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VOLUNTEERS IN TECHNICAL ASSISTANCE

ANNUAL REPORT

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PROJECT NO. 938-2037

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In the second year of the cooperative agreement, technical inquiries received and answered by the VITA Information Services Department exceeded 3,000 for the first time in VITA's history (see chart, Appendix I). This same unprecedented rate of utilization is manifested in every VITA service supported by the agreement. The use of VITA Volunteers as consultants by USAID missions and others is up sharply, as is volunteer participation in technical panels, field evaluations, preparation of technical papers, and providing direct support for VITA programs in Djibouti, Somalia, Guinea, Honduras, Thailand, and the Sahel Region of Africa.

The rapidly escalating demand for VITA's services is a source of pride, as it reflects the confidence that exists in the quality and effectiveness of those services. However, it also raises concern about the present dependence on a single funder (AID) for almost the entire budget of the Information Services Department. During the past two years this concern has generated an enormous effort to formulate and implement plans to develop alternative sources of support and income.

This annual report will review what has been done under the cooperative agreement during the past year. However, it will also go beyond the usual statistics of success and will lay out VITA's plans for the future, developed over the past two years through an intense process of planning, consultation, debate and decisions involving staff, directors, and volunteers.

TOWARD SELF SUFFICIENCY

It has been both implicit and explicit throughout all VITA's internal discussions that our end purpose is to serve the low income populations of Third World countries, and that it will continue to be so. There is also a clear understanding that

development is best served through the creation of wealth, and that this entails the responsible exploitation of natural resources, together with the encouragement of the initiative, enterprise and energy of a nation's people. Finally, there has been agreement that pragmatism must typify our approach to the accomplishment of our goal, and that the following three criteria will guide our efforts:

- That VITA will use every reasonable means to continue the expansion of the scale and scope of its services and to strengthen the capacity of developing country institutions to provide these services to their own populations.
- That the quality of VITA services and access to them will be rigorously maintained and where possible improved.
- That VITA will strive through a variety of means to achieve greater financial self sufficiency and will assist its sister institutions in LDCs to move in that direction.

THE PLAN

The VITA long-term plan has several facets, many of which are already being implemented. They are:

- A major fund raising effort to be kicked off by VITA's twenty-fifth anniversary celebration.
- A three track service component which includes the use of communications and computer technologies and a new organizational structure to reduce costs and generate income. The tracks are:

- I. VITA TRADITIONAL SERVICES
- II. VITA DEVELOPMENT SERVICES
- III. VITA BUSINESS SERVICES

FUNDRAISING

A fund raising goal of two million dollars to be raised from the private sector over the next three years has been established. Of this amount \$500,000 will be in discretionary funds and \$1,500,000 in programmatic funds. At present, VITA raises less than \$100,000 in discretionary income, about \$200,000 in program income and generates in excess of \$100,000 in the sale of publications, training programs, etc.

While fund raising has been neglected in the past few years, a very serious effort is now being implemented. An experienced fund raiser has been hired full time and plans are being laid out for the campaign. They will include corporate solicitation by members of the board of directors and management, as well as a schedule of events such as a major dinner, a series of technical conferences and the professional marketing of existing, as well as new publications.

The goals established are well within VITA's capacity to achieve.

SERVICE TRACKS

While it is necessary here to describe each service track separately, there will be considerable overlap in practice. The essential synergy of all of VITA's capabilities will strengthen those on each track.

I. VITA TRADITIONAL SERVICES

VITA remains as committed today as it has been for the past quarter century to providing access to the highest quality of technical information in the most useable form possible to requesters in developing countries--technical information

which can directly or indirectly improve the condition of low income persons. The increase in demand for these services is unlikely to slow down in the future. Clearly, more efficient ways of handling these requests had to be devised if VITA was to keep up with the demand and still keep costs within acceptable limits.

During the last year several steps were taken to reduce costs without sacrificing the quality or speed of response. They include:

A. Computerization--A panel of VITA Volunteers met twice during the year 1982 and developed an agenda for the computerization of VITA's information system. In early 1983 a gift of two microcomputers from the Apple Corporation permitted us to start the transformation from a manual to a computerized operation.

As a first step, staff computer expert Dr. Gary Garriott, working together with volunteer consultants on a data base manager, CONDOR, brought the computerized volunteer roster in-house from a service bureau (BRS), thereby saving many thousands of dollars annually in time share costs. Working on this smaller system provided valuable experience toward undertaking the much more complex task of computerizing our very large document collection.

We know of no organization using microcomputer technology for such a large data bank (26,000 entries with a projected annual increase of about 3,000). Again, using the data base manager, CONDOR, the software development was completed and the data entered. The system will be up and running very soon and should make our operations much more rapid and efficient.

Other computerization activities that have been carried out include bringing in-house the VITA information which is part

of the DEVELOP data base marketed by the Control Data Corporation. We have also brought in-house two computerized data bases developed by A.T. International (i.e, ACCESS and EXCHANGE) at the reputed cost of \$600,000. Both data bases contain information about business establishments in the United States and the Third World which we expect will be of great value as we build VITA BUSINESS SERVICES.

The computerization of VITA's services has been viewed as a necessary step for our own operations, but also as having great significance in the scope and nature of the services we provide to requesters and institutions in LDCs. We now include computer training in our twice a year information management course and we have developed software for information management which is tailored to the needs of developing countries.

The increasing dependence on computer technology in all of VITA's activities was close to exhausting the capacity of the microcomputers contributed by the Apple Corporation when we received a welcome gift of ten microcomputers from Reynolds + Reynolds, a Dayton, Ohio company. The equipment, the accompanying software and peripherals, has been valued by the company as in excess of \$350,000.

B. Microfilming--More than 20,000 documents were put on microfiche last year, representing the distillation of twenty-five years of collecting, testing, culling, and evaluating technical documents and the subjects they describe. This is an inexpensive, but enormously valuable resource which can readily be transferred to institutions in LDCs. Thousands of the documents are available no where else and discuss field experiences with the technologies. Soon VITA itself will use microfiche almost exclusively and discard the paper copies in its library. Dispensing with the storage of documents will save expensive footage in its offices for more productive purposes, and will also reduce the cost of document acquisition.

C. Technical Papers--Some 50,000 information transfers have occurred since VITA was established in 1959. A selection process has identified 120 subjects on which inquiries are received most frequently, as well as almost one hundred volunteer experts in these areas, who are knowledgeable about conditions in developing countries. These volunteers are working to develop state-of-the-art technical papers on each subject area, which will be concise syntheses of extensive documentation which heretofore was xeroxed and mailed to requestors. In addition, several university engineering departments have agreed to assign a variety of these subjects to graduate students as papers, or as class projects, and in some cases, doctoral theses. The project to develop these papers has taken on a life of its own, and will undoubtedly be a continuing effort in which new papers are assigned and others updated each year.

A rich new information resource will be created with the simplified, clear format and language which has distinguished VITA's publications throughout its history. Further, arrangements will be made with information centers in other countries to translate the papers in exchange for distribution rights.

Requestors will be sent papers by a clerical person or an intern instead of a coordinator, thus realizing important economies in personnel and copying costs. The process will weed out the merely curious and the information collector and will permit us to concentrate our limited resources on the serious requestor, who comes back for more detailed information which might be used in starting a business or adapting a technology to a specific use which might be valuable elsewhere.

Finally, the coordinators are now information managers rather than researchers, who will select the appropriate volunteers to answer the inquiry, and provide them with the background

information on the request being referred to them. Interns will field questions and do the follow up work with the volunteers. In order to insure quality control, the coordinators will review materials prepared by volunteers before they are sent to the requestor. The volunteers will once again become the primary element in the response process just as they were in VITA's early history.

To date, the Information Resources Department has been reduced by half, and four interns are already working. The number of volunteers being used by the inquiry service has increased sharply (Appendix II) and in February, 1984 was up more than 1000% over a year ago.

D. Evaluation--An evaluation of VITA's inquiry services commissioned in 1982 by AID and performed by Ms. Mary B. Anderson made the observation, "I have seldom (perhaps never) seen an organization that is more concerned with monitoring its own work and recording its efforts." Ms. Anderson went on to say, "In terms of the grant support received from AID, VITA performs an important, unique and helpful service to a number of people and institutions in the developing countries and meets specific needs that would not otherwise be met." She suggested, however, "...some additional collection of information about impact and experimentation with different transmission forms." We have moved decisively to carry out the suggestion.

Last year more than 550 overseas volunteers in 89 countries were asked to interview requestors living near them. The invitation was accepted by 150 volunteers residing in 50 countries and many of the completed questionnaires resulting from the interviews have already been received. Information of great value is being collected regarding the utility of various technologies under field conditions, their commercial viabili-

ty and jobs created through their exploitation and the quality of VITA's services.

This procedure enhances what is already a unique vehicle for an ongoing dialogue between VITA and thousands of individuals and institutions in developing countries, about what they perceive to be their needs, and how they view VITA's response to them. VITA's evolution over the past twenty-five years has been driven by the information gained through this dialogue.

E. VITA Volunteers--While the contributions traditionally made by volunteers and the increase in their utilization has been discussed, it is appropriate here to consider the future potential for using volunteers in creative and imaginative ways, and in such a way as to enhance VITA's three track system.

Last February a panel of volunteers who represented a wide variety of skills, experience and backgrounds were invited to meet to discuss how VITA had used them in the past and how they felt they might most effectively be used in the future. As a result of that meeting, the coming year will be a period of reorganization and reorientation of the Volunteer Services Division of the Inquiry Services Department.

The results of the panel will be disseminated to all the volunteers currently on the roster. They will be asked to rededicate themselves and pledge their time and effort to carry out the panel's recommendations. Those unwilling to do so will be purged from the rolls.

A recruiting campaign will be implemented, directed towards adding volunteers with the skills for which the greatest need and demand exists. Graduate schools in engineering, the physical sciences and management will be solicited for volunteers.

Professional associations in these same areas will also be urged to encourage volunteering among their membership. Ethnic publications will be used extensively to recruit professionals from countries where volunteer opportunities exist such as China, India, the Caribbean, and African countries.

It is anticipated that within the next five years, VITA will have a roster of five to ten thousand volunteers with expertise in all the areas essential to development.

II. VITA DEVELOPMENT SERVICE

Support from interested donors and other income from commercial activities will probably always be required to support VITA's traditional free services. However, VITA DEVELOPMENT SERVICES, designed to strengthen the capacity of institutions to handle their own information management needs, will be financed through a fee structure, which will not inhibit their use, but will permit the service to be self sufficient.

Computer skills, technical information, and information management competence are critically important to the development process. If developing countries do not acquire these capabilities they will be seriously handicapped as the "information revolution" evolves. Unfortunately, despite the acute need for technical information there seems to be relatively little demand for it in most developing countries. It is VITA's judgement that this is due to several factors which can be overcome.

A Rockefeller Foundation evaluation of the indigenous capacity, "for acquiring and handling foreign information" in the Dominican Republic found that it was almost non-existent. The report commented, "This is not for lack of potential users or general infrastructure, and only to a small extent for lack of

purchasing power. The single most important problem is lack of in-country information-handling and distribution capability." A local Dominican official lamented that people do not know what is available, where to get it, or how to find it. Happily, the evaluation cited VITA as being the most successful disseminator of information in the country.

Ben Kilgore, Vice President for Special Strategic Programs for the Control Data Corporation, has observed that while satellites and computers now permit almost instant access to information, they have also created the problem of an information glut. Without computer skills or information management expertise, the marvels of the information age are beyond reach. Kilgore further suggests that bibliographic data bases are of very limited value in LDCs for these and other reasons. He concludes that the present most critical need is for training and for "mining" information. By this he means the sort of thing VITA is doing with its technical papers, i.e. collecting information, synthesizing it and writing a new document in clear and simple language.

Kilgore's remarks were made during a meeting in which VITA and Control Data explored a joint venture to which VITA would bring "...its resources as an information supplier and its knowledge of the need for information in the developing world. Control Data would bring to this joint venture resources to provide computer data base and training technology and marketing information services" (see Appendix III). The parties agreed to exchange concept papers by April 20.

A joint venture might include training, publications and the development and marketing of jointly owned data bases. A preliminary estimate of the potential demand unsupported by a market survey is up to 300,000 information transfers annually and in excess of a million dollars a year in revenue.

Another part of VITA DEVELOPMENT SERVICE is a Technology Resource Service being negotiated with the National Technical Information Services branch of the U.S. Department of Commerce. The service will be a development system designed to provide technical information from the village level to the application of high technology in development, as well as to provide other resources and services or direct subscribers to other sources (see Appendix IV). The services offered include:

- Training in information management,
- Transfer of a microfiche collection of 20,000 documents,
- Training in the use and care of the microfiche and maintenance of equipment,
- Training in the use of a microcomputer in information management,
- Transfer of microcomputer software and bibliographic data base covering the microfiche.

These services may be purchased separately or as a package for a total cost of perhaps \$10,000.

An annual subscription of between \$1,000 and \$1,500 will buy the following services:

- Up to 1,000 new documents a year to keep the collection current and cull obsolete documents,
- A limited number of technical reports as requested by the client and prepared by VITA,
- Access through VITA to commercial data bases on a limited basis,
- Limited access to VITA's skills bank.

It is anticipated that negotiations will be completed and the new venture announced in the next several weeks. VITA staff has discussed these services and fees with institutions in LDCs, and we feel confident that the demand for them will be considerable.

The final component of VITA DEVELOPMENT SERVICES is PACSAT the low earth orbiting satellite.

VITA has already trained 45 persons from 25 countries in its documentation center. These and future trainees constitute a global network in which each group could be a valuable resource to the others if a means were available to provide rapid and inexpensive communication between them.

VITA and the Radio Amateur Satellite Corporation have brought together volunteer groups in the United States, Canada and Great Britain to design and launch a low earth orbiting satellite that will permit digital transmission of information between and within countries. The University of Surrey in England is doing much of the design work and is raising half the cost of the effort (\$800,000 of \$1,600,000).

The entire system is simple and relatively inexpensive and consists of:

- The satellite with an on-board microcomputer that stores and transmits information,
- Licensed amateur radio operators (there are about a million around the world),
- Inexpensive home computers, connected to simple transmitting and receiving equipment.

The satellite will be launched from a space shuttle flight in less than two years. Interest in the satellite is building rapidly. In just one month 58 inquiries were received from twenty countries and in March, the United Nations Industrial Development Organization (UNIDO) endorsed the effort in the following recommendation to a Consultative Group which will be convened in August:

"(iii) Study the possibility of providing low-cost communication infrastructure for a variety of applications to geographically dispersed groups/individuals through the use of low-altitude earth satellites. The [PACSAT] project of VITA, which was endorsed by the meeting as a useful experiment and an opportunity for participation by different organizations, would be studied from this viewpoint and action programmes developed. Interested Groups: VITA, UNIDO and possible funding agencies..."

"(iv) Study the use of information technology to provide better access to techno-economic intelligence relating to technologies of relevance to developing countries, and to assist in information dissemination in general. VITA, UNIDO, IDRC...would explore this feasibility taking as an example the work done in the design and development in wood stoves."

In a letter to Executive Director, Henry Norman, the Pan-African Documentation and Information System Director, Julien Quirino-Lanhounmey, offered to help in fund raising if assured of five ground stations in Africa (see Appendix V).

The Rockefeller Foundation which is concentrating its programming in Africa has also indicated an interest in supporting the effort and also wants ground stations.

Peter McPherson recently stated "...communications can make a difference in meeting the basic human needs of rural people. Satellites can provide reliable and affordable communications in many rural areas" (Uplink, February, 1984). Another article in the same Uplink said, "Many fruitful studies of the micro-economic effects of telecommunications are showing strong linkages between investment in telecommunications and economic development."

A recent joint ITU/OECD study on "Telecommunications and Development," highlights the fact that "investments in telecommunications entail very significant economic and social benefits and contribute...to identifiable increases in gross national product. These increases...are greatest in the countries and regions with the lowest incomes" (International Issues in Communication Technology and Policy, AED).

The AID Office of PDC/PVC, came through at a critical moment in the early stage of the development of this concept and authorized the use of \$30,000 of the present cooperative agreement to support a project director while VITA raised other funds. The ultimate success of this effort might well be traced to that decision.

III. VITA BUSINESS SERVICES

An analysis of VITA's twenty-five years of experience in assisting thousands of small and medium businesses in developing countries to solve problems and pursue opportunities led to the conclusion that these same services could be marketed commercially to generate income to support VITA's other activities. A marketing survey done by a consultant verified that such services would indeed find a ready market. Further testing by VITA staff lent support to the conclusion. For example, Henry Norman recently described VITA BUSINESS SERVICES to Read McNamara, Director of Business Development, International Group of the Pillsbury Corporation, and inquired if the company would be interested in such services. Mr. MacNamara replied "unequivocally enthusiastically, yes."

The services to be offered are:

- Licensing--Technology searches on request and assistance with negotiations for licenses for production by Third World enterprises.

- Brokering Services--Matching of interested businesses to engage in joint enterprises of mutual benefit, such as joint ventures and coproduction. An agreement between the U.S. Small Business Administration and VITA will soon be announced under which the two agencies will conduct a series of workshops in major cities in the United States. Targeted toward small business entrepreneurs, the workshops will provide information on government programs available to encourage investment in developing countries. VITA will explain its services designed to assist such investment.

Information about interested businesses will become part of a data base which includes the ACCESS and EXCHANGE data bases VITA obtained from A.T. International last year. This will be one of the products that will be marketed under the CDC agreement referred to earlier. The information will be of great value to VITA and others seeking to encourage private investment in LDCs.

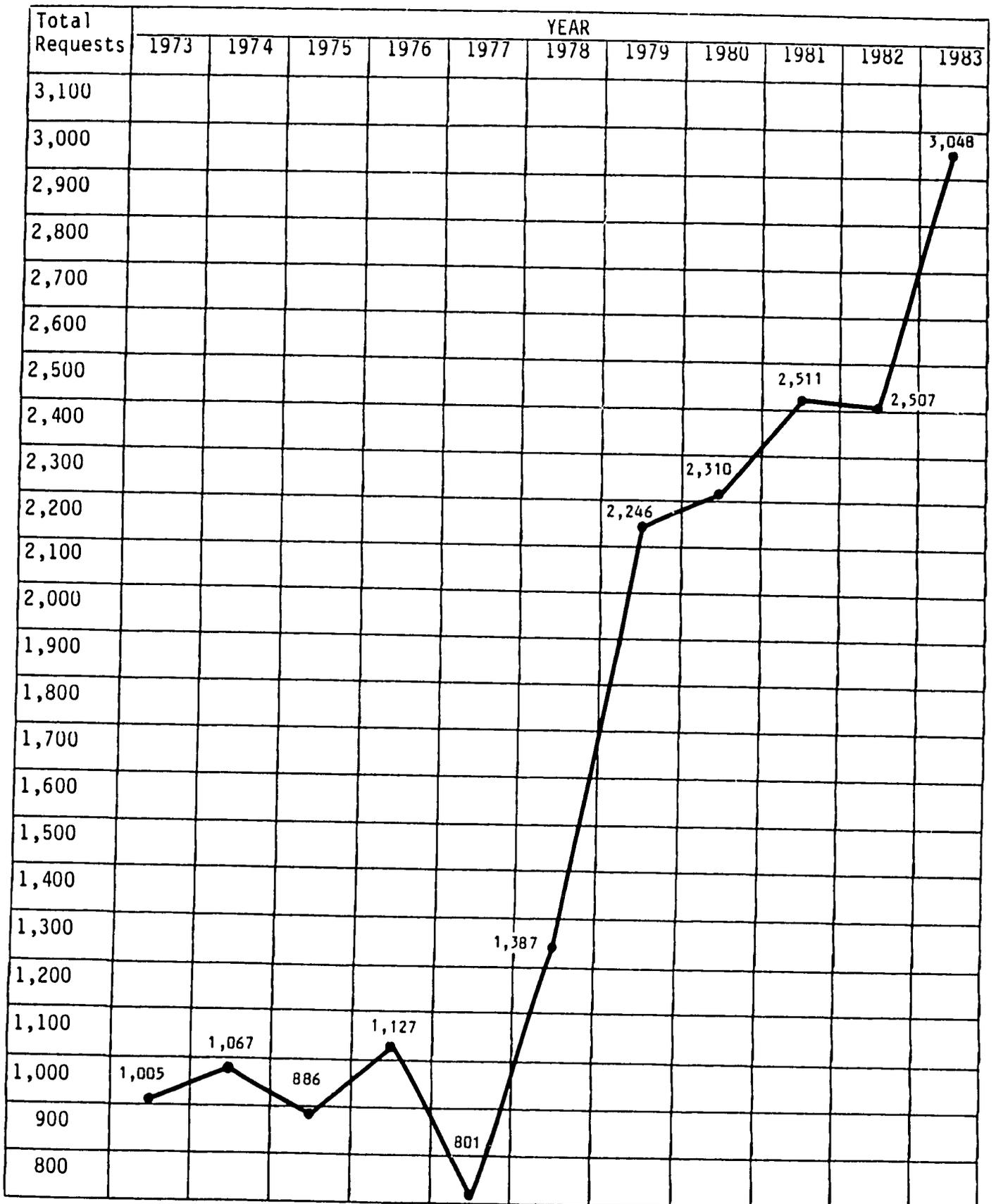
- Technology Assessment--Assistance with defining needs of Third World industry and evaluating whether proposed technologies answer that need. Assessments of the appropriateness of technologies to the specific Third World context.
- Intermediary Services--Assistance through the maze of cultural differences, business practices, laws, and other constraints faced by both sides; assistance with negotiations, analysis of contract proposals, sources of financing, and government regulations.
- Patent and trademark searches.

SUMMARY

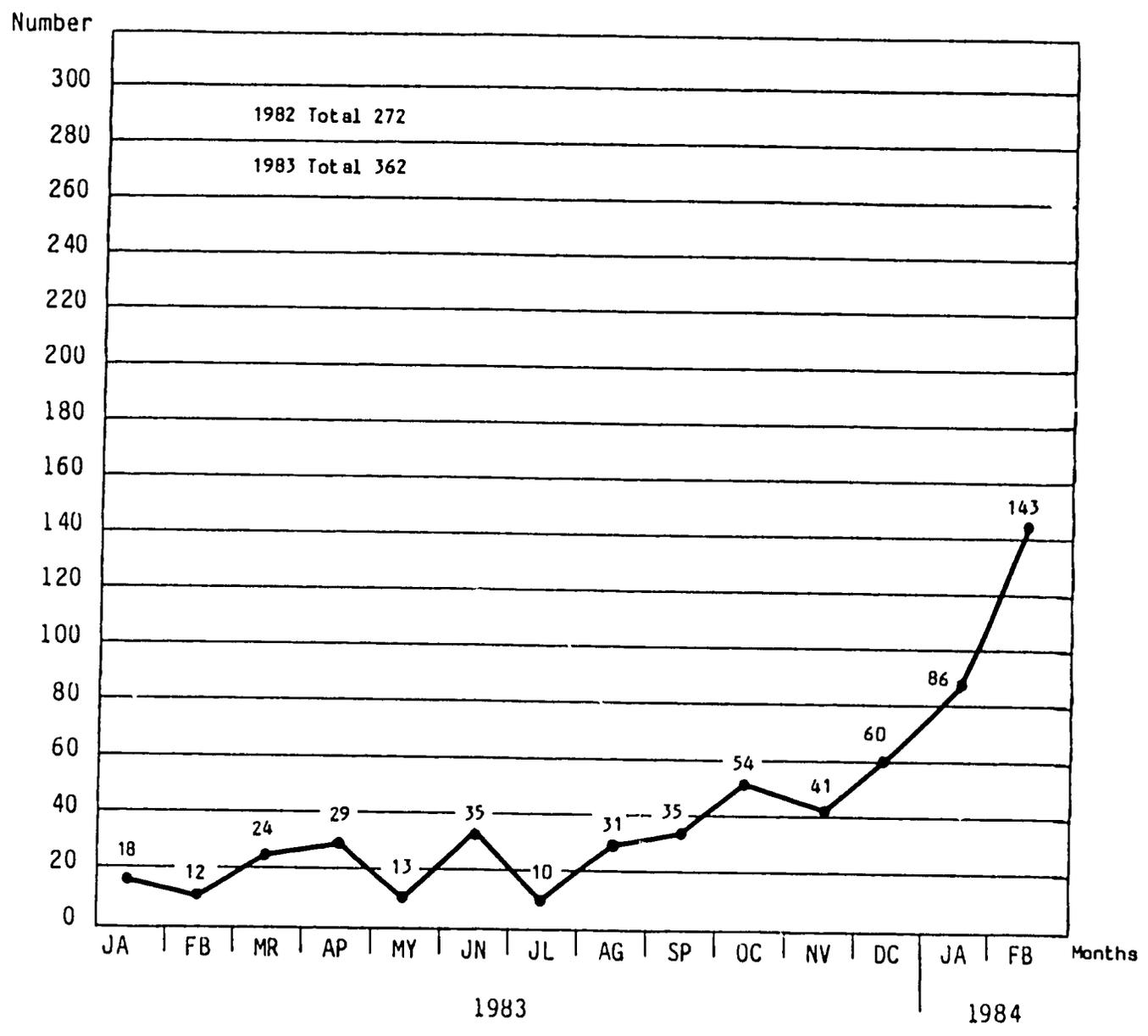
The first two years of the cooperative agreement have been a period of intense review, planning, and implementation of the most far reaching changes in VITA's history. The burgeoning demands for VITA's services and our determination to meet that demand with quality products has necessitated the automation of the system and the redesign of procedures in order to reduce costs. Even with this, the VITA Board of Directors and its management understand the necessity of raising funds and generating income. Action is being implemented to do both.

It is anticipated that VITA will propose a matching grant arrangement in the future. We would hope that volunteer time might be quantified as part of VITA's contribution. We would also propose that a one hundred percent match with AID's contribution might be achieved in the third year of a new agreement with lesser amounts required the first and second year. In any case, it is our judgement as it was the judgement of the AID appointed evaluator, that VITA provides a unique and essential service unavailable to the low income persons in LDCs from any other source. It is important that it continue to be available.

GRAPH OF INCREASES IN REQUESTS FOR INFORMATION FOR TEN YEARS
(1973 to 1983)



NUMBER OF VOLUNTEERS USED FOR INQUIRIES
1983 AND BEGINNING OF 1984



CONCEPTS - VITA/CDC COLLABORATION

1. VITA HAS EXTENSIVE EXPERIENCE IN SERVICING REQUESTS FOR TECHNICAL INFORMATION FROM THE DEVELOPING WORLD AND A NETWORK OF INFORMATION USERS AND SUPPLIERS.
2. VITA HAS INTEREST IN ESTABLISHING A COMMERCIAL TECHNICAL INFORMATION SERVICE
3. CONTROL DATA HAS EXPERIENCE IN NETWORK DATABASE SERVICES AND INTERESTS IN DEVELOPING A COMMERCIAL SERVICE THAT ADDRESSES THE NEED FOR TECHNICAL INFORMATION AND TRANSFER OF TECHNOLOGY.
4. A JOINT VENTURE BETWEEN THE TWO ORGANIZATIONS CAN FURTHER EACH ENTITY'S INTEREST AND JOIN TOGETHER RESOURCES FOR A MORE EFFECTIVE AND SUCCESSFUL SERVICE.
5. A JOINT VENTURE WOULD ALLOW VITA TO SEPARATE THEIR PHILANTHROPIC ASSISTANCE FROM THEIR COMMERCIAL ACTIVITY AND ALSO PROVIDE INCOME TO VITA ITSELF TO FURTHER ITS TRADITIONAL ASSISTANCE.
6. VITA WOULD BRING TO THE JOINT VENTURE ITS RESOURCES AS AN INFORMATION SUPPLIER AND ITS KNOWLEDGE OF THE NEEDS FOR INFORMATION IN THE DEVELOPING WORLD. CONTROL DATA WOULD BRING TO THIS JOINT VENTURE RESOURCES TO PROVIDE COMPUTER DATABASE AND TRAINING TECHNOLOGY AND MARKETING OF COMMERCIAL INFORMATION SERVICES.
7. A JOINT MANAGEMENT COMMITTEE FROM THE TWO ORGANIZATIONS WOULD BE FORMED TO OVERSEE THE JOINT VENTURE.
8. THE JOINT VENTURE WOULD BE A MODEL FOR PVO-CORPORATE COOPERATION.

3/20/84
BFK

A PROPOSAL FOR A TECHNOLOGY RESOURCE SERVICE

Although the National Technical Information Service (NTIS) and Volunteers in Technical Assistance (VITA) are very different institutions, they share the common purpose of disseminating technical information as broadly as possible throughout the world so that it might be used to better the lives of people.

NTIS

A cornerstone of the technological publishing structure in the United States, NTIS, an agency of the U.S. Department of Commerce, is the central source for the public sale of U.S. Government sponsored research, development, and engineering reports, as well as for foreign technical reports and other analyses prepared by national and local government agencies, their contractors or grantees. NTIS is one of the world's leading processors of specialty information. Its information collection exceeds 1.2 million titles, about 300,000 of which originate in some 40 other countries. Each year, 70,000 new reports on completed research are added. In addition, NTIS provides access to data bases processed by other U.S. Government agencies such as the Energy Data Base, the world's largest and most comprehensive data base on energy, created and maintained by the U.S. Department of Energy and the Patent Data Base of the U.S. Patent and Trademark Office. Although it is a government agency, the law establishing NTIS as a clearinghouse for scientific, technical, and engineering information directed NTIS to be self-supporting, i.e., all of its costs are paid from its sales income.

VITA

Volunteers in Technical Assistance is a not-for-profit private voluntary organization established 25 years ago to encourage the dissemination of technical knowledge and the transfer of technology to persons, institutions, organizations, and enterprises in developing countries. VITA's emphasis has been on small-scale, relatively simple technologies that could be commercially exploited by marginally skilled persons or replicated by the unskilled. A network of 4,600 volunteers in more than 100 countries participate in this on-going effort. While VITA's collection of documents is modest compared to that of NTIS, its value belies its size. VITA has used its collection as a practical tool for development. Additions and deletions are made constantly and the value of the technology as well as the technical document is evaluated in the field. Over a quarter of a century VITA has developed considerable expertise in the management of technical information of practical use in development. In addition, it

has developed a vast network of active collaborators throughout the world with which it exchanges information. In recent years this network has been expanded to include information centers whose personnel have been trained by VITA in the management of information.

The Problem: Constraints on the Dissemination of Technical Information

There are several constraints on the dissemination of technical information in developing countries. Obviously, foreign exchange problems as well as the lack of money of any kind inhibit access to technical information. However, experience indicates the problem is not primarily financial, but a combination of the following:

1. A lack of demand for information. Potential users of technical information must first know they need the information if they are to have an incentive to seek it. The management weakness of industry and others in developing countries to diagnose problems and identify technical needs discourages the demand for information since they don't know what to look for.
2. The lack of systems for acquiring, evaluating, storing, retrieving, and disseminating information.
3. The lack of effective extension or outreach services that aggressively disseminate information, provide technical assistance and training, and indicate sources of capital. Too often, governments and institutions are interested only in building up their own prestigious libraries, with little regard to the actual use of the information.

The Response

NTIS and VITA propose to create a cooperative Technology Resource Service through a contract between the two agencies. The service will be more than a data base, it will be a development system able to provide subscribers with needed services and resources or to direct them to the sources where they may be obtained. Like NTIS itself, this service is proposed to be self-sufficient and pay its expenses from subscriber income and sales of publications and services. The services offered would include the following:

- **Training in Information Management.** Both VITA and NTIS operate their own unique training programs. To date, some 45 persons from 25 countries have been trained at VITA to establish and manage a documentation center and information ser-

vice. NTIS has 45 outlets for its publications around the world and has trained people to manage these distribution points. Under the proposed technology resource service, training programs tailored to the specific needs of institutions throughout the world can be given.

- **Provision of Microfiche Collection of Small-scale Technologies.** VITA's collection of over 20,000 documents represents a quarter of a century of collection, evaluation, and field experience of VITA and other organizations throughout the world. Kept at a state-of-the-art level by periodic culling by technical staff and volunteers and exchange agreements with hundreds of sister organizations in almost every country, the collection contains thousands of documents available nowhere else. This entire resource will be transferred to subscribers.
- **Training in the Use and Care of Microfiche Collections and Equipment.** The use of microfiche can dramatically reduce the cost of a collection of publications, as well as the space required to store it. However, some training in the use and care of microfiche is appropriate and will be offered.
- **Training in the Use of a Microcomputer in Information Management.** VITA has developed computerized information handling systems tailored to the unique requirements of a small-scale technology information service. Last October, for the first time, the computer systems were incorporated into VITA's regular information management training program--to the enthusiastic response of all participants. In December, at a meeting of the Organization of American States in Miami, Florida, VITA computer expert Gary Garriott demonstrated the use of a microcomputer with software designed by VITA for use in managing information in a specialized documentation center. Almost all of the 50 Latin American organizations represented expressed interest and requested information on the training program. Clearly the need for and interest in computerized systems have been awakened in developing countries.
- **Provision of Microcomputer Software and Bibliographic Data Base.** The microfiche referred to above include the non-copyrighted publications in VITA's collection. That collection also includes about 15,000 copyrighted publications that are part of the computerized bibliographic data base. This entire collection, with the appropriate computer software to manage it, will also be transferred to the client.

These services could be part of an initial turnkey purchase by the client at a total cost of no more than \$10,000.

Annual Subscription

In order to ensure that each individual system remains state-of-the-art, VITA and NTIS propose an additional, annual subscription service. For payment of \$1,000 to \$1,500, subscribers will receive the following:

- Up to 1,000 new documents each year will be added to the collection to keep it state-of-the-art. Obsolete or dated documents will be culled. A considerable portion of new documents would come from the NTIS collection, depending on subscriber needs and requests, while the balance would come from VITA's other sources in the U.S. and overseas.
- Limited access will be provided to VITA's skills bank of 4,600 technical experts in 100 countries.
- A limited number of specific reports responding to the client's needs will be prepared on request each year.
- A limited number of specified searches of data bases will be provided each year.

Marketing of The Service

The need for the proposed service is apparent, but a demand for it must be generated. This demand should not be confused with the desire noted earlier of governments and institutions to create prestigious repositories of technical information unconnected to and often unrelated to any means of dissemination of the information. The proposed Technology Resource Service will be an active and dynamic one that is aggressively marketed to reach those who can use it most effectively in actually initiating the commercial exploitation of technology.

NTIS markets its publications through several means, including brochures, workshops, and its 45 associated retailers throughout the world. VITA markets its services through its constantly expanding network of collaborating organizations, individuals, enterprises, and institutions in the developing world and through its quarterly newsletter, VITA News.

A joint marketing effort will be planned and implemented by the parties in order to generate the demand for the service, which will make it self-sufficient and increasingly capable of responding to the real needs of people and enterprises in the developing world.

Outreach

The establishment of repositories for technical information cannot be considered an end in itself even if the management of the center is excellent. Outreach to potential users is essential. Even here, however, the delivery of information does not constitute technology transfer, but is only one step in the process. Until the technology is understood and used, it cannot be said to have been transferred. The "know-how" is an essential element in assuring the exploitation of a technology.

It is the long experience with the combination of information management, training, and technical assistance in every step of this process that makes this service so valuable and unique. VITA has always been able to call on its 4,600 volunteer development specialists in 100 countries for the "hands on" outreach service that provides the indispensable component of "know-how." Funded by a variety of means, including subscriptions to this service, the technical assistance described above will continue as an important element of support.

In addition, VITA is mounting a major enterprise development effort in which the identification of sources of capital, both private and public, will be an important element. A data base on this will be developed and will become an integral part of this service.

The outreach service will be available to the subscriber on a fee for service basis, but VITA will make every effort to raise money to enable it to provide the service where the subscriber is unable to pay.

Benefits of the Service

Priority areas of all the parties engaged in this agreement and those who will benefit from the services provided will be served.

NTIS

The distribution of NTIS publications in developing countries is very limited. Through this project persons in such countries will learn of the NTIS system and become familiar with its services and publications. The market for those publications will be expanded both through their inclusion in the data base to be transferred to the subscribers as well as increased demand from others who will be made aware of their availability.

VITA

The dissemination of technical information to people and organizations in developing countries has been VITA's primary mission since it was established 25 years ago. In recent years VITA has sought to establish and reinforce the capacity of institutions in developing countries to acquire, evaluate, store, retrieve, and disseminate technical information. Most recently, VITA has placed great emphasis on the commercial exploitation of technical information by small and medium industry in developing countries. This has required extensive field work as well as more sophisticated information in industrial processes, patents, licenses, funding sources, etc., which VITA seeks to make available to potential subscribers.

Subscribers

The needs of requesters of information in developing countries have changed over the years, and VITA seeks to put together the means to satisfy these more sophisticated requirements. In addition, VITA perceives an opportunity to generate the resources to serve those needs from subscribers with the means to pay for the services provided, just as NTIS has done under the law that established it.

The subscribers will receive a vast reservoir of practical, useful information that has been collected in response to a real need defined by developing countries themselves rather than abstractions or data bases appropriate to developed industrial societies.

This information base will not be limited to traditional or even small-scale technologies. On the contrary, technologies from the village to the moon will be available to them. However, in this program a highly selective process guided by their needs will protect them from information overload, which they may have neither the skills nor the resources to control or maintain.

Subscribers will be trained in the management of information and they will become part of a global network in which information is shared by institutions similar to their own as well as a rich mix of other groups in academia, government, industry, and science.

Association of Other Parties

This agreement should not be viewed by either party as exclusive of other organizations and institutions. Both parties would

welcome the association of other private and public institutions or groups who, in the opinion of VITA and NTIS, might contribute to the increased effectiveness of this effort.

**UNITED NATIONS
ECONOMIC COMMISSION FOR AFRICA**



**NATIONS UNIES
COMMISSION ECONOMIQUE POUR L'AFRIQUE**

**AFRICA HALL
ADDIS ABABA**

**CABLE: ECA, ADDIS ABABA
P. O. BOX 3001
TELEPHONE 447000-447200**

DATE 12/19/83

REFERENCE

Mr. Henry R. Norman
Executive Director
VITA
1815 N. Lynn Street
Arlington, Virginia 22209
USA

Dear Mr. Norman,

Pursuant to our discussion of this date, please be assured of the interest of the Pan-African Documentation and Information System in the AMSAT/VITA Low Earth Orbiting Satellite Project.

We are interested in serving on the international governing board to be established in the coming year. We would also be keenly interested in establishing five ground stations in Africa including a regional center in Addis Ababa where our offices are located.

In consideration of the above we would be prepared to join with VITA in the fund raising effort to finance the program.

We both recognize that this expression of interest is not a commitment but a recognition of our mutual desire to work together to realize the benefits we both anticipate will come from this exciting effort.

I look forward to further discussions with you to implement the above.

Very truly yours,

A handwritten signature in black ink, appearing to read 'Julien Quirino-Lanhounmey'.

Julien Quirino-Lanhounmey, Ph.D.

REQUESTS FOR TECHNICAL INFORMATION

Statistical Summary

March 23, 1984

REPORTING PERIOD: April 1, 1983
Thru March 31, 1984

REQUEST CLASSIFICATION

WORLD REGION

<u>Technical Field</u>	<u>Africa</u>	<u>Latin America</u>	<u>Asia/Pacific</u>	<u>3rd World Total</u>	<u>Developed World</u>	<u>World Total</u>
Agriculture	306	113	101	520	11	531
Crafts/Industry	163	76	130	369	12	381
Energy	228	165	232	625	76	701
Water Resources	80	50	59	189	24	213
Sanitation	6	8	2	16	2	18
Food/Nutrition	72	59	54	185	9	194
Housing/Constr.	47	29	57	133	11	144
Health/Medicine	64	11	10	85	3	88
Conserv./Nat. Res.	10	9	5	24	1	25
Educ/Commun.	15	5	9	29	2	31
Gen'l Devel.	34	21	25	80	15	95
Comm. Devel.	76	27	40	143	10	153
Infor. Systems	6	3	7	16	0	16
Other	2	5	1	8	0	8
TOTAL	1,109	581	732	2,422	176	2,598

Source

Government	155	77	60	292	12	304
University	102	65	98	265	23	288
School	117	5	16	138	2	140
PVO	216	103	143	462	28	490
Business	176	113	139	428	18	446
Int'l Org.	19	11	20	50	4	54
Other/Unknown	5	0	4	9	0	9
Individual	319	207	252	778	89	867
TOTAL	1,109	581	732	2,422	176	2,598

*(THIS SUMMARY INCLUDES FIGURES PROJECTED FOR THE LAST WEEK OF MARCH 1984)

Classification*

Inquiry	69	81	97	247	3	250
Request for Documentation	1,030	490	621	2,141	163	2,304
Referral	10	10	14	34	10	44
TOTAL	1,109	581	732	2,422	176	2,598

* Inquiry = requests requiring assistance from VITA Volunteer Experts.
Request for Documentation = information available from library or through staff research
Referral = other sources of information suggested

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TO: Henry
FROM: Phillipa
DATE: March 28, 1984
SUBJECT: CORE Grant Expenditures for 1983-84

The following is a revised listing of the expenditures incurred under the CORE grant for the 1983-84 fiscal year. Please note that the expenditures indicated for the months of January, February, and March are projections, in the absence of the formal statements produced by Porterfield each month.

<u>Month</u>	<u>Amount</u>
April 1983	\$ 88,442.60
May	84,383.40
June	93,456.63
July	84,730.71
August	84,736.56
September	94,499.10
October	138,082.42
November	86,844.17
December	58,384.71
January 1984	40,794.03
February	50,640.22
March	55,640.16
	<hr/>
Sub-Total	\$960,634.71
Less: Income Earned	50,431.51
	<hr/>
NET EXPENDITURES	<u>\$910,203.20</u>

The following should be kept in mind when examining these figures: The figures above have been adjusted retroactively rather than just at year-end to show the true cumulative effects of audit adjustments made to date. Expenditures decreased after November as a result of reductions in staff to facilitate our more efficient operations. It should be reiterated that the expenditures indicated for the months of January, February and March are projections, and actual expenditures may deviate from those above, but the deviations should not be of significant consequence.

The income earned is derived from training programs, name referrals, inquiry service income, and other contract/grant income.

BUDGET PROJECTIONS FOR 1984

	Info. Systems	Doc. Center	Inquiry Service	Volunteer Resources	Total
Salaries	138,374	104,859	95,284	58,861	397,378
Benefits	45,726	35,451	38,316	19,307	138,800
Occupancy	20,802	17,586	19,868	8,670	66,926
Technical Consultants	9,738	16,696	1,115	6,947	34,496
Consultant Travel	2,495	636	---	---	3,131
Computer Services	-0-	30,778	---	---	30,778
Office Supplies	499	2,048	5,697	1,055	9,299
Copier Expenses	103	14	---	---	117
Postage	-0-	300	---	---	300
Temporaries/Consultants	-0-	3,451	---	---	3,451
Books, Dues & Subscpts.	-0-	3,864	---	---	3,864
Staff Travel	2,543	2,324	2	103	4,972
Volunteer Travel	-0-	-0-	---	---	-0-
Microfilming/Printing	-0-	1,925	---	---	1,925
Tuition/Training	50	-0-	---	---	50
Misc. Expenses	66	2,574	7,385	159	10,184
Furn., Fix., & Equip.	1,220	3,184	35	220	4,659
Awards & Grants	<u>5,000</u>	<u>-0-</u>	<u>---</u>	<u>---</u>	<u>5,000</u>
Sub Total	226,616	225,690	167,702	95,322	715,330
G & A Allocation	<u>77,050</u>	<u>76,735</u>	<u>57,019</u>	<u>34,050</u>	<u>244,854</u>
TOTAL	<u><u>303,666</u></u>	<u><u>302,425</u></u>	<u><u>224,721</u></u>	<u><u>129,372</u></u>	<u><u>960,184</u></u>