## KNUDSEN ENGINEERING LIMITED

77 Gore Street East Perth, Ontario Canada K7H 1H8

Tel: (613) 267-1165

Contact: D.C. Knudsen, President



Company background.

Knudsen is engaged in the design and manufacture of advanced digital electronic systems and related products. Two specialized, but expanding markets have been targeted for initial emphasis: airborne remote sensing systems and underwater acoustic systems. Although seemingly unrelated, the two fields share a great deal of technology, particularly in the areas of digital signal processing and image enhancement and display. Both products effectively utilize the expertise and experience of Knudsen Engineering's technical staff.

Although long-range emphasis is on product development and manufacturing, the company also performs contract research and development — including field work, particularly as related to Arctic conditions and ice-covered waters. Clients include the Canada Centre for Remote Sensing, ESSO Resources, Litton Systems, the Environmental Protection Service, and through subcontracts, Dome Petroleum, Gulf Canada and the Arctic Pilot Project.

Products. Currently, Knudsen Engineering Limited offers two products for the international remote sensing market: the ALICE Display and the ALICE Processor System. Both are state-of-the-art digital electronic systems for application to airborne linescan imagers. The company is now supplying ALICE digitizers to Daedalus International of Ann Arbor, Michigan, for incorporation into its airborne linescanners.

The ALICE Color Display is a high-performance image enhancement and display system designed specifically for airborne remote sensing, applicable to both rotating mirror and pushbroom linescanners as well as side-looking and synthetic aperture radar systems. ALICE generates a real-time, in-flight video presentation of the data produced by a digital linescan imager and its firmware-based architecture provides an impressive array of scan conversion, annotation, and image enhancement features.

The ALICE Processor is a digitizer and digital signal processing system designed for rotating mirror airborne linescan imagers. Up to 12 channels of analogue video are digitized, radiometrically and spatially corrected and transmitted to a digital recording system.

Both ALICE products are ideally suited for several areas of remote sensing including oil spill reconnaissance, agricultural remote sensing, search and rescue, and forestry.

ALICE, a state-of-the-art digital electronic system, supplying real-time display, verification and image analysis during an airborne linescanner data acquisition over an offshore gas well blow-out.