

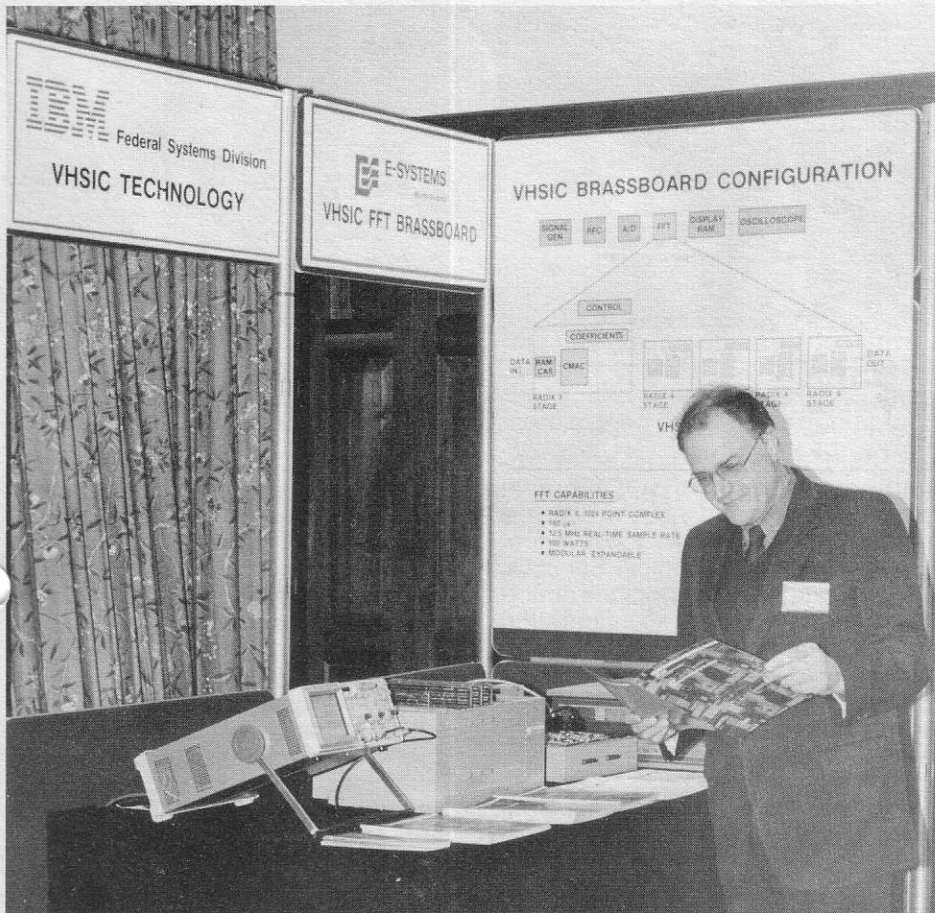
MELPARTICULARS

Volume 7, Number 1

E-Systems Melpar Division

February 1986

MELPAR AND IBM SHARE EXHIBIT AT ANNUAL VHSIC CONFERENCE



Melpar Technical Staff member, John Whelchel, looks over details of the joint Melpar/IBM exhibit displayed at the annual VHSIC conference. (Photo by Larry Stein)

On December 4, 5 and 6, Melpar demonstrated a state-of-the-art Fast Fourier Transform (FFT) processor at the annual VHSIC conference held at the Naval Surface Weapons Center in White Oak, Maryland.

As a result of an FFT processor demonstration held for the Navy VHSIC Office in October, arrangements were made for Melpar to share exhibit space with IBM, manufacturer of the Complex Multiply Accumulate Chip (CMAC). The fact that Melpar was represented at this event was significant because, to date, Melpar is the only non-VHSIC contractor that has demonstrated Very High Speed Integrated Circuit (VHSIC) hardware at the annual conference. Over 350 people from government and industry were in attendance.

The VHSIC program was initiated in 1980 to develop "super chips" which would benefit military electronics systems. Funding for the program is over \$500 million, with chips being developed by only six contractors. Melpar was one of the first non-VHSIC contractors to obtain chips and demonstrate their use in actual application. (There were only a total of 30 CMACs in existence when Melpar received eight of them in late 1984.) The CMAC is the VHSIC chip being used in the FFT processor and it is capable of performing 100 million multiplications per second.

Developed at Melpar, the FFT is the result of several years of IR&D efforts and it has a variety of applications in the communications product area.

BUSINESS PROJECTIONS OUTLINED AT MANAGEMENT DINNER

At the in-house management meeting and dinner held on December 4, Vice President and General Manager Talbot S. Huff, along with four of the Division's vice presidents, outlined 1985 business highlights and the future goals of the Melpar Division.

Addressing an audience of approximately 350 employees, Huff began last year's review and ensuing business projections by describing the three significant programs that have opened up opportunities for Melpar. He also talked about the BGPHEs program which has provided the Division with a basis for continued growth into the Navy. According to Huff, 1985

MEETING Cont. on page 4

TRSS CONTRACT AWARDED TO MELPAR

E-Systems Melpar Division has been awarded a \$1.1 million contract by Sandia National Laboratories, Albuquerque, New Mexico, for the development of a signal repeater and portable monitor message display subsystem for the U.S. Marine Corps Tactical Remote Sensor System (TRSS) program.

The TRSS is a tactical combat-environment system designed to give advance warning of hostile troop movements into or through zones controlled by friendly forces. The movement sensing devices transmit indicators of detected activity to the hand-held display unit over long distances by means of a communications system composed of one or more repeaters.

Work on the TRSS subsystem will be performed at Melpar's Fairfax facility. The TRSS communications subsystem joins E-Systems family of sophisticated militarized security systems for worldwide use in both interior and exterior environments. These include the AS/GPS-15 and AN/GPS-16 sensors for large, solid vaults or chambers, the AN/GSS-36 sensor for large open hangars or other lightly constructed facilities, and the AN/GSC-35 for the protection of aircraft parked in open areas.

Security Spotlight

The protection of classified information is the responsibility of each individual who possesses or has knowledge of such information, regardless of how it was obtained.

Security directives and orientations do not guarantee protection and cannot cover all conceivable situations; therefore, basic security principles, common sense, and a logical interpretation of the existing procedures must be applied to given situations. The collection, obtaining, recording or removing, for any personal use whatsoever of any matter classified in the interest of national security is prohibited.

Security responsibility cannot be delegated; we must all accept this responsibility and report to Security or take action to correct any known discrepancies or violations.

Library Up-date

Melpar's Vendor Catalog Collection is now collocated with the Specification Center situated in their new area on the fourth floor of the Annex in Falls Church.

The Vendor Catalog Collection consists of approximately 2000 vendor catalogs, as well as data sheets from more than 3000 manufacturers and distributors. The catalogs contain a wealth of information, including specifications for electrical/electronic equipment and components, application notes, and price lists. One can also locate information on industrial equipment.

In addition to hard copies of the items mentioned above, the collection also receives the Vendor Selector Service (VSS). The VSS is a set of vendor catalogs on microfilm which can be used to locate information not found elsewhere in the collection.

There is a variety of reference material available to assist in using the collection. Some of these aids are: the Thomas Register, the IC Master, the Electronic Engineers Master, the Gold Book, the Electronic Industry Telephone Directory, and a set of D.A.T.A. Books. In addition, summaries of recent releases from the Government and Industry Data Exchange Program are posted. These summaries describe the failure experiences, safety alerts, reliability information, test data, and diminishing manufacturing sources for a variety of components.

The collection also maintains the

TWO PROMOTED TO DIRECTORSHIPS



**DIRECTOR —
RONALD J. STROUT**

Ronald J. Strout has been appointed to Director of Technical Services reporting to Vice President of Support Services Albert J. Wavering.

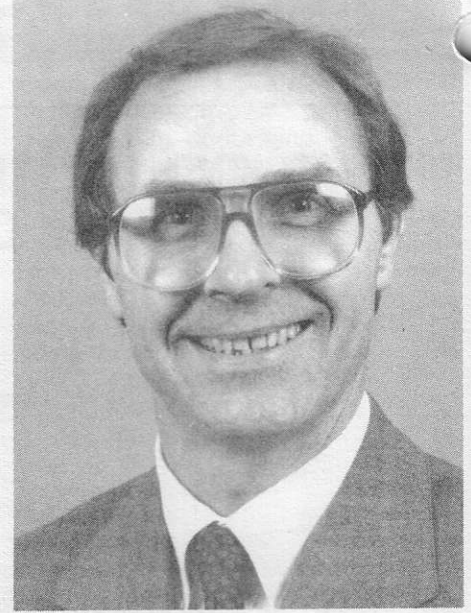
As Director of Technical Services, Strout's responsibilities include directing the efforts of the Configuration Management, Drafting, and Publication groups. Before joining Melpar, he worked for General Electric, Co., holding a number of managerial assignments including Technical Services, Quality Control, and Product Design.

Strout holds a BSEE degree from the University of Maine and has done graduate study at the University of Alabama and Syracuse University. A native of Maine, he currently resides in Fairfax, VA, with his wife.

most current listing of the Federal Supply Code for Manufacturers. From this listing, one can obtain a code number for a given company or can identify a company from its code number.

Finally, the Vendor Catalog Collection staff can cross reference manufacturers to part numbers, part numbers to characteristics, products to manufacturers, and obsolete part numbers to new part numbers.

The collection is a valuable resource for Melpar employees. Although material from the collection does not circulate, a copier is located nearby for your use. Please contact



**DIRECTOR —
JON O. SAMPSON**

Reporting to Vice President of Support Services Albert J. Wavering, John O. Sampson has been named Director of Manufacturing and Test.

In his new position as Director of Manufacturing and Test, Sampson's responsibilities include the planning and execution of production and testing at the Falls Church location. Prior to joining Melpar, he worked as a Federal Systems Group Production Manager at Sanders Associates, managing multiplant, prototype and production operations during a period of expansion and major program start up.

Born in Streator, Illinois, Sampson received an MBA from the University of Chicago in 1975 and a BSIE from Northwestern University in 1963. He also attended various programs and seminars at the University of Chicago. Currently, he resides in Clifton, VA, with his wife and two children.

MELPARTICULARS

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Sandi Riedel or Judy King on extension 4449 for assistance with your vendor catalog requests.

BURN TRAUMA UNIT BENEFITS FROM E-TEAMERS

Bob Levey's column in the January 9 issue of the Washington Post stated, "Employees of E-Systems, Inc., Melpar Division in Falls Church - \$8,406.28 the biggest gift of the campaign so far - well done!"

Instead of exchanging holiday cards, E-Teamers again contributed generously to the Children's Hospital, culminating with Levey's congratulations on the part of the Hospital. An additional \$195 arrived after the holidays. Our donations were designated for the burn trauma center which treats 250 patients a year.

Sometimes it is difficult to imagine all the expense, work, and stress involved in treating patients in the burn center. Joan Holihan, Director of the Burn Unit Nursing Services, explained what methods are used at the Children's Hospital in an article published in the Washington Post. "Every burn center has a different treatment technique," Joan said, "Here we use the closed technique, where the burn is left covered. Children are more comfortable when the burn is not exposed to the air." She went on to explain, "Children don't have to be in isolation; parents don't have to wear gowns or masks. We try to keep the environment as normal as possible." There are some drawbacks to using the closed technique to treat burns, such as the fact that the dressings must be changed daily which is very painful for the patients and very

stressful for the nurses. The sound of children crying or screaming is a constant accompaniment to daily dressing change. Often, children are readmitted to the burn center when parents cannot bring themselves to continue the treatment at home.

The Children's Hospital is publicly supported and our donations will help in the treatment of burn patients through improved medical apparatus, special burn units, and extras like play areas for the psychological redevelopment of a child after such a trauma. We can be sure our contributions will be put to good cause in the burn center.

The fund drive emphasized the team approach. With the assistance of organization representatives from each department, Jami Dittmeier and Pat Stewart of Personnel coordinated the campaign publicity and canvassing this year. Ed Comitz of Publications designed the accompanying card signed by Melpar's contributors. Maggie Hess of Advanced Systems also designed a special card for the "C" group to sign and enclosed it with the Melpar employee card. In addition, the children at Brookfield Elementary School in Chantilly created 50 holiday posters to decorate the walls of Melpar to publicize the campaign. The posters and cards were presented to the hospital, along with our check, for all the young patients to enjoy.



Representatives from the Melpar Division presenting their check to Directors from the Children's Hospital. From left to right are: Ed Comitz, Publications; Joan Holihan, Director of the Burn Unit Nursing Services; Pat Stewart, Personnel; Charles Glanville, Director of the Office of Development; and Shannon Porter, Personnel.

COST AVOIDANCE REDUCTION SAVES \$ \$ \$

The Cost Avoidance Reduction Team (CART) program is picking up momentum and heading straight down the outlined itineraries of cost-effective reductions throughout the Division.

As part of the CART program a project has recently been effected for the wetline of Printed Circuit Board Fabrication Shop. The wetline is a series of 17 chemical or rinse tanks that are used to clean and prepare boards for copper or solder plating. The tanks are 15 gallons each and have a useful chemical life from two days to four months. The cost of replacing the chemical in each tank runs between \$9.00 and \$140.00. Attached to these figures is the disposal costs which run approximately \$50.00 per tank with each change. Thus, the average monthly chemical cost for the line is \$921.00 and the disposal cost runs \$1,418.00.

In order to reduce this monthly outlay, a decision was made to reduce the tank volume by two-thirds and the same size boards could be run. This task was accomplished by designing a removable five gallon tank that would fit inside the existing tanks. This design allows flexibility in reducing chemical/disposal cost during periods of low shop activity without losing the larger capacity needed for higher board volume. Three units have already been installed in the highest cost tanks (83% of the total cost).

The PC Shop cost reduction project has been translated into projected total savings of \$1,294.00 per month or \$15,528.00 per year. Due to the purchase price of the three tanks, the estimated net savings for the first year will be \$15,048.00.

This project, along with other cost reducing programs and continuous money saving ideas at Melpar, propels the company into stronger competitive and efficient levels of business interaction.

A SPECIAL THANK YOU!

Melpar received a letter of thanks from Donald Graham, 1985 United Way General Campaign Chairman.

The letter read, "On behalf of the 200 human care agencies of the United Way of the National Capital Area, I would like to extend a heartfelt thanks and congratulations to E-Systems Melpar Division for an outstanding 1985 employee campaign. E-Systems Melpar employees pledged \$61,811.00, an amazing 95% increase over last year!"

MEETING Cont. from page 1

was a year in which formal competition became a real force. Melpar's preparedness to compete was exemplified by winning seven programs in that category. He went on to emphasize the Division's plan for continued development through the expansion of current programs, and the addition of new customers in new business areas. "We have chosen our 1986 theme from Darwin - survival of the fittest," he stated. "Those who adapt to change will flourish, while those who do not are doomed to extinction. For Melpar, survival is continued growth, diversification, and profitability."

Next, Vice President Sam Warren spoke about the Division's progressive strategy from an Advanced Development viewpoint. He detailed EW systems, including Navy SIGINT and international RCSS, and discussed plans for an extended focus of efforts beyond sensors toward physical security systems. He also stressed the utilization of computer-aided manufacturing and test facilities for electronic production, which includes micromin receivers and RPV payloads. "The transition from EW systems to electronic products is projected in the out years as the emphasis in production hardware will increase," he said. Warren ended by detailing the group's financial forecast and indicating business projections for the next five years.

Systems Development Vice President Ed Isbell, then covered the foundation programs that serve as a base for continued growth in systems development, as well as business strategies for communication and information systems. Elaborating on these as well as various intelligence systems, he described new business areas and future program objectives planned for Melpar. He summarized the main points stating, "Systems Development has a positive outlook for the planning period. We expect considerable growth in our mature Air Force intelligence systems and an expanding share of the market in communication and information systems."

Following Isbell's presentation, Vice President Mike Cooke, outlined Advanced Systems' new business aims. "Our growth is keyed to the extended groups of sea, air, and land," he said. Cooke defined existing business opportunities and explained the IR&D focus, including new technologies that will position the Division for fresh business targets of opportunity. He delineated future intended plans for change, which encompass building a production and product base for the systems Melpar designs and fields.

MICHAEL KEY SELECTED FOR "WHO'S WHO . . ."

Michael L. Key of the Advanced Systems Department located at Fairfax, has been nominated and selected for inclusion in the 1985 edition of "Who's Who in the Frontiers of Science and Technology."

Published by the same producers of "Who's Who in America," the single volume reference is used by scientists, researchers, corporations, and government agencies to obtain profiles on individuals working in leading technological fields.

Key is currently the manager of Special Processing Systems, working in the areas of spread spectrum, C³CM, and ESM.

MELPAR ENGINEERS RECEIVE AWARD FOR PUBLICATION OF TECHNICAL PAPER



Shown above are the recipients of an award for the publication of a technical paper entitled "Fourier Receivers and VHSIC 1 FFTs". Coauthored by three E-Teamers, the paper covers the theory and application of a Fast Fourier Transform (FFT) based receiver to RF scanning systems. Standing from left to right are: John Whelchel, Technical Staff; Vice President and General Manager Talbot Huff; Larry Stein, Senior Electrical Engineer; and Tim Harvey, Manager of Search and Subsystems.

Finishing his presentation, he talked about the following five year period explaining that production contracts on current programs will provide a growing backlog that could be significantly augmented by new business.

The final analysis, formulated by Vice President of Advanced Programs Al Jackson, covered the Division's non-financial objectives. These areas included our selected business targets, profiles of these markets and the strategies; with Melpar's role in accomplishing them. In conclusion, Jackson stressed the necessity for forward

Credit Union News

The Melpar Employees Federal Credit Union is seeking volunteers to fill positions on the Board of Directors, the Credit Committee, and the Supervisory Committee.

The elections will be held in April. Positions to be filled include, Chairman of the Supervisory Committee and Secretary for the Board of Directors.

If you are interested or need more information concerning the vacancies that expire this year, please contact President Bill Mitchell on extension 3491 or Vice President Harold Marine on extension 2730.

motion in business, pointing out that our competitive success not only rests with Melpar but with the whole of E-Systems.

Summarizing the four different presentations by Melpar's vice presidents, Huff concluded the hour-long meeting by saying, "We will continue to adapt to the changing environment. The key will be to keep our competitive edge and to move faster and be smarter than the competition. With our plan for growth, diversification, and profitability, we will be among the fittest."

1986 SERVICE AWARDS FIRST QUARTER

Thirty-Five Year Service:

Benton D. DeGroot



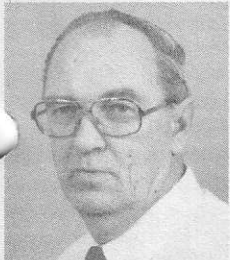
Thirty Year Service:



Hector A. Campbell



Michael Dumas



William D. Hixson



Craddock W. Granger



Freddie M. Lucas



Jennings R. Ross

Estelle Williams (Pictured with Retirees)

Twenty Year Service:

Roy D. Bailey

Fifteen Year Service:

Eugene E. Jacob
Walter P. Maxwell
Sonja C. May
Ronald R. McDonald
Ethel G. Minnick
Edward L. Yowell

Ten Year Service:

Phyllis L. Cummings
Maggie Hess
Luis Ruck

PROMOTIONS — NOVEMBER AND DECEMBER

	From	To
J.M. Allen	Detailer	Drafter
J.A. Andahazy	Prin Design Eng	Supv, Cable Design
W.W. Ashley	Sr Planning Spec	Planning Supv
J.B. Berthold	Jr Eng Assistant	Eng Assistant
T.A. Bonner	EM Inspector	EM Inspector 1cl
J.D. Campbell	Jr Cost Analyst	Cost Analyst
K.L. Clinton	System Eng	Sr Systems Eng
R.C. Fawcett	Tech Typist	Word Processor Oper
J.P. Fiala	Sr Elec Eng	Prin Field Eng
D.R. Fulmer	Sr Pub Prod Spec	Supv Prod Serv
R.J. Gable	Prin Eng	Member Tech Staff
P.A. Gardner	Software Analyst	Sr Software Analyst
S.A. Helton	Proc Analyst	Sr Proc Analyst
C.T. Johnson	Sr Systems Eng	Test Supv
J.F. Johnson	Programmer	Software Analyst
D.A. Jones	Software Analyst	Sr Software Analyst
E.M. Kehoe	Eng Tech	Sr Eng Tech
M.R. Kellison	Assem 1cl	Assem 1cl Grp Leader
R.B. Kitch, Jr.	Facilities Eng	Sr Facilities Eng
H.T. Le	Assem	Assem 1cl
P.M. Lewis	Assoc System Eng	Systems Eng
S.W. Lindemuth	Cost Analyst	Sr Cost Analyst
D.A. Lockhart	Assem 1cl	Assem Tech
P.L. Montague	Sr Methods Eng	Prin Methods Eng
T.S. Montemorano	Assoc Elec Eng	Elec Eng
E.D. Pittelkau	Software Analyst	Sr Software Analyst
S.M. Ramsey	Sr Report Typist	Jr Program Mangt Asst
D.A. Sargent	Sr Elec Eng	Prin Eng
T.P. Wallace	Tech Writer	Sr Tech Writer
E.E. Watson	Assoc Tech Editor	Tech Editor
P.A. Zuk	Jr Facilities Eng	Facilities Eng

Five Year Service:

Richard D. Bardwell
Eston B. Bonner
Regina Bonner
Sharon R. Brill
Edith A. Couch
Howard L. Davis, Jr.
Manual D. Figueroa
Shirley A. Gallagher
Linda L. Gaston
Deborah E. Greenstreet
Paul B. Gural
Michael E. Guymon
Charles E. Hoffman, Jr.
Pamela W. Jordan
Steve R. Lovewell
I. Kay Lunn
Paul A. Mansour
Christopher B. Miller
Conrad Ornstein
Sandra S. Orrison
William M. Perry
Edward L. Riggins
Timothy J. Sweeney
Joseph Thomas
Fred L. Wahl
Charles N. Whelan
Joseph J. Yavulla, Jr.

RETIREES

Edward Balchunas
27 yearsKatherine L. Clark
21 yearsTed J. Jackie
8 yearsEstelle Williams
30 years

Sports Corner... WILDCATS JOIN FOOTBALL FEVER IN UK

The following article was written by George Zentner, a Melpar Contract Field Support representative assigned to the U.S. Forces at RAF Alconbury, England. His story tells how he began an American football team in England which "raged" in the British news last year as the sports novelty of 1985...

Driving home from church on a cold, wet, and windy day in March, 1984, my son asked me if he could go to RAF Wyton to watch or play in a new American-style, British football team practice. His classmates had assured him that this get together was for all ages and they were going. The base was on my way to RAF Alconbury so I said, "Sure I'll drop you off and pick you up on the way back." WRONG!!

Sixty British males of all ages were milling about on a wet, muddy, and cold rugby "pitch" ... and no American coach in sight! I stayed. British T.V. CH-4 had been showing highlights of NFL football and these men wanted to learn to play the game. Since this gathering was on a RAF base (and the team was formed by and for RAF personnel) the team was 'run' by a RAF Committee and I was to serve as their advisor. Two young USAF Sgts from RAF Alconbury were recruited to act as the player-coaches.

Training rugby and soccer players how to block and tackle without sleds and dummies was difficult and they "didn't need all that armour to play this game." After they learned to 'hit' properly, they changed their minds. They became so wrapped up in the game

they gave up rugby!

RAF Wyton officials requested and the RAF Alconbury C.O. agreed, to lend this new team (to be called EAGLES) 30 kits so they could play some games against other British teams. The "Eagles" didn't win any of the games they played but all of the U.K. knew about this new RAF team. Unfortunately, the kit had to be returned and most of the team stopped coming out for practice. About 12 dedicated players did stay and out of this grew a great county team ... Cambridge County 'CATS.

Since the "Eagles" were RAF and RAF officials didn't recognize this sport, the team had difficulty getting civilian sponsors. Therefore, a new team committee was formed and the decision made that they would become the Huntingdon American Football Club (AFC) and move operations to Cambridge where the City Council Sports Department was willing to let us practice on council grounds. Further arrangements were made with an old established firm of the Cambridge City Football Club (soccer) to allow the newly named 'CATS to play their '85 season home games on their new "pitch."

The team committee set up trials in January '85 and 120 potential players showed up. However, when cost was brought up, it quickly went down to 60 players. I had told the Committee that if the players bought their own kit, I would guarantee the uniforms. Cambridge is a university town (30+ colleges) and it has been difficult finding

a sponsor there. However, as the 'CATS have improved, the news and radio media have given the team much needed publicity. Luckily, the Mayor for '86 is one of our fans. 1986 should be a banner year for the 'CATS but we need the support ...

The '85 season saw the team win their Division with an 8-0 record only to lose (a protest has been lodged) in the semi-finals. During the season my 16 year old son served as the 1st string Quarterback. With him, the team averaged 45 points a game (he had 5 touchdown passes in one game).

An organization new to the U.K., Anheuser Busch, has formed a "Budweiser League" to be controlled by British Sports Promotion Co.. The first meeting saw 70 to 80 teams being represented and it looks like the start of an organized and professionally-run league that has been lacking here in England. The 'CATS joined in hopes of being in the top ten in '85 and top five in the years to come. There are 110 teams in the U.K. and Ireland at present, so that's saying a lot for the 'CATS.

The U.K. Gridiron magazine and Quarterback paper have done a very good job of covering football all over the globe. You would be surprised at the number and quality of football games played in ... Austria!?!; Finland!?!; Germany!?!; Holland!?!; and Italy! ... We in the U.K. hope to be one of the better teams in Europe in the near future. The 'CATS say that's a promise!!

