

# BusinessJet interiors INTERNATIONAL

INNOVATIONS

## IFEC AND CMS

There seems to be consensus that the trends for increased connectivity and use of PEDs will grow. "The challenge will be supporting a multitude of off-the-shelf platforms in terms of charging and input," says Tray Crow, director of interior design at Gulfstream.

For Inmarsat, which offers a Ka-band internet service with speeds up to 30Mbps, the key is to keep adding capacity. Kurt Weidemeyer, vice president of business and general aviation, says Inmarsat is talking to its hardware suppliers to introduce "proven" modem technology that will take streaming speeds to 330Mbps within the next two years. "We're also looking to get more efficiency out of the antenna," he says.

Also within the sphere of connectivity, Chris Moore, CCO of Satcom Direct, says maintaining the integrity of data in the air through cybersecurity tools is key.

PEDs aren't the only technologies that could contribute to the demise of fixed displays, says Billie Noble, director of electrical engineering at Associated Air Center (AAC): "I would like to see some interior designs replace monitors with screenless TVs that work like holograms."

Yves Pickardt, VIP aircraft interior designer at Linda Pinto-led studio Alberto Pinto, has the same idea: "You can get rid of real monitors and display information on almost any surface."

Elisabeth Harvey, director of design at the Jet Aviation Basel

Design Studio, says fixed PCUs will be replaced by smart storage solutions and holding devices for PEDs, but that 3D screens will become more popular. In the near term, Vince Restivo, vice president of program management at Mente Group, says space-saving OLED/QLED screens aren't too far off. "Practical video-conferencing and voice-activated system interfaces will soon be prevalent," he says. "Camera and video screen improvements will also make virtual reality a part of the interior."

Pickardt of Alberto Pinto and Adam White, director of Factorydesign, also expect a move to voice control. Harvey of Jet Aviation expects certain developments in the car industry to translate to private aircraft interiors within the next 10 years. "Hologram touch displays or gesture control will give passengers much more freedom in the cabin," she says.

Jay Beever, vice president of interior design at Embraer Executive Jets, warns that importing from other industries has to be done carefully. "We do not want to accidentally incorporate something that becomes out of date quickly," he says.

Overall, Noble of AAC says the move is toward functions combining in more unobtrusive and lighter equipment: "Companies will start producing smart boxes that include all the functions needed."

The recent FCX-001 concept from Bell Helicopter envisages augmented reality being used for infotainment

There is now a European Centre for Cyber Security in Aviation; members will be provided with intelligence on cyberattacks and on-demand means to face these threats

The new Glass Cabin 3D moving map from FDS Avionics enables passengers to see through the cabin to the surrounding terrain in the direction they point their PED



TOP: FDS AVIONICS' GLASS CABIN 3D MOVING MAP

ABOVE: VISION SYSTEMS INTRODUCED GESTURE CONTROL FOR ITS SPD-SMART EDW

RIGHT: SATCOM DIRECT AND LUFTHANSA TECHNIK RECENTLY LAUNCHED A PED-FRIENDLY IFEC CONTENT SERVICE DELIVERED VIA SMARTBOX



Inmarsat is launching the European Aviation Network, using a combination of satellite and air-to-ground technologies. In test flights, the service hit speeds of up to 75Mbps. Kurt Weidemeyer credits this to having a 30MHz frequency spectrum and using 4G LTE technology



LEFT: IDAIR ENABLES CMS CONTROL FROM PASSENGERS' SMART WATCHES

RIGHT: GESTURE CONTROL IS ALREADY IN SOME CARS - INCLUDING THIS VW GOLF

