## Repairing a Pump

by John Speranza (onboard '52-'53)

The ship had a fire and flushing pump in the Forward Engineroom. Periodically the front bearing would freeze to the shaft. The routine repair procedure was to take the pump apart, remove the entire shaft and bearing, replace them with the spare shaft and bearing, a two hour job. We would then take the shaft and bearing to the Machinist Mates, and they would very skillfully burn off the bearing. We would then put the old shaft into the spare parts locker.

We had a new Electrical Officer come aboard and he wanted to be involved in all emergency repairs, so when the pump went out, he was notified and came to the engine room to observe. We were ready to do our exchange and take the old shaft and bearing to the Machinist Mates, when he asked how we were to remove the bearing. We explained our procedure and he said no, we will do it as the manual dictates, using a bearing puller. The First Class explained that wouldn't work because the bearing is fused to the shaft, so we cut off the bearing and then using crocus cloth, burnish the shaft. He also explained that the threaded end of the shaft was soft and could not stand the pressure from the puller.

"Do it," the officer orders. We did. We mashed the threads and the puller popped off. The officer instructed us to put a "c" clamp on the legs to keep the puller in place. We did. We bent the shaft. Then he ordered us to put the shaft in the freezer, since the bearing was one compound and the shaft another, they would shrink different amounts and then the bearing should pop off. That did not work.

The challenge remained to get the bearing off, so we took it to the fantail and tried everything we could. No luck. Captain Madden came by and asked what we were doing. I told him and he said, "Follow me, I have the solution." I followed him to his cabin. He gave me a bottle of Sloans liniment. He said it worked on the subs for such things, so trying not to laugh I took it to where we were working and proceeded to douse the bearing with the liniment. We waited a while and then tapped the bearing very gently. It popped off. Right there I swore never to put Sloans liniment on my body.