

FIGHTING SQUADRON TWELVE

ACA-1 REPORTS

(5 APRIL - 31 MAY 1945)

CONFIDENTIAL

ACTION REPORT - VF-12

Period 5 April to 31 May 1945

The following comments concern the operating period 7 April to 28 May 45, during which time VF-12 participated in support of the occupation of Okinawa, in neutralizing adjoining islands in the Nansei Shoto, and in carrier strikes and sweeps against aircraft and aircraft facilities on the Japanese Island of Kyushu.

"Homogeneous" Strikes:

It is felt that when possible all the units of a strike should be launched from a single ship, and that the strike or mission leader be the Air Group Commander or a Squadron Commander from the same ship. Thorough briefing on both primary and secondary targets and plans of attack may be discussed and definitely set up, avoiding unnecessary confusion and radio transmissions required to coordinate the strike on the way to and at the target. It is also recommended that, in cases of strikes on fields where many parked aircraft are known to exist, additional divisions of fighters be launched. After the strike, a reduced number of fighters may escort the attack group back, while the remainder remain to destroy individual planes by strafing and fragmentation bombs. This may be done with advantage due to the state of confusion at the field and the usual smoke and dust screen left by the attack.

Target Coordinators:

It is believed that pin-pointing targets in support work could be done more accurately by target coordinators who were members of the CASCUC unit. They would be familiar with the progress of the ground units and could more rapidly and accurately pin-point the targets for the air support missions.

ASH Radar on F6F-5E:

At present this Air Group has no F6F-5E aircraft. All F6F-5E's have been lost due to gun fire blast or combat damage. Since losing these planes, two occasions have arisen where fighter radar was desirable for search and navigation under very bad weather conditions. Both times a night fighter was used, flying a loose wing on the flight leader, and using a blue day viewer. Although the APS-6, is not as adaptable for search and mapping as the ASH, excellent results were achieved by use of the night fighter. In this way, the work of navigation and radar searching is divided between two planes. The success of this procedure leads to the recommendation that the Air Group Commander and the Squadron Commanding Officer not use F6F-5E. The few opportunities to use the radar to advantage do not justify the added weight of the gear. It is further recommended that the radio altimeter be retained for use in leading a flight through bad weather, which necessitates "flying on the deck". The night fighters of this squadron have made a change in the radio altimeter warning system, which is believed to be very practical. The red and green lights have been removed, and the white light (the brightest of the three) has been moved to the lowest position. A more positive warning system is thus achieved. The constant flashing of lights is eliminated, and the brightest light is used as a warning of low altitude.

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5 April to 31 May 1945(continued)

Radio Discipline:

Radio discipline, conspicuous by the lack of same, is still one of the biggest bugbears of efficient air operations. It seems that every day our pilots complain about two or three chronic offenders which indicates that some units are not treating the problem seriously. "What are you getting on YE, Bill"; "I can't get suction on my belly tank. What shall I do", are examples of the kind of needless chatter one hears every day. A few suggestions for winning the fight are:

1. Use of hand signals for YE sector, gun testing, checking IFF etc.
2. Fines within the squadron for unnecessary chatter.
3. Indoctrination of pilots in aircraft troubles so that they may know whether or not they can go on with the flight or whether they have to return to the ship - without a 20 minute essay on the subject in the air.
4. Monitor common channels and take action against chronic offenders.

Of all the breaches of radio discipline, the worst is a "Tallyho" with no voice or fighter direction call attached.

Package Cameras:

This squadron has tested and found very effective a K25 camera carried in an external package slung from the bomb rack of an F6F. Due to the lack of a proper metal press the package is not streamlined, and is heavier than necessary. However, the flying characteristics of the plane are not altered by its use. The camera is quickly installed and leads connected through the gun camera circuit allow pictures to be taken while strafing and firing rockets. The camera takes two exposures a second and produces excellent pictures, showing targets selected at altitudes not normally achieved in any other type of still photography. A close study of these films shows clearly dummy planes, camouflage in hangars, shop spaces, and revetments, and close quarter damage assessment. Incendiary 50 Cal. bursts show up well, and it is possible to assess the damage done to aircraft in strafing runs in cases where the plane did not burn. It is felt that the value of the pictures produced, when used in conjunction with pictures from photo planes, is sufficient to warrant the use of the camera in every VF sweep, and that a more streamlined package be designed. As a future step, it is hoped that a K25 will be built into the leading edge of the wing in addition to the gun camera.

5 April to 31 May 1945 (continued)Dummy Planes:

The effective use of dummy planes by the Japanese, has been "brought home" to this squadron by analysis of package camera pictures. In a single sweep over an airfield on Kyushu, three strafing runs were wasted on a single dummy plane. By studying dummies, I feel that the squadron is becoming "dummy plane conscious", and is more adept in recognition of these ruses. As the AA fire becomes more intense, greater stress must be placed on making every run lethal.

Neutralizing Operations:

Enemy landing mats, such as Wan airfield on Kikai, are very difficult to make inoperative. Regardless of the number of craters in the mat, a quick survey of the damage will show at least one straight line path that can be used as a take-off strip by filling only a few holes. This was proved at Kikai by planes taking off at a time when the mat was declared inoperational. Against such a mat, it is suggested that a surprise bombardment be used. A CA or fast BB protected by DD's and a sizeable CAP might be able to crater the mat beyond repair within a few hours, and retire before enemy resistance could be brought to bear.

Napalm:

This squadron is highly enthusiastic over the use of Napalm. During the period of this report Napalm was used at Okinawa and Kikai. Uniform observations as to its results were reported in each instance. They were: (1) no duds (2) wide area covered (3) fires persisting as long as 3½ hours after attack. The extreme temperature developed by the bomb, gives it a high destructive value against any target except those requiring mining effect. Against personnel, barracks areas, parked aircraft, open or reveted gun emplacements, and lightly constructed industrial targets the bomb is very effective.

Rather crude but conclusive tests have been made by this squadron to determine the best and most convenient method of carrying Napalm. Drops were made with both the 150 centerline tank and the 58 gal wingtank. Pictures of the area covered showed the 58 gal tank covered slightly more than half the area of the 150 gal tank. During these tests, it was noted that the fuze and grenade were, in some instances, blown clear of the tank and napalm and the drop resulted in a dud. Lieut. A.L. Bureau then made changes which resulted in 100% performance. He used two 58 gal tanks with two grenades and fuzes for each tank. (See photographs). Using two of the 58 gal tanks on each plane in place of the 150 gal tank, a 16 plane napalm load can be poured, fuzed, and loaded in an hour. The whole operation and the removal of the bombs in case of altered missions is simplified by the use of bomb skids, which is not possible with the 150 gal tank. The photographs also show the method of securing the after fuze against the possibility of being thrown clear of the tank. It is hoped that in the near future a stabilized fire bomb case will be developed (similar to a large waterfillable bomb). This would allow steep dives and normal bombing releases. It is believed that napalm could then be used effectively and accurately against gun positions without hazarding a low level drop. Low level napalm drops and intense AA do not mix well.

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8 April to 31 May 1945 (continued)

Target Reputation:

During the long combat period in the Okinawa area, many patrols and sweeps were made over the same targets. The natural consequence was that each target earned the reputation of being either poorly or well defended. The well defended targets were treated with respect. However, over a period of several attacks on the poorly defended targets, careless, low and slow, and uncoordinated runs became the practice until a "cinch" shot was set up for the tracerless medium and light AA. The result was a needless loss of pilot and plane by playing into the Japs "Waiting Game". All pilots must be enjoined against trusting target reputation.

MK 23 Illuminated Sight:

At this stage of the war, very few opportunities are presented to give the MK23 conclusive tests. The problem of time for recognition and span setting coupled with the problem of re-setting the span during an attack of assorted enemy types, has reduced the effectiveness of the sight. However, a mean span setting of 37 feet for all single engine types has helped solve the problem. Variations from 37 feet offer proportionate errors in lead. The greatest advantages of the sight are the true solution of the line of motion and the correction for skid. In the few deflection shots obtained, results were excellent if there was time available for proper settings. It is hoped that a simple radar range input will be developed for later models of the sight, and that the fixed reticule will be enlarged to give at least 100 mils.

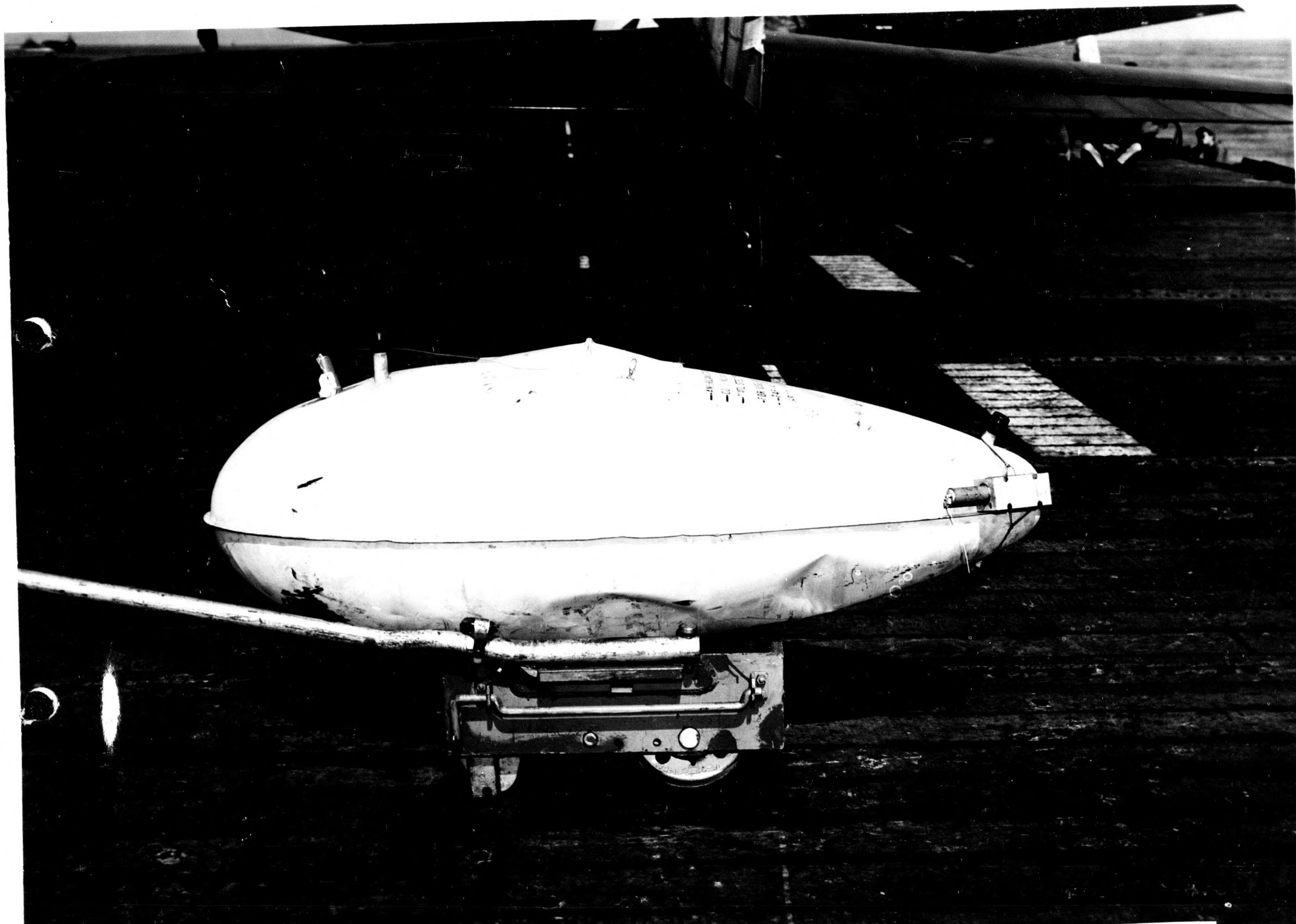
Strafing:

If the fighter is to remain an effective weapon, it is felt that more emphasis should be given to strafing and that the armament be set up accordingly. It is hoped that the mixed battery program of 2-20 millimeter and 4-50 calibre will be extended to equip the day fighters at an early date. An 800 to 1000 yard boresight for two 20's and two 50's is suggested to increase the effectiveness of strafing. With the present 500 yd boresight, the pattern of the 50's is so large and the bullet density so low, it is necessary to go right into the teeth of medium and light AA to do the job well.

"Zebra" Suits:

The zebra suits are still fulfilling their designed purpose, but the material, nylon, is not considered safe. In two cases of fire in the cockpit, the pilots were badly burned where the suit touched the skin. It is recommended that the suit be retained in its present design, but that it be made out of a different material.


F. H. MICHAELIS, Lt. Comdr., USN,
Commanding Officer.



58 gallon napalm fire bomb showing the position of nose fuze, tail fuze and arming wire.
58 gallon fire bomb handles very well on the starboard bomb skid and it is easily
loaded on or unloaded from the plane. Tanks are filled and fuzed while on the bomb skid.

NO. 1070 DATE _____

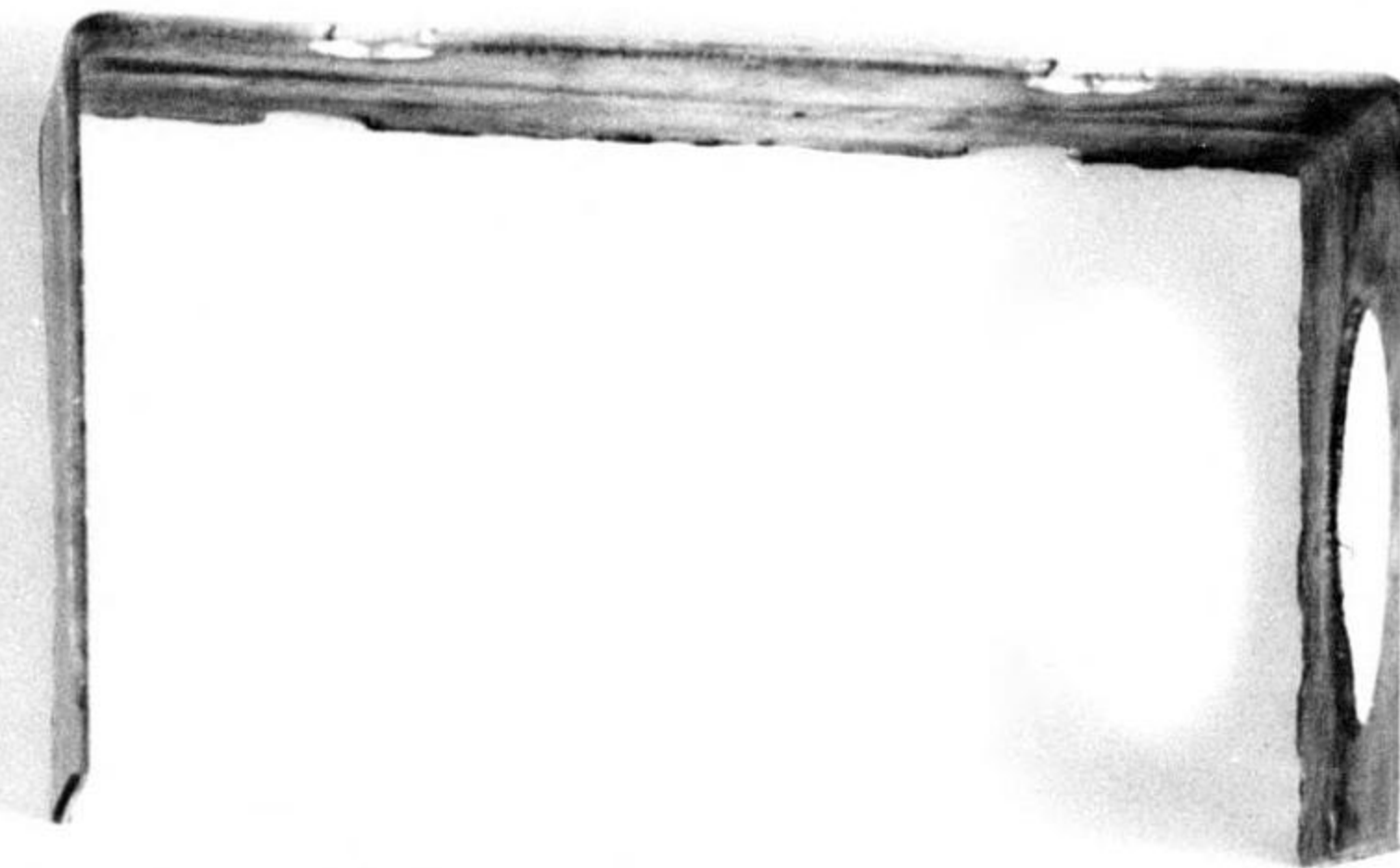
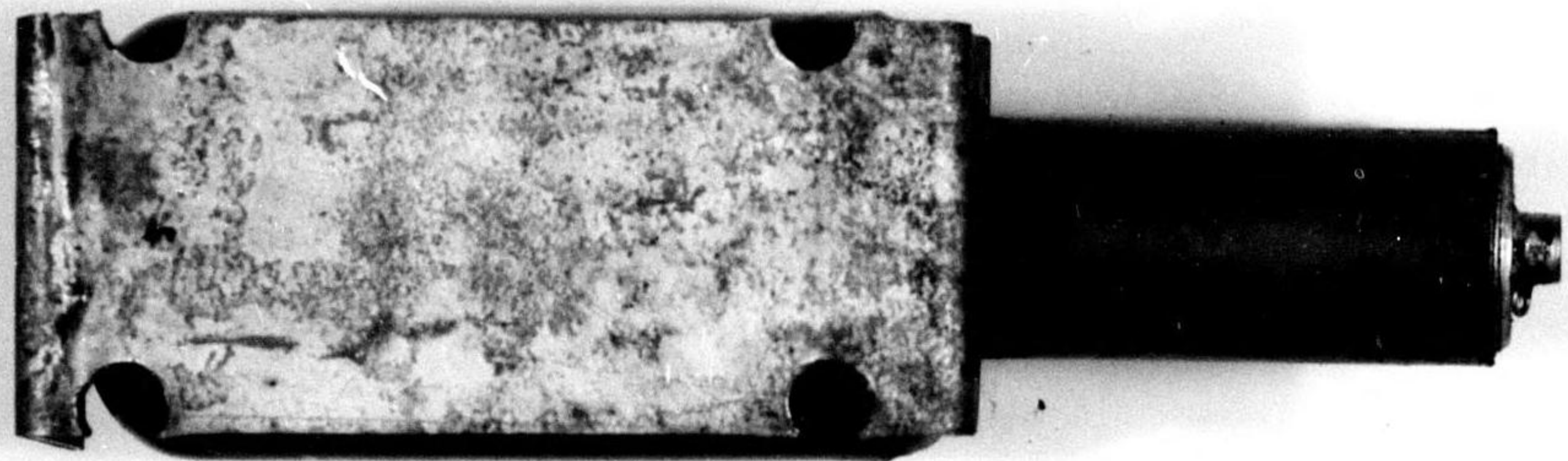
UNIT CV-13

MADE BY CAG 12

SUBJECT Close-up of Napalm
bomb and arming device

OFFICIAL PHOTOGRAPH

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THE CHIEF OF THE BUREAU
OF AERONAUTICS



Tail fuze bracket made from 14 or 16 gauge galvanized iron

Swiveling Wire. Standard Swivel and two lengths of .033 steel safety wire

NO. 1185 DATE 10 MAY 1951

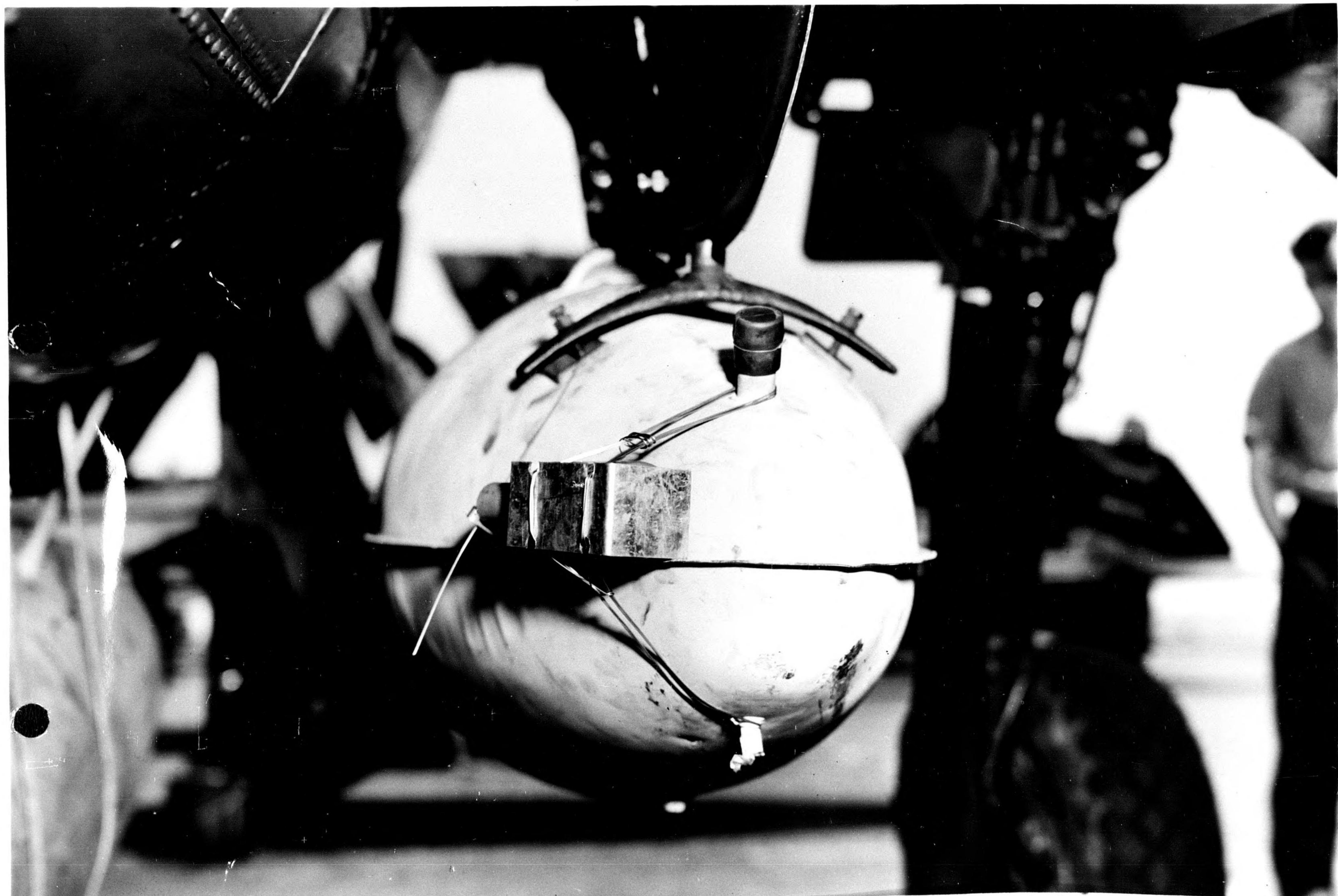
UNIT CV-13

MA CAG 12

INCENDIARY Grenade
bracket

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58 gal. napalm fire bomb suspended from starboard bomb rack of F6F.
Tail fuze is secured on the inboard side of the fire bomb to eliminate the possibility
of the fuze being struck by the catapult bridle when the plane is catapulted.
Leather pads or plywood blocks 2 inches square are placed between the sway brace set
screws and the tank.

6 MAY 1945

NO. 1069 DATE _____

UNIT CV-15 _____

MADE FOR CAG-12 _____

SUBJECT Close-up of Superm

comb and armory

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OFFICIAL PHOTOGRAPH

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OF AERONAUTICS

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