NEW ORLEANS EDUCATIONAL TELECOMMUNICATIONS CONSORTIUM

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NOETC NEXUS

ITFS: What is it?

First of a two part series

NOETC is a member of the National ITFS Association and holder of ITFS licenses. NIA research was used within this article.

The Instructional Television Fixed Service (ITFS) is a band of twenty (20) microwave channels available to be licensed by the FCC to local credit granting educational institutions. It was designed to serve as a means for educational institutions to deliver live or pre-recorded video instruction to multiple sites within school districts and to higher education branch campuses. In recognition of the variety and quantity of materials required to support instruction at numerous grade levels and in a range of subjects, licensees were typically granted a group of four channels. Its low capital and operating costs as compared to broadcast television, technical quality that compared favorably with broadcast television, and its multi-channel per licensees feature made ITFS an extremely cost effective vehicle for the delivery of educational materials. There are currently several hundred ITFS systems in operation delivering schedules of live and pre-recorded instruction.

The FCC initially authorized ITFS to operate using a one-way, analog, line-of-sight technology. Typical installations included up to four transmitters multiplexed through a single broadcast antenna with directional receive antennas at each receive site. Receive site installations included equipment to down convert the microwave channels for viewing on standard television receivers. In typical installations, the down converted ITFS signals were distributed to classrooms over multi-channel closed circuit television systems.

In the late 1980's the FCC recognized that many ITFS licensees lacked the technical expertise and/or the financial means to make effective use of ITFS. <more>

Special Points of Interest

- ⇒ Fall Programming begins August 30, 2004
- ⇒ LONI Meeting Sept. 2-3, Baton Rouge
- ⇒ LA Communication Assoc., Xavier, Sept. 11
- ⇒ Bb SE Users' Group, Sept. 23-5, Durham, NC
- ⇒ Polycom Demonstration Sept. 30, BR
- ⇒ NOETC Executive Committee meeting, Oct. 6
- ⇒ Educause Conference Oct. 19-22, Denver
- ⇒ AECT Convention, Oct. 20-4, Chicago
- ⇒ CCUMC Conference, Oct. 28-Nov.1, Cleveland

The New Orleans Educational Telecommunications Consortium, Inc. is a nonprofit organization geared toward facilitating research, development, funding, and effective implementation of technologies to support technology-enhanced instruction and related activities.

Did you know…

that Delgado Community College's NOETC Executive Committee Member is Dr. Jeff Smith?

NOETC Joins Educause

In October, NOETC will join Educause. This will help broaden the scope of NOETC. EDUCAUSE 's mission is to advance higher education by promoting the intelligent use of information technology. NOETC will participate at a level that allows one primary, three participating and seven subscribing members, which will be derived from NOETC's IT committee. EDUCAUSE programs include professional development activities, print and electronic publications, strategic policy initiatives, research, awards for leadership and exemplary practices, and a wealth of online information services. The current membership comprises nearly 1,900 colleges, universities, and education organizations, including more than 180 corporations, and more than 13,000 active member representatives.

More information is available at educause.edu.

New Orleans Educational Telecommunications Consortium

NOETC NEXUS

We're on the Web!
Visit www.noetc.org

The Avid DV Workstation (pictured above) gives NOETC the capability to digitize programming received in any format, and will serve as the cornerstone for the organization's automated playback system, to be installed later this semester.

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Want to get the word out about your College?

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What is ITFS? Part I

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Subsequently, the FCC authorized ITFS licensees to lease a portion of their spectrum, designated as "Excess Capacity," for commercial use. ITFS licensees were required to retain forty hours per week per channel for instruction with the excess available for commercial use in exchange for technical and financial support for their instructional service. Using ITFS excess capacity and up to thirteen channels in the companion commercial service, the Multi-Multipoint Distribution Service (MMDS}, a number of telecommunications companies built wireless cable systems. The number of available channels, however, proved to be insufficient to compete effectively with the expanding channel capacity of cable TV.

ITFS and MMDS licensees then sought FCC authorization to employ digital compression technology, which would substantively increase the number of program streams that could be carried on the channels of the combined ITFS and MMDS spectrum.

In 1998, the FCC approved the use of digital compression in ITFS. At the time digital compression technology was expected to expand the number of program streams by a ratio of 4 to 1 or more. The FCC also authorized both cellular and two-way operations in the ITFS/MMDS services and the potential for ITFS to be used for the distribution of data, as well as video. In the same rule, the FCC reduced the capacity that educational licensees were required to retain for instruction from forty hours per week per channel to 5% of channel capacity. In permitting two-way operations the FCC created the first potential for a substantial use of instructional materials that rely on interaction between the instructional program and learners.