

Cable AML News

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CABLE ONE UPGRADES TWO-WAY AML

Cable AML has concluded an upgrade of an existing bi-directional AML system linking the towns of Natchez (Mississippi) and Vidalia (Louisiana) across the Mississippi River .

Cable operator Cable One wanted to improve the reliability of the link to provide better upstream DOCSIS modem service to Vidalia subscribers from the existing Headend at Natchez.

The improvements required eliminating a tower-



Kenny Wright, System Engineer for Cable One of Natchez MS, at the Vidalia site in Louisiana. *Continued on page 4*

m o u n t e d LNA which was prone to failures due to the high frequency of lightning strikes on the tower. To compensate the losses through a long run of elliptical waveguide, a high power upstream transmitter

CABLE SYSTEM EXPANDS WITH AML LINK



From left to right: Henry Ketner with Hilario Baltazar, Alejandro Baltazar and Jorge Alejandro Baltazar at the conclusion of the training in Torrance, California.

Mexican Cable Operator Sistema de Comunicaciones de Quiroga has started to provide cable service to the towns of San Andres and Eronguaricaro in the state of Michoacan (Mexico) from an existing headend at Quiroga.

Two AML links fed from the same transmitter were used to transport the 65 channels from the headend to the two towns at distances of 11 Kms and 25 Kms respectively. The second of the paths is mostly over water, crossing Lake Eronguaricaro.

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44 MILE INTER-ISLAND DIGITAL VIDEO BACKBONE

Cable AML has provided a cost effective state-of-the art system to transport video feeds from the US Virgin Island's Legislature in St Croix to the nearby island of St. Thomas.

The system's first two hops are implemented with an 18 GHz FM modulated link carrying video and stereo audio from the USVI Government building in Fredricksted (St. Croix) to a relay repeater on St Georges Hill (1.75 miles) and then to a receiver at Blue Mountain (4.45 miles).

To minimize cost and complexity, an on-frequency



Anthony Ramirez adjusts the 4 foot 18 GHz receive antenna at the St. Georges repeater site.

repeater at St Georges Hill was used to avoid de-modulation, re-modulation and signal processing associated with conventional video repeaters.

At Blue Mountain the video and audio feeds are QPSK-modulated and frequency-multiplexed for transport by a 13 GHz bi-directional broadband link to the nearby island of St. Thomas (a distance of 44 miles).

The receiver at St Thomas recovers the baseband video and audio for transmission to the Government facility and the local cable system (Innovative Cable).

The inter-island QPSK link provides a bi-directional

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TV ZAC EXPANDS MMDS COVERAGE



Lic. Francisco Aguirre (left) and Ing. Mario Torres (right) following installation of the Veta Grande MMDS Repeater.

TV ZAC, the fastest growing MMDS operator in Mexico, has recently implemented a significant expansion of the coverage area of the Zacatecas-Fresnillo MMDS system by installing a 250 Watt Repeater in Veta Grande, near the city of Zacatecas, and also relocating the Fresnillo transmitter to higher ground.

The new repeater expands the coverage area of the Zacatecas system by providing coverage to Calera and several communities near Calera, with a combined potential market of more than five thousand TV homes. The repeater is temporarily fed from another 30 Watt Repeater installed for this purpose on the La Virgen hill,



New tower in Fresnillo, with the 13 GHz STL antenna and the MMDS antennas.

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NEW AML LINK GOES UP IN TAMAULIPAS (MEXICO)

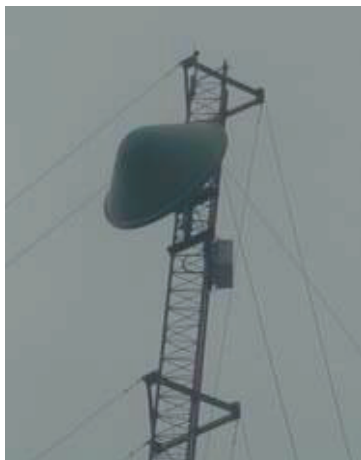


From left to right: Pedro Guajardo, Marcelino Vázquez, Mario Lozano, Eduardo Elías, Ing. Alma Alarcón, Ing. Jesús Chacón following installation of the AML transmitter at the headend.

A point-to-point AML link which 80-channel capacity has been installed by Telecomunicaciones de China in the city of China (Tamaulipas, Mexico) to transport Cable TV signals from the local headend to the city of General Bravo, over a distance of 8 miles.

The system was installed and commissioned by Ing. Alma Alarcón and Ing. Jesús Chacón following the training course at Cable AML's facilities in Torrance, California.

The transmit antenna was mounted on a T45 tower at a height of 27 meters and the receiver antenna at a height of 40 meters. Because of the high winds prevalent over the area, radomes were installed on the antennas to minimize wind damage.



AML Antenna with Radom

According to Ing. Alarcón, "the AML link is allowing us to offer Cable TV service in General Bravo with excellent signal quality and at a much lower cost than any of the alternatives available". ♦

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St. Georges repeater site at St Croix in the US Virgin Islands.

backbone with sufficient capacity to allow expansion for transport of more video programming or additional data carriers. ♦



From left to right, Bernard Rey, System Engineer of Innovative Cable in St. Thomas, Douglas Pompey, System Engineer of Innovative Cable in St. Croix and Toya Malone, Media Director for the Government of the USVI, at the Inter-island 13Ghz QPSK transceiver in St. Thomas.



Upcoming Event

Cable AML looks forward to seeing you this summer!

WCA 2007, Booth # 519

June 12-15 2007, Washington, DC

<http://www.wcai.com/event/07/07gen.htm>

Cable One Continued from Cover...

was installed and integrated with the existing broadband downlink used for analog and digital video transmission.

An extra benefit of the upgrade was to improve clear-weather carrier-to-noise and also fade margin.✦

Cable System Continued from Cover...

Following a site evaluation survey, a transmitter site was selected near the Quiroga headend, from which there was good line of sight to the two towns. The headend signal was transported to this site by a 2.5 mile (4 Kilometer) fiber link. Following the installation and commissioning of the two links, the cable operator is now providing 65-channel cable service in both towns.

According to Alejandro Baltazar, General Manager of the company, "we are extremely pleased with the performance of the system. We did all the installation ourselves with some guidance from Cable AML and we have been able to start providing cable service to an area where it is imperative to offer service quickly and at low cost. Due

to the relatively short straight line distance over Lake Eronguaricaro, the only other alternative was to install a long and costly fiber link or to purchase, install and operate two additional headends. We strongly recommend the Cable AML solution to any cable operator in Mexico that needs to transport the cable signals efficiently and easily".✦

TV Zac Continued from page 2...

the highest mountain in the vicinity of Zacatecas.

The new location for the 500-Watt transmitter provides expanded coverage north of the Fresnillo valley to a distance of more than 25 Kms. A broadband microwave link operating in the 13 GHz band was installed to interconnect the Fresnillo headend with the new transmitter location.

According to Francisco Aguirre, General Manager of TV ZAC, "The expanded system coverage is providing excellent signal to several communities which had no multichannel TV service of any kind. These communities can now have the same high-quality multichannel TV programming offered to subscribers in the capital city of Zacatecas". ✦

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