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Stephanie Steele

Instructions for Running the Wavemaker

Never turn on or off the wavemaker servo amp while the wave paddle hydraulics are pressurized!!!

Startup:
0. Turn on the switch for the cooling fan.
1. Turn on wavemaker servo amp.
2. Open valve located on wall by hydraulic pump. Arrow is drawn on wall to indicate direction to turn to open valve. This valve should already be open already if the wavemaker was shut down properly.
3. Press start button for hydraulic pump on wall above valve.
4. Close valve located on wall by pump.
5. Watch pressure gauge attached to red canister through viewing window. Needle will stop moving about 1 o'clock – then the wave paddle is fully pressurized.
6. Generate waves using LABVIEW programs.

Shut down:
0. Open valve on wall by hydraulic controls.
1. Wait until pressure gauge reads zero (10 o'clock).
2. Turn off wavemaker hydraulic pump (press STOP).
3. Turn off servo amp.
4. Switch off hydraulic pump cooling fan.

Old instructions for generating waves:

    a. Plane progressive waves
- i. Make sure a BNC is connected from the wavemaker servo amp to the low frequency function generator.
- ii. Set frequency on the function generator.
- iii. Se amplitude potentiometer on the servo amp.
- iv. Start recording data.
- v. Turn black knob in middle of servo amp panel clockwise (CW) to start waves.
- vi. Turn black knob CCW to stop waves.
- vii. Stop recording data / Save file.

    b. Two-frequency and continuous frequency waves
- i. Connect BNC from servo amp to the silver box with the 2-prong banana plug. The connector goes into the end two red terminals. (Right half pair D/A1B lock for Ground/ Pin on banana plug.)
- ii. This silver box is connected to the wave function generator card in Atlantic (defunct computer).
- iii. Reboot Atlantic to DOS, run the program
  1. twofreq.bat or bs8.bat
  2. set the amplitude on the servo amp as tabulated on the chart posted by the servo amp
  3. start data acquisition
  4. ramp up wavemaker, generate desired wave train
  5. ramp down wavemaker
  6. stop program
  7. stop data aq., save data