Cable AML News

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CABLE ONE INSTALLS MULTICHANNEL HDTV LINK

US Cable Operator **Cable One** has upgraded a 23-mile FM link in Clarksdale, originally used to transport seven distant TV stations, to now transport SDTV and HDTV digital signals with 8VSB modulation.

The traditional way to transport HDTV signals, which was to demodulate them to ASI Transport Streams and then to transmit each one through a digital radio, is very expensive for a multi-carrier application.

The method implemented by Cable AML is the least complex, least expensive and most reliable approach. The 8-VSB modulated, 6 MHz-wide digital signals were frequency-multiplexed and transported through a broadband Cable AML transmitter.

At the receive site the AML receiver delivers all the carriers on a single cable, which is linked to the headend. The 8VSB

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Elvis Brown of Cable One installs the headend hardware for the Multichannel HDTV Link.

MMDS SYSTEM DEBUTS IN MONROVIA (LIBERIA)

An integrated MMDS system was installed and deployed in Monrovia, the capital of Liberia (West Africa), in time for its inauguration prior to the World Soccer Cup.

The system has an initial capacity of 31 analog channels and is ready for an upgrade to digital. With a range of 20 Kms, it provides state-of-the-art multichannel TV service to an area of several thousand potential subscribers.

The deployment consists of a fully integrated headend including an encoding system to prevent unauthorized reselling of programming content. The encoding system also offers the possibility of multiple program tiers. The system was provided on a "turn-key" basis and includes a broadband trans-

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Salleh Hawaidi supervises an MMDS subscriber installation

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NEW MMDS SYSTEM IN NUEVO CASAS GRANDES, MEXICO

A new MMDS system has been designed, procured and installed by Mexican Cable Operator, Megacable in Nuevo Casas Grandes, an important city in the state of Chihuahua (Mexico). The system is powered by a Cable AML broadband 500 Watt broadband transmitter.

The system provides multichannel TV subscription service to an area of more than 100 square kilometers using scrambled analog signals. The transmitter is digital-ready in anticipation of converting the system to digital in the future.

According to Francisco Sandoval, Manager Technical Services of Megacable, "The system was installed in very little time and has been working perfectly since day one. In less than one month we have more than 1000 subscribers and the number continues to increase at a high rate. We have been operating an older channelized MMDS system in another city, and this is our first experience with a broadband system. We are very pleased with the results in terms of the quality of the pictures, the ease of installation and operation and the savings from the lower power consumption at the transmitter site." ✦

Ing. Francisco Sandoval of Megacable during the commissioning of the new MMDS system in Nuevo Casas Grandes.

DIGITAL MMDS RE-TRANSMITS AT 55 KMS

A digital MMDS system covering a range of approximately 30 Km radius from the main transmitter site at Renala in Pakistan has installed and commissioned a link to feed the same headend signal to a new transmitter at 55 Kms from the main

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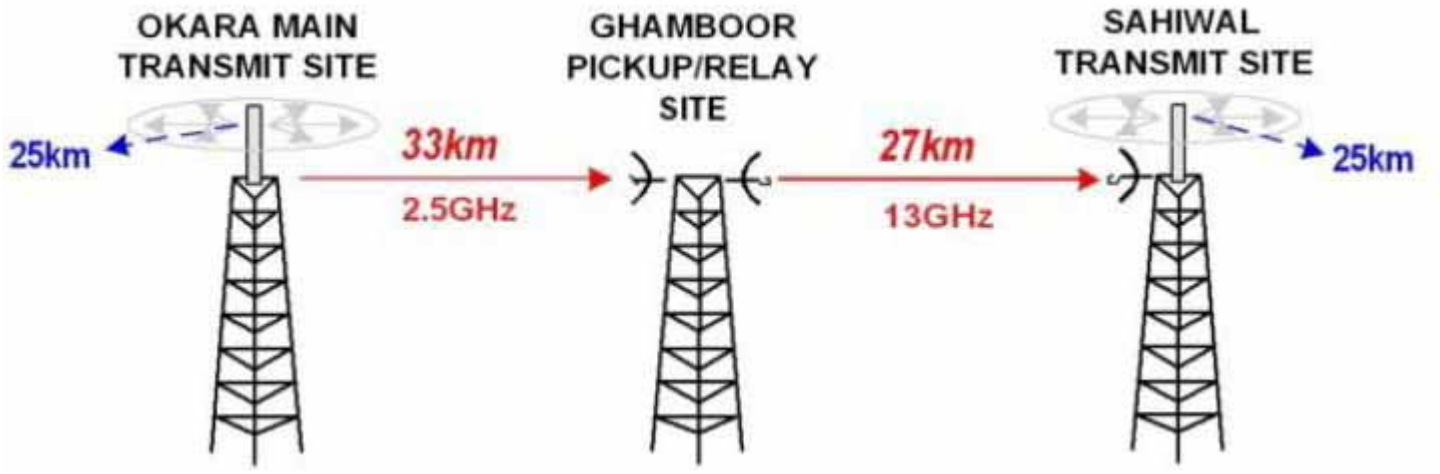
Relay station towers at Sahiwal are 55 Kms from Main Transmitter at Renala Headend.



Digital MMDS Pakistan

Second transmitter at 55 Kms from the main transmitter is fed by an AML link from a relay point at 30 Kms.

REPEATERS EXPAND COVERAGE IN MANAUS DIGITAL MMDS

ACOM Communicacoes, the leading Digital MMDS Operator in Brasil, has started to expand the coverage area of the system in the city of Manaus by installing several one-way and two-way outdoor broadband repeaters.

The one-way repeaters provide digital TV service and are mounted in strategic locations selected to provide service in areas blocked by terrain or other obstacles.

The two-way repeaters provide broadband TV as well as wireless internet coverage in blocked areas.

Luiz Fernando Martins, Chief Engineer of ACOM commented that, "by physically separating the downstream from the upstream signals paths, the Cable AML repeaters provide flexibility in the deployment of TV and Wireless Internet services independant of each other and of the physical configuration of the relay site. This makes it much easier to find sites for the repeaters."✦

EduardoWanderley and Wilson B. Silva of ACOM following the successful installation of the MMDS Repeater in Manuas.

MULTICANAL EXPANDS COVERAGE WITH TWO-WAY REPEATERS

Two-way MMDS repeaters are being installed by Multicanal in Asuncion (Paraguay) to provide wireless Internet service to several areas previously served by one-way repeaters for TV signals only.

Carlos Esteche, Julio Fernandez and Miguel Orsuza inspect an antenna prior to installation.

ACOM Digital MMDS continued...

With the new two-way repeaters, TV subscribers in the coverage areas will also be able to subscribe to wireless Internet service.

Cable AML's 10-Watt two-way repeaters provide TV and Wireless Internes service in an area of several kilometers radius.

According to Carlos Esteche, "The repeaters were real easy to install with practically no interruption to the TV service." ✦

Repeater antennas mounted on the repeater tower.

Cable One continued from cover...

signals can be demodulated to ASI and/or baseband audio and video, depending on how they are to be used.

The antennas and waveguide previously used for the FM microwave were suitable for the broadband AML transport of the 8VSB signals. Using the same antennas and waveguide, allowed an electronics only upgrade to a digital link, minimizing the cost and installation time. ✦

MMDS Debut in Liberia cont from cover...

Nanasat headquarters with the MMDS transmission tower in the back.

mitter and associated transmission equipment, as well as subscriber reception and decoding equipment.

Salleh Hawaidi, President of Nanasat, said "We are extremely pleased with the quick delivery and installation of the system, as well as the excellent quality of the signals provided to our customers. ✦

Digital MMDS continued from pg. 2...

headend.

The new 250 watt transmitter provides coverage to an area of approximately 20 Kms radius from the broadcast tower.

The repeater link was implemented by a broadband AML link fed directly from an MMDS pick-up antenna at the relay site at Ghamboor, about 30 Kms from the main transmitter site.

Omar Nazir, President and CEO of RANJA Enterprises, the operator of the state-of-the-art digital MDMS system, said, "The new link and transmitter have allowed our company to significantly expand its coverage footprint from the same centralized headend, significantly expanding our customer base without the expense of installing or operating a new headend. ✦

The top of the MMDS transmission tower at the Nanasat headquarters.

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