

Co-operation with SWERA - Badewanne Diving Exploration Team

- Exploring and documenting the wrecks of World Wars in the Gulf of Finland



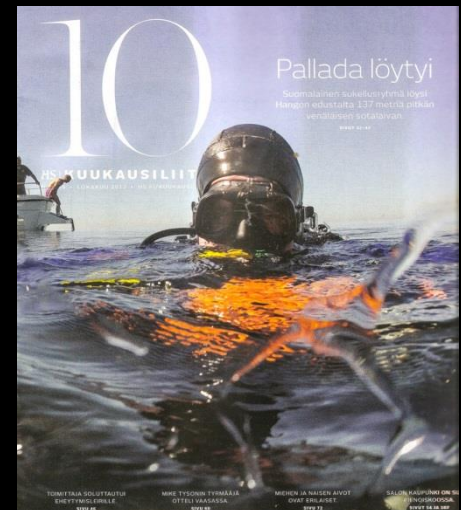
Who/what is Badewanne

- A Finnish group of voluntary divers that has explored shipwrecks in the Gulf of Finland for 20 years
- Amateurs, everybody have their normal daily jobs
 - Exploration funded by everybody's daily jobs as a freetime hobby
- A multitallented team with a broad skill set
 - Video & Still photography
 - Drawing & 3D modelling
 - Engineering (lights, sonar, electronics)
 - Biology and environmental sciences, marine research



Our Aim: High quality documents for the broad public, data for researchers

- For over 20 years we have been locating, exploring and documenting war wrecks in the Gulf of Finland
- The work has amounted lots of photographs combined with historical background material, 3D models, drawings and more





Documentary "Nazi Sunken Sub"

- Submarine war on Gulf of Finland on early 1945
- German U-boats *U-745*, *U-676*, Finnish mineship *Louhi*



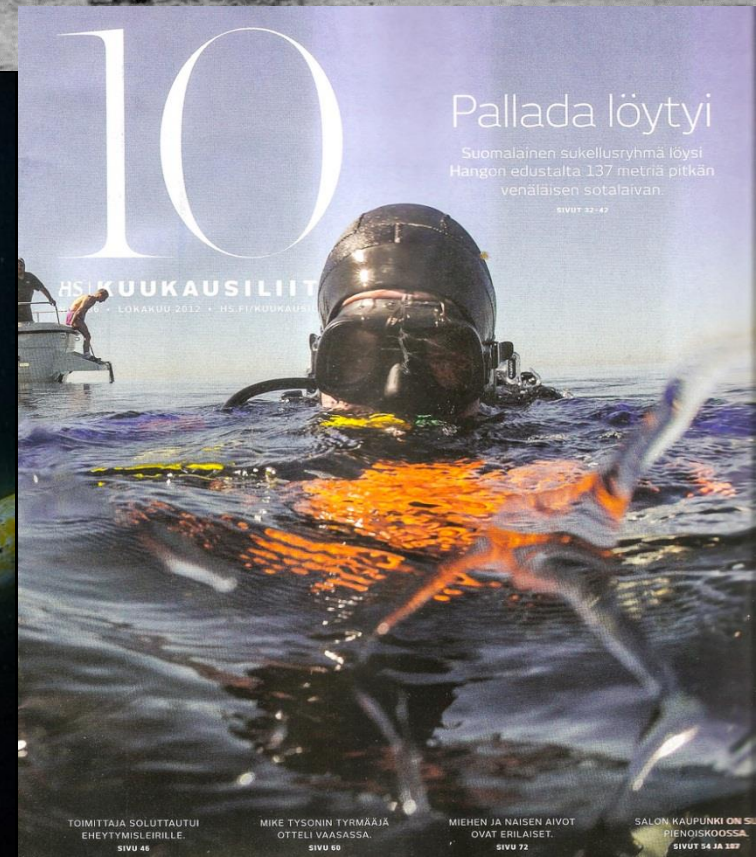
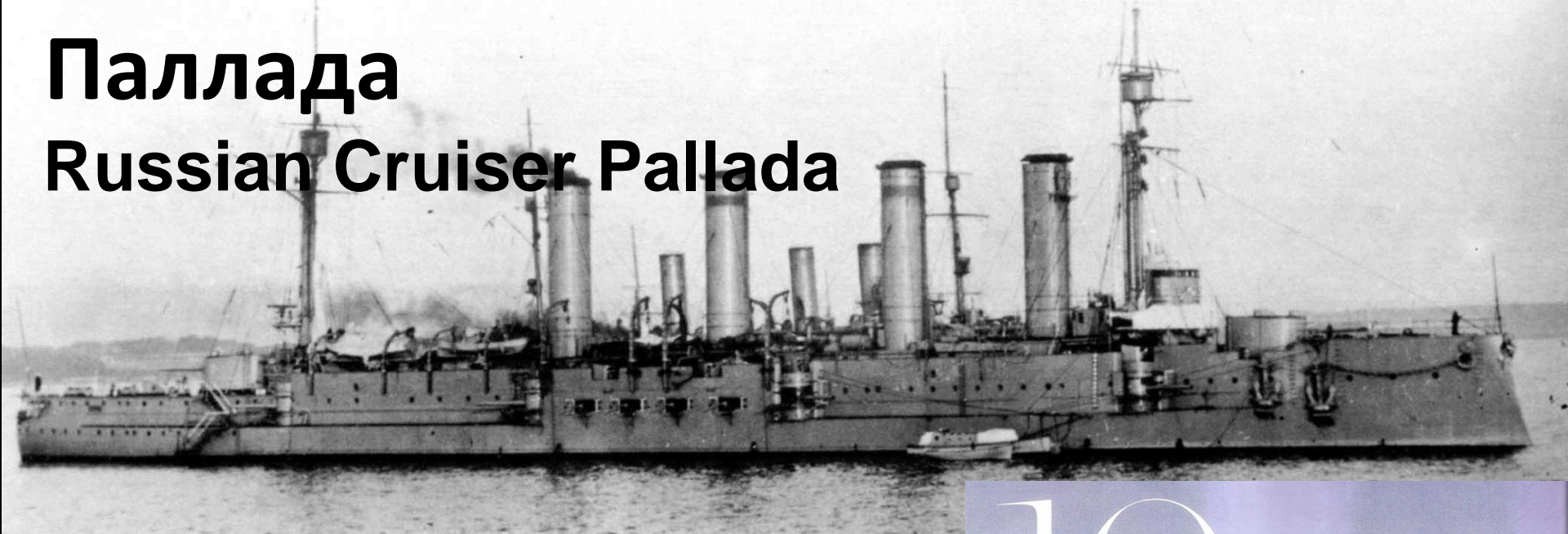
U 676



U 475

Паллада

Russian Cruiser Pallada



**Pallada was sunk by German submarine U26 on 11th Oct. 1914
Located by Badewanne team on 2000, published on 2012
Off Hanko, Gulf of Finland**



Soviet submarine wrecks, Several from WWII



"Mystery Ship"

Sloop of war from late 18th century



Location: Off Helsinki
Depth: 60m
Identity: unknown, possibly British origin



German destroyers Z35 and Z36

Off Porkkala, Gulf of Finland

Sunk 12th of Dec. -1944

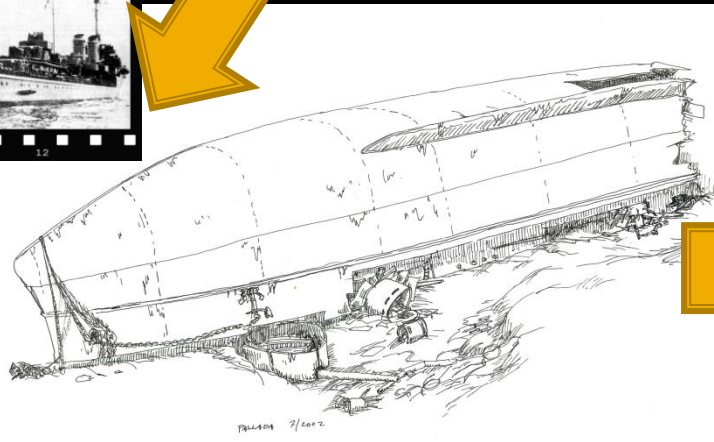
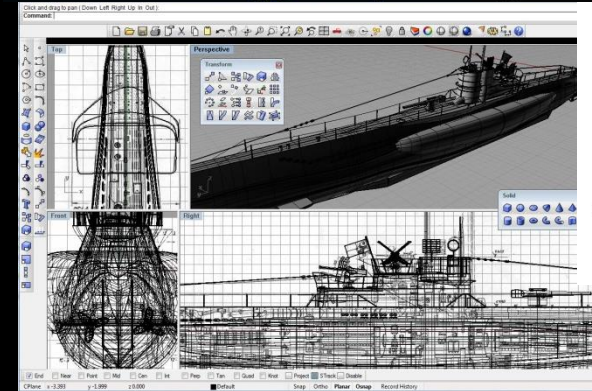
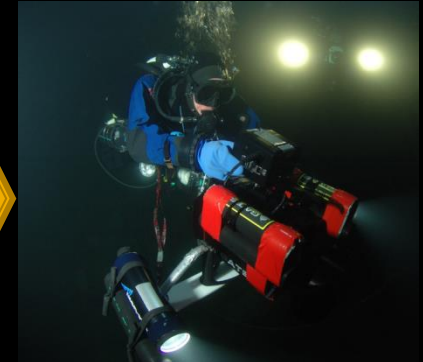
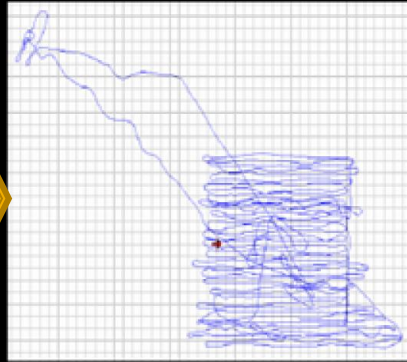
Navigation error, own German minefield

Depth 70 meters

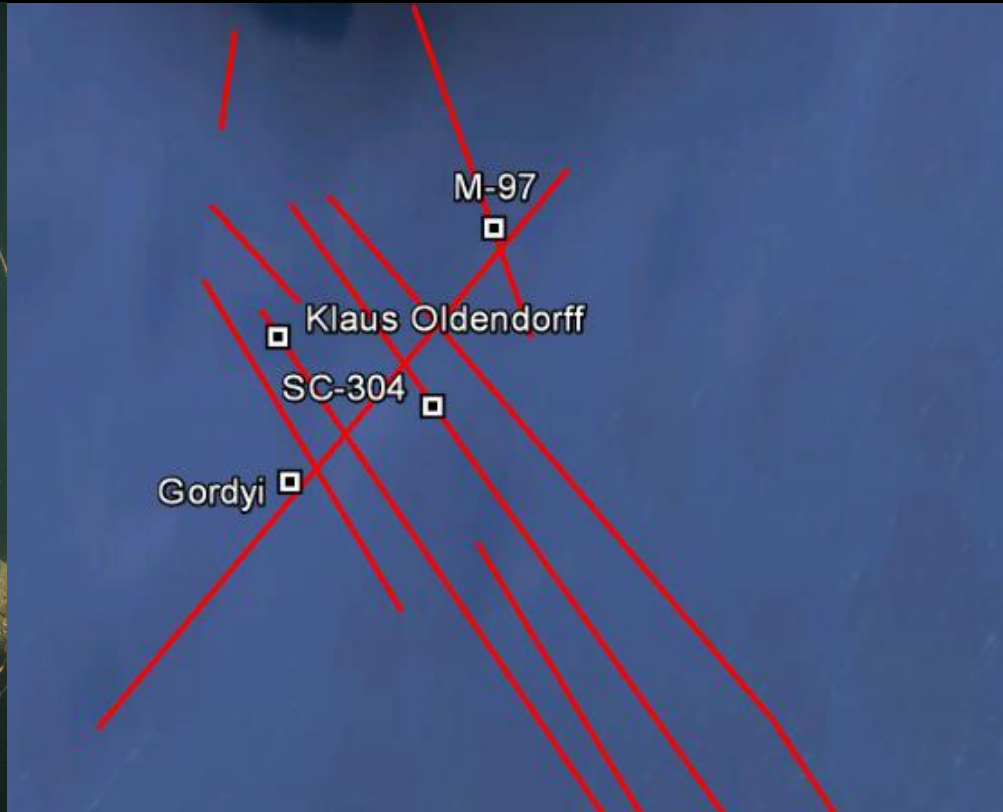


The documentation "process"

Time	Alt	Significant	Time	Alt	Significant
11:00	110	1. The first dive was made at 11:00. The diver found a large number of small objects, mostly metal, and a few pieces of wood. The objects were scattered over a large area, and the diver was unable to collect them all. The objects were mostly small, and the diver was unable to collect them all. The objects were mostly small, and the diver was unable to collect them all.	11:00	110	1. The first dive was made at 11:00. The diver found a large number of small objects, mostly metal, and a few pieces of wood. The objects were scattered over a large area, and the diver was unable to collect them all. The objects were mostly small, and the diver was unable to collect them all.
11:05	110	2. The second dive was made at 11:05. The diver found a large number of small objects, mostly metal, and a few pieces of wood. The objects were scattered over a large area, and the diver was unable to collect them all. The objects were mostly small, and the diver was unable to collect them all.	11:05	110	2. The second dive was made at 11:05. The diver found a large number of small objects, mostly metal, and a few pieces of wood. The objects were scattered over a large area, and the diver was unable to collect them all. The objects were mostly small, and the diver was unable to collect them all.
11:10	110	3. The third dive was made at 11:10. The diver found a large number of small objects, mostly metal, and a few pieces of wood. The objects were scattered over a large area, and the diver was unable to collect them all. The objects were mostly small, and the diver was unable to collect them all.	11:10	110	3. The third dive was made at 11:10. The diver found a large number of small objects, mostly metal, and a few pieces of wood. The objects were scattered over a large area, and the diver was unable to collect them all. The objects were mostly small, and the diver was unable to collect them all.
11:15	110	4. The fourth dive was made at 11:15. The diver found a large number of small objects, mostly metal, and a few pieces of wood. The objects were scattered over a large area, and the diver was unable to collect them all. The objects were mostly small, and the diver was unable to collect them all.	11:15	110	4. The fourth dive was made at 11:15. The diver found a large number of small objects, mostly metal, and a few pieces of wood. The objects were scattered over a large area, and the diver was unable to collect them all. The objects were mostly small, and the diver was unable to collect them all.
11:20	110	5. The fifth dive was made at 11:20. The diver found a large number of small objects, mostly metal, and a few pieces of wood. The objects were scattered over a large area, and the diver was unable to collect them all. The objects were mostly small, and the diver was unable to collect them all.	11:20	110	5. The fifth dive was made at 11:20. The diver found a large number of small objects, mostly metal, and a few pieces of wood. The objects were scattered over a large area, and the diver was unable to collect them all. The objects were mostly small, and the diver was unable to collect them all.
11:25	110	6. The sixth dive was made at 11:25. The diver found a large number of small objects, mostly metal, and a few pieces of wood. The objects were scattered over a large area, and the diver was unable to collect them all. The objects were mostly small, and the diver was unable to collect them all.	11:25	110	6. The sixth dive was made at 11:25. The diver found a large number of small objects, mostly metal, and a few pieces of wood. The objects were scattered over a large area, and the diver was unable to collect them all. The objects were mostly small, and the diver was unable to collect them all.
11:30	110	7. The seventh dive was made at 11:30. The diver found a large number of small objects, mostly metal, and a few pieces of wood. The objects were scattered over a large area, and the diver was unable to collect them all. The objects were mostly small, and the diver was unable to collect them all.	11:30	110	7. The seventh dive was made at 11:30. The diver found a large number of small objects, mostly metal, and a few pieces of wood. The objects were scattered over a large area, and the diver was unable to collect them all. The objects were mostly small, and the diver was unable to collect them all.
11:35	110	8. The eighth dive was made at 11:35. The diver found a large number of small objects, mostly metal, and a few pieces of wood. The objects were scattered over a large area, and the diver was unable to collect them all. The objects were mostly small, and the diver was unable to collect them all.	11:35	110	8. The eighth dive was made at 11:35. The diver found a large number of small objects, mostly metal, and a few pieces of wood. The objects were scattered over a large area, and the diver was unable to collect them all. The objects were mostly small, and the diver was unable to collect them all.
11:40	110	9. The ninth dive was made at 11:40. The diver found a large number of small objects, mostly metal, and a few pieces of wood. The objects were scattered over a large area, and the diver was unable to collect them all. The objects were mostly small, and the diver was unable to collect them all.	11:40	110	9. The ninth dive was made at 11:40. The diver found a large number of small objects, mostly metal, and a few pieces of wood. The objects were scattered over a large area, and the diver was unable to collect them all. The objects were mostly small, and the diver was unable to collect them all.
11:45	110	10. The tenth dive was made at 11:45. The diver found a large number of small objects, mostly metal, and a few pieces of wood. The objects were scattered over a large area, and the diver was unable to collect them all. The objects were mostly small, and the diver was unable to collect them all.	11:45	110	10. The tenth dive was made at 11:45. The diver found a large number of small objects, mostly metal, and a few pieces of wood. The objects were scattered over a large area, and the diver was unable to collect them all. The objects were mostly small, and the diver was unable to collect them all.



Many of the war wrecks in Gulf of Finland where sunk by mines



Find the mines and you find the wrecks...

"I think it's a little to the right..."



Philosophy and training

- Avoid complacency
- Avoid distraction Be a disciplined diver.
- Be a thinking diver not just a reactionary diver.
- Always know your PO_2 .
- Do not be cheap
- Dive the CCR regularly
- Assume that any mechanical or electrical device will fail
- Accept that all emergencies that are discussed and taught during training will happen eventually on any CCR
- Do not start dives with a known system failure
- **Giving consideration to the above, CCR is by far safer than any other form of diving.**

Equipment of choice JJ-CCR

- eCCR, since 2006
- CE according to EN 14143:2013
40m, 4°C, 1,6L CO₂, 40L/min = 180min
- Shearwater Petrel controller, HUD
- Clean chest
- Back plate harness
- No "auto pilot function"
- Diver controlled unit



JJ-CCR

- Simple, robust, and reliable
- Stainless steel, delrin and high grade aluminium
- Flexible
- Travel friendly



Current Research Topics WW I

- **Documenting located wrecks**
 - Documenting mineship Yenisey (sunk by U26), on Estonia
 - Documenting destroyer Kazanets (mined by UC27 mines), on Estonia
 - Documenting wrecks on the minefield laid by “Deutschland” 17.8.1914 (2 Dutch merchants, 3 Russian sweepers)
- **Documenting German U 26 (sank Pallada, Yenisei, Petshora, Fråck)**
 - Badewanne team discovered SM U 26 off Hanko on Russian WWI minefield on May 2014
 - U 26 wreck need to be still documented further
- **Search for German UC 57**
 - Lost after 17.11.1917 somewhere in the Gulf of Finland
- **Search for the seven lost destroyers of the German X. TorpedobooteFlotille**
 - Seven class V25 destroyers lost 10./11.11. 1916 on a raid to Baltischport (Paldisky) of Dagerort on the mines of the “Forward Position”-field. Approximate positions known.



Russian archives & sources vital for the research

Current Research Topics WW II

■ Submarine warfare

- Soviet submarines on GoF on 1941 ... 1943 (several boats still missing, SC301 probably located but not documented)
- German submarines on GoF on 1944 ... 1945 (Documenting U479, search for U679)
- Finnish & Russian surface vessels sunk by German U-boats on autumn 1944
- Soviet antisubmarine operations on autumn 1944

Russian archives & sources vital for the research

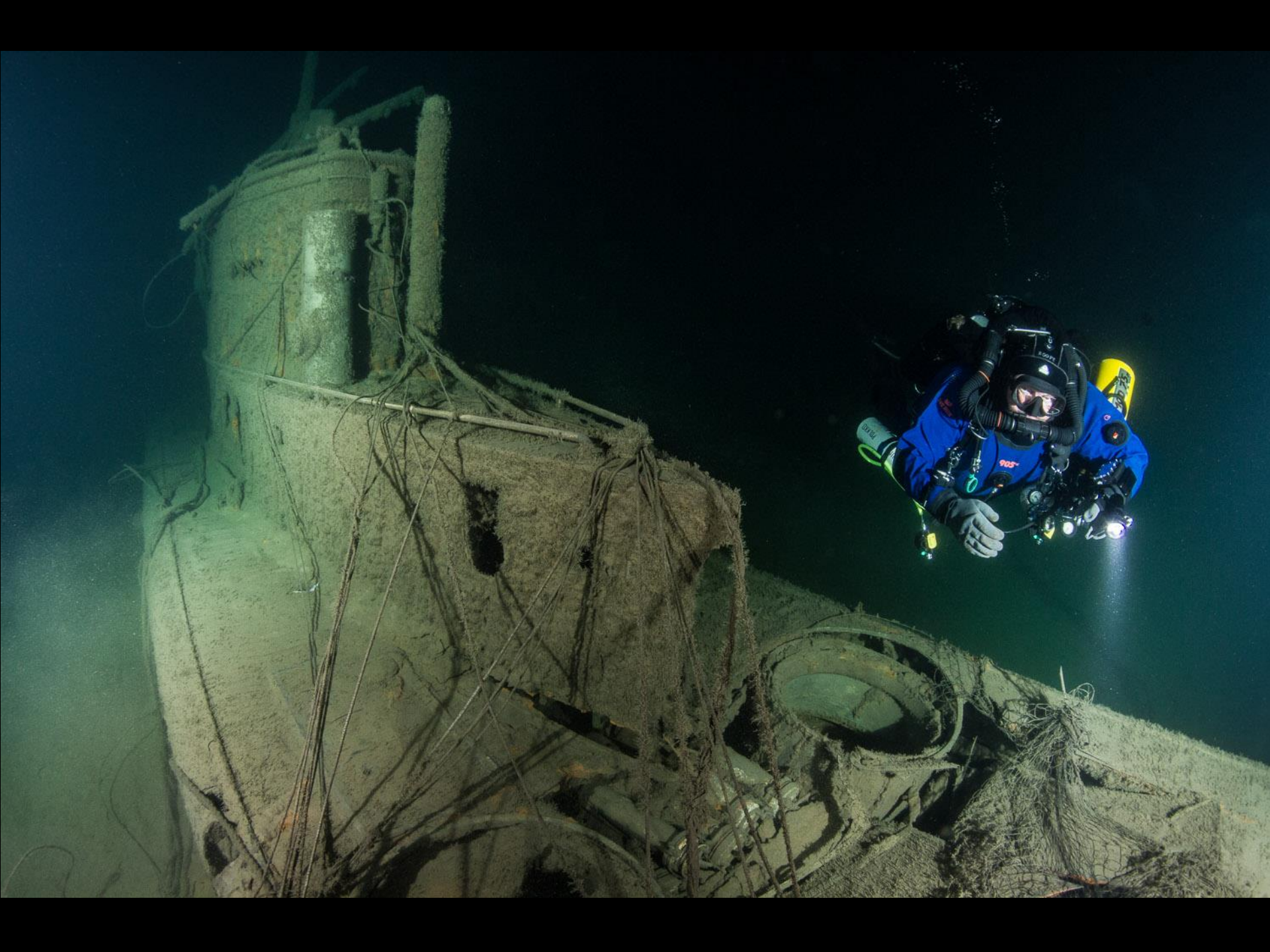
An underwater photograph of a shipwreck, likely a cargo ship, lying on its side. The hull is visible, showing some markings and structural details. The water is dark and murky, with some light reflecting off the ship's surface. The text "Some highlights from the seasons 2014 - 2015" is overlaid in a bright yellow font.

Some highlights from the
seasons 2014 - 2015

German submarine SM U 26

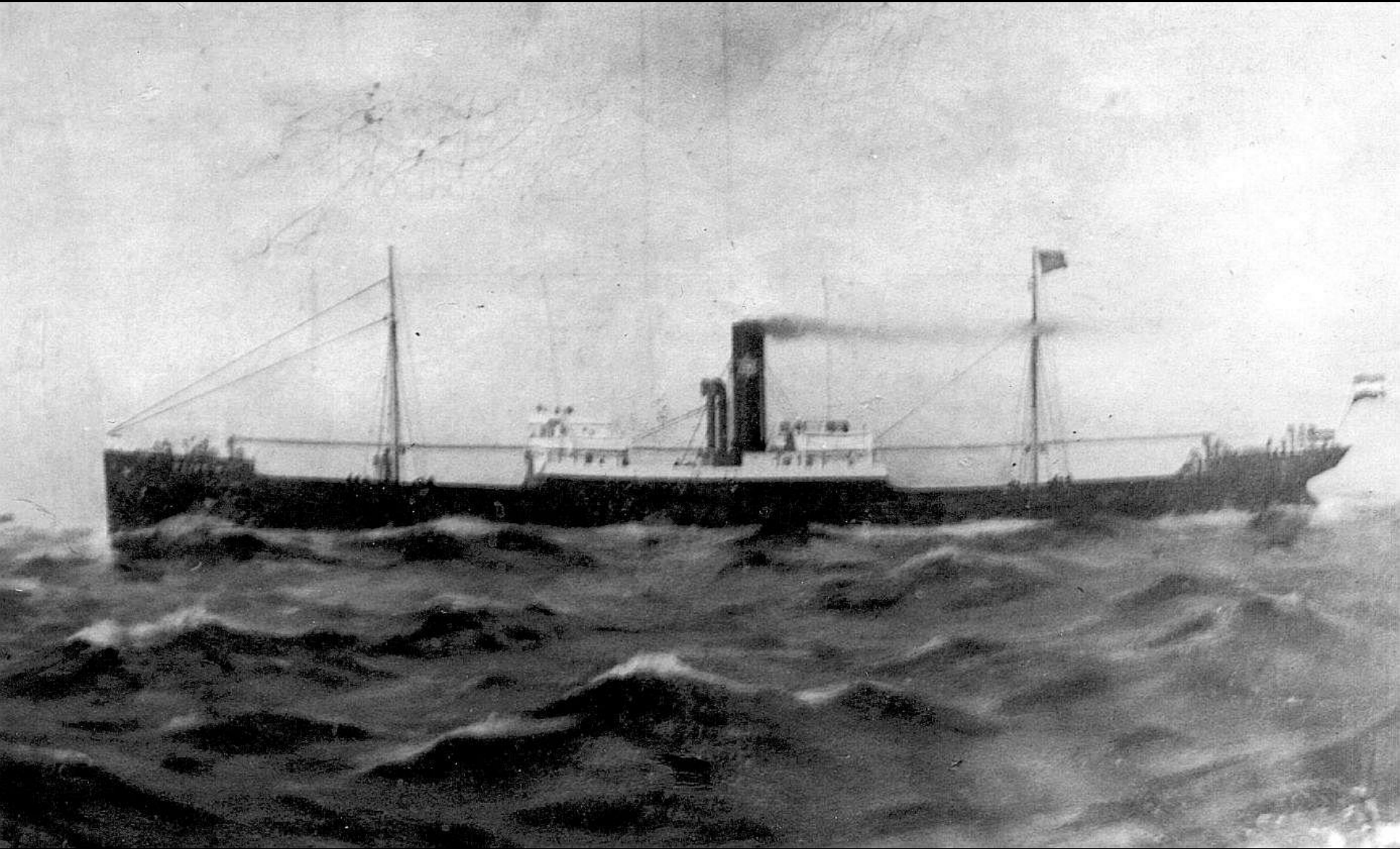






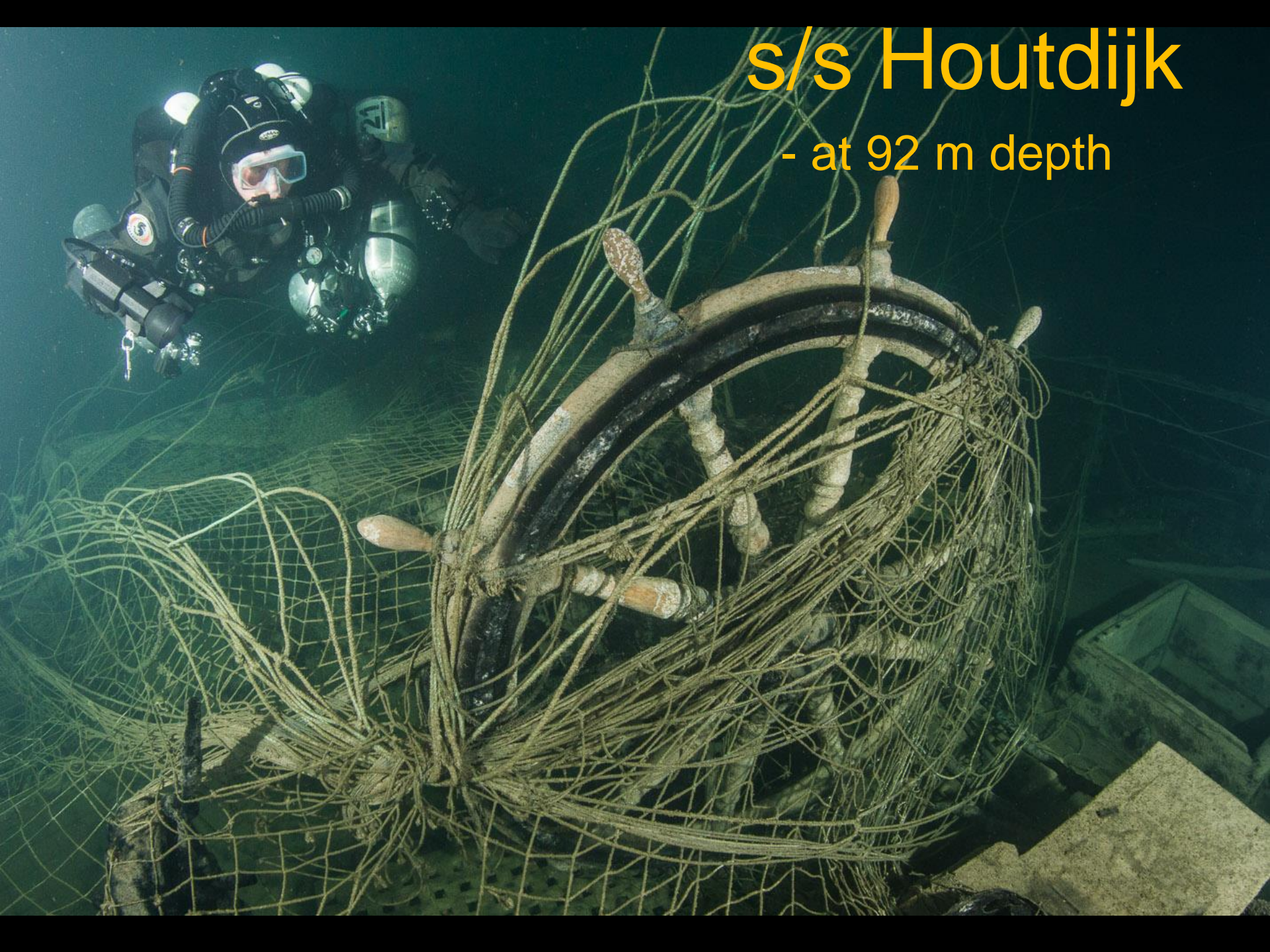
Dutch steamers Alice H. And Houtdijk

- The first victims of the WW I in the Gulf of Finland



s/s Houtdijk

- at 92 m depth



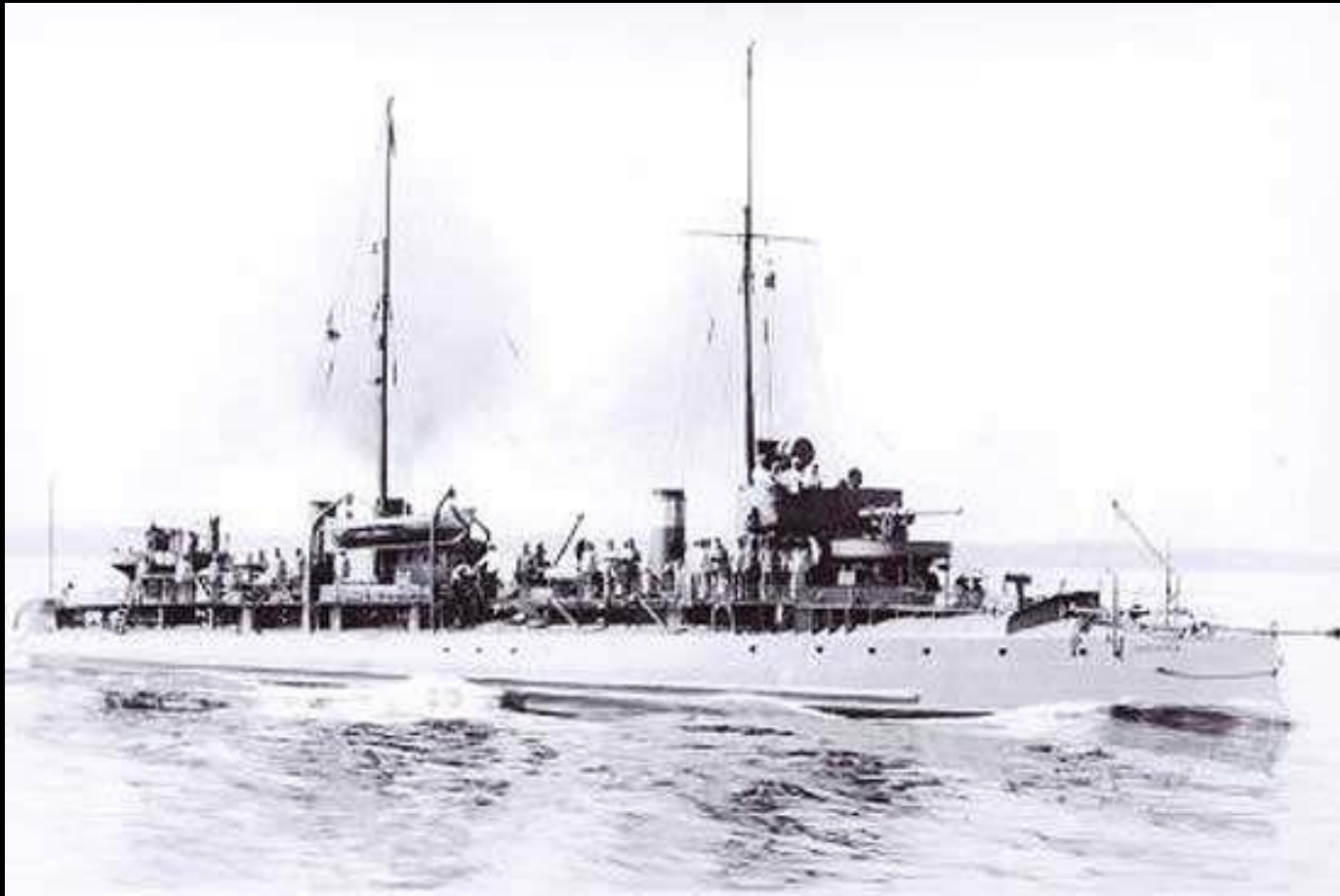


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Ispolnitelnyi (Исполнительный) and Letutshi (Летучий)

- Russian WWI destroyers lost in storm Dec. 1914
Leutenant Burakov 1905 class



Ispolnitelnyi

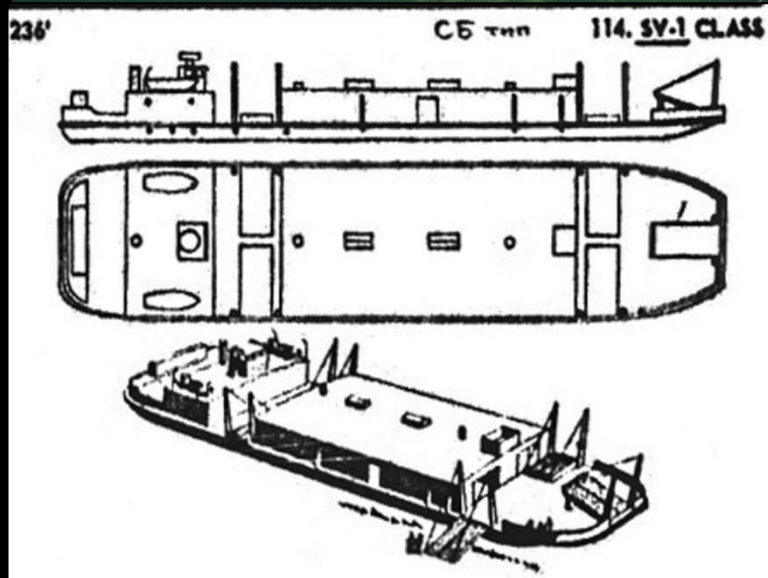






Soviet SB-2 (CB -2), amphibious assault craft

- Sunk by German U-958 Oct. 1944

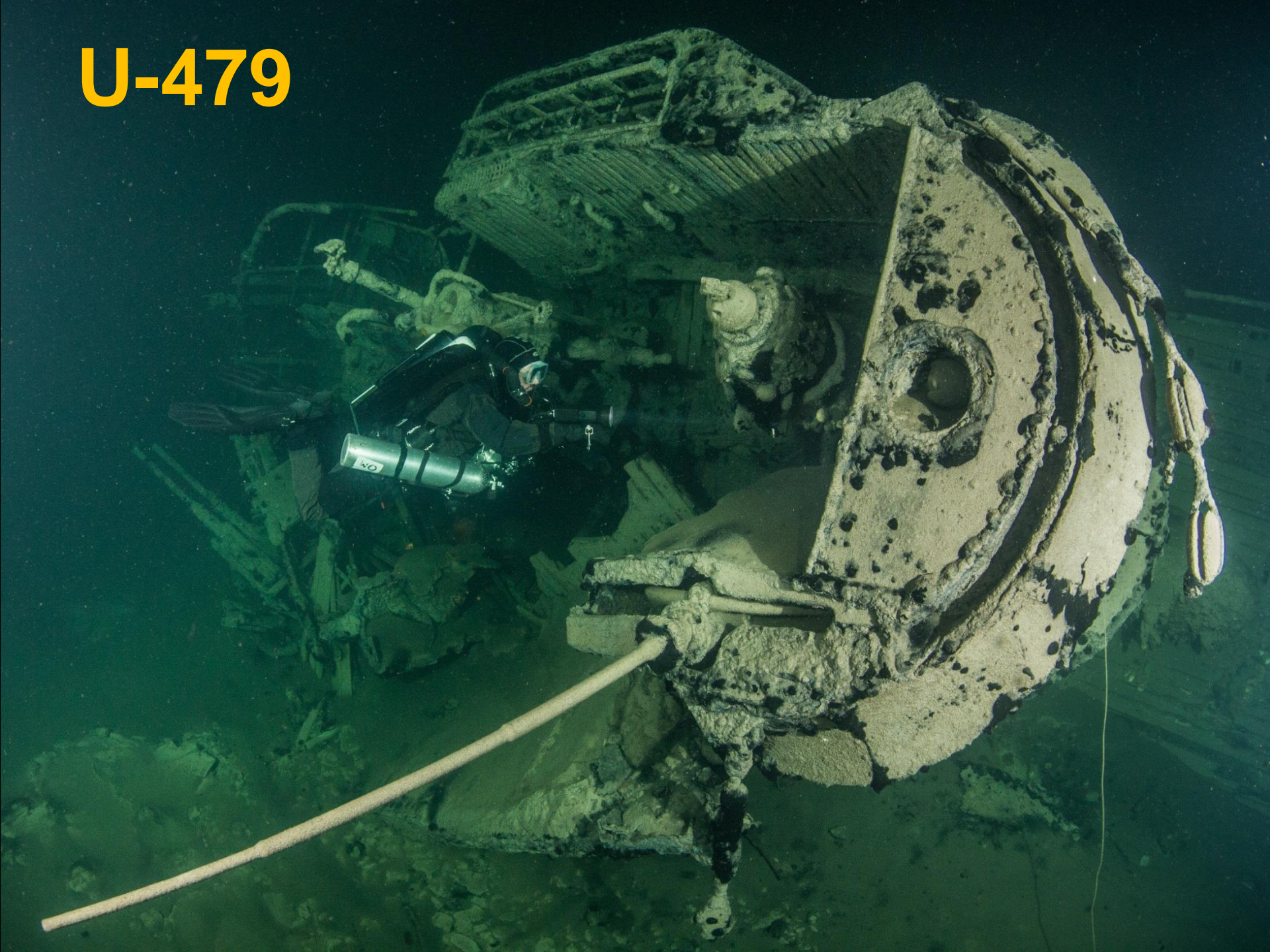


U-479

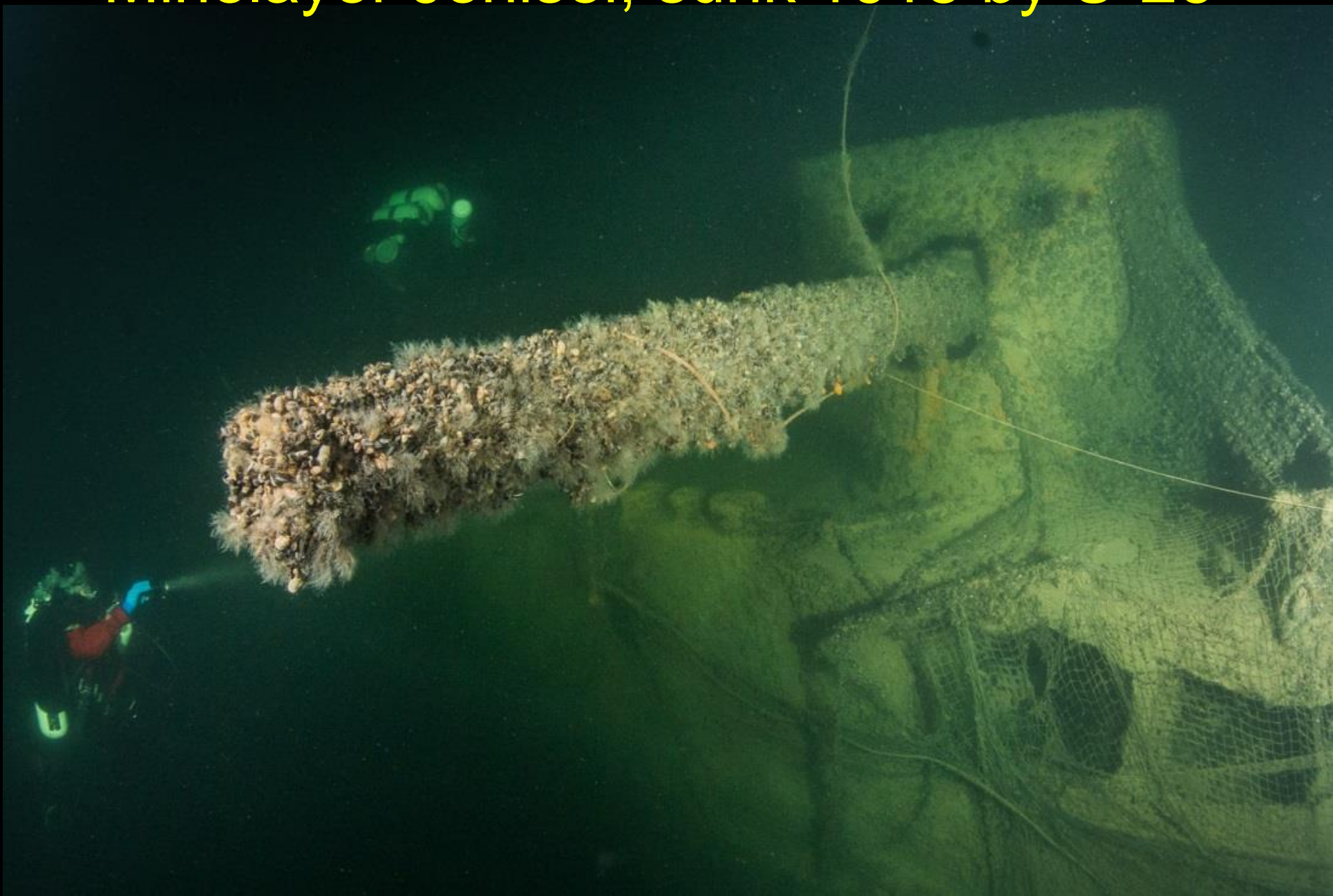


- 3,7cm FlaK Rheinmetall-Borsig (RmB) M42
- Twin 2cm guns, "Zwilling", RmB (in the background)

U-479

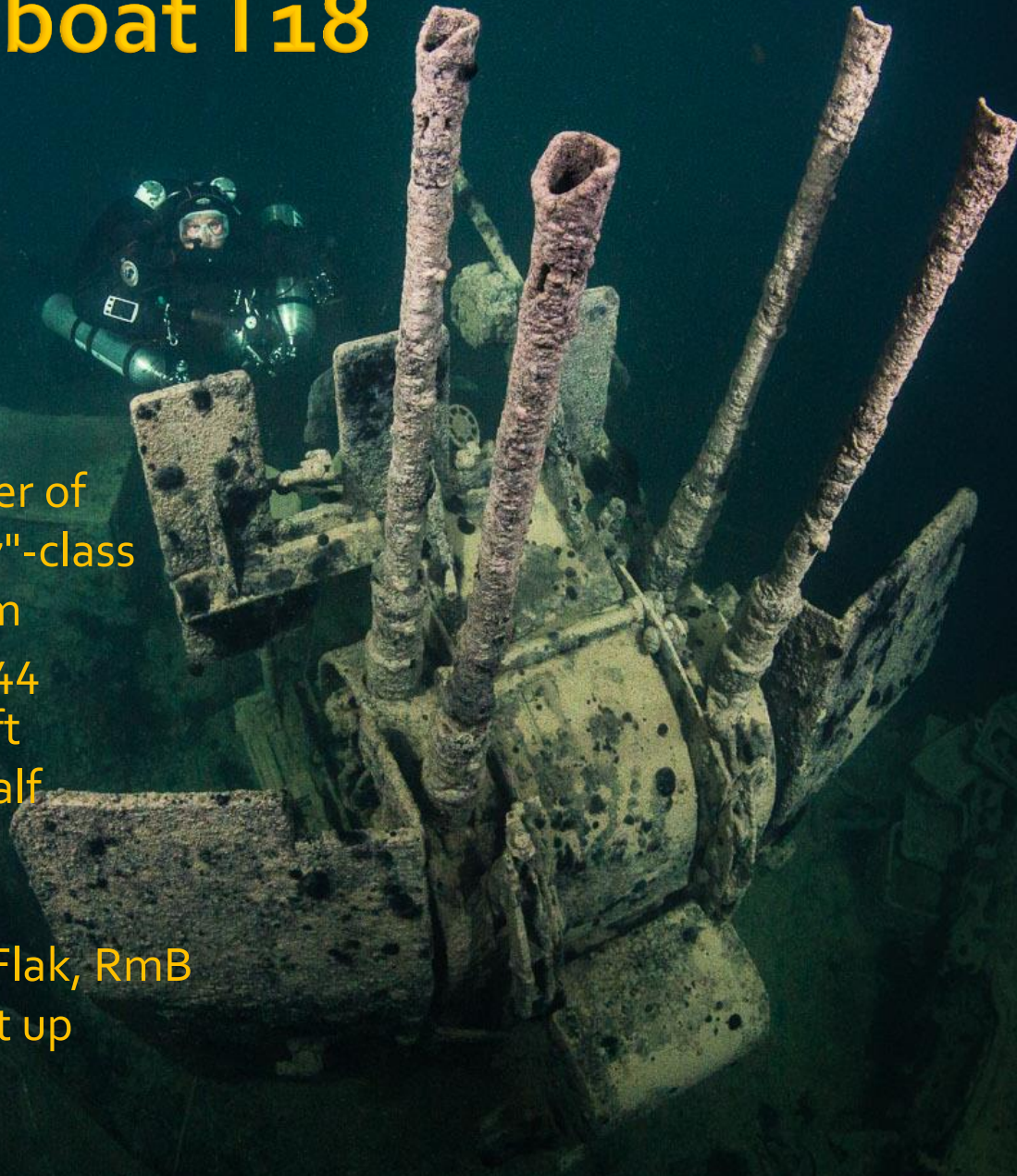


Minelayer Jenisei, sunk 1915 by U-26



Torpedo boat T18

- 900 ton destroyer of "torpedoboot 37"-class
- Size 85,2 x 8,87m
- Sunk 17 Sept 1944
By Soviet aircraft
- Lies broken in half
- Estonian waters
- 100m depth
- 2 cm "Vierling" Flak, RmB pointing straight up



Torpedo boat T18



• 1 × 105 mm L/45 C/34, RmB

Schnellboot S-106

- 35m long
- Made of wood!
- 2 × 53.3 cm torpedo tubes
- 1 × 20 mm gun, RmB
- 1 × 40 mm gun, Bofors
- Located 2015
- 80m
- Worlds best preserved?!
- MG 34, 7,9mm



Schnellboot S-106



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