

The Network Times

MCDONNELL DOUGLAS

Published for Employees of Network Systems Company

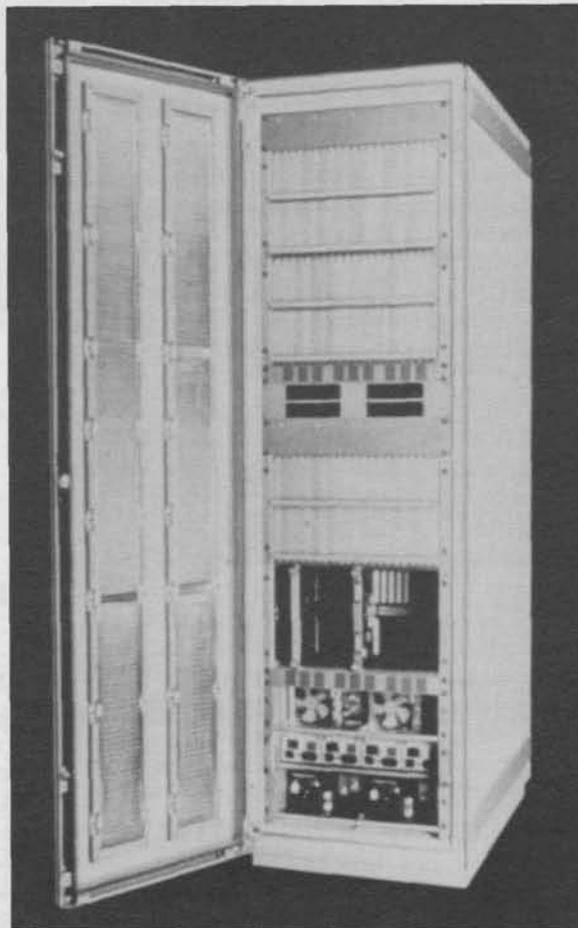
First Quarter 1988

Watch out, world! Tymnet has a new product that will make EVERYONE take notice. Taking advantage of recent technological developments, Tymnet is introducing a new generation of packet switches that will satisfy customer demands for higher bandwidth and new communications services—and, especially, enable us to compete effectively into the '90s.

You've probably heard whisperings around the company about the project, Skywalker, destined to keep Tymnet in the forefront of data communications. Well, the secret is out now and it's no longer called Skywalker but Turbo-Engine.™ The unveiling took place at the TELECOM '87 trade show held in Geneva, Switzerland on October 20, 1987.

With the Turbo-Engine product line (also known as

the Series 7500 packet-switch), Tymnet has taken a new approach: we have used industry-standard components and programming language, and combined them with the best of our proprietary technology to create a truly powerful, flexible switch that will be compatible with multiple products and applications with key system components. Programmed in the high-



Telenet, take note! The Turbo Engine is Tymnet's linchpin for success into the '90s.

Tymnet's Latest and Greatest: The Turbo-Engine™

Continued on Page 17

Reception Wows Customers and Media

By Lori Waggener

In these days of the ubiquitous holiday cocktail reception, it's not often that you say "WOW!!!!" after going to yet another one.

But literally everyone who attended the December 9 Open House at the new San Jose McDonnell Douglas Center was REALLY impressed, including a local news station—Channel 36—who covered the event, and did a four-minute spot on the 10:00 News!

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Tired of Red Tape? Tell Clint and Win \$100!

You're not seeing things. This isn't a gimmick and you don't have to buy a thing. If you recall, Clint DeGabrielle recently sent out a memo asking Tymnet employees for suggestions to reduce the bureaucratic red tape that they feel has no resulting benefit.

He feels so strongly about streamlining bureaucratic bottlenecks within the company that he's willing to give money to the

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Sandy McDonnell cuts the proverbial ribbon.



Warren Prince models the latest fashion trend: half a tie.

Reception—

Continued from Page 1

The event, as you've probably heard, was a customer and media reception to celebrate the opening of the impressive new McDonnell Douglas campus ... and the list of attendees was impressive.

Sandy and John McDonnell, Jerry Causley, Warren Prince and MANY other members of the ISG executive staff were present to view the new facility, chat with employees and customers, and cut the proverbial ribbon. As a playful twist, Sandy McDonnell cut Warren's tie off, instead of the ribbon and then proceeded to next cut off Jerry's tie! Eventually, yes, the ribbon did get cut.

A representative from California Governor George Deukmejian's office, Kirk West, was on hand commendations at McDonnell Douglas' commitment to continue to employ a large amount of people in the Silicon Valley, as evidenced by the enormous commitment in real estate that the new campus represents. (In fact, the McDonnell Douglas campus represents one of the largest real estate deals ever made in Silicon Valley.)

Sandy McDonnell made a fast friend during the course of the evening: he and the Network Tymes Editor, Anne Gough, are true buddies (see photo); he even called out her name to hand her Warren's tie once he had cut it off!

The new Visitor's Center within the campus, which consists of several rooms, housed the reception. In one room was an **excellent** jazz trio, and mountains of fancy desserts. Another room featured a sushi bar and all kinds of cheeses. And yet another room had Italian cold-cuts and fresh salmon. Guckenheimer, the company who handles our cafeteria, catered the event and really proved much more than capable. The food was absolutely exquisite! Kudos to Guckenheimer and all of the employees who made this ceremony a success!



Anne Gough, cub reporter, and new-found friend, Sandy.

New Format for The Network Tymes

Notice anything different about *The Network Tymes*? Not really? Well, if you look closely at this issue, you'll see a different format and a few different graphic elements. These changes to the newsletter are at the suggestion of McDonnell Douglas Corporate Communications, who want to create, through the use of a visual framework, a "family look" for all MDC employee newsletters; and within this framework, to allow each publication the flexibility to take on its own personality.

It's been a challenge working with this new format and rewarding as well. I can see lots of room for improvement but I think we're well on our way to achieving the unity MDC wants. I hope you like the new *Network Tymes*.

The Editor ■





Lori Waggener, Manager of Public Relations.

PR Update

By Lori Waggener

Call us the press tour Nazis! Since the last *Network Tymes*, the PR department has orchestrated TWO press tours: one to announce our new Async enhancements and upgrades (including 9600 bps async dial-up, support for MNP, Outdial and 2400 bps expansion, etc.), and one to inform publications and analysts about the adverse effects of the proposed FCC access charge hike.

For the async stint, Clint DeGabrielle, Bob Fultz and I pounded down the doors of over 25 key publications and industry analysts on the East Coast to tell our story—it truly was the “Clint & Bob Show!” Meanwhile, Mike Cady & Jeff Steinberg simultaneously worked the West Coast editorial/analyst community to do same. The results were spectacular: over 30 articles have been written to date on the announcement, one even saying: “With the introduction of 9600 bps dial-up, Tymnet leaves closest competitor Telenet out in the cold.” Another article started out saying, “Tymnet breaks the speed barrier!!” Love it!

Warren Prince was the star of the FCC access charge-related tour. In New York & Washington, D.C., we met with various trade publications and analysts, as well as top-level business publications: *Fortune*, *Forbes*, *Washington Post*, *New York Times*, etc. By the time each interview was over, each interviewer seemed to be completely convinced that the access charges are a bad idea (if they weren't convinced of that already), and many have since written editorials and articles to that effect. We're expecting more. In addition, it was an excellent opportunity to get in the doors

of some of these dailies and business publications that are otherwise difficult to attract.

This out-on-the-road kind of activity is invaluable because it enables us to tell our story one-on-one to the people who count, in an unhurried, relaxed atmosphere. By the same token, it raises our visibility with the editorial community more effectively than just about any other activity.

“Tymnet is going places, doing things, on a fast-growth track, concerned about topical issues!”

Last item: we have completed three consultant seminars: the first in Chicago, second in San Francisco and third in New York. The seminars got progressively better, as we gained experience in what kinds of information and hands-on product exposure that consultants are looking for. An invaluable experience, and certainly a good relationship-builder with the consultant community.

More about the day-to-day in the next column.

McDonnell Douglas Among Space Station Contract Winners

By Julie Westermann

McDonnell Douglas has been selected by NASA to perform a \$1.9 billion, 10-year contract to design and develop a major portion of NASA's manned space station. McDonnell Douglas Astronautics Company will lead a five-company team responsible for designing and developing structures and systems covered in Work Package 2, the largest of four work packages that comprise the total space station effort.

MDC will integrate, manage and build the integrated truss, airlocks, propulsion and the mobile base for the mobile transporter, as well as outfit the resource nodes. Manufacturing will take place at MDAC-HB. Operations planning, avionics integration, software development and support of the Johnson Space Center project office will take place in Houston. ■



The popcorn chefs take their allotted 15-minute break. (L-r): Al Fenn, John Elbert, Ron Bamberg, Phil Kreter, Warren Prince and Clint DeGabrielle. (Not pictured: Bob Tomasi).



The open house crowd gathers for the drawing.



Virginia Leland makes life a little easier for all of us with her Rate Schedule Guide.

TEAM Open House Stresses Unity, Awareness and FUN

You had to have seen it. MDC's own power executives—Warren Prince, Phil Kreter, Bob Tomasi, Clint DeGabrielle, John Elbert and Ron Bamberg—all dressed up as . . . popcorn chefs! And serving it, too! What, are they tired of the ol' corporate, work-a-day world? Are they thinking of going into popcorn management?

Of course not. They were just participating in MDC's open house which was held on November 13 and 14 (as if you didn't know!). All of the MDC business components here at the McDonnell Douglas Center took time out to set up exhibits and displays in each of their departments in an effort to promote awareness of and respect for each department's function.

And my oh my, the spirit was flowing for two days! I don't have enough room to cover all of the interesting exhibits—there were so many. I could mention NTD's BubbNet and ACS's roulette wheel, or Facilities' site board and Building F's building rally—but I've gotta stop somewhere.

I would like to mention and thank those individuals who were the "core leaders" of the whole shebang. They organized the event, cajoled people into participating and got the ball rolling. Many thanks to: Alice Leonard, Dave Naumann, Wanda Hoyles, Peggy Bollinger and Adele Newman for all of their hard work. You made it work for all of us. Ed. ■



International's exhibit took employees "around the world in 80 nodes."



Business Development and Planning exhibited its Wheel of Fortune.

New Guide Clarifies Rate Schedule

It has happened to everyone. You look at Tymnet's Rate Schedule and become confused—about prices, components—everything. If you could only **see** the configuration the Rate Schedule is describing, then you might understand. Well, now you **can** understand because Marketing Support has recently put together a Tymnet Rate Schedule Guide to use along with the Rate Schedule.

Virginia Leland and Dirk Heartman in Marketing Support came up with the idea when Virginia, who transferred from International, expressed concern over her lack of knowledge of domestic products. Although looking at the Rate Schedule helped, it still didn't give her the complete picture. Thus, the idea of a "picture book" was conceived.

The Rate Schedule Guide's purpose is "to show graphically the components of various Tymnet services used to provide Public Network solutions to our customers. Tymnet's pricing approach is to provide a variety of pricing components that can be mixed and matched according to a customer's particular needs."

The guide gives you a picture of every product in the Rate Schedule and explains pricing and other related information along with it. Published in August 1987, the guide has been extremely helpful to those working in Billing, Order Processing, Sales and MIS. It has also saved precious time

Continued on Page 5

THUGS Meeting a Smashing Success

By Mike Lynch

Well, another successful Public Network THUGS (Tymnet Happy Users Group) has come to a close, and as in years past, thought-provoking presentations highlighted the meeting.

Jerry Pournelle "christened" THUGS with an enlightening keynote address called "The New Networks: Evolution of the Global Village," echoing the meeting's ambitious theme, "Networking into the '90s." Dr. Charles Garfield, our luncheon speaker, delivered an inspiring talk about "Peak Performance," instilling in all of us a renewed sense of motivation and purpose.

From beginning to end, Tymnet and customer presentations directly addressed the issues, concerns and opportunities facing our organization and marketplace well into the '90s. "Securing the Dial-Up Environment," "Tymnet's Connection to Southern New England Telephone," "LAN Architectures & Tymnet" and "Tymnet & ISDN" all provided our users with insights into our company and its symbiotic relationships with differing technologies and market strategies.

With regard to the FCC access charge issue, a talk by Warren Prince and Steven Bell helped to allay the fears of our users and then charted the most effective course of action for defeating the surcharge.

New, interactive breakout sessions such as "The Help Desk Workshop" and "Forum for THUGS Input: Invoices, Tapes & Reports," were extremely well attended and very participative.

Through a panel format (the panel consisted of Tymnet customers experienced in setting up help desks), our users learned more effective ways of organizing and operating a successful customer service center with regard to Tymnet. The forum provided THUGS members a golden opportunity to have their ideas included in the design of the new billing systems.

The meeting, however, didn't end on Wednesday. Presentations by PTTs from Japan, the U.K., Australia and Canada highlighted an informative and unique international session. The meeting provided the rare opportunity for our domestic and international users to discuss among themselves the issues and concerns common to communications throughout the world.

In all, 97 customers (nearly one-third of them international) experienced the invaluable interaction that reminded them of the necessity to take a global perspective when making business decisions. ■



Luncheon speaker Charles Garfield, author of *Peak Performance*, motivates THUGS attendees.



Dawn Danaher sets up a demo for interested customers.

New Guide—

Continued from Page 4

for product managers since the guide answers many of the commonly asked product and pricing questions.

"I think the guide is a wonderful tool for orienting new employees about our products and prices," remarked Virginia. This multi-faceted guide can be yours if you call Virginia at extension 7570. And it's free! ■

Employees Dig Deep for Charity

By Joy Schenk

"Somebody Needs You" was the slogan for the recent PCS-West Charity Drive, and Tymnet employees responded generously to the plea. Steve Poppe chaired an interim committee to coordinate the drive, with the help of representatives from the following divisions:

Operations—Ron Wipfler

Finance—Virginia Diraison

Personnel & Administration—Jeri McCaughey
Marketing & Sales—Patty Pickett and Alice Leonard

NTD—Joy Schenk

Volunteers from each department within the respective divisions were recruited to display posters and distribute brochures and sign-up cards. Their hard work and dedication really paid off. Take a look at these highlights:

Operations

The TIP group in Order Processing had 100% participation!

Sales & Marketing

Mike Cady's group, Network Systems Marketing, had the highest participation rate within the division (Dennis Hawes was the department

representative). Neil Sullivan's External Network Services group was just 2% lower than Mike Cady's (Bruce Welsh was the department representative).

Finance

Finance finished the week with an overall 51.2% participation rate, the highest in this division, with 33% of this enrollment at the sponsor/patron levels. General Accounting, Asset Accounting and MIS Development all had over 60% participation.

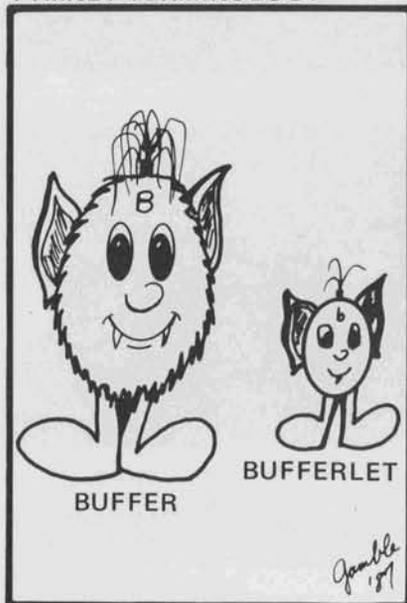
NTD

A final tally of NTD's participation equaled 42% of the nearly 200 employees. Mike Rude's Network Interfaces and Applications group (Drue Bondad was the department representative) had an overall participation rate of 83%, while four units within this department had a 100% participation rate.

Before the interim committee disbanded, a PCS local board was elected for the 1987-1988 term. The new members are: Charles Faubion, Edsel Garcia-Mendez Budar, Mollie Keezer, Kay Childs (non-voting) and Dan Lasater.

We wish to thank all participants in the 1987 drive for their generosity and we look forward to an even more successful 1988. ■

TYMNET TERMINOLOGY



Holiday Schedule

The following holiday schedule for 1988 will be observed by Network Systems Company Employees:

| | | |
|------------------------|-----------|-------------|
| New Year's Day | Friday | January 1 |
| Memorial Day | Monday | May 30 |
| Independence Day | Monday | July 4 |
| Floating Day | Tuesday | July 5 |
| Labor Day | Monday | September 5 |
| Thanksgiving Day | Thursday | November 24 |
| Day After Thanksgiving | Friday | November 25 |
| Day After Christmas | Monday | December 26 |
| Floating Day | Tuesday | December 27 |
| Floating Day | Wednesday | December 28 |

External Network Services: Full Steam Ahead

By Keith Curtis

Our External Network Services group (ENS) has been very busy the last quarter developing new products and promoting International Services. A special international session was run in conjunction with the THUGS (Tymnet Happy Users Group) meeting this year with extremely successful results.

A wide variety of international customers showed up as well as PTTs, who provided valuable information to everyone present. In addition, ENS produced an international survey during the meeting for our customers designed to help us focus our planning and development efforts next year. These surveys are available through your local offices.

ENS also attended two important international events. Bob McCormick represented Tymnet at the Telecom '87 trade show in Geneva, Switzerland. Telecom, which is held once every four years, is probably the most important single international trade show and is widely attended by European PTTs and telecommunications vendors. Bob promoted Tymnet services and strengthened our contacts with the PTTs.

Keith Curtis visited the fiery Arab Gulf for presentations at the BATELCO Data Base Seminar hosted in Bahrain. Keith made presentations in the public seminar to large groups of the Arab financial, petroleum and general business communities. Over 400 companies that do business with the Middle East attended the seminar.

Bahrain's local packet network, configured exclusively with TYMNET technology, is the principal transit location for traffic from the Arab Middle East. As a result of the visit, Tymnet, in agreement with BATELCO, can now offer generic access to locations in the Middle East. BATELCO also plans to expand its service offerings, including the Tymnet-addressable CONSAT and a local implementation of X.PC.

Both of these developments are important to our customers seeking to use Bahrain as a transit point from locations such as Kuwait and India. Although I was in Bahrain (an island off of Saudi Arabia in the Arab Gulf) during the week in which Iran hit a ship in Kuwaiti waters and the US retaliated against derrick platforms in the Gulf, Keith reports that he still feels more comfortable there than he does in New York City.

On the product side, Tymnet introduced international access to public Asynchronous Outdial through an Enhanced Gateway Access. This product allows users to build direct terminal-to-

terminal calls internationally at public prices. It provides our customers a cost-effective alternative to International Distance Dialing or Telex messaging calls with the value-added features of the public network.

The most successful current international product is the Tymnet offering in Japan. The TYMNET network in Japan, known as Network Information Service (NIS), is a joint venture between MDC and the Marubeni Corporation. The network covers some 30 cities in Japan with full connectivity to the U.S. The Japan office employs over 80 full-time local people.

The full range of Tymnet services can be offered on the network in Japan, and the user can choose reverse charge or prepaid service billing options. In addition, the International Dedicated Connection facility offers the users a ceiling on their connect time charges internationally. In the short period that we have been offering direct services from Japan, it has generated tremendous interest among our customers as a comprehensive and cost-effective method of providing their communications needs from Japan.

All in all, Tymnet has been very active in the international arena. We sense the growing need for the above services and are responding by expanding our international support and product offerings. ■



**How do federal sales reps take out their frustrations on management?
Just ask Andy "Dunk 'em" Price!**

Network Engineering Meets SBI Goal

By Craig Clemens

Local asynchronous terminal access is the "front door" to the TYMNET network through which much of our revenue is generated. It is also the first contact the customer has with the network to determine what quality of service to expect. The measure of local access quality of service is P-Grade, which is defined as the probability of a call being blocked during the peak hour of the day. One of McDonnell Douglas Network Systems Company's SBI goals is to improve the number of access rotaries providing a P-Grade of P.01 (1%) by 15% in both halves of 1987.

The number of rotaries offering a P.01 grade of service was increased from 310 in December 1986 to 356 by June 1987 to meet the June goal, despite a 25% increase in connect hour traffic. The TYMNET network has 543 asynchronous access rotaries as of September 30, 1987, and 429 of these rotaries offer a P.01 grade of service. This is a 73 rotary increase over June, which puts us well on our way to meeting the December goal as well.



Nadyne Sotto's hard work keeps TRW happy.

TRW Upgrades

By Nancy Seyferth

Nadyne Sotto, a Project Administrator for Western District Private Networks, has been working feverishly on a TRW upgrade since July. She has worked above and beyond the call of duty, spending many late nights and early mornings putting together a smooth running upgrade of a massive \$1.3 million project which encompasses 16 sites and 34 installations.

Thanks for all of your hard work, Nadyne. It doesn't go unnoticed. You're an example to all of us.

RCF Conversion Saves Big Bucks

By Craig Clemens

Tymnet, Network Systems Company, began providing asynchronous access in 1984 to its customers by Remote Call Forwarding (RCF) local calls to a WATS rotary. This method provided quick access to the TYMNET network from 38 new cities. As a result, Tymnet circumvented the lengthy process required to establish new nodal sites. Unfortunately, the cost of providing this service grew to \$130,000 per month in September 1986.

To reduce this cost, Tymnet Network Engineering launched a project to convert all 38 cities to nodal access cities at a cost of approximately \$57,000 per month. To provide nodal access, a Tymnet Engine processor is installed locally and connected to the network via a line leased from a telephone company.

During Phase I of this project, we converted 20 cities and lowered the monthly cost to \$80,000 by May 1987. We completed the project in September 1987 and disconnected the WATS rotary. The cost savings achieved through the remainder of 1987 will be approximately \$200,000 with an annual savings of approximately \$900,000.



The Private Networks Western District team at its first annual meeting. (Back row, l-r): Nancy Seyferth, Rise' Ciufia, Nadyne Sotto, Joe Magnan, Cynthia Gair, Rob Crow, Jan Fritz. (Front row, l-r): Kathy Wilkinson, Susan Estrem, Dona Roche.

Trailblazers Convene

By Nancy Seyferth

The Tymnet Trailblazers blew into Santa Cruz August 25-26 for the first annual Private Networks Western District meeting.

Top-secret strategies were discussed for the new year, with resolutions from each of the P-NET reps to bring in new accounts. Susan Estrem, Rick Sprenkel, Rob Ritchie and Rise' Ciufia were on hand with words of wisdom and information on new products and marketing strategies.

Fully staffed and prepped, the Trailblazers are sure to be the success of '88.



Bob Tomasi, VP of Operations, displays the coveted softball trophy.

The Rivalry Has Begun

By Kevin Hadnot

In August 1987, a third meeting between Operations and Marketing took place. The location of this prestigious meeting was a softball field—Columbus Park, to be exact. The meeting? A fierce softball game between the two departments which everyone is hoping will become an annual event.

It all started back in July 1986. It was supposed to be a fun game to relieve some of the tension brought on by the lay-offs and the presence of Proudfoot, a consulting firm brought in to improve productivity. Well, Operations won the first game, 16-15, and at that time there was no trophy so Operations won "bragging rights." A second game followed shortly after in September; Marketing won the game, 15-8, and a trophy as well.

So, in August of 1987, the second annual Marketing versus Operations softball game was played. Yes, the rivalry has begun! In this game, as in the first game, Operations had to come from behind in the bottom of the last inning to win the game, 10-9, and the trophy. The score was 9-4 in favor of Marketing, with one out and runners at first and second when Aaron Perry of Project Implementation sparked a six-run rally that ended with Vice President Bob Tomasi scoring the tenth and deciding run on an overthrow to home plate.

It was said to be sheer genius on the part of Manager Mike Rensimer to recognize one of Marketing's weaknesses (beer!) and strategically shuffle his players to mastermind a come-from-behind victory. But, knowing how good Marketing's team is, this ploy will not work again, so Mike said he'll be working on another strategy next year. ■

Tymnet Takes Third

By Larry Gayer

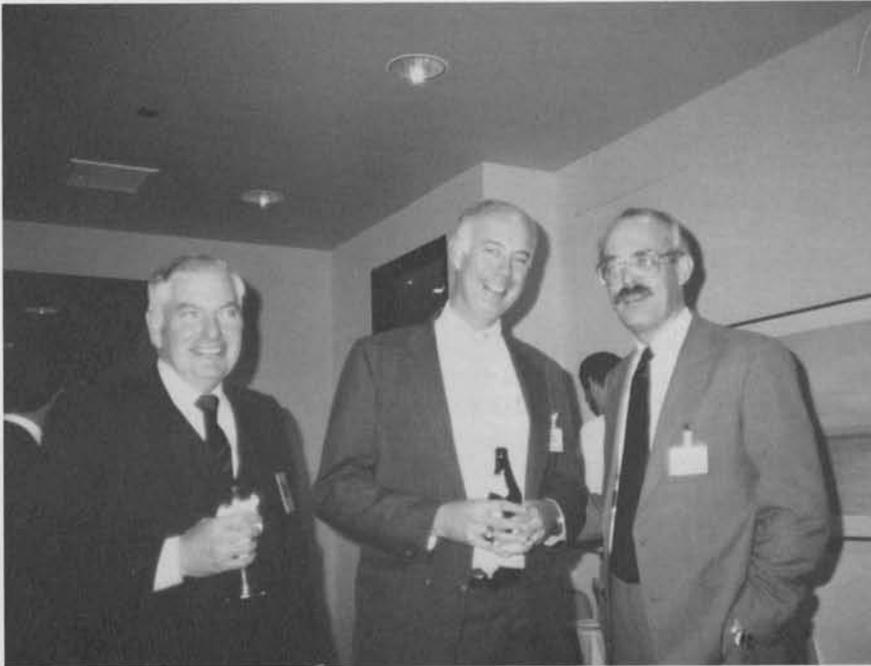
The Summer of 1987 will be remembered forever by the Vienna office as the season of the third-place finish in a local softball league. The Vienna team, affectionately known as the EDGEHEADS, named after our fearless leader Jerry Edgerton, played a 14-game season, with ten wins and four losses. This record allowed them to finish second in their division and play in the championship series.

The championship series consisted of two teams from each division and was held on one of the rainiest days of the Summer. The EDGEHEADS lost the first game to the team that eventually won the series but stuck together to win the second game, thereby finishing third in the league.

The EDGEHEADS include the following NSC employees: Liz Milloy, Steve Resz, Stephanie Gallups, Natalie White, Roger Higgins, Stephen White, Dan Lane, Allen Jakobitz, Andy Price, Peter Pfude, Mike Perez, Mike Betty, Dan Mulvey, Steve Byron, Larry Gayer, Steve Myers, Greg Mintel, Ken Dulabahn, Lidia Steinwinder, Tony Miceli, Carol Anderson, Linda Silverman, Janet Clark, Tom Clark, Helena Bradshaw, Rosemary Donoso, Lisa Geib, and Jerry "The Edge" Edgerton. ■



The 1987 softball victors! The Operations softball team beat Marketing 10-9 and now has bragging rights until the next game.



Neil Sullivan, Rob Ritchie and Rick Edwards enjoy a light moment together.



And the cameras were rolling . . . Channel 36 was there to capture the moment.

Highlights of the Customer Media Reception



Kirk West, President of the California Chamber of Commerce, presented Sandy with the California bear flag.



Sandy McDonnell gives his blessing to the McD



These chefs were part of the Guckenheimer team that created all of the wonderful food.



What a spread! Guckenheimer does it again.

December 9, 1987



nnell Douglas Center.



As employees, vendors and customers chatted, this musical trio added a finishing touch to the event.

CTS Continues its Excellent Support

By Steve Petryszyn

During the last quarter, the Central Tech Support team (CTS) continued to provide great technical coverage and happily received numerous awards for its expertise.

Phil Sneddon (Houston) and **Annette Jacobsen** (St. Louis) were highlighted as top performers in ISG's *Spectrum*. Phil was chosen for the outstanding job he has done in supporting Exxon's private network. Annette was rated a top performer because her demonstration of 3270/CMT helped sell Tymnet services to Tyson Foods.

Congratulations to the following consultants for receiving honors:

Annette Jacobsen—CTS technical person for July

John Bell—CTS technical person for August

Deb Mielke—CTS technical person for September

Phil Sneddon—CTS technical person for second quarter

Deb Mielke—CTS technical person for third quarter



The few, the proud, the Central Tech Support Managers! (Back row, l-r): Steve Petryszyn (Detroit), Pam Pobat (Chicago), Phil Kiefer (Central). (Front row, l-r): Roger Babcock (Houston), Michelle Willhauck (St. Louis), Wayne Bader (Houston Manager, Private Network Project Implementation).



CTS's Joe Bedoun (left) and Steve Petryszyn meet with one of Tymnet's favorite customers.

Pam Pobat, Chicago's Technical Manager, celebrated seven years of service with Tymnet. Known as a dedicated worker, Pam has excelled from Secretary to Customer Service Rep from which she was promoted to Technical Consultant. She then moved upward to head the Chicago technical team for the public and private nets.

Communications Specialist **Rick Krul** (Detroit) hit the five-year service mark with Tymnet. Four CTS consultants have been promoted to Senior Communications Consultants: **John Bell** (Chicago), **Annette Jacobsen** (St. Louis), **Randy Howland** (St. Louis) and **Ken Stone** (Houston). Way to work!

Phil Kiefer hosted the first CTS Managers' Meeting in Chicago. With Phil leading the team for a two-day brainstorming session, **Wayne Bader**, **Roger Babcock**, **Steve Petryszyn**, **Pam Pobat** and **Michelle Willhauck** discussed the 1988 budget and developed the CTS plan of attack for 1988. One of the highlights of the day was desserts provided by Phil's Secretary, **Marianne Kowalkowski**.

Western Support Technical Manager **Kushi Kullar** taught presentation skills to all of the CTS managers and in return, Kushi was "presented" a night on the town where he sampled deep dish pizza—windy city-style.

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NTD's Les Seltzer and Product Manager Jerry Messina ran a CMF (Configuration Management Facility) demo for the CTS group in St. Louis.

Secretaries Meet to Discuss Budget

By Sandra Brock

Tymnet's Eastern Region secretaries met during August to learn what managers have struggled with forever—controlling the district budgets. Led by Sandee Olsen, the District Field Operations' Financial Analyst, the course plunged into the depths of the general ledger, expense pools, capital budget, operating expenses, requisitions, profit and loss forecasts, split lists and deadlines.

The mantra of "You spend it, we end it" was heard on day two as the secretaries learned how to purge the general ledger (and thereby their districts) of expenses wrongly coded or, most importantly, wrongly attributed to the district's cost code. "It's amazing how much money you can save once you learn how to read and understand the general ledger," said Sandee.

Armed with an understanding of the regional financial goals, the Eastern Region team is anticipating a streamlined fiscal year in 1988 lead by their own financial analysts—the Southeast, Penn-Jersey, Northeast, New England and New York district secretaries! ■



The Eastern Region Secretaries will be keeping a close eye on district budgets. (Back row, l-r): Sandra Brock, Susan Fahy, Susan Murphy. (Front row, l-r): Mercedes Freer, Maria Kulnis (Regional Secretary), Laraine Franchino.

Introducing Video Training!

By Jane Wesner

Video is one of the newest ways to reach remote locations with product/services training. Managers and sales reps from the DFO organization have developed training modules on specific products and services that Tymnet offers.

Some of the topics covered are features, functions, benefits, target markets, customer environments prior to Tymnet, competition and real-life case studies. Subjects are as follows:

| | |
|-----------------------|--------------------|
| Async Host Interfaces | Paul Jacoby |
| Async Access | Catherine Crandall |
| X.PC Menu | |
| Service/Outdial | Joe Murphy |
| X.25 | Ben Slick |
| 3270 | Barclay Doyle |

Other subjects taped are:

| | |
|--------------------------------|-----------------|
| International | Keith Curtis |
| Handling Objections | Mike Staed |
| Giving Effective Presentations | Mark G. Johnson |

Each tape, with summary outlines, runs between 30-60 minutes. Video sets are available for viewing in San Francisco, Irvine, Chicago, Dallas, Minneapolis, Detroit, Westport, Vienna, St. Louis and Tymnet Training in San Jose.

Besides being cost-effective, these videos supplement and enhance existing formal classroom and seminar programs. Send an OnTyme to NETS.J/WESNER for information on borrowing the tapes.

Check TTE's schedule of 1Q 1988 class offerings by accessing OnTyme:

:EXEC***TTE.ENROLL ■



TTE's Jane Wesner discusses the finer aspects of video taping with Sales Rep Barclay Doyle.

New Program Emphasizes Prospect's Point of View

By Jane Wesner

Western/Central DFO sales reps and managers met in Irvine for the Counselor Selling Skills (CSS) seminar in October. Based on a thorough understanding of the process that occurs between prospects and sales reps, CSS places the sales rep in a consultative role.

The sales reps develop skills that assist them in looking at the sales process from the prospect's point of view, building a relationship, discovering needs, advocating solutions and supporting buying decisions. CSS is the latest program added to the sales training track and will be included in the 1988 public net sales training schedule.

This was a terrific class and very well received by all! ■

Quarterly Product Update: Reported 4Q87

The Product Status Matrix below provides current information on products and services either in development or in the process of being released. The dates presented are as accurate as we can be at this time. They are not, of course, set in concrete: test results, new priorities and available resources can all impact these dates, so it's always a good idea to exercise caution when making customer commitments.

| PRODUCT | BETA TEST | LIMITED RELEASE | FULL RELEASE |
|---|-----------|-----------------|--------------|
| End User Product | | | |
| Model 927 X.PC/MNP Modem | | | NOW |
| X.PC | | | |
| XNI Network Interface, version 1.05 | | | NOW |
| XNI, version 2.00 | 4Q87 | | |
| PC Driver Module, version 4.01 | | | NOW |
| 3270 SNA/SDLC SVC—Display Only | 1Q88 | 3Q88 | 4Q88 |
| X.25-to-SDLC | NOW | | |
| SDLC Extension Cord | NOW | | |
| Async-to-3270 Service | | | |
| Character Mode Support | | | |
| CRT & Printer Pairing (CRM4) BSC | | 1Q88 | 2Q88 |
| Improved Terminal Menu | | 4Q87 | 1Q88 |
| CMT Timer | | 4Q87 | 1Q88 |
| Screenflash for SmarTym 3270 | | 4Q87 | 1Q88 |
| CMT Tymnet 78 | 1Q88 | 2Q88 | 3Q88 |
| CMT/SNA Char. Set Printer (LU1 Printer) | LATE | | |
| CMT Circuit Balancing | 1Q88 | 2Q88 | 3Q88 |
| CRT & Printer Pairing (CRM4) SNA | LATE | | |
| End of Session Option (SNA) | LATE | | |
| Asynchronous Outdial™ | NOW | 1Q88 | 2Q88 |
| ATC-4/8 | | | |
| version 1.26 (Domestic) | | | NOW |
| version 2.00 (U.K.) | | 2Q87 | 3Q87 |
| version 3.00 (U.K.) | NOW | | |
| Micro Engine 4 (HDLC) | | | NOW |
| TymDial X.25™ | | | NOW |
| X.25/X.75 version 4.03 | 4Q87 | 1Q88 | 2Q88 |
| Engine Family Enhancements | 4Q87 | 1Q88 | 2Q88 |
| Nano Engine | 1Q88 | 2Q88 | 3Q88 |
| DVM | | 1Q88 | 2Q88 |
| Mini Sup | 1Q88 | | 2Q88 |
| CMF | 4Q87 | | 1Q88 |
| Private Line Expander | | | |
| TMX-7008 | | | 4Q87 |
| TMX-7040 | | 4Q87 | 1Q88 |

| PRODUCT | BETA TEST | LIMITED RELEASE | FULL RELEASE |
|---------------------|---------------------------------------|--------------------|-----------------|
| Menu Service | | | |
| version 1.11 | — | — | NOW |
| version 1.13 | NOW | 4Q87 | 1Q88 |
| version 2.00 | 4Q87 will be dropped for version 3.00 | | |
| version 3.00 | 1Q88 | 2Q88 | 3Q88 |

NETWORK ARCHITECTURE

Supervisor

| | | | |
|---------------|------|------|------|
| version 41.01 | | | NOW |
| version 41.04 | | | NOW |
| version 42.00 | NOW | 1Q88 | 2Q88 |
| version 43.00 | 2Q88 | 4Q88 | 1Q89 |

Node Code

| | | | |
|--------------|------|------|------|
| version 5.10 | | | NOW |
| version 5.2x | NOW | 4Q87 | 1Q88 |
| version 5.3x | 2Q88 | 4Q88 | 1Q89 |
| version 5.4 | 3Q88 | 1Q89 | 2Q89 |

ISIS

| | | | |
|--------------|------|------|------|
| version 5.08 | | | NOW |
| version 7.0x | | | NOW |
| version 9.0x | 1Q88 | 2Q88 | — |
| version 10.0 | 2Q88 | 4Q88 | 1Q89 |

NETWORK MANAGEMENT TOOLS

TMCS

| | | | |
|---------------|------|------|------|
| version 7.08 | | | NOW |
| version 10.0x | | | NOW* |
| version 10.2x | | | NOW* |
| version 11.0x | 2Q87 | 1Q88 | 2Q88 |

*NOTE: The alarm feature is a special product

Netval

| | | | |
|--------------|------|------|------|
| version 3.1x | NOW | 4Q87 | 1Q88 |
| version 4.0x | 3Q87 | 4Q87 | 1Q88 |
| version 5.0 | 3Q88 | 4Q88 | 1Q89 |

RAM

| | | | |
|---------------|------|------|------|
| version 10.07 | | | NOW |
| version 11.1x | NOW | | |
| version 12.0x | 3Q87 | 4Q87 | 1Q88 |

ELF

| | | | |
|--------------|--|-----|------|
| version 3.10 | | | NOW |
| version 4.0x | | NOW | 1Q88 |

Tymnet Headquarters is eagerly seeking Beta Test customers for the products listed here. If you have a likely candidate, please contact Product Marketing.

Quarterly Product Update (Continued)

ATC-8: Hardware supports up to eight asynchronous terminals at speeds up to 9,600 bps. This concentrator also has two network links. The ATC comes with preconfigured software. This device does not support PVCs, switching, passthroughs or addressable ports.

ASYNCHRONOUS OUTDIAL: Allows customers to share outdial ports and pay on a usage sensitive basis. See ***Public.Outdial for details.

X.25/QLLC-to-SDLC: QLCC is IBM's current implementation of X.25 support for 3270s. This interface will allow an X.25/QLLC 3270 to use TYMNET to access an SNA/SDLC mainframe. IBM customers will not need NPSI software to support an X.25/QLLC 3270 cluster controller.

X.PC: TYMNET network support for the Async dial-up error protection protocol. X.PC is focused specifically at end users to allow the greatest flexibility in using PCs as 'smart' data terminal devices. PC software and hardware incorporating X.PC support is available. See ***XPC.PRODUCTLIST.

3270 CMT CRT and PRINTER PAIRING (CRM4): Allows "wild card" addressing for CRTs and printers. No more unique user names for each CRT and printer user.

3270 CMT IMPROVED TERMINAL MENU: Allows all terminal types to be called by name. For instance, Crosstalk can have its own entry so end-users won't have to remember it's a VT100. Terminal types will now appear in columns.

3270 SNA/SDLC SVC—DISPLAY ONLY: This capability allows 3270 SDLC terminal devices to access multiple hosts. Allows individual 3270 Displays to select their host designation independently and at any time. Only 3270 devices and only Display units (not printers) can utilize this capability.

TYMNET 78: Tymnet 78 is the protocol that runs between the PC and CMT which is part of the second generation of Async-to-3270 service. This protocol provides for 3279 four-color support and eliminates all echo delays while editing. The PC will appear like a real 3270 device. The first vendor to implement this protocol is Softronics in their Softerm PC package.

CMT TIMER: This feature solves the problem of long sessions and users being zapped in mid-session. It also reduces the need for unnecessary connect time charges.

CMT/SNA LU1 PRINTER: Supports the LU1, SCS (SNA character set) printers. Will now be able to print from IMS applications and any other application that requires LU1 (SCS) print support.

CMT CIRCUIT BALANCING: Balances the network traffic between multiple CMT/HIF interfaces. Will alleviate the problem of "Host out of ports."

TymDial X.25™: Provides minicomputers, packet assembler/disassemblers (PADS) and personal computers switched access to applications based on host computers connected to the TYMNET network. Also offers end-to-end synchronous communications, 2400 bps transmission speed, password protection and usage-sensitive billing. Users access the service via a Tymnet-certified X.25 device and a V.22 bis modem operating synchronously.

MICRO ENGINE 4: Latest member of the micro engine family, this compact engine processor supports 14 total ports. Four of the ports are SIO asynchronous only while the other 10 may support SIO asynchronous, bit-synchronous or byte-synchronous protocols. Device and network links support speeds up to 19.2k bps, asynchronous or synchronous (limited 19.2k bps support).

MODEL 972: 2400/1200/300 bps Hayes-compatible antodial modem with support of both X.PC and MNP. Tymnet datasheets now available.

SNA END OF SESSION OPTION: As an enhanced security feature, Tymnet offers an option that allows the IBM host to end the session and return the user to "PLI."

ATC 4/8: The ATC concentrates 8 ports of asynchronous traffic onto 2 network links. Device and network links support speeds up to 9.6k bps. Note: this is an async concentrator only and does not support PVC, local switching or passthrough traffic.

NANO ENGINE: The Nano Engine is a compact communications processor. Each of the eight ports is software programmable for speed and protocol. Two of the ports support speeds up to 64,000 bps while the other six ports support speeds up to 9,600 bps. The switch supports PVCs and passthrough traffic. The Nano Engine is fully compatible with the Tymnet Engine® family and uses the Tymnet library of software.

DATA-VOICE MULTIPLEXER: The DVM is a device which will integrate voice and full duplex data on one 2-wire twisted pair cable (in-house telephone wire) at speeds up to 19.2k bps, async or sync, and for distances to 6 miles (distance is speed dependent). This device is for local access, either terminal or host, to the Tymnet data switch. The DVM is ideally used for sites with PBXs where the in-building or campus telephone wiring is being directed to a PBX. At the wiring closet in front of the PBX, the voice traffic is sent to the PBX and the data traffic is sent to the Tymnet switch.

TMX-7008 PRIVATE LINE EXPANDER: The TMX-7008 can provide a mixture of voice and data over a 56 Kilobit digital line. The basic voice configuration provides eight high-quality voice channels between customer locations. The system can also provide six voice circuits and one 9.6 Kilobit data circuit or four voice circuits and one 19.2 Kilobit data circuit. The 56 Kilobit digital line can be a leased DDS circuit or a DS-O channel on a T-1 multiplexer.

TMX-7040 PRIVATE LINE EXPANDER: The TMX-7040 can provide as few as eight high-quality voice channels over a single 56 Kilobit digital line or up to 40 high-quality voice channels over four 56 Kilobit digital lines. The 56 Kilobit digital lines may be leased DDS circuits or DS-O channels on a T-1 multiplexer.

Turbo-Engine—

Continued from Page 1

level language "C" to ensure application portability, this switch can be used in either public or private packet-switching networks and is fully compatible with Tymnet's existing switches.

With built-in, multi-tasking capabilities, the new switch provides exceptional flexibility. Thanks to the incorporation of the industry-standard VME global system BUS into the Turbo-Engine, faster development time for future products is now possible. The Turbo-Engine will certify facsimile, voice and Integrated Services Digital Networks interfaces developed by third parties for the VME bus.

The initial software release for the Turbo-Engine will support switching of up to 3,000 packets per second. Tymnet will support this new switch architecture with a number of phased hardware and software product releases over the next three years, with steadily increasing throughput rates.

Receiving so many requests for a new "high-end box" prompted Network Technology Development (NTD) to send 12 engineers down to Monterey for the week to come up with ideas of how to implement this concept. That was in December 1986. According to Ken Holcomb, Director of Consulting and Support Services and one of the project leaders, the hardware development and software architecture for Skywalker began in January of 1987.

"We're working at an extremely fast pace. We've got at least 40 to 60 people working on this project to get it out the door," said Ken. And working they are! Turbo-Engine test beds have been in-house since late September and much of the coding has already been completed. Most of the internal documentation for the project, a lengthy and detailed job, has been written.

Enhancements to the Turbo-Engine, such as hot swap of boards and single node appearance, are also being worked on at this time. Ken hopes for systems integration sometime in January and aims for internal completion by mid-May. The Turbo-Engine will go to Quality Assurance (QA) in September for Beta Test, and if everything goes as planned, full production should begin in 1989.

Ken mentioned that several large companies with TYMNET networks have already expressed interest in the Turbo-Engine. Sweden's Televerket, the Hongkong Shanghai Bank and Britain's Cable and Wireless have been following NTD's progress closely to determine if the Turbo-Engine is what they need for their networks.

This product is a BIG DEAL. Summarizes Ken: "The Turbo-Engine is Tymnet's linchpin for success into the '90s." ■

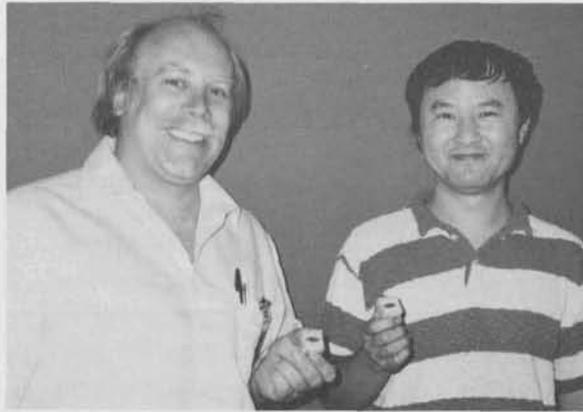
Red Tape—

Continued from Page 1

employee who best identifies a problem and suggests a solution.

Each month for the next six months, Clint will award a \$100 cash prize to the employee who can best identify a substantial bureaucratic bottleneck and come up with a better way of handling it. Plain and simple.

So, if you think a procedure could be handled differently and more effectively, drop a line to Clint DeGabrielle at mail stop F33 or send him an OnTyme: TYMHQ.C/DEGABRIELLE. Please be as clear as possible regarding the item in question and your proposed alteration or elimination. ■



QSATS' John Shutich (left) and Ben Chen proudly display their five-year service pins.



District Manager Scott Johnson presents Marian Hasty with a five-year pin.



NTD longtimers celebrate their years of service. (Back row, l-r): Chung Shaw (5 yrs.), Nancy Holt (9 yrs.), Mike Rude (10 yrs.), Les Seltzer (5 yrs.), Dennis Ernst (5 yrs.), Steve Feldman (5 yrs.). (Front row, l-r): Bob Carhart (5 yrs.), Ed Gauci (5 yrs.), Linda Johnson (5 yrs.).



Jane Wesner teaches a beginning OnTyme class to a small but enthusiastic group of employees.

Hasty Awarded for Outstanding Service

By Angela Torbett

Marian Hasty was awarded a McDonnell Douglas five-year pin for five years of outstanding service at the semi-annual Southeast District Meeting held July 17, 1987.

Hasty joined Tymnet in 1982 after receiving a B.S. degree in Marketing from Florida State University and an MBA from the University of Miami.

Marian is a Senior Sales Representative in the Miami office and has repeatedly proven herself a valuable asset to Tymnet. She successfully secured more than ten previously installed competitive accounts, as well as closed business with major companies including Eastern Airlines, Knight-Ridder, General Electric, Seaboard Coastlines and Harris Computers. ■

TYMNET TERMINOLOGY



Xerox Applauds Tymnet

Xerox Corporation
Building 205-99F
800 Phillips Road
Webster New York, 14580

August 24, 1987

XEROX

Mr. Mark Lonergan
Eastern Region Manager
TYMNET McDonnell Douglas Network Systems
333 Post Road West
Westport, Connecticut 06880

Dear Mark:

I am writing to express the appreciation of Xerox Data Network Services for the outstanding support we received from TYMNET during our recent problem at Webster Bldg. 214. Several TYMNET people worked as a team to expeditiously resolve our problem.

In your sales staff, we would like to thank Greg Toombs, your Xerox Account Representative. In Field Service, we would like to thank Charlie Renna who located an engine, Joe Rice, who delivered it to Xerox, Clay Winters, who coordinated liaison with Rochester Telephone Corp., and Reid Kier, who, along with Joe Rice, installed the device.

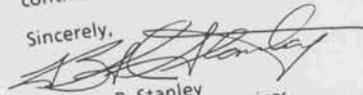
Don Johnson, Frank Barker, and Barbara Ellen Starks of Technical Support and Pat Phillips, Jack Snavely, Bob Tomasi, Jim Stein, Beryl Aqua and Aaron Perry of Project Implementation played equally important roles during what changed rapidly from a problem isolation event into a full project implementation.

Xerox believes strongly in "preferred vendors," companies with whom we develop sustained business relationships. We expect the close working relationships that develop between Xerox people and those who work for our "preferred vendors" to foster a shared sense of commitment and responsibility that will result in superior service to the Xerox end-user.

This recent incident demonstrated the value of our "preferred vendor" program. The value we received, however, was not delivered by a program. It was delivered by TYMNET and Team Xerox people who, working as a close knit team, took the initiative to act when the need for action became apparent.

We would sincerely appreciate it if you would formally recognize the contributions made by each of the people named above.

Sincerely,



Bertram R. Stanley
Mgr. Data Network Services
Real Estate and General Services Division

Here's one example of Tymnet's top-notch customer service.

CTS—*Continued from Page 12*

Customized demos pay off big with orders from new customers. Detroit's **Roseann Krul** recently showed Wendy's that "we're the best!" Her SNA/CMT presentation helped win this account over from Telenet. **Joe Bedoun** followed tradition in Detroit by proving to Haworth Company that the demo he prepared for them was flawless, which resulted in another order! Nice work!

St. Louis hosted a CMF (Configuration Management Facility) demo and had **Les Seltzer** and **Jerry Messina** demonstrate the product for the CTS management staff and Southwestern Bell. **Roseann Krul's** five years experience and expertise in SNA proved to be a good background to teach SNA at TTE recently.

Michelle Willhauck helped develop an advanced X.25 troubleshooting class, which was taught by personnel from HQ Tech and other Tymnet groups. Michelle served on a quality training team with the TTE group to help expand troubleshooting techniques by including instructors from the field.

By the time you read this, all of the CTS members will have converged in Chicago for the first CTS meeting to learn and share knowledge, meet their remote teammates and have fun! ■

The Network Tymes

MCDONNELL DOUGLAS

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| | | |
|------------|---------------|------------------|
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