

Case Study – Christian Raddich
Hull Cleaning (Pressure Washing)

Job No – D/5070

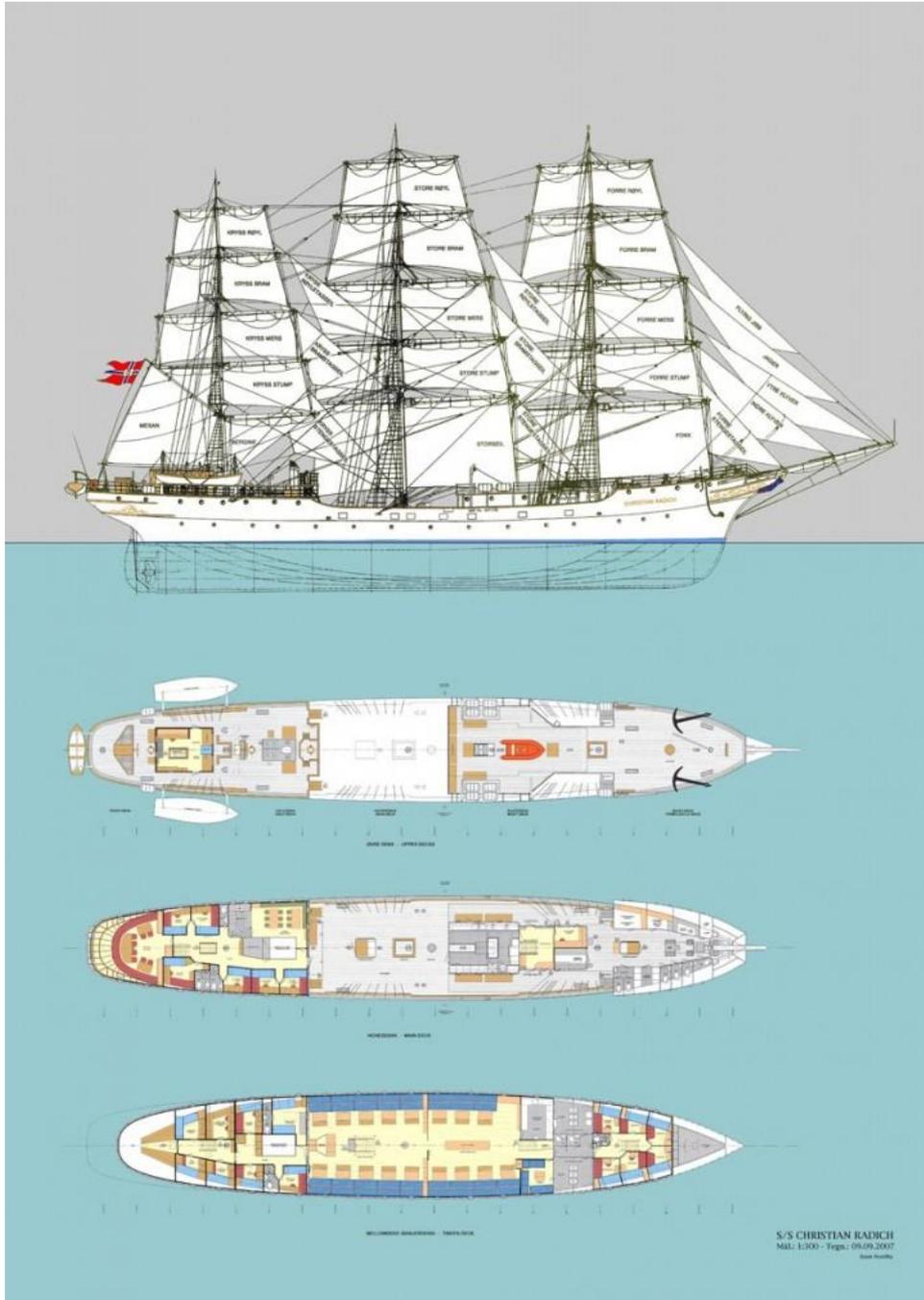
Date – Saturday 7th July 2018



Work-Scope

The first task carried out is a brief AS Found survey of the vessel to allow the client to have a visual reference of the marine growth coverage on the vessel. The Vessel had an extensive coverage of soft marine growth over the full hull, stern gear, connection points and the rudder. We agreed with the Client that we would clean a 3metre band from Bow to Stern using a pressure washer with more attention focused on the FWD Bow section. The blades required cleaned and a GVI (General Visual Inspection) under Client supervision, carried out by the Diver to allow the Client make a decision if a propeller polish would be required.

Vessel Diagram



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Diving Information

The scope that was initially agreed with the Client was that we would clean of a 2 to 3 metre band of the soft marine growth that had been previously noted during a hull survey the vessel had received when in Norway. In our quote, we had allowed for a 12hour period of Diving to clean a 2metre band on the vessel. This was agreed on the basis that the growth was as discussed in our initial conversations with the Client. Due to the vessel having a tight schedule, it was made clear that the window for cleaning was going to be limited by the planned port call scheduled to be 24 hours. Other limitations were crew and passengers staying on board limiting the ability to work in unsociable hours.

No footage of the Vessel condition was made available to assist us prior to issuing prices and projected timescales. The vessel length subsea was 53 metre approximately and the cleaning would be carried out using a pressure washer to jet of the soft marine growth. We reduced the power of the pressure washer so that we removed the marine growth while trying to reduce damage to the vessels protective coatings (Antifouling) and paintwork. We also agreed to perform a pressure washer test under client supervision so that the amount of paint loss was seen by the client and agreed to before any cleaning operations commenced.

During all dive operations, all dives were recorded for Company and Client reference purposes.

When we arrived at the vessel, we spoke to the Client, and it was agreed in the pre-dive meeting that we would plan to work from the bow of the vessel. We would clean the Starboard side of the vessel which was lying on the Quayside. We had Yokohama fenders placed at the forward and aft quarters of the vessel to allow safe access egress for the diver, and allow for a safe working area for working between the Pier and the vessel.

Diver 1 (Aron MacGregor) performed a As Found survey which is required to give both the Client and ourselves a better understanding of the subsea condition of the vessel. We performed a total of 7 dives on this job.

All diving carried out on the job involved the Diver using a pressure washer. Due to condition of the growth, and hull profile a brush cart would not have been effective due to the riveted plates.

Diver 7 (Aron MacGregor) carried out an AS Left survey on completion of the cleaning phase of this job. This was a visual recording of the now completed cleaned hull condition starting from the Portside working to the AFT of the vessel. When he arrived at the stern gear of the, the diver performed an inspection of the blades, shaft, rudder and fixing using our IWS (In Water Survey) format. This confirmed that blades were clean, all fixings cleaned and secured, that there were no obvious signs of damage and that the requirement for propeller polishing which had been discussed by the client was not required. The diver then made his way from AFT of the Vessel on the Starboard Side and worked FWD taking in the cleaned sections. Once the Diver was at the FWD section of cleaned areas, he then highlighted the fact that the cleaning of the Bow on both the Port and Starboard were cleaned and dressed to be uniform on both sides. This dressed section was 15 metres from the Bow. Once at the Bow, this concluded the AS Left survey.

The survey was carried out with Vessel Client representation present and on completion of this, the client confirmed they were happy with all work carried out.

The job was completed with no Damage to any equipment, and with no LTI's

Working on the Job
Diver – Joe Willett

After setting up the equipment, carrying out our TBT's and pre-dive plans, we began the Inspection of the vessel. I was tending to begin with, so my tasks were to keep the site tidy and running smoothly whilst also tending to the diver various requirements of tension or slack to the pressure washer or his umbilical. The task of the tender is one that can be tricky when working on vessels where the work site is open to public access. That's why the importance of good housekeeping on the worksite is imperative to reduce the chance of slips trips and falls to working personnel and onlookers. This can be challenging due to the natural inquisitive nature of the public who have an interest in the task your carrying out. You are also try to balance being able to try to answer the various questions your asked by members of the vessel crew who are the client and members of the public while trying to remain vigilant to the task in hand and the risks to everyone during this time. Normally the first 2 hours of the job are the most challenging until interest fades in the task your carrying out.

On the completion of Dive 1, I was the next diver. Once I performed all my pre-dive checks, I entered the water. I resumed where the previous diver had finished. The pressure washer was left at the area I would begin cleaning.

I began to mark out a line in the growth using the pressure washer further down the vessel so that once this area is marked out I could move forward and begin cleaning to this line. This gives you an indication as to where you are when cleaning so that after each dive you can begin to get an idea of productivity. I kept repeating is pattern with little variation of working FWD to AFT for the entirety of my dive. While in the water I wanted to be able to use a pattern which streamlines the cleaning of the vessel, which helps me to avoid going over already cleaned section to try to maximise the productivity of my dive. By having a system and good structure to your dive, it also helps with regards to the umbilical management which is important on any job.

I find the task of cleaning vessels very satisfying, and although the dive is mentally and physically challenging it is personally rewarding due to you being able to see visual production of the cleaned sections of the vessels. It is also rewarding when clients appreciate and thank you for the job you've done. It is rewarding on a personal and collective level and one we all enjoy.

In Water Information

Diver	Task	Dive Duration		
1 - A. MacGregor	As Found – Cleaning Bow` on Starboard Side of Vessel	162 Mins		
2 - J. Willett	Continues Cleaning Starboard side of Vessel.	180 Mins		
3 - L. Manners	Cleaning Aft section of Starboard side. Cleaning of Prop, rudder, fixings. Moving to Port Side of the Vessel	173 Mins		
4 - S. McNiff	Resuming cleaning on hull on Port side. Growth more extensive on portside due to vessel lying Starboard side in port.	117 Mins		
5 - J. Haynes	Cleaning from Bow on Portside working AFT down vessel to join the cleaned sections.	93 Mins		
6 - M. Simmons	Cleaning Portside. Continuing cleaning band working AFT from Bow to Stern.	200 Mins		
7 – A. MacGregor	Touch up cleaning of Bow section and trimming of the cleaned sections. As Left Survey of Vessel with Captain to show agreed areas of the vessel have been cleaned and to confirm completion of cleaning operations.	104 Mins		
	Total	1032mins In Water		

Supporting Job Documentation List

Tool Box Talk – Hazzard Risk Identification and Assessments – REA No 6470/8709

Dive Log Sheets – Operational Dive Report Forms – 00185/01357

Day Work Sheets – 7113/7169