



CONGRESSIONAL BUDGET OFFICE  
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WASHINGTON, D.C. 20515

Rudolph G. Penner  
Director

April 11, 1984

MEMORANDUM

FROM:

Bob Hale

John Hamre

SUBJECT: Preliminary Analysis of Equipping the Total Army and  
POMCUS Sets 5 and 6

Attached are briefing slides and explanatory notes that comprise preliminary results of an analysis of the Army's ability to equip its total force and POMCUS sets 5 and 6. The analysis has been done by the Congressional Budget Office at the request of the Defense Subcommittee of the Senate Appropriations Committee. These preliminary results are being made available in time for Subcommittee hearings on Army procurement.

In the fiscal year 1984 Defense Appropriations bill, the Congress directed that the Army not proceed with repositioning equipment in POMCUS sets 5 and 6 until 70 percent and 50 percent of equipment requirements were provided to the active and reserve forces, respectively. The language in the law is vague. But CBO's analysis finds that, given a stringent interpretation of the 70/50 thresholds, current Army inventories are sufficient to proceed in fiscal year 1984 with equipping POMCUS sets 5 and 6 for almost all major combat items and most major combat support items. Moreover, the Administration's procurement plans for fiscal year 1985 to 1989, at least those included in the February 1984 budget, indicate that the Army will not be seriously constrained from proceeding with the POMCUS program over the next five years. Even if the Army continues with its likely distribution plans--which more than meet the law's minimum requirements--its POMCUS plans will not be seriously constrained for major combat items, though they would be for many combat support items.

Later this year, CBO will publish a full report on equipping the Army. That report will consider the effects of alternative procurement plans and alternative definitions of the law on the Army's ability to meet the Congressionally-mandated thresholds.

The analysis is being done by Nora Slatkin and Julie Carr of CBO's National Security and International Affairs Division. If you have any questions about these preliminary results, please call Nora at 226-2920.

Attachment

**EQUIPPING THE TOTAL ARMY**

**AND**

**POMCUS SETS 5 AND 6:**

**A PRELIMINARY ANALYSIS**

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**JULIE CARR**

**CBO**

**APRIL 1984**

## BACKGROUND

- o FY 1984 APPROPRIATION BILL DIRECTS THE ARMY NOT TO PROCEED WITH PREPOSITIONING EQUIPMENT FOR SETS 5 AND 6 UNTIL ARMY EQUIPS ACTIVE FORCES AT 70 PERCENT AND RESERVE FORCES AT 50 PERCENT
- o THESE LEVELS ORIGINALLY CAME FROM A 1979 ARMY STUDY ASSESSING MINIMUM ACCEPTABLE LEVELS OF EQUIPMENT FOR TRAINING

## BACKGROUND

Consistent with the U.S. commitment to the defense of NATO, the U.S. Army deploys in Europe four divisions, three brigades, and two armored cavalry regiments, as well as numerous combat support and combat service support units, ranging from maintenance units to medical units. Additional divisions for wartime reinforcements are based in the United States. In the event of war between NATO and the Warsaw Pact, the U.S. is committed to provide ten divisions to NATO within ten days after mobilization. To meet this commitment, the Department of Defense has implemented a program to speed the deployment of these reinforcements without stationing additional personnel overseas. This program prepositions equipment in Europe for U.S.-based units and is known as POMCUS (Prepositioned Overseas Materiel Configured to Unit Sets). Prepositioning avoids the time-consuming shipment of equipment overseas. In the event of war, troops would be flown quickly to Europe where they would draw their equipment from POMCUS warehouses.

Currently, there are four division sets of equipment in the POMCUS program. (A division set consists of numerous pieces of equipment ranging from tanks to spare parts.) For the last five years, the Congress has refused Administration requests for funds to expand the program to include two additional division sets of equipment--the full U.S. commitment to NATO as outlined in the NATO Long Term Defense Program in 1978. The major Congressional concerns regarding expanding POMCUS have centered on:

- o the potential limitations on U.S. ability to respond to crises outside of NATO Europe if more equipment is positioned in Europe,
- o the vulnerability of these storage sites in the event of war, and
- o the potential diversion of modernized equipment from active and reserve units to fill the POMCUS sets.

In fiscal year 1984, the Congress agreed to appropriate funds for the expansion to six sets but directed that the Army not proceed with equipping POMCUS sets 5 and 6 until active units were equipped at 70 percent and reserve units were equipped at 50 percent, respectively.

The equipment thresholds of 50 and 70 percent stem from a 1979 analysis performed when the Department of Defense initially committed the Army to placing two additional sets in POMCUS. The analysis concluded that, to ensure peacetime readiness, the minimum acceptable levels of equipment needed for training equated to 70 percent of requirements for the active forces and 50 percent for the reserve forces. CBO's analysis examines the Army's ability to meet these equipment thresholds.

## CASE 1. COMBAT EQUIPMENT

In fiscal year 1984, inventories of almost all of the combat items of equipment dealt with in this analysis are largely sufficient to meet the Army's objectives, defined as Case 1, which exceed the Congressionally-mandated thresholds. After appropriate assets are distributed to the active and reserve forces, under this scheme, the POMCUS stocks could be filled completely for most of the combat equipment.

By 1989, inventories of most combat equipment expand over 1984 levels, given projections of assets to be delivered over the next five years. At the same time, however, requirements for most of these combat items are also growing by fiscal year 1989. Nonetheless, by 1989 inventories of most combat items are sufficient to meet the thresholds and to allow all POMCUS requirements to be met.

There are a few exceptions to these favorable findings. The Bradley Fighting Vehicle System, for example, is the only combat item examined where assets in fiscal year 1984 and those projected for fiscal year 1989 do not meet the thresholds for the active and reserve units. And two items, the Multiple Launch Rocket System and the M109 howitzer, have enough assets to fill the active and reserve forces but no additional assets to fill completely the POMCUS stocks.

CASE 1

(Army Objectives For Distribution)

<u>COMBAT SUPPORT EQUIPMENT</u>	<u>MEETS THRESHOLDS</u>		<u>PERCENT POMCUS FILL</u>			
	<u>1984</u>	<u>1989</u>	<u>1984</u>		<u>1989</u>	
			<u>1-4</u>	<u>5&amp;6</u>	<u>1-4</u>	<u>5&amp;6</u>
HMMWV <u>1/</u>	Yes	Yes	100	100	61	0
M578 Recovery Vehicles	Yes	Yes	100	100	100	100
M548 Cargo Carrier	Yes	Yes	93	0	72	0
M577 Command Post	Yes	Yes	85	0	88	0
2½ Ton Trucks	Yes	Yes	100	100	64	1
Forklifts	Yes	Yes	80	1	21	1
Trailers	Yes	Yes	68	3	41	1
Repair Vans	Yes	Yes	100	48	42	2
5 Ton Trucks	Yes	Yes	50	0	100	100
10 Ton Trucks	No	Yes	1	0	*	0
15 KW Generators	Yes	No	17	0	6	0
Singcars Radios <u>2/</u>	Yes	No	65	1	36	*
M88 Recovery Vehicles	Yes	No	53	6	46	1
Semitrailers	No	No	17	0	6	0

1. The HMMWV is a new vehicle designed to replace jeeps and other comparable light transport.
2. Represents family of radios that Singcars is replacing.

\* = Less than .5 percent

## CASE 1. COMBAT SUPPORT EQUIPMENT

The picture differs for the combat support items included in the study. For most combat support equipment, the thresholds for the active and reserve units are also met in fiscal year 1984, assuming the Army's objectives for the distribution of assets. On the other hand, much less combat support equipment is available to be prepositioned in Europe after the active and reserve forces have been equipped. In several cases, such as the cargo carrier, the 5-ton truck fleet, and the 10-ton truck fleet, the Army lacks additional assets even to begin to fill POMCUS sets 5 and 6 in fiscal year 1984, even though they can meet the 70/50 thresholds. Thus, under Case 1, the Army essentially is prohibited from prepositioning these items in POMCUS sets 5 and 6.

By fiscal year 1989, the picture worsens. Some additional combat support equipment will not meet the Congressional thresholds because requirements are increasing faster than assets. Two combat support items--the 2½-ton truck and the 1½- and ¾-ton trailer series--do not receive any new assets over the five-year period. Indeed, these items actually lose assets due to planned wash-outs of overage equipment and attrition. Thus, in contrast to the combat equipment, by 1989, the majority of combat support items have fewer assets available to fill the POMCUS stocks requirements as compared with the asset position in fiscal year 1984.

There are, of course, some exceptions to these unfavorable findings for combat support items. One of the fourteen types of equipment meets the thresholds and equipment needs in 1984 and 1989. And one item improves; projected deliveries of 5-ton trucks over the next five years will satisfy the needs of all active and reserve forces as well as the full requirements for six sets of POMCUS.

In general, the trends for combat support equipment over the next five years portray a less optimistic asset position than those for the combat items in terms of the total force requirements and, in particular, filling the needs of the POMCUS stocks in the near-term, and over the five years.

CASE 2

(Stringent Interpretation of Appropriations Language)

<u>COMBAT EQUIPMENT</u>	<u>MEETS THRESHOLDS</u>		<u>PERCENT POMCUS FILL</u>			
	<u>1984</u>	<u>1989</u>	<u>1984</u>		<u>1989</u>	
			<u>1-4</u>	<u>5&amp;6</u>	<u>1-4</u>	<u>5&amp;6</u>
M60 Tanks <u>1/</u>	Yes	Yes	100	100	100	100
M110 Howitzer	Yes	Yes	100	100	100	100
M109 Howitzer	Yes	Yes	100	100	100	50
M901 Improved TOW Vehicle	Yes	Yes	100	100	100	100
M113 Personnel Carrier	Yes	Yes	100	100	100	100
M1 Tank	Yes	Yes	100	N/R	100	100
Multiple Launch Rocket System	Yes	Yes	83	N/R	100	100
Bradley Fighting Vehicle	No	No	0	0	0	0

N/R = No Requirement

1. Includes M48 tanks.

## CASE 2. COMBAT EQUIPMENT

If the Army backs off its likely distribution plan to meet objectives under Case 1 and adopts the law's minimum requirements, even a stringent interpretation of those minimums, then the picture improves, especially for combat support equipment.

The boxed items on this slide show improvements under Case 2 in four of the eight types of combat equipment dealt with in this analysis. Thus, the Army would meet the 70/50 thresholds for combat equipment more frequently than under Case 1 and could also meet more POMCUS requirements. There still, however, would not be enough assets to allow the Bradley Fighting Vehicle to meet the thresholds. And the M109 howitzer, while it would meet the 70/50 thresholds, would not have enough equipment to meet more than 50 percent of the requirements for POMCUS sets 5 and 6.

CASE 2

(Stringent Interpretation of Appropriations Language)

<u>COMBAT SUPPORT EQUIPMENT</u>	<u>MEETS THRESHOLDS</u>		<u>PERCENT POMCUS FILL</u>			
	<u>1984</u>	<u>1989</u>	<u>1984</u>		<u>1989</u>	
			<u>1-4</u>	<u>5&amp;6</u>	<u>1-4</u>	<u>5&amp;6</u>
HMMWV <u>1/</u>	Yes	Yes	100	100	100	100
M578 Recovery Vehicles	Yes	Yes	100	100	100	100
M548 Cargo Carrier	Yes	Yes	100	100	100	100
M577 Command Post	Yes	Yes	100	100	100	100
2½ Ton Trucks	Yes	Yes	100	100	100	100
Forklifts	Yes	Yes	100	100	100	100
Trailers	Yes	Yes	100	100	41	1
Repair Vans	Yes	Yes	100	100	100	100
5 Ton Trucks	Yes	Yes	100	94	100	100
10 Ton Trucks	No	Yes	1	0	100	78
15 KW Generators	Yes	Yes	100	100	47	0
Singcars Radios <u>2/</u>	Yes	Yes	100	100	80	0
M88 Recovery Vehicles	Yes	No	62	6	46	1
Semitrailers	No	No	17	0	6	0

1. The HMMWV is a new vehicle designed to replace jeeps and other comparable light transport.
2. Represents family of radios that Singcars is replacing.

## CASE 2. COMBAT SUPPORT EQUIPMENT

Under Case 2 versus Case 1, improvements in the Army's relative asset position, both in fiscal years 1984 and 1989, are even more dramatic for the combat support equipment. (See boxed items of slides which identify every improvement.) This occurs because the Army, under Case 2, can redistribute assets from higher to lower priority units. In terms of meeting the thresholds for active and reserve forces, for example, Case 2 allows the Army to provide fewer generators and radios to the active forces in order to satisfy the requirements in the reserves. Using this distribution scheme, even more assets could be available to fill POMCUS stocks.

The most drastic change evident with this distribution scheme, as compared with the previous case, is the additional assets that could be available for POMCUS stocks. Twelve of the fourteen types of combat support equipment dealt with in this analysis have more stocks in POMCUS in Case 2 as opposed to Case 1. It is not clear that the Army would actually choose to adopt the Case 2 distribution approach since it violates some of its priorities. But it is clear that, even under a fairly stringent interpretation of the laws like Case 2, the Army would not be seriously constrained for major types of combat and combat support equipment under the assumptions made in this analysis.

### POTENTIAL CHANGES TO ANALYSIS

- o CHANGES IN PRIORITIES FOR DISTRIBUTION COULD ALTER FINDINGS
  - IF EQUIPMENT WERE ALLOCATED TO 30 DAYS OF WAR RESERVE STOCKS IN HIGHER PRIORITY, SOME RESULTS WOULD CHANGE
- o OTHER DEFINITIONS OF THRESHOLDS COULD CHANGE RESULTS
  - IF APPLIED TO FAMILIES OF WEAPONS AS OPPOSED TO INDIVIDUAL ITEMS
  - IF APPLIED ON INDIVIDUAL UNIT BASIS
- o LIGHT INFANTRY DIVISION REQUIREMENTS ARE NOT INCORPORATED YET. WILL AFFECT ACTIVE AND RESERVE FORCES
- o LOWER LEVELS OF REAL GROWTH IN FISCAL YEAR 1985 TO FISCAL YEAR 1989 COULD ALTER RESULTS
  - AFFECTS ASSET POSITION BEYOND FISCAL YEAR 1986

## CHANGES TO ANALYSIS

If several assumptions used in this analysis were varied, the Army's ability to meet its commitment to NATO for equipping POMCUS sets 5 and 6 could be altered. CBO will examine the effects of changing assumptions in the near future.

If priorities for distribution of equipment were changed, results for some major items of combat and combat support equipment would be altered, assuming the Army's likely distribution plan to meet objectives (Case 1). If, for example, equipment were allocated to fill thirty days of war reserve with a higher priority than assumed in this analysis—as some might argue would make sense to prepare for war—one combat item, the Improved TOW Vehicle, would not meet the thresholds for the reserve forces. Moreover, several items of equipment would have fewer assets for POMCUS. Those items would include the M1 tank, the 5-ton trucks, and the High Mobility Multipurpose Wheeled Vehicles (HMMWV). While fewer assets would be available for prepositioning based on the assumptions in Case 1, the results would remain unchanged when the less stringent restrictions of Case 2 are applied.

Other definitions of the equipment thresholds could also alter results. For example, if the restrictions were defined in terms of families of weapons (such as all tanks including M48s, M60s, and M1s) it would be much easier to meet the thresholds than if items of equipment were considered on an individual basis. On the other hand, the law's restriction would be much more severe if the thresholds for equipment were applied to relatively low levels of organization units (i.e., battalions). While the Army might be able to meet 50 percent equipment fill for reserves in general, not all units in the reserves would have 50 percent of their equipment requirements.

Finally, the analysis of Army assets in fiscal year 1989 assumes the completion of the Administration's defense program for fiscal year 1985 to 1988. If lower levels of real growth are provided for Army procurement during this period, the assets available to the Army beyond fiscal year 1986 could be much lower. Indeed, if the procurement plans for combat support equipment were reduced significantly, the Army may not be able to meet the thresholds for some items of equipment unless wash-outs of overage vehicles are reduced sharply. The effects of procurement reductions are less obvious for some combat items since the general asset position appears to be more favorable. Nonetheless, some combat items may meet the thresholds but not have enough assets to fill POMCUS requirements as well. Analysis of the effects of alternative procurement plans will be a major subject of future CBO work.

## SUMMARY

- o UNDER A STRINGENT INTERPRETATION OF CONGRESSIONAL LANGUAGE, ARMY MAY EQUIP POMCUS SETS 5 AND 6 FOR MAJORITY OF ITEMS
  
- o THERE WOULD, HOWEVER, BE SOME INDIVIDUAL ITEMS OF EQUIPMENT THAT CAN NOT BE PREPOSITIONED IN FISCAL YEARS 1984 AND 1989
  
- o OTHER DEFINITIONS FOR APPLYING THE THRESHOLDS, OR LIMITS ON PROCUREMENTS BECAUSE OF BUDGET PRESSURE, COULD ALTER RESULTS

## SUMMARY

In sum, given a stringent interpretation of the equipment thresholds embodied in the Appropriations Bill, such as defined in Case 2, current Army inventories are sufficient to proceed in fiscal year 1984 with equipping POMCUS sets 5 and 6 for almost all major combat items and most combat support items. Moreover, current procurement plans for fiscal year 1985 to 1989 indicate that the Army will not be seriously constrained from proceeding with the POMCUS program over the next five years. Even if the Army continues with its objectives for distribution (Case 1)—which more than meets the law's minimum requirements—its POMCUS plans will not be seriously constrained for major combat items, though they would be for many combat support items.

If the Congress were to define the thresholds to include thresholds for war reserve stocks or to require that thresholds be met by individual units in the active and reserve forces, the Army may be constrained from prepositioning equipment in sets 5 and 6 for more items of equipment. Moreover, reductions in procurement could also cause the Army problems in filling sets 5 and 6, while also meeting the law's minimum thresholds.