSIGNED  
PROJECT OFFICER: Arthur L. Jansen, AMCCOM, AMSMC-PDC, DSN  
793-3581.

# UNCLASSIFIED

AN/TSQ-73 (NHPLO)

1. COUNTRY/INTERNATIONAL ORGANIZATION: NHPLO
2. DATE OF MOU/MOA: An MOU between the U.S. Government and NHPLO for coproduction of AN/TSQ-73 system by NHPLO was signed 23 Feb 81.
3. EXPIRATION OF MOU/MOA: The expiration date of the MOU was 23 Feb 91. See additional information in paragraph 15, below.
4. ITEMS AND QUANTITIES AUTHORIZED FOR PRODUCTION:
  - a. Authorized Hardware Quantities: Twenty-nine (29) AN/TSQ-73 systems.
  - b. Estimated total value of authorized program is \$252M.
5. ESTIMATED EXPENDITURES IN THE U.S.: \$153M.
6. STATUS OF FOREIGN COUNTRY'S PRODUCTION:

Quantity Produced to Date: 11 (6 Italy/5 France)
7. REPORT OF EXPENDITURES IN U.S. \$135.2M as of 31 Dec 91.
8. THIRD COUNTRY SALES AUTHORIZED: None.
9. SUMMARY/IDENTIFICATION OF NONCOMPLIANCE DURING PREVIOUS 12 MONTHS: None
10. SOURCE OF PRODUCTION, QUANTITIES AND REPORTS: NHPLO
11. SUMMARY OF MONITORING ACTIONS: N/A
12. NAME, ORGANIZATION AND TELEPHONE NUMBER OF ASSIGNED DOD PROJECT OFFICER: Mr. James S. Hinkle, Project Manager, HAWK Project Office, Weapon Systems Management Directorate, U.S. Army Missile Command, Redstone Arsenal, AL, DSN 746-4715, Commercial 205-876-4715.

# UNCLASSIFIED

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HAWK

1. COUNTRY/INTERNATIONAL ORGANIZATION: NATO
2. DATE OF MOU/MOA: Mar 60
3. EXPIRATION OF MOU/MOA: 29 May 72
4. ITEMS AND QUANTITIES AUTHORIZED FOR PRODUCTION: 26  
Battalions
5. STATUS OF FOREIGN COUNTRIES PRODUCTION:  
Quantity produced: 26 Battalions
6. THIRD COUNTRY SALES AUTHORIZED: None
7. SUMMARY/IDENTIFICATION OF ANY REPORTS OF NONCOMPLIANCE  
DURING PREVIOUS 6 MONTHS: None
8. SOURCE OF PRODUCTION QUANTITIES AND REPORTS: Coproduction  
report.
9. SUMMARY OF MONITORING ACTIONS: None
10. NAME, ORGANIZATION, AND TELEPHONE NUMBER OF ASSIGNED  
PROJECT OFFICER: Bill Wimberly, MICOM, AMSMI-SA-PR, DSN  
742-4143.

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## MODULAR THERMAL IMAGING SYSTEM (MOD FLIR)

1. COUNTRY/INTERNATIONAL ORGANIZATION: Netherlands, Germany
2. DATE OF MOU/MOA: 22 Dec 81
3. EXPIRATION OF MOU/MOA: 10 Jun 91
4. ITEMS AND QUANTITIES AUTHORIZED FOR PRODUCTION:  
None. Production Feasibility Only.
5. STATUS OF PRODUCTION IN NETHERLANDS: None.
6. THIRD COUNTRY SALES AUTHORIZED: None.
7. SUMMARY/IDENTIFICATION OF ANY REPORTS OF NONCOMPLIANCE  
DURING PREVIOUS 6 MONTHS: None
8. SOURCE OF PRODUCTION QUANTITIES AND REPORTS: N/A
9. SUMMARY OF MONITORING ACTIONS: None
10. NAME, ORGANIZATION, AND TELEPHONE NUMBER OF ASSIGNED  
PROJECT OFFICER: Dr. Rudolf G. Buser, CECOM Night Vision and  
Electronic Sensors Directorate, (703)704-1172.  
793-3581.

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## M109 155MM SP HOWITZER

1. COUNTRY/INTERNATIONAL ORGANIZATION: Netherlands
2. DATE OF MOU/MOA: 3 May 66
3. EXPIRATION OF MOU/MOA: Completion of production.
4. ITEMS AND QUANTITIES AUTHORIZED FOR PRODUCTION:

	QUANTITY
a. M109 155MM SP Howitzer (MOU dtd 3 May 66)	134
b. M127 Gun Mount and Parts/Components/ Assemblies (First MOU Supplement, 17 Mar 69)	*
c. M126E1 Cannon and Parts/Components/ (First MOU Supplement, 17 Mar 69)	*
d. M109A1 Kits (Second MOU Supplement, 5 Jun 75)	132
e. M119A2 Propelling Charge (Second MOU Supplement, 5 Jun 75)	40,000
f. M109A2s (86 Howitzers and 5 Driver Trainers) (Third MOU Supplement, 14 Apr 79)	91
g. M109A3 Kits (136 for GON and 80 for Government of Denmark) (Fourth MOU Supplement, 15 Mar 83)	216

\* Not Specified

5. STATUS OF PRODUCTION IN NETHERLANDS:

	QUANTITY PRODUCED
a. 109 SP Howitzer	134
b. M127 Gun Mount	222
c. M126E1 Cannon	142
d. M109A1 Kits	132
e. M119A2 Propelling Charge	None



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f. M109A2s	91
g. M109A3 Kits	216

6. THIRD COUNTRY SALES AUTHORIZED:

- a. M109 SP Howitzer: Not authorized.
- b. M127 Gun Mount and components: Belgium, Canada, Denmark, and United Kingdom.
- c. M126E1 Cannon and components: Same countries as in 8b above.
- d. M109A1 Kits: Not authorized.
- e. M119A2 Propelling Charge: Not authorized.
- f. ML109A3 Kits: Denmark.

7. SUMMARY/IDENTIFICATION OF ANY REPORTS OF NONCOMPLIANCE DURING PREVIOUS 12 MONTHS: None

8. SOURCE OF PRODUCTION QUANTITIES AND REPORTS: AMSMC-PDC-C records and The Royal Netherlands Embassy, Washington, D.C.

9. SUMMARY OF MONITORING ACTIONS: None

10. NAME, ORGANIZATION, AND TELEPHONE NUMBER OF ASSIGNED PROJECT OFFICER: Arthur L. Jansen, AMCCOM, AMSMC-PDC, DSN 793-3581.

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M109 SP HOWITZER

1. COUNTRY/INTERNATIONAL ORGANIZATION: Norway
2. DATE OF MOU/MOA: 30 Dec 66
3. EXPIRATION OF MOU/MOA: Completion of the program.
4. ITEMS AND QUANTITIES AUTHORIZED FOR PRODUCTION:
  - a. Item: M109G 155mm Self-Propelled Howitzer (SPH).
  - b. Quantity: Not specified in MOU.
5. STATUS OF FOREIGN COUNTRIES PRODUCTION:  
Quantity produced: 126
6. THIRD COUNTRY SALES AUTHORIZED: Not authorized
7. SUMMARY/IDENTIFICATION OF ANY REPORTS OF NONCOMPLIANCE DURING PREVIOUS 12 MONTHS: None
8. SOURCE OF PRODUCTION QUANTITIES AND REPORTS: ODC, American Embassy, Oslo Norway.
9. SUMMARY OF MONITORING ACTIONS: None
10. NAME, ORGANIZATION, AND TELEPHONE NUMBER OF ASSIGNED PROJECT OFFICER: Arthur L. Jansen, AMCCOM, AMSMC-PDC, DSN 793-3581.

4.17

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TOW 2 NIGHT SIGHT (AN/UAS-12A)

1. COUNTRY/INTERNATIONAL ORGANIZATION: Pakistan
2. DATE OF MOU/MOA: 27 Jan 90
3. EXPIRATION OF MOU/MOA: 27 Jan 2000
4. ITEMS AND QUANTITIES AUTHORIZED FOR PRODUCTION:  
500 AN/UAS-12A Night Sight Equipment Sets.
5. ESTIMATED EXPENDITURES IN THE U.S.: \$30 million FMS credits.
6. STATUS OF FOREIGN COUNTRY'S PRODUCTION: Program on hold.  
Implementing Arrangement has been prepared but has not been  
submitted to Pakistan.
7. THIRD COUNTRY SALES AUTHORIZED: None.
8. SUMMARY/IDENTIFICATION OF ANY REPORTS OF NONCOMPLIANCE  
DURING PREVIOUS 12 MONTHS: None
9. SOURCE OF PRODUCTION QUANTITIES AND REPORTS: N/A
10. SUMMARY OF MONITORING ACTIONS: None
11. NAME, ORGANIZATION, AND TELEPHONE NUMBER OF ASSIGNED DOD  
PROJECT OFFICER: Vincent I. Gosa III, Cooperative Programs and  
Foreign Systems Division, Security Assistance Management  
Directorate, U.S. Army Missile Command, Redstone Arsenal, AL, DSN:  
746-3819, Commercial: 205-876-3819.
12. NAME, ORGANIZATION, AND TELEPHONE NUMBER OF FOREIGN PROJECT  
OFFICER: Dr. Akram S. Hussain Abidi, Dir Gen, LOP, Chaklala.

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M16 RIFLE

1. COUNTRY/INTERNATIONAL ORGANIZATION: Philippines
2. DATE OF MOU/MOA: 17 May 74
3. EXPIRATION OF MOU/MOA: None
4. ITEMS AND QUANTITIES AUTHORIZED FOR PRODUCTION:  
150,000
5. STATUS OF FOREIGN COUNTRIES PRODUCTION:  
Quantity produced: 166,315
6. THIRD COUNTRY SALES AUTHORIZED: None
7. SUMMARY/IDENTIFICATION OF ANY REPORTS OF NONCOMPLIANCE  
DURING PREVIOUS 12 MONTHS: None
8. SOURCE OF PRODUCTION QUANTITIES AND REPORTS: Coproduction  
report 1983.
9. SUMMARY OF MONITORING ACTIONS: None. This project has  
been inactive since Jan 82.
10. NAME, ORGANIZATION, AND TELEPHONE NUMBER OF ASSIGNED  
PROJECT OFFICER: Arthur L. Jansen, AMCCOM, AMSMC-PDC, DSN  
793-3581.

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# UNCLASSIFIED

M109A1B 155MM SP HOWITZER

1. COUNTRY/INTERNATIONAL ORGANIZATION: Switzerland
2. DATE OF MOU/MOA: 7 Jul 81
3. EXPIRATION OF MOU/MOA: 7 Jul 96 or until completion of program.
4. ITEMS AND QUANTITIES AUTHORIZED FOR PRODUCTION:
  - a. Item: M109A1B 155mm Self-Propelled Howitzer.
  - b. Quantity: 207
5. STATUS OF FOREIGN COUNTRIES PRODUCTION:
  - a. Item produced: M109A1B 155mm Self-Propelled Howitzer.
  - b. Quantity produced to date: 207
6. THIRD COUNTRY SALES AUTHORIZED: Not authorized.
7. SUMMARY/IDENTIFICATION OF ANY REPORTS OF NONCOMPLIANCE DURING PREVIOUS 12 MONTHS: None
8. SOURCE OF PRODUCTION QUANTITIES AND REPORTS: AMSMC-PDC-C office records.
9. SUMMARY OF MONITORING ACTIONS: None.
10. NAME, ORGANIZATION, AND TELEPHONE NUMBER OF ASSIGNED PROJECT OFFICER: Arthur L. Jansen, AMCCOM, AMSMC-PDC, DSN 793-3581.

4.20

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## GENERAL PURPOSE VEHICLES

1. COUNTRY/INTERNATIONAL ORGANIZATION: Taiwan

2. DATE OF MOU/MOA: 13 Jul 66

3. EXPIRATION OF MOU/MOA: None

4. ITEMS AND QUANTITIES AUTHORIZED FOR PRODUCTION:

ITEMS	QUANTITY
2 - 1/2ton M35A2	7537
1 - 1/4ton M715	46
1/4ton M151A1	1894
1/4ton M151A2	8466

5. STATUS OF FOREIGN COUNTRIES PRODUCTION:

### QUANTITY PRODUCED

2 - 1/2ton M35A2	7537
1 - 1/2ton M715	46
1/4ton M151A2	8466

6. THIRD COUNTRY SALES AUTHORIZED: None

7. SUMMARY/IDENTIFICATION OF ANY REPORTS OF NONCOMPLIANCE DURING PREVIOUS 12 MONTHS: None

8. SOURCE OF PRODUCTION QUANTITIES AND REPORTS: Coproduction report 31 Jul 81.

9. SUMMARY OF MONITORING ACTIONS: None.

10. NAME, ORGANIZATION, AND TELEPHONE NUMBER OF ASSIGNED PROJECT OFFICER: Elma Seldon, TACOM, AMSTA-BTF, DSN 786-7607.

# UNCLASSIFIED

## M14 RIFLE, M60 MACHINE GUN, AND 7.62MM AMMUNITION

1. COUNTRY/INTERNATIONAL ORGANIZATION: Taiwan
2. DATE OF MOU/MOA: 23 Jan 67
3. EXPIRATION OF MOU/MOA: None
4. ITEMS AND QUANTITIES AUTHORIZED FOR PRODUCTION:

M14 Rifle	Unlimited
M60 Machine Gun	Unlimited
7.62mm (M80) Ammunition	Not addressed
5. STATUS OF FOREIGN COUNTRIES PRODUCTION:

Quantity Produced	
M14 Rifle	146,596
M60 Machine Gun	10,725
7.62mm (M80) Ammunition	252,794,000 rds.
6. THIRD COUNTRY SALES AUTHORIZED: None
7. SUMMARY/IDENTIFICATION OF ANY REPORTS OF NONCOMPLIANCE DURING PREVIOUS 12 MONTHS: None
8. SOURCE OF PRODUCTION QUANTITIES AND REPORTS: Coproduction report 1981.
9. SUMMARY OF MONITORING ACTIONS: None. This project has been inactive since 1979.
10. NAME, ORGANIZATION, AND TELEPHONE NUMBER OF ASSIGNED PROJECT OFFICER: Arthur L. Jansen, AMCCOM, AMSMC-PDC, DSN 793-3581.

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## UH-1H HELICOPTER

1. COUNTRY/INTERNATIONAL ORGANIZATION: Taiwan
2. DATE OF MOU/MOA: 69 and 12 Aug 72
3. EXPIRATION OF MOU/MOA: None
4. ITEMS AND QUANTITIES AUTHORIZED FOR PRODUCTION:  
118 UH-1H Helicopters
5. STATUS OF FOREIGN COUNTRIES PRODUCTION:  
Quantity produced: 118
6. THIRD COUNTRY SALES AUTHORIZED: None
7. SUMMARY/IDENTIFICATION OF ANY REPORTS OF NONCOMPLIANCE  
DURING PREVIOUS 12 MONTHS: None
8. SOURCE OF PRODUCTION QUANTITIES AND REPORTS: Coproduction  
Report 1977.
9. SUMMARY OF MONITORING ACTIONS: None
10. NAME, ORGANIZATION, AND TELEPHONE NUMBER OF ASSIGNED  
PROJECT OFFICER: Kent McQuillen, AVSCOM, AMSAV-IX, DSN  
693-3732.

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2.75 INCH ROCKET

1. COUNTRY/INTERNATIONAL ORGANIZATION: Turkey
2. DATE OF MOU/MOA: 29 May 72
3. EXPIRATION OF MOU/MOA: None
4. ITEMS AND QUANTITIES AUTHORIZED FOR PRODUCTION:  
50,000 per year
5. STATUS OF FOREIGN COUNTRIES PRODUCTION: No rocket  
production resulted from this program.
6. THIRD COUNTRY SALES AUTHORIZED: None
7. SUMMARY/IDENTIFICATION OF ANY REPORTS OF NONCOMPLIANCE  
DURING PREVIOUS 12 MONTHS: None
8. SOURCE OF PRODUCTION QUANTITIES AND REPORTS: Coproduction  
report 1984.
9. SUMMARY OF MONITORING ACTIONS: None
10. NAME, ORGANIZATION, AND TELEPHONE NUMBER OF ASSIGNED  
PROJECT OFFICER: Arthur L. Jansen, AMCCOM, AMSMC-PDC, DSN  
793-3581

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JUL 04 1994

[REDACTED]

MEMORANDUM FOR THE DIRECTOR, DEFENSE SECURITY ASSISTANCE AGENCY  
(DSAA) (ATTN: OPS-E)


Subj: SEMI-ANNUAL REPORT OF INTERNATIONAL COPRODUCTION PROGRAMS

- Ref: (a) DOD Directive 2000.9  
(b) DOD Manual 5105.38-M (SAMM), Chapter 14,  
Section 140105, paragraph F  
(c) DSAA memo I-04513/91 of 21 Aug 91

- Encl: (1) Guided Missile Frigate (FFG-7) Construction MOA  
w/Australia.  
(2) New Tactical Fighter Aircraft (F/A-18) Acquisition  
and Coproduction MOU w/Australia.  
(3) AIM-9L Coproduction MOU w/Germany.  
(4) APG-65 Radar Program for F-4 Upgrade MOU w/Germany.  
(5) 5" Rolling Airframe Missile (RAM) System MOU  
w/Germany and Denmark.  
(6) AH-1 Night Targeting System Development and Production  
MOU w/Israel.

- [REDACTED]
- (14) AV-8B/GR5 Development, Production, and Support MOU  
w/United Kingdom.  
(15) NATO SEASPARROW Cooperative Development and Production  
and Cooperative Support Multilateral MOUs.

1. Enclosures (1) through (15) are forwarded in accordance with references (a) through (c). This report covers the period 1 July to 31 December 1993. Navy IPO point of contact for this report is Mr. T. Noble IPO-03B2, (703) 692-3956.

  
F.D. Kenlon  
By direction

[REDACTED]

**SUBJECT: Guided Missile Frigate (FFG-7) Coproduction Program**

1. Participating Countries:

- a. United States of America
- b. Australia

2. Date MOU Initiated: 11 July 1983

3. Expiration Date of MOU:

Termination at the end of the program unless terminated sooner.

4. Production Quantities Authorized by MOU:

- a. Construction of two (2) Perry Class (FFG-7) guided missile frigates authorized by MOU as replacements for existing outdated escort vessels.

5. Production Status:

- a. Units in Production: One.
- b. Units Produced During Report Period: None.
- c. Units Produced Since MOU Initiated: One.

6. Third Country Sales: NONE AUTHORIZED

7. MOU Noncompliance: NONE

8. Status/summary of technology flowback received and its use:

Australia is in the production phase for one ship while the U.S. has finished production of the FFG-7 class. Although Australia has made no significant modifications to the FFG-7 design, they have provided the U.S. with the flowback listed below:

- a. A design for a variable orifice to control firemain system pressure.
- b. A modified design for the 4100 ton stability SHIPALT to minimize disruption during ship PSA.
- c. A method for installing a sonar dome to avoid sonar transducer array impact.

9. Source of Information:

- a. Reports from the Royal Australian Navy.
- b. USN and RAN Project Officer meetings and correspondence.

**ENCLOSURE(1)**

**SUBJECT:** Guided Missile Frigate (FFG-7) Coproduction Program

10. Program Manager Information:

- a. Name & Rank - M. Taelman
- b. Organization & Code - NAVSEA, PMS-38012
- c. Telephone Number - (703)602-0470

**SUBJECT: F/A-18 Acquisition and Coproduction Program**

1. Participating Countries:
  - a. United States of America
  - b. Australia
2. Date MOU Initiated: 12 September 1980
3. Expiration Date of MOU: NONE
4. Production Quantities Authorized by MOU:
  - a. 75 F/A-18 Aircraft (2 Completed in U.S., 73 Assembled in Australia from kits)
5. Production Status:
  - a. Units in Production: NONE
  - b. Units Produced During Report Period: NONE
  - c. Units Produced Since MOU Initiated: 75 F/A Aircraft; delivery of final units taken in May 1990.
  - d. Additional MOU related status information: The F/A-18 Forward Looking Infra-Red (FLIR) pod (AN/AA-38). The RAAF procured and received, under FMS case AT-P-BBK, 29 FLIR pods and are awaiting delivery of the LTD/R. In August 1990, the U.S. State Department approved the Technical Assistance and Licensing Agreement (TA&LA), DTC Case AG-341-90 to Litton. Litton has contracted to Amalgamated Wireless of Australasia-Defense Industry (AWA-DI) to coproduce the LTR/R unit. AWA-DI is under contract to receive 35 subsystems/Kit on which they will perform final assembly followed by system test. The first 4 LTD/R units were co-assembled and tested, at LLS in CONUS in March and April 93. The remaining 25 units were co-assembled at AWA/DI in March 93 and deliveries are expected to be complete by June 94.
6. Third Country Sales: NONE AUTHORIZED
7. MOU Noncompliance: NONE
8. Status/summary of technology flowback received and its use: Australia has provided the U.S. program office with their "lessons learned" and maintenance improvements which were based on U.S. programs.
9. Source of Information: USN F/A-18 Program office, PEO(T), PMA-265-11B.

**ENCLOSURE(1)**

**SUBJECT:** F/A-18 Acquisition and Coproduction Program

10. Program Manager Information:

- a. Name & Rank - Susan Lyon (Acting)
- b. Organization & Code - PEO(T), PMA265-1A
- c. Telephone Number - (703) 692-9191, X-7476



**SUBJECT: AIM-9L Coproduction Program (Germany)**

1. **Participating Countries:**

- a. United States of America
- b. Federal Republic of Germany
- c. United Kingdom\*
- d. Norway\*
- e. Italy\*

\* U.S. approved  
European AIM-9L  
Consortium  
members

2. **Date MOU Initiated: February 1975**

3. **Expiration Date of MOU: NONE**

4. **Production Quantities Authorized by MOU:**

No specific quantity identified in the MOU; Production is limited to AIM-9L missile minus the target detector.

5. **Production Status:**

- a. Units Under Production: NONE
- b. Units Produced During Report Period: NONE
- c. Units Produced Since MOU Initiated: 19,808; original production agreement fulfilled.

6. **Third Country Sales:**

- a. Denmark - 372
- b. The Netherlands - 910
- c. Spain - 204
- d. Turkey - 302

7. **MOU Noncompliance: NONE**

8. **Status/summary of technology flowback received and its use:**

Germany has modified the AIM-9L to incorporate an IRCCM capability. The U.S. Navy has conducted tests on the missile with the German modification and determined that the capabilities of the U.S. AIM-9M will better satisfy U.S. requirements.

**ENCLOSURE(3)**

**SUBJECT:** AIM-9L Coproduction Program (Germany)

9. **Source of Information:**

The production of AIM-9L Missiles is monitored through the sales of Target Detectors which were withheld from the original coproduction MOU and are sold Foreign Military Sales.

10. **Program Manager:**

- a. Name & Rank - Reynolds M. Williams
- b. Organization & Code - NAVAIR, PMA-259E
- c. Telephone Number - (703)692-8080

**SUBJECT:** APG-65 Radar Program for F-4 Upgrade MOU

1. Participating Countries:
  - a. United States of America
  - b. Federal Republic of Germany
2. Date MOU Initiated: 8 December 1987
3. Expiration Date of MOU: 8 December 1997
4. Production Quantities Authorized by MOU:
  - a. 110 radar units for F-4F Aircraft plus 20 spares.
    - 1) United States - Three to be provided by Hughes Aircraft Co.
    - 2) FRG - The remaining 127 units to be manufactured by Deutsche Aerospace, A.G. (Formerly TST).
5. Production Status:
  - a. Units in Production: 62 units in production
  - b. Units Produced During Report Period: Fourteen (14)
  - c. Units Produced Since MOU Initiated: Sixty eight (68)
6. Third Country Sales: No Third Country Sales have been authorized.
7. MOU Noncompliance: NONE
8. Status/summary of technology flowback received and its use:

There has been no technology flowback identified, requested, or received in this program.
9. Source of Information:
  - a. Deutsche Aerospace, A.G. and Hughes Aircraft (US) Program Managers.
  - b. PMA Program Manager.
  - c. Regularly scheduled program reviews.
10. Program Manager Information:
  - a. Name & Rank - Karl Voight
  - b. Organization & Code - PEO(T), PMA-265-19D
  - c. Telephone Number - (703)692-9191, X-7440

**ENCLOSURE(4)**

**SUBJECT:** 5" Rolling Airframe Missile System Coproduction Program

1. Participating Countries:

- a. United States of America
- b. Federal Republic of Germany
- c. Kingdom of Denmark

2. Date MOU Initiated:

- a. "Cooperative Development of an Advanced Surface-to-Air Missile System" dated 22 July 1976 (US, GE, KD).
- b. "Cooperative Full Scale Engineering Development of an Advanced Surface-to-Air Missile System" dated 18 May 1979 (US, GE, KD).
- c. "Cooperative Production of the MK 31 Guided Missile Weapon System" dated 31 August 1987 (US, GE).
- d. "Principles Governing Mutual Cooperation in the Research and Development, Production, Procurement, and Logistic Support of Defense Equipment" dated 17 October 1978 (US, GE).

3. Expiration Date of MOU:

"Cooperative Production of the MK 31 Guided Missile Weapon System" expires on 3 August 2007.

4. Production Quantities Authorized by MOU:

- a. Guided Missile Round Packs: 6,230
- b. Launching Systems: 77

5. Production Status:

a. Units Under Production:

- 1) Guided Missile Round Packs - 1565 (RAMSYS, GMBH)
- 2) Launching Systems - 51 (TRANSLANT INC.)

b. Units Produced During Report Period: 115 Guided Missile Round Packs, 26 Launching Systems

c. Units Produced Since MOU Initiated: 215 Guided Missile Round Packs, 43 Launching Systems

6. Third Country Sales:

a. Japan and Korea have requested Planning and Review Data.

b. 

ENCLOSURE(S)

**SUBJECT:** 5" Rolling Airframe Missile System Coproduction Program

7. **MOU Noncompliance:** NONE

8. **Status/summary of technology flowback received and its use:**

None during this period. Germany has provided the U.S. with signal processing algorithms to be used for IR all-the-way capability upgrade of the missile. The U.S. is planning to include these algorithms in the Block I upgrade program.

9. **Source of Information:**

- a. The production quantities are derived from the production contracts.
- b. Third country sales information is from the Japanese request for Planning and Review data and a Memorandum from the Under Secretary of the Navy.

10. **Program Manager:**

- a. Name & Rank - J.Z. Stepien
- b. Organization & Code - PEO(TAD)-DR
- c. Telephone Number - (703)607-1631

**SUBJECT: AH-1 Night Targeting System Coproduction Program**

1. Participating Countries:

- a. United States of America
- b. Israel

2. Date MOU Initiated: 4 August 1987

3. Expiration Date of MOU:

At the completion of delivery of the units, unilaterally, or ten (10) years from the signature date.

4. Production Quantities Authorized by MOU:

- a. Initially 80 Night Targeting Systems were scheduled for delivery to the U.S., but the Marines now require 197.
- b. Initial Israeli requirement was 40 units; because of funding constraints, only 33 have been procured.

5. Production Status:

- a. LOT I Production contract of 33 systems for the Israel Air Force (IAF) and 2 systems for USMC validation and verification was signed July 12 1991. Deliveries began second quarter FY 93.
- b. Units Produced During Report Period: Twelve (12) IAF & three (3) USMC
- c. Units Produced Since MOU Initiated: Eighteen (18) IAF & three (3) USMC

6. Third Country Sales: NONE. [REDACTED]

[REDACTED] Exception to National Disclosure Policy to release system to Taiwan approved. Sale of system to Taiwan and Turkey proceeding, based on approval of operational evaluation completed September 1993. (COMOPTEVFOR Dec 93 report).

7. MOU Noncompliance: NONE

8. Status/summary of technology flowback received and its use:

None. No technology flowback has been identified, requested, or received. AH-1 Night Targeting System is based on an Israeli developmental system.

9. Source of Information:

- a. MOU, Acquisition Plan AIR-88-07, and Contract N00019-88-C-0054, and Acquisition Strategy Report AIR-ASR-16A.
- b. NAVAIR personnel have monitored the contractor's lab

**ENCLOSURE(4)**

**SUBJECT:** AH-1 Night Targeting System Coproduction Program

test/integration and test procedures since program inception.

c. IAF flight evaluation conducted May-July 1993.

10. Program Manager:

- a. Name & Rank - C.E. Stelloh-Garner
- b. Organization & Code - PEO(A), PMA-276E2
- c. Telephone Number - (703) 692-3150

**SUBJECT: AV-8B/GR5 Coproduction Program**

1. **Participating Countries:**

- a. United States of America
- b. Government of the United Kingdom of Great Britain and Northern Ireland

2. **Date MOU Initiated: July 1981**

3. **Expiration Date of MOU: 31 December 1995**

4. **Production Quantities Authorized by MOU: No specific quantities written in MOU.**

a. Items authorized BAE to MCAIR:

- (1) After Fuselage
- (2) Fin
- (3) Rudder
- (4) LERX

b. Items authorized MCAIR to BAE:

- (1) Forward Fuselage
- (2) Wing
- (3) Wing Pylon
- (4) Nose Covers

c. Quantities Authorized: No specific quantities written in MOU.

5. **Production Status: (includes T/AV-8B)**

a. BAE to MCAIR:

- (1) Rear Fuselage - 277 produced; 8 produced during report period.
- (2) Fin - 280 produced; 11 produced during report period.
- (3) Rudder - 279 produced; 10 produced during report period.
- (4) LERX - 57 produced; 12 produced during report period.

b. MCAIR to BAE:

- (1) Forward Fuselage - 98 produced; 0 produced during report period.
- (2) Wing - 100 produced; 0 produced during report period.

**ENCLOSURE(14)**



**SUBJECT: AV-8B/GR5 Coproduction Program**

- (3) Wing Pylons - 96 sets produced; 0 sets produced during report period.
- (4) Nose Covers - 98 produced; 0 produced during report period.

Note: Status of MCAIR to BAE has not changed because the last GRMK5/7 items were shipped in September 1991. Numbers include the TMk.10 trainers.

6. Third Country Sales:

- a. Spain - 12 AV-8B aircraft (FMS)
- b. Italy - 2 TAV-8B aircraft (FMS)
- c. Italy - 3 AV-8B plus aircraft (FMS)
- d. Italy - 13 AV-8B plus aircraft (JPO)
- e. Spain - 8 AV-8B plus aircraft (JPO)

7. MOU Noncompliance: NONE

8. Status/summary of technology flowback received and its use:

No technology flowback has been identified, requested or received in this program.

9. Source of Information:

- a. Information on paragraphs 4 and 5 provided by Art Witmer, MCAIR, St. Louis.
- b. Information on paragraph 6 is FMS Case SP-P-SCA for Spain and FMS Cases IT-P-SBH and IT-P-SBJ for Italy, and Joint Program Office.

10. Program Manager Information:

- a. Name & Rank - Linda Farrell
- b. Organization & Code - NAVAIR, PMA-2575
- c. Telephone Number - (703) 692-5750 X7153

**SUBJECT:** The NATO Seasparrow Coproduction Program

1. Participating Countries:

- a. United States of America
- b. Australia
- c. Belgium
- d. Canada
- e. Denmark
- f. Germany
- g. Greece
- h. Italy
- i. The Netherlands
- j. Norway
- k. Portugal
- l. Turkey
- m. Spain

2. Date MOU Initiated:

- a. Cooperative Development MOU - 10 June 1968.
- b. Cooperative Support MOU - 1 December 1977.

3. Expiration Date of MOU: NONE

4. Production Quantities Authorized by MOU:

One of the Project's objectives is to "Utilize most effectively the ... industrial ....resources of the Participating Governments." Since the project's inception in 1968, the Consortium has capitalized on the industrial resources of the Participating Governments by cooperatively producing NATO Seasparrow end items. Although no specific items or quantities are identified for coproduction in either of the MOUs, the prime contractor (Raytheon Company) continues to award subcontracts to a variety of international vendors located in the countries of the Consortium members. To this end, the Project has utilized the industrial resources of the Participating Governments and cooperative production as another means of strengthening the Consortium.

5. Production Status:

The Development MOU sighted above covers coproduction of the NATO Seasparrow launching systems, the missiles themselves are provided by the U.S. Navy through FMS. The NATO Seasparrow equipment continues to be produced by the Raytheon Company, Equipment Division, Wayland Mass-

**ENCLOSURE(15)**

**SUBJECT: The NATO Seasparrow Coproduction Program**

achusetts utilizing an extensive subcontractor network in Europe and Canada. In addition to the requirements for spare and repair parts, Raytheon and its subcontractors have delivered, or are currently manufacturing the major equipments for the countries shown below:

- MK 57 Mod 2 (single) & Mod 3 (dual) NATO Seasparrow Surface Missile System
- MK 48 Guided Missile Vertical Launch System
- MK 73 Mod 1 Transmitter Group
- MK 29 Guided Missile Launching System
- Missile Launch Controllers for MK 41 VLS/Seasparrow VL Program

for the countries shown below:

- a. Australia - 4 transmitters & 4 MLCs
- b. Belgium - 4 transmitters & 4 GMLSS
- c. Canada - 25 transmitters & 13 MK 48 GMVLSS
- d. Denmark - 1 single and 5 dual NSSMSs
- e. Germany - 25 transmitters, 9 GMLSS, & 5 MLCs
- f. Greece - 12 transmitters, 2 GMLSS, & 4 MK 48 GMVLSS
- g. Italy - 4 single NSSMSs
- h. Japan (FMS) - 2 transmitters, 5 GMLSS, & 2 MK 48 GMVLSS
- i. Korea (FMS) - 2 transmitters & 1 MK 48 GMVLSS
- j. The Netherlands - 45 transmitters, 14 GMLSS, & 8 MK 48 GMVLSS
- k. Norway - 6 single NSSMSs
- l. Portugal - 6 transmitters & 3 GMLSS
- m. Spain (FMS) - 4 transmitters & 4 GMLSS
- n. Turkey - 12 transmitters & 6 GMLSS
- m. United States - 39 single & 64 dual NSSMSs

6. Third Country Sales: NONE

7. MOU Noncompliance: NONE

8. Status/summary of technology flowback received and its use:

Other than the normal exchange of technical information amongst the Participating Governments, there have not been any extraordinary technology exchanges or flowback during this reporting period. The Participating Governments continue to exchange system performance and firing data as well as RM&A data that is used to improve availability, enhance employment of the system and identify performance improvements.

**SUBJECT:** The NATO Seasparrow Coproduction Program

9. **Source of Information:**

- a. Raytheon Company, Equipment Division, Wayland, MA.
- b. NATO Seasparrow Project Office.
- c. NATO Seasparrow subcontractors are monitored by a network of national quality assurance representatives and the Raytheon subcontracts section in Wayland, Massachusetts. Also a monitoring group located in Copenhagen, Denmark periodically visits and reviews contractual, quality and schedule matters with foreign suppliers.
- d. Monthly status reviews with Raytheon Company.

10. **Program Office POC:**

- a. Name & Rank - Mr. Raymond Blackburn, III
- b. Organization & Code - NATO Seasparrow Project Office
- c. Telephone Number - (703) 746-6289

**USAF COPRODUCTION PROGRAMS**

**FOR**

**THE PERIOD**

**OF**

**1 JUL 93 - 31 DEC 93**

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USAF COPRODUCTION PROGRAMS

RCS DSAA 1226 REPORT

FOR

31 DEC 93

1. **COUNTRY/INTERNATIONAL ORGANIZATION:** Republic of Korea.
2. **DATE OF MOU/MOA:** 1991
3. **EXPIRATION OF MOU/MOA:** 2001
4. **ITEM(S) AND QUANTITY(S) AUTHORIZED FOR PRODUCTION IN MOU/MOA:** 72 F-16 C/D block 52 Aircraft.
5. **STATUS OF FOREIGN COUNTRY'S PRODUCTION; I.E., ITEMS IN PRODUCTION, QUANTITIES PRODUCED DURING PREVIOUS SIX MONTHS, QUANTITY PRODUCED TO DATE.** None. First aircraft expected in September 1997. This is a licensed production program.
6. **THIRD COUNTRY SALES AUTHORIZED, IF ANY, SPECIFYING COUNTRY AND QUANTITY INVOLVED.** None.
7. **IDENTIFICATION/SUMMARY OF ANY REPORTS OF MOU/MOA NONCOMPLIANCE RECEIVED DURING THE PREVIOUS SIX MONTHS (IF NONE, STATE NONE).** None.
8. **SOURCE OF INFORMATION FOR DATA PROVIDED UNDER SECTIONS 5, 6, AND 7 OF THE REPORT, AND A SUMMARY OF MONITORING ACTIONS TAKEN DURING THE PREVIOUS SIX MONTHS.** Security Assistance Program Manager, F-16 SPO, Wright Patterson AFB, OH. Management Action Team meetings and Program Management Review #5.
9. **NAME, ORGANIZATION, AND TELEPHONE NUMBER OF THE ASSIGNED PROJECT OFFICER.** Lt Col Peters, SAF/IAP, 697-0822.
10. **STATUS/SUMMARY OF TECHNOLOGY FLOWBACK RECEIVED AND ITS USE.**  
None.

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USAF COPRODUCTION PROGRAMS

RCS DSAA 1226 REPORT

FOR

31 DEC 93

1. **COUNTRY/INTERNATIONAL ORGANIZATION:** European Production Group: Belgium, Denmark, the Netherlands, Norway, and the United States/F-16 Multinational Fighter Program.
2. **DATE OF MOU/MOA:** Original MOU in 1975. The Mid-Life Update (MLU) is an initiative from the F-16 Steering Committee. Arrangement #45 defines the terms for the MLU program.
3. **EXPIRATION OF MOU/MOA:** N/A.
4. **ITEM(S) AND QUANTITY(S) AUTHORIZED FOR PRODUCTION IN MOU/MOA:** Mid-life update retrofit kit for F-16A/B aircraft: Belgium 48 with option for 24 more, Denmark - 63, Norway - 58, the Netherlands - 136, the United States has dropped plans to upgrade 130 F-16A/Bs. US will upgrade computers only on 233 C/D models. Other EPG members are deciding the scope of their effort as they down-size their air forces.
5. **STATUS OF FOREIGN COUNTRY'S PRODUCTION; I.E., ITEMS IN PRODUCTION, QUANTITIES PRODUCED DURING PREVIOUS SIX MONTHS, QUANTITY PRODUCED TO DATE.** None.
6. **THIRD COUNTRY SALES AUTHORIZED, IF ANY, SPECIFYING COUNTRY AND QUANTITY INVOLVED.** None.
7. **IDENTIFICATION/SUMMARY OF ANY REPORTS OF MOU/MOA NONCOMPLIANCE RECEIVED DURING THE PREVIOUS SIX MONTHS (IF NONE, STATE NONE).** None.
8. **SOURCE OF INFORMATION FOR DATA PROVIDED UNDER SECTIONS 5, 6, AND 7 OF THE REPORT, AND A SUMMARY OF MONITORING ACTIONS TAKEN DURING THE PREVIOUS SIX MONTHS.** Program Element Monitor.
9. **NAME, ORGANIZATION, AND TELEPHONE NUMBER OF THE ASSIGNED PROJECT OFFICER.** Maj MacLaird, SAF/AQPF, 614-4173.
10. **STATUS/SUMMARY OF TECHNOLOGY FLOWBACK RECEIVED AND ITS USE.** None. However, the US will receive Modular Mission Computer technology from the research and development application of the MLU.

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USAF COPRODUCTION PROGRAMS

RCS DSAA 1226 REPORT

FOR

31 DEC 93

1. **COUNTRY/INTERNATIONAL ORGANIZATION:** Turkey
2. **DATE OF MOU/MOA:** LOA TK-D-SFA, Dec 83; agreed to in the terms and conditions.
3. **EXPIRATION OF MOU/MOA:** 9 December 1994
4. **ITEM(S) AND QUANTITY(S) AUTHORIZED FOR PRODUCTION IN MOU/MOA:** 152 F-16C/D aircraft.
5. **STATUS OF FOREIGN COUNTRY'S PRODUCTION; I.E., ITEMS IN PRODUCTION, QUANTITIES PRODUCED DURING PREVIOUS SIX MONTHS, QUANTITY PRODUCED TO DATE.** 18 aircraft produced last six months, 137 produced through December 1993. Production rate was 3 per month through December. Additionally, 20 engines, 133 AME sets, and 9 INUs were produced during the last six months. Total engines are now 37, total AME sets produced are 233, and INUs are 26.
6. **THIRD COUNTRY SALES AUTHORIZED, IF ANY, SPECIFYING COUNTRY AND QUANTITY INVOLVED.** None authorized at this time.
7. **IDENTIFICATION/SUMMARY OF ANY REPORTS OF MOU/MOA NONCOMPLIANCE RECEIVED DURING THE PREVIOUS SIX MONTHS (IF NONE, STATE NONE).** None.
8. **SOURCE OF INFORMATION FOR DATA PROVIDED UNDER SECTIONS 5, 6, AND 7 OF THE REPORT, AND A SUMMARY OF MONITORING ACTIONS TAKEN DURING THE PREVIOUS SIX MONTHS.** Monitoring actions consist of a program management review meeting in October 1993, plus in-country US contractor management of the production factory.
9. **NAME, ORGANIZATION, AND TELEPHONE NUMBER OF THE ASSIGNED PROJECT OFFICER.** Lt Col Hill, SAF/IAE, 697-0768.
10. **STATUS/SUMMARY OF TECHNOLOGY FLOWBACK RECEIVED AND ITS USE.** None.

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USAF COPRODUCTION PROGRAMS

RCS DSAA 1226 REPORT

FOR

31 DEC 93

1. **COUNTRY/INTERNATIONAL ORGANIZATION:** US/United Kingdom of Great Britain and Northern Ireland.
2. **DATE OF MOU/MOA:** 21 September 1983. Extended 27 December 1990 until MOU can be amended.
3. **EXPIRATION OF MOU/MOA:** Extended by mutual consent.
4. **ITEM(S) AND QUANTITY(S) AUTHORIZED FOR PRODUCTION IN MOU/MOA:** Numerous JTIDS components - see Annex "A" of MOU for specifics. The UK is planning a direct procurement with GEC Marconi of 60 Class II terminals and follow-on production of 240 Class II terminals in a combined buy with the JTIDS JPO.
5. **STATUS OF FOREIGN COUNTRY'S PRODUCTION; I.E., ITEMS IN PRODUCTION, QUANTITIES PRODUCED DURING PREVIOUS SIX MONTHS, QUANTITY PRODUCED TO DATE.** Program is entering low-rate initial production.
6. **THIRD COUNTRY SALES AUTHORIZED, IF ANY, SPECIFYING COUNTRY AND QUANTITY INVOLVED.** None - in accordance with para 7.3 of MOU.
7. **IDENTIFICATION/SUMMARY OF ANY REPORTS OF MOU/MOA NONCOMPLIANCE RECEIVED DURING THE PREVIOUS SIX MONTHS (IF NONE, STATE NONE).** None.
8. **SOURCE OF INFORMATION FOR DATA PROVIDED UNDER SECTIONS 5, 6, AND 7 OF THE REPORT, AND A SUMMARY OF MONITORING ACTIONS TAKEN DURING THE PREVIOUS SIX MONTHS.** None.
9. **NAME, ORGANIZATION, AND TELEPHONE NUMBER OF THE ASSIGNED PROJECT OFFICER.** Maj Pickett, SAF/AQPC/614-4590.
10. **STATUS/SUMMARY OF TECHNOLOGY FLOWBACK RECEIVED AND ITS USE.** None.

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USAF COPRODUCTION PROGRAMS

RCS DSAA 1226 REPORT

FOR

31 DEC 93

1. **COUNTRY/INTERNATIONAL ORGANIZATION:** NATO AEW&C Program Management Organization (NAPMA).
2. **DATE OF MOU/MOA:** 6 December 1978. Addendum 7 December 1990.
3. **EXPIRATION OF MOU/MOA:** TBD
4. **ITEM(S) AND QUANTITY(S) AUTHORIZED FOR PRODUCTION IN MOU/MOA:** 18 E-3As and modifications to Air Defense Environment. Addendum extends programs to include E-3 upgrades to meet evolving threats and maintain interoperability with US, UK, and French E-3s. Modernization projects will be individually approved.
5. **STATUS OF FOREIGN COUNTRY'S PRODUCTION; I.E., ITEMS IN PRODUCTION, QUANTITIES PRODUCED DURING PREVIOUS SIX MONTHS, QUANTITY PRODUCED TO DATE.** None.
6. **THIRD COUNTRY SALES AUTHORIZED, IF ANY, SPECIFYING COUNTRY AND QUANTITY INVOLVED.** None.
7. **IDENTIFICATION/SUMMARY OF ANY REPORTS OF MOU/MOA NONCOMPLIANCE RECEIVED DURING THE PREVIOUS SIX MONTHS (IF NONE, STATE NONE).** None.
8. **SOURCE OF INFORMATION FOR DATA PROVIDED UNDER SECTIONS 5, 6, AND 7 OF THE REPORT, AND A SUMMARY OF MONITORING ACTIONS TAKEN DURING THE PREVIOUS SIX MONTHS.** E-3 AWACS SPO (ESC/AWI), Hanscom AFB, MA 01731-2115. Daily participation in NATO AWACS program.
9. **NAME, ORGANIZATION, AND TELEPHONE NUMBER OF THE ASSIGNED PROJECT OFFICER.** Maj Pickett, SAF/AQPC, 614-4590
10. **STATUS/SUMMARY OF TECHNOLOGY FLOWBACK RECEIVED AND ITS USE.** None.

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USAF COPRODUCTION PROGRAMS

RCS DSAA 1226 REPORT

FOR

31 DEC 93

1. **COUNTRY/INTERNATIONAL ORGANIZATION:** Italy (EUROMAV Consortium)
2. **DATE OF MOU/MOA:** 28 November 1984, amended 25 July 1986.
3. **EXPIRATION OF MOU/MOA:** Indefinite
4. **ITEM(S) AND QUANTITY(S) AUTHORIZED FOR PRODUCTION IN MOU/MOA:**  
15,000 AGM-65D/F/G Maverick Air-to-Ground Missiles.
5. **STATUS OF FOREIGN COUNTRY'S PRODUCTION; I.E., ITEMS IN PRODUCTION, QUANTITIES PRODUCED DURING PREVIOUS SIX MONTHS, QUANTITY PRODUCED TO DATE.** None produced to date.
6. **THIRD COUNTRY SALES AUTHORIZED, IF ANY, SPECIFYING COUNTRY AND QUANTITY INVOLVED.** None authorized.
7. **IDENTIFICATION/SUMMARY OF ANY REPORTS OF MOU/MOA NONCOMPLIANCE RECEIVED DURING THE PREVIOUS SIX MONTHS (IF NONE, STATE NONE).** None.
8. **SOURCE OF INFORMATION FOR DATA PROVIDED UNDER SECTIONS 5, 6, AND 7 OF THE REPORT, AND A SUMMARY OF MONITORING ACTIONS TAKEN DURING THE PREVIOUS SIX MONTHS.** Monitoring actions have been conducted by means of bi-monthly program updates with Maverick System Program Office and SAF/IAE. In December 1988, Italy put consortium efforts on hold while pursuing Maverick co-assembly as an Italian national program via a commercial arrangement outside the terms of this MOU. There are no plans to coproduce at this time.
9. **NAME, ORGANIZATION, AND TELEPHONE NUMBER OF THE ASSIGNED PROJECT OFFICER.** Lt Col Daley, SAF/IAE, 695-2646.
10. **STATUS/SUMMARY OF TECHNOLOGY FLOWBACK RECEIVED AND ITS USE.**  
None.

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RCS DSAA 1226 REPORT

FOR

31 DEC 93

1. **COUNTRY/INTERNATIONAL ORGANIZATION:** Belgium/Multinational Fighter Program (MNFP).
2. **DATE OF MOU/MOA:** 10 June 1975.
3. **EXPIRATION OF MOU/MOA:** Indefinite.
4. **ITEM(S) AND QUANTITY(S) AUTHORIZED FOR PRODUCTION IN MOU/MOA:** 160 F-16A/B aircraft.
5. **STATUS OF FOREIGN COUNTRY'S PRODUCTION; I.E., ITEMS IN PRODUCTION, QUANTITIES PRODUCED DURING PREVIOUS SIX MONTHS, QUANTITY PRODUCED TO DATE.** Last of 160 aircraft delivered in February 1992.
6. **THIRD COUNTRY SALES AUTHORIZED, IF ANY, SPECIFYING COUNTRY AND QUANTITY INVOLVED.** None. Note: Third country offset ongoing as per MOU.
7. **IDENTIFICATION/SUMMARY OF ANY REPORTS OF MOU/MOA NONCOMPLIANCE RECEIVED DURING THE PREVIOUS SIX MONTHS (IF NONE, STATE NONE).** None.
8. **SOURCE OF INFORMATION FOR DATA PROVIDED UNDER SECTIONS 5, 6, AND 7 OF THE REPORT, AND A SUMMARY OF MONITORING ACTIONS TAKEN DURING THE PREVIOUS SIX MONTHS.** MNFP Review October 1993.
9. **NAME, ORGANIZATION, AND TELEPHONE NUMBER OF THE ASSIGNED PROJECT OFFICER.** Maj Isaacson, SAF/IAE, 697-0767.
10. **STATUS/SUMMARY OF TECHNOLOGY FLOWBACK RECEIVED AND ITS USE.** None.

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FOR

31 DEC 93

1. **COUNTRY/INTERNATIONAL ORGANIZATION:** Denmark/Multinational Fighter Program (MNFP).
2. **DATE OF MOU/MOA:** 10 June 1975
3. **EXPIRATION OF MOU/MOA:** Indefinite.
4. **ITEM(S) AND QUANTITY(S) AUTHORIZED FOR PRODUCTION IN MOU/MOA:** 70 F-16A/B aircraft. All have been produced.
5. **STATUS OF FOREIGN COUNTRY'S PRODUCTION; I.E., ITEMS IN PRODUCTION, QUANTITIES PRODUCED DURING PREVIOUS SIX MONTHS, QUANTITY PRODUCED TO DATE.** Production complete.
6. **THIRD COUNTRY SALES AUTHORIZED, IF ANY, SPECIFYING COUNTRY AND QUANTITY INVOLVED.** None. Note: Third country offset ongoing as per MOU.
7. **IDENTIFICATION/SUMMARY OF ANY REPORTS OF MOU/MOA NONCOMPLIANCE RECEIVED DURING THE PREVIOUS SIX MONTHS (IF NONE, STATE NONE).** None.
8. **SOURCE OF INFORMATION FOR DATA PROVIDED UNDER SECTIONS 5, 6, AND 7 OF THE REPORT, AND A SUMMARY OF MONITORING ACTIONS TAKEN DURING THE PREVIOUS SIX MONTHS.** MNFP Review October 1993.
9. **NAME, ORGANIZATION, AND TELEPHONE NUMBER OF THE ASSIGNED PROJECT OFFICER.** Maj Isaacson, SAF/IAE, 697-0767.
10. **STATUS/SUMMARY OF TECHNOLOGY FLOWBACK RECEIVED AND ITS USE.** None.

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**RCS DSAA 1226 REPORT**

**FOR**

**31 DEC 93**

1. **COUNTRY/INTERNATIONAL ORGANIZATION:** Netherlands/Multinational Fighter Program (MNFP)
2. **DATE OF MOU/MOA:** 10 June 1975
3. **EXPIRATION OF MOU/MOA:** Indefinite.
4. **ITEM(S) AND QUANTITY(S) AUTHORIZED FOR PRODUCTION IN MOU/MOA:** 213 F-16A/B aircraft.
5. **STATUS OF FOREIGN COUNTRY'S PRODUCTION; I.E., ITEMS IN PRODUCTION, QUANTITIES PRODUCED DURING PREVIOUS SIX MONTHS, QUANTITY PRODUCED TO DATE.** Last of 213 aircraft was delivered in February 1992.
6. **THIRD COUNTRY SALES AUTHORIZED, IF ANY, SPECIFYING COUNTRY AND QUANTITY INVOLVED.** None. Note: Third country offset ongoing as per MOU.
7. **IDENTIFICATION/SUMMARY OF ANY REPORTS OF MOU/MOA NONCOMPLIANCE RECEIVED DURING THE PREVIOUS SIX MONTHS (IF NONE, STATE NONE).** None.
8. **SOURCE OF INFORMATION FOR DATA PROVIDED UNDER SECTIONS 5, 6, AND 7 OF THE REPORT, AND A SUMMARY OF MONITORING ACTIONS TAKEN DURING THE PREVIOUS SIX MONTHS.** MNFP Review October 1993.
9. **NAME, ORGANIZATION, AND TELEPHONE NUMBER OF THE ASSIGNED PROJECT OFFICER.** Maj Isaacson, SAF/IAE, 697-0767.
10. **STATUS/SUMMARY OF TECHNOLOGY FLOWBACK RECEIVED AND ITS USE.** None.

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**FOR**

**31 DEC 93**

1. **COUNTRY/INTERNATIONAL ORGANIZATION:** Norway/Multinational Fighter Program (MNFP).
2. **DATE OF MOU/MOA:** 10 June 1975.
3. **EXPIRATION OF MOU/MOA:** Indefinite.
4. **ITEM(S) AND QUANTITY(S) AUTHORIZED FOR PRODUCTION IN MOU/MOA:** 74 F-16A/B aircraft.
5. **STATUS OF FOREIGN COUNTRY'S PRODUCTION; I.E., ITEMS IN PRODUCTION, QUANTITIES PRODUCED DURING PREVIOUS SIX MONTHS, QUANTITY PRODUCED TO DATE.** All 74 aircraft have been delivered to Norway.
6. **THIRD COUNTRY SALES AUTHORIZED, IF ANY, SPECIFYING COUNTRY AND QUANTITY INVOLVED.** None. Note: Third country offset ongoing as per MOU.
7. **IDENTIFICATION/SUMMARY OF ANY REPORTS OF MOU/MOA NONCOMPLIANCE RECEIVED DURING THE PREVIOUS SIX MONTHS (IF NONE, STATE NONE).** None.
8. **SOURCE OF INFORMATION FOR DATA PROVIDED UNDER SECTIONS 5, 6, AND 7 OF THE REPORT, AND A SUMMARY OF MONITORING ACTIONS TAKEN DURING THE PREVIOUS SIX MONTHS.** MNFP Review October 1993.
9. **NAME, ORGANIZATION, AND TELEPHONE NUMBER OF THE ASSIGNED PROJECT OFFICER.** Maj Isaacson, SAF/IAE, 697-0767.
10. **STATUS/SUMMARY OF TECHNOLOGY FLOWBACK RECEIVED AND ITS USE.** None.

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