

~~SECRET~~SECTION 8: ROK LAND FORCE SUPPORT REQUIREMENTS8.1 Summary

The present ROK land force support structure does not appear adequate for a sustained defense. Additional support units are necessary, as well as continued effort on building the required infrastructure. It is true that many improvements have been made since the Korean War, including new and improved roadways, additional railroad capacity, permanent depots, etc. However, the actual land force support limits are considerably reduced in strength. They actually appear less capable of supporting the ROK combat units now than during the war.

At the current level of 18 ROK divisions (17 Army-1 Marine), for instance, additional support units totaling approximately 113,000 men would be required to sustain these divisions in combat continuously. At the 16, 20, and 23 division force levels, the support augmentation required is about 90,000; 125,000; and 150,000 men respectively. These findings are substantiated by a recent study of the 18 ROK division case by the Commander of US forces in Korea. His study, like ours, concluded that the overall augmentation requirement for 18 ROK divisions is approximately 113,000 men.

In considering a broad range of alternatives to improve ROK support capabilities, four specific support concepts were selected for study. First, the current ROK support structure could be left unchanged and be improved in a minor way with US grants or military sales. Assuming continuation of the currently proposed MAP program, the five year cost of this alternative would range from about \$88 million for 14 divisions to \$125 million for 20 divisions.

A second alternative would be to make no major changes to the force structure, but to fill equipment shortages in the existing support structure. This would assure adequate ROK ability to oppose the NKA, even if the North Koreans make qualitative improvements in their force. Estimated MAP (or FMS) costs would range from \$246 to \$276 million for 16-18 divisions, including \$90 to \$150 for the current MAP program.

Thirdly, the force structure could be increased to assure that the ROKs could engage the NKA on a sustained basis. This would entail full support for ten divisions. At a 14-16 division level (active), estimated additional MAP (or FMS) costs range from \$330 to \$349 million. These costs include equipment for new support units plus \$170 to \$200 million for present equipment shortages. Such a force could assist in non-peninsular conflicts, such as the current SVN conflict, but only in a limited way.

Finally, the force structure could be increased so the ROK could engage a NKA/CPR attack, at least ^{FRD} [redacted] are brought to bear. This entails support units for 18-20 divisions fully engaged. Additional MAP (or FMS) costs range from \$367 to \$500 million, including \$200 to \$230 million for present equipment shortages. This force

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would be extremely strong, furnishing the ROKs with a capability to lead in regional defense arrangements.

The cost of relying on the US to supply the support units in sustained conflicts against either the NKA or NKA/CPR forces is quite high. The five-year cost for the additional units needed to support 10 divisions in sustained combat is over \$1.6 billion if the units are US as compared to \$837 million (\$230 million MAP or FMS, \$90-\$607 ROK defense budget costs for O&M) depending on whether the ROK forces are active or reserve. To support more ROK divisions is correspondingly more expensive: least cost alternatives (which include both the ROK budget and MAP assistance to Korea) for the added forces to support 16 and 18 ROK divisions are \$1.4 and \$1.7 billion respectively. This conclusion holds even though the study assumes that support for seven divisions is available in the baseline force structure at no cost for use in Korea.

It would seem, therefore, that the US should begin discussing with the ROK some fundamental force changes which might be necessary on the basis of this evaluation. Such changes would include either the formation of additional support units or a tradeoff of existing combat units for support units. For instance, at the 16 division force level, nearly all of the required support augmentation of 90,000 spaces could be provided from within the existing Army structure. Assuming that the ROK troops currently deployed in Vietnam are redeployed to Korea, there would be available in the force structure four divisions plus miscellaneous support, or a total of approximately 65,000 men: To avoid possible conflicts with the present ceilings on ROK forces (600,000) these units could be organized as ready reserves.

In any event, no matter which alternative is selected for the deployment of US forces in Korea, those US land force units necessary to support the ROK Army should be clearly identified in our force structure and included in contingency planning. They should be labeled as a special mission package and tailored and oriented to perform their support mission in Korea. The least cost alternatives for the four support options stated above are shown in Table 8-1.

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TABLE 8-1

FOREIGN EXCHANGE COST OF PRIMARY ROK SUPPORT ALTERNATIVES
(Assumes no inflation in MAP or FMS items)

	<u>FY 70</u>	<u>FY 71</u>	<u>FY 72</u>	<u>FY 73</u>	<u>FY 74</u>	<u>TOTAL</u>
<u>Present MAP Program (18 Div)</u> ^{1/}	24.1	22.5	21.6	23.1	22.3	113.6
<u>Alternatives</u>						
<u>Force Level Variations Present MAP Program</u>						
14 Divisions	18.8	17.5	16.7	18.0	17.4	88.4
16 Divisions	21.4	20.1	19.2	20.5	19.8	101.0
20 Divisions	26.6	24.9	24.0	25.6	24.7	125.8
<u>Fill Equip. Shortages</u>						
16 Divisions	44.4	53.0	54.0	43.5	51.7	246.6
18 Divisions	49.8	60.1	60.3	49.0	57.1	276.3
<u>Increase Support Structure</u> ^{2/}						
<u>Sustained Spt Against NKA Attack</u>						
16 Divs/10 Divs Spt	44.4	78.7	84.4	134.6	130.5	472.6
18 Divs/10 Divs Spt	44.4	89.2	86.6	139.9	141.0	501.1
<u>Increase Support Structure</u> ^{3/}						
<u>Sustained Spt Against NKA/GPR Attack</u>						
20 Divs/16 Divs Spt	55.2	91.5	115.5	190.5	196.1	648.8

^{1/} Support units only. See Section 6 for combat unit improvement.

^{2/} For costs see Section 8.44. Reserve division cases, with costs of about 15% of the active rate, are detailed in Section 9. Includes equipment shortage fill and modernization (and operation) in the current program.

^{3/} Assumes support forces in SVN return with their US equipment.

8.2 Present Program

Although the current ROK support structure does not have all the equipment required by unit TOEs, plans exist for meeting the most critical shortfalls over the next five years through US grant aid. The major items involved and the cost of this presently proposed program are shown in Table 8-2, p. 129. Implementation of the MAP plan, of course, is contingent on the availability of funds.

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TABLE 8-2

PRESENT MAP PROGRAM WITH FORCE LEVEL VARIATION
Cost (Millions in US \$) (Invest. plus Operating) 1/

	<u>FY 70</u>	<u>FY 71</u>	<u>FY 72</u>	<u>FY 73</u>	<u>FY 74</u>	<u>TOTAL</u>
14 Divisions						
Vehicles	14.7	13.4	12.4	13.8	14.0	68.3
Bridging Equip.	.1	--	.1	--	--	.2
Const. Equip.	4.0	3.8	4.0	3.7	3.0	18.5
Commo. Equip.	--	.3	.2	.5	.4	1.4
TOTAL	18.8	17.5	16.7	18.0	17.4	88.4
16 Divisions						
Vehicles	16.8	15.3	14.2	15.7	16.0	78.0
Bridging Equip.	.1	--	.1	--	--	.2
Const. Equip.	4.5	4.4	4.6	4.2	3.4	21.1
Commo. Equip.	--	.4	.3	.6	.4	1.7
TOTAL	21.4	20.1	19.2	20.5	19.8	101.0
18 Divisions						
Vehicles	18.9	17.2	16.0	17.7	18.0	87.8
Bridging Equip.	.1	--	.1	--	--	.2
Const. Equip.	5.1	4.9	5.2	4.7	3.8	23.7
Commo. Equip.	--	.4	.3	.7	.5	1.9
TOTAL	24.1	22.5	21.6	23.1	22.3	113.6

1/ Includes only operating costs directly related to support units.

Although this probably would not allow the ROKs to fight on a sustained basis without US logistic support, it would appear to be enough for them to defend against North Korea, given the intelligence estimates of NKA sustained support capability. The comparison between ROK and NKA support levels in Table 8-3 below indicates that the NKA has little ability to fight on a sustained basis, except possibly in defense, where they would have shorter lines of supply and communication, and could fall back on prepositioned stocks.

TABLE 8-3

COMPARATIVE ROK-NKA STRENGTHS
(See Tables 5-1, 5-2 and 5-11 for more detail)

	<u>Total</u> <u>Combat</u>	<u>Support</u>			<u>Spt</u> <u>Combat</u>
		<u>Division</u>	<u>Corps-Army</u>	<u>Total</u>	
North Korean Army	193,279	46,498	40,808	87,306	.45
Present ROK Structure	226,182	76,173	140,982	217,155	.96

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8.3 Fill Equipment Shortages

8.3.1 General. The second alternative, modernizing and filling the equipment requirements of the existing ROK support structure, would give greater confidence of an adequate ROK Defense against a NKA attack, but at a considerably higher cost than the first alternative. A rough estimate of this cost is shown in Table 8-4 below. A more detailed discussion of each of the major categories of equipment is contained in succeeding sections.

TABLE 8-4

FOREIGN EXCHANGE COST OF EQUIPMENT FILL AND MODERNIZATION^{1/}
(Millions of \$US)

<u>Item</u>	<u>FY 70</u>	<u>FY 71</u>	<u>FY 72</u>	<u>FY 73</u>	<u>FY 74</u>	<u>TOTAL</u>
14 Divisions						
Vehicles	--	23.5	31.5	38.6	45.9	139.5
Bridging Equip.	3.5	--	--	--	--	3.5
Combat Support Equip.	3.0	4.5	--	--	--	7.5
Const. Equip.	--	--	7.6	--	--	7.6
Commo. Equip.	<u>8.8</u>	<u>17.6</u>	<u>8.9</u>	<u>--</u>	<u>--</u>	<u>35.3</u>
TOTAL	15.3	45.6	48.0	38.6	45.9	193.4
16 Divisions						
Vehicles	--	27.9	36.0	43.5	51.7	159.1
Bridging Equip.	4.2	--	--	--	--	4.2
Combat Supt. Equip.	3.1	4.8	--	--	--	7.9
Const. Equip.	--	--	7.8	--	--	7.8
Commo. Equip.	<u>10.0</u>	<u>20.3</u>	<u>10.2</u>	<u>--</u>	<u>--</u>	<u>40.5</u>
TOTAL	17.3	53.0	54.0	43.5	51.7	219.5
18 Divisions						
Vehicles	--	32.2	40.7	49.0	57.1	179.0
Bridging Equip.	4.8	--	--	--	--	4.8
Combat Supt. Equip.	3.1	5.1	--	--	--	8.2
Const. Equip.	--	--	8.1	--	--	8.1
Commo. Equip.	<u>11.2</u>	<u>22.8</u>	<u>11.5</u>	<u>--</u>	<u>--</u>	<u>45.5</u>
TOTAL	19.1	60.1	60.3	49.0	57.1	245.6

1/ Does not include the foreign exchange cost of the current MAP program which would have to be implemented before or with this modernization plan. It does include vehicle operating costs and automotive spare parts, based on costs in Table 16, CINCPAC MAP plan for an 18 division force. For 14 and 16 divisions, the 18 division costs were factored by -4.0.

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8.32 Vehicles

In Section 5 the ROK relative superiority over the NKA in trucks was clearly indicated. Most of these ROK vehicles are five to six years old (87% OSPJ series). Allowing for overhead and rebuilds, the expected economic life is another six to seven years. As a consequence, the ROK need make only minor changes to its truck force, concentrating limited funds on keeping the existing vehicles operating. Such a course would not jeopardize ROK defense capabilities against a NKA surprise attack. The additional foreign exchange costs for spare parts, on the basis of the CINCPAC shortfall analysis, would amount to \$23.3 million in MAP operating funds.

In anticipation of the problem the Koreans will face in 1972-74 when the present vehicle fleet is in need of replacement, several alternative courses bear consideration. One alternative would be to establish a joint US-Korea co-production facility in Korea for the newer US Army standard M-series vehicles (or M600 series). Under current prices for M600 series vehicles, replacement of the entire fleet would cost \$180,000,000. On the basis of limited experience with co-production in Taiwan, it is clear the US-Korea co-production, or even vehicle assembly in Korea, could reduce these costs somewhat. Using the M16 data as an index, assembly in Korea could be expected to reduce costs by 30%. Because of the large capital investments involved, co-production would be more expensive of the large capital investments involved, co-production would be more expensive at low volumes but could make possible savings of up to 75% once fixed costs had been written off. The benefits to the economy of local production could be great because of the potentially large demand for similar vehicles in the civilian sector. In very rough terms, the costs of the co-production program could range from \$95 million for 14 divisions to \$160 million for 23 divisions. The large lead-times involved would push most of these expenses beyond the FY 70-74 period.

A second alternative would be outright sale or grant of M600 series vehicles to the Koreans. The cost of such a program is extremely large, ranging from \$243 million for 14 divisions to \$400 million for 23 divisions. The numbers of vehicles and costs involved in this course using as an example 18 divisions are set forth in Table 8-5 below.

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TABLE 8-5
WHEELED VEHICLES REPLACEMENT (18 DIVISIONS)

<u>Item</u> ^{1/}	<u>ROK TOE Requirement</u>	<u>Cost</u>
Trucks, 5T	4,762	\$ 63,374,267
Trucks, 2½T	18,258	\$157,442,186
Trucks, ¾T	10,682	\$ 32,927,120
Trucks, 1½T	10,112	\$ 42,658,925
Trailers	12,595	\$ 12,130,830
Semi-trailers	662	4,610,814

1/ All types within General category.

As an interim measure, the OSPJ rebuild program could be expanded in order to maintain the fleet at its current size or to increase it, filling TOE shortages, depending, of course, on available rebuildable assets coming out of the SVN war. This course could extend the life of the present vehicle fleet into 1975-76. Detailed costs are not available for this alternative, but assuming on the basis of Taiwan experience that rebuild costs are about 15% of replacement (\$1,000 for a 2½ ton truck) about \$25-\$36,000,000 would be needed for a 14-18 division force. Most of the expenses would come up in the mid-1970s, beyond the FY 70-74 program. The present vehicle fleet and replacement costs are tabulated in detail in Table 8-6 on page 93.

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8.33 Engineer Equipment: Bridging. Ground reaction forces, except those with an amphibious capability, must rely on key bridges. These bridges are vulnerable to enemy artillery (and probably air attacks) as well as destruction due to seasonal flooding or sabotage. The ROK Army has little combat bridging equipment on hand at present, and will be restricted in reacting to North Korean penetration until it has some efficient bridging capability. The equipment indicated in Table 8-6, which could be managed without changes to the force structure, is a modest answer to this problem.

8.34 Engineer Equipment: Combat Support. Engineer and artillery units are also short mine detector sets, generator sets, surveying sets, searchlights, tractors, inflatable assault boats, light sets, and other specialized items to carry out their assigned missions. These items shown in Table 8-6 are part of the designed (or authorized) equipment levels. Although these items are minor, they are necessary to the operation of the major units they support, and therefore should also be considered important.

8.35 Engineer Equipment: Construction. Some additional engineer construction equipment is also needed in ROK engineer units. Included are crane shovels, tractors, scoop loaders, compressors and pneumatic tools, concrete and bituminous mixers and handling equipment, rock crushers and road graders, transits and surveying sets, and specialized equipment sets. Also, some combat units are short engineer equipment items such as small compressors, generator sets, water pumps and sterilizing bags, lighting sets, drafting sets, hand operated chain hoists and flashlights. While these items are insignificant in relation to costly major items, each is important to the major operation it supports. The ROK land forces would also need these smaller items in appropriate quantities to support the modernized units. These items are shown in Table 8-6.

8.36 Communications Equipment. Much of the communications equipment in the hands of the ROKA is of World War II vintage and was given to the ROKs during the Korean War. While many of the items are still operable and useful, in many cases the advanced age of the equipment, shortage of spare parts and limited capability for badly needed long-range or high-volume traffic make continued use an uneconomical process. In the program which follows, the communications switching equipment will give flexibility to ROK Army Commanders in determining the threat to their units and in exercising appropriate command and control over them. The switchboards will both link the echelons of the ROK Army to permit the rapid and accurate transmission of orders and information by land lines and permit continuous communications under mobile combat conditions. Modernized land communications are vital to modernizing the ROK Army to meet attacks anywhere in the ROK.

Although some communications equipment modernization is being undertaken in the CIGFIR program (approximately \$8.4 million) it is useful to look at the overall requirements as indicated in Table 8-6 and in Section 6. Any further communications modernization program should be worked out considering carefully the CIGFIR program.

TABLE 8-6
FOREIGN EXCHANGE INVESTMENT COST OF EQUIPMENT FILL
 (FY 70-74)
 (Millions of \$US)

Items	18 Div. Requirement	No. of Divisions		
		14	16	18
Vehicles				
Truck, ½ ton				
Util (M606A3)	1,719	\$ 2.5	\$ 2.5	\$ 3.2
Amb (M170)	35	.1	.1	.1
RR	45	.1	.1	.1
Truck, 2½ ton				
Cargo (M602)	1,041	5.3	6.0	6.8
Dump (M614)	311	3.1	3.6	4.0
Van (M609A1)	20	.2	.2	.2
Truck, 5 ton				
Cargo (M542A)	393	3.6	4.1	4.6
Chassis (M612A)	29	.2	.3	.3
Wrecker (M543A2)	426	7.2	8.3	9.3
Trac. (M32A2)	293	2.6	2.9	3.3
Sub-Total		\$24.9	\$28.4	\$31.9
Operating Costs ^{1/}		114.6	130.7	147.1
Sub-Total		139.5	159.1	179.0
Bridging Equipment				
Bridge, fixed, highway Bailey	7	.2	.2	.2
Bridge, floating highway alum deck	18	1.6	1.9	2.2
Bridge, floating, raft-section, lt.	43	1.3	1.6	1.9
Boat, bridge, erection 27' long	12	.2	.3	.3
Outboard motor, gas 25 BHP	240	.2	.2	.2
Ferry conversion at, Infantry apt	2			
Sub-Total		3.5	4.2	4.8
Engineer Combat Support				
Detecting set, mine AN/PSS-4	2,536	.7	.8	.9
Generator set, diesel 45 kw	124	.8	.9	1.0
Metascope asy, transit	1,459	.3	.4	.4
Survey sets, artillery				
(4th & 5th order)	475	.2	.3	.3
Searchlights, 18" & 30"	252	.4	.4	.5
Boat, landing, inflatable 15 men	342	.4	.4	.4
Tractor, FT, Low-speed diesel w/blade	128	4.7	4.7	4.7
Sub-Total		7.5	7.9	8.2
Combat Construction Equipment				
Craze, Shovel, 20T	128	5.5	5.5	5.5
Scoop loader, diesel	38	.5	.5	.6
Road grader, diesel, hvy	12	.1	.1	.1
Roller, motorized, 10T	47	.2	.3	.3
Scraper, towed	5	.1	.1	.1
Pneumatic tool outfits w/compressors	125	1.2	1.3	1.5
Sub-Total		7.6	7.8	8.1
Communications Equipment				
Switchboard, AN/MTC-1	5	\$ 1.0	1.2	1.3
Switchboard, AN/MTC-3	20	.5	.5	.6
Switchboard, AN/MTC-7	120	.9	1.1	1.2
Switchboard, AN/MTC-9	2	.3	.4	.4
Battery terminal equip. (HAWK-HERC)	3	.9	1.0	1.1
Radio Term, AN/MRC-39	382	19.4	22.2	25.0
Radio Relay, AN/MTC-36	255	7.8	8.6	9.7
Switchboard, AN/MTC-1 w/veh and pwr	12	2.4	2.8	3.1
Switchboard, AN/MTC-3 w/veh and pwr	57	1.2	1.4	1.6
Switchboard, AN/MTC-7 w/veh and pwr	94	1.2	1.3	1.5
Sub-Total		35.3	40.5	45.5
TOTAL ^{2/}		78.8	88.8	98.5
TOTAL (ALL COSTS)		\$193.4	\$219.5	\$245.6

^{1/} Operating costs and spare parts for vehicles only based on FY 70 costs in Table 16, CINCPAC MAP Plan.

^{2/} Minus vehicle operating costs.

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8.4 Sustained Support Increment for ROK Forces

8.4.1 General

The last two alternatives - force structure increases to assure that the ROKs could engage a NKA attack on a sustained basis and that they could delay a combined NKA/CPA attack - are based on a detailed study of the existing ROK force structure.

Support requirements for ROK forces were examined in two basic scenarios: (1) An 8, 10, 12 and 14 division defense against a North Korean limited objective attack aimed at taking the ground between the Imjin River and the MDL, or at destroying the key hydro-electric plant at the Hwachon Reservoir; the defense would be followed by a counter-attack. (2) A 16, 18, 20, 23, 28 and 30 division defense against a North Korean attack along the historic avenue of approach to Seoul - the general attack - which would be supported, when necessary, by eventual commitment of Chinese Communist Army units; the defense would be followed by a counter-attack to restore, as a minimum, any threatened areas near Seoul. Actual equipment levels were assumed for cases ranging from 8 to 20 divisions, and full TOE equipment levels were assumed for cases from 12 to 30 divisions.

Determining Total Requirements

For the alternative ROK force levels examined, the Modular Force Planning Model was used to determine the total support required.* This is a computerized model designed to derive total in-theater support requirements. Given the desired number and mix of combat battalions in the theater, the support force required to support both the combat units and the support force itself, i. e., a balanced, self-sufficient force can be computed. This is done by using a variation of the standard input-output methodology commonly used in economic models in order to relate the additional requirements on the whole system that one specific additional unit generates. Inputs to the model, in addition to the number and mix of combat modules, include such things as casualty rates, medical evacuation policies, fuel consumption rates, estimates of prisoners and civilian internees, etc. The output is a balanced theater troop list. Typical ROK combat unit inputs are shown in Table 8-7 below. A detailed discussion of combat modules input to the model is contained in Appendix A, Annex II.

TABLE 8-7

ILLUSTRATIVE COMBAT UNITS TO BE SUPPORTED

	<u>Number of Divisions</u>				
	<u>14</u>	<u>16</u>	<u>18</u>	<u>20</u>	<u>23</u>
Inf. Battalion	117	135	153	171	198
Marine Regt.	3	3	3	3	3
Tank Bn.	10	10	10	10	10
105mm Bn (Div) Towed	42	48	54	60	69
155mm Bn (Div) Towed	14	16	18	20	23
155mm Bn Towed	10	10	10	10	10

* Developed by the studies and models group in the Office of the Assistant Vice Chief of Staff of the Army.

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In addition to the above illustrative inputs, it was also necessary to look at a number of additional factors. Included were: (1) the additional support units required to support the ROK and US Air Forces, (2) the variation in consumption and maintenance requirements between ROK units with the actual equipment levels and with full TOE equipment; and (3) the theater base and special units not included in the model which might be required by the ROKs.

Since the model was originally designed for US units, errors were undoubtedly introduced in adapting it to ROK units. Many of the potential difficulties were eliminated, however, by using ROK consumption requirements, and by replacing US TOEs with ROK TOEs for combat-type units. For a detailed discussion of the modification and assumptions used to adapt this model to the ROK land forces case (see Appendix B, Annex II.)

The number of troops required for several representative cases is shown in Table 8-8 below:

TABLE 8-8

TOTAL SUPPORT STRUCTURE REQUIRED
(Thousands of Troops)

	<u>14 Div</u>	<u>16 Div</u>	<u>18 Div</u>	<u>20 Div</u>	<u>23 Div^{2/}</u>	<u>30 Div^{2/}</u>	<u>ROK Current</u>
Combat	4	4	4	4	5	6	1
Intell.	10	11	12	12	14	16	5
C, C & C ^{1/}	50	47	54	55	60	66	35
Engineer	35	36	36	36	36	36	35
Transp.	28	31	34	36	43	55	9
Medical	43	47	54	59	69	88	18
Spl&Maint.	40	42	44	47	55	69	25
Admin.	3	3	3	3	3	3	3
Spec. Oprs.	<u>2</u>	<u>2</u>	<u>2</u>	<u>2</u>	<u>2</u>	<u>3</u>	<u>1</u>
TOTAL	215	223	243	254	287	342	131

^{1/} Command, Control & Communication

^{2/} 23 and 30 Div. cases assume TOE equipment levels; all others use actual equipment levels.

8.42 Determining Augmentation

To determine augmentation requirements, we compared the balanced troop list obtained from the model with current ROK capabilities. The difference between the two is simply the augmentation that is required, stated in terms of US TOE units. Using the total troop list, it is also possible to determine which of these US-type units might actually be provided by the US and which might be furnished by the ROKs. This breakdown was made in four different ways as follows:

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Alternative 1 - Total US Augmentation: In this case, all units would be provided by the US. This alternative assumes that current ROK support capability does not increase and that the total augmentation will be made up of US troops. This is an important case because it is close to being our only current option, given the long lead-time required to form and equip new ROK units.

Alternative 2 - Comparative Advantage Case: Based on the technical skills and training required for various units, and the relative costs of training and supporting US and ROK personnel, this breakout would be an attempt to obtain the required capability at a minimum cost, including both ROK and US costs. This is an important case because it is the most efficient, from the standpoint of comparative advantage.

Alternative 3 - US in Rear Area Only: Here no US units would be forward of the corps rear boundaries. This alternative is identical to Alternative 2 but adds the additional constraint that US troops would be located in the rear area only. We looked at this case because it is conceivable that, for certain conflicts with North Korea, the US would prefer to limit direct combat participation, at least for awhile.

Alternative 4 - US Rapid Deployment after 60 Days: In this case no US units would be used for the first 60 days of an engagement. Again, this would be similar to Alternative 2, but with an additional time constraint which influences the breakdown between troops provided by the US and those provided by the ROKs. This case was considered important in light of advantages we gain with strategic mobility, since it allows us to consider how great our forward deployment need be.

A discussion of type support units which could be provided under various alternatives is at Appendix C - Annex II. Examples of augmentation for several representative cases are shown below:

TABLE 8-9

FORCE AUGMENTATION REQUIREMENTS
(Thousands of Troops)

	<u>14 Div</u>	<u>16 Div</u>	<u>18 Div</u>	<u>20 Div</u>	<u>23 Div</u> ^{1/}
Present Case					
ROK	0.0	0.0	0.0	0.0	0.0
US	84.3	92.0	113.0	123.2	156.1
Comparative Advantage					
ROK	80.3	88.0	108.5	118.6	150.7
US	4.0	4.0	4.5	4.6	5.4
US Rear Area Only					
ROK	83.9	91.6	112.5	122.7	155.4
US	.4	.4	.5	.5	.7
US Rapid Deployment					
ROK	83.9	91.6	112.5	122.7	155.4
US	.4	.4	.5	.5	.7

Spaces available in existing ROK Combat Units.	86.0	60.0	34.0	0.0	0.0

^{1/} 23 Div. case assumes TOE equipment levels; all others assume actual equipment levels.

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8.43 An Historical Explanation

If one looks at changes that occurred in the ROK forces over the last 15 years, it is easy to see why augmentation of some magnitude might now be necessary. The support structure which proved to be necessary during the Korean War was nearly 16,000 men per division. In other words, a combat division of approximately 13,000 men required a slice of support units of roughly 16,000 men. The slice behind current ROK divisions, however, is now only about 6,000 men per division, based on an analysis of the ROKA current troop list. Although part of this decrease can be explained by such changes as the increasing use of national facilities (such as railroads), the construction of permanent depots, and the use of better equipment, it seems clear that a slice of 6,000 men is probably too low. The slice behind a 16,000-man US division, for instance, is roughly 32,000 men.* As shown in Table 8-8, an augmentation which would bring the slice to approximately 12,000 men seems reasonable at the present time.

8.44 Costs

In analyzing the cost of alternative support augmentations, cost to both the US and the ROK were summed for the period FY 72-74 when the augmentation would be initiated. The cost of ROK units was based on current estimates of ROK O&M and MAP costs per man for FY 70-74, and current table of equipment costs per unit. MAP incremental increase for ROKA support base is shown in Table 8-10 below. (See Appendix B, Annex II).

TABLE 8-10
INCREMENTAL MAP COST OF
ROKA SUPPORT FORCE INCREASE
(FY 72-74)
(Millions of US \$)

<u>Base Support</u>	<u>FY 72</u>	<u>FY 73</u>	<u>FY 74</u>	<u>Total Cost</u>
14 Div/10 Divs SPT	82.0	129.0	119.9	330.9
16 Div/10 Divs SPT	84.4	134.6	130.5	349.5
18 Div/10 Divs SPT	86.6	139.9	141.0	367.5
20 Div/16 Divs SPT	115.5	190.5	196.1	502.1

The cost of US units is based on the support level cost factors contained in Tables 11-3 and 11-6, Section 11, Alternative US Deployments. Total costs for creating units required for US augmentation were estimated assuming that new units would be added to the US force structure as follows: 30% in FY 72; 40% in FY 73; 30% in FY 74. US augmentation unit costs were also based on a CONUS Active deployment for the support forces.

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TABLE 8-11
COST OF SUPPORT STRUCTURE AUGMENTATION ^{1/}
(Total FY72-74) ^{2/}
(Millions of US \$)

<u>ALTERNATIVE</u> ^{3/}	<u>14 Div</u>	<u>16 Div</u>	<u>18 Div</u>	<u>20 Div</u>
TOTAL US AUGMENTATION (No increase to ROK Capability)	1,379.9	1,493.0	1,774.5	2,036.1
COMPARATIVE ADVANTAGE (Substantial increase to ROK force structure)	380.7	399.3	424.5	559.3
US REAR AREA ONLY (Substantial increase to ROK force structure)	335.8	354.4	374.7	509.3
US RAPID DEPLOYMENT (Substantial increase to ROK force structure)	335.8	354.4	374.7	509.3

^{1/} Includes cost of US units plus MAP costs for ROKA support.

^{2/} Assumes augmentation begins in FY72 and increases incrementally during FY72-74.

^{3/} See Sec. 8.42 for discussion of alternatives.

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SECTION 9: ROKA FORCE STRUCTURE ALTERNATIVES

9.1 General

On the basis of the discussion in Section 3-5, it is fairly clear that a small ROK force, ranging from 9 to 12 divisions, would suffice for defending the South from North Korea.* Additional defense forces would be needed to meet the greater threat of a combined NKA/CPR conventional invasion. The historical, wargame, and force comparison analysis suggested 16-23 divisions would be needed for this task, depending on whether an initial or sustaining defense force were needed. Not all these divisions need be active, of course.

The modernization programs discussed above for combat units (Section 6) and support units (Section 8) focused on a narrower range of divisions - fourteen to twenty. In the program years being discussed, full modernization of twenty divisions would be a major undertaking and could well overtax the leadership and management resources of the ROK military. Conversely, a reduction of present forces from the presently constituted nineteen divisions to a modernized force of fourteen divisions was also considered the largest feasible reduction, in the next five years, without overburdening the military leadership or generating political problems. These judgments, though consistent with the political analysis in Chapter Seven, are subject to change as programs are implemented.

The alternative ROK land force structures indicated below are illustrative. Additional variations are certainly possible, and granted limitations in funds, would probably be more realistic. However, the purpose here has been to furnish the total military requirement, at minimum risk, and keep the discussion of resource restraints, higher levels of risk, NKA reactions, and problems of implementation in Chapter One. The main alternatives and costs are indicated below and in Table 9-1, page 141.

a. Continuation of Present Program

(1) Minimal Land Force Program. Gradual reductions in MAP grants for land forces would be initiated when politically feasible (FY 71-72), transferring such expenditures to FMS. The rationale for these changes rests on (a) ROK/US willingness to discount the CPR threat; (b) a decision to retain US land forces in Korea for the FY 70-74 period; (c) the fact that the ROK economy will be able to support greater expenditures. FY 70-74 costs would entail \$467 million MAP for the land forces, exclusive of the CIGFIR program. ROK costs for the same period would be approximately \$1540 million.

(2) Modest Modernization. This is essentially the present MAP program downgraded to a 14-16 division program. It includes some ROK modernization, but still leaves a large range of needs unaddressed. The rationale is as in (1) above. This course does not preclude withdrawing some US forces from Korea or repositioning the present forces to fill a regional reserve role.

* Appropriately modernized.

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140

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TABLE 9-1

ILLUSTRATIVE ALTERNATIVE ROK LAND FORCE ROK BUDGET/MAP COSTS^{1/}
(1968 prices in \$ US Millions)

	<u>CY70</u>	<u>CY 71</u>	<u>CY72</u>	<u>CY73</u>	<u>CY74</u>	<u>Total</u>
<u>Present Program</u>						
ROK Costs	236	273	305	344	382	1540
US Costs (MAP)	102	100	99	86	80	467
Total	338	373	404	430	462	2007
<u>Alternatives</u>						
<u>Present Program with CIGFIR</u>						
ROK Costs	236	273	306	345	384	1544
US Costs (MAP)	102	149	106	93	87	537
Total	338	422	412	438	471	2081
<u>ROK Self Defense Force-NKA Threat</u>						
<u>Combat Modernization</u>						
ROK Costs	236	273	300	334	356	1499
US Costs (MAP)	102	216	139	101	71	629
Total	338	489	439	435	427	2128
<u>Balanced Force (A)</u> ^{2/}						
ROK Costs	236	273	302	337	372	1520
US Costs (MAP)	124	311	196	145	124	900
Total	360	584	498	482	496	2620
<u>Balanced Force (B)</u> ^{3/}						
ROK Costs	236	273	304	343	380	1535
US Costs (MAP)	124	311	282	280	254	1251
Total	360	584	586	623	634	2786
<u>ROK Self Defense-NKA/GFR Threat</u>						
<u>Initial Defense (A)</u>						
ROK Costs	236	273	305	344	382	1539
US Costs (MAP)	126	326	240	140	129	961
Total	362	599	545	484	511	2500
<u>Initial Defense (B)</u> ^{4/}						
ROK Costs	236	273	320	387	446	1662
US Costs (MAP)	126	326	327	302	270	1451
Total	362	699	647	689	716	3113
<u>Sustained Defense</u> ^{5/}						
ROK Costs	236	273	330	419	482	1740
US Costs (MAP)	132	330	381	398	361	1602
Total	368	603	711	817	843	3342

1/ See Tables 9-2, 9-3, 9-4, 9-5, Section 9.

2/ Includes Combat Force Modernization and equipment fill for support units.

3/ Includes Balanced Force A plus additional support units for 10 divisions.

4/ Includes Combat force modernization, equipment fill for support units and new support units for 10 divisions.

5/ Includes Initial Defense A plus additional support units for 16 divisions.

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FY 70-74 MAP costs range from \$410 to \$480 million, depending on whether or not the JCS CIGFIR program is included.

b. ROK Land Force Self-Defense: NKA Threat

(1) Minimal Program. Under this alternative, modernization improvements would be related to eventual changes in US land force dispositions. One US division, or elements of it, might be retained in Korea for its value as a symbol of US commitment. These forces would be positioned so that outbreaks of hostilities between the ROK and North Korea, short of war, need not necessarily involve US forces. ROK land forces modernization would be explained as demonstrably assisting ROK assumption of DMZ defense and reducing the risks that a quick NKA attack would be successful. The minimal program is tied to improving a smaller number of elite divisions (14), and improvements would be concentrated in maneuver unit and artillery firepower. MAP FY 70-74 costs would be about \$629 million and ROK FY 70-74 costs would be about \$1500 million.

(2) Balanced Program. In addition to the modernization included in b(1) above, the ROK Army support capabilities and war reserve ammunition stocks would also be improved. Two options bear consideration with regard to the support structure: (a) fill TOE shortages through MAP (or FMS) and by encouraging local production of essential items: estimated additional MAP cost ranges from \$40 to \$237 million; (b) increase the ROK Army force structure so that support units would be available for ten ROK divisions simultaneously engaged: estimated additional MAP cost of about \$330 to \$350 million. Total MAP costs for this alternative could range from \$900 to \$1251 million. ROK Costs would remain about the same as under the minimal program.

c. ROK Self Defense: CFR/NKA Attack

(1) Initial ROK Defense: (Minimal Program). In this posture the ROK forces would be expected to hold alone against an NKA attack, even if the latter were reinforced by a CFR force subsequent to the attack and on confirmation of CFR involvement. US land forces could move from reserve positions or be rapidly deployed to Korea using programmed strategic mobility resources to reinforce ROK defenses. FRD

FRD The land force modernization and improvement programs for the ROK would include: (a) firepower modernization for 16 elite divisions; (b) increasing the support structure to support 10 divisions; (c) TOE fill at CINCPAC levels for 16 divisions. These programs would entail a MAP program ranging from \$900 to \$1251 million. ROK 70-74 costs would be about \$1500 million.

(2) Initial ROK Defense: (Average Risk). The major difficulty with c(1) above is that ROK commanders (and US commanders as well) may be unwilling to reduce the size of ROK forces at the same time the US conventional role is reduced, despite the cost and extent of modernization. Accordingly, 18 rather than 16 divisions might have to be maintained. The support capability would be improved by filling equipment shortages and possibly increasing the

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support structure to accommodate 10 simultaneously engaged divisions. MAP for FY 70-74 would range from \$961 to \$1451 million. ROK budget costs would range from \$1540 to \$1662 million for FY 70-74.

(3) Sustained Defense. As indicated in other sections (3, 4, 5) 16 ROK divisions could probably hold a NKA/CFR invasion, if they were equipped and fought at US standards. US forces could be deployed to augment the ROK, if necessary; however, in this posture extra funds would be spent to reduce the risk of an early ROK defeat. The modernization and improvement program would extend to 20 ROK divisions. TOE shortages in support units would be filled, and the support structure would be increased (mostly reserve units) so that 16 fully engaged divisions could be supported simultaneously. At the twenty division level, MAP costs for FY 70-74 would range from \$1451 to \$1602 million; ROK budget costs would range from \$1662 to \$1740 million.

9.2 The Present Program

The existing force structure in Korea as described in the CINCPAC Military Assistance Plan for Korea has been taken as the current program. In general, it was assumed that no fundamental force structure changes would take place. From a technical viewpoint, estimates of changes in defense costs are based on the following assumptions: (1) that the military services will see increased pay in 1968 price items at a rate of 10% per annum; (2) the procurement costs will increase at 3% per annum in 1968 price terms -- this increase will meet part of the added operating cost requirements of new equipment; and (3) that construction and unit operations will increase at 5% per annum in 1968 prices, except during the period when ROK forces are redeployed either from South Vietnam or onto the DMZ. An error category is carried throughout the projections, starting with \$19 million in CY 69, to account for MND expenses, added expenses for counter-infiltration units, and marginal changes in other expenses.

Various specialized improvement programs have been requested for the ROK either by COMUSKOREA or the Koreans themselves. For example, the CIGFIR program (counter-infiltration and force improvement program) would furnish \$73.4 million of equipment and spare parts primarily for counter-infiltration. About \$15 million of this would meet modernization requirements discussed in section six above. Also under discussion is an extensive M16 rifle facility, costing the US and ROK jointly about \$60 million beyond the M16 proposals discussed in paragraph 6.4 above. Because endorsement of the latter proposals has not progressed beyond the Defense Department level, it has not been included in the estimates of the current program in Table 9-2 on the following page.

9.3 ROK Self-Defense Against NKA

There are a number of improvements to ROK land forces which, if made, could be the basis for both reducing the size of the active forces and change US troop dispositions. Combat force modernization would be the cornerstone to any such program, costing up to \$172 million (see section six). Beyond

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143

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TABLE 9-2

PRESENT PROGRAM COSTS
ROK LAND FORCES
(1968 constant prices in \$US Millions)

<u>Present Program</u>	<u>CY69</u>	<u>CY70</u>	<u>CY71</u>	<u>CY72</u>	<u>CY73</u>	<u>CY74</u>
<u>ROK Costs</u> ^{1/}						
Local currency	201.7	226.0	257.3	281.0	311.5	344.1
Foreign exchange	<u>.7</u>	<u>10.1</u>	<u>15.7</u>	<u>23.9</u>	<u>32.6</u>	<u>38.3</u>
<u>Total</u>	202.4	236.1	273.0	304.9	344.1	382.4
<u>US Costs (MAP)</u>	104.9	102.0	100.3	98.8	85.9	80.0
<u>Total ROK & US</u>	<u>307.3</u>	<u>338.1</u>	<u>373.3</u>	<u>403.7</u>	<u>430.0</u>	<u>462.4</u>
<u>Present Program & CIGFIR</u> ^{2/}						
<u>ROK Costs</u>	202.4	236.8	273.9	305.8	345.0	383.6
<u>US Costs (MAP)</u>	<u>138.1</u>	<u>102.0</u>	<u>148.7</u>	<u>105.8</u>	<u>92.9</u>	<u>87.0</u>
<u>Total</u>	340.5	338.8	422.6	411.6	437.9	470.6

^{1/} Costing assumes changes in exchange rate offset by inflation. Other assumptions used are: (a) unit operations, construction, and other costs increase at 5% p.a.; (b) procurement of equipment costs increase at 3% p.a.; (c) construction and unit operations increase by 10% when forces are redeployed from SVN or when ROK forces move onto the DMZ; (d) an error category is carried throughout the projections, starting with \$19 million in CY 69, to account for MND, counter-infiltration, et. al.

^{2/} CIGFIR land force costs are taken from the JCS 19 April 1969 memorandum. Operations costs in FY 72-74 are estimated at 10% CY 69-70 investment or \$7.0 million p.a.

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that, improvement of the ROK counter-infiltration capabilities could be important, more for political than military reasons; our rough estimates of the purely counter-infiltration aspect of this program, including operations costs, is \$66 million.

The specific alternatives developed here, for illustrative purposes, were designed as follows: First, the ROK/US could improve the combat capability of 14 of the ROK divisions now in Korea. The remaining divisions would be added to the "ready reserve" beginning in 1972. In addition, to improve ROK force support capabilities, equipment shortages in support units would be eliminated so that these units can adequately perform assigned missions. The new ROK force should be adequate to meet a NKA conventional invasion, on the basis of force discussions in Sections 3, 4 and 5. Added funds for the counter-infiltration programs should meet ROK needs in that category.

It is possible that ROK land force reductions below sixteen divisions would be politically unacceptable. Accordingly, two alternatives have been developed at the sixteen division level, ranging from modernization of the combat forces, the counter-infiltration program, and filling TOE shortages in support units, up to a major restructuring of ROK forces. The latter alternative would include combat modernization, filling TOE shortages in support units, and adding other support unit capabilities so that the ROK could sustain 10 divisions at full combat (US standards). ROK and US FY 70-74 costs for these alternatives are summarized in Table 9-3 on the next page.

9.4 ROK Self-Defense Against an NKA/CPR Attack

A ROK defense force larger than what is needed against the NKA can be rationalized as follows: First, if the ROK forces are to play an important role in the region, they should probably be capable of meeting more than their own defense requirements. Again, if US land forces were to be positioned so they did not become immediately engaged until positive confirmation of CCA involvement is obtained, the ROK forces should be capable of defending alone against a large conventional invasion. In either event, part or all of the added ROK forces could be maintained as reserves.

The ROK land force structures designed against the CPE/NK threat (and then for regional deployment as well) include: (a) combat modernization at sixteen, eighteen, or twenty divisions (see Table 9-3 for sixteen division case); (b) some of the counter-infiltration program (again \$66 million); (3) improvements to the support structure either through just filling TOE shortages or by doing that as well as increasing the support structure so that ten-sixteen divisions can be supported in combat simultaneously. Costs for initial defense against the larger threat, including the support structure changes, are indicated in Table 9-4.

Bringing the ROK to a point where its land forces could well be adequate for sustained defense against a CCA/NKA conventional attack is extraordinarily

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TABLE 9-3

ROK SELF-DEFENSE LAND FORCES - NKA THREAT
US AND ROK COSTS
(1968 Constant Prices in \$US Millions)

	<u>CY 70</u>	<u>CY 71</u>	<u>CY 72</u>	<u>CY 73</u>	<u>CY 74</u>
<u>14 Division Force (Basic)</u>					
<u>ROK Costs^{1/}</u>					
Local currency	226.0	257.3	276.2	300.0	317.9
Foreign exchange	<u>10.1</u>	<u>15.7</u>	<u>23.9</u>	<u>32.6</u>	<u>38.3</u>
<u>Total</u>	236.1	273.0	300.1	333.5	356.2
<u>US Costs^{2/}</u>					
Combat modernization	10.6	74.5	56.5	34.0	17.7
Fill support equip. shortages	15.3	45.6	48.0	38.6	45.9
Add support units	--	--	82.0	129.0	119.9
Counter-infiltration	--	48.4	7.0	7.0	3.5
Other (present program)	<u>96.0</u>	<u>93.3</u>	<u>71.0</u>	<u>60.0</u>	<u>50.0</u>
<u>Total</u>	121.9	261.8	268.5	268.6	237.0
<u>Total ROK and US</u>	<u>358.0</u>	<u>534.8</u>	<u>568.6</u>	<u>602.1</u>	<u>593.2</u>
<u>16 Division Force (Basic)</u>					
<u>ROK Costs^{1/}</u>					
Local currency	226.0	257.3	280.0	310.5	341.3
Foreign exchange	<u>10.1</u>	<u>15.7</u>	<u>23.9</u>	<u>32.6</u>	<u>38.3</u>
<u>Total</u>	236.1	273.0	303.9	343.1	379.6
<u>US Costs^{2/}</u>					
Combat modernization	10.6	116.1	61.5	35.0	17.7
Fill support equip. shortages	17.3	53.0	54.0	43.5	51.7
Add support units	--	--	84.4	134.6	130.5
Counter-infiltration	--	48.4	7.0	7.0	3.5
Other (present program)	<u>96.0</u>	<u>93.3</u>	<u>75.0</u>	<u>60.0</u>	<u>50.0</u>
<u>Total</u>	123.9	310.8	281.9	279.1	254.2
<u>Total ROK and US</u>	<u>360.7</u>	<u>583.8</u>	<u>585.8</u>	<u>622.1</u>	<u>634.0</u>
<u>16 Division Force (No support units added)</u>					
<u>ROK Costs^{1/}</u>	236.1	273.0	302.1	337.2	371.8
<u>US Costs^{2/}</u>	123.9	310.8	197.5	144.5	123.7
<u>Total ROK and US</u>	<u>360.0</u>	<u>583.8</u>	<u>499.6</u>	<u>481.7</u>	<u>495.5</u>

^{1/} Assumes no additional burden sharing of foreign exchange costs. More detail furnished in Tables 6-1 and 8-1.
^{2/} See note one of Table 9-2 for forecasting assumptions.

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TABLE 9-4

ROK SELF DEFENSE LAND FORCES--INITIAL DEFENSE
AGAINST NKA/CPR ATTACK

(1968 Constant Prices in \$ US Millions)

	<u>CY70</u>	<u>CY71</u>	<u>CY72</u>	<u>CY73</u>	<u>CY74</u>
<u>Initial Defense</u>					
<u>18 Division Force (Basic)</u>					
<u>ROK Costs</u> ^{1/}					
Local currency	226.0	257.3	296.5	354.0	408.0
Foreign exchange	<u>10.1</u>	<u>15.7</u>	<u>23.9</u>	<u>32.6</u>	<u>38.3</u>
Total	236.1	273.0	320.4	386.6	446.3
<u>US Costs</u> ^{2/}					
Combat modernization	10.6	123.8	97.6	66.5	18.6
Fill support equip. shortages	19.1	60.1	60.3	49.0	57.1
Add support units (10 Div.)	--	--	86.6	139.9	141.0
Counter infiltration	--	48.4	7.0	7.0	3.5
Other (present program)	<u>96.0</u>	<u>93.3</u>	<u>75.0</u>	<u>60.0</u>	<u>50.0</u>
Total	<u>125.7</u>	<u>325.6</u>	<u>326.5</u>	<u>302.4</u>	<u>270.2</u>
<u>Total ROK and US</u>	311.8	598.6	646.9	689.0	716.5
<u>18 Division Force</u> <u>(No Support Units</u> <u>Added)</u>					
<u>ROK Costs</u> ^{1/}	236.1	273.0	304.9	344.1	382.4
<u>US Costs</u>	<u>125.7</u>	<u>325.6</u>	<u>239.9</u>	<u>139.9</u>	<u>129.2</u>
<u>Total ROK and US</u>	361.8	598.6	544.8	484.0	511.6

1/ See Note one, Table 9-2.

2/ MAP Costs assuming no ROK sharing of the added foreign exchange burden through military sales. More detail on modernization furnished in Table 6-1 and Table 8-1.

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147

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expensive, involving up to \$1.52 billion in MAP during FY 70-74, as well as \$60 million in budget support per annum. The costs for this program are detailed in Table 9-5.

9.5 The Operating Cost Burden

As new items of complicated equipment are added to the ROK force structures, the basis is created for future expenditures on maintenance overhauls and expensive spare parts. These future costs will generate needs for more foreign exchange or US grant assistance in the form of operating expenses. In 1974 the operating cost requirement for land forces will be about \$84 million, based on the current force structure and CINCPAC MAP plan projections. Only \$72.3 of this can be funded within the limits of the program level (\$140 million in MAP for Korea). In addition, the CINCPAC plan forecasts further shortages in spare parts, maintenance overhauls, and other operating costs which would come to over \$300 million if funded.

The alternative modernization programs were designed with a view toward reducing the future requirements for spare parts. In the combat modernization package older systems were recommended: it can be anticipated that US use of these systems, such as the M48 tank, will be curtailed sharply and our stocks of spare parts would become available for ROK use at very low costs. In developing equipment requirements to fill TOR shortages, additional spare part needs for the support units were included. These spare parts needs were derived from the CINCPAC estimates of over \$300 million in operating short-fall referred to above (Table 16, CINCPAC MAP Plan, July 1968). Regardless, the modernization packages will still tend to increase the long-run requests for US produced spare parts. A rough estimate of these requirements is given below:

TABLE 9-6
OPERATING COST REQUIREMENTS: 1974
(Foreign Exchange Cost in \$US Millions - 1968 Constant Prices)

<u>Current Plan</u>	\$84.0
<u>Modernization Package</u>	
<u>Operating Costs</u>	
Counter-Infiltration (section 6) ^{1/}	3.5
Combat Modernization ^{2/}	
14 Div	18.4
16 Div	19.0
18 Div	23.1
20 Div	30.4
Support Equipment	
14 Div	20.6
16 Div	24.7
18 Div	26.5
20 Div	28.5
Support units	
10 Div	33.1
16 Div	50.3

- ^{1/} The original CIGFIR program put operating costs at \$8.4 million. Most of the force improvement operating costs of the CIGFIR proposal are included under combat modernization.
- ^{2/} These costs could be reduced considerably if the BOK HAWK and UH1B programs were excluded.

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TABLE 9-5

ROK SELF DEFENSE LAND FORCES--SUSTAINED DEFENSE
AGAINST CPR/NKA ATTACK
(1968 Constant Prices in \$US Millions)

<u>Sustained Defense: 20 Division Force (Basic)</u>	<u>FY70</u>	<u>FY71</u>	<u>FY72</u>	<u>CY73</u>	<u>CY74</u>
<u>ROK Costs</u> ^{1/}					
Local Currency	226.0	257.3	306.0	386.5	444.0
Foreign Exchange	<u>10.1</u>	<u>15.7</u>	<u>23.9</u>	<u>32.6</u>	<u>38.3</u>
TOTAL	236.1	273.0	329.0	419.1	482.3
<u>US Costs</u>					
Combat modernization	10.6	121.7	115.8	91.3	54.7
Fill support equip. shortages ^{3/}	25.7	66.7	67.7	49.0	57.1
Add Support Units	-	-	115.5	190.5	196.1
Counter infiltration	-	48.4	7.0	7.0	3.5
Other (present program)	<u>96.0</u>	<u>93.3</u>	<u>75.0</u>	<u>60.0</u>	<u>50.0</u>
TOTAL	<u>132.3</u>	<u>330.1</u>	<u>381.0</u>	<u>397.8</u>	<u>361.4</u>
<u>Total ROK and US Costs</u>	368.4	603.1	710.0	816.9	843.7
<u>20 Division Force (No Support Units Added)</u>					
<u>ROK Costs</u> ^{1/}	236.1	273.0	313.9	354.6	393.3
<u>US Costs</u> ^{2/}	<u>132.3</u>	<u>330.1</u>	<u>265.5</u>	<u>207.3</u>	<u>165.3</u>
<u>Total ROK and US Costs</u>	368.4	603.1	579.4	561.9	558.6

^{1/} See note one, table 9-2.

^{2/} MAP costs assuming no ROK sharing of the added burden through foreign military sales. More detail on modernization furnished in tables 6-1 and 8-1.

^{3/} For 18 divisions of support units only.