



0 8 OCT 2002

THRU: ARMY ACQUISITION EXECUTIVE

FOR: VICE CHIEF OF STAFF, ARMY

SUBJECT: M113 Family of Vehicles (FOV) Recapitalization
Program Baseline (RPB) Approval

SJC
The enclosed subject memorandum is provided for both the Army Acquisition Executive and Vice Chief of Staff, Army signatures. The M113 RPB obtained the required documentation and coordination from the Army Staff.

The M113 program has a congressional decrement pending. Enclosed (TAB F) is an appeal letter detailing the changes to the Recapitalization Program Decision. Upon resolution the approved baseline will be adjusted.

Very respectfully,

John S. Caldwell, Jr.
John S. Caldwell, Jr.
LTG, GS

Enclosure



DEPARTMENT OF THE ARMY
WASHINGTON, D.C. 20310

SAAL-SI

MEMORANDUM FOR SEE DISTRIBUTION

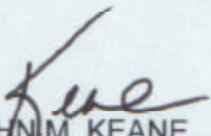
SUBJECT: M113 Family of Vehicles (FOV) Recapitalization Program Baseline
(RPB) Approval

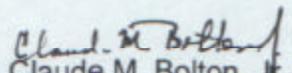
The M113 FOV RPB (TAB C) is submitted for review and approval by the Army Acquisition Executive/Vice Chief of Staff of the Army. The November 7, 2001, letter (TAB D) from LTG Caldwell tasked the Program Executive Officer (PEO) Combat Support/Combat Service Support (CS/CSS) to comply with the RPB guidance. The PEO CS/CSS conducted a Decision Review of the M113 FOV Recapitalization Program and validated it pending final approval of the RPB by the Army Acquisition Executive/Vice Chief of Staff, Army (TAB B).

In accordance with the Army Recapitalization Management Policy, M113 FOV RPB, dated May 30, 2002, is approved for implementation. The PEO and Project Manager will execute the selected upgrade for the M113 FOV in accordance with the funding and schedule baselines documented in the RPB. The RPB will provide the basis for sound management and historical record from which to measure success.

It is imperative that we work together and establish close partnerships at all levels to ensure success. Our warfighters depend on this recapitalization effort to maintain system readiness, sustainability, and combat overmatch as we transform the Army.

Point of contact for this matter is Mr. Jose Rivera, 703 604-7244,
jose.rivera@saalt.army.mil.


JOHN M. KEANE
General, U.S. Army
Vice Chief of Staff, Army


Claude M. Bolton, Jr.
Army Acquisition Executive

Enclosures

DISTRIBUTION:

ASSISTANT SECRETARY OF THE ARMY (ACQUISITION, LOGISTICS AND TECHNOLOGY), ATTN: SAAL-ZR, SAAL-RP

ASSISTANT SECRETARY OF THE ARMY (FINANCIAL MANAGEMENT AND COMPTROLLER), ATTN: SAFM-BUI

GENERAL COUNSEL, ATTN: SAGC

DEPUTY CHIEF OF STAFF FOR LOGISTICS, ATTN: DALO-SM

DIRECTOR, PROGRAM ANALYSIS AND EVALUATION, ATTN: DACS-DPZ-A

DIRECTOR, U.S. ARMY COST AND ECONOMIC ANALYSIS CENTER, ATTN:
SAFM-CA-ZA

COMMANDERS

U.S. ARMY MATERIEL COMMAND, ATTN: AMCRDA-AM

U.S. ARMY AUTOMOTIVE-ARMAMENTS COMMAND, ATTN: AMSTA-CG

PROGRAM EXECUTIVE OFFICER, COMBAT SUPPORT/COMBAT SERVICE SUPPORT, ATTN: SFAE-CSS

M113A3 ARMORED PERSONNEL CARRIER and FAMILY of VEHICLES (FOV)

Recapitalization Program Baseline Guidance



**Providing the Counter Attack Corps M113 FOV with T150F Track
Enhancing Operational Readiness and Reducing O&S Costs**

July 10, 2002

M113A3 APC



- 1. Program Description:** 28 September 2001, the VCSA directed PM CE/MHE/M113 to field-retrofit the Counter Attack Corps (CATK) M113 FOVs with the new T150F Track starting in 2003. PM CE/MHE/M113 will apply T150F Track Assemblies to 2079 M113A2 and M113A3 CATK vehicles by MWO. Only the track and sprocket metrics will be monitored and reported. The adapter rings are basically spacers that do not experience wear. The component recapitalization list is shown at Table 1.

Component	Configuration		Stock Number	Status	NMWRS
	M113A2	M113A3			
4 Adapters	x	x	5340-01-497-7433	Contract, Evaluating	No
4 Sprockets	x	x	3020-01-496-4445	Contract, Evaluating	No
Track	x	x	2530-01-496-4444	Contract, Evaluating	No

Table 1. Recapitalization Component Configuration List

2. Baseline Funding: The recapitalization funding profile in Table 2 was approved by the VCSA on 28 September 2001. The recapitalization team placed the M113 FOV Carrier Modification (A3) for FY02 and the T150 Track and the PM Disestablishment for FY03 in the RU11 MDEP. Actual funding may vary due to routine budgetary actions. Table 2 contains funding information cited from the FY 2003 President's Budget.

Required	FY03	FY04	FY05	FY06	FY07	FY03-07	EPP	Total
RDTE	0							
PA	X							
Installation Kits	44.6					44.6	0.0	44.6
STS	5.9					5.9	0.0	5.9
PM Support/Close Out	7.5					7.5	0.0	7.5
Pre Conversion	0.0					0.0	0.0	0.0
MWO Installation	0.9					0.9	0.0	0.9
Fielding	1.4					1.4	0.0	1.4
Total	60.3					60.3	0.0	60.3
System Name	FY02 Program Acquisitions Unit Cost							
M113A2	Track Assembly					\$ 19,073.12		
M113A3	Track Assembly					\$ 19,073.12		
M113A2/A3	MWO Installation					\$418.72		

Table 2. Recapitalization Funding Table

See Appendix A for Methodology

3. Baseline Schedule: Table 3 presents the T150F Track Focused Recapitalization Program Schedule. Vehicle RECAP quantities are scheduled by Fiscal Year with end state quantities annotated in the far right column. Quantities reflected in the table co-inside with track kit deliveries, which are preceded by 12 to 18 months of acquisition activities (e.g., proposal evaluations, contract negotiations, system development, etc.).

M113A2 M113A3	FY02	FY03	FY04	FY05	FY06	FY07	FY08	FY09	FY10	Total
Track Install		470	1,128	481						2079

TABLE 3. Baseline Application Schedule

4. Performance Measurement: The performance metrics outlined in Table 4 will be used to measure the effectiveness of the M113 FOV Counter Attack Corps T150F track Focused Recapitalization Program. AMSAA will exercise the process to collect supporting empirical data at appropriate times to ensure all data elements required for the calculations are available. The macro level metrics listed below are formulated to be flexible and efficient performance measures.

- Measure number of miles/shoe, sprocket for T150 VS T130

Data collection efforts will consist of the following:

- 3 ACR: One attack battalion allowing data collection before and after RECAP effort
- AMSAA: Collects and analyzes RECAP data for PM CE/MHE/113 consisting of:
Supply data
Demand history
Operating and Support Management Information System (OSMIS)
AMSAA related databases

Nomenclature	A	B	Stock Number
T150F Track	X		2530-01-496-4444
T150F Sprocket	X		5340-01-497-7433
T130E1 Track		X	2530-00-078-2908
T130E1 Sprocket		X	3020-00-141-1154

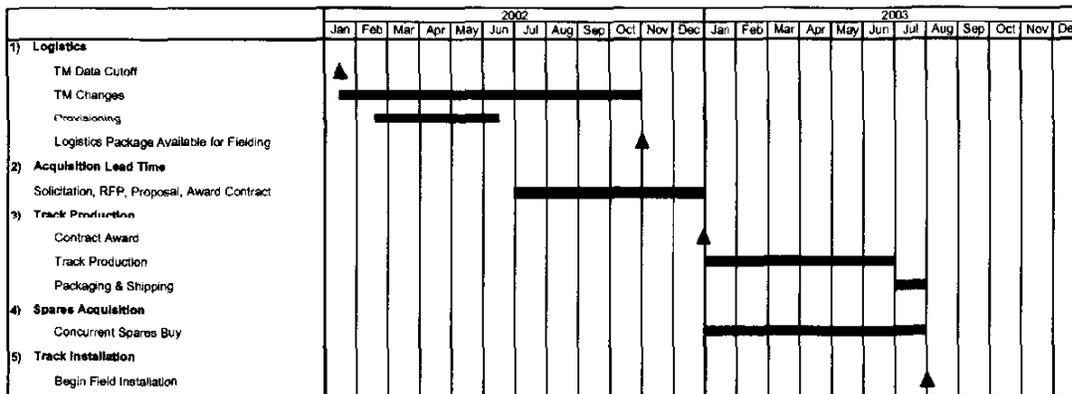
Metric	Objective	Data Source
Formula	Performance Measurement	
Measure number of miles/shoe and miles /sprocket for T150F VS T130E1	Provide a track shoe and sprocket that lasts 4 times longer than a T130E1 track shoe and sprocket	OSMIS DA2410 AMSAA Data Bases
$AIMMBF = \frac{MMBF(A)}{MMBF(B)}$	Calculations are made as track shoes/sprockets fail	Final calculation is made when 50 T150F shoes and 20 sprockets fail or AMSAA data proves out the objective
Where AIMMBF = Average Increase in Mean Miles Between Failures MMBF(A) = Mean Miles Between Failures T150F (track shoe, sprocket) MMBF(B) = Mean Miles Between Failures T130E1 (track shoe, sprocket)		

TABLE 4. Metrics

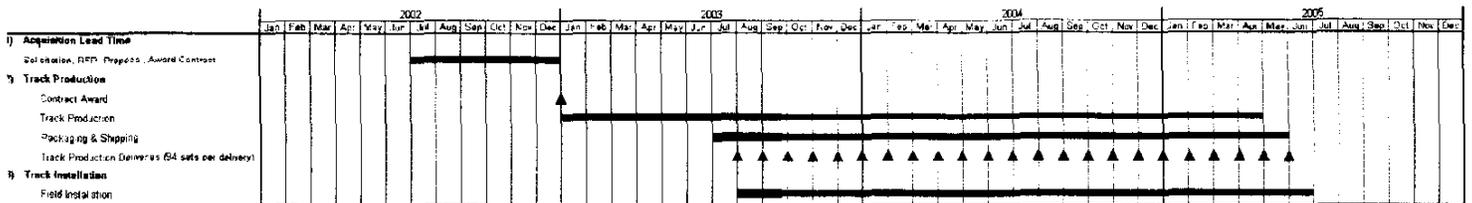
5. Recapitalization Interfaces: Competitive contract action planned.

Depot/Industry Partnership	Agreements	Date of signature/ Implementation	Test Relationship (if required)	Recap Initiative
Track Manufacturer	TBD	JAN 03 EST	None	Produce and ship track kits
TACOM contract MWO Application Team	TBD	Jan03 EST	None	Remove T130E1 Track and Install T150F Track

TABLE 5. Base Interface



T150 Track Program Master Schedule



T150 Track Recapitalization Program Schedule

Appendix A

Methodology

1. Installation Kits:

- Approximate Cost of 1 Installation Kit : \$19,000
- Approximate Cost of Packaging/Overhead for 1 Installation Kit: \$2400
- Total Number of Vehicle Requiring New Track: 2079

Solution:

Installation Kits = (Kit plus Packing/Overhead) X Total M113s Requiring Track

Installation Kits = (\$19,000 + \$2400) X 2079

Installation Kits = \$44,490,600

2. System Technical Support (STS):

- ROM Cost of STS FY03 from Contractor: \$5.9M

3. PM Support/Close Out:

- Estimated Cost to Close Down M113 STS Contract: \$7.5M

4. MWO Installation:

- MWO Installation Per Vehicle Cost:
 - Total Installation ROM Cost From Contractor: \$870,520
 - Total Number of Vehicle Requiring New Track: 2079
 - MWO Installation Cost Per Vehicle = \$870,520 / 2079
 - MWO Installation Cost Per Vehicle = \$418.72
- Total Number of Vehicles Requiring New Track: 2079

Solution:

MWO Installation = MWO Install Cost Per Vehicle X # M113s Requiring Track

MWO Installation = \$418.72 X 2079

MWO Installation = \$870,512

5. Fielding:

- Estimated Cost to Manage, Ship, and Store 2079 MWO Track Installation Kits.

6. PAUC Track Assembly:

- Current ROM to manufacture T150F track – \$19,073.12.

7. MWO Installation Per Vehicle:

- MWO Installation Per Vehicle Cost:
 - Total Installation ROM Cost From Contractor: \$870,520
 - Total Number of Vehicle Requiring New Track: 2079
 - MWO Installation Cost Per Vehicle = \$870,520 / 2079
 - MWO Installation Cost Per Vehicle = \$418.72



DEPARTMENT OF THE ARMY
OFFICE OF THE ASSISTANT SECRETARY
ACQUISITION LOGISTICS AND TECHNOLOGY
103 ARMY PENTAGON
WASHINGTON DC 20310-0103

07 NOV 2001

REPLY TO
ATTENTION OF
SAAL-SI

MEMORANDUM FOR SEE DISTRIBUTION

SUBJECT: Recapitalization Program Baseline

This memorandum sets forth guidance that should be followed to document and track the Army's Recapitalization effort. Enclosed is the template that will be used to develop and execute the individual systems Recapitalization Program Baseline. The Program/Project/Product Manager of the systems that have already been approved by the Army Acquisition Executive/Vice Chief of Staff, Army (AAE/VCSA) will be afforded 90 days from the date of this document to follow and complete the Recapitalization approval process laid out in this Recapitalization Program Baseline guidance. Future candidate systems that have not been seen by the AAE/VCSA will be afforded 60 days after an option is adopted, to complete the process of creating a baseline. All recapitalization systems will obtain validation, within afforded time frames, of the Baseline Cost Data, Cost Benefit Analysis and Trade Off Analysis from the Cost and Economic Analysis Center.

The point of contact for this matter is COL Jim Wells, DSN: 224-3993 or 703-614-3993.

A handwritten signature in black ink, appearing to read "John S. Caldwell, Jr.", written over the typed name.

JOHN S. CALDWELL, JR.
Lieutenant General, GS
Military Deputy to the
Assistant Secretary of the
Army (Acquisition, Logistics
and Technology)

Enclosure

DISTRIBUTION:
ASSISTANT SECRETARY OF THE ARMY (ACQUISITION, LOGISTICS AND
TECHNOLOGY), ATTN: SAAL-ZR, SAAL-RP
ASSISTANT SECRETARY OF THE ARMY (FINANCIAL MANAGEMENT
AND COMPTROLLER), ATTN: SAFM-BUI

DECISION MEMORANDUM

SUBJECT: M113 A3 Recapitalization Program Baseline (RPB) and Recapitalization Decision Review

1. In accordance with the direction dated 28 September 2001, the Vice Chief of Staff, Army (VCSA) and the Acting Army Acquisition Executive directed PM CE/MHE/M113 to field retrofit the Counter Attack Corps (CATK) M113A3 FOVs with the new T150F Track in 2003.
2. I have separately reviewed and approved the PM CE/MHE/M113's System Acquisition Strategy to upgrade the CATK to T150F track. An Acquisition Plan is not required because of the one time buy acquisition strategy. IAW DFARS Part 207 paragraph 207.103 (d) (ii), "Written plans are not required in acquisitions for a final buy out or one time buy". This refers to a single contract that covers all known present and future requirements.
3. In addition I concur with the following documents: 1) The M113 RPB, 2) the VCSA and the Acting Army Acquisition Executive approved M113 Recapitalization Brief and 3) the Army Cost and Economic Analysis Center concurrence documentation.

ROGER A. NADEAU
Brigadier General, USA
Program Executive Officer
Combat Support & Combat Service Support



REPLY TO
ATTENTION OF

DEPARTMENT OF THE ARMY
COST AND ECONOMIC ANALYSIS CENTER
1421 JEFFERSON DAVIS HWY SUITE 900G
ARLINGTON VA 22202-0259



SFFM-CA-ZA (11-18a)

26 APR 2002

MEMORANDUM FOR THE PROGRAM EXECUTIVE OFFICER, COMBAT SUPPORT AND
COMBAT SERVICE SUPPORT, ATTN: SFAE-CSS, WARREN, MI 48397

SUBJECT: M113A3 Armored Personnel Carrier and Family of Vehicles
Recapitalization Baseline Cost Sufficiency Review

1. The Army Cost and Economic Analysis Center has reviewed the cost presented by the Program Manager for the M113A3 Armored Personnel Carrier and Family of Vehicles, dated 01 April 2002. Our review focused only on the recapitalization investment cost estimate. Per our agreement with Office of the Assistant Secretary of the Army Acquisition, Logistics, and Technology (OASAALT), we did not examine the potential savings or affordability of the recapitalization program. The submission provided a reasonable estimate of the total recapitalization baseline cost.

2. The U.S. Army Cost and Economic Analysis Center points of contact are: Mr. Pete Steniski, (703) 601-4191 or DSN 329-4191, and Mr. Bob Conley, (703) 601-4173 or DSN 329-4173.

Encl


ROBERT W. YOUNG
Director

CF:
Project Manager - M113
ASA (ALT), ATTN: SAAL-SI

FUNDING AND SCHEDULE SUBMISSION, DATED 01 APR 02

Baseline Funding: The Recapitalization funding profile in Table 1 was approved by the VCSA on 28 SEP 01. Actual funding may vary due to routine budgetary actions.

BY02 \$M								
Required	FY03	FY04	FY05	FY06	FY07	FY03-07	EPP	Total
RDTE								
PA								
Installation Kits	44.6					44.6		44.6
STS	5.9					5.9		5.9
PM Support/ Close Out	7.5					7.5		7.5
Pre Conversion	0.0					0.0		0.0
MWO Installation	0.9					0.9		0.9
Fielding	1.4					1.4		1.4
Total*	\$60.3					\$60.3		\$60.3
System Name	BY02 (\$K) Program Acquisition Unit Cost							
M113A2/A3	Track Assembly					\$19.0		
M113A2/A3	MWO Installation Per Vehicle					\$0.4		

* - This is the total for FY03 only. No RECAP funding was provided in FY02 and none will be provided from FY04-FY07.

Baseline Schedule: The following table presents the T150 Track Focused Recapitalization Program Schedule. Quantities reflected in the table are deliveries, which are preceded by 12 to 18 months of acquisition activities (e.g., proposal evaluations contract negotiations, system development, etc.).

M113 FOV	FY02	FY03	FY04	FY05	FY06	FY07	FY08	FY09	FY10	Total
Track Install		470	1,128	481						2079

**Department of Defense Appeal
FY 2003 Defense Appropriation Bill**

Subject: CARRIER, MOD

Appropriations: Procurement of Weapons and Tracked Combat Vehicles, Army

Summary: The Senate reduced the DoD request by \$4.5M due to excessive growth program management and by \$16.4M due to Track (T-150), buying ahead of need. The House reduced the budget by \$10M due to program growth.

<u>Item</u>	<u>Budget Authority</u> (Dollars in Millions)			
	<u>Budget</u>	<u>House</u>	<u>Senate</u>	<u>Appeal</u>
Line 10, Carrier, Mod	60.3M	50.3M	39.4M	50.3M

DoD Position: The Department asks the Conference to support the House position. The T-150 track replaces the most significant cost driver for the M113. FY03 is the only year funding to procure the T-150 track is required. The Senate reduction would not allow the Army to buy/field the required T150 track to the Counter Attack (CATK) Corps. The M113 T150 Track is a high priority approved Recapitalization Program to be completed in FY03. The funding reduction will reduce the planned kit acquisition by 1621. This will require CATK units to maintain dual logistic systems, driving up O&S costs. The Department urges the conference Committee to support the House position.

Comptroller Internal Control Notes:

Submitter: Jose Rivera-Cott /SAALT-ZCS/604-7244

Page/Section References: Senate Report 107-000 p.49; House Report 107-523 p.20-21

Reviewing directorate/analyst:

Director's recommendation/rationale:

July 26, 2002

8 Oct 02

Paul Hancq 707 941

**Office, Assistant Secretary of the Army (ALT)
SUMMARY OF ACTION**

To: VCSA Thru: AAE <i>CB</i> Thru: MILDEP	ACTION OFFICER: José Rivera OFFICE SYMBOL: SAAL-ZCS PHONE NO: 604-7244 DATE/TIME: 18 August 02/0800 hrs	SUSPENSE DATE
		CONTROL NO. <i>21001531</i>

SUBJECT: M113 Family of Vehicles (FOV) Recapitalization Program Baseline (RPB) Approval

RECOMMENDATION: AAE/VCSA sign the M113 Family of Vehicles (FOV) Recapitalization Program Baseline (RPB) Approval Memorandum

	ACTION		INFO	DRIVE LOCATION	
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SUMMARY OF ACTION:
 I TG Caldwell tasked the Program Executive Officers (PEO) of the Recap systems approved by the VCSA to comply with the RPB guidance. PEO Combat Support/Combat Service Support (CS/CSS) conducted a Decision Review of the M113 FOV Recapitalization Program and validated the Recap baseline pending final approval by the Army Acquisition Executive/Vice Chief of Staff, Army.

Note: In the FY03 Defense Appropriations Bill, the House reduced the Carrier, Mod (M113 FOV) Budget Line \$10M and the Senate \$20.9M. The M113 Recap Program is to upgrade the CATK M113 FOV with T-150 Track. The \$20.9M will reduce the VCSA approved 2079 T-150 upgrades to 1034 upgrades.

TAB A – MIL DEP recommendation to approve, sign and forward the approval memorandum to the AAE/VCSA.
 TAB B – AAE/VCSA approval letter
 TAB C – RPB
 TAB D – MIL DEP Recapitalization Guidance Letter
 TAB E – PEO validation letter
 TAB F – PEO/PM appeal letter

MILITARY DEPUTY ACTION				G-4 ACTION			
[Approved] [Disapproved]	[Recommend Approval] [Recommended Disapproval]			[Approved] [Disapproved]	[Recommend Approval] [Recommend Disapproval]		
PSM	Noted			PSM	Noted		
Comments:				Comments:			

W/11

COORDINATION					APPROVALS							
CC	NCC	OFFICE	NAME	PHONE		A	D	INT. Date		A	D	INT. Date
X		OGC	Paul Hancq	697-5120	DASA				ZXA			
X		G-8	Wilson Russ	692-8293	Asst. DASA			<i>21/1</i>	DIR	✓		<i>23 Aug 02</i>
X		PEO-CS/CSS	Teresa Ratlif	(586) 574-5675	DIV				DEP DIR			
✓		SAAL-SI	COL Jim Wells	614-3993	DASA XO	✓		<i>0530</i>	DIR XO			
X		SAFM-BUI	Marcia Freeman	614-8249	Asst. G4				DIV	✓		
X		SAAL-ZL	KERRY McABE	604-1503	XO, G4				CACO			
					<i>Went</i>							

CC = Concur NCC = Nonconcur A = Approved D = Disapproved

R
BOL