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**GRANT REQUEST FOR
TRAVEL AND PER DIEM FUNDING FOR USTTI TRAINING PROGRAM**

Submitted to: Administrator
U.S. Agency for International Development

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**GRANT REQUEST FOR
TRAVEL AND PER DIEM SCHOLARSHIPS FOR TRAINING**

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EXECUTIVE SUMMARY

Since April 1983, the United States Telecommunications Training Institute (USTTI), a 501(c)(3) non-profit corporation and private sector dominated joint venture with the U.S. government, has offered a well-rounded curriculum of free telecommunications and broadcast training programs for qualified and deserving men and women from the developing nations of the world. The goal of this industry-government joint venture is to share the United States' telecommunications and broadcast advances on a global basis by providing a comprehensive array of free technical and managerial courses in telecommunications and broadcasting. Since its inception in 1982, USTTI has provided 248 discrete training courses and has graduated more than 2,000 men and women who manage the broadcast facilities and telephone systems in 114 developing nations of the world; at least another 50 diverse training courses will be offered by USTTI's corporate sponsors and U.S. government sponsoring agencies in 1991. All of these courses are offered tuition-free by the corporate and federal sponsors under the auspices of the USTTI.

Two important developments have occurred since USTTI's last grant request to AID: (1) The inauguration of USTTI's first training venture for Eastern Europe. Following an official visit by USTTI Chairman Michael Gardner to Poland and Hungary, the USTTI Board of Directors for the first time made the USTTI's 1990 curriculum available to qualified professionals from Eastern Europe. In addition, special training courses are being offered specifically for Polish and Hungarian telecom and broadcast professionals. (2) In November of 1989, USTTI offered its first training via satellite program to Latin America. Using the U.S. Information Agency's WORLDNET system, USTTI was able to transmit live training to 16 Latin American countries, including interactive instruction to Mexico and Venezuela.

It has historically been the case that travel and per diem funds necessary for the neediest qualified Third World managers and technocrats to attend USTTI's tuition-free training are sorely lacking. In 1989, 76% of all applicants indicated they were unable to obtain funding through their own organizations. The need for travel and subsistence support is especially critical in certain regions of the world. For example, of the 64 African participants in 1989, only two were fully funded by their organizations.

As it completes its eight training year, the USTTI is appropriately viewed

as one of the most successful examples of the Bush Administration's call for more private sector involvement. However, as the USTTI enlarges its volunteer corporate outreach to the developing world, it urgently needs stable financial involvement from the U.S. Agency for International Development to continue its success. Each year USTTI has witnessed an increased need for training, as evidenced by the growing number of applications. This year alone USTTI has received in excess of 3,400 qualified applications for its 610 training slots -- almost a 20% increase over the prior year. When viewed in the context of its three compatible goals -- humanitarian, political, and commercial -- in order for the USTTI to reach with parity and equality into all corners of the developing world in 1991, AID funding must be committed so that the USTTI can respond to the increased volume of USTTI applicants and join the private sector in increasing its support. The USTTI is a program that continues to respond to the Administration's and Congress' urging that the U.S. private sector do more for itself and for the United States' interest in the global community.

Each year U.S. industry support has grown, and, in 1990, with the addition of six new corporate sponsors, USTTI increased the number of training slots available by 26%. By contrast, funding on the part of AID has remained stagnant at the level of \$300,000 for the past five years; this amount is less than 28% of what was necessary to ensure full participation in every USTTI training course in 1989.

This proposal by USTTI to the U.S. Agency for International Development seeks funding for travel and maintenance support in the amount of \$2,000,000 for approximately 444 individuals in Fiscal Years 1991 and 1992. The participants to be supported with the AID funds would be from those countries eligible for AID assistance, including the newly emerging democracies of Central Europe. The amount requested is based on an expected average cost of \$4,500 per participant for travel and per diem funding. AID funding assistance at the level requested is critical if the interest of the United States government and private sector is to be maximized as the USTTI moves aggressively into the second half-decade of its outreach throughout the developing world as well as Central Europe; moreover, the requested level of AID assistance remains relatively modest when compared to the private sector's cash and in-kind support for the USTTI which totalled \$2 million in 1989 and is estimated to total \$2.5 million at the end of 1990.

Based on the increasing demand for USTTI training throughout the developing world, the USTTI Board of Directors voted to increase their financial

support of the USTTI by 30% in 1991 so that the USTTI staff could be augmented. The private sector also agreed to provide substantial increases in in-kind support so that additional training slots would be available in 1991. The only remaining element needed for the USTTI's continued success is the government's support of those vital, non-operational costs attendant to the travel and subsistence needs of worthy USTTI participants from the least developed countries of the world. Ironically, the neediest applicants are the ones who most often represent the highest potential return on investment in terms of their ability to improve the quality of life in Third World countries where the communications infrastructure is in such disrepair.

USTTI training provides individuals with the skills necessary to operate, maintain, upgrade and expand their telephone and broadcast facilities, and to meet their domestic telecommunications requirements. Thus when a qualified but financially defunct USTTI applicant is able to utilize the USTTI's free training through AID's travel and subsistence funding, that individual is then able to return home and immediately put his or her new knowledge to work in improving the means of communicating intra-country. These communications infrastructures, when improved, largely through the private sector-provided USTTI training, become the means whereby vital information of all kinds is then more readily transmitted intra country. The quality of life on every level, be it agricultural, medical, commercial, or even political is thus improved. As we have seen so dramatically in Eastern Europe, the dissemination of information is essential to the knowledge which develops options that Third World people must have to improve their own daily lives. USTTI training has been and continues to be vital to achieving the goal of improving the communications infrastructures. But as the private sector responds to that increasing challenge by its substantial increased funding and in-kind support of the USTTI in 1991, AID must also respond with a 1991-92 USTTI grant that reflects the extraordinary success and growth of this program as it enters its ninth year. In the selection of participants funded under the 1991-92 AID grant, USTTI will continue to work with AID officials to ensure that the results of such training are beneficial to ongoing and/or future AID programs and projects.

I. BACKGROUND AND PURPOSE

In January 1985 the Independent Commission for World Wide Telecommunications Development (the Maitland Commission) issued its report entitled, "The Missing Link." In this report, the Commission analyzes the present situation of telecommunications, projects objectives for the next 20 years, and makes a number of concrete recommendations. As a major objective, the Commission states that:

. . . by the early part of the next century virtually the whole of mankind should be brought within easy reach of a telephone and, in due course, the other services telecommunications can provide.

A. USTTI AND TELECOMMUNICATIONS TRAINING

The proper planning for the operation and maintenance of existing networks and for integrating new services and equipment and making the best use of available technology requires new skills for which many, if not all, developing countries have little preparation. The telephone and broadcast facilities in developing countries are often meagerly staffed, with little opportunity for employees to be trained in new technologies. Moreover, many developing world nations are often struggling to maintain outdated systems without any training in the basic skills routinely available in the developed world.

The USTTI's training of telecommunications and broadcast managers, technocrats, and policy makers, and the resulting development of telecommunications services in the Third World can enhance the economic value of the infrastructure investment to overall economic development. Telecommunications and broadcasting might be called the "nervous system" of modern societies: multipurpose in use and pervasive in effect. An effective telecommunications system provides significant social and economic benefits critical to raising the quality of life by: 1) making possible the extension of access to health, education, agriculture, security, government administration and other services that can collectively promote economic growth and social well being; 2) improving business productivity; and 3) augmenting opportunities for investment in new domestic and international economic activities.

The U.S. Telecommunications Training Institute (USTTI), a unique joint venture of major American telecommunications and broadcast corporations and the U.S. Government, offers free training designed to lessen the current communications and technology imbalance and increase the ability of Third World manpower to manage telecommunications systems in their countries. The goal of

this joint venture is to share the United States' telecommunications advances and technology on a global basis by providing a comprehensive array of tuition-free telecommunications and broadcast training courses each year for qualified men and women from the developing world. USTTI is a non-profit 501(c)(3) organization administered by a Board of Directors representing both industry and government. By offering tuition-free training programs at both the management and advanced technical levels, USTTI seeks to contribute to the strengthening of planning and operations of telecommunications infrastructures of developing nations and in turn facilitate domestic improvements ranging from health delivery systems and coordinated agricultural programs, to enhanced marketing and distribution of goods and services.

At the end of its eighth year of training in November, 1990, USTTI trained more than 2,000 men and women who today manage the phone systems and broadcast facilities in 114 developing countries of the world, including representatives from 34 nations in Africa, 36 Latin American and Caribbean countries, 25 nations of Asia and the Pacific, 16 Middle and Near East countries, and three Eastern European countries.

Serving as Chairman of the Board is the USTTI founder, Michael R. Gardner, former U.S. Ambassador to the 1982 International Telecommunication Union Plenipotentiary Conference held in Nairobi, Kenya. Ambassador Gardner announced the formation of the USTTI at the Nairobi Plenipotentiary Conference as a major contribution of both the U.S. Government and private sector to the training needs of the Third World. All USTTI Board members join Ambassador Gardner as volunteers, donating the time and resources of their companies and government agencies to the training provided by the USTTI.

The USTTI Board of Directors from the U.S. corporate world includes: Seth D. Blumenfeld, President, MCI International; Bruce L. Crockett, President, World Systems Division, COMSAT Corporation; John Davenport, Chief Executive, Cable & Wireless North America, Inc.; Jonathan F. Gunter, Executive Director, International Business Development, Southwestern Bell Corporation; John A. Hinds, President, AT&T International; Desmond F. Hudson, President, Northern Telecom World Trade; Ron Parsons, Group Director, Utilities & Telecommunications Marketing, Digital Equipment Corporation; David J. Markey, Vice President, Federal Regulatory Affairs, BellSouth Corporation; Travis Marshall, Vice President & Director of Government Relations, Motorola; Harrison Schmitt, former U.S. Senator, New Mexico; Ronald Stowe, Vice President/Washington, Operations, Pacific Telesis; H. Laird Walker, Vice President of Federal Relations, US WEST;

Lawrence L. Wills, Director of Standards, IBM Corporation; and Bernard Wunder, Attorney, Wunder & Diefenderfer. Other USTTI Board Directors include the Federal members: Ambassador Bradley P. Holmes, U.S. Coordinator & Director, Bureau of International Communications & Information Policy, State Department; Alfred C. Sikes, Chairman, Federal Communications Commission (FCC); Janice Obuchowski, Assistant Secretary of Commerce for Communications and Information, NTIA; and Bruce S. Gelb, Director of the U.S. Information Agency. In 1984 and 1986, the USTTI Federal Board members were instrumental in enacting legislation which encourages government and industry to support the activities of the USTTI. The particular legislation was contained in (1) the Cable Communications Policy Act of 1984 (Sec. 7); and (2) the Omnibus Diplomatic Security and Antiterrorism Act of 1986 (Sec. 1307).

The proven success of USTTI during its first eight years has attracted increasing international and domestic attention. In addition to the numerous references to USTTI and the value of its training to Third World nations in development communications journals and papers, USTTI has experienced growing visibility in the telecommunications trade papers and magazines (e.g., Satellite Week, Broadcasting, Telephony). Articles in The New York Times, The Washington Post and the Hearst newspapers have also featured USTTI and the unusual nature of this joint venture between the Federal government and private sector.

USTTI has sponsored and will continue to sponsor several special training programs, which allow USTTI to take training overseas, to benefit not only the programs' participants, but also to promote important U.S interests throughout the developing world.

For the first time, in July 1986, USTTI presented a regional training effort for the Caribbean. Five USTTI corporate sponsors took their training to the Caribbean in order to focus on specific regional needs and give access to those managers and engineers who might not otherwise have had the opportunity to take advantage of this first rate training. Fifty-two telecom and broadcast managers, engineers and technicians from 16 Caribbean island nations graduated from the training. This special effort in the Caribbean was designed to bring intense telecommunications and broadcast training to the nations of this region in order to enhance their telecommunications infrastructures.

In a special joint program with COMSAT, INTELSAT, USAID, NTIA and USIA, USTTI coordinated a training course in radio propagation measurements using radiometric methods for two scientists each from Cameroon, Kenya and Nigeria

beginning in 1986 and continuing through 1989. This training was offered in direct response to several ITU Resolutions and Recommendations that the International Radio Consultative Committee (CCIR) study radio wave propagation in equatorial Africa.

In response to several requests from the Indian Department of Telecommunications, USTTI provided five training courses at the Advanced Level Telecommunications Training Center in Ghaziabad, India from January through April of 1989. Five USTTI corporate sponsors -- AT&T, COMSAT, Motorola, Racal-Milgo and DSC Communications -- sent their trainers to India to hold courses on topics ranging from satellite communications to data transmission. The program was made possible by a grant to USTTI from the U.S. Department of State's Trade and Development Program.

In November of 1989, USTTI telecast a five day training program for telecommunications engineers and managers in Latin America over the U.S. Information Agency's WORLDNET system. This new training venture for USTTI was made possible by a grant from the U.S. Department of State and was a cooperative effort among government and industry sponsors. Training was conducted in Spanish and was viewed live at U.S. Information Service (USIS) Posts throughout Central and South America. In addition, WORLDNET provided an interactive satellite transmission between Washington, Mexico, and Venezuela.

The purpose of the training was to share with countries in Latin America the advances in digital technology that are revolutionizing the communications world. Two USTTI corporate sponsors, AT&T and COMSAT Corporation, provided experts to lecture on Integrated Services Digital Network (ISDN) and Common Channel Signaling System No. 7.

Following a trip in February 1989 to Poland and Hungary by USTTI Chairman Michael R. Gardner, the USTTI announced a special training program for Polish and Hungarian telecom and broadcast managers. Nine USTTI corporate Board sponsors will provide three series of courses in telecommunications specifically for Poland; in addition, several broadcast entities will offer courses that will focus on the creative side of broadcasting. It is expected that this Polish and Hungarian training will serve as a prototype for additional courses to be offered to Poland, Hungary and other Eastern European countries in 1991.

Other special training initiatives, in addition to the USTTI core curriculum provided at U.S. corporate locations, are planned for 1991; these

include: a policy roundtable, a follow-up WORLDNET telecast, special Eastern European training, and a special Chinese program when permitted by law.

B. BENEFITS OF TELECOMMUNICATIONS AND BROADCAST TRAINING

The growing recognition worldwide of the USTTI and the significance and potential of telecommunications and broadcasting in the economic and social development process, as well as in the effective and efficient execution of government services, supports the appropriateness of AID assistance for this venture. Telecommunications training should be an integral part of AID's planning process in order to multiply the social and economic benefits derived from such development assistance. With better understanding of technology options, computer systems management, and planning at the senior level (all of which are offered in USTTI's curriculum), telecommunications managers will be able to plan for short-term improvements and long-term rational systems. This in turn will benefit not only the economic development process, but provide in-country communications support to AID programs in nations currently receiving economic assistance from the U.S as well.

The blend of international experience and expertise also provides opportunities for establishing professional networks of developing country engineers and managers, as well as valuable contacts with technical specialists from the U.S. private sector who may continue to be a resource to these individuals once they return to their home countries.

C. AID EVALUATIONS OF USTTI

In 1987 and 1988, USTTI was the subject of two intensive AID evaluations, one internal and one external. The purpose of these evaluations was to determine: the strength of USTTI as an institution; where within AID the program/project responsibilities for USTTI should be centered; the impact of USTTI in the developing world; and the international political and trade ramifications stemming from USTTI training. The evaluations also considered the possibilities of using the USTTI model for other industries, such as energy, agriculture, medicine, etc.

AID's first evaluation was conducted by three AID officials: John Daly - AID/SCI, Joe J. Sconce - TDP, and Birge Watkins - AID/S&T/IT. This evaluation team issued two reports, an Interim Report, dated March 13, 1987, and a Draft Final Report, dated June 15, 1987. In the Draft Final Report, the team concluded

"[t]he judgement [sic] of the performance of the U.S. Telecommunications Training Institute is very positive" and recommended "a five year grant be made to the U. S. T. T. I. by A.I.D. The grant would allow expansion of the current funding for participants by approximately 50 percent. The grant would be administered by the S&T Bureau of A.I.D., preferably by the Office of Education with the cooperation of the Office of International Training."

The Institute for International Research, Inc. (IIR) was awarded the contract to do the second evaluation of USTTI in 1987 and hired two consultants, William A. Delphos and Donald Foster to conduct the evaluation. In their November 20, 1987, report to IIR, "Analysis of USAID Support for the U.S. Telecommunications Training Institute," Delphos and Foster concluded "USTTI is a viable institution providing services consistent with USG and private sector goals and objectives, including the establishment of important links with developing nation's leaders and professionals both in their country and at international fora." They recommended that "[i]nternal USAID deliberations should result in elimination of USTTI's ad hoc funding transaction from PPC and placing responsibility for support in programs/projects where development project goals are facilitated by telecommunications training." USTTI has never received a copy of IIR's final report to AID.

At the request of the second evaluation team, USTTI convened a special meeting at its offices on December 15, 1987, to provide the opportunity for those officials at AID who had initiated the evaluations to meet with USTTI Chairman, Michael R. Gardner, USTTI staff and USTTI corporate and government sponsors.

In conclusion, both AID evaluations unequivocally praised the USTTI, recognized the success and importance of USTTI, and endorsed a multi-year commitment (three to five years) by AID to USTTI rather than the current ad hoc funding arrangement.

II. PROPOSAL

The need for effective management and technical training for upper and mid-level telecommunications and broadcast professionals in developing countries is clear. The benefits to U.S. interests in the Third World are also easily identified. Experience shows that it is more likely for a country to obtain financing for the technology than to obtain financing for the development of human resources to plan, manage, operate and maintain such technology. Tuition for USTTI training programs is provided free-of-charge by the sponsoring corporations and federal agencies, but the cost of international travel and subsistence while in the U.S. for this free USTTI training is the responsibility of the participants' nominating ministry or organization. Some participants are able to obtain tickets for travel on their own national carriers, but are unable to bring funds for subsistence during their stay in the United States. This legitimate financial difficulty was demonstrated in 1989 by the fact that 76% of USTTI applicants' organizations were unable to provide funding to support their trainees' travel and living expenses.

Due to the worsening international financial crisis faced by most of the lesser developed countries, it has become virtually impossible for the vast majority of the world's developing nations to secure the necessary hard currency for travel and living costs to enable their personnel to participate in the tuition-free USTTI training courses. In addition, as events have taken place in Eastern Europe and in countries that are struggling to define their democracies, the USTTI Board of Directors decided that opening up USTTI's free training to the telecom and broadcast engineers and managers of the Central European nations could only benefit their effort. USTTI expects to train 60-70 professionals from Eastern Europe by the end of 1990, and will continue to offer training to Eastern Europe in 1991 and beyond.

A. AID/USTTI HISTORY

To assist participants and administrations unable to secure the foreign currency necessary for participation in USTTI training, AID made available to USTTI a Fiscal Year 1984 grant in the amount of \$200,000. These funds were administered on USTTI's behalf by AED, and were used to bring 49 participants from 21 countries to USTTI courses.

The 1985 course year, with the great demand for training evidenced by the

800-plus applications received for the 373 course slots, unfortunately saw only 86% of the training slots filled -- due in large measure to the shortfall of funds for travel and subsistence during the first half of the USTTI training year. In July of 1985, midway through the 1985 USTTI training year, AID awarded USTTI a second grant of \$500,000 to help pay for travel and subsistence costs for participants from the poorest countries of the world. Through the use of this grant, USTTI was able to provide scholarship assistance during the second half of the 1985 training year to 68 individuals from 32 Third World nations. If AID funding had been assured earlier in 1985, another 40 to 50 qualified applicants could have attended USTTI training.

The urgent demand for USTTI telecommunications training continued unabated in 1986 -- USTTI received 1,600 applications from 780 individuals for the 493 training slots available. USTTI used approximately one-half (\$243,000) of the FY85 AID grant of \$500,000 in the 1985 training year; therefore, the remaining funds (\$257,000) in the FY85 grant, plus a \$300,000 ad hoc extension granted to USTTI in August 1986, enabled USTTI to use these AID designated funds to assist 132 participants from 36 countries during the 1986 training year. In summary, the remaining funds from FY85 and the \$300,000 extension awarded in FY86 were exhausted by the end of the 1986 training year.

Response to the 1987 curriculum with its 36 courses outpaced previous years. USTTI received 1,984 applications from 989 qualified individuals in 87 developing nations; 79% of the applicants indicated that full or partial scholarship help was necessary in order to attend training. Although AID recognized the important work of the USTTI, it only provided \$300,000 in 1987 for travel and subsistence funding for qualified participants from the least developed areas of the world. All of the 1987 designated AID funds were utilized to provide full and/or partial scholarships to 74 participants from 33 developing nations. However, due to the shortfall in AID funding to USTTI, the 1987 courses were only 81% full.

1988 was another benchmark year for USTTI, with 2,300 applications received from 1,136 individuals in 97 countries. While USTTI's curriculum grew in size and diversity, AID's support to USTTI continued at the \$300,000 level in 1988. Fifty-nine men and women from 32 developing nations received either full and/or partial support from AID in 1988; this figure represents 22.4% of the 263 USTTI graduates in 1988.

In 1989, USTTI once again topped its previous year's benchmark by receiving

over 2,700 applications for the 480 training slots available. USTTI ended the year with 320 graduates -- 65, or 20%, of whom were funded either in whole or in part by a \$300,000 grant award from AID. As was the case in previous years, these 65 participants would have been unable to attend USTTI's tuition-free training without this much-needed support from AID.

USTTI was awarded \$300,000 by AID for the fifth consecutive year in 1990 to be used exclusively for travel and subsistence funding for the neediest participants, including professionals from Eastern Europe. By mid-August, with 41% of the 1990 curriculum completed, USTTI had used \$185,995 of the grant to pay for the travel and per diem costs of 46 individuals from 27 developing nations. USTTI's burden has been made heavier with the additional support needed for participants from Eastern Europe; a strong effort has been made to continue to support the telecom and broadcast professionals from the African continent who so desperately need assistance.

In summary, the \$2.2 million awarded to USTTI by AID from FY84 through FY90 has covered the travel and/or per diem costs of 460 individuals from 72 countries throughout the developing world (see Appendix A, "AID/W Proposals: A History"). This amount included the usual 14% to cover directly related administrative costs, per the FY84 through FY90 grants. It should also be noted that USAID missions are increasingly urging USTTI to use its own AID/W funds to provide travel and per diem for candidates, whom the missions believe are crucial to the telecommunications infrastructures in their respective countries.

B. 1991 REQUEST FOR AID FUNDING

With 45 courses offered, the 1990 curriculum is the largest to date. (See Appendix B, "1990 USTTI Course Catalog/Annual Report"). The U.S. telecommunications and broadcast industry has responded to the obvious need for training in the developing world by increasing the number of training slots available in 1990 by 26% -- to 609. In other words, the growing need and requests from the Third World for USTTI training has been met through corporate generosity by the increased number of tuition-free technical and managerial training courses offered. However, the funding level from AID has remained stagnant at \$300,000 per year for the past five years despite repeated requests from USTTI for funding at the \$700,000 level. Based on prior years' experience, USTTI expects to receive and process approximately 3,400 quality applications and graduate at least 400 telecommunications and broadcast professionals from the developing world in 1990.

A training slot is a perishable commodity. While developing countries have demonstrated the need for training, it is also evident that these same nations have difficulty securing the necessary hard currency for their engineers, managers and technicians to attend USTTI training. With a minimum of 400 graduates expected by the end of 1990, USTTI expects to graduate at least 450 individuals in 1991 and 500 in 1992 as the courses offered in those years also expands. It is also USTTI's experience that approximately 75% of the participants will need funding assistance in any one year; therefore, we can expect a shortfall of approximately \$1.6 million for 1991 and 1992 respectively.

USTTI is requesting AID assistance to fund approximately 444 participants from AID-eligible countries who will need assistance in 1991 and 1992. Based on average travel and per diem costs per participant, USTTI expects the cost per participant to be \$4,500 in 1991 and 1992. Therefore, the USTTI's request for \$2,000,000 from AID for the 1991 and 1992 training years would cover the travel and subsistence needs for 444 participants, or 222 each year. A grant at the \$2,000,000 level would assure funding for approximately 35.39% per year of the USTTI participants needing assistance in those years.

USTTI continues to make great strides to diversify its funding sources. In 1983, 1984 and 1985 assistance was obtained from funds granted in trust by USIA to the IPDC (UNESCO), to be used in technical assistance, particularly in providing training opportunities to developing countries. In addition, in recognition of the good work USTTI has done in developing nations, the IPDC awarded USTTI a direct grant in 1989 to cover the travel and per diem expenses for four individuals from Africa and one from Central America. Over the past seven years, scholarships for travel and per diem costs have been secured from such international and regional organizations as the ITU, the Organization of American States (OAS), the U.N. Development Program (UNDP), the Asia Pacific Telecommunity, and the World Bank. In addition, USTTI currently has an aggressive program in place to raise funds for the travel and subsistence needs of qualified USTTI candidates from the lesser development nations. (See Appendix C, "Record of Scholarships and Participants Funded Through AID Grants".)

During USTTI's first eight years, the private sector contributed and donated in-kind services totalling \$15.4 million (see Appendix D, "1983 - 1989 Contributions"). Corporate sponsors' support, in addition to the provision of training and course development, includes: monthly telex credit; a computer system -- both hardware and software as well as service maintenance contracts;

modem equipment; graphics services; public relations support; printing; receptions and direct scholarship aid.

In reviewing this request, it is important to note that all of the USTTI overhead -- program development costs, salaries and benefits for the eight-person staff and indirect institutional costs -- is paid for directly and solely by the private sector. USTTI's 1990 operating budget of \$378,108 is intentionally kept low so that any and all excess corporate donations can be used to pay for the travel and per diem of those participants from poor countries ineligible for AID assistance. For example, from 1986 through 1989, USTTI used such funds to pay for the travel and per diem for 90 individuals from 35 developing countries.

The AID funding requested here would pay for the travel and subsistence expenses to bring individuals from those least developed countries designated as beneficiaries for AID support, including the countries of Eastern Europe. AID's assistance will ensure that all developing nations, particularly the poorest and least developed countries of the world, are able to take advantage of this important effort which uses the U.S. private sector's resources and expertise in a positive, creative fashion, providing a vehicle by which U.S. telecommunications corporations and U.S. government agencies can share their information and knowledge. At the same time, these same corporations and Federal agencies are able to gain a greater understanding of the real needs and challenges faced by developing country telecommunications administrations.

Ultimately, USTTI's goal is to provide individuals with the skills necessary to maintain, operate and expand their telephone and broadcast facilities and to meet their telecommunication infrastructures demands and requirements in order to improve the overall quality of life. USTTI is the finest working example of how the private sector, together with modest government support, can accomplish what most people thought only the Federal government could do. Going on its ninth year, USTTI represents the successful implementation of the President's call for more private sector involvement; however, increased and stable AID support is indispensable for USTTI's continued success.

In summary, this grant request for AID support is as follows:

	<u>FY91</u>	<u>FY92</u>
Number of Travel & Per Diem Scholarships for Training:	222	222
Grant Amount:	\$1,000,000	\$1,000,000
Total Grant Requested:		\$2,000,000

III. PROJECT DESCRIPTION

A. CURRICULUM DEVELOPMENT

USTTI training courses cover multiple subject areas in the field of telecommunications: radio, telephony, broadcasting, satellite, transmission, data communications, and computers. Courses are scheduled to allow participants to attend one or several courses, depending on interests, funding, and time constraints. The USTTI course schedule has grown from 13 courses during its first year of training in 1983 to 45 full-fledged courses in 1990 and an expected 50-course curriculum in 1991. The USTTI Board of Directors endorsed the formation of an Advisory Committee on the Curriculum in 1985, to be comprised of high level members of the various corporations and federal agencies who have offered USTTI training over the past few years. This Advisory Committee is to provide the USTTI staff with assistance and specific recommendations for the curriculum, making sure it is current and comprehensive. USTTI has also opened up its training to Eastern European participants in order to assist them in rebuilding their communications infrastructures.

B. RECRUITMENT

Following the finalization of the curriculum, a detailed course catalog is published outlining all of the courses to be offered, including prerequisites, course objectives, and participant learning objectives.

USTTI distributes more than 10,000 of its catalogs and applications worldwide to telecommunications and broadcast authorities and ministries; ITU regional offices; U.S. Embassies, USAID missions, USIS posts; as well as former USTTI participants, applicants and their supervisors. Past participants and key leaders in both the private and public sectors of telecommunications are informed and asked to help identify key individuals to be recommended for USTTI training. USAID mission personnel have been and continue to be provided with full information on USTTI training programs offered, and are encouraged to identify appropriate candidates who could best benefit from these programs.

C. SELECTION AND SCREENING

As each application is received, it is screened by USTTI staff for basic qualifications including: general experience in an appropriate telecommunications

or broadcast field, education, citizenship and employment in the telecommunications sector of a developing country, support and signature of the applicant's supervisor, and English language ability. It should be noted that USAID missions, USIS posts, and U.S. embassies around the developing world very often identify qualified and worthy applicants for USTTI training.

Those applications which pass the initial screening are then forwarded to the sponsoring corporation or government agency for both a technical review and decision regarding the most appropriate and qualified individuals for each course. As noted in the course summary, Appendix E ("1985 - 1989 Course Year Summaries"), oversubscription, by as much as five or six times the course size, is often the case.

USTTI strives to have a representative balance of participants from Africa, Latin America, Asia and the Pacific, and the Near East. For example, in 1989, the distribution was as follows: 29% - Asia/Pacific; 25% - Africa; 18% - Latin America; 15% - Caribbean; 12% Near East and 1% - other regions. (See Appendix F, "Origin of Participants by Area/Country.")

D. AID LOGISTICS

Prior to the start of each training year, AID sends a worldwide priority cable to all USAID missions throughout the developing world. This cable provides a summary of the USTTI joint private and public sector program, encourages USAID Missions' nominations of candidates for training, and outlines the procedures to be followed when applicants are selected to receive funding from AID/W's grant to USTTI.

Typically, a course sponsor will forward onto USTTI the names of the qualified applicants for acceptance into its training course. Upon receipt of these names, USTTI submits the application forms of those candidates from AID eligible countries to Dr. Clifford Block, Deputy Director of AID's Office of Education, Bureau for Science & Technology for approval. Once Dr. Block's approval is received, USTTI then sends notification of the AID/W funding nomination to the USAID missions in the proposed candidates' countries; the missions then have three weeks in which to indicate their nonconcurrency to USTTI. After these three steps have been completed, USTTI then notifies the prospective USTTI participant that he/she has been awarded travel and/or per diem funding through the U.S. Agency for International Development. It should be pointed out that USTTI makes every effort to have all candidates nominated by

USAID missions approved and accepted by the course sponsor for training; quite often, USTTI utilizes its own AID/W funding to provide the travel and/or per diem needs for these candidates, if the mission is unable to do so.

E. TRAINING

All USTTI training programs begin with a three-day orientation in Washington, DC. This gives the participants an opportunity to overcome the rigors of long distance travel and provides an introduction to U.S. culture as well as to telecommunications in the U.S. The participants, who may represent as many as 20 different countries in one course, have the opportunity to become acquainted with one another in a relaxed setting, and to establish themselves as a group before entering the training environment.

A formal welcome opens the orientation program, generally hosted by the Chairman of the USTTI Board of Directors, Michael R. Gardner. Subsequent sessions cover an overview of the unique balance between the government and private sectors in American telecommunications and broadcasting and a cross-cultural discussion.

USTTI training courses last anywhere from one to four weeks; all courses take place at the training facility of the corporate or federal sponsor. Occasionally, several companies work together in a cooperative joint course focused on a specific technology, offering different modules at each corporate location. USTTI training is not product-specific but generic in nature, and is specifically oriented toward adaptive strategies, helping the telecommunications or broadcast professional make an informed assessment about where his/her own organization is in relation to the new technologies, and the appropriate path for development.

F. EVALUATION

Written and oral evaluations are conducted at the end of each course. An extensive questionnaire asks participants to rate the course and indicate how the information acquired will be used upon return home; the evaluation form also contains open-ended questions allowing participants to give recommendations for improving the training as well as new courses to be included in future curricula.

Following the written evaluation, a USTTI staff member conducts an oral evaluation to try and elicit further feedback regarding the strengths and

weaknesses in the program, particularly drawing upon the group's experience to help identify future areas of curriculum development for USTTI. The training sponsor is intentionally not present during this session in order to provide a more relaxed and candid atmosphere for comments and suggestions.

Evaluations are tabulated and summarized for each course and subsequently shared with the training sponsor as well as any funding agency which might request a follow-up evaluation. Suggestions for future developments or ways that either the orientation or logistical arrangements could be improved are implemented as appropriate. Each AID funded participant is asked to fill out a separate questionnaire which USTTI then sends to the appropriate USAID mission.

One African participant wrote in his evaluation: "these courses are one of the best ways that the U.S. can technologically reach the developing world. Since these are individuals who ultimately will play a vital role in the overall development process of their respective countries, the impact of the training offered cannot be overemphasized."

G. OVERALL RESULTS

Cable traffic from U.S. embassies, USAID missions and USIS posts abroad indicates an increasing interest on the part of U.S. government officials in USTTI's training programs for their own work with developing country telecommunications administrations. U.S. representatives to international telecommunications meetings are encountering colleagues from developing nations who have participated in USTTI courses and exhibit a much greater openness and understanding of the U.S. position. Ambassador Travis Marshall, USTTI Board member and Head of the U.S. Delegation to the 1989 ITU Plenipotentiary Conference in Nice, stated that, with over 25 former USTTI graduates serving on their countries' delegations to the Nice Plenipotentiary, the work of the U.S. Delegation was made easier because these men and women developed a positive attitude toward the U.S. while they were in USTTI classes. Robert Mayher, Chief of Spectrum Engineering and Analysis of the National Telecommunications & Information Administration, Department of Commerce, and a delegate to the National Frequency Management meetings held in Geneva in October 1983, reported that a number of administrations gave high praise for the USTTI "Radio Spectrum Management" course. In particular, the comment was made that, ". . . if the delegates at this Frequency Management Meeting had attended the USTTI course, they would not be taking the time of the meeting with the basic questions they were asking." Another delegate, William M. Moran, reported: "The United States

received credit for the work of USTTI several times during the week-long meeting from many different and unexpected sources. From my brief exposure, I would say that USTTI has been well received and appreciated by the developing countries."

Written statements taken from participant evaluations are further indications of the long-term benefits for the United States: "This experience has dispelled many of my fears about the U.S." and "Now I know that in the future we should look at American companies when we consider major equipment procurement."

IV. EVALUATION

In order to evaluate the effective use of AID funding to provide telecommunications and broadcast professionals from the developing world the opportunity to participate in USTTI training programs, three fundamental issues need to be addressed:

1. The quality of the training and the participant's experience in the United States;
2. The appropriateness or useful application of the training upon return to a participant's own environment; and
3. The effectiveness of USTTI in its mandate to facilitate the transfer and development of telecommunications technology in the developing world.

USTTI suggests that the following measures be used to address these issues:

1. USTTI will continue to provide to AID, on a quarterly basis, a report summarizing financial information on those AID scholarship recipients trained during the previous quarter. Quarterly reports have been sent to USAID for the FY84 through FY89 grants;
2. A special written evaluation is taken for each AID/W sponsored participant and copies of the written evaluations are sent to the respective USAID Missions; and
3. Independent evaluation could be made in follow-up contacts with USTTI participants two to four months after their return home by USAID mission staff or embassy personnel, examining the usefulness of the training received once the individual has returned to his/her organization. The process could provide valuable input for other AID communications development projects.

Appendix A

AID/W Proposals: A History

U.S. TELECOMMUNICATIONS TRAINING INSTITUTE

AID/W PROPOSALS: A HISTORY

1. January 17, 1984 Proposal submitted for:

 \$445,440 (FY84 for 80 individuals) and
 \$725,535 (FY85 for 125 individuals)

Awarded: \$199,980
AID Grant #4340

 Period covered: 9/18/84 to 10/25/85
 Grant depleted
 49 individuals trained (1984 & 1985 training year)
 \$4,082 average cost per participant*

2. March 22, 1985 Proposal submitted for:

 \$200,000 (FY85 for 40-50 individuals) and
 \$600,000 (individuals in training June - Nov. 85)
 \$800,000 Total amount proposed in FY85

Awarded: \$500,000
AID Grant #5119

 Period covered: 7/9/85 to 11/15/85
 Expenditures by 12/85: \$243,712
 68 individuals trained (1985 training year)
 \$3,584 average cost per participant*

AID Grant #5119,
cont.

 Period covered: 4/24/86 to 7/25/86
 (USTTI Courses 86-101 to 86-204)
 Approximate expenditure through 7/25/86: \$256,288
 55 individuals trained (1986 training year)
 \$4,676 average cost per participant*

3. March 14, 1986 Proposal submitted for:

 \$580,000 (FY86 for 116 individuals) and
 \$700,000 (FY87 for 140 individuals)

Awarded: \$300,000
AID Grant #5119
(Amendment 1)

 Period covered: 7/24/86 to 11/15/86
 (USTTI Courses 86-205 to 86-310)
 Expenditures by 12/86: \$286,113
 77 individuals trained (1986 training year)
 \$3,704 average cost per participant*

Awarded: \$200,000
AID Grant #5119
(Amendment 2)

 Period covered: 4/8/87 to 7/29/87
 Expenditures by 7/87: \$206,821
 52 individuals trained (1987 training year)
 \$3,977 average cost per participant*

Awarded: \$100,000
AID Grant #5119
(Amendment 3)

 Period covered: 7/30/87 to 11/13/87
 Expenditures by 11/87: \$104,881
 22 individuals trained (1987 training year)
 \$4,767 average cost per participant*

4. November 11, 1986 Proposal submitted for: \$600,000
(FY87 for 145 individuals)
USTTI underwent two AID evaluations in 1987.
- Awarded: \$200,000
AID Grant #5119
(Amendment 4)
- Period covered: 4/6/88 to 8/16/88
Expenditures by 8/88: \$195,088
39 individuals trained (1988 training year)
\$5,002 average cost per participant*
- Awarded: \$100,000
AID Grant #5119
(Amendment 5)
- Period covered: 8/17/88 to 11/17/88
Expenditures by 11/88: \$90,127
0 individuals trained (1988 training year)
\$4,506 average cost per participant*
5. November 15, 1988 Proposal submitted for: \$700,000
(FY89 for 155 individuals)
- Awarded: \$300,000
AID Grant #5119
(Amendment 6)
- Period covered: 4/20/89 to 11/9/89
Expenditures by 11/89: \$310,000 (estimate)
65 individuals trained (1989 training year)
\$4,769 average cost per participant* (estimate)
6. October 27, 1989 Proposal submitted for: \$700,000
(FY90 for 155 individuals)
- Awarded: \$300,000
AID Grant #5119
(Amendment 7)
7. October 1, 1990 Proposal submitted for: \$2,000,000
(FY91 for 222 individuals)
(FY92 for 222 individuals)

* NOTE: Average costs are for aggregate participants; does not reflect regional composition or length of stay.

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Appendix B
1990 Course Catalog and Annual Report

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Appendix C
Record of Scholarships and Participants

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1989 PARTICIPANTS FUNDED BY AID/W

REGION	COUNTRY	NUMBER OF INDIVIDUALS	PARTICIPANT DISTRIBUTION	LEVEL OF FUNDING	FUNDING DISTRIBUTION
AFRICA					
14 COUNTRIES	CAMEROON	1	1.54%	\$6,771.11	2.21%
	GAMBIA	2	3.07%	10,138.02	3.31%
	GHANA	8	12.32%	38,035.11	12.43%
	GUINEA	4	6.16%	20,789.70	6.79%
	IVORY COAST	2	3.07%	14,793.57	4.84%
	KENYA	2	3.07%	8,621.82	2.82%
	MADAGASCAR	1	1.54%	8,079.77	2.64%
	NIGERIA	1	1.54%	2,690.40	0.88%
	SENEGAL	3	4.62%	12,787.84	4.18%
	SIERRA LEONE	3	4.62%	19,897.42	6.50%
	TANZANIA	3	4.62%	15,746.99	5.15%
	UGANDA	5	7.70%	20,270.45	6.63%
	ZAIRE	2	3.07%	11,281.79	3.69%
	ZIMBABWE	1	1.54%	11,208.55	3.66%
		38	58.48%	201,112.55	65.73%
ASIA/PACIFIC					
6 COUNTRIES	INDIA	1	1.54%	5,291.20	1.73%
	NEPAL	1	1.54%	5,177.24	1.69%
	PHILIPPINES	2	3.07%	8,425.47	2.75%
	SRI LANKA	2	3.07%	8,075.26	2.64%
	THAILAND	2	3.07%	9,093.05	2.97%
	TONGA	1	1.54%	4,149.01	1.36%
		9	13.83%	40,211.22	13.14%
CARIBBEAN					
1 COUNTRY	HAITI	1	1.54%	2,796.42	0.91%
		1	1.54%	2,796.42	0.91%
LATIN AMERICA					
9 COUNTRIES	BOLIVIA	3	4.62%	13,256.17	4.33%
	COSTA RICA	1	1.54%	3,335.00	1.09%
	ECUADOR	2	3.07%	6,313.71	2.06%
	EL SALVADOR	2	3.07%	2,530.80	0.83%
	GUATEMALA	1	1.54%	4,047.34	1.32%
	HONDURAS	1	1.54%	3,235.70	1.06%
	PARAGUAY	1	1.54%	2,996.10	0.98%
	SURINAME	1	1.54%	1,510.50	0.49%
	URUGUAY	1	1.54%	4,993.58	1.63%
		13	20.00%	42,218.90	13.80%
NEAR EAST					
3 COUNTRIES	EGYPT	2	3.07%	8,780.54	2.87%
	MOROCCO	1	1.54%	7,606.05	2.49%
	TUNISIA	1	1.54%	3,235.11	1.06%
		4	6.15%	19,621.70	6.41%
ALL COUNTRIES		65	100.00%	\$305,960.79	100.00%

1988 PARTICIPANTS FUNDED BY AID/W

REGION	COUNTRIES	NUMBER OF INDIVIDUALS	PARTICIPANT DISTRIBUTION	LEVEL OF FUNDING	FUNDING DISTRIBUTION
AFRICA 17 COUNTRIES	BURUNDI	1	1.70%	\$ 6,289.	2.21%
	CENTRAL AFRICAN REP.	1	1.70%	3,942.	1.38%
	EQUATORIAL GUINEA	1	1.70%	4,838.	1.70%
	THE GAMBIA	1	1.70%	5,881.	2.06%
	GHANA	5	8.47%	21,312.	7.47%
	GUINEA	2	3.38%	10,200.	3.58%
	KENYA	1	1.70%	5,383.	1.89%
	LIBERIA	1	1.70%	8,060.	2.83%
	MADAGASCAR	1	1.70%	5,347.	1.87%
	MOZAMBIQUE	1	1.70%	6,921.	2.43%
	NIGERIA	1	1.70%	6,210.	2.18%
	SENEGAL	1	1.70%	7,298.	2.56%
	SIERRA LEONE	3	5.08%	14,925.	5.23%
	TANZANIA	2	3.38%	7,930.	2.78%
	UGANDA	3	5.08%	19,879.	6.97%
	ZAMBIA	5	8.47%	27,239.	9.55%
	ZIMBABWE	2	3.38%	14,846.	5.21%
	32	54.24%	\$176,500.	61.90%	
ASIA/PACIFIC 4 COUNTRIES	PHILIPPINES	1	1.70%	\$ 4,312.	1.51%
	SRI LANKA	4	6.78%	16,096.	5.64%
	THAILAND	2	3.38%	10,137.	3.55%
	TONGA	3	5.08%	13,982.	4.90%
		10	16.94%	\$44,527.	15.60%
CARIBBEAN 5 COUNTRIES	ANTIGUA	1	1.70%	\$ 4,733.	1.66%
	DOMINICAN REPUBLIC	1	1.70%	3,301.	1.16%
	HAITI	1	1.70%	2,406.	0.84%
	JAMAICA	1	1.70%	2,552.	0.89%
	ST. VINCENT	1	1.70%	1,693.	0.59%
	5	8.50%	\$14,685.	5.14%	
LATIN AMERICA 4 COUNTRIES	ECUADOR	1	1.70%	\$ 3,924.	1.38%
	GUATEMALA	1	1.70%	3,084.	1.08%
	HONDURAS	2	3.38%	8,270.	2.90%
	PERU	5	8.46%	20,248.	7.10%
	9	15.24%	\$35,526.	12.46%	
NEAR EAST 2 COUNTRIES	EGYPT	1	1.70%	\$ 3,718.	1.30%
	MOROCCO	2	3.38%	10,259.	3.60%
		3	5.08%	\$13,977.	4.90%
ALL COUNTRIES		59	100.00%	\$285,215.	100.00%

1987 PARTICIPANTS FUNDED BY AID/W

REGION	COUNTRIES	NUMBER OF INDIVIDUALS	PARTICIPANT DISTRIBUTION	LEVEL OF FUNDING	FUNDING DISTRIBUTION
AFRICA 15 COUNTRIES	CAMEROON	1	1.35%	\$ 3,950.	1.27%
	THE GAMBIA	5	6.77%	13,759.	4.41%
	GHANA	6	8.12%	25,788.	8.27%
	GUINEA	3	4.05%	12,292.	3.95%
	KENYA	6	8.12%	27,835.	8.94%
	LESOTHO	1	1.35%	5,469.	1.75%
	MADAGASCAR	1	1.35%	4,999.	1.60%
	MALAWI	3	4.05%	16,870.	5.41%
	MOZAMBIQUE	1	1.35%	4,721.	1.51%
	SENEGAL	3	4.05%	12,895.	4.14%
	SIERRA LEONE	2	2.70%	7,387.	2.40%
	SOMALIA	1	1.35%	3,329.	1.07%
	SUDAN	1	1.35%	4,576.	1.47%
	UGANDA	3	4.05%	17,713.	5.58%
	ZAMBIA	6	8.12%	34,477.	11.06%
		43	58.13%	\$196,060.	62.83%
ASIA/PACIFIC 7 COUNTRIES	COOK ISLANDS	2	2.70%	11,198.	3.60%
	FIJI	1	1.35%	3,499.	1.12%
	INDONESIA	1	1.35%	4,419.	1.42%
	PHILIPPINES	4	5.41%	18,871.	6.06%
	WESTERN SAMOA	1	1.35%	4,473.	1.45%
	THAILAND	1	1.35%	4,227.	1.36%
	TONGA	1	1.35%	2,953.	0.95%
		11	14.86%	\$49,630.	15.96%
CARIBBEAN 3 COUNTRIES	DOMINICA	1	1.35%	2,815.	0.91%
	JAMAICA	1	1.35%	3,197.	1.03%
	ST. VINCENT	1	1.35%	1,716.	0.55%
		3	4.05%	\$7,728.	2.49%
CENTRAL/SOUTH AMERICA 7 COUNTRIES	BELIZE	3	4.05%	7,615.	2.45%
	BOLIVIA	2	2.70%	8,118.	2.61%
	COSTA RICA	2	2.70%	4,232.	1.36%
	ECUADOR	2	2.70%	7,778.	2.50%
	GUATEMALA	1	1.35%	3,874.	1.25%
	HONDURAS	2	2.70%	3,080.	0.99%
	PERU	4	5.41%	18,714.	6.00%
		16	21.61%	\$53,411.	17.16%
NEAR EAST 1 COUNTRY	MORCCCO	1	1.35%	4,870.	1.56%
		1	1.35%	\$4,870.	1.56%
ALL COUNTRIES		74	100.00%	\$311,699.	100.00%

1986 PARTICIPANTS FUNDED BY AID/W

COUNTRIES	NUMBER OF INDIVIDUALS	PARTICIPANT DISTRIBUTION	LEVEL OF FUNDING	FUNDING DISTRIBUTION	
AFRICA 15 COUNTRIES	CAMEROON	2	1.52%	\$8,022	1.48%
	GAMBIA	3	2.27%	16,413	3.03%
	GHANA	9	6.82%	45,698	8.43%
	GUINEA	6	4.55%	29,275	5.40%
	KENYA	11	8.33%	47,995	8.85%
	LIBERIA	4	3.03%	18,389	3.39%
	MADAGASCAR	4	3.03%	22,211	4.09%
	MALAWI	3	2.27%	15,273	2.82%
	RWANDA	2	1.52%	12,483	2.30%
	SIERA LEONE	2	1.52%	13,565	2.50%
	SOMOLIA	1	0.76%	5,625	1.04%
	UGANDA	3	2.27%	17,748	3.27%
	ZAIRE	5	3.79%	18,555	3.42%
	ZAMBIA	11	8.33%	50,383	9.29%
	ZIMBABWE	1	0.76%	3,818	0.70%
		67	50.76%	\$325,452	60.00%
ASIA/PACIFIC 7 COUNTRIES	FIJI	2	1.52%	5,151	0.95%
	INDIA	2	1.52%	9,178	1.69%
	NEPAL	1	0.76%	2,573	0.47%
	PHILIPPINES	11	8.33%	47,934	8.84%
	SRILANKA	3	2.27%	16,716	3.08%
	THAILAND	4	3.03%	16,492	3.04%
	TONGA	7	5.30%	22,256	4.10%
		30	22.73%	\$120,300	22.18%
CARIBBEAN 3 COUNTRIES	ANTIGUA	1	0.76%	2,632	0.49%
	BELIZE	3	2.27%	4,817	0.89%
	DOMINICA	2	1.52%	5,026	0.93%
	DOM REPUBLIC	1	0.76%	2,050	0.38%
	HAITI	2	1.52%	5,041	0.93%
	JAMAICA	4	3.03%	11,842	2.18%
	ST. LUCIA	1	0.76%	1,756	0.32%
	TRINIDAD	1	0.76%	2,258	0.42%
		15	11.36%	\$35,422	6.53%
LATIN AMERICA 4 COUNTRIES	COSTA RICA	3	2.27%	7,285	1.34%
	GUATEMALA	1	0.76%	4,666	0.86%
	HONDURAS	5	3.79%	14,346	2.64%
	PERU	2	1.52%	6,767	1.25%
		11	8.33%	\$33,063	6.10%
MIDDLE EAST COUNTRIES	EGYPT	8	6.06%	24,968	4.60%
	MOROCCO	1	0.76%	3,195	0.59%
		9	6.82%	\$28,164	5.19%
TOTAL 36 COUNTRIES					

1969 PARTICIPANTS FUNDED BY AID/W

	COUNTRIES	NUMBER OF INDIVIDUALS	PARTICIPANT DISTRIBUTION	LEVEL OF FUNDING	FUNDING DISTRIBUTION
AFRICA 13 COUNTRIES	GAMBIA	1	0.85%	3,792	0.87%
	GHANA	4	3.42%	24,122	5.53%
	GUINEA	1	0.85%	4,479	1.03%
	KENYA	5	4.27%	19,146	4.39%
	LIBERIA	3	2.56%	10,599	2.43%
	MADAGASCAR	3	2.56%	13,483	3.09%
	MALAWI	3	2.56%	12,358	2.83%
	NIGERIA	1	0.85%	4,795	1.10%
	SIERA LEONE	5	4.27%	24,755	5.67%
	TANZANIA	4	3.42%	22,830	5.23%
	UGANDA	1	0.85%	5,280	1.21%
	ZAIRE	2	1.71%	10,973	2.52%
	ZAMBIA	5	4.27%	31,090	7.13%
			38	32.48%	\$187,703
ASIA/PACIFIC 9 COUNTRIES	FIJI	2	1.71%	4,585	1.05%
	INDIA	3	2.56%	11,280	2.59%
	INDONESIA	2	1.71%	9,371	2.15%
	MALAYSIA	1	0.85%	3,116	0.71%
	PAKISTAN	1	0.85%	5,896	1.35%
	PHILIPPINES	11	9.40%	53,213	12.20%
	SRILANKA	1	0.85%	3,477	0.80%
	THAILAND	3	2.56%	9,460	2.17%
	TONGA	1	0.85%	3,421	0.78%
		25	21.37%	\$103,828	23.80%
CARIBBEAN 4 COUNTRIES	ANTIGUA	1	0.85%	1,937	0.44%
	DOMINICA	1	0.85%	1,382	0.32%
	DOM REPUBLIC	2	1.71%	3,659	0.84%
	JAMAICA	1	0.85%	1,490	0.34%
		5	4.27%	\$9,468	1.94%
CENTRAL/ SOUTH AMERICA 12 COUNTRIES	BELIZE	8	6.84%	14,129	3.24%
	BOLIVIA	2	1.71%	10,934	2.51%
	BRASIL	3	2.56%	16,755	3.84%
	CHILE	1	0.85%	4,603	1.06%
	COLOMBIA	1	0.85%	171	0.04%
	GUATEMALA	2	1.71%	755	0.17%
	GUYANA	5	4.27%	18,453	3.77%
	HONDURAS	1	0.85%	2,435	0.56%
	PANAMA	1	0.85%	831	0.19%
	PERU	3	2.56%	14,709	3.37%
	SURINAME	1	0.85%	2,281	0.52%
	URUGUAY	1	0.85%	4,217	0.97%
		29	24.79%	\$88,273	20.24%
NEAR EAST 4 COUNTRIES	ALGERIA	3	2.56%	10,450	2.40%
	CYPRUS	3	2.56%	1,585	0.36%
	EGYPT	8	6.84%	18,174	4.17%
	JORDAN	6	5.13%	17,768	4.07%
		20	17.09%	\$47,955	10.99%
TOTAL 42 COUNTRIES		117	100.00%	\$436,227	100.00%

Appendix D
1983-1989 Contributions

U.S. TELECOMMUNICATIONS TRAINING INSTITUTE

1983-1984 CONTRIBUTIONS

I. Cash and In-Kind Contributions

A. U.S. Private Sector

1. Cash Contributions	\$ 375,500
2. In-kind Contributions	
Training*	\$ 1,546,000
Training meetings**	128,000
Telex services	14,400
Fundraising support	35,000
Receptions	1,000
Wye Monograph (Benton Foundation/ COMSAT)	17,000
Policy Seminar (Alascom)	12,500
	\$ 1,753,900

U.S. Private Sector Total

\$ 2,129,400

B. U.S. Government

Training (VOA)*	\$ 48,000
Training (NTIA/FCC)*	211,500
Training (AID)*	47,000
Training meetings**	32,000
Communications Technology Seminar (USIA)	244,000
Graphics services (USIA)	2,000
Catalog printing (NTIA)	2,160
Catalog distribution (State Dept.)	2,000
Staff person (NTIA)	20,000
Staff person (FCC)	20,000
Telex service (FCC)***	10,000

U.S. Government Total

\$ 638,660

TOTAL CASH AND IN-KIND CONTRIBUTIONS

\$ 2,768,060

* Value of USTTI training is based on a standard industry average of \$ 2,000 per person per week for actual training and development costs.

** Value of training meetings is based on travel, lodging and value of training sponsors time while attending USTTI training sponsors meetings.

*** Estimate

II. Scholarship Funding and Contributions (Travel and Per Diem)

A. U.S. Private Sector		
Nord Resources	\$ 11,000	
GTE Corporation	10,000	
<u>U.S. Private Sector Total</u>		\$ 21,000
B. U.S. Government		
Agency for International Development	\$ 56,000	
USIA (International Visitor Program)	10,000*	
<u>U.S. Government Total</u>		\$ 66,000
C. International Organizations		
IPDC/UNESCO	\$ 172,000	
International Telecommunications Union	155,000*	
Asia Pacific Telecommunity	4,000	
Fulbright Scholar Travel Fellowship	3,000	
Chinese Coordination Advisory Association-American Institute in Taiwan	55,000	
World Bank	10,000*	
Organization of American States	5,000*	
Brazil Science Research Council	3,000	
<u>International Total</u>		\$ 407,000
TOTAL SCHOLARSHIP FUNDING		\$ 494,000*
TOTAL CASH AND IN-KIND CONTRIBUTIONS (carried forward)		\$ 2,768,060
1983-1984 GRAND TOTAL		\$ 3,262,060

* Estimate based on \$5,000 per participant

* In addition, USTTI directly funded 22 participants (\$ 71,000) in 1983-1984 for travel and per diem with funds from the U.S. private sector. This \$71,000 is included in the private sector's cash contributions noted on the previous page.

Note: Scholarship figures do not include approximately 1/3 of participants who secure funding through their organization.

U.S. TELECOMMUNICATIONS TRAINING INSTITUTE

1985 CONTRIBUTIONS

I. Cash and In-Kind Contributions

A. U.S. Private Sector

1. Cash Contributions	\$ 251,000
2. In-Kind Contributions	
Training*	\$ 1,030,000
Training meetings	32,000
Telex service	7,200
Reception	750
Computer system	23,000
Catalog design and pre-press work	13,500
	\$ 1,106,450

U.S. Private Sector Total

\$ 1,357,450

B. U.S. Government

Training (NTIA/FCC)*	\$ 140,000
Training (FCC)*	24,000
Training (VOA)*	64,000
Training (AID)*	34,000
Training meetings	8,000
Catalog distribution (AID)	2,000
Catalog distribution (State Dept.)	2,000
Catalog printing (Commerce)	9,500
ITU Conference--travel and per diem (NTIA-Commerce)	2,055

U.S. Government Total

\$ 285,555

TOTAL CASH AND IN-KIND CONTRIBUTIONS

\$ 1,643,005

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- * Value of USTTI training is based on a standard industry average of \$ 2,000 per person per week of actual training and development costs.
 - ** Value of training meetings is based on travel, lodging and value of training sponsors time while attending USTTI training sponsors meetings.

II. Scholarship Funding and Contributions (Travel and Per Diem)

A. U.S. Government		
Agency for International Development (Wash)	\$ 388,000	
USAID Missions	15,000 *	
Cyprus-America Scholarship Fund	5,000 *	
Pakistan Development Scholarship Project	10,000 *	
Partners in International Education & Training	5,000 *	
<u>U.S. Government Total</u>		\$ 423,000
B. International Organizations		
International Telecommunications Union	\$ 50,000 *	
IPDC/UNESCO	26,000 *	
UNDP	10,000 *	
Asia Pacific Telecommunity	7,000	
World Bank	4,000	
Organization of American States	5,000 *	
Institute for International Education	5,000 *	
Partners of the Americas	10,000 *	
World Meteorological Organization	5,000 *	
<u>International Total</u>		\$ 122,000
TOTAL SCHOLARSHIP FUNDING		\$ 545,000 *
TOTAL CASH AND IN-KIND CONTRIBUTIONS (carried forward)		\$ 1,643,005
1985 GRAND TOTAL		\$ 2,188,005

* Estimate based on \$5,000 per participant

* In addition, USTTI directly funded 11 participants (\$ 32,000) in 1985 for travel and per diem with funds from the U.S. private sector. This \$ 32,000 is included in the private sector's cash contributions noted on the previous page.

Note: Scholarship figures do not include approximately 1/3 of participants who secure some funding through their organization.

U.S. TELECOMMUNICATIONS TRAINING INSTITUTE

1986 CONTRIBUTIONS

I. Cash and In-Kind Contributions

A. U.S. Private Sector

1. Cash Contributions	\$ 301,000
2. In-Kind Contributions	
Training*	\$ 1,900,000
Training meetings	44,240
Telex service	7,200
Computer services/equipment	7,000
Catalog design and pre-press work	10,000
	\$1,968,440

U.S. Private Sector Total

\$2,269,440

B. U.S. Government

Training (NTIA)*	\$ 144,000
Training (FCC)*	48,000
Training (VOA)*	80,000
Training (AID)*	30,000
Training meetings	10,960
Catalog distribution (AID)	2,000
Catalog distribution (State Dept.)	2,000
Catalog printing (Commerce)	9,500

U.S. Government Total

\$ 326,460

TOTAL CASH AND IN-KIND CONTRIBUTIONS

\$ 2,595,900

* Value of USTTI training is based on a standard industry average of \$ 2,000 per person per week of actual training and development costs.

** Value of training meetings is based on travel, lodging and value of training sponsors time while attending USTTI training sponsors meetings.

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II. Scholarship Funding and Contributions (Travel and Per Diem)

A. U.S. Private Sector

Nord Rutile \$ 5,777
Digital Equipment Corp. 3,970

U. S. Private Sector Total \$ 9,747

B. U.S. Government

Agency for International Development \$ 554,000
(Wash)
Cyprus-America Scholarship Fund 4,100*
Pakistan Development Scholarship 4,100*
Project
Partners in International Education & 28,700
Training
U.S. Information Agency 8,200*

U.S. Government Total \$ 599,100

C. International Organizations

International Telecommunications \$114,800
Union
Asia Pacific Telecommunity 4,100*
World Bank 34,704
Institute for International Education 4,100*
Partners of the Americas 12,300*

International Total \$ 170,004

TOTAL SCHOLARSHIP FUNDING \$ 769,104**

TOTAL CASH AND IN-KIND CONTRIBUTIONS \$ 2,595,900
(carried forward)

1986 GRAND TOTAL \$ 3,365,004

* Estimate based on \$4,100 per participant.

** In addition, USTTI funded 51 participants (\$145,000) in 1986 for travel and per diem with funds from the U.S. private sector. Approximately 1/2 were full scholarships. This \$145,000 is included in the private sector's cash contributions noted on the previous page.

NOTE: Scholarship figures do not include approximately 1/3 of participants who secure some funding through their organizations.

U.S. TELECOMMUNICATIONS TRAINING INSTITUTE

1987 CONTRIBUTIONS

I. Cash and In-Kind Contributions

A. U.S. Private Sector

1. Cash Contributions	\$227,820	
2. In-Kind Contributions		
Training *	1,719,845	
Meetings **	44,120	
Telex Service	7,200	
Computer Service	7,826	
Catalog/PR design	14,221	
Poster	2,820	
	<u>\$1,799,032</u>	
U.S. Private Sector Total		\$2,023,852

B. U.S. Government

1. In-Kind Contributions		
Training (NTIA) *	122,700	
Training (VOA) *	81,800	
Training (FCC) *	40,900	
Training (USAID) *	30,675	
Meetings **	2,330	
Catalog Distribution (AID)	2,000	
Catalog Distribution (State)	2,000	
1988 Catalog Printing (Commerce)	9,500	
Poster Design (USIA)	1,500	
	<u>\$293,405</u>	
U.S. Government Total		\$293,405

Total Cash and In-Kind Contributions \$2,317,257

* Value of USTTI training is based on an average of \$2,045 per person per week for actual training and development costs.

** Value of board, planning and orientation meetings is based on travel, lodging and value of attendees time.

II. Scholarship Funding and Contributions (Travel and Per Diem)

A. U.S. Private Sector

Xerox	\$15,000
Nord Resources Corp.	8,721
Digital Equipment Corp.	7,030
AT&T	3,760
Norman Wain	3,013
IBM	2,300
GeoStar	1,050
Southwestern Bell	1,000
Citicorp	<u>1,000</u>

U.S. Private Sector Total \$42,874

B. U.S. Government

Agency for International Development (Washington)	\$300,631
Agency for International Development (Missions) *	14,000
Agency for International Development (Office of Foreign Disaster Asst.) *	6,000
Partners in International Education & Training *	10,000
U.S. Information Agency *	8,000
Pakistan Development Scholarship Project *	<u>4,000</u>

U.S. Government Total \$342,631

C. International Organizations

International Telecommunication Union *	\$84,000
World Bank *	78,000
Organization of American States (CITEL)	50,000
Asia Pacific Telecommunity *	4,000
Institute for International Education *	<u>4,000</u>

International Organizations Total \$220,000

Total Scholarship Funding ** \$605,505

**Total Cash and In-Kind Contributions
(carried forward)** 2,317,257

1987 Grand Total \$2,922,762

* Estimate based on \$4,000 per participant.

** In addition, USTTI sponsored scholarships totalling \$5,000. This money is included in the private sector's cash contributions noted on the previous page.

Note: Scholarship figures do not include approximately 1/3 of participants who secured some funding through their organizations.

U.S. TELECOMMUNICATIONS TRAINING INSTITUTE

1988 CONTRIBUTIONS

I. Cash and In-Kind Contributions

A. U.S. Private Sector

1. Cash Contributions	\$250,230	
2. In-Kind Contributions		
Training *	\$1,495,000	
Meetings **	52,200	
Telex Service	7,200	
Computer Service	7,826	
Catalog/PR design	5,000	
Space WARC luncheon	350	
	<u>\$1,567,576</u>	
U.S. Private Sector Total		\$1,817,806

B. U.S. Government

1. In-Kind Contributions		
Training (NTIA) *	\$150,000	
Training (VOA) *	88,000	
Training (FCC) *	48,000	
Training (USAID) *	35,000	
Meetings **	5,010	
Catalog Distribution (AID)	2,000	
Catalog Distribution (State)	2,000	
1988 Catalog Printing (Commerce)	9,500	
Space WARC Travel & Per Diem (Commerce)	2,000	
Participant Handbook Printing (FCC)	591	
	<u>\$342,101</u>	
U.S. Government Total		\$342,101

Total Cash and In-Kind Contributions \$2,159,907

* Value of USTTI training is based on an average of \$2,000 per person per week for actual training and development costs.

** Value of board, planning and orientation meetings is based on travel, lodging and value of attendees time.

II. Scholarship Funding and Contributions (Travel and Per Diem)

A. U.S. Private Sector	
IBM Corporate Grant	\$15,000
IBM *	8,200
Nord Resources Corp.	8,062
Digital Equipment Corp.	6,295
Northern Telecom	4,339
Academy for Educational Development *	4,100
COMSAT *	4,100
GTE Spacenet *	4,100
PBS *	2,050
Southwestern Bell	1,000
Citicorp	<u>1,000</u>
<u>U.S. Private Sector Total</u>	\$58,246
B. U.S. Government	
Agency for International Development (Washington)	\$285,215
Agency for International Development (Missions) *	53,300
U.S. Information Agency *	30,750
Agency for International Development (Office of Foreign Disaster Asst.) *	8,200
U.S. Department of Commerce (NOAA) *	4,100
Hubert Humphrey Fellowship Program	<u>4,100</u>
<u>U.S. Government Total</u>	\$385,665
C. International Organizations	
World Bank *	\$143,500
Organization of American States (CITEL)	50,000
International Telecommunication Union *	32,800
Asia Pacific Telecommunity *	20,500
United Nations Development Program *	<u>4,100</u>
<u>International Organizations Total</u>	\$250,900
Total Scholarship Funding **	\$694,811
Total Cash and In-Kind Contributions (carried forward)	<u>\$2,159,907</u>
1988 Grand Total	<u>\$2,854,718</u>

* Estimate based on \$4,100 per participant.

Note: Scholarship figures do not include approximately 1/3 of participants who secured some funding through their organizations.

U.S. TELECOMMUNICATIONS TRAINING INSTITUTE

1989 CONTRIBUTIONS

I. Cash and In-Kind Contributions

A. U.S. Private Sector

1. Cash Contributions	\$250,000	
2. In-Kind Contributions		
Training *	\$1,618,000	
Meetings **	38,015	
Telex Service	7,200	
Computer Service	7,826	
Catalog/PR design	9,810	
	<u>\$1,686,041</u>	
U.S. Private Sector Total		\$1,930,851

B. U.S. Government

1. In-Kind Contributions

Training (NTIA) *	\$180,000	
Training (VOA) *	96,000	
Training (FCC) *	48,000	
Training (OFDA/USAID) *	20,000	
Meetings **	2,895	
Catalog Distribution (AID)	2,000	
Catalog Distribution (State)	2,000	
1989 Catalog Printing (Commerce)	9,500	
ITU Plenipotentiary Reception (State)	1,200	
Participant Handbook Printing (FCC)	413	
	<u>\$362,008</u>	

U.S. Government Total \$362,008

Total Cash and In-Kind Contributions \$2,292,859

* Value of USTTI training is based on an average of \$2,000 per person per week for actual training and development costs.

** Value of board, planning and orientation meetings is based on travel, lodging and value of attendees time.

II. Scholarship Funding and Contributions (Travel and Per Diem)

A. U.S. Private Sector		
IBM Corporate	\$15,000	
Xerox Foundation	15,000	
IBM Corp. *	12,300	
Nord Resources Corp. *	10,590	
Digital Equipment Corp.	8,200	
Pacific Telesis *	4,100	
Society of Broadcast Engineers *	2,050	
LinkNet International, Inc.	1,000	
SatelLife	<u>1,000</u>	
<u>U.S. Private Sector Total</u>		\$69,240
B. U.S. Government		
U.S. Agency for International Development (Washington)	\$304,718	
U.S. Agency for International Development (Missions) *	51,250	
U.S. Information Agency *	20,500	
Agency for International Development (OFDA)	19,144	
U.S. Department of Commerce (NOAA)	4,676	
U.S. Department of State (TDP/India)	<u>14,724</u>	
<u>U.S. Government Total</u>		\$415,012
C. International Organizations		
World Bank *	\$69,700	
Organization of American States (CITEL)	50,000	
International Telecommunication Union *	57,400	
UNESCO (IPDC)	24,873	
Pan Caribbean Disaster Preparedness and Prevention Project	6,193	
Partners of the Americas *	4,100	
International Civil Aviation Organization *	4,100	
United Nations Development Program *	<u>8,200</u>	
<u>International Organizations Total</u>		\$224,566
Total Scholarship Funding **		\$708,818
Total Cash and In-Kind Contributions (carried forward)		<u>\$2,292,859</u>
1989 Grand Total		<u>\$3,001,737</u>

* Estimate based on \$4,100 per participant.

Note: Scholarship figures do not include approximately 1/3 of participants who secured some funding through their organizations.

Appendix E
1985-1989 Course Year Summaries

U.S. TELECOMMUNICATIONS TRAINING INSTITUTE: SUMMARY — 1983 TO 1989

Year	No. of Courses	No. of Training Slots	No. of Course Applications	No. of Individual Applicants *	No. of Graduates **	No. of Countries Served
1983	13	246	398	-	205	60
1984	15	215	359	-	168	44
1985	27	373	813	404	190	62
1986	36	493	1,600	780	339	72
1987	36	451	1,984	989	266	71
1988	37	467	2,300	1,136	263	78
1989	<u>39</u>	480	2,747	1,318	<u>320</u>	<u>81</u>
Totals:	203				1,751	111 ***

* Most applicants apply to more than one course.

** Graduates counted once per year, regardless of number of courses taken.

*** This figure represents total countries served, 1983-1989.

REGIONAL DISTRIBUTION OF GRADUATES BY YEAR

Region	1983	1984	1985	1986	1987	1988	1989
Asia/Pacific	37 (18%)	48 (29%)	99 (31%)	106 (22%)	93 (25%)	106 (29%)	131 (29%)
Lat.Am./Caribbean (combined)	52 (25%)	57 (34%)	101 (32%)	-	-	-	-
Latin America Caribbean	-	-	-	77 (16%)	71 (19%)	72 (20%)	79 (17%)
Africa	-	-	-	124 (25%)	57 (16%)	52 (14%)	68 (15%)
Near East	83 (41%)	44 (26%)	64 (21%)	127 (26%)	105 (29%)	83 (23%)	117 (26%)
Other	29 (14%)	19 (11%)	51 (16%)	52 (11%)	39 (11%)	46 (13%)	54 (12%)
	4 (2%)	-	-	-	-	3 (1%)	5 (1%)
TOTALS:	205 (100%)	168 (100%)	315 (100%)	486 (100%)	365 (100%)	362 (100%)	454 (100%)

Appendix F
Origin of Participants by Area/Country

U.S. TELECOMMUNICATIONS TRAINING INSTITUTE

ORIGIN OF PARTICIPANTS BY AREA/COUNTRY

1983 - 1989

ASIA/PACIFIC

Bangladesh	(1988,1989)
Bhutan	(1987,1988)
Brunei	(1984,1985,1986,1987,1988,1989)
Burma	(1985)
China	(1983,1984,1985,1986,1987,1988,1989)
Cook Islands	(1987)
Fiji	(1983,1985,1986,1987,1988)
Hong Kong	(1983,1984,1985,1986,1987,1988,1989)
India	(1983,1984,1985,1986,1987,1988,1989)
Indonesia	(1983,1984,1985,1986,1987,1989)
Iraq	(1986)
Korea	(1983,1984,1985,1986,1987,1988,1989)
Malaysia	(1985,1986,1988,1989)
Maldives	(1984,1986,1987)
Micronesia	(1989)
Nepal	(1985,1986,1987,1988,1989)
Pakistan	(1983,1984,1985,1986,1987,1988,1989)
Papua New Guinea	(1988,1989)
Philippines	(1983,1984,1985,1986,1987,1988,1989)
Singapore	(1983,1985,1986,1988,1989)
Sri Lanka	(1985,1986,1988,1989)
Taiwan	(1983,1984,1985,1986,1987,1988,1989)
Thailand	(1983,1984,1985,1986,1987,1988,1989)
Tonga	(1984,1985,1986,1987,1988,1989)
Western Samoa	(1987)

AFRICA

Botswana	(1983)
Burkina Faso	(1989)
Burundi	(1988)
Cameroon	(1983,1984,1985,1986,1987,1989)
Central African Republic	(1988)
Congo	(1983)
Cote d'Ivoire	(1983,1985,1989)
Equatorial Guinea	(1988)
Ethiopia	(1983,1984,1986,1987,1988,1989)
The Gambia	(1983,1984,1986,1987,1988,1989)
Ghana	(1984,1985,1986,1987,1988,1989)
Guinea	(1983,1984,1985,1986,1987,1988,1989)
Guinea-Bissau	(1985)
Kenya	(1983,1984,1985,1986,1987,1988,1989)
Lesotho	(1987)
Liberia	(1983,1984,1985,1986,1987,1988,1989)
Madagascar	(1983,1984,1985,1986,1987,1988,1989)
Malawi	(1983,1985,1986,1987,1989)
Mozambique	(1987,1988,1989)

Nigeria	(1983,1985,1986,1987,1988,1989)
Rwanda	(1983,1984,1986)
Senegal	(1983,1985,1987,1988,1989)
Sierra Leone	(1983,1984,1985,1986,1987,1988,1989)
Somalia	(1986,1987)
Sudan	(1983,1987)
Swaziland	(1983,1988)
Tanzania	(1983,1984,1985,1986,1987,1988,1989)
Togo	(1987,1988)
Uganda	(1985,1986,1987,1988,1989)
Zaire	(1983,1985,1986,1987,1989)
Zambia	(1983,1984,1985,1986,1987,1988,1989)
Zimbabwe	(1983,1986,1988,1989)

LATIN AMERICA/CARIBBEAN

Anguilla	(1986)
Antigua	(1983,1985,1986,1987,1988,1989)
Argentina	(1987,1988,1989)
Aruba	(1983,1984,1986,1987,1988,1989)
Bahamas	(1983,1984,1985,1986,1987,1988,1989)
Barbados	(1984,1985,1986,1987,1988,1989)
Belize	(1983,1984,1985,1986,1987,1989)
Bolivia	(1983,1985,1986,1987,1989)
Brazil	(1983,1984,1985,1986,1987,1988,1989)
British Virgin Islands	(1986,1988)
Chile	(1983,1984,1985,1986,1987,1988,1989)
Colombia	(1985,1988,1989)
Costa Rica	(1984,1985,1986,1987,1988,1989)
Dominica	(1983,1984,1985,1986,1987,1988,1989)
Dominican Republic	(1983,1985,1986,1987,1988,1989)
Ecuador	(1987,1988,1989)
El Salvador	(1983,1986,1987,1988,1989)
Grenada	(1986,1988,1989)
Guatemala	(1983,1984,1985,1986,1987,1988,1989)
Guyana	(1983,1985,1986,1987,1988,1989)
Haiti	(1983,1984,1985,1986,1987,1988,1989)
Honduras	(1983,1984,1985,1986,1987,1988,1989)
Jamaica	(1983,1984,1985,1986,1987,1988,1989)
Mexico	(1983,1987,1988,1989)
Montserrat	(1986)
Netherlands Antilles (Curacao, St. Maarten)	(1985,1986,1988)
Panama	(1984,1986,1987,1988,1989)
Paraguay	(1988,1989)
Peru	(1985,1986,1987,1988,1989)
St. Kitts & Nevis	(1989)
St. Lucia	(1986,1987,1988,1989)
St. Vincent & The Grenadines	(1986,1987,1988,1989)
Suriname	(1984,1985,1986,1987,1988,1989)
Trinidad & Tobago	(1983,1984,1985,1986,1987,1988,1989)
Uruguay	(1985,1988,1989)
Venezuela	(1983,1985,1987,1988,1989)

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NEAR EAST

Algeria	(1985)
Bahrain	(1983,1986,1989)
Cyprus	(1983,1985,1986,1987)
Egypt	(1984,1985,1986,1987,1988,1989)
Israel	(1983,1985,1986,1987,1989)
Jordan	(1983,1984,1985,1986,1987,1988)
Kuwait	(1983,1985,1989)
Lebanon	(1983)
Morocco	(1986,1987,1988,1989)
Oman	(1988,1989)
Qatar	(1983,1984,1985,1988,1989)
Saudi Arabia	(1983,1987,1988,1989)
Tunisia	(1984,1986,1989)
Turkey	(1983,1984,1988)
United Arab Emirates	(1985,1986,1989)
Yemen	(1983)

OTHER

Poland	(1988,1989)
Yugoslavia	(1988)

TOTAL COUNTRIES TO DATE: 111

December 18, 1989