



COMSAT

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Happy Holidays

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Videomultiplex License Agreement Signed With Ikegami

A licensing agreement allowing the Japanese broadcast equipment and technology firm Ikegami to use and market videomultiplexing technology developed at COMSAT Labs was signed last month in Tokyo. The agreement will be in effect beyond the year 2000.

Ikegami has been granted exclusive rights to market the technology in certain Asian countries for five and a half years.

The company will have non-exclusive rights in other countries. In the case of the United States, COMSAT retains exclusive marketing rights for the national broadcast and cable television market segments.

Royalty rates will vary, depending on the cumulative number of units sold.

The Time Multiplex Video Transmission (TMVT) technology can triple the possible video traffic that passes over a standard 36 MHz transponder. It has the capability to provide the user with simultaneous transmission of two "broadcast quality," or three high quality television channels, with associated stereo audio over one transponder.

Marketing Possibilities

Stephen J. Day, vice president of ventures in COMSAT Systems Division, sees a number of marketing opportunities for the technology.

"In addition to providing Intelsat with additional international video transmission capability, there are diverse domestic markets for this in the Far East as well as the U.S.," Day said.

In Japan, customers using JC-SAT and Superbird transponders would find the technology's applications useful, especially for private networks, he added.

"Possible U.S. users include regional and national cable networks, the national broadcasting networks and private video networks," Day continued. "COMSAT's technology allows a family of video multiplexing products to be developed with varying numbers of full

motion TV channels per transponder—combined with a sophisticated and low-cost security and addressability feature."

Imprecise sales forecasts make it difficult to predict how much COMSAT will reap from its technology, but Day said it has the potential to be worth several million dollars.

More COMSAT Labs Technology

The TMVT technology was devel-

oped by the Communications Technology Division of COMSAT Labs. Russell Fang is the division's director, and Lin Nan Lee leads the Video (Imaging) Group. He is joined on the TMVT development team by Neal Becker, Pete Johnson, Tashin Lin, Don Power, and Dave Vogel.

"This group represents a formidable force at the leading edge of video technology," according to Day. ■

ISDN Test Bed at L'Enfant Plaza



Scott Hower (l) and Saleem Imdad examine circuitry on boards before installing them in an Integrated Services Digital Network (ISDN) controller switch.

An ISDN test bed was inaugurated at COMSAT's Plaza headquarters earlier this summer. COMSAT will use this facility to provide international tests and demonstrations for its customers and Intelsat signatories, showing the digital capability of the Intelsat satellites and promoting their use for the development of global ISDN. The test bed will also be used for tests to aid telecommunications standard-setting organizations, (such as the Committee for International Telephone and Telegraph, or CCITT), to help establish international protocols for the creation of a global ISDN using both satellites and fiber optic cables.

During the August ceremony, COMSAT previewed five services that could be offered by ISDN facilities. Digital telephone, high-speed facsimile, slow-scan video, full-color video telephone and personal computer file transfer were demonstrated at the new facility.

Second Front Page

COMSAT Labs Technology Will Benefit Consumers

British Firm Makes Major Purchase of Flat Plate Antennas

Thousands of Direct Broadcast Satellite (DBS) customers in the United Kingdom are about to benefit from flat plate antenna technology developed at COMSAT Laboratories. In an agreement signed September 5, British Satellite Broadcasting (BSB) agreed to purchase an initial order of 70,000 antennas from Matsushita Electric Works, with the final total expected to be well over one million.

COMSAT, through a 1986 licensing agreement with Matsushita allowing the Japanese firm to use Labs technology and then market the product, will get a royalty from each antenna sold. Dan Wells, vice president of business development for COMSAT Video Enterprises, said the 16 inches-square antennas will be part of the equipment viewers will set up in their homes to receive signals from the British "Marco Polo" satellite launched August 27.

"This initial purchase is intended just to seed the market," said Wells. "After that, BSB has designated three companies in Europe and one in Taiwan that will sell the Matsushita antennas as part of the home receiving equipment package."

BSB's purchase order is also expected to stimulate the Japan flat plate antenna market. The British firm was able to convince Matsushita that U.K. demand would be substantial, even though the Japanese market has so far been small.

"Because of the large quantity of antennas expected to be produced, Matsushita can reduce prices substantially, and the Japanese market will take advantage of that," Wells said. Already, prices for the antenna in Japan have been reduced 30 percent to the U.S. equivalent of \$275. In Britain, the cost for the entire home equipment



Dan Wells, left, and Bob Sorbello, right, hold the flat plate antenna that will soon be available to DBS customers in Great Britain.

package will be approximately U.S. \$465.

"This antenna purchase, and future purchases, are significant for COMSAT because we have found a way to capitalize on technological developments made at the Labs and place them in a consumer product that we now have a market for," said Wells.

Dr. Robert Sorbello, the manager of the Satellite Antenna Department at COMSAT Labs, sees the sale as a morale booster for the people at the Labs who worked on the project.

"An initial large purchase such as this one means there is a lot of interest in the antenna," Sorbello said. "It motivates people here, and it also lets upper management know that the flat plate

antenna has a bright future."

The Future

British viewers can expect to begin watching DBS programming via their new antennas in Spring of 1990, Wells said.

In the meantime, COMSAT Labs and Matsushita will continue to develop the flat plate technology in keeping with a 10 year joint-development agreement, also reached in 1986.

"Each year, we get together and decide what development will take place on the flat plate antenna that year," Wells said. "Our objective is to keep the antenna competitive."

"I think," he added, "that this is only the beginning." ■

COMSAT in Moscow

CSD, Soviets Celebrate Opening of Global Network

While most of the world stood in awe of the breakthroughs in Eastern Europe last month, representatives of COMSAT were in the Soviet Union fostering cooperation between the two nations.

David J. Cade, vice president marketing and business development in COMSAT Systems Division (CSD), led a three-man COMSAT delegation to Moscow which celebrated the opening of the Soviet portion of the United Nations global seismic network.

CSD received a \$4.4 million contract from the Soviet Academy of Sciences in April to design, integrate and install the satellite-based communications network and related computer facilities in the USSR. The Academy and its Institute of Physics of the Earth (IPE), will use the network for global seismic data analysis and exchange under the auspices of the United Nations Conference on Disarmament Group of Scientific Experts.

During remarks at the SovinCenter attended by Soviet Union and American Embassy officials, Cade said, "this COMSAT-IPE project is an excellent example of the ever-expanding dialogue between our two countries.

"As U.S. Secretary of State James Baker has said, 'the task of the United States—together with the USSR—is to find enduring points of mutual advantage that serve the interests of both countries.'" Certainly, the new facilities we commemorate this evening represent such a joint new initiative," Cade said.

Soviet officials on hand included Deputy Minister of the Soviet PTT Urji Zubarev, IPE Director Dr. Vladimir Strakhov, IPE Main Investigator Mikhail Gokhberg, IPE Technical Director Dr. Vladimir Ratushny, and other IPE members from Obninsk and L'vov.

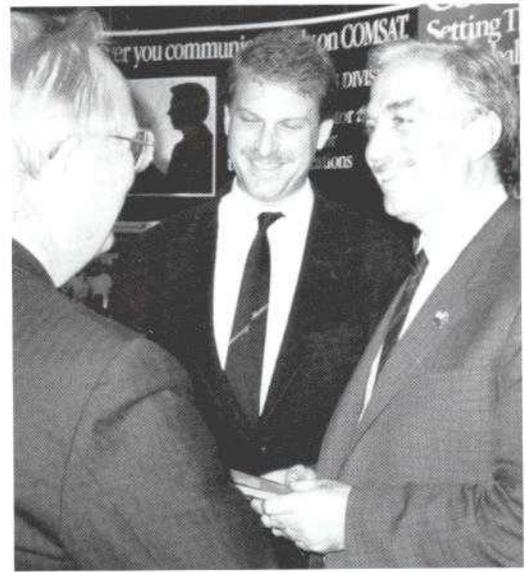
Representing Ambassador Jack Matlock at the ceremony were Economic Counselor John Blaney, Science Counselor Dr. Jack Gosnell, and Commercial Counselor James May.



COMSAT's David Cade heads the receiving line at the Moscow SovinCenter to formally greet guests from the USSR Academy of Sciences. From l-r, Dr. Jack Gosnell, science counselor American Embassy; Mrs. James May; James May, commercial counselor American Embassy; John Blaney, economic counselor American Embassy; Ludmila Zhokina, translator; and Cade.



Dr. Nikolai F. Yukhnin of the Soviet IPE, (left, foreground) proposes a toast to Bob Yamazaki, COMSAT program manager. CSD's John Gulick is at right.



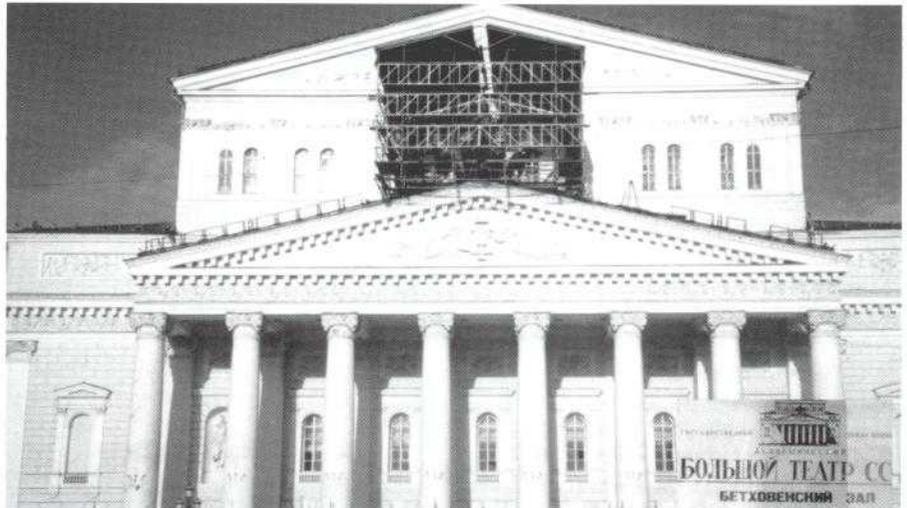
The Director General of the Turkish PTT, Emin Baser (r) confers with Jim Sutton (l), CSD Regional Director of Europe/Middle East and Vedat Yelkenci, (center) at the COMSAT exhibit at Communications Turkey '89.



Urij Zubarev (l), deputy minister of the Soviet PTT, pauses to chat with John Blaney of the American Embassy and CSD's John Gulick (r).



David Cade shares a light moment with Dr. Vladimir Ratushny, technical director of the IPE. Ratushny traveled to the United States earlier this year to tour COMSAT Labs.



Renovations underway at Moscow's famous Bolshoi Ballet.



Special Recognition

Cade paid special recognition to Bob Yamazaki, COMSAT's Program Manager, "...who worked long and hard and travelled many miles to bring this system in on time and at cost."

CSD installed three satellite earth stations in the USSR at Obninsk and L'vov. Two of the earth stations are designed to Eutelsat standards and one to Intelsat standards. Data processing centers were also installed at Obninsk, the location of the USSR International Data Center, and in Moscow at the IPE.

Participating as subcontractors with COMSAT were SAIC of San Diego (computer hardware), Science Horizons of Encinita, Calif. (workstations and systems training), and Radiation Systems, Inc. of Sterling, Va. (earth station antennas).

CSD In Turkey

Prior to the Moscow ceremony, CSD exhibited during Communications Turkey '89, a five day international electronics communications fair in Istanbul. Exhibitors represented more than 115 companies from 14 nations.

James J. Sutton, CSD regional director of Europe/Middle East, headed the trade show delegation which included John Gulick, CSD director of marketing communications, and Vedat Yelkenci of the Yelpro company, representing CSD in Turkey.

CSD is currently under contract to the Turkish PTT Administration to modernize U.S. military communications in the Mediterranean area. ■

KOMÜNİKASYON '89

Bomb-U.K.	58	Blazevic P.B.G.	276	Chips Turkey
BR	290	Bellon America U.S.A.	289	Comtek U.S.A.
	94	Charles West U.S.A.	91	Comtek U.S.A.
	230	Chernov U.S.A.	79	Comtek U.S.A.
	70	Clem "Teta" Jordan	91	Comtek U.S.A.
S.A.	80	Cleaveland U.S.A.	91	Comtek
	274	Clear Sound Korea	91	Comtek U.S.A.
	143	Colter Mikovick U.S.A.	91	Comtek
Alphara	58	Compu Electronics Pak	91	Comtek
	204	Compu-CP Finland	110	Comtek
S.A.	209	Compu-U.S.A.	79	Comtek and Compu Japan
	91	Compu	91	Comtek U.S.A.
G	288	Concord Data Systems U.S.A.	224	Comtek Turkey Systems Hubert
	298	Data U.S.A.	91	Comtek U.S.A.
	298	Data U.S.A.	91	Comtek U.S.A.

Exhibits at Communications Turkey '89.



Lenin's Tomb in Red Square.

Funny Bones...And Bills

It was a simple transaction. Kathleen Quinn Abernathy sold her car (which she advertised in COMSAT's *News Update*) and the buyer gave her several thousand dollars, mostly \$100 and \$50 bills.

Standing in her front yard, Kathleen stuffed the bills in the pocket of her sweatshirt and walked into the house. She gave the money to her husband, who deposited it in the bank.

The next day, she got two phone calls. One was from the bank. The other was from the U.S. Treasury Department. One of the \$100 bills Kathleen's husband had deposited was counterfeit.

"The people from Treasury wanted to know where I got the bill," she said. "They said there are quite a number of counterfeit \$100's floating around the Washington area."

The Treasury Department investigation found that the woman who gave Kathleen the bill had gotten the money from her bank.

"Apparently, the teller at that bank had missed it," Kathleen added.

Kathleen's bank discovered the bogus bill when they noticed the edges on it had frayed, something the high quality paper used in authentic bills does not do.

"My husband saw the bill when he went down to the bank," Kathleen said. "When he looked closely, he could definitely see there was something funny about it."

While the perpetrator of Kathleen's bogus bill appears to have gotten away with it (for now), other area counterfeiters haven't been so lucky.

"A few days later I was telling a taxi driver about the bad bill," Kathleen said. "He told me that someone at an area race track used a bad hundred to make a two-dollar bet, walking away with 98 dollars in change. On the next race, the person went up to the same teller and did exactly the same thing. The suspicious teller, who was on the lookout for bad bills, called the police."

Needless to say, it didn't take too long to catch up with that counterfeiter."

Meanwhile, at Clarksburg...

It was a couple of weeks before Halloween, and Joann Rubin and Carol Talbot were taking their lunch-time stroll along West Old Baltimore Road. As they admired the just-turning Clarksburg foliage, Carol saw something underneath the bridge that carries I-270 past the Labs.

"Look at that--a body!" she said excitedly as the two crept closer for a better look.

"There was a bag, with blood everywhere, and bones sticking out of it," says Joann, who suspected some pre-Halloween foul play. "We thought it might be a person, so we ran as fast as we could back to the Labs to tell secu-

rity."

When the breathless pair arrived at the security desk, they frantically tried to tell security guard Jonathan Fitz-Enz that they had found a body. Jonathan and Colin Bathgate immediately jumped into a pickup truck, and sped off to investigate.

But, no it wasn't human. Jonathan, concluding that it was probably a cow, called the Montgomery County authorities to investigate.

Joann and Carol still go for their noontime walks, but "we don't go down by the highway anymore," says Carol.

(Special thanks to the Labs' publication *Side Band* for that one.) ■

COMSAT Employees on Land and Sea



COMSAT's Mark Michalowski (above, right) looks strong as he passes the Washington Monument and the 15-mile mark of last month's Marine Corps Marathon. Michalowski, who works in Finance, finished the marathon (his first ever), in 2 hours, 56 minutes and 15 seconds.



ISS Business Development's Cynthia Cole competed in Boston's prestigious Head of the Charles rowing regatta last month. Her Potomac Boat Club shell finished fifth out of 18 competitors in its division. Cole, wearing sunglasses, above, rowed the crucial stroke oar position for her lightweight four (with coxswain) entry.