Did ASI create the first commercial aircraft router?

Author - Ron Chapman Company Founder ASI Group

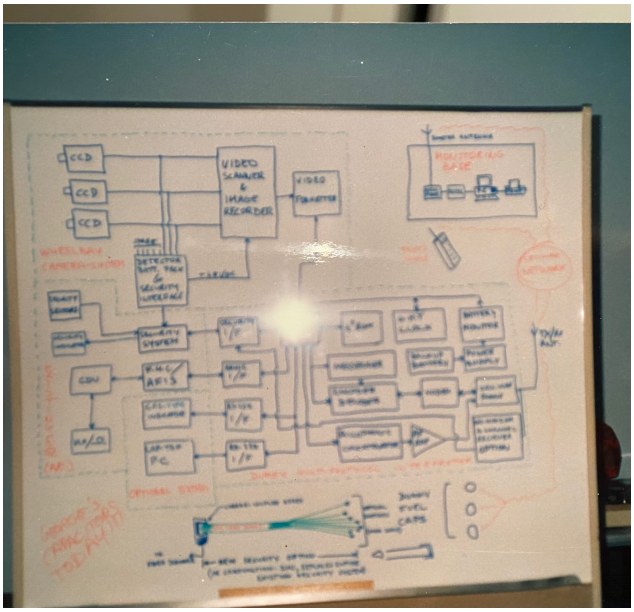

Figure 1 Router Design 13th July 1987

35 years in the making

On 13th July 1987 I formed ASI and in a converted airline utilities building on Essendon Airport, white boarded our next generation system designated the Duplex Multi-protocol Interpreter “DMI”.

It’s hard to see in the photo, our plan for interfaces for Video, Cockpit and PC, with off aircraft links including VHF, cell phones and satellites. (Apologies for the resolution, we did not have a decent camera back then)

With the arrival of cellphone technology and potential for new satellites, plus the evolution of satellite paging and ACARS, I wanted a system that had the flexibility to interface any device onboard and connect to the outside world. Our primary justification was to provide an active office environment however, I could also see applications for security and the cockpit.

In December 1989, we would commission the first DMI on a corporate B737-300, including our inflight PC.

Inflight it supported our office in the sky concept and on ground connected the aircraft security system to our global surveillance centre.

The DMI incorporated both cellphone and satellite paging technology for data transfer (overland) and included a video interface, as part of a more advanced plan to transmit digital pictures via cell phone and FAX, using frame capture technology.

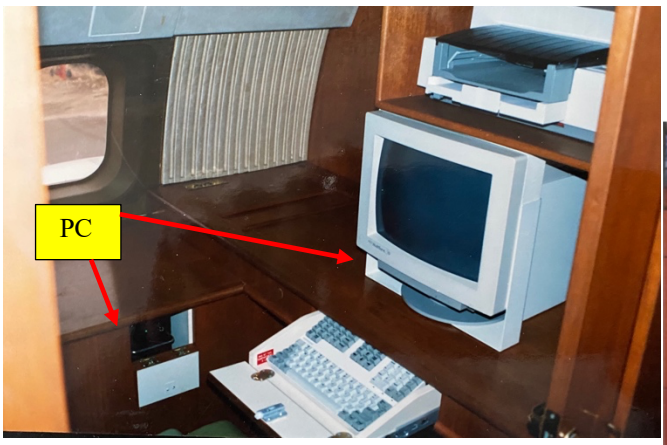

Figure 2. Office in the Sky B737-300 Dec 1989

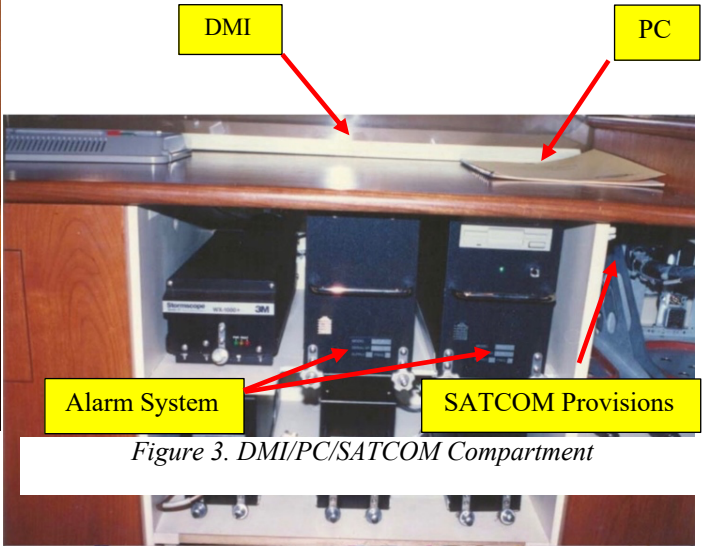

Figure 3. DMI/PC/SATCOM Compartment

To top it off we included provisions for the new INMARSAT constellation providing global satellite coverage.

The result was a system and concept that would form the basis of all future ASI programs.

In 1990, working with QANTAS we embarked on an airline version called ACAMS. Two years later ASI commissioned the world's first Cabin Crew and Passenger Telefax messaging server on a QANTAS Boeing 747-400, that also facilitated live ordering of flowers (Interflora) and a duty-free POS terminal.

I don't think there was another comparable solution in the eighties, that could be classified as a commercial aircraft router. The in-seat video companies developing cabin distribution, lacked off board connectivity and while ACARS might predate the DMI, it's focus was operations. So perhaps the DMI was a first for the cabin.

Three decades later and the concept of DMI has taken a new direction with the launch of ASI's new airline system called fflya. A revolutionary onboard Bluetooth router connecting via the latest Iridium Next Low Earth Orbit satellites. Fflya is a new generation ultra-low-cost passenger and cabin crew free messaging platform, with interfaces to the cockpit and cabin for Telemetry and Credit Card processing.

As we also celebrate our 35th year in the inflight connectivity business, little did we know that impact that whiteboard would ultimately have on ASI.

Without the generous support of many airlines, private jet operators and industry friends our DMI and certainly ASI would not be where it is today.