

The Jutland WWI memorial

Dive for Peace expedition
for safeguarding the underwater cultural
heritage of the First World War



CMAS

CONFÉDÉRATION MONDIALE
DES ACTIVITÉS SUBAQUATIQUES

WORLD UNDERWATER FEDERATION

The wrecks of Jutland

Jutland



In the North Sea, about 70 miles westwards from the harbor Thyborøn (NW Denmark), there are resting a lot of wrecks on the seabed. What happened? In 1916 the biggest sea battle ever in history of mankind took place in that region. It was a very important battle and probably the result of this encounter influenced in a strong way the outcome of World War I. It's clear that two parties were in combat at that moment; the British fleet and the German fleet. We give hereby a short overview of what happened but even today it's hard to tell who won this battle? The conclusion however is clear that on both sides the losses were enormous; as well the losses of lives of seamen as the amount of ships that was brought to sink. It's also clear that Britain has nominative spoken the biggest losses, but Germany didn't reach their strategic goal. Indeed; difficult to say who won this very important battle! Britain? Germany? Nobody? This is an entertaining subject for a discussion! But judge yourself when going through this brochure!

History of the battle of Jutland

Prehistory

For having a clear idea about the battle of Jutland, also called the battle of Skagerrak, we have to go back till May 31th and June 1st of the year 1916 – just in the middle of World War I. Britain blocked the harbors of Germany to prevent the German to get supplies. Germany wanted to break through this blockade but they also knew that if this action ends in a battle on sea, between the two fleets, they would for sure lose. Therefor the Germans came with the plan to fake an outbreak. This would for sure be followed by a reaction of the British fleet (their ships were faster than the Germans). While the fast battle ships moved towards the faked outbreak, German dive boats are posted along the attack line of the British ships. But it was a fact that Britain could intercept these plans and therefor Britain send a bigger fleet with a lot more cruisers in the direction of the German fleet. Also, Britain was much more faster at the spot and ready to attack, than the Germans expected. The result of this quick action was that the German dive boats were not in position at the moment both sides stood in front of each other.

The start of the fight

On 31st May of the year 1916 the commander Reinhard Scheer sailed Northwards with his German fleet, consisting of 22 battle ships (6 of

them pre-dreadnoughts), 5 battle cruisers, 11 lighter battle cruisers 61 torpedo boats. The German fleet left the harbor of Wilhelmshaven. They came in the operating zone of the British fleet. The British 'Grand Fleet' was under command of John R. Jellicoe, coming from the West. The encounter between the two fleets took place at Skagerrak at the West coast of Denmark. The British fleet was superior in number. There fleet consisted of 28 battle ships, 9 battle cruisers, 8 armored ships, 26 light cruisers, 77 torpedo hunters and 3 commander ships. The maximum caliber of the German guns was 305 mm and smaller than the British gun caliber (maximum 381 mm). The German ships were better armored and they had more precise optical distance measuring systems. Also the German ships were better positioned in separated zones and this resulted in less vulnerable stores of their munition.

The battle started at 13:45 hours between the battle cruisers of both sides because they were ahead of the rest of the battle ships due to their higher speed. The Germans (under command of Franz von Hipper) tried to lure the British fleet (under command of David Beatty) and to convince them to take the direction towards the German main fleet. And indeed; Beatty followed instantly and a huge fight exploded between the two warring parties. The distance between the two fleets varied between 9.000 meter and 15.000 meter.

The British convoy, clearly visible amongst the Western sky, became an easy target for the Germans. On the contrary the British warriors couldn't get a clear view on the German fleet due to low hanging fog and due to the better opposite position of the German fleet. The German ships were relative safe and they hit in a heavy way the British battle cruiser 'Tiger' and 'Lion'. A while later the British 'Indefatigable' was also heavily hit and exploded. The result: 1.015 officers and soldiers died! Only 2 sailors survived this attack. At that moment 4 fast British battle ships of the 'Queen Elisabeth class' arrived on the scene. A 381

mm grenade was launched by the 'Barham' from a distance of 17,000 meters and penetrated the armor-plate of the 'Von der Tann'. Due to the adequate actions of the Germans the ship could be protected from sinking. At 4:26 hours the British battle cruiser 'Queen Mary' was hit and exploded. Only 9 seamen from the 1,275 survived this attack. When the German main fleet joined the fighting battle cruisers (it was about 4:50 hours), Beatty changed his course into a more Northern direction.

But also the German ships and especially the battle cruisers who were fighting from the start of the sea battle, got heavily damaged. At around 18:00 hours almost all the cannons of the 'Von der Tann' were taken out. The 'Seydlitz' was on fire and took water, the 'Derfflinger' and the 'Lutzow' were also heavily damaged. At 18:31 hours a salvo from the heavily damaged 'Derfflinger' hit the British battle cruiser 'Invincible' and 'the mother of all battle cruisers' exploded and sunk. From the 1,037 men on board, only 6 were picked up and survived.

The withdrawal

The British domination was nevertheless overwhelming and Scheer attempted, with tactical maneuvers, to escape from the British pressure. He made a wide circular movement and went in the Northern direction. He took also further steps to support the sinking ships 'Wiesbaden' and 'Lutzow'. At a certain moment the forefront of the German fleet came under fire of 33 British 'Dreadnoughts' and Scheer, under protection of a final attack of his heavily damaged battle cruisers

and supported by his torpedo boats, had to withdraw. Around 19:30 hours the main battle was over. Till the morning of 1st July, there were still rear guard battles going on between the lighter vessels of both sides. In the night the German pre-dreadnaught 'Pommern' was hit by a torpedo and exploded. None of the 844 crew members survived. The heavily damaged battle cruiser 'Lutzow' was declared as lost and after taking the crew on board of other German ships, the 'Pommern' was sunk at 1:45 hours by German fire. The other ships could, sometimes with a huge effort, reach the harbors.

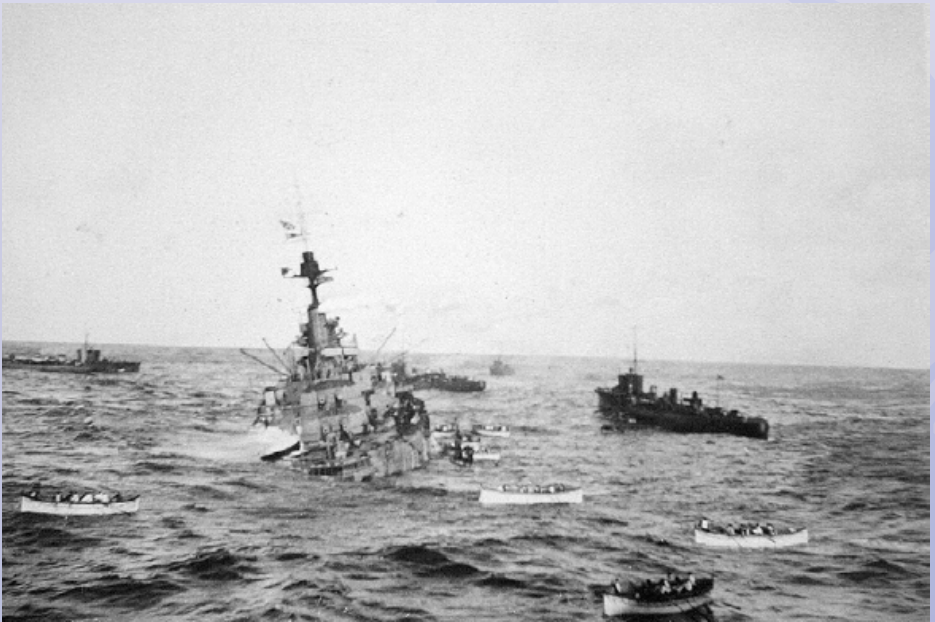
Balance

The British losses (6.094 casualties and 115.025 tons of battle ships: 3 battle cruisers, 3 cruisers and 8 destroyers) were more significant than the German losses (2.551 casualties and 60.180 tons of battle ships: 1 battle cruiser, 1 pre-dreadnaught, 4 cruisers and 4 destroyers). The Germans fired 3.597 heavy shells and 120 of them reached their target (3.33 %), while the British guns fired 4.598 shells whereby only 100 of them reached their target (2.17%). The roaring of the heavy canons could be heard even in Friesland at the coast of the Netherlands.

In the strategic setup nothing changed. The British superiority at sea stays untouched and the German fleet never risked again such an outbreak. The British commander Jellicoe kept saying that he got the best out of that situation, although there were technical and tactical shortcomings to notice. A lot of maritime experts in uncountable discussions after the battle, seems to agree with this theorem. Indeed the blockade against Germany stays intact and that was the final goal. The British public opinion on the other hand was one of

disappointment, because it was since the battle in Travalgar in 1805 that the British army was really successful and the British people needed desperately an enormous success to push up the moral of the fighting soldiers, especially since the dramatic situation at the Western front. This was clearly not the case and that was the reason that the Germans claimed a tactical success out of this sea battle.

The downfall of the British battle cruisers was in the first place due to the light armor of their ships and the careless handling while loading and manipulating their ammunition.



The dive expedition in 2016

Experience in supporting dive expeditions

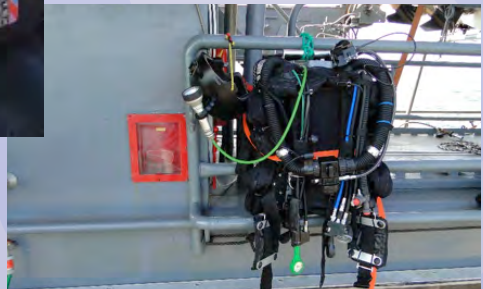
The organization of the Jutland expedition 2016 has indeed a lot of experience in setting up and realizing dive expeditions all over the world. Even the specific experience of establishing dive expeditions at the wrecks of Jutland can be offered and is of a great importance to organize in a correct way the trip in 2016. We can realize this expedition in the best circumstances and conditions possible because we can offer the divers the support and comfort of the dive vessel Cdt. Fourcault.



The Cdt. Fourcault – our dive vessel.
The Cdt. Fourcault's home harbor is Antwerp.



Captain and owner of the boat, Pim De Rhooes, will support this expedition with all the facilities the Cdt. Fourcault has on board and that's a lot. Pim knows perfect what divers need because he is himself a technical rebreather diver. Here after follows a brief overview of the facilities on board of his ship.



1. The dive deck

Were ever possible (most around the chimney) Pim welded bars to place the rebreathers or the twinsets at a comfortable height. During sailing or in rough weather, all the twinsets and rebreathers are secured by ratchet straps. Before jumping into the water, the diver simply has to stand before his gear and fasten the carrying straps. Easy and comfortable!

There is space enough on the dive deck to prepare all the divers together (about 30 technical divers).

2. The recuperation of the divers

Of course, it's impossible to climb on board of this ship with all the gear a technical diver wears. Also, after a deep and long dive, all exercises must be avoided! Well, there is a nice solution available on board. When the diver surfaces, he gives a sign that he wanted to be picked up. The RIB arrives near the diver as soon as possible. At the back of the RIB there is a surfboard mounted. The diver climbs, with the help of the crew of the RIB, on that board and when on place, the RIB tows him to the Cdt. Fourcault. When arriving in the front of the Cdt. Fourcault the diver jumps of the board and the RIB leaves to pick up the next diver. In the meantime the crew on board levers a cage into the water by means of one of the hydraulic cranes on board. The diver swims into the cage and the crane pulls the diver out of the water and brings him on board. The diver goes out of the cage. Stages and fins are put off by the helping crew. The diver can walk directly to the shower on deck and after a quick rinse, he can install his rebreather or twinset on the bars.





3. What about camera's and scooters?

Before preparing for the dive, the camera's and scooters can be hand over to the crew of the RIB. They will load everything the diver needs into the RIB and after that the RIB will be placed off board by the hydraulic crane. The crew brings the gear to the diver at the shotline. It's important to label the gear.

4. Safety precautions

Besides the adapted safety procedures, the Cdt. Fourcault has two important safety resources: a decompression chamber and a helicopter.

The deco chamber allows doctors to enter the chamber via a separate sluice so that they can in an effective way, support the person that needs a treatment while under pressure. When diving operations are going on, there is all the time a qualified deco chamber operator standby. When necessary he can contact a hyperbaric doctor or in most cases there is a hyperbaric doctor on board during these trips.



The helicopter travels along with the Cdt. Fourcault tightened on the helideck platform at the back. Besides the pilot (Pim) the helicopter has place for one extra person in the front and three persons in the back. Within half an hour the helicopter is operational when necessary.

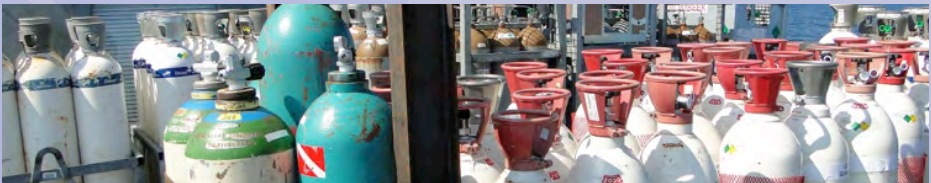




5. Breathing gasses

A technical expedition of this kind needs a good plan and a huge logistical support. A typical example of this is the way to organize the needed breathing gasses. The wrecks in Jutland lay on the bottom around 55 meter - maximum 60 meter and the temperature on the wreck (the bottom) is between 10 °C and 14 °C. In the decompression zone the temperature is about 17 °C. It's therefore important to dive with a head that's fully clear. This needs an appropriate trimix. Trimix is a mix of three gasses: oxygen, nitrogen and helium. It's the helium that makes the diver less narcotic and that the breathing gas becomes less poisoning. We try to offer standard gasses, if possible and if the guests do agree with this. It's also important to realize that the expedition is open as well for closed circuit rebreather divers as for open circuit technical divers. Often the balance is almost every time 50/50.

In Jutland, in open circuit, most of the technical divers use a twinset 2 x 10 liter 200 bar with a trimix Tx18/30 (18% oxygen, 30% helium and 52% nitrogen). Beside this twinset the diver needs gasses for an accelerated decompression. The lean gas is most of the time typically a ni-trox32 (32% oxygen and 68% nitrogen) in a 12 liter tank 200 bar. The rich decompression gas is most of the time typically a nitrox75 (75% oxygen and 25% nitrogen) also 12 liter and 200 bar.





The rebreather diver has mounted on his unit (in most cases) two 3 liter tanks. One with pure oxygen and one with a diluent. The diluent was typical a trimix Tx13/35 (13% oxygen and 35% helium – the rest nitrogen). Also the rebreather diver has the obligation to take decompression tanks with him in case of an emergency (bailout). We suggest to put In one 12 liter tank 200 bar a Tx18/30 (bottom bailout) and in another 12 liter tank 200 bar an appropriate nitrox mix.

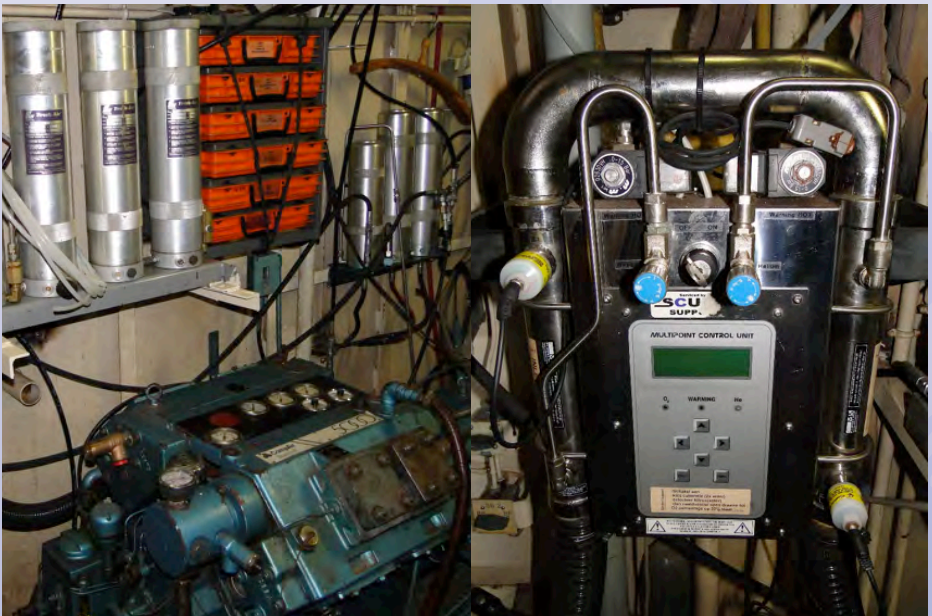
We program on this trip 2 dives per day. It is the hope and the wish of the organization (and also the divers of course) to perform two dives per day – 6 diving days per week – 3 weeks in total with 25 divers per week. So you can imagine that we might need a lot of gasses.

During the expedition in 2014 to Jutland, we stored on the front deck of the Cdt. Fourcault about 150 tanks of 50 liter 200 bar and some of them were even 300 bar. The tanks are filled with helium or oxygen. Most of the 50 liter tanks came in iron racks holding 12 tanks each. Pim brought these racks on board with the hydraulic crane of his truck and he simply welded these racks on the iron deck of the Cdt. Fourcault for the expedition trip! This is the only way to keep this tanks on board in heavy weather circumstances...



6. Filling tanks

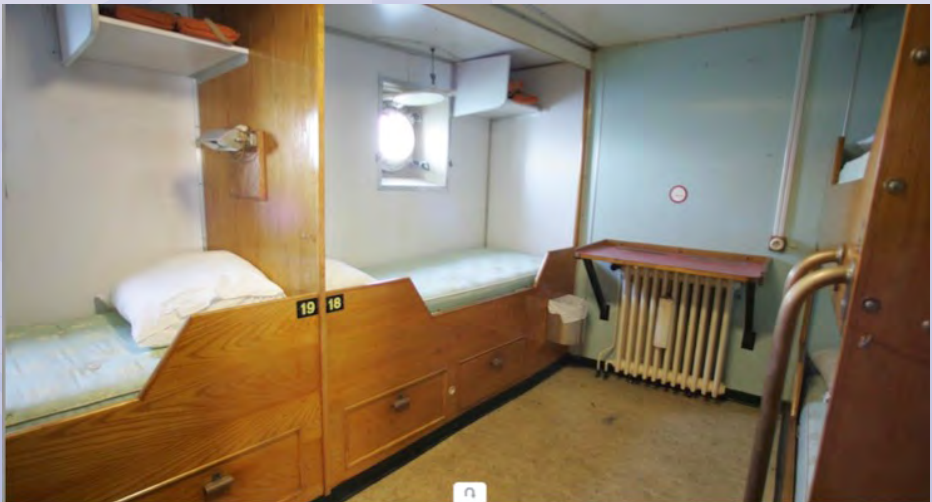
There is a real grown up filling station on board of the Cdt. Fourcault. Besides three high capacity compressors, we have several booster pumps available to fill the dive tanks. Besides this machines, there is a nice electronic mixing panel installed. This needs an operator with knowledge about blending but this is provided also. Nevertheless the whole filling procedure can take hours.



7. Accommodation

There is a lot of space in the well-equipped cabins. There are cabins for one, two or three persons. Each cabin has enough electrical outlets to charge batteries.

Besides the nice cabins there are on several places shower rooms and toilet rooms available. Midships just above the sea level a big dining room and annex a nice and comfortable salon to rest or to see the photos and the films of the day.



The organization of this expedition

1. The captain of the boat – Pim de Rhooedes

The owner and captain of the ship really enjoys to invite divers on board of his vessel. He has, as captain of the ship, the end responsibility of what will happen and eventually what is not going to happen. But a long experience with him learns us that he will do everything that's possible (and more) to reach the goals of the dive group. He will offer us all the support of himself and his crew and he will offer the logistical possibilities of his ship (and that's a lot as described above).

Besides captain of the boat, he is also pilot of the helicopter secured on the back deck of the Cdt. Fourcault.

2. The logistical manager – Angel

Angel is Pim's wife and has full control of all the logistical situations on board. She finally decides where the guests will take a cabin but she is well willing to listen to the specific needs of her guests. She arranges everything to make the stay on board as comfortable as possible. She has also full control of the kitchen and the inherent meals that will be served. If guests need to do some washing (salty or dirty clothes), Angel will support that to make her wash machine available. If there is any concern about the cabins or any kind of hosting, she is the person to contact on board.

3. The general organization

b. Dive organization

The make of this expedition a realistic but also a special (anniversary, memorial, heritage...) trip, full of adventure, there is a lot of logistical organization involved with that. Stef Teuwen (Belgium) is taken care of that. He is member of the Technical Committee of CMAS and member of the CMAS Dive Federation BEFOS. He is a Technical Instructor in open circuit as well in



closed circuit. He knows very well what is needed when divers come on board of the Cdt. Fourcault for a dive trip. He has been several times on board of this ship while taking the lead of the diving aspects in direct dialog with Pim, the owner of this ship. In 2014 he organized two weeks in Jutland, so the dive area is well known by him and the crew.

Stef has a large experience in diving the North Sea and knows well all the procedures involved with diving on wrecks in that area and especially of diving in a safe way from a boat like the Cdt. Fourcault. Diving from such a vessel needs special precautions and adapted safety procedures.

All possible questions about this trip can be asked to him and he will do his very best to please the participants, as long as it stays safe. If you want to have a 'once in a lifetime experience', you have to join us on this trip. In a nutshell: 'What makes this trip so very special?'

- We dive with technical divers of all over the world. This is always very educational for every member of this expedition.
- Depth is always between 45 meter and 60 meter. This can be stipulated (especially in that water – visibility and cold) as technical but on the other hand it allows to make a fair bottom time of about 30 to 45 minutes.
- The visibility on the wrecks is most of the time excellent, so filming and taking photos is almost a must!
- If you come down on these wrecks, it's almost as having a 'flash back'. The wrecks are in a very good condition (except of course the damage they concurred when being attacked during the sea battle 100 years ago).



Do not hesitate and fill in the necessary forms, so that you can be one of the happy guys that will be selected to be member of this expedition. Note that when we are full booked, we will close the inscriptions. Don't let it come that far and don't take the risk that this diving stays on your wishlist for ever.

There are three weeks planned and each week we want to take about 25 divers on board (minimum 24 – maximum 30 is the goal). There is also an option to book for two weeks.

Stef can be contacted as follows:

- By email: stef.teuwen@outlook.com
- By phone: 0032 475 290202
- Stef Teuwen – Maria Henriëttalei 53 – 2660 Hoboken – Belgium

c. Organization of the gasses for the Jutland 2016 expedition

Gasses will be brought on board through a Belgian supplier. Stef Teuwen will be responsible for organizing the blending of the gasses and he will take enough gasses on board and technicians to fill the dive tanks with the right mix.

d. Underwater Cultural Heritage

CMAS President of the Technical Committee Jean Rondia (Belgium) and CMAS President of the Scientific Committee Ralph O. Schill (Germany) ensuring the protection of the submerged heritage of World War I, which is under the protection of the 2001 UNESCO Convention on the Protection of the Underwater Cultural Heritage. A special commemorative event during the expedition on underwater cultural heritage from World War I will be the placing of memorial stones on a British and a German wreck.

e. Organization of the subscriptions

Divers need to fill in a personal file and a disclaimer (see further). Divers have to pay a fee of 550 EUR per week that they stay on board before being accepted on the final list of participants before 1st January 2016.

4. Practical information in a nutshell for divers

For divers the total price per week is determined to be 1650.00 EUR, all included, except gasses and sorb.

Divers can perform the payment in one, two or three different moments in time.

Divers can also pay the total cost when performing their first payment before the 1st January 2016.

The first contribution needs to be paid before the 1st January 2016. This payment is required to become member of this expedition.

a. When?

- WEEK 1:

From Sunday 14/8/2016 (check in at 15h00) till Sunday 21/8/2016 (check out before 11h00)

- Week 2:

From Monday 22/8/2016 (check in at 15h00) till Monday 29/8/2016 (check out before 11h00)

- Week 3: memorial week with VIPs

From Tuesday 30/8/2016 (check in at 15h00) till Tuesday 6/9/2016 (check out before 11h00)

b. PAYMENTS PER PERSON PER WEEK

- First payment: 550 EUR before 1st January 2016
Correct filled in forms need to be included for an accepted subscription.
- Second payment: 550 EUR before 1st April 2016
- Third and final payment: 550 EUR before 1st July 2016

Payments will not be paid back, unless cancelled by the organization. Divers who cannot join the trip but did already payments are advised to look for replacement.

c. What is included in the price?

- Food and soft drinks on board
 - Breakfast
 - 2 warm meals
 - Alcohol will not be served but is allowed to take on board
 - Alcohol before the diving is strictly forbidden
- Personal accommodation
 - Cabins of 2, 3 or 4 persons
 - Personal closets
 - Electrical outlets in the cabin
- Boot costs
- Air fills

d. What is not included in the price?

- Gasses (helium and oxygen)
- Sorb for CCR divers
Sorb is available on board (please, enter all fields correctly)
- Transport in both directions from home to Thyborøn havn
- Tips
- Rental of dive gear

e. Dive experience

- Extended Range Diver (OC)
 - Maximum depth: 60 meter
- Normoxic Diver OC
 - Maximum depth: 60 meter
- Advanced Trimix Diver OC
- CCR Diver Diluent Normoxic Trimix
 - Maximum depth: 60 meter
- CCR Diver Diluent Advanced Trimix

Extra requirements:

- Minimum 3* diver or equivalent
- Minimum 200 dives
- Minimum 80 nitrox dives and at least 50 dives performed with accelerated decompression.
- Minimum 50 dives deeper than 30 meter
- Minimum 20 dives deeper than 40 meter
- Minimum 50 dives on the rebreather (when diving on CCR)
- Advised: 50 dives in the North Sea or equivalent

There is a perfect mix possible between OC en CC divers. Normally teams consists of three members regarding safety. Teams can choose to perform dives in a self-sufficient way or in team bailout.

5. Safety first

- Every diver has to dive in his or her comfort zone. If you think you reach the borders of your capacities, don't hesitate to inform the rest of your team and end the dive.
- Hydration is very important. Soft drinks are free – so take enough before diving.
- Alcohol and diving is not allowed.
- Medical products are normally not allowed. When necessary, it has to be mentioned. Our doctor will assist this. To avoid disappointments, please inform us before you do your subscription.
- Divers have to prove that they are medical screened and found able to dive by a doctor. Attesting this is necessary.
- Divers have to sign release weavers and medical weavers.
- Divers have to bring their dive licenses and they have to hand this over to the organization.
- Divers can bring their own tanks on board but they will only be filled when the tanks are properly tested. The safety of the whole ship and the blender is in-volved here! It's a bad idea to let a tank explode when in the middle of the sea. We are trying not to dive on the wreck of the Cdt. Foircault...
- Several forms need to be filled in in a proper way.

- Special needs about the food? Vegetarian meals can be ordered.
- Equipment (rebreather yes or no)
- Stages
- Material to hire?

Please fill in carefully those forms (see website or ask them via email).

6. Setting up dive teams

Divers can form their own teams and they have to put the members of their team on the list.

We will be flexible about this but we will keep the end responsibility and we will interfere when necessary. We are well willing to please everybody and we will discuss our view when we suggest changes. We suggest to dive with three divers in one team. Modifications on this matter are discussable.

Teams can stay together for the whole week when this is wanted but this can also change during the week.

7. The filling of the tanks

CCR tanks will be filled from our buffer if divers agree on this. We foresee Trimix Tx13/37 (heli-air). This diluent gas is perfect for the depths of the wrecks.

OC divers can ask a fill of their own choice. We suggest at least a trimix Tx18/30. The amount of helium will give you a clear head when visiting these wrecks and that's the goal of course!

8. The cabins

Angel will take care about this. Sheets and pillows are available and clean in each cabin.

9. Contact information

All the practical organization of this expedition is in hands of Stef Teuwen.

Contact:

Stef Teuwen

Maria Henriëttalei 53 – 2660 Hoboken – Belgium

stef.teuwen@outlook.com

+32 475 290202

Payments:

BELFIUS Bank Hoboken Centrum

Kioskplaats 49, 2660 Hoboken

IBAN BE30 7895 7791 5611

BIC: GKCCBEBB

ACCOUNT HOLDER

Stef TEUWEN

Maria Henriëttalei 53

2660 Hoboken

Belgium

References:

'Jutland 2016 – August 14-21- name and first name'

'Jutland 2016 – August 22-29 - name and first name'

'Jutland 2016 – August 30-September 6 - name and first name'

Check in and check out on the Cdt.Fourcault

August 14 check in at 15h00 and August 21 check out before 11h00

August 22 check in at 15h00 and August 29 check out before 11h00

August 30 check in at 15h00 and September 6 check out before 11h00

Further information

Stef Teuwen will update every participant as soon as new information is available. Please, follow the CMAS website and the facebook page about the Jutland 2016 expedition: www.facebook.com/Jutland2016.