DECLASSIFIED

From: Commanding Officer
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, U.S. Pacific Fleet

Subj: Action Report for the period 13 December 1951 to 3 February 1952

Ref: (a) OpNav Instruction 3430.4


1. In accordance with reference (a), the action report for the period 13 December 1951 to 3 February 1952 is herewith submitted.

PART I COMPOSITION OF CVN FORCES AND MISSION:

a. At various times during the period of this report, Task Force 77 was composed of the following units: USS ESSEX (CV9), ComCarDiv ONE, RADM J. FERRY, USN embarked, USS VALLEY FORGE (CV45), ComCarDiv FIVE, RADM F. W. McMahan, USN embarked, USS ANTIETAM (CV36), USS ROCHESTER (CA124), USS ST PAUL (CA73), ComCruDiv ONE, RADM M. E. STONE, USN, embarked, USS MANCHESTER (CG43) and units of Destroyer Division 12, 31, 72, 91, 92, 111, 122, 132, 131, 151, 152, 171, 172, and Escort Destroyer Division 11, 12.

b. During the subject period, the USS ESSEX (CV9) operated off the East-coast of Korea in accordance with CTF 77 Operations Order 22-51 (1st & 2nd revisions), plus supplemental plans and orders issued during the period.

The mission of TF 77 was primarily to support the United Nations ground forces in Korea. The support missions included close support, deep support, armed and photographic reconnaissance, interdiction of enemy supply lines, and strikes against enemy installations.

PART II CHRONOLOGY:

13 December Enroute from operating area to Yokosuka, Japan in accordance with CTF 77 dispatch 100540Z Dec.

14 December 1510 moored port side to, Piedmont Pier, Yokosuka, Japan.

26 December Underway Yokosuka, Japan for operating area in accordance with CTF 77.04 dispatch 230140Z Dec.

27 December Proceeding to operating area.

28 December Conducted refresher Air Operations. Joined Task Force 77 RADM J. FERRY, USN, Commander Carrier Division ONE, relieved RADM F. W. McMAHON, Commander Carrier Division FIVE as OTC.

29 December Conducted Air Operations.

30 December Conducted Air Operations.

31 December Task Force replenished. The following message was received from Commander SEVENTH Fleet addressed to Commander Task Force SEVENTY-SEVEN. "YOUR STELLAR PERFORMANCE OF YESTERDAY, ESPECIALLY THAT OF ESSEX AIR GROUP FIVE IN KILLING 123 RAIL CUTS, WAS A FITTING CLIMAX TO THE YEARS WORK WHICH HAS SEEN TASK FORCE 77 HITTING THE ENEMY FROM THE BOOMLINE TO RASHIN & MY WISH FOR THE NEW YEAR IS THAT YOUR EFFORTS WILL CONTINUE WITH EVEN GREATER SUCCESS AND THUS HASTEN THE VICTORY WHICH WE ALL SEEK X VADM MARTIN SENDS"

1 January 52 Conducted Air Operations.

2 January Conducted Air Operations.

3 January A 20mm gun installed in a F2H Banshee accidentally discharged due to a broken breech block lock and air pressure loss. Five men were wounded when the high explosive shell hit a F6F Panther and exploded. Four men were listed as not serious and one was listed as critical.

4 January Task Force replenished.

5 January Conducted Air Operations. The following message was received from Commander SEVENTH Fleet addressed to CTF 77 "THE MORE RED YOU PUT ON CCR INTERD ICTION CHART THE LESS RED AICE AND AMMO GET TO ITS DESTINATION X TODAY'S PICTURE IS THE MOST SATISFYING YET X KEEP UP THE GOOD WORK X VADM MARTIN SENDS"


7 January Task Force replenished.

8 January Conducted Air Operations.

10 January Task Force replenished.

11 January Conducted Air Operations. 1235 - AD BUNO, 122339 was seen to spin and crash shortly after takeoff. After a normal carrier takeoff, plane jettisoned 1-one thousand pound bomb then climbed abruptly to an estimated 900 feet, made three shallow turns to the right, the last turn steepening into a nose down diving spiral. The plane sank immediately after striking the water. Two helicopters conducted a fruitless search for the pilot. No radio transmissions were received from the pilot at any time. Cause unknown. Pilot (LTJG J. H. GOLLER) listed as killed in the line of duty.

12 January Conducted Air Operations.

13 January Conducted Air Operations. Captain WILLIAM J. ROBEE, USN, relieved Captain AUSTIN W. WHEELOCK, USN, as Commanding Officer of the USS ESSEX (CV-9). The following message was received from Captain WHEELOCK addressed to Commander Air Group FIVE "UPON BEING RELIEVED AS COMMANDING OFFICER OF THE ESSEX I WISH TO CONVEY MY DEEP APPRECIATION FOR THE OUTSTANDING ACCOMPLISHMENT OF AIR GROUP FIVE X YOUR SUPERB PERFORMANCE HAS BEEN A CONTINUOUS SOURCE OF INSPIRATION TO ME AND THE OFFICERS AND MEN OF THE ESSEX X I WISH YOU THE BEST OF LUCK FOR THE FUTURE AND GOOD HUNTING X SIGNED CAPTAIN AUSTIN W. WHEELOCK"

1210, F4U BUNO, 62982 hit by AA fire, ditched 5 miles East Mayang-Do. Pilot (ENS E. R. HADIS) picked up by USS PORTERFIELD. No injuries sustained.

14 January Conducted Air Operations.

15 January Conducted Air Operations. The following message was received from Commander Task Force SEVENTY-SEVEN addressed to Task Force SEVENTY-SEVEN, "COMMANDER 140212Z QUOTED FOR INFO QUOTE SUCCESSFUL OPERATIONS TASK FORCE SEVENTY-SEVEN ON 5 CM 6 AND 6 JANUARY IN DESTROYING HEAVILY DEFENDED KEY RAIL AND HIGHWAY BRIDGES WEST OF YANG-DO X MOST GRATIFYING X SPECIAL PREDAWN OPERATIONS 12 JANUARY NETTING 2 LOCOMOTIVES AND 16 RAIL CARS DESTROYED AND 2 ADDITIONAL LOCOMOTIVES DAMAGED X ALSO NOTED WITH PLEASURE X CONSIDER SUCCESS THESE OPERATIONS REFLECT ASTUTE PLANNING AND SKILLFUL EXECUTION BY COMMANDER TASK FORCE SEVENTY-SEVEN AS WELL AS OUTSTANDING PERFORMANCES BY AIR GROUP PERSONNEL X WELL DONE X ADM G. T. JOY SENDS UNQUOTE X THE PLANNING REFLECTS THE COMBINED KNOWLEDGE AND EXPERIENCE OF BOTH STAFF AND FLIGHT PERSONNEL X THE SUPPORT PROVIDED BY THE MAINTENANCE X ORDNANCE AND FLIGHT DECK CREWS MADE IT POSSIBLE X THE CONTINUED PERFORMANCE OF TASK FORCE 77 SUPPORT AND SCRAMBLE VESSELS PERMITS SCHEDULING OPERATIONS OF THIS NATURE WHENEVER AN OPPORTUNITY IS OFFERED"

1125 AD BUNO, 122313 hit by AA fire, ditched in Wonsan Harbor. Pilot (LT F. J. PRENDERGAST) picked up by USS MACKENZIE. No injuries sustained.
16 January Conducted Air Operations.

17 January Task Force replenished.

18 January Conducted Air Operations


20 January Task Force replenished.

21 January Conducted Air Operations. The following message was received from Commander Task Force SEVENTY-SEVEN addressed to the ESSEX and ANTITAK: "WELL DONE TO BOTH CARRIERS FOR THEIR WORK TODAY WHILE WE REGRET LOSSING AN AILE DOG, WISCONSIN'S WINDMILL MADE AN EXCELLENT RESCUE X HERE IS THE SCOPE WITH NIGHT HUNTERS STILL OUT, RAIL CUTS 137 BRIDGES 5 DESTROYED 2 DAMAGED X RR CARS 6 DESTROYED 32 DAMAGED X LOCOMOTIVES 2 DAMAGED X BYPASSES 2 DESTROYED X TROOPS 15 KILLED"

22 January Conducted Air Operations. 1005 F4U BUNO. 63033 hit by enemy AA fire. Pilot (LTJG J. M. BOBOTT) bailed out 20 miles South of Hungnam, was picked up by ROCHESTER helicopter and transferred to Yokosuka Naval Hospital for treatment. 1015 F4U BUNO. 62943 crashed in enemy territory. Pilot (LTJG E. V. LANEX) in attempting to drop a life raft to ROCHESTER helicopter crewman in water fouled tail of plane with raft causing crash - pilot picked up by ROCHESTER helicopter, no injuries sustained. 1225, AD4 BUNO. 122807 crashed in Wonsan Harbor. Probable cause enemy AA fire. Pilot (Cdr P. N. GRAY) picked up by OTE 75, 21. No injuries sustained.

23 January Conducted Air Operations.

24 January Task Force replenished.

25 January Air Operations cancelled due to weather.


27 January Conducted Air Operations.

28 January Task Force replenished.

29 January Conducted Air Operations.

30 January Conducted Air Operations. 1025, AD BUNO. 122325 ditched in Wonsan Harbor. Probable cause prop failure. Pilot (Cdr P. N. GRAY) picked up by the USS TWINING (DD 540), no injuries sustained. The following message was received from Commander SEVENTH Fleet "THE OUTSTANDING
31 January Conducted Air Operations,

1 February Task Force replenished. 1145 RADM F. W. McMahon, USN, ComCardDiv FIVE, relieved RADM J. Garry, USN, ComCardDiv ONE as CTF 77.
1330 Took departure TF 77 proceeding to Yokosuka, Japan with ComCardDiv ONE embarked, in accordance with CTF 77 290908Z FEB.

2 February Proceeding to Yokosuka, Japan.

3 February 0945. Arrived Yokosuka, Japan for rest, recreation and yard availability.

PART III ORDNANCE:

1. Expenditure of Air Ordnance.
   See enclosure (1)

2. Expenditure of Ship's Ordnance for training.
   a. For the period 13-31 December 1951: None
   b. For the period 1-31 January 1952: None
   c. For the period 1-3 February 1952: None

   a. Performance of Ship's Ordnance Equipment: The performance of ship's ordnance equipment was satisfactory.

PART IV BATTLE DAMAGE.

1. Ship
   a. On 26 and 27 December enroute to the combat zone the ship sustained minor structural damages as a result of heavy seas as follows:
      (1) Three 3"/50 ready boxes were torn from their bases on the forecastle. All were recovered.
      (2) Four life rafts were carried away off the port side forward.
      (3) The starboard forward boat boom was broken; only eight feet remained.
      (4) Framing on the main and second decks (frame 20 to 26) was distorted due to heavy seas hitting the flare of the ship.
      (5) Indentations were made in the ship's hull on the port side at frame 7 and the deck depressed at frame 6 (Compt A-401-A).
(6) The port corner of the spray shield around Secondary Conn was forced up and back approximately eight inches.

(7) The gasoline line, port side frame 20 01 deck, was crushed.

b. On 4 January a welded seam opened in the sea chest of A-50V, flooding the void with 22 feet of water. This same seam had been opened on 22 November 1951. Repairs were made by Ship's Force.

2. Damage Inflicted on the Enemy.
   See enclosure (1)

3. Damage Inflicted on ESSEX aircraft.
   See enclosure (1)

PART V PERSONNEL PERFORMANCE AND CASUALTIES:

1. Performance.

   Under the heavy workload of continuous operations, the performance of all personnel has been excellent and morale has been a factor requiring no special attention.

2. Casualties.

   a. Ship's Company

      On 3 January 1952 the following men were wounded as a result of shrapnel and flying debris caused by the accidental discharge of a 20mm automatic gun in a F2H Banshee aircraft.

      FERRIER, C. L, 926 99 80, SN, USNR, Multiple shrapnel wounds, back with traumatic section spinal cord. Placed on sick and critical list.

      CLECKLEY, A. D, 422 02 57, AA, USN, Shrapnel wound, left leg. Wound dressed and returned to duty.

      LAMBERT, G. D, 571 78 80, SA, USN, Shrapnel wounds, left elbow and right buttock. Placed on sick list, not serious.

      LEARY, M, M, 799 79 85, AFMN, USN, Shrapnel wound, right forearm, right buttock and right knee. Placed on sick list, not serious.

      WOODSIDE, J, R, 342 83 27, AO2, USN Shrapnel wounds multiple right leg from hip to ankle. Placed on sick list. Not serious.

   b. Air Group FIVE
      See enclosure (1)
PART VI COMMENTS:

1. Engineering Department

   a. The Engineering Department experienced no casualties during this operational period.

   b. Recommendations.

      None

   c. Steaming Data

      | Miles steamed | 15-31 Dec 51 | 1-31 Jan 52 | 1-3 Feb 52 |
      |---------------|--------------|-------------|------------|
      | Fuel Oil Received | 773,192 gal. | 1,588,469 gal | 243,524 gal |
      | Fuel Oil Delivered DD's | 82,536 gal. | 163,651 gal | 28,644 gal |
      | Fuel Consumed (underway) | 427,720 gal. | 1,641,000 gal | 194,450 gal |
      | Fuel Oil consumed (anchored) | 73,650 gal | --- | --- |
      | Average Speed | 18.2 knots | 15.2 knots | 19.4 knots |
      | Hours Underway | 132 | 744 | 57.8 |

2. Air Department

   a. Catapult and Arresting Gear

      During the period of this report Catapult and Arresting gear operations were normal with the following exceptions:

      The platform for No. 5 barrier air cylinder, located within the island structure aft (Repair VIII locker) was reinforced with welded 1/4 inch plate. The platform, constructed of two 1/4 inch plates, is welded boxlike at the deck-bulkhead seam. With movement of the air cylinder both the bulkhead and deck plate would work, causing a torsion of the platform, and canting the air cylinder so that the piston rod wedged on the side of the cylinder. As a result the barrier remained approximately 10 to 12 inches above the deck. With additional bracing fore and aft, the twisting action was eliminated.

      During the past six months of operations it has been determined conclusively that the jet starting units, installed under the edge of the flight deck adjacent to the catapults, have not justified the space and maintenance required by them. At the beginning of this period the starter units were used, however, several times planes could not be started when the signal was given, but immediately after the launch were lit off satisfactorily with a starter jeep. The use of the units was discontinued due to their extreme unreliability, and thereafter the cud problem was greatly reduced. Starter jeeps have since been used exclusively and there is rarely any difficulty in keeping the catapults "fed" in spite of the fact that the jets are started only 3-4 minutes before launch time, and that during a 16-plane jet launch anywhere from 24 to 29 engines have to be started. Using the starter jeeps, jets can be turned up anywhere on the flight or hangar deck.
The F2H Banshee, unlike the F9F, cannot fold its wings with gas in the tin tanks. In the midst of a launch, a Banshee docked, with a wing span of approximately 45 feet, does present a problem, but no more so than that of an F9F, if handled properly. They can either be parked forward of the island with the tail outboard, aft of the island in the same position, or placed on the No. 7 elevator and then dropped down to hangar deck level and taken off onto the hangar deck. The Banshee, however, has proved to be an exceptionally reliable aircraft, and it is not uncommon to have a run of 200 Banshees launched without encountering a dud.

During this tour on the line, severe cold weather was encountered. After three weeks of such conditions it was found necessary to give certain flight deck personnel, especially plane directors, relief from all duties for a short period, usually 48 hours. With the flight deck crew 25% under complement, proportionately longer hours of work have been required of all hands. This, plus continued cold weather and high winds across the flight deck, have hastened fatigue. This practice (short relief from all duties) has paid big dividends in better leadership and higher morale.

b. Operating data for December 1951 and January and February 1952.

<table>
<thead>
<tr>
<th></th>
<th>15-31 Dec</th>
<th>1-31 Jan</th>
<th>1-3 Feb.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arrested Landings</td>
<td>226</td>
<td>1,929</td>
<td>None</td>
</tr>
<tr>
<td>Catapult Shots (starboard)</td>
<td>62</td>
<td>541</td>
<td></td>
</tr>
<tr>
<td>Catapult Shots (port)</td>
<td>60</td>
<td>559</td>
<td></td>
</tr>
<tr>
<td>Gasoline, (gallons)</td>
<td>131,762 gal.</td>
<td>1,074,667 gal</td>
<td>None</td>
</tr>
<tr>
<td>Luboil Symbol 1100</td>
<td>1,147 gal.</td>
<td>4,583 gal</td>
<td></td>
</tr>
<tr>
<td>Luboil Symbol 1010</td>
<td>348 gal.</td>
<td>5,967 gal</td>
<td></td>
</tr>
<tr>
<td>Luboil Symbol 1120</td>
<td>300 gal.</td>
<td>2,405 gal</td>
<td></td>
</tr>
<tr>
<td>Alcohol AN-A-24</td>
<td>15 gal.</td>
<td>----</td>
<td></td>
</tr>
<tr>
<td>Alcohol AN-A-1</td>
<td>2 gal.</td>
<td>43 gal.</td>
<td></td>
</tr>
</tbody>
</table>


a. Aviation Stores

(1) No particular difficulties were experienced in obtaining aviation stores material.

(2) Approximately 150 tons of aviation stores representing the last major replenishment of stock in this area were received.

b. General Stores

(1) Services rendered by the CASTOR, ELECTROL, Fleet Activities, and CTR 92,5 were excellent during this period. The CASTOR was particularly outstanding due to the short period of time it required to screen and fill requisitions.

(2) Approximately 75 tons of 3SK materials were received.
c. Ship's Stores

(1) During the import period of 15-26 December, stores received from the afloat activities were 39% of those ordered. The availability of cobbler, tailor, and laundry supplies appears to be critical in this area. A fair assortment of other standard items is still available. Additional requirements placed on Fleet Activities resulted in 6% completion.

(2) About 6 tons of stores were received during this period.

d. Clothing and Small Stores

(1) Very few C&S items were ordered during this period.

(2) All items were received with the exception of marks and service stripes, size 32 dungsaees, and work gloves.

e. Commissary Officer

(1) No comments on services while in port. Replenishment at sea is decidedly preferable to replenishment in port.

(2) Received 4.6 tons of provisions from USS GUNTILLA and 16 tons from Fleet Activities, Yokosuka for a total of 62 tons.

f. Disbursing

(1) W2, 1040 and 1040A tax forms were ordered but not procured from sources in this area. No receipt transfers of cash while in port. Fifteen deposit record books were received by transfer from Fleet Activities Disbursing Office.

(2) Tonnage not applicable.

For the period 1 January to 15 January 1952

a. Aviation Stores

The period 1 January 1952 was critical for the Aviation Stores Group. The 180 day initial allowance of spare parts (approximately 18,000 items) insofar as high usage and critical items were concerned, stocks were fairly well exhausted by the end of November, 1951, although stocks were reordered as low limits were reached. 510 requisitions were pending on 15 January, representing about 1200 items due. Of these 1200 items 19 were pending on a Priority 1 basis for AOG aircraft.

During the first two weeks of January, 5 of the Priority A items were received by CCDFISH delivery. The oldest pending Priority A requisition is dated 29 November 1951, for a nose assembly for an AD-4NL APS-31 radome, stock number N82-DC-53804/66-650. Delivery is indefinite due to inability of contractor to meet requirements because of tooling redesign.
Four AD aircraft were AOG because of the critical shortage of propellers, stock number R87-ADD-P100017. Up to 1 January, 19 propeller changes had been made on the ESSEX AD aircraft, with the 4 pending making a total of 23 to date. Apparently this requirement is unusually high.

Mutual support between the carriers in the operating area continued to be of great value. No ship has failed to send over an AOG part, if available. The importance of this informal source of supply cannot be over-emphasized. The last time the Aviation Stores Group was replenished at sea by the USS JUPITER (AVS-8) was on 29 October 1951, and we do not expect to replenish at sea again until 31 January 1952. Replenishment at sea is advantageous and greater utilization of this method would improve deliveries of aviation parts which are most necessary at this time, particularly in view of the present extended period of deployment of this ship.

b. General Stores

(1) The system of furnishing standard stock continues to be excellent. There has been no shortage of important items.

(2) Electronic and machinery spare parts are the most difficult to replace. Although replenishment sources have furnished available spares promptly, only about 30% of the items required can be obtained in NAVFAC area. Replenishment from Far00C is comparatively slow with the result that stocks on board are diminishing progressively.

(3) Through the combined efforts of CTG 92.5 and CTG 92.1 to procure critical spares; CONFISH air deliveries; and cooperation between all ships in CTF 77 exchanging parts, we have had no major equipment shut down for lack of spares.

(4) During the period which is covered by this report, the ship has been operating in a very cold climate. Experience during this time has proven that all of the type of winterization equipment as allowed has been adequate. Considering that this ship is allowed 2,250 complete sea outfits of clothing, it is suggested that specially constructed storerooms be provided. This would greatly facilitate issues and provide for better care of the clothing while in stock.

c. Commissary

One hundred and sixteen tons of provisions were received from the USS POLARIS (AF11) in less than two hours; up to the present time about 48.5 tons per hour was average. The service has been satisfactory except for some of the highly perishable fresh items such as lettuce, tomatoes and celery. It is suggested that the AF's notify ships present when they take on their fresh provisions so the larger ships could load a month's supply, thus eliminating excessive handling and facilitating sorting of perishable items.

An itemized list of all provisions carried by the supply ships would be mutually helpful, along with instructions on the most expeditious means of replenishment, such as, suggestive quantities, better time to order, at sea or in port, and items that the AF would like to move.
d. Disbursing

The last details of the transition from old to new pay records were completed. Income tax forms, (W-2) Withholding Statements, were prepared for distribution to all hands.

e. Clothing and Small Stores

The following items are difficult to obtain in sufficient quantities to maintain adequate stock levels, and at present are at the low limits.

- Trouser, Dungaree, Sizes 31 and 32.
- Socks, Black, Cotton, Size 10½.
- Service Stripes, Blue
- Branch Marks

f. Ship's Store

By the use of several display tables at scheduled times, the ship's store has been able to present souvenir items to ship's company. This method has been necessary since these items can not be displayed along with other merchandise because of the inadequacy of show space in the ship's stores.

4. Administration

The complement of this vessel must be maintained at the authorized level of 2060 enlisted personnel in order to carry out the mission of the ship during the present type of deployment. No problem existed with respect to personnel until the change in deployment schedule which required that many reserve Petty Officer personnel be transferred from the ship prior to its departure for the continental United States. Corrective measures have been taken to cover the additional period of deployment by the ordering of "short timer" personnel to the ship.

5. CIC

The stowage and correction of the CIC allowance of H. O. charts have proved to be a problem. The number of portfolios sent to the ship for CIC has been far more than required for any particular cruise. In fact during the present action in the Sea of Japan one chart was used for weeks on end, and once a month three or four additional charts were used proceeding to and from port.

In the meantime correction changes to the entire allowance of charts continued to be received regularly. In order to keep up with these changes critical radar rates were taken from their primary CIC jobs. At times, due to the ship's steady operation, personnel to record the changes have not been available otherwise.
No stowage facilities exist in CIC for charts. Consequently in order to stow the CIC allowance facilities designed for the use of Air Operations and the Operations Department in general have been usurped. This in turn has overcrowded the Operations Department entire filing system facilities.

It is recommended that consideration be given to a "tailor-made" allowance of N. O. charts for CIC based upon the particular cruise or operation in which the ship is expected to be involved or that the Navigator's allowance be augmented in certain categories upon which CIC might draw for its needs.

6. Communications

As a result of improvements in communications effected during the fourth period of operations, ESSEX was able to carry out task force communications responsibilities more expeditiously than any previous period.

CW Circuits

Following requests initiated by this command, a reassignment of frequencies was made by the area commander for the Tactical Air Administrative net (Joint Operation Center, Korea — net control station). Two additional daytime frequencies (designated Z-29 and Z-30 in the current edition of 5th Air Force Communication Operating Instruction #29) have greatly benefitted conditions on this circuit. Circuit G-65, used on a continuous 24-hour basis prior to the new assignments is now employed primarily as the night frequency.

The use of the Task Force Common CW circuit (designated C4.3c in JANAP 195-B) has been extended and its value increased by the relay through a destroyer in TF 77 of traffic to and from Task Force 95 — specified TG 95.2 units (with the screen commander in the force designating the guardship). This destroyer closes down on C4.3c to transmit to TF 95 units on C4.3a. On an experimental basis, this arrangement has proved highly satisfactory.

All other CW circuits have been operated as before. Experience has proved that the "replenishment" circuit (C2e) is best guarded by the flagship, and the guardship of the wea-recco circuit assigned to a carrier or cruiser in company.

Numerous (and, it is felt, excessive) orders for shifts of frequency on the 7th Fleet Command net (C16) continued to be recorded during this period of operations.

Radioteletype Circuits

An evaluation of the total daily hour's operating time of the ship-to-shore R.TT circuit with NDT, Tokyo, has pointed up the great advantage of this method for clearing S/S traffic. A 15-day test estimate has shown that the flagship was in teletype communications with the beach an average of 20-plus hours daily. Excellent cooperation has been obtained from the shore facility during this period making possible the successful Duplex operations serving units afloat. As flagship, ESSEX cleared traffic from the beach to commands such as Com7thFlt and CTF 95 in addition to transmitting almost all traffic received from the force for shore station relay by means of this circuit.
To a large extent the success of shipboard operations has been due to the use of the TBA-model transmitter. NDT supplemented the number of frequencies available to CTF 77 adding frequency C19a to the frequencies allocated by Circuit A4.3 (refer JANAP 195-B). A lower frequency than any that had been previously allocated, C19a has proved an ideal working frequency for night transmissions; the difficulties from dusk-to-dawn interference (evaluated as other TTY transmitting stations ashore) encountered on A4.8a and A4.8b have been effectively reduced. NDT has further improved teletype communications by adding a frequency in the VLF band (123 kc.) for dusk-to-dawn Fox broadcast as well as for Duplex purposes with this command (when acting as flagship).

Voice Circuits:

The conditions on the circuit with JCC, Korea, continue to leave room for improvement; this command's request for a change, particularly in the frequencies assigned to the circuit at night, has not been acted upon to date.

With the receipt of TED transmitters on board, the testing of this new equipment on circuits such as the Flag Conference net is planned. On the last day of this report the frequency for this circuit was changed from 386.6 mc (T3) to 307.4 mc (T5).

NOTE: The first TED fully installed has been used successfully on the Task Group Commanders net (HATT), designated circuit T6 — although a full evaluation is not possible at this time.

Antenna Installations:

A letter to BuShips is being prepared requesting a clarification of the conditions requiring the rigging and unrigging of whip antenna; (5 forward, and 8 aft). ESSEX' average daily loss of transmitting time on the forward whips has been about 3½ hours; on the after whips, about 45 minutes. Primary cause of this loss has been the plane-gassing operations for which the "de-energizing" of whips has been required.

Traffic:

A preliminary traffic analysis for the period 1-31 January 1952 indicates the following volume of incoming and outgoing traffic by radio, visual means, and mail. Only total figures are shown.

Incoming - 22,861
Outgoing - 5,432

Personnel:

Due to the fact that six key personnel eligible for transfer volunteered to remain on board until the ship's return stateside, communications has been able to operate effectively (Condition III Watch Schedule) with enlisted personnel assigned as follows:
Radio

Ship's Company

Teletype

Flag

Main Communications

3

5

Signal

15

7*

Post Office

24

3

TOTAL

4

0

85

15 - 100

* Includes 4 Marine Detachment personnel serving as messengers.

N.B. The total of 100 personnel is believed the minimum number with which a flagship can fulfill its communications obligations.

7. Air Intelligence

a. Photo Interpretation

The majority of photo interpretations during the period were devoted to the preparation of flak mosaics for distribution to all carriers operating with the force. These mosaics were prepared for the major strikes as well as routine rail cutting and were well received by the Air Groups embarked. In particularly intense flak concentrations it was found that new positions were installed in a matter of 48 hours or less and therefore required photo coverage approximately every 2 or 3 days. The enemy has utilized previously unoccupied positions which make it imperative that photo interpreters annotate all gun positions, occupied or unoccupied, in order that the pilots will be aware of their presence. These mosaics, once prepared, were copied, printed, and assembled in book form for easy reference on the pilots' knees pads or chart boards.

For the latter portion of this period, the F2H-2P have been operated to supplement the coverage obtained by the F9F-2P. Arrangements with the Air Force for two K-38 36" cameras were successful; the cameras were installed in the F2H-2P's which enabled them to photograph the high intensity flak areas at 15000 feet and still obtain scales suitable for flak analysis. The K-38 photography is far superior to the K-17 in that one run is required to cover an area which heretofore required three runs.

In view of the above, it is highly recommended that future photo detachments deployed to WesPac be equipped with planes capable of accommodating K-38 cameras.

Air Group FIVE has now completed four full months in the Korean operating area using original charts covered with frisket paper. As far as can be determined the charts show all indication of being fully serviceable for another period.
8. Photography

a. Aerial Film Drying

The film-drying problem was temporarily solved during warm weather by installation of two aerial film-dryers in one of the heated uptake spaces. During the past two months of cold weather operations this uptake space lost a considerable amount of its heating power. During the warm weather the aerial film dryers (E-18-D-794 Morse A-5) were operated in the uptake space at the maximum speed of five feet per minute. During cold weather it has been operated at approximately two feet per minute.

OPERATING SPEEDS AND DRYING TIMES

<table>
<thead>
<tr>
<th>Operating Speed of Dryer</th>
<th>Time required for drying 200' roll</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 feet per minute</td>
<td>40 minutes</td>
</tr>
<tr>
<td>4 feet per minute</td>
<td>50 minutes</td>
</tr>
<tr>
<td>3 feet per minute</td>
<td>1 Hr 7 minutes</td>
</tr>
<tr>
<td>2 feet per minute</td>
<td>1 Hr 40 minutes</td>
</tr>
<tr>
<td>1 foot per minute</td>
<td>3 Hr 19 minutes</td>
</tr>
</tbody>
</table>

MAXIMUM OPERATING SPEEDS OF DRYERS ON BOARD

E-18-D-794
Morse A-5

E-18-D-796
Model "J"

5 feet per minute
3 feet per minute

With the addition of a heater unit (E-18-H-348-300) for the Model "J" aerial film dryer the maximum speed remained three (3) feet per minute.

b. Matte Print Dryer

The matte print dryer (E-18-D-830), used for Sonne print drying, has been operated at the rate of three feet per minute requiring one man to operate capable of drying either one or two rolls at a time. During this operating period the matte print dryer was speeded up to the rate of six feet per minute, requiring two men for drying one roll or three men for drying two rolls simultaneously.

The faster drying was accomplished by installing reels in the overhead for hanging approximately 40' of Sonne paper. The paper was sponged or squeegeed and then advanced over the reels into the dryer. This partial drying has been found necessary to remove enough moisture in order that the higher rate of drying six feet a minute could be maintained. The dryer itself was speeded up by using a smaller-sized pulley.
DECLASSIFIED

Speed of matte print dryer | Time req. to dry 1 200' roll | Aver. time per roll 2 rolls at a time | No. men req. to dry 1 roll | No. men req. to dry 2 rolls at a time
---|---|---|---|---
3 feet per minute | 67 Min. | 34 Min. | 1 | 1
6 feet per minute | 34 Min. | 18 Min. | 3 | 3
12 feet per minute | 18 Min. | 9 Min. | 2 | 3

The quality or type of Sonne paper has been a major factor in the drying problem. Experience has proved the dryer can be operated very satisfactorily at 6 feet per minute when the Sonne paper does not break down. It has been found that the majority of the Sonne paper being used, (Kodak Resisto Rapid, Navy 3/N E-18-P-328 Cont. No. A.F. 33-038-15597 Spec. No. 67) has broken down in processing, allowing the solutions to get to the paper base and resulting in slower drying to remove moisture.

USE OF F-56 20" CAMERA IN F9F-2P AIRCRAFT

An F-56 20" camera has been used during this operating period in the F9F-2P aircraft for shooting aerial oblique photographs. This installation was made primarily to shoot color transparencies. This was done to utilize F-56 color film on board and to minimize the quantity of solutions required for processing. Handling of the 7" width film has been easier than for 9" film. Previously, only K-17 12" or K-17 6" could be mounted in the Banshee in the oblique position. Brackets were installed on trunnions for attachment to the camera. The handles of the camera were removed, and the handle bolts were used to secure the trunnions to the camera bodies. The forward trunnion on the camera was fitted into one of the mounting slots in the aircraft camera mount which is used for installation of the K-17 6"; while the rear trunnion on the camera (fitted in place of the rewind handle) was fitted into one of the mounting slots used for installation of the K-17 12". Mounted in this manner the camera has an approximate depression angle of 10 degrees. The camera can be mounted with the aperture and shutter speed knobs at the top for convenience in making the desired settings.

Fourth Operating Period 29 December 1951 through 31 January 1952

Total number of photographic missions flown 31
Total number of rolls filed 104
Average number exposures per roll 73
Total number of 9 x 9 B/W negatives used 6659
Total number of 9 x 18 B/W negatives used 1271
Total number of 9 x 9 color transparencies used 188
DECLASSIFIED

Total number of 9 x 9 B/W prints made 79,908
Total number of 9 x 18 B/W prints made 15,252
Total number of prints made 95,160

TIME PRODUCTION FIGURES FOR FOURTH PERIOD
29 DECEMBER 1951 THROUGH 31 JANUARY 1952

Running Time

Average time to process & wash one roll. 71 Min 1 Hr 11 Min.
Average time to dry one roll of film. 69 Min 2 Hr 19 Min.
Average time to make first flash print and deliver to film marking. 84 Min 3 Hr 43 Min.
Average time to identify, mark (grease pencil) and deliver flash print to P.I. Officer. 70 Min 4 Hr 53 Min.
Average time to mark one roll of film (computed from time of delivery to film marking until time returned to laboratory for distribution printing). 124 Min 6 Hr 57 Min.
Average time for one set of marked prints to P.I. 2 Hr 20 Min 9 Hr 17 Min.
(This print made from marked negatives) Time computed from time of delivery of film to laboratory from film marking until completed set of prints delivered to P.I. Officer.

AERIAL PHOTOGRAPHY PRODUCTION
1ST PERIOD THROUGH 4TH PERIOD 24 AUGUST 1951 THROUGH 31 JANUARY 1952

Total number of missions flown 263
Total number of B/W rolls filed 369
Total number of color rolls filed 4
Total number of 9 x 9 B/W negatives used 21,385
Total number of 9 x 18 B/W negatives used 1271
Total number of 9 x 9 color transparencies used 188
Total number of 9 x 9 B/W prints made 216,081
Total number of 9 x 18 B/W prints made 15,252
Total number of all prints made 231,333
Average exposures per roll (for 1st, 2nd, 3rd, 4th operating period) 61
**DECLASSIFIED**

**RECORD OF K-25 STRIKE PHOTO 4TH OPERATING PERIOD**
29 DECEMBER 1951 THROUGH 31 JANUARY 1952

<table>
<thead>
<tr>
<th>Rolls taken</th>
<th>75</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total possible exposures</td>
<td>1588</td>
</tr>
<tr>
<td>Total exposures taken</td>
<td>1067</td>
</tr>
<tr>
<td>Total usable exposures</td>
<td>786</td>
</tr>
<tr>
<td>Total unusable exposures</td>
<td>315</td>
</tr>
<tr>
<td>Total negatives filed</td>
<td>118</td>
</tr>
<tr>
<td>Rolls not used due to poor techniques</td>
<td>2</td>
</tr>
<tr>
<td>8 x 10 prints made</td>
<td>1770</td>
</tr>
</tbody>
</table>

*(2ND, 3RD, AND 4TH OPERATING PERIOD)*
4 OCTOBER 1951 THROUGH 31 JANUARY 52

<table>
<thead>
<tr>
<th>Rolls taken</th>
<th>209</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total possible exposures</td>
<td>4483</td>
</tr>
<tr>
<td>Total exposure taken</td>
<td>3360</td>
</tr>
<tr>
<td>Total usable exposures</td>
<td>2284</td>
</tr>
<tr>
<td>Total unusable exposures</td>
<td>1081</td>
</tr>
<tr>
<td>Total negatives filed</td>
<td>355</td>
</tr>
<tr>
<td>Rolls not used due to poor techniques</td>
<td>15</td>
</tr>
<tr>
<td>8 x 10 prints made</td>
<td>5325</td>
</tr>
</tbody>
</table>

**RECORD OF K-17 STRIKE PHOTO**
4TH OPERATING PERIOD 29 DECEMBER 1951 THROUGH 31 JANUARY 52

<table>
<thead>
<tr>
<th>Rolls taken</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total possible exposures</td>
<td>280</td>
</tr>
<tr>
<td>Total exposures taken</td>
<td>280</td>
</tr>
<tr>
<td>Total usable exposures</td>
<td>90</td>
</tr>
<tr>
<td>Total unusable exposures</td>
<td>190</td>
</tr>
<tr>
<td>Total negatives filed</td>
<td>45</td>
</tr>
<tr>
<td>Rolls not used due to poor techniques</td>
<td>0</td>
</tr>
<tr>
<td>8 x 10 prints made</td>
<td>675</td>
</tr>
</tbody>
</table>

**GUN CAMERA FOOTAGE**

1. Gun camera footage has been handled in the following manner:

   a. The unexposed magazines have been drawn from the ship's photographic laboratory by the Petty Officer in charge of the K-3-A processing machine.

   b. The magazines have then been titled with pilots' names and squadrons on each individual roll (magazine) of gun camera film before installation in the aircraft. The magazines then have been delivered to the squadron ready rooms and placed in the pilots' boxes.
c. Loading magazines in gun cameras has been the pilots' responsibility with actual installation made by their plane captains.

d. Setting of the lens and the number of frames per second has been done by the Petty Officer processing the film. Special attention has been given to quality of film and necessary lens adjustments.

e. Following each flight the plane captains have removed exposed film from the aircraft for delivery to the ready rooms.

f. At 1800 daily the Petty Officer in charge of processing has obtained all film in the ready room for delivery to the K-3-A processing room. The film has been processed and edited the same night in order to have the finished film ready for delivery to the ship's photographic laboratory. The squadron representatives have then called for the finished film for eventual assessment.

PROCESSING OF GUN CAMERA FILM TO A NEGATIVE

ADVANTAGES
Greater latitude in exposures.
More film processable without changing solutions.
Little upkeep required on tanks since solutions contain no strong acids.

DISADVANTAGES
Pilots have difficulty distinguishing objects for identification.

PROCESSING OF GUN CAMERA FILM TO A POSITIVE

ADVANTAGES
Pilots have little difficulty identifying objects.

DISADVANTAGES
Exposure is very critical.
Solutions must be renewed frequently.
Tanks require constant cleaning and maintenance due to the use of sulphuric acid and sodium hydroxide used in the reversal solutions.

2. Footage Processed.

<table>
<thead>
<tr>
<th></th>
<th>1st Period</th>
<th>2nd Period</th>
<th>3rd Period</th>
<th>4th Period</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>B&amp;W Negative</td>
<td>11,000</td>
<td>6900'</td>
<td>8900'</td>
<td></td>
<td>26,800'</td>
</tr>
<tr>
<td>B&amp;W Reversal</td>
<td></td>
<td></td>
<td></td>
<td>13,000</td>
<td>13,000</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>39,800</td>
</tr>
</tbody>
</table>
Processing Problems

a. Spots and streaks on the film apparently caused by potassium bichromate not thoroughly dissolved before use. The bichromate settles to the bottom and forms on the sides of the bleach tank adhering to the film prior to re-exposure.

b. The film does not dry when machine operated at 13 feet per minute as recommended T.O. 10-10-25.


Due to the high speed of Banshee aircraft gun camera footage obtained has left much to be desired. Frame rate of the present cameras has not been fast enough to keep pace with strafing runs over target area. The jet aircraft do not begin to pull out of their dives at sufficiently low altitudes to enable the focal length of camera lenses to produce an image large enough for satisfactory evaluation.

K-17 STRIKE PHOTOGRAPHY

A K-17 24" camera was used during this operating period for strike photographs in conjunction with K-25 strike photography. It was desired to obtain a usable size image of bomb damage from a higher altitude than the altitudes from which K-25 (f/1 63/8") strike photographs have been made.

A camera capsule was designed by VF-54 personnel to accommodate the K-17 24" camera. This capsule was suspended from the wing in the same manner as the K-25 except it was hung at stub wing station left. The camera was electrically operated; vacuum was supplied by a venturi tube. Installation and photography proved very satisfactory; however, the capsule with camera was lost in action on 15 January 1952.

[Signature]

W. F. RODEE

Copy to:
CNO (Advance, airmail) (2)
COMAIRPAC (Advance, airmail) (2)
CINCPACFLT (Advance, airmail) (2)
COMCARDIV ONE
COMSEVENTHFLT
COMNAVFIE
COMCARDIV THREE
COMCARDIV FIVE
USS BOXER (CV21)
USS PRINCETON (CV37)
USS PHILIPPINE SEA (CV47)
USS VALLEY FORGE (CV45)
USS BON HOMIE RICHARD (CV31)

USS ANTIETAM (CV36)
USS KEARSARGE (CV33)
CVG 5 (5)
CVG 11
CVG 15
CVG 101
CVG 102
AIR TASK GROUP ONE
COMNAVFIE EVALUATION GROUP
(CDR W. W. Bisham)