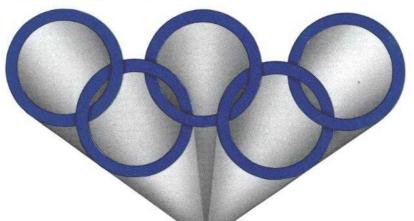


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COMSAT to Play Biggest Role Ever in Olympic Broadcasts



Every four years since 1964, when the Olympic Games were played in To-kyo, COMSAT has provided a key overseas transmission link enabling live broadcasts of the sporting events. Depending on whether the Games were being played in the U.S. or in some distant locale, COMSAT has carried the events by satellite into or out of the country.

But at no time in the company's involvement in Olympic broadcasts has COMSAT played as big a role in bringing the Games to Americans as it will this year during the 1988 Summer Olympic from Seoul, South Korea. The principal reason: COMSAT General's ongoing contract for satellite distribution of NBC-TV programming.

When the Games begin in mid-September, COMSAT will handle broad-



cast transmissions along much of the domestic leg of the programming's journey into U.S. homes.

According to COMSAT General's Paul Palmiter, Olympic broadcasts will arrive in U.S homes via this route:

NBC will uplink the Olympics programming directly from its broadcast center in Seoul. COMSAT General will receive the transmissions from the Pacific Ocean INTELSAT satellite using the 14-meter dish located at the earth station at Santa Paula, Calif. One of the six transportable earth stations that COMSAT General owns and operates for NBC is parked at the Santa Paula facility and will uplink the programming into the satellite television network provided by COMSAT General under the NBC contract.

Once the programming enters the domestic Ku-band television network, NBC can either route the programming directly to the 175 affiliate stations across the country (as in prime time), or simply tape the programming at its studios in New York and Burbank, Calif. for later broadcast. Each of the affiliates is equipped with an earth station to

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receive the signals. Only then will COMSAT General's responsibility end. The stations will take charge from there, broadcasting the Games to homes in their service areas.

COMSAT General's involvement in the coverage of the Olympic Games transcends the obvious technical accomplishments. As any recent viewer knows, state-of-the-art Olympics broadcasting requires more than coverage of the live action. It also requires interviews with sporting experts, athletes' families and others who may have remained in the U.S. To make sure it has the communications paths needed to conduct two-way interviews, NBC called up another link, carrying programming that originates in the U.S., received from the domestic satel-

lite network and uplinked out of Santa Paula destined for Seoul. This transmit feed will carry the U.S. side of live, onair interviews to the athletes in Seoul at various times throughout the Games.

"These links were engineered by Dennis Bouchard and implemented by Santa Paula earth station manager Dan Geer and his staff," said Palmiter. "They are of the highest quality possible and are fully backed up. These people will continue to monitor the performance of the transmissions to ensure that nothing goes awry during the Games."

Any way you look at it, COMSAT's fingerprints—though invisible to the viewer—will be all over this fall's Summer Games.

COMSATPAC Raises \$49,000 To Set Record

Contributions from employees to COMSAT's Political Action Committee (COMSATPAC) have exceeded its 1988 goal of \$45,000. In contributing more than \$49,000, employees set an all-time COMSATPAC record.

Participation in this year's COM-SATPAC campaign was the best ever, according to Government Relations Specialist Tom Sadler, who tracked the results. Fifty percent of employees who were solicited responded, he said. Earlier in the spring, employees who are eligible under Federal Election Commission guidelines were asked to consider voluntarily contributing to the PAC.

Spearheading this year's drive were Ernie Kelly, corporate; Bill Coulter, World Systems Division; Jerry Colosimo, COMSAT Video Enterprises; Fred Gould, COMSAT Labs; and Charles Zito, COMSAT Systems Division.

Monies raised by COMSATPAC are given to political candidates to assist in their election. "Our PAC contributions

to candidates help us gain access to the people who can help us," said Sadler. "Their votes are decided by the merits of the legislation under consideration. But our contributions help us to get in the door and present our side of the issue."

"We are deeply appreciative of the level of support and participation from employees this year," said Richard McGraw, vice president of corporate affairs and chairman of COMSATPAC. "A strong PAC is particularly important during an election year."

Voters will elect a new president, all members of the House of Representatives and one-third of the members of the Senate in the November election. PAC contributions are vital to many candidates facing escalating campaign costs.

"As in the past, we will continue our policy of giving to candidates who support COMSAT on committees that handle issues of importance to us. Our support, as always, will be bipartisan," said McGraw.

Short Takes

Bill Schnicke, COMSAT Intelsat Satellite Services, was elected chairman of the INTELSAT Board of Governors' Advisory Committee on Planning at its June meeting...George Tellmann, formerly vice president and general manager of COMSAT Maritime Services, has been named President and Chief Executive Officer of American Mobile Satellite Consortium, the group pursuing development of land mobile satellite services...Effective July 25, the Buddy Reserved Parking System was implemented at the Plaza. A vellow sign marks these parking places. They will be reserved for employees who have buddy parking assignments. For more information, contact Denise Isaac, X6617...COMSAT has sold its Ebeye and Majuro earth stations to the Republic of Marshall Islands and it earth stations in Kosrae, Ponepei, Truk and Yap to the Micronesian Telecommunications Corporation....

SBS-2 Transfers To COMSAT General

The FCC has okayed the transfer of SBS-2 from MCI to COMSAT General. COMSAT General also was granted permission to co-locate SBS-2 with its SBS-1 satellite, temporarily located at 99 degrees west longitude. When another domestic satellite arrives to occupy that slot, COMSAT General will relocate to its assigned orbital slot at 75 degrees WL.

The public interest is served by the transfer, the FCC held, because it will provide an opportunity for continued service from SBS-2. Co-location, it said, conserves orbital and spectrum resources.

COMSAT, Ikegami To Test Market For New Video Transmission Technology

When COMSAT announced last month new technology that allows TV broadcasters to pack more programming onto a single transponder, the company added yet another entry to a growing list of major satellite advancements from COMSAT Labs.

And, with the signing of a memorandum of understanding with Japan's Ikegami Tsushinki Co., Ltd., COMSAT took a vital first step on the road to selling the technology to people who can benefit from it — and turning it into a profit-making product.

Called video multiplexing, the technology allows broadcasters to send up to three channels of TV programming over one transponder. But, according to James "Buzz" Beitchman, CSD's vice president of Far East operations, more significant than the number of channels may be the quality of the television picture achieved by the COM-SAT equipment.

Already, Beitchman says, other multiplexing equipment is in use loading two TV channels onto single transponders. Its problem, however, is quality: TV pictures multiplexed with earlier technologies suffer flicker, motion blurring and other impairments.

COMSAT multiplexed TV pictures have much higher "apparent quality," said Beitchman. Noting that you have to give up something when you send twice as much information over the same amount of bandwidth, Beitchman said that the genius of COMSAT's technology is in what it chooses to sacrifice. "Our technique fools the human eye so that what is given up in picture quality is not perceptible or objectionable to the viewer," he said.

However, to the sophisticated television engineer, the picture may appear "compromised," Beitchman noted.

How professional and casual viewers will receive multiplexed broadcasts is one of the many unknowns COMSAT and Ikegami will explore in the months ahead as Ikegami leads an extensive market research effort in Japan, the first country where the video multiplexing

equipment is expected to be sold.

Japanese markets appear ripe for high-quality video multiplexing, according to Beitchman. Currently, satellite transponders are available only through a very high-priced government-sponsored satellite program, he said. But next year for the first time, two fully commercial companies will launch Japan's first Ku-band domestic satellites. Transponder prices are expected to remain very high—about five times the going U.S. rate.

Therefore, the logic goes, if COMSAT's video multiplexing equipment can transmit two or three channels over one transponder, it should reduce the need for broadcasters to buy or lease additional transponders. That should be incentive to use multiplexing technology.

"Selling new equipment to Japan's newly formed, highly capitalized companies could be very complicated," Beitchman says. "The market is full of unknowns — but also great opportunities."

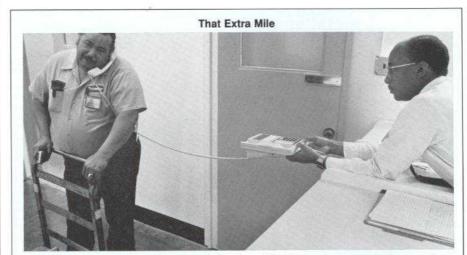
COMSAT and Ikegami have set an ambitious schedule for the months ahead. They want to be ready with

product to sell when Japan's new satellite companies launch their services in the middle of next year.

First will come an intense period of market research. Demonstrations using a Labs-developed, three-channel plus audio prototype sending signals over an INTELSAT transponder are planned for the fall. Once the research is done and it appears that prospects are good, COMSAT and Ikegami would look to conclude a definitive business agreement. By the end of the year, Ikegami is scheduled to complete a manufacturing prototype so that the product will be available early in 1989.

By teaming with Ikegami, COMSAT gains a powerful partner, one that is acclaimed as a world leader in the broadcast and video equipment markets. Interestingly, the two companies had met before they signed the recent MOU. Ikegami, it turns out, has been a major supplier of equipment for the CORABI medical work station and transmission system, in which COMSAT is a partner.

Could this be the beginning of a beautiful friendship?



When Shipping and Receiving specialist Leon Hill (left) got an urgent phone call recently, mailroom supervisor Mike Ashton stretched across the mail counter to connect Hill with his call. Says Ashton: "Hey, whether it's getting your packages out, moving the mail or helping get the job done, we'll go the extra mile for you."

INMARSAT Defers Action On Lease Capacity Request

Members of the INMARSAT Council deferred action on a COMSAT request to lease INMARSAT satellite capacity for aeronautical communications services proposed by ARINC. Gathered in Honolulu for a meeting hosted by World Systems Division, the INMARSAT Council noted that the lease application seemed to be compatible with a pre-emptible lease policy expected to be approved at the Council's next meeting in November.

The Council, which had twice before deferred action on the request, again based its vote on the lack of a single policy on long-term leasing of IN-MARSAT capacity. Development of the policy is under way.

COMSAT Maritime Services Vice President Ron Mario called the Council's latest decision to defer " a victory for the U.S. position. When we first came to the Council requesting a long-term lease, we met almost unanimous resistance. We believe the Council's actions in working toward a lease policy represent substantial progress," he said.

At the previous Council meeting, COMSAT had requested that ARINC begin service on a demand-assigned basis and move to a pre-emptible full-channel lease on existing INMARSAT capacity in 1991. Originally, COMSAT had asked for a non-preemptible, long-term lease of a full channel for ARINC, but had subsequently revised its request.

COMSAT had requested long-term capacity from INMARSAT as part of an agreement with ARINC negotiated late last year. That agreement represented an important step in clearing the way for U.S. companies to begin offering aeronautical communications services via satellite.

The debate over long-term leases was one of a number of actions taken by the Council:

 A European proposal to build an Aramis spot-beam satellite was defeated. The satellite would provide capacity as INMARSAT expands its services to include aeronautical and land-mobile communications. COMSAT voted against the proposal largely because it did not fit within a carefully intergrated INMARSAT business plan and because of the hazards of procuing a one-of-a-kind satellite outside of a normal competitive procurement process.

• A request by COMSAT on behalf of the new U.S. land-mobile consortium, the American Mobile Satellite Consortium (AMSC), was deferred to the next Council meeting. AMSC's request had arrived too late for the normal clearance by INMARSAT's Advisory Committee on Technical and Operational Matters prior to the Council meeting.

- The Council decided to recommend to the INMARSAT Assembly of Parties that amendments to the Convention and Operating Agreements concerning provision of land mobile services be adopted. The Council agreed to set a date for an extraordinary Assembly of Parties during its next meeting.
- It was reported that 21 countries, representing almost 79 percent of the investment shares, have ratified amendments that would allow INMARSAT to offer aeronautical communications services. Nine more countries are needed.

Uprooted Uplink



The first of several COMSAT Video Enterprises antennas was lowered by crane at Clarksburg earlier this month after having been transported from Memphis. By the time CVE's anntenna farm is fully operational, it will qualify as a teleport.

Photo: Carroll Haugh

- 26 years ago, on August 31, 1962, President Kennedy signed the Satellite Act into law. Congress had passed the Act on August 27.
- 25 years ago, on August 3, 1963, NASA's SYNCOM II became the first communications satellite to operate successfully in synchronous orbit. SYNCOM's success encouraged COM-SAT to choose the synchronous orbit for its first commercial satellite, Early Bird.
- 24 years ago, on August 20, 1964, INTELSAT came into being. Seven

Looking Back



years later, on the same date, U.S. Secretary of State William P. Rogers and COMSAT President Joseph V. Charyk signed definitive arrangements for IN-

TELSAT on behalf of the U.S.

- 11 years ago, on August 1, 1977, groundwork for worldwide commercial maritime satellite communications service was completed when Japan agreed to build a coast earth station and provide maritime services in the Indian Ocean.
- Four years ago, on August 20, 1984, INTELSAT set a new record for television coverage of a single event when it carried over 5,500 hours of Los Angeles Olympic Games programming to some 67 countries and an audience estimated at 2 billion.

COMSAT's Quarterly Results Show Gains; Dividend Increased 10 Percent

When COMSAT's second quarter ended on June 30, the company had good news to announce. Compared with first quarter 1988 results, consolidated net income was up 23 percent, operating income rose 35 percent and revenues grew by 6 percent.

Debentures Refinanced

In an action expected to reduce COMSAT's cost of borrowing money by several million dollars, the company last month gave notice at the FCC that it plans to sell debt securities in the principal amount of \$100 million.

Some \$93.5 million of the proceeds will be used to redeem the company's 12 1/4 percent Guaranteed Debentures, callable on May 1, 1989, in whole at par value.

A single institutional investor will purchase all the securities at an interest rate of 9.55 percent. The notes will be issued on or about April 28, 1989 and will mature in April 1994.

With the announcement, the company's board of directors voted a 10 percent increase in the regular quarterly dividend to 33 centers, up from 30 cents per share. Shareholders of record on Aug. 12 will receive the dividend, which is payable Sept. 12.

Chairman Irving Goldstein, calling the quarterly performance "one of the best we've ever had," said, "Obviously, the decision we made a year ago to restructure and refocus the company was the right decision to make. I'm very proud of our people for this performance."

Compared with last year's second quarter performance when COMSAT recorded a \$83.8 million net loss due to restructuring, discontinued operations and other non-recurring items, the company during the 1988 quarter had net income of \$17.6 million.

Maritime Services and COMSAT Video Enterprises fueled the quarter's revenue increase, which was partially offset by lower revenues in the Systems Division as some of its contracts neared completion.

Maritime's growth and reduced Systems division expenses contributed to the net income increase. However, the INTELSAT satellite services group reported reduced operating income due to reductions in rates.

For the six months, revenues stood at \$173 million, compared with \$168.9 million for the first half of 1987. Net income was \$31.9 million, compared with a net loss in 1987's first half of \$75.4 million.

New FCBA Officer



Kathleen Abernathy, COMSAT's director of federal affairs in World Systems Division, was recently elected assistant secretary of the executive committee of the Federal Communications Bar Association.

Systems Division Marketing Team Takes Shape

COMSAT Systems Division, its sights set on the high-stakes government and international information systems business, announced last month that the hiring of key members of its new marketing team is virtually complete.

Assembled by Division Vice President of Marketing and Business Development David Cade, the team collectively brings over 100 years experience in the telecommunications industry to COMSAT. "With our new marketing organization, CSD is postured to become a formidable competitor in the systems integration marketplace," Cade said.

Cade has structured the marketing department to focus on two principal markets: U.S. government and international.

Leading efforts to market the division's expertise in systems integration to the U.S. government's civil, defense and intelligence communities is Ralph Fulchino, vice president. Most recently director of business and marketing development at GTE Government Systems, Fulchino has over 20 years of government marketing experience.

Four directors, three of them new to COMSAT, work with Fulchino. David Clevenger, previously in the business development organization at Martin Marietta Information and Communications Systems, and Ronald Council, most recently with the Harris Corporation, focus on the Department of Defense and intelligence communities.

Mark Dillon directs programs aimed at marketing CSD services to civil government agencies. He worked previously with IBM's Federal Systems Division. Also new to COMSAT and reporting to Dillon is Senior Account Manager Steve Bullock, previously with Atlantic Research Corporation.

As director of international government marketing, Eric Novotny, a nineyear COMSAT employee, leads efforts to win contracts for overseas information and communication networks being implemented by U.S. government agencies such as the Defense Communications Agency and the State Department.

Named to head marketing and business development in the international arena was Charles Kenmore, vice president. Kenmore has 18 years of experience in the telecommunications industry. Most recently a vice president with CONTEL ASC, Kenmore previously was with COMSAT Technology Products where he had marketing responsibilities.

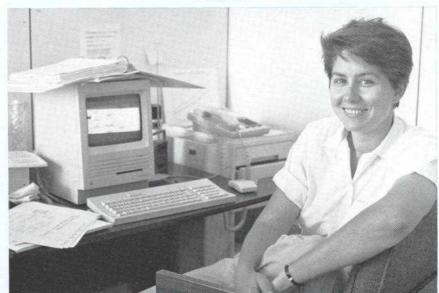
Working with Kenmore are Directors Homero Belmar and Keary Cannon. One director's slot remains unfilled. Belmar previously worked with IN-TELSAT as manager of business development in Latin America. Before joining INTELSAT, he was with COMSAT General for 10 years. Cannon is a five-year COMSAT veteran.

The marketing and business develop-

ment group also includes Advanced Programs, under the leadership of vice president George Bolling. Advanced Programs takes the handoff of projects from both marketing groups and carries them through detailed assessment and proposal development.

In March, division President Joel Alper announced plans for the \$70 million business unit to "grow substantially over the next five years in revenue, earnings and network systems and services offered." He also outlined how the division would be structured to continue service to customers in existing markets and to pursue more aggressively the government and international arenas. Marketing and Business Development was one of the newly organized division's four principal components. Other CSD components include COM-SAT General, Engineering and Development and a Program Management Office.





Graphic Specialist Mary Burns, located on the 7th Floor of the Plaza, provides a host of graphic services to COMSAT (including creative design work for *TODAY* and *News Update*) and serves as a liaison to the full-service Clarksburg Graphics shop. For information on in-house graphics capabilities, call Burns on X6712.