

**CLIENT** MBS Electronic Systems  
**PROJECT** Feature article for trade journal publication  
**OBJECTIVE** Raise awareness and generate inquiries about MBS's AESyBus line of bus interface modules.

## COPY EXCERPT

### Defusing the Obsolescence Time Bomb

**Next-generation interface solutions will make upgrading easier and less expensive when aircraft outlive their test equipment.**

Computer-hosted testing solutions often hold a hidden cost for aerospace testing and maintenance organizations.

While their aircraft often remain in service for 30 years or more, the computer data buses used in their test systems typically become obsolete within 10 years. Consequently, maintaining an operational test system when computers or data buses fail can require the expense of replacing interface cards, developing new software and re-qualifying the test system.

Fortunately, a new class of avionics bus testing solutions is emerging that offers longer life spans for test equipment. Employing standard Ethernet and IP protocol, they show promise for ending this vicious cycle.

#### Evolution and Obsolescence

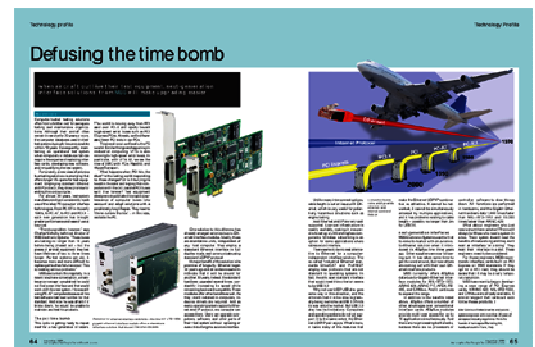
For almost 30 years, test system manufacturers have consistently made use of the latest PC consumer interface technologies. From PC-XT in the early 80's, to PC-AT, to PCI and PCI-X – each new generation has brought greater performance and ease of use at low cost.

“But there's a problem,” says Charles Nicholls, technical director of MBS Electronic Systems. “These buses are not lasting more than 10 years before being phased out. But the aircraft equipment they test have lifetimes of two to three times longer. As test systems get old, it becomes harder and harder to replace parts when failures occur. This is creating serious problems.”

MBS encounters this regularly. In a recent telephone conversation, a maintenance manager complained he could not find a new interface card which would work with his test system. He was still using PC-AT computers, because all his test software had been written for that standard. And now he was afraid if it broke down, he would be unable to maintain and test his products.

#### The PCI Time Bomb

This cycle is getting ready to repeat itself for a new generation of testers. The world is moving away from PCI and even PCI-X. It's moving rapidly to high-speed serial buses like PCI Express (PCIe). Already, we find fewer and fewer PCI slots in our computers... \*



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*\* Call or write to request a PDF of the complete article.*