



**PRESS RELEASE - FOR IMMEDIATE RELEASE**

## **First Contract for MANNARINO's New Real-Time Operating System**

**MONTREAL, CANADA, and FARNBOROUGH, UK - July 22, 2020**

MANNARINO Systems and Software Inc. of Montreal, Quebec, Canada today announces the first purchase of its newly launched proprietary real time operating system, M-RTOS. MicroPilot Inc. of Stony Mountain, Manitoba, Canada, will employ M-RTOS for its range of certified autopilot systems, which are primarily designed for remotely-piloted aircraft systems (RPAS).

M-RTOS is a modular, flexible and affordable alternative for managing high-level aerospace applications ideally suited for RPAS platforms. It can run on any microprocessor with memory protection; these include MicroPilot's Texas Instruments TMS570L4357 Hercules microcontroller, which is based on an ARM Cortex R5F ASP Core (ARM V7-R architecture). M-RTOS minimizes overhead in memory and timing usage and features robust spatial and temporal partitioning.

M-RTOS is fully compliant with ARINC-653, the industry standard for operating systems, and is RTCA/DO-178C certifiable. Upon initial delivery of M-RTOS in 2019, MicroPilot successfully ported existing autopilot code to multiple partitions, simplifying the path to certification. MANNARINO's contract with MicroPilot includes options to select appropriate certification artifacts based on design assurance level (DAL); and certification support services.

M-RTOS is offered on a novel subscription basis. Product and customer support initiatives are adaptable to unique requirements and provide unparalleled flexibility. The software includes a complete tool suite designed to optimize the user experience. The Mannarino Workbench is an innovative development environment with features encouraging collaboration and maximized efficiency.

"The selection of M-RTOS and collaboration with MicroPilot emphasize the utility and value of our operating system for remotely piloted aircraft, as well as for a host of other aerospace and defense industry applications. Feedback from MicroPilot based on their practical experience has been constructive and has assisted with product improvements," said John Mannarino, President.

The introduction of M-RTOS is the natural evolution of Mannarino's two decades of internationally recognized expertise in aerospace engineering of safety critical systems, certifiable software and electronic hardware. The company is also an accredited Design Approval Organization (DAO) for Transport Canada.

According to Howard W. Loewen, President of MicroPilot, the choice of M-RTOS was based on numerous advantages offered by MANNARINO. "We saw the partitioning and affordability benefits that M-RTOS brings. MANNARINO's expertise in terms of systems development and certification is also critically important. As ARINC partitioning was new to us, technical support was also a very important criterion. MANNARINO brings the full package of certifiable products and unprecedented service we were looking for in the development our next-generation autopilot products."

For further details visit MANNARINO at [www.mss.ca](http://www.mss.ca) or contact Mario Iacobelli, Senior Product Manager at [Mario.Iacobelli@mss.ca](mailto:Mario.Iacobelli@mss.ca)

For further details visit MicroPilot at [www.micropilot.com](http://www.micropilot.com) or contact Howard Loewen, President, at [hloewen@micropilot.com](mailto:hloewen@micropilot.com)

**Mannarino Systems & Software Inc.**

**100 BOULEVARD ALEXIS-NIHON, SUITE 800, ST-LAURENT, QUEBEC, CANADA, H4M 2P4**

**TEL: (514) 381-1360 | FAX: (514) 381-7511 | [www.mss.ca](http://www.mss.ca)**