

# EQUIPMENT LEASING NEWSLETTER

SPRING 2011

Wave Measurement

Current Measurement

Ice Measurement

Sediment Transport

Fish Habitat Studies

Coastal Engineering

# ASL



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The ADCPs continue to be our most popular instruments leased. We have almost the entire range of frequencies to cover off most water depths. We have also just added a 600kHz RiverRay to our lease pool. However, we lease more than just ADCPs, including CTDs, tide gauges, tilt-pingers, scanning sonar, etc as evident in the following examples of interesting leases in 2010:

## Turbidity Monitoring in New York Harbor

HDR Inc. used Campbell Scientific OBS3A turbidity data loggers to monitor suspended sediment plumes in connection with a variety of submarine cable installations and dredging projects in New York/New Jersey Harbor. The OBS3A units were attached to a carousel water sampler and used to collect turbidity profiles and trigger the collection of water samples for suspended sediment plume monitoring. In addition, multiple OBS units were also used with fixed buoy arrays to continuously record turbidity at various water depths to monitor the spatial extent of suspended sediment plumes.



**WorleyParsons** leased two RBR submersible and one non submersible pressure transducers for tide measurements in Strathcona Sound in the remote Canadian Arctic. Steel housings were fabricated to hold the submersible transducers and connected to the sheet pile wall approximately 12m below high tide elevation to protect them from propeller wash and potential ice damage if they could not be recovered until 2011 after the ice broke up. The transducers were heavily weighted within the housing to ensure they remained at a constant elevation throughout their deployment. The transducers were successfully recovered two months after deployment and their data were used to establish chart datum and enable tidal predictions for Strathcona Sound.

The non submersible gauge was required to account for atmospheric changes.

*photo* - welding the housing to the sheet pile wall above water for the atmospheric gauge.  
*insert* - steel housing.



**“ Reliable Rentals at Reasonable Rates ”**

Check out our rates at [www.aslenv.com](http://www.aslenv.com)

**Largest oceanographic equipment lease pool in North America!**

## ADCPs for Beluga Whale Study in Beaufort Sea

The Department of Fisheries and Oceans, Winnipeg, Canada (DFO) is to monitor the ecosystem structure and function in the nearshore region of the Mackenzie Delta in context of beluga habitat use.

This year's project was focused on Shallow Bay (Niaqunnaq).



Photo courtesy Andrea Niemi (DFO)

Two moorings were deployed for the duration of the field study to continuously monitor hydrological conditions in

Shallow Bay. The moorings were equipped with the following sensors: salinity/depth/temperature, dissolved oxygen, turbidity/fluorescence, and Acoustic Doppler Current Profiler (ADCP, 600 kHz and 1200 kHz). In addition, on one mooring, wave gauge and optical backscatter sensor were installed (courtesy of S. Salomon, NRCan).

ASL provided all the instrumentation and moorings and helped set-up sampling configurations.



## New additions to the lease pool:

TELEDYNE RDI RiverRay ADCP  
(600 kHz phased array)

For Transects  
in 0.4-40 m  
water depths.  
Comes with  
trimaran boat.



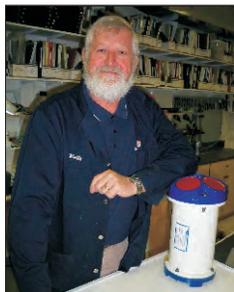
More TELEDYNE RDI 300 kHz WH Sentinel ADCPs  
either moored or vessel-mounted (Transect)

Typical profile range to 100 m,  
bottom-track to 200 m;  
directional wave capable.



ORE PORT LF Acoustic Release

The PORT will be replacing the  
CART which will no longer be  
offered by ORE.



## Meet the newest member of our Equipment Leasing team:

Wally Horniak, Oceanographic Technician

Wally maintains the lease pool equipment - mobilizes the instruments, inspects returned equipment, and makes sure everything is performing as per factory specs. Wally can be reached at [whorniak@aslenv.com](mailto:whorniak@aslenv.com)

## Insurance Reminder

Please remember to get insurance. In 2010 our clients (who shall remain nameless) lost/damaged: one RBR CTD, one Nortek profiler, one 600 kHz TRDI ADCP, two Benthos pingers, and another 600 kHz TRDI ADCP.