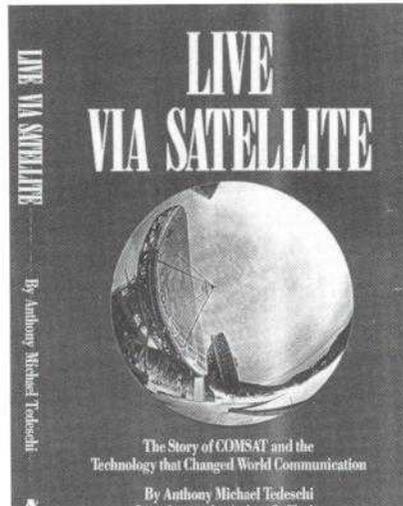


Live Via Satellite New Book Tells Story of How COMSAT Changed the World

Watching the first man walk on the moon *live*...seeing the triumphs of the Seoul Olympics *live*...viewing the tragedy of Mexico City during an earthquake *live*...reading the New York Times, The Wall Street Journal and USA Today anywhere in the world only hours after printing...all of these wondrous achievements in communications, mostly taken for granted, began with the birth of COMSAT, the Communications Satellite Corporation. But, then, you knew that, right? Well, thanks to a 224-page book published this month by Acropolis, so will the rest of the world.

Live Via Satellite unveils a drama equal to that of the race to the moon, starting with John F. Kennedy's mo-



mentous words to Congress in 1962 to establish a global communications system "which will contribute to world

peace and understanding."

Most of the technology did not even exist, yet just three years later Early Bird (Intelsat I) sent live television broadcasts around the world.

From the astonishing early successes of COMSAT to the details of refinement through the next 26 years, *Live Via Satellite* presents a remarkable success story of America's government and private sector profitably teaming up with other countries to bring us an international communications revolution. "It's a tale that will instruct, enthrall, and inspire us all," says a press release by Acropolis Books.

Author Tony Tedeschi was commissioned to write the book by COMSAT Corporate Affairs. ■

CVE Tests Movie Pricing



During April and May, COMSAT Video Enterprises (CVE) is conducting a test in more than 250 of its subscribing hotels to determine how much people are willing to spend to watch a pay-per-view movie.

"Our concern is pricing our pay-per-view movies appropriately," said Allison Curtis, CVE marketing director. "\$6.35 may be okay in New York City, but not in Kentucky," she said.

Pricing during the test will range from \$2.25 at some hotels to more than \$7 in others, she said. ■

Stylish Selection

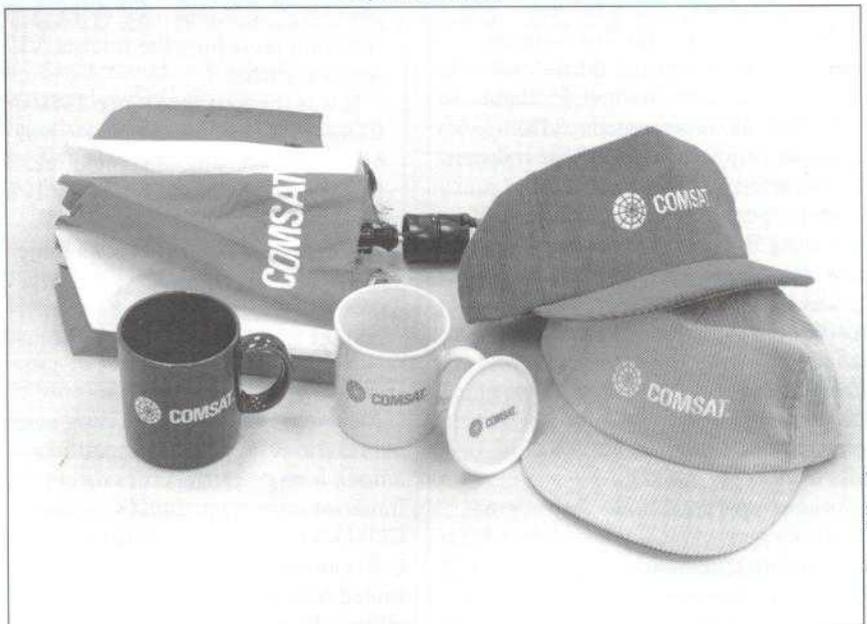


Photo: Carroll Haugh

COMSAT Employee Association representatives say sales are brisk for their new line of logo-emblazoned merchandise such as the samples shown here. Need info on how to order? Call your local CEA representative.

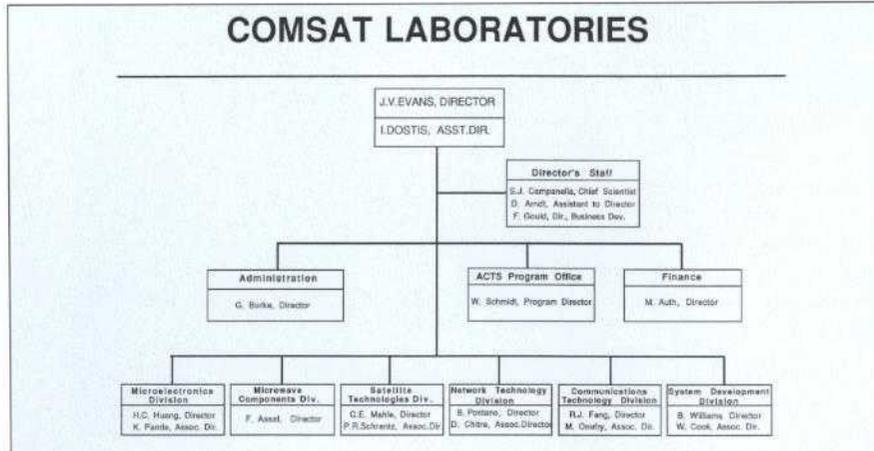
Better Customer Service, R&D Marketing Labs' Reorganization Goal

COMSAT Laboratories created two new divisions this month, each bringing together expertise that will allow the Labs to better serve customer needs and enhance its ability to capture additional research and development work in new technologies.

A new Satellite Technology Division combines parts of each of the Applied Technologies and Microwave Technology Divisions. Under the new organization, people most familiar with the construction, monitoring and operation of current communications satellites are grouped together. "This will allow our customers who build and operate satellites to get technical support from a single entity," said Dr. John Evans, vice president and director of the Labs.

Heading the Satellite Technology Division are Chris Mahle, executive

COMSAT LABORATORIES



director, and Paul Schrantz, associate director.

Microwave Components, the second new division, brings together expertise from the Monolithic Microwave Techniques, Satellite Antennas, Earth Terminal Antennas, Microwave Systems and Microwave Circuits Departments. Creating this division and drawing upon expertise in the Microwave Components Division will position the Labs to win additional work on new technologies, Evans said. He cited phased-

array antenna, technology likely to be used in future communications satellites, as an example.

Francois Assal was named executive director of the Microwave Electronics Division.

Labs' divisions whose names remain unchanged are Microelectronics, Communications Technology, Network Technology

and Systems Development.

In addition to announcing the two new divisions, Evans also appointed Dr. Richard Arndt assistant to the director, one of three director's staff positions. Arndt succeeds Dr. Geoffrey Hyde, who retired April 15. Arndt, whose new duties include chairmanship of the editorial board of the COMSAT Technical Review, was previously senior scientist in the Labs' Microelectronics Division. ■

Door Opens Slightly To Aeronautical

The Federal Communications Commission last month OK'd COMSAT's request to remove two obstacles blocking the company from providing international aeronautical satellite communications services. But even though the FCC pushed open the aeronautical door slightly by granting the two waiver requests, other issues must be resolved before a decision is reached about COMSAT's role in providing satellite communications services to airliners.

The first waiver allows COMSAT to begin modifying its two coast earth stations in Santa Paula, Calif. and Southbury, Conn. for operation with

the Inmarsat aeronautical system. Actual operation could not begin without a favorable FCC action on the company's applications to provide the service. Otherwise, the earth station modifications would be made without firm assurances on COMSAT's future role.

The second waiver lifts a freeze on applications to provide international aeronautical satellite services. COMSAT filed its applications to offer the services in December. With the freeze off, COMSAT's applications can now be placed on public notice for comment.

Ron Mario, Maritime Services' vice president and general manager, called

the FCC actions "an important step to ensuring that the U.S. won't be shut out of the market by foreign carriers that already are marketing Inmarsat aeronautical satellite services to airliners around the world."

Already, Maritime Services has begun evaluating proposals for modifying its two coast earth stations, he said.

If the final regulatory approvals are granted soon, COMSAT projects that it could have an interim, low-speed data service in operation by mid-1989 and a full-service system for high-speed data and voice serving both crew and passengers by late 1990. ■

Turkey (continued from page 2)

technical solution that held up against intense competition and customer scrutiny."

Dr. Young Lee and Larry Rands anchored the team effort that produced the winning technical solution. Members of the technical team included CSD engineers Iraj Brelan, Haresh Daryanani, Vo Luu, Dave Reiser, and Santiago Romero.

Fulchino's Red Team members included John Ozols, Dick McBride, Steve Struharik, Denis Bouchard, and Gary Gomes (STS). They performed a close technical critique of the proposal.

As prime contractor and system inte-

grator, COMSAT will manage the entire program and be responsible for all technical aspects, including network design, equipment selection, and implementation. Satellite Transmission Systems, Inc., is the principal subcontractor, providing the radio frequency terminals and the monitoring and control portions of the system. The operator and primary user of the network will be the U.S. Air Force, with the Army and Navy sharing in the upgraded services. "The system will enhance U.S. and NATO regional communications tremendously," said David Cade, CSD vice president of Marketing and Business Development. "Because of the strategic location of these sites,"

he added, "the new capabilities they provide will be a real force multiplier for NATO."

'Landmark Victory'

Eric Novotny, the new vice president of International and Commercial Marketing and Business Development for CSD, who nurtured this opportunity through the project stage along with Clavelli, called Turkey DMIP "a landmark victory which embellishes our image and enhances our win potential for both government and international business objectives." Similarly, Fulchino pointed out that DMIP is only the first of several follow-on opportunities both in Turkey and the Mediterranean region. "I'm excited about the prospects of capitalizing on this important win," he said.

Cade confirmed that COMSAT has targeted the defense market as a high priority for business expansion, both in the U.S. and abroad. He sees the Turkey DMIP contract as fully in accord with CSD's long-range strategy.

The Work Ahead

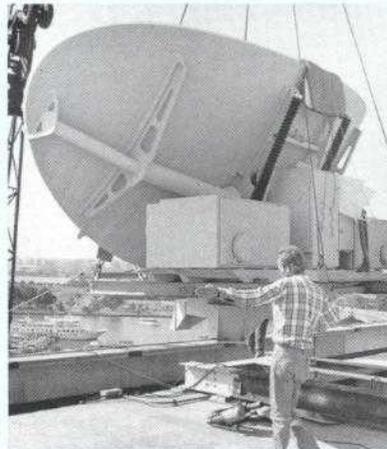
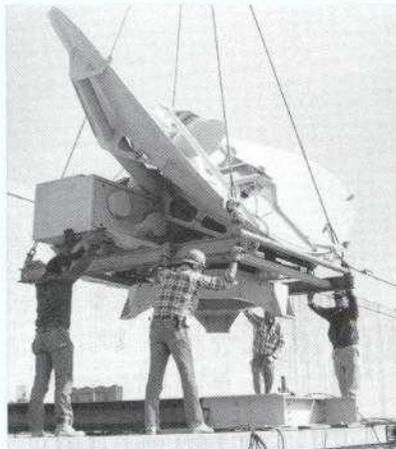
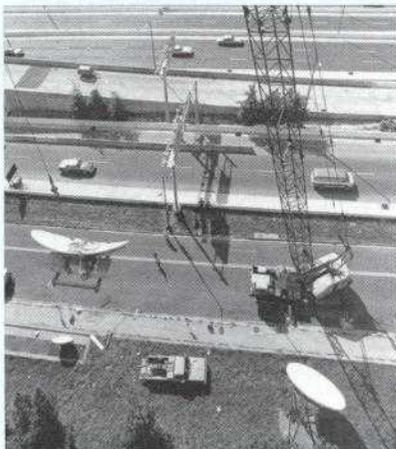
As Bolling handed off the project to Ron Johnson, vice president of Engineering and Programs, Turkey DMIP became a program, for which Clavelli is now the Program Manager.

Implementation will begin this spring, following a six-month engineering and design phase, and is expected to be completed in 1991 when the network becomes fully operational.

Supporting Clavelli on the program management team are: Bruce Giel, material procurement; Nelson Garcia, contract administration; Vig Mangasarian, administration manager; John Ozols, project engineer; Jim Pockrus, implementation manager; and Bob Smith, training manager.

Chairman Irving Goldstein was among those attending a dinner celebration earlier this month to honor the employees who worked on the Turkey DMIP contract. As the echoes of the April 4 celebration fade from the Early Bird Room, the effort now shifts from conceptualizing to getting the job done. And all who participated up to this point are eager to see the results of their tightly orchestrated efforts. ■

Droppin' In On COMSAT



In this dramatic series of photographs taken by Clarksburg lensman Carroll Haugh, an ISDN gateway antenna is being lowered into place at L'Enfant Plaza. The elliptical 4.5-meter dish provides World Systems Division with international access to the Plaza ISDN demonstration suite and test facility located on the first floor.

Another Satellite First: HDTV Beamed Overseas

High-definition television (HDTV) may be a technology of the future, but when the future arrives, COMSAT will be ready.

Earlier this month, COMSAT teamed with its Japanese counterpart, KDD, AT&T and Intelsat to demonstrate for the first time that satellites can successfully transmit HDTV overseas.

The demonstration originated from an AT&T earth station in Malibu, Calif., traveling via Intelsat to viewers in Tokyo. It included a menu of visual delectables including high-definition tapes of sporting and musical events. Also during the demonstration, World Systems Division President Bruce Crockett, Intelsat Director General Dean Burch and AT&T Director of International Marketing Rod Sturm extended greetings to those watching.

"This transmission marks the beginning of a broad new field of application for satellites," Crockett said. "It also is a dramatic testament of what can be achieved through cooperation."

Technically, the transmission was a feat that couldn't have been performed without some recent technological

achievements, developed and contributed by COMSAT and KDD. To achieve the extraordinary quality for which HDTV is known, each signal must carry about five times as much information as today's conventional broadcast signals.

Through the cooperative efforts of COMSAT and KDD and using devices that each had developed, the HDTV signal was compressed to fit a 72 MHz transponder. KDD's device, called a codec (coder/decoder), squeezed the signal down to a data rate of 140 megabits per second. At that rate, a high-capacity modem designed by COMSAT Labs could send it over the satellite, making more efficient use of the bandwidth than conventional digital transmission techniques.

"This effort reflects on a very small scale the kind of cooperation that occurs daily between Intelsat and its users to meet the world's communications needs," said Intelsat's Burch. He said the global satellite consortium was interested in HDTV transmission for two reasons: It adds yet another capability to Intelsat's growing list of digital

services and it again places Intelsat on the "cutting edge of technology."

Small Ku-band antennas, including a 2.6 meter portable mounted on a van, received the broadcast in Japan. Crockett said that use of the small antennas in the demonstration provided "proof-positive that smaller, cost-efficient antennas will have a place in the transmission and reception of HDTV programming."

Referring to the variety of HDTV standards under development in different parts of the world, Crockett assured viewers that "We at COMSAT will work to ensure that our services and the Intelsat network remain flexible to accommodate any standard devised."

The demonstration was a joint effort locally as well, bringing together the cooperative efforts of both World Systems and COMSAT Labs. Leading the effort were WSD's Ed Faine, principal engineer and Wayne Shore, senior systems planner, along with Mark Kappes, manager of the transmission processing department, David Layer, technical staff member and Mark Hutchins, technical specialist, all from the Labs. ■



PROMOTIONS

World Systems Division

Betty Alewine,
VP & GM, ISS
Donald Boyd,
Revenue Acct. Spec.
John Beaubien,
Sr. Financial Anal.
Nancy Nolting,
Telecomm. Mktg.

Corporate Staff

Diane Haderly,
Office Sys. Anal.
Gail Miller,
Dir. Income Taxes
Jack Bell,
Chief Electrician
Norman Schafer,
Mgr. Bldg. Oper.
Orlando Wilson,
Office Services Clerk I

Sandra Hall,
Sr. Sys. Anal.
Scott Hess,
Dir. Corp. Acctg.

COMSAT Labs
Michael Onufry, Jr.,
Assoc. Exec. Dir.

COMSAT Systems Division
Lori Owens,
Rev. Acctg. Asst.
Rebecca Hilsheimer,
Admin. Secretary
Terrance McGuire,
Principle Eng.

COMSAT Video Enterprises
Kathryn Szollar,
Fixed Asset Coord.

SERVICE ANNIVERSARIES

Twenty Years
Francois Assal
Robert Gruner
Robert C. Myer, Jr.

Fifteen Years
Willie Walters
Tish Fonda

Ray Malitzke-Goes
Ranjit Singh
Tamotsu Iwamoto
Ronald Johnson
John Reisenweber, Jr.
K. Virupaksha
Henry Waight

Ten Years
Charles Arvin
Robert Baxter

Lawrence Biller
Madelyn Brown
Parris Caulk
John Forrer
Patricia McCoy
Harry Ricker III
Barry Ross
Harold Silverman
Mary Sims
Nancy Jo Southward
Susan Thompson
Michael McAllister
Robert Mansbach
Jeffrey Binckes
Kenneth Sweigart
Leonard Ngo
Peter Comar
William Voss

Five Years
Lilia Benavidez
Marvin Bowser
Fred Brantner

Gregory Burke
Susan Gourley
David Daniels
John Spencer
Gary Traver
Ulrika Williamson
Douglas Purdham
James Thomas
Pamela Sanchez
Yvonne Robertson
Daniel Thomas
David Beddow
Donald Kron
Linda Whalen
Paul Chaconas
Robert Gray
Wei-Na Koo
Ynetta Johnson
B. Stellabotta
Karen Moore-Elmore

News Briefs Spectradyne Sold

For the second time in two years, Spectradyne, COMSAT Video Enterprises' number one competitor, has changed hands. Multi-millionaire Marvin Davis and the Prudential Insurance Company teamed up in March to make the purchase, valued at \$635 million. Spectradyne's price tag was \$452 million when Acadia Partners bought it in 1987. Revenues for the Richardson, Texas-based company were reported at more than \$110 million last year. ■

Intelsat Board Meets

The Intelsat Board of Governors, meeting last month, authorized Director General Dean Burch to contract for launch services for the Intelsat VII satellite series. Gathered in Nairobi, Kenya, the Board designated that three of the five birds be launched by Ariane-space and two by General Dynamics commercial launch services, using Atlas-Centaur rockets. The first of the launches is currently scheduled for the third quarter of 1992; the last is set for the first half of 1994.

In other action, the Board approved the sale of 10 transponders to seven countries under the Intelsat Planned Domestic (PDS) program. The transponders will be used for a full range of domestic communications—voice, data and video. Since the PDS program began, 19 countries have purchased 57 transponders.

The Board also reduced tariffs for a range of Intelsat services, an action taken 14 times over the organization's 25-year history. The reductions are aimed at encouraging the move to digital service and to long-term service commitments.

In other Intelsat news, the African nation of Zimbabwe became the international consortium's 117th member. ■

COMSAT Wins Award For Mock Election

COMSAT's Corporate Public Relations Department, together with COMSAT Video Enterprises, has won the equivalent of an Academy Award for public service.

The national award, known as the Silver Anvil, is presented annually by the Public Relations Society of America to a select group of corporations, government or non-profit organizations who demonstrate a significant mark of excellence in public relations.

The 1989 Silver Anvil for corporate public service was awarded jointly to COMSAT Corporate, CVE, Time Magazine, HBO, Conus Communications, CNN, C-Span, Holiday Inns, Inc., The National Student/Parent Mock Election and the New York City Board of Education for their collaborative effort to research, plan, execute and evaluate the 1988 Student/Parent Mock



Elections.

Held every four years as the nation's largest civic and voter education project, the National Student/Parent Mock Election gives millions of students around the country the opportunity to cast a simulated vote in the U.S. presidential election.

This year, for the first time, the event was broadcast live from New York to a nationwide

audience over the "COMSAT Student Network," a satellite network donated by CVE. Cathy Waters, CVE's videoconferencing virtuoso, along with "SkyBridge" operator Bob Mohan, coordinated the technical details for COMSAT. Corporate Affairs' Bob Hunter and Rick Wasser coordinated publicity and planning for the event. All will participate in an awards ceremony in New York in June. ■

Picture This



Photo: Carroll Haugh

Cathy Waters, CVE's manager of videoconference operations, and her staff worked the phones fast and furiously this month as they coordinated a 120-site videoconference for a company announcing a new product (a thousand dollar VCR that plays \$100 subliminal video tapes). Helping Waters is Mark Masson, videoconference coordinator and Chris Holdsworth, secretary.