U.D.F. 7 x 50 blc U-boat sight for torpedo firing

By Anna and Terry Vacani

In our collection is another heavy duty binocular for U-boat.

In: 'Militärische Ferngläser und Fernrohre in Heer, Luftwaffe und Marine' book, in chapter 17th - 'Glossary and translation of frequently occurring German terms', Dr Hans Seeger explains the term D.F – Doppel-Fernrohr does mean double telescope, binoculars. After a consultation with Dr Hans Seeger the letter 'U', Dr H.Seeger says:' I think that UDF means U-Boot-Doppelfernrohr, maybe Unterwasser-Doppelfernrohr'.

The binocular is rare because it is complete: with hood and sights on the right tube. After the war not many were left complete. As far as today, we know only four another collectors, who have in their collections the complete U.D.F. 7×50 .



As the production number indicated, the binocular was produced c.1943-1945 by Carl Zeiss Jena (blc).



The binocular was built up for U-boats. It was mounted on the torpedo aiming device.



Picture 1



The picture was taken in April 1942, on U-373

Picture No 1 and 2 are from book: "Wolfpack. U-boats at war 1939-1945" b y Philip Kaplan and Jack Currie, published by Naval Institute Press, Annapolis, Maryland in 1999. The book is in our collection.

Let's look at the outside construction of the binocular.



Both sides of our binocular

As we can see in the right picture, it is a heavy brass body construction. Looking at the binocular it does not give an impression that it is very heavy, but the weight of the binocular including hoods is 6, 3 kg.

In the right picture is visible the bending bar across the binoculars' body, with micrometer adjustment for eye - width of a user.

In the same picture, on the bending bar, are visible two holes to help locate the binocular in the right position to the torpedo aimer device - look at the pictures above binoculars. The binocular was fastened to the torpedo aimer and the target's bearing was then automatically transmitted below to the conning tower.

The hoods have the covers fitted to the tubes with hinges. When binocular is in used, the covers can be clipped back on the top of the hoods.



Picture of our binocular

Other kinds of clips are integral with rubber eyecups. Both kinds of the clips are very well designed for using the binocular on the sea without any distraction.

The rubber eyecups shape excludes all distracting light from reflecting eyepiece. The eyecups have a unique element – the holes to prevent condensation.

The same design of rubber eyecups has the 7 x 50 H for signalling lamp.



Picture of our binocular

The sights are made from plated steel varnished with shellac. The fore and aft sights are radiant painted.



Picture of our binocular

The binoculars' reticule is round with a black horizontal line.



The reticule in our U.D.F. visible in the picture below

The illumination mechanism of reticule is exceptional.



The mechanism under the right hand top plate

The illumination is emitted from the ring, partly painted with a radiant paint.



The pictures from Dr Hans Seeger book (mentioned above) taken by Terry Vacani

At that time in the German army were applied two illumination sources: incandescent lamps and radiant paint. The radiant paint is loosing luminosity after fifteen to twenty years of manufacturing. The adjustment lever of the illumination mechanism is on the right plate of the binoculars.



The external lever of the illumination mechanism

The word 'Hell' means bright, and 'Dunkel' – dark. The external mounted lever turns a shaft with a gear on the end that engages with another gear to rotate the painted ring.



The optics is fully coated. The binocular has fixed focus. If it is out of focus it is not possible to adjust without dismantling of the binocular. This service is nearly impossible without some damages, as the body is sealed.

The prisms are Porro II.

After the war U.D.F. binoculars were not popular, it was difficult to use as handheld binocular because of the weight. But it was often advertised, in shops catalogues as 'Zeiss battleship model binoculars', in London by 'Headquarter and General Supplies Limited' and in Scotland' by 'Charles Frank Glasgow'.



Picture of the catalogue from c.1955 from our collection

In 1970s still for sale for the same price:



We hope this short article will increase your knowledge about this binocular.