

MANNARINO SYSTEMS & SOFTWARE INC. Capabilities Overview

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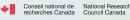
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CORPORATE PRESENTAITON / MANNARINO Systems & Software Inc.

MANNARINO is a 55 person engineering firm providing safety-critical systems, software and electronic hardware engineering services to the aerospace, defense, space, simulation, power generation and rail industries. We are highly specialized in the design, verification and validation of safety-critical systems with particular expertise in the following areas:

- Airborne Embedded Software (RTCA/DO-178B/C)
- Real-Time Software
- Systems Engineering
- Airborne Electronic Hardware (AEH) (RTCA/DO-254)
- Industrial Gas Turbine Controls Software & Simulation
- Aircraft Systems Simulation
- Process Improvement

MANNARINO has been authorized as a Design Approval Organization (DAO) for Airborne Software (RTCA/DO-178B/C) and Airborne Electronic Hardware (AEH) (RTCA/DO-254) by the National Aircraft Certification Branch of Transport Canada Civil Aviation (TCCA) ~ a first for a Canadian service-based organization.

MANNARINO also offers training in the development of airborne software (RTCA/DO-178B/C).

MANNARINO data is subject to and maintained in accordance with the following Canadian and U.S. export control, data control and cyber security requirements:

- Canadian Controlled Goods Program (CGP)
- United States Bureau of Industry and Security (BIS)
- United States International Traffic In Arms Regulations (ITAR)
- Technical Assistance Agreements signed with multiple customers (TAA)
- NATO Secret Security Clearance

MANNARINO is committed to the security and protection of proprietary and controlled data.

Technology Control Plans also in place which detailed processes followed for particular customers.

MANNARINO obtained its ISO 9001:2015 accreditation in March 2018.



MANNARINO CAPABILITIES

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)
- Real-Time Software
- Systems engineering
- Airborne electronic hardware (RTCA/DO-254) support

DESIGN APPROVAL ORGANIZATION (DAO)

Technical expertise recognized by TCCA in authorization of MANNARINO as the 1st service-based company DAO in Canada with authorized specialties in airborne software & airborne electronic hardware .

DESIGN ASSURANCE

MANNARINO has significant experience in the aerospace certification process per the following guidelines: RTCA/DO-178B/C (Software Considerations in Airborne Systems and Equipment Certification) and RTCA/DO-254 ~ Design Assurance Guidance for Airborne Electronic Hardware

MANNARINO also supports its aerospace customers in the application of the following guidelines and aerospace recommended practices:

- SAE ARP 4754A Guidelines for Development of Civil Aircraft and Systems
- SAE ARP 4761 Guidelines & Methods for Conducting the Safety Assessment Process on Civil Airborne Systems & Equipment
- RTCA/DO-278/A Guidelines for Communication, Navigation, Surveillance & Air Traffic Management Systems Software Integrity Assurance

POTENTIAL PARTNERS

As MANNARINO serves a variety of markets, we are always interested in partnering with companies that have a need for our services.

As it relates to the new military platforms that have either been acquired / are to be acquired by the Government of Canada, MANNARINO is interested in the Griffon, the Cormorant, the FSWAR, the CF-18, the Multi-Mission Aircraft, the RPAS and the Future Fighter Capability aircraft. MANNARINO is very well-versed with all the elements of the Canadian Industrial Technological Benefits and Value Proposition requirements outlined by the Government of Canada and we have concluded a number of successful transactions as a result. In addition, MANNARINO is a known entity with Canadian DND / DTAES, and would welcome more direct opportunities working with these two organizations.

MANNARINO through its DAO and Design Assurance capabilities, is very interested in the autonomous vehicle sector. For the 2nd year in a row, MANNARINO will be exhibiting at AUVSI XPONENTIAL in Denver (1 to 3 May) and we will also be a speaker addressing the topic of *«Regulatory Framework and Standards for acceptance of Unmanned Vehicles (UAV) with respect to Complex Systems, Software and Electronic Hardware»*.

MANNARINO is also entering the software product market. We would be happy to discuss this matter with any potential customers that may be interseted in learning about this further.

