## Lower Bearing Replacement (Starlight 35)

"For those interested I have now successfully completed this job, with thanks to Mike Lucas and Martin French of Rampart Yachts (<a href="www.rampartyachts.co.uk/">www.rampartyachts.co.uk/</a>) for their valuable advice.

It is not necessary to drop the rudder to replace the lower skeg housed bearing, which is called a "Top Hat Bearing". To replace it one does the following:-

- 1. Remove the plastic fairings on each side of the rudder in the vicinity of the 6 bearing housing clamp bolts.
- 2. Chock up the rudder from the ground to take the weight off the top hat bearing, yet still allow the rudder to turn. Also a good idea to tighten the emergency tiller bronze fitting at the top of the rudder stock to prevent the rudder weight being taken on the steering mechanism should the chock slip. There's a small allen grub screw in the side of this fitting.
- 3. With an 8mm Allen key remove the 6 bearing clamp bolts and carefully remove the clamp together with one half of the bearing shells. To do this you will need to turn the rudder from side to side. You may also find you cannot get the clamp/bearing shell out because the rudder won't turn far enough. In this case you'll need to remove one of the rudder stops where the emergency tiller attaches (mark the old position first!) and try again (Carefully, don't force it, or you'll stress the steering mechanism). If this still isn't enough then you need to remove the cowelling over the rudder/quadrant and remove the steering draglink, and probably the pilot drive too if there is one. I only needed to undo one rudder stop.
- 4. Tap the other bearing shell out with something like a screw driver and hammer, tapping on the shell edge until it rotates round sufficiently to remove.
- 5. Put one new bearing shell in. Use the reverse method to 4/, carefully to avoid damaging the bearing shell.
- 6. Put the clamp/other bearing shell over the back and replace the clamp bolts, making sure the 2 halves of the top of the bearing shells are level. Suggest threadlock is used. Bolt torques are not specified, but I was told to make them "extremely tight". I tightened to 60Nm. Hopefully this wasn't too much!
- 7. Replace the rudder stop as it was and re-instate any steering items previously disassembled. Check for rudder movement and that the rudder stops limit the rudder movement rather than the steering system.
- 8. Replace rudder fairings."

The Top Hat bearings can be obtained from Lake Engineering in

Poole. <a href="http://www.lakesterngear.co.uk/">http://www.lakesterngear.co.uk/</a>

Ask for Les Hill.

Bearings cost roughly £82."

Hope this is sufficiently clear and is of help to anyone considering this job for themselves. I found it quite straight forward.