

# Remote Access

In-flight entertainment handsets have had many facelifts over the years— and yet another is within arm's reach.

BY HOWARD SLUTSKEN





**E**arly remotes were button-festooned slabs of plastic that liberated TV viewers from the excruciating exercise of getting up from the couch, walking across the room and changing the channel. Now, remotes are sleek, high-tech, touchscreen-enabled devices that likely have the computing power to calculate an orbital trajectory – and still change the channel.

Up in the air, there have been remote controls for as long as in-flight entertainment (IFE) has been in the cabin. Long before touch screens, control buttons for an IFE system were either installed in a seat’s armrest or on a tethered remote unit that retracted into a recess.

“I think the first purpose of handsets for Emirates was probably as an in-seat telephone, in 1995 or ‘96,” says Patrick Brannelly, Emirates’ divisional vice-president of Customer Experience, In-Flight Entertainment and Connectivity. “We added passenger control unit buttons for efficiency, and even a keyboard. The games controls were added, but I’m not sure games even worked in those days.”

### ON THE SMALL SCREEN

The technology has come a long way since the mid-90s. The introduction of smartphones and the landslide of available content and applications has transformed our lives on the ground and in the air, where these changes are being reflected in IFE controllers.

“Handsets are perpetually evolving, and today we are seeing three major trends,” says Jon Norris, senior director, Corporate Sales and Marketing, Panasonic Avionics, and APEX board member. “A while back, the trend was to increase functionality, include video or map capabilities and provide second-screen

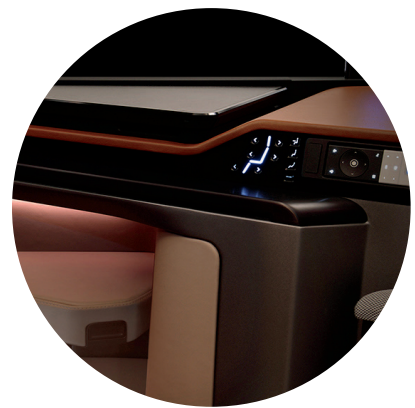
entertainment to passengers. Today, that cycle seems to have run its course, and we now appear to be going back to simple designs.”

Norris explains that handsets are now designed with a focus on ergonomics, showcased by Panasonic’s introduction of a smoothly curved, “pebble-inspired” controller for Emirates’ recently announced upgrade to its first-class suite.

While these premium cabin screens may be touch-enabled, they’re just too far away for a seated passenger to comfortably reach. One, if not two control units are often available to bring a second or even multiscreen experience to the passenger, mirroring content viewing habits from the ground.

An interactive second screen is the second trend, Norris says. “For airlines that still want to offer a more premium experience, a slim tablet design seems to be gaining traction. We’ve developed tablet designs that can act as a second screen for seat and cabin environment control and to navigate the IFE system. These are typically larger, 13-inch capacitive touch screens offering Wi-Fi, Bluetooth, a high-definition camera, microphone, speaker and other options.”>

Panasonic Avionics’ Waterfront seat offers a tablet controller and dedicated handset (previous page and below). The handset from Thales’ Avant IFE system offers second-screening capabilities (above).



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**JON NORRIS,  
PANASONIC AVIONICS**





Handsets with second screens complement Emirates' IFE system.

According to Dave Pook, director, Marketing, IFE Systems, Thales InFlyt Experience, "Passengers will demand more second-screen applications to augment their experience on the IFE display. They will want second-screen applications on the smart controllers in first- and business-class seats, but also on their personal devices."

It's no surprise that the ubiquitous smartphone is the third trend Norris identifies in IFE controllers. Brian Simone, vice-president, IFE Product Line, Zodiac Inflight Innovations, agrees, saying that, in addition to a handset, the company developed a RAVE mobile application that allows passengers to pair a personal device to the IFE system to be used as a remote or second screen in flight.

### DOWN TO THE WIRE

Then there's the debate between wired and wireless controllers. "Wireless is always better from a user perspective, but tough practically, from an airline perspective: managing losses, but more importantly the ability to keep devices charged enough to last a long flight, quick turnaround and return flight," Emirates' Brannelly says.

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EMIRATES



Simone says that while the tether on a wired controller is the most common failure point, "It is also the feature that keeps the handset from walking off the aircraft. I believe this to be a love/hate relationship – we all hate the fact that it is wired, but love the simplicity of the system." At the same time, the pace of upgrades to consumer devices makes it difficult for airlines to develop and

deploy wireless controllers that meet consumer expectations.

"A purpose-built wireless controller is a challenge for suppliers and airlines. These devices are often larger and less capable than the equivalent consumer devices and are obsolete by the time they enter in service. This leaves the passenger underwhelmed compared to the amount of effort spent to develop, deploy and manage these units," Simone says.

Back in economy, embedded touch screens and Wi-Fi-enabled IFE systems that stream content to passengers' personal devices are eliminating the need for remotes. "We see decreasing demand for controllers in the economy-class seats, with the exception of first-row economy-class seats, with displays mounted on the bulkhead. This is largely due to the basics of human anatomy, as it's easy to reach out and touch screens in economy. Personal devices and associated applications synchronized with the IFE display experience is the bigger trend in the economy-class cabin," Thales' Pook says.

PHOTOS: EMIRATES; PANASONIC. ILLUSTRATIONS: MARCELO CACERES

### Handset Handiwork

A rundown of the IFE controller designs that have appeared in the cabin.



### Button Up

Button-festooned handsets were designed to increase functionality and display every feature available to the passenger.



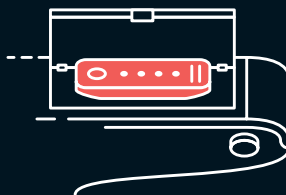
### Second-Screening

IFE controllers with built-in video displays allow passengers to keep watch of the moving map on their remotes, while enjoying the content catalog on the embedded screen.



### Minimalist

With the advent of touch screens came the appearance of mobile devices, such as tablets, as large control panels.



### Dedicated Controllers

Despite the popularity of the BYOD trend and companion apps, airlines are still keeping dedicated controllers around – providing passengers with multiple points of entry into the IFE system.



The bring-your-own-device trend has influenced the design of IFE systems.

### FAST FORWARD

Looking ahead, personal smartphones will take on a greater role in enhancing passengers' IFE experience by enabling customized pre-flight planning, and serving as an onboard remote control, Norris says. Describing Panasonic's companion app, he explains that "Passengers can preview content, set up custom playlists, order special food, and even resume entertainment from a previous flight. Once on board, they simply sync their device to the IFE system, load their custom content and then begin their entertainment experience."

And while the number of devices on our tray tables might eventually match the number of remotes we have scattered at home, the dedicated IFE controller will still be there, and will benefit from smartphone technologies – with improved user interfaces and cursor navigation, touchpad tech, accelerometers and motion tracking, even gesture and voice control.

"Voice recognition has become very good – directional microphones and the



Companion apps allow passengers to navigate the IFE system from their smartphone.

'abilities' of voice-controlled devices are amazing in the consumer world. On the aircraft, it is still unproven if the noise increase is going to be manageable," Zodiac's Simone says. After all, you don't want that loud talker next to you changing the channel on your screen. ■