Since the executive's design has been kept simple and has been implemented in a high-level language, it may be understood both by those assigned to write the initial application programs and those assigned to maintain the system. Thus is not beyond the means of a small programming team to construct a software environment within which real-time application programs may be produced at reasonable cost.

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Appendix: Implementation

The executive was originally implemented using a C cross compiler that runs on a minicomputer and produces optimized Z80 code. This provides an excellent environment for producing major real-time systems. However, for more modest systems and to aid the reader interested in the subject of real-time programming, a version has been prepared that uses the less expensive C/80 C compiler. This is a "native" compiler, meaning that it runs on the target machine. It produces 8080 microprocessor code that will run on the Z80 machine.

The C/80 version, called CX/80, includes source files for the task scheduler, a set of queue assess functions, example application tasks and interrupt handlers, and two runnable demonstration programs. It can be supplied in most 5 1/4" single sided disk formats. Those interested should contact INTR-SOFT Co., Box 351, Bedford, MA 01730.


Walter S. Heath is a Boston-based software consultant. His principal interests are real-time systems software and communication protocols. Previous experience includes the design and implementation of computer navigation, communication, and control systems, including some of the initial computer implementations of Loran and Omega radio navigation systems. This article is based on work he performed for the Federal Aviation Administration at Lincoln Laboratory on the TCAS Airborne Collision Avoidance System and a GPS satellite navigation system. He also contributed to the design of the communication protocol for FAA Air/Ground Data Link Project.

Heath received BSEE and MSEE degrees from the University of Michigan, specializing in electromagnetic field theory and computer technology. Before concentrating in real-time computer systems, he performed original research on the application of ferrite materials in the design of microwave antennas and components.

Questions about this article can be directed to the author at 465 Auburn Street, Auburndale, MA 02166: (617) 244-3071.