Object-Based Computing and the Ada Language  
G. D. Buzzard and T. N. Mudge

While Ada incorporates key concepts of an object-based language, it was designed to compile onto conventional architectures. Consequently, it captures only the static aspects of object-based computing.

Space Station Flight Software: Hal/S or Ada?  
Allan R. Klumpp

Space station flight language selection and implementation must begin soon, as at least two years are needed to implement embedded languages.

Survey of Spacecraft Memory Technologies  
E. L. Greenberg, R. E. Malcho, P. J. Stoll, and D. J. Theis

Increasingly diverse and sophisticated requirements projected for future satellite systems are causing spacecraft engineers to consider how much and what types of memory to use.

MASCO: The Design of a Microprogrammed Processor  
Jack N. Fenner, Jeffrey A. Schmidt, Houssam A. Halabi, and Dharma P. Agrawal

A microprogrammed simulation of a hardwired processor is easier to design and modify, especially when the simulation is systematically derived.

A Fault-Tolerant Dataflow System  
Vason P. Srini

A distributed computer system based on the data flow model of computation can support fault tolerance by automatically reassigning nodes when processors fail.

Computer Recognition of Two Overlapping Parts Using a Single Camera  
Scott Berman, Parag Parikh, and C. S. George Lee

Computer vision will revolutionize automated assembly processes by enabling robots to select and transport components. This system differentiates between overlapping automotive parts.

An Assessment of the Competitiveness of the United States Software Industry  
Ware Myers

If the US software industry is to continue to dominate the world market, the government may have to provide legal protection, import/export controls, and investment incentives.

Using the Decision-Tree Model in Database Design  
Ambrose Sunny O. Okorie

This tool for the logical design of centralized databases offers a precise view of the application environment without the need for a design-user middle man.

Workshop on Models and Languages for Software Specification and Design  

Evaluation criteria are still needed for effective tool comparison, but the major lack in existing tools is analysis capabilities.