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90TH CONGRESS
1st Session

SENATE

REPORT
No. 76

AUTHORIZING APPROPRIATIONS DURING FISCAL YEAR 1968 FOR PROCUREMENT OF AIRCRAFT, MISSILES, NAVAL VESSELS, AND TRACKED COMBAT VEHICLES, AND RESEARCH, DEVELOPMENT, TEST, AND EVALUATION FOR THE ARMED FORCES

MARCH 20, 1967.—Ordered to be printed

MR. RUSSELL, from the Committee on Armed Services, submitted the following

REPORT

[To accompany S. 666]

The Committee on Armed Services, to which was referred the bill (S. 666) to authorize appropriations during the fiscal year 1968 for procurement of aircraft, missiles, naval vessels, and tracked combat vehicles, and research, development, test, and evaluation for the Armed Forces, and for other purposes, having considered the same, reports favorably thereon with an amendment and recommends that the bill as amended do pass.

PURPOSE

This bill would (1) authorize appropriations for two of the important military functions of the Department of Defense in fiscal year 1968, and (2) authorize a limited merger of military assistance financing for South Vietnam, Laos, and Thailand with the funding of military functions and military construction functions of the Department of Defense.

The functions for which appropriations would be authorized are (1) major procurement, and (2) research, development, test, and evaluation.

The total of the appropriations the bill proposes to authorize is $20,765,332,000. Of this amount $13,484,700,000 is for procurement of aircraft, missiles, naval vessels, and tracked combat vehicles, and $7,280,632,000 is for research, development, test, and evaluation.

65-010—67——1

RELATIONSHIP OF AUTHORIZATION TO DEPARTMENT OF DEFENSE APPROPRIATIONS

In fiscal year 1968 the Department of Defense proposes programs that require $76,429,407,000 in total obligational authority. Funding expected to be available through financial adjustments to current programs reduces the new obligational authority needed to $75,270,000,000. Defense expenditures in 1968 are expected to be $73,100,000,000. In comparison, fiscal year 1967 expenditures are estimated to be $68 billion if its total new obligational authority of $72.8 billion, some of which is now being considered by the Congress, is approved.

Not all the appropriations to the Department of Defense require annual authorization. Appropriations for military personnel, operations and maintenance, and a part of procurement are made on the basis of continuing authorizations. Section 412(b) of Public Law 86–149, as amended by Public Law 87–436, Public Law 88–174, and Public Law 89–37 require annual authorization of appropriations for (1) procurement of aircraft, missiles, naval vessels, and tracked combat vehicles, and (2) research, development, test, and evaluation. This bill would provide authorization to support appropriations for these functions.

This relationship and other comparisons are shown in the table as follows:

DEPARTMENT OF DEFENSE, 1968

[In thousands]

	Total 1967 regular and supplemental	Fiscal year 1968 regular estimate	1968 authorization required
Military personnel:			
Military personnel, Army	$6,893,400	$7,870,000	
Military personnel, Navy	3,950,600	4,065,000	
Military personnel, Marine Corps	1,265,900	1,402,000	
Military personnel, Air Force	5,525,800	5,694,000	
Reserve personnel, Army	309,311	297,200	
Reserve personnel, Navy	113,400	116,100	
Reserve personnel, Marine Corps	37,300	38,300	
Reserve personnel, Air Force	70,800	67,700	
National Guard personnel, Army	370,333	345,000	
National Guard personnel, Air Force	84,200	85,700	
Retired pay, Defense	1,814,000	2,020,000	
Proposed legislation		24,000	
Total, military personnel	20,435,044	22,001,000	
Operation and maintenance:			
Operation and maintenance, Army	7,183,427	7,103,000	
Operation and maintenance, Navy	4,671,003	4,706,000	
Operation and maintenance, Marine Corps	424,600	395,000	
Operation and maintenance, Air Force	5,537,100	5,412,000	
Operation and maintenance, Defense agencies	912,600	966,000	
Operation and maintenance, Army National Guard	231,000	241,000	
Operation and maintenance, Air National Guard	254,700	266,970	
National Board for the Promotion of Rifle Practice, Army	404	428	
Claims, Defense	34,000	30,000	
Contingencies, Defense	15,000	15,000	
Court of Military Appeals	600	602	
Proposed legislation		18,000	
Total, operation and maintenance	19,264,821	19,136,000	

[In thousands]

	Total 1967 regular and supplemental	Fiscal year 1968 regular estimate	1968 authorization required
Procurement:			
Procurement of equipment and missiles, Army	$5,613,300	$5,581,000	$1,962,000
Procurement of aircraft and missiles, Navy	3,541,900	3,046,000	3,046,000
Shipbuilding and conversion, Navy	1,756,700	1,824,000	1,824,000
Other procurement, Navy	2,255,300	2,359,000	
Procurement, Marine Corps	515,900	665,000	28,200
Aircraft procurement, Air Force	5,320,300	5,582,000	5,582,000
Missile procurement, Air Force	1,234,500	1,343,000	1,343,000
Other procurement, Air Force	2,658,600	2,477,000	
Procurement, Defense agencies	51,300	40,000	
Total, procurement	22,947,800	22,917,000	13,785,800
Research, development, test, and evaluation:			
Research, development, test, and evaluation, Army	1,568,700	1,539,000	[1] 1,539,000
Research, development, test, and evaluation, Navy	1,798,600	1,858,000	[2] 1,864,118
Research, development, test, and evaluation, Air Force	3,145,600	3,287,000	3,288,514
Research, development, test, and evaluation, Defense agencies	481,059	464,000	464,000
Emergency fund, Defense	125,000	125,000	125,000
Total, research, development, test, and evaluation	7,118,959	7,273,000	7,280,632
Special foreign currency program	7,348	16,000	
Revolving funds:			
Army stock fund	351,000	60,000	
Navy stock fund	77,000		
Marine Corps stock fund		4,000	
Air Force industrial fund		44,000	
Defense stock fund	107,000	133,000	
Total, revolving funds	535,000	241,000	
Total, military personnel, operation and maintenance, procurement, R.D.T. & E., revolving funds, and foreign currency program	70,308,972	71,584,000	
Military construction:			
Military construction, Army	402,514	592,000	592,000
Military construction, Navy	266,918	651,000	651,000
Military construction, Air Force	401,495	618,000	618,000
Military construction, Defense agencies	7,547	240,000	240,000
Military construction, Army Reserve			
Military construction, Naval Reserve	5,400	5,000	5,000
Military construction, Air Force Reserve	3,600	3,900	3,900
Military construction, Army National Guard			
Military construction, Air National Guard	9,400	9,500	9,500
Loran stations, Defense		3,600	3,600
Transfer from southeast Asia fund			
Total, military construction	1,096,874	2,123,000	2,123,000
Family housing	507,196	787,000	787,000
Homeowner's assistance	11,000	27,000	27,000
Total family housing, Defense	518,196	814,000	814,000
Civil defense:			
Operation and maintenance, civil defense	66,100	73,100	
Shelter, construction and research, and development	35,000	37,900	
Construction of facilities, civil defense			
Total, civil defense	101,100	111,000	
Total, military functions	72,025,142	74,632,000	
Military assistance	792,000	596,000	596,000
Total, Department of Defense	72,817,142	[3] 75,228,000	24,599,432
Estimated expenditures, Department of Defense	67,950,000	73,100,000	

[1] Includes $6,118,000 for the special foreign currency program included under a separate appropriation heading.

[2] Includes $1,514,000 for the special foreign currency program included under a separate appropriation heading.

[3] Does not include $42 million for legislation that is yet to be transmitted.

For the functions covered by this bill the following tabulations compare the authorizations and appropriations in fiscal year 1967, the authorization requested by the Department of Defense in fiscal year 1968, and the authorization recommended by the committee.

[Dollars in thousands]

	Authorized,[1] fiscal year 1967	Appropriated[2] fiscal year 1967	Requested, fiscal year 1968	As reported by committee
Procurement:				
Aircraft:				
Army	$1,145,500	$1,145,500	$768,700	$768,700
Navy and Marine Corps	3,137,500	3,125,500	2,420,400	2,420,400
Air Force	5,344,300	5,320,300	5,582,000	5,582,000
Missiles:				
Army	516,100	516,100	769,200	769,200
Navy	416,400	416,400	625,600	625,600
Marine Corps	19,800	19,800	23,100	23,100
Air Force	1,234,500	1,234,500	1,343,000	1,343,000
Naval vessels: Navy	1,901,800	1,756,700	1,824,000	1,522,900
Tracked combat vehicles:				
Army	421,400	421,400	424,700	424,700
Marine Corps	7,900	7,900	5,100	5,100
Total	14,145,200	13,964,100	13,785,800	13,484,700
Research, development, test, and evaluation:				
Army	1,579,500	1,568,700	1,539,000	1,539,000
Navy (including the Marine Corps)	1,841,100	1,798,600	[5] 1,864,118	1,864,118
Air Force	3,151,600	3,145,600	[6] 3,288,514	3,288,514
Defense agencies	481,059	481,059	464,000	464,000
Emergency fund	125,000	125,000	125,000	125,000
Total	[3] 7,178,259	[4] 7,118,959	[7] 7,280,632	7,280,632
Grand total	21,323,459	21,083,059	21,066,432	20,765,332

[1] Include $3,707,700,000 requested in fiscal year 1967 supplemental authorization request.
[2] Same as [1] above, except use "budget" in lieu of "authorization."
[3] Includes $135,000,000 in fiscal year 1967 supplemental authorization request.
[4] Includes $135,000,000 in fiscal year 1967 supplemental budget request.
[5] Includes $6,118,000 for the special foreign currency program included under a separate appropriation heading.
[6] Includes $1,514,000 for the special foreign currency program included under a separate appropriation heading.
[7] Includes $7,632,000, the total of [5] and [6] above.

COMMITTEE ACTION AND VIEWS

ABM

Last year the committee took the initiative in providing the first authorization of appropriations for pre-production activities directed toward the deployment of an antiballistic missile defense system. $167.9 million was added to the 1967 authorization bill for that purpose. None of the appropriations made against this authorization have been used.

In fiscal year 1968 the Department of Defense appropriations request includes $377 million, of which $291 million is in this authorization, as contingent funding for the initiation of procurement for an antiballistic missile system, with one possibility being the protection of MINUTEMAN missile sites if the negotiations with the Soviet Union on banning deployment of an antiballistic missile system are unsuccessful. The committee understands that for a total cost of slightly more than $4 billion, spread over fiscal years 1967 through 1973, the United States could deploy a so-called "thin" antiballistic missile system that would afford significant protection for the entire United States against a relatively light unsophisticated ballistic missile attack. Against an attack of the type that might occur accidentally, or from Communist China, or that might be threatened

as a form of blackmail, such a system probably could preclude damage during the 1970's almost entirely. Furthermore, this investment would provide a more concentrated defense, using the SPRINT missile, for several of the MINUTEMAN missile squadrons. Such a system could be expanded to include a terminal, concentrated defense for about 25 cities at a total procurement cost of between $9 billion and $10 billion, or to provide the same concentrated protection for about 50 cities at a total procurement cost of between $19 billion and $20 billion.

As is true for the "thin" deployment, the funding for either of these expansions would occur over a period of 6 or 7 years. The first year's cost under any of the three deployments mentioned could be funded from the $167.9 million approved last year, plus the $377 million included in the 1968 program.

The committee hopes negotiations with the Soviet Union on antiballistic missile deployments will result in an agreement that fully protects the security interests of the United States. The committee considers that it would be unwise to permit these negotiations to be extended interminably, however, and if such an agreement cannot be concluded within a reasonable period, the committee strongly believes the United States should begin procurement for deployment of an antiballistic missile defense system. The Committee is aware that an agreement with the Soviet Union not to deploy an ABM system could leave us unprotected against the threat posed by a Chinese Communist attack, an accidental firing, or both. In the view of the committee our negotiations with the Soviet Union should include consideration of the desirability of our deploying a "thin" ABM defense against such threats, or those that might be posed by future nuclear powers.

FDL's

The committee recommends a reduction in the authorization of appropriations for the construction of naval vessels in the amount of $301.1 million. This action reflects the committee's decision to disapprove the construction of a new class of fast deployment logistics ships.

The Department of Defense proposed the procurement over a period of several years of as many as 30 of these ships, which would be deployed throughout the world with heavy combat equipment embarked to facilitate a prompt reaction whenever and wherever there was a decision to commit U.S. forces abroad. In concept, our ground forces would be flown to the trouble spot and the heavy equipment would already be there. The ships would be procured from a single contractor over a period of several years by using the total package procurement technique. The estimated cost of procuring 30 of these ships is more than $1 billion and the cost of operating them over their useful life is approximately $1 billion.

The committee is unconvinced that a program of such cost is justifiable. The ships would be constantly deployed in forward areas. Near a combat zone it would be necessary to provide antisubmarine escorts or antiaircraft protection, or both, for the vessels, thus increasing the costs of the system. Beyond the cost, the committee is concerned about the possible creation of an impression that the United States has assumed the function of policing the world and that it can be thought to be at least considering intervention in any kind of strife

or commotion occurring in any of the nations of the world. Moreover, if our involvement in foreign conflicts can be made quicker and easier, there is the temptation to intervene in many situations.

In those locations where the United States is by treaty or other commitment obligated to resist aggression, there are other possibilities for providing the heavy equipment needed by our ground forces. In some of these locations, such as Western Europe, the heavy equipment is pre-positioned on land. The Committee was informed that the C–5A, a new large jet transport now under development, will be capable of carrying 98 percent of the heavy bulky equipment ground forces require for maximum combat effectiveness.

In the shipbuilding program for fiscal year 1966 the Department of Defense sought authorization for the construction of four of these ships. At that time the Committee recommended, and the Congress approved, a reduction of the authorization to two ships and indicated in its report (S. Rept. No. 144, 89th Cong., first sess.) the Committee's doubts about the justification for constructing large numbers of ships that would be limited to the pre-position role. The authorization and appropriations for the two ships in the fiscal year 1966 program have not been used. The Department proposed this year to combine the 1966 funding with the additional amount needed to procure seven of the ships initially. The amount requested for authorization was $233,500,000, of which $55.5 million was intended as a contingent contract cancellation payment if more FDL's were not approved for procurement in future years.

The committee recommends $67.6 million of the unobligated funds for the FDL's in the 1966 program be applied to the construction of other vessels in the 1968 program. Consequently, a reduction of $301.1 million in the Navy's shipbuilding authorization has been made.

PROCUREMENT

AIRCRAFT

ARMY

The authorization of appropriations for the procurement of Army aircraft is $768,700,000. Appropriations based on this authorization would permit the procurement of 1,479 aircraft.

The aircraft types to be procured are listed below. The Army aircraft authorization includes funding for several costs in addition to the cost of the aircraft. Some of these costs are the modification of aircraft already in service, spare parts, support equipment, facilities, and transportation.

Designation:	*Popular name*
CH–47A	CHINOOK.
UH–1B/D	IROQUOIS.
AG–1G	COBRA.
OH–6A	CAYUSE.
CH–54A	FLYING CRANE.
AH–56	AAFSS.
OV–1	MOHAWK.

CH–47A (CHINOOK)

This transport helicopter has a 3-ton lift capacity. It is being extensively used in Vietnam to lift troops, supplies, and weapons. In

addition to this use it can carry internally the solid propellant missiles of the Army.

UH–1B/D (IROQUOIS)

This utility transport helicopter has been procured in large numbers and is extensively used in Vietnam. It provides tactical mobility for combat troops and supplies and is used to evacuate casualties from the battlefield.

AG–1G (COBRA)

This is an armed version of the IROQUOIS that is being used to escort troop-carrying helicopters.

OH–6A (CAYUSE)

This is a light observation helicopter that can carry 650 pounds of cargo or three passengers, in addition to the pilot. Its primary missions are observation, target acquisition, reconnaissance, and command control.

CH–54A (FLYING CRANE)

This is a heavy-lift helicopter powered by twin turbines that is used to carry very heavy or bulky cargo over difficult terrain.

AH–56 (AAFSS)

This is an armed helicopter now under development that will have the speed and the firepower to function effectively in escorting troop carrying helicopters. When produced it will replace the COBRA. The procurement authorization is intended for the ordering of components that require a long time to produce.

OV–1 (MOHAWK)

This is a fixed-wing aircraft that is used for observation, day and night photography, and electronic surveillance. It can operate from short and unimproved runways. It has proved valuable in Vietnam.

NAVY

The authorization of appropriations for the procurement of Navy and Marine Corps aircraft is $2,420,400,000. The fiscal year 1968 program for the procurement of 680 aircraft requires $2,560,400,000 in new obligational authority, but the Department of the Navy has available funding in the amount of $140 million to apply against this requirement.

In addition to the procurement of the aircraft types that are described below, the Navy aircraft authorization is intended to permit appropriations for the purchase of spares and repair parts, the modification of operating aircraft to make them safer and more effective in performing their missions, the procurement of components in next year's program that require a long time to produce, and the purchase of other supporting equipment and facilities that are not identified with a specific aircraft model.

Designations of the aircraft types to be procured and the popular names of the types are listed below.

Designation:	*Popular name*
RA–5C	VIGILANTE.
A–6A	INTRUDER.
EA–6B	INTRUDER.
A–7B	CORSAIR II.
F–4J	PHANTOM II.
F–111B	----------
OV–10A	----------
CH–46D	SEA KNIGHT.
CH–53A	SEA STALLION.
P–3C	ORION.
T–37B	----------
LTH	----------
LC–130R	----------

Many of these types have been authorized and appropriated for in earlier years, but a brief description of each type in the 1968 program appears below.

RA–5C (VIGILANTE).

This long-range tactical reconnaissance aircraft that is flown from carriers will be bought in the next year for the first time since fiscal year 1963. The aircraft of this type tbat are now in use are proving to be effective in gathering information needed in tactical decisions.

A–6A (INTRUDER)

This type is now being used effectively by both Navy and Marine Corps squadrons in southeast Asia. It can attack targets accurately at low level and in all kinds of weather. The production rate on this aircraft has been increased recently.

EA–6B (INTRUDER)

This aircraft, which uses the basis airframe of the A–6A, will be used for electronic countermeasures. It is designed to have significant improvements over existing types that do this work.

A–7B (CORSAIR II)

This is an attack aircraft, used for close air support, that will be deployed to the Pacific late this year. Its fuel capacity will permit it to carry a large load of bombs on long-range missions without inflight refueling. It is designed to be highly reliable in operations with only a minimum of maintenance.

F–4J (PHANTOM II)

The F–4 is the firstline fighter of the Navy, the Marine Corps, and the Air Force. It has replaced the F–8 on all the larger attack carriers and is replacing the F–8 in the Marine air wings. Improvements in the J model include a better fire control system and more powerful engines.

F–111B

The first quantity production of this carrier-based, supersonic, all-weather fighter is proposed in this year's program. Four aircraft for testing were approved in fiscal year 1966 and funding for pilot production of its missile control system was approved last year.

Tests in calendar year 1967 will determine whether the weight of this aircraft has been reduced sufficiently and whether its performance will be suitable for carrier operations.

OV–10A

This aircraft was developed to meet a Marine Corps requirement for a light armed reconnaissance aircraft. Other uses are as a helicopter escort and for close air support. Design changes in the past year have increased the wingspan and engine power to improve stability and performance.

CH–46D (SEA KNIGHT)

One of two types of combat assault helicopters being procured for the Marine Corps, the CH–46D operates from carriers or from land. It is used to lift both troops and cargo and to evacuate wounded. Improvements resulting from combat experience in South Vietnam will be incorporated in the new versions.

CH–53A (SEA STALLION)

A heavy assault helicopter, the CH–53A can lift twice the load of the CH–46. It lifts heavy support equipment, armament, and supplies for amphibious assault operations. It has recently been deployed to southeast Asia.

P–3C (ORION)

An antisubmarine warfare type, the P–3C will also be capable of ship surveillance and mining in the day and at night and in all kinds of weather. The new series of this patrol aircraft will have a new kind of antisubmarine warfare avionics system called A–NEW, which uses a computer and a data processing system to manage the sensors, aircraft armament, communications, and navigation equipment.

T–37B

This is now the primary jet trainer for the Air Force. The Navy will use it for the first jet training of student aviators. For training in carrier operations and for weapons training, the Navy will continue to use the basic carrier jet trainer, the T–2B.

LTH

This is the designation assigned to a light training helicopter that will be bought for primary helicopter training. The model to be procured will be selected from three light turbine-powered helicopters that have already been approved by the Federal Aviation Administration.

LC–130R

This is a version of the C–130 equipped with skis that will be bought to replace obsolescent LC–47 and LC–117 aircraft now used for Operation DEEPFREEZE. The better performance characteristics of the LC–130 will make flights safer and more effective.

AIR FORCE

The authorization of appropriations for the procurement of Air Force aircraft is $5,582 million. The aircraft procurement program of the Air Force involves 1,262 aircraft, requiring obligational authority of $6,205 million. Available funding in the amount of $623 million reduces the new obligational authority needed for fiscal year 1968 to $5,582 million.

Appropriations based on the authorization contained in this bill would be used to finance a variety of expenses related to aircraft procurement. Examples of these costs that are in addition to the cost of procuring the aircraft are modifications, spares and repair parts, ground equipment, component improvement, industrial facilities to accelerate production, items expended on combat missions. (auxiliary fuel tanks, pylons, and ejector racks), and other charges.

Some of the aircraft types to be procured by the Air Force are for South Vietnamese forces. The UH–1D, the A–37B and the U–17A are types that will be procured for South Vietnam.

A listing of the aircraft to be procured follows:

FB–111A	O–2A	T–38A
A–7D	A–37B	T–41A
F–4E	OV–10A	UH–1D
F–5A	C–5A	CH–3E
F–111A	CX–2	HH–53B
RF–4C	T–37B	U–17A

Each of the aircraft to be procured by the Air Force is described briefly below.

FB–111A

This is a strategic bomber version of the F–111 on which development was begun in February of 1966 to replace B–52 aircraft of series C through F. It is designed to deliver nuclear weapons, short range attack missiles (SRAM), or conventional bombs. The first flight of the prototype is scheduled for the middle of this calendar year.

A–7D

This is a relatively inexpensive, subsonic, attack aircraft that has good range, large ordnance-carrying capability, long-loiter time, and good close ground support features. It is being procured under a program managed by the Navy.

The Air Force version will have a more powerful engine than the Navy's, since it will be required to take off without the assistance of catapults.

F–4E

This is a twin-engine, two-place fighter that will perform close support and interdiction missions for tactical forces. This model has a new engine and an internal M–61 20-millimeter Gatling gun in the nose of the aircraft. Fighters armed only with air-to-air missiles are often too close to targets to attack after positive identification is made and the gun on this model will permit air-to-air attacks at close range.

F–5A

This type is a lightweight, twin-engine supersonic fighter that will be procured for military assistance purposes.

F–111A

This model of the aircraft, which is being procured in many different versions for many different purposes, is an advanced tactical fighter that is designed to operate effectively under all weather conditions. The testing is proceeding and the committee was informed that many of the test results are excellent.

RF–4C

This is a reconnaissance version of the F–4. It is now being used effectively in southeast Asia in collecting intelligence under all weather conditions, day and night.

O–2A

This aircraft is being procured to satisfy greatly increased requirements for forward air controller in southeast Asia. It has superior characteristics to the O–1 that is now being used for this purpose.

A–37B

This is a tactical version of the T–37B trainer. It is different from the trainer model in that it has larger engines, pylons for bombs or fuel tanks, wingtip tanks, a nose gun, a longe range, and a takeoff weight almost twice that of the T–37B.

OV–10A

This is a rugged two-place twin-engine aircraft with short takeoff and landing characteristics that will be used by the Air Force in a forward air controller role in southeast Asia.

The Marine Corps is also procuring a version of this aircraft.

C–5A

This is a very large jet transport now being developed to carry about 98 percent of the heavy bulky equipment that the ground forces require for maximum combat effectiveness. On a basic mission it will be capable of transporting 220,000 pounds a distance of 3,000 nautical miles at high subsonic speeds. The first two squadrons are scheduled to become operational in fiscal year 1970.

CX–2

This will be a medium-sized jet transport equipped to perform aeromedical evacuation within the United States. The first procurement funds were included in the fiscal year 1967 program. Several manufacturers of medium-sized commercial jet transports will compete for the contract award.

T–78B

This is a two-place, twin-jet, subsonic trainer that is used for the second phase of pilot training. An increased pilot training requirement has created a need for more of these trainers.

T–38A

This is also a two-place, twin-jet, supersonic trainer that is used in the advanced phase of pilot training. Its procurement is increased to support a larger pilot production.

T–41A

This is a lightweight, reciprocating engine trainer procured off the sbelf for the primary stage of pilot training.

UH–1D

This is a model of tbe UH1 helicopter that has been procured in large numbers by the Army. The Air Force will buy it to support South Vietnam.

CH–3E

This helicopter is used for logistics support and for other missions to areas that are inaccessible by other forms of transportation. It is proving useful in South Vietnam.

HH–53B

This helicopter will be procured as a replacement for the HH–3E combat recovery helicopter. Recovery helicopters rescued 374 persons from hostile areas in southeast Asia during 1966. The HH–53B is larger, faster, and more powerful than the HH–3E that is now performing similar recovery missions. The new helicopter has an aerial refueling system and a personnel hoist that can lift as many as three people simultaneously from dense jungle areas

U–17A

A light, six-place, utility aircraft that can perform several missions, including the transportation of persons and cargo and ambulance service. It can be procured off the shelf.

Missiles

ARMY

The authorization of appropriations for the procurement of Army missiles is $769,200,000. This authorization would support appropriations to cover not only the cost of procuring the missiles, but costs of modifications, spare parts, training kits, production base support, and first destination transportation.

The missile systems in this authorization are listed below:

CHAPARRAL	TOW
REDEYE	PERSHING
HAWK	SERGEANT
NIKE X	SHILLELAGH
HONEST JOHN	LANCE

Each of these systems is referred to briefly below.

CHAPARRAL

This is the adaptation of the SIDEWINDER missile to a self-propelled cargo carrier that has the mission of providing a part of an interim, highly mobile, low altitude defense against aircraft attacking at low levels in the forward battle area. The missile is a supersonic, passive-homing one, with an infrared sensor that enables it to lock on its target.

REDEYE

A surface-to-air missile carried by the individual soldier, REDEYE is fired from the shoulder against low-flying aircraft. It is designed to be effective for the close-in air defense of combat units.

HAWK

This is an antiaircraft system that is now deployed worldwide with our forces. It provides the field Army with a defense against low and medium altitude supersonic enemy aircraft. It reenforces the low altitude capability of CHAPARRAL and REDEYE and provides air defense for our strategic strike forces. The authorization in this bill would be used to increase the mobility of a part of the units now

deployed and for improvements to increase the effectiveness of the system.

NIKE

An antiballistic missile system that has evolved through development effort since 1956, the current NIKE X concept combines the long-range intercept missile SPARTAN, the terminal intercept missile SPRINT, and varying arrangements of search and tracking radars to permit a wide choice of deployment plans.

The sum of $269 million of missile procurement authorization is included in this bill for tooling and for components having a long leadtime if a decision is made to deploy an antiballistic missile system.

HONEST JOHN

This is a surface-to-surface, free-flight rocket that has been operational for several years. It is more mobile than conventional artillery.

The small funding in 1968 is to provide dummy warheads and telemetry to support the joint Army-AEC stockpile reliability program.

TOW

A new antitank missile to be used by infantry, mechanized infantry, and airborne battalions, TOW is tube launched, optically tracked, and wire guided. It can be mounted on a vehicle or carried by hand. Ultimately it will replace ENTAC, the 106-millimeter recoilless rifle, and perhaps the SS–11 antitank weapons.

PERSHING

This surface-to-surface ballistic missile that has been operational for several years has a range of from 100 to 400 nautical miles and a two-stage solid propellant rocket engine. It can be carried by the CARIBOU aircraft and the CHINOOK helicopter.

The authorization in this bill would be used for range support, telemetry, procurement of missiles, and improvements to the system.

SERGEANT

This is a mobile, second generation, surface-to-surface ballistic missile that uses inertial guidance and a solid propellant engine. The small amount of authorization for this system in 1968 is for telemetry and dummy warheads to support the joint Army-AEC stockpile reliability program.

SHILLELAGH

This antitank weapon system is a combination gun and launcher that can be mounted on tanks and reconnaissance vehicles. It will be used on the main battle tank that the United States is developing jointly with the Federal Republic of Germany.

LANCE

This is a lightweight, mobile, surface-to-surface missile that will provide greater fire support for divisions. A replacement for HONEST JOHN, it uses a modified M–113 personnel carrier as both a transporter and a launcher.

A part of the Army missile authorization is for the procurement of the land combat support system, which is a mobile electronic system for testing and repairing components of several Army missile systems.

The Army will also procure a variety of target missiles and drones for training and practice.

NAVY

The bill would authorize appropriations for the procurement of missiles for the Navy and the Marine Corps in the amount of $625,600,000. The Marine Corps missiles that are included in this authorization are only the air-launched type.

Appropriations based on this authorization would fund, in addition to the specific missiles that will be listed below, the modification of missiles already procured in order to improve their reliability and performance, the purchase of spares and repair parts for missiles, the procurement of satellites and boosters in support of the Navy's astronautics program, the financing of industrial production, and the testing of machinery and equipment.

A listing of the missile programs requiring funding with this authorization follows.

POLARIS/POSEIDON
SPARROW III
SIDEWINDER I-C
PHOENIX
SHRIKE/STANDARD ARM
STANDARD MISSILE-MEDIUM RANGE
STANDARD MISSILE-EXTENDED RANGE
TALOS
SUBROC
AERIAL TARGETS

Each of the systems listed above is described briefly below.

POLARIS/POSEIDON

By September of 1967 the last two submarines of the planned 41-ship POLARIS force will become operational. The decision to deploy the POSEIDON missile in 1970 has resulted in a schedule of retrofitting many of these submarines to accommodate this new strategic missile that is designed to be several times as effective as the POLARIS.

The decision to deploy POSEIDON reduced the inventory objectives for the POLARIS A-3 missile and no further procurement of it is planned. The authorization in this bill for these two missiles will be used to provide continuing support and improvement of existing POLARIS missiles and to procure long leadtime components, tools, and test equipment to permit the start of POSEIDON missile production in fiscal year 1969.

SPARROW

This missile provides the F-4 aircraft with an all-weather air superiority capability. The 1968 purchase will be of the 7-F model, which should have better performance characteristics and a higher kill probability. The SPARROW has been credited with destroying eight MIG aircraft over North Vietnam.

SIDEWINDER

The other primary air-to-air weapon that is used by the Navy, the Marines, and the Air Force, the SIDEWINDER has accounted for the destruction of more than 20 Mig aircraft over North Vietnam. The 9-D, the model to be bought in 1968, has been improved to increase the range and altitude at which it is effective.

PHOENIX

This missile is intended for use with the Airborne Missile Control System in the F-111B aircraft. It is designed to have a range greatly exceeding that of any air-to-air missile in use today. The 1968 funds are for the first production quantity.

SHRIKE/STANDARD ARM

SHRIKE is the antiradiation missile now operational in southeast Asia with Navy and Air Force air units. Its purpose is to destroy enemy radar installations. STANDARD ARM is the designation of the second generation of this missile that is now being developed under Navy contract. The precise mix of the two missiles to be bought with 1968 funds would depend on the progress of this development.

STANDARD

These missiles are being procured to replace TARTAR and TERRIER missiles. The medium range model will replace TARTAR as the antiaircraft armament aboard guided missile cruisers and destroyers. The extended range version will replace TERRIER aboard carriers, cruisers, and missile frigates. With minor changes to shipboard equipment, both versions are compatible with the weapons control systems of the ships on which they will be used.

TALOS

This is the largest of the ship-launched missiles. It defends the fleet against high performance aircraft and has a secondary mission of shore bombardment. The 1968 funding will complete the existing procurement program.

SUBROC

This is a missile that will deliver a nuclear depth bomb from a submerged submarine to destroy high performance submarines of an enemy. A substantial number of our submarines will be equipped with this missile in 1968.

AERIAL TARGETS

A variety of aerial targets will be procured to provide realistic training and to use in evaluating the performance of our missile.

MARINE CORPS

The bill provides $23,100,000 in fund authorization for Marine Corps missile procurement.

Of this amount, $17 million is to complete the procurement objective for the REDEYE missile, the surface-to-air missile that is fired from the shoulder against low-flying aircraft.

The rest of the authorization is divided nearly equally between spare parts for missiles and the procurement of components and modifications for the HAWK and REDEYE missile systems that the Marine Corps has already procured.

AIR FORCE

The bill would authorize appropriations for the procurement of Air Force missiles in the amount of $1,343 million. The total Air Force missile procurement program requires funding of $1,414.7 million, but

available funding and recoupments totaling $71.7 million reduce the net authorization required.

Appropriations based on this authorization would be used for a variety of costs other than the cost of purchasing missiles. Examples of these associated costs are modifications, missile spares and repair parts, support equipment, facilities, and other charges.

The missile systems in the 1968 program are listed below:

MINUTEMAN II/III
SHRIKE
SPARROW

Each of these systems is referred to briefly below:

MINUTEMAN II/III

The MINUTEMAN I program with 800 missiles at 5 wings has now been completed. Last year plans called for a MINUTEMAN force that ultimately would have consisted of a combination of 1,000 MINUTEMAN II's and MINUTEMAN III's, with all the MINUTEMAN I's being phased out. To increase the capability of this force against an antiballistic missile defense, the 1968 proposal is to increase the proportion of MINUTEMAN III's in the force and to equip them with a new improved third stage that will increase the payload of each missile. The schedule for reequiping the MINUTEMAN II's with an improved reentry vehicle has been speeded up.

SHRIKE

This is a defense suppression weapon that uses a radar sensor to locate and to home on enemy ground radars. Although it is procured by the Navy, the SHRIKE is being used on the Air Force F–105 and will be used on the F–4.

SPARROW

This air-to-air missile that is procured by the Navy is used on the Air Force F–4 aircraft. It has a semiactive radar guidance system.

The Air Force will procure target drones to simulate both subsonic and supersonic enemy aircraft for use in training.

NAVAL VESSELS

The committee recommends authorization of appropriations for the construction of naval vessels in the amount of $1,522,900,000. The program approved by the committee involves the construction of 29 new ships and the reconversion or modernization of 21 other vessels. The Navy Department will apply $122.4 million of funding available from programs of earlier years against the total obligational authority required for 1968.

A brief description of the vessels in the 1968 shipbuilding and conversion program appears below.

New construction

Three nuclear-powered attack submarines (SS(N))

Two of these attack submarines are the same as the ships authorized in the fiscal year 1967 program. Their unit cost is $71.6 million. The third will be a prototype with an electric drive instead of the conventional steam turbine drive. The Navy hopes to achieve a reduction

in the noise level of submarines by using electric drive. The cost of the electric drive submarine is $100.8 million.

The mission of this type ship is to locate and to destroy other ships, particularly submarines.

Two guided missile destroyers (DDG)

These ships are a new and improved class. They are larger than the last DDG that was authorized in 1961. The new propulsion plant will use gas turbines. The naval tactical data system and a long-range, three-dimensional radar will be installed. A TARTAR missile system will fire the middle range standard missile. Weapons for antisubmarine warfare include ASROC and improved torpedoes. These ships will have two lightweight 5-inch/54 gun mounts.

The cost of the lead ship is $99.7 million and the second ship is estimated to cost $66.9 million, for a total of $166.6 million for the two.

The missions of the DDG's are to operate with offensive strike forces and with hunter-killer groups, to support amphibious assault operations, and to screen support forces and convoys against submarines and air and surface threats.

Ten escorts (DE)

These ships are of the same design as those in last year's bill. The design incorporates a long-range, active, bow-mounted sonar. The ships are equipped with ASROC, torpedoes, one 5-inch/54-caliber gun, and they have facilities for a drone antisubmarine helicopter.

The unit cost of these ships is $29.8 million and the total cost of the 10 is estimated to be $298 million.

The mission of the destroyer escorts is to operate offensively against submarines and to screen support forces and convoys.

One multipurpose amphibious assault ship (LHA)

This is to be a new type of ship for amphibious warfare. Its characteristics have not been finally determined. The mission will be to transport and land troops and their combat equipment and supplies by helicopters, amphibious craft, and amphibian vehicles that are embarked on the ship.

The Navy needs a bigger assault ship that can land a much larger and more balanced land force than is possible now with any existing vessel. On the basis of preliminary design work, the LHA would displace about 40,000 tons and would have both a boat well and a helicopter deck. It would be able to carry as many troops and helicopters as the LPH, as much cargo as the existing AKA, and as many landing craft as the LSD.

The Navy proposes to procure this ship through the use of the so-called total package procurement technique used for the C–5A aircraft.

The authorization of $137 million includes $123 million for the first ship plus contingent cancellation charges if additional ships are not ordered.

Seven ocean minesweepers (MSO)

These ships are similar to those newly designed in the fiscal year 1966 program. They are equipped with the best minesweeping and minehunting equipment available. Displacement is approximately 1,010 tons.

Each ship will cost about $8.7 million and the total cost is estimated to be $60.7 million.

The mission of these ships, of course, is to sweep sea mines and to locate and to neutralize sea mines.

One fast combat support ship (OAE)

This would the fifth of a new class of multipurpose, one-stop replenishment ships. It can resupply ships of an attack carrier strike force with fuel oil, aircraft fuel, aircraft and surface ordnance, refrigerated cargo, and nonrefrigerated stores. Hangar space is provided to accomodate three transport helicopters. Ships of this class are capable of a sustained speed of 26 knots. The first AOE, the U.S.S. *Sacramento*, was commissioned in 1964 and has proved its value and versatility in the waters of southeast Asia. The cost of this ship is $71.5 million.

Two ammunition ships (AE)

These would be the seventh and eighth of a new class of ammunition ships, the first of which will be commissioned in November 1967. Its holds are specially designed for loading missiles and for high-volume low-density ammunition. The ship can transfer simultaneously to two ships alongside. It will have modern facilities for transfer at sea, including helicopters and the fast automatic shuttle transfer system. Each ship will cost about $32.7 million and the authorization for the two is $65.4 million.

Two oceanographic research ships (AGOR)

These ships will be of the same class as those from the fiscal year 1966 program. Their design provides a high degree of maneuverability at slow speeds and a positive means of controlling the heading of the ship when it is dead in the water. It has space for oceanographic laboratories, drafting rooms, photographic laboratories, and a chart and scientific instrument room. There will be accommodations for 25 scientists. The mission is to conduct oceanographic research for ultimate application in naval warfare. These ships will cost $7 million each and the authorization for the two is $14 million.

One submarine rescue vessel (ASR)

The mission of this ship is to rescue persons entrapped in a submarine. The ASR in the 1968 program is the second ship of a new class first authorized last year. The catamaran design is intended to give greater stability in the operation of the deep salvage vessels. In addition to its submarine salvage function, this ship provides facilities for mobile search and rescue missions and for various diving and salvage services. The estimated cost is $17.7 million.

Service and landing craft

Forty million eight hundred thousand dollars is included in the shipbuilding authorization for the procurement of 108 service and landing craft of various types. Many of the Navy's small craft were built in World War II and are showing the wear and tear of long and strenuous service. Modern barges and lighters are needed to handle weapons and supplies and to support ships. The landing craft are needed to transport troops and their equipment from amphibious ships.

Conversions and modernization

The 1968 conversion program affects 21 vessels and involves an estimated cost of $443 million. Fund authorization is provided for the conversion or modernization of—

(1) Three fleet ballistic missile submarines to accommodate the new POSEIDON missile system;

(2) One submarine tender to enable this ship to provide mobile repair and logistic support facilities for POSEIDON ballistic missile submarines;

(3) Nine ocean minesweepers that will undergo a rehabilitation and a refurbishing of the electrical and degaussing systems and of all machinery and piping;

(4) One guided missile frigate that will be modernized for antiaircraft warfare through the installation of the Navy Tactical Data System, the SPS–48 three-dimensional radar, and improvements to the missile fire control radars and computers; and

(5) Seven destroyers that will be up-dated in their capability to conduct antisubmarine warfare by installing improved sonar equipment, the antisubmarine rocket (ASROC), and more modern communications and command and control facilities.

Other costs that are included in the authorization of appropriations for Naval vessels are:

(1) $18 million to pay for the contract definition phase of the LHA, the new amphibious assault ship;

(2) $30 million for the contract definition phase of a new class of escort ships now referred to as DX/DXG; and

(3) $50.5 million for the advance procurement of long leadtime components for a nuclear-powered attack carrier expected to be included in the fiscal year 1969 shipbuilding authorization.

Tracked Combat Vehicles

ARMY

The bill would authorize appropriations for the procurement of tracked combat vehicles by the Army in the amount of $424,700,000.

Some of the more important vehicles to be procured are described briefly below:

M113A1 personnel carrier.—A diesel-powered, aluminum-armored, full tracked vehicle that transports 12 troops in addition to the driver. Mobile and amphibious, it affords protection against shell fragments, flash burns, and small arms fire.

M548 cargo carrier.—A lightweight, unarmored, amphibious member of the M113 personnel carrier family that is used for logistic support.

XM163 self-propelled air defense gun.—A six-barrel, 20-millimeter cannon mounted in an open turret on the M113 armored personnel carrier. Along with the CHAPARRAL, this will constitute the interim forward area air defense system for the Army. It can also deliver ground fire against light-armored vehicles and personnel.

XM551 GENERAL SHERIDAN armored reconnaissance and airborne assault vehicle.—An aluminum-armored vehicle with a 152-millimeter gun launcher that can fire conventional ammunition or

the SHILLELAGH missile. Air droppable and amphibious, it has good cross-country mobility and range.

M60A1E2 combat tank.—The new version of the Army's main battle tank that will be equipped with the same 152-millimeter gun tube used on the GENERAL SHERIDAN vehicle.

M60A1 combat tank.—A version of the heavy combat tank that is equipped with a 105-millimeter gun.

Three other tracked combat vehicles in the 1968 program will be mounted on the M113 chassis. These are the self-propelled 81-millimeter mortar, a 107-millimeter mortar carrier, and a command post carrier.

Other combat vehicles to be procured include a light armored recovery vehicle, a transporter for the armored vehicle launched bridge, a combat engine vehicle, and an assortment of trainers.

MARINE CORPS

The $5.1 billion in authorization of appropriations to the Marine Corps for tracked combat vehicles is for the procurement of spares and repair parts and miscellaneous items of equipment to maintain the current inventory of vehicles. No new procurement of vehicles is planned.

RESEARCH, DEVELOPMENT, TEST, AND EVALUATION

[In thousands]

	Authorized, fiscal year [1] 1967	Appropriated, fiscal year [2] 1967	Requested, fiscal year 1968	As reported by committee
Army	1,579,500	1,568,700	1,539,000	1,539,000
Navy (including Marine Corps)	1,841,100	1,798,700	1,864,118	1,864,118
Air Force	3,151,600	3,145,600	3,288,514	3,288,514
Defense agencies	481,059	481,059	464,000	464,000
Emergency fund	125,000	125,000	125,000	125,000
Total	7,178,259	7,118,959	7,280,632	7,280,632

[1] Includes $135,000,000 in fiscal year 1967 supplemental authorization request.
[2] Includes $135,000,000 in fiscal year 1967 supplemental budget request.

Research, development, test, and evaluation programs proposed by the Department of Defense for fiscal year 1968 require total obligational authority of $7,523 million. The new obligational authority, which corresponds to the authorization and appropriations contained in this bill, is $7,280 million. The difference between the two figures is the amount of funding that is available from programs approved in earlier years.

The amount of authorization for research and development requested by the Department of Defense is about $900 million less than the sums requested by the military departments and the Defense agencies.

About $2,400 million of the funding will be applied to systems already approved for deployment. Consequently, the size of the research and development program on weapons and systems of the future if more accurately determined by deducting this amount from the approximately $7,500 million to be spent in fiscal year 1968.

The Department of Defense organizes the research and development effort in five sequential steps: research, exploratory development, ad-

vanced development, engineering development, and operational systems development. Appropriations for research and development, however, are made by eight budget categories: military sciences; aircraft and related equipment; missiles and related equipment; military astronautics and related equipment; ships, small craft, and related equipment; ordnance combat vehicles and related equipment; other equipment; and program management and support. Within budget activities the research and development work can range all the way from research through all the intermediate steps to operational systems development.

1. Military sciences:

Army	$165,400,000
Navy	192,000,000
Air Force	156,000,000
Defense agencies	97,000,000

This budget activity funds relatively basic research and studies that are generally intended to increase scientific understanding instead of having an immediate use on military weapons.

The work is accomplished in several different ways. Much of it is conducted in universities and colleges that have received research grants or contracts. Laboratories operated by the military departments and the Defense agencies also carry on a large part of this effort. Some of the military science research is performed by private institutions.

The number of grants and contracts for this kind of research and development is so large that it is impractical for the Department of Defense to manage each task and project separately. Instead, management is accomplished on a "level of effort" basis. Since the primary objective is the advancement of knowledge broadly and generally, funding is applied in more or less arbitrary amounts. Much of the work is in the fields of physical, chemical, biological, medical, and social sciences.

In 1967 about $18 billion was approved in this budget activity to start a new university program on a broader geographic basis. This program, which is now called THEMIS, is in addition to the normal contracts and grants with colleges and universities and is not intended as a substitute for them. The 1968 research authorization includes $27 million for participation by the Department of Defense in this new effort to develop centers of excellence in science and technology. The beginning emphasis will be on the establishment of about 50 of these centers. The tentative conclusion is that support of less than approximately $200,000 per year for any center would not contribute to the desired results and consequently an attempt will be made to avoid distributions less than this amount.

All the military departments have budgeted amounts for "in-house independent laboratory research programs." Under these programs the chiefs of laboratories operated by the military departments and the Defense agencies are allowed funds to be used on programs suggested by persons in their laboratories. About $33.8 million for this kind of application is included in the authorization; $10.2 million of this amount is for the Army, $15.6 million for the Navy, and $8 million for the Air Force.

Under this activity, work by Defense agencies includes research on materials sciences, behavioral sciences, information processing techniques, and technical studies managed by the Advanced Research

Projects Agency; nuclear weapons effects research by the Defense Atomic Support Agency; and operational analyses and evaluations by the Weapons Systems Evaluation Group.

2. Aircraft and related equipment:	$115,700,000
Army	268,000,000
Navy	703,000,000
Air Force	10,000,000
Defense agencies	

This budget activity funds work on airframes, engines, and equipment installed in aircraft.

In the Army, the largest project is for the advanced aerial fire support system, a new kind of armed helicopter that will be used to escort helicopters carrying troops. Other significant projects are those on research helicopters, air mobility, and an aircraft suppressive fire support system.

Navy aircraft research funds will be applied to the continued development of the new interceptor, the F–111B, a new antisubmarine warfare aircraft now designated as VSX but which has not yet been approved for production, and an improved electronic countermeasures aircraft, the EA–6B. More general work in this activity will occur on navigational and communications equipment, airborne sensors, a carrier-based tactical control system, and a carrier-based aircraft for early warning purposes.

In the Air Force the largest amount of the authorization will be used for continued development of the C–5A, the very large jet transport. This activity also funds development effort on the F–111A, which the Air Force will use for close support of ground troops and for interdiction; the FB–111, a bomber version of the same aircraft; the A–7, a light attack aircraft, similar to one being developed for use by the Navy; and an advanced manned strategic aircraft (AMSA), for which $26 million will be used in the next fiscal year.

The test program by Joint Task Force 2 which is conducting a series of tests on the operation capabilities and vulnerabilities of tactical and strategic weapons systems is funded under tbe work of Defense agencies in this activity.

3. Missiles and related equipment:	$706,200,000
Army	764,000,000
Navy	874,000,000
Air Force	110,000,000
Defense agencies	

$423.3 million of the Army's missile research funding will be applied to continued work on the NIKE–X antiballistic missile system. Another important missile development effort is the SAM–D, an air defense system which ultimately will replace the HAWK and the HERCULES. Work on an interim forward area air defense system involving the use of SIDEWINDER missiles and 20-millimeter guns on self-propelled chassis will be continued. Parts of this authorization are for the Kwajalein Testing Site and the White Sands Missile Range.

The largest project in the Navy's missile development program is for fleet ballistic missile systems. Tbis includes the POSEIDON, a new fleet ballistic missile designed for an accuracy and payload to permit it to penetrate an antiballistic missile defense. The CONDOR, a new tactical air-to-surface missile of the standoff type, is another important project in this activity. Others are the PHOENIX missile

system, which will be installed on the F–111B and which will be capable of detecting several different aircraft at long ranges and launching missiles to destroy them, continued work on a system for firing ballistic missiles from surface ships, and improvements to our missiles that are intended to destroy enemy radar installations. The expenses of the Pacific Missile Range are funded in this activity.

The most costly Air Force program in missile development is for improvements to the MINUTEMAN system. The SRAM missile, which is being developed for installation on the FB–111 and for possible installation on the B–52's of the G and H series, will enable these aircraft to attack targets defended by sophisticated antiaircraft systems. Other important projects are ABRES, which involves advanced work on the technology of ballistic missile reentry; MAVERICK, a tactical air-to-ground missile; and early effort on a new intercontinental ballistic missile. The costs of operating the Eastern Test Range and the Western Test Range are funded here.

The DEFENDER program of broad research in advanced ballistic missile defense, for which ARPA is responsible, is carried on under this activity.

4. Military astronautics and related equipment:

Army	$11,100,000
Navy	16,000,000
Air Force	1,031,135,000
Defense agencies	3,000,000

The relatively small programs of the Army and the Navy under this budget activity are concerned with development of equipment to permit forces of these departments to take advantage of the improved communications made possible by the Defense Communications Satellite.

The Manned Orbiting Laboratory accounts for $430 million of the Air Force development work on missiles. The TITAN III space booster, which will place the manned laboratory in orbit, is another large program. The expense of operating the Arnold Engineering Development Center and payments to the Aerospace Corp. for the scientific and engineering support it provides the Air Force missile program are funded in this budget activity.

The work by Defense agencies under this activity consists of the integration of the surface and space components of the Defense Communications Satellite System by the Defense Communications Agency.

5. Ships, small craft, and related equipment:

Army	$900,000
Navy	290,000,000

The Army's work under this activity is directed toward new marine propulsion techniques, new amphibious concepts and designs, and a beach discharge lighter.

For the Navy this activity funds research and development effort on radars and sonars, nuclear propulsion, new ship design, mine detection and destruction, communications and navigation systems, and improved equipment for launchings and recovering carrier aircraft.

6. Ordnance combat vehicles and related equipment:

Army	$183,600,000
Navy	129,000,000

Important Army development effort under this activity includes the main battle tank that is being jointly developed with West Germany, new antitank weapons, defense against chemical and biological warfare, improved artillery and howitzers, and better infantry rifles and supporting weapons.

The Navy development under this activity is for items such as torpedoes, bombs, rockets, mines, projectiles, guns, and combat vehicles for use by the Marine Corps and amphibious operations.

7. Other equipment:	
Army	$309,300,000
Navy	137,000,000
Air Force	282,000,000

Army effort here is directed toward new and improved communications and surveillance systems, electronics, target acquisition, night vision, combat feeding, special clothing and equipment, and defense against chemical and biological warfare.

One of the important Navy programs is deep submergence, which attempts to improve man's ability to work and to conduct salvage and rescue operations at great depths beneath the ocean. Other important projects are for advanced undersea surveillance, new training equipment, and portable airfield equipment for quick installation and use by the Marine Corps.

The Air Force funds will be applied to work on ground electronic systems, conventional munitions, new radar techniques, the technology and research provided by Lincoln Laboratory, and the scientific and engineering support provided by the Mitre Corp.

The funding for Defense agencies under this activity covers Project VELA on nuclear test detection, project AGILE on counterinsurgency warfare, nuclear weapons effects tests by the Defense Atomic Support Agency, and technical evaluation and analysis of the National Military Command System by the Defense Communications Agency, and classified projects.

8. Program management and support:	
Army	$78,800,000
Navy	102,000,000
Air Force	220,685,000
Defense agencies	10,700,000

This budget activity funds expenses for operating and maintaining facilities and installations that are not reimbursed with funds from projects financed under other budget activities. The kinds of costs included are civilian salaries, utilities, communications, supplies and materials that are procured locally, and the maintenance and improvement of buildings.

The Atlantic Undersea Test and Evaluation Center, which provides test ranges for weapons, accoustic systems, and sonars, is funded here.

Research and development effort by the Defense Supply Agency on the Defense Documentation Center is the Defense Agency work under this activity.

SUPPORT OF SOUTH VIETNAM, OTHER FREE WORLD FORCES THERE, LAOS AND THAILAND

Section 401 of Public Law 89–367 authorized appropriations action that made Department of Defense appropriations during the fiscal

years 1966 and 1967 available for the support of the South Vietnamese and other free world forces in South Vietnam and for related countries.

That section permitted the merger of unexpended balances of military assistance funds for South Vietnam with the accounts for military functions and military construction functions of the Department of Defense. Funds required during fiscal year 1967 for the support of the forces of South Vietnam and other free world forces in that country were authorized for and appropriated to the accounts of the military departments.

This limited merger of funding of support of allied forces in a combat area with that of U.S. forces engaged in the same objective is similar to the practice followed during the Korean war. It was approved, because the Department of Defense urged that the maintenance of parallel but separate financial and logistic systems for U.S. forces and for forces supported by military assistance are cumbersome, time-consuming, and inefficient in a combat zone. Specific authority for such action was required, because there is no authority to use funds appropriated to the Department of Defense for any purpose other than support of U.S. forces. Military assistance funds are customarily appropriated to the President and allocated to the Department of Defense. The use of these funds is subject to approval by the State Department and the Agency for International Development.

The text of the current law on this subject appears at the end of this report. It contains amendments recommended by the committee last year that (1) require quarterly reports on the estimated value by country of military assistance type of support that is furnished from Defense appropriations, and (2) confined the furnishing of military assistance type of support to the appropriate appropriations account; for example, procurement for allied forces must be accomplished only from procurement appropriations and not from appropriations for personnel or operation and maintenance.

The Department of Defense requests continuation of this authority for fiscal year 1968 and its expansion to include the support of local forces in Laos and Thailand. The justification for including what formerly was military assistance for Thailand and Laos in the authorization and appropriations for Department of Defense functions is that events in those countries are closely related to the activity in South Vietnam and the same reasons for last year's special handling of support for South Vietnam and other free world forces there apply to Laos and Thailand. Accordingly, the committee recommends approval of the request to continue this authority in 1968 and that it include local forces in Laos and Thailand.

The total amount of assistance to be provided South Vietnam and other free world forces there, Laos, and Thailand, in 1968 is about $1.4 billion. Since much of this is for procurement other than that covered by this bill, or for operation and maintenance type of expenditures, the authorization contained in S. 666 contains only about $48.6 million of such assistance.

COST

If the full amount of this authorization is appropriated the cost of the bill is $20,765,332,000.

DEPARTMENTAL RECOMMENDATION

The letter from the Deputy Secretary of Defense dated January 24, 1967, that is printed below and made a part of this record shows that this bill is a part of the legislative program of the Department of Defense and that its enactment would be in accord with the program of the President.

A letter from the Secretary of Defense dated March 18, 1967, that is printed below and made a part of this report contains further information about the reasons for transferring responsibility for financing military assistance to Laos and Thailand to the Department of Defense.

THE SECRETARY OF DEFENSE,
Washington, January 24, 1967.

Hon. HUBERT H. HUMPHREY,
President of the Senate,
Washington, D.C.

DEAR MR. PRESIDENT: There is forwarded herewith a draft of proposed legislation to authorize appropriations during fiscal year 1968 for procurement of aircraft, missiles, naval vessels, and tracked combat vehicles, and research, development, test, and evaluation for the Armed Forces and for other purposes. This proposal is a part of the Department of Defense legislative program for the 90th Congress, and the Bureau of the Budget has advised that enactment of the proposal would be in accord with the program of the President.

This proposal is identical in form to the provisions of Public Law 89–501, approved July 13, 1966, providing authorizations for appropriations as required pursuant to section 412(b), Public Law 86–149, as amended.

This proposal would provide for authorization of appropriations as needed for procurement in each of the categories of aircraft, missiles, naval vessels, and tracked combat vehicles for each of the military departments in the amount of the new obligational authority being requested for such purposes in the President's budget for fiscal year 1968. In addition, the proposal would provide fund authorization in amounts equal to the new obligational authority included in the President's budget for fiscal year 1968 in total for each of the research, development, test, and evaluation appropriations for the military departments and the defense agencies. Appropriations are also authorized for the emergency fund for research, development, test, and evaluation or procurement or production related thereto, for the Department of Defense.

The proposal would also continue for fiscal year 1968 the authority for appropriations of the Department of Defense to be made available for the support of the Vietnamese and other free world forces in Vietnam. Additionally, it would amend section 401(a) of Public Law 89–367 so as to provide authorization for appropriations of the Department of Defense to be made available for the support of the forces of Laos and Thailand thus transferring responsibility for financing the support and related costs of these forces from the military assistance program to the military services and defense agencies programs and appropriations. This transfer is to be effective July 1, 1967, and unexpended balances of funds supporting military assistance programs for Laos and Thailand will be transferred to and merged with appropriate military function appropriations as of that date. All of such

appropriations would then be available, as in the case of the Vietnamese and other free world forces, for the use of these programs. The reporting requirements of subsection (b) of section 401 cited above would be equally applicable to the support furnished Laos and Thailand under this amendment.

The Committees on Armed Services will be furnished, as in the past, information with respect to the program for which fund authorization is being requested in a form identical to that submitted in explanation and justification of the budget request. Additionally, the Department of Defense will be prepared to submit any other data required by the committees or their staffs.

It is expected that the Armed Services Committees will desire that top civilian and military officials of the Department of Defense be prepared to make presentations explaining and justifying their respective programs as in the past.

For ready reference, there are attached tables showing the results of previous congressional action on applicable budget requests, together with the amounts of new obligational authority being requested in the supplemental estimate.

Sincerely,

CYRUS VANCE, *Deputy.*

THE SECRETARY OF DEFENSE,
Washington, March 18, 1967.

Hon. RICHARD B. RUSSELL,
Chairman, Senate Armed Services Committee,
U.S. Senate, Washington, D.C.

DEAR MR. CHAIRMAN: As you are well aware, the Governments of Laos and Thailand are engaged in armed struggles against forces supported by North Vietnam and other Communist countries. In Laos, Government forces are engaged in open combat against Pathet Lao and regular North Vietnamese troops, who are protecting the vital supply lines of the Ho Chi Minh trail from North to South Vietnam, as well as attempting to encroach further on the territory controlled by the Royal Lao Government. Although the scale of combat in Thailand is considerably smaller, the Government there faces growing insurgent forces in the northeast area adjacent to the Laotian border. Peking and Hanoi have openly stated that they support the insurgency in Thailand, and captured insurgents have confessed to receiving their guerrilla training and Communist indoctrination in North Vietnam. The evidence clearly indicates that the armed conflicts in Laos and Thailand are part of the broader struggle against Communist armed aggression in southeast Asia.

The intensified struggles in Laos and Thailand have resulted in a doubling of the level of their military assistance programs over the past 2 years. Although our current estimate is that the fiscal year 1968 requirements will remain at about the fiscal year 1967 levels, increased needs for ammunition, small aircraft, helicopters, and other equipment used in light infantry combat could result in substantially higher expenditures. There is no way to predict what changes will occur in the intensity of the fighting in those countries or when another sneak mortar attack will destroy additional equipment. Just a few weeks ago, such an attack destroyed $4 million of U.S. supplied equipment in a single night.

The reduced military assistance program is simply not able to accommodate sharp and unpredictable fluctuations in programs. The proposed fiscal year 1968 program is $681 million, of which $596 is new obligation authority. In fiscal year 1967 these same programs (which do not include Laos and Thailand) were about $50 million higher. Assistance to six forward defense countries (Korea, China, Turkey, Greece, Iran, and the Philippines) accounts for about three quarters of the fiscal year 1968 program. These assistance levels represent minimum military requirements and reductions from them would directly affect our national security interests.

The logistic requirements for the support of combat operations in Laos and Thailand require a more flexible and timely response than is available under MAP procedures. Therefore, the efficiency and effectiveness of these programs would be improved by integrating their logistic support into the common supply system which supports other combat operations in southeast Asia.

The above are the basic reasons the President has recommended that the support of Lao and Thai forces be transferred from the military assistance program to the regular Defense budget.

We are prepared to provide Laos and Thailand the equipment and supplies they require to combat the armed Communist forces which threaten their freedom. Therefore, the transfer itself implies neither escalation of conflict nor change in type or level of assistance; it merely reflects the most effective manner of handling the problem.

As a final point, you should know that the Comptroller General's audit authority over assistance provided to Laos and Thailand will not be changed by the transfer, since the authority to audit, investigate, and review both MAP and military function appropriations stems from the same basic legislation, the Budget and Accounting Act of 1921, as amended by the Budget, Accounting, and Procedures Act of 1950.

Sincerely,

ROBERT S. MCNAMARA.

CHANGES IN EXISTING LAW

In compliance with subsection 4 of rule XXIX of the Standing Rules of the Senate, changes in existing law proposed to be made by the bill are shown as follows: Existing law to be omitted is enclosed in black brackets, new matter is printed in italic, and existing law in which no change is proposed is shown in roman.

SECTION 401, PUBLIC LAW 89-367 (80 STAT. 37)

SEC. 401(a). Funds authorized for appropriation for the use of the Armed Forces of the United States under this or any other Act are authorized to be made available for their stated purposes [in connection with support of Vietnamese and other free world forces in Vietnam, and related costs, during the fiscal years 1966 and 1967,] *to support: (1) Vietnamese and other Free World Forces in Vietnam, (2) local forces in Laos and Thailand; and for related costs, during the fiscal year 1968,* on such terms and conditions as the Secretary of Defense may determine.

(b) Within 30 days after the end of each quarter, the Secretary of Defense shall render to the Committees on Armed Services and Appropriations of the Senate and the House of Representatives a report with respect to the estimated value by country of support furnished from appropriations authorized to be made under this subsection.

(c) The Secretary of Defense shall furnish to the Committees on Armed Services of the Senate and House of Representatives a description of all construction projects, including cost estimates and periodic reports, made available to the Secretary of Defense simultaneously with the receipt of such information from the persons responsible for the construction of such projects in support of Vietnamese and other free world forces in Vietnam. Whenever such construction projects, involving $1,000,000 or more, are performed by private contractors, the Secretary of Defense or his representative in Vietnam shall report to the Committees on Armed Services of the Senate and House of Representatives the name or names of such private contractors, the amounts involved in each contract, a copy of the report in support of each progress payment, and a complete report prior to final payment.

(d) The Secretary of Defense shall also furnish to the Armed Services Committees of the Senate and House of Representatives complete information regarding the alternative methods of adequately auditing contracts which he and the Comptroller General have agreed upon prior to the execution of any contract which would waive the provisions of section 2313(b) of title 10, United States Code.

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