

Company Products and Capabilities

Developed products:

- EFS Electronic Flight Strips Management System; supersedes the FAA TFDM requirements;
- SMGCS (ASDE-X) surface management guidance and control system;
- ATM Air Traffic Management System, including
 - 1. RDPS;
 - 2. FDPS;
 - 3. Arrival/Departure management.
- Mitigation algorithm for minimizing the effect of wind farms on radar performance;
- Multi-Radar Tracker;
- Training Simulator;
- ADS-B/ADS-C/CPDLC/AFN processing and implementation;
- Radar Data Processing (various formats, including Asterix);
- Eurocontrol Asterix standards 1, 2, 8, 10, 19, 20, 21, 23, 34, 48, 63, and 65;
- Radar Data Analysis software (for detection of reflection areas and other anomalies) .

R&D Projects

- Auto pilot for unmanned aerial vehicles (UAVs). Cooperative effort with the National Aviation University of Ukraine (NAU);
- Space Navigation and communication (with the goal of controlling "space garbage" pick-up shuttles. Cooperative effort with NAU.
- Automatic landing system for UAVs.

Experience working in the following projects:

- Experts in many widely-used ATM Systems deployed around the world:
 - 1. CTAS adaptation of CTAS to Canadian airspace;
 - Participated in NASA AVOSS project as a part of International team, headed by Transport Canada. As a result, received the award "Turning Goals into Reality" for outstanding contributions to Aircraft Vortex Spacing System (AVOSS) Team and exceptional progress toward Revolutionizing Aviation By Increasing Capacity While Maintaining A High Degree of Safety from National Aeronautics and Space Administration (2001).
 - 3. Worked for 12 months with NASA Ames on the development of various modules for the CTAS;
 - 4. 5 years of development of NATSIM NAV Canada ATC simulator.
- Fibre Optic-based Voice Comms Systems;
- CTAS: provided services for two-year evaluation for Nav Canada of NASA's ATC scheduling tools, including one year at NASA Ames Research Center;
- Enhancement of Marine Radar Targets in Ice, for the Canadian Coast Guard;
- Radar Situation Display;
- Systems Design for Mission Systems for DND's EH-101 helicopter project;
- Support for Canada's Department of National Defence's (DND) Air Traffic Control System (TRACS);
- Weather Radar Data Transmission Studies, for Environment Canada;
- Tunable Dye Laser Control System, for Lumonics;
- Prototype Radar Display for Vessel Traffic Management System, for Leigh Instruments;
- Real time Hydrological/Meteorological Prediction and Data Acquisition;
- Weather Radar Colour Displays.