

G. A. BORSTAD ASSOCIATES LTD.

100-Marine Technology Centre
9865 West Saanich Road
Sidney, British Columbia
Canada V8L 3S1

Tel: (604) 656-5633

Contact: Dr. G.A. Borstad, President

Company background. G.A. Borstad Associates Ltd. is a Canadian company specializing in research, development and application of airborne and satellite remote sensing techniques, software and sensors for fisheries and oceanographic use. The firm exports its consulting, analysis and project services.

Borstad's development of airborne mapping techniques for phytoplankton, sediment and temperature and its joint work with the Canadian Department of Fisheries and Oceans on remote detection of chlorophyll have contributed to the development

of a new fluorescence line imaging spectrometer. This spectrometer has gained international attention as the prototype of the next generation of spacecraft sensors.

Projects. Borstad Associates has been conducting descriptive biological and physical oceanographic studies of large, remote and poorly known areas using aircraft and satellites. Airborne and satellite mapping projects have been carried out in the Canadian and American Arctic and off the British Columbia and Newfoundland coasts, in support of ecological and oceanographic

studies. One recent project developed automatic mathematical techniques to track ice movement in the Beaufort Sea and beyond using series of co-registered NOAA AVHRR images. This technique can be applied to in-water features as well. Current committed projects are for Australia, Peru and China and include training.

Oceanographic analysis services. The company has developed near real-time satellite oceanographic analysis and offers this service. Clients value the ability to obtain a map while they are at sea since it allows them

to rationalize their sampling procedure and save expensive ship time. This technique could be easily extended to commercial fisheries where appropriate support exists, such as a NOAA or GOES receiving station, or a small (\$30 000 Cdn) direct readout station.

Maps of water colour variations are used to infer biological productivity, used here for bowhead whales along the Arctic's Yukon Territory coast.

