N94-11810

THE REVITALIZATION OF HEALTH AND EDUCATION IN RURAL AMERICA ACT OF 1992

General:

During the preceding decade of the 1980's, rural communities witnessed an exodus of over 5 million residents to urban and suburban areas of the nation. It has become increasingly clear that rural parts of the country must adopt aggressive strategies to strengthen rural communities and enhance the quality of life for its citizens into the 21st century.

Studies by the U.S. Department of Commerce, Office of Technology Assessment, and the Aspen Institute all identify advanced telecommunications systems as the linchpin for a vigorous future for rural America. The Revitalization of Health and Education in Rural America Act of 1992 incorporates these recommendations into viable strategies to improve health care and educational services for rural citizens. By linking up hospitals and schools through advanced telecommunications technology, vast geographic distances are instantly reduced. With the proper infrastructure in place, up-to-date telecommunications services will facilitate endless opportunities for improving the quality of life in remote areas. This comprehensive legislation is the critical first step in forging a partnership with urban communities to create an economically sound and technologically advanced America for generations to come.

Improvement of Health Care and Educational Services in Rural Areas through the Implementation of Interactive Telecommunications Systems.

The bill sets up a program through the Rural Electrification Administration (REA) for providing grants to qualified health and education

consortia to assist them in obtaining access to modern interactive telecommunications systems through the public switched network. A qualified health care consortium is made up of a large health facility linked up with at least three rural hospitals, clinics, community health centers, migrant health centers or local health departments. A qualified education consortium is a consortium of not less than three educational institutions accredited by the State.

In order for a State's potential grantees to participate in the program, the Governor of that State must submit a plan to the Administrator of REA to upgrade and modernize its rural telecommunications infrastructure and improve the use of telecommunications, computer networks, and related advanced technologies within ten years. An interested health or education consortium would then submit a plan to REA to provide more comprehensive health or education services through interactive telecommunications systems in order to receive a grant. The bill sets out de minimis standards for the Governor to meet in order for the State to have eligible grant applicants.

In selecting the grantees, the Administrator of REA must prioritize those grants which have the greatest likelihood of success, participation of the local telecommunications exchange carrier, and support of the local community. The grants are capped at \$1.5 million per consortium and must be used for the purpose of improving health care and education as provided under the bill through a qualified health or education consortium. As an incentive for local telephone exchange carriers to upgrade existing facilities, a telephone borrower can receive a low interest loan through REA if the State in which the borrower does business has a qualified plan submitted by the Governor of that State to REA.

Grants to improve health care in rural areas can be used for consultations between health care providers; transmitting and analyzing x-rays, lab slides and other images; and providing continuing education programs for physicians. Grants to improve education in rural areas can be used for the development of innovative education programs and expanding curriculum offerings; providing continuing education to all members of the community; providing the means for libraries of educational institutions and public libraries to share resources; provide public access to State and national data bases; and conducting town meetings for educational purposes.

The bill authorizes \$30 million to be appropriated for health care consortia and \$20 million to be appropriated for education consortia. The legislation amends the Rural Electrification Act in order to provide Section 305(b) insured 4% loans to telephone companies that participate in the Governor's plan. The Act is further amended to provide for the rural population requirement under the

telephone loan program of REA to be increased from 1,500 to 10,000 in order to enhance participation by those local telephone exchange carriers not currently upgrading in their service areas. There is a "Sense of the Congress" provision stating that those local telephone exchange carriers interested in upgrading their service territory with REA loans, but are reluctant due to the lien requirements. may set up a subsidiary for that exchange in order to borrow from REA.

			_
			_
		,	_
			_
	•		erior.
			_
			_
			_
			_
			_
			_
			_
			-
			_

102D CONGRESS 2D Session

H.R. 5238

IN THE HOUSE OF REPRESENTATIVES

Mr.	ENGLISH	introduced	the	following	bill;	which	was	referred	to	the
		Commi	ttee	on						

A BILL

- To establish a grant program to improve the provision of health care services and educational services in rural areas by enabling providers of such services to obtain access to modern interactive telecommunications systems, and for other purposes.
 - 1 Be it enacted by the Senate and House of Representa-
 - 2 tives of the United States of America in Congress assembled,
 - 3 SECTION 1. SHORT TITLE.
 - 4 This Act may be cited as the "Revitalization of
 - 5 Health and Education in Rural America Act of 1992".

PRECEDING PAGE BLANK NOT FILMED

1	SEC. 2. GRANTS TO ENABLE PROVIDERS OF HEALTH CARE
2	AND EDUCATIONAL SERVICES IN RURAL
3	AREAS TO IMPLEMENT INTERACTIVE TELE-
4	COMMUNICATIONS SYSTEMS.
5	(a) FINDINGS.—The Congress finds that—
6	(1) interactive telecommunications systems hold
7	the potential to alleviate many of the problems rural
8	Americans face in obtaining access to adequate
9	health care and expanded educational services; and
10	(2) access to such systems by providers of
11	health care services and educational institutions in
12	rural areas would greatly increase their ability to
13	provide more comprehensive health care and edu-
14	cation to rural, underserved populations.
15	(b) GRANT PROGRAM.—Subtitle D of title XXIII of
16	the Food, Agriculture, Conservation, and Trade Act of
17	1990 is amended by adding at the end the following:
18	"CHAPTER 3—IMPROVEMENT OF HEALTH CARE
19	SERVICES AND EDUCATIONAL SERVICES
20	THROUGH TELECOMMUNICATIONS
21	"SEC. 2338. GRANT PROGRAM.
22	"(a) ESTABLISHMENT.—The Administrator of the
23	Rural Electrification Administration (in this chapter re-
24	ferred to as the 'Administrator') shall establish a program
25	for providing grants to any qualified consortium to assist
26	the consortium in obtaining access to modern interactive

1	telecommunications systems through the public switched
2	network.
3	"(b) DEFINITIONS.—
4	"(1) QUALIFIED CONSORTIUM.—As used in this
5	chapter, the term 'qualified consortium means a
6	consortium which—
7	"(A) provides health care services or edu-
8	cational services in a rural area of a qualified
9	State; and
10	"(B) is composed of—
11	"(i) a tertiary care facility, rural re-
12	ferral center, or medical teaching institu-
13	tion, or an educational institution accred-
14	ited by the State;
15	"(ii) any number of institutions that
16	provide health care services or educational
17	services; and
18	"(iii)(I) in the case of a consortium
19	seeking a grant under this chapter to im-
20	prove health care services, not less than 3
21	rural hospitals, clinics, community health
22	centers, migrant health centers, local
23	health departments, or similar facilities; or
24	"(II) in the case of a consortium seek-
25	ing a grant under this chapter to improve

1	educational services, not less than 3 edu-
2	cational institutions accredited by the
3	State.
4	"(2) QUALIFIED STATE.—The term 'qualified
5	State' means a State which has adopted, within 1
6	year after the date final regulations are prescribed
7	to carry out this chapter, a plan for the upgrading
8	and modernization of the rural telecommunications
9	infrastructure of the State which, among other
10	things—
l 1	"(A) provides for the elimination of party
12	line service in rural areas of the State;
13	"(B) encourages and improves the use of
14	telecommunications, computer networks, and
15	related advanced technologies to provide edu-
16	cational and medical benefits to people in rural
17	areas of the State;
18	"(C) provides for an enhancement in the
19	quality and availability of educational opportu-
20	nities for students in rural areas of the State;
21	"(D) provides for improvement in the qual-
22	ity of medical care provided, and access to med-
23	ical care afforded, to people in rural areas of
24	the State;

25

	-
1	"(E) provides incentives for local telephone
2	exchange carriers to improve the quality of tele-
3	phone service and access to advanced tele-
4	communications services for subscribers in rural
5	areas of the State, including facsimile document
6	transmission, multifrequency tone signaling
7	services, interactive audio and video trans-
8	missions, voicemail services, and other tele-
9	communications services;
10	"(F) provides for the full participation of
11	rural areas in the modernization of the tele-
12	communications network through the implemen-
13	tation of joint coordinated network planning,
14	design, and cooperative implementation among
15	all local telephone exchange carriers in the pro-
16	vision of public switched network infrastructure
17	and services;
18	"(G) provides for the achievement, preser-
19	vation, and enhancement of universal service by
20	bringing reasonably priced, high-quality, ad-
21	vanced telecommunications network capabilities
22	to the people of the rural areas of the State, in-
23	cluding through the sharing of public switched
24	network infrastructure and functionality by

local telephone exchange carriers at the request

I	of local telephone exchange carriers lacking
2	economies of scale or scope to provide such in-
3	frastructure or functionality on their own;
4	"(H) provides for the achievement of such
5	goals within 10 years after the adoption of the
6	plan; and
7	"(I) does not alter the boundaries of any
8	local telephone exchange company franchised
9	service area designated or recognized by the
10	State, or the equivalent in the State.
11	"(3) RURAL AREA.—The term 'rural area' has
12	the meaning given such term in section 203(b) of
13	the Rural Electrification Act of 1936.
14	"(4) TELEPHONE SERVICE.—The term 'tele-
15	phone service' has the meaning given such term in
16	section 203(a) of the Rural Electrification Act of
17	1936.
18	"(c) SELECTION OF GRANT RECIPIENTS.—
19	"(1) APPLICATION REQUIREMENT.—
20	"(A) IN GENERAL.—Any qualified consor-
21	tium that provides services in a State and de-
22	sires to obtain a grant under this chapter shall
23	submit to a State agency designated by the
24	Governor of the State an application in such
25	form, containing such information and assur-

1	ance, and at such time, as the Administrator
2	may require.
3	"(B) CONTENTS OF APPLICATION.—The
4	application shall contain or be accompanied
5	by—
6	"(i) a copy of the State plan described
7	in subsection (b)(2);
8	"(ii) the plan of the applicant, for ob-
9	taining access to interactive telecommuni-
10	cations systems, which—
11	"(I) specifies, consistent with
12	subsection (f), the uses to be made of
13	such systems;
14	"(Π) demonstrates that the sys-
15	tems will be capable of being readily
16	connected to the established public
17	switched network; and
18	"(III) is compatible with the
19	State plan; and
20	"(iii) a commitment by the State to
21	make a grant to the applicant in an
22	amount equal to 20 percent of the funds
23	required to carry out the plan of the appli-
24	cant, conditional upon a commitment by
25	the Administrator to make 1 or more

1	grants to the applicant under this chapter
2	in an amount equal to 80 percent of the
3	funds required to carry out the plan of the
4	applicant.
5	"(2) REVIEW AND COMMENT.—The State agen-
6	cy shall review the application and the applicant's
7	plan and, after any revisions made by the applicant
8	are incorporated, transmit to the Administrator the
9	application and plans, and the comments of the
10	State agency.
11	"(3) SELECTION OF GRANTEES.—The Adminis-
12	trator shall—
13	"(A) review the applications and plans
14	transmitted pursuant to paragraph (2);
15	"(B) consider the comments of the State
16	agency with respect to the application; and
17	"(C) make grants in accordance with para-
18	graph (4) to each applicant therefor that com-
19	plies with the requirements of this chapter and
20	the regulations prescribed by the Administrator
21	to carry out this chapter.
22	"(4) PRIORITIES.—Priority for grants under
23	this chapter shall—
24	"(A) be accorded to applicants whose ap-
25	plications demonstrate—

1	"(1) the greatest likelihood of success
2	fully and efficiently carrying out the activi
3	ties described in subsection (f)(1);
4	"(ii) the participation of the local tele-
5	phone exchange carrier in providing and
6	operating the telecommunications trans-
7	mission facilities required by the plan; and
8	"(iii) unconditional financial support
9	from the local community; and
10	"(B) so as to ensure, to the extent pos-
11	sible, that various regions of the United States
12	benefit from the use of the grants.
13	"(d) MAXIMUM AMOUNT OF GRANT.—The amount of
14	each grant under this chapter shall not exceed \$1,500,000
15	"(e) DISTRIBUTION OF GRANTS.—Grants to any
16	qualified consortium under this chapter shall be disbursed
17	over a period of not more than 3 years.
18	"(f) Use of Funds.—
19	"(1) In GENERAL.—Grants under this chapter
20	may be used to support the costs of activities involv-
21	ing the sending and receiving of information to im-
22	prove health care services or educational services in
23	rural areas, including—
24	"(A) in the case of grants to improve
25	health care services—

1	(1) consultations between nearth care
2	providers;
3	"(ii) transmitting and analyzing x-
4	rays, lab slides, and other images;
5	"(iii) developing and evaluating auto-
6	mated claims processing, and transmitting
7	automated patient records; and
8	"(iv) developing innovative health pro-
9	fessions education programs;
10	"(B) in the case of grants to improve edu-
11	cational services—
12	"(i) developing innovative education
13	programs and expanding curriculum offer-
14	ings;
15	"(ii) providing continuing education to
16	all members of the community;
17	"(iii) providing the means for libraries
18	of educational institutions or public librar-
19	ies to share resources;
20	"(iv) providing the public with access
21	to State and national data bases;
22	"(v) conducting town meetings; and
23	"(vi) covering meetings of agencies of
24	State government; and
25	"(C) in all cases—

1	"(i) transmitting financial informa
2	tion; and
3	"(ii) such other related activities as
4	the Administrator deems to be consistent
5	with the purposes of this chapter.
6	"(2) Limitation on acquisition of inter-
7	ACTIVE TELECOMMUNICATIONS EQUIPMENT.—Not
8	more than 40 percent of the amount of any grant
9	made under this chapter may be used to acquire
10	interactive telecommunications end user equipment.
11	"(3) Limitation on use of consultants.—
12	Not more than 5 percent of the amount of any grant
13	made under this chapter may be used to employ or
14	contract with any consultant or similar person.
15	"(4) PROHIBITIONS.—Grants made under this
16	chapter may not be used, in whole or in part, to es-
17	tablish or operate a telecommunications network or
18	to provide any telecommunications service for hire.
19	"(g) Limitations on Authorization of Appro-
20	PRIATIONS.—
21	"(1) GRANTS TO IMPROVE RURAL HEALTH
22	CARE SERVICES.—For grants under this chapter to
23	improve health care services, there are authorized to
24	be appropriated to the Administrator not to exceed
25	\$30,000,000.

1	"(2) Grants to improve rural edu-					
2	CATIONAL SERVICES.—For grants under this chap					
3	ter to improve educational services, there are author-					
4	ized to be appropriated to the Administrator not to					
5	exceed \$20,000,000.					
6	"(3) AVAILABILITY OF FUNDS.—Sums appro-					
7	priated pursuant to this subsection are authorized to					
8	remain available until expended.".					
9	(c) REDUCTION IN INTEREST RATE ON INSURED					
10	TELEPHONE LOANS FOR BORROWERS FROM STATES					
11	WITH PLANS FOR UPGRADING RURAL TELECOMMUNI-					
12	CATIONS INFRASTRUCTURE.—Section 305(b) of the Rural					
13	Electrification Act of 1936 (7 U.S.C. 935(b)) is amended					
14	by adding after and below the end the following:					
15	"Notwithstanding the preceding sentence, an insured tele-					
16	phone loan made under this section on or after the date					
17	of the enactment of this sentence to an otherwise eligible					
18	borrower therefor in any qualified State (as defined in sec-					
19	tion 2338(b)(2) of the Food, Agriculture, Conservation,					
20	and Trade Act of 1990), which would (but for this sen-					
21	tence) bear interest at more than 4 percent per annum,					
22	shall bear interest at 4 percent per annum.".					
23	(d) Elimination of Preference for Rural					
24	TELEPHONE BANK LOANS FOR BORROWERS LOCATED IN					
25	STATES WITH PLANS FOR UPGRADING RURAL TELE-					

- 1 COMMUNICATIONS INFRASTRUCTURE.—Section 408(b)(2)
- 2 of the Rural Electrification Act of 1936 (7 U.S.C.
- 3 948(b)(2)) is amended by inserting "which is not located
- 4 in a qualified State (as defined in section 2338(b)(2) of
- 5 the Food, Agriculture, Conservation, and Trade Act of
- 6 1990)" after "any borrower".
- 7 SEC. 3. INCREASE IN LIMITATION ON POPULATION OF
- 8 RURAL AREAS FOR PURPOSES OF TELE-
- 9 PHONE LOANS.
- 10 (a) IN GENERAL.—Section 203(b) of the Rural Elec-
- 11 triffication Act of 1936 (7 U.S.C. 924(b)) is amended by
- 12 striking "one thousand five hundred" and inserting
- 13 "10,000".
- 14 (b) CONFORMING AMENDMENT.—Section 13 of such
- 15 Act (7 U.S.C. 913) is amended by inserting "(except in
- 16 title Ⅱ)" before "shall be deemed to mean any area".
- 17 SEC. 4. SENSE OF THE CONGRESS.
- 18 It is the sense of the Congress that persons who are
- 19 eligible for telephone loans under the Rural Electrification
- 20 Act of 1936 and are interested in upgrading telecommuni-
- 21 cations in rural areas should obtain financial assistance
- 22 under such Act through a subsidiary in order to limit the
- 23 assets subject to the lien requirements of such Act.

F :

- 1 SEC. 5. REGULATIONS.
- Within 180 days after the date of the enactment of
- 3 this Act, the Administrator of the Rural Electrification
- 4 Administration and the Governor of the Rural Telephone
- 5 Bank shall prescribe such regulations as may be necessary
- 6 to carry out the amendments made by this Act.

Appendix C

				-
				-
And the second s	 	1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -		
				=
				: -
				_
			•	
				F 3
				- Introduce
				=
				· = 3
				_
				آ
				. <u>*</u>
•				ن ا
				- -
				a i
				in the second se
				•

9 - 11 December 1991

Uniformed Services University of the Health Sciences Bethesda, Maryland USA

Verenik Abramian, M.D.
USSR Supreme Soviet
Chairman of the Subvcommittee of Social Hygiene and Medical Ecological Problems
Krelim
Moscow,
USSR

Dr. Hagop S. Akiskal Sr. Science Advisor on Affective and Related Disorders National Institute of Mental Health 10C-24 Parklawn 5600 Fishers Lane Rockville, MD 20857 301 443 1636

Mr. Ray J. Arnold
Deputy Assistant Administrator for Commercial
Programs
NASA Headquarters
Code C
Washington, DC 20546
703 557 8684

Mr. Artur Askalonov Representative USSR Supreme Soviet of the RSFSR

Tony Ausseresses Immediate Specialist LDS Hospital 325 8th Avenue Salt Lake City, UT 84143

Marion Ball Vice President University of Maryland at Baltimore 301 328 8459

Arthur S. Blank, M.D. Director, Readjustment Counseling Department of Veterans Affairs (115) Washington, DC 20420

Mr. Philippe Boulle Director, New York Office United Nations Disaster Relief Coordinator Room S-2935A, United Nations 1 UN Plaza New York, NY 10017 212 963 5704

The Honorable George E. Brown, Jr. US House of Representatives Washington, DC 20515

Dr. Claude Cadoux, M.D.
Chief Medical Officer
Office of Foreign Disaster Assistance/State/Aid
3526 Raymond Street
Chevy Chase, MD 20815

Mr. Robert J. Caldwell
Director of Marketing
Interactive Telemedical Systems
2735 Ponce de Leon Blvd
Coral Gables, FL 33134
305 444 9796

Dr. Gary L. Chadwick, D. Ph. USPHS-NIH 9000 Rockville Pike Bldg 31, Rm 5B59 Bethesda, MD 20892 301 496 7041

Lawrence P. Chambers
Manager, Life Sciences Space Stations and Soviet
Flight Programs
NASA Headquarters
Washington, DC 20546

Terry P. Clemmer, M.D. Director, Critical Care Medicine LDS Hospital 8th Avenue and C Street Salt Lake City, UT 84143 801 321 3662

Uniformed Services University of the Health Sciences Bethesda, Maryland USA

MAJ Clifford C. Cloonan USUHS 4301 Jones Bridge Road Bethesda, MD 02814 301 295 3637

Roy Collins Manager Government Sales Comsat, Mobile Communications 950 L'Enfant Plaza, SW Washington, DC 20024 202 863 6725 202 488 3814/3819

Peter B. Collis, M.D.
DASD (Medical Readiness)
OASD (Health Affairs)
Pentagon
Washington, DC 20301
703 614 1418

Mr. Craig Covault Sr. Space Editor Avaition Week Washington, DC 202 833 6004

Dr. David Cruess, Ph.D. Professor of PMB USUHS 4301 Jones Bridge Road Bethesda, MD 20814 301 295 3709

Ken Czisny ARCO

Joseph P. Dervay, M.D.
Operational Medicine
Lockheed Engineering & Sciences Company
600 Maryland Avenue, SW
Suite 600
Washington, DC 20024
202 488 5854

Ms. Ingrid Desilvestre International Officer

NASA Headquarters 400 Maryland Ave., SW Washington, DC 20546 202 453 8440

Claude DeVille de Goyet, M.D.
Chief, Emergency Preparedness and Disaster Relief
Coordination Program
Pan American Health Organization/WHO
525 23rd Street, NW
Washington, DC 20037
202 861 4325

Russell R. Dynes Research Professor Disaster Research Center University of Delaware Newark, DE 19716 302 453 4202

Dr. Burt Edelson George Washington University Washington, DC 20052 202 994 1431

Troy Ellington GTE Spacenet 703 848 0004/5

Glenn English US House of Representatives 2206 Rayburn Building Washington, DC 20515

Bud Evans
The Center for Space & Advanced Technology
703 385 1668

Sharon Falkenheimer, M.D. Dep. Dir., Clinical Readiness OASD (Health Affiars) Pentagon Washington, DC 20301 703 697 8233

Uniformed Services University of the Health Sciences Bethesda, Maryland USA

James J. Ferguson, M.D. Special Expert National Library of Medicine Rockville Pike Bethesda, MD 20894 202 245 7694

Glenn Ferraro
Lockheed Engineering & Sciences Company
600 Maryland Avenue, SW
Suite 600
Washington, DC 20024
202 863 5284
202 863 5240

Stephen W. Fogleman Deputy Director, Life Sciences Division Office of Space Science and Applications NASA

Ms. Carol S. Fullerton, Ph.D. Assistant Professor USUHS Psychiatry Dept. 4301 Jones Bridge Road Bethesda, MD 20814 301 259 2470

Emil Gabrielian Yervah, State Medical Institute 375095 ARMENIA

Mr. John K. Gaffney University of New Mexico Center for Disaster Medicine 620 Camino De Salud, NE Albuquerque, NM 87131-5246

Ms. Karen Gaiser Program Manager Lockheed Engineering & Sciences Company 600 Maryland Avenue, SW Suite 600 Washington, DC 20024 202 488 5854 202 863 5240 Joseph J. Gancie
Executive Assistant to the Chairman and CEO
World Communications, Inc.
Suite 660
1820 L Street, NW
Washington, DC 20036
202 296 6213

Mereille M. Gerard
Division Director
Corporate and International Programs
AIAA
370 L'Enfant Promenade, SW
Washington, DC 20024
202 646 7450
202 646 7508

Amanda Gomez, Ph.D.
Engineer of the Project
Space Research Program
Edificio de la Investigacion cientifica UNAM
Circuito Exterior Ciudad Universitaria
PO Box 70-256
Ciudad, 04510
MEXICO

Igor Goncharov, M.D.
Institute of Biomedical Problems
Khoroshevscoye Shosse 76A
Moscow, 123007
USSR
95 195 63 63
Telex-SU VUAL 411048

Vladimir Gorkovoy General Director NPO Precision Instruments 1 Yurlovski pz Moscow, 12790 USSR

Mr. Richard C. Grace Senior Project Manager CAE-Link Corporation 209 Madison Street Alexandria, VA 22314 703 739 8049 703 739 8121

Uniformed Services University of the Health Sciences Bethesda, Maryland USA

Ms. Kathryn Greenfield Anchor Reporter NASA Space Flight Center Code 543.8 Greenbelt, MD 20771 301 286 1320

ENS David A. Guerrieri, M.C., USNR USUHS
PO Box 345
Bethesda, MD 20814
301 907 0807

The Honorable Ralph M. Hall US House of Representatives Washington, DC 20515

Joanne M. Hauser Director, Management Seminars AIAA 370 L'Enfant Promenade, SW Washington, DC 20024 202 646 7452 202 646 7508

Mr. Neil Heim Sr. Research Scientist George Washington University Institute of Applied Space Research 801 22nd Street, NW Washington, DC 20052

Mr. Val G. Hemming Chairman, Dept. of Pediatrics USUHS 4301 Jones Bridge Road Bethesda, MD 20814 301 259 3391

Mr. Donald A. Henderson
Associate Director for Life Sciences
Office of Science and Technology Policy
Executive Office of the President
17th & Pennslyvania Avenue
Room 494 OEOB
Washington, DC 20500
202 456 2892
202 395 1571

Dr. Rene S. Hernandez Research Physiologist USUHS Military Med. 4301 Jones Bridge Road Bethesda, MD 20814 301 295 3809

Dr. Harry C. Holloway, M.D.
Deputy Dean
F. Edward Hebert School of Medicine
Uniformed Services University of the Health Sciences
4301 Jones Bridges Road
Bethesda, MD 20814-4799
301 295 3016

Ms. Karen L. Honaker Program Planner Lockheed Engineering & Sciences Company 600 Maryland Avenue, SW Suite 600 Washington, DC 20024 202 863 5293 202 863 5240

Dr. Maxwell House, M.D. Associate Dean, Professional Affairs Health Sciences Center Faculty of Medicine St. Johns, Newfoundland, 709 737 6645

Bruce A. Houtchens, M.D. Assistant Chief, Surgical Service VA Medical Center 500 Foot Hill Drive Salt Lake City, UT 84148 801 584 1239

Carolyn L. Huntoon, Ph.D. Director, Space and Life Sciences NASA Johnson Space Center M/S SA Houston, TX 77058 713 483 3503

9 - 11 December 1991

Uniformed Services University of the Health Sciences Bethesda, Maryland USA

BRIG/GEN John E. Hutton, Jr. Professor of Clinical Surgery, USUHS HQ-MAMZ Tacomma, WA 98431

Ramiro Iglesius, M.D.
Chairman of Aersopace Medicine Project
Space Research Program
Ave. Universidad 1495
01030
MEXICO

Prof. I. Jacoby USUHS 4301 Jones Bridge Road Bethesda, MD 20814

Dr. Philip Jajosky USUHS/NIOSH 16517 Walnut Hill Road Gaithersburg, MD 20877 301 926 9647

Jackie Kaftarian Uniformed Services University /OSAP 4301 Jones Bridge Road Bethesda, MD 301 443 5276

Viatcheslav Kalinin, M.D. Minister of Health Republic of Russia

Kathleen Keagan NASA 7130 Galleon Drive Houston, TX 77036

Mr. Samuel W. Keller Associate Deputy Administrator NASA Headquarters Code ADA Washington, DC 20546 202 453 1024 Mr. Vincent Kiernan Military Space Reporter Space News The Times Journal Co. Springfield, VA 22159-0400 703 658 8417 703 658 8412

Alexander Kiselev, M.D. Director Soyuzmedinform 2A, Moskvoretskaya Nab Moscow, 109240 USSR Telex 412128 MEDIN SU 95 298 58 08

Tom Klagholz Director, The Media Center Fairfax Hospital 2741-B Prosperity Avenue Fairfax, VA 22031 703 560 7400

Yuri Koptev Acting Deputy Minister of General Machine Building USSR

CAPT Henry Krakauer PMB/USUHS 4301 Jones Bridge Road Bethesda, MD 20814 301 295 3831

Vladimir Kvetan, M.D. Director, Critical Care Medicine Montefiore Medical Center Critical Care Medicine 111 East 210th St. Bronx, NY 10467 212 920 5440

Michel Lechat, M.D.
Professor, School of Epidemiology and Public Health
University Catholique de Louvain
EPID/30.34
Brussels, 1200
BELGUIM

Uniformed Services University of the Health Sciences Bethesda, Maryland USA

Llewellyn J. Legters, M.D.
Professor and Chairman
Uniformed Services University of the Health Sciences
Department of Preventive Medicine and Biometrics
4301 Jones Bridge Road
Bethesda, MD 20814-4799
301 530 4373

Dr. Craig H. Llewellyn Professor and Chairman Dept. of Military and Emergency Medicine USUHS 4301 Jones Bridge Road Bethesda, MD 20814

Boris Loginov, M.D. Director National Library of Medicine 30 Krasikova Stz. Moscow, 117478 USSR

Ms. Kim Luoma Director Veterans Affairs 50 Irvine St., NW Washington, DC 20422 202 745 8458

Andrea Maleter
Manager of Service Assistance
INTELSAT
3400 International Drive, NW
Washington, DC 20008

Mr. Charles R. Mannix General Counsel USUHS 4301 Jones Bridge Road Bethesda, MD 20814-4799 301 295 3028

James O. Mason, M.D.
Assistant Secretary for Health
Department of Health and Human Services
200 Independence Ave., SW
Room 716G, Hubert Humphery Bldg
Washington, DC 20201

202 245 7694

Dr. Joseph Massa, Ph.D.
Communications Management Officer
Federal Emergency Management Agency
500 C Street, SW
Washington, DC 20472
202 646 3083

Ronald C. Merrell, M.D. Associate Dean, Clinical Affairs University of Texas Medical School at Austin 6431 Fannin Suite G104 Houston, TX 77030 713 792 5578

Edward F. Miller, Ph.D.
Head Communications Systems Branch
Aerospace Technology Directorate
M/S 54-2
NASA Lewis Research Center
21000 Brookpark Road
Cleveland, OH 44135
216 433 3566
216 433 3479

Sandra Morey NASA Headquarters Washington, DC 20546 703 557 8545

Mr. Chris Morris Stars 3003 Moffett Lane Houston, TX 77489 713 835 7232

Frank F. Naeymi-Rad, M.D. Director of the Computer Center University of Health Sciences Chicago Medical School N. Chicago, IL 60064 708 578 3212

9 - 11 December 1991

Uniformed Services University of the Health Sciences Bethesda, Maryland USA

Thomas A. Natiello, Ph.D. President Telemedicine Systems Corporation PO Box 248524 Coral Gables, FL 33124 305 666 8989 305 665 1192

Mr. Dennis Nelson Director, University Computer Center USUHS 4301 Jones Bridge Road Bethesda, MD 20814 301 295 3304

Bein W. Newburger President Corabi 890 S. Pickett Street Alexandria, VA 22304 703 823 4753

Arnauld E. Nicogossian, M.D. Director, Life Sciences Division NASA Headquarters Code SB Washington, DC 20546 202 453 1530

Haik Nikogossian, M.D. Diagnostica Corporation 6 Markarian St. Yerevah, 375073 ARMENIA 8852 34 32 47

Mr. Dave Olson CEO Stars/World Communication 3003 Moffett Houston, TX 77389 713 438 3600

Mr. William A. Pfeiffer
Project Manager
Center for Space and Advanced Technology
9302 Lee Highway
Suite 1200

Fairfax, VA 22031-1207 703 385 1660 703 385 1668

Samuel L. Pool, M.D. Chief of Medical Sciences Division NASA Johnson Space Center M/S SD Houston, TX 77058 713 483 7109

COL Darrel R. Porr, MD Consultant/Military Medicine US Army Health Professional Support Agency 5109 Leesburg Pike Falls Church, VA 22041-3250 703 756 0159 703 756 0163

Ms. Diane Rausch Assistant to the Associate Deputy Administrator NASA Headquarters M/S ADA Washington, DC 20546

Russell B. Rayman, M.D.
Manager, Operational Medicine
Life Sciences Program Office
Lockheed Engineering & Sciences Company

LT. Gary L. Rebholz
Assistant Commandant Navy Element
Uniformed Services University of the Health Sciences
4301 Jones Bridge Road
Bethesda, MD 20814
301 295 2470

Mr. Howard P. Reis
Director of Business Development for Multimedia
Communications
NYNEX Science & Technology, Inc.
500 Westchester Avenue
Room 02D2
White Plains, NY 10604
914 644 2067 or 7600

Uniformed Services University of the Health Sciences Bethesda, Maryland USA

Mr. Mikhail Reshetnev General Director NPO Applied Mechanics Hozkoho 57 Kzasnojazki-26, 660026 USSR

Mr. Thomas P. Reutershan
Director, Office of Emergency Preparedness/
National Disaster Medical System
US Public Health Services
Room 4-81 Parklawn Buidling
5600 Fishers Lane
Rockville, MD 20857
301 443 1167

Mr. Vern Riportella President Network Services International Warwick, NY 914 986 6904

Prof Donald R. Roberts USUHS 4301 Jones Bridge Road Bethesda, MD 20814 301 259 3493

Donald R. Roberts, M.D.
Department of Preventative Medicine and Biometrics
Uniformed Services University of the Health Sciences
Bethesda, MD 20894
301 295 3734

Ensor Rodriguez, M.D., Ph.D. Corporate Medical Director ARCO Corporation 515 South Flower Street Suite AP 463 Los Angeles, CA 90071 213 486 1675

Alexander Rutskoy Vice President Russian Republic

José E. San Esteban, M.D.

Director of Health Research
National University of Mexico
Edificio de la Investigacion cientifica
Circuito Exterior
Ciudad Universaterio
Mexico City, MEXICO
550 0904

Jay A. Sanders, M.D.
Pesident
Interactive Telemedical Systems
2735 Ponce de Leon
Coral Gables, FL 33134
305 444 9796
305 448 5349

Ashot Sarkisian, M.D. NPO Diagnostika Center 6 Markarian Street ARMENIA 375073 8852 35 70 13

Dr. Howard J. Schneider Mission Scientist NASA Johnson Space Center Code SA Houston, TX 77058 713 483 2380

Mr. John Carver Scott
President
Center for Public Service Communications
2111Wilson Blvd
Suite 421
Arlington, VA 22201
703 528 0801
703 528 0802

Mr. Roan Scraper COO Stars/World Communication 3003 Moffett Houston, TX 77489 713 438 3600

Uniformed Services University of the Health Sciences Bethesda, Maryland USA

Willard D. Shaw, Ed.D.
Senior Program Officer
Acadamy for Educational Development
1255 23rd Street, NW
Washington, DC 20037
202 862 1275

Mr. Samuel D. Shiplett Research Administrator H.M. Jackson Foundation Rockville, MD 301 295 7470

Elizabeth M. Short, M.D.
Deputy ASCMD for Academic Affairs
Veteran's Health Administration
810 Vermont Ave
Washington, DC 20420
202 535 7090

John H. Siegel, M.D.
Director, New Jersey State Trauma Center
Chief, Section of Trauma Surgery
University Hospital
New Jersey Medical School:UMDNJ
150 Bergen Street
Trauma Center E 245
Newark, NJ 07103
201 456 4004

John Silva, M.D. Uniformed Services University of the Health Sciences Bethesda, MD 301 295 3741/3155

Martin Silverstein, M.D.
Clinical Professor of Surgery
F. Edward Hebert School of Medicine
Uniformed Services University of the Health Sciences
7041 Corrida De Venado
Tucson, AZ 85718
602 297 2963

CAPT Jack Slusser Medical and Health Director Office of US Foreign Disaster Assistance AID/FHA/OFDA, Rm 1262A Washington, DC 20523 202 647 5916

Jo Ann Smith Business Manager Telemedicine Systems Corporation PO Box 248524 Coral Gables, FL 33124 305 666 8989 305 665 1192

James C. Smith
Director, Technology Assessment
Project HOPE
Carter Hall
Millwood, VA 22646
703 837 2100 x 312

CAPT Steven S. Sohn, M.D. USUHS 4301 Jones Bridge Road Bethesda, MD 20814-4799 301 259 3493

Greg Spinelli NASA 1339 Hungerford Place Herndon, VA 22070

COL Charles Springate
Chief Deputy Medical Examiner
AFIP
Washington, DC 20306

Donald F. Stewart, M.D. Manager, Aerospace Medicine Office NASA Headquarters Code SB Washington, DC 20546 202 453 1527

Uniformed Services University of the Health Sciences Bethesda, Maryland USA

James Sweeney
Chief, Bioengineer/Critical Care
Albert Einstein College of Medicine
Montefiore Medical Center
111 East 210th Street
Bronx, NY 10467
212 920 2449

Mr. Gennady Tamkovitch Deputy Director Space Research Institute Pzofsoyuzuaya 84/32 Moscow, 117810 USSR Telex-411498 STAR SU 7095 3107023

Mr. Doug Tang
Chairman Dept. Biostatistics
WRAIR
Washington, DC 20012
202 576 2212

Ms. Mary Ann Tatman Veterans Affairs Learning Resources Svc 810 Vermont Avenue, NW Washington, DC 20420 202 535 7112

Mr. Ronald Teeter Technical Writer Lockheed Corporation 600 Maryland Avenue, SW Suite 600 Washington, DC 20024

Mr. Thomas Throop Sr. Engineer Corabi 880 S. Pickett Street Alexandria, VA 22304 703 823 4253

David Trace, M.D. Medical Director MEDAS Mr. Richard H. Truly Administrator NASA Headquarters Code A Washington, DC 20546 202 453 1010

Mr. Nikolai Varrava Director National Disaster Medical Center

Vladimir Vlasov NPO Precisiow 1 Yuzlovsky pz Instiumeuts, Moscow, 127450 USSR

Yuri Vorobiev Vice Chairman Commission on Disaster Management Chotny Riad, 4 Moscow, RSFSR, 103759 USSR Telex-412327 OPRON SU 95 975 23 63

Ron Wehman Three Sigma Group 9302 Lee Highway Suite 1207 Fairfax, VA 22031 703 385 9815 703 385 9818

Ms. Connie Wessner Senior Research Associate IHPP 2021 K Street, NW Suite 800 Washington, DC 20001 202 872 1445

Uniformed Services University of the Health Sciences Bethesda, Maryland USA

Gail Yamazaki Communications Officer Intelsat Services and Marketing Division 3400 International Drive Washington, DC 20008-3098

James A. Zimble, M.D.
President
Uniformed Services University of the Health Sciences
4301 Jones Bridge Road
Bethesda, MD 20814-4799
301 295 3016