U.S.S. SUWANNEE (CVE-27)

ACTION REPORT - OKINAWA - PART VI - SPECIAL COMMENTS AND INFORMATION - SECTION (C) - SPECIAL COMMENTS (1) Combat information center, and (2)(3)(4)(5).

(c) Radar Countermeasures.

The following RCM equipment is installed in C.I.C.:

T-9/APQ-2A	Transmitter, frequency 200-550 mcs. (modified for jamming 143-163 mcs.)
AN/APR-1	Search receiver, frequency 40-1000 mcs.
AN/SPA-1	Pulse Analyzer.

The pulse analyzer and search receiver have been used whenever possible during this operation. The jammer has not been used due to tactical considerations.

No certain enemy transmissions have been recorded during operational watches on the search receiver and pulse analyzer during this operation.

A log has been made of the friendly frequencies picked up in order to train operators to recognize enemy contacts.

The maintenance of RCM equipment and the training of RCM operators is being carried on by the RMO. Immediate need for instruction literature was met by use of RCM Operators Manual, Serial 0753.

2. COMMUNICATIONS.

No unusual communications problems arose during the operation.

3. DECEPTION.

To avoid giving away the general location of the task unit, planes returning from the Sakishima area were required to fly on a course toward Okinawa for twenty-five miles before returning to base.

4. NAVIGATION.

LORAN stations 4H2, 4H3, 4H6, and 4H7 were used extensively during this operation. Although average distance from the stations was over 1100 miles, readable signals were received from one hour after sunset until one-half hour after sunrise. The average accuracy of the four-station LORAN fix was within five miles. Due to uncertain set and drift and the high percentage of cloudy days, LORAN proved itself indispensable.

5. ENGINEERING.

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The ship's engines continued to function normally during this operation.

U.S.S. SUWANNEE (CVE-27)

ACTION REPORT - OKINAWA - PART VI - SPECIAL COMMENTS AND INFORMATION -
SECTION (C) - SPECIAL COMMENTS (6) and (7).

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6. SUPPLY.

The normal problems incident to replenishing in an anchorage were greatly complicated during periodic visits to the Kerama Retto by (a) pressure of time, (b) constant threat of enemy air attacks resulting in calls to General Quarters during every visit but one, and (c) inadequate boats and personnel. Despite these handicaps the ship managed to load sufficient quantities of ordnance and stores to continue uninterrupted operations.

7. MEDICAL.

(a) Despite the unprecedented length of the operation the general health of the officers and crew of the ship was good. However, toward the end of the operation there was a marked increase in the number of minor accidents about the ship. This was thought to be due to "staleness" incidental to the mental and physical exhaustion of the men.

(b) In general the health and morale of the pilots in both squadrons remained good, despite the length of the operation and the many long flights demanded of them. During April there was only one pilot grounded because of ill health and that was for only a half day. With the operation continuing through May it was inevitable that the usual number of colds and accidents would keep more of the pilots on the deck for short periods. It is remarkable, however, that after eleven weeks of continuous operations only two pilots were grounded for more than one day due to pilot fatigue.

However, at the end of the operation there was present a general accumulated fatigue, and it was apparent that rest and care were badly needed. However, there was a general willingness to fly and to do any job that might help, but operating efficiency was unquestionably lowered. The peak of efficiency was reached near the end of April and declined thereafter. Following a rest it should normally improve but it would not be likely to reach its April maximum. This is an inevitable result traceable to mental fatigue, traumata from operational accidents, personnel losses and daily involvement with violence.

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S-E-C-R-E-T

U.S.S. SUWANNEE (CVE-27)

ACTION REPORT - OKINAWA

PART VI - SPECIAL COMMENTS AND INFORMATION

SECTION (D) - DAMAGE CAUSED BY EXPLOSION ON FLIGHT DECK ON 24 MAY 1945.

1. At 1042, Thursday 24 May 1945, TBM-3 Bureau Number 68368 exploded on flight deck immediately after coming to a stop following normal landing on board. The accident apparently was caused by the explosion of 100# bomb in the bomb bay.

2. The explosion occurred on the flight deck at frame 70, centerline. Two large holes, one having a three foot diameter, and the other a two foot diameter, were made in the deck at this location. The deck was deflected downward from normal about six inches, in the vicinity of the holes, buckling five longitudinal 12' x 12" x 5" deck beams (transverse girders were not disturbed). The deflection of the deck extended irregularly over an area of approximately 12 feet diameter. Numerous holes were caused by bomb fragments, damaging the deck over an area of approximately 30 feet, to an extent to be dangerous for operation. Four drain and securing tracks were buckled and perforated by bomb fragments. One yielding element was damaged. The hangar deck sprinkling lines were punctured in several places and 16 - 3/4" sprinkler branches, with fog nozzles, were broken off by blast effect.

3. Necessary repairs of a temporary nature were completed by 1600, consisting of the following:

(a) Filling pieces of 4" x 4" shoring were fitted in the deflected area; these were covered by welding together 15 lb. plate secured to the deck with screws and made water-tight by a gasket of canvas and white lead. The deck drains and securing tracks were dammed by welding in a fore and aft partition.

(b) The hangar deck sprinkling system was made partially operational in this area by plugging all fragment holes and broken fittings. It is believed the above will suffice until such time as operations will allow proper repairs.

4. Eight photographs (Enclosure "A") are enclosed showing the nature of damage caused by this explosion.

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U.S.S. SUWANNEE (CVE-27)

ACTION REPORT - OKINAWA

PART VII - PERSONNEL PERFORMANCE AND CASUALTIES

1. The conduct of the officers and men of the ship was completely satisfactory. With a normal working day of sixteen to eighteen hours, particularly in the Air Department, plus overtime on many occasions, the strain on the ship's company was severe. Under such circumstances the standard of performance by all hands was remarkably high and deserving of the greatest praise.

The conduct and performance of the air group personnel was equally satisfactory, especially so in the case of the pilots. Although the average number of hours in the air per pilot was 113 in April, 80 in May and 50 in the first half of June, there were no cases of pilot failure and only two cases of pilot fatigue requiring grounding (for brief periods).

2. During the Okinawa operation the following casualties were suffered by personnel aboard the U.S.S. SUWANNEE:

Killed in action

CAMPBELL, Carroll R.	Lieut.	146666	4-27-45
LOUGHRIDGE, James R.	AMM1c.	402 77 16	4-27-45
ZAHN, Edward A.	ARM2c.	706 62 84	4-27-45

Missing in action

SAMPSON, Richard D.	Lt.Comdr.	81178	4-4-45
COLLURA, Frank	Lieut.	124403	4-25-45
DENMAN, Maxwell F.	Lt.(jg)	337547	5-28-45
POWELL, Cletus H.	AOM1c.	360 19 93	4-25-45
STEWART, Clifford H.	ARM3c.	808 73 91	4-25-45
BAIRD, Robert J.	ARM3c.	842 66 01	5-31-45
CHRISTMAS, James D., Jr.	AMM3c.	845 97 80	5-31-45

Operational Accidents

(a) Killed when airplane crashed almost immediately after being catapulted.

BRIDGERS, Edward L., Jr.	Lt.(jg)	215722	3-6-45

(b) Killed or injured in flight deck accident on 24 May 1945.

ABASTA, Edward M.	S1c.	880 69 09	Injured
BOOTH, William G.	S2c.	386 83 42	Injured
CARDOZO, Antone F.	StM2c.	205 58 73	Injured (Serious)
HUGHES, Frederick B.	S1c.	626 71 60	Injured
JOYCE, James Joseph	ARM1c.	607 90 25	Injured (Critical)*

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U.S.S. SUWANNEE (CVE-27)

ACTION REPORT - OKINAWA - PART VII - PERSONNEL PERFORMANCE AND CASUALTIES

KILCHRIST, Victor (n)	BM1c.	274 57 32	Injured	
LA MAR, Frank "D" Jr.	S1c.	880 77 26	Injured	
LEMATTA, Enright Archie	Lieut.	125209	Injured	
Mc COY, John Henry	S1c.	378 23 80	Injured	
MORROW, Richard D.	AMM2c.	860 65 11	Injured	(Serious)
PHAIR, Allen Fredrick	QM2c.	565 32 17	Injured	
RUSHING, Logan B.	AOM2c.	295 74 67	Injured	(Serious)
SLINGERLAND, Obed F.	Lt.(jg)	315251	Killed	
SMITH, James Eldon	AM3c.	883 05 46	Injured	
SPADA, Louis V.	S1c.	923 45 15	Injured	
STEELE, Harry A.	AOM(B)3c.	293 23 55	Injured	

* Died from injuries during transfer.

S-E-C-R-E-T

U.S.S. SUWANNEE (CVE-27)

ACTION REPORT - OKINAWA

PART VIII - COMMENTS, LESSONS LEARNED AND RECOMMENDATIONS

SECTION (A) - AIR GROUP COMMANDER'S COMMENTS

1. PLANES

(a) All replacement planes must be given a thorough acceptance check before flight until the replacement situation improves. The planes received later in the operation were better than those received in April, but were still not "combat ready". The effort to improve this situation is paying dividends and should be kept up.

(b) Four hundred hours is an exceptionally long engine life before overhaul under conditions existing in this operation. Chronic oil leaks resulting in obscured windshields, barrier crashes, and pilot distrust appeared after 250 - 300 hours on F6F-5's and TBM-3's.

2. TACTICS

(a) No air opposition was encountered but opposition from light and medium A/A was considerable. VF as well as VT were loaded with bombs and rockets, a fact which changed our basic tactics. Instead of keeping a strike group together for the whole period, VF, with greater speed and climb, preceded VT to the target, dropped their load and joined VT when the latter arrived. VF were then able to furnish effective strafing cover against A/A as VT bombed and rocketed. In the usual strike group of 8 VF and 8 VT, 4 VF preceded VT in dive, strafing suspected gun positions, and 4 VF followed VT in dive, strafing gun flashes.

(b) Considerable bad weather was encountered both over and enroute to the target. Conditions were usually very localized and strike groups frequently were forced to fly to the target on the deck only to find conditions CAVU at the target itself. On the other hand the target might be closed in when the route and ship's operating area were wide open. Immediate cognizance should be taken of target weather reports, and if doubt exists, a VF pathfinder section should be launched, rather than a whole strike group. When a strike group jettisons its load due to impossible conditions at target the man-hours wasted are considerable.

(c) The VF squadron has shot down nine enemy aircraft during this operation; one out of ten sighted escaped. This was due to the lack of resourcefulness of the wingman who saw him. In this connection, it is believed that the defensive tactical spirit is favored over the offensive a little too much in advanced and operational VF pilot training. This is dangerous, particularly in view of the mass suicide raids which have characterized this operation. Fighter pilots should be aware of the fact that a single Jap plane airborne means potentially one of our ships out of commission. Tactics must be designed to "get 'em all", and if a division leader must split his division

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U.S.S. SUWANNEE (CVE-27)

ACTION REPORT - OKINAWA - PART VIII - COMMENTS, LESSONS LEARNED AND RECOMMENDATIONS - SECTION (A) - AIR GROUP COMMANDER'S COMMENTS

2. TACTICS (Continued)

to insure that a maximum number of enemy planes are taken under attack immediately, he should do so. This doctrine is, of course, designed for CVE VF on local and target CAP. These VF are up there to knock down enemy planes and not to protect themselves.

3. PILOTS

(a) With the use of twenty VF in a SANGAMON class CVE, the VF pilot complement should be increased to thirty pilots in the CVE groups. The VF squadron averaged almost 115 hours per pilot in April, and with the addition of one combat team, bringing us to a total of thirty-two, VF pilots averaged almost 80 hours per pilot in May.

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(b) It is difficult for a squadron of this size, which has been together for nine months in training and combat, to assimilate a complete new combat team into its organization in the middle of an operation. It would be preferable to receive junior pilots as replacements and fit them into the squadron singly. A squadron commander in this way can pick his team leaders from pilots who have been with the squadron for some time and have demonstrated positive qualities of leadership and flying ability under his own observation. Undoubtedly, replacement by teams works out much better in larger fighting squadrons.

4. ARMAMENT

(a) For neutralizing airfields of the type hit by this group, VF should carry two bombs instead of one bomb and six rockets. This would double runway damage inflicted by VF and would save many wasted rockets. If it is known that rocket targets are available they should be carried, but there were few good rocket targets in the Sakishima area.

(b) VT should make one run with one load and come home. Putting rockets on the VT for strikes gives the inexperienced pilot the idea that he is supposed to fly his large, slow plane down to the ground to hit pinpoint targets. This is all right in support work, and our VT pilots have had considerable success with rockets there, but for strikes against enemy airfields the VT load should be one that can be used effectively in a run started at 11,000 feet with recovery at 3,000 feet. ORTSEL #2 clarified the problem of neutralizing airfields very well, and made it clear that the best load is the maximum number of 100-pound bombs with various delays in fuzing.

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U.S.S. SUWANNEE (CVE-27)

ACTION REPORT - OKINAWA - PART VIII - COMMENTS, LESSONS LEARNED AND RECOMMANDATIONS-
SECTION (A) - AIR GROUP COMMANDER'S COMMENTS

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4. ARMAMENT (Continued)

(c) Another difficulty that arises with both rocket and bomb loading for work where A/A is dangerous is that the pilot has to pull his airplane out of the first run with a load still on it. The loss of several chunks of TBM-3 elevator are attributed to this. It is all very well to prescribe speed limitations for varying loads, but the pilot will find it hard to choose between the possibility of losing part of his tail in the dive and the prospect of being nicked by A/A.

U.S.S. SUWANNEE (CVE-27)

ACTION REPORT - OKINAWA

PART VIII - COMMENTS, LESSONS LEARNED AND RECOMMENDATIONS

SECTION (B) - COMMENTS

1. ROTATION OF UNITS.

There is an advantage in retaining ships on station for a long period in contrast to quick rotation. During the first few days of an operation there is some slight confusion and a resulting clumsiness in carrying out air operations. This causes a lack of much needed rest and a large expenditure of energy on the part of the planners and organizers, reaching down to the lowest rating. Within a short time the whole process becomes routine and appears much simpler to perform, although, in reality, the tempo may be increased. This acclimatization is clearly apparent when a new unit joins with an old one. There is a noticeable period during which the ship and group go through operational difficulties before they both settle into "the groove".

2. AIR OPERATIONS SCHEDULES.

In a large-scale operation it is obvious that there must be a considerable lag between the time that an officer in the field knows just what kind of air support he desires the next day and the time the Navy pilot who is to give him that support hears of it. Due to the various echelons of command that such requests and orders must go through, some time lag is unavoidable. However, all possible attempts at decreasing it should be made for the benefit of all concerned. The optimum time for an individual ship to receive its air operations orders for the day is 1500 of the preceding day, so that planning and a great deal of the rearming can be accomplished during daylight hours. During the periods when this unit was assigned to cover the Sakishima airbases, very little trouble along this line was experienced. However, during periods of supporting Okinawa operations the final air operations schedule for the individual ships would not be known anywhere from early evening of the day before to early morning of the scheduled day. This resulted in working the rearming crews, especially, and other personnel of the Air Department and Air Group for 24 hours a day on many occasions. Over an extended period this is detrimental to the health of p ersonnel and the efficiency of operations.

3. AIRCRAFT REPLACEMENTS.

The aircraft replacement program should be improved considerably. In an extended operation, with its extremely heavy demands on aircraft, there comes a time when maintenance requirements not only increase but are of a more difficult nature and require more time. The maintenance crews slowly drop behind in their work until either availability decreases or aircraft are being flown in combat which are on the verge of being unsafe.

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U.S.S. SUWANNEE (CVE-27)

ACTION REPORT - OKINAWA - PART VIII - COMMENTS, LESSONS LEARNED AND RECOMMENDATIONS
SECTION (B) - COMMENTS

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During the first month of operations this ship experienced very little maintenance trouble. During this period the fighters averaged 150 hours, much of it at full power. During the second month, increasing trouble was experienced as total engine times passed the 250-hour mark and approached 300. Under the pressure of such high operational requirements, replacement of engine and aircraft should be made previous to the 300-hour mark, when at all practicable, and aircraft should be new in all respects. Such replacements should be easily accessible at all times, making it unnecessary to wait a week or two before requests can be complied with.

It is also felt that both the pools and transport carriers should make all current changes possible on aircraft in their charge, so that the combatant ships need only make an acceptance check prior to using the planes in combat. It is very discouraging to receive a new aircraft only to find, for example, that a complete radio change must be made, or in the case of the TBM, that wing modification must be made before it can carry 5" rockets.

4. INADEQUATE REARMING CREWS.

The steady use of rockets has more than doubled the work of the rearming crews, and it was found that the rearming crews needed considerable help from other divisions of the ship in order to get out repeated strikes on time. The process of bringing up, assembling, and securing the rockets to the planes is at best a slow task. It took a much greater number of men to accomplish this, plus rearming with bombs and ammunition, than the rearming crew of 35 men could do alone in the time usually alloted. It is felt that consideration should be given to this item of inadequate manpower whenever a new ordnance item is added.

5. ORDNANCE.

(a) Nose Fuze Protectors for F6F Aircraft: The nose fuze protector described in Model F6F-3 Airplane Bulletin No. 19 of 23 November 1943 is not being stocked in sufficient numbers by aviation supply ships. The number of 500-lb. bombs dropped in this operation was so great that it was impossible to keep a stock of this item on board, despite the fact that there were well over 500 on board when this vessel left the United States, and every effort was made to manufacture them on board. When the fuze protector was not available and bombs were dropped minus a nose fuze, about 10% of the bombs were duds.

(b) Shortage of Primer Detonators Mk14 for Tail Fuzes: In the forward areas there is a shortage of Mk14 .01-second-delay primer detonators. This shortage is believed to result from NAVORD OCL AV2-45 of 16 January 1945, which states that the AN-M100A2 fuze will be shipped with a non-delay primer detonator assembled and that 25% spares will be supplied only in .025-second-delay primer detonators. 531