

Bird is in hand for pay cable

Satellite service is introduced as venturers forecast joint use of earth stations for broadcast, cable and data communications; all goes well on Ali-Frazier transmission from Manila

The potential for satellite networking was translated into actuality last week as Home Box Office Inc. initiated the first pay-cable satellite feed to UA-Columbia Cablevision's systems at Fort Pierce-Vero Beach, Fla., and to American Television & Communications' system at Jackson, Miss.

The cable-satellite tie-in was shown to work and work well. Topping off the inaugural feed was the Ali-Frazier fight brought live from the Philippines to the cable homes in Florida and Mississippi over a 92,500-mile path.

The technology that was put into action had been available for some years, but it was RCA's reduced tariff agreement with HBO for satellite time and Scientific-Atlanta's provision of earth stations at \$65,000 each that fitted the pieces together.

Initial customer response to the new satellite network was said to be good. UA-Columbia's two systems in Florida account for close to 20,000 cable subscribers. All regular customers were given the HBO service free for a two-week trial period, but even before the first HBO telecast some 2,500 homes indicated they would buy the service at an additional \$8.00 a month. In the two Florida systems where nearly 80% of all homes are passed by the cable, UA President Bob Rosencrans expects 30-35% pay penetration.

In Jackson, AT&C has about a 27% cable saturation with 5,000 regular subscribers. But already 1,000 have placed orders for the pay service at an additional \$6.95 per month, where a two-week trial period was also offered.

Where will it go from there? Predictions range from 35 to 75 earth stations becoming operational by the end of 1976. The number of pay subscribers is expected to accordingly double. HBO, which now serves 200,000 pay subscribers in the Northeast via terrestrial microwave, expects that number to grow to 250,000 by the end of this year and double by the end of the next.

There are those who see the use of satellite feeds extending well beyond pay cable. "Satellites should revitalize live events on television," said Jerry Levin, HBO president, on broadcast TV as well as cable. Indeed the sharing of earth stations by cable operators and broadcasters is a technical possibility that promises economic advantages.

A single earth station, like the 10-meter receive-only antenna manufactured by S-A and used at Fort Pierce and Jackson,

sells for \$65,000. Cable operators now employ receive equipment to translate only two transponders or channels from the satellite, to provide HBO programing plus a backup channel. That same earth station, however, has the capability to receive all channels transmitted from a single satellite. For an additional \$15,000, receive equipment can be added to the existing down converter unit to bring in more channels, including broadcast signals.

As Robert Button, co-founder of Transcommunication Corp., a consultant on satellite service, pointed out, why should broadcasters—especially public broadcasters who are now looking at bids for earth stations—lay out \$65,000 for one of their own when they could share an earth station put up by a cable operator at much less cost, as long as the programing is transmitted on the same satellite?

Irving Kahn, cable entrepreneur who for some time has pointed to the cable-satellite tie-in, sees huge economies in the combined use of satellites for pay-cable operations, broadcast programing and data communications—all sent from the same satellite and received on a single earth station. Once earth stations are emplaced in all of the top-100 markets, said Mr. Kahn, there will be a real alternative to present broadcast networks. Indeed the optimists last week were saying that earth station owners of the future will control the communications conduits into a community.

The earth station market is expected to open wider if the FCC permits the use of smaller antennas—which are less costly to build. Ken Gunter, vice president of UA Columbia, believes a five- or six-meter dish may be feasible without introducing problems in positioning satellites. (The smaller the dish the farther apart satellites must be positioned to prevent interference.) The FCC has set up a finite number of satellite positions available on the equatorial plane—a location necessary if the satellite is to be received without tracking capability on the ground. Some feel the commission's standards for 10-meter dishes are overly protective and in time will be relaxed.

Everyone, including Mr. Levin, expects competition to develop in satellite networking. And that would be "healthy," said Mr. Kahn, since there's room for competition. HBO hopes to stake out a position as a diversified source of movies, sports, special events, children's and instructional programs.

Richard Shively, president of Telesis Corp., which has announced plans to build a statewide network in Indiana (BROADCASTING, Sept. 22), suggested that regional satellite networks may be the next step. According to Mr. Shively, the movie package of HBO is fine, but sports programing may receive greater audience approval if packaged on a regional or statewide basis. It's feasible, said Mr. Shively, to offer cable subscribers several services—for example, basic cable plus HBO or basic plus HBO plus a regional sports service.

The transmission path of last Tuesday's inaugural satellite service began at Manila in the Philippines, transmitted up to Intelsat IV and across the Pacific to California where the Intelsat receive station is located. From there the signal went across the country via AT&T long lines to Home Box Office headquarters in New York. (Theoretically, the signal could have been transferred directly to the RCA transmit station on the West Coast and sent across the country via satellite, but FCC regulations forbid an international satellite receive point to interface with a domestic receive circuit.) From HBO the signal went via microwave to Valley Forge, Pa., site of RCA's transmit station and then up to the Westar satellite on which RCA presently leases transponders from Western Union. That signal was picked up directly at the earth stations at Jackson and Fort Pierce and in the latter case sent 15 miles over to Vero Beach in one microwave hop.

The use of the satellite for program distribution is made possible by a favorable tariff set by RCA for HBO in its developmental stages. For the first three months of service, rates are \$75,000 per month for two channels, 12 hours a day. (The regular RCA tariff for video transponder time on a full-time basis costs \$60,000 a month for one channel for a 10-hour day.) Not until the third year would rates become compensatory, explained Harold Rice of RCA. A total of \$9.6 million would be paid by HBO to RCA over the initial 75-month service period with rates reaching \$1,914,000 (annually) by the sixth year.

RCA intends to put its own satellite up by Dec. 11, with commercial operation beginning sometime toward the end of January. The 24-transponder bird will make twice that number of channels available by utilizing both horizontal and vertical polarization, creating overlapping channels. (RCA is also negotiating with CML Corp., the newly created domestic satellite group, to lease transponder time in the two or three years it takes CML to put up its own bird.)

Scientific-Atlanta has agreements with Teleprompter Corp. and UA to provide their earth station needs for the next 12 months (BROADCASTING, Aug. 18). Teleprompter's preliminary plan calls for 24 earth stations, with the first likely to be Eugene, Ore. UA plans for five in addition to Fort Pierce, and AT&C has submitted a firm order for Orlando, Fla., in addition to Jackson. Two new bids have been received from Liberty Communications based in Eugene, Ore., and Summit Communications based in Winston-Salem, N.C.

The earth station was installed at Fort Pierce in five days. It weighs 9,000 pounds (too heavy to be put on an ordinary rooftop) and was installed on a concrete pad on the ground. With just one microwave hop, an earth station can feed other headends at about a 50-mile circumference.

HBO now offers 84 hours a week of programing from 1:30 p.m. to 1:30 a.m. The Ali-Frazier fight, brought in exclusively to the three satellite-fed HBO affiliates, was