

PanAmSat Calls on Enliten for support during the 2002 World Cup in Seoul, Korea



A view of the International Media Center in Seoul, Korea

The 2002 World Cup, co-hosted by South Korea and Japan, was a tremendous success for the US Soccer Team, exceeding nearly everyone's expectations. The event was a phenomenal success for a number of US companies as well, including PanAmSat Corporation (PAS) and the Enliten Management Group.

PanAmSat, a subsidiary of Hughes Electronics Corporation, maintains a fleet of 21 communications satellites on a global basis and is a leading satellite provider of global video and data broadcasting services. PanAmSat manages the transmission and distribution services of many of the major live sporting events throughout the world, including the Olympics, World Cup and Pan American Games. The 2002 World Cup was the largest special event in PanAmSat's history, and presented PanAmSat with another opportunity to excel, offering customers unparalleled global reach, production and transmission facilities.

PanAmSat provided the satellite delivery of live and pre-recorded video of the games and news updates from the numerous television studios and stadium venues throughout the host countries for broadcast partners around the world. To accomplish this, PanAmSat installed and operated a fully functional Satellite Content Delivery Network (CDN), including fixed antennas, mobile Satellite News Gathering (SNG) facilities and a fully staffed operations center and booking office, in the International Media Center in Seoul, Korea (pictured above).

Enliten Management Group, a Marietta GA, consulting and technical services group specializing in the satellite industry, provided technical staffing to PanAmSat to help manage and operate the network for the duration of the games.



Don May and Tom Baltes of Enliten pick up security credentials for the World Cup.

PanAmSat's CDN provided comprehensive services, such as encoding, compression, transmission, encryption, monitoring and conditional access for nearly 20,000 hours of World Cup programming to broadcasters, television programmers and news agencies from over two-dozen countries around the world via more than 60 different paths and 30 transponders across 11 satellites.

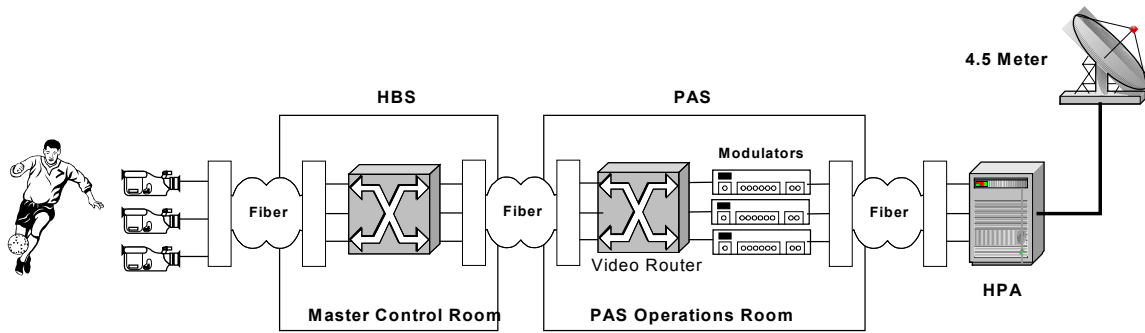
In early-May, Enliten engineers traveled to Seoul to assist the PanAmSat staff in preparing for the start of the games in mid-June. The Enliten team was on site at the International Media Center in Seoul throughout the entire games, providing operational support, network monitoring and engineering assistance to PanAmSat and its customers and partners. Enliten had provided similar support for PanAmSat at the 2000 Olympic Games in Sydney, Australia.



Enliten's Michael Howe inspects Antennae on the roof of the Media Center

Broadcast Feeds:

Several International broadcasters contracted with PanAmSat to receive broadcast feeds via PanAmSat's satellite fleet. Available services included a broadcast feed with graphics and commentary, a basic feed without graphics and commentary, and supplemental camera angles from the venues with views of the fans, stadiums, coaches and players during the games.



Simplified Block Diagram of Broadcast Feeds

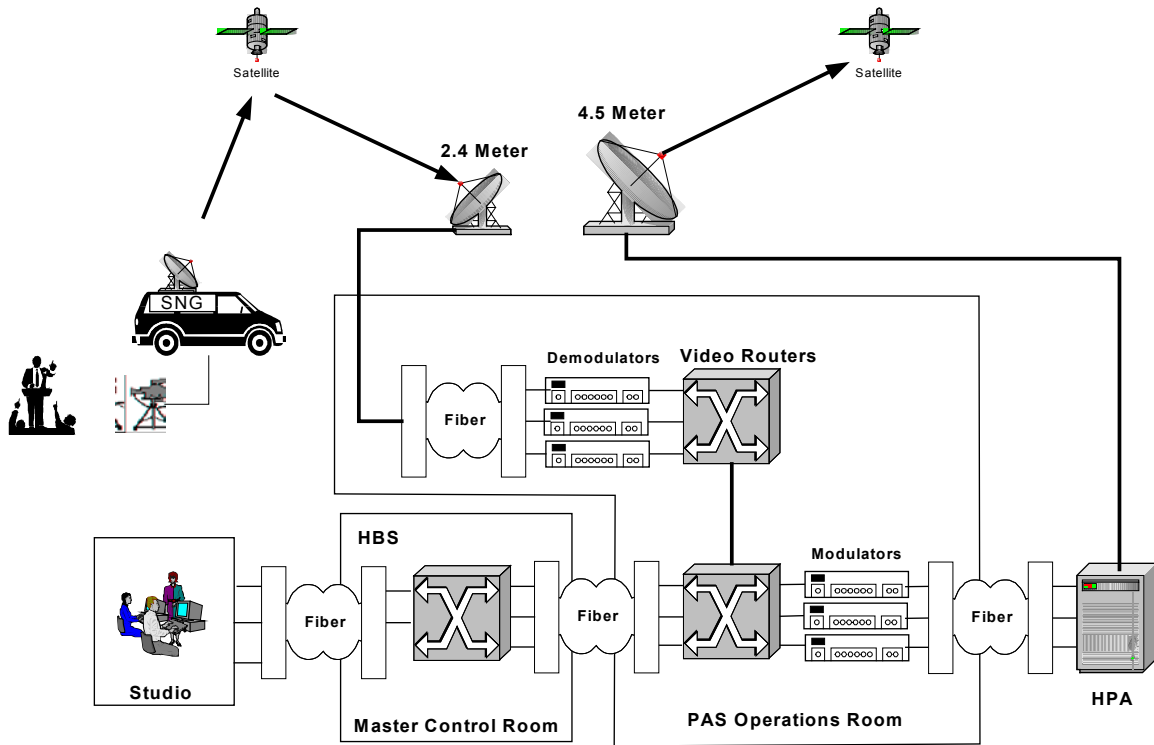
These broadcast feeds were provided on permanent, 24 x 7 circuits over the PAS satellite fleet for the duration of the games. Video feeds from the venues were carried over fiber connections to the Media Center, and then routed to PAS Operations. Host Broadcast Services (HBS), a Swiss company, provided the fiber circuits, routing services and connections to temporary television studios constructed in the media Center.

PanAmSat teleports in Germany and the US provided relay services for final delivery to broadcasters internationally. With these services, Broadcasters were able to provide live coverage of the games as well as highlights of previous games and analysis of up-coming matches.

Ad Hoc Events:

In addition to the permanent broadcast feeds, PanAmSat offered book-able short term bandwidth for Ad-Hoc events such as live reports and news conference coverage. SNG trucks provided mobile on-site up-linking. The signals were down-linked by the PAS Operations staff and either routed to a local studio or re-modulated and transmitted to a PAS satellite for relay to a remote facility.

Downlink services included C and Ku bands, and SA, NAGRA and SCOPUS compliant IRDs. The CDN architecture was designed to support up to six concurrent Ad Hoc events at one time.



Simplified Block Diagram – Ad Hoc Events

For further information on the services provided by Enliten, please see our Web Site, www.enliten.net , or call Enliten at (770) 590-1590.