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TECH HELPING ARMY TO COMPUTERIZE   For Immediate Release

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ATLANTA, GA -- The computer revolution is forcing the Army to revise traditional approaches for equipping itself.

In the past, military leaders have defined major requirements, then built and fielded complete systems to meet these objectives. This method has not fit a current U.S. Army Forces Command (FORSCOM) goal: rapid computerization of some of its tactical intelligence operations.

''Computer technologies are evolving so rapidly that hardware is outdated long before systems can be implemented,'' says Ed Shanahan of Georgia Tech's Engineering Experiment Station. '' Also, it's hard for military personnel to assess their computer needs before working with the technology for a while.''

Georgia Tech's solution to this problem has been to apply an ''evolutionary'' approach for the Army to define its computer needs and identify appropriate hardware.

Engineers in Tech's Command and Control Branch are helping FORSCOM intelligence units to ''use, learn and develop'' computer technologies for their jobs.

Instead of defining a whole computer system in advance, then building it, Georgia Tech will help the Army to experiment with a series of demonstration models. This project will progressively refine the requirements for computerizing Army intelligence operations until a

high grade system is in place.

In short, the evolutionary approach will rely on ''trial and learn'' experience instead of mere theory.

''The advantage of this method is that the system developers and the Army intelligence operators will be speaking the same language,'' Shanahan says. ''Everyone will be using compatible demonstration models and making improvements based on their total experience.''

This acquisition procedure is not practical with large weapons systems, because putting sufficient demonstration models into the hands of users would be prohibitively expensive. However, computer equipment prices have dropped so much in recent years that the Army can afford to experiment with small hardware before investing in a final system.

Shanahan expects this evaluation process will take three to four years. To begin the program, FORSCOM bought 33 Apple microcomputers and placed them in intelligence units throughout the Command.

Georgia Tech will present a series of two-week courses for Army intelligence personnel in the use of the Pascal computer language. Tech engineers also are developing a videodisc which can be used in conjunction with the Apple as a training device.

Georgia Tech will assist the Army in storing spot reports and order of battle files in the Apple memory. Tech will develop another videodisc which can display this information on computer graphics maps. This feature will allow intelligence analysts to interpret the significance of battlefield data more rapidly than is currently possible.

Another computer system being investigated provides intelligence

personnel with a digitized map of battlefields using a microcomputer.
This display allows operators to do line of sight and terrain analysis
quickly and accurately.

Georgia Tech's Command and Control Branch is experienced with
computer technologies and the problems of the military. Its research
staff includes veterans of the Army, Navy and Air Force who have worked
extensively with military intelligence units. The Branch also has
access to the capabilities of other Tech R&D programs, many of which
are oriented to military intelligence activities.

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