

# Systems & Software Inc.

# MANNARINO AT A GLANCE

Mannarino Systems & Software Inc provides safety-critical systems engineering services, as well as software and programmable hardware engineering services to the aerospace, defense, space, simulation, rail and power generation industries. We are specialized in the design, verification and validation of safety-critical systems.

### **ENGINEERING SERVISES**

Safety-critical systems, software & electronic hardware engineering services to the aerospace, defense, space, simulation, rail and power generation industries with particular expertise in:

## Airborne embedded software (RTCA/DO-178B/C)

- Avionics systems and software (Levels A-D) Gas turbine Full Authority Digital Engine Controls (FADEC)
- Aerial refueling systems
- Health & Usage Monitoring Systems (HUMS)
- Ground Support Equipment (GSE)

#### Real-Time Software

- Aircraft Simulators
- Power Generation
- Rail

### Systems engineering

- Requirements management (definition, allocation, validation, ARP4754A)
- Systems-level testing
- Safety analysis support (ARP 4761)

### Airborne electronic hardware (RTCA/DO-254) support

- Planning documents & requirements definition
- Coding & verification of Field-Programmable Gate Array (FPGA) & Circuit-Card Assemblies (CCA).

# **TRAINING SERVICES**

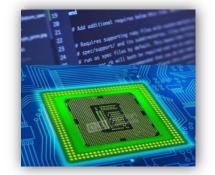
MANNARINO offers a variety of training options including off-the-shelf seminars on industry guidance material as well as customtailored solutions. Training seminars are offered on the following disciplines:

- RTCA DO-178B/C, DO-254, DO-278
- SAE/ARP 4754A
- ARP4761
- Management Training.

#### **DESIGN APPROVAL ORGANIZATION**

MANNARINO is a Transport Canada Civil Aviation accredited Design Approval Organization for Airborne Software (DO-178B/C) & Airborne Electronic Hardware (DO-254). We support our customers in the application of the following guidelines and aerospace recommended practices:

- RTCA/DO-178B/C
- RTCA/DO-254
- SAE ARP 4754A
- SAE ARP 4761
- RTCA/DO-278/A







MANNARINO is very proud to be the recipient of Lockheed Martin's largest investment ever awarded to a Canadian SME. This investment enabled MANNARINO to develop and commercialize its own proprietary airborne software products, complementing its existing airborne engineering and certification services offering.

#### PARTNERSHIP



Curtiss-Wright and MANNARINO announce strategic partnership that greatly expands the capabilities and services available to system designers developing COTS-based DO-254 airborne electronic hardware (AEH) and DO-178B/C software-based safety-certifiable avionics solutions. MANNARINO will provide Curtiss-Wright and its customers with safetycertifiable software, systems integration support, and consultancy through certification processes. The agreement further strengthens Curtiss-Wright's leadership position as a supplier of open architecture-based secure and safety-critical subsystems for Aerospace and Defense platforms.

OUR ITB INVESTOR