OAR 152/CV

U. S. S. PHILIPPINE SEA (CV-47)
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Serial: 06

JAN 11 1951

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

DOWNGRADED AT 3 YEAR INTERVALS;
DECLASSIFIED AFTER 12 YEARS
DOD DIR 5200.10

Subj: Action Report for the period 1 November through 31 December 1950

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

Encl: (1) CVG-11 Operational Summary for the subject period
(2) Damage inflicted during subject period

1. This report is submitted in accordance with reference (a).

Part I - Composition of Own Forces and Mission

During these operations, the U.S.S. PHILIPPINE SEA operated on the east coast of Korea as a part of Task Force 77. CTF-77 was ComCarDivONE (RADM E.C. EWEN), embarked in this vessel. At various times during the operation ComSEVENTHFlt, embarked in the U.S.S. MISSOURI (BB-63), was present; however, except during the replenishment of this vessel ComCarDivONE acted as Officer in Tactical Command. Whenever the U.S.S. PHILIPPINE SEA replenished during the period 7 November through 21 November, ComCarDivTHREE was directed to act as OTC in the absence of ComCarDivONE. Upon the arrival of ComCarDivFIVE on 5 December, he assumed temporary OTC duties during ComCarDivONE's absences. The mission of the force was to perform reconnaissance, close support, interdiction and air bombardment missions in order to destroy enemy forces, communications and installations, in support of United Nations Forces. This vessel operated in accordance with ComCarDiv ONE Operation Order No. 4-50 and supplemental plans promulgated during the period of this report.

Part II - Chronological Order of Events

a. November - At 0000I, 1 November the U.S.S. PHILIPPINE SEA with ComCarDivONE embarked, in company with the U.S.S. THOMAS (DDR-833), enroute from SASEBO Harbor to YOKOSUKA, Japan. The ship was in typhoon condition III, the typhoon center then being about 300 miles northeast of the ship. At 1346I, 1 November the ship anchored in berth No. B-136, YOKOSUKA KO,

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Japan. The ship was scheduled to stay in the YOKOSUKA area for a week of liberty and recreation. At approximately 1900I, 4 November a dispatch was received from ComNavFE directing the U.S.S. PHILIPPINE SEA to proceed to the east coast of Korea to destroy enemy troops and installations there. The ship got underway at 0859I, 6 November for the east coast of Korea where she rendezvoused with the remainder of Task Force 77 in the early morning of 9 November. The first strike group for this period was launched at 0800I, 9 November. The primary target was the railroad bridge at SINUIJU. On this flight, naval aircraft were engaged for the first time by MIG-15 aircraft. One enemy MIG-15 was shot down by the Commanding Officer, VF-111. This was the first attack by CVG-11 aircraft on the Yalu River bridges. Attacks on these Yalu River bridges from SINUIJU to HYESANJIN continued from 9 through 28 November. During the first 10 days our flights consisted of the bridge strikes, armed reconnaissance between the bomb line and the Manchurian border, and an occasional close support flight under control of the 10th Corps. On 21 November, the Secretary of the Navy (Honorable F.P. MATTHEWS) came on board for an official visit. He remained over-night witnessing air operations, and left the following day. On 30 November close air support was furnished the 8th Army in the KUNURI area.

b. December - During the entire operating month of December, the primary mission was close air support for the 10th Corps in the HUNGNAM-CHOSIN reservoir area. Photo reconnaissance, TARCAP and Night Heckler missions also were flown. On 25 December, this ship took departure of Task Force 77 after 50 continuous days of operations at sea, arriving at SASEBO, Japan at 1043I, 26 December for a 10 day period of urgently needed maintenance and repair.

c. Replenishment - During the two month period, the ship replenished on an average of once every third day.

Part III - Ordnance

a. Performance - See Part I of enclosure (1).

b. Ammunition expended

Bombs:

2606 - 100# GP
241 - 500# GP
61 - 1000# GP
6 - 2000# GP
18 - 350# ADB
361 - 220# FRAGS
1254 - 260# FRAGS

Napalm:

69845 lbs. of powder
290 Jap made drop tanks
347 MK12 drop tanks
120 MK5 drop tanks

[redacted]

[redacted]

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Rockets:

176 - HVAR
47 - 6½" ATAR
9 - 3½" Solid head

Machine gun ammo:

156,954 rounds of 20MM

Part IV - Damage

a. Own

(1) Aircraft

COMBAT

	F4U	AD	F9F	TOTAL
Lost	2	3		5
*Damaged	18	12		30
Total	20	15		35

OPERATIONAL

HO3S	F4U	AD	F9F	TOTAL
	7	4	10	21
1	20	15	14	50
1	27	19	24	71

*This includes all Class "B", "C" and "D" damage

(2) Ship

The effectiveness of the fire fighting organization was demonstrated on 14 November when an F9F crashed through the barriers into parked planes on the flight deck. The fire occurred among planes fully gassed and loaded with bombs. The fire was brought under control in 6 minutes and extinguished in 9 minutes. This was the first chance to test the modified foam system of this vessel which was recently installed by the ship's force and the results were most gratifying. The modification consists of a prime booster pump at each generator to ensure foam at low flow rates. Satisfactory foam was obtained from the four stations used to extinguish the fire and the present foam system is considered a vast improvement over the system as originally installed in this vessel.

b. Damage inflicted on the enemy

See enclosure (2)

Part V - Personnel Casualties

1. HORTON, Robert Lee, ENS, USN, 496668/1315 (VF-113)
Admitted: 11/27/50
Description: Wound, missile, punctured left chest - struck by bomb or shell fragment during strike over SINUIJU. Wound occurred during enemy action.

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2. NOONAN, William Donald, ENS, USN, 507341/1310 (VA-115)
Admitted: 11/27/50
Description: Drowning - Pilot of AD-4 aircraft which crashed into the sea. Body not recovered.

3. CRIST, Denzel Leland, ENS, USN, 506825/1310 (VA-115)
Admitted: 12/1/50
Description: Burn (face, 1st and 2nd degree). Injured in aircraft accident.

4. TODD, Chester Barton 329 61 88, AD3, USN (USS PHILIPPINE SEA)
Admitted: 12/8/50
Description: Submersion, non-fatal. While attempting rescue of a fellow seaman. Man fell into the sea.

Part VI - Doctrine and Operating Procedures

a. Flight Deck Operations

(1) Cold Weather

(a) The advent of cold weather during this operating period came suddenly and brought with it many headaches to operating personnel. The principal cold weather problem of immediate concern was that of changing the timing of all operations preparatory to a scheduled launch. Because of the increased time necessary to start and warm up engines (not true in the case of jets) and the time required for pilots to don additional cold weather flight gear, it was found that other preparatory operations such as feeding and briefing pilots, flight deck spotting, and ordnance loading had to commence much earlier in order to meet scheduled launches. As a result of several days experience under cold weather conditions, it was found that launch schedules could be met by having pilots man planes at minus 40 minutes rather than the usual minus 20 minutes and by commencing other operations correspondingly earlier.

(b) Maintenance of aircraft was somewhat limited under cold weather conditions because of the necessity for conducting all maintenance on the hangar deck where personnel can work efficiently. This, of course, further restricts the already limited flexibility attainable in spotting and respotting aircraft. The necessity for a marked reduction in aircraft complement under cold weather conditions to maintain acceptable availability and operating efficiency was indicated. This reduction was achieved by normal attrition for which replacements were not available.

(c) Snow and ice removal was not a serious problem during this period. By judicious maneuvering of the force, snowstorms and resulting

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accumulations of snow on the flight deck were usually avoided. In one instance where a light layer of snow and ice had formed, two jets were taxied "fish-tailing" up the deck and proved to be quite effective not only in removing the snow but in melting the ice and leaving the deck relatively dry.

Recommendations - It is recommended that:

(a) All units be alerted to the necessity for revising prelaunch check-off lists to allow greater time for manning, starting and warming up planes during cold weather.

(b) Air schedules be loosened up drastically to allow for cold weather operational inflexibility.

(c) Carrier aircraft complements be reduced to about 75 planes during cold weather in order to attain optimum operational efficiency.

(d) The use of jet aircraft for snow and ice removal be further developed and tested.

(2) Ready Deck Carriers

During this period a noticeable increase in flight deck efficiency was noted due to the adoption of the system of assigning ready deck and Condition 10 fighter duties in accordance with the flight schedule rather than by arbitrary assignment to the duty carrier for an entire day. Many unnecessary respots were avoided by this system.

Recommendation - It is recommended that this system be adopted as Standard Operating Procedure.

(3) Jet Barriers

On 14 November, an F9F jet crashed through all three Davis barriers when a pitching deck caused the hook to break on striking the ramp, and the landing gear failed as a result of the ensuing hard landing. The fire which started after the plane crashed into other aircraft parked forward of the barriers was quickly extinguished, thanks to a splendid performance on the part of fire-fighting personnel and equipment. This accident left all witnesses with two distinct impressions: First, that the accident might well have been catastrophic had the fire become uncontrollable; and second, that accidents of this type can be expected to reoccur until a successor to the Davis barrier is developed which will positively arrest jet aircraft with damaged landing gear. Fortunately no personnel were injured as a result of this accident although a total of 11 aircraft

[redacted]

were damaged. This is the second accident of this nature since arrival in Korean waters. We may not be so fortunate in the event of a third similar accident.

Recommendation - It is recommended that the development of a positive jet barrier be accelerated and furnished the fleet on a highest priority basis. It is suggested that Davis barriers be used on the two after barriers since they will stop the majority of planes with only slight damage. However, as a last resort the final barrier should be positive in its action and be able to stop the plane even though its landing gear has been completely wiped out. Possibly a mesh-type barrier or a barrier with vertical arresting members which can engage other parts of the plane than the landing gear would be feasible.

(4) Night Operations

Operations during this period have continued to emphasize the necessity for a night carrier. Even if the numbers of non-night aircraft were reduced, it would still be a practical impossibility to operate the carriers continuously day and night on the sustained basis which has been the exception rather than the rule in the Korean operations to date. On a carrier operating over 80 aircraft, the futility of trying to spot and re-spot 90% of the aircraft during hours of darkness in order to launch and recover 10% of the aircraft is obvious. On the other hand, unless air operations are maintained against the enemy at night we can expect him to continue his tactics of night mass troop movements and infiltration. It is believed that the risk of having "all eggs in one basket" is merited in view of the tremendous operational advantage to be gained.

Recommendations

(a) It is recommended that one or more carriers with air groups capable of flying night air defense, night ASW, night reconnaissance and night strike missions be organized and deployed.

(b) It is further recommended that the peacetime policy of maintaining night detachments on day carriers be abandoned.

b. Reconnaissance

During this operation, the value of photographic and visual reconnaissance was again illustrated. Certain defects in both are still to be overcome before the ground forces can expect to receive maximum results from this type of reconnaissance.

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(1) Photography

In photography the problem is getting the developed prints in the quantity needed to the ground forces expeditiously. On a recent assignment, mass reproduction of aerial photographs (5 prints each of an area requiring 500 shots to map it), the finished prints could not be delivered until the day following the photo flight.

Recommendation - It is recommended that a camera be developed which will permit the pilot to drop the undeveloped film to the ground forces without returning to the carrier.

(2) Visual

In visual reconnaissance the pilot is faced with the problem of what to look for and how to look for it. Intelligence must tell the pilots what to look for but only through experience and training can a pilot be taught how to see. In the visual reconnaissance missions assigned during this operating period, the pilots were looking for enemy troops, supply dumps, military equipment and all types of transportation equipment. Through experience it has been found that it is very difficult to see this type of target when concealed or camouflaged, from an altitude above 1,500 feet. In like manner, it has been determined that most of our aircraft have been hit by anti-aircraft fire when flying below 1,500 feet. As a compromise, one or two aircraft were sent low - 50 to 1,500 feet - while the remainder of the flight stayed about 3,000 feet above the low planes. Even with such an arrangement the results achieved, in many cases, depended upon the visual acuity of the individual.

Recommendations

(a) It is recommended that the ComAirPac Training and Competition Manual be modified to include visual reconnaissance flight at low altitudes (below 1,500 feet) and at medium altitudes (3,000 to 6,000 feet) and that these flights be covered when practicable by photo planes to check results.

(b) The training and experience being gained by pilots of the PHILLIPINE SEA Air Group in visual reconnaissance against an enemy skilled in camouflage and concealment is invaluable. Since there is no substitute for this type of experience, it is recommended that carrier air units in the Continental U.S. be sent forward at the earliest to ensure maximum benefit is obtained from this type of operational experience by as many naval aviators as possible while the opportunity still exists.

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c. Charts

(1) Use

Aeronautical charts are an important tool of the pilot; but to furnish him the information he needs they should be accurate, standardized and easy to handle. The scales in use (1: 1,000,000; 1: 500,000; 1: 250,000 and 1: 50,000) appear to be adequate for navigation except when pin point bombing is required. In such cases an illustration at a 1: 10,000 or smaller scale is desired. The plastic paper elevation chart (scale 1: 250,000) is an excellent briefing and flight planning chart, but has been available in very limited quantity.

(2) Deficiencies

(a) Many of the Aeronautical Chart Service Pilotage and Approach Charts are of a 1945 or 1946 series which are inaccurate with respect to rail lines, reservoirs and other man made changes.

(b) Many of the AMS L-751 series are old Jap black and white reproductions which are very difficult to follow.

(c) Not all charts are gridded. Approach and Pilotage Charts have red grids lines which disappear under red night lighting.

(d) The AMS L-552 map is made of a very poor grade of paper which tears easily. On this map railroad and highways are printed in red which disappears under red night lighting.

(e) For single seat aircraft the problems of number and bulk still exist. Pilots are required to fly many different types of missions and therefore must carry many charts to effectively complete their tasks. The idea of map pockets has been investigated and found to be an improvement, but shifting from chart to chart, and the continual folding and unfolding, are time consuming and interfere with the pilots' flying.

Recommendations

(a) Aeronautical charts be developed which permit a simple turning of a page about both a horizontal and a vertical axis, dependent upon the direction of flight instead of unfolding the chart completely as with charts now in use. The size of the folded chart should be 10" X 10".

(b) A universal military grid be established with this grid superimposed on all charts.

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operating and repair personnel. As it is not considered desirable to use less than all eight boilers when making 30 knots, the requirement for full boiler power every operating day seriously limited the upkeep on boilers and auxilliary machinery. Also, eight boilers are a handicap when surface winds of 20 knots or more are available. This is due to the fact that at low speeds, the superheat temperature is difficult to control and fuel economy is greatly reduced. Further, when large changes of speed are used, such as from 30 knots down to 10 knots, thermal shock to economizers result due to decrease of water flow through the economizer and the large amount of heat available in the furnace. The considerable number of economizer leaks occurring on this vessel have been attributed to thermal shock.

Recommendations

That boiler power requirements for CV's be modified as follows:

Boilers	Speed
4	26 knots
6	28 knots
8	30 knots

It is then recommended that boiler power be reduced to 28 knots for jet operations on days when good surface winds are expected.

f. Mark V IFF

The Mark V IFF system was put into operation during the latter part of this period. Preliminary evaluation shows the Mark V system to be highly successful, especially in the identification and control of F9F type A/C.

Recommendations

That further evaluation of the Mark V IFF system be made and a standard doctrine for its use be drawn up for use by all units having the system installed.

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GVG-11 Operational Summary for the period 1 November through December 31, 1950

Part I - Cold Weather Ordnance

a. NAPALM

As noted in OP 1361 gasoline and napalm, U.S. Navy Type I, will not gel at temperatures appreciably below 60°F. unless a catalyctic agent is used. This was experienced by the ships and aircraft using napalm as the weather in the Korean area approached winter. Pilots were reporting 50% dud napalm drops and the napalm bombs were noticed to be at least 50% liquid gasoline and 50% gel. This ship and air group worked together in developing an excellent method of producing napalm mix without using X-Ylenol. Thirty to forty feet of one inch coiled steel tubing was inserted in a 55 gallon drum filled with water. One end of the coiled steel tubing was connected to the gasoline supply and the other end to the napalm hopper. Low pressure steam was injected into the water and the water temperature was raised to about 212 degrees Fahrenheit. A thermometer is installed at the discharge end of the gasoline heating coil and this temperature is maintained at about ninety degrees F., by regulating the incoming steam valve. (Above 90°F. gasoline begins to vaporize but there is no danger of ignition in this system.) At the napalm tank filler nozzle a four foot length of flexible copper tubing is attached to enter into the tank and act as an agitator. Gasoline heated and a six percent mix agitated as described above produces 100% gel which is ready for immediate use as soon as the napalm bomb is filled. Pilots now experience hardly any duds and are very enthusiastic about the spread and burning quality of correctly gelled napalm.

b. 20MM-Guns

The 20MM gun is one of the air groups greatest problems in the combat area during cold weather. The life of the present 20MM gun heaters, R94-AYO-7229391 is now estimated to be 30 operating hours. In extreme cold (-40°F) it is doubtful if the heaters do any good even if operating. It is considered that one of the main problems is the freezing of condensed water on the gun parts and on the ammunition trays and cans. Care in gun maintenance, cleaning every 600 rounds with cleaning solvent PS 661, oil very sparsely with JAN-L-644 (Formerly OS 1361) then wiping dry, compliance with cold weather notes in Bulletin of Ordnance Information 1-48, and keeping muzzle tape in place until action is imminent are essential for good operating results. Experiments are being conducted in mounting two

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heaters, one .50 caliber gun heater, R94-11-213010, on each 20MM gun in order to keep more metal surface heated. All squadrons have been plagued by belt breakages due to the use of the MK7 20MM link. MK8 links are still unavailable in the WestPac Area.

c. Rockets

Aircraft rockets have been in restricted use during cold weather. If long exposure below zero degrees F. is forecast rocket loadings are not ordered. It is understood that certain rocket motors are marked for minus twenty degrees F. Ordnance armaments would be much improved if these were available. Pilots sorely miss using the HVAR.

d. Fuzes

Some difficulty with VT fuzes has been reported since 15 November. Perhaps condensation is freezing the impellors, but probably pilots are having difficulty in allowing enough air travel for the VT fuzes in mountainous terrain, especially when low ceilings are present. Recently, daisy cutter fuzes have been used in lieu of VT fuzes and found to be very satisfactory.

Part II - Flight Gear

Experience in this air group with the advent of heavy winter flight gear underneath the QFS parachute R83-NAF-312165-2 has shown the extreme difficulty, and, in some cases, impossibility for pilots to reach the rip cord "Dog" ring with the right hand. Immediate remedial action is recommended including the reissue of World War Two QAS Harnesses and parachutes. Extreme discomfort on prolonged flights is encountered by pilots with long trunks as available parachutes do not have sufficient length from seat to shoulder. Additional advantage of the QAS parachute is ease of attachment of harness to chute after take-off and of disconnect prior to landing during carrier operations.

Recent experience in an aircraft fire indicates the unsuitability of Nylon fabric for use in aviators flight clothing. There has been considerable informal discussion regarding the merits of nylon flight clothing. The following is positive evidence of the actual hazard accompanying the use of nylon:

An AD-4, making an extremely hard landing during a snowstorm with a pitching deck, caught fire when the engine broke off at the firewall. The flames did envelop the aircraft for a moment but died quickly as the

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or toward a division of F9F's. Defensive tactics used were slight climb at high speed, a left or right fairly steep turn, and a Split-S to enter a dive. The diving characteristics were the best feature of the MIG.

The F9F had no trouble countering the tactics mentioned above, except for the high speed dive, which in all cases ended the fight. The F9F can turn with the MIG and although the MIG appeared faster, the speed advantage is considered to be less than 50 knots.

b. Escort Tactics

In order to safely escort the conventional planes a new procedure was adopted by all jet squadrons of this Task Force. This consisted of establishing an approach and retirement corridor through which all conventional planes passed going to and returning from the target area. The initial point, designated Point Able, was set up over some well defined land mark 30 to 40 miles from the objective area. Point Baker and Point Charlie were established as 1/3 and 2/3 of the distance toward the target. The strike leader informs the jet cover as he passes each of these points, to facilitate keeping track of the flight without having to constantly watch their progress. Usually four jet divisions were employed, with divisions stationed at 20,000, 25,000, 30,000, and 35,000 feet. A TarCap Coordinator is assigned each flight, and if cloud cover exists, he reassigns altitudes in the area. If the 35,000 foot level causes condensation trials, the division leader is free to lower his altitude, or with permission of the TarCap Coordinator, he may become a roving division and assume any altitude. It has been found that short, one syllable radio calls were a necessity while in the objective area.

c. F9F Hydraulics

Hydraulically operated equipment fails to perform satisfactorily in extremely low temperatures encountered at high altitudes. The hydraulic system has become too sluggish for acceptable limits at 65° F (35,000 feet over North Korea). The main landing gear requires 85 seconds to lock down, gun operation has been seriously hampered by sluggish and partially congealed hydroluble (U-4 Spec 51F22), and the increased time to complete wing folding after landing has held up deck spotting. (VF-112, RUDM 23-51).

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DAMAGE INFLICTED -- MONTHS OF NOVEMBER AND DECEMBER

TARGET	DESTROYED	PROBABLY DESTROYED	DAMAGED
Vehicles (Small)	5		
Vehicles (Unidentified)			17
Trucks	33	3	28
Trailer	1		
Ammo truck	1		
Carts	61	2	30
Tractors	7		
Passenger car		1	
RR Cars			4
Tanks	3	1	3
Bulldozer	1		
Wagons			2
Oxen	2		
Horses	4		
Pack animals	50		
Highway bridge	1		7
RR Bridge			5
Bridge approaches			2
Warehouses	194	2	109
Buildings	201	5	25

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TARGET	DESTROYED	PROBABLY DESTROYED	DAMAGED
Barracks	5		4
Buildings housing troops	1		
Quonset type huts	23		1
Houses	95		25
Troops	(not accurately known, but estimated at 3,000 - 4,000)		
Flak positions			1
Gun positions			3
Field piece	2		
MIG-15	1		1
Saw mills			2
Supply dumps			2
Ammo dumps		2	
Gas drums	540		
Command posts	2		
Towns (% of each destroyed)	1 - 40% 3 - 50% 1 - 60% 1 - 70% 1 - 95%		

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