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U.S.S. PHILIPPINE SEA (CV-47)
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ORIGINAL

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From: Commanding Officer, U.S.S. PHILIPPINE SEA (CV-47)
To : Chief of Naval Operations
Via : (1) Commander Carrier Division FIVE
(2) Commander SEVENTH Fleet
(3) Commander Naval Forces Far East
(4) Commander-in-Chief, Pacific Fleet

Subj: Action Report for the period 15 March through 30 May 1951

Ref: (a) CNO res ltr Op-345 serial 1197P34 of 3 August 1950

1. This action report for the subject period is submitted in accordance with reference (a).

Part I - Composition of Own Forces and Mission

During the subject period, the U.S.S. PHILIPPINE SEA operated in the Formosan Straits and off the east coast of Korea, as a unit of TASK FORCE 77, in accordance with Commander Carrier Division FIVE Operation Order No. 1-51 and Commander SEVENTH Fleet Operation Plan No. 75-51, plus supplemental plans and orders issued from time to time during the period.

TASK FORCE 77 consisted of the U.S.S. PHILIPPINE SEA (CV-47), USS NEW JERSEY (BB-62), U.S.S. BOXER (CV-21), U.S.S. PRINCETON (CV-37), U.S.S. MANCHESTER (CL-83), USS JUNEAU (CLAA-119), U.S.S. ST. PAUL (CA-73), U.S.S. HELENA (CA-75) and units of DesDiv 11, 32, 52, 71, 81, 132, 161 and 162.

Commander SEVENTH Fleet (VADM H.M. MARTIN, USN) was embarked in this vessel from 28 March 1951 until 13 May 1951, at which time he transferred his flag to the U.S.S. NEW JERSEY (BB-62). Except for periods when the NEW JERSEY was detached from TASK FORCE 77, Commander SEVENTH Fleet was present during operations covered by this report. ComCarDivFIVE (RADM R.A. OFSTIE, USN until 6 May 1951, at which time he was relieved by RADM G.R. HENDERSON, USN) was embarked in the USS PRINCETON (CV-37), and acted as OTC except for periods when that vessel was detached from TASK FORCE 77. During those periods, ComCarDivTHREE (RADM U.G. TOMLINSON, USN), who was embarked in the U.S.S. BOXER (CV-21), assumed duties as OTC.

The mission of TASK FORCE 77 was, primarily, to support the United Nations ground forces in Korea, which were advancing north of the 38th degree parallel. The support missions included close support, deep support, armed and photo reconnaissance, interdiction of enemy supply lines and strikes against enemy



installations. From 8 through 15 April 1951, the mission of TASK FORCE 77 was as contained in ConSEVENTHFlt Operation Plan No. 75-51.

Part II - Chronological Order of Events

From 15 March to 1 April, the U.S.S. PHILIPPINE SEA was moored to Piedmont Pier, Yokosuka, Naval Base, Truman Bay, Koni Kai, Yokosuka, Japan. On 2 April, the U.S.S. PHILIPPINE SEA (CV-47) got underway and rendezvoused with other units of TASK FORCE 77 on 4 April.

From 5 through 7 April, air operations consisted of primarily close air support and interdiction of the enemy main supply routes. At the close of air operations on 7 April, Commander SEVENTH Fleet Operation Plan No. 75-51 went into effect.

From 8 to 14 April TASK FORCE 77 was enroute from the Sea of Japan to the Formosan Straits, replenishing on the 8th and 12th.

On 11 April, the U.S.S. PHILIPPINE SEA (CV-47) launched 63 sorties on an air parade along the east coast of China in conjunction with a flight from the U.S.S. BOXER (CV-21). After replenishing on the 12th, a second air parade, including photo reconnaissance sorties, was launched to fly outside the 3 mile limit off the east China coast. In the afternoon a third air parade was held over the Island of Formosa.

On 14 April TASK FORCE 77 was enroute from the Formosan Straits to the Sea of Japan.

From 16 April to 3 May, except for 23 April during replenishment and 28 April when adverse weather cancelled all flights, air operations consisted primarily of close support missions in support of United Nations ground forces advancing north of the 38th degree parallel. Of the 1,150 offensive sorties flown during this period 568 were close support missions.

On 4 and 5 May, the U.S.S. PHILIPPINE SEA (CV-47) was enroute from the Korean Operating Area to Yokosuka, Japan. From 5 to 14 May she was at Yokosuka for maintenance, repairs and recreation. On 16 May the USS PHILIPPINE SEA got underway, rendezvousing with other units of TASK FORCE 77 on 17 May.

From 17 to 30 May, air operations again were primarily close support, in an all out effort to help stop the enemy spring offensive and to support the United Nations ground forces in their counter attack after the offensive was shattered. During this 11 day period, once again, over 50% of the sorties were close support missions.

It is interesting to note that during April and May, while operating off the coast of Korea, there were only 3 days when the weather prevented all air operations, and there was only one day when air operations were not scheduled in

order to replenish. During the latter part of this period, all replenishment was conducted at night after the last flight was recovered.

Part III - Ordnance

a. Ammunition expended:

Bombs - 1,800.77 tons

7,331 - 100# GP
842 - 250# GP
958 - 500# GP
24 - 1000# SAP
404 - 1000# GP
158 - 2000# GP
5,519 - 260# FRAGS

Rockets:

304 - 3.5" ATAR
1,411 - 5" HVAR
969 - 6.5" ATAR

Napalm:

1,973 Tanks
34.46 tons of Napalm Thickner
789.2 Napalm bombs

Machine Gun Ammunition:

1,918,233 rounds of 20MM
166,287 rounds of 20 cal.

b. Comments on Ordnance

(1) The present system of aviation ordnance logistics is considered too unwieldy and inflexible to insure the kind of support needed by carriers for their operations in the Korean theater. The basic reason for this lies in the unrealistic allowances of aviation ordnance carried on board. At the risk of pointing to the obvious, the following factors which govern the selection of an adequate allowance are discussed in the light of recent experience.

(a) The ship's capacity: A certain amount of inflexibility in controlling ordnance allowances is caused by the fact that many different kinds of ordnance cannot be stored interchangeably. Rockets and bombs are a good example. Now that the use of rockets has fallen off, the unsuitability of rocket stowage for bomb stowage prevents any further modification of the ordnance allowance to increase the number of bombs carried without modifying the magazines.

(b) The composition of the air group: When this ship was first deployed to the Korean theater, our air group consisted of 2 F9F-2 squadrons, 2 F4U-4B squadrons, 1 AD-4 squadron plus detachments. Since the 31st of March, the group complement has been 3 F4U-4 squadrons and 1 AD squadron plus detachments. It should be obvious that the ordnance expenditure of an all prop group would be vastly higher than for a mixed prop and jet group, yet changes to the ordnance allowance have not reflected this change. The need for carrying 50 cal. instead of 20MM gun ammunition was obvious and planned for, but the

inability of the F4U-4 to carry wing bombs heavier than 100 lb. bombs was not taken care of by a change in allowance. As a result of these ordnance allowance discrepancies it has been necessary to replenish with ammunition much oftener than normally expected.

(c) The employment of the group: This factor, which has a tremendous direct influence on what ordnance should be carried, has been most difficult to predict during Korean operations because of the fluid and changing ground situation. Early in the war when carrier offensive missions consisted mainly of armed reconnaissance as a daily fare, rockets and 500 lb. bombs were the high expenditure items. Later, as the Navy sold its case for close support of ground troops, the use of napalm, fragmentation bombs, and 100 lb. bombs became popular. Still later, a vigorous interdiction program, involving strikes against key enemy bridges, called for more and more 1000 lb. and 2000 lb. bombs. Related to the above, is the provision in the allowance for certain ordnance items which cannot be effectively used during current operations. Torpedoes and Tiny Tim rockets are a good example. There has been a marked tendency to hang on to weapons, which, "we might need sometime" while urgently needed items are in short supply.

It should be apparent that decisions as to what is the best ordnance allowance cannot be resolved at the ship level. Similarly, rear area planners cannot very well prescribe ordnance allowances when they have little knowledge of expected future expenditures. It is important that Force Commanders pass the word back as quickly as possible when changes in ordnance allowances are expected to become necessary. It should be remembered that the ordnance-carrying capacity of modern naval aircraft is much greater than it was during World War II and, as a result, the rate of flow in ordnance pipelines is much faster. This should make it possible to be much bolder in effecting changes to allowances.

RECOMMENDATION - It is recommended that continuous study be given to aviation ordnance allowances with a view to maintaining adequate levels of the proper types on board carriers actively involved in current operations.

(2) The Phil Sea Method of Mixing Napalm:

One of the most pressing problems which faced this ship after arrival in the Korean Area was that of mixing napalm in the quantity required by air plans. To this problem was added that of getting napalm powder and gasoline to form a proper gel when the gasoline temperature is below 75 degrees Fahrenheit, which has been the prevailing condition during most of our operations.

After many months of experimenting and doing it the "hard way", the present system, now known as the "PHIL SEA METHOD", was developed and has been successfully used for many months. The development of this method was truly an all hands job, having been contributed to by ordnancemen, gasoline crews, ship's repair force, and various other officers and men of the ship and Air Group ELEVEN. The successful completion of this project while the ship was

engaged in full scale, continuous air operations is an eloquent testimony to the industry, ingenuity and resourcefulness of the modern American sailor who need offer no apologies to his predecessors of previous wars.

Basically, the "PHIL SEA METHOD" consists of passing gasoline through a simple, home-made, hot water type heater and thence to the hopper for mixing with the powder in the usual manner. A unique feature of the process is the arrangement of the equipment. The heater, hopper and powder are all located in one of the unused port side gun tubs, off the flight deck, protected by a removable canvas screen to reduce the chilling effect of the bitter Japan Sea winds. Empty tanks on bomb skids are wheeled to the edge of the flight deck, are filled by the filling hose, which is led up from the hopper, and are then wheeled to the planes for hoisting to the rack and fuzing. The filling process was improved by the addition of a long rubber filling nozzle which extends well down into the tank and accelerates the mixing and gelling process. The possibility of damage to the heavily loaded tanks while hoisting to the bomb racks has been avoided by the use of improvised metal hoisting bands. Like so many other successful innovations, the logic and simplicity of the entire method is so evident that it is surprising that it has not been developed earlier.

The advantages of this method of mixing napalm are as follows:

- (a) It insures an instantaneous, uniform, 100% napalm gel in every tank, regardless of weather conditions.
- (b) It keeps the flight deck clear of hopper, napalm cans and other equipment, thereby reducing the hazard of littered decks and providing no more interference with flight deck respots than that caused by conventional bomb rearming.
- (c) With one heater operating, napalm can be mixed as fast or faster than by any other known method. We believe we have tried them all.
- (d) With the addition of Y-type outlets on the heaters or by the installation of additional heating units, the output of mixed napalm can be increased to keep pace with the air plans of the most ambitious Task Force Commander. (Fleet Activities YOKOSUKA constructed an excellent additional heater for this vessel from plans furnished in one days time).

Several Air Force units, who have been having difficulty with cold weather napalm mixing, have sent representatives to observe this process in operation. Their response, like that of the pilots of Air Groups TWO and ELEVEN, has been most enthusiastic. It is believed that the only people who will not endorse our napalm product are to be found north of the 38th parallel on the Korean Peninsula.

RECOMMENDATION - It is recommended that the "PHIL SEA METHOD" of mixing napalm be adopted as standard for all carriers. (Additional details are to be found in CV-47 letter serial 1085 of 4 May 1951, addressed to BuShips, with copies to ComAirPac and BuOrd.)

(3) Hung Aviation Ordnance

(a) Commander Carrier Air Group TWO, in his confidential letter serial 07 of 27 April 1951, reported on the incidence of unfired and unfettisonable rockets and bombs returned to and landed aboard the ship. Certain possible fixes were recommended. In endorsing this letter, this command stressed the seriousness of the situation, particularly in view of the large amounts of ordnance exposed as a result of the intensity of daily air operations. Because of the importance of this problem, mention of it in this report is considered appropriate. Until a satisfactory solution is found, ships, aircraft and personnel engaged in Korean Operations will continue to be exposed to an extremely grave danger. During ten months of operating on the line, control personnel could never get accustomed to the announcement over the bull horn, "Hoods up - hung bombs"; wondering why, after five years, a satisfactory solution to bomb racks has not been found.

(4) 20MM Gun Failures

(a) In previous action reports, this ship reported on the frequency of 20MM gun failures during very cold weather and on various measures taken to correct them. During the period of this report, air operations have been conducted with Air Group TWO, most of whose planes are equipped with 50 caliber guns. This, plus the fact that the weather has taken a much milder turn, has reduced the gun failure problem to acceptable limits. However, since this is expected to be the last action report this ship will submit for some time, it is again desired to point out the importance of developing the 20MM gun into a reliable weapon at all altitudes and temperatures. The best fighter the Navy can turn out is absolutely worthless if the guns won't shoot.

RECOMMENDATION - It is recommended that the development and improvement of the 20MM gun be continued until it can be considered a reliable weapon at all altitudes and temperatures. It is further recommended that ordnance personnel of all squadrons equipped with 20MM guns be thoroughly trained and indoctrinated in maintenance procedures which will insure continued reliability of the gun under normal cold weather operating conditions.

Part IV - Damage

a. Gun

(1) Ship - None

(2) Aircraft:

	<u>COMBAT</u>	<u>OPERATIONAL</u>
	#FU:AD:TOTAL	#FU:AD:TOTAL
Lost	<u>9 : 3 : 12</u>	<u>0 : 1 : 1</u>
* Damaged	<u>74 : 14 : 88</u>	<u>17 : 19 : 37</u>
Total	83 : 17 : 100	17 : 20 : 39
	* The totals include all Class "B", "C" and "D" damage.	

b. Damage Inflicted:

<u>TARGET</u>	<u>DESTROYED</u>	<u>DAMAGED</u>
Amunition Dumps	8	3
Barracks	57	43
Block Houses	2	0
*Bridges	30	128
**Buildings	1704	446
Bulldozers	0	1
Carts	67	37
Fuel Dumps	16	4
Guns	12	3
Gun Positions	27	9
Hangars	0	2
Horses	9 (Killed)	
Locomotives	8	7
Lumber Mills	1	2
Lumber Storage	0	2
Mine Laying Junks	0	1
Oxen	39 (Killed)	
Pill Boxes	0	2
Power Boats	2	3
Radar Antenna	0	1
Radio Towers	0	2
Railroad Cars	154	106
Railroad Round Houses	1	1

b. Damage Inflicted: (Cont'd)

<u>TARGET</u>	<u>DESTROYED</u>	<u>DAMAGED</u>
Railroad Stations	0	1
Railroad Tunnels	0	5
Supply Dumps	6	11
Tanks	6	10
***Troops	3770 (Killed)	
Trucks	96	62
Vehicles (Unidentified)	13	11
Warehouses	42	34
Villages	1 (80% destroyed)	

*A bridge is not considered destroyed unless all spans are down or destroyed.

**The term "buildings" applies to all military structures not otherwise listed.

***Troops claimed include only those seen by the pilot, TAC or TACP.

Part V - Personnel, Performance and Casualties

a. Health and Performance of the Crew:

The health and performance of the crew has been excellent. Most complaints at sick call were of a minor nature. There has been the usual amount of routine surgery, i.e., appendectomies, circumcisions, etc. One patient was received from the U.S.S. FISKE (DD-842) with diagnosis of DU (Crushing, Pelvic Region). Surgery (Suprapubic Cystostomy) was performed and diagnosis established as Repture, Traumatic, membranous urethra. Prognosis of patient good. The number of work days lost due to illness has been held to a minimum. The crew continued to perform their duties during flight operations and replenishment in an outstanding manner, in spite of the intensified flight operations and so many months in the combat zone.

b. Casualties:

ENS E.E. BREY, 506733, USN, was declared missing in action when his AD crashed and no survival observed. ENS C.E. WEST, 507709, USN, died when his plane crashed into the mountainside in Korea following a strafing run. ENS M.A. TUTHILL, 506498, USN, died from wounds received from flak encountered during combat mission over Korea. LCDR E.R. COFFMAN, 79594, USN, died when his plane crashed into the sea and exploded. C.A. BLACK, AA, USN, and E. VALLEZ, AN, USN, received minor shrapnel wounds from an exploded shell when a 20MM aircraft cannon was fired accidentally. W.R. LOEFFLER, BM2, USN, received contusions of the right chest and ankle when he was hit by a net load of bombs which was inadvertently lowered on his right ankle. R.M. MASSIE, SN, USN, received amputation of the 3rd and 4th Distal Phalanx when the emergency lever was released catching his fingers in the ejector of 5" gun. LTJG J.B. DICK, Jr., 0496951/1310, USN and ENS R.W. MURPHY, 0505624/1310, USN were both declared missing in action on 29 May 1951; both pilots of AD's on a combat bombing mission, planes involved in mid-air collision, both presumably lost. LT H.H. OSBORNE, 0263936/1310, USN, declared missing in action 23 May 1951. Crash not observed - aircraft demolished. Search negative. LTJG W.R. BALL, Jr., 0461067/1310, USN, missing in action 19 May 1951. Pilot parachuted, observed, no movement after landing in enemy territory. LTJG L.E. ELMORE, 0496954/1310, USN received burns of the face, wrist and hands - first and second degree. While on combat strafing run, plane caught fire - pilot parachuted. Treated on board the U.S.S. HAVEN (AH-12).

PART VI - Special Comments on Doctrine and Operating Procedures

The comments which follows, like those contained in Part III of this report, represent, in many cases, the observations and experience of this vessel over the entire ten months of operations in the Korean combat zone, a period during which over 12,000 sorties of all kinds were flown, over seven thousand tons of aviation ordnance were expended on the enemy and over 108,000 engine miles steamed. These comments therefore, stem from a much greater variety of operating conditions, needs and policies than would normally exist in a report of this nature. In many cases, certain comments and recommendations, contained in previous action reports and correspondence have been restated herein for emphasis. Where appropriate, reference has been made to such previous reports and correspondence.

a. Aerology

Refer to Section E, Part IV, of ComGarDivONE Action Report for the periods 6 November through 25 December 1950 and 7 January through 19 January 1951 for the weather encountered during the summer and fall of 1950. The weather encountered during the winter months, although at times more severe, was much the same as that encountered during the late fall and the methods employed to avoid the bad weather, where possible, were the same. As was pointed out in the above section E, the weather surrounding the operating area on many occasions was much worse than that in the immediate vicinity of the Force, because Point OBOE was shifted to take advantage of the marked water temperature gradient and the

protection afforded by the mountains of Eastern Korea. During the spring, available climatic data was sufficient to give a forewarning of the advection fog that could be expected over the water. The Western Sea of Japan resembles very closely the East Coast of the United States north of Cape Hatteras in the spring when the flow of warm air from the south causes fog to form over the colder water. Here again, advantage was taken of the marked water temperature gradient between the cold Liman Current along the East Korean Coast and the warmer Tsushima Current a branch of the Japan Current, farther offshore. A few cases occurred when the air temperatures were sufficiently high to preclude operating in any area within the combat radius of the aircraft. However, strikes were launched many times under very marginal flying conditions only because alternate airfields were available in South Korea.

On scheduled operating days throughout the entire period from August 1950 through May 1951 flights were cancelled on less than 13% of the days because of the bad weather. The percentage of bad weather actually encountered was somewhat higher, but with the need for replenishment of the Force every three or four days, advantage could be taken of expected bad weather for replenishment.

More detailed information on the weather is not available at this time, because all original records have been sent to Commander Naval Forces, Far East for transposing all available weather data to punch cards.

RECOMMENDATIONS

(a) It is recommended that the Navy establish a central collection agency in the forward area for the collection and rebroadcast of Navy weather reports and for the dissemination of area forecasts. It is also recommended that any such collection agency be an integral part of a joint agency operated by the Air Force and the Navy. The Navy was able to copy the Air Force broadcasts, but the reverse was not true. There were no Navy broadcasts for the dissemination of ship reports which are of as much value to the Air Force as to the Navy.

(b) It is recommended that a cipher system such as the "K" Cipher be issued to ALL Services so that weather reports from ships can be sent in the plain.

b. Air Operations

(1) Dissemination of Information

This ship's operations have been sometimes handicapped by non receipt or late receipt of essential operating information. This has been particularly true when the ship has rejoined the task force after an availability period in port. The number of changes in operating policies, air plans and operation orders, which can occur during a ten day absence, is amazing. Too often it is assumed that ships not present have received all these changes when in fact they have not. It is not enough to place vital information of this nature in the mail and assume that it will reach its intended destination in time; the sender

should insure that the means of delivery are adequate to afford timely distribution.

It should be standard practice to have the air plan for the following day in the hands of the operating carrier by 1600 of the day before. This is necessary to give flight deck and ordnance crews, operations Department personnel and all related ship's activities, a chance to work out the details of the next day's operations. It was found that only by early notification of the next day's intentions could the working people carry on full scale air operations on a sustained basis and still get some degree of rest.

Related to the above is the matter of frequent conferences as a means of disseminating and exchanging information. It is realized that battles are not won around the conference table. However, it is felt that battles are also not won by despatches and answers thereto, attempting to clarify misunderstandings. The present media for transmitting information to the carriers and back to the force commander are not considered adequate to pass on all of the valuable detailed information available. Moreover, operating personnel simply do not have time to add to the already excessive burden of paper work.

RECOMMENDATIONS

- (a) All changes in operating planes, policies and procedures should be delivered to carriers upon rejoining the force well in advance of any scheduled operations. If necessary, a briefing officer from the OTC's staff should deliver them to insure that they are received and understood.
- (b) Air plans should be delivered to operating carriers prior to 1600 of the day before the plan is effective.
- (c) Task Force Commanders should encourage visits by staff personnel to other carriers for the purpose of advising them of plans, policies and procedures and in order to gain information for the commander from sources not available on the flagship.

(2) Air Schedule Changes

During scheduled operations there has been a tendency to change the air schedule at the last minute prior to launching.

Aside from the confusion introduced into an otherwise orderly flight deck by this practice, there is a very real danger in that it requires pilots to man planes inadequately briefed. Even with the most efficient external and internal communications system, it takes time to receive change information from the flagship and transmit it to all ship activities needing to know. It takes more time to get properly dressed, equipped and provided with charts and other information essential to the safety and effectiveness of the flight they are about to undertake

Finally, pilots should man their planes 20 minutes prior to launching.

After too many months of continuous operations in an area where a fluid ground situation calls for flexible operating procedures, this ship is only too familiar with the many shortcuts necessary to insure such flexibility. This flexibility, however, should be reserved for real emergency situations.

RECOMMENDATION:

Changes in air schedules should be effected in sufficient time to allow thorough briefing of pilots in order to insure safety and effective completion of the mission.

(3) Aircraft Voice Calls

This ship and its air group desire to add their voices to those of other ships who have complained of the present system of generating aircraft voice calls proscribed by JANAP 119(A). Not only are the resulting calls too long and unwieldy for pilots to use in rapid air communications but the system itself does not adequately cover all the variety of missions now being flown in Korea nor do all commands interpret the call-generating system uniformly. Nearly every new staff that has entered this area has brought with it a new interpretation of JANAP 119(A). Moreover, because of the unfamiliarity of Air Force controllers in Korea with the Navy call system, it has become necessary to provide flight leaders of close air support flights with an additional call to permit identification by the controllers.

RECOMMENDATION

It is recommended that the aircraft voice call system contained in JANAP 119(A) be thoroughly revised to provide a system that will be simpler, less capable of misinterpretation, adaptable to a wider variety of missions, and, if possible, understood by the Air Force.

(4) Sorties By F4U's

During one week, picked at random from this entire operating period, an average of 104 sorties per day were scheduled for this ship. Of this average, an average of 35 combat sorties were scheduled for the AD's and 56 for the F4U's. An average of 81 F4U pilots were available from the three embarked F4U squadrons during this week, whereas only 34 AD pilots were available in the single AD squadron. This gave a scheduled average of 1.03 sorties per AD pilot and .69 sorties per F4U pilot, a marked deviation from balanced scheduling.

It is realized that the tremendous load-carrying ability of the AD, as compared to the F4U, makes it a much more desirable airplane, particularly for such missions as bridge strikes and close air support. However, the fact still remains that this vessel's air group is comprised of 3 F4U squadrons

group is placed on the ship, or a new function requiring additional personnel is added to the ship, new inroads are made on the limited berthing available. Specialized groups within the Navy have been able to add newer and larger equipment to the ship with no apparent restriction other than that of keep topside weight to a minimum.

After ten months of Korean operations, which have been unprecedented for the sustained intensity of air operations, this command is convinced that the crewmen of aircraft carriers, who have worked night and day to make these operations possible, are entitled to better living conditions than a cot or hammock in a passageway or on the mess-deck. This command is further convinced that living spaces located closer to working spaces and arranged to provide adequate space for such off duty diversions as reading and letter-writing are not only possible, but essential to the efficiency of the ship.

It is obvious that the attainment of better berthing conditions is not now within the capabilities of commanding officers or local commanders. Such a goal can only be reached by action at the highest levels.

RECOMMENDATIONS:

- (a) All functions not essential to the fulfillment of the mission of this class of vessel as an aircraft carrier be eliminated and personnel and equipment for these non-essential functions be removed.
- (b) Using the space thus made available rearrange spaces so as to provide the maximum number of berths consistent with acceptable modern living standards.
- (c) Once the final berthing arrangement has been attained, the loading of personnel should never again be permitted to exceed the number of berths available.

d. CIC Communications

CIC Communications on this ship (which has not been modified in accordance with ShipAlt CV989) have been a constant headache throughout the entire Korean campaign. Lack of enemy air opposition has lessened the problem somewhat but has also served to increase the apprehension over what might happen if the enemy decides to use his air power over the force.

Anyone who has ever served in a unmodified CIC on an ESSEX-class carrier can attest to the totally unsatisfactory conditions for coping with the complexities of modern, high speed, air defense problems. Poor and piecemeal arrangement of communications equipment over a period of years has caused CIC to become so overcrowded and noisy that reliable internal and external communications are nearly impossible. The unsuitability of carriers with unmodified CIC's as CTF flagships goes without saying.

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and 1 AD squadron and scheduling for a different ratio is not going to change it.

RECOMMENDATIONS:

- (a) The ratio of AD pilots and planes to F4U pilots and planes be increased for CVG's destined for Korean Operations.
- (b) The scheduling of sorties by types conform as closely as possible to the availability of planes and pilots by types.

(5) Pilot Ejection Seats

On 20 April 1951, LCDR E.R. COFFMAN, Commanding Officer, VF-24, was killed attempting to bail out of his damaged F4U over Wonsan Harbor. Reports received indicate that his plane had been so badly damaged by anti-aircraft fire that he was unable to maintain control when he reduced his air speed below 160 knots. Realizing the condition of his aircraft, he had three alternatives - ditching alongside one of the friendly ships in the harbor, attempting to make it to a friendly field, or bailing out. He selected the course of action most pilots would have chosen under the circumstances - bailing out - and in attempting to do so, crashed before he could get clear of his plane.

It is believed there have been many more pilots lost during the Korean action under similar circumstances, and that pilot ejection seats would have saved them. The restrictions on additional weight in the design of aircraft are recognized but the continuous daily hazard from ground fire to which pilots are subjected in their flights over Korea would point to the incorporation of ejection seats in propeller type aircraft as a subject meriting reconsideration.

RECOMMENDATION

It is recommended that pilot ejection seats be incorporated in all aircraft regularly employed on close air support missions.

c. Berthing

By separate correspondence (CV-47 ltr serial 1108 dated 1 May 1951), the present totally unsatisfactory conditions for berthing and messing the officers and men of ESSEX class carriers were pointed out to the type commander and certain recommendations were submitted toward alleviating this situation. Because of the direct bearing this condition has on operating efficiency, some mention of this subject is considered appropriate in this report.

It is believed that the deterioration in berthing aboard this class of carrier has been cancerous in nature - the diversion of berthing space has been so gradual that the ultimate damage to the overall operating efficiency of the ship has been barely perceptible. Each time that a larger staff or a larger air

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Shipalt CV989, which calls for the installation of a CIC Communications Console, was turned down for completion during this vessel's last shipyard overhaul and has been disapproved again for the forthcoming overhaul. By separate correspondence (CV-47 conf. ltr serial 077 dated 26 May 1951) this command pointed out the undesirability of this action in view of the past and expected future employment. It is difficult to understand why carriers, whose roles in the present conflict are so vital, would be deployed to the combat zone with uncompleted alterations as important to operational efficiency and safety as Shipalt CV989.

RECOMMENDATION

It is recommended that carriers scheduled for deployment to the Korean Area be provided with the latest and best communications CIC equipment.

a. Communications

(1) General

Communications on the whole have been very satisfactory. Much improvement can still be made in reducing unnecessary transmissions, addresses and in assigning proper precedence and classification. Use of unauthorized and unfamiliar abbreviations has contributed considerably toward the number of service messages required to clear grables. Voice Communications with planes have been satisfactory except that some channels are overcrowded, and many unnecessary transmissions are made. Circuits D118 and D189 with JOC Korea have been highly satisfactory in providing speedy communications between the services. The absence of enemy opposition and the non-use of low and medium frequency radio direction finders by our own forces has made us indifferent to possible enemy use of RDF. It should be remembered that NDT RATT FOX and, to a lesser degree, GEORGE and JIG FOX is extremely susceptible to jamming. Too much reliance must not be placed on these broadcasts. It is recommended that the Task Force Common circuit (532 Kcs) be shifted to the 2,000 to 3,000 Kcs Band which is much less susceptible to RDF.

(2) NDT RATT FOX

This circuit has been highly successful in delivering a large amount of traffic at high speed. The double transmission of messages has been helpful but it is believed that if the second transmission were made one hour after the first the number of service messages would be reduced. The same conditions of weak signal, static or interference usually exist when the message is immediately retransmitted after the original transmission. A closer check of messages prior to broadcast would be helpful as several messages have been transmitted with only four internal indicators.

(3) UHF RATT - Intra Task Force

The UHF RATT Circuit has been invaluable in passing flash reports,

[REDACTED]

intelligence summaries, and long messages, which, to be effective, must be handled at high speed. Future communication plans should provide for this circuit. Security of UHF RATT is greater than voice as intercept planes are not likely to be equipped with UHF RATT Intercept Equipment for some time.

(4) Primary Tactical

Difficulty is still experienced with blind spots in TES antenna patterns, necessitating using two equipments, one with a port and one with a starboard antenna. It is recommended that the primary tactical circuit be shifted to UHF to take advantage of better antenna radiation patterns, increased signal-to-noise ratios, and reduce local interference. The allowance of TDZ Transmitters for CV's should be increased to four to provide one equipment for standby or guarding fleet common primary.

(5) Antennae

The present 35 foot whip transmitting antennae have performed satisfactorily in either up or down positions. The receiving antennae on port and starboard yardarms are unsatisfactory due to the shielding effect of the island structure. A study should be made of the problem of providing a better arrangement, or of providing more receiving ship antennae in the island structure. Some improvement was made by extending the yardarm antennas to the SU and SX Radar Platform.

(6) Crypto Repair

This vessel has furnished the services of a crypto repairman to the Task Force during the entire period in the operating area. A qualified crypto repairman with a small kit of critical spare parts not contained in ships spares should be assigned to each Task Force to provide on-the-spot service. Basing crypto repair facilities in tenders at bases is good for overhauls but is of little help to a destroyer at sea with a casualty. It is further recommended that a short course in simple cleaning procedures of rotors and baskets be given in schools for communications watch officers.

(7) Teletype Repair

Increasing commitments of Teletype equipment resulted in practically 100% utilization of equipment. Continuous preventative maintenance is imperative. It is recommended that a small teletype repair shop be made available in the island structure and an allowance of tools and spare parts be set up.

(8) Personnel

The Communications personnel on board has been adequate except when a CarDiv Commander was embarked. It is recommended that the allowance of radio-men and telomen for CarDiv Staffs be increased to meet the additional watchstanding requirements.

[REDACTED]

(9) Communications Spaces

The communication spaces are widely separated. Centralization of the spaces would allow more efficient use of personnel and provide closer coordination of effort. It is recommended that future plans place Radio ONE, Communication Office and Code Room in adjacent spaces.

(10) Facsimile

Facsimile equipment installed in October while underway, has proved highly successful in transmitting photos direct to Radio San Francisco. An average of 12 weather maps were copied daily. This equipment was transferred to the U.S.S. BOXER (CV-21) prior to leaving the area. It is recommended that facsimile equipment be made part of the regular allowance of all CV's. Using Amplitude Modulation of Sub-Carrier F11, it is feasible to use facsimile with VHF or UHF Equipment presently installed for intra-task force transmission of photos, documents and lengthy messages. Speeds of 100 to 300 words per minute can be obtained depending on size of type and composition of message.

f. Engineering and Damage Control

(1) Steaming Data

Since leaving for the forward area on 5 July 1950 until 10 June 1951, the ship has steamed over 100,000 engine miles without failing to answer a bell or without a major engineering casualty.

A summary of the ships operations is given below:

Days underway:	264
Days in port	76
Days with 8 boilers steaming	103
Days with 6 boilers steaming	36
Days with 4 boilers steaming	75

(2) Use of Floodable Voids for Torpedo Protection

With the present armament installation, this vessel has a one and one half degree list to port under fully-loaded conditions. Under certain conditions experienced in the forward area, this list has amounted to as much as two degrees to port. Five (5) starboard floodable voids have been used to correct the resulting port list. By use of these voids not only has the list been corrected but it has provided invaluable training for damage control personnel.

In the absence of other ballasting instructions from BuShips of the Tyc Commander, Damage Control Diagram No. 2 (liquid loading diagram) was used as a guide for ballasting fuel oil tanks. Use of this diagram, however, requires ballasting immediately after each wing tank is emptied resulting in the

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necessity of ballasting after the burning of approximately 52,000 gallons of fuel. During operations in the Korean area, compliance with the above liquid loading was not practical as this ship was frequently called upon to refuel on short notice. This was due to the fact that Task Force replenishments were frequently scheduled when flying conditions became undesirable in order that maximum flight operations could be conducted.

RECOMMENDATION

- (1) That all floodable voids be painted with bottom plastic or a suitable vinyl resins paint. These tanks could then be used as frequently as desired for removing list and for the training of Damage Control personnel.
- (2) That a fuel oil tank emptying sequence be adopted whereby the inboard wing fuel oil tanks would be emptied first. As each inboard fuel oil tank is emptied, the adjacent floodable void should be flooded to provide two liquid layers for torpedo protection. Outboard wing tanks should always be kept filled to the water line. It is realized that the above might result in some decrease in torpedo protection and some increase in maintenance; however, the training of personnel would be extremely valuable and, at the same time, the ship could be always ready to refuel on short notice. Assuming that the fuel on hand has not been reduced below 47%, the above methods would further provide two (2) protective liquid layers immediately preceding and during fueling operations, a period during which carriers are most vulnerable to a torpedo attack. This ballast could also be carried into port, providing protection off harbor entrance.

f. Supply

The success of the past ten months combat operations can be attributed to a great degree to the excellence of mobile logistic support. Although not a new concept, it is believed that such support has been developed to a degree of efficiency heretofore unknown. In spite of the general overall excellence of mobile support, however, many problems have arisen. Most of these problems have been solved, but some still remain. It is hoped that the following constructive criticism will to some degree aid in their solution.

(1) Commissary

With few exceptions, all items of provisions were available at every replenishment. At times, however, fresh provisions in the variety and quantity desired, were not available. In this regard, it is suggested that reefer ships be loaded more extensively with frozen fruits and vegetables. Although more expensive, their use in the general mess would provide greater variety, less waste, and more compact stowage with attendant saving in shipping space and ease of handling and stowage aboard the using vessel.

Fresh and dry (canned items) provisions are still being received in the forward area in domestic pack. Such containers are not strong enough to withstand the necessary multiple handling, cargo net loading, and inclement weather conditions during loading at sea. If at all possible, all items of provisions destined for the forward area should be in overseas pack of sturdy containers. Use of palletized loads of some items of provisions (such as canned staples and sacked items) would greatly facilitate handling, with resultant decrease of loss and conservation of man hours during replenishment. Aircraft maintenance work, flight and hangar deck respotting, night ordnance breakout crews, and replenishment working parties necessitated extensive night feeding, with from 200 to 500 men being fed at midnight. It was the practice to serve a hot meal, consisting if possible, of left-overs from the evening meal. Only with careful planning and aid of competent general mess personnel was an overissup avoided.

Non-availability of adequate refrigeration space in the galley should be given consideration in future design of this type vessel as well as in current alteration plans. At present, the saving of left-overs and the service of salads, jello and ice cream (especially in warm weather) in the general mess is difficult if not impossible. An alteration request for converting part of the butcher shop to a walk-in refrigeration box is being submitted.

Only through the competence of repair personnel and stock of spare parts on hand, was galley, bake shop, butcher shop and vegetable preparation room equipment kept in operation during the ten months.

(2) General Stores

Logistic support with regard to general stores materials improved continually throughout the ten months period. With the arrival of the U.S.S. POLLUX and the accumulation of usage data, most general stores items were found to be available. Some stock items (especially in classes 5, 27, 32, 51, 52 and 53) as well as most repair parts and ship's spares are still not obtainable or obtainable in only limited quantities in the forward area. Experience has indicated that a procurement lead time of at least three months be allowed for their procurement from the states. The outstanding need for spare parts (other than aeronautical) developed in the maintenance of automotive and material handling equipment, due to extensive use and deterioration of parts (especially in the ignition system) because of humidity and salt spray. In particular, the parts required for plane handling tractors and fork lifts reached the critical stage on several occasions. It is recommended that a pool of replacement tractors and fork trucks as well as office labor saving devices (typewriters, calculators, adding machines, cash registers, and mimeograph machines) be established in the forward area.

Delivery of fleet freight while at sea, which at first was poor, improved greatly throughout the period. With the advent of COD (carrier on board delivery) air service, the delivery of priority freight was excellent. At the end of the period, fleet freight was still being received without papers, as

well as papers being received without material. It is recommended that all shipping activities be requested to insure that advance copies of bills of lading and invoices are air mailed directly to the ultimate consignee at the time shipment is made.

Due to the necessity of watertight integrity while in the combat zone only several storerooms and magazines could be opened at one time. This of course hampered issues of stores. The problem was solved to some degree by increasing the number of stock classes carried in the Main GSK Issue Room, and by setting definite hours for the issue of high usage items from other storerooms. The facts that many of Supply's personnel were standing condition III watches in Gunnery and Damage Control and that few storerooms could be opened while underway, made maintenance of the material condition of storerooms, as well as restowage and inventory, difficult. Such time as could be spared from replenishment while in port, was devoted to this work.

Perhaps the major difficulty experienced in supply support of general stores materials concerned the filling of priority "C" requisitions. From conversations with supply officers of other vessels, it is believed that this difficulty is widespread. In accordance with instructions, all requisitions are forwarded to the service command for screening, after which they are passed to the supply ships for action. Priority "A" and "B" requisitions are forwarded to PRCO, NSC, Oakland if the item is not carried or not in stock. It has been the practice, however, to return priority "C" requisitions to the requesting vessels without further action being taken by the supply ship. As a result, and because mail delivery while at sea takes from 7-10 days, two to three weeks elapse from the time the requisition is submitted until notification is received that the material is not carried or not in stock and no further action is being taken. By that time, such requisitions might have reached the priority "A" or "B" classification. Further, if the requisition is resubmitted as a priority "C" the same chain of events may occur, with the result that 4 - 6 weeks has elapsed, during which time a "triangle" passing of paper has occurred, but no material has been received nor action taken to obtain it. It is recommended, therefore, that priority "C" requisitions be passed to CONLUS for direct delivery to the requisitioning vessel (which, naturally would increase the burden on fleet freight), or that supply ships obligate against incoming stock. It might be advisable for requesting vessels to indicate on each requisition the quantity of each item on hand, on order, and past six months issues. This would enable the supply ships to anticipate requirements and recurring items.

(3) Clothing and Small Stores and Ship's Stores

At the end of the ten months period, about the only items of clothing and small stores still in short supply in the forward area were khaki shirts and khaki trousers.

Supplies for ship's store service activities (barber shop, cobbler shoemaker, tailor shop, and laundry) are still in short supply or non-existent (examples

arc, soles, heels, press cover cloth).

Uniform and uniform accessories (especially cap frames) are difficult if not impossible to obtain, even from shore activities. Tailor made uniforms are available, but because of length of time involved in get manufacture and the brief periods in port for fittings, etc., these do not solve the problem.

Dry-cleaning poses another problem. Because of the relative long periods at sea and short periods in port, the problem is a difficult one to solve. It is noted that AD and AS type vessels are to be fitted with dry-cleaning plants. Such an addition to a CV could be used to a maximum advantage.

(4) Disbursing

The sale of Yen prior to entering port proved to be somewhat of a problem. It was found that its sale in \$5.00 increments, precounted, facilitated its disbursement.

Although only occurring once, the exchange of Military Payment Certificates for U.S. Currency prior to departure for CONLUS, especially if the final in-port period is a short one, is difficult. Using the services of seven supply officers, the exchange of \$175,000 was accomplished in about 15 hours. It is highly probable that some individuals may still have a substantial quantities in their possession. It is suggested that exchange facilities could be established at major West Coast ports.

(5) Aviation Stores

Supply support of aeronautical material has been excellent. The U.S.S. JUPITER has provided fine service both at sea and in port. The same difficulty with regard to filling of priority "C" requisitions as stated above (under general stores) has been experienced, however. The Supply Officer of the JUPITER has stated that steps are being taken to solve this problem.

During the last six weeks operations, availability of aircraft due to lack of spares did not fall below 97%. This is attributable to the excellent logistic support from the U.S.S. JUPITER as well as other CV's operating with this vessel, and the fact that aviation stores have been stocked on the basis of past usage and not the various section allowance lists. From experience it is felt that these allowances lists can no longer be used as

even a guide for some items. For example, 4 each R32-CV-VS-40315-5 section assembly for F4U-4 are allowed, whereas usage of this item for the past 3 months has been 14 each.


I. E. HOBBS

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