PSF Navy: James Forrestal 1944 – 1945

PSF Navy
Sec. James Forrestal

Box 66

Came to file - June 26, 1940

File PSF: Forrestal Personal Nav

JAMES FORRESTAL

Forrestal

Following up your suggestion that you might want to take Forrestal on as one of your administrative assistants to help find the men with "big names" and organizing ability to handle the problem of industrial production of war materials.

Forrestal is 48 years old. He comes from Dutchess County -- Beacon. He is the present head of Dillon, Read.

All Dillon's wide interests are now under Forrestal's direction.

He has been the acknowledged open leader of your crowd in Wall Street.

From the point of view of what you said you needed now, Forrestal has three outstanding qualifications:

(1) His specialty is industrial personnel -- he has been rounding up management material for Dillon's companies for a long time. He has the best lists of the new "big names" in the country.

(2) He has enormous courage to do things that have never been done. He has pioneered financing jobs that everyone else in the Street was afraid to touch -- like this new common stock utility financing.

(3) He has followed the German situation closely for many years because of Dillon's post-War German financing -- he understands the situation thoroughly and bitterly and he has followed you eagerly in your perception in the need to get the nation ready.

Forrestal went to college a little late -- before that he worked on newspapers (he understands the handling of the press), with New Jersey Zinc Company, with American Tobacco Company. From there he went to Princeton; then with Dillon, Read. During the World War he was in Naval aviation.

The appointment together of Forrestal, and of Sumner Pike to the Republican vacancy on S.E.C., would head off all the pressures Henry Luce is engineering to force you to "recognize" Willkie.

Franklin D. Roosevelt

THE SECRETARY OF THE NAVY

WASHINGTON

10 February 1945

My dear Mr. President:

In 1823, the Secretary of the Navy, Mr. Samuel L. Southard, submitted for the first time, and at the request of President Monroe, a report to the President on the administration of the Navy Department. In accordance with the custom thus established and since continued, I submit herewith the report for the fiscal year 1944.

In time of war, no annual report can do justice to all of the activities of the Navy. This report will not attempt to do so.

For example, it will not discuss combat operations because Admiral King has already submitted a report on them. But I should like here to record explicitly what I hope is implied through the report: my deep personal admiration for the fighting men of the Navy, from Admiral King to the seaman on the smallest landing craft.

This report will cover only six problems which were especially prominent during the fiscal year ended June 30, 1944: Logistics, production, research, training, health, and finance.

The achievements recorded in this report are not those of any man or small group of men. The Navy is a team. Every man and woman who wears its uniform is a member of that team, sharing in the achievements reported here -- and in many more. Similarly, if the Navy is to solve the problems set forth here, they will be solved by the work of all hands.

Respectfully,

James Forrestal

James Forrestal

The President,

The White House.

PSF
Navy
Forrestal

THE SECRETARY OF THE NAVY

ANNUAL REPORT

FISCAL YEAR 1944

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INTRODUCTION

The Navy pays tribute to Frank Knox, whose death in line of duty was, as Admiral King has said, as much a casualty of the war as those of the men who have fallen in combat. He was a soldier, a wise counsellor, and a friend. Under his administration, the Navy was reborn after Pearl Harbor, and most of the progress recorded in this report took place. He would have liked, I know, to live to witness the victory which will be made possible in large measure by his efforts and by his devotion to his country and to the Navy. However, he died, as I know he would have chosen to die, in the full rush of an active and useful life.

If he had lived, Secretary Knox would have written you first of the other gallant members of the Navy who gave their lives or who were casualties in the fight against the enemy. From Pearl Harbor to June 30, 1944, 71,929 men were listed as casualties by the Navy, Marine Corps, and Coast Guard. Of these, 31,880 died (19,483 being killed in battle), 25,974 were wounded, 9,313 were missing, and 4,762 were prisoners of war. These casualties were more than three times the casualties in World War I, and since June 30, of course, the number has increased.

To these men and to their families the Navy and the Nation owe a debt for which there is no measure.

In the hearts and minds of our people, the history of the Navy for the year covered by this annual report will always be dominated by the multitude of combat actions and victories over our enemies which occurred therein. A major part of this report, therefore, might logically have been devoted to these actions. However, Admiral King in his report

of March 27, 1944, related the military operations of the Navy through that date. To his recital I can make only one addition. That is to express the gratitude of all our people to Admiral King and to the men who fight under his command. In the presence of their victories the nation they serve is very proud -- and very humble.

Between the last action related in Admiral King's report and the close of the fiscal year 1944, two other military events of exceptional importance took place.

The first occurred June 6, 1944, when our invasion armies landed on the coast of Normandy, breaking into the fortress of Europe.

The second major event took place June 15, 1944, 12,500 miles from Normandy. It was our invasion of the Marianas, bringing us to the doorstep of the Western Pacific, giving us bases for the subsequent invasion of the Philippines, and making possible the bombing of Tokyo by the Army Air Forces.

These two actions, like many which preceded and followed them, demonstrate again that sea power is the foundation, though not the final element, of victory. Neither our land forces nor our air forces could be brought to bear in this war until, having beaten back the enemy fleets, we secured our advance bases and the sea lanes to them. Our ability to reach the homelands of our enemies -- and their inability to reach us -- have depended on one factor: Allied control of the sea.

I am pleased to be able to record that by June 30, 1944, we and our Allies dominated all the oceans of the world except those seas immediately adjacent to Japan, Formosa, the Philippines, and the East Indies. Even those seas had been invaded by our submarines whose necessarily

unpublicized exploits form one of the great chapters of this war.

Admiral King in his discussion of this war has referred to it constantly as an amphibious war. I think the people of our country cannot overemphasize the implications of this statement. We have learned that in order to make our nation secure we must always retain the capabilities of attacking our enemies on their shores rather than permitting them to bring the war to us. The Navy and Marine Corps development of amphibious warfare in the years prior to this conflict has paid high dividends. It is true that amphibious operations have expanded far beyond anything which even they contemplated, but the foundations were well and properly laid in those experimental operations of 1925, 1928 and 1933-41. The result is that today we have a seapower which enables American arms to be deployed anywhere in the world.

By the end of the 1944 fiscal year the United States Navy was the largest in the world. Why, then, do we plan to build more ships in 1945, 1946, and 1947?

Of course, we must forearm ourselves against heavier losses as we approach Japan, fighting not only her Navy but her air power. But there is another more profitable reason for continuing naval construction.

We must maintain and increase the tremendous margin which we now have, the margin which has enabled us to conduct almost simultaneous operations against the Japanese. The Navy's operations in this war resemble the use of multiple teams in football -- one team on the field, another on the sidelines, a new, fresh one ready to go in and exploit weaknesses that become apparent. That requires surplus power.

With a plenitude of power we are able to have at any given moment a multiple series of attacks under way and in the making.

The greater our strength, the sooner our victory.

After the war the United States and its Allies should keep fleets capable of controlling the world's oceans. Such power is not inconsistent with plans for international collaboration, because our contribution to world peace must be threefold:

Participation in a society of nations dedicated to a peaceful, just, and decent ordering of world affairs.

Willingness among our people to fight, if necessary, for a world order in which our way of life can endure.

Retention of the weapons with which to fight if we must -- because the means to conduct war must be in the hands of those who hate war.

A powerful Navy is one of those weapons, an indispensable one. At an appropriate time, the Navy Department will present for your consideration the possible composition of postwar fleet.

Problem I

CREATING A LOGISTIC ORGANIZATION

The Problem

In wartime the Navy must have a logistic mechanism capable of supplying equipment and personnel to the right place, at the right time, and in the right amounts to support the fleets in their actions against the enemy. A vigorous nucleus of this mechanism must be preserved during peace.

The Solution

The solution has four parts. Two have always existed. A third is being created. The fourth has yet to be achieved. The parts are:

A. The genesis of naval logistics is the concept of a mobile fleet, one not tied to its land bases, one capable of enormous strategic range because it carries with it or creates its own support as it advances. This concept is one of the foundations of American naval strategy.

B. The raw material of logistic support is equipment and men. As Problems II and IV of this Report show, the Navy has demonstrated its ability to produce equipment and train men in the enormous volume required by this war.

C. What needs strengthening now is the link between our fleets and our production: planning to determine what is needed and when it will be needed, plus control of stocks on hand. During the 1944 fiscal year, four major developments strengthened this part of the Navy's

logistic mechanism. First, the Archer-Wolf group surveyed the whole logistic field, emphasizing particularly the need for clarifying responsibilities and authority in the Navy logistic organization, which under the pressure of war had, like Topsy, just growed.* Second, the Logistic Organization Planning Unit, created by Admiral King, began its work of devising a system of over-all logistic reports. Third, the logistic staff assigned to the Vice Chief of Naval Operations was strengthened by creation of a Deputy Chief of Naval Operations (Air) to handle aviation logistics and in other ways. Fourth, a Navy Inventory Control Office, described in Problem II, was established.

D. The fourth part of the solution -- the one still missing, which involves perpetuation in peacetime of a satisfactory logistic organization -- will require increasing attention in the months ahead.

Discussion of the Problem

Logistics is the process of providing what is needed when it is needed where it is needed.

It embraces the supply and distribution of material and men. It involves forecasting requirements. It is the scheduling, production, assembly, storage, distribution, maintenance, repair, and replenishment of equipment. It is the procurement, training, billeting, feeding, distribution, staging, hospitalization, replenishment, and rehabilitation of personnel.

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* To this group of business men, headed by T. P. Archer of General Motors and George Wolf of U. S. Steel, the Navy is indebted for a helpful and comprehensive study of its logistic problems.

On June 30, 1944, the United States Navy, the world's largest, consisted of 1,108 warships, plus 60,191 other craft, powered by 80,000,000 horsepower. These vessels had to be constructed and must be continuously maintained, armed, fueled, and repaired.

The Navy consisted also of 34,000 planes, needing fuel, maintenance, arming, repair, and replacement.

Navy vessels and planes mounted over 220,000 guns. They had to be built, fed ammunition, repaired, and, in some instances, relined.

Fleet operations are based on over 900 shore establishments, including 300 advance bases some of which are as large as Peoria, Illinois, or Columbia, South Carolina -- and almost all of which had to be newly built.

Most important of all, the Navy consisted on June 30, 1944 of 3,623,000 officers and men, who must be housed, fed, clothed, transported, and trained.

All of this is logistics. The problem is not new to the Navy -- but its present dimensions are. The fleet has always been kept mobile by the employment of floating repair facilities, supply vessels and means for extemporizing advance bases. Actual experience in logistic support has been provided in the cruises incident to peace time "war problems." But the enormous expansion of the Navy, particularly in small craft that can carry few supplies and no repair facilities, has created administrative problems of a scope never approached in pre-war days.

Now the logistic system is complex beyond any pre-war conception. A network of over 700 depots and stations must keep stocks

of over 4,000,000 kinds of items.

It is immense. In the past fiscal year the Navy trained 1,523,000 men, sent to sea 42,000 new craft and deployed 29,000 new planes -- besides maintaining the men and equipment already in the service.

It is dynamic. The flow of men and material must be projected 3,000 miles across one ocean and 7,000 miles across another. Great fleets must be supplied at sea.

To conduct these logistic operations requires careful planning and vigorous execution.

I can best illustrate the need for planning by summarizing the preparation which was necessary in order to put one of our Navy air base units ashore in Kwajalein, after our invasion in January, 1944.

Orders for the critical equipment, such as generators and cranes, had to be placed in September, 1942, a year and a quarter before the invasion actually occurred.

Orders for less critical components were placed in December, 1942, and March, 1943, thirteen and ten months, respectively, before the attack on Kwajalein. (These orders and those placed during the preceding September were not, of course, specifically earmarked at that time for the Kwajalein air base unit. The most critical equipment had to be ordered only on the general knowledge that, when completed, it would be needed somewhere in the Pacific.)

In April, 1943, the Chief of Naval Operations specified the men and material that would be required at the Kwajalein air base nine months later.

Shortly thereafter ninety-five men who were to be the skilled staff at the base began their training, and in May training of the rest of the complement began.

By August and September, 1943, men and materials began to arrive at Port Hueneme, California, and shipping preparations began to be made. The invasion still was more than four months away. Training and assembly of supplies continued.

In October Admiral Nimitz transmitted his desired shipping schedule for the air base unit.

In December the first two echelons of the unit began moving from California to Hawaii for further training.

The invasion of Kwajalein occurred January 31, 1944, and early in February both the echelons at Hawaii and those still in California set sail for the new base, a year and a quarter after their first equipment had been ordered. Of course, the air base unit was only one of many that had to be synchronized to achieve the capture and construction of our Kwajalein base -- and by the time the Kwajalein units were under way, the Marianas preparations had begun.

Without careful planning such operations may go awry. The critical materials may not be ready at the right time or in the correct amounts -- while useless surpluses of other materials may pile up. Men may not be properly trained. Shipping may be incorrectly timed.

Vigorous execution of plans is equally necessary, because the ability to fight prolonged sea battles, like those in which we now engage, depends on precise logistic support. This dependence emerges from the following rough log of the fast carrier force of the Third Fleet for

two months beginning August 28, 1944. The logistic functions in the Task Force's activities are underlined. I call your attention to the fact that during these two months, while the Third Fleet was engaging in twenty-one combat actions, the carriers also had to undertake twenty-six logistic operations. This log shows that, if the right supplies had not been at the right places at the right time, the Third Fleet could not have made its sustained attack which opened up the Philippines and which provided air cover for General MacArthur's troops for almost two months.

On 28 August Task Force 38 -- the fast carrier task force of the Third Fleet -- sortied from Eniwetok.

From 30 August to 1 September Task Group 38.4 attacked Jap bases in the Bonin and Volcano Islands.

On 1-2 September Task Groups 38.1, 38.2, 38.3 fueled at sea north of the Admiralties.

During 3-4 September Task Group 38.4 fueled near Guam and rearmed at Saipan.

On 5-7 September all Task Groups of TF 38 attacked Palau, Yap, and Ulithi.

On 8 September Task Group 38.4 fueled east of Palau.

During 8-9 September Task Groups 38.1, 38.2, 38.3 struck the Mindanao area of the Philippines.

From 9 to 15 September Task Group 38.4 supported the invasion of Peleliu and Angaur (14 September).

On 10 September Task Groups 38.1, 38.2, 38.3 fueled southwest of Palau.

On 11-13 September Task Groups 38.1, 38.2, and 38.3 attacked the Central Philippines.

14-15 September, Task Groups 38.1 supported the landings on Morotai Island (14 September).

On 15 September Task Groups 38.2 and 38.3 fueled west of Palau.

On 18 September Task Groups 38.1, 38.2, and 38.3 fueled about 400 miles northeast of Mindanao.

During 20-22 September Task Group 38.4 rearmed and reprovisioned in the Admiralties.

On 20-21 September Task Groups 38.1, 38.2 and 38.3 attacked Luzon.

22 September the same Task Groups fueled northwest of Palau.

On 23 September the same Task Groups attacked the central Philippines.

From 25 to 30 September Task Group 38.3 fueled and rearmed in Kossol Passage, Palau.

On 26 September Task Group 38.4 fueled southwest of Palau.

During 27-28 September Task Group 38.2 reprovisioned, rearmed, and refueled at Saipan.

On 28-30 September Task Group 38.1 reprovisioned and rearmed in the Admiralties.

From 1 to 4 October Task Group 38.3 reprovisioned at Ulithi Atoll.

On 2 October Task Group 38.4 fueled northwest of Palau.

On 7 October all Task Groups fueled about 500 miles northwest of Saipan.

On 9 October Task Force 38 attacked the Ryukyu Islands.

10 October Task Force 38 fueled about 350 miles northeast of Luzon, and launched minor strikes against Luzon.

(NOTE: Except for this one period of fifteen days from September 23 to October 9, the fast carrier task force was not out of action for more than five consecutive days during its entire cruise -- a cruise which lasted beyond this chronology for a total period of almost three months from the sortie date of August 28. This sustained action is possible only with adequate logistic support.)

During 11-13 October Task Force 38 attacked Formosa. Two U.S. cruisers were damaged by aerial torpedoes.

On 14 October Task Groups 38.2 and 38.3 fueled about 400 miles east of Luzon. Task Group 38.1 covered the retirement of damaged cruisers. Task Group 38.4 attacked northern Luzon.

15 October Task Groups 38.1 and 38.4 fueled northeast and east of Luzon, respectively.

16 October Task Group 38.4 attacked Luzon.

On 17 October Task Groups 38.1, 38.2, and 38.4 attacked Luzon. Task Group 38.3 fueled about 300 miles east of Luzon.

19 October Task Groups 38.1 and 38.4 supported the landings on Leyte. Task Groups 38.2 and 38.3 conducted negative searches for the Jap fleet.

On 20 October Task Groups 38.1 and 38.4 fueled about 400 miles east of Luzon. Task Groups 38.2 and 38.3 attacked the Central Philippines and searched unsuccessfully for the Jap fleet.

21 October Task Groups 38.1, 38.2, and 38.4 conducted negative searches for the Jap fleet. Task Group 38.3 fueled about 400 miles east of Luzon.

22 October Task Force 38 searched without success for the Jap fleet from positions 250 to 400 miles east of Luzon. Task Group 38.1 started for Ulithi.

On 23 October contact was made with a large force of enemy warships south of Mindoro Island in the Philippines.

(NOTE: At the time the Jap fleet was sighted on October 23 the fast carrier task force had been away from its Eniwetok base for almost two months and had engaged in sixteen combat actions, ranging over 1,800 miles from north to south. Nevertheless, it was able to engage the Japanese fleet in the decisive Battle for Leyte Gulf, which began at this time. Its ability to do so is a dramatic illustration of the necessity for the underlying logistic support.)

Task Groups 38.2 and 38.3 attacked this force. Task Group 38.3 was attacked by many enemy planes, and the PRINCETON received damage resulting in her sinking. Task Group 38.1 reversed course to the west to join the battle. Task Group 38.4 attacked targets in the Leyte area. In the afternoon, Task Group 38.3 search planes contacted an enemy carrier force east of Formosa. Task Groups 38.2, 38.3 and

38.4 rendezvoused and headed north to intercept the enemy force.

24 October. In the early morning, night searches from Task Groups 38.2, 38.3, and 38.4 located the enemy carrier force. These groups attacked the enemy fleet at around 0845 and sank four Jap carriers. Task Group 38.1 attacked enemy forces retiring through San Bernardino Straits.

On 25 October Task Groups 38.3 and 38.4 fueled about 400 miles east of Luzon.

26 October Task Groups 38.3 and 38.4 attacked and damaged several enemy warships in the Central Philippines. Task Groups 38.1 and 38.2 fueled about 350 miles east of Luzon. Task Groups 38.1 and 38.3 departed for Ulithi to rearm and reprovision.

During 27-29 October Task Groups 38.2 and 38.4 operated off Samar and attacked the Manila Bay area and other targets throughout the Philippines.

28-30 October Task Groups 38.1 and 38.3 rearmed and reprovisioned at Ulithi.

During these two months planes of the fast carrier task force had flown 18,266 sorties, expending 6,000 tons of bombs, 331 torpedoes, 7,752 rockets, and enormous amounts of fuel and provisions. It had lost 326 planes in combat and operational accidents, and 297 of its pilots and aircrewmen were casualties. One carrier had been lost and two cruisers damaged.

Nevertheless, the fast carrier task force was able in November to take up the aerial bombardment of Manila in support of General MacArthur's troops. These bombings continued throughout most of November, the Third Fleet's third consecutive month away from its Eniwetok base. And within slightly more than a month the big carrier force was able to begin its historic sweep which carried the American Navy, for the first time in this war, back to the China coast.

Conclusion

A logistic organization which has successfully supported prolonged operations like the one chronicled above obviously is in a good state of repair. What remains to be done during this war is, first, to clarify responsibility and planning along lines suggested after the close of the 1944 fiscal year by the Archer-Wolf group and the Logistic Organization Planning Unit, and, second, as Problem II explains, to tighten controls over production.

How shall we preserve an alert nucleus of this logistic organization during peace?

The answer to this question has ramifications throughout the Navy. It will determine the future of many war-born innovations such as the dual position of Commander-in-Chief, U. S. Fleet, and Chief of Naval Operations. It will govern the role to be played in the Navy by the civilian secretariat. It will modify the course of study at the Naval Academy and the standards by which an officer's qualifications for command are measured.

In the midst of war the Navy can not make all of the adjustments which will be necessary in order to preserve a vigorous logistic mechanism during peace, but these adjustments will increase in urgency.

This is the first war in which the Navy has had to fight in a number of theatres, all of them removed by thousands of miles from our sources of supply in the United States. This war may not be the last one which we are thus required to fight. Indeed, if other wars

come, I hope that we can always fight them abroad. Therefore, it is imperative that the Navy in peace continue a first-rate logistic organization -- one in which men will be trained from the time they enter the Naval Academy and in which civilian business skills will be fully used.

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Problem II

ACHIEVING PEAK PRODUCTION and REVIEWING THE PROGRAM

The Problem

During the fiscal year 1944, production for the Navy presented a twofold problem. The first task was to drive production to peak levels -- peaks which, in some instances, need not be attained again. The second phase of the problem was to review this immense production program as it reached its peak, making doubly certain that the proper materials were procured in the proper quantities and at the proper time.

The Solution

Achievement of peak production was made possible by the industrial mobilization which had occurred before the fiscal year 1944 began. During that year, there remained only the work of pushing at maximum speed, certain urgent production, particularly destroyer escorts and landing craft.

The procurement review phase of the problem required establishment of new mechanisms, among which three were outstanding: the Procurement Review Board initiated by the Director of War Mobilization and the Joint Production Survey Committee which evolved therefrom, the Logistic Organization Planning Unit established by the Commander-in-Chief, U. S. Fleet, and Chief of Naval Operations, and the

Navy Inventory Control Office created by the Secretary.* (Results of these actions are set forth under "Conclusions" on p. 30)

Discussion of the Problem

Peak Production. By June, 1944, production for the Navy had reached a peak which probably need not be exceeded. In some fields peaks were established which will not be equalled during the remainder of the war.

The 405,254 tons of newly constructed naval vessels completed in May, 1944, probably will stand as the highest monthly record during this war. Also, the 2,800 aircraft accepted by the Navy in March, 1944, probably will be the largest monthly total recorded. The public works program of the Navy, embracing both domestic and advance base construction, reached its peak in 1943 and probably will not again attain those levels.

Offsetting these declines are increases in other Navy programs, particularly the procurement of expendable items. The ordnance program of the Navy, for example, is expected to go on increasing in volume throughout the first quarter of 1945. Similarly, the procurement of clothing, small stores, provisions, and fuel did not reach its peak until the end of the 1944 calendar year.

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*Both the need and the methods for inventory control were brought into sharp focus by the work of Murray D. Safanie, special assistant to Secretary Knox, and of a most helpful committee of three business executives: J. F. Creamer, A. C. Romer and C. W. Cederberg.

To sum up, by the end of the 1944 fiscal year, production of what may be called the capital equipment of the Navy -- ships, planes, guns, and bases -- had begun a gradual decline. Meanwhile, production of expendable material -- ammunition, fuel, clothing, and repair parts -- were continuing to increase with the tempo of the fighting.

The net result of these divergent trends in various Navy production programs is that over-all production for the Navy, having reached a record-breaking level in the April-June quarter of 1944, probably will not be called upon to exceed that level.* The problem now is to change the character of production for the Navy, as the war requires, without allowing it to lose its present intensity.

Reflecting achievement of unprecedented production, the value of ships, planes, and major ordnance items delivered to the Navy rose to $12.7 billion in the 1944 fiscal year. This total shows an increase of 87% over the 1943 fiscal year figures of $6.8 billion.

Ship completions set an all-time record in the 1944 fiscal year; 42,248 naval craft, aggregating 4,483,947 tons, were finished, ready for use or shakedowns. Of these ships, 32,814 were landing craft, 355 were auxiliaries, 954 were patrol and mine craft, 6,887 were small boats, 560 were district craft, and 678 were combatant ships. The combatant vessels completed in the 1944 fiscal year comprise one battleship, six 27,000-ton aircraft carriers, four 11,000-ton light carriers,

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* The index of total Navy procurement, based on the first quarter of 1944 as 100, was 115 in April-June, dropped to 106 in July-September, remained at 106 in October-December, and is expected to drop again in 1945.

sixty-nine escort carriers, thirteen cruisers, 115 destroyers, 399 destroyer escorts, and seventy-one submarines. In all classes and subclasses these 1943-44 completions were the highest on record.

More than 29,000 planes of all types were accepted by the Navy during the fiscal year, an increase of 80% over the preceding fiscal year. Like ship completions, plane production was the highest on record.

Ordnance output for ships, aircraft, and lend-lease included over 63,000 gun assemblies of 20 mm. caliber and larger, and over 500,000,000 rounds of antiaircraft ammunition.

This record-breaking production was a solid tribute to the power of industrial America. The Navy here reiterates its gratitude to the men and women whose genius, skill and devotion made this production possible.

Three special production achievements during the 1944 fiscal year typify the drive for peak munitions production.

In the first half of the 1943-44 fiscal year the Navy, after serious delay in getting under way, met its deadline in destroyer escort construction. These vessels, designed, built and armed to combat submarines in the Atlantic and to assist in Pacific convoy work, were the Navy's largest venture into mass production of warships. The authorized program at one time included as many as 1,005 vessels. Of this program, the Joint Chiefs of Staff had marked 300 destroyer escorts "urgent," desiring at least that many by December 31, 1943. A destroyer escort is not a simple vessel to build. It is over 300 feet in

length. Its beam is 36 feet. Its speed is in excess of twenty knots, and it carries torpedo tubes and depth charge racks in addition to guns. When the 1944 fiscal year began, on July 1, 1943, only fifty-six of the 300 "urgent" DE's had been completed. In the ensuing six months prior to the December 31 deadline, the Navy yards and private shipyards of the nation produced -- and our ordnance plants armed -- the astonishing total of 250 additional destroyer escorts, thus slightly exceeding the goal of 300. This remarkable record, completing nearly three warships every two days, is without precedent in naval construction.

The second outstanding production achievement during the 1944 fiscal year was the completion of landing craft. In anticipation of the landings in Normandy, in the south of France, and in the Pacific, the landing craft construction program of the Navy was increased at the Quebec conference of August, 1943, and was still further augmented by decisions of the Cairo conference in November, 1943. As a result of these strategic determinations, the landing craft to be completed rose from 612,000 tons in the fiscal year 1943 to more than 1,100,000 tons in the fiscal year 1944. Because the Cairo decisions came in the fifth month of the fiscal year, by far the largest part of the new landing craft program not only had to be superimposed on other shipbuilding programs, but also had to be compressed into the last six months of the fiscal year. The Navy was called upon to produce and arm between January 1 and June 30, 1944, almost double the tonnage of landing craft which had been produced in the immediately preceding six months.

This goal was achieved with a margin to spare. A strategic deadline of May 31 had been set for the major part of the landing craft under construction. Once again, as in the destroyer escort vessels program, the Navy yards, shipyards, and ordnance plants performed an enormous task by turning out between the first of January and the end of June almost 20,000 landing craft of an aggregate tonnage in excess of 728,000. An average of 107 new landing craft hit the water every day for six months. They made the subsequent invasions possible.

The third outstanding production achievement during the fiscal year 1944 was the output of Navy combat aircraft. The 24,000 new combat aircraft accepted by the Navy in the 1944 fiscal year exceeded by 80% the Navy combat planes accepted in the preceding three fiscal years combined. The number of fighters and bombers accepted in the first six months of the fiscal year alone was greater than such acceptances in the whole preceding fiscal year. This outstanding acceleration of production more than met basic operational requirements for naval aircraft during the fiscal year, and mass production of planes made possible the great naval air battles over the Philippine Sea.

These three programs -- destroyer escorts, landing craft, and combat planes -- typify a year of record production. While these and other programs were reaching spectacular levels, other types of production were falling behind requirements -- not because output declined, but because the war forced the Navy to enlarge and accelerate its requirements. By June 30, 1944, the Navy, having successfully expedited one group of programs, found itself confronting new production problems in the following fields:

1. Assault ships. Requiring greater "reach" for our amphibious strikes as Pacific distances stretched out, the Navy began to assist the Maritime Commission in constructing two new types of invasion ships: attack transports and attack cargo vessels.

2. Rockets. Producing rockets for the Army as well as itself, the Navy found it must enormously increase its output to $70 million a month.

3. High-capacity ammunition. Like rockets, high capacity ammunition has proved especially useful against shore defenses. By the end of the 1944 fiscal year, the Navy was obliged to expedite output in order to meet the fleet's needs.

4. Repair parts. Ships built to steam 50,000 miles between overhauls have steamed over 200,000. Plane engines designed to operate 800 hours between overhauls have operated 2,500 hours. Remarkable as these records are, the Navy was required by June, 1944, to emphasize production of repair parts in order to make good the wear and tear of war.

How these and other new production problems were met is a story running into the 1945 fiscal year. What is especially significant, however, is that throughout the 1944 fiscal year the Navy was repeatedly pushing some programs to record-breaking peaks, then letting them decline while pressure was applied to newly-urgent programs.

Fluidity was the order of the day. To achieve it required constant scrutiny of production schedules, constant matching of industrial

activity against battle experience.*

Program Review. The first major step in this intensified review of programs was taken by the Director of War Mobilization, Mr. Byrnes, on June 25, 1943, when he suggested to Secretary Knox the establishment of the Procurement Review Board. The work of this board has had a triple result. First, it has led to the adjustment of many specific programs. Second, it has encouraged the Navy to undertake on its own motion a tighter control of its logistic operations. Third, it evolved into the Joint Production Survey Committee, which continues to review war programs for the Joint Chiefs of Staff.

Some of the more important adjustments in individual programs which grew out of the various review activities were the following:

1. Reduction in the anti-submarine vessel programs, especially the cut-back of 440 destroyer escort vessels.
2. Curtailment of submarine production.
3. Review of aircraft attrition rates, with a subsequent downward adjustment in fighter production schedules.

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* Adjustment of production to changing needs also raised the problems of contract termination and disposal of useless surpluses. Under the leadership of Messrs. Byrnes, Baruch, and Hancock, the Navy in the 1944 fiscal year assisted in the formulation of basic policies and set up its own machinery to handle this work.

4. Reduction in certain ammunition requirements, of which the most spectacular was a reduction in torpedo production schedules.*

While these adjustments were taking place in individual programs, the Navy overhauled its production-review mechanism. This improvement took four forms.

First, Admiral King undertook, at my request, to review the shipbuilding program each month in order to keep production schedules in balance with changing strategic needs.

Second, Admiral King appointed a Logistic Organization Planning Unit. This unit, working in conjunction with the Archer-Wolf group, designed a system of over-all reports, relating strategic plans to logistic needs, so that the Navy would have available a comprehensive statement of the materials necessary to carry out its strategic plans. The work of this unit was not completed until after the close of the fiscal year under discussion. A final report and evaluation of the Unit's work will not be made in this annual report.

The third major improvement in the Navy program-review mechanism began on May 23, 1944, when an order was signed inaugurating our long-projected war-time inventory of all Navy material on hand.

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*War, however, has no respect for mathematical projections. In October, 1944, the fleet used more surface and aircraft torpedoes in combat than during all of the last six months of the 1944 fiscal year, requiring restoration of part of the torpedo cut-back. Similarly, by 1945 the Navy was restoring some of its fighter plane cut-back because the character of aerial warfare had changed and because these planes had evolved into dual-purpose fighter-bombers.

Taking an inventory of a business as large as the Navy, which spends $26 billion a year, was an enormous undertaking. Stock taking had to occur at 700 different depots and stations scattered over the U. S., the Caribbean, the Canal Zone, and the Hawaiian Islands. Supplies of 2,000,000 kinds of items had to be tallied. Like the Logistic Organization Planning Unit, the inventory organization did not complete its work during the fiscal year under discussion, and its results will not be included in this report, except to say that by December 31, 1944, the Navy, for the first time in its history, will have stock records that have been audited in their entirety by a physical inventory during the calendar year 1944. This inventory will be kept current.

The fourth improvement is linked to the third. It is a new system of stock control, determining on the basis of past usage plus known future needs the quantities of material which should be kept in stock. Stock control is the end to which our inventory is the means. This control system, like the inventory, is an immense undertaking, and it will not be in full operation until after the close of the 1945 fiscal year.

Conclusion

Mr. President, I submit that the Navy now is gathering into its hands the controls needed for a flexible production program. By June 30, 1944, we either had or were in the process of getting:

A. A systematic statement of logistic requirements arising out of future strategic plans.

B. An inventory to show what material is on hand.

C. A stock control system which should discourage surpluses and anticipate shortages.

D. A procurement and production organization which, on the record of its ability to achieve successive peaks in output, can be relied upon to fill gaps between logistic requirements and stocks on hand -- with the assistance, of course, of over-all industrial mobilization.

E. A delivery service composed of the Naval Transportation Service and the Naval Air Transport Service which has, with the fine assistance of the War Shipping Administration, put the necessary equipment to the hands of our fighting forces.

What now remains to be done is to push through to maturity the planning, program-review, inventory, and stock control work already begun, developing them into the useful tools of management which they should be.

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Problem III

RESEARCH

The Problem

In peace, even more than in war, scientists owe to their nation an obligation to contribute to its security by carrying on research in military fields. The problem which began to emerge during the 1944 fiscal year is how to establish channels through which scientists can discharge this obligation in peace as successfully as they have during this war.

The Solution

The Navy believes that the solution for this problem is the establishment by law of an independent agency devoted to long-term, basic military research, securing its own funds from Congress and responsive to, but not dominated by, the Army and Navy. This agency, the Navy believes, should be authorized to use the methods of the Office of Scientific Research and Development, contracting with institutional and industrial laboratories wherever possible. Its own facilities should be kept to a minimum. The Army and Navy would continue their own research, devoted primarily to applying the results of the new agency's fundamental research to their own particular problems.

The Navy realizes that this solution will not be possible without the cooperation of the War Department and of other agencies. However, the Navy so firmly believes in the importance of this solution to the future welfare of the country that advocacy of it will become settled

Navy policy.

Discussion of the Problem

I have said that it is even more important in peace than it is in war for scientists to contribute to basic military research. Wars are fought primarily with weapons which were developed before the fighting began. Experience demonstrates that a nation at war usually does not have time to push through a new line of fundamental research and then apply that research before the outcome of the war is decided. Research requires time. Application of its result absorbs more time. Wars, long as they are, move more swiftly. During war a nation has time only to improve and adapt weapons, the fundamentals of which were evolved during the preceding years of peace. It follows, therefore, that, if we are to be scientifically prepared for war, that preparation must take place before, not after, the outbreak of hostilities.*

The two most spectacular new weapons used in this war are rockets and radar. Both of them prove that, if a weapon is to be employed during a war, the fundamental research underlying it must have been conducted over a protracted period before the war.

Rockets, of course, are a very old military weapon. The records of the Navy show that an unsuccessful test firing of a military

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* Scientific preparation for defense presupposes knowledge of weapons being developed by potential enemies. Such knowledge cannot be obtained without a more adequate intelligence system than the United States has ever maintained in its history. A corollary of adequate scientific preparation, therefore, may be an expanded intelligence system.

rocket was conducted at the Washington Navy Yard in the presence of President Lincoln in 1863. Work on what might be called a modern rocket engine dates back at least to the 1920's. Every year since 1925, the Navy Department has made an annual contribution to research on rocket engines. After the outbreak of the present war, this work, having gone through a long and necessary period of trial and error, was accelerated. The beginning of successful production of modern rockets in the United States probably dates from contractual arrangements, made at the request of the Navy, between the National Defense Research Council and the California Institute of Technology in 1941. Thus, the present varied types of rockets are the final links in a chain of research and adaptation stretching back two decades.

Both among our Allies and our enemies, modern rocket development had a similar history, having been under way in Germany, according to recent reports, for some twenty years.

Radar surely will stand as the most effective new weapon in this war. It has been used by the Navy, of course, for search, identification and fire control since our entry into the war. During the fiscal year under discussion, we were able to perfect still more adaptations of radar. Among them was a lightweight radar bombsight; a lightweight computer for firing rockets, cannons and machine guns; reliable remote control radar systems; systems for jamming enemy radar; highpowered fighter director and search radar for use aboard aircraft carriers, permitting them to spot enemy planes as remote as 100 miles; special radar for amphibious operations; and further development of radar controlled craft. All of these innovations stem back to basic research which began in 1922.

In September of that year, two scientists at the Naval Aircraft Radio Laboratory at Anacostia, D. C. made the first observations which led to the development of radar. Throughout the next eighteen years, they and their associates conducted the time-consuming basic research which today makes possible our amazing and varied uses of radar -- an art in which we are far ahead of our enemies.

These examples -- rockets and radar -- are merely two of many. They show that, if we are not to fight a new war with the weapons of past wars, research on new weapons must precede, not follow, actual fighting. Our design engineers have demonstrated their ability to adapt and improve known weapons such as planes, guns, ships and projectiles. Our industrial mechanism has shown itself capable of producing the volume of munitions we need. But will we produce the right weapons next time?

To be assured that we do, the Navy is especially anxious to establish as soon as possible a research mechanism which will make available to the Army and Navy in time of peace the same excellent scientific cooperation which they have enjoyed during this war. To that end, the Secretary of the Navy, speaking for himself and the Secretary of War, on May 29, 1944, asked Mr. Charles E. Wilson, then Vice Chairman of the War Production Board, to head a committee of civilian and military scientists and technicians which would recommend the most desirable method for continuation of military research after the war. This committee did not complete its work during the fiscal year under discussion. However, it did report subsequently that it favored creation of a new independent agency along the lines outlined under "The Solution" in this section

of this report. The committee added the proviso that until this new agency could be created, the work might be carried on by the National Academy of Sciences. The Secretaries of War and Navy have requested the National Academy of Science to initiate this activity.

Like the Wilson committee, the Navy is firmly convinced that the eventual establishment of the new, independent agency devoted solely to basic military research is urgently necessary if this country is to be prepared adequately against war.

Conclusion

The uncertainty which prevailed at the close of the 1944 fiscal year about the peacetime future of fundamental military research and which the Wilson committee was to dispel still persists, despite the report of that committee. The Navy Department feels so deeply about the importance of the solution of this problem that it requests your intervention, guidance and support on this problem, which transcends the responsibility and authority of any single department.

Problem IV

TRAINING OFFICERS AND MEN

The Problem

Personnel problems during the 1944 fiscal year were analogous to production problems. The Navy was confronted with training in a single year the largest new naval force ever sent to sea in that period of time, a task comparable to attaining peak production of equipment.

At the same time, and especially toward the end of the fiscal year, the Navy was obliged to review and adjust its use of personnel -- as it was reviewing and adjusting its production program -- in an effort to stay within its personnel ceiling of 3,657,000, a limitation which shortly after the close of the fiscal year became untenable.*

The Solution

The first phase of this twofold problem -- peakload training -- was met in four ways. First, the Navy school system was enormously expanded. Second, a new system of "pre-commissioning" or team training for crews of Naval vessels was instituted. Third, intensified use of training aids speeded up the educational process. Fourth, training periods had to be shortened.

The second phase of the problem -- reviewing and adjusting the Navy's use of personnel -- was attacked in several ways. The

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* The 3,657,000 ceiling mentioned here includes Marine Corps and Coast Guard as well as the Navy proper. For the latter alone the ceiling then was 3,006,000.

Manpower Survey Committee set up by order of Secretary Knox on November 12, 1943, reviewed the complements of Naval Shore Establishments, recommending re-assignment to more urgent work of a large number of officers and men. Toward the end of the fiscal year, a diminished need for men in the Armed Guard, in coastal patrols, in some Atlantic stations, and in other activities permitted additional plans for shifting men to other assignments.

All of these adjustments, however, were not sufficient to allow the Fleet to be manned under the personnel ceiling then existing, and by the close of the 1944 fiscal year, the Navy was preparing to recommend to you an increase in its authorized strength.

Discussion of the Problem

The 1944 fiscal year broke all records for the number of men and women joining the Navy. The combined strength of the Navy, Marine Corps and Coast Guard reached 3,623,211 on June 30, 1944, an increase during the year of almost 1,420,000. This rate of expansion exceeded all previous records for the United States Navy and certainly surpasses the expansion of any navy, in any nation, at any time in history.

By the end of the fiscal year 1944, the Marine Corps and Coast Guard had virtually reached their maximum authorized strengths and were preparing to go on schedules of inductions which would provide for replacements only. The Navy itself, however, still had ahead of it at least another year of net increase in personnel.

The Navy, excluding the Marines and Coast Guard, inducted and trained during the fiscal year 1944 approximately 1,500,000 new officers and men. This was the largest training job ever undertaken by the Navy.

Today the world's greatest naval force is manned predominantly by men who had had no previous seagoing experience. That fact deserves remembering. It is a tribute to the training and leadership furnished by the regular Navy. It is equally a tribute to the skill and spirit of the 2,800,000 men and women who have joined the Navy, principally the Reserve, during the four years ended June 30, 1944.

When our big new warships put to sea for shakedown, as much as 87% of their crews have never been to sea before. Of the 2,981,365 persons in the Navy at the close of the 1944 fiscal year, 88% were school boys, workers, farmers, or business men at the time of the Pearl Harbor attack. The complexity of the training which they have mastered is reflected in the fact that new personnel must be trained to proficiency in more than 450 enlisted specialties and petty officer ratings, which are indispensable to man, fight, and maintain the highly complicated mechanism of a modern Navy.

With ingenuity and courage, young Americans of this generation have gone down to the sea, learning to handle and to fight intricate modern warships in a manner which should make the men of this Navy legendary.

Training of the greatest citizen naval force in history has been achieved by expansion of the naval training establishment, by channeling aptitudes after selection and classification of previously acquired civilian skills, by standardized curricula, by practical instruction, including the use of training aids, and by intensified team training of groups ashore prior to duty afloat and abroad.

Prior to the inception of the Navy's intensive shipbuilding

program in 1940, the Navy had in operation a training establishment of approximately 75 schools with an average attendance of 10,000 personnel. In addition the Navy operated two air training schools with an attendance of 865 men which produced an average of 350 pilots a year.

The Navy at the end of the 1944 fiscal year had a total of 954 schools with an attendance of 510,000. Of these schools, 455 were maintained for training officers and officer candidates, 413 for training enlisted personnel, and 86 for the training of both officers and enlisted personnel.

The Navy's schools for training officers and officer candidates fall into two principal groups:

1. Six Naval Reserve Midshipmen's Schools, since their establishment, have sent a total of 41,689 deck and engineering officers to duty assignments throughout the Naval establishment. These schools, established since 1940 for the training of officer candidates from civil life and from the enlisted ranks, are the Navy's principal source of young, seagoing officers, and 95% of their graduates are serving at sea.

2. Knowing that Selective Service would in time diminish the supply of men between 18 and 21 years upon which the Navy could depend for additional officer candidates, the Navy on July 1, 1943, instituted the Navy College Program (V-12) for the preliminary training of young officer candidates. A year later, on June 30, 1944, the Navy College Program (V-12) was operating 264 units at 202 colleges and universities and had a current attendance of 63,000 officer candidates. Since its establishment, the V-12 program has delivered more than 23,000 qualified officer candidates to the Reserve Midshipmen's Schools, Supply Corps

Schools and Marine Officer Candidates' Schools. In addition to this number, 2,600 officers were commissioned directly from Naval Reserve Officer Training Corps, now a part of the V-12 program, and the medical and dental schools have supplied the Navy with 1,400 doctors and dentists.

The Navy's training schools for instruction of enlisted personnel fall into two groups:

1. Recruit training -- or "boot" training -- is provided to new enlisted personnel at eight of these schools which had a total attendance of 224,829 at the end of the fiscal year. During the 1944 fiscal year 1,083,938 men and women completed "boot" training and were passed into service or into advanced enlisted training schools.

2. To provide advanced and specialized training for enlisted specialists, 405 schools are maintained with an enrollment, as of the end of the fiscal year, of 146,405. These schools had an output of 500,388 during the year.

Today, by utilizing civilian skills and by intensifying training, the Navy sends petty officers, third class, to specialized duty as soon as seven months after their first enlistment. During peacetime an average of four years had been required to train a petty officer, third class. A young commissioned officer was not usually assigned to take a deck watch under way until he had spent two years at sea following his four years at the Naval Academy. Now officers stand watch in the vessel for which they have been qualified after an average time of six months.

The magnitude of the shipbuilding program and the urgent need for crews with maximum team training before going to sea made

advisable the establishment in January 1943 of operational and pre-commissioning training activities, a development unique in naval instruction methods. Instead of sending officers and men already skilled in a specialty directly to sea after preliminary training at officers and enlisted service schools, the Navy assembled the officers and men of a new ship's company to train as teams ashore at operational and pre-commissioning training bases.

Prior to the commissioning of a new vessel, the new crew is gathered together and becomes a ship's organization on land. Built around a nucleus of experienced personnel drawn from the Fleet, these crews draw their remaining personnel directly from training schools, taking men with no previous sea or combat experience. Thereafter, the men of the crew live together and in all respects operate together as if in fact they were at sea. As members of teams who will later serve together in combat, officers and men are given advanced training in the scores of specialties required to master the complicated mechanism of the modern Naval vessel. The veteran personnel, brought back from the Fleet, are responsible for bringing the new men, lately from indoctrination and training schools, quickly to the high point of efficient team operation which conditions in action require. As a result, members of the new crew, when assigned to their new vessel, possess far more practical training as fighting units than was possible under previous methods of instruction ashore. By the continuation of training at sea, seasoned personnel can be developed in months rather than years. I cite three examples --

Charles William Fred, of 241 West Exchange Street, Akron, Ohio, was an eighteen-year old apprentice machinist when he reported to the Great Lakes Naval Training Station for induction into the Navy on July 7, 1943. He began his recruit, or "boot," training at the Great Lakes Naval Training Station on July 14, completing it about two months later on September 9, 1943. At that time he received the rating of fireman, third class.

Fireman Fred was assigned to the Naval Training School (Basic Engineers) at Great Lakes, Illinois, for further instruction, which he began on September 23, and which he completed on November 18, 1943, finishing with an average of 90 and standing sixteenth in his class of 222. He was advanced to fireman, second class.

Three weeks later, on December 6, 1943, Fireman Fred reported to the Nordberg Uniflow Steam Engine School at Milwaukee, Wisconsin, for a two weeks course in steam engines of the type used aboard escort aircraft carriers. Upon successful completion of this course, Fireman Fred had completed his formal schooling in the Navy slightly less than six months after he was first inducted.

On December 29, 1943, he began his precommissioning training at the Receiving Station, Puget Sound Navy Yard, Bremerton, Washington. Here Fireman Fred became a member of an actual ship's company ashore, working and training for a month with other members of the crew destined to serve

aboard the escort carrier U.S.S. MARCUS ISLAND.

Fireman Fred reported aboard the MARCUS ISLAND on her commissioning date, January 26, 1944, seven months and nineteen days after he first entered the Navy and just one day before his own nineteenth birthday. The next month was spent learning his duties aboard ship while the MARCUS ISLAND completed her fitting out at the Puget Sound Navy Yard.

On February 21, 1944, the MARCUS ISLAND, ready for her shakedown, put to sea. Thus, Fireman Fred, a landsman who had never been to sea before, was, within eight months after joining the Navy, one of a team of men, mostly like himself, who were taking to sea a 9,000-ton aircraft carrier.

The MARCUS ISLAND's shakedown actually turned out to be a series of cruises delivering planes to Pacific island bases, so that the crew, including Fireman Fred, had their first sea training doing actual work in the Navy's logistic operations. By July 3, 1944, the MARCUS ISLAND, with Fireman Fred now advanced to Machinist's Mate, third class, was back in San Diego for her post-shakedown check up.

At the end of this check up, the MARCUS ISLAND -- including Machinist's Mate Fred, who had been in the Navy one year and five days, and who had served at sea four months -- was ready for a combat assignment.

The name of Machinist's Mate Charles William Fred appears on the September 30 Muster Roll of the MARCUS ISLAND. Therefore, he probably was aboard her when she

fought in the Second Battle of the Philippine Sea, October 23-25, 1944, eight months after he first went to sea.

Ensign Maynard James Mitchell, A-V(N), USNR, and William Clifford Pinkerton, Aviation Radioman, 3/c, USNR, are today serving aboard the aircraft carrier SHANGRI-LA as pilot and combat aircrewman. These two men are a fighting team in the Navy's air arm. The following chronology of their training typifies the skill and adaptability with which young men have learned their role in a sea-going air force.

Maynard James Mitchell, 2437 Highland Street, Berwyn, Illinois, was a student at Cicero Junior College when he was accepted for enlistment as an Aviation Cadet, V-5, by the Naval Aviation Cadet Selection Board, Chicago, on November 3, 1942. He was just four days past his eighteenth birthday.

Cadet Mitchell was called to active duty on December 5, 1942, and ten days later, after physical examination and indoctrination, he reported for civilian pilot training at Texas College of Mines, El Paso, Texas. Ten weeks later he began Naval pre-flight training at Athens, Georgia, where he reported on February 25, 1943. (While Mitchell was still in pre-flight training, Pinkerton, his future combat aircrewman, was entering the Navy at Harrisburg, Pennsylvania, on May 3, 1943).

On May 17 Cadet Mitchell completed his pre-flight training with a mark of 3.18 -- 4.0 is perfect -- and was transferred to the Naval Air Station, Memphis, Tennessee, for

primary flight training. He probably flew solo for the first time about the end of May, roughly five and a half months after he had first reported for training.

Completing his primary flight training in three and a half months Cadet Mitchell reported to the Naval Air Station, Corpus Christi, Texas, on August 30, 1943, for intermediate training. Here he spent his first anniversary as a member of the Navy, remaining in intermediate training until February 2, 1944. On that date he accepted his appointment as an Ensign in the United States Naval Reserve and was designated a Naval Aviator.

Ensign Mitchell had earned his Navy wings within thirteen and a half months after he had first reported for training in the Navy. The following day, February 3, 1944, he was detached from the Naval Air Station at Corpus Christi and was ordered to report on February 9 to the Naval Air Station, Deland, Florida, for operational training. At Deland Ensign Mitchell met for the first time Aircrewman Pinkerton.

William Clifford Pinkerton had been in the Navy nine months when he met and teamed up with Ensign Mitchell at Deland. Pinkerton, who had been born, finished high school and found a railroad job in Lykens, Pennsylvania, was nearing his nineteenth birthday when on May 3, 1943, he enlisted as an apprentice seaman.

He was called to active duty a week later and ordered to the Naval Training Station, Bainbridge, Maryland. On

July 6 he completed eight weeks of recruit training there, advancing to seaman, second class.

On July 27, 1943 (while Ensign Mitchell was still a Cadet in primary training at Memphis) Pinkerton was transferred to the Naval Air Technical Training Center, Jacksonville, Florida for instruction at the Aviation Radioman's School. This course lasted four months and Seaman Pinkerton, completing it on December 4, 1943, was advanced to Seaman first class (ARM) three days later. Next he received a brief ten-day course at the Aviation Radio Operator School.

Having finished his radio instruction, Seaman Pinkerton was confronted with a new subject, gunnery. On December 21, 1943, he was transferred to the Naval Air Gunnery School at Jacksonville and on February 2, 1944, after successfully completing training in all types of machine guns and turrets, was recommended for operational training in order to qualify as a combat aircrewman. On that date he was transferred to the Naval Air Station, Deland, Florida and shortly thereafter met Ensign Mitchell for the first time.

Ensign Mitchell and Seaman Pinkerton finished their operational training together as a Navy bomber crew on April 13. Ensign Mitchell had been in the Navy sixteen months. Pinkerton, who now had a petty officer's rating of Combat Aircrewman, ARM 3/c, had served one month short of a year.

After another month of rapid-fire refresher assignments Ensign Mitchell and Petty Officer Pinkerton reported to

a new bombing squadron at Wildwood, New Jersey on May 19, 1944. For the next five and a half months the squadron trained together from its land base, and Mitchell and Pinkerton, having already learned to operate as a team, now learned their part in the larger team which made up the squadron.

On November 4, 1944, Ensign Mitchell and Petty Officer Pinkerton, together with the rest of their squadron, reported aboard their new aircraft carrier for the first time. Now that carrier is en route to its baptism in fire, bearing a pilot and aircrewman who first met less than a year ago, who joined their squadron about ten months ago, and who first set their plane down on the carrier deck three months back.

At the outset of its program to build the greatest fleet in history, the Navy had had no previous experience to indicate whether in limited time it could thus train to expert proficiency the large number of civilian reserves necessary to man the great new sea and air force. But the job is being done. No Navy vessel or unit has been delayed in commissioning for lack of trained personnel. And the newly-trained Reserve officers and men have proved their excellence everywhere. Of the officers serving at sea on June 30, 1944, eight out of ten were members of the Reserve, and the ratio among enlisted men (on whom no segregated figures are available) probably was at least as high. Officers and men of the Reserve were filling all types of billets -- general duty deck assignments, engineering duty, staff positions, and in aviation where nine out of every ten aviators serving at sea were

members of the Reserve. Members of the regular Navy would join me, I know, in reporting that, whatever their assignments on the Navy's fighting team, their conduct has been, in the language of citations, "in keeping with the highest traditions of the United States Naval Service."

As the 1944 fiscal year drew to a close with the personnel ceiling for the Navy (excluding Marines and Coast Guard) still fixed at 3,006,000, the Navy faced the prospect of a static number of men, but an expanding number of ships and planes. In spite of the work of the Manpower Survey Committee, suggesting the reassignment of personnel, and in spite of a review of the operating force plan, the Navy could foresee a manpower shortage within three months after the end of the 1944 fiscal year. There were two reasons why this condition had developed:

1. Since the beginning of the war, the Navy frequently had had to revise production schedules to meet changing material requirements. Amphibious warfare particularly, since it lacked established standards of measurement, imposed the necessity of reviewing and re-estimating at every important juncture the changing requirements resulting from battle experience. Shifting material production was paralleled by similarly revised calculation of required personnel.

2. While the war in the Pacific was by no means approaching an end, it had been possible by June 30, 1944 to strike at Japan's intermediate defenses sooner than was expected. We moved faster than we had anticipated. Additional personnel were needed to keep pace with the acceleration of operations. Men who might not have been needed until late in the next fiscal year now had to be drawn into service between October 1944 and July 1945 to assure successful operations on the

revised time-table. For the most part the additional personnel were needed for manning new amphibious craft and auxiliary vessels going into commission in 1945.

Therefore, the Navy began preparing estimates of the additional enlisted strength which it would require during the 1945 fiscal year. This increase was not approved by the Joint Chiefs of Staff and by the President until after the close of the 1944 fiscal year. However, by June 30, it became apparent that, even after full allowance for the prospective increase, the Navy in the 1945 fiscal year would have to train or re-train less than half of the personnel trained in the 1944 fiscal year. In other words, the peak in training activities had been reached and, so far as we can now see, passed during the fiscal year which ended June 30, 1944.

Conclusion

With the great load of mass training behind it, the Navy still has the never-ending responsibility of improving its training techniques. But in the years following the 1944 fiscal year, personnel problems, other than training, will demand an increasing share of attention. Among the most important of these are the following:

A. In spite of its past efforts, the Navy has not yet solved the problem of rotating personnel so that officers and men who have served overseas for long periods may be returned to the United States on furlough. This rotation, which will become more important to morale as the Pacific war continues, deserves and shall receive the best efforts of the Navy. It should be supported by improvement in

all of our welfare and recreational work.

B. The problem of properly placing and utilizing personnel is one which is never successfully terminated. Although the Navy uses a system of tests to ascertain civilian skills adaptable to Navy work, the problem of measuring skills and of placing personnel so that they will be used to a maximum is, like the related training problem, one which will require unending attention.

C. A third problem which will become more pressing is the proper relationship between the regular Navy and the Reserve, with particular attention to offering the most able Reserve officers and enlisted men status, opportunity and prestige in the permanent service of the Navy.

D. Preparation of a personnel demobilization plan has begun and its urgency will increase. The Navy expects to be ready to handle demobilization. Unlike the Army, however, the Navy anticipates no partial demobilization at the end of the war in Europe.

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PROBLEM V

HEALTH

The Problem

Because 1943-44 was a year of invasion, the predominant problem in caring for the health of the men in the Navy was the task of taking medical care into beachheads.

The Solution

The solution was the creation of amphibious medicine. The Navy evolved a chain of medical facilities reaching from the corpsmen on the beachhead to aid stations, to field hospitals, thence to special hospital ships, and finally to fleet and advance base hospitals. Through this chain of medical care Marine and Navy men wounded in combat moved to safety with such success that, out of every hundred wounded men, ninety-eight recovered.

Discussion of the Problem

The twelve months ended June 30, 1944 -- encompassing the invasions of Sicily, Italy and Normandy, Tarawa, Kwajalein and Saipan -- brought about a full blown development of amphibious medical devices with which the Navy had previously experimented.

In an invasion the medical care of the wounded begins on the assault beaches.* Assault troops land accompanied by hospital

*Men wounded in landing craft on the way in are given first-aid by the boat crews, who are trained and equipped for that work, and are returned to the ships from which they came.

corpsmen who are specially trained and medically equipped to give first aid treatment of life saving proportions to wounded men. These corpsmen are the heroes of our medical organization. They are the first to see and care for the wounded. By the use of plasma, control of hemorrhage and proper splinting they are able to evacuate wounded whose lives might otherwise be lost.

There are eight hospital corpsmen to each Infantry Company -- one corpsman to every twenty-five men in the front line. In addition to their knowledge of first aid the corpsmen also are taught how to protect themselves from enemy fire and are trained in all phases of an amphibious assault. These men move inland with the advancing troops.

They are soon followed by the battalion aid station consisting of two medical officers, eight hospital corpsmen, stretcher bearers and jeep ambulances. The battalion aid station begins the collection of the wounded, augments first aid and continues the administration of plasma before evacuation to the beaches or to the field hospital. The jeep ambulance, which was first used on Guadalcanal, has proved invaluable in evacuating casualties from the front lines to the aid station, field hospital and beaches. The battalion aid station has two of these ambulances with a total of fifty-two for each Marine Corps Division. Each ambulance is capable of carrying two stretcher cases and two ambulatory wounded men. It is combat-loaded with essential medical

supplies, splints and equipment so that it not only acts as an ambulance but also as a mobile first aid unit.

The next medical echelon to arrive on the beach is the regimental aid station which is soon followed by the field hospital. The field hospital is staffed by five medical officers and seventy hospital corpsmen. It is divided into a collecting company and a hospital section. The collecting company assists, as necessary, with the collecting of the wounded while the hospital section sets up and begins definitive life saving surgery. For this purpose the hospital personnel have a portable plywood surgery which is brought ashore in landing craft. At Tarawa, two such hospitals were set up and were doing major surgery within six hours after the time they landed on the beach. On Tinian one such hospital was doing major surgery within four hours after landing. There are five of these hospitals to each Division, each capable of handling from two to three hundred patients. After treatment they act as holding hospitals for the more seriously wounded who can not be transported and as clearing units for wounded who can stand immediate evacuation seaward.

The seaward evacuation of casualties begins shortly after the landing of assault troops. A medical platoon which is attached to the Shore Party Commander lands shortly after the assault troops and is responsible for the evacuation of land casualties seaward. The platoon is equipped with essential medical supplies for first aid and with

jeep ambulances for lateral communication. Each beach medical platoon which operates on the beach in support of a Marine Battalion consists of one medical officer, eight hospital corpsmen and stretcher bearers. Immediately upon landing they establish a beach evacuation station, collect and render first aid to casualties and prepare them for evacuation to the ships. As the ground troops advance inland, the beach medical platoon remains on the beach as a receiving point for wounded men being evacuated seaward from the battalion and regimental aid stations and from the field hospital. When the beachhead becomes secure the platoons consolidate at selected points most convenient to inland communications. They continue to function, living in fox-holes and subjected to frequent air bombardment, until their job is accomplished. In the Normandy invasion they remained under these conditions for thirty days.

The actual method used for evacuating casualties from a beachhead to a ship depends on the character of the terrain and the hydrography of the area invaded. In general, any landing craft capable of landing on a beach is suitable and is used for the return of wounded men to a designated casualty handling ship. In the Pacific where coral reefs are frequent, transfer of casualties from a craft capable of surmounting the reef to faster crafts becomes expedient.

The ships receiving wounded are designated, equipped, and trained prior to an invasion. They are manned with well trained

surgical teams and hospital corpsmen and are equipped with the latest surgical equipment and supplies. The ships may include assault transports (APA's), LST's, hospital carriers (APH's) and hospital ships (AH's). Each type has its particular role. The hospital ships (AH) usually arrive in the combat area on D plus one, during day light, and receive fresh casualties, if the situation demands, or take aboard wounded men from other ships which have reached their casualty-carrying capacity. The seriously wounded are given priority in transfer to hospital ships. The hospital ships depart from the area before night fall, taking their wounded to base hospitals in the rear. The hospital carrier (APH) is the second type of ship to depart. The assault transport (APA) and the LST are the last ships to leave for the rear areas.

The LST has proved invaluable as a ship for the evacuation of the wounded. It was first used in the follow-up to the Sicily and Italy invasions and later in the Pacific. At the present time it is being used in the Pacific as a casualty control vessel and, in one instance, as a hospital ship. The casualty control LST takes its position near the beach and all casualties from the beachhead are routed to it for distribution. Some of the wounded men are retained on board while others are sent, after examination, to assault transports, hospital carriers and hospital ships.

The LST bears the distinction of handling more casualties during the 1943-44 invasions than any other single type of ship. It is

ideal for short hauls where the early discharge of wounded is possible. The arrangements made to handle wounded from the Normandy beachhead were, perhaps, the most interesting. A special fleet of LST's was designated for this task. They were loaded with combat men and equipment which could be off-loaded on the beaches with special rapidity, quickly freeing the LST's for their assignment as evacuation ships. Frequently in the early phases casualties were loaded before the ships were completely unloaded, affording the earliest possible care of the wounded. As soon as the combat equipment which the ship brought to the beachhead was out of the way, the LST became both an operating theater and a casualty-carrying ship on its return trip to England.

In the Normandy operation medical care during the assault phase was exacting because of the nature and the severity of the wounds. Definitive life saving surgery was practiced on a large number of cases aboard LST's and the majority of the wounded reaching England for hospitalization were in excellent condition. The result: an extremely low mortality rate of three-tenths of one per cent among the wounded reaching England.

These LST's handled 41,035 wounded as their contribution to the Normandy invasion. They were augmented by hospital ships under British operational control and by air evacuation.

Air evacuation was inaugurated at Guadalcanal. Since its inception it has made progressive strides and in the past year has

supplemented sea evacuation of wounded men in a very effective manner. As soon as landing strips become available and as the tactical situation permits, transportation by air ambulance begins. When it is operating fully, the majority of casualties are evacuated by this method. In Normandy air evacuation was planned to begin by D plus fourteen, but actually it was functioning on D plus four. Many casualties occurring on the beach and battlefield in Normandy were resting comfortably in hospitals in England by night of the same day.

The ultimate links in the chain of Naval medical care are advance base and fleet hospitals. These great installations, capable of caring for between 1,000 and 2,000 patients, are established in rear areas. As of June 30, 1944, eighteen were functioning in the Pacific area, and three, including an especially large one to handle wounded from the Normandy beachhead, were in existence in England and other Atlantic areas.

These hospitals are individual, functional units. They usually are housed in insulated Quonset huts and are equipped with the latest surgical devices. Their hospital beds have inner-spring mattresses. Laundry equipment, bakeries, maintenance shops and recreational halls are a part of their facilities. Their medical personnel consists of a specialist heading each department and fully-qualified doctors and surgeons, assisted by efficient nursing staffs for the care of the wounded. In these hospitals life saving procedures are continued on the highest

scientific plane, and a large percentage of the wounded are restored to their normal state of health.

The low mortality rate of two percent among wounded personnel can be attributed to two factors: quick and adequate first aid plus life saving surgery which, insofar as possible, is taken to the patient instead of bringing the patient to the surgery. To this end, the medical-aid man accompanying troops into battle has been given the training and materials to administer to a wounded man's early needs. This early care, combined with good transportation, plasma, whole blood, portable surgical facilities on land, and good surgical facilities afloat, made possible this saving of lives.

Although the development of amphibious medical care was the outstanding characteristic of the 1943-44 fiscal year, it also witnessed the solution -- or marked progress toward solution -- of numerous other medical problems, including the following:

Establishment at Klamath Falls, Oregon, of an unique center for treatment and retraining of United States Marines infected with malaria or filariasis.

Cooperative effort with other agencies in improvement of air-sea rescue operations.

Development, testing and arrangement for large scale production of blood plasma fractions which are saving the lives of

many wounded.

Reduction of the venereal disease rate to an all-time low.

Perfection of scores of devices by specialists in aviation, submarine and field medicine--protective clothing, ear wardens, insect control, improved litters, chemical desalination of sea water for drinking purposes and numerous others--designed to prolong survival, to hasten recovery, and to prevent disease, accident and injury.

Reduction of sick list admissions by nearly one-fourth during the last quarter of the fiscal year 1944.

Conclusion

The effort to save the lives of sick and wounded men of the Navy never ends. Although our 1943-44 progress was encouraging, it should be only the prologue to further advances -- and invasions of new lands will create new medical problems.

Problem VI

HANDLING THE NAVY'S FUNDS

The Problem

The people of the United States, their representatives in Congress, and the executive heads of the Navy must know what the Navy does -- and intends to do -- with the public funds appropriated to it. The problem is to arrange for fiscal machinery which will provide prompt and accurate accounts of the Navy's finances, together with a critical analysis of the uses to which the money is being placed.

The Solution

By the end of the 1944 fiscal year, three reports previously made* had shown that the solution for this problem is five-fold.

A. Centralized direction of Navy fiscal procedures, from budget making through auditing, should be established, making available to the administrative heads of the Navy the financial reports which they need for critical analysis of Navy operation.

B. Overlapping accounting activities of the various bureaus must be untangled because they now result in a confusion of conflicting financial reports.

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*A memorandum submitted February 23, 1943, to the Paymaster General by Mr. N. P. Cassidy; a report submitted by Mr. Paul Grady to the Under Secretary on April 5, 1943; the McNeil Plan, submitted to the Paymaster General November 26, 1943.

C. The 900 Navy field disbursing offices making payments to vendors must be consolidated into approximately fifteen regional offices to reduce the scattering of work and records.

D. Keeping of detailed accounts, which now is congested in Washington, should be decentralized to these fifteen regional offices, retaining only master accounts in Washington. Changes mentioned here and in paragraph C should make possible current, accurate reports on Navy commitments and expenditures.

E. Changes in appropriation structure may be necessary in order to provide better fiscal administration.

Discussion of the Problem

There are four stages in Navy financial operation.

The first stage is justification to the Congress of the funds and contract authority required by the Navy to carry out its programs and to meet contingencies as they arise.

The second stage is receipt by the Navy of authority from Congress to incur obligations for specific or approximate sums of public money. The total of these grants from Congress represents the Navy's financial ability to conduct its business. (Congressional grants may take one of two forms. Congress may first authorize the Navy to contract for a stated amount of work and then subsequently Congress

must appropriate actual cash to defray these contracts. Or Congress may appropriate the cash in the first instance without a prior authorization.)

For the year ended June 30, 1944, the Navy received from Congress authorizations amounting to $28,892,000,000 and appropriations to defray these and earlier authorizations amounting to $29,386,000,000.

From July 1, 1940, through June 30, 1944, Congress has authorized a Navy program estimated to cost $118.2 billion. To finance these authorizations, Congress has appropriated $105.4 billion, leaving about $13 billion of authorizations to be financed out of future appropriations. (These totals include $21.1 billion of authorizations and $26.5 billion of appropriations for the 1945 fiscal year.)

The third stage in Navy financial operations is the commitment of these authorized funds by the Navy for the various projects in the Navy program. These commitments take many forms: contracts, letters of intent, orders, and other legal obligations, plus requisitions, preliminary letters of intent and Bureau allotments. They represent commitments of the Navy to pay out funds for goods and services.

Commitments into which the Navy has entered have risen from an annual rate of $12.7 billion in the 1941 fiscal year to a peak of $26.8 billion in the 1943 fiscal year, declining to $24.2

billion in the year ended June 30, 1944.

Against the total program of $118.2 billion (see above), the Navy between July 1, 1940, and June 30, 1944, committed $86.8 billion, leaving $31.4 billion uncommitted. Included in this uncommitted balance is, of course, almost all of the $21.1 billion authorized in June, 1944, for the 1945 fiscal year.

The fourth and final stage in Navy financial operations is the actual disbursement of money to liquidate the commitments into which the Navy has entered. This expenditure takes place as the persons performing work for the Navy submit bills, invoices, and other evidences of work done.

Since the beginning of the defense program on July 1, 1940, annual expenditures by the Navy have multiplied ten-fold, rising from $2.6 billion in the 1941 fiscal year to $26.6 billion in the 1944 fiscal year.

Throughout these four fiscal years the total expenditures by the Navy have been $59.7 billion. In other words, the Navy has paid out $59.7 billion in liquidation of commitments amounting to $86.8 billion (see above). The remaining $27.1 billion of commitments has yet to be liquidated as work is completed.*

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*The figures given here for the total Navy program as of June 30, 1944, can be summarized and broken down as follows: (Continued on next page.)

The volume of authorizations, commitments, and expenditures has risen enormously. The financial mechanism of the Navy has not handled the swollen volume with ease. The responsibilities which

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Total program - $118.2 billion has been authorized, of which only $105.4 billion has been actually appropriated. Of its total authorizations, the Navy has committed $86.8 billion, leaving $31.4 billion available for future business. Of the $86.8 billion of commitments, $59.7 billion have been paid, leaving $27.1 billion still outstanding.

These over-all figures break down into the following grand divisions:

Bureau of Ships (principally for the shipbuilding program) - $37.2 billion has been authorized of which $32.3 billion is actually appropriated. Commitments amount to $31.7 billion, so that $5.5 billion of authorizations remain unused. $21.2 billion has been paid out against the commitments, leaving $10.5 billion unliquidated.

Bureau of Aeronautics (aircraft and accessories) - $25.3 billion has been authorized, of which $21.5 billion is actually appropriated. Commitments are $16.5 billion, leaving an unused balance of $8.8 billion. Disbursements against the commitments are $9.9 billion, leaving unliquidated a balance of $6.5 billion.

Bureau of Ordnance (armament, armor and ammunition for planes and ships) - $20.9 billion has been authorized, of which $18.3 billion is actually cash appropriations. Commitments, amounting to $14.6 billion, leave unused authorizations of $6.3 billion. Disbursements amount to $8.8 billion, so that commitments still outstanding amount to $5.8 billion.

Bureau of Yards and Docks (public works) - $8 billion has been authorized of which $6.5 billion has been appropriated. Commitments of $6.3 billion have exhausted all but $1.7 billion of the authorizations, and disbursements of $5.1 billion have liquidated all but $1.2 billion of the commitments.

Bureau of Supplies and Accounts (pay, subsistence, clothing, general supplies, fuel and transportation) - $19.6 billion has been authorized -- and all of it appropriated. $12.8 billion has been committed, leaving an unused balance of $6.8 billion. Disbursements against commitments are $10.8 billion, leaving $2 billion of commitments outstanding.

Miscellaneous items (training, medical care, Marine Corps, Coast Guard) - $7.2 billion, all appropriated, has been authorized, $4.9 billion committed, and $3.9 billion disbursed.

that mechanism must discharge can be simply stated.

1. The Navy must compile its annual budget, presenting to the President and to Congress estimates of future obligations and expenditures and a request for authorizations and appropriations.

2. The Navy must record the appropriations and authorizations received, and also record against them the commitments which are entered into, showing the uncommitted balances which are available for current and future business.

3. The Navy must next audit and disburse the funds which are actually paid out in liquidation of its commitments, keeping accurate, current records of these disbursements.

4. The Navy's final responsibility is to compile summary reports from which Congress, the President and the executive heads of the Navy can determine the pace, propriety and efficiency of Navy operations.

These responsibilities were scattered throughout the Navy at the end of the 1944 fiscal year as follows:

Preparation of the Navy's budget has been the responsibility of the Office of Budget and Reports.

The work of recording authorizations and commitments entered into against those authorizations has been scattered throughout the several bureaus of the Navy. When a procurement officer enters into a contract, he is obliged to send a copy of the contract for

accounting purposes to each of three different places. One copy goes to the Finance Officer of the Bureau in Washington for which the contracting officer works, that is, Ships, Aeronautics, Ordnance, et cetera. A second copy also goes to Washington to what is known as the Central Accounting Group of the Bureau of Supplies and Accounts. A third copy goes to one of the 900 disbursing offices, the one which will handle the disbursement of funds under the contract. Each of these three recipients of contracts attempts to keep detailed records on the contracts being entered into by the Navy. Since the Navy enters into about 10,000 contracts each month, the volume of work imposed on each of these three offices has obviously been large. Practices followed in the several offices recording contracts vary, as does the speed with which each one handles its work. Therefore, although the cognizant Bureau, the field offices, and the Bureau of Supplies and Accounts each is receiving the same basic information on commitments, reports emanating from each of them differ from the reports emanating from the other two. The result is confusion over just what portion of the Navy's authorizations is committed and how much remains available for future business.

The keeping of expenditure accounts is equally complicated. Money is paid by the 900 field disbursing offices on the basis of the audited invoices received from persons doing work for the Navy. About 500,000 of these invoices are received each month. Upon payment, copies of the payment vouchers are distributed for accounting purposes. One copy goes to the financial office of the Bureau having cognizance over the appropriation to which the expenditure is charged. Another

copy comes to Washington to the Central Accounting Group of the Bureau of Supplies and Accounts. The Central Accounting Group is Washington attempts to keep detail records compiled from these 500,000 monthly payment vouchers. The task is an enormous one, and the Central Accounting Group, besides experiencing great difficulty in its efforts to keep expenditure accounting on a current basis, makes no central use of the 'books of original entry' which exist in the 900 field offices. The result is that the Navy cannot say with certainty how much money has been spent and how much remains unspent as of any given day.

These procedures deny to the top management officials of the Navy Department the summary reports which they need for control of Navy funds. Information is slow. For example, the Annual Report of Naval Expenditures for the fiscal year 1943 was not published until June, 1944, eleven months after the close of the fiscal year. Information is cast in useless, outmoded forms. For example, the summaries in the Annual Report of Naval Expenditures, using an accounting classification devised early in this century, shows no expenditures for aviation, although the Navy has spent $10 billion for aeronautical purposes in four years.

Remedies for these deficiencies have been fairly clearly set forth, as explained under "The Solution" above, in a series of studies. The key to the remedy is the creation of a Fiscal Director for the Navy Department, empowering him to unify practices, to end duplication among Bureaus, to simplify the field office system, and to decentralize the work now in the Central Accounting Group.

Conclusion

When the 1944 fiscal year closed, plans were being drawn for action in all of these directions, and within six months thereafter the Office of Fiscal Director had been created. The Navy has in mind additional measures to strengthen its financial mechanism. What remains to be done is the enormous work of putting them into effect.

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EPILOGUE

A substantial portion of this report has dealt with statistics about production, the movement of supplies, the problems of maintaining ships, and in general the vast industrial, procurement and engineering organization necessary to support a navy operating on such a scale as ours and in a war for which, in so many of its aspects, there were no criteria of past experience.

I have considered the recital of these facts necessary and desirable, but, if one looks at such statistics only, the Navy might seem to be a lifeless and vast mechanism, an aggregation of mechanical details and automatic sequences -- an organization, in other words, manned and run by robots. As you know from your own experience, that is far from the truth.

There is still a spiritual factor in war and no matter how good the material, it is valueless unless it is used and fought by men of valor and brawn and brains. One cannot fly in a plane operated by Naval airmen, one cannot sail in a ship of the Navy, whether it is one of our great new battleships or the humblest landing craft, without being aware that the spiritual force which pervades all our history is still the real foundation for the success of our arms.

It would be inappropriate for me to try to evaluate in a cold analysis the attitude of the men who have fought and who are still fighting our battles on the sea. But no man can stand in the presence of these young men on the eve of battle without a deep humility, nor can he, without being presumptious, undertake to describe their heroism,

their sacrifice and their service.

As I write these observations, I have before me a few citations accompanying decorations, some of them awarded posthumously. The stark recital of some of their deeds is the most eloquent testimony to the patriotism of our Bluejackets and our Marines.

Pfc. John Dury New, USMC.

"While an officer and observer were directing mortar fire *** against a cave in a pinnacle overlooking our lines, an enemy Japanese soldier * * * hurled a grenade into their position. Private First Class New who was nearby * * * flung himself on the grenade, taking the full impact of the explosion in order to save the lives of his comrades."

Pfc. Luther Skaggs, Jr., USMC.

"On the morning of 21 July shortly after H-Hour on Beach Red One the 60 mm. mortar section of Company "K" was subjected to a heavy mortar barrage, causing seven casualties in the section. Immediately, on his own initiative Private First Class Skaggs reorganized and led the section a distance of two hundred yards under heavy mortar and sniper fire to a position from which he supported the successful attack by his company against strategic Chonito Cliff. During the night of 21-22 July, the enemy launched a series of four heavy counterattacks against "K" Company's perimeter on Chonito Cliff. During the first of these an enemy hand grenade exploded in Skaggs' hole, blowing off his lower left leg. Applying a tourniquet to his dismembered limb, he remained in his foxhole for the remaining eight hours of darkness, propping himself up in his foxhole in such a position that, despite the loss of his leg, he was able to return enemy fire with his rifle and hand grenades. In the desperate struggle that developed in this sector thirteen of fourteen men in defending positions were killed or wounded. Skaggs' heroic example enabled other wounded to continue the fight, holding their ground until it became necessary to withdraw a short distance in order to shorten the defensive line. Throughout the night Skaggs remained calm and cheerful, repeatedly reassuring those around him both as to his own condition and the situation in general, which at that time was desperate. When a withdrawal was ordered he refused assistance, crawling to the rear unaided. In so doing he left two men free to cover the withdrawal. In the words of the Lieutenant who had that sector, 'His (Skaggs') courageous conduct was the greatest inspiration possible for the men in

that sector.'"

Commander Lawson P. Ramage, USN.

"As Commanding Officer of a U. S. submarine in a pre-dawn attack on a Japanese convoy * * * Commander Ramage launched a perilous surface attack by delivering a crippling stern shot into a freighter and quickly following up with a series of bow and stern torpedoes to sink the leading tanker and damage the second one. Exposed by the light of bursting flares and bravely defiant of terrific shellfire passing close overhead, he struck again, sinking a transport by two forward reloads. In the mounting fury of fire from the damaged and sinking tanker, he calmly ordered his men below, remaining on the bridge to fight it out with an enemy now disorganized and confused * * * As a fast transport closed in to ram, Commander Ramage daringly swung the stern of the speeding submarine as she crossed the bow of the onrushing ship, clearing by less than fifty feet but placing his submarine in the deadly cross-fire from escorts on all sides and with the transport dead ahead. Undaunted, he sent three smashing down-the-throat bow shots to stop the target, then scored a killing hit as a climax to forty-six minutes of violent action with the submarine and her valiant fighting company retiring victorious and unscathed."

"Commander David McCampbell, USN.

"Commander McCampbell led his fighter planes against a force of eighty Japanese carrier-based aircraft bearing down on our Fleet on June 19, 1944. Striking fiercely * * * he personally destroyed seven hostile planes during this single engagement in which the outnumbering attack force was * * * virtually annihilated. During a major Fleet engagement with the enemy on October 24, Commander McCampbell, assisted by but one plane * * * attacked a formation of sixty land-based craft approaching our forces. Fighting desperately but with superb skill against such overwhelming power, he shot down nine Japanese planes and, completely disorganizing the enemy group, forced the remainder to abandon the attack before a single aircraft could reach the Fleet."

Lieutenant Nathan G. Gordon, USNR.

"As Commander of a Catalina Patrol Plane * * * rescuing personnel * * * shot down * * * over Kavieng Harbor * * * Lieutenant Gordon * * * flew boldly into the harbor, defying close range fire from enemy shore guns to make three separate landings in full view of the Japanese and pick up nine men, several of them injured. With his * * * flying boat dangerously overloaded, he made a brilliant take-off despite heavy

swells and almost total absence of wind and set a course for base, only to receive the report of another group stranded in a rubber life raft 600 yards from the enemy shore. Promptly turning back, he again risked his life to set his plane down under direct fire of the heaviest defenses of Kavieng and take aboard six more survivors, coolly making his fourth dexterous take-off with fifteen rescued officers and men."

Electrician's Mate, First Class, Arthur Virgil Shields, USNR.

"While serving on board the U.S.S. LCI(L) 415 during the invasion of France June 6, 1944 * * * his ship * * * beached on a bar fifty yards from shore; Shields voluntarily swam the distance through a hail of enemy shrapnel to test the depth of the water before disembarkation of troops. Although exhausted upon returning to the ship, he unhesitatingly plunged in again to aid two soldiers in danger of drowning and, despite heavy shellfire, supported them until a rubber boat arrived. Placing one man in the boat and assisting the other to shallow water, he subsequently boarded a disabled landing craft nearby and remained aboard after the abandon ship order had been given, rendering valiant aid to the officers and a pharmacist's mate in removing a wounded crew member. While carrying the helpless man along the beach to find another landing craft, he was mortally wounded * * * * He gallantly gave his life for his country."

These acts of courage were not the acts of men driven either by fanaticism or by terror; they are not the product of any suicidal negation or of a pagan civilization. They are the affirmation of our American faith and of the willingness of men to lay down their lives for each other. They truly exemplify that definition of courage -- grace under pressure.

I have said that the achievements set forth in this report should be credited to the entire Navy team. That team consists of the 3,900,000 officers and men serving, as of this date, in the Navy, Marine Corps, and Coast Guard. The credit is shared by all of them. However, I wish to list below certain members of that team who, because

of the responsible positions which they held at the close of the 1944 fiscal year, stood out as leaders in the Navy organization. (Commanding officers in the major engagements fought in this period are not listed here becaust most of them are named in Admiral King's report.)

Under Secretary of the Navy, Ralph A. Bard

Assistant Secretary of the Navy for Air, Artemus L. Gates

Commander-in-Chief, U. S. Fleet, and Chief of Naval Operations,
Admiral Ernest J. King, USN

Chief of Staff to the Commander-in-Chief,
Vice Admiral R. S. Edwards, USN

Vice Chief of Naval Operations,
Vice Admiral Frederick J. Horne, USN

Commandant, U. S. Marine Corps,
Lieutenant General Alexander A. Vandegrift, USMC

Commandant, U. S. Coast Guard,
Vice Admiral Russell R. Waesche, USCG

Fleet Commanders

Commander-in-Chief, Pacific Fleet,
Admiral Chester W. Nimitz, USN

Commander-in-Chief, Atlantic Fleet,
Admiral Royal E. Ingersoll, USN

Third Fleet, Admiral William F. Halsey, Jr., USN

Fourth Fleet, Vice Admiral J. H. Ingram, USN

Fifth Fleet, Admiral R. A. Spruance, USN

Seventh Fleet, Vice Admiral T. C. Kinkaid, USN

Eighth Fleet, Vice Admiral H. K. Hewitt, USN

Tenth Fleet, Admiral Ernest J. King, USN

Twelfth Fleet, Admiral H. R. Stark, USN

Commanding Officers of Marine Corps Divisions

1st Marines, Maj. Gen. Wm. H. Rupertus, USMC

2nd Marines, Maj. Gen. Julian C. Smith, USMC

(Succeeded by Maj. Gen. Thos. E. Watson in April, 1944)

3rd Marines, Maj. Gen. Allen H. Turnage, USMC

4th Marines, Maj. Gen. Harry Schmidt, USMC

5th Marines, Maj. Gen. Keller E. Rockey, USMC

6th Marines, Maj. Gen. Lemuel C. Shepherd, USMC

Sea Frontier Commanders

Eastern Sea Frontier,

Vice Admiral H. F. Leary, USN

Gulf Sea Frontier,

Rear Admiral W. R. Munroe, USN

Caribbean Sea Frontier,

Vice Admiral A. B. Cook, USN

Western Sea Frontier,

Vice Admiral D. W. Bagley, USN

Alaskan Sea Frontier,

Vice Admiral F. J. Fletcher, USN

Hawaiian Sea Frontier,

Vice Admiral R. L. Ghormley, USN

Moroccan Sea Frontier,

Commodore B. V. McCandlish, USN

Panama Sea Frontier,

Rear Admiral H. C. Train, USN

Commandants, Naval Districts

First Naval District,

Rear Admiral R. A. Theobald, USN

Third Naval District,

Rear Admiral E. J. Marquart, USN

Fourth Naval District,

Rear Admiral M. F. Draemel, USN

Fifth Naval District,

Rear Admiral D. M. LeBreton, USN

Sixth Naval District,

Rear Admiral Jules James, USN

Seventh Naval District

Rear Admiral W. R. Munroe, USN

Eighth Naval District

Rear Admiral A. C. Bennett, USN

Ninth Naval District,

Rear Admiral A. S. Carpender, USN

Tenth Naval District

Vice Admiral A. B. Cook, USN

Eleventh Naval District,

Rear Admiral W. L. Friedell, USN

Twelfth Naval District

Rear Admiral C. H. Wright, USN

Thirteenth Naval District,

Rear Admiral S. A. Taffinder, USN

Fourteenth Naval District,

Vice Admiral R. L. Ghormley, USN

Fifteenth Naval District,

Rear Admiral H. C. Train, USN

Sixteenth Naval District, (in enemy hands)

Seventeenth Naval District,

Rear Admiral F. E. M. Whiting, USN

Chiefs of Offices and Bureaus

Office of Procurement and Material,

Vice Admiral S. M. Robinson, USN

Judge Advocate General,

Rear Admiral Thomas L. Gatch, USN

General Counsel, Mr. H. Struve Hensel

Aeronautics, Rear Admiral D. C. Ramsey, USN

Medicine and Surgery

Vice Admiral Ross T. McIntire, Mc, USN

Naval Personnel, Vice Admiral Randall Jacobs, USN

Ordnance, Rear Admiral G. F. Hussey, Jr., USN

Ships, Rear Admiral E. L. Cochrane, USN

Supplies and Accounts,

Rear Admiral W. B. Young, SC, USN

Yards and Docks, Vice Admiral Ben Moreell, CEC, USN

PSF: Navy (Forrestal folder) 2-44

F.D.R. file (Given 9/14/44)

THE SECRETARY OF THE NAVY
WASHINGTON

My dear Mr. President:

Information has come to me that Dewey's first major speech will deal with Pearl Harbor. This is not verified but I wonder if it would not be wise for I am to keep currently informed of the Army and Navy inquiry proceedings.

Respectfully,

J. F.

BF Navy; Forrestal Freder

file Roosevelt 2-44

THE WHITE HOUSE
WASHINGTON

July 13, 1944.

MEMORANDUM FOR
THE SECRETARY OF THE NAVY

Will you please appoint John L. Sullivan as Assistant Secretary of the Navy? I feel that appointing him as Special Assistant to you would be quite a come-down from his present position. It would be most helpful if you could do this.

F. D. R.

THE WHITE HOUSE

WASHINGTON

July 13, 1944

MEMORANDUM FOR THE PRESIDENT:

Jim Barnes saw Jim Forrestal this morning and talked with him about putting Sullivan in as Asst. Secy. of the Navy. Jim Forrestal said he would make him a Special Asst. to the Secretary, but he was reluctant to make him Asst. Secy. Jim Forrestal even went so far as to say to Jim Barnes, "There is one way to have power in Washington and that is to always be ready to leave at any time. I am ready to leave at any time."

Jim Barnes thinks the only way this can be done is for you to call Jim Forrestal and say it would be quite a comedown for John Sullivan from Asst. Secy. of the Treasury to Special Asst. to the Secy. of the Navy and that you think that he ought to go all the way and make him Asst. Secy.

If this is done, then Jim Barnes will take up with Henry Morgenthau the question of filling John Sullivan's place with Charlie Sawyer.

GGT

THE WHITE HOUSE

WASHINGTON

July 12, 1944.

MEMORANDUM FOR THE PRESIDENT:

Jim Barnes telephoned this morning to confirm an order given to him by Mr. Hannegan from you to the effect that he was to call Jim Forrestal and tell him you wanted John Sullivan, who is now in the Treasury, appointed as Assistant Secretary of the Navy.

Is this O.K.?

G.

THE WHITE HOUSE

WASHINGTON

July 4, 1944.

M E M O R A N D U M

FOR THE PRESIDENT

FROM JAMES M. BARNES

I talked to Secretary Forrestal concerning the Assistant Secretary of Navy and he made the suggestion that this place be not filled until after election or until after the convention. Nevertheless, he did submit the following names:

(1) Walter G. Dunnington
(2) John T. Cahill
(3) John Kenney

Another suggestion has been made that Forrestal might agree to approve John Sullivan, Treasury, to Assistant Secretary of the Navy and then have either Mathes or Sheppard appointed to his place in Treasury to please the California people.

File personal

THE WHITE HOUSE
WASHINGTON

July 13, 1944

MEMORANDUM FOR THE PRESIDENT

Jimmy Forrestal called me to say that he had your memo in re the Assistant Secretary of the Navy. He would prefer not to name anybody until after election. He would be willing then to put John Sullivan in that spot and, if you approve, he will send for John and commit himself to the appointment at that time.

He explains that he needs the three or four men who have been considered over there for the job and it will keep them working if they have hopes that they are going to get it.

He says that he cannot get along with just girls and clerks -- he needs top men and he will lose them if he makes the appointment now.

Will you let me know what I can say?

G.

The P. said
"In view of this
I won't do anything
until I get back".
Told G & T. this on
phone 7/14/44 & she said
she'd call Forrestal
& tell him -
TOI

PSF Navy/Forrestal folder 2-44

THE WHITE HOUSE
WASHINGTON

August 28, 1944.

MEMORANDUM FOR:

THE PRESIDENT

I talked with Secretary Forrestal concerning John Sullivan and his switching from the Treasury to Assistant Secretary of the Navy. Forrestal said: "No, that you have to have an experienced man" and he did not have the time to break in a new man in that job. Forrestal suggested making Hensel Assistant Secretary until the first of the year.

I would like to talk this matter over with you sometime.

JAMES M. BARNES,
Administrative Assistant
to the President.

ROBERT E. HANNEGAN

Memorandum

August 28, 1944

VIA AIR MAIL--SPECIAL DELIVERY

TO: MISS GRACE G. TULLY

You will recall that on one of my recent visits to the President he indicated to me he would suggest to Secretary Forrestal that he appoint John L. Sullivan, Assistant Secretary of the Treasury, to the post of Assistant Secretary of the Navy.

Would appreciate your kindness in again calling the President's attention to this for consideration.

PSF: Navy (Forrestal folder) 2-45

19 January 1945

file

MEMORANDUM FOR ADMIRAL McINTIRE

I wish you would check and see if the President has enough movies to select from on his trip.

The ones I suggest are: The Fighting Lady; a very short film on fighting on Palau (this is an excellent and realistic series of battle shots); and a few other shorts which could be put in before a longer picture.

Among the conventional movies I recommend that he take "When Our Hearts Were Young and Gay" and "The Return of the Conquering Hero," if he hasn't already seen them.

J.V.F.

James Forrestal

JF:HCO

CC: Miss Grace Tully

T-468 PSF Navy — Forrestal folder 2-45

THE WHITE HOUSE

WASHINGTON

January 22, 1945.

~~HIGHLY CONFIDENTIAL~~

MEMORANDUM FOR

THE SECRETARY OF THE NAVY:

If you have any urgent messages which you wish to get to me, I suggest you send them through the White House Map Room. However, only absolutely urgent messages should be sent via the Map Room. May I ask that you make them as brief as possible in order not to tie up communications. If you have very lengthy messages the Map Room officer will have to exercise his discretion as to whether it is physically possible to send them by radio or whether they will have to be sent by pouch.

F.D.R.

(Identical memos sent to all Cabinet members & memo, 1/19/45, from Adm. Brown re this is filed - Adm. Brown folder, 2-45.)

~~CONFIDENTIAL~~

January 29, 1945.

MEMORANDUM FOR THE SECRETARY OF THE NAVY

Dear Jim:

I have glanced through the rough draft of your annual report which you were good enough to send me and I congratulate you on transforming what is ordinarily a very dry, uninteresting document to one that is alive and full of interest.

In sending it to me in advance of publication, I suppose you want my comments, and I, therefore, send you the following:

(a) In the hearts and minds of our people the history of the Navy during the fiscal year 1944 will be centered in our multitude of actions and victories against our enemies. While your report recognizes that these actions have previously been covered by Admiral King at the outset of your introduction, it seems to me it would be well if you would stress our pride in our victories and our fighting men throughout the report. Specifically, I think the paragraph two of your letter of transmittal to me should state that, since Admiral King has already issued the history of our actions and victories, your report will confine itself to logistics, production, research, etc., and that recognition of the fighting forces should be more adequately covered.

(b) It appears to me highly inappropriate that civilians should be mentioned by name when the men who have fought our battles are only listed among the many agencies of the shore establishment at the end of the report. In this connection, I note with concern that, whereas you mention a long list of Naval officers by name for recognition, General Vandegrift is the only Marine who is mentioned by name.

(c) Your report will, of course, be read by the fighting forces and I think we must keep in mind

CONFIDENTIAL

MEMORANDUM FOR THE SECRETARY OF THE NAVY
(page 2)

what their reaction will be to the report you make, as well as the impression it will make on the public and on Members of Congress. I, therefore, repeat that it seems to me throughout the report there should be ample appreciation of the brilliant work the Navy has accomplished as a fighting machine.

In general, I agree with your conclusions. In particular I agree with your ideas on research and intelligence during peace. I emphatically agree that a grand job has been done by the Navy team.

Sincerely yours,

FRANKLIN D. ROOSEVELT

Honorable James V. Forrestal,
The Secretary of the Navy.