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REPORT TO THE CONGRESS

B-178736

Potential For Greater Consolidation Of The Maintenance Workload In The Military Services B-178736

Department of Defense

BY THE COMPTROLLER GENERAL OF THE UNITED STATES

~~710998~~ 094089

JULY 6, 1973

COMPTROLLER GENERAL OF THE UNITED STATES
WASHINGTON D C 20548

B-178736

To the President of the Senate and the
Speaker of the House of Representatives

We are reporting on the potential for greater consolidation of the maintenance workload in the military services.

We made our review pursuant to the Budget and Accounting Act, 1921 (31 U S.C 53), and the Accounting and Auditing Act of 1950 (31 U.S.C. 67).

We are sending copies of this report to the Director, Office of Management and Budget, the Secretary of Defense, and the Secretaries of the Army, Navy, and Air Force.

Elmer B. Staats

Comptroller General
of the United States

Contents

ABBREVIATIONS

AMA	Air Materiel Area
AMC	Army Materiel Command
DOD	Department of Defense
GAO	General Accounting Office
NARF	Naval Air Rework Facility
NAVAIR	Naval Air Systems Command

COMPTROLLER GENERAL'S REPORT TO THE CONGRESS

POTENTIAL FOR GREATER CONSOLIDATION OF THE MAINTENANCE WORKLOADS IN THE MILITARY SERVICES
Department of Defense B-178736

D I G E S T

WHY THE REVIEW WAS MADE

The military services use aircraft, vehicles, and other weapons and equipment with an inventory value of over $103 billion. The Government spends $6 billion annually to maintain its materiel using its own facilities which cost over $12.1 billion

To avoid duplicating maintenance capability, the Secretary of Defense requires each military service to use, whenever feasible, the maintenance capability of another service through an interservice support agreement (See p 5.)

GAO reviewed the effectiveness of interservice maintenance programs to see whether they were carrying out the policy of the Department of Defense (DOD) for in-house maintenance

FINDINGS AND CONCLUSIONS

Each military service has overemphasized developing its own maintenance capability rather than tried to use the other services' existing ones (See p 12)

Excluding $2 billion worth of maintenance work done at the Navy's shipyards, interservice maintenance amounted to only $61 million, or about 2 percent, of the total $3 billion worth of depot maintenance done in the United States in fiscal year 1971 and to about $72 million in 1972 (See p 13)

Although various DOD directives and instructions have encouraged interservice maintenance, the services have circumvented the spirit and intent of this policy (See p 19)

Consequently they have extensively duplicated, and thus underused, maintenance facilities Because many of the services' items are basically similar, common use of maintenance facilities should be encouraged. (See p 14)

GAO found that responsibility for maintenance within DOD was fragmented but that it was feasible to consolidate workloads

GAO did not recommend specific cases where workloads should be consolidated, nor did it review all items in the military services that were being repaired at the depot level It found, on a test basis, that

--The Air Force and Navy both had maintenance capabilities for overhauling five similar aircraft engines (See p 14)

--The Army had set up its own capability to repair the T-62 auxiliary helicopter engine although a nearby Navy maintenance activity could repair this engine (See p 15)

--The Navy, Marine Corps, and Army together had at least eight locations for repairing automotive and construction equipment (See p 16.)

--Similar pumps, compressors, small arms, and electronic items were being repaired at several military activities (See p 17)

The Secretary of Defense has not been able to effectively control the services' continued use of their own maintenance capabilities because they have claimed a need to maintain mission-essential equipment in their own facilities (See p 7)

Because duplicated maintenance facilities are costly, interservice use of depot-level maintenance facilities can save money. Substantial long-range savings and more efficient use of facilities would result by removing direct control of depot-level maintenance from the individual services.

RECOMMENDATIONS OR SUGGESTIONS

The Secretary of Defense should form a plan for realigning management of depot-level maintenance This plan should consider the following alternatives.

--Establishing an independent agency, similar to the Defense Supply Agency, to assume responsibility for the depot-level maintenance of all commonly used equipment items

--Assigning a single manager to be responsible for maintenance of specific classes of items

AGENCY ACTIONS AND UNRESOLVED ISSUES

DOD agreed that the dollar volume of interservice support agreements was not large and that the technique of interservice maintenance had not been fully exploited (See app. I.)

DOD stated that GAO's recommendation that a single manager be responsible for maintenance of specific classes of items had considerable merit

DOD said the military departments had established a task group to study integrated management of secondary items DOD noted that this effort offered more promise than any previous effort

DOD intends to acquire more information on the task group's study before implementing a single-manager approach to maintenance.

The military departments' actions to integrate management of secondary items are steps in the right direction, but the task group's study should cover all items, including mission-essential items

The interservice support already established for mission-essential items, such as the Sparrow missile, Marine Corps aircraft, and TF-41 aircraft engines, reflects the ability of one service to perform adequate and timely maintenance for another Therefore, for DOD to defer action, pending the results of the services' study, would delay implementation of a sound, integrated maintenance management program

Because the services have resisted implementing interservice support agreements, especially for mission-essential items, DOD should take a strong position, direct the services to work together toward integrated management, and monitor the progress of the services to insure that the

objectives of integrated management are being achieved

DOD's long-range objective should be to establish an integrated maintenance management system that insures logical assignment of all depot-level maintenance, considering the individual services' needs and available depot capability

This could be done by strong DOD leadership through single-manager assignments, or if needed, a separate maintenance agency similar to the Defense Supply Agency

MATTERS FOR CONSIDERATION BY THE CONGRESS

The military departments are operating their maintenance activities below optimum capacities and are duplicating maintenance work for similar items They are not aggressively seeking opportunities to eliminate these inefficiencies

The Congress should know of the actions taken by DOD and the military departments to reduce or eliminate these inefficiencies

CHAPTER 1

INTRODUCTION

The military services use aircraft, vehicles, and other weapons and equipment with an inventory value of over $103 billion The Government spends $6 billion annually to maintain its materiel using its own facilities which cost over $12 1 billion

Department of Defense (DOD) Directive 4000 19 dated March 27, 1972, sets forth DOD's policy on interservice maintenance, which is (1) to avoid developing or acquiring duplicate military maintenance facilities as new systems and equipment are acquired and (2) to use existing maintenance facilities more efficiently and economically Interservice maintenance is based on the principle that operating a few facilities at full capacity is more cost effective than is operating more facilities at lower capacity Cost benefits arise from savings in personnel and equipment and from investments in parts and materiel inventories

To further encourage interservice maintenance, the Depot Maintenance Interservice Workload Management Task Group was created early in the 1960s, shortly after the DOD directive was published The task group, located at Wright-Patterson Air Force Base, included representatives from each of the services and was controlled by the Joint Commanders of the Army Materiel Command (AMC), the Naval Material Command, the Air Force Logistics Command, and the Air Force Systems Command The task group studied the area and recommended greater interservice support for depot maintenance

Because the services needed a more systematic way of identifying items that were candidates for interservice depot maintenance, the Interservice (Depot) Maintenance Interrogation System was created The system accumulates information on those commonly used items which can be repaired through interservice maintenance At the outset this system was limited to aeronautical items but was to include all other reparable items when certain data compatability problems had been solved

Subsequently, the Standard Integrated Support Management System was created to aid in arriving at more complete

interservice support agreements earlier in the system acquisition process Because of this system, the task group, which had saved over $40 million by consolidating or integrating depot maintenance, was eventually dissolved These two systems currently are the principal means for encouraging greater interservice maintenance

This entire issue has been reviewed intensively over the past decade in a series of studies with impetus primarily from the Assistant Secretary of Defense (Installations and Logistics) The latest of these studies, issued in January 1972 by the DOD Maintenance Study Group, reiterated the results of earlier studies Although the report did not propose any major changes in maintenance management, it did recommend increasing the emphasis on interservice maintenance using existing systems and procedures

CHAPTER 2

MILITARY SERVICES' POLICIES AND PRACTICES CONCERNING INTERSERVICE SUPPORT

In the DOD appropriations hearings for fiscal year 1972, the House Committee on Appropriations suggested that the military services carry out joint logistics support plans so that existing maintenance facilities could be efficiently used and new facilities could be economically constructed.

DOD Directives 4000 19 and 4151 1 provide, in part, that (1) private contracts be used to supply maintenance needs, except when it is in the national interest for the Government to provide directly the products and services it uses, (2) depot support of mission-essential items[1] be kept to the minimum necessary to meet military contingencies, (3) a joint support plan be developed when the same weapon is being procured for use by two or more services, (4) interservice support be requested when advantageous to DOD, and (5) the responsibility for aggressive use of interservice support rest with all management and operating levels in DOD

DOD Directive 4151 1 provides also that DOD maintain mission-essential military materiel with its own resources when necessary to insure a controlled source of equipment support of military operations Although the intent of the directive was to have a maintenance capability within DOD, each of the services has its own maintenance capability for its mission-essential items The services usually do not consider mission-essential items for interservice support

ARMY

Army Regulation 235-5 directs that maximum use be made of interdepartmental and interagency arrangements for maintenance operations AMC Regulation 700-71 specifies that AMC headquarters be responsible for initiating, developing, managing, and monitoring all interservice support agreements

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[1]Mission-essential items are those items authorized for combat, combat-support, combat-service-support, and combat-readiness-training forces and activities required to support approved emergency and/or war plans

Interservice support agreements may be initiated by the commodity commands themselves or by the commodity commands working through AMC headquarters

We reviewed two commodity commands In fiscal year 1971 (1) the Mobility Equipment Command requested maintenance support from another service only once and (2) the Electronics Command had only three items repaired, at a cost of $64,000, by other services

We found that the commodity commands lacked (1) information about the maintenance programs or capabilities of the other services and (2) the incentive to give work to another service because of the possibility of working themselves out of jobs

AMC headquarters also lacks information about other services' maintenance programs and seeks maintenance assistance from the other services only when (1) the Army cannot do the maintenance or (2) the volume of work is beyond the physical capacity of a depot AMC headquarters and the other services do not try to eliminate duplicate maintenance capabilities

The Army agreed that it usually did not consider mission-essential items for interservice support but stated that our observation was not generally correct concerning low-density, mission-essential items Whenever the Army is not capable of maintaining low-density items, it seeks interservice support.

We believe that the Army is not taking a positive approach in seeking opportunities for interservice support, but as it indicated, is seeking interservice support only when it cannot do the work We believe that the Army should not limit interservice support to items that exceed its capabilities but should include high-density, mission-essential items for interservice support

Of a total $1 billion maintenance program, only $15 million worth, or about 1 5 percent, of its maintenance was done by other services in fiscal year 1971 About $6 5 million of the $15 million was for the Navy's repairing Army helicopters at its Naval Air Rework Facility (NARF), Pensacola, Florida The Secretary of Defense (Installations and Logistics) requested the Navy to do the work because of the

overflow of work at the Army Aeronautical Depot Maintenance Center, Corpus Christi, Texas

NAVY

We restricted our Navy review to aeronautical items because these are most likely to be used in common with other services Naval Air Systems Command (NAVAIR) Instruction 4000 18 authorizes NAVAIR to negotiate and sign interservice support agreements for aircraft, engines, missiles, and other support and training workloads The seven NARFs--five on the east coast and two on the west coast--do not initiate interservice support agreements The NAVAIR representatives for the Atlantic and the Pacific Fleets and the Aviation Supply Office may sign and negotiate interservice agreements for certain items, within certain cost limitations

NAVAIR does not seek opportunities to consolidate workloads with those of other services NAVAIR officials advised us that they request support from another service only when maintenance workloads are beyond NAVAIR's in-house capabilities

NAVAIR stated that the current trend, as demonstrated by the A-7 Aircraft Joint Planning and Scheduling Group effort, was to consider mission-essential items used by more than one service for interservice support

We believe that the Navy is not changing its philosophy of keeping maintenance management control of Navy items The A-7 group is an ad hoc committee established in 1969 to seek interservice support agreements between the Navy and Air Force for components related only to the A-7 aircraft The group has no application to other weapon systems in the Navy The Navy has no current plans to expand the group or to establish a new ad hoc committee to study other weapon systems

The NAVAIR maintenance program for fiscal year 1971 amounted to $646 million In fiscal year 1971 the Navy submitted about $5 5 million worth of work to the Army and $1 86 million worth to the Air Force for interservice support, which accounted for about 1 percent of the Navy's total maintenance program

AIR FORCE

Air Force Logistics Command Regulation 65-14 implements DOD Directive 4000 19 by encouraging the Air Materiel Areas (AMAs) to explore interservice agreements on assigned equipment Major overhaul and repair work is done at the five AMAs within the continental United States that are responsible for initiating and negotiating interservice support agreements

Unlike the other services, the Air Force does not have its own capability to repair such commercial items as wheeled vehicles and construction equipment To maintain this equipment the Air Force has established 10 geographic districts When an item requires overhaul or repair, the Air Force inquires whether another service in the district can repair it If another service can repair it, the Air Force requests interservice support, if it cannot, the Air Force awards a commercial contract locally The Air Force believes that, under this system, transportation costs are minimized

The Air Force policy on noncommercial items is similar to those of the other services, it does the work itself or requests interservice support Items are considered for interservice support when (1) the Air Force lacks the needed capability or (2) workloads exceed an AMA's capacity

In fiscal year 1971 the Air Force maintenance program cost about $1 34 billion The Air Force gave about $39 million worth, or 2.5 percent, of maintenance to other services

MARINE CORPS

The Marine Corps does its depot-level maintenance at two supply centers located at Albany, Georgia, and Barstow, California Each of the centers repairs similar items, Albany supports east coast operations and Barstow supports west coast operations According to Marine Corps Order P5240.2B, Headquarters, Marine Corps, is primarily responsible for identifying items to be considered for interservice support and for initiating interservice support agreements However, headquarters may delegate authority to initiate interservice agreements to the Marine Corps supply centers Marine Corps Order P5240 2B provides guidelines for interservice support and states that the repair of Marine Corps equipment through the use of other services' facilities is

encouraged when necessary to accomplish repairs beyond the depots' capacities and/or technical capabilities

Officials at the centers indicated that in fiscal year 1971 no authority had been delegated to the centers to initiate interservice support agreements However, Headquarters, Marine Corps, allocated $10 4 million for interservice maintenance, or about 35 percent of the total $30 million maintenance program

The Navy does all aircraft maintenance for the Marine Corps This work is not categorized as interservice maintenance because the Marine Corps' aircraft are a part of the Navy's overall aircraft maintenance program We were unable to determine the amount of work the Navy did because it did not segregate aircraft maintenance cost data

CHAPTER 3

MILITARY SERVICES' JUSTIFICATIONS FOR CONTINUING IN-HOUSE MAINTENANCE CAPABILITIES

The services' justifications for maintaining in-house capabilities for mission-essential items are (1) the absence of assurances that another service will be able to provide timely repair service, especially when items are urgently needed, (2) a need to maintain each service's engineering expertise necessary for coordination between the operational and technical maintenance personnel, and (3) the need for providing work to the depots to sustain their operations In addition, the Navy prefers to do its own rework because it claims that (1) pipeline costs would increase significantly if interservice support were expanded, (2) precise specifications, which are more expensive, are needed when another service does the work, and (3) changing a specification is more costly and time consuming when a non-Navy facility does the work

The Marine Corps' additional justifications for doing its own work are to (1) maintain its capability for emergency or war situations, (2) maintain control over and flexibility of workloads, and (3) reduce costs.

GAO EVALUATION OF THE MILITARY SERVICES' JUSTIFICATIONS

We do not agree with the military services' justification that they must each have their own capability to maintain mission-essential items Their justifications are based on assumptions that another service would not be able to respond to their needs and that, in times of emergencies, they could not get adequate maintenance priorities to insure overall mission performance

The services took similar positions and argued against the establishment of the Defense Supply Agency, stating that each service needed to have its own supply system for commonly used items However, the Defense Supply Agency has shown it can provide excellent service in supplying these items Other excellent illustrations of where one service provides maintenance support for mission-essential

items are (1) the Navy repairs all Marine Corps' aircraft, (2) the Air Force overhauls the Navy's TF-41 aircraft engines, and (3) the Navy overhauls the Air Force's Sparrow missile The services have had no major problems in obtaining adequate and timely maintenance

DOD's policy is to establish single-service maintenance management for commonly used items entering the DOD inventory We believe that DOD is not functioning as a single entity to coordinate its maintenance programs Under the present structure each service operates independently to meet its own requirements

We believe that the maintenance management should be taken from the services and centralized in DOD We are aware that maintenance capability is dictated by force structure and war conditions Therefore, in projecting unified maintenance needs, DOD should carefully organize its maintenance operations to support its minimum peacetime needs and should establish backup facilities for emergency needs

The concept of establishing single management was also promoted in July 1970 by the Blue Ribbon Defense Panel's report to the President recommending that logistical services be consolidated and assigned to a unified logistics command

Excluding $2 billion worth of maintenance work done at the Navy's shipyards, interservice maintenance amounted to only $61 million, or about 2 percent, of the total $3 billion worth of depot maintenance done in the United States in fiscal year 1971 and to about $72 million in 1972 Although this increase indicated some improvement, the amounts themselves were relatively insignificant compared with the total $3 billion maintenance workload

Although we did not review all the items in the DOD inventory that could be consolidated, we concluded that a significant change in maintenance management was needed to bring about greater common use of maintenance facilities Our review disclosed that (1) maintenance of similar items used by more than one service was being duplicated at various DOD facilities and (2) maintenance facilities at many installations were not being fully used

CHAPTER 4

POTENTIAL AREAS FOR CONSOLIDATING MAINTENANCE WORKLOADS

We found that maintenance within DOD was fragmented. Although we did not attempt to identify specific cases where maintenance should have been consolidated, we did notice many items that were being repaired at depot level at various locations

AIRCRAFT ENGINES

Listed below are similar aircraft engines that were being repaired by both the Air Force and the Navy during fiscal year 1972

Aircraft engine description	Number repaired or overhauled	Repair facility	
		AMA	NARF
J-57	1,167	Oklahoma City	
	15		Alameda
	276		Norfolk
	71		North Island
J-79	732	Oklahoma City	
	241	San Antonio	
	131		Cherry Point
	522		North Island
	215		Quonset Point
	33		Jacksonville
TF-30	409	Oklahoma City	
	32		[a]Jacksonville
	260		[a]Norfolk
TF-41	257	Oklahoma City	
	115		Alameda
	67		Jacksonville
T-56	1,159	San Antonio	
	470		Alameda
	26		Norfolk

[a]Repairs engines but does not have overhaul capability

The above table shows that maintenance activities were duplicated and fragmented among the services and within each service Besides those cited, there are many other aircraft engines maintained by the services that are also similar and, we believe, susceptible of interservice maintenance

On January 22, 1971, DOD issued the report, "DOD Aircraft Engine Requirements, Capabilities and Capacities " One of the purposes of the report was to find alternatives to currently projected workload distribution plans that might improve effectiveness and/or reduce costs The report concluded that DOD could meet the aircraft engine maintenance requirements using less than the 10 activities[1] currently in operation

The report stated that, if the Navy were to maintain 70 percent of its mission-essential engines in-house (the Navy now repairs all of these engines in-house), it would need a maximum of only three engine repair capabilities at the NARFs and one of those would not be fully used The Navy rejected the concept of eliminating engine repair-overhaul operations at four of its NARFs, stating that further study was needed to make a firm determination To date DOD had taken little or no action to do this Consequently the Navy is still repairing and overhauling aircraft engines at seven NARFs

The study pointed out that the Air Force at one time repaired-overhauled aircraft engines at seven AMAs Today the Air Force operates only two AMAs

T-62 auxiliary engines

The Army Aeronautical Depot Maintenance Center overhauls the T-62 auxiliary engines used on the Army's Chinook helicopters Because the Center could not overhaul the engines, repair and test equipment were installed at Sharpe Army Depot to accommodate the overflow work from the Center In fiscal year 1972 Sharpe planned to overhaul 46 engines

[1] Army Army Aeronautical Depot Maintenance Center, Corpus Christi, Texas. Navy NARFs Alameda, California, Quonset Point, Rhode Island, Jacksonville, Florida, Cherry Point, North Carolina, and Pensacola, Florida Air Force AMAs Oklahoma City, Oklahoma, and San Antonio, Texas

The Navy uses the same T-62 auxiliary engine on its CH-46 and CH-53 helicopters The engines are overhauled at NARF Alameda. NARF Alameda overhauled 15 engines during the fourth quarter of fiscal year 1971, and planned to overhaul 178 engines in fiscal year 1972

NARF Alameda used 54 percent of its engine maintenance capacity during fiscal year 1971 and forecast that it would use 67 percent in fiscal year 1972

The Army did not attempt to initiate an interservice agreement with the Navy but chose to establish a capability at Sharpe (NARF Alameda and Sharpe are about 65 miles apart) According to the Army, Sharpe's workload had been decreasing and the Army was sending additional work to Sharpe to help keep it operational The Navy told us that NARF Alameda could repair the Army's engines.

We believe that Navy maintenance of the Army's T-62 auxiliary engine would be an excellent example of interservice maintenance Instead of negotiating an agreement with the Navy--a logical source--the Army demonstrated its intent to perpetuate self-interests.

AUTOMOBILE AND CONSTRUCTION EQUIPMENT

The Navy, the Marine Corps, and the Army each has developed its own in-house capability for repairing automobile and construction equipment. The Air Force is the only service that does not have its own capability for repairing these items When Air Force items require overhaul or repair, the Air Force inquires whether another service in the area can repair them If such a capability exists, the Air Force requests interservice support; if not, it awards a commercial contract locally. The Air Force believes that it is uneconomical to establish its own capability for repairing these items.

We found similar capabilities for repairing and overhauling automotive and construction equipment at Marine Corps depot, Navy, and Army activities Many of the items repaired in-house by the Marine Corps at Albany and Barstow are comparable to those items repaired in Army depots The Marine Corps repairs some items in-house and sends the rest to contractors or other services.

The Navy repairs automotive and construction items at three Naval Construction Battalion Centers--Port Hueneme, California, Davisville, Rhode Island, and Gulfport, Mississippi--and has some work done at various Navy Public Work Centers The Army repairs and overhauls similar items at its Atlanta, Sharpe, and Tooele Depots Therefore, within DOD, at least eight activities can overhaul and repair these items

OTHER AREAS FOR POSSIBLE CONSOLIDATION

Following are other areas where, we believe, consolidation is possible

Small arms

The Anniston Army Depot operates, at about 19 percent of capacity, a small-arms repair facility for overhauling, cleaning, function firing, and packing rifles, carbines, pistols, machineguns, bayonets, small-arms mounts, and related subassemblies The Marine Corps operates a comparable small-arms facility at Albany at about 31 percent of capacity Although the Robbins AMA does not repair small arms, it does require overhaul and repair of small arms At the time of our review the Robbins AMA was negotiating with the Army and Navy and with commercial contractors to do needed work

Pumps and compressors

Various types of pumps and compressors are being repaired at the Robbins AMA, the Atlanta and Anniston Army Depots, and the Marine Corps Supply Center, Albany These facilities are close to each other The following table shows the actual use of these facilities in fiscal year 1971 and their projected use in fiscal year 1972

Installation	Percent of use	
	1971	1972
Atlanta Army Depot	34	33
Anniston Army Depot	44	49
Albany Marine Corps Supply Center	83	63
Robbins AMA	-	42

Electronic items

Listed below are similar electronic items that were serviced and repaired at more than one military maintenance activity during fiscal year 1972

System and stock number	Quantity	Service and repair location
ARC 27 radio part, 5821-254-9347	2,274	Air Force--San Antonio
	700	Navy--Alameda
	500	Navy--North Island
HF 101 radio part, 5821-893-0193	277	Air Force--San Antonio
	400	Navy--Alameda
	250	Navy--Pensacola
	200	Navy--Norfolk
ARN 21 radio part, 5826-553-6103CX	113	Air Force--San Antonio
	543	Navy--Norfolk
	1,000	Navy--Pensacola
VHF 101 radio part, 5821-682-9337	118	Air Force--San Antonio
	297	Army--Sacramento
ARC 73 radio part, 5821-685-8366	255	Air Force--San Antonio
	188	Army--Sacramento
FM 622 (ARC 31 Army), 5821-933-8987CX	277	Air Force--San Antonio
	739	Army--Sacramento

CHAPTER 5

CONCLUSIONS AND RECOMMENDATION

CONCLUSIONS

The Secretary of Defense has not been able to promote extensive interservice maintenance The services have been successful in justifying their own maintenance capabilities by claiming a need to support mission-essential items and by stating that support by any means other than their own in-house facilities would jeopardize their combat capabilities.

However, the Defense Supply Agency has provided excellent service in supplying the military services, and (1) the Navy is providing maintenance seivice for all the Marine Corps aircraft, (2) the Air Force is overhauling the Navy's TF-41 aircraft engine, and (3) the Air Force's Sparrow missile is being efficiently and promptly overhauled by the Navy We believe that these facts illustrate greater interservice support, especially for commonly used items, is feasible

Maintenance fragmented among many facilities, all working at or below their capacities, undoubtedly increased the cost of DOD maintenance We believe that major changes are needed in the management of depot-level maintenance Centralized depot maintenance operations can produce economic and logistics benefits because of

1 Improved use of modern facilities and centralized planning, which could result in fewer, better equipped maintenance facilities

2 Greater productivity, which could result from a longer run of production lines and greater concentration of technical and skilled personnel

3 Better supply management, which could result in fewer repair parts being needed, fewer locations stocking repair parts, fewer control and accountability records being needed, less confusion as to repair locations, and potentially better pricing through consolidated (volume) procurements of repair parts

In our opinion, the current organization structure generates a conflict because the military services are primarily interested in work for their own depots and consider only residual items for interservice maintenance. They are not motivated to give work to another service We believe that DOD could realize substantial long-range savings and could more efficiently use its facilities by removing direct control of depot-level maintenance from the individual services and assigning this control to a DOD maintenance manager As an alternative, DOD could assign control over specific classes of items to single maintenance managers

RECOMMENDATION

We recommend that the Secretary of Defense, in accordance with the authority delegated to him by the National Security Act of 1947, as amended, form a plan for realigning management of depot-level maintenance in DOD This plan should consider the following alternatives

1 Establishing an independent agency, similar to the Defense Supply Agency, to assume responsibility for the depot-level maintenance of all commonly used equipment items

2 Assigning a single manager to be responsible for maintenance of specific classes of items

AGENCY ACTIONS

DOD agreed that the dollar volume of interservice support agreements was not large and that the technique of interservice maintenance had not been fully exploited DOD stated that our recommendation that a single manager be responsible for maintenance of specific classes of items had considerable merit

DOD advised us that the military departments had established a task group to study integrated management of secondary items DOD stated that it would have to fully explore delegating single-manager responsibility to military departments, before establishing time-phased plans for implementation

The military departments' actions to integrate management of secondary items are steps in the right direction, but their study should cover all items, including mission-essential items The interservice support already established for mission-essential items, such as the Sparrow missile, Marine Corps aircraft, and TF-41 aircraft engines, reflects the ability of one service to perform adequate and timely maintenance for another Therefore, for DOD to defer action pending the results of the services' study would delay implementation of a sound, integrated maintenance management program

Because the services have resisted implementing interservice support agreements, especially for mission-essential items, DOD should take a strong position, direct the services to work together toward integrated management, and monitor the progress of the services to insure that the objectives of integrated management are being achieved

DOD's long-range objective should be to establish an integrated maintenance management system that insures logical assignment of all depot-level maintenance, considering each service's needs and the available depot capabilities This could be done by strong DOD leadership through single-manager assignments, or if needed, a separate maintenance agency similar to the Defense Supply Agency

CHAPTER 6

SCOPE OF REVIEW

We reviewed the status of interservice maintenance within DOD for fiscal years 1971 and 1972 We reviewed also DOD policy and pertinent directives and guidelines pertaining to interservice support agreements among the military services

We analyzed documents relating to the extent that interservice support agreements were being negotiated and the types of items involved, developed data on the capacity of depot maintenance activities, analyzed relevant reports, and interviewed officials at the following locations

Army Materiel Command Headquarters
Washington, D C

Anniston Army Depot, Alabama

Atlanta Army Depot, Georgia

Electronics Command
Philadelphia, Pennsylvania

Major Item Data Agency
Letterkenny Army Depot
Pennsylvania

Mobility Equipment Command
Saint Louis, Missouri

New Cumberland Army Depot, Pennsylvania

Sacramento Army Depot, California

Sharpe Army Depot, California

Naval Air Systems Command Headquarters
Washington, D C

Naval Air Rework Facility, Alameda, California

Naval Air Rework Facility, Norfolk, Virginia

Naval Air Rework Facility, North Island, California

Air Force Logistics Command Headquarters
Washington, D.C.

Sacramento Air Materiel Area
McClellan Air Force Base, California

Robbins Air Materiel Area
Robbins Air Force Base, Georgia

Marine Corps Supply Center, Albany, Georgia

Marine Corps Supply Center, Barstow, California

ASSISTANT SECRETARY OF DEFENSE
WASHINGTON, D C 20301

19 APR 1973

INSTALLATIONS AND LOGISTICS

Mr Werner Grosshans
Assistant Director-In-Charge
of Materiel Management
Logistics and Communications Division
U S General Accounting Office
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Dear Mr Grosshans

This letter is in response to your draft report to the Congress of the United States dated February 1973, entitled "Potential for Greater Consolidation of Maintenance Workload in the Military Services," (OSD Case #3576)

At the outset it should be noted that the primary objective of DoD policy is to retain and operate only that in-house depot maintenance capability and capacity necessary to assure technical competence and resources to meet military contingencies Beyond that, the DoD will rely on contractor support consistent with government-wide policy (OMB Circular A-76) The second objective is to utilize the retained facilities as efficiently as possible on a DoD-wide basis Pertinent policy for establishment, retention, and use of depot maintenance facilities in the DoD is contained in DoD Directive 4151 1, "Use of Contractor and Government Resources for Maintenance of Materiel," dated June 20, 1970

Alternatives available to the Military Departments to efficiently utilize depot facilities include consolidation of workloads into fewer facilities within each Department to avoid duplicate investments and to achieve economies of volume or concentration of like work at a single point among the depots providing specialized service to all customers including other facilities An example of the former was the consolidation of Air Force work into five (5) depot maintenance activities in lieu of the former nine (9) An example of the latter, again in Air Force, is assignment of individual depots as the Specialized Repair Activity (SRA) for specific stock classes of material This concept is being further refined by a recently approved program for assignment of SRA's based on technology rather than stock class We feel that this latter approach offers considerable potential

Concentration of workloads within Departments is not limited to components. For example, only two (2) of five (5) Air Force depots are authorized to overhaul engines In Army, the CH-47 helicopter is overhauled at New Cumberland Army Depot, while its engine (T-55) is processed at the Army Aeronautical Depot Maintenance Center, Corpus Christi, Texas along with the engine for the UH-1.

Interservice support is really an extension of the concept of consolidation to encompass combination of workloads between Military Departments The most easily identifiable and controllable opportunity for savings through interservice support occurs when a new weapon system is introduced for use by two or more services In such cases DoD policy (DoD Directive 4151 1) requires development of a Joint Support Plan Opportunities also arise for interservicing if an existing depot is closed for any reason, by transferring work to the facility offering maximum advantage to the DoD Beyond these two instances identification and evaluation of potential savings through interservice support become increasingly difficult.

We concur that the technique of interservicing has not been fully exploited Obstacles to interservicing had first to be overcome in order to permit more widespread use of this alternative Accordingly, an automated programming system (DoD Instruction 4151 15) was developed to provide the visibility, heretofore lacking, of future depot workloads, requirements for facilities, equipment and other resources, and projected facility utilization Already implemented for aeronautical work the system is being extended to other materiel The Military Departments issued a Joint Regulation entitled "Interservice (Depot) Maintenance Interrogation System (ISMIS)" to overcome the lack of a common system to routinely identify reparable components susceptible to interservicing To provide an organization and procedures to facilitate interservice support the Standard Integrated Support Management System (SISMS) was developed by the Military Departments and is now being implemented A uniform cost accounting manual for depot maintenance is being developed by the Military Departments, at ASD(I&L) request, to provide a better basis for determining economic benefits of interservicing proposals Some, although not complete, relief has been obtained on employment at industrially funded activity by removal of OMB imposed manpower ceilings We expect to follow and review each of the above efforts closely to assure that they contribute to increased interservice support where economies can be achieved

While the above actions are in process, interservice support in terms of dollar volume has involved, with some exceptions, major items usually those being introduced into the inventory where interest by the Military Department Headquarters and the OSD overcame the above obstacles in

individual cases Agreements include overhaul of the UH-1 helicopter by Army for Navy, and Air Force, the OV-10 aircraft and CH-53 helicopter by Navy for Air Force, and TF-41 engine (A7E) by Air Force for Navy Actually, because of the volume of UH-1 helicopters supported by Army, Navy is overhauling quantities of the Army UH-1 inventory Also, as a result of a special Joint Planning and Scheduling Group (JPSG) for the A-7 aircraft, consolidation of Navy and Air Force workloads for selected common items resulted to date in an estimated $9 1 million avoidance of cost for tools, test equipment and facilities

We are pleased to note the increase in interservice work from $54 million in Fiscal Year 1971 to $72 million in 1972 We consider this a beginning, although it is not possible at this time to quantify the real potential Measurement of interservice work as a percentage of total workloads is not particularly meaningful since certain work is not readily interserviced Contract work for example is not usually a candidate for interservice support Ship maintenance is almost exclusively with Navy We are convinced however that an opportunity exists for substantially more interservice work which could improve utilization of DoD depot facilities

Finally, we note increased interest in interservice support by the Military Departments which have established a task group addressed to integrated management of secondary items (components and subassemblies) We believe this effort offers more promise than any attempted to date providing that the scope is defined to include subsystems as large as an aircraft engine, or a radar set for example, and depot maintenance support is included within the concept of integrated management We intend to advise the Military Departments of both our interest and concern in this area, our desire to follow the progress of this effort, and the need to establish a realistic completion date.

The Office of the Secretary of Defense has been proceeding in an orderly fashion to achieve efficient utilization of depot maintenance activities While the dollar volume of interservice support to date is not large, it is in fact increasing In the meantime it has been necessary to provide the mechanism to facilitate future interservice support agreements whenever it is advantageous to the DoD Pending availability of this capability we have required development of Joint Support Plans for multi-service weapon systems, and have carefully reviewed proposed military construction programs to preclude creation of duplicative capacity

We do not concur at this time in the establishment of an independent agency similar to the Defense Supply Agency for depot level maintenance of commonly used items of equipment in the DoD Your recommendation for

the assignment of a single manager who would be responsible for the consolidation of maintenance workload requirements and the distribution and financing of workloads for specific classes of items would seem to have considerable merit Delegation of such responsibility to a Military Department, most likely to the dominant user of the equipment, should be fully explored however before specific assignments are made and time-phased plans for implementation are established This preferred alternative could most appropriately be handled as a part of the effort underway by the Military Departments relative to integrated management of reparables and will be considered accordingly

Comments by the Military Departments on selected statements included in the report are attached for your information

We wish to thank you for your continued interest and assistance in the maintenance management area

Sincerely,

Acting Assistant Secretary of Defense
(Installations and Logistics)

Attachment

PRINCIPAL OFFICIALS OF THE DEPARTMENT OF DEFENSE AND THE MILITARY DEPARTMENTS RESPONSIBLE FOR ADMINISTRATION OF ACTIVITIES DISCUSSED IN THIS REPORT

	Tenure of office	
	From	To
DEPARTMENT OF DEFENSE		
SECRETARY OF DEFENSE		
William P Clements, Jr. (acting)	Apr 1973	Present
Elliot L Richardson	Jan. 1973	Apr 1973
Melvin R Laird	Jan 1969	Jan 1973
Clark M Clifford	Mar 1968	Jan 1969
Robert S McNamara	Jan 1961	Feb. 1968
DEPUTY SECRETARY OF DEFENSE		
Willian P. Clements, Jr	Jan. 1973	Present
Kenneth Rush	Feb 1972	Jan. 1973
David Packard	Jan 1969	Dec 1971
Paul H Nitze	July 1967	Jan 1969
Cyrus R Vance	Jan 1964	June 1967
ASSISTANT SECRETARY OF DEFENSE (INSTALLATIONS AND LOGISTICS)		
Hugh McCullough (acting)	Jan 1973	Present
Barry J. Shillito	Feb 1969	Jan 1973
Thomas D Morris	Sept 1967	Feb 1969
Paul R Ignatius	Dec 1964	Sept 1967
DEPARTMENT OF THE ARMY		
SECRETARY OF THE ARMY		
Robert F Froehlke	July 1971	Present
Stanley R Resor	July 1965	June 1971
Dudley C Mecum	Oct 1971	Present
J. Ronald Fox	June 1969	Sept 1971
Vincent P Huggard (acting)	Mar 1969	June 1969
Dr. Robert A Brooks	Oct. 1965	Mar 1969

APPENDIX II

	Tenure of office	
	From	To
DEPARTMENT OF THE NAVY		
SECRETARY OF THE NAVY		
John W Warner	Apr 1972	Present
John H Chafee	Jan. 1969	Apr. 1972
Paul R Ignatius	Sept. 1967	Jan. 1969
Charles F Baird (acting)	Aug. 1967	Sept. 1967
Robert H B Baldwin (acting)	July 1967	Aug 1967
Paul H Nitze	Nov 1963	July 1967
ASSISTANT SECRETARY OF THE NAVY (INSTALLATIONS AND LOGISTICS)		
Robert D Nesen	Jan. 1973	Present
Charles L Ill	July 1971	Jan 1973
Frank Sanders	Feb 1969	July 1971
Barry J Shillito	Apr 1968	Feb 1969
Vacant	Feb. 1968	Apr. 1968
Graeme C. Bannerman	Feb 1965	Feb 1968
DEPARTMENT OF THE AIR FORCE		
SECRETARY OF THE AIR FORCE		
Dr Robert C Seamans, Jr.	Jan 1969	Present
Dr Harold Brown	Oct. 1965	Jan 1969
ASSISTANT SECRETARY OF THE AIR FORCE (INSTALLATIONS AND LOGISTICS)		
Lewis E Turner (acting)	Jan 1973	Present
Philip N Whittaker	May 1969	Jan. 1973
Robert H Charles	Nov 1963	May 1969

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