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OFFICE AUTOMATION

A TRIAL BALLOON IN D.C.

Xerox's experimental office information system gets high marks in the White House, but others are wary.

Washington, D.C., is a city quite familiar with trial balloons. Over the years, countless projects and schemes have initially surfaced this way so it isn't at all surprising to see a major office system vendor testing the Washington waters in search of a market. And that's exactly what Xerox Business Systems is doing in an effort to check out the potential marketing might of its sophisticated but still experimental office information system.

Officially called the Advanced

Multi-Function Office Station (AMFOS), it was developed at the Xerox Palo Alto Research Center around a work station called the Alto. It's attracted much attention despite Xerox's concerted efforts to keep it under wraps. Up until the fall of 1977, Xerox did not allow the prototype system to be used outside the company. Operating internally at Xerox in an exclusive evaluative mode, the AMFOS wasn't installed at an outside site until May 1978.

That outside site happened to be the White House, which had a contract with Xerox to test the AMFOS system through the National Bureau of Standards. In addition to the White House, the Xerox systems also are being evaluated by the NBS, the House and Senate. "Washington," confirms a Xerox spokesman, "is definitely a major test site for the AMFOS system."

While Xerox readily acknowledges all this AMFOS activity in Washington, up until recently the company has been reluctant to talk about it. All the Capital city contracts, in fact, carry specific nondisclosure clauses. As part of these confidentiality conditions, neither the White House, Congress nor NBS is supposed to say anything about the experimental system. Xerox itself, a company spokesman explains, is also "not supposed to use the fact that the system is installed in these places to advance the marketing of the system in any way should we ever want to market it."

But despite the hush-hush atmosphere, AMFOS systems in Washington are no secret. The key system element is the Alto workstation which features advanced alphanumeric and graphic capabilities. The station includes a keyboard, a high resolution crt, a 16-bit minicomputer and a disk. Another important system component is the xerographic printer which receives digital images from

the workstation. (While the printing is done xerographically, the imaging is done with a laser.)

Communications is through an Ethernet-type distribution arrangement which allows up to 256 communicating workstations to be connected to the sys-

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tem. Using this wideband link, the stations can broadcast brief bursts of information at frequencies of 50KHZ or more.

The White House complex has five AMFOS systems in operation. To prevent them from shooting off megahertz-range emanations, Xerox designed special shields for the gear for the White House environment. Some of the system's high-speed logic caused these broadcast problems and troubled security-conscious White House personnel who found that the system was jamming their own bug detection devices.

As part of the White House project, the Office of Management & Budget put in a standalone AMFOS for its energy task force. Installed in August, the system helps track the Administration's energy initiatives and legislation. Most of the AMFOS systems in the White House have been aimed at sophisticated word processing applications. These chores basically involve document and newsletter production. Some interactive graphics experiments are also under way, but no production jobs have as yet been tackled.

Fascinated by AMFOS's wide-ranging applications potential, President Carter's assistant for information management, Richard Harden, has launched an experiment in his own office with the equipment. Harden, who also serves as director of the Executive Office of the President's Office of Administration, had two

shielded Alto workstations installed in June—one in his office and one directly outside at his administrative assistant's desk.

Harden views his AMFOS arrangement as an executive workstation. He says he wants to explore the possibility of using this technology "to improve the productivity of the executive as opposed to just doing the fancy text-editing type applications."

Xerox has been working closely with Harden to develop certain applications. Harden is currently using the system for such applications as document

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preparation, project tracking and list maintenance. He's also considering a scheduling/time analysis system which would maintain his appointments schedule as a byproduct.

Harden is impressed with the Xerox system and sees the White House experiment as a mutual learning experience. "It's certainly the most powerful piece of equipment I've ever worked with," he declares.

Another AMFOS experimenter, House Information Systems (HIS) chief Boyd Alexander, is less enthusiastic. Alexander, who has been using the system (currently configured around five workstations) about a year and a half, says "the newness has worn off." HIS, which is currently evaluating the AMFOS project, has found the system lacks capabilities needed in a total office automation application.

Alexander reports that while the system is good at handling large volumes of text such as committee reports, it isn't particularly good on small correspondence work. "The communications aren't quite there yet," he contends, "and that's the weakest link. Also, the graphics package, while a unique approach, is a little difficult to use."

While AMFOS has potential, "right now it looks like it's probably going to be more costly than alternative methods that could give us the same product," he says.

Xerox spokesmen repeatedly point out that Xerox is still in a marketing probe phase with AMFOS and will eventually get all functions running smoothly. "It's kind of a battle," concedes a Xerox source, "between maintaining a certain degree of functionality, and yet making it available to terminals which have no capabilities in terms of implementing those functionalities. It's a very difficult problem to wrestle with."

John Swearingen, director of technical services for the Senate, is cautiously optimistic about his AMFOS experiment

which began in August 1978. "We're getting use out of (the system) but we're not ready," he insists, "to make a general application out of it." Swearingen also admits that Xerox's reluctance to talk about even a tentative timetable for any follow-on product has given rise to uncertainty. "By now I would have expected Xerox to have announced the product. And that makes us a little bit uncertain about it," he confesses.

The Senate, which is running an AMFOS setup with eight workstations and three xerographic printers, is using the system mainly as a pure word processor to get material such as committee reports ready for printing. "As far as the printing aspects of the system are concerned," Swearingen notes, "we think it has great possibilities."

AMFOS project workers in the Senate, according to Swearingen, did send Xerox back to the drawing boards for more software. Xerox came up with some fixes but some of "the changes we've asked for we understand could be substantial," says Swearingen.

To date, around 1,200 Alto processors have been manufactured by Xerox. Some are workstations and some have been incorporated into filing systems, communications stations or laser printers. Most of these Alto's are being used in-house by Xerox in an R&D mode. Several large U.S. corporations are also pilot testing the prototype system. Xerox, however, declines to pinpoint exactly which companies are on the test circuit. But the company does admit it's searching for new test candidates.

"We're looking for additional probe sites to test different functionality for the workstation," affirms one Xerox insider. "We're very interested in the clerical aspects of it as opposed to the secretarial aspects." But what will that future product be like? The Xerox source sheds some light on what may unfold: "We're really looking at this system in its product form as a terminal which would have multi-uses based on the kind of software we would develop to put into it. It would be a common set of hardware tailored to a specific application based on the software. . . . And all communications would be over both the intraoffice network, Ethernet, and the interoffice network which could be a combination of leased lines, satellite communications, XTEN or whatever communications facility might be available in the future."

Xerox's future in the office-of-the-future market clearly hinges on the AMFOS system. Today the company seems content to garner feedback from its various marketing probes, including the highly visible ones in Washington. But the cautious company also knows some of its system testers are getting anxious. Declares the Senate's Swearingen: "I'm

pleased with the test we took. Now we're waiting on Xerox to see whether the market is there for them—whether they are finally going to follow up and give us all the benefits of a production model."

—Linda F. Runyan