U.S.S. BADOENG STRAIT (CVE-116) c/o Fleet Post Office San Francisco, California

CV E116/SOC/ja A4-3/30 Ser: 0020

16 NOV 1952

**DECLASSIFIED** 

DOWNGRADED AT 3 YEAR INTERVA DECLASSIFIED AFTER 12 YEARS

From: Commanding Utilicer, U.S.S. BADOENG STRAIT (CVE-116) To:

DOD DIR 5200.10

Chief of Naval Operations

Via: (1) Commander Task Group 76.7 (Commander Carrier Division SEVENTEEN)

(2) Commander Task Force 76 (Commander Amphibious Group THREE)

(3) Commander Joint Amphibious Task Force 7 (Commander SEVENTH Fleet)

(4) Commander Naval Forces Far Mast (5) Commander in Chief, U.S. Pacific Fleet

Subj: Action Report for 9 October through 16 October 1952; submission of

Ref:

(a) Art 0705 Navy Regulations

(b) OPNAV INST 3480.4

(c) CINCPACELT INST 3480.1

(d) CTF 90 and CTF 76 Op Plan No. 101A-52

(e) CTG 70.3 Op Flan No. 22-52

(f) CTG 76.7 and CTE 76.53 Op Plan No. 21-52

- In accordance with references (a), (b), (c), (d), (e), and (f) the action report of the BALDENG STRAIT for the period from 9 October through 16 October 1952 is submitted herewith.
- The report is divided into six parts, as listed below:

Part I General Narrative - appendix I

Part II Chronological Order of events - Appendix II

Part III ammunition expenditures - Appendix III

Part IV Summary of our and enemy battle damage - Appendix IV

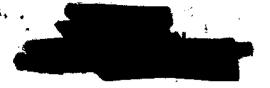
Part V Personnel performance and casualties - Appendix V

Part VI Comments and recommandations - appendix VI

N. J. Ray



cc 64983/6



#### DISTRIBUTION LIST

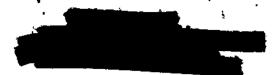
**DECLASSIFIED** 

UNO (2) Advance
CINCPACFLT (2) Advance
CINCPACFLT Evaluation Group (1)
COFNAVFE (1) Advance
COMMAVFE Evaluation Group
COM7thFLT (1) Advance
CTF 76 (2) Advance
COMAIRPAC (5)
COMSEMVFAC (1)
COMFALMJAP (1)
Naval War College (1)

CCD-15
CO, FAIRBETTUPAC (2)
U.S.S. BATAAN (CVL-29) (1)
U.S.S. RENDOVA (CVE-114) (1)
U.S.S. BAIROKO (CVE-115) (1)
U.S.S. SICILY (CVE-118) (1)
U.S.S. POINT CRUZ (CVE-119) (1)

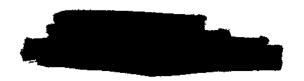
AUTHENTICATED

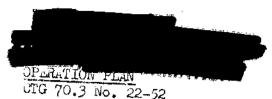
S. O. COLE
CLM, USN
Operations Officer



#### GENERAL NARRATIVE

- 1. During the period 9 October 1952 through 16 October 1952, the U.S.S. BADDANG STRAIT under command of Captain H. L. RAY, 62691/1310, USN, and with VS-931, Commander F. V. KANNAY, 084253/1310, USN, Commanding, embarked; operated as a part of SAVANTH Fleet and Task Force 76 and successively under the operational control of Commander Task Group 70.3, Commander Task Group 76.7 and Commander Task Alement 76.53. Commander Carrier Division 17 embarked in the U.S.S. BADDANG STRAIT was the immediate operational commander in each instance.
- 2. The mission of the BALOENG STRAIT during this period was:
  - (1) To conduct ASW flight operations in support of Commander Task Group 76.7, Commander Task Element 76.53, and Commander Task Group 70.3.
- 3. The Task Element of which the BADOENG STRAIT was a part, reported for cuty with CTG 76.5 at OTARU, Japan, departing on 9 October, to area TARE in the objective area, below WONSAN, korea, departing therefrom on 16 October 1952. The enemy forces were the North Korean Peoples Army and the so called Volunteer Chinese Communist Forces in North Korea. This Task Unit performed the tasks set forth in the mission. VS Squadron 931 flew 278 day and night hours during this time. On 16 October Task Group 76.7 was detached to resume its normal designation of Task Group 96.7.





UTG 70.3 No. 22-52

JOINT AMPHIBIOUS TASK FORCE 7 COMMANDER TASK GROUP 70.3 ASW GROUP and COMCARDIV-17 U.S.S. BADOENG STRAIT, Flagship

Yokosuak, Japan 1 October 1952

Chart and map Reference: Air Navigation Chart V30-17

### Task Organization

70.3 ASW Group

RADM C.E. EKSTROM (212)

(a) 70.30 Carrier Element

BADOENG STRAIT (CVE-116) CAPT H.L. RAY (1362) 1 CVE

VS-931

CDR F.V. KENNEY (5420) 18 AF

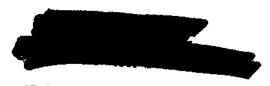
Plane Guard(s) as assigned

(b) 70.31 Screen and Destroyer Mement Destroyers as assigned

(c) 70.3.1 Surface Attack Unit One Destroyers as assigned

(d) 70.3.2 Surface Attack Unit Two Destroyers as assigned





OPARATION PLAN UTG 76.7/CTE 76.53 No. 21-52 JOINT AMPHIBIOUS TASK FORCE 7, COMMANDER TASK GROUP 76.7 and TASK ELEMENT 76.53 of TASK FORCE 76 and COMMANDIV-17 U.S.S. BADOENG STRAIT, Flagship

Yokosuka, Japan 1 October 1952

Chart and Map References:

(Refer to ComPhibForFE OpPlan No. 101A-52)

#### Task Organization

76.7 ASW Group

HADM C. E. EKSTROM (212)

76.53 ASW Element

RADM C. E. EKSTROM (212)

(a) 76.7.1/76.53.1 Surface Attack Unit One

Destroyers as assigned

(b) 76.7.2/76.53.2 Surface Attack Unit Two

Destroyers as assigned

(c) 76.7.3/70.53.3 <u>Carrier Unit</u>

BADOENG STRAIT (CVE-116) CAPT H.L. RAY (1362) 1 CVE

VS-931

CDR F.V. KENNEY (5420)18AF

Plane Guard(s) as assigned.

(d) 76.7.4/76.53.4 Screen and Destroyer Unit

Destroyers as assigned



#### CHRONOLOGICAL ORDER OF EVENTS

#### 9 October 1952

- 082130Z Arrived OTARU, Hokkaido with CTG 96.7 and VS-931 embarked.
- 090430Z Underway from OTARU, hokkaido with CTE 76.53 and VS-931 embarked.
- 090505Z Launched 2 ASW teams for ASP using search plan 1 MIKE for Anti-Submarine coverage during sortie of CTF 76.5.
- 090750Z Recalled all aircraft and cancelled further air operations due to weather.

- 091800Z CTG 76.5 reported pinacle (Enemy radar at bearing 300°).
- 091915Z Launched One (1) team for ASP.
- O92010Z Aircraft investigating 3 kmNT reports bearings indicated "A" (232°), "B" (010°), and "C" (307°). Aircraft encountered heavy rain while investigating pinacle "A". The BADOENG STRAIT and the HARRY m. HUBBARD attempted to coordinate by triangulation on these pinacles but the base line between the ships was too short to give a reasonably good position of the source of RENT.
- 092020Z The HAMIY E. HUBBARD reported pinacle "C" as RENT 8800/200/1/unknown/300°T. Evaluated as possible enemy submarine.
- 092023Z Pinacle "C" faded.
- 092025Z Pinacles "A" and "B" faded.
- 092100Z 5 Kneehigh (BallOFNG STRAIT aircraft call) reported APS -20 radar out of commission. 5 Kneehigh was recalled. 4 Kneehigh was ordered to search, under positive control, ahead of the Task Group.
- O92140Z The FRANK KNOX in station 5 reported sonar contact 2350/8000 yards. The HOLLISTER assisting. The Task Group made an emergency turn 20° right.
- O92148Z Sonar contact evaluated as school of fish by the HOLLISTER. The FRANK KNOX concurred.
- 0922512 4 Kneehigh returned from search and landed.
- 1001342 CTG 70.5 reported RENT 8565/700/1/unknown. This was evaluated as MK-34 fire control radar or possible SS radar.





10 October 1952 (Continued)

100258Z Launched one team for ASP.

100407Z BADOENG STRAIT exercised at General Quarters for abandon ship drive.

100558Z Launched search team for ASP.

100601Z Recovered search team launched at 100258Z.

101045Z Recovered search team launched at 100558Z.

11 October 1952

101837Z ASP cancelled due to weather.

1023402 The HarmY E. HUBBARD reported RENT 4350/410/2/unknown/unknown. No evaluation could be made.

1100002 Launched one search team for ASP Plan 3L.

110120Z 7 and 8 Kneehigh reported a disappearing radar contact. 8 Kneehigh (attack aircraft) was unable to drop sonobuoys due sonobuoy dispenser failure. 22 Kneehigh was launched to replace 8 Kneehigh. 8 kneehigh was directed to conduct visual search ahead of the screen.

110256Z Launched 3 and 4 Kneehigh for ASP.

110312Z Contact reported by 7 and 8 Kneehigh evaluated as non-submarine.

110343Z Recovered 7, 8, and 22 Kneehigh.

110400Z The BallowNG STRAIT exercised at General Quarters for "A" bomb defense.

110606Z Recovered 3 and 14 Kneehigh.

1107002 Launched two teams - 9 and 10 Kneehigh first team and 4 and 15 second team for ASP search plan 4L.

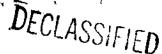
110710Z 9 Kneehigh reported his APS-20 Radar out of commission. 5 Kneehigh was launched as replacement.

110933Z The HarmY E. HUBBARD reported RENT 2040/700/2/10/165°.

111053Z 4, 5, 10, and 15 Kneehigh recovered.

12 October 1952

1,118007 Launched 9, 14, 7, and 20 Kneehigh for ASP.



#### 12 October 1952 (Continued)

- 111855Z BALDENG STRAIT obtained RENT 116/60/5/3/unknown.
- 111907Z Task Group 76.5 disclved. Task Group 76.7 was formed under command of Commander Carrier Division 17, with Baddeng STRAIT, V5-951 embarked, and the DDs UHLMANN, KIDD, WEDDERBURN, and HOPPAPELL.
- 1119302 General Quarters set Condition ONE.
- 1121002 Launched 5 and 10 Kneehigh and 3 and 4 kneehigh for ASP.
- 1121452 9, 14, 7, and 20 Kneehigh recovered.
- 1123402 3 and 4 Kneehigh reported disappearing radar contact 6 miles East of ULUNG-DO. Sonobuoys were dropped with no results.
- 120000Z Launched 2, 19, 7, and 22 Kneehigh for ASP.
- 1201002 5, 10, 3, and 4 kneehigh recovered.
- 120256Z Launched 12, 15, 10, and 17 Kneehigh for ASP.
- 120313Z Launched 5 Kneehigh to replace 17 Kneehigh whose radar was reported out of commission.
- 1204112 CTF 77 reported 20 enemy aircraft over WOWSAN.
- 120411Z CTF 77 reported enemy aircraft headed Northwest.
- 1207004 12, 15, 10, 5, and 17 Kneehigh recovered.
- 120830Z Launched 7 and 22 Kneehigh for ASP.
- 121112Z 7 and 22 Kneehigh recovered.

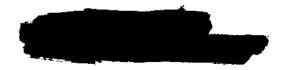
- 1218002 Launched 7 and 20 Kneehigh for ASP.
- 122031Z Dawn alert set Condition ONE.
- 122049Z BALOWNG STRAIT obtained neNT 8710/800 to 900/ 1 to 3/4.
- 122052Z Launched 4 and 11 Kneehigh for ASP.
- 122127Z 7 and 20 Kneehigh recovered.
- 122215Z Fueled WEDDARBURN (DD-684).
- 122320Z Fueled UHLMANN (DD-867).

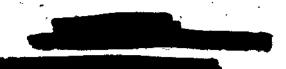
### · PECLASSIFIED



#### 13 October 1952 (Continued)

- 130000Z Launched 5 and 14 Kneehigh for ASP. 5 Kneehigh reported APS-20 radar out of commission. 7 Kneehigh launched as replacement for 5.
- 1300352 4, 5, and 11 Kneehigh recovered.
- 130040Z Fueled KIDD (DD-661).
- J30150Z Fueled nOPeWELL (DD861).
- 130206Z 7 Kneehigh reported disappearing radar contact bearing 115/18 miles dropped investigating sonobuoy. Later evaluated as school of porpoises seen in the area.
- 130310Z Launched 17 and 20 Kneehigh for ASP. 17 Kneehigh could not retract landing gear so 19 Kneehigh was launched as replacement.
- 1303372 14 Kneehigh had barrier crash necessitating engine and propeller change.
- 1304002 8, 10, 17, 5 Kneehigh recovered.
- 1304002 BADOENG STRAIT obtained RENT 8795/1575/.25/unknown/unknown.
- 130415Z BaDOENG STRATT obtained RENT 885/1785/.25/2/unknown.
- 130407Z Both 19 and 20 Kneehigh IFF inoperative. They were then assigned to search South of the force, under positive control.
- 140455Z Launched 6 and 9 Kneehigh to replace 19 and 20 Kneehigh on ASP in vicinity of contact area.
- 1306202 Task Group 76.7 dissolved and Task Element 76.53 reactivated with same forces under command of Commander Carrier Division 17.
- 1306202 17 and 20 Kneehigh recovered.
- 130756Z Launched 10 and 19 Kneehigh for ASP.
- 130836Z 6 and 9 Kneehigh recovered.
- 131026Z Joined Task Group 76.5.
- 131110Z 10 and 19 Kneehigh recovered.
- 1314552 HARRY E. HUBBARD (DD-768) reported RENT 1450/50/15/5.





- 131805Z Launched 2 and 9 Kneehigh for ASP.
- 131947Z UHLMANN (DD-687) reported sonar contact, doubtful submarine 130°/2175 yards.
- 131953Z Task Group made emergency turn to starboard.
- 1320142 UHLMANN evaluated contact as school of fish.
- 1320352 EWANVILLE (PF) in the slow tractor group reported sonar contact, evaluated as submarine, North of ULUNG-DO. ROGERS assisting. 2 and 9 Kneehigh vectored to investigate.
- 132100Z Launched 8 and 17 Kneehigh for ASP.
- 132123Z 8 and 17 Kneehigh relieved 2 and 9 over contact area.
- 132135Z 8 Kneehigh dropped 2 sonobuoys then dispenser jammed, 17 Kneehigh reported his APS-20 Radar inoperative.
- 132140Z 2 and 9 Kneehigh recovered.
- 132205Z Launched 12 and 19 Kneehigh to replace 8 and 7 Kneehigh. After several attempts at working the dispenser 8 Kneehigh finally succeeded in laying a complete pattern. Cavitations were heard but were evaluated as caused by adjacent ships. The contact was evaluated as school of fish.
- 1322552 12 and 19 Kneehigh directed to search in close proximity of Task Group.
- 140003Z Launched 11 and 22 Kneehigh for ASP.
- 140050Z 8, 12, 17, and 19 Kneehigh recovered.
- 140150Z General Quarters. Unidentified aircraft in the area.
- 140207Z Aircraft identified as friendly. Secured from General Quarters.
- 140300Z Launched 5 and 20 Kneehigh for ASP.
- 140630Z Launched 9 and 22 Kneehigh for ASP.
- 140704Z 5 and 20 Kneenigh recovered.
- 141018Z 22 kneehigh recovered.
- 141018Z 9 Kneehigh crashed over port side after failing to engage an arresting wire. HOLLISTER and STEMBLE assisting in search for members.



#### 14 October 1952 (Continued)

141042Z Crew of 9 Kneehigh composed of 4 men, recovered by HOLLISTER small boat and returned to BALOENG STRAIT. Crewmen received only minor injuries. 9 Kneehigh sank.

#### 15 October 1952

- 1419002 CTE 76.53 chopped to CJATF-7 to become CTG 70.3 with BADOENG STRAIT VS-931, WELDERBURN, UHLMANN, HOPWEWLL, KIDD, FRANK KNOX, and HOLLISTER.
- 142030Z General Quarters, dawn alert.
- 1421002 weather unsatisfactory for flying. Air Operations held in abeyance on one half hours notice.
- 150220Z "H" Hour set as 151400ITHM by CTG 76.5.
- 1502452 Launched 4, 17, 5, 8, 2, and 11 Kneehigh for ASP. IFF inoperative on 4 and 17 kneehigh.
- 1503152 Launched 1 and 10 Kneehigh to replace 4 and 17.
- 150332Z 4 and 17 Kneehigh recovered.
- 150335Z l and 10 Kneehigh IFF inoperative directed to search in vicinity of own carrier under positive control.
- 150400Z Fueled HOPWLWLL (DD-861)
- 150420Z 5 and 8 Kneehigh reported disappearing contact 220°/60. Sonobuoy pattern laid and machinery noises received. Contact designated as COBLIN ABLE.
- 150425Z LOS ANGELES and CHAIG reported to be close to contact area, possible source of machinery noises.
- 150455Z Fueled WEDDLKBURN (DD-684)
- 150516Z TE 70.31, SAU-1 composed of mOLLISTER and FRANK KNOX departed screen for contact area. hOLLISTER in command.
- 1505282 8 Kneehigh reported sonobuoy pattern lost due to high seas.
- 150540Z Fueled KIDD (DD-661).
- 150545Z 8 Kneehigh laid new sonobuoy pattern. Still receiving machinery noises, but no movement of target.
- 150023Z Launched 3, 20, 12, 7, 14, 19 Kneehigh for ASP. 55 Knots of wind accross the deck. Flew aircraft off with full load, did not use

APPENDIX II-6



#### 15 October 1952 (Continued)

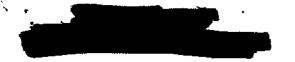
- 150657Z 1, 8, 10, and 5 Kneehigh recovered.
- 150720Z 2, 5, and 11 Kneehigh recovered. All aircraft recalled because of high winds and heavy seas.
- 150850Z 3, 7, 12, 14, 19, and 20 Kneehigh recovered.
- 151040Z CTG 70.3 chopped to TF 76 to become CTG 76.7 to provide ASP for TG 76.4 on movement to P'OHANG-LONG.
- 151100Z Contact Cold. SAU-1 composed of FRANK KNOX and HOLLISTER chopped to CTE 76.4.

- 152000Z Launched 5 and 12 Kneehigh for ASP.
- 152336Z Launched 4 and 11 Kneehigh for ASP.
- 160000Z 5 and 12 Kneehigh recovered.
- 1600202 Fueled UhlMaNN (DD-867).
- 160125Z Fueled HOLLISTER (DD-788).
- 160225Z Fueled STAMBLE (DD-644).
- 1603372 4 and 11 Kneehigh recovered.
- 1604002 Fueled OZBOURN (DD-846).
- 160700Z Fueled FRANK KNOX (DDR-742).
- 160755Z Operations having been terminated for this group CTG 76.7 chopped to COMNAVFE to resume its normal designation of CTG 96.7.



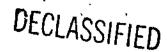
No ammunition was expended during the period of this operation.





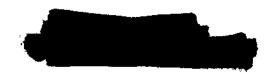
#### SUMMARY OF OUR AND ENEMY BATTLE DAMAGE

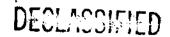
The BadoenG STRaIT did not engage the enemy. No battle damage resulted. No ammunition was expended in battle.

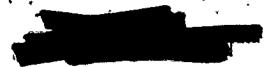


PERSONNEL PERFORMANCE AND CASUALTIES

There were no casualties. The performance of personnel was deemed to be satisfactory in all respects under the conditions that existed. The effectiveness in full combat of the ship's batteries and repair parties with fractional complements and frequent personnel changes remains to be seen.







#### COMMENTS AND RECOMMENDATIONS

#### 1. NAVAL OPERATIONS

#### n. Surface

#### (1) Tactics

The formation was protected by a bent line screen. Formations 92R, 92V, and 92Z were prescribed for TF 76.5. In 92R (the formation normally used) this ship was assigned BakeR 42 as its station. The SOA of the group was 15 knots, thus leaving a 4 knot speed differential for the carrier to take position for the conduct of flight operations and return to station. This necessitated the carrier having to leave station approximately one hour early under wind conditions that usually existed to position itself for flight operations by method BakeR. It would be preferable for conducting air operations to leave one station in each quadrant on the outer circle unassigned, giving the carriers the option of selecting a station which would facilitate operations.

#### Recommendations:

When formation 92R is used or a similar formation is prescribed, assign to the carriers one station in each quadrant, on the outer circle, for occupancy at its option, depending upon existing wind.

#### B. air

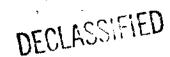
#### (1) Day - Wight

It is believed that this is the first time a CVE has attempted to operate with a full VS complement of 18 AF-2 Type aircraft under war time conditions.

when eighteen (18) aircraft are carried, eight (8) can be carried on the hangar deck and still allow sufficient space for the helicopter and the tournapull. Ten (10) aircraft can be operated and handled on the flight deck. Nine (9) aircraft were spotted forward of the barriers, thus permitting recovery of the tenth aircraft. Under adverse deck conditions, or during night recoverey operations, a longer landing interval for the last few aircraft was necessary in the interest of safety. Spotting operations in the very close quarters forward of the barriers was necessarily slow. Furthermore, this longer interval between aircraft enables plane crews and spotting personnel to clear the area forward of the barriers prior to the next aircraft's recovery, a most important measure of safety.

#### C. All Weather

On October 14th and 15th a low pressure wave formed with surprising rapidity in the objective area. The attendant high winds caused



a choppy sea which soon developed heavy grounds swells. It was necessary to cancel flight operations because a severely pitching deck increased the possibility of a landing aircraft damaging the tightly spotted aircraft forward. A further consideration was the possibility of serious damage to the Mark IV arresting gear due to the weight of the AF aircraft.

#### D. Anti-Submarine

#### (1) Surface

Standard bent line screens were ordered employed. No unusual antisubmarine tactics were used.

#### (2) mircraft

The tactics used by aircraft were in accord with published doctrine. The armament carried was one (1) MK-24 Mine, two (2) MK-54 depth charges and four (4) 3.25" rockets. This combination of armament would permit the attack plane to press a Class "A" attack anywhere within the area to be covered, the MK-24 mine to be used only when well clear of friendly forces.

Recommandations:

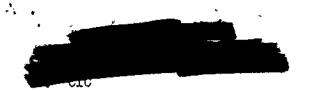
None.

#### (3) wir/Surface

at 150420Z one team reported a disappearing radar contact. A standard five (5) buoy pattern was laid and machinery noises were heard and reported. The contact was 60 miles from the Task Group. A Search and Attack Unit consisting of the HOLLISTER and FRANK KNOX was dispatched to the Datum. High seas prevented the SAU from steaming at full speed, therefore, the time late was excessive. By this time the pilot had used all his smoke lights in trying to keep his pattern marked. He could only maintain his position in the general area by radar plotting from known positions on the beach. The SAU arrived in the area, however, and commenced a spiral search plan. At 151100Z the contact was reported as still cold. The SAU was ordered to abandon the search.

#### Recommendations:

- (a) Advanced training should be provided to develop the ability by airborne radar operators to interpret targets through heavy sea returns.
- (b) A long burning smoke light of at least two hours should be



In early July of this year it was decided to install the MK-10 IFF on this vessel, then scheduled to sail on 19 July. A hurried installation of UPX-1 equipment was made by the Naval Station, San Diego. This equipment was installed for use with the SK radar. This installation is unsatisfactory in that it is non-directional and the reliable range is limited to about 20 miles. One test with aircraft was made prior to departure west coast. There was no opportunity to use this equipment until the period of this operation. The indication on the scope is a complete circle that coincides with the target being interrogated. This indication is satisfactory only when two targets do not appear simultaniously at the same range, and there are relatively few targets on the scope.

#### Recommendation:

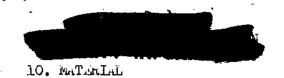
The complete 5PS-6 and UPX-1 equipment should be installed at the earliest opportunity.

#### ELECTRONIC COUNTER MEASURES

During previous Hunter/Killer operations an experimental installation of AN/APR-9 equipment was made to determine the extent of improvement of this equipment over the standard shipboard ECM equipment of limited frequency range. A motor generator from the AN/ARR-7 was used to obtain the necessary 115V AC 400 cycle power for the equipment. A motor generator from the AN/APX-1 was used for the 28V DC supply. The AN/APR-9 was installed in the ship's ECM Room, and connected so that it could be supplemented by the RD-J pulse analyzer, RDP Panoramic adapter, and the DBM direction finder for further evaluation of contacts. The DBM antenna was used with the TN-128 and TN-129 tuning heads. Excellent bearings were obtained on the primary frequency in passive ECM exercises on a submarine SV radar out to 30 miles without having to worry about harmonics. On higher frequencies, such as the SS radar uses, a standard "Y" (AS--45 A/APR) antenna was used. This was necessary since the sensitivity of the DBM antenna at these frequencies was so high that the DBM scope was completely saturated, and no bearings could be obtain-The RDP and RDJ were used to further evaluate contacts. The RDJ was used successfully in determining pulse width. The RDP was used to determine the repetition frequency without much success. The best repetition rates were obtained by the operator using earphones. The ship evaluates the installation as highly successful, the most important feature being that of the frequency range of the APR-9. The installation was transferred on 18 October to the U.S.S. SICILY.

#### Recommendations

The APR-9 equipment should be made available for installation on an interim basis, as described above, until permanent equipment is procured for shipboard use.



#### a. Bureau of meronautics

#### (1) Catapults and Arresting Gear

The H-4C catapult was used almost exclusively due part of the time to low wind conditions and part of the time to the unavailability of the h-2 mod 1 catapult. The AF aircraft spotted fairly easy, considering its size and weight. It is essential, however, that a tail wheel steering bar be used to expedite lining the tail wheel fore and aft along the catapult tail wheel guide. Low wind conditions reduced the usefulness of the H-2 mod 1 catapult. The average launching pressure used was 2850 psi. This exerted high shock loads on the reeving and sheave system. Consequently, in addition to routine checks, careful inspection during non-operating periods was required to insure proper operation of the bearings and spacers for the high speed towing sheaves.

The MK-4 arresting gear with the MK-4 CPV and the Fisher limited lift valve operated normally throughout the period, with only one difficulty being encountered. Although wind over the deck was often as low as 18 knots, the mean was about 24 knots, there was little difficulty in arresting the AF in favorable seas. Aircraft were scheduled for three hour flights and were loaded, during daylight hours with one (1) MK-24 mine, two (2) MK-54 Depth Charges, four (4) 3.25" rockets and a full load of fuel. Occasionally, due to adjustments of the flight schedule it was necessary to recover the AF2S in a slightly overloaded condition. When this became necessary the average overload was 200 lbs. No difficulty was encountered, however, in arresting the aircraft in this condition and no illeffects were noted in the arresting gear. Three instances occurred wherein aircraft pulled out close to the maximum available purchase cable. These times occurred during low wind conditions with the flight dock steady. The average runout experienced was approximately 117 feet.

#### H-2 MOD-1 Catapult

A malfunction occurred when the 30-inch speed sheave on the piston end froze. Disassembly and inspection of the sheave and bearings revealed that the roller bearings had broken down, possibly due to high shock loads, resulting in excess friction and binding of bearing surfaces. Temporary repairs were made by the ship's force, and the catapult returned to an emergency standby status. Inspection of the 30-inch speed sheave on the crosshead revealed that it was also beginning to break down. While operating with AF's most launchings were made at pressures near 2900 psi. This caused unusually high shock koads to be exerted on the sheaves. All sheaves were receiving ample lubrication.

