



TODAY

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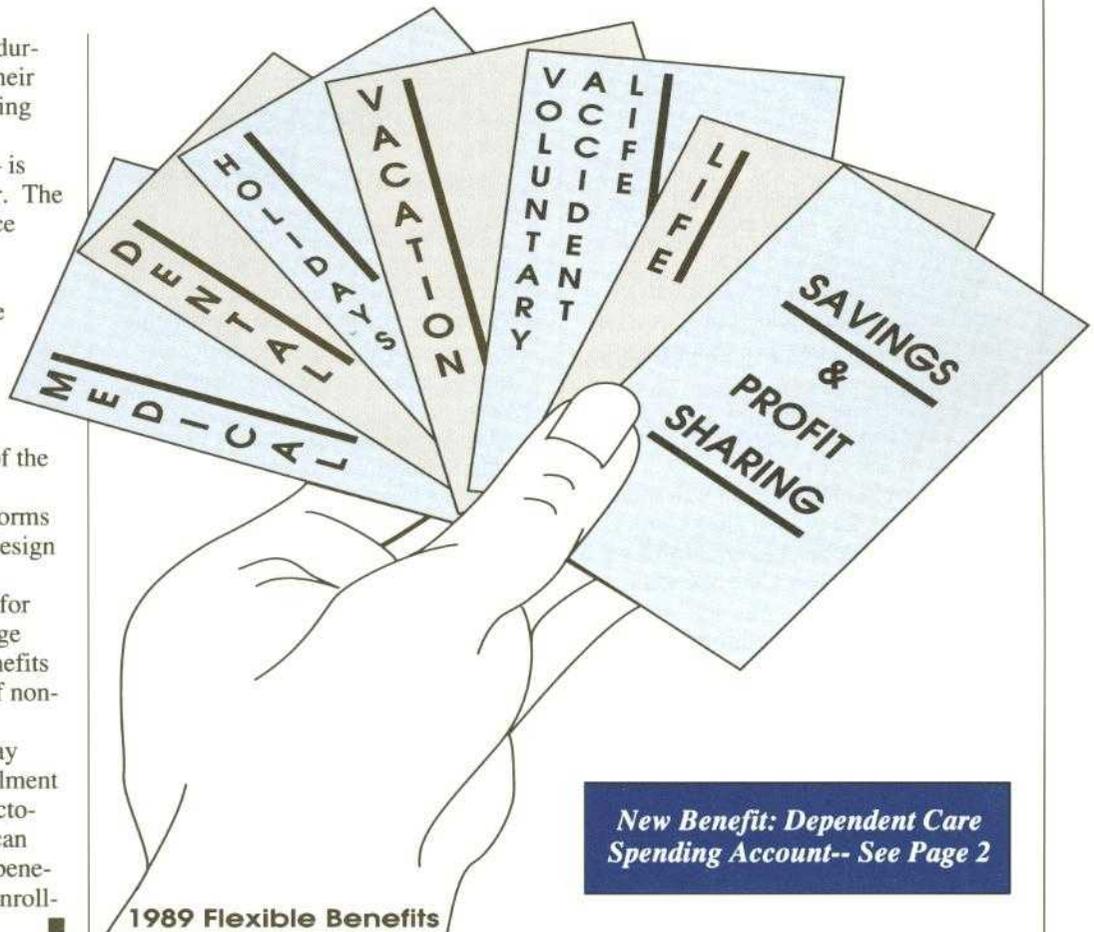
Employee Alert! Get Ready To Choose 1989 Flexible Benefits

Open enrollment — the period during which employees may tailor their own benefits package for the coming calendar year by choosing from COMSAT's full benefits menu — is scheduled to begin in late October. The Benefits Department will announce specific dates as soon as they are known.

Employees — particularly those who intend to be away on vacation or business travel during the open enrollment period — are urged to turn in their benefit enrollment forms before the end of the designated period.

Those who fail to turn in their forms on time will forfeit their right to design a program for the coming year. Smoker rates will also be applied for medical and life insurance coverage because without the form, the Benefits Department has no certification of non-smoker status.

Benefits Manager Barbara Finlay said benefits statements and enrollment forms will go out by the end of October. Meetings where employees can ask questions relating to specific benefits will be scheduled during the enrollment period. ■



1989 Flexible Benefits

COMSAT Introduces New Benefit To Ease Dependent Care Expenses

Working parents — moms and dads, singles and marrieds — take note.

Employees supporting a disabled adult, take heart.

A new COMSAT benefit aimed at easing the burden of day care expenses is on its way.

Beginning in January, employees with children — or other dependents unable to care for themselves — will be able to pay for day care expenses with pre-tax dollars.

"COMSAT is delighted to offer a benefit that addresses one of today's most important employee issues, one that is at the top of the national agenda," said Bambi Kirkpatrick, director of Human Resources corporate staff. "We are sensitive to the need for affordable day care and believe our new plan will represent a true benefit to our employees."

To participate in the new benefit plan, called the Dependent Care Spending Account, employees must sign up during the annual Flexible Benefits Open Enrollment period, scheduled for a two-week period later this fall. The exact dates of the Open Enrollment period will be announced soon.

You are eligible to participate if, in order to work, you (and your spouse, if you are married) pay day care expenses for:

- a child 14 or under; or
- a dependent of any age who is incapable of self care.

The Benefits Department will spell out details of the plan in an upcoming Benefits Newsletter, but briefly, this is how your Dependent Care Spending Account will work:

During Open Enrollment, you will need to designate how much money you want to deposit in your account throughout 1989. The maximum amount you can designate is \$5,000 (\$2,500 if married and filing separately).

Beginning in January with each pay period, deductions will be made from your paycheck on a pre-tax basis. If, for example, you designated

\$2,600 for your Dependent Care Spending Account, each paycheck during the year would reflect a \$100 deduction.

You will be reimbursed for day care expenses from your account. You need only submit a claim form and a bill or other proof that dependent day care expenses have been incurred. As soon as practical, you will receive reimbursement through payroll, with the reimbursement reflected on your paycheck.

The savings occur at income tax filing time. Since deductions deposited into the account are pre-tax, they are not included in gross income for the year. Your taxable income is thus reduced by the amount you deposited in your account. For example, if you earn \$35,000 annually and contribute \$2,000 to the Dependent Care Spending Account during the year, you would be

subject to income tax on only \$33,000.

Three important points to consider about this plan: **It cannot be purchased with benefit credits**, the Internal Revenue Service requires that designated money not spent must be forfeited and the designation, once made, is irrevocable during the calendar year. In other words, if you designate \$2,600 for your Dependent Care Spending Account, but only use \$2,000 for dependent care during the year, the remaining \$600 will be forfeited. Because of this, careful planning is important!

Employees interested in determining the potential tax advantage the dependent care plan offers should contact the Benefits Department for tax examples and worksheets during the open enrollment period. Human Resources employees will be available to assist you in completing the worksheets. ■

Consider These Points Before Enrolling

Barbara Finlay, COMSAT benefits manager, suggests that employees interested in the Dependent Care Spending Account begin considering these points and gathering information to help determine the benefit's value to them.

- Are you a father with a wife who is working, a mother with a working husband or a single parent paying day care expenses for your child? If so, you are eligible to participate.
- Are you supporting an adult who is physically or mentally incapable of self-care and paying for care during the day for that person? If this is necessary for you to be able to continue working, you can be reimbursed for day care expenses.
- How much do you expect to spend on day care during 1989? It is important to designate only the amount you expect to spend because

money you do not claim (through submission of a claim form and bill or receipt) cannot be reimbursed.

- Can you produce bills or receipts to verify day care expenses you paid? If not, then you cannot be reimbursed.
- Do your children attend pre-school or kindergarten? If so, the money you pay for their enrollment is eligible for reimbursement under the plan.
- Are your children in before - and after - school care programs? If so, the amount you pay is eligible for reimbursement. Any tuition you might pay for private full-time school from first grade up is not eligible.
- While you work, are your children being cared for by a day care provider in a home, by a day care center, or by a pre-school? If so, money you pay is eligible for reimbursement. ■

Flat Antenna Debuts in U.S. To Rave Reviews at Nashville Trade Show

A U.S. audience this month responded enthusiastically to a working model of the flat plate antenna which COMSAT designed and Matsushita Electric Works is currently manufacturing and marketing in Japan.

In a demonstration jointly conducted by COMSAT Video Enterprises (CVE) and Matsushita, visitors to the Satellite Broadcasting and Communications Association Show in Nashville earlier this month watched as the flat antenna received signals from the G.E. Satcom K-1 satellite.

If interest and enthusiasm are any measure, the flat antenna received a hero's welcome from the trade show attendees. Some 1,000 business cards were deposited at the CVE booth, and visitors displayed tremendous interest in the product, said CVE Vice President Dan Wells.

Wells, who delivered a 25 minute presentation on the flat antenna, had to cut off questions from the audience some 30 minutes *after* the end of his scheduled presentation due to time constraints. "There is a lot of interest in the flat antenna," Wells said, adding that the initial U.S. market would likely be in private business networks using Ku-band satellites.

In addition, Wells said, some two dozen companies at the Nashville show approached Matsushita about being considered as the sales and distribution entity for the flat antenna in the U.S. Product samples should be available in the U.S. by May of next year, and full-scale production could begin by September.

The antenna that was demonstrated was the same basic design as the Matsushita/COMSAT flat antenna already installed at some Japanese homes to receive TV programs from two direct broadcast channels. The Japanese version sells for \$425, including the outdoor electronics. A European version is expected to be available next year in Europe as high-powered satellite services becomes operational.

Measuring slightly under one square



COMSAT's aesthetically pleasing flat antenna installed on a veranda in Japan.

yard and one inch thick while weighing in at about 10 pounds, the antenna is ideal for installing on walls, roofs or balconies.

Unlike a parabolic antenna which reflects microwaves and directs them into a primary "feedhorn," the flat antenna receives the microwave signals directly through many printed circuit elements across its entire surface.

It was through the application of printed circuit technology that COMSAT Labs began developing the flat antenna in 1983. In 1986, COMSAT

and Matsushita signed a licensing agreement allowing Matsushita to use COMSAT technology in the manufacturing of flat antennas. The two companies also signed a 10-year joint development agreement to continue improvements that will keep the flat antenna competitive in the marketplace. Wells said that current development efforts under way at COMSAT Laboratories, under the direction of Bob Sorbello, include features such as dual polarization, transmit and receive capability and electronic steerability. ■

Beware Hostile Intelligence

COMSAT employees should be alert to the activities of hostile intelligence services looking to acquire controlled technology or company proprietary information, according to Bob Gray of COMSAT's Corporate Security office.

Gray's advice comes at the urging of the FBI, which is charged with counter-intelligence and espionage investigations within the U.S. "The FBI wants government contractors to be aware of the threats posed by hostile intelligence

services," he said.

Gray's office maintains a listing of hostile government establishments in the Washington, D. C. area. The list may serve as a guide in evaluating requests for restricted information or materials from unidentified sources, Gray said. The list and answers to questions relating to technology transfer can be obtained by calling Gloria Ford in the Security office at X6606. ■

Industry News

- The INTELSAT V-A satellite launched in May arrived at its operating location at 307 degrees E Longitude on August 10. The INTELSAT V (F-3), which had been in that location, is now drifting toward a new position for service in the Pacific Ocean region.

- Orion and Financial Satellite (Finansat) have asked the FCC for more time to seek the financial backing they will need to build, launch and operate the international satellite systems they have proposed. The FCC had required that by July 13 they demonstrate their financial qualifications to carry out their plans.

- COMSAT last month completed its plans to get out of the manufacturing business when it sold its mobile satellite terminal business to Mobile Telesystems Inc., (MTI) of Fairfax. Terms of the deal were not disclosed. With the purchase, MTI will begin marketing such products as maritime satellite terminals and portable, land-based "earth stations in a suitcase."

- Lloyd's Aviation Department has published definitive work on world satellite systems, entitled "World Satellite Survey." Additional information on the book is available from Lloyds of London Press, Ltd., Sheepen Place, Colchester, CO3 3LP (United Kingdom), 1987. Price: 165 pounds.

- Orbiting junk, which could potentially wreak havoc on operating satellites, is beginning to win official attention, with NASA initiating a strategy to combat the growing orbital debris problem. Although the problem is said to be less severe in the geosynchronous orbit, some 7,000 manmade objects are being tracked by radar in low-earth orbit.

- AT&T said last month that it finished laying its 3,160 mile TAT-8 fiber optic cable between Tuckerton, N.J.,



ON THE JOB

Chuck Yost, applications engineer for Maritime Services, holds a microprocessor board that he programmed for the SeaPhone and YachtPhone and (above) checks the dialing sequence on a CashPhone. Thanks to Yost's technical expertise and innovative marketing by COMSAT Maritime Services, the cruise industry has become an exciting growth market for satellite telephone services.



and an undersea branching unit on the European continental shelf. France and Britain will lay the cable branches to their countries.

- China has been awarded an \$8 million contract to provide tracking, telemetry and command services (TT&C) for INMARSAT 2 satellites in the Pacific Ocean region. Italy's Telespazio will handle TT&C services for a single satellite in each of the Atlantic Ocean and Indian Ocean regions.

- Looking ahead to the introduction of the new Standard-C mobile terminal for maritime customers, INMARSAT

awarded three contracts for Standard-C network coordination station services. The contracts went to British Telecom International in the Atlantic, Telecoms Singapore in the Pacific and the Hellenic Telecommunications Organization in the Indian Ocean region.

- The first World Summit for Electronic Media, ITU-COM 89, is set for Oct. 3-8, 1989 in Geneva. The program, "Toward Global Information: the Electronic Media Explosion," will reflect the growing importance of electronic mass media communications in everyday life. ■

Labs Host R&D Meeting

Members of the public interested in the results of recent COMSAT Labs' international satellite research and development activities have been invited to the Labs' annual public meeting on Thursday, Sept. 22 at Clarksburg.

Each year, the Labs invites the public to a session for a review of its research funded by the ratepayer and sponsored by INTELSAT.

The directors of the Labs' six divisions will report on relevant developments. A poster board display will supplement their presentations.

COMSAT is required to share with the public the results of ratepayer-funded international satellite research and development work it conducts. ■

ICIA Seeks Nominees

The International Communications Industries Association (ICIA) has opened its Achievement Awards Program to ICIA members and non-members. The awards program hopes to identify pioneers and innovators whose work has made a significant contribution to the communications products industry. Deadline to enter is Oct. 31.

Awards will be presented at INFO-COMM International, the Association's trade show set for Feb. 3 in Dallas. For nomination regulations, contact Barbara Reck at ICIA headquarters (703) 273-7200. ■

Pontano Named Acting Director

Doctor Benjamin A. Pontano has been named acting director of the Network Technology Division, COMSAT Laboratories. According to "Side Band," the COMSAT North Newsletter, Pontano's appointment was occasioned by the resignations of Doctor Ashok Kaul and Mr. Thomas Dobyns, director and associate director, respectively of the Network Technology Division, who left COMSAT last month to form their own company. ■

Analysts Forecast \$3 EPS



Three recent analyst reports on COMSAT have forecast earnings per share (EPS) for the year well into the \$3 to \$4 range.

Value Line has estimated primary EPS at \$3.25, while Merrill Lynch's estimate was from \$3.50 to \$3.60 for primary EPS and \$3.10 - \$3.20 for fully diluted EPS.

Despite projections of 1988 primary EPS of \$3.26 and fully diluted EPS of \$2.90, Donaldson, Lufkin & Jenrette (DL&J) removed COMSAT from its "Recommended List." The decision was based on two opinions: that price cuts aimed at keeping within the company's authorized return on equity limits will lead to reduced earnings for the second half of 1988 and that COMSAT stock will not realize its full price potential (approximately \$40 per share, according to DL&J) for at least a year when COMSAT Video Enterprises can produce several consecutive quarters of positive earnings.

"A restructured COMSAT will likely show a healthy earnings recovery in 1988," Value Line reported. "A further

gain of 6 percent seems likely next year. The video division will probably make a positive bottom line contribution, although the pace of improvement likely will be somewhat less than earlier anticipated," the report said. "We expect these shares to trace the market averages over the next year. Appreciation potential to 1991-93 appears subpar, partly due to ongoing skepticism regarding the competitive pressures from fiber optic cable."

Merrill Lynch estimated "that annualized international circuit growth was 24 percent in the June quarter, compared to 20 percent in the March 1988 quarter and 16 percent for full year 1987." The report said revenue growth from the INTELSAT business could be expected to slow as AT&T converts from analog to digital transmission. Referring to COMSAT Video Enterprises, Merrill Lynch said it expected "break-even operations in the September quarter and an operating loss in the December quarter due to seasonal factors. ■

Short Takes

Michael Glasby, World Systems sales promotion manager, has been appointed a member of the board of directors of the International Exhibitors Association (IEA). At IEA's recent annual conference, Glasby moderated a panel on how an exhibit manager with no staff can effectively manage company exhibit requirements...**Ray Crowell**, director of strategic planning for ISS, is serving on the planning committee for a conference, "Forging a New Telecommunications Strategy: Choices for the Next Administration," set for Sept. 27-28 in Washington. The conference is sponsored by the Public Service Satellite Consortium

and co-sponsored by COMSAT and Pacific Telesis... The White House has announced that President Reagan intends to nominate **Thomas C. Griscom** to COMSAT's board of directors, succeeding Neal B. Freeman. Griscom recently resigned as assistant to the President for communications and planning. Previously, he was president and CEO of Ogilvy & Mather public affairs...COMSAT is working with **Turner Broadcasting** to distribute a documentary, "Without Borders," on the environment to 120 nations on Oct. 24, United Nations Day.... ■

Maritime Offers Maripress Discounts

COMSAT Maritime Services recently introduced discounted rates for customers who sign up for long-term Maripress service and for customers with two or more ships subscribing to the service.

Maripress, which feeds news, sports and financial information compiled from news services to maritime subscribers, is \$30 per day, or about \$900 a month, without the new discounts.

By signing up for monthly service, ships with populations of more than 300 persons can receive Maripress for \$750. With fewer than 300 persons, the monthly cost is \$350.

Annual savings are even greater. For ships with populations of more than 300 the yearly fee is \$7,500; for those with fewer people on board, the cost is \$3,500.

Shipping companies with multiple ships subscribing to Maripress can receive significant additional discounts. Companies with up to five ships can take advantage of an additional 20 percent discount on monthly or annual service, while companies with six or more ships are eligible for a 30 percent discount. ■

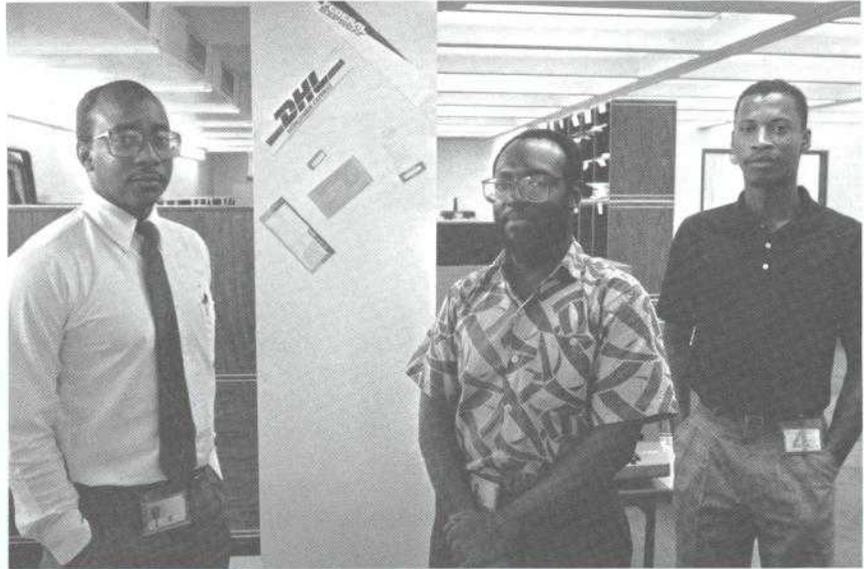
INTELSAT Projects Growth of 6.3% in 1988

INTELSAT expects system-wide traffic to grow 6.3 percent during 1988. At that rate, the number of full-time

FULL-TIME HALF-CIRCUITS	
92,463	1987
104,848	1988

half-circuits should increase from 92,463 at the end of 1987 to 104,848 by the end of 1988.

ON THE JOB



With the recent move of the Plaza mailroom, all courier, mail and express package services have been consolidated under one roof on the Lobby level of the Plaza, across from the Security Office. For assistance with any of these services, see (from L-R) Mike Ashton, Orlando Wilson or Ray Logan.

According to other data from the 1988 INTELSAT Global Traffic Meeting, 1988 full-time half-circuits are forecast at nearly 59,700 in the Atlantic, 25,600 in the Indian and 19,500 in the Pacific Ocean regions.

System-wide circuit totals are expected to decline as more customers move traffic to digital "bearer" circuits. ■

INMARSAT Tests Standard-C For Land Mobile Use

Using its small Standard-C communications system, a device about the size of a car radio, INMARSAT recently completed a successful 3,500 mile test demonstration in Eastern Europe and the U.S.S.R. of its proposed land-mobile service.

Mounted on a specially equipped mobile home, the Standard-C equipment sent and received text messages to and from INMARSAT headquarters. It also fed a steady stream of position reports to London.

COMSAT will be demonstrating this

equipment on the U.S. West Coast next month as it works with a variety of potential land-mobile service providers to show them how the INMARSAT system operates. ■

Ships To Receive Olympics Results

Through COMSAT Maritime Services, crew members and ship passengers at sea will have an opportunity to receive complete coverage of the 1988 Summer Olympics from Seoul, Sept. 17- Oct. 2.

Ships that subscribe to the service will receive 15-minute transmissions daily on Olympics results.

The Olympics News Service, compiled from reports by the world's major wire services, also will include an Olympic Scoreboard of each country's standings, an Olympic Digest of in-depth interviews with athletes, and a Capsule of Olympic Events, including individual scores and highlights of the day's most thrilling events.

COMSAT is making the 16-day service available for \$100. As of September 13, more than 150 vessels had placed orders for the service. ■



Looking Back

- **32 years ago**, on Sept. 25, 1956, the first transatlantic cable began service.
- **24 years ago**, on Sept. 17, 1964, COMSAT held its first shareholders meeting.
- **19 years ago**, on Sept. 8, 1969, COMSAT Laboratories officially opened its new Clarksburg, Md., facility.
- **16 years ago**, on Sept. 10, 1972, satellite coverage began of the Olympic Games from Munich, W. Germany. A new record for coverage was set as all four INTELSAT IV satellites were used in transmitting 1,023 half-channel hours of TV to 33 countries. ■

Plan Funds Show Positive Returns

COMSAT's three Savings and Profit-Sharing Plan funds showed positive rates of return for the first half of 1988.

Fund A earned 4.5 percent for the first two quarters. Fund A guarantees principal and, over the course of the year, will earn a blended rate based on the comingling of several contracts that earn rates from 7.5 percent to 12.7 percent.

Fund B, invested in the Vanguard Trustees' Comingled Equity Fund, U.S. Portfolio, earned 22.9 percent. Fund B does not guarantee principal.

Fund C, invested in COMSAT common stock, earned 5.2 percent. Return includes changes in market value and quarterly dividends. ■

Tanner and Twining To See Olympics Up Close

By the time you settle into your easy chair for the first night of Olympics action this month, fellow employees Joanne Tanner and Robert Twining will already have another view of the Games from Seoul. Some clever copywriter might call their view "up close and personal."

Tanner and Twining, account managers in World Systems' video marketing group, will be seeing the action from the inside. From inside the International Broadcast Center in Seoul, that is.

But let there be no mistake. In being dispatched to the Games by COMSAT's Intelsat Satellite Services, Tanner and Twining are expected to be more than mere spectators.

Their role is to help COMSAT's video customers — the networks and TV stations — arrange for INTELSAT satellite capacity to broadcast their reports. And, if there are quality problems, Tanner and Twining will be on hand to help iron those out too.

Their presence at a major overseas video event is hard evidence that COMSAT World Systems is dedicated to improved customer service, a pledge it

has made over the past year.

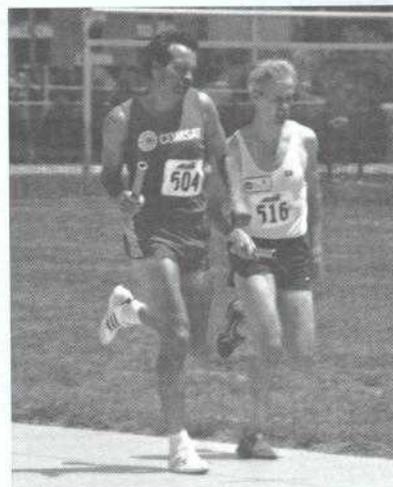
"Our customers have been encouraging us to have a presence at these events," said Tanner. "Our being in Seoul demonstrates our commitment to serving customers."

Tanner and Twining were scheduled to arrive several days before Olympic broadcasts began. That's when broadcasters were making last minute arrangements for satellite capacity. Their schedule called for returning on Sept. 21 — before the Olympics conclude, but after broadcast operations have settled down and are running smoothly.

NBC, which holds the sole right to broadcast the 1988 Summer Olympics in the U.S., is COMSAT's biggest video customer during the event. NBC broadcasts will be routed to the U.S. over two INTELSAT Pacific Region satellites, one Ku-band, 1 C-band.

While NBC may be the biggest user of COMSAT's satellite services during the Olympics, other broadcasters in need of scheduling occasional-use basis may also seek Twining's and Tanner's assistance. ■

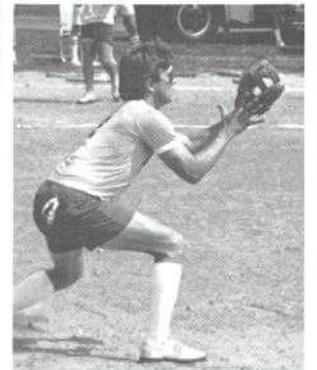
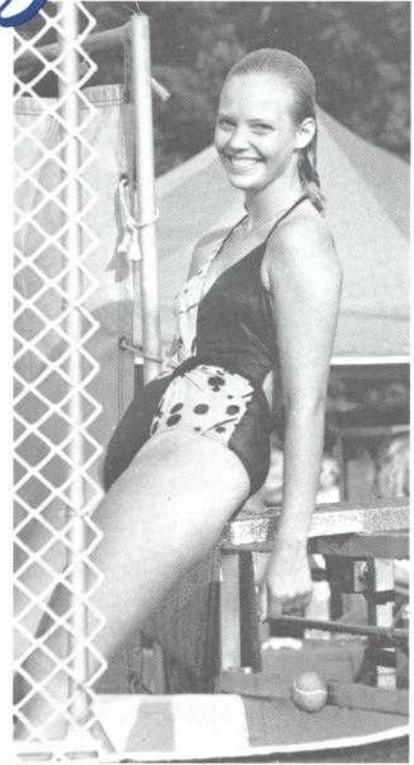
THE FINAL STRETCH



Photos: Joel Alper

COMSAT Labs runner Earl Main kicks into high gear in the final stretch of the Mid-Atlantic Corporate Cup relay held this summer at Gallaudet University. Main's strong finish gave COMSAT a victory in that heat. Overall, COMSAT placed 8th out of 30 teams.

Fun Days



Sights and sounds from Clarksburg annual softball tournament and family fun day as seen through the lens of COMSAT Labs photographer Carroll Haugh.