SURFACE SHIP SUPPORT PROGRAM

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In an environment in which the United States Navy faces the most severe threat at sea in its history, the deployment of increasingly sophisticated, electronic-oriented weapon systems on all surface combatant ships has become an absolute necessity. As a direct consequence, the use of automatic test equipment in support of those electronic systems is now imperative at all levels of maintenance. This derives primarily from the fact that only ATE can provide the capability to achieve the required timely, comprehensive and effective on-board testing. In addition, the variety of ATE currently available makes it economically feasible. To reap these benefits, however, a comprehensive, well-integrated program plan is essential. The Surface Ship Support Program has been formulated within the Naval Material Command in response to that need.

Experience with the development and employment of ATE in support of avionics maintenance has shown its implementation to be a complex and sometimes costly process. Accordingly, a major element of the program will be determination, through requirements analyses, of cost-effectiveness and feasibility of utilizing ATE for test and repair of electronic modules and printed circuit boards. Thereafter, the program will establish, through level of repair and workload analyses, optimum deployment profiles of resources at all levels of maintenance and will, in addition, evaluate current ATE capabilities and workload at existing Navy facilities. Much of this will be accomplished in a pilot program which will validate equipment availability and effectiveness. The pacing factor in this deployment will be the availability and development of adequate numbers of test program sets to provide return on investment. As an extension of the pilot program, a software center will be developed to support the deployed automatic test equipment and associated test program sets. A final element in the program involves establishment of a close tie-in with miniature and microminiature repair facilities.

As a result of this total effort, which involves all the Systems Commands, it is anticipated that a significant number of testers to support surface ships will be deployed in the early 1980s. This will be a vital step in achieving the degree of Fleet readiness needed to carry out the Navy's assigned missions in the face of the current and projected threat.