

## THE SECOND SIX MONTHS

Based upon the lessons of the first 6 months our rearmed ships were again rearmed as described before. With new construction augmenting our battleship strength, with auxiliary carriers, new carriers, and even British carriers replacing the *Yorktown*, *Hornet*, *Wasp*, and *Lexington*, nobly sunk, with destroyers, submarines, transports, and other auxiliaries going into service in rapid succession, the United States and all of the United Nations took the offensive.

*The Japs were stopped at Guadalcanal.*

*The Second Front opened in North Africa.*

In both of these major operations the anti-aircraft batteries played a leading part, equalled only in outstanding performance by radar. For justification of the anti-aircraft performance see the "Official Bag" following:

## OFFICIAL "BAG"

Ship	Pearl Harbor	Southwest Pacific	Marshall and Gilbert Islands	Solomon Island (Hogalaville)	Coral Sea	Midway	Solomon Islands, Aug. 7-8	Solomon Islands, Aug. 24	Solomon Islands, misc. action	Solomon Islands, Oct. 26	Africa, Nov. 8	Solomon Islands, Nov. 11-12	Total
Alchiba							1						1
Alhena							3						3
Allen	2						3						3
American Legion										3			3
Anderson					2	6	6						14
Astoria							1						1
Avocet	1			1			1						7
Bagley	5					2		2					4
Balch							3						3
Barnett									2				2
Bellatrix						5							5
Benham							2					5	7
Betelgeuse							2						7
Blue	5												1
Breese	1												1
California	1												6
Chester					6								5
Chicago					5								3
Conyngham							4					2	6
Crescent City										3			4
Cummings	1												3
Curtiss	3												1
Cushing										1			1
Dale	1												6
Dewey				2	3		1						1
Ellett								1					1
Enterprise								15		30			45
Farragut	1												1
Fomalhaut							1						1
Gamble	1												1
George F. Elliott							5						5
Hamann					1								1
Helena												4	4
Helm	1												1

\* First team

† High gun

## OFFICIAL "BAG"—Continued

Ship	Pearl Harbor	Southwest Pacific	Marshall and Gilbert Islands	Solomon Island (Hogalaville)	Coral Sea	Midway	Solomon Islands, Aug. 7-8	Solomon Islands, Aug. 24	Solomon Islands, misc. action	Solomon Islands, Oct. 26	Africa, Nov. 8	Solomon Islands, Nov. 11-12	Total
Henley	1						2						3
Heron		1											1
Houston		7											7
Heywood							1						1
Hopkins							1						1
Hornet										25			25
Hovey												3	3
Hulbert	1												1
Hull	1												1
Hunter Liggett							4						4
Indianapolis				1									1
John Penn											1		1
Lardner									2				2
Lexington				2	4								6
Libra												2	2
Marblehead		2											2
Mahan										4			4
Maury									3				3
Mayrant											1		1
McCalla												3	3
McFarland									1				1
Medusa	1												1
Minneapolis						4				2			4
Monssen										2			2
Morris						2	1						3
Mugford	3							3					6
Mustin											3		3
Neosho						3							3
Nevada	2												2
Northampton											5		5
North Carolina													7
Patterson	1												1
Pensacola												12	12
Pennsylvania	1												1
Phelps	1												1
Portland									3		1	2	6
Russell						2					5		7
St. Louis	3												3
Salt Lake City				1									1
San Diego											3		3
Selfridge									5				5
Shaw	1											2	3
Southard										1			1
South Dakota											26		26
Sims						3							3
Sterett										1			1
Sumner	1												1
Swan	1												1
Talbot, R										6			6
Tangier	2												2

† First team.

\* No. 3 gun.

\* No. 2 gun.



## OFFICIAL "BAG"—Continued

Ship	Pearl Harbor	Southwest Pacific	Marshall and Gilbert Islands	Solomon Islands (Bougainville)	Coral Sea	Midway	Solomon Islands, 4 to 8 AUG. 7-8	Solomon Islands, AUG. 24	Solomon Islands, etc. misc. action	Solomon Islands, Oct. 26	Africa, Nov. 8	Solomon Islands, Nov. 11-12	Total
Tautog	1					3	3						1
Vincennes													6
Vireo	1				1								1
Walke													1
Worden	1												16
Yorktown					13	3							1
Zane							1					2	2
Zellin													
<b>Total</b>	46	10	1	6	49	20	59	30	6	127	2	32	388

First team.

## MERCHANT SHIP "BAG" (MARCH 5, 1943)

Ship	Date	Route	Planes downed	Remarks
1943				
S. S. Eldena	March 20-April	Northern Russia	3	1 at sea; 2 at Murmansk.
S. S. Dunboyne	March 30-April 28	Murmansk	2	Manned A. A. battery 58 times.
S. S. Exhibitor	April 3	India	1	By .30 caliber gun.
S. S. Yaka	April 19-July 27	Murmansk	1	156 air-raid alarms.
S. S. Mormacrio	May 12	do	1	Manned A. A. battery 58 times.
S. S. Michigan	May 25	Northern Russia	2	400 3"/23; 4,000 .30 caliber.
S. S. West Nilus	May 27	do	1	By .50 caliber gun.
USAT President Fillmore	June 3	Dutch Harbor	1	By 3"/50 caliber gun.
S. S. William Hooper	July 4	Northern Russia	1	.50 caliber set port engine afire.
S. S. John Witherspoon	July 4	do	2	By .50 caliber gun.
S. S. El Capitan	July 4	do	2	By .30 and .50 caliber guns.
S. S. Washington	July 4	do	1	By .50 caliber gun.
S. S. Bellingham	July 4-6	do	2	Do.
S. S. Daniel Morgan	July 5	do	2	
S. S. Robin Tuxford	August 5	Suez	1	By 3"/50 caliber gun.
S. S. Almeria Lykes	August 13	Mediterranean	2	6,000 rounds of 20-mm.
S. S. Chant	September 10	Malta	2	
S. S. Schoharie	September 13-14	Northern Russia	2	By 20-mm.
S. S. Nathaniel Greene	September 13-18	do	8	2 direct hits 3", 6, .50 caliber.
S. S. Virginia Dare	September 13-18	do	7	One direct hit 3", 7, 20-mm.
S. S. William Moultrie	September 13-18	do	5	By 3"/50 caliber and 8, 20-mm.
S. S. Patrick Henry	September 13-18	do	1	By .50 caliber gun.
S. S. Africander	September 13	do	2	By 2 .50 caliber and 2 20-mm.
S. S. Tanimbar	September 18	Malta	1	
S. S. Esek Hopkins	September 18	Northern Russia	1	By 3"/50, 20-mm.
S. S. Exford	September 18	do	1	By 20-mm.
S. S. St. Olaf	September 18	do	1	By 3"/50 gun.
S. S. Edward Rutledge	November 8	Africa	1	By 20-mm. and .50 caliber.
S. S. Tawali	November 20	do	1	By 4 20-mm.
S. S. Mokihama	December 31	Casablanca	1	By 3"/50 caliber gun.
<b>Total</b>			59	

In the official bags, combatant ship and merchantmen, an attempt has been made to list only those in planes positively shot down. The list totals 437. A reasonable estimate, allowing for duplication, of the total enemy aircraft that failed to make a home port following an attack is larger by nearly 50 percent. It is estimated that the ship-mounted anti-aircraft batteries of the entire United States Navy have accounted for 650 airplanes during the first year of the war. Add to this total those downed by other aircraft and by shore batteries and the conclusion is reached, well expressed by the captain of the *Enterprise*, who writes:

"The last attacks made on this ship have demonstrated that the cost of an attack against a well-defended ship under present attack methods approaches a figure which is considered prohibitive, even for the Jap."

Referring to the last paragraph on page 1 of Information Bulletin No. 20, you will find a list of new weapons and improvements that "by the time a second 8-month period has passed—will have made themselves felt in battle." Following through this list in detail it is now possible to say:

(a) Radar direction and range for the 5-inch guns is in service in nearly all destroyers and larger vessels, has been in action and has been responsible for shooting down planes by completely blind firing.

(b) The Mark 50 director for the 3"/50 gun has not yet gone to service. This complicated piece of equipment has met some delays in manufacture. The delay does not detract from its prospective value, once it is available.

(c) Improved ammunition for the larger anti-aircraft guns has gone to service in quantity, has proved its value in action and is in large-scale production.

(d) Main battery ammunition suitable for use against aircraft has been issued. Its usefulness is still open to question when fired at short range because of the possible distracting effect on the regular anti-aircraft personnel.

(e) Replacement of the 3"/23 by 3"/50 on nearly all vessels is going forward as fast as production permits. In addition, replacement of the single purpose 4- or 5-inch stern chaser is being made by the 5"/38 double-purpose mount designed especially for merchant ships and auxiliaries by the Bureau of Ordnance.

(f) Replacement of the 1.1/75 by the 40-mm anti-aircraft guns is going ahead rapidly. This substitution does not mean that the 1.1/75 caliber quadruple mount is not a good and useful weapon. It is effective and will remain in service on various ships that cannot accept the weight of the quadruple 40-mm.

(g) Introduction of Marks 49 and 51 anti-aircraft directors is an accomplished fact. Some ships have a few of each and from these ships reports are anxiously awaited. The more complicated director with limited lead angle of about 13°, in other words the Mark 49, is particularly applicable for control of the short range weapons of the ship attacked. The simple "Broomstick" director with 25° lead angle, this time the Mark 51, is possibly more suited for vessels of the screen. Action reports will tell. The decision is in the hands of the forces afloat.

(h) Addition of Mark 14 automatic lead computing sights to all 20-mm anti-aircraft guns is going well. Hundreds have been issued and the rate of production is improving. The sight represents a radical departure from conventional methods of machine gun control. In one of its first trips in action it was responsible for dropping a Jap plane at a thousand yards with the target presenting a full deflection shot. The *Enterprise*, on the other hand, is not too well disposed toward it. Like all new and radical pieces of equipment, it will have to be weighed by the forces afloat, forces now engaged in the type of target practice that leads to a clean cut answer to the question, "Is it effective?" Like all radical departures from the conventional, it will have the "pros" and the "cons." Time will tell the answer and action reports from the fleet will help.

(i) Replacement by the 20-mm of nearly all of the caliber .30 and .50 machine guns is progressing rapidly. There are many ships which, when the 20-mm is mounted refuse to give up the caliber .30 and .50 they have in place. These ships have some justification for the smaller weapons are still bringing down airplanes.

(j) Introduction of short-base range finders has gone forward with limited sample production of a 15-inch Eastman and a 43-inch Polaroid. The range finders are definitely short-range instruments. Any attempt to push them out to ranges much in excess of 2,500 yards will meet with failure. Again reports from the forces afloat are awaited with interest.

(k) Increase in number of all antiaircraft weapons mounted has gone on to such an extent that it is almost beyond control. The pendulum swings and having passed the point of balance swings back. When ships asked for more than 20 5"/38 double-purpose, 16 40-mm. quadruple, and 60 20-mm. single antiaircraft mounts; a total of 144 antiaircraft barrels; there appeared many who did not approve further increase, *provided all arcs can be properly covered by this number*. Not alone numbers but proper all-around coverage is and must remain the criterion.

(l) As fast as guns and ships are available the ships are being properly armed. The results of the policy of increasing the merchant ship armament can be seen in the "Merchant Ship Bag."

(m) Dispersal of living and messing accommodations is going forward more in some ships than in others. Where possible, officers are being reassigned to rooms, bunk assignments of enlisted personnel are being changed to guard against loss of all of one type of specialist. More study into this problem is in order.

(n) The results of improvement in underwater protection remain to be seen. New construction vessels have demonstrated that "they can take it."

### CURRENT PROBLEMS

It is desirable to emphasize again the fact that our antiaircraft weapons have been so effective against the enemy that a change in his tactics must be anticipated. Some indications of changes can be seen in the night antiaircraft attacks of recent weeks. With the installation of radar in planes of the enemy this type of attack will increase. Formation bomb and torpedo attacks at higher altitudes and longer ranges are probable. Skip bombing will increase. Above all, new types of missiles, the junior "secret weapons" may make their appearance any day. We must not be content with what we now have! We must take stock repeatedly of our own successes and failures and from the information so obtained invent, design, construct, and install improved weapons, or new weapons, for scientific slaughter to meet the enemies' counter measures at the start rather than 6 months to a year after they become effective.

### OBSERVE—DEFEAT—REPORT!

By the excellent reports following may the rest of the Navy, and in particular the anti-aircraft gunners, profit and prosper.