

PART IV

Extracts from the Press

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AIR FORCE OPERATIONS AT SEA. EXPERIENCE OF SPANISH CIVIL WAR

(Extracts from an article recently published in the Russian paper *Krasni Flot*, which is believed to have been compiled from information supplied by Soviet Air Force officers serving with the Spanish Government forces and is therefore somewhat one-sided.)

Bombing of Insurgent warships by Government aircraft began at the end of 1936 with fairly effective results. In December, 1936, as a result of bombing attacks, the Insurgent cruiser *Almirante Cervera* was temporarily put out of commission, and in January, 1937, the cruiser *Canarias* was also damaged.

The experience of bombing warships at sea demonstrated the fact that 220 lb. bombs produced little effect on a modern cruiser, and it would appear that the minimum weight of bomb required for such attacks is 550 lb. It is true to state however that 220 lb. bombs are in certain cases effective. In this connexion it is interesting to note that the German cruiser *Deutschland* sustained serious damage from the effects of four 220 lb. bombs.

Bombing men-of-war at sea is not an easy business. Experience has shown that the most suitable height for bombers when carrying out such attacks is between 6,000 feet and 10,000 feet. At greater heights, the increased time of flight of the bomb affords greater possibility for the ship to take avoiding action. A particular case occurred when the Government destroyers successfully withstood, for a period of 10 hours, an Insurgent bombing attack which was carried out from a great height.

It is considered that, as a result of actual experience, it is essential to carry out bombing attacks on ships at sea in groups of from 9 to 12 planes. For a successful attack against a squadron of ships, it would be preferable to employ 30 to 40 planes which would be capable of bombing the sea area available to the squadron for avoiding action. Experience also shows that the approach to the target must be made at a height of about 23,000 feet, the final descent being made at a steep angle. This mode of attack reduces the chances of effective sound detection and, in addition, minimises the effect of anti-aircraft fire.

It has been confirmed that it is essential to maintain a continuous aircraft look-out during the whole period that a ship is at sea. It is also necessary for aircraft look-outs to be thoroughly acquainted with the silhouettes of their own planes and of those of the enemy. In connection with this question of identification, it has also been established that not only signalmen but also the whole ship's company