



# KLAXON

December 2024

## Newsletter of the International Research Group Orford Ness



In 2024, we made great progress in our research and had the privilege of personally meeting the public on two occasions - the Open Day at Martlesham Heath and the Cold War Network Meeting on Orford Ness. We heard many new, personal stories that made the history of Orford Ness come alive again. Have a peaceful, happy festive season and may our New Year be full of exciting discoveries!



Olaf Kirchner, Chairman

In a first for IRGON, we set up a kiosk at the **Martlesham Heath Aviation Society Open Day** on 8th September. Four of our members were on site, and we also had a representative from the National Trust assisting in our gazebo. We set up a number of display boards, showed a 15 minute video on a continuous loop, and had an A3 folder showing projects currently in progress. This event was definitely worthwhile, as besides raising awareness of Orford Ness and its history, we managed to make contact with a few Ness veterans.



### Cold War Network Meeting on Orford Ness

IRGON was one of several organisations presenting at the Cold War Network event on Orford Ness. The event took place on 17th October, and a number of different organisations were represented including the British Nuclear Test Veterans' Association, the Porton Down Veterans, Royal Signals Museum and others. The National Trust also introduced Orford Ness, and IRGON presented an overview of our current research.

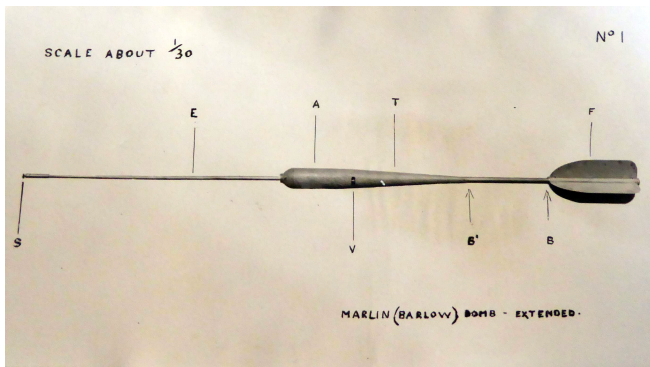


## Bouncing bombs on Orford Ness

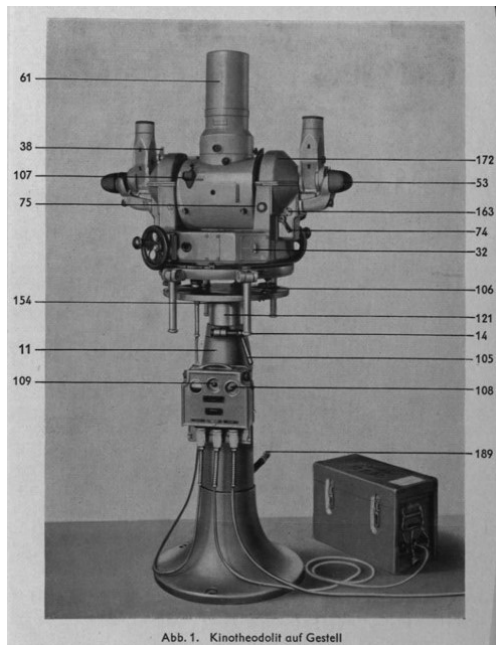
To most of us, the phrase “bouncing bombs” conjures up the massive cylinders released by the Lancasters of 617 Squadron during the famous Dambusters raid of 1943.

Interestingly, some British designs of bouncing bombs were tested on Orford Ness during World War 1.

IRGON researcher Dr. Roland Edwards is preparing a new article, covering three distinct designs of bouncing aerial bomb developed during the Great War. It will be available soon on our website [irgon.org](http://irgon.org).



*The Marlin (Marlow) Bomb*



*Frank Tanner with the Askania Kth.41 on the Ness*



## The Kine-Theodolites of Orford Ness

From the first trials in the late 1920 to the end of World War II, bomb ballistics experiments on Orford Ness required the test aircraft to fly along precisely defined “bombing lines”, so that they and the dropped charges could be followed by fixed “ground speed cameras” and the camera obscura installed along these lines Bomb Ballistics – IRGON. Shortly after the end of World War II, at least seven kine-theodolites were acquired and set up at various locations around the edges of Orford Ness. These instruments allowed long-baseline three-dimensional dynamic tracking of aircraft and their charges as they were dropped on the Ness, recording the altitude and azimuth data of the tracked object on film.

While kine-theodolites were also manufactured in the UK and elsewhere, at least some of the instruments that appeared on Orford Ness, housed in their characteristic octagonal brick shelters, were made by Askania in Germany. In an effort to understand the reasons for that choice, and to trace the potential war booty origin of the Orford Ness kine-theodolites, we contacted the Peenemünde Museum in Germany *Museum Peenemünde - The Peenemünde Historical Technical Museum*.

Well known for its activities in testing and perfecting the V-2 and V-1 weapons in World War II, the geographic coastal isolation and strict security of that site makes it the “German Orford Ness” - and we know that kine-theodolites were used for tracking their missiles.

The museum informed us that they only knew of one war booty kine-theodolite from Peenemünde ended up in the UK. This was used on the Aberporth site until 1998, when it was donated to the museum in recognition of its historic importance. While the mystery of the kine-theodolites on Orford Ness thus remains unsolved, the museum kindly sent us the complete operating instructions for the Askania Kth-41 instruments used on Orford Ness, which will be invaluable once we discover more about the instruments in Suffolk.



## Aircraft associated with Orford Ness

From 1915 until 1972, Orford Ness has seen an extraordinary range of aircraft activities. Many prototypes were test flown over the Ness before they were adopted (or rejected) by the RFC, RAF or FAA. British, German, Japanese and American aircraft were fired on with various weapons during World War II to test their resistance to battle damage. Specialised aircraft were used to release a variety of bombs and other stores for their ballistics to be investigated (including at least one captured Junkers Ju 88).

After the airfields on Orford Ness were closed in 1939, test aircraft were based at Farnborough, Martlesham Heath, Woodbridge and elsewhere, but continued using this shingle peninsula as the perfect testing ground, all the way to determining the aerodynamics of Britain's nuclear bombs in the 1950s and '60s.

Comprehensive airfield operations records from the period have now come to light that allow us to start correlating the research described in now-declassified test reports with the individual aircraft used for the purpose. We have already identified around 610 individual aircraft associated with activities on Orford Ness - and we haven't even started on major periods of history like World War I. If you are interested in following aircraft histories - join us and get involved!



*Armstrong Whitworth F.K. 10 battle damage test on Orford Ness (Crown Copyright)*



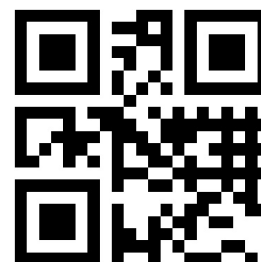
## Aircraft list

IRGON has been compiling a list of the many aircraft associated with Orford Ness. There were many types based there during the aerodrome era, and later on many different aircraft were involved on bomb ballistics and other trials. Post-war, meaningful drop tests with nuclear weapon test vehicles meant that the latest prototypes were pressed into service to achieve greater heights and speeds. Our list therefore includes exotica like the Short Sperrin VX161 and Python Lincoln RE339. The table is searchable and sortable, and will be updated as our research continues. The table can be found under <https://www.irgon.org/aircraft-armament/>

**Want to know more or join us?** – If you have an interest in military history, if you have a personal or family connection to the work carried out on Orford Ness or access to information that may help us further document this history, you will find our contact details on [www.IRGON.org](http://www.IRGON.org).

Thank you!

**Website** – Our updated website now has new articles, visit us to find the most up-to-date information and discoveries made by IRGON.



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