



Equipment Leasing Newsletter

April 2002

Improved Solutions For Wave Measurements

We now offer several state-of-the-art instruments for measuring waves over a wide range of water depths.

In waters up to 20m, directional wave data can be obtained using the traditional PUV (pressure/velocity) method with a Nortek Aquadopp on a Nortek Profiler. The less expensive Macrowave uses pressure only for non-directional data.

Our new 1200kHz RDI WH ADCP also provides directional wave data in water depths to 20m, while our 300kHz WH unit extends out to about 100 meters.

Our *ASL Wave Profiler* can measure non-directional waves in even deeper water (>/150m). The *Wave Profiler* measures wave height directly, and is not limited through use of approximate linear wave theory.

New Equipment

Recent additions to the lease pool include:

- Another 1 MHz Nortek current profiler. This one has a 90° head. Both have pressure sensors and are capable of directional wave measurements with 85 Mbytes of data storage.
- Nortek Velocimeter 10 MHz. This unit features fast sampling (to 25 Hz) of a small volume (0.25cm³), ideal for turbulent flows.
- 1200 kHz WH "ZedHed" ADCP with Bottom-Track. This unit has an exceptionally small blanking for measurements in very shallow waters. It joins our 600 kHz BBADCP, and 300 kHz WH ADCP, which has recently been upgraded to measure waves as well as currents.
- Benthos pinger receiver APR-272 with directional hydrophone DHA-151. This helps find your mooring: assuming you put a pinger on it.
- Vemco Minilog 12 TR temperature loggers.
- Imagenex 881A Scanning Sonar. This is a variable frequency sonar, self contained with power and memory, ideal for bottom survey deployments.

What Some of Our Clients Are Up To

KR Croasdale – using one of our Nortek Aquadopp current meters to measure currents under landfast ice in the northern Caspian Sea.

EHI/ Army Corps of Engineers – measured currents in shallow water using our 1 MHz Nortek profiler.

Fundy Aquaculture – currents and waves at fish farm sites.

US Dept. Energy, Pacific NW Lab – leased our 300 kHz RDI ADCP to measure currents in the forebay of the Grand Coulee Dam

Caspian Sea, Kazakhstan

AGIP KCO exercised their lease-to-purchase option on the 1200 kHz RDI ADCP. It will be used for their multi-year program of ice measurement.

The ADCP measures ice velocity via the bottom track capability, complementing the ice thickness data provided by the *ASL Ice Profiler*.

ASL recently purchased a replacement 1200kHz ADCP to maintain our equipment inventory.



Equipment Availability and Lease Rates

Rick Birch, Senior Oceanographer at

rbirch@aslenv.com

Dave English, Oceanographic Technician at

denglish@aslenv.com

or on our web site <http://www.aslenv.com>

ASL Environmental Sciences

1986 Mills Road, Sidney BC, Canada V8L 5Y3

Tel: (250) 656-0177 Fax: (250) 656-2162 Toll Free: 1-877-656-0177

Email: asl@aslenv.com

<http://www.aslenv.com>