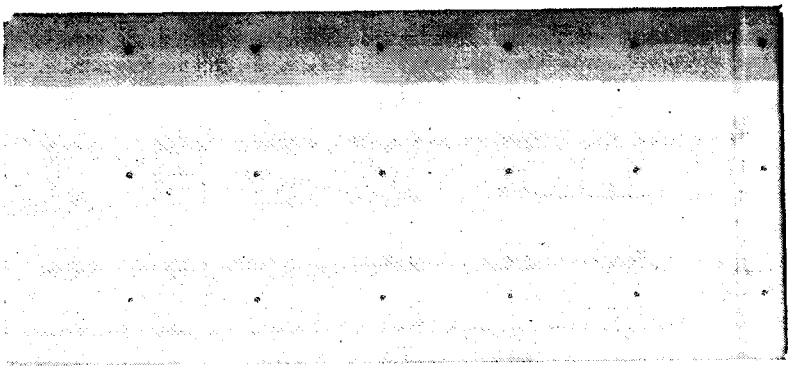
NASW 4142
p.41



NASA UK TAP

(NASA-CR-180350) NASA/UK TAP Annual Report, 1985-1986 (Kentucky Univ.) 41 p CSCL 05B

N88-20223

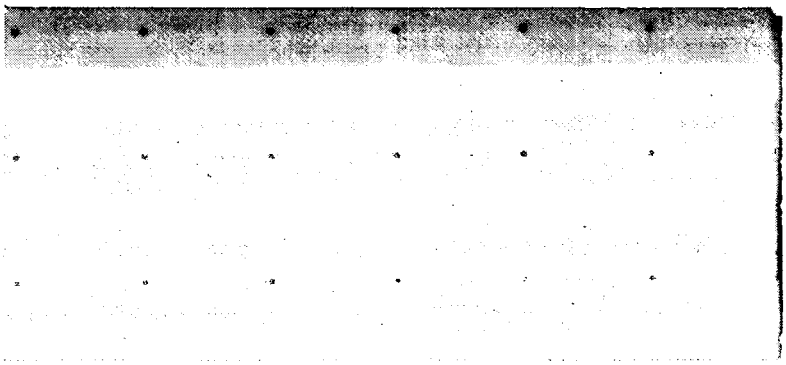
Unclas
G3/85 0063927

A Technology Applications Program to Aid Government and Industry in Kentucky

Prepared by

NASA/UK Technology Applications Program

NASA
National Aeronautics and Space Administration



NASA/UK TAP is a unique public service program of the Martin School, University of Kentucky and the National Aeronautics and Space Administration. Its purpose is to provide scientific and technical information for use in problem solving by both state and local government and by business and industry within the Commonwealth of Kentucky. The objectives of the Technology Applications Program are to promote secondary uses of NASA technology and stimulate technology transfer through its information services and technical assistance.

Please let us know how we can further serve your needs by contacting program representatives directly for details.

NASA/UK Technology Applications Program
109 Kinkead Hall
University of Kentucky
Lexington, Kentucky 40506-0057

Telephone: (606) 257-6322

***

NASA/UK TAP

1985-86 ANNUAL REPORT

TABLE OF CONTENTS

EXECUTIVE SUMMARY

EXECUTIVE SUMMARY

NASA/UNIVERSITY OF KENTUCKY TECHNOLOGY APPLICATIONS PROGRAM

NASA/UK TAP is a unique public service program of the James W. Martin School of Public Administration of the University of Kentucky. The initial program contract was signed in February 1977. Since then, the program has operated as a contract agency of NASA and part of a nationwide network under NASA's Technology Transfer Division.

The purpose of the Technology Applications Program is to provide problem solving information and assistance to both the public and private sectors in the Commonwealth of Kentucky, with emphasis primarily in the public sector. As a service and outreach function of the University of Kentucky, NASA/UK TAP strives to promote an increased awareness of technological advances and encourages innovation by the application of current research results to the solution of technical problems. By taking advantage of TAP services, government and industries save time and money; thus benefiting Kentucky's economy through increased efficiency and productivity.

TAP is recognized as the most comprehensive, multidisciplinary problem solving information source in the state. Each year NASA/UK TAP responds to approximately seven hundred requests for information and/or assistance from organizations within the state. The public sector inquiries represent 60% of the total,

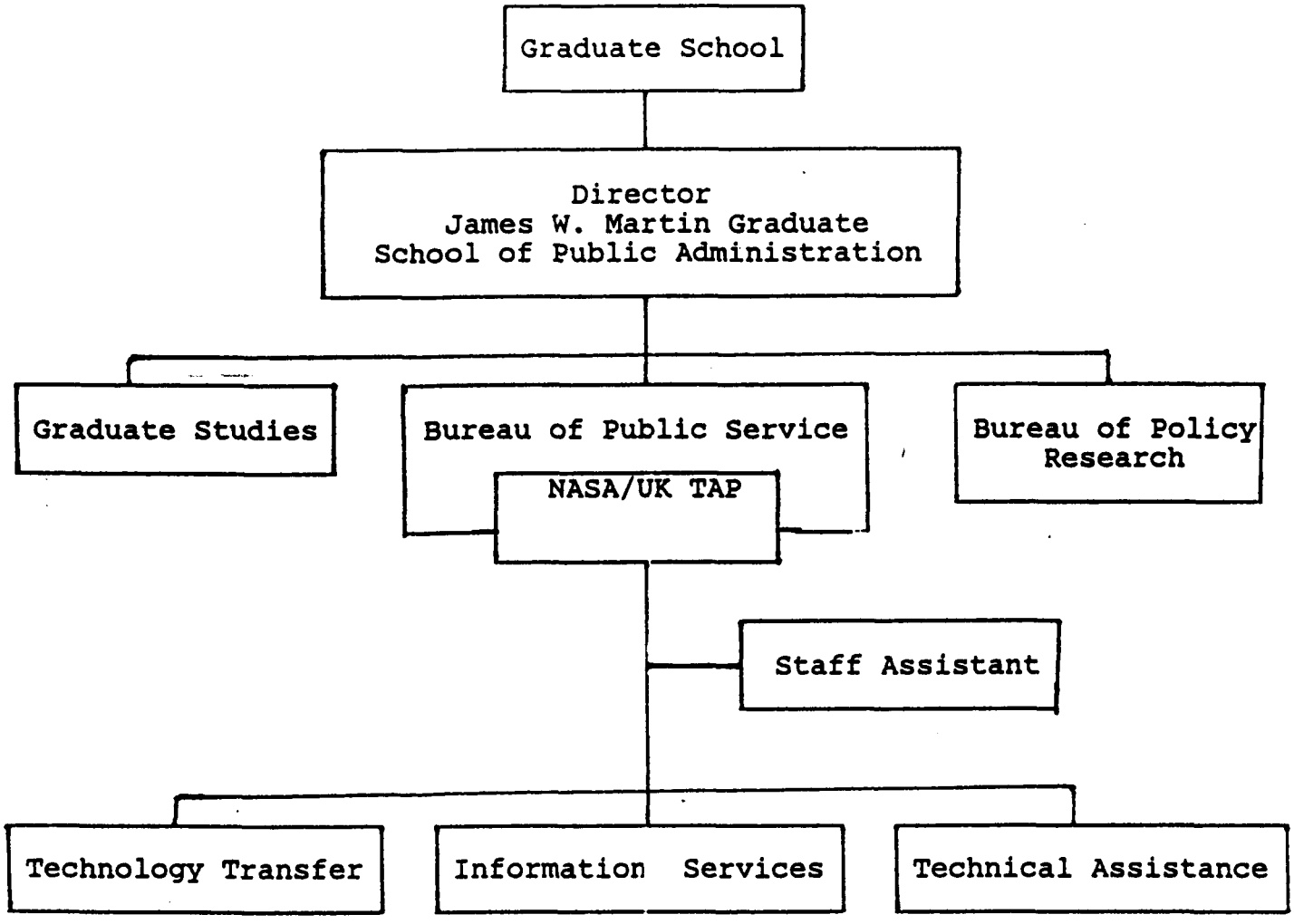
while requests from business, industry and other organizations represent the remainder. These inquiries are most frequently in the form of problems confronting decision makers and cover all facets of science and technology in addition to management, education, engineering and manufacturing processes. Using the methodology "search before research" to avoid reinventing the wheel, TAP is able to identify relevant research findings and suggest applications which will contribute to the understanding or solution of the clients' problems. TAP accesses over 1200 online computer databases, including files from the U.S., Canada, Europe and Australia. The program and its services represent a significant first step in guaranteeing a rapid response to problems confronting organizations in Kentucky.

From July 1, 1979 through June 30, 1986 NASA/UK TAP professional staff members interacted directly with hundreds of clients in the field who represent over half of the counties in the Commonwealth. During that time, TAP responded to 4920 inquiries, providing information and assistance to clients for solving problems. During the 1985-86 contract period, TAP responded to 645 inquiries which resulted in an increase of 16% over the 1984-85 contract period. Ongoing program evaluations indicate that primary economic benefits to state and local government and business in terms of cost avoidance, annually exceed a million dollars. In addition, there are substantial non-quantifiable client benefits in the areas of improved service delivery, increased productivity, and improved decision making capacity. Historically, NASA/UK TAP has found through our client evaluation

program that 80% of our searches and assistance result in some tangible benefit to the client. With continued support by the University, the Commonwealth and NASA, this program will further enhance the economic well-being of the state and the service image of the University and NASA's commitment to share research information with the citizens of the United States.

ORGANIZATION/PERSONNEL

NASA/UK TAP ORGANIZATION CHART



Local Government

State Government

Industry/Business

Non-Profit Organizations

Administrative Support:

1 - School of Public Administration
1 - TAP Director
1 - Staff Assistant
1 - Technical Information Services Coordinator
3 - Technology Transfer Coordinators
3 - Graduate Research Assistants

Dr. Phillip W. Roeder, Director, James W. Martin Graduate School of Public Administration

Education: B.A., University of Delaware; M.A., University of Delaware; Ph.D., Florida State University

Experience: Director, UK Survey Research Center; Director, Bureau of Policy Research; Director of Graduate Studies, Department of Political Science; Director of Undergraduate Studies, Department of Political Science; Associate Director of Graduate Studies, James W. Martin Center for Public Administration; author of numerous articles and monographs.

William R. Strong, Director, NASA/UK TAP

Education: B.A., History, English and Secondary Education, Eastern Kentucky University; M.B.A., Business and Financial Management, Syracuse University; additional work at the University of Alaska; further study in personnel, business management and logistics.

Experience: Deputy Director, UK Center for Public Affairs; Management Consultant to Health Care Delivery Agencies; Retired Colonel, U.S.A., Executive and Administrative Officer, Comptroller, Battalion Commander, Training and Logistics Advisor; Instructor, University of Maryland, U.S.A.F.I., Military Service Schools.

Lawrence A. Floro, Jr., Technology Transfer Coordinator

Education: B.S., Mathematics, Washington and Jefferson College; M.S., Physics and Nuclear Engineering, University of Tennessee, additional study in transportation operations and traffic management, tactical and logistical operations.

Experience: Retired Colonel, U.S.A.; Deputy Commander and Director for Distribution and Transportation, Lexington-Bluegrass Army Depot; Department of Army Logistics Staff Officer; Battalion Commander; Action Officer, U.S.A. Nuclear Weapons Security Group and Transportation Research and Development; Instructor, U.S.A. Transportation School.

Richard P. Dedic, Technology Transfer Coordinator

Education: B.B.A., M.B.A., University of Michigan, Industrial Relations.

Experience: Coordinator of Cooperative Education Program and Graduate Placement, Lexington Technical Institute; Account Representative, Blair, Follin, Allen and Walker; Personnel Officer, Computer Maintenance Officer, System Controller, Technical Instructor, U.S.A.F.

Douglas T. Robinson, Technology Transfer Coordinator

Education: B.A., Political Science, Maryville College; M.P.A., Public Administration, University of Tennessee-Knoxville; related study, Environmental Engineering and Management, University of Tennessee; further study in public technology and innovation.

Experience: Responsibilities in environmental systems, American Consolidated, Inc.; graduate teaching assistant, University of Tennessee; graduate research assistant (public administration), University of Tennessee.

Jannette E. Bolton, Technical Information Services Coordinator

Education: B.A., English, Universtiy of North Carolina-Greensboro,; M.S.L.S., Library and Information Science, University of Kentucky.

Experience: Medical Librarian, University of South Alabama, Mobile, AL. Graduate Assistant, Government Documents, M.I. King Library, University of Kentucky.

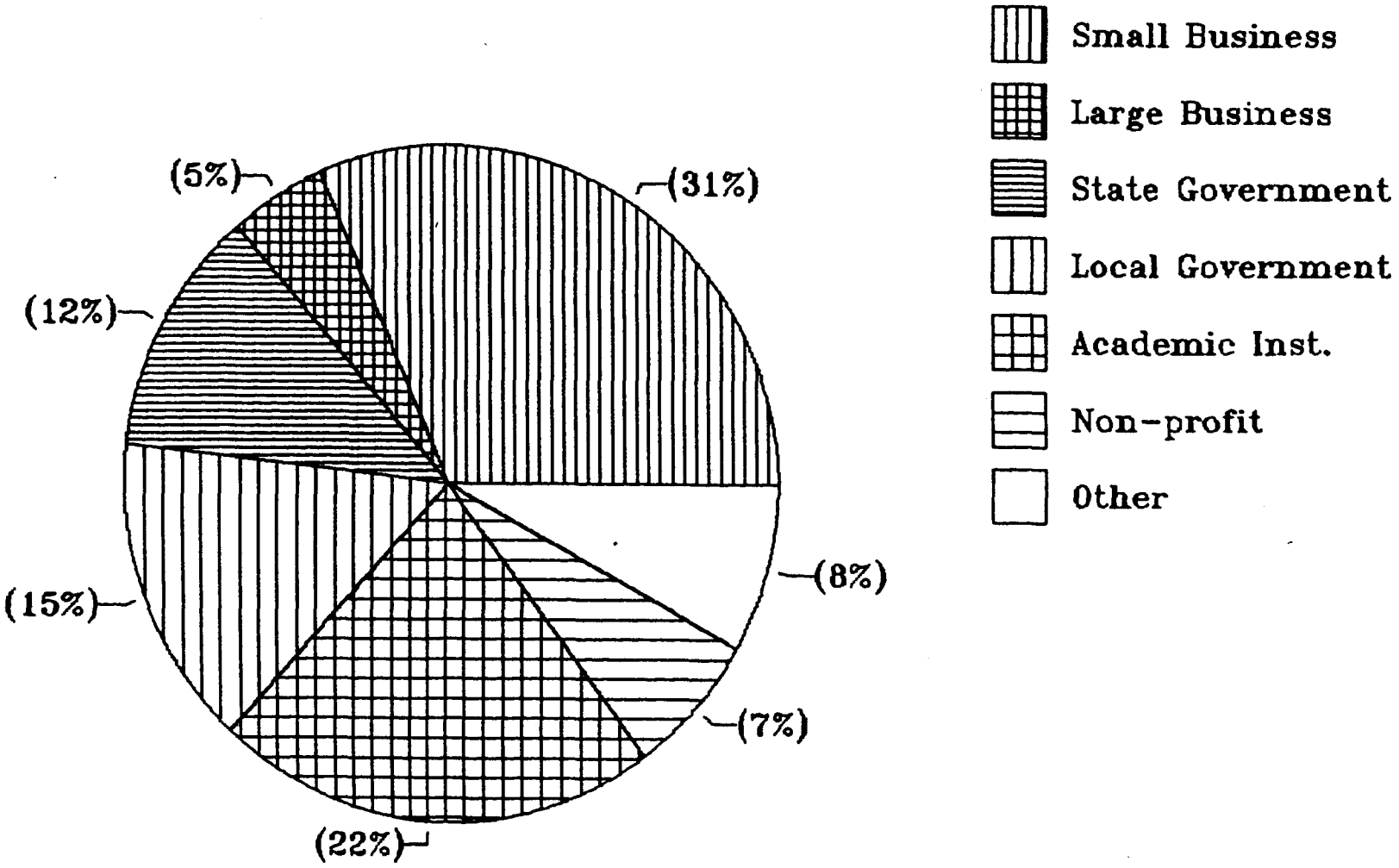
Sally J. Crouch, Staff Assistant

Experience: Receptionist and Assistant in a physician's office; Receptionist Circulation Department, Lexington Herald-Leader; Bookkeeper, Classified Advertising, Lexington Herald-Leader; Administrative Secretary, University of Kentucky Community College System.

The NASA/UK TAP staff is assisted by qualified students from the University of Kentucky's Graduate School.

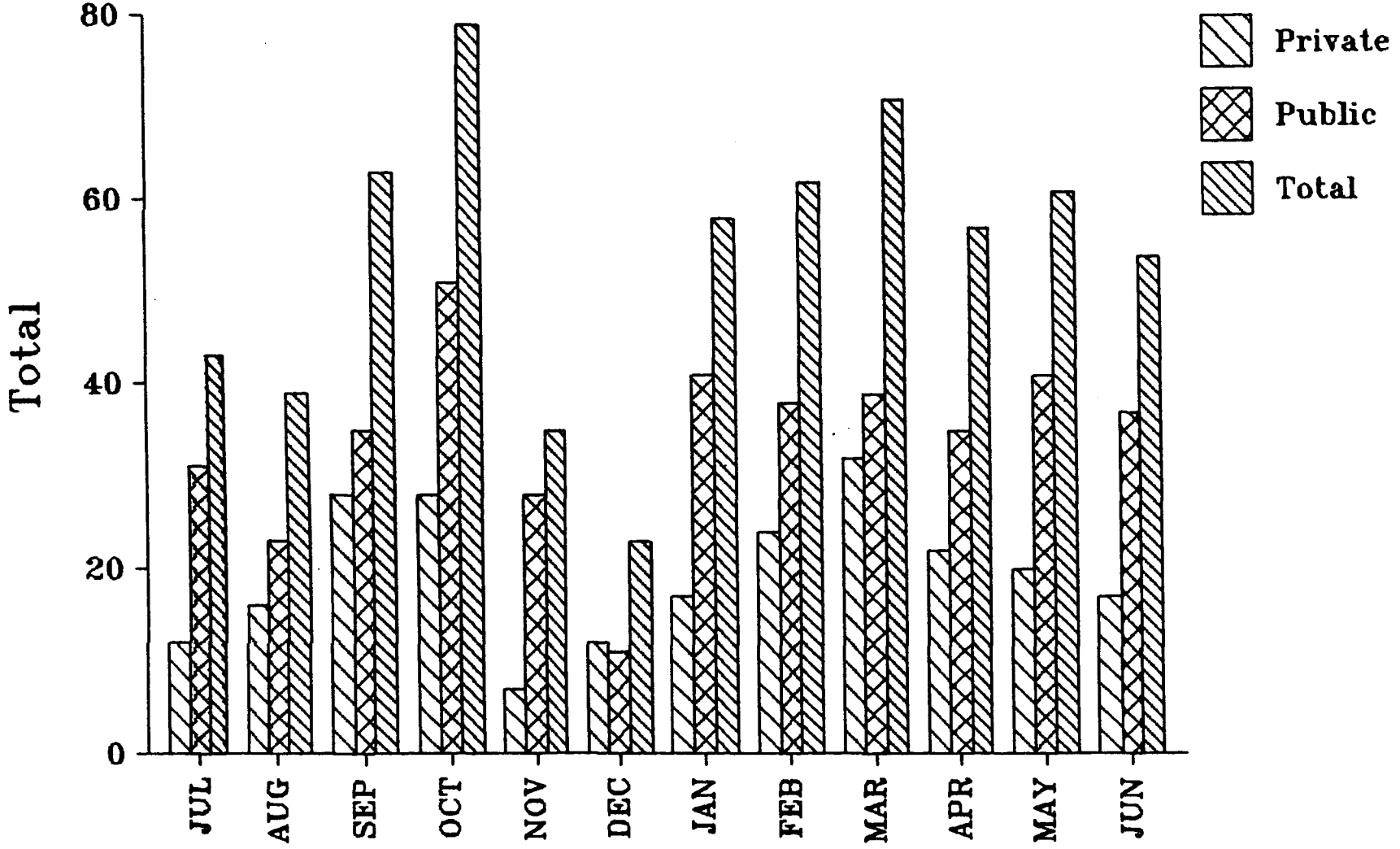
SUMMARY DATA

SEARCHES BY CLIENT TYPE: FY85-86

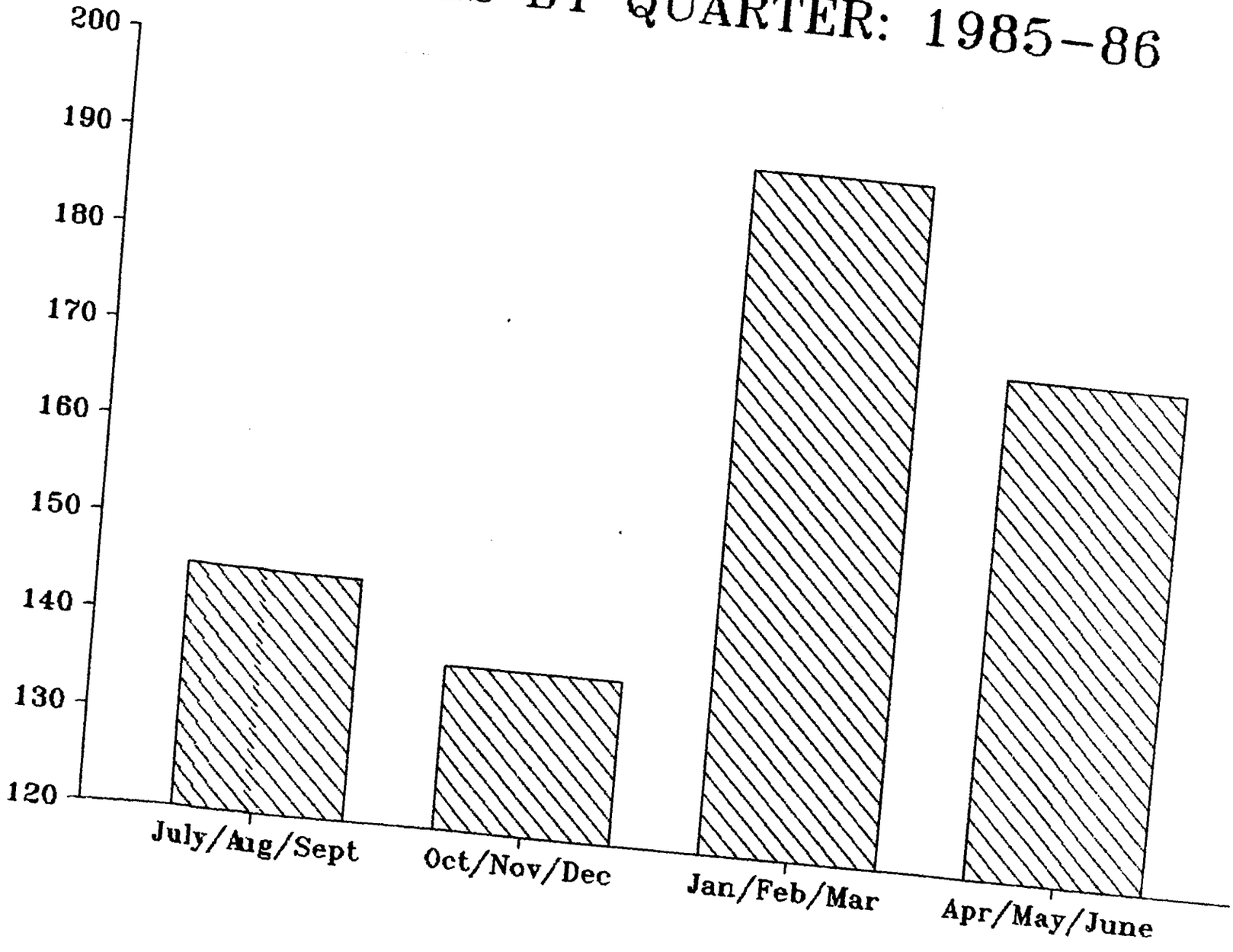


SEARCHES BY CLIENT TYPE: FY85-86

Total for 85-86: 645



SEARCHES BY QUARTER: 1985–86



SBIR AND SBDC RELATED ACTIVITIES

SBIR AND SBDC RELATED ACTIVITIES
FOR THE 1985-86 CONTRACT YEAR

1) CONFERENCE AND SEMINARS

We did not participate in any SBIR or SBDC related conferences or seminars during this reporting period.

2) NUMBER OF SBIR RELATED SEARCHES:

During the reporting period we did 7 SBIR related searches and 2 SBDC searches.

3) NAMES AND LOCATIONS OF COMPANIES REQUESTING SBIR RELATED SEARCHES OR MATERIAL

Palmer	Sunnyvale, GA
Accutype	Charlottesville, VA
Applied Medical Technology	Independence, OH
Ultra-Research, Inc.	Atwood, CA
Trident Systems, Inc.	Fairfax, VA
National Safe Transit Assoc.	Chicago, IL
McNally	Philadelphia, PA
Herndon	San Diego, CA
Technology Systems, Inc.	Lexington, MA
LTS Corporation	Manassas, VA

DESCRIPTION OF METHODOLOGY:
ASSESSMENT OF BENEFITS

To assess the benefits and impact of TAP services within the Commonwealth, a formal program evaluation was established in 1978. The purpose of the user evaluation is to collect information about completed searches in order to determine the effectiveness of TAP, determine benefits attributed to program services, and document potential spinoff candidates.

An ongoing evaluation process provides the mechanism for the documentation of benefits achieved through TAP services, and provides a means of evaluating the effectiveness of the technology transfer process. The raw data is utilized in determining the degree to which program objectives are achieved. In addition, the summary of evaluation data is useful in monitoring program direction as well as drawing conclusions concerning the estimated economic impact of the program within Kentucky.

The instrument used to document benefits derived through TAP's service during the program year is an evaluation survey questionnaire employing the client perception technique. This type of survey is simple to administer and has been found to be an effective tool for collecting data about user benefits, perceptions, experiences, and reasons for nonutilization of the information provided by TAP. Furthermore, client survey responses can be readily analyzed to determine underlying patterns, relationships, user satisfaction and indicators of impact.

Utilizing client and program personnel interactions, the evaluation questionnaire is an in-house design that has been refined over several years. It is simple to complete, and

straight-forward in its approach for data and client reaction. The format allows the client to indicate the benefits of TAP services, as well as instances of cost avoidance. The client is asked to respond to a series of short closed-ended questions concerning the impact of TAP services, and provided an opportunity for additional comments. For several reasons it is assumed that the results of this client evaluation process will be somewhat biased in favor of the program. Most users tend to respond favorably on university provided services since these services are usually obtained at little or no cost.

The total evaluation process is completed as a subsystem of TAP's computerized management information system (MIS) that has been developed to manage the collection, analysis, and dissemination of management information for the program. This system, written in dBase III command language by program personnel, provides data base and report generation features to support the evaluation process as part of its modules. This part of the MIS offers a means to store information on each client interaction, process the mailing of evaluations to each client on specially designed forms, and record client responses in the data base when the form is returned. In addition, the MIS provides program personnel with the capability to produce a variety of reports regarding evaluation data, including the required management reports submitted to NASA. A summary report format which links searches to returned evaluation data is available for each coordinator to keep them informed on the impact of service to their clients. This microcomputer based system is constantly

being refined to reflect changes in requested formats and reporting requirements of the program. During the 1985-86 program year, the MIS underwent extensive revision and enhancement. Additional programs were written to analyze and display collected benefits data. New features and screen input designs now offer a system that is much easier to use.

The evaluation questionnaire is forwarded to the client a minimum of three months after completion of a specific search. This lag time usually allows for implementation of the search results, thus any benefits can be more readily assessed by the client. This time interval between the provision of search results and follow-up evaluation is especially important with public sector clients. Experience has shown that because of the nature of the public sector decision-making process, there is a significant lapse of time between information/technology transfer and actual utilization.

It must be acknowledged that useful problem-solving information is not available for all inquiries directed to TAP. Because of the characteristics of certain searches, each interaction is reviewed on a case-by-case basis by the coordinator to determine which ones would be appropriate for formal evaluation. Consequently, not all searches initiated during each program year have been assessed, but evaluations were forwarded for more that 90% of completed searches since the evaluation process began.

Benefits Reported

A definitive determination of the value of technology trans-

fer services is susceptible to many interpretations. Any measurement using client perceptions is subjective and therefore open to criticism. However, data is successfully gathered on economic gain, cost avoidance, and manhours saved through TAP's services. Because of the specific nature of the evaluation process, it must be noted that only primary benefits are identified and documented. During each program year, no attempt has been to document secondary and tertiary benefits that may have occurred as a result of the service provided by TAP in the program year or previous years. In addition, the benefits reported reflect only those benefits documented by the evaluation questionnaires returned to TAP. For the questionnaires not returned for analysis, we may assume that client benefits realized were commensurate to those that did respond or that no benefit was realized. If the former assumption is correct, the impact of the program's services could be increased by approximately one-third over reported levels. However, no attempt has been made to extrapolate and include this data in the overall assessment of benefits.

For the period covered by this preliminary review, the first three quarters of the 1985-86 contract year, total benefits were lower than 1984-85. This is only an estimate that may be adjusted once all the benefits have been collected. The response rate as of this report is 54%. The client benefits, in terms of cost avoidance, and other measurable impacts declined only slightly on a per unit search basis. Client reported benefits in the areas of new product or process development, improved products or processes and improved planning capabilities in-

creased slightly over the last contract period. Information obtained from client responses to the program evaluation process yield the following results (because a client may select multiple categories when responding, the percentages do not total 100%):

--approximately 82% of the clients responding indicated a savings in research time, which totaled an estimated 5,644 hours. This figure represents gross benefits, which does not reflect the time invested by the client to evaluate and/or apply the information provided by TAP.

--approximately 28% of the clients responding indicated an additional savings in manpower which totaled 2,031 hours.

Respondents indicated that TAP is fulfilling its role and meeting its objectives in the areas of technology dissemination and the introduction of scientific and technical information into the decision-making processes of client organization. The following summarizes the percent of positive responses to the question: "Did our information services and/or assistance result in ....?

--improved decision-making or problem-solving capabilities: 53%

--improved planning capabilities: 47%

--increased awareness of a new or existing technology: 43%

In the broad areas of productivity improvement, improved product or processes and improved service, approximately one-fourth of the clients responding indicated some benefit from TAP services. Recognizing the ever increasing emphasis on productivity improvement and efficient delivery of public services, it is evident that TAP's impact in this area has been beneficial to client organizations in Kentucky. "Did our information services

and/or assistance result in...?

--an improved product or process: 13%

--improved service delivery: 20%

--improved productivity: 23%

The responses to questions concerning any benefit in aiding in the development of new products or processes were lower than other responses, however, new product development requires an initial capital investment that may be difficult to acquire because of interest rates and uncertainty concerning marketplace acceptance. The total number of responses to the question is higher than the previous program year. The impact of the program in the area of employee addition or deletion to our client organizations appears to be negligible. "Did our information services and/or assistance result in...?"

--a new product or process: 11%

--a change in the number of employees: 1%

Nonutilization of Information

This particular element of TAP's evaluation method attempts to ascertain the reason(s) for the nonutilization of information provided. This service, even if it was not applied to the specific problem addressed by TAP. Of the total number of respondents, 8% indicated that at the time the evaluation survey was completed, the services provided to them by TAP had not been beneficial to them. Of the numerous barriers to successful technology dissemination and utilization, no one impediment was found to be

significant. From the responses, the reasons for nonutilization can be distributed by percent in the following manner:

1.	Economics	1%
2.	Political	>1%
3.	Personnel Restrictions	>1%
4.	Market Factors	>1%
5.	Level of Technology	1%
6.	Responsiveness of TAP	>1%
7.	Quality of Information	1%
8.	Other	4%

Summary Data On NASA Application Modes

Application	Description
Mode 0	Classified as no benefit; information was not utilized because it could not be used to solve the problem. RESPONSE: 6%
Mode 1	Classified as information benefit only. Response categories include improved productivity,improved decisionmaking capabilities, increased awareness of new or existing technology. RESPONSE: 55%
Mode 2	Classified as direct application benefit that results in use. Response categories include a new product or process; and improved product or process, or improved service delivery. RESPONSE: 38%

Gross Economic Benefit and Cost Avoidance

Some of the benefits reported may be quantified while others may only give an indication of some economic significance. However, in most cases there is an indication of cost avoidance, economic benefit or additional profit realized that can be attri-

buted to services provided by the Program. Listed below is a estimate for the first three quarters of the 1985-86 reporting period.

1) 7675 research and manhours saved @ $50.00 per hour provides a gross benefit of $383,750.

2) Estimate of additional dollar savings and economic benefits as reported by clients, $27,450.

3) Estimate of profit reported by clients is $382,200.

As is evident from the estimates above, the benefits accured to the Commonwealth of Kentucky through the efforts of NASA and the University of Kentucky's Technology Applications Program is valued at approximately $793,400 in primary benefits through the third quarter of the 1986 contract period. After all the assessments are completed for the period, these estimates will be revised substantially to reflect the final quarter of activity and subsequent mailings to clients to gather additional benefits data.

FINANCIAL DATA

FINANCIAL DATA

In order to accomplish NASA/UK TAP objectives and comply with the contract, financial support was necessary. The information below outlines the financial resources expended in support of the program during the reporting period.

*EXPENDITURES

Personnel (Wages, Salaries, Etc.)	$ 186,288
Support (Travel, Rental, Communications, Etc.)	73,044
Facilities (Indirect Costs)	129,714
Income Account	1,486
TOTAL	$ 390,532

(See the Expenditures Pie Chart)

The source of expenditures incurred by NASA/UK TAP for the reporting period is as follows:

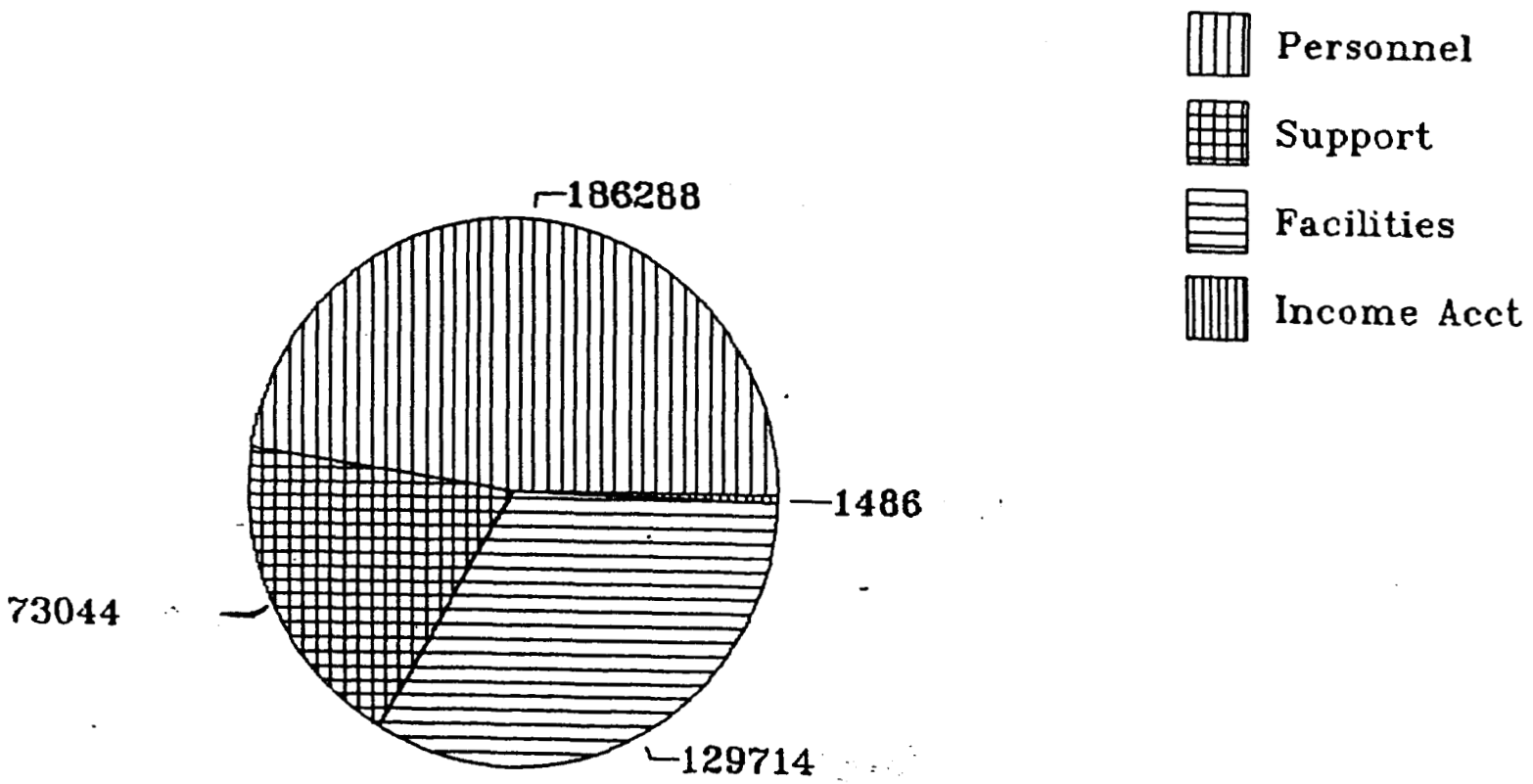
NASA	$ 172,638
UK	
Direct	86,694
Indirect	129,714
INCOME	1,486
TOTAL	$ 390,532

(See the Sponsored Expenditures Pie Chart)

*These figures represent our informal totals. Only UKRF, the official contracting agency, has formal totals.

EXPENDITURES

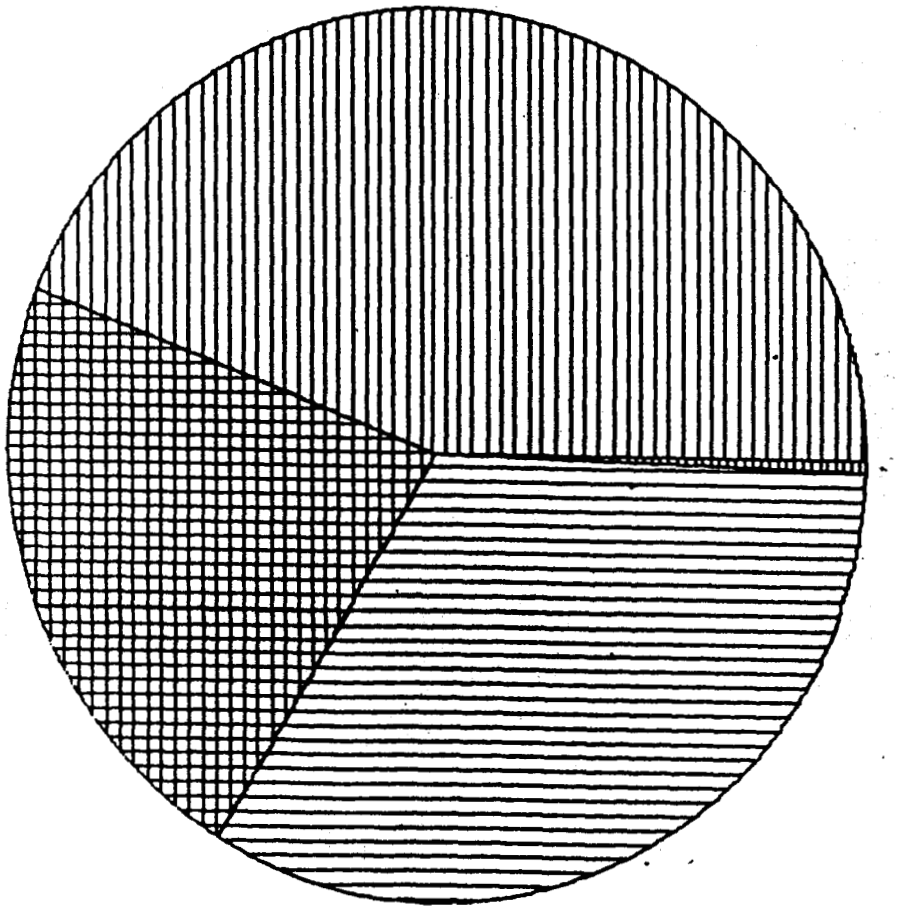
1985-86 FY

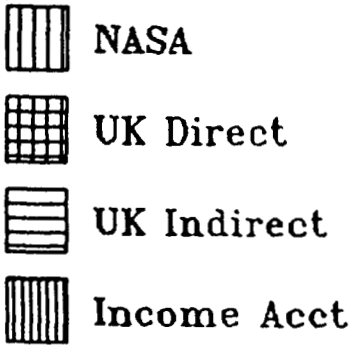


TOTAL: $390,532

SPONSORED EXPENDITURES

1985-86 FY





TOTAL: $390,532

EXAMPLES OF SUCCESSFUL TRANSFERS

1) During the 1986 Biennial Commonwealth of Kentucky Legislative session it was mandated that all future license plates will be manufactured utilizing reflective material.

The Kentucky Transportation Research Program in conjunction with the state Transportation Cabinet requested assistance from the NASA Technology Applications Program at the University of Kentucky. Through the services and assistance provided, the client reviewed the existing technology which supported the implementation of the mandated policy requiring reflective material.

2) During a consulting project to develop a process to manufacture elemental sulphur, Mershon & Associates requested assistance of the NASA Technology Applications Program at the University of Kentucky.

The services and assistance provided by TAP enabled the consulting firm to sign a contract to develop a sulphur plant.

3) During the 1985/86 academic year at the University of Kentucky, the Mechanical Engineering Department requested assistance from the NASA Technology Applications Program concerning vibration characteristics of Piezo Electric Dampening.

Through the services and assistance provided, the Department reviewed NASA sponsored research and other investigations of the dampening effect. This preliminary effort resulted in the Department receiving a National Science Foundation grant in excess of a million dollars to conduct further study in this

area.

4) The City of Shelbyville, KY (pop. 5400) requested information and technical assistance concerning the acquisition and use of a computer system to handle the financial management, tax billing, and record keeping functions of the city. TAP provided information assistance on needs analysis, specifications and RFP development. The city selected a vendor that has installed a new multiuser computer system and Shelbyville now benefits from municipal software and a system that matches its needs and enhances local productivity and information management.

5) The Kentucky Chamber of Commerce recognized that their members located across the state required information on a timely basis during the state's General Assembly legislative session. With assistance requested from TAP, a microcomputer based database system, which tracks bills in committee and provides for updated reports to be sent to Chamber members was developed before the session started. This program offered state members an enhanced service as well as the opportunity to stay abreast of legislative actions in a very timely manner.

6) The City of Mt. Sterling, KY (pop. 5800) utilized the services of NASA/UK TAP to address a number of problems during the 85-86 contract period. One issue which received considerable attention was related to communication system management and the confusing aspects of telephone deregulation. With information

provided through TAP, the city clerk was made aware of the benefits of interconnect telephone systems for the city hall and the various options for system management. The city now owns their own system and reports that in addition to an initial savings, an ongoing annual savings over one thousand dollars because the city now owns the system.

7) The University of Kentucky Medical Center Planning Division was charged with the responsibility to evaluate and plan the implementation of an emergency air ambulance service using helicopters to airlift critically sick or injured patients from Kentucky's eastern mountain area to the UK Medical Center for treatment. Based on a long standing relationship between that division and NASA/UK TAP assistance was requested to find appropriate information and technologies that could facilitate the implementation of this project. We provided case histories of other similar services and procedures that were developed in support of the NASA space program. Using this information a plan was developed, presented to and approved by the University of Kentucky Board of Trustees. The new service will be implemented over a two year period. We anticipate additional information and technical interface assistance will be requested by the planning division in support of this development.

8) A group of local real estate and commercial developers, in conjunction with the mayor and council of a small rural community in eastern Kentucky, requested information about self-contained

solar communities. Information on solar energy production, agricultural commodity production, construction and environmental control was provided from a number of resources including several NASA studies on space station activities. In-as-much-as this proposed new community would resemble a self-contained space station much of the NASA information was particularly pertinent to the design of this community. At the present time an initial design has been prepared and details of construction are being evaluated.

9) Several requests for information and assistance were received from the Federal Correctional Institution in Lexington. They dealt with various means of setting up and conducting prisoner counselling/self-help groups. Information was provided from government and commercial resources describing the process of establishing this service. Topics for discussion ranged from post-Vietnam syndrome/adjustment to rape and sex abuse. Resource materials were provided from government resources and group organization activities were described in several psychology and sociology documents retrieved from commercial databases. The self-help groups were considered to be very successful by the participants and even received a feature write-up in the Lexington newspaper.

10) Material was provided a client concerning the histology of the frog. The material substantiated testimony by an expert witness that resulted in a $5,000,000 claim being settled out of

court for less than $200,000.

MARKETING, PUBLIC RELATIONS AND PROFESSIONAL ACTIVITIES

JULY

1) The interview process was started in the selection of a new Information Services Coordinator.

2) The Local Government Technology Transfer Coordinator continues to work on the Mayor's Hazardous Materials Task Force.

3) The Local Government Technology Transfer Coordinator participated in the "Micro-Computers in Local Government Workshop" which was held in Nashville, TN. NASA/UK TAP co-sponsored the workshop with the University of Tennessee's Center for Government Training. This was the second of two workshops, with the first being held in Lexington, KY in May.

AUGUST

1) A new Technical Information Services Coordinator was hired and reported for duty.

2) The Director and the Business & Industry Technology Transfer Coordinator met with the Dean of the University of Louisville's School of Business to discuss the utilization of NASA/UK TAP services.

3) The Local Government Technology Transfer Coordinator made a presentation to the Kentucky Chamber of Commerce in regard to micro-computers.

4) The Local Government Technology Transfer Coordinator attended the annual conference of the Kentucky Municipal League in Owensboro, KY.

5) The Director attended the National Innovation Workshop for the Southeast Region in Raleigh, NC. While at this workshop he had the opportunity to meet with the Director of Technology Utilization from NASA Headquarters.

OCTOBER

1) The Local Government Technology Transfer Coordinator evaluated the cities of Mt. Sterling and Lexington for the Kentucky Chamber of Commerce sponsored Kentucky Certified Cities Program.

2) The Local Government Technology Transfer Coordinator made a presentation on micro-computers to the International Right-of-Way Association.

3) The State Government Technology Transfer Coordinator and the Business and Industry Technology Transfer Coordinator meet

with a representative from the Council of State Governments in regard to the NASA/UK TAP program.

1) The Information Services Coordinator meet with the Special Libraries Association.

2) The Business & Industry Technology Transfer Coordinator attended the FLC Meeting in Champaign, IL.

3) The Information Services Coordinator attended an NLM Update Workshop in Louisville, KY.

4) The Director made a presentation to the Cynthiana, KY Rotory Club on the topic of Commercialization of Space.

5) The Local Government Technology Transfer Coordinator attended a seminar in Frankfort, KY on underground storage tanks.

6) The Information Services Coordinator attended a conference at M.I. King Library for online searchers.

DECEMBER

1) The Director had a meeting with the director from the Equal Opportunity office of the University of Kentucky to discuss plans for the site visit from the equal opportunities audit team which visited this reporting period.

JANUARY

1) Paul Brockman visited the NASA/UK TAP office and also had meetings with the Director of the TAP and the Council of State Governments to start preliminary negotiations for an agreement between NASA/UK TAP and CSG for information retrieval services.

2) TAP personnel met again with the CSG personnel regarding the impending agreement.

3) The Business & Industry Technology Transfer Coordinator assembled a package that was sent to the Federal Laboratory Consortium's site selection committee to offer Lexington as the meeting place and NASA/UK TAP as the hosting organization for their Spring 1987 meeting.

4) The Local Government Technology Transfer Coordinator attended a Technical Issues Conference in Ft. Mitchell, KY in regard to groundwater. This was sponsored by the Council of State Governments.

5) The Director met at Marshall Space Flight Center with

his committee that was selected by NASA Headquarters to discuss the TU Program's future direction.

FEBRUARY

1) The Technical Information Services Coordinator attended two meetings with online searchers at the University of Kentucky.

2) The Director attended an IAC and STAC Directors meeting at NASA Headquarters in Washington, DC.

MARCH

1) The State Technology Transfer Coordinator attended a meeting of the Kentucky Aerospace Education Advisory Committee in Frankfort, KY.

2) The Local Government Technology Transfer Coordinator met with local government officials from Mt. Sterling, Kentucky to discuss computer acquisition for their use.

APRIL

1) The Local Government Technology Transfer Coordinator attended the ASPA (American Society of Public Administration) Annual Meeting in California. Then he attended the NATOA (National Association of Telecommunications Officers and Advisors) meeting in Atlanta, GA as a representative from TAP and requested by the Kentucky Municipal League.

2) The Director and the Business and Industry Technology Coordinator met with the Director for Research and State Services at the Council of State Governments to discuss plans for the Spring 1987 FLC meeting that we will be co-hosting.

3) The contract for the 1985-86 fiscal year was received.

MAY

1) The Technical Information Services Coordinator attended the National Online Meeting in New York, NY.

2) The Business & Industry Technology Transfer Coordinator attended the FLC Meeting in Annapolis, MD.

3) The Local Government Technology Transfer Coordinator attended the Southern Consortium of University Public Service Organizations meeting in Savannah, GA.

4) The Director met with Paul Brockman and representatives

from the Council of State Governments in regard to the NASA/UK TAP, James W. Martin School of Public Administration, Council of State Governments and NASA's agreement of understanding between these parties.

JUNE

1) The Business and Industry Technology Coordinator met with the coordinator for the Federal Laboratory Consortium Meeting that will be held in Lexington the spring of 1987 and which will be co-sponsored by NASA/UK TAP and the Council of State Governments.

2) The Local Government Technology Coordinator attended the Governors Conference on Occupational Safety and Health in Louisville, KY.

3) The Technical Information Services Coordinator attended a searchers meeting at the University of Kentucky. Then later served as a consultant to the reference department of the M.I. King Library at the University of Kentucky.

4) The Business & Industry Technology Coordinator attended the Technology Transfer Society meeting in Indianapolis, IN.

5) A Memorandum of Understanding with the Council of State Governments, University of Kentucky and NASA was signed in regard to the cooperation between these agencies.

6) A Memorandum of Understanding was signed with the Kentucky Municipal League between NASA/UK TAP and KML to provide information to KML members.