

## Probs with Props

*We were swinging the lamp in the club a few Fridays ago, as we are wont to do, when Derric Webster mentioned that one of the ships he was on had lost a propeller blade. This prodded a few memory cells into action and perhaps it was not such an uncommon occurrence. Some of the Nourse Line ships that I served my time on carried spare blades, usually secured upright in no.5 'tween deck, for just such an occasion, more of which in a later edition. Most ships carried spare propellers either on deck or in a hold and quite a few of us will remember the spare propellers for the old Queens which were laid along the sides of the King George V Graving Dock in Southampton.*

*Here is Derric's account of his experience when he was Third Mate on a BP tanker.*

### NO DRYDOCK?

It was tea-time – I was in the saloon having just come down from the bridge after relieving the Chief Officer for his meal when suddenly the ship started bouncing, for want of a better description. It was most uncanny and, as the engine slowed down the “bounce” changed to a “waggle” where both the fo’c’sle and the poop were visibly “wagging” – then we stopped.

The Ship – “British Holly”, on passage in ballast from the Antipodes to Abadan.

The Year – 1950 or 51.

The Place – The Arabian Sea, some three or four days steaming from Ras al Hadd.

There was some discussion as to what might be the cause of this sudden irregularity. The Engineers checked the tail shaft in the vicinity of the stern tube but nothing conclusive was visible (although suspicions were aroused), the engine was running perfectly, so the general conclusion was that something had gone wrong with the prop. In due course a pilot ladder was lowered over the stern and the Chief Officer went down to have a look whilst the Engineers turned the propeller by hand. Sure enough, there appeared to be a blade missing.

There was nothing to be done then and there except to report our misfortune to Britannic House in London and continue our voyage pending further instructions. The engine was restarted and we carried on at a speed which kept the vibration to a minimum – somewhere between half and full speed was the optimum if I remember rightly.

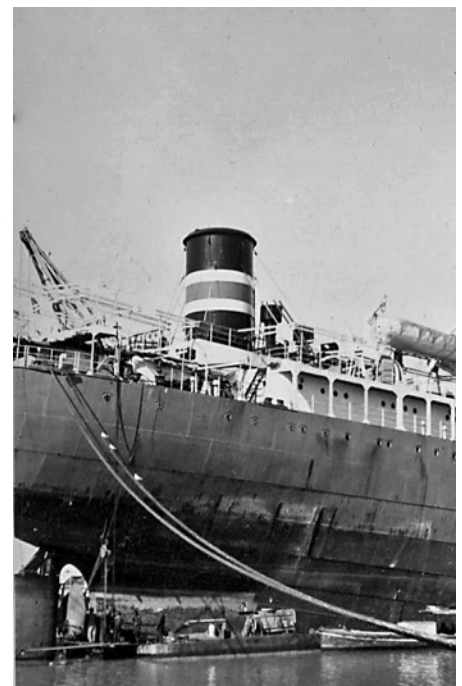
Of course conjecture was rife! We were bound for Abadan but that port did not have a drydock. Would we go to Bombay, or would we load a cargo for the UK or Europe and limp home at a reduced speed? Neither was the answer – continue to Abadan where the spare prop would be fitted. That’s what the Office said. Quite surprising when you think of it! No drydock? It would be a tricky operation!

We plodded on and eventually arrived at the Pilot Station at the mouth of the Shatt-al-Arab. The river passage had to be handled with considerable care in order to avoid the critical engine speeds at which the vibration was so severe. Between Slow and Dead Slow was the worst. Number 16 Berth was allotted to us – a sort of mixed use cum lay-by berth about half way along the row of oil berths and just across the road from the Bawardi Club, which was handy! (Cold beer at the bottom of the gangway – well, almost – but the beer sold in Abadan in those days was an acquired taste as any ex BTC people will remember).

The next job was to trim the ship so that the propeller boss was sufficiently clear of the water to enable the props to be changed without filling the engine room once the tail shaft was withdrawn. We filled the forepeak and Numbers 1 and 2 cargo tanks, emptied all the other tanks and I think the Engineers were able to shift some bunkers forward. This did the trick and had the ship trimmed sufficiently by the head to proceed with the repairs.

The spare, a cast iron propeller, was secured on the tank deck just by Number 7 Centre Tank, so it was quite easy for the resident floating crane to access it – not like a general cargo ship where the spare prop was often in the ‘tween deck. A couple of barges were secured, one each side, under the stern to provide a working platform and scaffolding was rigged through the propeller aperture, whilst the floating crane brought the spare propeller from the deck to the barge under the port quarter. By that time it was possible to inspect the damage at close quarters and it was found from looking at the staining in way of the break that the propeller blade had suffered a crack which had gradually got worse over time until it eventually gave way and the blade dropped off. About half the thickness of the stump was darker than the other half.

A couple of chain blocks from the pad eyes on the hull, enabled the weight to be taken so that the shaft could be disconnected and the tail shaft withdrawn into the tunnel leaving the prop hanging from the chain blocks. It was then swung across and



**British Holly, trimmed by the head and the tail shaft clear of the water**

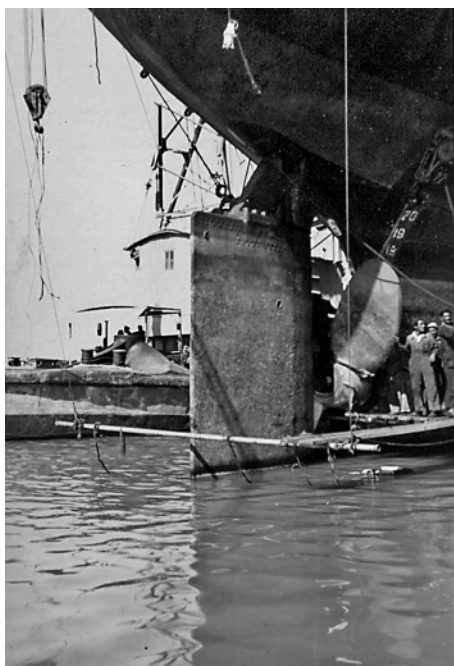
landed on one of the barges leaving the propeller aperture clear enough to lift the spare prop and, by a similar manoeuvre in reverse, swing it into position and push the tail shaft back, connect everything up, and “Bob’s Your Uncle”, job done!!



**The spare propeller lowered onto the barge, ready for fitting**

Sounds simple, but it required both time, patience and a considerable amount of skill to accomplish the changeover in a two week period. A lot of credit must be given to the resident engineering staff in Abadan who were working only a few inches above the murky waters of the Shatt-al- Arab at the same time dealing with a heavy piece of machinery in a situation where any slip-up or miscalculation could have jeopardised lives and sent one, possibly two, valuable propellers to the bottom of the river.

The floating crane put the broken prop back on deck where the spare used to be. Once suitably secured the ship was ready to move to one of the other berths to load and so continue the voyage. I cannot remember where we went after this but I do not think it was straight back to Europe. We soldiered on, our speed somewhat reduced due to cast iron props being less efficient than bronze props, until our drydocking in the UK, due some months later, when a new bronze prop was fitted.



**The faulty prop being removed, the stump of the missing blade clearly visible**

Interestingly, in the few short months the cast iron propeller was in use, the amount of corrosion to the tips of the blades was considerable. At the time, someone said that the useful life of a cast iron propeller was about 12 months.

I always felt that an occasion such as this, changing a prop with the ship remaining afloat, was an uncommon experience, if not unique. I think it would be difficult to trim a general cargo ship sufficiently by the head without resorting to filling No.1 Hold with solid ballast but since discussing this with colleagues at the Club two other Members have cited instances of lost blades but drydocks were, I think, used in both cases. I wonder if anyone else has had the experience of changing a damaged prop with the vessel still afloat?

