

Statement of Work
for the Modification of a
Benthos ATM-887-LF-Omni
Acoustic Modem
Rev 3

"The modem" refers to a standard ATM-887-LF-OMNI that has been purchased from Benthos and will be used on a deployment during the second week of June. After the deployment the modem will be returned to Benthos (approximately June 18th) to have the following modifications done to it. These modification need to be completed and the modem returned to MBARI by July 3rd, 2009.

The modem shall be self contained with power source inside its housing using a standard ATM-887 battery compliment (2x 001402).

The modem shall have a processor reset line that will be able to be activated and deactivated via top-side control or command. The processor reset line shall be an active low open collector style output that is capable of sinking 80mA to ground.

The modem shall have a means to be powered from an external source. This external source shall be in an either or configuration with the internal source.

The Burn wire capability shall be the standard for the Benthos burn wire option (13VDC and 1A). After the release command, the current/voltage shall be applied indefinitely until commanded to turn off or the batteries exhausted. The burn current shall be able to be queried across the acoustic link. The Burn wire shall occupy pin 2 as the positive lead and pin 4 as the negative lead. The burn current shall be able to be queried from the topside via the acoustic link.

The modems are to be used in a Point-to-Point Protocol (PPP) serial link between two Linux hosts.

Communication lines required with modem:

TX
RX
RTS
Signal Ground

All lines shall conform to RS-232 levels with voltages while spacing from +3 to +25V and while marking from -3 to -25V.