APPENDIX A REPORT ON BOMBING ACTIVITIES BY NO. 263 SQUADRON.

Air Sea. Practice.

On arrival at R.A.F. Warmwell, intensive practice bombing was carried out and pilots quickly brought their bombing error down to an average of twenty yards for eight bombs. Those that had more practice than the rest brought their errors down to ten yards or below. Since then practices have been restricted owing to a shortage of practice bombs and to the fact that the Naval authorities have not been able to replace the target which was badly damaged and had to be removed. A second target is now being built on the Q site.

It is felt that to maintain a high state of bombing efficiency each pilot should carry out at least four practices per week. This, however, would entail using 740 practice bombs. To keep each pilot in some sort of practice it is intended to carry out two practices for each pilot at an expenditure of 368 practice bombs per week.

All the practices where pilots have been accurate have been carried out at the lowest possible level. The bombing error increases as height is increased. From five hundred feet the best average for eight bombs is about sixty yards. High dive practices have not been carried out owing to shortage of practice bombs.

Live Bomb Practices.

The 11½1b practice bomb referred to above has an instantaneous fuse and burst on striking the water. The 2501b. bomb can be used for instantaneous XXXX three or eleven seconds. For practice and for operational use this squadron has used three seconds delay. A few 2501bs bombs have been dropped in conditions of rough water and others in calm weather. In the first case, from the level of an ordinary operational attack the bomb "porpoised" on the water for about thirty-forty yards before exploding, and the aircraft was able to get well away. In the case of calm water the bomb bounced a hundred yards and exploded fairly near the aircraft – the explosion being enough to rock it.

Owing to this "porpoising" on water it is felt that for real low level attacks which are accurate 500-lbs bombs may be too dangerous, but it is hoped to obtain an anemitagraph picture of the bombs action after release till the time of exploding. With the experience we have to date it is thought that accuracy is not so necessary against shipping for as long as the bomb is dropped short it should "porpoise" into the ship and act as a torpedo. In fact the present bomb is very good for shipping attacks. I think that possibly four 250 lb would be a better load than two 500 lb bombs.

The squadron's experience on land is limited to a drop from 500 feet in which eight bombs were dropped fairly near the target but four bombs bounced many yards and are liable to explode too near the aircraft for safety. Therefore on land with the present bomb we cannot be really accurate and this form of attack is ineffective.

Conclusion.

If attacks are made from 500 - 1500 feet, with or without delay, we cannot get accuracy. From these heights the attacking aircraft would be easy targets for flak. We have found that from real low levels with practice bombs, pilots can get six direct hits out of eight bombs. This form of attack presents the flax gunners with a very difficult target, therefore, if a bomb could be devised that would not bounce but would penatrate the target where it fell, the Whirlwind bomber could be used with great effect on land. It is wondered if a bomb which on release allowed a parachute to open and force the nose down to strike the ground in a verticle attitude could be devised. It is realised that it would have a different trajectory, but with practice pilots would probably become just as accurate as with normal bombs.

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