DECLASSIFIED

5. Aircraft Maintenance

It has been found that QEC units for R-3350 engines are not complete. This has lengthened engine change time approximately 2 days per engine. This has been partially corrected by obtaining a completely "Ready" engine installed with QEC on an L stand.

The supply of special tools for various aircraft types was found to be incomplete. This was a critical item especially with such tools as engine bount wrenches for R-3350 engines.

The ship has installed three chainfalls for drop checking aircraft. Two of these are located just forward of the metal shop and one is located near frame 60 amidships. It would be desirable to have two additional chainfalls located in the forward hangar bay to facilitate drop checking when the hangar is congested. The mounting required for these chainfalls has so far been unobtainable.

The special stands for removal of jet engines from cans were found to be of no use and were off-loaded. The same results may be obtained by the use of forklifts and/or standard hoists. The stands take up considerable room, and space is at a premium.

In order to furnish the squadrons with a working space readily available to their planes, the crews berthing space B-227-L was converted to a working space fitted with tool cages, work benches and designated "Maintenance Control". A watch is manned on phones and availability boards are maintained. Squadron maintenance personnel report their discrepancies and completion to Maintenance control from which they are forwarded to Flight Deck Control and the ready rooms.

Auxiliary power units were originally issued from a central pool. This turned out to be highly unsatisfactory as responsibility for damage to units, running out of fuel and security of units could not be fixed. The APU's were issued to individual squadrons with satisfactory results.

All tires are mounted by ship's maintenance crew. In this way there is little danger to personnel in handling tires and satisfactory arrangements have resulted.

All props are mounted and pulled by the ship's air maintenance division. The concentration of these functions, along with engine changes has resulted in better availability and better use of special tools required.

One special device constructed by the metal shop has shown considerable utility. A reinforced beam has been built which projects the forklift about six feet higher and about 24 inches in front of the fork. This is helpful in the removal and installation of props and engines and lifting heavy bombs as they come aboard when bands are removed and they are placed on skids.

Difficulty has been experienced in obtaining properly heat-treated parts for surface repairs. Several of the newer airplanes require 80 percent to 100 percent of the original strength over portions of their surface. It is recommended that a heat-treat oven of approximately 24" by 24" be installed in ships of this class.

It is recommended that a small spot welder be added to the metal shop in order to facilitate repair of class 265 surfaces.

Although no spark-plug hot locker has been available, the ship constructed one and installed light-bulb elements. This has worked very well.

6. Aviation Electronics

When this carrier was recommissioned it was necessary to re-establish the Aviation Electronics shop. Very little of the original test equipment was available or suitable for maintaining the present type of electronic equipment now being used. In addition the shop arrangement was not suitable and alteration plans to cover the removal of storage bins was considered. A ship alteration covered the removal of the bins and the installation of a center line bench which would provide additional space for maintenance of electronics equipment.

[redacted] DECLASSIFIED

Due to the fact that the ship was scheduled for 27A conversion after this cruise the ship alteration covering the removal of bins and installation of fluorescent lights was not done completely. The ship's force removed the bins and designed a suitable bench which would suffice during the cruise. Power required for the test equipment of the new bench was also provided.

Since the Air Group assigned to the ship would have a detachment of AD-4W planes with AEW electronic equipment it was necessary to provide space for the maintenance of this equipment. A ship alteration covered the provision of space, benches and power for this purpose; however, in view of the conversion mentioned above it was not deemed advisable to make this alteration. In order to provide for maintenance of the AEW equipment the ship arranged for the necessary power for the motor-generator sets to be provided in Squadron Armory No. 3 and a center line bench was installed. The installation of the necessary auxiliary power and bench setup for maintenance of the equipment was done by Air Group personnel after embarkation.

Considerable difficulty was experienced in obtaining the QR allowance test equipment and material during the time the ship was being recommissioned and during its shakedown and qualification period. It was felt advisable to have the electronic personnel check the material so marked for electronics (green ball marking) and unpack it to determine whether it was test equipment or material. If this had not been done the shop would have been slow in getting established and shortages of test equipment would not have been realized prior to the ship's departure from the states. In addition, it was necessary to have certain racks and cabling for the initial bench setups which would come from the QR material allowances. There again the provision of all necessary racks, cabling, units and control boxes was slow and progress of establishment of the shop layout was drastically retarded. No bench setups were available at the time the ship arrived at San Diego for taking aboard the Air Group for its qualifications, nor was the shop in a satisfactory condition during the ORI. Time was available prior to this period but the material and test equipment had not been received. It is essential that the material and equipment be made available as promptly as possible in order to permit an orderly installation.

The present arrangement of recommissioning a carrier does not provide for the electronic equipment necessary to make the bench setups in the shop. It was necessary to take equipment from the QR allowances for the various types of gear and this caused shortages. It is felt that each carrier should be provided with the necessary equipment to provide the initial bench setups and not be required to take such items from the QR section allowances.

Due to the size of the shop space it was believed that conditions would be extremely crowded if the APS-4 and APS-19 radar equipment were maintained in the main shop. A platform just aft of the shop on the 02 level was utilized and a small bench with associated power provided. All maintenance of the APS-4 and APS-19 radar equipment is done in this space. Radar bomb racks for the APS-4 are readily available in this platform as well as a hoist for raising or lowering them. This eliminates the necessity of opening the hatch in the main electronic shop and provides more space for the maintenance personnel. Prior to this arrangement the platform was used as a storage place for electronic equipment.

The present CV carriers are not provided with storage spaces for the APS-19 radar bomb units. In order to provide suitable storage facilities modifications were made to the radar bomb storage facilities on the second platform aft of the electronic shop. This was done by the removal of the vertical angle irons in eight storage compartments and converting them to six storage compartments by respacing the vertical angle irons. The bins removed from the aviation electronic shop were reinstalled on this platform and provide the additional space required to store electronic equipment.

Initially, no AC auxiliary power units were provided. One of the Wakesha units was modified to provide both AC and DC power which is necessary for maintenance of certain electronic equipment. It is felt that all ships should be provided with both types of auxiliary power equipment.

13

[redacted]

DECLASSIFIED

7. Aviation Gasoline

By effecting close cooperation between the jet plane captains and the gasoline crews, the time required to re-fuel this type of aircraft has been reduced considerably. Immediately upon landing the jets are spotted on the port side forward of #2 elevator. The gasoline crew produces a proportioner gasoline line and gives it to the plane captain who commences re-fueling the main cell. Two men from the gasoline detail gas the wing-tip tanks simultaneously. By this time the second plane has been received and a second proportioner line is given to the plane captain and the main cells are started. The wing-tips fill faster than the mains so these crews gradually gain on the operation until all tip-tanks on the incoming flight are re-fueled. At such time both proportioner lines are fed to one jet aircraft. During this period of time the squadron armament personnel are rearming the jets with 20MM's and rockets, if required. The gasoline crew furnishes the fire protection throughout the operation.

Upon completion of refueling from a tanker and in preparation for unhooking the gasoline line, it was found that considerable time could be saved by setting up the carrier's pump room for drain back and utilizing the eductor to take a momentary suction on the re-fueling line instead of the usual procedure of blowing back by means of forcing inert gas through the piping system in order to force the gasoline back to the tanker. This method is faster, more effective and eliminates the necessity of recharging the inert gas accumulators. Approximately 2,000 lbs of inert gas pressure was required to effectively accomplish the blow back. Replacing this amount of inert gas required about four and one half hours operation of the producer.

This vessel's capacity for receiving gasoline from the tanker is limited by the fact that there is only one available receiving station which is on the starboard side forward. This line is a four inch line. By removing the plus valve now installed in the port side of the gasoline system at frame 40 and installing a three-way, three position valve it would be possible to isolate the system, from the after system. By leading a four inch line across the hangar deck from this new valve, it would permit the ship to fuel both systems at once by using the WYE fitting offered by the tanker, thereby reducing the fueling time considerably.

8. Aviation Ordnance

Upon commencing operations on 31 May difficulty was experienced in having the right quantities of assembled bombs and rockets available when required. The bomb supply crews had not had sufficient training in preparation of large quantities of different sizes of bombs with several different types of fuzes. After a period of trial and error methods a firm plan of assembly and supply was put into effect which has proven satisfactory for present operations. The assembly of 100#GP, 250#GP, 500#M29 clusters, 1000#GP, 2000#GP, 5" HVAR and 6.5" ATAR was assigned to bomb supply forward. The assembly of 260# FRAG, 500# GP, 3.5" AR and 350" ADB was assigned to bomb supply aft. Due to the better location of the two bomb elevators forward in relation to the assembly space it is possible to supply more than twice the munitions than bomb supply aft.

Some difficulties have been experienced because of small elevators peculiar to this ship. 6.5" ATAR heads must be assembled on the motors on the flight deck as the bomb elevators are not long enough to handle an assembled 6.5" ATAR. A 2000#GP bomb will barely fit into the elevators. Handling these large bombs is a slow operation due to the work required with the leaded Mk 8 skid on the elevator.

After gaining experience ordnance assembly crews have proven very capable and keep ahead of munition requirements with ease.

More training should be given to munition assembly crews prior to departure from the U.S. This training should be based on actual operations that are being conducted in the forward area. The Air Ordnance Officer should be sent on TAD to the operating area ahead of the carrier to observe actual operations.

Some AN M57 250#GP bombs were received with a wide, triangular shaped single suspension lug that was too large to latch on a Mk55 bomb rack. This situation has been remedied as 250#GP are now screened for large lugs prior to issue to ammunition ships.

Napalm thickener, Type I - Some napalm powder received has been useless due to exposure to weather. The containers were seemingly in good shape but upon being opened the powder was found to be so caked (and even wet in some cases) that it was not usable.

B. AEROLOGY

1. Aerological Data

A tremendous amount of error has been found in official publications pertaining to the climatology of the eastern coast of Korea and its adjacent waters. This is fully brought out by the statistics that have been worked up by this ship. The climatological reports indicated that there would only be seven days flying weather in the entire month of July in our target areas. The weather was not ideal but the total number of flying days far exceeded the number as layed down by the climatological reports available.

The following statistics are offered as an aid in correcting the climatology of this area:

(a) June 1 to June 16

Prevailing wind direction, south, from which the wind blew 23% of the time.
Average wind velocity was 8 knots with the strongest winds coming from the south at 29 knots.
Duration of the wind over twenty four knots was ten hours.
Average air temperature 62F
Average maximum air temperature 66F
Maximum air temperature during the period 75F
Minimum temperature during the period 55F
Average minimum temperature 60F
Average sea water temperature 63F
Average maximum sea water temperature 66F
Average minimum sea water temperature 61F
Minimum sea water temperature during the period 57F
Ceiling:
- Unlimited 37%
- Greater than 9,950 feet 12%
- Between 4,950 and 10,000 feet 19%
- Between 2,450 and 5,000 feet 21%
- Between 950 and 2,500 feet 10%
- Less than 1,000 feet 1%

Visibility:
- Over 6 miles 93%
- Between 3 and 6 miles 7%

Precipitation occured only as light and brief on 6 days.

(b) July 1 to July 28

Average wind velocity for the month 10 knots
Strongest winds came from the south at 33 knots
Average air temperature 70F
Average maximum air temperature 74F
Maximum air temperature 81F
Average minimum air temperature 68F
Minimum air temperature 60F
Average sea water temperature 72F
Average sky cover 6 tenths

2. Equipment and Communications

Aerology is hampered by faulty operating radios and the lack of adequate communication facilities with other departments and offices on board, and the lack of a teletype in the office. It is suggested that in order to increase the efficiency of communications that a teletype be installed in the office connecting air plot, CIC and the ready rooms and that a squawk box be installed and connected with the ready rooms, air plot, the bridge, air intelligence, flag plot and CIC.

DECLASSIFIED

[redacted]

C. COMBAT INFORMATION

1. General

The primary function of CIC during this operation has been passing information to and from the flagship, along with aircraft control. For the most part this has consisted of jet cap control. Numerous intercepts have been conducted on friendly aircraft returning from the target areas. No enemy aircraft was sighted. On a few occasions strike control was shifted to this vessel, although the general policy has been to keep strike control on the flagship.

2. Radar Guards

Radar guards were maintained as assigned. These consisted chiefly of the SK guard and the homing guards. The SPS/6B was used consistently by the air controllers. Due to its antenna location it has proved to be less than 50% efficient from 0° to 130° relative on the starboard side of the ship. The performance of this radar has been excellent on the port side. On several occasions jets have been picked up at ranges exceeding 60 miles (2 jet at 15,000 feet or above). The maximum recorded range on jets was 82 miles (2 jets at 15,000 feet). Propeller type aircraft was consistently picked up at ranges exceeding 60 miles. The maximum recorded range on props was 124 miles (10 props at 7,000 feet). Some phenomenal ranges have been recorded on surface contacts. An aircraft carrier and its escorts were picked up at 135 miles and tracked.

The SM radar has been a maintenance nightmare from the beginning and has been in operation less than 20% of the time. The information received was so unreliable that it was used only as a check for other altitude radars in the force. Recorded ranges on jets were never greater than 35 miles. Props have been held at 70 miles. Surface contacts have been picked up and tracked at 54 miles.

3. Mark V IFF

The Mark V IFF system has worked effectively, but it is felt even better performance could have been effected with AN/UPA-3 Slave antenna. Bongo ranges have been consistent at 80 miles. The system also has the same limitations as the SPS/6B radar on the starboard side.

4. Flight Information

Flight information was displayed on an edge-lighted status board where launch time, recovery, event number, number and type of aircraft scheduled, mission, flight leaders, call control channel and control ship were listed. As the hops were landed, the events were erased from the board.

5. CIC Communications

Communication difficulties encountered consisted mainly of feed back from one circuit to another. This was particularly noticed between the land-launch frequency and all air control channels, and all air control channels through the screen common. Communications with aircraft and other ships during this period has been uniformly good. It is recommended a second AN/ARC be installed in CIC, because of the necessity of getting on one of these channels for operational information from the flag when the AN/ARC is being used by the air-controller. Air controllers have preferred the AN/ARC to the RCK/TDQ because of the high noise level experienced coming from our receivers.

Difficulties have been experienced in liaison between Air Plot and CIC because of the location of CIC in the hold and Air Plot thirteen decks above.

D. COMMUNICATIONS

1. Equipment

Considerable material difficulties were experienced during this period which it is believed to be the result of improper installation or faulty repair of equipment during the yard availability period in Bremerton, Washington.

DECLASSIFIED

[redacted]

Practically all of the VHF and UHF antenna were found to be grounded or open due to improper installation of coaxial fittings. Receivers were misaligned resulting in low sensitivity.

2. Personnel

The volume of traffic and the communication plan in effect places an extremely heavy load on the communication personnel allowed this vessel. It is felt that the authorized allowance is not practical or sufficient for the type of operations being conducted by this task force.

E. INTELLIGENCE

1. Pre-Combat and Equipment

The gathering and collecting of intelligence materials presented no problem. The Air Intelligence Officer reporting aboard a ship being re-activated, however, will be confronted with many problems pertaining to storage and equipment. Unless he reports early, he will find storage facilities cornered by other divisions and the Air Intelligence Office stripped of many essential items. Also, he will be confronted with the general reluctance to install many types of needed equipment, on a ship scheduled later for modernization.

For the tools to operate, he must start from scratch. Indeed, still operating under a 1945 Bureau of Ships' Allowance List, not even one typewriter was allowed for the Air Intelligence Office. Typewriters were, however, procured just prior to our departure for the operating area. An Intelligence Office aboard a large carrier cannot operate efficiently without at least two typewriters. Moreover, the work load during shakedown and training for an Air Intelligence Office, accumulating, assembling, cataloging and indexing materials represents a considerable work load.

The squawk box originally installed in the Air Intelligence Office on this ship had been removed and installed elsewhere. A squawk box is indispensable during periods of operation as it provides the only tie with all ready rooms. Indispensable as it might be, one was not provided and had to be recovered from the surplus disposal pile at the Bremerton Navy Yard.

It was recommended by the Operational Readiness Inspection Group that a teletype be installed in the Air Intelligence Office to provide for printed communications between Air Plot, CIC and all of the ready rooms. Last minute information, for instance, passed from the flag must necessarily come from CIC, or the main communications center, to Air Plot, to Air Intelligence and then go to the ready rooms. A teletype would eliminate this process and provide reliable printed communications between the ready rooms and the Air Intelligence Office. The request for a teletype was turned down. It would have been a great value to this ship during operations.

During the first training exercises at sea with the Air Group, it became apparent that a loud speaker system should be installed in each ready room. With the noises and interference caused by telephones, squawk boxes and planes landing and taking off on the flight deck, it was almost impossible to brief or interrogate flights properly. The request for installation of the MC 28 system, which is standard equipment for all CV type carriers was approved in the Bremerton Navy Yard during the period of final repairs. These systems have not yet however been provided. Various types of equipment have been improvised to aid briefing officers to make their voices audible. The MC28 speaker systems would relieve the strain. In the meantime we are compelled to do the best we can with what we have.

The aforementioned equipment is essential for achieving peak efficiency during operations. The need for the equipment under combat conditions exists; the cost is small.

2. Maps, Charts and Grids

ComAirPac and CinCPac did an excellent job in providing maps and charts for the ship. The charts were well packaged and indexed and more than filled our operating requirements. There were aboard approximately 100,000 maps and charts to provide for the possible operational requirements of the carrier.

DECLASSIFIED

[redacted]

With the commissioning of map centers in foreign countries however, it is felt that the allowance for charts can safely be reduced. Such reduction would alleviate the problem involved in the stowage of large quantities of charts, which could be drawn within a short period from map centers as the needs for them arise.

3. Escape and Evasion Materials

Blood chits, pointee talkees, E & E kits and safe conduct passes were not provided to the ship until weeks after operations had commenced. An evasion and escape team sponsored by ComNavFE came aboard after operations had started and thoroughly briefed all pilots and aircrewmen on evasion and escape techniques. It immediately procured, by special transportation, blood chits, and safe conduct passes for flying personnel. Approximately three weeks later, ComNavFE procured E & E kits for the ship. It is felt that all E & E materials should be made available prior to the departure of the ship from the U.S. to eliminate the possibility of having to operate without them.

4. Briefings Prior to Entering Combat

During training exercises in Hawaii, CinCPac assigned two Air Intelligence Officers who had recently returned from active duty in Korea to temporary duty aboard the ship for the purpose of briefing the Ship's Intelligence Officer on carrier operations in the Korean area. A special briefing on the situation in the orient was given at CinCPac for the Commanding Officer, and approximately forty additional officers of the ship and Air Group, at CinCPac Headquarters prior to our departure from Pearl Harbor.

On joining the Task Force the Intelligence Officer, Staff, Carrier Division Three lectured to all officers on the intelligence phases of operations; and provided up to date overlays on flak, reconnaissance routes and ground situation, operating doctrine and procedures.

These briefings and the assistance rendered to the ship by CinCPac and ComCarDivTHREE staff officers proved invaluable in the organization of the ship's intelligence office and greatly facilitated commencement of operations. It is recommended that similar briefings and assistance be given to each carrier destined for foreign operating areas.

5. Operations

Complete and up to date charts and overlays on the ground situation, order of battle, flak intelligence, reconnaissance and interdiction routes, friendly and enemy airfields were maintained in the Air Intelligence Office. These were copied by the squadron AI's or distributed to them and displayed in each ready room. Enroute to the forward areas, the ship displayed a wide variety of Korean target photographs. A terrain map of the AMS L-772 series was erected and tabbed to enable pilots to familiarize themselves with the topography and geographic features of Korea. In addition, the ship prepared and disseminated to each pilot printed materials on doctrine and procedure in the Korean area based on advance information received from the Task Force.

This type of graphic presentation and method of dissemination of information was a large factor in the operational readiness of the Air Group.

A daily Intelligence Brief was prepared by the ship's Intelligence Officer and distributed to the Air Group and key officers of the ship. This brief consisted of a summary of the ground situation and known enemy intentions, the friendly naval situation, enemy and friendly air activity, political notes when appropriate, mine information, the latest bombline, bombing and attack restrictions, flight precautions, communications, flak intelligence, search and rescue, evasion and escape, and miscellaneous items of an intelligence nature. This brief served as the source of all briefs to insure that intelligence required for any type of mission was presented to the pilots in a clear logical form. It was comprehensive enough to provide information for short lectures during general quarters on such topics as new type enemy aircraft, enemy intentions, etc.

[redacted]

DECLASSIFIED

Debriefing was done by the squadron AI's in the ready rooms, and coordinated by the ship's Intelligence Officer. Optimum conditions for the most effective debriefing are lacking and will never exist under the present type of operations until a separate room for debriefing purposes is provided.

6. Photographic Interpretation

A photographic interpretation officer reported for temporary additional duty on the first day of operations. This officer briefed all photographic missions and conducted a photographic briefing for strikes until the pilots became proficient in reading annotated photos. Since then, an annotated target photo has been prepared for each pilot on every strike.

The ship's plan did not provide space for photographic interpretation. Space was provided in an office on the number 2 deck which is removed from the Air Intelligence Office and ready rooms. This office provides adequate room for both the photo interpretation section and the squadron photo detachment team. Storage equipment, lighting and ventilation are unsatisfactory at present. It is believed that these deficiencies can be alleviated very shortly.

Photographic interpretation functions aboard carriers have increased greatly since World War II. It is recommended that suitable space be set aside on each CV type carrier for the exclusive use of the photo interpreter and the squadron photo detachment, and that this space be fully equipped for photo interpretation, film annotation, photo layouts, and the preparation of photo plot overlays. Such space should be located near or adjacent to the Air Intelligence Office. It is further recommended that photo interpreters be assigned to all CV type carriers before their deployment from the United States in order that the photo interpretation section of Air Intelligence may be properly organized and equipped before the ship reaches the operating area.

7. USAF Target Dossier

All of the target dossier material was delivered to the ship unassembled. The problem of assembling and properly indexing this material is complicated because suitable space does not exist aboard ship to spread the material out and sort it into proper order. Moreover, this imposes an additional burden on personnel fully occupied with other work. It is therefore suggested that the target dossiers be completely assembled and indexed prior to their delivery aboard ship.

8. Recognition

The recognition program started on the commissioning of the ship was greatly accelerated on departure for the forward area. An intensive recognition program was given to all gunnery crews and lookout teams. Recognition materials and posters were widely disseminated throughout the ship. A recognition program for all hands was carried on each evening for approximately 20 minutes before the movies. This program was made as interesting and entertaining as possible, and the crew seemed to enjoy it.

The common problem of lack of slides on new type aircraft was experienced aboard this ship also. Slides and photographs on mines were non-existent.

9. Personnel

Only one Air Intelligence Officer was ordered to the ship. One photographic interpretation officer reported for 90 days temporary duty at the start of operations. The volume of work on intelligence and photographic interpretation in this theater is tremendous. Photographic interpretation alone requires the full efforts of a qualified photo interpreter and two trained assistants. The assistance that such an officer can render to the ship's Intelligence Office on work other than photographic interpretation is therefore limited. Any amount of time devoted to assisting the Air Intelligence Officer seriously hampers photo interpretation work because of the large demands for photography, the review and analysis of a tremendous volume of photos, the briefing of photographic missions, and the proper interpretation of photographs.

[redacted]

DECLASSIFIED

Full cooperation and a close working relationship existed with the Intelligence Officer and the Air Group AI's, but the assistance these officers were able to render was negligible due to the heavy operations schedule for briefing and debriefing pilots.

Four enlisted men were assigned to the Air Intelligence Office. None had prior experience in intelligence. In fact, two strikers had no experience of any kind. After a brief period of training these men performed duties far above those ordinarily required by men of their rate.

Air Intelligence requirements in the Korean theater are rigorous. It is unreasonable to require one officer to carry the full load of air intelligence aboard a large carrier operating four squadrons plus 4 VC teams on a schedule that requires his full attention almost 24 hours a day, over extended periods of time. This ship was under complemented in other departments and no officers satisfactory for air intelligence work could be made available to assist in AI. The first officer that could be spared to AI, a newly commissioned Ensign, reported for duty 20 July 1951 and is now undergoing training for AI watch duties.

The photographic interpretation officer is scheduled to leave here in 30 days. A trained replacement for him is required to maintain efficient operations of the Air Intelligence section. An additional officer of any rank is also required for assumption of the many and varied duties. It is strongly recommended that such officers be provided.

10. Reporting Requirements

It is felt that some action should be taken to ease the reporting requirements for the more routine type of air operations. For example, no less than 27 copies of the Air Attack Report must be distributed to various commands after its preparation. Much of the information included in this report is duplicated and also included in other reports such as the debriefing form, flash reports, daily summary, Air Mission Log, War Diary and the ship's history. Moreover, the end use of these reports seems to be statistical. It seems that a better analysis could be made quicker and more efficiently in some other way of the present type of operations.

11. Miscellaneous

In accordance with the directive issued by CinCPac requiring Commanding Officers of vessels visiting foreign ports to indoctrinate crews on the customs, traditions and usages of the various countries visited, this ship established a policy whereby the crew would be indoctrinated before entering port and also be kept abreast of all developments.

Prior to our arrival in Pearl Harbor a pamphlet entitled "Hawaii-Pacific Crossroads" was prepared and distributed to each man aboard. In anticipation of our service within Korean waters another pamphlet, "Korea" was printed and distributed. This pamphlet was intended as a method of acquainting the crew with the geography, resources, and features of the country, but more important it explained the reason for our being here to halt aggression and repulse the expansion of Communism.

Before we reached Sasebo, Japan, a simple, attractive information booklet on the geography, history, the customs, traditions, usages, religion and politics of Japan was published for all hands. The major part of this material was gathered from other publications, as was true for all these informative productions. The material was assembled and prepared by the ship's Intelligence Officer, and the printing and art work done by the ship's personnel.

Enroute to the combat area a series of five intelligence lectures was delivered to the ship's company prior to the movies each evening. The topics were drawn from our activities in Korea and their international policy implications. Each evening a summary of our own actions and plans with brief references to geography and current affairs was broadcast over the public address system to keep the crew informed.

[redacted] DECLASSIFIED

The amount of time involved in the preparation of these materials, lectures, and summaries is small compared to the beneficial affects on the morale of the crew and the appreciation that has been expressed. Moreover, a definite interest on the part of the crew to know more about the lands we visit and the things we do is shown. The projects have proven to be worth while, and although they can still be improved upon, are recommended to any ships planning to operate abroad.

F. SUPPLY

1. Aviation Supply

On the basis of experience gained in supporting CAG-102 during aerial combat missions the following suggestions are recommended for consideration for incorporation with the Aviation Supply System, especially applying to ships being commissioned or re-activated.

(a) Much thought should be given to a system that would provide newly commissioned vessels with complete sets of pre-printed or pre-typed stock ledger cards on all material with the cognizant symbol of "R", "N", "V" and "E". These cards could be typed or printed in sheets on a continuous form, perforated for convenient insertion in stock ledger files. All applicable BuAer allowance lists, including sections "B" and "R" should be included and prepared in alphameric order.

(b) The importance of all precommissioning details on ships supporting aircraft relative to the establishment of proper and adequate Aviation Stock Ledgers should be greatly emphasized.

(c) Interchangeability of Section "B" material should be more thoroughly considered and all items of this nature on aircraft assigned to individual ships should be combined and precurement instigated under one SR instead of by separate allowance lists. This would eliminate much duplication of effort, much critical transportation saved and many man hours utilized for other purposes.

(d) All parties concerned should be directed to adhere more closely to the provisions of the BuSandA Manual and current directives.

(e) On the basis of available usage data on all Section "B" items, current allowances should be reviewed and increased at all major aviation supply points, thus making for quicker availability to Fleet Units, of all peculiar items necessary for the support of current aircraft types in combat. This usage information should be made available to higher authority as soon as established. Current section "B" allowances should be considered mean guides for initial outfitting primarily and then given wide flexibility on the basis of actual usage. Due to the circumstances and combat factors it would seem impossible to anticipate what items will or may be needed within any period.

(f) Critical spares should be made available closer to the operational area. Aviation supply ships should be supported either by ASB's or ASD's at Yokosuka, Japan, Guam, or Pearl Harbor; thus eliminating the necessity of procuring from the United States. Recurrent requests made of the supporting AVS should warrant the stocking of such critical or controlled material by the AVS. This applies especially to insurance items that are justified by usage.

In any theatre of operations on vessels supporting aircraft in any quantity, time is important. Combat aircraft must be kept in the air. Material must be stowed, broken out and replenished and then stowed again. This is an on-the-toes job, continuing around the clock, hence it is felt that too much importance cannot be given to paragraphs 1 (a), (b), (c) and (d).

2. GSK

The only difficulty encountered in routine replenishment of General Stores has been that the AKS's cancel requisitions for material when it is not in stock or not carried, therefore making it necessary to re-submit new requisitions in the future. At present, items not in stock are not obligated against stocks due by the AKS's.

DECLASSIFIED

[redacted]

Some requisitions are being forwarded to the United States by ComServRon3 for further action when the requisitions are submitted direct and the material is not available in this area.

3. Ship's Store

It is recommended that a full capacity of luxury items, i.e., approximately 1500 watches of various grades and 1500 pen and pencil sets of various grades be carried aboard. If coca cola dispensing machines are aboard, it is recommended that the following spare parts be on board: One complete set of electrical spares with gearing attachment to syrup pump motor or extra switches for all parts of the machine, one spare coin changer motor for each two machines and one spare coin changer for each two machines.

4. Clothing and Small Stores

It is difficult to obtain khaki shirts and trousers and miniature CPO devices in the forward areas.

5. Disbursing

During this period the disbursing office carried on its normal cutover period. All U.S. Currency was recalled and replaced with MPC Series 472. CODFISH was used for procurement of currency with excellent results.

6. Commissary

The logistic support given to the USS Bon Homme Richard in all kinds of provisions, from activities afloat and ashore, has been most gratifying.

G. ENGINEERING

1. Shipboard Electronics

This vessel had never operated under the new CV organization which provided for electronic maintenance and repair under ER Division.

At the time of commissioning the radar spare parts room frame 99 amidship was used as a workshop office and issue room although inadequate in size. Just prior to departure for the Far East Area, authority was obtained to cut an archway between the Radar Spare Part Room frame 99 amidship and the spare SM console room frame 99 starboard. This was accomplished by ship's force, and the radar spare parts room was fitted out suitably as a work shop and the spare SM console room was fitted out as an office and tool issue room. All work on working benches, cabinets, racks, etc. on the job was accomplished by ship's crew. This has now proved to be a workable arrangement, but it is felt that had this been accomplished by the Navy Yard prior to the ship's departure from the U.S., it would have been very beneficial in building a better electronics organization.

It was not until the ship had left the states that a decision was made to provide storeroom A308A for electronic maintenance spare parts. During the time the ship was with the underway training command, the spare parts were in Compt. B-127-L. However during the vessels second yard availability period this space was taken by the Air Department for Squadron Shops and for a period of approximately one week the spare parts were stored on the hangar deck. An electronic maintenance parts allowance for this vessel was not received on board until after the vessel had been in commission almost two months. Also, the allowance did not cover the model 5 SM radar equipment in particular plus a number of additional equipment. A revised 4110 report was submitted to the Bureau of Ships, and a new electronic maintenance part allowance was received after the ship had been operating in the Far East area for approximately a month. This new allowance still did not cover the model SM radar equipment, and No. 2 NITS list covering this equipment is available. Stowage for electronics spare parts was not provided because the ship is scheduled to undergo the 27A conversion in 1952.

22

DECLASSIFIED

[redacted]

The service of two field service engineers was provided for the ship at the start of the period that the vessel was engaged in the underway training program. Their services have been extremely valuable in connection with the repair and maintenance of electronic equipment. Their presence on board has practically revived the situation from having insufficient and inexperienced electronic personnel.

The Mark 12/ZZ/32 fire control radar was not in a satisfactory operating condition when the vessel left PSNS after the first yard availability period. It required the efforts of one field service engineer one month to put this equipment in good operating condition.

The model SM radar has been very difficult to maintain. Troubles have been encountered in almost every unit at some time. The radar can be used in connection with radar intercepts, but it is not dependable.

Trouble was encountered with the SPS-6B rotational system. With winds of 40 knots or more the antenna would stall and blow fuzes. It was found experimentally by rotating the antenna counter clock wise, it did not stall with high winds as in the clock wise rotation. The antenna has been operating for approximately two months using counter clock wise rotation without rotational failures.

Trouble was encountered with the YE homing equipment due to water leaking into the antenna drive unit. Several days' operations of this equipment were lost drying out the antenna unit and the cables feeding the unit.

An AN/SPN-12 air speed radar was installed on this vessel in the second yard availability at PSNS. Results with this equipment have proved very satisfactory. It has been of greatest value with landing jet aircraft and with landing "prop" type aircraft at night.

2. Personnel

The complement of personnel assigned the Engineering Department is adequate in all divisions except the Boiler Division. Due to the ship's operating at high speeds the presently assigned complement of Boiler Division is inadequate at 171. It is recommended, that with all stations having to be manned at high speeds, that the Boiler Division total complement be increased to 212 men.

3. Boiler Operations

Where speed in excess of 25 knots is required, 4 boiler operation will be normal with one boiler per fireroom. Where surprise air attack is probable or if speed requirements exceed 25 knots, then 8 boiler operation will be used. It should be noted that operational data indicated that at speeds above 20 knots for this vessel, 8 boilers will operate as economically as 4 boilers under 4 fireroom operation. This is due to higher boiler efficiency at lower fuel rates per boiler. Six boiler operation should not be used except under special conditions, because it drastically reduces machinery segregation and has negligible economy advantages over 8 boiler operation. Six boiler operation may lead to danger of overheating superheaters because of unstable flow conditions at low power, if load is not carefully balanced between boilers, it is absolutely necessary to insure cross connection of the steam drums via the auxiliary line on all boilers operating cross connection on the main steam line.

Cecil B. Gill

CECIL B. GILL