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DEPARTMENT OF DEFENSE IN-HOUSE RDT&E ACTIVITIES

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DEPARTMENT OF DEFENSE IN-HOUSE RDT&E ACTIVITIES

HAROLD F. DAVIDSON

(Management analysis rept.)

(11)

30 October 1979

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Prepared for:

US ARMY MATERIEL DEVELOPMENT AND READINESS COMMAND
5001 Eisenhower Avenue
Alexandria, Virginia 22333

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FOREWORD

THIS REPORT WAS PREPARED FOR THE US ARMY MATERIEL DEVELOPMENT AND READINESS COMMAND AT THE DIRECTION OF THE DEPUTY CHIEF OF STAFF FOR RESEARCH, DEVELOPMENT AND ACQUISITION. THIS EDITION IS THE THIRTEENTH OF A SERIES THAT WAS INITIATED IN 1966.

EACH IN-HOUSE RDT&E ACTIVITY OF THE DEPARTMENT OF DEFENSE IS DESCRIBED ON ONE PAGE IN THIS COMPILATION. THE DATA FOR 1979 ARE SUMMARIZED IN TABLES PRECEDING THE MAIN TEXT AND CHARTS AND TABLES ARE PROVIDED FOR EACH SERVICE SHOWING ORGANIZATIONAL RELATIONSHIPS AND COMMAND CHAINS.

ALL CURRENT DOD RDT&E ACTIVITIES WHICH MEET THE REPORT REQUIREMENT OF HAVING AT LEAST 25 PER CENT OF THEIR BUDGET IN RDT&E FUNDS ARE LISTED IN THE CONTENTS ALPHABETICALLY WITHIN EACH DEPARTMENT. SOME T&E FACILITIES WHICH DO NOT MEET THE REQUIREMENT PREVIOUSLY NOTED ARE ALSO LISTED BY SPECIAL REQUEST. ORGANIZATIONAL CHANGES DURING FY 1979 APPEAR IN APPENDIX I.

DOD INSTRUCTION 7700.9 WHICH HAS BEEN THE BASIS FOR THIS REPORT SINCE ITS INCEPTION HAS BEEN REPLACED BY A TRI-SERVICE REGULATION, AR 70-63 NAVCOMPTIST 7044.5D, AFR 80-26, ENTITLED DOD IN-HOUSE RDTE ANNUAL ACTIVITIES REPORT, 1 NOVEMBER 1978. APPENDIX II CONTAINS MANY OF THE DEFINITIONS USED IN THIS REPORT AND ARE PROVIDED AS AN ADDITIONAL AID IN USE OF THE REPORT. APPENDIX III LISTS SELECTED ABBREVIATIONS AND ACRONYMS. APPENDIX IV LISTS SELECTED KEY WORDS WITH PAGE REFERENCES.

EVERY EFFORT HAS BEEN MADE TO PROVIDE ACCURATE INFORMATION, PARTICULARLY FISCAL DATA. ALL NUMBERS AND STATEMENTS HAVE BEEN THOROUGHLY EXAMINED AND IN ALMOST ALL CASES, REVIEWED WITH THE SUBMITTING AGENCY TO INSURE CORRECTNESS AND CLARITY.

THIS YEAR A NEW FEATURE HAS BEEN ADDED. THE ARMY RESEARCH OFFICE, THE OFFICE OF NAVAL RESEARCH AND THE AIR FORCE OFFICE OF SCIENTIFIC RESEARCH ARE SHOWN FOR THE FIRST TIME.

IT IS DESIRED THAT THIS PUBLICATION BE GIVEN WIDESPREAD DISTRIBUTION IN THE DOD LABORATORIES AS AN INTERNAL MANAGEMENT DOCUMENT AT THE DIRECTOR AND COMMANDING OFFICER LEVEL AS WELL AS AT THE BENCH LEVEL IN ORDER TO ALLOW PERSONNEL AN OPPORTUNITY TO FAMILIARIZE THEMSELVES WITH THE FUNCTIONAL CAPABILITIES OF OTHER DOD LABORATORIES. IT IS HOPED THAT BY THIS MEANS LABORATORY SCIENTISTS AND ENGINEERS WILL BE ENCOURAGED TO COMMUNICATE WITH EACH OTHER ON COMMON PROBLEMS OF INTEREST TO THEIR SERVICE LABORATORIES AS WELL AS TO COMMUNICATE WITH LABORATORIES OF THE OTHER SERVICES.

SINCERE APPRECIATION IS EXTENDED TO MRS. EVELYN HUGHES AND HER ASSOCIATES OF THE US ARMY MANAGEMENT SYSTEMS SUPPORT AGENCY FOR THEIR EFFORTS AND ASSISTANCE IN PROVIDING A COMPUTER PRINTOUT FROM WHICH THIS REPORT IS PRINTED. SINCERE APPRECIATION IS ALSO EXTENDED TO MRS. JEANETTE MERRITT FOR HER KIND ASSISTANCE, AND TO MR EUGENE GROSECLOSE OF USAMSSA FOR HIS TECHNICAL TROUBLE SHOOTING WHICH MADE A COMPUTER PRINTOUT POSSIBLE. MR. FLOYD PURCE OF THE DEFENSE PRINTING SERVICE IS ALSO DESERVING OF A NOTE OF GRATITUDE FOR HIS EFFORTS IN PRINTING THIS DOCUMENT IN A THOROUGHLY PROFESSIONAL MANNER.

ADDITIONAL COPIES OF THIS DOCUMENT MAY BE OBTAINED BY WRITING THE DEFENSE TECHNICAL INFORMATION CENTER, BUILDING 5, CAMERON STATION, ALEXANDRIA, VIRGINIA 22314.

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SUMMARY

DEPARTMENT OF DEFENSE IN-HOUSE RDT&E FACILITIES

PROGRAM DATA FOR FY 1979

	(MILLIONS)
TOTAL ANNUAL PROGRAM	8372.823
TOTAL INHOUSE PROGRAM	3362.647
TOTAL RDT&E PROGRAM	4892.117
TOTAL INHOUSE RDT&E	2230.610
TOTAL ANNUAL OPERATING COST	911.315

PERSONNEL DATA (END OF FY 1979)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHD	TOTAL PROFESSIONALS
MILITARY	25421	832	6243
CIVILIAN	65621	3519	27413
TOTAL	91042	4351	33656

PHYSICAL FACILITIES (END OF FY 1979)

ACRES	9204499
SPACE (THOUSANDS OF SQ FT)	
LABORATORY	29761.125
ADMINISTRATIVE	11111.955
OTHER	57312.700
TOTAL	98185.780
COST (MILLIONS)	
REAL PROPERTY	4821.210
EQUIPMENT	4185.260
TOTAL	9006.470

TABLE 1. ARMY RDT&E ACTIVITIES, PROGRAM AND PERSONNEL DATA, FY 1979

INSTALLATION	FUNDING DATA (MILLIONS $)				PERSONNEL DATA					
	TOTAL	TOTAL INHOUSE	TOTAL RDT&E	INHOUSE RDT&E	TOTAL MIL	TOTAL CIV	PHD MIL	PHD CIV	PROF MIL	PROF CIV
AEROMEDICAL RESEARCH LABORATORY	4.789	4.177	3.771	3.159	77	65	11	4	27	21
AIR DEFENSE BOARD	7.610	7.118	3.495	3.151	117	86	0	0	22	14
AIRBORNE BOARD	2.990	2.990	1.427	1.427	87	40	0	0	17	4
ARMOR AND ENGINEER BOARD	10.748	10.748	6.553	6.553	227	102	0	2	107	18
ARMY RESEARCH OFFICE	38.774	0.082	38.692	0.000	2	94	0	33	2	34
ATMOSPHERIC SCIENCES LABORATORY	31.906	23.676	19.632	11.402	358	175	0	22	28	94
AVIATION BOARD	4.782	4.782	2.446	2.446	79	36	0	2	33	8
AVIATION DEVELOPMENT TEST ACTIVITY	10.848	10.848	7.128	7.128	231	93	0	1	33	14
AVIATION ENGINEERING FLIGHT ACTIVITY	7.291	5.658	6.317	4.684	66	100	0	0	15	26
AVIATION RESEARCH & TECHNOLOGY LABORATORIES	48.519	19.018	44.841	17.550	24	536	0	35	11	271
AVIONICS R & D ACTIVITY	15.332	9.125	10.401	5.504	12	211	0	5	8	133
BALLISTIC RESEARCH LABORATORY	49.644	36.970	45.854	34.748	26	755	2	100	10	390
BIOMEDICAL LABORATORY	0.000	0.000	0.000	0.000	66	121	25	10	41	54
CHEMICAL SYSTEMS LABORATORY	74.961	48.354	58.966	37.320	150	757	25	46	78	451
COLD REGIONS RGE LABORATORY	12.157	9.527	5.364	3.454	14	263	1	32	4	109
COLD REGIONS TEST CENTER	8.290	8.290	4.045	4.045	282	22	1	0	18	7
COMBAT SURVEILLANCE & TGT ACQUISITION LAB	55.559	12.319	34.590	9.749	14	165	0	3	7	103
COMMUNICATIONS - ELECTRONICS BOARD	2.199	2.199	1.263	1.263	62	31	0	0	43	7
COMMUNICATIONS R & D COMMAND	59.228	6.274	49.157	5.431	28	421	0	10	13	271
CONSTRUCTION ENGINEERING RESEARCH LAB	10.537	6.684	6.945	6.330	3	204	1	30	2	133
DUGWAY PROVING GROUND	24.253	21.397	17.594	15.306	159	619	1	15	10	73
ELECTRONIC PROVING GROUND	26.482	19.594	10.162	5.980	587	213	0	1	47	56
ELECTRONIC WARFARE LABORATORY	86.692	33.307	46.159	24.202	85	411	1	9	17	248
ELECTRONICS TECHNOLOGY AND DEVICES LAB	28.454	14.275	22.024	11.876	0	278	0	33	0	169
ENGINEER TOPOGRAPHIC LABORATORIES	25.565	10.402	23.253	8.994	15	299	1	19	9	173
ENGINEER WATERWAYS EXPERIMENT STATION	58.665	47.240	16.227	14.218	16	1381	0	81	17	493
FIELD ARTILLERY BOARD	3.624	3.624	1.242	1.242	152	37	0	0	29	3
FIRE CONTROL & SMALL CAL. WPNS SYSTS LAB	38.318	20.244	23.264	12.089	13	566	0	22	11	370
HARRY DIAMOND LABORATORIES	168.707	48.100	72.769	33.019	6	1148	1	57	5	453
HUMAN ENGINEERING LABORATORY	9.433	8.098	8.621	7.292	33	142	1	15	10	103
INFANTRY BOARD	3.226	3.226	1.563	1.563	122	55	0	1	3	5
INSTITUTE OF DENTAL RESEARCH	3.701	2.641	2.268	1.208	80	26	2	2	40	11
INSTITUTE OF SURGICAL RESEARCH	4.322	4.322	2.057	2.057	149	80	22	6	51	19
INTELLIGENCE & SECURITY BOARD	3.411	1.041	2.759	1.041	93	24	0	2	23	8
KWAJALEIN MISSILE RANGE,MARSHALL ISLANDS	108.660	5.670	100.940	4.890	27	103	0	1	17	52
LARGE CALIBER WEAPONS SYSTEMS LAB	157.303	71.159	130.292	57.348	28	1763	0	81	23	1088
LETTERMAN ARMY INSTITUTE OF RESEARCH	9.060	9.060	6.413	6.413	170	108	51	18	125	56
MATERIALS AND MECHANICS RESEARCH CENTER	36.604	20.018	25.691	15.902	18	604	1	61	10	190
MATERIEL SYSTEMS ANALYSIS ACTIVITY	21.263	15.120	16.564	10.416	29	411	0	22	13	315
MATERIEL TESTING DIRECTORATE	49.377	48.033	34.360	33.272	214	703	0	8	23	446
MEDICAL BIOENGINEERING R&D LABORATORY	4.645	4.455	3.561	3.371	34	102	3	15	17	39
MEDICAL R & D COMMAND	27.299	27.299	25.550	25.550	57	92	21	0	39	2
MEDICAL RSCH INST OF INFECTIOUS DISEASES	12.732	12.732	8.665	8.665	308	199	48	26	77	70
MISSILE RSCH . & DEV. CMD.	100.185	65.825	66.871	41.406	28	973	0	42	19	600
MOBILITY EQUIP R & D COMMAND	245.790	43.344	72.736	30.448	80	1182	1	21	17	378
NATICK R&D COMMAND	52.091	39.188	34.353	23.722	104	1083	7	70	28	446
NIGHT VISION & ELECTRO OPTICS LABORATORY	249.791	18.779	37.276	13.895	32	459	0	29	7	203
RESEARCH INST FOR BEHAVIORAL & SOCIAL SCI	24.816	12.203	24.129	11.516	30	328	2	132	21	189
RSCH INSTITUTE OF ENVIRONMENTAL MEDICINE	4.903	4.903	3.935	3.935	81	94	9	18	40	44
SIGNALS WARFARE LABORATORY	124.953	5.656	11.087	1.730	69	168	0	5	29	51
TANK-AUTO R & D COMMAND	170.408	23.952	65.371	13.448	40	795	3	15	38	342
TROPIC TEST CENTER	4.033	3.822	2.807	2.616	60	61	0	1	4	9
WALTER REED ARMY INSTITUTE OF RESEARCH	27.571	27.571	18.954	18.954	473	440	153	63	327	166
WHITE SANDS MISSILE RANGE	167.295	144.020	135.495	112.982	922	2750	1	46	402	1024
YUMA PROVING GROUND	45.223	45.223	38.333	38.333	383	603	6	0	41	78
TOTALS	2584.024	1116.382	1463.932	784.243	6642	22577	381	1272	2108	10134

TABLE 2. ARMY RDT&E FACILITIES DATA, FY 1979

INSTALLATION		SPACE AND PROPERTY SPACE (THOUSANDS OF SQUARE FEET)				COST (MILLIONS $)	
		ACRES	LABORATORY	ADMIN	OTHER	REAL PROPERTY	EQUIPMENT
AEROMEDICAL RESEARCH LABORATORY	FT.RUCKER,AL.	10	52.747	7.797	21.884	0.844	7.667
AIR DEFENSE BOARD	EL PASO,TX.	26	35.530	36.326	19.132	1.269	9.855
AIRBORNE BOARD	FT.BRAGG,N.C.	27	3.978	3.914	39.390	0.971	4.026
ARMOR AND ENGINEER BOARD	FT.KNOX,KY.	2	63.365	50.454	88.069	1.455	2.410
ARMY RESEARCH OFFICE	DURHAM,N.C.	0	0.000	23.440	0.000	0.000	0.350
ATMOSPHERIC SCIENCES LABORATORY	WHITE SANDS MR,N.M.	45	52.541	26.663	11.409	7.374	19.377
AVIATION BOARD	FT.RUCKER,AL.	0	0.000	18.514	12.961	0.000	0.433
AVIATION DEVELOPMENT TEST ACTIVITY	FT. RUCKER,AL.	1196	0.000	39.124	118.026	1.782	28.753
AVIATION ENGINEERING FLIGHT ACTIVITY	EDWARDS AFB,CA.	19	9.200	16.000	124.800	3.632	6.839
AVIATION RESEARCH & TECHNOLOGY LABORATORIES	MOFFETT FIELD,CA.	127	88.848	58.673	16.370	1.431	17.808
AVIONICS R & D ACTIVITY	FT.MONMOUTH,N.J.	0	16.000	33.500	0.000	0.000	7.098
BALLISTIC RESEARCH LABORATORY	ABERDEEN PROV.GR.,MD.	1920	539.702	11.200	40.982	14.595	33.742
BIOMEDICAL LABORATORY	ABERDEEN PROV. GR.,MD	0	0.000	0.000	0.000	0.000	0.000
CHEMICAL SYSTEMS LABORATORY	ABERDEEN PROV. GR.,MD	2000	579.564	84.169	405.670	22.032	26.692
COLD REGIONS R&E LABORATORY	HANOVER,N.H.	24	80.786	30.027	128.544	7.894	6.959
COLD REGIONS TEST CENTER	APO SEATTLE,WA.	647155	5.231	14.341	283.565	12.196	8.225
COMBAT SURVEILLANCE & TGT ACQUISITION LAB	FT.MONMOUTH,N.J.	35	52.324	6.139	10.589	0.950	11.333
COMMUNICATIONS - ELECTRONICS BOARD	FT.GORDON,GA.	7	0.000	18.960	2.488	0.125	0.077
COMMUNICATIONS R & D COMMAND	FT MONMOUTH,N.J.	0	72.746	4.642	0.000	0.000	10.800
CONSTRUCTION ENGINEERING RESEARCH LAB	CHAMPAIGN,IL.	30	76.081	34.159	0.000	3.896	4.438
DUGWAY PROVING GROUND	DUGWAY,UT.	802731	104.875	201.133	1643.266	79.999	28.762
ELECTRONIC PROVING GROUND	FT.HUACHUCHA,AR.	66000	0.000	50.300	215.242	7.127	51.200
ELECTRONIC WARFARE LABORATORY	FT.MONMOUTH,N.J.	6	142.936	37.617	48.502	92.766	42.961
ELECTRONICS TECHNOLOGY AND DEVICES LAB	FT.MONMOUTH,N.J.	0	89.500	30.636	7.290	0.000	14.527
ENGINEER TOPOGRAPHIC LABORATORIES	FT.BELVOIR,VA.	33	90.722	7.000	13.300	6.000	8.713
ENGINEER WATERWAYS EXPERIMENT STATION	VICKSBURG,MS.	722	1724.050	359.819	170.488	20.622	37.524
FIELD ARTILLERY BOARD	FT.SILL,OK.	23	22.566	32.802	13.335	3.330	1.080
FIRE CONTROL & SMALL CAL. WPNS SYSTS LAB	DOVER,N.J.	391	61.183	76.990	0.000	2.295	7.770
HARRY DIAMOND LABORATORIES	WASHINGTON,D.C.	2337	430.802	71.090	269.573	50.384	38.746
HUMAN ENGINEERING LABORATORY	ABERDEEN PRO.GR.,MD.	12	22.000	26.500	29.000	4.412	3.806
INFANTRY BOARD	FT.BENNING,GA.	1	0.000	32.203	30.156	0.900	0.818
INSTITUTE OF DENTAL RESEARCH	WASHINGTON,D.C.	4	9.325	5.696	6.730	0.875	1.791
INSTITUTE OF SURGICAL RESEARCH	FT.SAM HOUSTON,TX.	1	26.424	1.800	22.400	2.313	2.200
INTELLIGENCE & SECURITY BOARD	FT HUACHUCHA,AR.	10	0.000	5.000	42.663	0.025	1.659
KWAJALEIN MISSILE RANGE,MARSHALL ISLANDS	APO SAN FRANCISCO	1491	0.000	158.047	2305.824	592.832	160.956
LARGE CALIBER WEAPONS SYSTEMS LAB	DOVER,N.J.	1251	204.685	184.072	128.700	8.586	66.200
LETTERMAN ARMY INSTITUTE OF RESEARCH	PRESIDIO,S.F.,CA.	9	133.198	36.506	305.309	42.428	10.333
MATERIALS AND MECHANICS RESEARCH CENTER	WATERTOWN,MA.	48	389.161	83.380	160.030	16.591	15.150
MATERIEL SYSTEMS ANALYSIS ACTIVITY	ABERDEEN PROV.GROUND,MD	4	0.790	95.814	5.265	2.070	0.767
MATERIEL TESTING DIRECTORATE	ABERDEEN PROV.GR.,MD.	22865	724.317	4.351	269.547	17.245	43.344
MEDICAL BIOENGINEERING R&D LABORATORY	FT.DETRICK,MD.	5	45.103	27.300	34.108	3.228	3.014
MEDICAL R & D COMMAND	FT.DETRICK,MD.	1	0.000	33.022	0.000	0.151	0.610
MEDICAL RSCH INST OF INFECTIOUS DISEASES	FT.DETRICK,MD.	43	80.854	19.820	209.699	17.824	6.946
MISSILE RSCH . & DEV. CMD.	REDSTONE ARSENAL,AL.	11000	663.993	318.702	428.008	131.000	90.000
MOBILITY EQUIP R & D COMMAND	FT.BELVOIR,VA.	1064	750.849	146.730	209.879	49.093	34.947
NATICK R&D COMMAND	NATICK,MA.	2913	552.557	65.900	417.862	27.335	18.857
NIGHT VISION & ELECTRO OPTICS LABORATORY	FT.BELVOIR,VA.	38	180.639	27.186	20.000	32.000	50.000
RESEARCH INST FOR BEHAVIORAL & SOCIAL SCI	WASHINGTON,D.C.	0	46.110	2.559	6.190	0.000	1.795
RSCH INSTITUTE OF ENVIRONMENTAL MEDICINE	NATICK,MA.	4	60.421	18.563	28.647	3.710	3.825
SIGNALS WARFARE LABORATORY	VINT HILL,VA.	10	3.936	32.101	3.963	2.000	[illegible]
TANK-AUTO R & D COMMAND	WARREN,MI.	11	140.319	99.947	0.000	38.294	[illegible]
TROPIC TEST CENTER	FT.CLAYTON,C.Z.	2625	20.510	35.925	89.858	1.067	2.384
WALTER REED ARMY INSTITUTE OF RESEARCH	WASHINGTON,D.C.	203	382.974	58.360	0.000	10.080	17.609
WHITE SANDS MISSILE RANGE	WHITE SANDS,N.M.	4214377	1408.729	469.828	3007.638	185.192	180.584
YUMA PROVING GROUND	YUMA,AZ	870309	0.832	112.690	1294.937	46.997	80.726
TOTALS		6653165	10243.011	3487.431	12761.268	1579.221	1382.466

TABLE 3. NAVY RDT&E ACTIVITIES, PROGRAM AND PERSONNEL DATA, FY 1979

INSTALLATION	FUNDING DATA (MILLIONS $)				PERSONNEL DATA					
	TOTAL	TOTAL INHOUSE	TOTAL RDT&E	INHOUSE RDT&E	TOTAL MIL	TOTAL CIV	PHD MIL	PHD CIV	PROF MIL	PROF CIV
AEROSPACE MEDICAL RESEARCH LABORATORY	6.775	5.212	5.662	4.113	51	118	20	19	26	50
AIR DEVELOPMENT CENTER	181.196	89.336	127.081	61.190	290	2109	4	27	86	1085
AIR PROPULSION CENTER	28.627	21.044	24.458	18.304	8	587	0	0	8	155
AIR TEST CENTER	123.240	97.914	60.311	50.801	1565	2001	3	9	193	351
ARCTIC RESEARCH LABORATORY	10.376	0.056	8.841	0.000	3	0	0	0	2	0
ATLANTIC FLEET WEAPONS TRAINING FACILITY	18.043	3.801	0.239	0.202	100	34	0	0	30	19
BIOSCIENCES LABORATORY	3.563	0.895	2.446	0.591	9	6	2	0	5	0
CIVIL ENGINEERING LABORATORY	26.777	13.923	22.850	11.724	16	309	1	28	8	170
CLOTHING & TEXTILE RESEARCH FACILITY	2.156	1.989	1.060	1.060	1	55	0	1	1	37
COASTAL SYSTEMS CENTER	46.898	25.547	33.067	16.980	111	621	0	21	12	269
DAVID W. TAYLOR SHIP R&D CENTER	177.244	109.356	125.978	73.218	78	2489	1	126	22	1166
DENTAL RESEARCH INSTITUTE,NTC	1.242	1.242	0.697	0.697	29	18	12	3	16	4
ENVIRONMENTAL PREDICTION RESEARCH FACILITY	3.412	1.567	3.151	1.306	14	33	1	7	5	23
EXPLOSIVE ORDNANCE DISPOSAL FACILITY	9.173	5.406	3.648	1.677	36	165	0	1	10	41
HEALTH RESEARCH CENTER	2.927	2.927	2.371	2.371	33	80	7	10	16	38
MEDICAL RESEARCH INSTITUTE	14.385	13.193	11.269	10.077	249	240	69	41	88	95
MEDICAL RESEARCH UNIT NO.2	2.625	2.496	2.057	2.057	31	54	6	3	9	4
MEDICAL RESEARCH UNIT NO.3	2.506	1.203	1.913	0.610	27	54	6	12	10	54
NATIONAL PARACHUTE TEST RANGE	15.967	11.886	10.017	8.551	202	261	0	0	12	19
OCEAN R & D ACTIVITY	32.424	14.914	29.891	13.618	10	261	3	47	10	216
OCEAN SYSTEMS CENTER	241.687	119.125	159.562	85.889	321	2470	0	165	127	1286
OFFICE OF NAVAL RESEARCH	396.509	15.192	264.738	14.095	31	398	3	55	23	92
ORDNANCE MISSILE TEST FACILITY	5.741	3.494	4.066	2.225	86	54	1	0	33	6
PACIFIC MISSILE TEST CENTER	283.631	175.942	112.249	78.574	1060	3743	3	9	271	992
PERSONNEL RESEARCH & DEVELOPMENT CENTER	17.112	8.961	13.579	7.172	27	267	1	79	9	171
RESEARCH LABORATORY	220.818	181.726	188.575	149.483	143	3251	0	596	27	1539
SUBMARINE MEDICAL RESEARCH LABORATORY	2.487	2.487	1.960	1.960	30	62	10	12	14	33
SURFACE WEAPONS CENTER	308.606	149.335	213.932	97.873	125	4607	3	231	61	2117
UNDERSEA RANGES DEPARTMENT	32.621	22.800	25.028	21.828	44	38	0	1	8	26
UNDERWATER SYSTEMS CENTER	288.435	113.554	133.843	56.111	99	2701	1	98	26	1397
WEAPONS CENTER	283.951	151.279	181.390	102.713	583	3957	0	123	29	1387
WEAPONS EVALUATION FACILITY	7.547	6.741	2.193	1.732	147	107	1	2	15	39
TOTALS	2798.701	1374.543	1786.122	898.802	5559	31150	158	1726	1212	12881

TABLE 4. NAVY RDTGE FACILITIES DATA, F. 1979

INSTALLATION		SPACE AND PROPERTY SPACE (THOUSANDS OF SQUARE FEET)				COST (MILLIONS $)	
		ACRES	LABORATORY	ADMIN	OTHER	REAL PROPERTY	EQUIPMENT
AEROSPACE MEDICAL RESEARCH LABORATORY	PENSACOLA,FL.	6	172.546	11.768	6.400	3.130	4.033
AIR DEVELOPMENT CENTER	JOHNSVILLE,PA.	840	825.000	83.000	654.000	33.000	51.754
AIR PROPULSION CENTER	TRENTON,N.J.	68	376.704	37.973	211.766	50.979	11.516
AIR TEST CENTER	PATUXENT RIVER,MD.	7106	951.106	363.500	3501.167	161.414	23.521
ARCTIC RESEARCH LABORATORY	BARROW,AK.	4987	47.310	15.987	368.049	13.158	1.675
ATLANTIC FLEET WEAPONS TRAINING FACILITY	ROOSEVELT ROADS,P.R.	3602	0.000	14.957	154.065	10.902	96.798
BIOSCIENCES LABORATORY	OAKLAND,CA.	5	77.625	8.731	34.646	1.000	5.400
CIVIL ENGINEERING LABORATORY	PORT HUENEME,CA.	30	81.840	71.748	44.158	7.593	3.429
CLOTHING & TEXTILE RESEARCH FACILITY	NATICK,MA.	1	10.000	7.000	3.000	0.440	0.975
COASTAL SYSTEMS CENTER	PANAMA CITY,FL.	665	346.019	38.150	247.230	33.214	17.280
DAVID W. TAYLOR SHIP R&D CENTER	BETHESDA,MD.	324	1709.038	102.847	245.262	70.908	69.889
DENTAL RESEARCH INSTITUTE,NTC	GREAT LAKES,IL.	0	13.919	6.923	15.714	0.000	0.578
ENVIRONMENTAL PREDICTION RESEARCH FACILITY	MONTEREY,CA.	0	1.362	4.858	10.594	0.000	0.883
EXPLOSIVE ORDNANCE DISPOSAL FACILITY	INDIAN HEAD, MD.	1087	34.681	16.936	53.249	4.247	1.004
HEALTH RESEARCH CENTER	SAN DIEGO,CA.	2	11.177	4.500	0.000	[illegible]	0.613
MEDICAL RESEARCH INSTITUTE	BETHESDA,MD.	4	145.868	9.400	40.259	4.[illegible]	9.033
MEDICAL RESEARCH UNIT NO.2	MANILA,PHILIPPINES	0	10.370	3.500	0.600	0.[illegible]	0.807
MEDICAL RESEARCH UNIT NO.3	CAIRO,EGYPT	5	41.068	8.962	55.350	1.[illegible]	0.736
NATIONAL PARACHUTE TEST RANGE	EL CENTRO, CA.	484608	6.400	56.670	1142.407	33.061	20.629
OCEAN R & D ACTIVITY	BAY ST.LOUIS,MS.	5	63.976	18.990	25.794	9.000	5.000
OCEAN SYSTEMS CENTER	SAN DIEGO,CA.	3847	1162.394	205.889	163.233	39.507	130.640
OFFICE OF NAVAL RESEARCH	WASHINGTON D.C.	0	0.000	86.000	0.000	0.000	0.000
ORDNANCE MISSILE TEST FACILITY	WHITE SANDS,N.M.	88	108.566	30.539	78.694	5.822	10.106
PACIFIC MISSILE TEST CENTER	POINT MUGU,CA.	27084	945.133	396.770	3490.532	143.664	133.514
PERSONNEL RESEARCH & DEVELOPMENT CENTER	SAN DIEGO,CA.	1	63.580	7.080	0.000	0.485	2.350
RESEARCH LABORATORY	WASHINGTON,D.C.	798	2312.917	192.677	479.359	91.868	100.225
SUBMARINE MEDICAL RESEARCH LABORATORY	GROTON,CT.	1	40.514	14.099	0.000	1.105	1.806
SURFACE WEAPONS CENTER	SILVER SPRING,MD.	5380	1656.578	175.258	1285.183	90.474	85.325
UNDERSEA RANGES DEPARTMENT	NEWPORT,RI.	1042	75.603	17.339	304.964	24.182	1.305
UNDERWATER SYSTEMS CENTER	NEWPORT,RI.	367	1059.983	241.839	598.567	45.978	53.078
WEAPONS CENTER	CHINA LAKE,CA.	1127016	1155.058	400.259	5120.635	226.915	98.172
WEAPONS EVALUATION FACILITY	ALBUQUERQUE,N.M.	7	0.400	53.592	94.926	9.600	0.998
TOTALS		1668976	13506.735	2707.741	18412.883	1119.089	943.072

TABLE 5. AIR FORCE RDT&E ACTIVITIES, PROGRAM AND PERSONNEL DATA, FY 1979

INSTALLATION	FUNDING DATA (MILLIONS $)				PERSONNEL DATA					
	TOTAL	TOTAL INHOUSE	TOTAL RDT&E	INHOUSE RDT&E	TOTAL MIL	TOTAL CIV	PHD MIL	PHD CIV	PROF MIL	PROF CIV
AERO PROPULSION LABORATORY	91.298	15.025	90.310	14.037	51	383	3	28	32	213
AEROSPACE MEDICAL RESEARCH LABORATORY	15.297	6.561	15.297	6.561	135	154	16	22	56	94
ARMAMENT DIVISION	1248.527	231.403	372.980	147.406	4646	1743	28	37	851	801
ARNOLD ENGINEERING DEVELOPMENT CENTER	131.461	16.375	124.567	14.429	87	136	5	5	48	43
AVIONICS LABORATORY	143.291	31.991	139.592	28.862	170	774	8	32	108	427
EASTERN SPACE & MISSILE CENTER	184.659	53.592	0.000	0.000	942	1196	2	1	120	79
ENGINEERING & SERVICES CNTR / RD	7.845	1.968	6.173	0.301	69	15	5	2	45	11
FLIGHT DYNAMICS LABORATORY	97.179	37.894	93.702	34.597	198	722	11	22	115	443
FLIGHT TEST CENTER	156.504	119.136	93.354	70.324	3461	1675	1	3	136	194
FRANK J SEILER RESEARCH LABORATORY	1.258	1.258	0.638	0.638	24	9	17	1	21	6
GEOPHYSICS LABORATORY	60.708	30.143	51.065	26.000	120	498	7	74	41	271
HUMAN RESOURCES LABORATORY	26.163	10.728	22.477	8.077	127	238	12	42	84	144
MATERIALS LABORATORY	91.157	16.745	63.389	15.541	54	359	8	56	47	239
OFFICE OF SCIENTIFIC RESEARCH	101.178	23.282	100.130	22.234	45	99	7	19	17	23
ROCKET PROPULSION LABORATORY	38.447	13.468	36.145	11.166	176	255	2	13	64	90
ROME AIR DEVELOPMENT CENTER	206.564	27.201	159.571	23.974	232	1091	7	56	109	592
SCHOOL OF AEROSPACE MEDICINE	22.504	15.823	16.734	10.053	393	273	57	36	109	99
WEAPONS LABORATORY	189.863	64.683	178.185	53.005	647	464	56	49	388	240
WESTERN SPACE AND MISSILE CENTER	87.100	87.100	1.900	1.900	356	368	4	0	231	152
4950 TEST WING	54.218	43.381	51.984	41.147	854	1028	2	0	169	98
6585TH TEST GROUP	25.356	14.444	16.292	5.735	325	286	3	3	74	97
TOTALS	2980.577	862.201	1634.485	539.987	13137	11766	261	501	2865	4356

TABLE 6. AIR FORCE RDT&E FACILITIES DATA, FY 1979

INSTALLATION		SPACE AND PROPERTY SPACE (THOUSANDS OF SQUARE FEET)				COST (MILLIONS $)	
		ACRES	LABORATORY	ADMIN	OTHER	REAL PROPERTY	EQUIPMENT
AERO PROPULSION LABORATORY	WPAFB,OH.	40	229.490	41.784	105.665	56.100	193.130
AEROSPACE MEDICAL RESEARCH LABORATORY	WPAFB,OH.	30	73.614	5.247	87.764	21.200	27.835
ARMAMENT DIVISION	EGLIN AFB,FL.	464219	320.295	976.427	10639.000	290.401	163.727
ARNOLD ENGINEERING DEVELOPMENT CENTER	TULLAHOMA,TN.	39081	1092.409	182.573	561.154	378.772	60.850
AVIONICS LABORATORY	WPAFB,OH.	229	250.901	8.775	412.829	24.069	68.460
EASTERN SPACE & MISSILE CENTER	PATRICK AFB,FL.	18133	129.369	1213.525	4510.214	370.318	406.695
ENGINEERING & SERVICES CNTR / RD	TYNDALL AFB,FL.	3	4.981	2.400	9.751	1.600	1.202
FLIGHT DYNAMICS LABORATORY	WPAFB,OH.	92	518.859	5.408	143.317	26.186	50.516
FLIGHT TEST CENTER	EDWARDS AFB, CA.	227071	102.125	263.504	6737.323	279.068	124.052
FRANK J SEILER RESEARCH LABORATORY	USAF ACADEMY,CO.	1	19.003	1000.000	0.000	1.722	1.689
GEOPHYSICS LABORATORY	HANSCOM AFB,MA.	358	391.903	15.006	25.883	9.717	29.700
HUMAN RESOURCES LABORATORY	BROOKS AFB,TX.	13	76.369	49.759	54.680	5.487	33.182
MATERIALS LABORATORY	WPAFB,OH.	15	228.809	39.681	117.009	23.344	17.041
OFFICE OF SCIENTIFIC RESEARCH	WASHINGTON,D.C.	0	0.000	41.300	1.700	0.000	0.000
ROCKET PROPULSION LABORATORY	EDWARDS AFB,CA.	68345	419.046	86.848	4.780	125.000	23.487
ROME AIR DEVELOPMENT CENTER	GRIFFISS AFB,N.Y.	1517	772.193	87.767	168.762	30.351	52.996
SCHOOL OF AEROSPACE MEDICINE	BROOKS AFB,TX.	74	363.855	77.980	53.176	17.581	20.401
WEAPONS LABORATORY	KIRTLAND AFB,N.M.	702	553.823	105.574	125.118	76.061	69.493
WESTERN SPACE AND MISSILE CENTER	VANDENBERG AFB,CA.	55586	36.000	617.000	1199.000	260.000	49.900
4950 TEST WING	WPAFB,OH.	227	0.000	68.176	961.590	15.352	406.133
6585TH TEST GROUP	HOLLOMAN AFB, N.M.	6602	386.000	7.000	163.000	102.660	53.700
TOTALS		882348	5969.044	4895.734	26081.715	2114.989	1854.190

TABLE 7. DEPARTMENT OF DEFENSE RDT&E ACTIVITIES, PROGRAM AND PERSONNEL DATA, FY 1979

INSTALLATION	FUNDING DATA (MILLIONS $)				PERSONNEL DATA					
	TOTAL	TOTAL INHOUSE	TOTAL RDT&E	INHOUSE RDT&E	TOTAL MIL	TOTAL CIV	PHD MIL	PHD CIV	PROF MIL	PROF CIV
ARMED FORCES RADIOBIOLOGY RSCH.INSTITUTE	9.521	9.521	7.578	7.578	88	128	32	20	58	42
TOTALS	9.521	9.521	7.578	7.578	88	128	32	20	58	42

SUMMARY

DEPARTMENT OF DEFENSE IN-HOUSE R&D LABORATORIES

PROGRAM DATA FOR FY 1979

	(MILLIONS)
TOTAL ANNUAL LABORATORY PROGRAM	6193.485
TOTAL INHOUSE PROGRAM	2300.432
TOTAL RDT&E PROGRAM	3580.786
TOTAL INHOUSE RDT&E	1636.342
TOTAL ANNUAL OPERATING COST	617.604

PERSONNEL DATA (END OF FY 1979)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHD	TOTAL PROFESSIONALS
MILITARY	12195	788	3951
CIVILIAN	47300	3277	22812
TOTAL	59495	4065	26763

PHYSICAL FACILITIES (END OF FY 1979)

ACRES	1705281
SPACE (THOUSANDS OF SQ FT)	
LABORATORY	23192.309
ADMINISTRATIVE	6242.774
OTHER	24845.731
TOTAL	54280.814
COST (MILLIONS)	
REAL PROPERTY	2037.137
EQUIPMENT	2172.595
TOTAL	4209.732

TABLE 1A. ARMY R&D LABORATORIES, PROGRAM AND PERSONNEL DATA, FY 1979

INSTALLATION	FUNDING DATA (MILLIONS $)				PERSONNEL DATA					
	TOTAL	TOTAL INHOUSE	TOTAL RDT&E	INHOUSE RDT&E	TOTAL MIL	TOTAL CIV	PHD MIL	PHD CIV	PROF MIL	PROF CIV
AEROMEDICAL RESEARCH LABORATORY	4.789	4.177	3.771	3.159	77	65	11	4	27	21
ATMOSPHERIC SCIENCES LABORATORY	31.906	23.676	19.632	11.402	358	175	0	22	28	94
AVIATION RESEARCH & TECHNOLOGY LABORATORIES	48.519	19.018	44.861	17.550	24	536	0	35	11	271
AVIONICS R & D ACTIVITY	15.332	9.125	10.401	5.504	12	211	0	5	8	133
BALLISTIC RESEARCH LABORATORY	48.644	36.970	45.854	34.748	26	755	2	100	10	390
BIOMEDICAL LABORATORY *	0.000	0.000	0.000	0.000	66	121	25	10	41	54
CHEMICAL SYSTEMS LABORATORY	74.961	48.354	58.966	37.320	150	757	25	46	78	451
COLD REGIONS R&E LABORATORY	12.157	9.527	5.064	3.454	14	263	1	32	4	109
COMBAT SURVEILLANCE & TGT ACQUISITION LAB	55.559	12.319	34.590	9.749	14	165	0	3	7	103
COMMUNICATIONS R & D COMMAND	59.228	6.274	49.157	5.431	28	421	0	10	13	271
CONSTRUCTION ENGINEERING RESEARCH LAB	10.537	8.684	6.945	6.330	3	204	1	30	2	133
ELECTRONIC WARFARE LABORATORY	86.692	33.307	46.159	24.202	85	411	1	9	17	248
ELECTRONICS TECHNOLOGY AND DEVICES LAB	28.454	14.275	22.024	11.876	0	278	0	33	0	169
ENGINEER TOPOGRAPHIC LABORATORIES	25.565	10.402	23.253	8.994	15	299	1	19	9	173
ENGINEER WATERWAYS EXPERIMENT STATION	58.665	47.240	16.227	14.218	16	1381	0	81	17	493
FIRE CONTROL & SMALL CAL. WPNS SYSTS LAB	38.318	20.244	23.264	12.089	13	566	0	22	11	370
HARRY DIAMOND LABORATORIES	168.707	48.100	72.769	33.019	6	1148	1	57	5	453
HUMAN ENGINEERING LABORATORY	9.433	8.098	8.621	7.292	33	142	1	15	10	103
INSTITUTE OF DENTAL RESEARCH	3.701	2.641	2.268	1.208	80	26	2	2	40	11
INSTITUTE OF SURGICAL RESEARCH	4.322	4.322	2.057	2.057	149	80	22	6	51	19
LARGE CALIBER WEAPONS SYSTEMS LAB	157.303	71.159	130.292	57.348	28	1763	0	81	23	1088
LETTERMAN ARMY INSTITUTE OF RESEARCH	9.060	9.060	6.413	6.413	170	108	31	18	125	56
MATERIALS AND MECHANICS RESEARCH CENTER	36.604	20.018	25.691	15.902	18	604	1	61	10	190
MEDICAL BIOENGINEERING R&D LABORATORY	4.645	4.455	3.561	3.371	34	102	3	15	17	39
MEDICAL R & D COMMAND	27.299	27.299	25.550	25.550	57	92	21	0	39	2
MEDICAL RSCH INST OF INFECTIOUS DISEASES	12.732	12.732	8.665	8.665	308	199	48	26	77	70
MISSILE RSCH . & DEV. CMD.	100.185	65.825	66.871	41.406	28	973	0	42	19	600
MOBILITY EQUIP R & D COMMAND	245.790	43.344	72.736	30.448	80	1182	1	21	17	378
NATICK R&D COMMAND	52.091	39.188	34.353	23.722	104	1083	7	70	28	446
NIGHT VISION & ELECTRO OPTICS LABORATORY	249.791	18.779	37.276	13.895	32	459	0	29	7	203
RESEARCH INST FOR BEHAVIORAL & SOCIAL SCI	24.816	12.203	24.129	11.516	30	328	2	132	21	189
RSCH INSTITUTE OF ENVIRONMENTAL MEDICINE	4.903	4.903	3.935	3.935	81	94	9	18	40	44
SIGNALS WARFARE LABORATORY	124.953	5.656	11.087	1.750	59	168	0	5	29	51
TANK-AUTO R & D COMMAND	170.408	23.952	65.371	13.448	40	795	3	15	38	342
WALTER REED ARMY INSTITUTE OF RESEARCH	27.571	27.571	18.954	18.954	473	440	153	63	327	166
TOTALS	2033.640	752.897	1030.747	525.905	2721	16394	372	1137	1206	7933

TABLE 2A. ARMY R&D FACILITIES DATA, FY 1979

INSTALLATION		SPACE AND PROPERTY SPACE (THOUSANDS OF SQUARE FEET)				COST (MILLIONS $)	
		ACRES	LABORATORY	ADMIN	OTHER	REAL PROPERTY	EQUIPMENT
AEROMEDICAL RESEARCH LABORATORY	FT.RUCKER,AL.	10	52.747	7.797	21.884	0.844	7.667
ATMOSPHERIC SCIENCES LABORATORY	WHITE SANDS MR,N.M.	45	52.541	26.663	11.409	7.374	19.377
AVIATION RESEARCH & TECHNOLOGY LABORATORIES	MOFFETT FIELD,CA.	127	88.848	58.673	16.370	1.431	17.808
AVIONICS R & D ACTIVITY	FT.MONMOUTH,N.J.	0	16.000	33.500	0.000	0.000	7.098
BALLISTIC RESEARCH LABORATORY	ABERDEEN PROV.GR.,MD.	1920	539.702	11.200	40.982	14.595	33.742
BIOMEDICAL LABORATORY *	ABERDEEN PROV. GR.,MD	0	0.000	0.000	0.000	0.000	0.000
CHEMICAL SYSTEMS LABORATORY	ABERDEEN PROV. GR.,MD	2000	579.564	84.169	405.670	22.032	26.692
COLD REGIONS R&E LABORATORY	HANOVER,N.H.	24	80.786	30.027	128.544	7.894	6.959
COMBAT SURVEILLANCE & TGT ACQUISITION LAB	FT.MONMOUTH,N.J.	35	52.324	6.139	10.589	0.950	11.333
COMMUNICATIONS R & D COMMAND	FT MONMOUTH,N.J.	0	72.746	4.642	0.000	0.000	10.800
CONSTRUCTION ENGINEERING RESEARCH LAB	CHAMPAIGN,IL.	30	76.081	34.159	0.000	3.896	4.438
ELECTRONIC WARFARE LABORATORY	FT.MONMOUTH,N.J.	6	142.936	37.617	43.502	92.766	42.961
ELECTRONICS TECHNOLOGY AND DEVICES LAB	FT.MONMOUTH,N.J.	0	89.500	30.636	7.290	0.000	14.527
ENGINEER TOPOGRAPHIC LABORATORIES	FT.BELVOIR,VA.	33	90.722	7.000	13.300	6.000	8.713
ENGINEER WATERWAYS EXPERIMENT STATION	VICKSBURG,MS.	722	1724.058	359.819	170.488	20.622	37.524
FIRE CONTROL & SMALL CAL. WPNS SYSTS LAB	DOVER,N.J.	391	61.183	76.990	0.000	2.295	7.770
HARRY DIAMOND LABORATORIES	WASHINGTON,D.C.	2337	430.802	71.090	269.573	50.384	38.746
HUMAN ENGINEERING LABORATORY	ABERDEEN PRO.GR.,MD.	12	22.000	26.500	29.000	4.412	3.806
INSTITUTE OF DENTAL RESEARCH	WASHINGTON,D.C.	4	9.325	5.696	6.730	0.875	1.791
INSTITUTE OF SURGICAL RESEARCH	FT.SAM HOUSTON,TX.	1	26.424	1.800	22.400	2.313	2.200
LARGE CALIBER WEAPONS SYSTEMS LAB	DOVER,N.J.	1251	204.685	184.072	128.700	8.586	66.200
LETTERMAN ARMY INSTITUTE OF RESEARCH	PRESIDIO.S.F.,CA.	9	133.198	36.506	305.309	42.423	10.333
MATERIALS AND MECHANICS RESEARCH CENTER	WATERTOWN,MA.	48	389.161	83.380	160.030	16.591	16.150
MEDICAL BIOENGINEERING R&D LABORATORY	FT.DETRICK,MD.	5	45.103	27.300	34.108	3.228	3.014
MEDICAL R & D COMMAND	FT.DETRICK,MD.	1	0.000	33.022	0.000	0.151	0.610
MEDICAL RSCH INST OF INFECTIOUS DISEASES	FT.DETRICK,MD.	43	80.854	19.820	209.699	17.824	6.946
MISSILE RSCH . & DEV. CMD.	REDSTONE ARSENAL,AL.	11000	663.993	318.702	428.008	131.000	90.000
MOBILITY EQUIP R & D COMMAND	FT.BELVOIR,VA.	1064	750.849	146.730	209.879	49.093	34.947
NATICK R&D COMMAND	NATICK,MA.	2913	552.557	65.900	417.862	27.336	18.857
NIGHT VISION & ELECTRO OPTICS LABORATORY	FT.BELVOIR,VA.	38	180.639	27.186	20.000	22.000	50.000
RESEARCH INST FOR BEHAVIORAL & SOCIAL SCI	WASHINGTON,D.C.	0	46.110	2.559	6.190	0.000	1.795
RSCH INSTITUTE OF ENVIRONMENTAL MEDICINE	NATICK,MA.	4	60.421	18.563	28.647	3.713	3.825
SIGNALS WARFARE LABORATORY	VINT HILL,VA.	10	3.936	32.101	3.963	2.000	9.980
TANK-AUTO R & D COMMAND	WARREN,MI.	11	140.319	99.947	0.000	38.294	135.000
WALTER REED ARMY INSTITUTE OF RESEARCH	WASHINGTON,D.C.	203	382.974	58.360	0.000	10.080	17.609
TOTALS		24297	7843.088	2068.265	3155.126	621.007	769.218

TABLE 3A. NAVY R&D LABORATORIES, PROGRAM AND PERSONNEL DATA, FY 1979

INSTALLATION	FUNDING DATA (MILLIONS $)				PERSONNEL DATA					
	TOTAL	TOTAL INHOUSE	TOTAL RDT&E	INHOUSE RDT&E	TOTAL MIL	TOTAL CIV	PHD MIL	PHD CIV	PROF MIL	PROF CIV
AEROSPACE MEDICAL RESEARCH LABORATORY	6.775	5.212	5.662	4.113	51	118	20	19	26	50
AIR DEVELOPMENT CENTER	181.196	89.336	127.081	61.190	290	2109	4	27	86	1085
ARCTIC RESEARCH LABORATORY	10.376	0.056	8.841	0.000	3	0	0	0	2	0
BIOSCIENCES LABORATORY	3.563	0.895	2.446	0.591	9	6	2	0	5	0
CIVIL ENGINEERING LABORATORY	26.777	13.923	22.850	11.724	16	309	1	28	8	170
CLOTHING & TEXTILE RESEARCH FACILITY	2.156	1.989	1.060	1.060	1	55	0	1	1	37
COASTAL SYSTEMS CENTER	46.898	25.547	33.067	16.980	111	621	0	21	12	269
DAVID W. TAYLOR SHIP R&D CENTER	177.244	109.356	125.978	73.218	78	2489	1	126	22	1166
DENTAL RESEARCH INSTITUTE,NTC	1.242	1.242	0.697	0.697	29	18	12	3	16	4
ENVIRONMENTAL PREDICTION RESEARCH FACILITY	3.412	1.567	3.151	1.306	14	33	1	7	5	23
HEALTH RESEARCH CENTER	2.927	2.927	2.371	2.371	33	80	7	10	16	38
MEDICAL RESEARCH INSTITUTE	14.385	13.193	11.269	10.077	249	240	69	41	88	95
MEDICAL RESEARCH UNIT NO.2	2.625	2.496	2.057	2.057	31	54	6	3	9	4
MEDICAL RESEARCH UNIT NO.3	2.506	1.203	1.913	0.610	27	54	6	12	10	54
OCEAN R & D ACTIVITY	32.424	14.914	29.891	13.618	10	261	3	47	10	216
OCEAN SYSTEMS CENTER	241.687	119.125	159.562	85.889	321	2470	0	165	127	1286
PERSONNEL RESEARCH & DEVELOPMENT CENTER	17.112	8.961	13.579	7.172	27	267	1	79	9	171
RESEARCH LABORATORY	220.818	181.726	188.575	149.483	143	3251	0	596	27	1539
SUBMARINE MEDICAL RESEARCH LABORATORY	2.487	2.487	1.960	1.960	30	62	10	12	14	33
SURFACE WEAPONS CENTER	308.606	149.335	213.932	97.873	125	4607	3	231	61	2117
UNDERSEA RANGES DEPARTMENT	32.621	22.800	25.028	21.828	44	38	0	1	8	26
UNDERWATER SYSTEMS CENTER	288.435	113.554	133.843	56.111	99	2701	1	98	26	1397
WEAPONS CENTER	283.951	151.279	181.390	102.713	583	3957	0	123	29	1387
TOTALS	1910.22[illegible]	1033.123	1296.203	722.641	2324	23800	147	1650	617	11167

TABLE 4A. NAVY R&D FACILITIES DATA, FY 1979

INSTALLATION		SPACE AND PROPERTY SPACE (THOUSANDS OF SQUARE FEET)				COST (MILLIONS $)	
		ACRES	LABORATORY	ADMIN	OTHER	REAL PROPERTY	EQUIPMENT
AEROSPACE MEDICAL RESEARCH LABORATORY	PENSACOLA,FL.	6	172.546	11.768	6.400	3.130	4.033
AIR DEVELOPMENT CENTER	JOHNSVILLE,PA.	840	825.000	83.000	654.000	33.000	51.754
ARCTIC RESEARCH LABORATORY	BARROW,AK.	4987	47.310	15.987	368.049	13.158	1.675
BIOSCIENCES LABORATORY	OAKLAND,CA.	5	77.625	8.731	34.646	1.000	5.400
CIVIL ENGINEERING LABORATORY	PORT HUENEME,CA.	30	81.840	71.748	44.158	7.293	3.429
CLOTHING & TEXTILE RESEARCH FACILITY	NATICK,MA.	1	10.000	7.000	5.000	0.440	0.975
COASTAL SYSTEMS CENTER	PANAMA CITY,FL.	665	346.019	38.150	247.230	33.214	17.280
DAVID W. TAYLOR SHIP R&D CENTER	BETHESDA,MD.	324	1709.038	102.847	245.262	70.908	69.889
DENTAL RESEARCH INSTITUTE,NTC	GREAT LAKES,IL.	0	13.919	6.923	15.714	0.000	0.578
ENVIRONMENTAL PREDICTION RESEARCH FACILITY	MONTEREY,CA.	0	1.362	4.858	10.594	0.000	0.983
HEALTH RESEARCH CENTER	SAN DIEGO,CA.	2	11.177	4.500	0.000	2.000	0.613
MEDICAL RESEARCH INSTITUTE	BETHESDA,MD.	4	145.868	9.400	40.299	4.000	9.033
MEDICAL RESEARCH UNIT NO.2	MANILA,PHILIPPINES	0	10.370	3.500	0.600	0.000	0.807
MEDICAL RESEARCH UNIT NO.3	CAIRO,EGYPT	5	41.068	8.962	55.350	1.443	0.736
OCEAN R & D ACTIVITY	BAY ST.LOUIS,MS.	5	63.976	18.950	25.794	9.000	5.000
OCEAN SYSTEMS CENTER	SAN DIEGO,CA.	3847	1162.394	205.889	163.233	39.507	130.640
PERSONNEL RESEARCH & DEVELOPMENT CENTER	SAN DIEGO,CA.	1	63.580	7.030	0.000	0.485	2.350
RESEARCH LABORATORY	WASHINGTON,D.C.	798	2312.917	192.677	479.359	91.868	100.225
SUBMARINE MEDICAL RESEARCH LABORATORY	GROTON,CT.	1	40.514	14.099	0.000	1.105	1.806
SURFACE WEAPONS CENTER	SILVER SPRING,MD.	5380	1656.578	175.258	1285.183	90.474	85.325
UNDERSEA RANGES DEPARTMENT	NEWPORT,RI.	1042	75.603	17.339	304.964	24.182	1.305
UNDERWATER SYSTEMS CENTER	NEWPORT,RI.	367	1059.983	241.839	581.567	45.978	53.078
WEAPONS CENTER	CHINA LAKE,CA.	1127016	1155.058	400.259	5120.635	226.915	98.172
TOTALS		1145326	11083.745	1650.804	9686.037	699.400	644.986

TABLE 5A. AIR FORCE R&D LABORATORIES, PROGRAM AND PERSONNEL DATA, FY 1979

INSTALLATION	FUNDING DATA (MILLIONS $)				PERSONNEL DATA					
	TOTAL	TOTAL INHOUSE	TOTAL RDT&E	INHOUSE RDT&E	TOTAL MIL	TOTAL CIV	PHD MIL	PHD CIV	PROF MIL	PROF CIV
AERO PROPULSION LABORATORY	91.298	15.025	90.310	14.037	51	383	3	28	32	213
AEROSPACE MEDICAL RESEARCH LABORATORY	15.297	6.561	15.297	6.561	135	154	16	22	56	94
ARMAMENT DIVISION	1248.527	231.403	372.980	147.406	4646	1743	28	37	851	801
AVIONICS LABORATORY	143.291	31.991	139.592	28.862	170	774	8	32	108	427
ENGINEERING & SERVICES CNTR / RD	7.845	1.968	6.173	0.301	89	15	5	2	45	11
FLIGHT DYNAMICS LABORATORY	97.179	37.894	93.702	34.597	198	722	11	22	115	443
FRANK J SEILER RESEARCH LABORATORY	1.258	1.258	0.638	0.638	24	9	17	1	21	6
GEOPHYSICS LABORATORY	60.708	30.143	51.065	26.000	120	498	7	74	41	271
HUMAN RESOURCES LABORATORY	26.163	10.728	22.477	8.077	127	238	12	42	84	144
MATERIALS LABORATORY	91.157	16.745	63.389	15.541	54	359	8	56	47	239
ROCKET PROPULSION LABORATORY	38.447	13.468	36.145	11.166	176	255	2	13	64	90
ROME AIR DEVELOPMENT CENTER	206.564	27.201	159.571	23.974	232	1091	7	56	109	592
SCHOOL OF AEROSPACE MEDICINE	22.504	15.823	16.734	10.053	393	273	57	36	109	99
WEAPONS LABORATORY	189.863	64.683	178.185	53.005	647	464	56	49	388	240
TOTALS	2240.101	504.891	1246.258	380.218	7062	6978	237	470	2070	3670

TABLE 6A. AIR FORCE R&D FACILITIES DATA, FY 1979

INSTALLATION		SPACE AND PROPERTY SPACE (THOUSANDS OF SQUARE FEET)				COST (MILLIONS $)	
		ACRES	LABORATORY	ADMIN	OTHER	REAL PROPERTY	EQUIPMENT
AERO PROPULSION LABORATORY	WPAFB,OH.	40	229.490	41.784	105.665	56.100	193.130
AEROSPACE MEDICAL RESEARCH LABORATORY	WPAFB,OH.	30	73.614	5.247	87.764	21.200	27.835
ARMAMENT DIVISION	EGLIN AFB,FL.	464219	320.295	976.427	10639.000	290.401	163.727
AVIONICS LABORATORY	WPAFB,OH.	229	250.901	8.775	412.829	24.069	68.460
ENGINEERING & SERVICES CNTR / RD	TYNDALL AFB,FL.	3	4.981	2.400	9.751	1.600	1.202
FLIGHT DYNAMICS LABORATORY	WPAFB,OH.	92	518.859	5.408	143.317	26.186	50.516
FRANK J SEILER RESEARCH LABORATORY	USAF ACADEMY,CO.	1	19.003	1000.000	0.000	1.722	1.689
GEOPHYSICS LABORATORY	HANSCOM AFB,MA.	368	391.903	15.006	25.883	9.717	29.700
HUMAN RESOURCES LABORATORY	BROOKS AFB,TX.	13	76.369	49.759	54.680	5.487	33.182
MATERIALS LABORATORY	WPAFB,OH.	15	228.809	39.681	117.009	23.344	17.041
ROCKET PROPULSION LABORATORY	EDWARDS AFB,CA.	68345	419.046	86.848	4.780	125.000	23.487
ROME AIR DEVELOPMENT CENTER	GRIFFISS AFB,N.Y.	1517	772.193	87.767	168.762	30.351	52.996
SCHOOL OF AEROSPACE MEDICINE	BROOKS AFB,TX.	74	363.855	77.980	53.176	17.581	20.401
WEAPONS LABORATORY	KIRTLAND AFB,N.M.	702	553.823	105.574	125.118	76.061	69.493
TOTALS		535648	4223.141	2502.656	11947.734	708.819	752.859

TABLE 7A. DEPARTMENT OF DEFENSE RDT&E FACILITIES DATA, FY 1979

INSTALLATION		SPACE AND PROPERTY SPACE (THOUSANDS OF SQUARE FEET)				COST (MILLIONS $)	
		ACRES	LABORATORY	ADMIN	OTHER	REAL PROPERTY	EQUIPMENT
ARMED FORCES RADIOBIOLOGY RSCH.INSTITUTE	BETHESDA,MD.	10	42.335	21.049	56.834	7.911	5.532
TOTALS		10	42.335	21.049	36.834	7.911	5.532

TABLE 8 - ARMY RESEARCH AND DEVELOPMENT LABORATORY ORGANIZATIONAL RELATIONSHIPS

	COMMAND CHAIN	
	INTERMEDIATE	COMMAND
AEROMEDICAL RESEARCH LABORATORY	MEDICAL R&D COMMAND	THE SURGEON GENERAL
ATMOSPHERIC SCIENCES LABORATORY	ELECTRONICS R&D CMD	MAT DEV & READ CMD
AVIATION R&T LABORATORY	AVIATION R&D COMMAND	MAT DEV & READ CMD
AVIONICS R&D ACTIVITY	AVIATION R&D COMMAND	MAT DEV & READ CMD
BALLISTIC RESEARCH LABORATORY	ARMAMENT R&D COMMAND	MAT DEV & READ CMD
BIOMEDICAL LABORATORY	MEDICAL R&D COMMAND	THE SURGEON GENERAL
CHEMICAL SYSTEMS LABORATORY	ARMAMENT R&D COMMAND	MAT DEV & READ CMD
COLD REGIONS R&E LABORATORY	--	CHIEF OF ENGINEERS
COMBAT SURVEILLANCE & TARGET ACQUISITION LABS	ELECTRONICS R&D COMMAND	MAT DEV & READ CMD
COMMUNICATIONS R&D COMMAND	--	MAT DEV & READ CMD
CONSTRUCTION ENGINEERING RSCH LABORATORY	--	CHIEF OF ENGINEERS
ELECTRONIC WARFARE LABORATORY	ELECTRONICS R&D COMMAND	MAT DEV & READ CMD
ELECTRONICS TECHNOLOGY & DEVICES LABORATORY	ELECTRONICS R&D COMMAND	MAT DEV & READ CMD
ENGINEER TOPOGRAPHIC LABORATORIES	--	CHIEF OF ENGINEERS
ENGINEER WATERWAYS EXPERIMENT STATION	--	CHIEF OF ENGINEERS
FIRE CONTROL & SMALL CALIBER WPNS SYSTEMS LAB	ARMAMENT R&D COMMAND	MAT DEV & READ CMD
HARRY DIAMOND LABORATORIES	ELECTRONICS R&D COMMAND	MAT DEV & READ CMD
HUMAN ENGINEERING LABORATORY	--	MAT DEV & READ CMD
INSTITUTE OF DENTAL RESEARCH	MEDICAL R&D COMMAND	THE SURGEON GENERAL
INSTITUTE OF SURGICAL RESEARCH	MEDICAL R&D COMMAND	THE SURGEON GENERAL
LARGE CALIBER WEAPONS SYSTEMS LABORATORY	ARMAMENT R&D COMMAND	MAT DEV & READ CMD
LETTERMAN ARMY INSTITUTE OF RESEARCH	MEDICAL R&D COMMAND	THE SURGEON GENERAL
MATERIALS AND MECHANICS RESEARCH CENTER	--	MAT DEV & READ CMD
MEDICAL BIOENGINEERING R&D LABORATORY	MEDICAL R&D COMMAND	THE SURGEON GENERAL
MEDICAL R&D COMMAND	--	THE SURGEON GENERAL
MEDICAL RESEARCH INST OF INFECTIOUS DISEASES	MEDICAL R&D COMMAND	THE SURGEON GENERAL
MISSILE R&D COMMAND	--	MAT DEV & READ CMD
MOBILITY EQUIPMENT R&D COMMAND	--	MAT DEV & READ CMD
NATICK R&D COMMAND	--	MAT DEV & READ CMD
NIGHT VISION & ELECTRO-OPTICS LABORATORY	ELECTRONICS R&D COMMAND	MAT DEV & READ CMD

Table 8 - ARMY RESEARCH AND DEVELOPMENT LABORATORY ORGANIZATIONAL RELATIONSHIPS

	COMMAND CHAIN	
	INTERMEDIATE	COMMAND
RES INST FOR BEHAVIORAL & SOCIAL SCIENCES	--	DEPUTY CHIEF OF STAFF FOR PERSONNEL
RESEARCH INSTITUTE OF ENVIRONMENTAL MEDICINE	MEDICAL R&D COMMAND	THE SURGEON GENERAL
SIGNALS WARFARE LABORATORY	ELECTRONICS R&D CMD	MAT DEV & READ CMD
TANK-AUTOMOTIVE R&D COMMAND	--	MAT DEV & READ CMD
WALTER REED ARMY INSTITUTE OF RESEARCH	MEDICAL R&D COMMAND	THE SURGEON GENERAL

TABLE 9 - NAVY RESEARCH AND DEVELOPMENT LABORATORY ORGANIZATIONAL RELATIONSHIPS

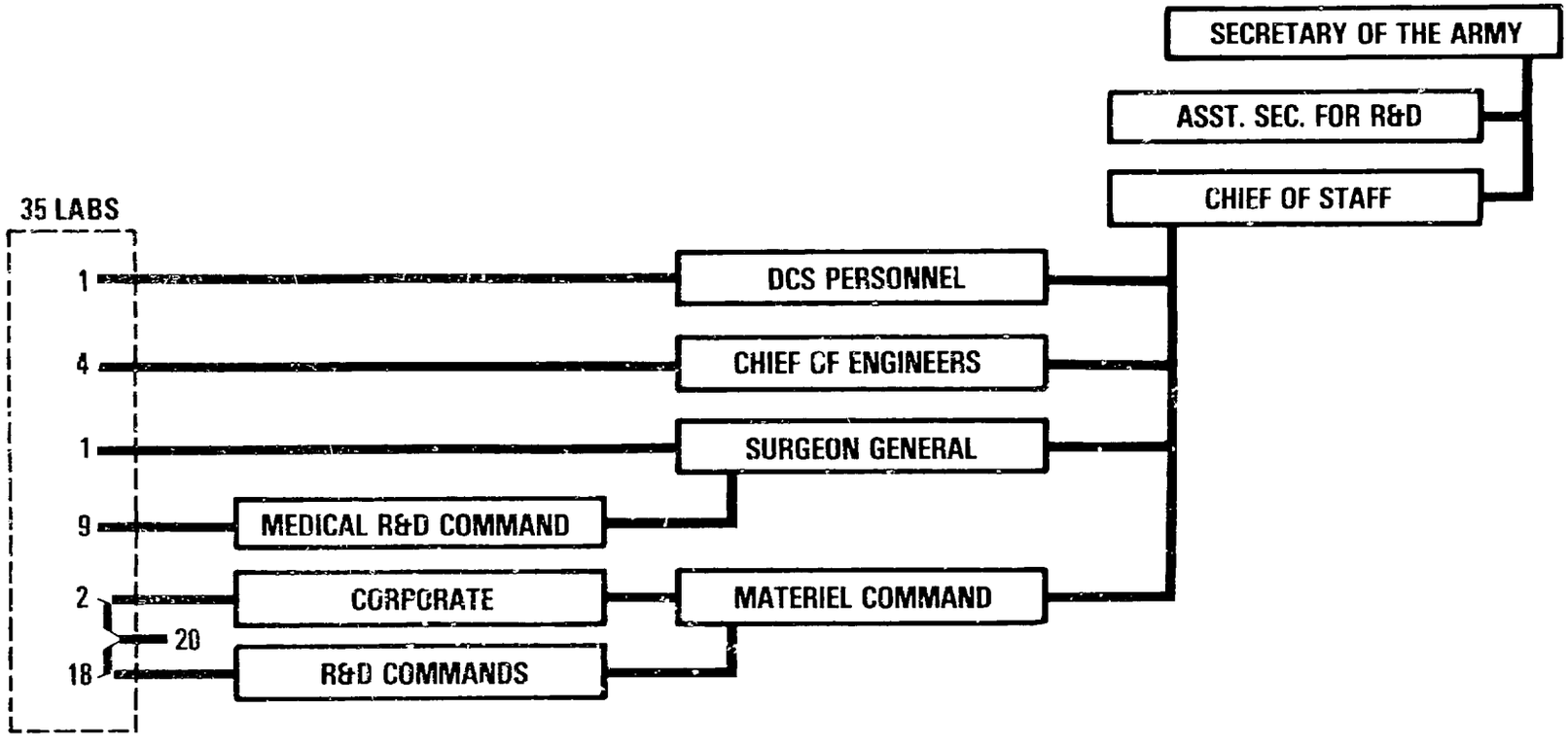
	COMMAND CHAIN	
	INTERMEDIATE	COMMAND
AEROSPACE MEDICAL RESEARCH LABORATORY	MEDICAL R&D COMMAND	CHIEF, BUR OF MED/SUR
AIR DEVELOPMENT CENTER	--	CHIEF OF NAVAL MATERIAL
ARCTIC RESEARCH LABORATORY	--	CHIEF OF NAVAL RESEARCH
BIOSCIENCES LABORATORY	--	CHIEF OF NAVAL RESEARCH
CIVIL ENGINEERING LABORATORY	FAC ENG COMMAND	CHIEF OF NAVAL MATERIAL
CLOTHING AND TEXTILE RESEARCH FACILITY	SUPPLY SYS COMMAND	CHIEF OF NAVAL MATERIAL
COASTAL SYSTEMS CENTER	--	CHIEF OF NAVAL MATERIAL
DAVID W. TAYLOR SHIP R&D CENTER	--	CHIEF OF NAVAL MATERIAL
DENTAL RESEARCH INSTITUTE, NTC	MEDICAL R&D COMMAND	CHIEF, BUR OF MED/SUR
ENVIRONMENTAL PREDICTION RESEARCH FACILITY	AIR SYSTEMS COMMAND	CHIEF OF NAVAL MATERIAL
HEALTH RESEARCH CENTER	MEDICAL R&D COMMAND	CHIEF, BUR OF MED/SUR
MEDICAL RESEARCH INSTITUTE	MEDICAL R&D COMMAND	CHIEF, BUR OF MED/SUR
MEDICAL RESEARCH UNIT NO. 2	MEDICAL R&D COMMAND	CHIEF, BUR OF MED/SUR
MEDICAL RESEARCH UNIT NO. 3	MEDICAL R&D COMMAND	CHIEF, BUR OF MED/SUR
OCEAN R&D ACTIVITY	--	CHIEF OF NAVAL RESEARCH
OCEAN SYSTEMS CENTER	--	CHIEF OF NAVAL MATERIAL
PERSONNEL RESEARCH & DEVELOPMENT CENTER	--	CHIEF OF NAVAL MATERIAL
RESEARCH LABORATORY	--	CHIEF OF NAVAL RESEARCH
SUBMARINE MEDICAL RESEARCH LABORATORY	MEDICAL R&D COMMAND	CHIEF, BUR OF MED/SUR
SURFACE WEAPONS CENTER	--	CHIEF OF NAVAL MATERIAL
UNDERSEAS RANGES DEPARTMENT	--	CHIEF OF NAVAL MATERIAL
UNDERWATER SYSTEMS CENTER	--	CHIEF OF NAVAL MATERIAL
WEAPONS CENTER	--	CHIEF OF NAVAL MATERIAL

TABLE 10 AIR FORCE RESEARCH AND DEVELOPMENT LABORATORY ORGANIZATIONAL RELATIONSHIPS

	COMMAND CHAIN	
	INTERMEDIATE	COMMAND
AEROPROPULSION LABORATORY	WRIGHT AERONAUTICAL LABS	AF SYSTEMS COMMAND
AEROSPACE MEDICAL RESEARCH LABORATORY	--	AF SYSTEMS COMMAND
*ARMAMENT LABORATORY	ARMAMENT DIVISION	AF SYSTEMS COMMAND
AVIONICS LABORATORY	WRIGHT AERONAUTICAL LABS	AF SYSTEMS COMMAND
ENGINEERING SERVICES CENTER/RD	--	HQ US AIR FORCE
FLIGHT DYNAMICS LABORATORY	WRIGHT AERONAUTICAL LABS	AF SYSTEMS COMMAND
FRANK J. SEILER RESEARCH LABORATORY	OFFICE OF SCIENTIFIC RES	AF SYSTEMS COMMAND
GEOPHYSICS LABORATORY	--	AF SYSTEMS COMMAND
HUMAN RESOURCES LABORATORY	--	AF SYSTEMS COMMAND
MATERIALS LABORATORY	WRIGHT AERONAUTICAL LABS	AF SYSTEMS COMMAND
ROCKET PROPULSION LABORATORY	--	AF SYSTEMS COMMAND
ROME AIR DEVELOPMENT CENTER	ELECTRONIC SYSTEMS DIVISION	AF SYSTEMS COMMAND
SCHOOL OF AEROSPACE MEDICINE	AEROSPACE MEDICAL DIVISION	AF SYSTEMS COMMAND
WEAPONS LABORATORY	--	AF SYSTEMS COMMAND

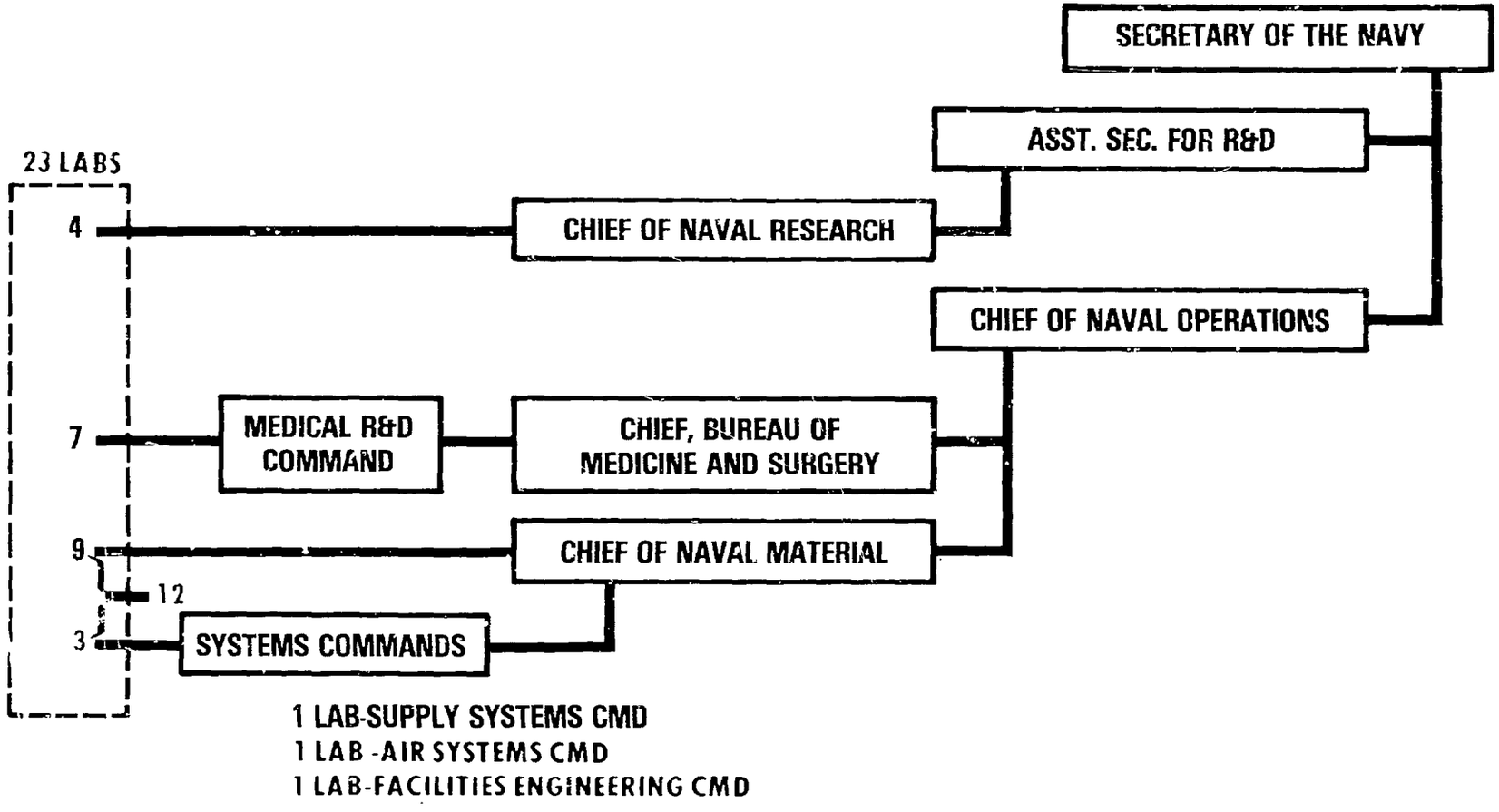
* Laboratory portion not reported separately in this report. (See Armament Division which includes Armament Laboratory)

ARMY LABORATORIES COMMAND CHAIN

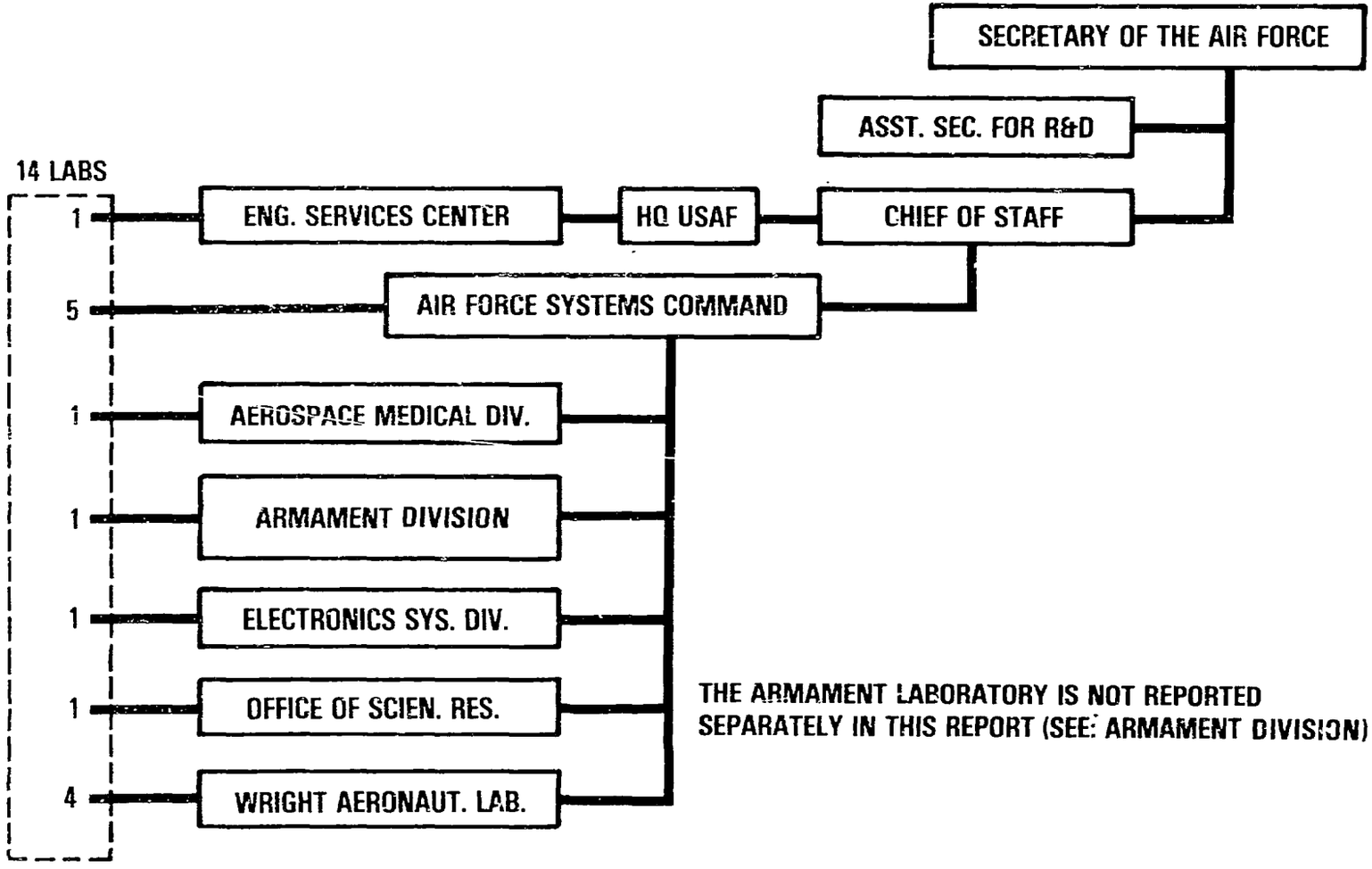


4 LABS	– ARMAMENT R&D CMD	1	– TANK-AUTOMOTIVE R&D CMD
2	– AVIATION R&D CMD	1	– COMMUNICATIONS R&D CMD
7	– ELECTRONICS R&D CMD	1	– MOBILITY EQUIPMENT R&D CMD
1	– MISSILE R&D CMD	1	– NATICK R&D CMD

NAVY LABORATORIES COMMAND CHAIN



AIR FORCE LABORATORIES COMMAND CHAIN



THE ARMAMENT LABORATORY IS NOT REPORTED SEPARATELY IN THIS REPORT (SEE: ARMAMENT DIVISION)

INSTALLATION: AEROMEDICAL RESEARCH LABORATORY FT.RUCKER,AL.

COR.COL. STANLEY C. KNAPP

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1979 (ACTUAL)	1980 (ACT + EST)
TOTAL RDT&E	3.771	3.362
TOTAL PROCUREMENT	0.000	0.000
TOTAL O&M	0.029	0.000
TOTAL OTHER	0.989	0.880
TOTAL ANNUAL LAB	4.789	4.242
TOTAL INHOUSE	4.177	3.825
TOTAL INHOUSE RDT&E	3.159	2.945
ANNUAL OPERATING COST	1.410	1.585

PERSONNEL DATA (END OF FY 1979)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON-PROF
MILITARY	77	11	27	50
CIVILIAN	65	4	21	44
TOTAL	142	15	48	94

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
10	52.747	7.797	21.884	82.428	0.84	7.667

...MISSION
CDT FUND MTL/APPLD RSCH ON MED ASPECTS OF AAVN,ABN&GND OPNS
PERF MED RSCH ON VIS/AUD FUNC;MAN/MACH INTEGRATION
MED ASPECTS OF NONMED MAT;PHYSIO/PSYCHO RSPNS TO OPNL ENVMNTS
MIL OPNL TNG IMPACTS UPON ECOLOGY.PRIME DOD CONSULT IN ALL AREAS.

...CURRENT IMPORTANT PROGRAMS
MEDICAL HAZARD ASSESSMENT OF MAJOR WEAPON SYSTEMS
RSCH AND DEV OR MED FACTORS INFLUENCING VEH AND WEAPONS CREW PERFORMANCE
RSCH OF VIS AND PSYCHOACOUSTICAL FACTORS OF MED IMPORT TO ARMY CBT SYS
DIRECT APPLIED RSCH AND DEV TO SPT TO ARMY AVN
FUNDAMENTAL BIOMED RSCH AND DEV TO ESTB EQUIP ENVMNT AND TASK DESIG CRIT

...FUNCTIONS/EQUIPMENT/CAPABILITIES
ANECHOIC CHAMBER;COLORIMETER;ECG&EEG MACH,AUTOANALYZER;MASS SPECTRO; 3 DEGREE FREEDOM CLOSED-LOOP SERVOHYDRAULIC HEL SEAT MNTD SIMULATOR;SEQ MULTI ANALYZER-COMPUTERIZED;SIMUHIMS(HELSIMULATOR);HYBRID CPMT SYSCSEL-8500 DIGITAL MAINFRAME;SAI-681 ANALOG MAINFRAME;SAI-693 COMM INTERFACE; IMLAC PDS-10 DISPLAY PROCESSOR); FAST FOURIER SOUND ANALYZER; PHOTOMETRY LAB W/AUTOMATIC CIE ANAL RAPID SCAN SPECTROMETER TRANSFERABLE TO BU OF STDS DROP TOWER FOR ANSI EVAL OF HEL SYS; THREE AXES PEGASUS MAN-RATED VIB PLATFORM W/HARDWIRE CMPT CONT/ANAL SYS CAPABLE OF MOVING 600LB LOAD 0-50 W/2DS ERROR; HEMISPHERE W/SENSORS TO DETM HEAD PNTING CAPABILITY FOR USE IN CONJ WITH/VIB PLATFORM FOR DYNAMIC STUDIES;EMERG PHYSICIAN CALL SYS (10 MILE RADIUS);ELECTRON MICROSCOPES(2EA); AUTOMATED TISSUE FIXATION SYS;ABN EQUIP;BIOCHEM LAB;ELECTRONIC&ENGR FAB SHOP;&PHOTO LAB.

INSTALLATION: AIR DEFENSE BOARD EL PASO,TX.

PRES.COL. JAMES C. CROSBY TECH.ADV.MR. CHARLES E. FRENCH

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1979 (ACTUAL)	1980 (ACT + EST)
TOTAL RDT&E	3.495	4.056
TOTAL PROCUREMENT	1.662	1.921
TOTAL O&M	0.270	0.464
TOTAL OTHER	2.183	2.284
TOTAL ANNUAL LAB	7.610	8.725
TOTAL INHOUSE	7.118	7.686
TOTAL INHOUSE RDT&E	3.151	3.319
ANNUAL OPERATING COST	0.335	0.379

PERSONNEL DATA (END OF FY 1979)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON-PROF
MILITARY	117	0	22	95
CIVILIAN	86	0	14	72
TOTAL	203	0	36	167

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
26	35.530	36.326	19.132	90.988	1.26	9.855

...MISSION
PLAN, CONDUCT AND REPT ON OT I, II, AND IIA AS RQR, AND OTHER USER-TYPE TESTS OF AD WPN SYS, FIRE DISTR SYS, ECM AND ECCM EQUIP AND DEVICES AND TGT DEVICES. MONITOR AND PARTICIPATE IN OT I AND OT II AND CONDUCT OTHER TESTS AND EVAL AS DIR BY CG, USA TRADOC AND CG, USAADCENFB.

...CURRENT IMPORTANT PROGRAMS
STINGER-POST CCMV
LOMAD AFU
DIVAD GUN OT II
PATRIOT OT II ADD-ON
ROLAND RELIABILITY DEMO

...FUNCTIONS/EQUIPMENT/CAPABILITIES
EQUIPMENT: MULTIPLE TGT TRACKING SYS PROVIDES DATA FROM AIR GROUND TGTS, TWO LASER TRACKING SYS TO BE OPER BY JAN 81 WILL PROVIDE DATA FROM COOPERATIVE TGTS, INSTR RADAR SYS THAT PROVIDES HIGH ACCURACY, TWO NIKE-HERC FIRE CON SYS USED AS INSTR RADARS MATED TO RADAR DATA RECORDERS, A RNG TIMING SYS TO PROVIDE A TIME BASE FOR ALL INSTR SYS, TWO DATA ACQ SYS ACCEPT 59 DIFFERENT SIGNALS, CCTV SYS FOR RNG SAFETY, TECH PHOTO LAB FOR REQUIRED DATA, RICS PROVIDES NEAR REAL TIME DATA OUTPUTS. FACILITIES AT FT BLISS: BLDG 1656 HOUSES RICS, RNG TIMING SYS, DATA PREPARATION, ELECTRONIC CAL & FABRICATION LAB, MACH & CARPENTER SHOPS, MICROWAVE TERM THAT PROVIDES DATA & COMMO LINK TO RANGES; BLDG 1658 - PHOTOGRAPHIC LAB; DONA ANA, MCGREGOR, NORTH MCGREGOR RANGES FOR FIRING FORWARD AREA WEAPON AT AIR OR GROUND TARGETS. SITE MONITOR FOR ELECTRONICS TESTING OF EQUIP.

INSTALLATION: AIRBORNE BOARD FT.BRAGG,N.C.

PRES.COL. G.G. THOMAS,JR. ENGR.ADV.MR. GEORGE G. GORE

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1979 (ACTUAL)	1980 (ACT + EST)
TOTAL RDT&E	1.427	1.126
TOTAL PROCUREMENT	0.299	0.500
TOTAL O&M	0.126	0.184
TOTAL OTHER	1.138	1.000
TOTAL ANNUAL LAB	2.990	2.810
TOTAL INHOUSE	2.990	2.810
TOTAL INHOUSE RDT&E	1.427	1.126
ANNUAL OPERATING COST	1.000	1.000

PERSONNEL DATA (END OF FY 1979)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON-PROF
MILITARY	87	0	17	70
CIVILIAN	40	0	4	36
TOTAL	127	0	21	106

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
27	3.978	3.914	39.390	47.282	0.97	4.026

...MISSION
THE MISSION OF THE ABN BD IS TO PLAN, CONDUCT AND REPORT ON DT I & II, FDTE AND OTHER USER TYPE TESTS OF AIRBORNE ITEMS; PARTICIPATE IN DT I, II & III AS DIRECTED; PROVIDE ADVICE AND GUIDANCE ON TEST AND EVALUATION MATTERS. CONDUCT SPECIAL TESTS & EVALUATIONS AS DIRECTED.

...CURRENT IMPORTANT PROGRAMS
LOW ALTITUDE PARACHUTE EXTRACTION SYSTEM
STANDARD AIRDROP OF SELECTED ITEMS OF EQUIPMENT
EXTERNAL AIR TRANSPORTABILITY
C-141B AIRCRAFT TEST PROGRAM
FAMILY OF HELICOPTER EXTERNAL SLINGS

...FUNCTIONS/EQUIPMENT/CAPABILITIES
FACILITIES INCLUDE: MAIN OFC BLDG, ABN HANGAR, INSTRUMENTATION/DESIGN INTERFACING SECTION, COMBINED SHOP & ADP FACILITY. MAJOR EQUIPMENT INCLUDES: LIGHTWEIGHT OPTICAL TRACKING SYSTEM, 25-TON CRANE, 2 20-TON MOBILE CRANES, 5-TON WRECKER, 40,000 LB ACFT LOADER, THREE T-28B ACFT, 1 UH-1H HELICOPTER, VARIOUS TYPES OF STANDARD PARACHUTES, NINE GASOLINE GENERATORS, DIGITAL THEODOLITES, ELECTRONIC DIAGNOSTIC EQUIPMENT, VOLTMETERS, AMMETERS, SPECTRUM ANALYZERS, SOUND & VIBRATION ANALYZERS, TIME MARK GENERATORS, OSCILLOSCOPES, MULTIMETERS, RANDOM NOISE GENERATORS, POWER SUPPLIES, Q METERS, ATTENUATORS, GRAPHIC LEVEL RECORDERS, 16 MM CAMERAS, FILM ANALYZERS, PORTABLE VIDEO EQUIPMENT, VAN METER, ANALOG TAPE RECORDER, GRAPHIC LEVEL, FREQUENCY COUNTERS, SOUND LEVEL CALIBRATORS, METER CALIBRATORS, MEGOHMMETER.

INSTALLATION: ARMOR AND ENGINEER BOARD FT.KNOX,KY.

PRES.COL. JIMMY L. PIGG CIV.SCI.ADV.MR. WARREN W. WELLS

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1979 (ACTUAL)	1980 (ACT + EST)
TOTAL RDT&E	6.553	14.526
TOTAL PROCUREMENT	0.596	0.560
TOTAL O&M	0.288	0.600
TOTAL OTHER	3.311	3.399
TOTAL ANNUAL LAB	10.748	19.085
TOTAL INHOUSE	10.748	19.085
TOTAL INHOUSE RDT&E	6.553	14.526
ANNUAL OPERATING COST	0.564	0.590

PERSONNEL DATA (END OF FY 1979)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON-PROF
MILITARY	227	0	107	120
CIVILIAN	102	2	18	84
TOTAL	329	2	125	204

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
2	63.365	50.454	88.069	201.888	1.45	2.410

...MISSION
PLAN,CONDUCT & REPORT OT I,II,III,FOTE,CEP,TEA & OTHER USER TESTS OF AR/ENGR EQ. PARTICIPATE IN OTI,II,III & SP STUDY OF CML EQ.PROVIDE GUIDANCE & ADVICE TO DEVELOPERS,PRODUCERS,OTHER SVCS & PRIVATE INDUSTRY. PLAN,COORDINATE,MANAGE & REPORT ON ACVTP. PROVIDE ADM,LOGIS & OPNS SPT TO DCD.

...CURRENT IMPORTANT PROGRAMS
COMBAT VEHICLE TECHNOLOGY PROGRAM
SURFACE LAUNCHED FUEL AIR EXPLOSIVE
GROUND EMPLACED MINE SCATTERING SYSTEM
XM-1 TANK EXTENDED FSED DURABILITY/RELIABILITY TEST
MODULAR PACK MINE SYSTEM (MOPMS)

...FUNCTIONS/EQUIPMENT/CAPABILITIES
REMOTE CONTROLLED, VARIABLE SPEED, RELOCATABLE MOVING TARGET(MT); REMOTE CONTROLLED, HIT INDICATING, RELOCATABLE STATIONARY TARGET(ST); TARGET SPOTTING SYSTEM (TSS); GUN CAMERA, SINGLE FRAME - 35MM CINE - 16 MM(GC); VIDEO AUTOMATIC TARGET TRACKING SYSTEM(VATTS);SIMFIRE HIT-KILL INDICATR; POSITION LOCATION SYSTEM (MMRIII); MULTIMODE EVASIVE TARGET SYSTEM; TANK VIDEO SYSTEM; RANGE TIMING EQUIPMENT; TELEMETRY EQUIPMENT; 16MM MOTION PICTURE CAMERA WITH DATADOORS; THRU-TANK-OPTICS VIDEO DEVICE; GUN ELEVATION LIMITING DEVICE; SLR CAMERA; AUTOMATIC FILM ANALYZER & DIGITZR SYSTEM; DATA ANALYSIS AND RECORDING SUBSYSTEM.

INSTALLATION: ARMY RESEARCH OFFICE DURHAM,N.C.

COR.COL. ANTHONY P SIMKUS TECH.DIR.DR.HERMAN ROBL

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1979 (ACTUAL)	1980 (ACT + EST)
TOTAL RDT&E	38.692	44.814
TOTAL PROCUREMENT	0.000	0.000
TOTAL O&M	0.000	0.000
TOTAL OTHER	0.082	0.082
TOTAL ANNUAL LAB	38.774	44.896
TOTAL INHOUSE	0.082	0.082
TOTAL INHOUSE RDT&E	0.000	0.000
ANNUAL OPERATING COST	3.208	4.384

PERSONNEL DATA (END OF FY 1979)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON-PROF
MILITARY	2	0	2	0
CIVILIAN	94	3	34	60
TOTAL	96	33	36	60

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
0	0.000	23.440	0.000	23.440	0.00	0.350

...MISSION
TO MANAGE THAT PORTION OF THE ARMYS RSCH PROG RELEVANT TO ARMY MSNS IN MATH AND THE PHYS, ENGR, ENVIRONMENTAL AND LIFE SCIS ACCOMP THROUGH CONTR AND GRANTS WITH EDUC INSTITS, RSCH INSTITS AND GOVT AND INDUS LAB AND TO REPRESENT THE RESEARCH INTERESTS OF THE ARMY OVERSEAS

...CURRENT IMPORTANT PROGRAMS
DEVELOPE AND MANAGE THE ARMY BASIC RESEARCH PROGRAMS
COLLECT,ANALYZE AND EVALUATE BASIC RESEARCH RESULTS
ESTABLISH AND MAINTAIN LIAISON WITH ARMY DEVELOPMENT AGENCIES

...FUNCTIONS/EQUIPMENT/CAPABILITIES
ADMINISTRATION OF RESEARCH PROGRAMS IN PHYSICAL SCIENCES MATHEMATICAL,MATERIAL,ELECTRONICS,MECHANICS AND AERONAUTICS. ADMINISTRATION OF THE RESEARCH PORTION OF ARMY RESEARCH AND STANDARDIZATION OFFICE,LONDON.COORDINATES ARMY RESEARCH EFFORTS WITHIN THE ARMY AND WITH OTHER GOVERNMENT AGENCIES SUCH AS NAVY,NASA,DOD,DOE, NSF AND OTHERS.

INSTALLATION: ATMOSPHERIC SCIENCES LABORATORY WHITE SANDS MR,N.M.

CDR.COL. WILLIAM E. RAWLINSON DEP.DIR. DR. HENRY RACHELE

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1979 (ACTUAL)	1980 (ACT + EST)
TOTAL RDT&E	19.632	22.587
TOTAL PROCUREMENT	0.000	0.000
TOTAL O&M	0.032	0.008
TOTAL OTHER	12.242	13.099
TOTAL ANNUAL LAB	31.906	35.694
TOTAL INHOUSE	23.676	24.971
TOTAL INHOUSE RDT&E	11.402	11.864
ANNUAL OPERATING COST	0.804	1.020

PERSONNEL DATA (END OF FY 1979)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON-PROF
MILITARY	358	0	28	330
CIVILIAN	175	22	94	81
TOTAL	533	22	122	411

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
45	52.541	26.063	11.409	90.613	7.37	19.377

...MISSION
RESPONSIBLE FOR THAT PORTION OF ERADCOM MISSION DEVOTED TO RESEARCH IN ATMOSPHERIC SCIENCES, DEVELOPMENT OF METEOROLOGICAL TECHNIQUES AND EQUIPMENT FOR FIELD ARMY. FURNISH METEOROLOGICAL SERVICES TO ARMY RDTE ACTIVITIES.

...CURRENT IMPORTANT PROGRAMS
AUTOMATIC ATMOSPHERIC SOUNDING SET AN/TMQ-31
ATMOSPHERIC CHARACTERIZATION
REMOTE ATMOSPHERIC SENSING AND PROBING
ATMOSPHERIC MODELS FOR E-O SYSTEMS
METEOROLOGICAL SUPPORT TO RDTE ACTIVITIES

...FUNCTIONS/EQUIPMENT/CAPABILITIES
METEOROLOGICAL RESEARCH FACILITY AND CAPABILITY
MOBILE ATMOSPHERIC CHARACTERIZATION EQUIPMENT
ATMOSPHERIC PHYSICS RESEARCH FACILITY AND CAPABILITY
UPPER ATMOSPHERE RESEARCH AND SOUNDING ROCKET FACILITY AND CAPABILITY
ION MASS SPECTROMETER SYSTEM
REMOTE ATMOSPHERIC SENSING FIELD RESEARCH FACILITY
ATMOSPHERIC SPECTROSCOPY - LASER PROPAGATION FACILITY
METEOROLOGICAL RDTE SUPPORT FACILITIES - ALASKA TO CANAL ZONE
METEOROLOGICAL INSTRUMENTATION TEST, MAINTENANCE, CALIBRATION FACILITY
FACILITY FOR SONIC OBSERVATION OF TRAJECTORY AND IMPACT OF MISSILES
HIGH ENERGY LASER TEST FACILITY

INSTALLATION: AVIATION BOARD FT.RUCKER,AL.

PRE.COL. ROBERT A. BONIFACIO TECH.ADV. GEORGE E. SLAGLEY

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1979 (ACTUAL)	1980 (ACT + EST)
TOTAL RDT&E	2.446	2.155
TOTAL PROCUREMENT	0.156	0.003
TOTAL O&M	0.698	0.081
TOTAL OTHER	1.482	1.579
TOTAL ANNUAL LAB	4.782	3.818
TOTAL INHOUSE	4.782	3.818
TOTAL INHOUSE RDT&E	2.446	2.155
ANNUAL OPERATING COST	1.286	1.333

PERSONNEL DATA (END OF FY 1979)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON-PROF
MILITARY	79	0	33	46
CIVILIAN	36	2	8	28
TOTAL	115	2	41	74

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
0	0.000	18.514	12.961	31.475	0.00	0.433

...MISSION
MISSION; THE CONDUCT OF OPERATIONAL TEST I, II,III, FOR NON-MAJOR SYS AND OTHER TESTS AS DIRECTED BY HQ TRADOC. SPECIFICALLY, THE AVIATION BD DESIGNS AND CONDUCTS TESTING AND EVALUATION OF AVIATION SYSTEMS, SUBSYSTEMS AND ANCILLIARY EQUIPMENT.

...CURRENT IMPORTANT PROGRAMS
0T263AAN/APR-39(V2)OT2
F0092BLACK HAWK IOC .
INTEGRATED AVIONICS CONTROL SYSTEM (IACS)
AN/PV-5 NVG AIRCRAFT POWER CONVERTER
QUADRANT LASER WARNING RECEIVER

...FUNCTIONS/EQUIPMENT/CAPABILITIES
NO MAJ EQP OR FAC.

INSTALLATION: AVIATION DEVELOPMENT TEST ACTIVITY FT. RUCKER,AL.

CDR.COL. WILLIAM E. CROUCH,JR. TECH.DIR.DR. JAMES S. KISHI

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1979 (ACTUAL)	1980 (ACT + EST)
TOTAL RDT&E	7.128	8.395
TOTAL PROCUREMENT	0.125	0.324
TOTAL O&M	1.638	1.819
TOTAL OTHER	1.957	2.093
TOTAL ANNUAL LAB	10.848	12.631
TOTAL INHOUSE	10.848	12.631
TOTAL INHOUSE RDT&E	7.128	8.395
ANNUAL OPERATING COST	5.104	5.458

PERSONNEL DATA (END OF FY 1979)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON-PROF
MILITARY	231	0	33	198
CIVILIAN	93	1	14	79
TOTAL	324	1	47	277

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
1196	0.000	39.124	118.026	157.150	1.78	28.753

...MISSION
TO PLAN,CONDUCT,EVALUATE,AND REPORT ON THE GOVT.TEST ELEMENTS- RDT-G, ADVT-G,PQT-G,PVT-G,AND TO MONITOR,EVALUATE AND REPORT ON CONTRACTOR TESTS UNDER SIDTC CONCEPT FOR AIRCRAFT, AIRCRAFT COMPONENTS AND RELATED EQUIPMENT.CONDUCT OTHER TESTS AND EVALUATIONS AS DIRECTED BY TECOM.

...CURRENT IMPORTANT PROGRAMS
AAH DEVELOPMENT TEST PROGRAM.
UH-60A BLACK HAWK DEVELOPMENT TEST PROGRAM.
YCH-47D DEVELOPMENT TEST II PROGRAM.
UH-58C VERIFICATION TEST PROGRAM.
ALQ-156 MISSILE APPROACH DETECTOR DEVELOPMENT TEST II PROGRAM.

...FUNCTIONS/EQUIPMENT/CAPABILITIES
PLAN,CONDUCT,RECORD,EVALUATE,AND REPORT RESULTS OF ASSIGNED DEVELOPMENT TESTS AND EVALUATIONS. PARTICIPATE IN AND SUPPORT THE DEVELOPMENT EFFORTS OF THE VARIOUS COMMODITY COMMANDS WITH RESPONSIBILITY FOR THE DEVELOPMENT OF AVIATION AND AVIATION RELATED MATERIEL. MONITOR CONTRACTOR TEST PROGRAMS, DEMONSTRATIONS, IN WHOLE OR IN PART. PERFORM SOLDIER TESTING TO EVALUATE HFE, SAFETY, AND THE MAN-MACHINE INTERFACE. PROVIDE TECOM TEST REQUIREMENTS FOR THE COORDINATED TEST PROGRAMS. PROVIDE DATA CONCERNING OPERATIONS UNDER EXTREME ENVIRONMENTAL CONDITIONS.CONDUCT PRODUCT IMPROVEMENT TESTS OF FIELDED AVIATION MATERIEL TO IMPROVE SYSTEM CAPABILITY AND RAM. REVIEW AND COMMENT ON NEW EQUIPMENT TRAINING PACKAGES. PROVIDE AIRCRAFT AND SUPPORT AS REQUESTED BY OTHER COMMANDS IN THE MATERIEL DEVELOPMENT EFFORT.

INSTALLATION: AVIATION ENGINEERING FLIGHT ACTIVITY EDWARDS AFB,CA.

CDR.COL. LEWIS J. MCCONNELL TECH.DIR. JAMES S. HAYDEN

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1979 (ACTUAL)	1980 (ACT + EST)
TOTAL RDT&E	6.317	4.600
TOTAL PROCUREMENT	0.000	0.000
TOTAL O&M	0.000	0.000
TOTAL OTHER	0.974	1.042
TOTAL ANNUAL LAB	7.291	5.642
TOTAL INHOUSE	5.658	5.509
TOTAL INHOUSE RDT&E	4.684	4.467
ANNUAL OPERATING COST	0.210	0.230

PERSONNEL DATA (END OF FY 1979)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON-PROF
MILITARY	66	0	15	51
CIVILIAN	100	0	26	74
TOTAL	166	0	41	125

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
19	9.200	16.000	124.800	150.000	3.63	6.839

...MISSION
PRODUCE ENGR FLT TEST DATA ON ACFT PERF, HANDLING QUALITIES VIBRATION SYS/SUBSYSTEM INTERFACE FOR USE IN ACFT DEVELOPMENT AND QUALIFICATION. SUSTAIN THE CAPABILITY TO COMPLETELY INSTRUMENT TEST ACFT WITH ONBOARD RECORDING/TELEMETRY REAL TIME DATA REDUCTION. CONDUCT PRE-TPS ORIENT.

...CURRENT IMPORTANT PROGRAMS
UH-60A A&FC
AH-1S TADS/PNVS
CH-47D PAE & A&FC
ICING: UH-60A,CH-47D,SIMULATOR DEVELOPMENT
AAH EDT III&IV

...FUNCTIONS/EQUIPMENT/CAPABILITIES
1JT-28B,1T-28B,20V-1C,1JU-21A,1JAH-1S,2JCH-47C,1JOH-58C,1JUH-60A,5JUH-1H
ACFT MAINT CAPABILITY
ACFT MODIFICATION CAPABILITY
ACFT INSTRUMENTATION CAPIBILITY
8AIRBORNE DATA AQUSITION-SYSTEMS
1EMR COMPUTER WITH TELEMETRY
3REMOTE GROUND STATIONS WITH COMPUTER AND TELEMETRY CAPABILITY
1MILIKEN CAMERA
1FAIRCHILD FLT ANALYSER
1MAG TAPE COMPOSER 3MAG TAPE TYPEWRITERS 2MAG TYPEWRITERS 3MAG COMPOSERS

INSTALLATION: AVIATION RESEARCH & TECHNOLOGY LABORATORIES MOFFETT FIELD,CA.

DIR.DR. RICHARD M. CARLSON DEP.DIR.COL. JOHN B. FITCH

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1979 (ACTUAL)	1980 (ACT + EST)
TOTAL RDT&E	44.841	49.770
TOTAL PROCUREMENT	2.830	4.201
TOTAL O&M	0.409	0.000
TOTAL OTHER	0.439	0.316
TOTAL ANNUAL LAB	48.519	54.287
TOTAL INHOUSE	19.018	25.819
TOTAL INHOUSE RDT&E	17.550	24.845
ANNUAL OPERATING COST	4.460	4.934

PERSONNEL DATA (END OF FY 1979)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON-PROF
MILITARY	24	0	11	13
CIVILIAN	536	35	271	265
TOTAL	560	35	282	278

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
127	88.848	58.673	16.370	163.891	1.43	17.808

...MISSION
MANAGES AND EXECUTES R&D OF ARMY AIRMOBILE SYSTEMS THROUGH DEMONSTRATION OF TECHNOLOGY. PROVIDES TECHNICAL SUPPORT TO PROJECT/PRODUCT MANAGERS & SYSTEM DEVELOPERS AS REQUIRED. PROVIDES INDEPENDENT TECHNICAL RISK ASSESMENT TO CG USAAVRADCOM AND HIGHER AUTHORITY.

...CURRENT IMPORTANT PROGRAMS
RESEARCH IN FUNDAMENTAL ROTOR AERODYNAMICS,DYNAMICS & NOISE.
RESEARCH & DEVELOPMENT OF SMALL GAS TURBINES.
R&D TO IMPROVE RELIABILITY & MAINTAINABILITY OF AIRMOBILE SYSTEMS.
RSCH, COMPOSITES & MEASURE OPNL. FLT.LOADS TO IMPROVE STRUCTURES FOR A/C
EVOLVE TECHNOLOGY & CRITERIA TO IMPROVE FLIGHT SAFETY & SURVIVABILITY.

...FUNCTIONS/EQUIPMENT/CAPABILITIES
THREE LABORATORIES AT MOFFETT FIELD CA, CLEVELAND OH, HAMPTON VA, COLOCATED WITH NASA,PARTICIPATING IN RESEARCH OF AIRMOBILE SYSTEMS & DISCIPLINES,JOINTLY USING WIND TUNNELS,SIMULATORS & LABORATORY TEST FACILITIES, INCLUDING SHOPS,FLIGHT LINE & HANGAR,STRUCTURE LAB,ENGINE TEST FACILITIES &COMPUTATIONAL EQUIPMENT. FOURTH LABORATORY AT FORT EUSTIS VA., PERFORMING ADVANCED APPLICATIONS WORK. MAJOR EQUIPMENT & FACILITIES: FILLAMENT WINDING MACHINES,TENSILE TESTERS,VIBRATION TESTER,SMALL BALLISTIC RANGE, CALIBRATION LAB,ENVIRONMENT CHAMBER,ATOMIC ABSORPTION SPECTR,TELEMETER GROUND STATION,NON-DESTRUCT TESTING FACILITY,FLIGHT SAFETY LAB.

INSTALLATION: AVIONICS R & D ACTIVITY FT.MONMOUTH,N.J.

CDR.COL.D. PETERSON DEP.DIR.MR. T. SUETA

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1979 (ACTUAL)	1980 (ACT + EST)
TOTAL RDT&E	10.401	11.068
TOTAL PROCUREMENT	3.914	5.091
TOTAL O&M	0.820	1.056
TOTAL OTHER	0.197	0.265
TOTAL ANNUAL LAB	15.332	17.480
TOTAL INHOUSE	9.125	10.035
TOTAL INHOUSE RDT&E	5.504	5.889
ANNUAL OPERATING COST	2.879	3.081

PERSONNEL DATA (END OF FY 1979)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON-PROF
MILITARY	12	0	8	4
CIVILIAN	211	5	133	78
TOTAL	223	5	141	82

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
0	16.000	33.500	0.000	49.500	0.00	7.098

...MISSION
RESPONSIBLE FOR THAT PORTION OF AVRADCOM'S MISSION WHICH PERTAINS TO AVIATION ELECTRONICS FROM RESEARCH THRU FIRST TIME PRODUCTION. THIS ENCOMPASSES BOTH AIRBORNE AND GROUND EQUIPMENT FOR COMMUNICATIONS, NAVIGATION INSTRUMENTATION, ENVIRONMENT SENSING, LANDING AND AIR TRAFFIC

...CURRENT IMPORTANT PROGRAMS
ARMY DIGITAL AVIONICS SYSTEMS
INTEGRATED AVIONICS CONTROL SYSTEM,IACS
AVIATION NAP-OF-THE-EARTH COMMUNICATIONS
WIRE AND WIRE LIKE OBJECT DETECTION SYSTEM
VERY LIGHT WEIGHT AIR TRAFFIC MANAGEMENT EQUIPMENT

...FUNCTIONS/EQUIPMENT/CAPABILITIES
MAJOR EQUIPMENT INCLUDES NIGHT NAVIGATION PILOTAGE SYSTEM, DIGITAL HUT BENCH SYMBOLOGY GENERATOR, WIRE DETECTION AND RECOGNITION SIMULATOR, DIGITALLY ADDRESSABLE, MULTI-LEGEND DISPLAY SWITCH, MICROPROCESSOR SYSTEM SIMULATOR, ENVIRONMENTAL VEHICLE FOR AVIONICS RESEARCH, SKC-2000 DATA ACQUISITION SYSTEM, ANTENNA RANGE, ELECTROMAGNETIC INTERFERENCE TEST FACILITY CAD-E FACILITY, MICROPROCESSOR DEVELOPMENT CENTER, DATA FORMATTING FACILITY AND AIR TRAFFIC MANAGEMENT SYSTEMS DESIGN CENTER. MATTING FACILITY AND AIR TRAFFIC MANAGEMENT SYSTEM DESIGN

INSTALLATION: BALLISTIC RESEARCH LABORATORY ABERDEEN PROV.GR.,MD.

DIR.DR.ROBERT J. EICHELBERGER DEP.DIR.COL.ROBERT M. GOMEZ

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1979 (ACTUAL)	1980 (ACT + EST)
TOTAL RDT&E	45.854	36.598
TOTAL PROCUREMENT	0.298	0.000
TOTAL O&M	0.397	0.124
TOTAL OTHER	2.095	2.155
TOTAL ANNUAL LAB	48.644	38.877
TOTAL INHOUSE	36.970	31.455
TOTAL INHOUSE RDT&E	34.748	29.176
ANNUAL OPERATING COST	11.084	11.749

PERSONNEL DATA (END OF FY 1979)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON-PROF
MILITARY	26	2	10	16
CIVILIAN	755	100	390	365
TOTAL	781	102	400	381

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
1920	539.702	11.200	40.982	591.884	14.59	33.742

...MISSION
CONDUCT RESEARCH AND EXPL DEV IN SCIENCES/TECHNOLOGIES NECESSARY FOR CONCEIVING,DESIGNING,DEVELOPING AND EVALUATING WEAPON SYSTEMS
PURSUE ORIENTED FUND RESEARCH IN PHYS,CHEM,MATH & ENGINEERING SUBJECTS
INVESTIGATE PERTINENT BRANCHES OF MILITARY SCIENCES AND TECHNOLOGIES

...CURRENT IMPORTANT PROGRAMS
PROPULSION DYNAMICS OF HYPERVELOCITY AND CONVENTIONAL GUNS
EFFECTS OF CONVENTIONAL/NUCLEAR WARHEADS AND BALLISTIC PROTECTION
WARHEAD DYNAMICS,PENETRATION,FRAGMENTATION,EXPLOSIVE/METAL INTERACTIONS
FLIGHT DYNAMICS OF PROJECTILES AND MISSILES;ARTILLERY FIRING TABLES
VULNERABILITY ANALYSIS/VULNERABILITY REDUCTION ARMY MATERIEL.

...FUNCTIONS/EQUIPMENT/CAPABILITIES
SHOCK TUBES TO SIMULATE NUCLEAR BLAST&MEASURE CHEMICAL REACTION RATES
SOFT RECOVERY SYSTEM FOR ARTILLERY SHELLS,HIGH SPEED MOTION PHOTOGRAPHY
SPARK PHOTOGRAPHY RANGES, X-RAY CINEPHOTOGRAPHY,FLASH HOLOGRAPHIC SYST
FIELD TEST FACILITIES FOR PROJECTILE,EXPLOSIVE,AND ARMOR RESEARCH TESTS
CENTRAL SITE COMPUTATIONAL FACILITY WITH 60 REMOTE INTERACTIVE TERM AND
PULSED FLOW CHEMICAL REACTOR SYSTEM

INSTALLATION: BIOMEDICAL LABORATORY * ABERDEEN PROV. GR.,MD

CDR.COL.CRAIG H. LLEWELLYN

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1979 (ACTUAL)	1980 (ACT + EST)
TOTAL RDT&E	0.000	6.246
TOTAL PROCUREMENT	0.000	0.000
TOTAL O&M	0.000	0.000
TOTAL OTHER	0.000	1.37[illegible]
TOTAL ANNUAL LAB	0.000	7.[illegible]
TOTAL INHOUSE	0.000	5.[illegible]
TOTAL INHOUSE RDT&E	0.000	4.0[illegible]0
ANNUAL OPERATING COST	0.000	2.791

PERSONNEL DATA (END OF FY 1979)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON-PROF
MILITARY	66	25	41	25
CIVILIAN	121	10	54	67
TOTAL	187	35	95	92

SPACE AND PROPERTY*

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
0	0.000	0.000	0.000	0.000	0.00	0.000

...MISSION
CONDUCTS RDTE IN SUPPORT OF THE ARMY MEDICAL DEPARTMENT PROGRAM FOR MEDICAL DEFENSE AGAINST CHEMICAL AGENTS AND IS THE PRINCIPAL ELEMENT FOR THE DEVELOPMENT AND EVALUATION OF THE SAFETY AND EFFICACY OF MODES FOR PROPHYLAXIS AND TREATMENT OF CHEMICAL INJURY IN MAN

...CURRENT IMPORTANT PROGRAMS
PROPHYLAXIS AND THERAPY FOR CHEMICAL CASUALTIES
DECREMENT OF PERFORMANCE
NON-BEHAVIORAL EFFECTS OF P AND T COMPOUNDS FOR CHEMICAL CASUALTIES
SKIN DECONTAMINATION AND PROTECTION
MECH OF THE SPONTANEOUS REACTIVATION OF GB-INHIBITED ACETYLCHOLINESTERAS

...FUNCTIONS/EQUIPMENT/CAPABILITIES
FULLY STAFFED CLINICAL RESOURCE FACILITY LARGE ANIMAL RESOURCE FACILITY LIQUID GAS COLUMN AND AFFINITY CHROMATOGRAPHY ELECTROPHORESIS SPECTROPHOTOMETRY AND FLUROMETRY RADIOISOTOPE ANALYSIS SCAT BEHAVIORAL CONTROL SYSTEM BEHAVIORAL TESTING LABORATORY NEUROPHYSIOLOGICAL PHARMACOLOGICAL INVESTIGATIONS COMPLETE VIDEO PRODUCTION FACILITY

*
SPLIT OFF FROM CHEMICAL SYSTEMS LABORATORY (CSL)
SPACE AND PROPERTY DATA INCLUDED UNDER CSL FOR FY79 ONLY
FISCAL DATA FOR FY80 NOT INCLUDED IN CSL,SHOWN ABOVE

INSTALLATION: CHEMICAL SYSTEMS LABORATORY ABERDEEN PROV. GR.,MD

DIR.COL. JOHN D. SPENCE DEP.DIR.DR. BENJ L. HARRIS

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1979 (ACTUAL)	1980 (ACT + EST)
TOTAL RDT&E	58.966	61.962
TOTAL PROCUREMENT	11.701	22.508
TOTAL O&M	1.600	2.000
TOTAL OTHER	2.694	1.359
TOTAL ANNUAL LAB	74.961	87.829
TOTAL INHOUSE	48.354	45.338
TOTAL INHOUSE RDT&E	37.320	34.605
ANNUAL OPERATING COST	6.874	6.588

PERSONNEL DATA (END OF FY 1979)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON-PROF
MILITARY	150	25	78	72
CIVILIAN	757	46	451	306
TOTAL	907	71	529	378

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
2000	579.564	84.169	405.670	1069.403	22.03	26.692

...MISSION
CLASS II ACTIVITY CONDUCTING A RESEARCH & DEVELOPMENT MISSION FOR ARMY CHEMICAL MUNITIONS & DEFENSIVE ITEMS. INCLUDES BASIC RESEARCH AND GENERAL INVESTIGATIONS AS WELL AS EXPLORATORY, ADVANCED AND ENGINEERING DEVELOPMENT OF MATERIAL.

...CURRENT IMPORTANT PROGRAMS
NEW PROTECTIVE MASK DEVELOPMENT
BINARY LETHAL CHEMICAL AGENT PROJECTILE DEVELOPMENT
SMOKE OBSCURANTS AND SMOKE TOXICOLOGY
MEDICAL DIAGNOSIS PROPHYLAXIS AND TREATMENT OF CHEMICAL AGENTS
CHEMICAL DECONTAMINATION AND CONTAMINATION AVOIDANCE

...FUNCTIONS/EQUIPMENT/CAPABILITIES
BASIC RESEARCH; SMOKE/OBSCURANTS; SMOKE TOX; DECON & CONTAMINATION AVOIDANCE; ALARM TECH; TRAINING AGTS; CML PROTECTION; PHY DEF AGAINST BIO ATTACK; DETECT & IDENT; CB THREAT ASSESS; OPER SCIENCE/TECH; TOX EFFECTS OF THREAT AGTS; LETHAL AGTS; MED EFFECTS CML AGTS; ENVIRONMENTAL QUALITY; CIVIL DIST; INCAP CML AGTS; BIO RESPONSE TO TRAUMA; ASSESS FOREIGN BIOLOGICALS
MAJOR EQUIP IS CONTAINED IN A COMPLEX OF ENGINEERING/LABORATORY AREAS. INCLUDES CML PILOT PLANT FAC; AEROSOL CHAMBER; MUNITION FILLING FAC; PLANT DESIGN; ANECHOIC CHAMBER; SIMULANT AGT CHALLENGE TEST CHAMBER; RUBBER/ELASTOMER MOLD FAC; SPEC CML AGT LABS; PYROTECHNIC MIXING LOADING HANDLING FAC; INDOOR BALLISTIC RANGE; SUBSONIC-SUPERSONIC,TRANSONIC WIND TUNNEL.A COMPLETE CLINICAL RES FAC, ANIMAL BREEDING-HOLDING FACILITY.

INSTALLATION: COLD REGIONS R&E LABORATORY HANOVER,N.H.

COR.COL.A.B. DEVEREAUX,JR. TECH.DIR.DR. D.P. FREITAS

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1979 (ACTUAL)	1980 (ACT + EST)
TOTAL RDT&E	5.064	5.956
TOTAL PROCUREMENT	0.000	0.000
TOTAL O&M	0.281	0.155
TOTAL OTHER	6.812	7.346
TOTAL ANNUAL LAB	12.157	13.457
TOTAL INHOUSE	9.527	10.467
TOTAL INHOUSE RDT&E	3.454	4.062
ANNUAL OPERATING COST	2.540	2.870

PERSONNEL DATA (END OF FY 1979)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON-PROF
MILITARY	14	1	4	10
CIVILIAN	263	32	109	154
TOTAL	277	33	113	164

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
24	80.786	30.027	128.544	239.357	7.89	6.959

...MISSION
AS THE ARMY LABORATORY FOR SCIENCE AND TECHNOLOGY IN COLD REGIONS, THE US ARMY COLD REGIONS RESEARCH AND ENGINEERING LABORATORY CONDUCTS AND COORDINATES RESEARCH APPLICABLE TO THE ARMYS NEEDS WHERE WINTER WEATHER AND COLD REPRESENTS A SEVERE PROBLEM.

...CURRENT IMPORTANT PROGRAMS
FACILITIES CONST, OPERATION, & REPAIR UNDER TEMP & ARCTIC COLD CONDITIONS WINTER COMBAT OPERATIONS TECHNOLOGY
IMPACT OF WINTER ENVIRONMENT ON NEW WEAPON SYSTEMS AND OTHER MATERIEL
CONTROL OF ICE ON STRUCTURES, EQUIPMENT AND IN NAVIGATION
LAND TREATMENT OF WASTEWATER

...FUNCTIONS/EQUIPMENT/CAPABILITIES
THE MAIN LABORATORY AT USACRREL CONTAINS 24 COLD LABS WHICH CAN BE OPERATED TO -58 F, SPECIAL TESTING APPARATUS FOR FROZEN MATERIALS, AN ICE ENGINEERING FACILITY FOR LARGE MODELING EXPERIMENTS WITH ICE, A CHEMISTRY LAB, AN ELECTRON MICROSCOPE LAB, A SOILS PROCESSING LAB, A PAVEMENT TEST FACILITY FOR TESTING UNDER FREEZING/THAWING CONDITIONS, A WASTEWATER TREATMENT RESEARCH FACILITY, A COMPUTER FACILITY, A MASS SPECTROMETER, A GAS CHROMATOGRAPH, AND A SMALL LASER FACILITY. THE ALASKA PROJECTS OFFICE AT FAIRBANKS CONDUCTS RESEARCH AND PROVIDES LOGISTIC SUPPORT FOR OTHER RESEARCH. USACRREL'S MILITARY AND CIVILIAN PERSONNEL HAVE EXPERTISE COVERING A WIDE RANGE OF SCIENTIFIC AND ENGINEERING DISCIPLINES RELATED TO COLD REGIONS RESEARCH.

INSTALLATION: COLD REGIONS TEST CENTER APO SEATTLE,WA.

COR.COL. JAMES F. HENRIONNET TECH.ADV. MR.WILLIAM J. HASLEM

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1979 (ACTUAL)	1980 (ACT + EST)
TOTAL RDT&E	4.045	5.103
TOTAL PROCUREMENT	0.033	0.010
TOTAL O&M	0.017	0.000
TOTAL OTHER	4.195	4.393
TOTAL ANNUAL LAB	8.290	9.506
TOTAL INHOUSE	8.290	9.506
TOTAL INHOUSE RDT&E	4.045	5.103
ANNUAL OPERATING COST	3.496	2.187

PERSONNEL DATA (END OF FY 1979)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON-PROF
MILITARY	282	1	18	264
CIVILIAN	22	0	7	15
TOTAL	304	1	25	279

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
647155	5.231	14.341	283.565	303.137	12.19	8.225

...MISSION
PLAN,CONDUCT,EVALUATE,REPORT ON ENVIRONMENTAL PHASE OF DEVELOPMENT TESTS EMPLOY INTEGRATED TESTING POLICIES DURING DEVELOPMENT TESTING.PROVIDE TECH INFO,ADVICE,GUIDANCE ON TESTS TO GOVT AGENCIES AND INDUSTRY.CONDUCT OTHER TESTS AND EVALUATIONS AS DIRECTED BY CG TECOM.

...CURRENT IMPORTANT PROGRAMS
COPPERHEAD/GROUND LASER LOCATOR DESIGNATOR
ROLAND
GROUND EMPLACED MINE SCATTERING SYSTEM
SURFACE LAUNCHED UNIT FUEL AIR EXPLOSIVE
XM252 81 MM MORTAR , UNITED KINGDOM

...FUNCTIONS/EQUIPMENT/CAPABILITIES
FACILITY CAN ACCOMODATE A WIDE VARIETY AND LARGE NO OF TESTS AT ANY ONE TIME.SEVERAL VEH TST COURSES AND EXTENSIVE CROSS COUNTRY TERRAIN RANGES ARE VERSATILE.500 THOUS ACRE ISOLATED IMPACT AREA, 50KM MAX UNOBSERVED RANGE.LARGE RESTRICTED AIRSPACE AREA WITH UNRESTRICTED FIRING TO 5000 FT ORDINATE. COORDINATION WITH FAA CAN EFFECT UNRESTRICTED ORDINATE.1ST 2ND OR 3RD ORDER SURVEY POINTS. GOOD SECONDARY ROADS. PHONE/NON-TAC RADIO AT ALL RANGES AND TEST SITES. AUTODIN,FASCIMILE TELETYPE,PHOTOLAB AND MAINT FOR MAJORITY OF EQUIP INCL ACFT,US/GS CALIBRATION,SVCS ,LIMITED ENGINEER SUPPORT.UHLA ACFT.AF SPT CAN BE ARRANGED.MFT TEAM SUPPORT AVAILABLE. INST FOR MOST ITEMS ON HAND, CAN OBTAIN OTHER INSTRUMENTS. MOVING TARGET SYSTEM, REMOTE SARTS TARGET SYSTEM, E.O.D, STATISTICAL AND MAINTENANCE EVALUATION CAPABILITIES AVAILABLE. ADAQUATE COMPUTER FACIL.

INSTALLATION: COMBAT SURVEILLANCE & TGT ACQUISITION LAB FT.MONMOUTH,N.J.

CDR.DIR. COL.J. G. MIKULA

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1979 (ACTUAL)	1980 (ACT + EST)
TOTAL RDT&E	34.590	38.757
TOTAL PROCUREMENT	20.183	39.881
TOTAL O&M	0.786	0.941
TOTAL OTHER	0.000	0.000
TOTAL ANNUAL LAB	55.559	79.579
TOTAL INHOUSE	12.319	12.604
TOTAL INHOUSE RDT&E	9.749	9.350
ANNUAL OPERATING COST	1.943	2.079

PERSONNEL DATA (END OF FY 1979)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON-PROF
MILITARY	14	0	7	7
CIVILIAN	165	3	103	62
TOTAL	179	3	110	69

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
35	52.324	6.139	10.589	69.052	0.95	11.333

...MISSION
CONDUCT ALL PHASES OF R&D INCL PROD IN THE FOLLOWING PHYSICAL SCIENCES & ASSOCIATED TECHNOLOGIES - IDENT FRIEND FOE NEUTRAL; DATA TRANSMISSION & PROCESSING; NUCLEAR RADIATION DETECTION & MEASUREMENT; RADAR; ACOUSTIC WEAPONS LOCATION; REMOTE SENSING; AND IMAGERY INTERPRETATION.

...CURRENT IMPORTANT PROGRAMS
PROCUREMENT OF MOBILE GROUND IMAGERY INTERPRETATION CENTER.
ADV DEV OF BATTLEFIELD IDENT FRIEND OR FOE.
DEV OF ADV GROUND SURV & TARGET ACQ RADAR SYSTEM.
ADV DEV & INITIAL PROD OF VARIOUS RADIAC SETS & DOSIMETERS
EXPL DEV OF VARIOUS CS&TA SENSORS & DATA XMSN TECHS & SYSTEMS

...FUNCTIONS/EQUIPMENT/CAPABILITIES
RADAR TECHNIQUES DEVELOPMENT FACILITIES, INCL MICROWAVE DARKROOM, ANTENNA PATTERN & TEST RANGE, 65-FT RADAR TEST PLATFORM. OUTDOOR & INDOOR RANGES INSTRUMENTED FROM 30 MHZ TO 70 GHZ. MOBILE SPECTRAL & TIME DISTRIBUTION MEASUREMENT FACILITIES. RADAR INSTRUMENTATION FACILITY CAPABLE OF TRACKING X-BAND RADAR & COLLECTING & RECORDING POSITIONS, VELOCITY, AND SIGNAL STRENGTH, INCLUDING A SHORT RANGE SEARCH CAPABILITY. DATA INFORMATION INVESTIGATION; STUDIES AIMED AT BANDWIDTH REDUCTION, AJ TECHNIQUES, INFORMATION PROCESSING, DIGITAL FRAME STORAGE MEMORY CIRCUITS AND MULTI-ELEMENT, MULTI-FUNCTION, MULTI-BEAM ANTENNA SYSTEMS. RADIOLOGICAL ASSISTANCE TEAM EXPERIENCED IN FUNCTIONING NEAR NUC DETONATIONS, FALLOUT FIELDS, & RADIOL ACCIDENTS. ALPHA, BETA, & GAMMA SURVEY METERS; NEUTRON & GAMMA DOSIMETERS.

INSTALLATION: COMMUNICATIONS - ELECTRONICS BOARD FT.GORDON,GA.

PRES.COL. NORMAN E. ARCHIBALD ENGR.ADV.MR. RONNIE E. BRACKETT

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1979 (ACTUAL)	1980 (ACT + EST)
TOTAL RDT&E	1.263	1.155
TOTAL PROCUREMENT	0.009	0.025
TOTAL O&M	0.076	0.023
TOTAL OTHER	0.851	1.229
TOTAL ANNUAL LAB	2.199	2.432
TOTAL INHOUSE	2.199	2.432
TOTAL INHOUSE RDT&E	1.263	1.155
ANNUAL OPERATING COST	0.189	0.443

PERSONNEL DATA (END OF FY 1979)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON-PROF
MILITARY	62	0	43	19
CIVILIAN	31	0	7	24
TOTAL	93	0	50	43

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
7	0.000	18.960	2.488	21.448	0.12	0.077

...MISSION
PLANS,CONDUCTS AND REPORTS ON OPERATIONAL TESTS OF I,II,AND III OF C-E SYSTEMS AND FORCE DEVELOPMENT TESTING AND EXPERIMENTATION AS PUBLISHED IN THE DA FIVE YEAR TEST PROGRAM. CONDUCTS CONCEPT EVALUATION PLANS AND OTHER USER-RELATED/CUSTOMER TEST DIRECTED BY TRADOC

...CURRENT IMPORTANT PROGRAMS
MILLIMETER WAVE LENGTH RADIO
ARMY DATA DISTRIBUTION SYSTEM/PACKET RADIO EXPERIMENT
DIVISION LEVEL DATA ENTRY DEVICE
ASYNCHRONOUS DIGITAL COMBINER
VIDEO TECHNICAL CONTROL CENTER

...FUNCTIONS/EQUIPMENT/CAPABILITIES
NO MAJOR EQUIPMENT, HOWEVER CAPABILITY EXISTS TO ACCOMPLISH ABOVE MISSION

INSTALLATION: COMMUNICATIONS R & D COMMAND FT MONMOUTH,N.J.

CDR.MG. EMMETT PAIGE,JR. TECH.DIR.MR. THEODORE PFEIFFER

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1979 (ACTUAL)	1980 (ACT + EST)
TOTAL RDT&E	49.157	60.485
TOTAL PROCUREMENT	7.415	4.500
TOTAL O&M	2.656	3.130
TOTAL OTHER	0.000	0.000
TOTAL ANNUAL LAB	59.228	68.115
TOTAL INHOUSE	6.274	12.186
TOTAL INHOUSE RDT&E	5.431	10.856
ANNUAL OPERATING COST	1.040	1.145

PERSONNEL DATA (END OF FY 1979)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON-PROF
MILITARY	28	0	13	15
CIVILIAN	421	10	271	150
TOTAL	449	10	284	165

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
0	72.746	4.642	0.000	77.388	0.00	10.800

...MISSION
CONDUCT R & D RELATED TO COMM EQUIP AND SYSTEMS,INCLUDING FIELDS OF RADIO,TELEPHONIC,FACSIMILE AND DATA COM;COMSEC AND COMM.PROC.CONDUCT AND DIRECT TECH BASE R & D PROG IN TACT ADP SYSTEMS AND COMP SCI DEV MULTI-APPL TACT ADP HARDWARE AND SOFTWARE,MANAGE THE C3 AND ARMY INTEROP SYS

...CURRENT IMPORTANT PROGRAMS
FIBER OPTICS
ARMY DATA DISTRIBUTION SYSTEM
DIGITAL GROUP MULTIPLEXER
MILITARY COMPUTER FAMILY AND INTELLIGENCE TERMINAL FAMILY
ARMY C3 AND INTEROPERABILITY SYSTEM ENGINEERING

...FUNCTIONS/EQUIPMENT/CAPABILITIES
TELEPROCESSING DESIGN CENTER IS LAB EXPERIMENTAL FACILITY THAT SUPPORTS EXPERIMENTS WHICH ALLOW OPTIMUM DEVELOPMENT AND VALIDATION OF ARMY AND JOINT SERVICES TACTICAL DATA SYSTEMS CONFIGURATIONS.TDC HAS EMULATIONS OF ARTADS TACFIRE BATTALION SYSTEM,AN/TSQ73 SUPPORT SOFTWARE SYSTEM.TDC HAS DEVELOPED EMULATIONS OF THE AN/UYK-15 AND AN/UYK-19 COMPUTERS IN SUPPORT OF FIREFINDER AND ATE DEVELOPMENT PROGRAM. C3 SYSTEM ENGRG IS BEING PERFORMED FOR THE ARMY COMMAND CONTROL MASTER PLAN, JINTACCS, INTRA-ARMY INTEROPERABILITY DEVELOPMENTS AND JOINT INTERFACE TESTING

INSTALLATION: CONSTRUCTION ENGINEERING RESEARCH LAB CHAMPAIGN,IL

CDR.COL. L. J. CIRCEO TECH.DIR.DR. L. R. SHAFFER

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1979 (ACTUAL)	1980 (ACT + EST)
TOTAL RDT&E	6.945	7.093
TOTAL PROCUREMENT	0.000	0.000
TOTAL O&M	1.416	1.769
TOTAL OTHER	2.176	2.678
TOTAL ANNUAL LAB	10.537	11.540
TOTAL INHOUSE	8.684	9.401
TOTAL INHOUSE RDT&E	6.330	6.465
ANNUAL OPERATING COST	1.593	1.890

PERSONNEL DATA (END OF FY 1979)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON-PROF
MILITARY	3	1	2	1
CIVILIAN	204	30	133	71
TOTAL	207	31	135	72

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
30	76.081	34.159	0.000	110.240	3.89	4.438

...MISSION
PLAN, EXECUTE, AND EVALUATE RESEARCH TO OBTAIN THE BEST COMBINATION OF ENGINEERING, DESIGN, CONSTRUCTION, OPERATION & MAINTENANCE TO PROVIDE FACILITIES FOR THE MILITARY ESTABLISHMENT AND OTHER AGENCIES AT LEAST COST AND TO DISSEMINATE THE RESEARCH RESULTS.

...CURRENT IMPORTANT PROGRAMS
DEV ENERGY CONS TECH/PROC BY 1985
DEV COMP AIDED SYSTS IN PLAN MILITARY FACILITIES
DEV MGMT SYST IN CONST OF MILITARY FACILITIES
DEV IMPROVED SYST FOR RPMA OF MILITARY FACILITIES
DEV SYSTS FOR USA EPA REQMTS

...FUNCTIONS/EQUIPMENT/CAPABILITIES
CONTROLLED ENVIRONMENT CHAMBER, ONE MILLION POUND CLOSED LOOP MATERIALS TEST SYSTEM, SCANNING ELECTRON MICROSCOPE, 5MW RESISTANCE LOAD BANK AND INSTRUMENTATION, X-RAY EQUIPMENT, SEMI-AUTOMATIC WELDING EQUIPMENT, BIAXIAL SHOCK TEST MACHINE, NON-DESTRUCTIVE TESTING FACILITY, VACUUM INDUCTION FURNACES, METALLOGRAPHIC SAMPLE PREPARATION AND RESEARCH METALLOGRAPH X-RAY DIFFRACTION AND VACUUM SPECTROSCOPY SYSTEM, DYNAMIC TENSION ANALYSIS SYSTEM, DIGITAL RECORDING ANALYSIS EQUIPMENT FACILITIES CAPABILITIES INCLUDE SYSTEMS BUILDING METHODS AND TECHNIQUES, COMPUTER BASED DESIGN AND CONSTRUCTION MANAGEMENT TECHNIQUES, HARDENED FACILITIES ANALYSIS,ENVIRONMENTAL QUALITY MANAGEMENT, POLLUTION CONTROL AND ABATEMENT, MILITARY HOUSING SYSTEMS, POWER GENERATION SYSTEMS, UTILITIES SYSTEMS ANALYSIS AND EVALUATION, AND ARCHITECTURAL RESEARCH.

INSTALLATION: DUGWAY PROVING GROUND DUGWAY,UT.

CDR.COL. CHARLES H. BAY SCI.DIR.DR. MORTIMER A. ROTHENBERG

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1979 (ACTUAL)	1980 (ACT + EST)
TOTAL RDT&E	17.594	17.363
TOTAL PROCUREMENT	0.363	0.300
TOTAL O&M	2.790	1.457
TOTAL OTHER	3.506	3.460
TOTAL ANNUAL LAB	24.253	22.580
TOTAL INHOUSE	21.397	20.334
TOTAL INHOUSE RDT&E	15.306	15.613
ANNUAL OPERATING COST	9.759	11.005

PERSONNEL DATA (END OF FY 1979)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON-PROF
MILITARY	159	1	10	149
CIVILIAN	619	15	73	546
TOTAL	778	16	83	695

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
802731	104.875	201.133	1643.266	1949.274	79.99	28.762

..MISSION
DPG PLANS & CONDUCTS APPROVED TESTS TO ASSESS THE MILITARY VALUE OF CML WEAPONS, SMOKE/OBSCURANTS & CML-BIO DEF SYS. TESTS SPT R&D & PROVIDE BASIS FOR DEVELOPMENT OF NEW OPERATIONAL & LOGISTICAL CONCEPTS FOR EMPLOYMENT OF TESTED SYS.TESTS ARE RESPONSIVE TO USER REQUIREMENTS.

..CURRENT IMPORTANT PROGRAMS
CONDUCTS SERVICE DEV CML CML-BIO DEFENSE SMOKE/OBSCURANT TEST PROGRAMS
CONDUCTS R & D & LAB INVESTIGATIONS NECESSARY TO SUPPORT MISSION
CONDUCTS JT OP CML & CML-BIO DEFENSE TESTS/STUDIES FOR CINCS, SERVICES
CONDUCTS PROG TO SUP ARMY POLL ABATEMENT HAZARD EVAL & DEMIL OPNS
CONDUCTS ECOLOGICAL EPIDEMIOLOGICAL & TOXICOLOGICAL SURVL OF DPG AREA

..FUNCTIONS/EQUIPMENT/CAPABILITIES
INST GRIDS FOR CML CML-BIO TESTS:ARTY RG FOR CONVL & CML METAL PARTS, BALLISTIC & DISSEM TESTS:WITH FIELD SMPL, SMPL MASS ANAL, MET(AUTO DATA ACQ & MESOMET NETWK)SYS. TSPI(RADAR SLAVE PHOTO)SYS;PHYS & ENVIRON TEST FAC(MIL SPEC 810) CHAMBERS FOR TOTAL AGENT CONTAINMNT; EXPLO SHIELDING PROPAGATION & OVERPRESSURE MEASMNTS,OPNS SPTD BY MET RSCH ON BEHAVIOR OF CLOUDS; CML, LIFE SCI TECHN, ECOL SURVL OF DPG; CAPBL FOR PLANNING ANAL,EVAL OF TESTS,OPNS RSCH;LABS EQUIPD FOR WIDE RNG OF CML,MICROBIOL, TOXICOL, IMMUNOL,ECOL,EPIDEMIO,POLL CNTL STUDIES; CAPBL FOR PROD BIO SIMUL AG; TECHN & MASS ASSAY OF FLUORESCENT AIR TRACERS; EXTENSV COMM & RG SAFETY SYS. OUTSTANDING ARE LARGE LAND AREA,RESTRICTED AIR SPACE, LONG & FLAT ARTY RANGES, PROJECTILE RECOVERY, SONIC & ELECTROMAG STERILITY, DIVERSE SKILLS.

INSTALLATION: ELECTRONIC PROVING GROUND FT.HUACHUCHA,AR.

CDR.COL. JAMES H. PHILLIPS TECH.DIR.MR. GRADY H. BANISTER,JR.

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1979 (ACTUAL)	1980 (ACT + EST)
TOTAL RDT&E	10.162	11.360
TOTAL PROCUREMENT	3.235	3.600
TOTAL O&M	2.062	2.300
TOTAL OTHER	11.023	10.262
TOTAL ANNUAL LAB	26.482	27.522
TOTAL INHOUSE	19.594	19.724
TOTAL INHOUSE RDT&E	5.980	6.700
ANNUAL OPERATING COST	7.919	8.667

PERSONNEL DATA (END OF FY 1979)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON-PROF
MILITARY	587	0	47	540
CIVILIAN	213	1	56	157
TOTAL	800	1	103	697

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET)				COST (MILLION $)	
	LAB	ADMIN	OTHER	TOTAL	REAL PROP	EQUIP
66000	0.000	50.300	215.242	265.542	7.12	51.200

...MISSION
PLAN, CONDUCT, EVALUATE AND REPORT ON DEVELOPMENT AND OTHER ENGINEERING/LAB-TYPE TESTS OF GROUND AND AIRBORNE EQUIPMENT AND SYSTEMS THAT UTILIZE ELECTRONIC/ELECTROMAGNETIC TECHNOLOGY. MAINTAIN MODERN TEST FACILITY, INSTRUMENTATION, AND METHODOLOGY CAPABILITY.

...CURRENT IMPORTANT PROGRAMS
STAND-OFF TARGET ACQUISITION SYSTEM
POSITION LOCATION REPORTING SYSTEM
SINGLE CHANNEL GROUND AIRBORNE RADIO SYSTEM
C3I SYS TEST CAPABILITY
AUTOMATIC COMMUNICATIONS CENTRAL OFFICE

...FUNCTIONS/EQUIPMENT/CAPABILITIES
CONDUCT TESTS OF HDWR/SOFTWARE, DOCTRINAL CONCEPTS/SCENARIOS TEST CAPABILITY INCL TEST OF COMM, IMAG, IMAGERY INTERPRETATION MET, RADIAC, RADAR, LASER INTEL, EW, CMD/CTRL, PWR SOURCES, RPV, GND+SCTY SENSORS SYS/EQUIP INCL EMC, EMI, EMV, ECM, ECCM, TEMPEST AND INTRA/INTEROPERABILITY ANAL AS REQ. TECHNIQUES INCL BENCH AND FLD TEST W/ACCESS TO EXTENSIVE REAL EST, MATH MODEL AND SIM FACILITIES INCL: EM, CLIMATIC/STRUCT ENVIRON, INSTRUMENTED SPACE POS RANGE (3 FPS-16/CAPRI), TEMPEST, C3I SYS TEST INCL A REALISTIC EM BATTLEFIELD, ANTENNA PATTERN, ELECTRO-OPT AND VARIOUS ENVIRONMENTAL FACILITIES INCL NUCLEAR, PERFORM RELIABILITY, AVAILABILITY AND MAINTAINABILITY (INCLUDE MAINTENANCE MANUALS, REPAIR PARTS, SPECIAL TOOLS), SAFETY AND HFE TEST, CONDUCT/PARTICIPATE IN RELATED DOCTRINAL AND CONCEPT STUDIES AND TEST FOR ARMY, OTHER SERVICES AND DOD AGENCIES.

INSTALLATION: ELECTRONIC WARFARE LABORATORY FT.MONMOUTH,N.J.

ACTG.DIR.MR. MAX ADLER

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1979 (ACTUAL)	1980 (ACT + EST)
TOTAL RDT&E	46.159	44.917
TOTAL PROCUREMENT	35.708	33.318
TOTAL O&M	4.825	6.390
TOTAL OTHER	0.000	0.000
TOTAL ANNUAL LAB	86.692	84.625
TOTAL INHOUSE	33.307	29.096
TOTAL INHOUSE RDT&E	24.202	20.124
ANNUAL OPERATING COST	3.655	4.737

PERSONNEL DATA (END OF FY 1979)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON-PROF
MILITARY	85	1	17	68
CIVILIAN	411	9	248	163
TOTAL	496	10	265	231

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
6	142.936	37.617	48.502	229.055	92.76	42.961

...MISSION
RES,DEV,INITIAL ACQ AND FIRST FIELDING OF EW AND SELECTED INTEL MATERIAL INCL EW PROTECT OF COMBAT VEHCLS,INTERCEPT,DF,LOCATION,SIG ANALYSIS,ECM. DECEP,VULNERABILITY/COUNTERCOUNTERMEASURES,SOFTWARE SUPPORT FOR ERADCOM. SYS,ACQ NON STANDARD INTEL TECHNICAL MATERIAL.

...CURRENT IMPORTANT PROGRAMS
DEVELOPMENT OF ARTILLERY FIRED/HAND EMPLACED EXPENDABLE JAMMERS
PRODUCTION OF SIGINT EQPT QUICK LOOK,GUARDRAIL,AND QUICK FIX
DEVELOPMENT OF CCM TECHNIQUES FOR SINCGARS
DEVELOPMENT OF ECM AND WARNING EQPT FOR SELF PROTECTION OF COMBAT VEHCL
EW VULNERABILITY INVESTIGATION OF MISSILE SYST,EG PATRIOT,ROLAND,DIVAD

...FUNCTIONS/EQUIPMENT/CAPABILITIES
ENCOMPASSES APPLD RDA INCL ORC DEV AND SPT IN INTERPT,DF,SIG ANALYSIS. JAM,DECEP,SIG INTEL,ACOUST INTEL,AGT EQUIP,SEC,CM INTEL,VULN AND CCM TECHNICAL FACILITIES:SIG CROW(KC-135),AIRBORNE EW LABORATORY,IRCM. SIMULATOR (US AND FOREIGN MISSILES),IR MEASUREMENTS AND REDUCTION. (ISMS,ISTS,ACFT SIGN),MOB INST FAC,IMDSO PHOTO,PHYS SEC FAC,EWIS (ORC DATA BASE),WAYSIDE TEST AREA (HF,VHF,DF,JONOSONDE),ANTENNA RANGE.

INSTALLATION: ELECTRONICS TECHNOLOGY AND DEVICES LAB FT.MONMOUTH,N.J.

TECH.DIR.DR. C. G. THORNTON DEP.DIR.MR. S. DANKO

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1979 (ACTUAL)	1980 (ACT + EST)
TOTAL RDT&E	22.024	34.330
TOTAL PROCUREMENT	5.795	5.040
TOTAL O&M	0.635	0.518
TOTAL OTHER	0.000	0.000
TOTAL ANNUAL LAB	28.454	39.888
TOTAL INHOUSE	14.275	16.586
TOTAL INHOUSE RDT&E	11.876	14.669
ANNUAL OPERATING COST	1.639	1.898

PERSONNEL DATA (END OF FY 1979)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON-PROF
MILITARY	0	0	0	0
CIVILIAN	278	33	169	109
TOTAL	278	33	169	109

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
0	89.500	30.626	7.290	127.426	0.00	14.527

...MISSION
TO DEVELOP AN ESSENTIAL BASE IN ELECTRONICS TECH & DEVICES CONSISTENT WITH NEXT GENERATION ARMY SYSTEM OPERATIONAL REQUIREMENTS.TO THIS END,AN APPLIED R&D PROGRAM IS PURSED,FOCUSING ON CRITICAL BARRIER DEVICE AND MATERIAL PROBLEMS THAT INHIBIT DEVELOPMENT OF NEW ARMY SYSTEMS.

...CURRENT IMPORTANT PROGRAMS
HI-SPEED & VERY HI-SPEED SIGNAL PROCESSING DEVICES FOR REAL TIME IDENT & LOCATION OF ENEMY EQUIP & WEAPONS. WIDE BAND EFF JAMMING DEVICES,DECOY COMPONENTS FOR OPERATION FROM EXPENDABLE AB PLATFORMS.MICROWAVE MM-WAVE DEVICES FOR LOCATION IDENT DESTRUCTION OF TARGETS THRU SMOKE INCLEMENT WATHER.LT WT PORTABLE PWR FOR ARMY HI-PWR PULSERS FOR LASERS/WEAPONS.

...FUNCTIONS/EQUIPMENT/CAPABILITIES
FACILITIES ARE AVAILABLE FOR PERFORMING R&D ON PREPARATION,PROPERTIES & CONTROL OF ELECTRONIC MATERIALS FOR CONDUCTING R&D ON ELECTRONIC PARTS, DEVICES,INTEGRATED CIRCUITS AND ASSEMBLIES.LABORATORIES FOR PERFORMING R&D IN THESE AREAS ARE EQUIPPED WITH THE NORMAL ARRAY OF STANDARD LAB INSTRUMENTATION AND FACILITIES.LABORATORY WORK AREAS INCLUDE FACILITIES FOR THE COMPLETE DESIGN,FABRICATION AND TESTING OF IC'S,HYBRID CIRCUITS ASSEMBLIES,SEMICONDUCTOR DEVICES,QUARTZ CRYSTALS,MICROWAVE AND MM-WAVE DEVICES AND CIRCUITS,ELECTRON TUBES AND DISPLAY DEVICES.ALSO,FACILITIES FOR PRIMARY,SECONDARY & SPECIFIC PURPOSE POWER SOURCES,ELECTROCHEMICAL RESEARCH,CHARACTERIZATION OF ELECTRONIC MATERIALS. THE LAB ALSO PROVIDES ARMY CUSTOMERS WITH EXPERT SERVICES INCLUDING,DIRECT R&D DEVELOPMENT, SUPPORT,CONSULTATION AND DIRECT PARTICIPATION IN SYSTEMS DEVELOPMENT.

INSTALLATION: ENGINEER TOPOGRAPHIC LABORATORIES FT.BELVOIR,VA.

CDR.COL. DANIEL L. LYCAN TECH.DIR.MR. R. P. MACCHIA

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1979 (ACTUAL)	1980 (ACT + EST)
TOTAL RDT&E	23.253	27.720
TOTAL PROCUREMENT	0.000	0.000
TOTAL O&M	2.101	2.141
TOTAL OTHER	0.211	0.225
TOTAL ANNUAL LAB	25.565	30.086
TOTAL INHOUSE	10.402	12.550
TOTAL INHOUSE RDT&E	8.994	10.843
ANNUAL OPERATING COST	2.798	3.100

PERSONNEL DATA (END OF FY 1979)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON-PROF
MILITARY	15	1	9	6
CIVILIAN	299	19	173	126
TOTAL	314	20	182	132

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
33	90.722	7.000	13.300	111.022	6.00	8.713

...MISSION
RESEARCH AND DEVELOPMENT IN TOPOGRAPHIC SCIENCES,MAPPING,POINT POSITIONING,AND MILITARY GEOGRAPHIC INFORMATION,OPERATIONAL SUPPORT,TERRAIN ANALYSIS,AND SCIENTIFIC/ADVISORY SERVICES.REMOTE SENSING,COMPUTER TECHNOLOGY,ENVIRONMENTAL EFFECTS DATA.

...CURRENT IMPORTANT PROGRAMS
SUPPORT TO PERSHING II
SUPPORT TO MX MISSILE PROGRAM
SUPPORT TO ARMY SPACE PROGRAM
EXPERIMENTAL DIGITAL INTERACTIVE FACILITY
QUICK RESPONSE MULTICOLOR PRINTER

...FUNCTIONS/EQUIPMENT/CAPABILITIES
FACILITIES INCLUDE A CARTOGRAPHIC LABORATORY TO STUDY THE PROBLEMS ASSOCIATED WITH HANDLING DIGITAL CARTOGRAPHIC DATA, A DIGITAL IMAGE PROCESSING LABORATORY TO STUDY THE MANIPULATION AND ENHANCEMENT OF TERRAIN IMAGERY FOR OBTAINING MAPPING AND GEOGRAPHIC DATA, COMPUTER ASSISTED PHOTO-INTERPRETATION STATIONS FOR EXTRACTION OF TERRAIN FEATURES, AND A COHERENT OPTICS LABORATORY FOR DETERMINING THE POTENTIAL OF COHERENT OPTICS FOR TOPOGRAPHIC DATA PROCESSING. COMPUTATIONAL EQUIPMENT INCLUDES THE CDC 6400, GOODYEAR STARAN S-1000, DEC PDP 1150 AND PDP 1170. OTHER SPECIALIZED EQUIPMENT INCLUDE A COMTAL,DICOMED, PDS DIGITAL AUTOMATED MICRODENSITOMETERS, A RECORDING OPTICAL SPECTRUM ANALYZER AND PRECISION MENSURATION EQUIPMENT.

INSTALLATION: ENGINEER WATERWAYS EXPERIMENT STATION VICKSBURG,MS.

COR.COL. NELSON P. CONOVER TECH.DIR.MR. F. R. BROWN

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1979 (ACTUAL)	1980 (ACT + EST)
TOTAL RDT&E	16.227	18.235
TOTAL PROCUREMENT	0.000	0.000
TOTAL O&M	0.186	0.220
TOTAL OTHER	42.252	47.345
TOTAL ANNUAL LAB	58.665	65.800
TOTAL INHOUSE	47.240	52.000
TOTAL INHOUSE RDT&E	14.218	15.045
ANNUAL OPERATING COST	8.124	9.511

PERSONNEL DATA (END OF FY 1979)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON-PROF
MILITARY	16	0	17	1
CIVILIAN	1381	81	493	888
TOTAL	1397	81	510	889

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
722	1724.058	359.819	170.488	2254.365	20.62	37.524

...MISSION
MIL&CIV FUNDED RSCH,DEV&INVES IN HYD,ECOLOGY,PERM&EXPEDIENT PAVEMENTS, SOIL,CONCRETE,EXPLO WPN EFF,EXPLO EXCAVATION,VEH MOBILITY&ENVIRONMENTAL ASPECTS OF MIL OPERATIONS. OPERATE TECH LIBRARY&GOVERNMENT CEMENT&POZZOLAN TEST PROGRAM. SERVES CE,DARCOM,DNA,DOE,AF,NAVY,EPA & OTHER AGENCIES.

...CURRENT IMPORTANT PROGRAMS
HYD&MATH MODELING TO SOLVE RIVER,TIDAL,WIND-WAVE,ECOLOGICAL&STRUC PROBS. RSCH ON VEH MOBILITY,REMOTE SENSING,ENVIR IMPACTS,&EARTHQUAKE DSGN CRIT. NUC&HE RSCH TO DEV CRIT FOR ED OF PROTECTIVE STRUC,BARRIERS&EXCAVATIONS. RSCH,DEV&FORMULATION OF NEW&IMP ENG CRIT ON ROADS,STOR AREAS,&AIRFIELDS. INVES OF CEMENTITIOUS MATERIALS AND RSCH OF MASS AND STRUCTURAL CONCRETE

...FUNCTIONS/EQUIPMENT/CAPABILITIES
CAPABLE OF PERF GEN INVES IN FLD OF HYD,SOIL MECH,CONCRETE,MOBILITY OF MIL VEH,EXPLO EFF,ECOLOGY&EXPLO EXCAVATION AND DEV OF STRUC & PAVEMENTS DESIGN CRIT. THRU BR&APPLIED RSCH,THE CAPABILITY OF DEV METHODS&TECH AND THE TESTING OF MAT&EQUIP IS EXERCISED TO ASST IN ACCOMPMT OF THE CE MSN. WES RESERVATION CNTN BLDGS,TEST SITES,SPECIAL EQUIP&OTHER PLANT FAC. TEST SITES&FAC FOR SP PURPOSES ARE MAINT IN OTHER AREAS ON PERM OR TEMP BASIS. FAC INCL FLUMES OF DIFF TYPES&SIZES,WAVE&TIDE GENR MACH,DRILL EQUIP,FULLY EQUIPED SOILS,CONCRETE,CHEMISTRY,CALBR,ELCT&TEMPERATURE CON ENVIRONMENTAL MODEL LABS,X-RAY DIFFRACTION&SPECTROSCOPY APPAR,LARGE AND SMALL BLAST LOAD GENERATOR,200K DYNAMIC LOADER,MOBILITY RSCH FAC,SINGLE AND MULTIPLE WHEEL LOAD CARTS,SUR EFF BLAST FAC,HIGH&LOW FREQ VIBRATORS, ELECTRON MICROSCOPE,LARGE SCALE CMPT FAC AND TECH LIBRARY.

INSTALLATION: FIELD ARTILLERY BOARD FT.SILL,OK.

PRES.COL. M. J. KLINNE,JR.

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1979 (ACTUAL)	1980 (ACT + EST)
TOTAL RDT&E	1.242	1.383
TOTAL PROCUREMENT	0.139	0.172
TOTAL O&M	0.129	0.061
TOTAL OTHER	2.114	2.506
TOTAL ANNUAL LAB	3.624	4.122
TOTAL INHOUSE	3.624	4.122
TOTAL INHOUSE RDT&E	1.242	1.383
ANNUAL OPERATING COST	0.245	0.245

PERSONNEL DATA (END OF FY 1979)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON-PROF
MILITARY	152	0	29	123
CIVILIAN	37	0	3	34
TOTAL	189	0	32	157

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
23	22.566	32.802	13.335	68.703	3.33	1.080

...MISSION
PLAN CONDUCT AND REPORT ON OT I OT II AND OTHER USER-TYPE TESTS
PARTICIPATE IN OT I AND OT II AS DIRECTED
PROVIDE ADVICE TO PROPONENT AGENCIES AND DEVELOPERS
CONDUCT OTHER TESTS AND EVALUATIONS AS DIRECTED BY TRADOC

...CURRENT IMPORTANT PROGRAMS
OPERATIONAL TEST II XM736
OPERATIONAL TEST II SMALL UNIT TRANSCEIVERS
ON-SITE USER TEST FIREFINDER RADAR OPER TRAINER
OPERATIONAL TEST II XM753
OPERATIONAL TEST II COMM MODE SELECTOR CONTROL

...FUNCTIONS/EQUIPMENT/CAPABILITIES
ONE MET STATION
TEST ITEMS ADDITIONAL SUPPORT IS OBTAINED FROM USAFACFS WHEN NEEDED

INSTALLATION: FIRE CONTROL & SMALL CAL. WPNS SYSTS LAB DOVER,N.J.

CDR.COL.AARON J.LARKINS DEP.DIR.DR. DONALD A. GYORUG

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1979 (ACTUAL)	1980 (ACT + EST)
TOTAL RDT&E	23.264	12.443
TOTAL PROCUREMENT	14.768	6.723
TOTAL O&M	0.000	0.000
TOTAL OTHER	0.286	0.270
TOTAL ANNUAL LAB	38.318	19.436
TOTAL INHOUSE	20.244	10.629
TOTAL INHOUSE RDT&E	12.089	8.403
ANNUAL OPERATING COST	11.484	13.522

PERSONNEL DATA (END OF FY 1979)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON-PROF
MILITARY	13	0	11	2
CIVILIAN	566	22	370	196
TOTAL	579	22	381	198

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
3.91	61.183	76.990	0.000	138.173	2.29	7.770

...MISSION
ACCOMPLISH EXPLORATORY, ADVANCED AND ENGINEERING DEVELOPMENT AND LIFE CYCLE TECHNICAL RESPONSIBILITY FOR FIRE CONTROL AND ALL WEAPON SYSTEMS AND ANCILLARY ITEMS THROUGH 40MM. FIRE CONTROL RESPONSIBILITY INCLUDES ALL VEHICLES, FIELD ARTILLERY, HELICOPTERS, AIR DEFENSE AND INFANTRY.

...CURRENT IMPORTANT PROGRAMS
JOINT SERVICE SMALL ARMS PROGRAM
FIRE CONTROL AND SMALL CALIBER ARMAMENT TECHNOLOGY
SQUAD AUTOMATIC WEAPON
NATO SMALL ARMS FIELD EVALUATION
MORTAR FIRE CONTROL CALCULATOR

...FUNCTIONS/EQUIPMENT/CAPABILITIES
THE LABORATORY CONDUCTS RESEARCH, EXPLORATORY, ADVANCED AND ENGINEERING DEVELOPMENT IN GUN FIRE CONTROL AND SMALL CALIBER WEAPON SYSTEMS. IT MAINTAINS TEST BED FACILITIES WHICH PERMIT EVALUATION OF SYSTEMS IN THE COMMODITY AREAS OF FIRE CONTROL, AIR DEFENSE AND COMBAT VEHICLES. THE LAB HAS THE CAPABILITY FOR DESIGN AND EVALUATION OF OPTICAL SYSTEMS, MATERIALS AND SIGHTING DEVICES, DIGITAL AND ANALOG SIGNAL PROCESSORS AND GUN/TURRET STABILIZATION AND CONTROL SYSTEMS, SMALL CALIBER WEAPONS, WEAPON MECHANISMS AND MOUNTS, PROJECTILES, PENETRATORS, SHAPED CHARGE LINERS, PROPELLANTS, PRIMERS AND CARTRIDGE CASES. JOINT SERVICE SMALL ARMS PROGRAM, JSSAP FOR CONVENTIONAL AND SPECIAL WEAPON SYSTEMS.

INSTALLATION: HARRY DIAMOND LABORATORIES WASHINGTON, D.C.

COR.COL. CLIFTON R. GOODWIN TECH.DIR.DR. WILLIAM W. CARTER

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1979 (ACTUAL)	1980 (ACT + EST)
TOTAL RDT&E	72.769	82.571
TOTAL PROCUREMENT	90.378	66.235
TOTAL O&M	4.141	4.114
TOTAL OTHER	1.419	1.130
TOTAL ANNUAL LAB	168.707	154.050
TOTAL INHOUSE	48.100	50.218
TOTAL INHOUSE RDT&E	33.019	38.301
ANNUAL OPERATING COST	12.800	13.500

PERSONNEL DATA (END OF FY 1979)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON-PROF
MILITARY	6	1	5	1
CIVILIAN	1148	57	453	695
TOTAL	1154	58	458	696

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
2337	430.802	71.090	269.573	771.465	50.38	38.746

...MISSION
MISSION: ELECTRONIC FUZES, NUCLEAR WEAPONS EFFECTS TECHNOLOGY, SPECIAL RADAR TECH'Y AND SYSTEMS, ELECTRONICS TECH'Y, COMPONENTS, CIRCUITS AND MATERIALS, FLUIDIC COMPONENTS AND SYSTEMS, ELECTRO-OPTICAL DEVICES. SELECTED INSTRUMENTATION/SIMULATORS, COUNTERMEASURES (CM) AND COUNTER-CM

...CURRENT IMPORTANT PROGRAMS
CURRENT SIGNIFICANT PROGRAMS: DEV OF XM818E1 FUZE FOR PATRIOT MISSILE
R&D ON FLUIDICS, ORDNANCE ELECTRONICS, NUCLEAR WEAPONS EFFECTS AND NMMW
DEVELOPMENT OF XM445 FUZE FOR GENERAL SUPPORT ROCKET SYSTEM
DEVELOPMENT OF XM749 AND M735 FUZES FOR 155MM AND 8 IN NUCLEAR ARTILLERY
DEV OF ART'Y DELIVERED EXPENDABLE JAMMERS; INSTALLATION SECURITY RADAR

...FUNCTIONS/EQUIPMENT/CAPABILITIES
MAJOR EQUIPMENT AND FACILITIES:
NUCLEAR FACILITIES: GAMMA RAY SIMULATOR (AURORA), HIGH INTENSITY FLASH X-RAY (HIFX), COBALT 60, AND ELECTROMAGNETIC PULSE SIMULATORS.
ELECTRONIC DESIGN FACILITIES: THICK FILM HYBRID CIRCUIT FACILITIES, MICROWAVE ANECHOIC CHAMBER, GAITHERSBURG TEST AREA
FUZING FACILITIES: ARTILLERY SIMULATOR, ENVIRONMENTAL TESTING, BLOSSOM POIN TEST AREA, MAGNETIC SIGNATURE FACILITY.

INSTALLATION: HUMAN ENGINEERING LABORATORY ABERDEEN PRO.GR.,MD.

DIR.DR. JOHN D. WEISZ

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1979 (ACTUAL)	1980 (ACT + EST)
TOTAL RDT&E	8.621	8.697
TOTAL PROCUREMENT	0.084	0.100
TOTAL O&M	0.344	0.300
TOTAL OTHER	0.384	0.425
TOTAL ANNUAL LAB	9.433	9.522
TOTAL INHOUSE	8.098	8.322
TOTAL INHOUSE RDT&E	7.292	7.497
ANNUAL OPERATING COST	3.414	3.472

PERSONNEL DATA (END OF FY 1979)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON-PROF
MILITARY	33	1	10	23
CIVILIAN	142	15	103	39
TOTAL	175	16	113	62

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
12	22.000	26.500	29.000	77.500	4.41	3.806

...MISSION
CONDUCTS FUNDAMENTAL AND APPLIED RESEARCH IN HUMAN FACTORS ENGINEERING. PROVIDES DIRECT DESIGN SUPPORT TO ALL MATERIEL DEVELOPMENT PROGRAMS SPONSORED BY DARCOM. FOURTEEN DETACHMENTS AND/OR LIAISON REPRESENTATIVES HAVE BEEN ESTABLISHED AT DARCOM COMMANDS, CRTC AND TRADOC CTRS/SCHOOLS.

...CURRENT IMPORTANT PROGRAMS
CONDUCT HELBAT TESTS/MAJOR ARTILLERY FIELD TRIALS
DEVELOPED A CONCEPT DRAGON TRIPOD
DETERMINE WEAKNESSES IN SPARE PARTS ORDERING
FEMALE SOLDIER PERFORMANCE TASKS
HUMAN FACTORS ENG IN SPT OF ALL MATERIEL BEING DEVELOPED BY DARCOM

...FUNCTIONS/EQUIPMENT/CAPABILITIES
DATA ACQUISITION AND BIOTELEMETRY SYSTEMS
GAT 2M HELICOPTER SIMULATOR
COMMAND CONTROL SIMULATOR SYS AND TEST FACILITY
ACOUSTICAL RSCH ANEHOIC CHAMBER REVERBERANT ROOM
LONG RANGE POSITIONED DETERMINING SYS
INSTRUMENTED PHYSICAL ENDURANCE COURSE
EYE MOVEMENT MEASURING DEVICE
SMALL ARMS TEST FIRING RANGE
NOISE MEASUREMENT & ANALYSIS INSTRUMENTATION
WOOD AND METAL WORKING TEST SUPPORT CAPABILITY
HUMAN PERFORMANCE DATA BANK
ARMOR TEST SITE

INSTALLATION: INFANTRY BOARD FT.BENNING,GA.

PRES.COL. ARTHUR J. KINZEL MR. CHARLES H. COSTIGAN

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1979 (ACTUAL)	1980 (ACT + EST)
TOTAL RDT&E	1.563	1.999
TOTAL PROCUREMENT	0.036	0.341
TOTAL O&M	0.037	0.056
TOTAL OTHER	1.590	1.800
TOTAL ANNUAL LAB	3.226	4.196
TOTAL INHOUSE	3.226	4.196
TOTAL INHOUSE RDT&E	1.563	1.999
ANNUAL OPERATING COST	1.053	1.094

PERSONNEL DATA (END OF FY 1979)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON-PROF
MILITARY	122	0	3	119
CIVILIAN	55	1	5	50
TOTAL	177	1	8	169

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
1	0.000	32.203	30.156	62.359	0.90	0.818

...MISSION
PLAN CONDUCT REPORT ON OPERATIONAL TESTS 1/2/3, FORCE DEVELOPMENT TESTS & OTHER TESTS OF EQUIPMENT & ANCILLARY ITEMS TO BE USED BY INFANTRY UNITS FOR COMMAND, CONTROL, FIREPOWER, TARGET ACQUISITION, GROUND SURVEILLANCE, FIRE CONTROL GROUND MOBILITY & TNG & CHEMICAL/BIOLOGICAL EQUI

...CURRENT IMPORTANT PROGRAMS
VIPER OT II
SQUAD AUTOMATIC WEAPON (SAW OTEA)
HIGH MOBILITY MULTIPURPOSE WHEELED VEHICLE OT II
SMALL UNIT TRANSCEIVER OT II
XM30 PROTECTIVE MASK OT II

...FUNCTIONS/EQUIPMENT/CAPABILITIES
AUTOMATED COMPUTERIZED AUTOMATIC & SMALL ARMS WEAPONS RANGE
CLOTHING & EQUIPMENT TEST FACILITY
MANNED EVASIVE TARGET TANKS
NOVA 312 COMPUTER CAPABILITIES

INSTALLATION: INSTITUTE OF DENTAL RESEARCH WASHINGTON,D.C.

COR.COL. DUANE E. CUTRIGHT RSCH.COORD.DR. GINO BATTISTONE

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1979 (ACTUAL)	1980 (ACT + EST)
TOTAL RDT&E	2.268	2.299
TOTAL PROCUREMENT	0.000	0.000
TOTAL O&M	0.167	0.152
TOTAL OTHER	1.266	1.352
TOTAL ANNUAL LAB	3.701	3.803
TOTAL INHOUSE	2.641	2.745
TOTAL INHOUSE RDT&E	1.208	1.241
ANNUAL OPERATING COST	0.614	0.569

PERSONNEL DATA (END OF FY 1979)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON-PROF
MILITARY	80	2	40	40
CIVILIAN	26	2	11	15
TOTAL	106	4	51	55

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
4	9.325	5.696	6.730	21.751	0.87	1.791

...MISSION
DEVELOP TECHNIQUES TO TREAT WAR RELATED MAXILLOFACIAL INJURIES AND DENTAL DISEASES.PREVENTION AND CONTROL OF DENTAL DISEASE.TO PROVIDE DENTAL RESIDENCY PROGRAMS.TO PROVIDE A DENTAL CLINIC FOR RESEARCH AND TRAINING

...CURRENT IMPORTANT PROGRAMS
BIODEGRADABLE MATERIALS FOR LONG TERM SLOW RELEASE AND ORGAN REPLACEMENT
USE OF SALIVA FOR DETECTING EXPOSURE TO CHEMICAL AGENTS IN THE FIELD
R&D OF NEW AND IMPROVED DENTAL MATERIALS FOR MILITARY USEAGE WORLD-WIDE
STUDIES ON METHODS OF IMPROVING COMBAT COTAMINATED WOUND HEALING
STUDIES FOR IMPROVING METHODS OF CONTROLLING INFECTIONS IN COMBAT WOUNDS

...FUNCTIONS/EQUIPMENT/CAPABILITIES
TEST AND EVALUATE THE PHYSICAL,CHEMICAL AND MECHANICAL PROPERTIES OF DENTAL METALS,ALLOYS,PLASTICS AND POLYMERS.EVALUATE CHANGES DUE TO ENVIRONMENT AND TRANSPORTATION.CONDUCT RESEARCH IN MICROBIOLOGY,CHEMISTR BIOCHEMISTRY,IMMUNOLOGY,RADIATION EFFECTS,PHARMACOLOGY,PHYSIOLOGY,HISTOL OGY AND PATHOLOGY AS THEY RELATE TO DENTAL MILITARY RESEARCH.CONDUCT EPIDEMIOLOGICAL STUDIES ON TRAUMA,DISEASE MAN MACHINE INTERFACE TRAUMA AND FIELD DENTAL EMERGENCIES.STUDY MEANS OF PREVENTING ORAL DISEASE. STUDY THE PSYCHOLOGY OF DENTAL TREATMENT ACCEPTANCE. STUDY NEW MATERIALS AND METHODS MORE CLINICALLY EFFECTIVE IN THE FIELD.DEVELOP AND EVALUATE NEW TECHIQUES AND NEW MATERIALS TO TREAT COMBAT WOUNDS AND TO TEST THESE IN VARIOUS BIOLOGIC MEDIA.DISSEMINATE AS PRACTICAL ALL INFORMATION TO THE FIELD.

INSTALLATION: INSTITUTE OF SURGICAL RESEARCH FT.SAM HOUSTON,TX.

CDR COL.BASIL A. PRUITT, JR.

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1979 (ACTUAL)	1980 (ACT + EST)
TOTAL RDT&E	2.057	2.129
TOTAL PROCUREMENT	0.000	0.000
TOTAL O&M	0.000	0.000
TOTAL OTHER	2.265	2.490
TOTAL ANNUAL LAB	4.322	4.619
TOTAL INHOUSE	4.322	4.619
TOTAL INHOUSE RDT&E	2.057	2.129
ANNUAL OPERATING COST	0.908	1.024

PERSONNEL DATA (END OF FY 1979)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON-PROF
MILITARY	149	22	51	98
CIVILIAN	80	6	19	61
TOTAL	229	28	70	159

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
1	26.424	1.800	22.400	50.624	2.31	2.200

...MISSION
CONDUCTS BASIC AND CLINICAL RESEARCH ON SEVERE BURN INJURIES AND THEIR COMPLICATIONS. PROVIDES TREATMENT FOR BURNED PATIENTS AND TRAINS SPECIFIED PERSONNEL IN THE TOTAL MANAGEMENT OF SUCH PATIENTS. OPERATES 30 BEDS FOR HOSPITALIZATION OF SERIOUSLY INJURED BURN PATIENTS.

...CURRENT IMPORTANT PROGRAMS
BURN INFECTION, TREATMENT AND PREVENTION
METABOLISM AND NUTRITIONAL EFFECTS OF BURN INJURY IN SOLDIERS
INFECTION AND MICROBIOLOGIC SURVEILLANCE OF TROOPS WITH THERMAL INJURY
ALTERATION OF HOST RESISTANCE IN BURNED SOLDIERS
ASSESSMENT OF L-TRIIODOTHYRONINE THERAPY IN THERMALLY INJURED SOLDIERS

...FUNCTIONS/EQUIPMENT/CAPABILITIES
PROVIDES CLINICAL AND LABORATORY SUPPORT AND RESEARCH CAPABILITY IN THE FIELDS OF PATHOLOGY, INCLUDING USE OF ELECTRON MICROSCOPE, MICROBIOLOGY, EXPERIMENTAL SURGERY, PHYSIOLOGY, AND BIOCHEMISTRY. MAINTAINS AN ANIMAL COLONY, ELECTRONIC SHOP, SURGICAL LIBRARY, METABOLIC CHAMBER, AND COMPUTER FACILITY.

INSTALLATION: INTELLIGENCE & SECURITY BOARD FT HUACHUCHA,AR.

PRES.COL. ROGER L. DUNLAP TECH.DIR.MR. PHILLIP E. WRALSTAD

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1979 (ACTUAL)	1980 (ACT + EST)
TOTAL RDT&E	2.759	3.367
TOTAL PROCUREMENT	0.652	1.047
TOTAL O&M	0.000	0.000
TOTAL OTHER	0.000	0.000
TOTAL ANNUAL LAB	3.411	4.414
TOTAL INHOUSE	1.041	1.392
TOTAL INHOUSE RDT&E	1.041	1.392
ANNUAL OPERATING COST	0.428	0.627

PERSONNEL DATA (END OF FY 1979)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON-PROF
MILITARY	93	0	23	70
CIVILIAN	24	2	8	16
TOTAL	117	2	31	86

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
10	0.000	5.000	42.663	47.663	0.02	1.659

...MISSION
PLAN,CONDUCT AND REPORT ON OT I,OT II,OT III AND OTHER USER TYPE TESTS OF TACTICAL INTELLIGENCE AND SECURITY MATERIAL. PROVIDE ADVICE ON TEST AND EVAL MATTERS TO MATERIAL DEVELOPERS,PRODUCERS,OTHER SERVICES AND PRIVATE INDUSTRY. CONDUCTS TEST AND EVAL AS DIRECTED BY CDR,TRADOC.

...CURRENT IMPORTANT PROGRAMS
QUICK FIX WITHOUT OF AN/ARQ 33
STANDARD FM RADIO ECM APPLIQUE
TACTICAL CONTROL ANALYSIS CENTER (DIVISION)
MOBILE ARMY GROUND IMAGERY INTERPRETATION CENTER
REMOTE BATTLEFIELD SENSOR SYSTEM

...FUNCTIONS/EQUIPMENT/CAPABILITIES
ELECTRONIC WARFARE MONITORING FACILITY (EWMF)-TRANSPORTABLE- HOUSED IN A 30 FT ELECTRONIC VAN WITH FOLLOWING CAPABILITY:RECEIVERS-10KHZ-26GHZ, ANTENNAS-30MHZ-40GHZ,TAPE RECORDERS,SPECTRUM ANALYZERS,OSCILLOSCOPES. REQUIRES 5 TON TRACTOR FOR TOWING.OTHER FACILITIES INCLUDE OVER 70000 ACRES AT FT HUACHUCA,23000 ACRES AT WILLCOX DRY LAKE AND 1505000 ACRES AT GILA BEND (UPON REQUEST) THAT CAN BE USED AS RANGES FOR OPERATIONAL TESTING OF INTEL/EW SYSTEMS.

INSTALLATION: KWAJALEIN MISSILE RANGE,MARSHALL ISLANDS APO SAN FRANCISCO

CDR.COL. R. A. PARSONS DEP.DIR.MR. O. E. OVA

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1979 (ACTUAL)	1980 (ACT + EST)
TOTAL RDT&E	100.940	112.017
TOTAL PROCUREMENT	0.000	0.000
TOTAL O&M	0.000	0.000
TOTAL OTHER	7.720	3.720
TOTAL ANNUAL LAB	108.660	115.737
TOTAL INHOUSE	5.670	5.923
TOTAL INHOUSE RDT&E	4.890	5.103
ANNUAL OPERATING COST	0.450	0.500

PERSONNEL DATA (END OF FY 1979)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON-PROF
MILITARY	27	0	17	10
CIVILIAN	103	1	52	51
TOTAL	130	1	69	61

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
1491	0.000	158.047	2305.824	2463.871	592.83	160.956

...MISSION
PLAN,MANAGE,DIRECT,CONTROL AND COORDINATE OVERALL ACTIVITIES OF THE KMR IN ACCORDANCE WITH DOD NATIONAL RANGE POLICIES. SERVE AS THE PRINCIPAL ADVISOR FOR ALL MATTERS PERTAINING TO THE KMR RELATIONSHIP WITH THE TRUST TERRITORY OF THE PACIFIC ISLANDS.

...CURRENT IMPORTANT PROGRAMS
BALLISTIC MISSILE DEFENSE R&D TESTING
ADVANCED BALLISTIC REENTRY SYSTEMS USAF BMO R&D TESTING
MINUTEMAN III USAF BMO R&D TESTING
MINUTEMAN II AND MINUTEMAN III USAF SAC OPERATIONAL TESTING
SPACE OBJECT IDENTIFICATION USAF SPACE TRACK

...FUNCTIONS/EQUIPMENT/CAPABILITIES
ALCOR,TRADEX,ALTAIR,2 AN/MPS 36,AN/TPQ 18,AN/TPX 42 RADARS,4 RADOTS,3 SUPER RADOTS,7 BALLISTIC CAMERAS,4 SPECTRAL CAMERAS,PHOTO LAB.5 BAND TELEMETRY RECEIVING SYSTEMS INCL 8 AUTO TRACK ANTENNAS,1 MOBILE RELAY SYS,RECEIVE & RECORD SYS,DATA SEPARATION AND DISPLAY SYS & DATA DISTRIB SYS,LONG HAUL & INTRA ATOLL COMMO SYS,METEOROLOGICAL SYS,LAUNCH ORDNANCE LAB,TIMING & COUNTDOWN SYS,FREQUENCY CONTROL & ANALYSIS SYS,7600/6400 INSTRUMENTATION CONTROL CENTER,AIR TRAFFIC CONTROL SYS INCL TACAN LOW FREQUENCY HOMING BEACON & AG COMMUNICATIONS,CLOSED CIRCUIT TV SYS,DATA REDUCTION FACILITY & INSTRUMENTATION SYS ACCURACY ANALYSIS CAPABILITY

INSTALLATION: LARGE CALIBER WEAPONS SYSTEMS LAB DOVER,N.J.

CDR.COL.D.P.WHALEN DEP.DIR.DR.J.T.FRASIER

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1979 (ACTUAL)	1980 (ACT + EST)
TOTAL RDT&E	130.292	97.691
TOTAL PROCUREMENT	21.600	19.000
TOTAL O&M	5.000	1.000
TOTAL OTHER	0.411	0.383
TOTAL ANNUAL LAB	157.303	118.074
TOTAL INHOUSE	71.159	51.045
TOTAL INHOUSE RDT&E	57.348	41.662
ANNUAL OPERATING COST	31.069	44.196

PERSONNEL DATA (END OF FY 1979)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON-PROF
MILITARY	28	0	23	5
CIVILIAN	1763	81	1088	675
TOTAL	1791	81	1111	680

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
12.51	204.685	184.072	128.700	517.457	8.58	66.200

...MISSION
DEVARSC WPNS SYS-GUN/AMMO-40MM&FOR TANKS,ARTY,MORTAR,RECOILLESS GUNS
AIR DEFENSE,MINES&DEMO SYS,EXPLOS&WHDS
SUPPORT TECH IN BASIC&APPLIED RES-LIFE CYCLE ENG&WPN SYS INTEGRATION
ENG SUPPT DURING PROCUREMENT,PRODUCTION&FIELD USE OF WEAPON SYSTEM

...CURRENT IMPORTANT PROGRAMS
SPT XM1 TANK-120MM AMMO/GUN
SCATTERABLE MINE SYSTEMS-MOPMS,GEMS,
ARTILLERY-ESPAWS.GUN PROPULSION INCL CHG DSG,REDUCTION WEAR&EROSION,
IMPROVED SENSING MUNS-TARG SENS&SELF FORG FRAG WHD-STAFF,SADARM
IMPROVED NON-NUCLEAR LANCE,PERSHING 2

...FUNCTIONS/EQUIPMENT/CAPABILITIES
DES&RSI WPNS SYS-GUN/AMMO-40MM&FOR TANKS,ARTY,MORTAR,RECOILLESS GUNS,
AIR DEFENSE,MINES&DEMOLITION SYS,EXPLOSIVES&WARHEADS
SUPPORT TECH IN BASIC&APPLIED RESEARCH
LIFE CYCLE ENG&WEAPON SYS INTEGRATION
ENG SUPPT DURING PROCUREMENT,PRODUCTION&FIELD USE OF WEAPON SYSTEMS

INSTALLATION: LETTERMAN ARMY INSTITUTE OF RESEARCH PRESIDIO,S.F.,CA.

CDR.COL. JOHN D MARSHALL,JR.

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1979 (ACTUAL)	1980 (ACT + EST)
TOTAL RDT&E	6.413	5.135
TOTAL PROCUREMENT	0.000	0.000
TOTAL O&M	0.090	0.250
TOTAL OTHER	2.557	2.597
TOTAL ANNUAL LAB	9.060	7.982
TOTAL INHOUSE	9.060	7.982
TOTAL INHOUSE RDT&E	6.413	5.135
ANNUAL OPERATING COST	2.316	2.065

PERSONNEL DATA (END OF FY 1979)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON-PROF
MILITARY	170	31	125	45
CIVILIAN	108	18	56	52
TOTAL	278	49	181	97

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
9	133.198	36.506	305.309	475.013	42.42	10.333

...MISSION
TO PROVIDE GENERAL MEDICAL RESEARCH CAPABILITY AND CONDUCT RESEARCH IN AREAS OF NUTRITION,FOOD WHOLESOMENESS,DERMATOLOGY,CHRONIC MAMMALIAN TOXICOLOGY,EFFECTS OF LASERS,EXPERIMENTAL PSYCHOLOGY,TRAUMA, RESUSCITATION AND OTHER RESEARCH AS DIRECTED BY CDR USAMRDC.

...CURRENT IMPORTANT PROGRAMS
DETERMINATION OF SAFE THRESHOLD LEVELS OF COHERENT RADIATION
RESUSCITATION SOLUTIONS FOR THE ACUTELY INJURED
APPLIED NUTRITION STUDIES OF DOD PERSONNEL
ADVERSE EFFECTS ON HUMAN SKIN BY ENVIRONMENTAL FACTORS
COMBAT CASUALTY CARE

...FUNCTIONS/EQUIPMENT/CAPABILITIES
SURGICAL OPERATING ROOMS,ENVIRONMENTAL ROOMS,GERM FREE ANIMALS,SCANNING TRANSMISSION ELECTRON MICROSCOPES, AUTO ANALYZERS/RECORDERS; AUTOMATIC MATIC BETA-GAMMA COUNTERS;SHADOW SHIELD WHOLE BODY COUNTER,GAMMA CAMERA AUTO AMINO ACID ANALYZERS;MASS SPECTROMETER
RESEARCH INCLUDES: NUTRITIONAL SURVEYS AND RATION TESTING;BIOMED COMPUTER RESEARCH; BASIC AND APPLIED STUDIES OF TRACE MINERAL METABOLISM NUTRIENT REQUIREMENT AND INTERRELATIONSHIP;EXPERIMENTAL SURGERY,BIOCHEM STUDY OF MUSCLE METABOLISM,EXERCISE AND FATIGUE IN MAN;STUDIES OF DELAY HYPERSENSITIVITY,STUDIES ON BLOOD PRESERVATION;OPTIMAL BLOOD STORAGE CONDITIONS AND CELL FREE RESUSCITATION FLUIDS;MAINTAINS BREEDING COLONY OF SPECIAL ANIMAL STRAINS; COMPUTER ENHANCED TOXICOLOGICAL RESEARCH; BIOMED ASPECTS OF CHEMICAL DEFENSE.

INSTALLATION: MATERIALS AND MECHANICS RESEARCH CENTER WATERTOWN,MA.

COR. COL. W.R. BENOIT DIR.DR. E. S. WRIGHT

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1979 (ACTUAL)	1980 (ACT + EST)
TOTAL RDT&E	25.691	27.247
TOTAL PROCUREMENT	7.177	7.536
TOTAL O&M	3.736	3.899
TOTAL OTHER	0.000	0.000
TOTAL ANNUAL LAB	36.604	38.682
TOTAL INHOUSE	20.018	21.267
TOTAL INHOUSE RDT&E	15.902	16.969
ANNUAL OPERATING COST	5.558	5.836

PERSONNEL DATA (END OF FY 1979)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON-PROF
MILITARY	18	1	10	8
CIVILIAN	604	61	190	414
TOTAL	622	62	200	422

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
48	389.161	83.380	160.030	632.571	16.59	16.150

...MISSION
MANAGE DARCOM STRUCTURAL MATLS AND MECHANICS PROGRAM.EXECUTE PROGRAM IN-HOUSE & BY ASSIGNMENT & FUND TRANSFER TO OTHER DARCOM FACILITIES,EDUCATIONAL & INDUSTRIAL CONTRACTORS; MANAGE FIVE INFORMATION CENTERS; ASSIST IN DESIGN OF AND DEVELOPMENT OF PROTOTYPE MATERIEL COMPONENTS.

...CURRENT IMPORTANT PROGRAMS
MATLS RESEARCH AIRCRAFT
MATLS RESEARCH ARMAMENT
MATLS RESEARCH ARMORED VEHICLES
MATLS RESEARCH MISSILES
MATLS RESEARCH MULTI-MISSION/SPECIAL REQUIREMENTS

...FUNCTIONS/EQUIPMENT/CAPABILITIES
MANTECH PROGRAMS. INSURES THE EFFECTIVE DEVELOPMENT,MANAGEMENT,AND COORDINATION OF TECHNICAL PROGRAMS IN CHEMICAL & PHYSICAL PROPERTIES,EXECUTE ASSIGNED PHASES OF INTERNATIONAL STANDARDIZATION AND OTHER PROGRAMS,DEVELOPS LONG RANGE R&D PLANS AND LONG RANGE MM&T PLANS CONSISTANT WITH THE OBJECTIVES OF THE ARMY, DEVELOPS OTHER GUIDANCE AS PROVIDED BY DARCOM INCLUDING ASSESSMENTS OF GOVERNMENT AND PRIVATE RESEARCH IN RELATION TO PLANS, CONDUCTS & MANAGES BASIC, APPLIED,AND ADVANCED RDT&E ON MATERIALS SUCH AS CERAMICS,METALS, ORGANIC POLYMERS, AND METAL AND ORGANIC MATRIX COMPOSITE MATERIALS; TO IDENTIFY AND INVESTIGATE FACTORS INVOLVED IN THE DEVELOPMENT, PROCESSING, AND APPLICATION OF NEW AND IMPROVED MATERIALS. CONDUCTS MANUFACTURING METHODS AND TECHNOLOGY PROGRAMS;ADVISE COMMANDS AND INDUSTRY ON PROCESSING TECHNIQUES

INSTALLATION: MATERIEL SYSTEMS ANALYSIS ACTIVITY ABERDN.PROV.GROUND,MD

ACTING DIR.COL. ALBERT DEPROSPERO

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1979 (ACTUAL)	1980 (ACT + EST)
TOTAL RDT&E	16.564	17.98[illegible]
TOTAL PROCUREMENT	0.000	0.000
TOTAL O&M	4.089	2.542
TOTAL OTHER	0.615	0.729
TOTAL ANNUAL LAB	21.268	21.252
TOTAL INHOUSE	15.120	14.577
TOTAL INHOUSE RDT&E	10.416	11.306
ANNUAL OPERATING COST	1.674	1.976

PERSONNEL DATA (END OF FY 1979)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON-PROF
MILITARY	29	0	13	16
CIVILIAN	411	22	315	96
TOTAL	440	22	328	112

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
	0.790	95.814	5.245	101.849	2.07	0.767

...MISSION
PROVIDES THE CENTRAL INDEPENDENT TECHNICAL CAPABILITY FOR DARCOM FOR THE CONDUCT OF MAJOR SYSTEMS ANALYSIS AND COST EFFECTIVENESS STUDIES. SERVES AS DARCOM LEAD ACTIVITY FOR SURVIVABILITY AND RELIABILITY, AVAILABILITY, AND MAINTAINABILITY METHODOLOGY.

...CURRENT IMPORTANT PROGRAMS
TEST DESIGN & EVAL OF AAH,HELLFIRE,FIGHTING VEHICLE SYSTEM,PATRIOT,& XM1
EFFECTIVENESS & SURVIVABILITY OF PATRIOT, HEL, AAH, AND HELLFIRE
INDEPENDENT EVAL OF XM1,COPPERHEAD,GSRS,PATRIOT,SOTAS, AND VIPER
EVALUATE DEV TEST OF AN/TPQ-36 AND TACFIRE DATA LINKS
PREPARE AIR-TO-AIR/AIR-TO-SURF JOINT MUNITIONS EFFECTIVENESS MANUALS

...FUNCTIONS/EQUIPMENT/CAPABILITIES
AMSAA MISSION CAPABILITIES INCLUDE' PERFORMING INDEPENDENT TEST DESIGN AND OVERALL EVALUATION FOR DECISIONS ON MAJOR, DESIGNATED NON-MAJOR, AND SELECTED OTHER SYSTEMS; PROVIDING OVERVIEW OF LIFE CYCLE SURVEILLANCE PROGRAMS FOR MATERIEL SYSTEMS IN INVENTORY; PROVIDING WEAPON SYSTEM EFFECTIVENESS ESTIMATES FOR COST AND OPERATIONAL EFFECTIVENESS ANALYSES; PROVIDING SYSTEMS ANALYSIS SUPPORT TO DARCOM MAJOR SUBORDINATE COMMANDS AND PROJECT/PRODUCT MANAGERS; MAINTAINING DIRECT CONTACT WITH ARMY MATERIEL USERS IN THE FIELD; SERVING AS THE DARCOM FIELD ACTIVITY FOR ADMINISTERING THE JOINT TECHNICAL COORDINATING GROUP FOR MUNITIONS EFFECTIVENESS (JTCG/ME), AND PERFORMING LOGISTICS AND READINESS RELATED ANALYSIS.

INSTALLATION: MATERIEL TESTING DIRECTORATE ABERDEEN PROV.GR.,MD.

CDR.COL. CHARLES W. BINNEY ACTG.DIR. DONALD RESCH

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1979 (ACTUAL)	1980 (ACT + EST)
TOTAL RDT&E	34.360	34.913
TOTAL PROCUREMENT	8.607	8.746
TOTAL O&M	0.881	0.895
TOTAL OTHER	5.529	5.104
TOTAL ANNUAL LAB	49.377	49.658
TOTAL INHOUSE	48.033	48.293
TOTAL INHOUSE RDT&E	33.272	33.808
ANNUAL OPERATING COST	21.098	23.612

PERSONNEL DATA (END OF FY 1979)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON-PROF
MILITARY	214	0	23	191
CIVILIAN	703	8	446	257
TOTAL	917	8	469	448

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
22865	724.317	4.351	269.547	998.215	17.24	43.344

...MISSION
PLAN CUT & REPT TESTS OF WPNS WPN SYS RKTS & GM SYS FIRE CON & TGT ACQ EQUIP ITEMS OF AMMU & MUN COMPONENTS CBT VEHS OTHER AUTO MAT GEN EQUIP. PROV COR SVCS FOR PROC OF ARMOR PLATE FOR ALL DARCOM INSTLS & ACTIVITIES PROV SUPPORT SVCS TO APG ELEMENTS & SUPPORTED COMMANDS.

...CURRENT IMPORTANT PROGRAMS
XM1 TANK SYSTEM
GROUND-EMPLACE MINE-MARKING SYS
120MM GUN INTEGRATION PROGRAM
INFANTRY FIGHTING VEHICLE
10 TON HIGH MOBILITY TRK (MAN) FRG

...FUNCTIONS/EQUIPMENT/CAPABILITIES
TEST AREA 68700 ACRES.RANGE TO LAND IMPAC. 26000M RANGE TO WATER IMPACT 30000M.41 MILES OF AUTMV CRS INCL 27 SP ENGR TEST CRS & OBSTACLES.VAR OF ENVIR OR COND EQUIP.SP CHAMBERS FOR SUBJECTING EQUIP TO DUST,SALT SPRAY OR SOLAR RADN.ISOLATED VIBRATION TEST FAC WHICH PERMITS SHAKING EXPLO EQUIP SIMULTANEOUSLY WITH TEMP CONDITIONING FAC.FOR CONTROLLED TESTS OF ELEC CONG GUIDANCE EQUIP.FREQ SOURCE WHICH PERMITS TESTING ALL TYPES OF MAT IN PRESENCE OF A HIGH INTENSITY ELEC MAGNETIC RADN.SP FAC FOR TEST OF ARMOR PLATE.SP VEL & TGT EQUIP IS AVAIL FOR OBSERVATIONS DURING RAPID FIRE AS IS RKT TRACK FOR CONTROLLED TERMINAL BALLISTIC TESTS.FAC AVAL FOR TESTS OF SP ELECTRONIC & FIRE CON EQUIP & RELATED SYS & COMPONENTS. PULSE RADIATION FAC AVAL FOR USE IN RADIATION TESTING NUCLEAR EFFECTS. SIMULATION REACTOR TECHNOLOGY & RADIATION PHYSICS

INSTALLATION: MEDICAL BIOENGINEERING R&D LABORATORY FT.DETRICK,MD.

CDR.COL. JOHN N ALBERSTON,JR.

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1979 (ACTUAL)	1980 (ACT + EST)
TOTAL RDT&E	3.561	4.276
TOTAL PROCUREMENT	0.000	0.000
TOTAL O&M	0.043	0.030
TOTAL OTHER	1.041	0.728
TOTAL ANNUAL LAB	4.645	5.034
TOTAL INHOUSE	4.455	4.643
TOTAL INHOUSE RDT&E	3.371	3.885
ANNUAL OPERATING COST	1.041	1.138

PERSONNEL DATA (END OF FY 1979)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON-PROF
MILITARY	34	3	17	17
CIVILIAN	102	15	39	63
TOTAL	136	18	56	80

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
5	45.103	27.300	34.108	106.511	3.22	3.014

...MISSION
CONDUCTS ENG RSCH AND DEVELOPMENT OF MILITARY MEDICAL EQUIPMENT
CONDUCTS THE SURGEON GENERALS RDT.E PROGRAM IN INTEGRATED PEST MGMT
CONDUCTS ENVIRONMENTAL , OCCUPATIONAL HEALTH RESEARCH
CONDUCTS LIFE CYCLE SYSTEM MGMT OF MED,DENTAL,AND PEST MGMT MATERIEL

...CURRENT IMPORTANT PROGRAMS
DEVELOPMENT OF FIELD MED DEVICES AND EQUIP
PEST MGMT RDT.E INCLUDING METHODS,MATERIALS,EQUIP AND CONCEPTS
DEVELOP OF ENVIRONMENTAL [illegible] TY STDS FOR DEMIL , INSTALL RESTORATION
ENVIRONMENTAL , OCCUPAT[illegible] HEALTH RSCH ON SMOKE , OBSCURANTS

...FUNCTIONS/EQUIPMENT/CAPABILITIES
DESIGN,DEVELOP,AND FABRICATE PROTOTYPE AND TEST MODELS OF MIL MED MAT
PRODUCE LIMITED QUANTITIES OF MED MAT FOR URGENT MIL REQ
DESIGN,DEVELOP,AND FABRICATE PEST MGMT EQUIP AND SYSTEMS
DESIGN,DEVELOP,AND FABRICATE PROTOTYPE AND TEST MODELS OF MIL DENTAL MAT
PERFORM HEALTH AND ECOLOGICAL EFFECTS RSCH ON ENVIRONMENTAL POLLUTANTS
PERFORM PILOT PLANT RSCH FOR WASTEWATER REUSE FOR FIELD ARMY

INSTALLATION: MEDICAL R & D COMMAND FT.DETRICK,MD.

CDR.BG.G. RAPMUND

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1979 (ACTUAL)	1980 (ACT + EST)
TOTAL RDT&E	25.550	27.391
TOTAL PROCUREMENT	0.000	0.000
TOTAL O&M	0.258	0.300
TOTAL OTHER	1.491	1.596
TOTAL ANNUAL LAB	27.299	29.287
TOTAL INHOUSE	27.299	29.287
TOTAL INHOUSE RDT&E	25.550	27.391
ANNUAL OPERATING COST	2.074	2.563

PERSONNEL DATA (END OF FY 1979)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON-PROF
MILITARY	57	21	39	18
CIVILIAN	92	0	2	90
TOTAL	149	21	41	108

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
1	0.000	33.022	0.000	33.022	0.15	0.010

...MISSION
ADMINISTRATION AND COORDINATION OF THE MEDICAL RDTE PROGRAM
PROGRAM LIMITED TO UNIQUE MIL PROBLEMS WITHIN US AND OCONUS

...CURRENT IMPORTANT PROGRAMS
CARE OF THE WOUNDED
PREVENTION AND CONTROL OF INFECTIOUS DISEASES
ENHANCEMENT OF MILITARY PERFORMANCE
PROTECTION AGAINST MILITARY ENVIRONMENTAL HAZARDS

...FUNCTIONS/EQUIPMENT/CAPABILITIES
SERVES AS AN ADMINISTRATIVE HEADQUARTERS FOR THE ARMY MEDICAL DEPARTMENT

INSTALLATION: MEDICAL RSCH INST OF INFECTIOUS DISEASES FT.DETRICK,MD.

CDR.COL. RICHARD F. BARQUIST CH.SCI.DR. WILLIAM R. BEISEL

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1979 (ACTUAL)	1980 (ACT + EST)
TOTAL RDT&E	8.665	8.915
TOTAL PROCUREMENT	0.000	0.000
TOTAL O&M	0.000	0.000
TOTAL OTHER	4.067	4.453
TOTAL ANNUAL LAB	12.732	13.368
TOTAL INHOUSE	12.732	13.368
TOTAL INHOUSE RDT&E	8.665	8.915
ANNUAL OPERATING COST	4.895	6.201

PERSONNEL DATA (END OF FY 1979)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON-PROF
MILITARY	308	48	77	231
CIVILIAN	199	26	70	129
TOTAL	507	74	147	360

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
43	80.854	19.820	209.699	310.373	17.02	6.946

...MISSION
PERF STUDIES ON THE PATHOGENESIS,DIAGNOSIS,PROPHYLAXIS,TREATMENT, EPIDEMIOLOGY OF NATURALLY OCCURING INFECT DISEASES OF MIL IMPORT WITH EMPHASIS ON PROBLEMS ASSOC WITH THE MED DEFENSE AGAINST BIO AGENTS AND ON MICROORGANISMS WHICH REQ SPEC CONTAIN FACILITIES.

...CURRENT IMPORTANT PROGRAMS
DEVELOPMENT OF NEW VACCINES AND TOXOIDS
IMMUNOLOGICAL STUDIES TO DETERMINE HOW TO IMPROVE VACCINE PRODUCTION
STUDIES ON PATHOGENESIS OF MILITARILY IMPORTANT INFECTIONS
DEVELOPMENT OF MORE RAPID AND ACCURATE METHODS OF INFECTION DIAGNOSIS AND MEDICAL THERAPY FOR BW DEFENSE

...FUNCTIONS/EQUIPMENT/CAPABILITIES
TWO LARGE BUILDINGS PROVIDE ABOUT 310,000 SQUARE FEET OF SPACE AND CONTAIN 23 MODERN LABORATORY SUITES WHICH REPRESENT THE LATEST IN FUNC CONCEPTS,LABORATORY DESIGN AND SAFETY.A COMPLEX PROGRAM OF MEDICAL RES IS CONDUCTED AND INCLUDES IMMUNOLOGY,PATHOLOGY,SEROLOGY,BIOCHEMISTRY, BIOPHYSICS,MOLECULAR BIOLOGY,AND TISSUE CULTURE.SPECIAL CAPABILITIES INCLUDE ELECTRON MICROSCOPY,RADIOIMMUNOASSAY LABORATORIES,A VACCINE PRODUCTION SUITE,HOSPITAL FACILITIES FOR MEDICAL PATIENTS AND FOR RES STUDIES WITH VOLUNTEERS.USAMRIID RESEARCH IS SUPPORTED BY TWO COMPUTERS AND AN ANIMAL FARM.

INSTALLATION: MISSILE RSCH . & DEV. CMD. REDSTONE ARSENAL,AL.

COR.MG. LOUIS RACHMELER ACTG.DIR.DR. JULIAN KOBLER

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1979 (ACTUAL)	1980 (ACT + EST)
TOTAL RDT&E	66.871	73.741
TOTAL PROCUREMENT	23.397	8.000
TOTAL O&M	7.583	4.146
TOTAL OTHER	2.334	40.376
TOTAL ANNUAL LAB	100.185	126.263
TOTAL INHOUSE	65.825	58.072
TOTAL INHOUSE RDT&E	41.406	44.700
ANNUAL OPERATING COST	14.255	14.968

PERSONNEL DATA (END OF FY 1979)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON-PROF
MILITARY	28	0	19	9
CIVILIAN	973	42	600	373
TOTAL	1001	42	619	382

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
11000	663.993	318.702	428.008	1410.703	131.00	90.000

...MISSION
MANAGE AND CONDUCT RSCH, EXP & ADV DEV FOR ASSIGNED MATERIEL; PROVIDE S&E SPT TO OTHER ACTIVITIES; PLANS, DIRECTS & CONDUCTS RSCH STUDIES & PRGMS TO ADVANCE SYS ENGR & TESTING TECHNOLOGY; PROVIDES CENTRAL ENGR BASE FOR DESIGN & MANUFACTURE OF PROTOTYPE SYS & COMPONENTS.OF MATERIELS

...CURRENT IMPORTANT PROGRAMS
TRANSFERRED SEEKER TECHNOLOGY TO ASSAULT BREAKER.
COLLECTED DATA ON IR/EO SENSORS DURING SMOKE WEEK II.
FLIGHT DEMONSTRATION OF DIGITAL AUTOPILOT SUCCESSFULLY COMPLETED.
OBSCURATION PROGRAM.
PRODUCTION ENGINEERING.

...FUNCTIONS/EQUIPMENT/CAPABILITIES
LAB IS EQUIPPED TO STUDY PROBLEMS IN PROP, AERO, G&C & STRUCTURES. MAJOR FAC IS MCMORROW LAB WHICH HOUSES MAJORITY OF FACILITY. SOME OF THE UNIQUE FAC ARE: ADV SIM CTR, A COMPUTER COMPLEX SURROUNDED PERPHERALLY BY 3 ENVIR EFFECTS SIMULATORS; MSL COMPUTER SOFTWARE/HDW CTR; SIG EVAL ENVIR CHAMBER; ARMY MSL OPTICAL RANGE DESIGNED TO MEASURE LASER RADAR SIG. MAINTAINS AND OPERATES 7 MAJOR TEST AREAS WHICH ENCOMPASS FLIGHT STATIC, ENVIRONMENTAL & FUNCTIONAL TEST; STATE-OF-THE-ART FACILITIES & EQP SUCH AS LASER TRACKERS & ELECTRO-MAGNETIC RADAR SENSORS. ENGR DESIGN & DEV OF CORRECTIONS TO DESIGN DEFICIENCIES IN FIELDED WPN SYSTEMS. PERFORMS ARMY LEAD LAB FUNCTION IN HIGH POWER/ENERGY LASER RSCH & TECH & MSL RSCH. FAC FOR MECH, ELECT & ELEC FABRICATION & ASSY, & HYBRID MICRO-CIRCUITRY DESIGN ARE AVAILABLE. SMOKE CHARACTERIZATION FACILITY IS ALSO AVAILABLE.

INSTALLATION: MOBILITY EQUIP R & D COMMAND FT.BELVOIR,VA.

CDR.COL. ALBERT F. DORRIS TECH.DIR.MR.DONALD B.DINGER

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1979 (ACTUAL)	1980 (ACT + EST)
TOTAL RDT&E	72.736	82.073
TOTAL PROCUREMENT	154.909	159.800
TOTAL O&M	18.145	19.569
TOTAL OTHER	0.000	0.000
TOTAL ANNUAL LAB	245.790	261.442
TOTAL INHOUSE	43.344	45.620
TOTAL INHOUSE RDT&E	30.448	29.280
ANNUAL OPERATING COST	13.664	14.547

PERSONNEL DATA (END OF FY 1979)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON-PROF.
MILITARY	80	1	17	63
CIVILIAN	1182	21	378	804
TOTAL	1262	22	395	867

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
1064	750.849	146.730	209.879	1107.458	49.09	34.947

...MISSION
ARMY WITH A SUPERIOR COMBAT & DETERRENT CAPABILITY, NOW & IN THE FUTURE EQUIPED WITH TECHNOLOGICALLY SUPERIOR & COST & OPERATIONALLY EFFECTIVE MATERIEL IN BARRIER/CTRBARRIER SYS,CTRSURVEILLANCE SYS, ENERGY & ENVIRON SYS, & SUPPLY DISTRIBUTION & CONSTRUCTION EQUIPMENT SYS AREAS.

...CURRENT IMPORTANT PROGRAMS
ENERGY & ENVIRONMENTAL SYSTEMS
COUNTERSURVEILLANCE SYSTEMS
FUEL & WATER SYS
BARRIER/COUNTERBARRIER SYSTEMS
MARINE & BRIDGE SYSTEMS

...FUNCTIONS/EQUIPMENT/CAPABILITIES
ACCOMPLISH RDTE OF MATERIEL FOR MIL SYS OF BARRIERS, BRDGNG & STRUCTURES COUNTERMINE, FIELD FORTIFICATIONS, CAMOUFLAGE, PHYSICAL SECURITY, TUNNEL DETECTION, TOPOGRAPHY(ENGRG ONLY), FUELS & LUBES, FUELS HNDLG EQUIP,ELEC POWER GENERATE & DISTRIB, ENVIRON CONTROL, WATER & WASTE MGT, MATERIALS HNDLG & SUPPLY DISTRIB, TRANSPORT-MARINE & RAIL EQUIP, AND CONSTRUCTION EQUIP. FAC INCL MINE FLD TEST LANES, SENSOR TEST AREA, RDO FREQ ANECHOIC CHAMBER, FLUID STROKING TEST CHAMBER, FUELS & LUBE LAB, FIRE SUPPRESSION CHAMBER, CAMOUF EVAL & REF CTR,ELECTRIC
PROPULSION SIM, BRIDGE TEST HANGER, MOB STRESS ANAL VAN, TRK STABILITY TILT TABLE, VEH TEST TRACKS, SHOCK & VIBRATION DYNAMIC SIM, ENVIRON SIM, MATERIALS RSCH LAB, CALIB & INSTRUMENTATION, EMI SIM, COMPT CTR, STILL & MOTION PIC SPT, RSCH & DEV MODEL FABRICATION SHOPS.

INSTALLATION: NATICK R&D COMMAND NATICK,MA.

CDR.COL. R.J. CUTHBERTSON ACTG.TECH.DIR. JAMES H. FLANAGAN

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1979 (ACTUAL)	1980 (ACT + EST)
TOTAL RDT&E	34.353	36.951
TOTAL PROCUREMENT	0.505	4.000
TOTAL O&M	12.212	11.107
TOTAL OTHER	5.021	5.053
TOTAL ANNUAL LAB	52.091	57.111
TOTAL INHOUSE	39.188	40.263
TOTAL INHOUSE RDT&E	23.722	25.585
ANNUAL OPERATING COST	7.571	6.974

PERSONNEL DATA (END OF FY 1979)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON-PROF
MILITARY	104	7	28	76
CIVILIAN	1083	70	446	637
TOTAL	1187	77	474	713

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
2913	552.557	65.900	417.862	1036.319	27.33	18.857

...MISSION
CONDUCT SCIENTIFIC R&D TO SUSTAIN AND PROTECT MIL PERS UNDER ALL CONDTNS DESIGN AND DEVELOP FOOD & FOOD SERV SYS,PROT CLOTH&AIRDROP DELIV EQUIP ACCOMPLISH ILS FUNCTION IN ABOVE & EXECUTE FIRST PROD PROC & FIELDING OF NEW ARMY MANAGED ITEMS.PROV TECH & ENG SUPPORT TO PROC AGENCIES

...CURRENT IMPORTANT PROGRAMS
RADIATION PRESERVATION OF FOOD
SUBSISTENCE TECHNOLOGY
ANALYSIS AND DESIGN OF MILITARY FEEDING SYSTEMS
CLOTHING AND EQUIPMENT TECHNOLOGY
AIRDROP TECHNOLOGY

...FUNCTIONS/EQUIPMENT/CAPABILITIES
COBALT 60 IRRAD FACIL DESIGNED FOR MAX FLEXIBILITY IN FOOD PROCESS HIGH POWER LINEAR ACCELERATOR PILOT PLANT FOR FOOD AND FOOD PACKAGING BACTERIOLOGY LAB EQUIP FOR INVESTIGATION OF PATHOGENIC MICROORGANISMS HIGH RESOLUTION MASS SPECTROMETER FOR ANALYSIS OF VOLATILE COMPOUNDS FEBETRON MACHINE USED AS A RAD SOURCE FOR PULSE RADIOLYSIS PILOT PLANT TO STUDY DATA ON CONVERTING CELLULOSE TO GLUCOSE ENZYMATICALLY DYEING AND FINISHING LAB FOR CONDUCTING STUDIES OF TEXTILES COMPUTER GENERATED SYS OF CLOTHING PATTERNS TO OUTPUT COMPLETE TARIFF OF SIZES FROM ONE MASTER CLIMATIC CHAMBERS TO TEST ITEMS AT TEMPS -57C TO 674C WITH WIND & RAIN FLAME PROTECTION LAB AND FACILITY INCLUDING AN OUTDOOR FLAME PIT UNIVAC 1106 COMPUTER WITH DISK PACS&TAPE DRIVES AND INPUT/OUTPUT EQUIP AIRCRAFT ROLLER CONVEYOR TEST FACILITY FIRE PITS FOR TESTING MATERIALS

INSTALLATION: NIGHT VISION & ELECTRO OPTICS LABORATORY FT.BELVOIR,VA.

ACTG.DIR.MR. JOHN JOHNSON ASSOC.DIR.DR. LOUIS M. CAMERON

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1979 (ACTUAL)	1980 (ACT + EST)
TOTAL RDT&E	37.276	39.565
TOTAL PROCUREMENT	211.807	165.646
TOTAL O&M	0.708	0.742
TOTAL OTHER	0.000	0.000
TOTAL ANNUAL LAB	249.791	205.953
TOTAL INHOUSE	18.779	22.321
TOTAL INHOUSE RDT&E	13.895	18.018
ANNUAL OPERATING COST	2.103	2.103

PERSONNEL DATA (END OF FY 1979)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON-PROF
MILITARY	32	0	7	25
CIVILIAN	459	29	203	256
TOTAL	491	29	210	281

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
38	180.639	27.186	20.000	227.825	32.00	50.000

...MISSION
NV&EOL IS RESPONSIBLE FOR PROVIDING THE ARMY WITH A NIGHT VISION CAPABILITY THAT WILL ALLOW IT TO OPERATE WITH NEAR DAYLIGHT EFFICIENCY. THE SYSTEMS DEV PROGRAM IS STRUCTURED AROUND A STRONG TECHNOLOGY BASE WHICH CONSISTS OF FIR, ELECTRO-OPTICS, LASERS AND VISIONICS.

...CURRENT IMPORTANT PROGRAMS
SECOND GENERATION THERMAL IMAGING
SURVEILLANCE TARGET ACQUISITION RADAR FOR TANK LOCATION & ENGAGEMENT
AVIATORS NIGHT VISION SYSTEM
LOW COST NIGHT VISION AIDS
ADVANCED LASER DEVICES

...FUNCTIONS/EQUIPMENT/CAPABILITIES
MAJOR FACILITIES INCLUDE: NIGHT VISION SYSTEM LAB, IR DETECTOR FABR & ANALYSIS FACILITY, SURFACE RESEARCH FACILITY, FOCAL PLANE ARRAY TEST FACILITY, IR OPTICAL TEST FACILITY, IMAGE INTENSIFIER TUBE TESTING FACILITY, SEMI-CONDUCTOR MATERIALS RESEARCH FACILITY, ELECTRONICS TEST FACILITY, INTERACTIVE IMAGE PROCESSING FACILITY, LASER RANGES, 3-D MULTI SPECTRAL SEARCH SIMULATOR, SCIENTIFIC COMPUTER CENTER, FIRING TEST RANGE, AND E-O/IR IMAGE EVALUATION FACILITY.

INSTALLATION: RESEARCH INST FOR BEHAVIORAL & SOCIAL SCI WASHINGTON,D.C.

COR.COL. FRANKLIN A HART TECH.DIR.DR. JOSEPH ZEIDNER

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1979 (ACTUAL)	1980 (ACT + EST)
TOTAL RDT&E	24.129	28.161
TOTAL PROCUREMENT	0.000	0.000
TOTAL O&M	0.000	0.000
TOTAL OTHER	0.687	0.738
TOTAL ANNUAL LAB	24.816	28.899
TOTAL INHOUSE	12.203	13.693
TOTAL INHOUSE RDT&E	11.516	12.960
ANNUAL OPERATING COST	3.244	3.683

PERSONNEL DATA (END OF FY 1979)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON-PROF
MILITARY	30	2	21	9
CIVILIAN	328	132	189	139
TOTAL	358	134	210	148

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
0	46.110	2.559	6.190	54.859	0.00	1.795

...MISSION
TO MAXIMIZE COMBAT EFFECTIVENESS THROUGH RESEARCH IN THE ACQUISITION, DEVELOPMENT AND UTILIZATION OF SOLDIERS IN MILITARY SYSTEMS

...CURRENT IMPORTANT PROGRAMS
PERFORMANCE ORIENTED SKILL DEVELOPMENT AND EVALUATION
TRAINING TECHNOLOGY
ON-THE-JOB TRAINING
MANPOWER ACCESSION AND RETENTION SYSTEMS
TECHNIQUES FOR ORGANIZATIONAL EFFECTIVENESS AND MANAGEMENT

...FUNCTIONS/EQUIPMENT/CAPABILITIES
NINE CONUS FIELD UNITS & ONE IN EUROPE, LIAISON OFFICES AT TRADOC, FORSCOM, & IN LONDON SUPPORT IN-HOUSE RESEARCH PROGRAM MANAGED BY 2 LABS WITHIN WHICH ARE 6 TECH AREAS, 1 PERSONNEL UTILIZATION, 2 TRAINING, 3 LEADERSHIP & MANAGEMENT, 4 SIMULATION SYSTEMS, 5 MANPOWER & EDUCATION SYSTEMS, 6 HUMAN FACTORS. CONUS FIELD UNITS ARE AT FTS BENNING, BLISS, KNOX, SILL, HOOD, LEAVENWORTH, RUCKER, BEN HARRISON, & PRESIDIO OF MONTEREY. IN-HOUSE EXPERIMENTAL FACILITIES INCLUDE LABORATORY AREA. ARMY -OWNED IN-HOUSE COMPUTERS PERMIT, WITHIN THE LABS, REAL-TIME EXPERIMENTATION, GAMING, & SIMULATION. ADDITIONAL TERMINAL LINES TO EXTERNAL COMPUTERS PROVIDE FLEXIBILITY. EXPER PROGRAM PERMITS A WIDE RANGE OF LAB OPTIONS TO TEST HUMAN PERFORMANCE HYPOTHESES UNDER SIMULATED OPERATIONAL CONDITIONS, INCL A COMMAND POST IN SIMULATED TACTICAL SITUATIONS.

INSTALLATION: RSCH INSTITUTE OF ENVIRONMENTAL MEDICINE NATICK,MA.

CDR.COL. HARRY G. DANGERFIELD

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1979 (ACTUAL)	1980 (ACT + EST)
TOTAL RDT&E	3.935	4.148
TOTAL PROCUREMENT	0.000	0.000
TOTAL O&M	0.000	0.000
TOTAL OTHER	0.968	1.019
TOTAL ANNUAL LAB	4.903	5.167
TOTAL INHOUSE	4.903	5.167
TOTAL INHOUSE RDT&E	3.935	4.148
ANNUAL OPERATING COST	0.888	0.950

PERSONNEL DATA (END OF FY 1979)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON-PROF
MILITARY	81	9	40	41
CIVILIAN	94	18	44	50
TOTAL	175	27	84	91

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
4	60.421	18.563	28.647	107.631	3.71	3.825

...MISSION
TO CONDUCT BASIC AND APPLIED RESEARCH TO DETERMINE THE EFFECTS OF HEAT, COLD,HIGH TERRESTRIAL ALTITUDE AND WORK UPON THE SOLDIERS'LIFE PROCESSES PERFORMANCE AND HEALTH.THE GOAL IS TO UNDERSTAND THE COMPLEX INTERACTION OF ENVIRONMENTAL STRESSES WITH THE BODY'S DEFENSE MECHANISMS AND TECH.

...CURRENT IMPORTANT PROGRAMS
IMPROVEMENT OF PHYSICAL FITNESS TRAINING AND PREVENTION OF INJ REL TO TG PHYSICAL FITNESS REQUIREMENTS,EVALUATION,AND JOB PERF IN THE US ARMY PREDICTION OF THE BIOLOGICAL LIMITS OF MILITARY PERF AS A FUNCT OF ENVIR BIOLOGICAL PROCESSES THAT LIMIT HEAVY PHYSICAL WORK ABILITY OF THE SOLDI PREVENTION AND TREATMENT OF DISABILITIES ASSOCIATED WITH MIL OPERATIONS

...FUNCTIONS/EQUIPMENT/CAPABILITIES
CONDUCT RESEARCH AND PROVIDE GUIDANCE TO DESIGNERS,ENGINEERS,TACTIANS, PLANNERS AND PHYSICIANS ON MILITARY PERFORMANCE AND CASUALTY PREVENTION AND TREATMENT IN EXTREME CLIMATES AND ENGINEERED ENVIRONMENTS;ADVISE ON HEALTH AND SAFETY IN MANEUVERS DURING HEAT,COLD,OR HYPOXIC STRESS AND RAPID AIR TRANSLOCATION.IN HUMAN AND ANIMAL RESEARCH USE APPROXIMATE 180 VOLUNTEER TEST SUBJECTS,AND CLIMATIC CHAMBERS OF USANARADCOM.IN ADDITION,APPROXIMATELY 475 OTHER HUMAN TEST SUBJECTS WERE UTILIZED AT VARIOUS LOCATIONS THROUGHOUT CONUS. THE MAJOR EQUIPMENT AND FACILITY CAPABILITIES OF THE LABORATORY INCLUDE,BUT ARE NOT LIMITED TO,MANY SMALL CHAMBERS,ANIMAL CARE FACILITIES,ELECTRON MICROSCOPE,UNDERWATER RESEARCH POOL,COOPER MANIKINS AND DIVERSE PHARMACOLOGICAL AND PSYCHOLOGICAL MEASUREMENT. THE INSTITUTE MAINTAINS A FIELD FACILITY AT PIKES PEAK, CO.

INSTALLATION: SIGNALS WARFARE LABORATORY VINT HILL, VA

DIR HERBERT S. HOVEY, JR.

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1979 (ACTUAL)	1980 (ACT + EST)
TOTAL RDT&E	11.087	14.067
TOTAL PROCUREMENT	91.400	62.200
TOTAL O&M	2.170	2.897
TOTAL OTHER	20.296	17.331
TOTAL ANNUAL LAB	124.953	96.495
TOTAL INHOUSE	5.656	6.022
TOTAL INHOUSE RDT&E	1.720	1.40
ANNUAL OPERATING COST	2.286	2.305

PERSONNEL DATA (END OF FY 1979)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON-PROF
MILITARY	69	0	29	40
CIVILIAN	168	5	51	117
TOTAL	237	5	80	157

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
10	3.936	32.101	3.963	40.000	2.00	9.980

...MISSION
RESEARCH, DESIGN, DEVELOPMENT, EVALUATION, ANALYSIS, LOGISTICAL INTEGRATION, FIRST ARTICLE PRODUCTION, SUCCESSFUL FIELDING AND PRODUCT IMPROVEMENT OF SIGNALS. INTELL/ELECTRONIC WARFARE SYS AND THE DESIGN OF SIGNAL SECURITY DEVICES AND TECH TO MEET ARMY AND DIRECTED NATIONAL REQMTS.

...CURRENT IMPORTANT PROGRAMS
AN/MLQ-33, CLOSE AIR SUPPORT ECM
AN/MLQ-34, TAC JAM
EXPENDABLE JAMMERS
AN/ALQ-151, QUICK FIX
AREA SUPPORT RADAR JAMMERS

...FUNCTIONS/EQUIPMENT/CAPABILITIES
THE US ARMY SIGNALS WARFARE LABORATORY IS LOCATED AT VINT HILL FARMS STATION, WARRENTON, VIRGINIA, IN A FACILITY UNIQUELY SUITED TO MISSION. THE LABORATORY CONSISTS OF APPROXIMATELY 4000 SQUARE FEET WITH A COMPUTERIZED SIGNAL PROCESSING FACILITY (CONSISTING OF A CPU, RECORDERS, ANAL) FOR SYS SOFTWARE VERIFICATION AND VALIDATION, R&D SOFTWARE DEV AND SUP ARE USED FOR DESIGN AND TEST OF EQUIP IN A REAL TIME ENVIRONMENT. THE LAB IS STAFFED WITH ELECTRONIC ENGINEERS AND TECH, SIGNALS ANALYSTS, OPERATION RESEARCH ANALYSTS, INTEGRATED LOGISTIC SUPPORT PERSONNEL, PRODUCT AND QUALITY ASSURANCE TECHNICIANS, AND PRODUCTION ENGINEERS TO PROVIDE FOR TECHNICALLY SOUND, MILITARIZED AND FULLY SUPPORTABLE AND INTER/INTRA-OPERATABLE COMMUNICATIONS AND ELECTRONICS SYSTEM AND EQUIPMENT.

INSTALLATION: TANK-AUTO R & D COMMAND WARREN,MI.

CDR.BG. A. H. ANDERSON TECH.DIR.DR. F. N. PETRICK

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1979 (ACTUAL)	1980 (ACT + EST)
TOTAL RDT&E	65.371	80.041
TOTAL PROCUREMENT	97.998	63.733
TOTAL O&M	7.039	9.898
TOTAL OTHER	0.000	0.000
TOTAL ANNUAL LAB	170.408	153.672
TOTAL INHOUSE	23.952	28.944
TOTAL INHOUSE RDT&E	13.448	17.993
ANNUAL OPERATING COST	4.298	3.945

PERSONNEL DATA (END OF FY 1979)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON-PROF
MILITARY	40	3	38	2
CIVILIAN	795	15	342	453
TOTAL	835	18	380	455

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
11	140.319	99.947	0.000	240.266	38.29	135.000

...MISSION
RESPONSIBLE FOR ACCOMPLISHING DESIGN,DEVELOPMENT,ACQUISITION AND INITIAL DEPLOYMENT OF ASSIGNED WEAPONS/EQUIP SYSTEMS. CONDUCT AND MANAGE RESEARCH,PERFORM PROCUREMENT AND QUALITY ASSURANCE THRU DEVELOPMENT. PERFORM RELIABILITY-MAINTAINABILITY ASSESSMENT

...CURRENT IMPORTANT PROGRAMS
HOLOGRAPHIC INTERFEROMETRY TECHNIQUES TO TEST TANK-AUTO COMP
ACOUSTIC DETECTION OF HELICOPTER FROM AIR DEFENSE VEHICLES
COUNTERMEAS AGAINST INFRARED AND RADAR ANTI-TANK GUIDED MISSILE THREATS
TOTAL ANALYTICAL BALLISTIC PROCEDURE APPLIED TO COMBAT VEHICLE SYSTEM
TANK SCIENCE AND TECHNOLOGY PLAN

...FUNCTIONS/EQUIPMENT/CAPABILITIES
VEHICLE BRAKE DYNAMOMETER; ENGINE AND TRANSMISSION TEST CELLS
VEHICLE SUBSYSTEM INTEGRATION; VEHICLE MOTION SIMULATOR
ANALYTICAL PREDICTION OF MILITARY VEHICLE PERFORMANCE
VEHICLE SIGNATURE MEASUREMENT CAPABILITY
SIX DEGREE OF FREEDOM SIMULATOR
VEHICLE COMPONENT EVALUATION
SIX DEGREE OF FREEDOM SIMULATOR
METAL ANAL W/MICROPROBE ELECTRON MICROSCOPE ANALYZER AND TECHNIQUES
DEVELOPMENT OF IMPROVED ARMOR WELDING,FABRICATION AND APPLIC TECHINQUES
LOW TEMPERATURE SHOCK AND VIBRATION TEST FACILITIES
VEHICLE DYNAMIC SIMULATION FACILITY; IMAGE PROCESSING CAPABILITY
HOLOGRAPHIC CAPABILITY FOR LARGE STRUCTURES

INSTALLATION: TROPIC TEST CENTER FT.CLAYTON,C.Z.

COR.COL. RICHARD P. BARRERE

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1979 (ACTUAL)	1980 (ACT + EST)
TOTAL RDT&E	2.807	3.107
TOTAL PROCUREMENT	0.027	0.001
TOTAL O&M	0.005	0.001
TOTAL OTHER	1.194	1.724
TOTAL ANNUAL LAB	4.033	4.833
TOTAL INHOUSE	3.822	4.124
TOTAL INHOUSE RDT&E	2.616	2.911
ANNUAL OPERATING COST	0.392	0.418

PERSONNEL DATA (END OF FY 1979)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON-PROF
MILITARY	80	0	4	76
CIVILIAN	61	1	9	52
TOTAL	141	1	13	128

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
2625	20.510	35.925	89.858	146.293	1.06	2.384

...MISSION
PLAN-CONDUCT AND REPORT ON ENVIRONMENTAL PHASES OF DEVELOPMENT TEST II, AND OTHER DEVELOPMENTAL TYPE TESTS. PROVIDE ADVICE AND GUIDANCE ON TESTS AND EVALUATION MATTERS TO MATERIALS DEVELOPERS,MATERIEL PRODUCERS,OTHER SERVICES,AND PRIVATE INDUSTRY

...CURRENT IMPORTANT PROGRAMS
DEMOLITION KIT BLASTING
BLACKHAWK
FIRING DEVICE DEMO,XM122
INDEPENDENT LABORATORY IN-HOUSE RESEARCH (ULTRA-VIOLET)
TEST METHODOLOGY AND RESEARCH AND DEVELOPMENT INSTRUMENTATION PROGRAM

...FUNCTIONS/EQUIPMENT/CAPABILITIES
TEST FACILITIES AND LABORATORIES WITH INSTRUMENT AND EQUIPMENT FOR CONDUCTING TROPIC TESTS OF DOD MATERIEL IN THE NATURAL ENVIRONMENT INCLUDE ELECTRONICS,HUMAN FACTORS,CHEMICAL,MICROBIOLOGICAL,MATERIALS,SOILS,CALIBRATION,AUDIO-VISUAL AND DATA ANALYSIS LABORATORIES.
OTHER TEST RESOURCES CONSIST OF FIRING RANGE, NATURAL TERRAIN MOBILITY COURSES,AMMO TEST STORAGE AND FUNCTIONING AREAS,JUNGLE GRASS AND COASTAL AND OTHER DEVELOPMENTAL TYPE TESTS PROVIDE ADVICE AND GUIDANCE ON TESTS PACK PORTABILITY COURSE,CALIBRATED SEISMIC DETECTION AND CHEMICAL TEST GRIDS AND 2,500 ACRES OF BROADLEAF EVERGREEN TREES,SEMIDECIDUOUS TREES, MARSHLAND,GRASSLAND,CORAL REEFS,FLAT AND HILLY TERRAIN AND ALL TYPES OF TROPIC VEGETATION.

INSTALLATION: WALTER REED ARMY INSTITUTE OF RESEARCH WASHINGTON,D.C.

CDR.COL. PHILIP K. RUSSELL

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1979 (ACTUAL)	1980 (ACT + EST)
TOTAL RDT&E	18.954	19.409
TOTAL PROCUREMENT	0.000	0.000
TOTAL O&M	1.301	1.651
TOTAL OTHER	7.316	7.699
TOTAL ANNUAL LAB	27.571	28.759
TOTAL INHOUSE	27.571	28.759
TOTAL INHOUSE RDT&E	18.954	19.409
ANNUAL OPERATING COST	1.749	2.169

PERSONNEL DATA (END OF FY 1979)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON-PROF
MILITARY	473	153	327	146
CIVILIAN	440	63	166	274
TOTAL	913	216	493	420

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
203	382.974	58.360	0.000	441.334	10.08	17.609

...MISSION
PERFORMS GENERAL MILITARY MEDICINE RESEARCH IN THE AREAS OF COMMUNICABLE DISEASE AND IMMUNOLOGY,SURGERY,EXPERIMENTAL THERAPEUTICS,NEUROPSYCHIATRY GENERAL MEDICINE,AND PREVENTIVE MEDICINE.SERVE AS COMMAND AND CONTROL ELEMENT FOR THE SPECIAL FOREIGN ACTIVITIES.PLAN AND CONDUCT AMEDD COURSE

...CURRENT IMPORTANT PROGRAMS
BASIC RESEARCH ON MILITARY DISEASES
MILITARY PSYCHIATRY
MICROWAVE INJURY,PREVENTION AND TREATMEN
MILITARY PREVENTIVE MEDICINE AND TROPICAL DISEASE
DRUG DEVELOPMENT FOR CHEMICAL DEFENSE

...FUNCTIONS/EQUIPMENT/CAPABILITIES
MAJOR EQUIPMENT AND FACILITY CAPABILITY OF THE LAB INCLUDES CHEMICAL ANALYTICAL EQUIPMENT,MICROWAVE EXPOSURE SYSTEMS,BEHAVIORAL RESEARCH INSTRUMENTATION AND ELECTRON MICROSCOPES ADDITIONAL RESEARCH FACILITIES ARE LOCATED IN GERMANY,KENYA,MALAYSIA,BRAZIL,THAILAND AND MARYLAND.

INSTALLATION: WHITE SANDS MISSILE RANGE WHITE SANDS,N.M.

CDR.MG. D. BALL TECH.DIR.DR. RICHARD H. DUNCAN

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1979 (ACTUAL)	1980 (ACT + EST)
TOTAL RDT&E	135.495	138.611
TOTAL PROCUREMENT	12.894	16.597
TOTAL O&M	5.409	5.250
TOTAL OTHER	13.497	56.095
TOTAL ANNUAL LAB	167.295	216.553
TOTAL INHOUSE	144.020	149.432
TOTAL INHOUSE RDT&E	112.982	115.412
ANNUAL OPERATING COST	36.037	37.880

PERSONNEL DATA (END OF FY 1979)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON-PROF
MILITARY	922	1	402	520
CIVILIAN	2750	46	1024	1726
TOTAL	3672	47	1426	2246

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
4214377	1408.729	469.828	3007.638	4886.195	185.19	180.584

...MISSION
OPERATE A NATIONAL MISSILE RANGE FOR SUPPORT OF ALL APPROVED MISSILE AND RELATED TEST PROGRAMS. INDEPENDENTLY TEST AND EVALUATE ARMY MISSILE AND ROCKET SYSTEMS. ENGINEER AND DEVELOP RANGE INSTRUMENTATION SYSTEMS FOR GATHERING TEST DATA.

...CURRENT IMPORTANT PROGRAMS
SECURE TELEMETRY
HIGH ENERGY LASER INSTRUMENTATION
HIGH INTENSITY SOLAR THERMAL FACILITY DESIGN
RADAR 85 (AIRSPACE SURVEILLANCE)
PROJECTILE MOTION DETERMINATION

...FUNCTIONS/EQUIPMENT/CAPABILITIES
INSURE GROUND AND FLIGHT SAFETY. OBTAIN FLIGHT TRAJECTORY AND EVENT DATA. RECOVER MISSILES OR PORTIONS THEREOF. REDUCE AND PREPARE DATA COLLECTED BY RANGE INSTRUMENTS FOR RANGE USERS. ENGINEER AND DEVELOP RANGE INSTRUMENTATION. INDEPENDENTLY TEST AND EVALUATE ARMY WEAPONS SYSTEMS. EVALUATE GUIDANCE AND CONTROL SYSTEMS, STRUCTURAL INTEGRITY, PROPULSION SYSTEMS, AND ELECTROMAGNETIC RADIATION EFFECTS. ANALYZE CHEMICAL, METALLOGRAPHIC, MICROBIOLOGICAL, AND CLIMATIC-ENVIRONMENTAL EFFECTS. TEST AND EVALUATE WARHEADS AND SPECIAL WEAPONS. SIMULATE WEAPONS SYSTEMS. TEST AND ANALYZE NUCLEAR EFFECTS. TEST COUNTER-COUNTER MEASURES. PROVIDE TEST DATA ON MISSILES AND RELATED PROGRAMS UTILIZING ELECTRONIC AND OPTICAL TRACKING SENSORS AND DATA TRANSMISSION. TEST UTILIZING SOLAR FURNACE.

INSTALLATION: YUMA PROVING GROUND YUMA,AZ

COR.COL. JAMES M. DAVIS,JR. TECH.DIR. RICHARD H. MILLER

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1979 (ACTUAL)	1980 (ACT + EST)
TOTAL RDT&E	38.333	32.983
TOTAL PROCUREMENT	1.226	0.300
TOTAL O&M	0.612	0.326
TOTAL OTHER	5.052	9.463
TOTAL ANNUAL LAB	45.223	43.072
TOTAL INHOUSE	45.223	38.772
TOTAL INHOUSE RDT&E	38.333	32.983
ANNUAL OPERATING COST	9.046	9.794

PERSONNEL DATA (END OF FY 1979)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON-PROF
MILITARY	383	6	41	342
CIVILIAN	603	0	78	525
TOTAL	986	6	119	867

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET)				COST (MILLION $)	
	LAB	ADMIN	OTHER	TOTAL	REAL PROP	EQUIP
870309	0.832	112.690	1294.937	1408.459	46.99	60.726

...MISSION
PLAN, CONDUCT, SPT DT AIR DEL EQ, L-RNGE TUBE ARTY, ACFT WPNS SYS, MOB EQUIP. PLAN, CONDUCT, RPT DESERT TEST. PROVIDE TEST, EVAL ADVICE, GUIDANCE TO PROSPECTIVE FACILITY USERS. DEVELOP, MAINTAIN MASTER PLAN FOR INSTALLATION, FACILITIES, METHODOLOGY.

...CURRENT IMPORTANT PROGRAMS
GLOBAL POSITIONING SYSTEM
ADVANCED ATTACK HELICOPTER
IMPROVED TOW VEHICLE
ENHANCED COBRA ARMAMENT PROGRAM
PROJECTILE 8-INCH XM753

...FUNCTIONS/EQUIPMENT/CAPABILITIES
INSTRUMENTED ARTILLERY RANGE
VEHICLE MOBILITY TEST RANGES AND FACILITY
INSTRUMENTED AIRCRAFT ARMAMENT RANGE
REAL TIME CINETHEODOLITE SYSTEM
LASER RANGE TRACKER
POSITION LOCATING DATA COMMUNICATION SYSTEM
INSTRUMENTED DROP ZONES
ENGINEERING TEST FACILITY
INSTRUMENTATION CALIBRATION FACILITY
SCIENTIFIC COMPUTER CENTER
ENVIRONMENTAL TEST FACILITIES
WEAPONS EVALUATION FACILITY

INSTALLATION: AEROSPACE MEDICAL RESEARCH LABORATORY PENSACOLA,FL.

CO. CAPT. R. E. MITCHELL TECH. ADV. DR.A.GRABIEL

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1979 (ACTUAL)	1980 (ACT + EST)
TOTAL RDT&E	5.662	5.962
TOTAL PROCUREMENT	0.000	0.000
TOTAL O&M	0.273	0.200
TOTAL OTHER	0.840	0.899
TOTAL ANNUAL LAB	6.775	7.061
TOTAL INHOUSE	5.212	5.591
TOTAL INHOUSE RDT&E	4.113	4.507
ANNUAL OPERATING COST	1.139	1.245

PERSONNEL DATA (END OF FY 1979)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON-PROF
MILITARY	51	20	26	25
CIVILIAN	118	19	50	68
TOTAL	169	39	76	93

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
6	172.546	11.768	6.400	190.714	3.13	4.033

...MISSION
CONDUCT RESEARCH DEVELOPMENT TEST AND EVALUATION IN AEROSPACE MEDICINE AND RELATED SCIENTIFIC AREAS APPLICABLE TO AEROSPACE SYSTEMS.

...CURRENT IMPORTANT PROGRAMS
PHYSIOLOGICAL AND BEHAVIORAL EFFECTS OF NONIONIZING RADIATION
HUMAN DYNAMIC RESPONSE TO IMPACT ACCELERATION AND VIBRATION
AVIATION PERSONNEL SELECTION PSYCHOMOTOR TEST DEVELOPMENT
CREW PERFORMANCE IN NAVAL MOTION ENVIRONMENTS.
AVIATION VISUAL PERFORMANCE REQUIREMENTS AND CAPABILITIES

...FUNCTIONS/EQUIPMENT/CAPABILITIES
MICROWAVE AND EXTREMELY LOW FREQUENCY NONIONIZING RADIATION FACILITY. SLOW ROTATION ROOM. CORIOLIS ACCELERATION PLATFORM. HUMAN DISORIENTATION DEVICE. STILL-WERNER CHAIR. OFF VERTICAL ROTATING CHAIR. ANACHOIC AND REVERBERANT CHAMBERS. AUTOMATED PULMONARY FUNCTION. TREADMILL. VECTOR AND ECHOCARDIOGRAPH. THERMOGRAPHIC IMAGING SYSTEM. 3D BINOCULAR EYE-TRACKER AND VISUAL STIMULATOR ELECTRON MICROSCOPE. IMPACT FACILITY 1 MEGA N THRUST ACCELERATOR. 213 M ENVIRONMENTALLY ENCLOSED TRACK. 17.8K N THRUST VERTICAL ACCELERATOR X-RAY CINEMATOGRAPHY. ELECTRODYNAMIC MOTION EXCITORS. C21J SHAKER. SHIP MOTION GENERATOR. 22 CHANNEL INERTIAL DATA ACQUISITION SYSTEM& HIGH SPEED CAMERAS VIVARIUM WITH OPERATING SUITE. EQUIPPED FOR HUMAN AND ANIMAL EXPERIMENTS IN UNUSUAL FORCE ATMOS PHERIC ACOUSTICAL ELECTROMAGNETIC ENVIRONMENTS.

INSTALLATION: AIR DEVELOPMENT CENTER JOHNSVILLE,PA.

CO. CDR. P. DUDLEY TECH.DIR. DR.R.K. LOBB

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1979 (ACTUAL)	1980 (ACT + EST)
TOTAL RDT&E	127.081	133.095
TOTAL PROCUREMENT	28.562	30.713
TOTAL O&M	13.999	18.241
TOTAL OTHER	11.554	13.625
TOTAL ANNUAL LAB	181.196	195.674
TOTAL INHOUSE	89.336	89.620
TOTAL INHOUSE RDT&E	61.190	58.921
ANNUAL OPERATING COST	29.545	33.609

PERSONNEL DATA (END OF FY 1979)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON-PROF
MILITARY	290	4	86	204
CIVILIAN	2109	27	1085	1024
TOTAL	2399	31	1171	1228

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
840	825.000	83.000	654.000	1562.000	33.00	51.754

...MISSION
TO BE THE PRINCIPAL NAVY RDT&E CENTER FOR NAVAL AIRCRAFT SYSTEMS LESS AIRCRAFT LAUNCHED WEAPON SYSTEMS

...CURRENT IMPORTANT PROGRAMS
CARRIER ANTI-SUBMARINE WARFARE MODULE
S-3A,F-14,F-18,VP PROGRAM
LIGHT AIRBORNE MULTI-PURPOSE SYSTEMS
V/STOL
J-TIDS

...FUNCTIONS/EQUIPMENT/CAPABILITIES
AIRCRAFT SYSTEMS SIMULATION, AIRBORNE SEARCH & RESCUE, INERTIAL NAVIGATION TECHNOLOGY, AIR VEHICLE TECHNOLOGY STRUCTURES, MATERIALS, FLIGHT DYNAMICS, PERFORMANCE, FLIGHT CONTROL, AIRBORNE ASW SYSTEMS. DEVELOP & INTEGRATION OF AIRBORNE SYSTEMS INCLUDING ELECTRONIC SURVEILLANCE & COUNTER MEASURES, COMMUNICATIONS, NAVIGATION INFORMATION PROCESSING & DISPLAY, ENVIRONMENTAL SENSING, ELECTROMAGNETIC/MAGNETIC, ACOUSTIC, ELECTRO-OPTIC, & PHOTOGRAPHIC, A/C SUPPORT SYSTEMS, A/C COST METHODOLOGY AND LOGISTICS, AEROSPACE MEDICINE AND AVIATION PHYSIOLOGY AND SUPPORT TO OTHER ACTIVITIES AS DIRECTED

INSTALLATION: AIR PROPULSION CENTER TRENTON,N.J.

CO. CAPT. B. T. ALLGOOD, JR. TECH.CONSUL.MR. B.T. MCWILLIAMS

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1979 (ACTUAL)	1980 (ACT + EST)
TOTAL RDT&E	24.458	34.133
TOTAL PROCUREMENT	2.771	3.399
TOTAL O&M	0.215	0.060
TOTAL OTHER	1.183	1.271
TOTAL ANNUAL LAB	28.627	38.863
TOTAL INHOUSE	21.044	23.770
TOTAL INHOUSE RDT&E	18.304	19.647
ANNUAL OPERATING COST	6.538	7.511

PERSONNEL DATA (END OF FY 1979)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON-PROF
MILITARY	8	0	8	0
CIVILIAN	587	0	155	432
TOTAL	595	0	163	432

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
68	376.704	37.973	211.766	626.443	50.97	11.516

...MISSION
PROVIDE NAVAIR & FLEET COMPLETE TECHNICAL & ENGINEERING SUPPORT FOR AIR-BREATHING PROPULSION SYSTEMS; ACCESSORIES, COMPONENTS AND FUELS & LUBES MANAGE AND PERFORM APPLIED R&D ON NEW PROPULSION SYSTEMS, EVALUATE NEW SYSTEMS. BY T&E ASSURE MISSION ACCOMPLISHMENT AND SOLVE FLEET PROBLEMS.

...CURRENT IMPORTANT PROGRAMS
CRUISE MISSILE ENGINE (F107) DEVELOPMENT & QUALIFICATION TESTING
F404-GE-400 ENGINE DEVELOPMENT & QUALIFICATION TESTING
TF30-P414/414A ENGINE STABILITY & PERFORMANCE EVALUATION
TF30-P-414A ENGINE BASELINE PERFORMANCE/SHALE-OIL FUEL TEST
TF700-GE-401 ENGINE CORROSION SUSCEPTIBILITY TEST

...FUNCTIONS/EQUIPMENT/CAPABILITIES
THREE LARGE ALTITUDE CELLS, TWO LARGE SEA LEVEL CELLS AND FOUR SMALL ALTITUDE CELLS PROVIDE ENVIRONMENTAL AND FLIGHT SIMULATION CAPABILITY OF SEA LEVEL TO 100000 FEET; MINUS 65 TO PLUS 650 DEGREES F, FLIGHT SPEEDS FROM ZERO TO MACH 3 TO TEST TURBOJET/FAN AND TURBOPROP/SHAFT ENGINES. SEVEN TEST ROOMS TEST STARTERS, ACCESSORIES AND AUXILIARY POWER UNITS. EIGHT TEST ROOMS AND CHEMISTRY LAB USED FOR R&D ON FUELS, LUBES AND BEARINGS. SPECIAL TEST FACILITIES ARE ROTOR SPIN FACILITY,HELICOPTER TRANSMISSION STAND, GYRO RIG, ENGINE TURNTABLE AND DEMISTER TEST CELL. FACILITIES ARE USED FOR R&D ON ADVANCED FUELS AND LUBRICATING OILS,OIL-WETTED ENGINE COMPONENTS, AIR POLLUTION, LOW CYCLE FATIGUE, CONTAINMENT, NOISE AND I/R PROGRAMS, NAPC QUALS OILS, MANAGES NAVY EXPLORATORY AND ADV DEVEL PRGMS, PROVIDES ADMN & TECH DIR TO SELECTED NAVAIR CONTRACTS.

INSTALLATION: AIR TEST CENTER PATUXENT RIVER,MD.

CO. RADM J.G. WISSLER TECH.DIR.MR.JOHN B. PARADIS

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1979 (ACTUAL)	1980 (ACT + EST)
TOTAL RDT&E	68.311	81.450
TOTAL PROCUREMENT	16.919	13.414
TOTAL O&M	12.297	13.730
TOTAL OTHER	25.713	24.684
TOTAL ANNUAL LAB	123.240	133.278
TOTAL INHOUSE	97.914	97.296
TOTAL INHOUSE RDT&E	50.801	54.740
ANNUAL OPERATING COST	52.652	58.917

PERSONNEL DATA (END OF FY 1979)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON-PROF
MILITARY	1565	3	193	1372
CIVILIAN	2001	9	351	1650
TOTAL	3566	12	544	3022

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
7106	951.106	363.500	3501.167	4815.773	161.41	23.521

...MISSION
MISSION-CONDUCT TECH EVALS & BIS TRIALS,TRAIN TEST PILOTS,TEST&EVALUATE TOTAL A/C,THEIR MISSION SYSTEMS & ALL SUBSYSTEMS & COMPONENTS, RELATED SUPPORT SYSTEMS & ILS. PROVIDE TECH ADVICE & ASSISTANCE TO NASC & OTHERS TO TRAIN TEST PILOTS & TO DEVELOP A/C TESTING TECHNOLOGY.

...CURRENT IMPORTANT PROGRAMS
PRINCIPAL SITE FOR FULL SCALE DEVELMENT,TEST&EVALUATION,AND BIS TRIALS OF ALL NAVY/MARINE A/C SUCH AS F14,F18,A4,A6,A7,EA6,AV8,LAMPS,P3,EP3E,E2 EC130,AH1,UH1,CH53,SH2,SH3,PLUS THEIR ASSOCIATED SIMULATORS, GROUND SUPPORT EQUIP, A/C COMPUTERS&SOFTWARE,RELIABILITY,MAINTAINABILITY,HUMAN FACTORS, ELEC WARFARE,ACLS,MLS,& CARRIER&AIRFIELD CERTIFICATIONS.

...FUNCTIONS/EQUIPMENT/CAPABILITIES
FACILITIES INCLUDE LARGE RESTRICTED AIRSPACE,REAL-TIME RANGE&A/C TEST DATA PROCESSING,COMPUTER&SOFTWARE T&E LABS,CATAPULTS&ARRESTING GEARS,ACLS SITES,ELECTROMAGNETIC SHIELDED HANGAR,GUN FIRING TUNNELS,ENVIRONMENTAL TESTING FACILITIES,ELECTRICAL POWER&CONTROL TESTING LABS,INSTRUMENTED SONOBUOY RANGE,ASW SYSTEMS LABS,BIOMEDICAL&HUMAN FACTORS LABS,EXTENSIVE INSTRUMENTATION DESIGN&CONSTRUCTION FACILITIES,WATER EDGE LOW ELECTRO-MAGNETIC NOISE TEST AREA,ELECTRO-OPTICAL TARGETS&TEST RANGE,ENGINE TEST CELL & THRUST STAND,BROADBAND EW TEST RANGE,VSTOL TEST SITE,SURFACE EFFECT SHIP TEST FACILITY.

INSTALLATION: ARCTIC RESEARCH LABORATORY BARROW, AK.

CO. LCDR. MICHAEL BROWN

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1979 (ACTUAL)	1980 (ACT + EST)
TOTAL RDT&E	8.841	6.517
TOTAL PROCUREMENT	0.000	0.000
TOTAL O&M	0.060	0.173
TOTAL OTHER	1.475	1.879
TOTAL ANNUAL LAB	10.376	8.569
TOTAL INHOUSE	0.056	0.056
TOTAL INHOUSE RDT&E	0.000	0.000
ANNUAL OPERATING COST	5.782	6.117

PERSONNEL DATA (END OF FY 1979)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON-PROF
MILITARY	3	0	2	1
CIVILIAN	0	0	0	0
TOTAL	3	0	2	1

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
4987	47.310	15.987	368.049	431.346	13.15	1.675

...MISSION
PROVIDE FACILITIES AND SERVICES FOR ACCOMPLISHING PROGRAMS OF BASIC AND APPLIED RESEARCH WHICH CONTRIBUTE TO SUCCESSFUL NAVY OPERATIONS IN THE ARCTIC REGIONS AND ENVIRONMENT.

...CURRENT IMPORTANT PROGRAMS
STUDY PHYSICAL PROPERTIES, OPTICAL CHARACTERISTICS AND CHEMICAL COMPOSITION OF ARCTIC AEROSOLS.
CONSTRUCT SEDIMENT DISTRIBUTION CHART OF THE ARCTIC BASIN
DEVELOP RELATIONSHIPS BETWEEN ICE, AIR AND WATER OF THE ARCTIC OCEAN.
STUDY THE PHYSICAL OCEANOGRAPHY OF THE BARENTS AND KARA SEAS.

...FUNCTIONS/EQUIPMENT/CAPABILITIES
THE FACILITY CONSISTS OF 116 SEMI-PERMANENT BUILDINGS (TO BE REDUCED BY 50 BLDGS BY FY80) INCLUDING A LABORATORY-ADMINISTRATION-BILLETING BLDG WHICH HAS 43 LABORATORY SPACES, SLEEPING QUARTERS FOR 100 PEOPLE, ADMIN OFFICES, GAME ROOM, MUSEUM OF ARCTIC FAUNA AND ARCHELOGY AND A LIBRARY OF POLAR ORIENTED PUBLICATIONS. THE LAB PROVIDES FACILITIES MAINTENANCE, UTILITY GENERATION AND DISTRIBUTION, MOTOR VEHICLE OPERATIONS AND MAINENANCE, FIRE PROTECTION AND SECURITY, JANITORIAL SERVICE, COMMUNICATIONS , AIRPORT OPERATION, MEDICAL SUPPORT, FOOD SERVICES, AND PROVISION OF SPECIAL SERVICES, INCLUDING LAUNDRY, RECREATION AND RESALE ACTIVITIES. THE LABS CAPABILITY INCLUDES LIMTED SUPPORT OF MILITARY OPERATIONS IN THE ARCTIC INCLUDING SEARCH AND RESCUE.

INSTALLATION: ATLANTIC FLEET WEAPONS TRAINING FACILITY ROOSEVELT ROADS,P.R.

CO. CAPT. R. M. BROWN TECH.DIR. MR. THOMAS RAMIREZ

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1979 (ACTUAL)	1980 (ACT + EST)
TOTAL RDT&E	0.239	0.209
TOTAL PROCUREMENT	4.791	4.711
TOTAL O&M	11.078	11.941
TOTAL OTHER	1.935	2.034
TOTAL ANNUAL LAB	18.043	18.895
TOTAL INHOUSE	3.801	3.762
TOTAL INHOUSE RDT&E	0.202	0.177
ANNUAL OPERATING COST	1.092	0.979

PERSONNEL DATA (END OF FY 1979)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON-PROF
MILITARY	100	0	30	70
CIVILIAN	34	0	19	15
TOTAL	134	0	49	85

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
3602	0.000	14.957	154.005	168.962	10.90	96.798

...MISSION
TO OPERATE,MAINTAIN AND DEVELOP WEAPONS TRAINING FACILITIES AND SERVICES IN DIRECT SUPPORT OF THE TRAINING OF FLEET FORCES AND OTHER ACTIVITIES, AND FOR THE DEVELOPMENT, TEST AND EVALUATION OF WEAPONS SYSTEMS.

...CURRENT IMPORTANT PROGRAMS
MOBILE SEA RANGE DEVELOPMENT SUPPORT
AN/SQS-56 SONAR TESTING
CNO111-OT-4B SLQ 32 TESTING
CNO111-OT-4B SLQ 32 TESTING
FFG-7 TRIALS

...FUNCTIONS/EQUIPMENT/CAPABILITIES
NAVYS LARGEST TRAINING FAC. FOR ATLANTIC FORCES WITH 202,000 SQ.MI. COMBINED SEA AREA FOR AIR,SURFACE AND SUBSURFACE WARFARE OPERATIONS,CENTRAL COMMAND AND CONTROL SYSTEM WITH NTDS LINKING,REALISTIC EW ENVIRONMENT, SURVEILLANCE/TRACK RADARS,AIR/SURFACE TARGET PRESENTATION, LARGE SCREEN DISPLAY SYSTEM FOR OPS MONITOR/CONTROL,EVENT RECONSTRUCTION,AND VARIOUS INSTRUMENTATION SYSTEMS BASED AROUND A UNIVAC 1230 COMPUTER SYSTEM WITH A SEXTENDED CORE MEMORY UNIT.FLTAC FIELD STATION FOR MISSILE ANALYSISAND EVALUATION. AIR TO GRND AND SURFACE TO SURFACE WEAPONS TARGET FACILITIES FOR CONVENTIONAL AIRCRAFT ORDNANCE DELIVERY,. STRAFING AND NAVAL GUNFIRE WITH RADAR,TV BOMB SCORING SYSTEM AND OTHER SCORING/SPOTTING SYSTEMS.UNDERWATER RANGE FOR PRECISION SURFACE AND SUBSURFACE TRACKING, WSATS AND FORACS.NAVSTA PROVIDES FOR AIRCRAFT/SHIPS LOGISTIC SUPPORT,BOQ AND BEQ.

INSTALLATION: BIOSCIENCES LABORATORY OAKLAND,CA.

CO. CAPT.J.F.PRIBNOW SCI.DIR. DR.N.A.VEDROS

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1979 (ACTUAL)	1980 (ACT + EST)
TOTAL RDT&E	2.546	2.319
TOTAL PROCUREMENT	0.000	0.000
TOTAL O&M	0.000	0.000
TOTAL OTHER	1.117	0.912
TOTAL ANNUAL LAB	3.563	3.231
TOTAL INHOUSE	0.895	0.830
TOTAL INHOUSE RDT&E	0.591	0.531
ANNUAL OPERATING COST	0.697	0.622

PERSONNEL DATA (END OF FY 1979)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON-PROF
MILITARY	9	2	5	4
CIVILIAN	6	0	0	6
TOTAL	15	2	5	10

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
5	77.625	8.731	34.646	121.002	1.00	5.400

...MISSION
THE MISSION OF THE BIOSCIENCES LABORATORY IS TO CONDUCT RESEARCH AND DEVELOPMENT IN THE BIOSCIENCES RELATED TO THE NEEDS OF THE NAVAL ESTABLISHMENT.

...CURRENT IMPORTANT PROGRAMS
STUDY THE EFFECT OF ENERGY CONSERVATION MEASURES ON AIR HYGIENE
CONTROL FOULING OF OPTICAL SURFACES IN A MARINE ENVIRONMENT
ASSESS THE BIOHAZARD RISK OF LABORATORY OPERATIONS
ISOLATION AND TESTING OF ANTIVIRAL SUBSTANCES FROM MARINE ALGAE
CHARACTERIZE THE IMMUNE SYSTEMS OF MARINE MAMMALS USED BY THE NAVY

...FUNCTIONS/EQUIPMENT/CAPABILITIES
EQUIPMENT INCLUDES MINIATURE DEEP FREEZE AND MINIATURE FIELD INCUBATORS FOR VIRUS ISOLATION, ROTATING DRUM USED TO INVESTIGATE EFFECT OF LIGHT ON AEROSOLIZED MICRO-ORGANISMS AND PHOTOCHEMICAL REACTIONS, A HYPERBARIC TEST FACILITY, MICROAEROFLUOROMETER USED TO TRACK AEROSOL CLOUDS AND CLASS IV CONTAINMENT FACILITIES FOR HANDLING EXTREMELY PATHOGENIC VIRUS AND BACTERIA, CONTINUOUS FLOW LIQUID WASTE DECONTAMINATION UNIT, PROCESS AIR DECONTAMINATION SYSTEM, MOVABLE 400 LITER AEROSOL TEST CHAMBERS. ELECTRON SPIN RESONANCE AND NUCLEAR MAGNETIC RESONANCE SPECTROMETERS, SPECTROPHOTOMETER, SPECTROFLOROMETER AND BOTH SCANNING AND TRANSMISSION ELECTRON MICROSCOPES. THE EQUIPMENT IS CONTINUOUSLY BEING MODIFIED AND EXPANDED ACCORDING TO CURRENT PROJECTS. NBL IS A CONTRACT BASIC RESEARCH LAB WITH THE UCB.MAJORITY OF SCIENTIFIC &TEC PERONNEL ARE UCB EMPLOYEES.

INSTALLATION: CIVIL ENGINEERING LABORATORY PORT HUENEME,CA.

CO. CAPT. RONALD P. COPE TECH.DIR. WILLIAM F. BURKART

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1979 (ACTUAL)	1980 (ACT + EST)
TOTAL RDT&E	22.850	24.046
TOTAL PROCUREMENT	0.219	0.310
TOTAL O&M	2.308	2.219
TOTAL OTHER	1.400	1.375
TOTAL ANNUAL LAB	26.777	27.950
TOTAL INHOUSE	13.923	14.791
TOTAL INHOUSE RDT&E	11.724	12.701
ANNUAL OPERATING COST	3.115	3.281

PERSONNEL DATA (END OF FY 1979)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON-PROF
MILITARY	16	1	8	8
CIVILIAN	309	28	170	139
TOTAL	325	29	178	147

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
30	81.840	71.748	44.158	197.746	7.59	3.429

...MISSION
MISSION OF LABORATORY IS TO BE THE PRINCIPAL RDT&E CENTER FOR NAVY SHORE FACILITIES, FIXED SURFACE AND SUBSURFACE OCEAN FACILITIES AND FOR THE NAVY AND MARINE CORPS CONSTRUCTION FORCES.

...CURRENT IMPORTANT PROGRAMS
NAVY SHORE FACILITIES SUPPORT. NAVY SEAFLOOR INSTALLATIONS, AMPHIBIOUS & ADVANCED BASE TECHNOLOGY. ENVIRONMENTAL PROTECTION. ORGANIC MATERIALS. ENERGY TECHNOLOGY. DEEP OCEAN TECHNOLOGY. OFFSHORE BULK FUEL TRANSFER. INDEPENDENT EXPLORATORY DEVELOPMENT. INDEPENDENT RESEARCH. CONTAINER OFF-LOADING TRANSFER SYSTEM (COTS). MARINE CORPS. ARMY.

...FUNCTIONS/EQUIPMENT/CAPABILITIES
PRESSURE VESSEL FACILITY WITH 9-72 INCH VESSELS SIMULATING PRESSURES TO OCEAN DEPTHS OF 20,000 FEET. DIVING LOCKER AND EQUIPMENT FOR 10 DIVERS. SEA FLOOR SOILS LAB. ENERGY TEST BED. CLASS G PHOTO LAB. PHYSICAL SECURITY LABS. CHEMISTRY LAB. INSTRUMENTATION LAB. WARPING TUG ELECTRO-MAGNETIC FACILITY CORROSION & METALLURGICAL LABS. ENVIRONMENTAL RESEARCH LAB. CDC 8090 TERMINAL WITH HIGH SPEED READER 4 LINE PRINTER. DIGITAL MAG TAPE. PEN PLOTTER. CURRENT SENSOR LAB. ENERGY MONITORING CAPABILITY. PROTOTYPE MACHINE,WELDING,CARPENTER,AND RIGGING SHOPS. SHALLOW OCEAN SIMULATING FACILITY. MATERIAL TESTING LAB. ELECTRICAL SYSTEMS LAB. CONCRETE MIXING LAB. AGGREGATE PROCESSING LAB. DATA PROCESSING CENTER.

INSTALLATION: CLOTHING & TEXTILE RESEARCH FACILITY NATICK,MA.

CO. COR. DONALD S. PARSONS

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1979 (ACTUAL)	1980 (ACT + EST)
TOTAL RDT&E	1.060	1.304
TOTAL PROCUREMENT	0.000	0.000
TOTAL O&M	1.067	0.994
TOTAL OTHER	0.029	0.216
TOTAL ANNUAL LAB	2.156	2.514
TOTAL INHOUSE	1.989	1.862
TOTAL INHOUSE RDT&E	1.060	0.980
ANNUAL OPERATING COST	0.032	0.060

PERSONNEL DATA (END OF FY 1979)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON-PROF
MILITARY	1	0	1	0
CIVILIAN	55	1	37	18
TOTAL	56	1	38	18

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
1	10.000	7.000	3.000	20.000	0.44	0.975

...MISSION
CONDUCT RESEARCH DEVELOPMENT TEST & EVALUATION &PROVIDE ENGINEERING SUPPORT IN CLOTHING TEXTILES & RELATED FIELDS ASSOCIATED WITH SERVICE CLOTHING & ENVIRONMENTAL PROTECTIVE CLOTHING

...CURRENT IMPORTANT PROGRAMS
WOMEN'S SEA ENVIRONMENTAL PROTECTIVE CLOTHING
FLAME-RETARDANT MATERIALS AND CLOTHING CONCEPTS
BATTLE DRESS CLOTHING
ENERGY CONVERSIONS SYSTEM FOR PROTECTIVE CLOTHING
SHIPBOARD DAMAGE CONTROL CLOTHING

...FUNCTIONS/EQUIPMENT/CAPABILITIES
AIR-SEA ENVIRONMENTAL TEMPERATURE LAB,AIR CHAMBER-MARINE TANK REPRODUCES AIR-SEA TEMP CONDITIONS FOR WATER IMMERSION PHYSIOLOGY & BUOYANCY TESTS
ENVIRONMENTAL TEST CHAMBER FOR EVALUATING PROTECTIVE CLOTHING UNDER WORK STRESS & EXTREME TEMPERATURES.
HYDROSPACE SIMULATOR,PRESSURE CHAMBER FOR DEPTH SIMULATION STUDIES PRESSURE EFFECTS ON CLOTHING MATERIAL PROPERTIES.
THERMAL FLAMMABILITY APPARATUS FOR CONDUCTING FLAME RETARDANCY, FLAMMABILITY & HEAT RESISTANCE MATERIAL TESTING.
CHEMICAL & PHYSICAL TESTING EQUIPMENT FOR CONDUCTING RDT&E ON FABRICS, YARNS,FIBERS,LEATHER,PLASTICS,RUBBER,DYES & FINISHES.
SEWING MACHINES & PATTERN DRAFTING FOR DEVELOPING GARMENTS

INSTALLATION: COASTAL SYSTEMS CENTER PANAMA CITY,FL.

CO. CAPT. RAYMOND D. BENNETT TECH. DIR. MR. GERALD G. GOULD

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1979 (ACTUAL)	1980 (ACT + EST)
TOTAL RDT&E	33.067	40.611
TOTAL PROCUREMENT	3.909	5.454
TOTAL O&M	6.448	6.801
TOTAL OTHER	3.474	2.625
TOTAL ANNUAL LAB	46.898	55.491
TOTAL INHOUSE	25.547	27.528
TOTAL INHOUSE RDT&E	16.980	19.119
ANNUAL OPERATING COST	8.218	9.966

PERSONNEL DATA (END OF FY 1979)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON-PROF
MILITARY	111	0	12	99
CIVILIAN	621	21	269	352
TOTAL	732	21	281	451

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
665	346.019	38.150	247.230	631.399	33.21	17.280

...MISSION
TO BE THE PRINCIPAL NAVY ACTIVITY FOR CONDUCTING RDT&E IN SUPPORT OF NAVAL MISSIONS AND OPERATIONS THAT TAKE PLACE PRIMARILY IN THE COASTAL (CONTINENTAL SHELF) REGIONS.

...CURRENT IMPORTANT PROGRAMS
DIVING, SALVAGE, AND SPECIAL WARFARE
MINE COUNTERMEASURES
TORPEDO AND SONAR COUNTERMEASURES
AMPHIBIOUS/INSHORE WARFARE SUPPORT
COASTAL TECHNOLOGY AND ADVANCED/SPECIAL CRAFT T&E

...FUNCTIONS/EQUIPMENT/CAPABILITIES
OCEAN SIMULATION FAC. HYDROSPACE LAB. HYDRODYNAMIC PRESSURE SIMULATOR. SWIMMER/DIVER R&D FAC. WET SUBMERSIBLE VEHICLE FAC. GAS ANALYSIS LAB. TWO OFFSHORE PLATFORMS WITH LIVING QUARTERS FOR 30 & 6 PEOPLE. MAGNETIC TARGET DETECTION & CLASSIFICATION RANGE. SYSTEMS DEVELOPMENT & TEST FAC. MAGNETIC LAB. CALIBRATION & STANDARDS FAC. MECHANICAL CALIBRATION LAB. OPTICAL POSITIONING SYSTEM. POST RUN ANALYSIS SYSTEM. PORTABLE TRACKING. ELECTRONIC TRACKING RANGE. ACOUSTIC TEST FAC. PRECISION ACOUSTIC TANK. ACOUSTIC ANALYSIS FACILITY. TRANSDUCER LAB AND CALIBRATION FACILITY. SONAR TEST BED FACILITY. CABLE TEST FACILITY. COUNTERMEASURES EVALUATOR. BURROUGHS B-5700 DIGITAL COMPUTER. ENVIRONMENTAL MONITORING FACILITY. INDUSTRIAL SHOPS. PIER SPACE & BOATS TO INCLUDE RESEARCH VESSEL, ATHENA. MSO-443, USS FIDELITY. HELIPORT COMPLEX WITH 2 RH53D & 1 UH1E HELOS.

INSTALLATION: DAVID W. TAYLOR SHIP R&D CENTER PETHESDA,MD.

CO. CAPT. M.V. RICKETTS TECH.DIR.-DR. A. POWELL

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1979 (ACTUAL)	1980 (ACT + EST)
TOTAL RDT&E	125.978	132.411
TOTAL PROCUREMENT	13.058	12.115
TOTAL O&M	24.183	23.001
TOTAL OTHER	14.025	10.884
TOTAL ANNUAL LAB	177.244	178.411
TOTAL INHOUSE	109.356	110.776
TOTAL INHOUSE RDT&E	73.218	78.129
ANNUAL OPERATING COST	36.247	49.267

PERSONNEL DATA (END OF FY 1979)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON-PROF
MILITARY	78	2	22	56
CIVILIAN	2489	125	1166	1323
TOTAL	2567	127	1188	1379

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
324	1709.038	102.847	245.262	2057.147	70.90	69.889

...MISSION
TO BE THE PRINCIPAL NAVY RDT&E CENTER FOR NAVAL VEHICLES AND LOGISTICS, AND TO PROVIDE RDT&E SUPPORT TO THE U.S. MARITIME ADMINISTRATION AND THE MARITIME INDUSTRY.

...CURRENT IMPORTANT PROGRAMS
SUBMARINE SILENCING, TARGET STRENGTH REDUCTION, SUBMARINE MANEUVERING, PRESSURE HULLS, PROPELLER DESIGN, ELECTRIC PROPULSION, CIRCULATION CONTROL ROTORS AND WINGS, ENERGY CONSERVATION AND SOURCES, HIGH STRENGTH STEEL, HYDROFOILS, SWATH, SURVIVABILITY, LOGISTICS.

...FUNCTIONS/EQUIPMENT/CAPABILITIES
PLAN AND CONDUCT RDT&E FOR NAVAL VEHICLES (SHIPS, SUBMARINES & AIRCRAFT) AND SUPPORT THE OPERATING FORCES IN THE AREAS OF SHIPS SYSTEMS DEVELOPMENT AND TECHNOLOGY (HYDRODYNAMICS, STRUCTURES, ACOUSTICS, PROPULSION AND AUXILIARY MACHINERY SYSTEMS, SHIPS MATERIALS ENGINEERING, COMPUTER-AIDED SHIP DESIGN), AIRBORNE AERODYNAMICS AND LOGISTICS.
FACILITIES INCLUDE: SHALLOW AND DEEP WATER TOWING BASINS, MANEUVERING & SEAKEEPING BASIN, WIND TUNNELS, ANECHOIC FLOW FACILITY, WATER TUNNELS, STRUCTURAL EVALUATION LAB, UNDERWATER EXPLOSIONS LABORATORY BARGE, SEVERAL LARGE PRESSURE TANKS, SUBMARINE INTERNAL FLUID DYNAMICS FACILITY, METALLURGICAL CHARACTERIZATION AND EVALUATION FACILITY, WELDING DEVELOPMENT LABORATORY, AND MACHINERY DEVELOPMENT LABORATORY.

INSTALLATION: DENTAL RESEARCH INSTITUTE,NTC GREAT LAKES,IL.

CO. CAPT. M.R. WIRTHLIN JR.

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1979 (ACTUAL)	1980 (ACT + EST)
TOTAL RDT&E	0.697	0.830
TOTAL PROCUREMENT	0.000	0.000
TOTAL O&M	0.000	0.000
TOTAL OTHER	0.545	0.583
TOTAL ANNUAL LAB	1.242	1.413
TOTAL INHOUSE	1.242	1.413
TOTAL INHOUSE RDT&E	0.697	0.830
ANNUAL OPERATING COST	0.254	0.320

PERSONNEL DATA (END OF FY 1979)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON-PROF
MILITARY	29	12	16	13
CIVILIAN	[illegible]	3	4	14
TOTAL		15	20	27

SPACE AND PROPERTY

ACRES	[illegible]	(THOUSANDS OF SQUARE FEET) ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
0	[illegible]	6.923	15.714	36.556	0.00	0.578

...MISSION
TO CONDUCT RESEARCH,DEVELOPMENT,TEST,AND EVALUATION IN DENTAL AND ALLIED SCIENCES, WITH PARTICULAR EMPHASIS ON PROBLEMS OF DENTAL AND ORAL HEALTH IN NAVY AND MARINE CORPS POPULATIONS ASHORE,AFLOAT AND IN THE FIELD.

...CURRENT IMPORTANT PROGRAMS
MONITORING ORAL HEALTH OF NAVAL PERSONNEL
PROCEDURES FOR TREATMENT OF DENTAL PULP DISEASE
WOUND HEALING OF SUPPORTING TISSUES
NAVY DENTAL TECHNICIAN UTILIZATION
DENTAL EQUIPMENT DEVELOPMENT AND EVALUATION OF FLEET HEALTH

...FUNCTIONS/EQUIPMENT/CAPABILITIES
AMINO ACID ANALYZER/ATOMIC ABSORPTION UNIT/FLOURIDE ELECTRODES/ SCINTILATION COUNTER/MINI COMPUTER/GAS CHROMATOGRAPH UNIT/FOUR DENTAL UNITS/FOUR DENTAL CHAIRS/TRANSMISSION ELECTRON MICROSCOPE DIAZZO PROCESSOR,SPECTROPHOTOMETERS,ORAL SURGERY CHAIR,THERMAL BALANCE VIVARIUM,X-RAY EQUIPMENT,SOUND METERS,INCUBATORS,CENTRIFUGES,FRACTIONATORS,FIELD DENTAL EQUIPMENT,PHOTO.LAB,ANIMAL FACILITIES,DENTAL EQUIPMENT REPAIR SHOP.

INSTALLATION: ENVIRONMENTAL PREDICTION RESEARCH FACILITY MONTEREY,CA.

CO. CAPT. W.G. SCHRAMM DIR.OF RSCH. DR. A. WEINSTEIN

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1979 (ACTUAL)	1980 (ACT + EST)
TOTAL RDT&E	3.151	3.729
TOTAL PROCUREMENT	0.000	0.000
TOTAL O&M	0.000	0.000
TOTAL OTHER	0.261	0.284
TOTAL ANNUAL LAB	3.412	4.013
TOTAL INHOUSE	1.567	1.813
TOTAL INHOUSE RDT&E	1.306	1.529
ANNUAL OPERATING COST	0.531	0.584

PERSONNEL DATA (END OF FY 1979)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON-PROF
MILITARY	14	1	5	9
CIVILIAN	33	7	23	10
TOTAL	47	8	28	19

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
0	1.362	4.858	10.594	16.814	0.00	0.883

...MISSION
CONDUCT RESEARCH AND DEVELOPMENT DIRECTED TOWARD PROVIDING OBJECTIVE LOCAL, REGIONAL AND GLOBAL ENVIRONMENTAL ANALYSIS AND PREDICTION TECHNIQUES. PROVIDE PLANNING, MODELING AND EVALUATION SERVICES TO DETERMINE THE EFFECT OF ENVIRONMENTAL ELEMENTS ON NAVAL WEAPON SYSTEMS

...CURRENT IMPORTANT PROGRAMS
DEVELOP TECHNIQUES FOR PROCESS/DISPLAY OF ENVIRONMENTAL SATELLITE DATA
DEVELOP COMPUTER MODELS TO ANALYZE/ASSIMILATE ATMOSPHERIC DATA
DEVELOP TECHNIQUES TO PREDICT/DIAGNOSE ATMOS EFFECTS ON WEAPON SYSTEMS
DEVELOP OBJECTIVE LOCAL/REGIONAL ATMOS ANALYSIS/PREDICTION TECHNIQUES
DEVELOP SYNOPTIC, SUBSYNOPTIC AND MESOSCALE ATMOS PREDICTION MODELS

...FUNCTIONS/EQUIPMENT/CAPABILITIES
DATACRAFT/5 COMPUTER
TWO NOVA 2 COMPUTERS
ACCESS TO CDC CYBER 175 COMPUTER
ACCESS TO 3 CDC 6500 COMPUTERS
CAPABILITY OF BUILDING, ANALYZING AND MODIFYING GLOBAL, REGIONAL AND LOCAL WEATHER MODELS
CAPABILITY OF RECEIVING ENHANCING AND ANALYZING REMOTELY SENSED ATMOS DATA

INSTALLATION: EXPLOSIVE ORDNANCE DISPOSAL FACILITY INDIAN HEAD, MD.

CO. CDR. J.T. KENNEDY TECH.DIR. MR. L.A. DICKENSON

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1979 (ACTUAL)	1980 (ACT + EST)
TOTAL RDT&E	3.648	6.865
TOTAL PROCUREMENT	0.635	1.300
TOTAL O&M	3.910	1.273
TOTAL OTHER	0.980	1.000
TOTAL ANNUAL LAB	9.173	10.438
TOTAL INHOUSE	5.406	5.656
TOTAL INHOUSE RDT&E	1.677	3.978
ANNUAL OPERATING COST	3.507	1.922

PERSONNEL DATA (END OF FY 1979)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON-PROF
MILITARY	36	0	10	26
CIVILIAN	165	1	41	124
TOTAL	201	1	51	150

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
1087	34.681	16.936	53.249	104.866	4.24	1.004

...MISSION
CONDUCT RESEARCH, DEVELOPMENT, TEST AND EVALUATION CONCERNING BOTH THE DISPOSAL AND RENDERING-SAFE PROCEDURES FOR CONVENTIONAL AND SPECIAL WEAPONS, GUIDED MISSILES, UNDERWATER WEAPONS, EXPLOSIVES, BIO AND CHEM. MUNITIONS, BOTH U.S. AND FOREIGN, PLUS THE REQUIRED TOOLS AND EQUIPMENT.

...CURRENT IMPORTANT PROGRAMS
RANGE CLEARANCE AND DISPOSAL TECHNIQUES
TERRORIST DEVICES COUNTERMEASURES
REMOTE EXPLOSIVE CASE ENTRY SYSTEMS
IMPROVISE NUCLEAR DEVICE COUNTERMEASURES
EOD DIVER BREATHING SYSTEM

...FUNCTIONS/EQUIPMENT/CAPABILITIES
DEVELOP EXPLOSIVE ORDNANCE DISPOSAL -EOD- PROCEDURE, PREPARE AND PUBLISH EOD PUBLICATIONS FOR JOINT-SERVICE USE, CONDUCT EXP. AND ADV. DEVELOPMENT LEADING TO SPECIALIZED TOOLS AND EQUIP. NEEDED TO LOCATE, IDENTIFY, RECOVER, RENDER-SAFE AND DISPOSE OF ALL TYPES OF EXPLOSIVE ORDNANCE. PREPARE AND MAINTAIN DOCUMENTATION FOR EOD TOOLS AND EQUIP. CONDUCT FIRST ARTICLE INSPECTION ON EOD TOOLS BEING PROCURED FOR ALL SERVICES. CONDUCT IN-SEARCH ENGINEERING FUNCTIONS FOR EOD AND SWIMMER WEAPONS SYSTEM TOOLS. CONDUCT INITIAL EVALUATION OF FOREIGN EXPLOSIVE ORDNANCE. MAINTAIN, STOCK AND ISSUE EOD PUBLICATIONS FOR JOINT-SERVICE USE. CAPABILITY OF TESTING EOD TOOLS TO A DEPTH OF 400 FT IN A DIVING CHAMBER

INSTALLATION: HEALTH RESEARCH CENTER SAN DIEGO,CA.

CO. CAPT. RICHARD H. RAHE

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1979 (ACTUAL)	1980 (ACT + EST)
TOTAL RDT&E	2.371	2.365
TOTAL PROCUREMENT	0.000	0.000
TOTAL O&M	0.000	0.000
TOTAL OTHER	0.556	0.575
TOTAL ANNUAL LAB	2.927	2.940
TOTAL INHOUSE	2.927	2.940
TOTAL INHOUSE RDT&E	2.371	2.365
ANNUAL OPERATING COST	0.486	0.670

PERSONNEL DATA (END OF FY 1979)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON-PROF
MILITARY	33	7	16	17
CIVILIAN	80	10	38	42
TOTAL	113	17	54	59

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
2	11.177	4.500	0.000	15.677	2.00	0.613

...MISSION
CONDUCT RSCH AND DEVELOPMENT ON MEDICAL AND PSYCHOLOGICAL ASPECTS OF HEALTH AND PERFORMING OF NAVAL SERVICE PERSONNEL AND TO PERFORM SUCH OTHER FUNCTIONS OR TASKS AS MAY BE DIRECTED BY CHIEF BUMED

...CURRENT IMPORTANT PROGRAMS
MORBIDITY FORECASTING
PSYCHOLOGICAL DEFENSES,COPING IN THE NAVAL RECRUIT
STUDY OF SLEEP PATTERNS/STRESS
MEDICAL/PSYCHOLOGICAL RESPONSES TO PROLONGED STRESS
RAPID DIAGNOSIS USING ANTIGEN-ANTIBODY REACTIONS

...FUNCTIONS/EQUIPMENT/CAPABILITIES
ELECTROENCEPH MONITORING OF SLEEP PATTERNS
CARDIOVASCULAR STRESS TESTING LAB
MUSCLE STRENGTH TESTING LAB
RADIOIMMUNO - ASSAY CAPABILITY
SERUM AUTO-ANALYSIS
MICROBIOLOGY DIAGNOSTIC KITS
COMPUTER STORAGE-TOTAL USN/USMC HEALTH DATA
COMPLETE HEALTH DATA FOR ENLISTED WOMEN
STUDIES OF SUBMERSIBLES
BIOCHEMICAL CORRELATES OF STRESS

INSTALLATION: MEDICAL RESEARCH INSTITUTE BETHESDA,MD.

CO. CAPT. WALTER F. MINER

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1979 (ACTUAL)	1980 (ACT + EST)
TOTAL RDT&E	11.269	11.973
TOTAL PROCUREMENT	0.000	0.000
TOTAL O&M	0.000	0.000
TOTAL OTHER	3.116	3.334
TOTAL ANNUAL LAB	14.385	15.307
TOTAL INHOUSE	13.193	14.951
TOTAL INHOUSE RDT&E	10.077	11.617
ANNUAL OPERATING COST	4.300	5.423

PERSONNEL DATA (END OF FY 1979)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON-PROF
MILITARY	249	69	88	161
CIVILIAN	240	41	95	145
TOTAL	489	110	183	306

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
4	145.868	9.400	40.299	195.567	4.00	9.033

...MISSION
CONDUCT BASIC & APPLIED RESEARCH &
DEVELOPMENT CONCERNED WITH THE HEALTH,
SAFETY,& EFFICIENCY OF NAVY
PERSONNEL

...CURRENT IMPORTANT PROGRAMS
TISSUE TYPING ORGAN TRANSPLANTS & IMMUNOSUPPRESSION IN RESTORATIVE SURG
BASIC & APPLIED MICROBIOLOGY & VACCINE DEV TO CONTROL MALARIA & SCHISTO
BASIC MECHANISM OF BACTERIAL & TRAUMATIC SHOCK HEAT STRESS & TOXIC MAT
PSYCHOLOGICAL AND PHYSIOLOGICAL EFFECTS OF HYPERBARIC ENVIRONMENT
MECHANISMS OF ORAL PLACQUE DISEASE & TREATMENT OF ORAL DISEASE & TRAUMA

...FUNCTIONS/EQUIPMENT/CAPABILITIES
ENVIRONMENTAL HEALTH EFFECT LAB INCLUDE MAN-RATED HYPERBARIC CHAMBERS
HUMAN PHYSIOLOGICAL & HEAT STRESS EQUIPMENT & FACILITIES
HUMAN TISSUE PRESERVATION & STORAGE EQUIPMENT & FACILITIES
BIOHAZARDOUS MATERIALS HANDLING LAB EQUIPMENT & FACILITIES
TOXICOLOGY EVALUATION EQUIP & FACILITIES INCLUDE HYPERBARIC CHAMBERS
TRANSMISSION & SCANNING ELECTRON MICROSCOPES FLUORESCENT ANTIBODY CELL
SORTER & COMPUTER
EXPERIMENTAL ANIMAL FACILITIES ANIMAL HOUSE & OPERATING ROOMS
LAB EQUIPMENT & FACILITIES FOR BASIC & APPLIED BIOCHEMICAL,
MICROBIOLOGICAL, & PSYCHOLOGICAL STUDIES.

INSTALLATION: MEDICAL RESEARCH UNIT NO.2 MANILA,PHILIPPINES

CO. COR. WILLIAM H. SCHRUEDER SCI.DIR.DR. JOHN CROSS

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1979 (ACTUAL)	1980 (ACT + EST)
TOTAL RDT&E	2.057	0.793
TOTAL PROCUREMENT	0.000	0.000
TOTAL O&M	0.000	0.000
TOTAL OTHER	0.568	0.312
TOTAL ANNUAL LAB	2.625	1.105
TOTAL INHOUSE	2.496	1.105
TOTAL INHOUSE RDT&E	2.057	0.793
ANNUAL OPERATING COST	1.020	0.365

PERSONNEL DATA (END OF FY 1979)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON-PROF
MILITARY	31	6	9	22
CIVILIAN	54	3	4	50
TOTAL	85	9	13	72

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
0	10.370	3.500	0.600	14.470	0.00	0.807

...MISSION
TO CONDUCT RESEARCH AND DEVELOPMENT ON INFECTIOUS DISEASES OF MILITARY IMPORTANCE THAT ARE ENDEMIC OR EPIDEMIC IN ITS ASSIGNED GEOGRAPHICAL AREA.

...CURRENT IMPORTANT PROGRAMS
CONDUCTS RESEARCH AND DEVELOPMENT IN THE BIOMEDICAL SCIENCES. PROVIDES DATA ON DISTRIBUTION AND PREVALENCE OF INFECTIOUS DISEASES IN WESTERN ASIA,ESP.PHILIPPINES AND INDONESIA. EXPERIMENTAL AND IMMUNOLOGICAL STUDIES ON SCHISTOSOMIASIS AND FILARIASIS AND ON ETIOLOGY OF DIARRAEAL DISEASES AND INFLUENZA SURVEILLANCE.

...FUNCTIONS/EQUIPMENT/CAPABILITIES
STUDIES ON THE DIAGNOSIS,DISTRIBUTION,AND PREVALENCE OF TROPICAL DISEASE EPIDEMIOLOGIC STUDIES ON INFECTIOUS DISEASES IN ASIA.ADEQUAIR LABORATORY FACILITIES FOR STUDIES ON VIRAL,BACTERIAL,PARASITIC,AND ARTHROPOD-BORNE DISEASES.CLINICAL,BIOCHEMICAL AND PATHOLOGY LABORATORIES,RADIOISOTOPE EQUIPMENT,COMPUTER CAPABILITY. FULLY OPERATIONAL PERMAMENT DETACHMENT IN JAKARTA,INDONESIA,WITH ADEQUATE CAPABILITIES TO CONDUCT ALL ASPECTS OF BIOMEDICAL RESEARCH.FIELD COLLECTING FACILITY IN TAGUDIN,ILUCOS SUR,& LUZON,PHILIPPINES. LABORATORY ANIMAL CARE FACILITIES IN INDONESIA.

INSTALLATION: MEDICAL RESEARCH UNIT NO.3 CAIRO,EGYPT

CO. CAPT. RAYMOND H. WATTEN

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1979 (ACTUAL)	1980 (ACT + EST)
TOTAL RDT&E	1.913	1.726
TOTAL PROCUREMENT	0.000	0.000
TOTAL O&M	0.000	0.000
TOTAL OTHER	0.593	0.575
TOTAL ANNUAL LAB	2.506	2.301
TOTAL INHOUSE	1.203	1.259
TOTAL INHOUSE RDT&E	0.610	0.684
ANNUAL OPERATING COST	0.000	0.000

PERSONNEL DATA (END OF FY 1979)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON-PROF
MILITARY	27	6	10	17
CIVILIAN	54	12	54	0
TOTAL	81	18	64	17

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
5	41.068	8.962	55.350	105.380	1.44	0.736

...MISSION
TO CONDUCT RESEARCH AND DEVELOPMENT IN INFECTIOUS DISEASES OF MILITARY IMPORTANCE TO ITS ASSIGNED GEOGRAPHICAL AREA,AND,TO PERFORM SUCH OTHER FUNCTIONS AS MAY BE DIRECTED BY THE CHIEF BUREAU OF MEDICINE & SURGERY

...CURRENT IMPORTANT PROGRAMS
MENINGITIS STUDY
PATHOPHYSIOLOGY AND TREATMENT OF SCHISTOSOMIASIS
ARTHROPOD VIRUS ISOLATIONS IN TICKS,MOSQUITOES,AND SANDFLIES
IMMUNOLOGY OF HUMAN SCHISTOSOMIASIS
VIRAL,ECOLOGICAL,CLINICAL AND EPIDEMIOLOGY OF RIFT VALLEY FEVER

...FUNCTIONS/EQUIPMENT/CAPABILITIES
MODEL LS2,VERTICAL ILLUMINATOR OUTFIT,OILFIREDPORTABLE HOT HIGH PRESSURE CLEANER,ROTARY MICROTOME,AUTOMATED MICROTOME KNIFE SHARPENER,FREEZING CHAMBER,BIOGARD HOOD,ABSORBANCE MONITOR WITH STAND & FLOW CELL,INCUBATOR ULTRA CENTRIFUGE,NIKON INVERTED MICROSCOPE,AUTOMATIC SLIDE STAINER,HABMA CONVT PLATELET COUNTING SYSTEM,MICROTOME AO,COULTER COUNTER,REVCO FREEZ-ERS,CENTRIFUGES,PATIENTS WARD TO HOSPITALIZE SICK EGYPTIANS,PUBLIC WORKS FACILITY,TECHNICON TISSUE PROCESSOR,PICKER X-RAY APPARATUS,CLIMATIZER, WORLD'S MOST COMPLETE TICK COLLECTION,EXTENSIVE MEDICAL LIBRARY,ANIMAL FACILITY.

INSTALLATION: NATIONAL PARACHUTE TEST RANGE EL CENTRO, CA.

CO. CAPT. E. D. LIGHTER TECH. DIR. MR. H. C. FISH

PROGRAM DATA BY FISCAL YEAR (MILLION $)*

PROGRAM	1979 (ACTUAL)	1980 (ACT + EST)
TOTAL RDT&E	10.017	0.000
TOTAL PROCUREMENT	1.874	0.000
TOTAL O&M	1.035	0.000
TOTAL OTHER	3.041	0.000
TOTAL ANNUAL LAB	15.967	0.000
TOTAL INHOUSE	11.886	0.000
TOTAL INHOUSE RDT&E	8.551	0.000
ANNUAL OPERATING COST	4.055	0.000

PERSONNEL DATA (END OF FY 1979)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON-PROF
MILITARY	202	0	12	190
CIVILIAN	261	0	19	242
TOTAL	463	0	31	432

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
484608	6.400	56.670	1142.407	1205.477	33.06	20.629

...MISSION
CONDUCT RDT&E AND FOLLOW-ON ENGINEERING OF AERODYNAMIC DECELERATORS. ASSOCIATED SYSTEMS, ASSEMBLIES AND EQUIPMENT, AND TO PROVIDE COMMON RANGE, TECHNICAL AND BASE SUPPORT FOR UNITS OF OPERATING FORCES OF THE NAVY AND OTHER DOD APPROVED USERS.

...CURRENT IMPORTANT PROGRAMS
SEA-WATER ACTUATED RELEASE SYSTEM
TAV-8A ESCAPE SYSTEM
SJU-3A EJECTION SEAT
MARTIN BAKER ESCAPE SYSTEM FOR F-18
EXPLORATORY DEV.-PARACHUTE REPACK STUDY, AEROCONICAL VACUUM PACK PRCHT.

...FUNCTIONS/EQUIPMENT/CAPABILITIES
DROP TEST RANGE LAND AND SALT WATER. SPACE POSITIONING PHOTO CCTV TELEMETRY INSTRUMENTATION-ADP FOR RANGE DATA-PARAMETERS SEA LEVEL TO 80KFT ENGINEERING SERVICES-EXPLORATORY DEVELOPEMENT ADVANCED AND BASIC DESIGN IN SERVICE ENGINEERING MATERIALS TESTING LAB PHYSIOLOGICAL EVAL. EQUIPMENT-PHOTO LAB STILL AND MOTION-16MM TO 70MM AND COLOR 5000 FPS. AIRCRAFT-TRANSPORT DELIVERY LOW TO HIGH SPEED-VEHICLE DELIVERY-AIR TO AIR PHOTO COVERAGE-EJECTION SEAT TEST BED-PERSONNEL DELIVERY. INDUSTRIAL SHOPS-MACHINE SHOP-MODEL MAKING-VEHICLE AND PROTOTYPE PARACHUTE AND HARDWARE FABRICATION-CARPENTRY-WOODWORKING PAINTING METAL FABRICATION FOR WELD, HEAT TREAT AND MAGNAFLUX

*
ACTIVITY DISESTABLISHED. ZERO FUNDS SHOWN FOR 1980

INSTALLATION: OCEAN R & D ACTIVITY BAY ST.LOUIS,MS.

CO. CAPT.C.G.DARRELL TECH.DIR.DR.R.R.GOODMAN

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1979 (ACTUAL)	1980 (ACT + EST)
TOTAL RDT&E	29.891	32.152
TOTAL PROCUREMENT	0.000	0.000
TOTAL O&M	0.425	0.458
TOTAL OTHER	2.108	2.264
TOTAL ANNUAL LAB	32.424	34.874
TOTAL INHOUSE	14.914	16.038
TOTAL INHOUSE RDT&E	13.618	14.647
ANNUAL OPERATING COST	3.786	4.589

PERSONNEL DATA (END OF FY 1979)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON-PROF
MILITARY	10	3	10	0
CIVILIAN	261	47	216	45
TOTAL	271	50	226	45

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET)				COST (MILLION $)	
	LAB	ADMIN	OTHER	TOTAL	REAL PROP	EQUIP
5	63.976	18.990	25.794	108.760	9.00	5.000

...MISSION
TO CARRY OUT A BROAD BASED RDT&E PROGRAM IN OCEAN SCIENCE AND TECHNOLOGY WITH EMPHASIS ON UNDERSTANDING OCEAN PROCESSES THRU MEASUREMENT AND ANALYSIS,AND THE EFFECTS OF THIS OCEAN ENVIRONMENT ON NAVY SYSTEMS AND OPERATIONS

...CURRENT IMPORTANT PROGRAMS
ACOUSTIC BOT INTERACTION PROG IN SUPPORT OF DEEP OCEAN SURV SYS DEV.AND OPER.DEV OCEAN PRED MODELS TO ACQUIRE,ANAL,INTERPRET OCEAN ENV DATA FROM REMOTE SENS SYS.RES EFFORTS IN ARCTIC REGION TO QUANTIFY AND DESCRIBE EFFECTS OF POLAR ENV ON NAVY OPER SYS.MANAGE ENV ACOUSTICS SUP PROG.TACT ASW ENV ACOUSTICS SUP PROG.OCEAN MEAS PROG,MARINE EARTHQUAKE MONITOR SYS

...FUNCTIONS/EQUIPMENT/CAPABILITIES
WAVE-CURRENT INTERACTION SIMULATION FACILITY. INTERACTIVE DIGITAL SATELLITE IMAGE PROCESSING SYSTEM TO HANDLE DATA FROM ALL IMAGING,SATELLITES, DEEP OCEAN SEDIMENT CORE AND DREDGE SAMPLE DEPOSITORY-1728 SQ FT. VERA IS A MULTI-PURPOSE HYDROPHONE,PRESSURE SENSOR KEVLAR ARRAY WHICH CAN BE DEPLOYED IN VARIOUS MODES FOR EXPERIMENTAL MEASUREMENTS. X-RAY FLOURESCENCE,TRANSMISSION AND SCANNING,ELECTRON MICROSCOPE FACILITY.

INSTALLATION: OCEAN SYSTEMS CENTER SAN DIEGO,CA.

COR. CAPT. S. L. GUILLE TECH. DIR. DR. H. L. BLOOD

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1979 (ACTUAL)	1980 (ACT + EST)
TOTAL RDT&E	159.562	175.410
TOTAL PROCUREMENT	37.065	23.094
TOTAL O&M	34.843	38.467
TOTAL OTHER	10.217	8.021
TOTAL ANNUAL LAB	241.687	244.992
TOTAL INHOUSE	119.125	147.436
TOTAL INHOUSE RDT&E	85.889	106.661
ANNUAL OPERATING COST	38.353	43.825

PERSONNEL DATA (END OF FY 1979)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON-PROF
MILITARY	321	0	127	194
CIVILIAN	2470	165	1286	1184
TOTAL	2791	165	1413	1378

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
3847	1162.394	205.889	163.233	1531.516	39.50	130.640

...MISSION
TO BE THE PRINCIPAL NAVY RESEARCH, DEVELOPMENT, TEST AND EVALUATION CENTER FOR COMMAND CONTROL, COMMUNICATIONS, OCEAN SURVEILLANCE, SURFACE AND AIR LAUNCHED UNDERSEA WEAPON SYS, AND SUPPORTING TECHNOLOGIES.

...CURRENT IMPORTANT PROGRAMS
OCEAN SURVEILLANCE SYS WITH SOSUS UPDATE AND MULTI-SENSOR INTEGRATION COMMAND CONTROL AND COMMUNICATIONS SYS ARCHITECTURE AND ENGINEERING ADVANCED SURFACE AND AIR LAUNCHED UNDERSEA WEAPON AND FIRE CONTROL SYS TECHNOLOGY DEVELOPMENTS SUCH AS ADV MARINE BIO SYS, EXTERNAL STOWAGE AND LAUNCH, ARCTIC SUB OPS, OCEAN ENGINEERING AND ELECTRONIC WARFARE

...FUNCTIONS/EQUIPMENT/CAPABILITIES
FACILITIES AT SAN DIEGO OR HAWAII LABS INCLUDE ARCTIC RESEARCH FACILITY; MICROWAVE AND MILLIMETER WAVE ANTENNA PATTERN RANGE COMPLEX; OCEANOGRAPHIC RESEARCH TOWER; STABLE SEMI-SUBMERGED PLATFORM; UNMANNED UNDERWATER TETHERED VEHICLES INCLUDING CURV III, SCAT, RUWS, AND SNOOPY; USS DOLPHIN, EXPERIMENTAL SUB; TRANSDUCER EVALUATION CENTER; ELECTRONICS DEVELOPMENT AND TEST LAB; MICROELECTRONICS LAB COMPLEX, ACOUSTIC SIGNAL DATA ANALYSIS AND CONVERS SYSTEM; SIMULATION AND REAL-TIME COMPUTER FACILITY FOR DEVELOPMENT OF ASW SYSTEMS; SHIP MOTION SIMULATOR; AND A BIO-SCIENCE FACILITY ENGAGED IN RESEARCH, TRAINING, AND HANDLING OF MARINE MAMMALS. OFF-STATION FACILITIES INCLUDE A VERY LOW FREQUENCY SOUNDER SITE IN ARIZONA

INSTALLATION: OFFICE OF NAVAL RESEARCH WASHINGTON D.C.

CO. RADM A.J. BACIOCCO JR. TECH DIR DR. JEROME A. SMITH

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1979 (ACTUAL)	1980 (ACT + EST)
TOTAL RDT&E	264.738	295.243
TOTAL PROCUREMENT	4.449	4.500
TOTAL O&M	121.465	105.855
TOTAL OTHER	5.857	5.466
TOTAL ANNUAL LAB	396.509	411.064
TOTAL INHOUSE	15.192	16.242
TOTAL INHOUSE RDT&E	14.095	15.070
ANNUAL OPERATING COST	10.080	10.772

PERSONNEL DATA (END OF FY 1979)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON-PROF
MILITARY	31	3	23	8
CIVILIAN	398	55	92	306
TOTAL	429	58	115	314

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
0	0.000	86.000	0.000	86.000	0.00	0.000

...MISSION
RESPONSIBLE FOR LEADERSHIP OF NAVY RESEARCH PROGRAM, MANAGEMENT AND DIRECTION OF ONR CONDUCTED RDT&E AND OF THE NAVY-WIDE PATENT PROGRAM, DEVELOPMENT OF NAVY-WIDE RDT&E FOR ASN(RES), WORLD WIDE RESEARCH INFO AND CONTRACT MGMT OF FEDERALLY FUNDED UNIVERSITY RESEARCH.

...CURRENT IMPORTANT PROGRAMS
CONTRACT RESEARCH AND TECHNOLOGY PROGRAMS
NAVY PATENT PROGRAM
NAVY-WIDE RDT&EN APPROPRIATION ADMINISTRATION
FOCAL POINT FOR WORLD-WIDE RESEARCH INFORMATION
CONTRACT MANAGEMENT PROGRAM AT EDUCATIONAL INSTITUTIONS

...FUNCTIONS/EQUIPMENT/CAPABILITIES
ADMINISTRATION OF RESEARCH PROGRAMS IN PHYSICAL SCIENCES,MATHEMATICAL AND INFORMATION SCIENCES,BIOLOGICAL SCIENCES,PSYCHOLOGICAL SCIENCES, ARCTIC AND EARTH SCIENCES,MATERIAL SCIENCES,OCEAN SCIENCE AND TECHNOLOGY ADMINISTRATION OF TECHNOLOGY PROGRAMS IN NAVAL VEHICLE AND WEAPONS TECHNOLOGY,SENSOR AND CONTROL TECHNOLOGY,ANALYSIS AND SUPPORT.FIELD ACTIVITIES INCLUDE NRL,NORDA,NBL,ANDNARL. MANAGES TECHNICAL ASPECTS OF NAVY INDUSTRIAL INDEPENDENT RESEARCH AND DEVELOPMENT PROGRAM. MAINTAINS RESEARCH RESERVE PROGRAM. COORDINATES NAVAL RESEARCH AND PROMOTES CO-OPERATIVE RESEARCH EFFORTS WITHIN NAVY,OTHER DOD,NSF,NASA,DEPT OF ENERGY AND OTHER GOVERNMENT RESEARCH GROUPS. SUPPORT AND ADMINISTRATION OF NAVAL RESEARCH ADVISORY COMMITTEE.

INSTALLATION: ORDNANCE MISSILE TEST FACILITY WHITE SANDS,N.M.

CO.CAPT.M.A. PETERSON,JR. FAC.ENG. MR H.L. HENDON

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1979 (ACTUAL)	1980 (ACT + EST)
TOTAL RDT&E	4.066	5.172
TOTAL PROCUREMENT	0.218	0.000
TOTAL O&M	0.001	0.000
TOTAL OTHER	1.456	1.751
TOTAL ANNUAL LAB	5.741	6.923
TOTAL INHOUSE	3.494	3.269
TOTAL INHOUSE RDT&E	2.225	1.913
ANNUAL OPERATING COST	0.940	0.807

PERSONNEL DATA (END OF FY 1979)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON-PROF
MILITARY	86	1	33	53
CIVILIAN	54	0	6	48
TOTAL	140	1	39	101

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
88	108.566	30.539	78.694	217.799	5.82	10.106

...MISSION
SUPPORT THE NAVY GUIDED MISSILE AND RESEARCH ROCKET PROGRAMS INCLUDING GROUND AND FLIGHT TESTING, ASSIST JOINT SERVICE LASER GUIDED WEAPONS COUNTERMEASURE TEST, PARTICIPATE IN THE OPERATION OF THE DOD INTEGRATED MISSILE TEST RANGE AT WHITE SANDS

...CURRENT IMPORTANT PROGRAMS
STANDARD MISSILE 1 AND 2/AEGIS FLIGHT TESTING
CRUISE MISSILE FLIGHT TESTING
RAM FLIGHT TESTING
VERTICAL LAUNCHER TESTING
UPPER ATMOSPHERE RESEARCH ROCKET LAUNCHING

...FUNCTIONS/EQUIPMENT/CAPABILITIES
FLIGHT TEST TERRIER/TARTAR/STANDARD/SAM GUIDED MISSILES AND PROJECTILES
LAUNCH AEROBEE 150, 170, 200, ARIES, ASTROBEE F, D, BLACK BRANT ORION AND VARIOUS OTHER SOUNDING ROCKETS FOR UPPER ATMOSPHERIC STUDY
CONDUCT NAVY AIR WEAPONS TESTS
LAUNCH VARIOUS ROCKETS IN SUPPORT OF NASA PROJECTS
LAUNCH VARIOUS ROCKETS IN SUPPORT OF AIR FORCE PROJECTS
CONDUCT VARIOUS DEVELOPMENT TESTS FOR SSM AND SAM PROJECTS
PROVIDE DRONE SUPPORT
ASSIST IN OPEVAL OF CRUISE MISSILE
MAINTAIN TARGET ECM EQUIPMENT
5-INCH GUIDED PROJECTILE LAUNCH CAPABILITY
PROVIDE WARHEAD AND EOD ANALYSIS ARENA

INSTALLATION: PACIFIC MISSILE TEST CENTER POINT MUGU,CA.

CO. RADM F.H. BAUGHMAN TECH. DIR. MR. T.P. PERRY

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1979 (ACTUAL)	1980 (ACT + EST)
TOTAL RDT&E	112.249	115.048
TOTAL PROCUREMENT	71.550	67.904
TOTAL O&M	49.892	52.607
TOTAL OTHER	49.940	48.804
TOTAL ANNUAL LAB	283.631	284.363
TOTAL INHOUSE	175.942	178.116
TOTAL INHOUSE RDT&E	78.574	80.534
ANNUAL OPERATING COST	20.307	20.569

PERSONNEL DATA (END OF FY 1979)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON-PROF
MILITARY	1060	3	271	789
CIVILIAN	3743	9	992	2751
TOTAL	4803	12	1263	3540

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
27084	945.133	396.770	3490.632	4832.535	143.66	133.514

...MISSION
PERFORM DEVELOPMENT TEST AND EVALUATION, DEVELOPMENT SUPPORT, FOLLOW-ON ENGINEERING AND LOGISTICS AND TRAINING SUPPORT FOR NAVAL WEAPONS, WEAPON SYSTEMS AND RELATED DEVICES; AND PROVIDE MAJOR RANGE, TECHNICAL, AND BASE SUPPORT FOR FLEET USERS AND OTHER DEFENSE AND GOVERNMENT AGENCIES.

...CURRENT IMPORTANT PROGRAMS
TOMAHAWK CRUISE MISSILE
HARPOON ANTI-SHIPPING MISSILE
PHOENIX AIR-TO-AIR MISSILE
F-14 TACTICAL SOFTWARE
TRIDENT SUBMARINE-LAUNCHED BALLISTIC MISSILE

...FUNCTIONS/EQUIPMENT/CAPABILITIES
TEST LABORATORIES FOR WEAPON SYSTEMS SIMULATIONS, SYSTEM INTEGRATIONS, ENVIRONMENTAL, ANECHOIC, ELECTRONIC WARFARE COUNTERMEASURES, TACTICAL SOFTWARE SUPPORT, AIR AND SURFACE TRACKING RANGE-45000 SQUARE MILES/ RADARS- FPS-16, FPQ-10, FPQ-12, MPS-75/ THEUDOLITES AND CINE SEXTANTS. RECEIVE, RECORD AND DISPLAY P, L AND S BAND TELEMETRY, REAL TIME AND POST OPERATIONAL DATA REDUCTION FACILITIES. MISSILE AND TARGET LAUNCH PLATFORMS AND FACILITIES. COMMAND CONTROL AND FLIGHT TERMINATION FACILITIES. SHIP MOTION SIMULATION. USNS WHEELING-TRACKING, TELEMETRY COMMAND, CONTROL AND FLIGHT TERMINATION SHIP FOR BROAD OCEAN AREA (PACIFIC) TESTS. MISSILE IMPACT LOCATION AND MISS-DISTANCE INDICATOR SYSTEMS. ALL-UP ROUND MISSILE TEST FACILITY. UNDERWATER TRACKING RANGE-1000 SQUARE MILES, 3-DIMENSIONAL 400-6000 FATHOMS.

INSTALLATION: PERSONNEL RESEARCH & DEVELOPMENT CENTER SAN DIEGO,CA.

CO. CAPT. D.F. PARKER TECH. DIR. DR.J.J.REGAN

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1979 (ACTUAL)	1980 (ACT + EST)
TOTAL RDT&E	13.579	18.945
TOTAL PROCUREMENT	0.311	0.104
TOTAL O&M	1.766	0.677
TOTAL OTHER	1.456	0.718
TOTAL ANNUAL LAB	17.112	20.444
TOTAL INHOUSE	8.961	10.716
TOTAL INHOUSE RDT&E	7.172	9.557
ANNUAL OPERATING COST	2.924	3.396

PERSONNEL DATA (END OF FY 1979)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON-PROF
MILITARY	27	1	9	18
CIVILIAN	267	79	171	96
TOTAL	294	80	180	114

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
1	63.580	7.080	0.000	70.660	0.48	2.350

...MISSION
PRINCIPLE NAVY ACTIVITY FOR CONDUCTING HUMAN RESOURCES RDTE IN THE AREAS OF MANPOWER PERSONNEL EDUCATION AND TRAINING AND TO SERVE AS THE COORD ACTIVITY FOR ALL SUCH RDTE FOR THE NAVY. PROVIDE SUPPORT TO CNM ACTIVITIES TO AUGMENT HUMAN FACTORS EFFORTS IN DEVELOPMENT OF NEW SYSTEM

...CURRENT IMPORTANT PROGRAMS
PERSONNEL ACQUISITION UTILIZATION AND EFFECTIVENESS
HUMAN PERFORMANCE IN NAVY SYSTEMS
PERSONNEL EDUCATION AND TRAINING
PERSONNEL MANPOWER MANAGEMENT
MANAGEMENT SYSTEMS

...FUNCTIONS/EQUIPMENT/CAPABILITIES
GENERAL AUTOMATION 18/30 COMPUTER SYSTEM WITH REMOTE JOB ENTRY TO OTHER COMPUTER CENTERS PDP 12 LABORATORY INSTRUMENT CONTROL SYSTEM PDP 11/47 AUTOMATED TESTING AND TRAINING SYSTEM TEKTRONIC GRAPHIC TERMINALS INTERFACING WITH NAVAL OCEAN SYSTEMS CENTER UNIVAC 1100 MAXICOMPUTER

INSTALLATION: RESEARCH LABORATORY WASHINGTON,D.C.

CO. CAPT. E. E. HENIFIN DIR. OF RSCH. DR. ALAN BERMAN

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1979 (ACTUAL)	1980 (ACT + EST)
TOTAL RDT&E	188.575	194.462
TOTAL PROCUREMENT	6.339	5.908
TOTAL O&M	11.067	10.737
TOTAL OTHER	14.837	15.384
TOTAL ANNUAL LAB	220.818	276.491
TOTAL INHOUSE	181.726	186.748
TOTAL INHOUSE RDT&E	149.483	154.719
ANNUAL OPERATING COST	51.318	56.252

PERSONNEL DATA (END OF FY 1979)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON-PROF
MILITARY	143	0	27	116
CIVILIAN	3251	596	1539	1712
TOTAL	3394	596	1566	1828

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
798	2312.917	192.677	479.359	2984.953	91.86	100.225

...MISSION
TO CONDUCT A BROADLY BASED MULTIDISCIPLINARY PROGRAM OF SCIENTIFIC RESEARCH AND ADVANCED TECHNOLOGICAL DEVELOPMENT DIRECTED TOWARD NEW AND IMPROVED MATERIALS, EQUIPMENT, TECHNIQUES, SYSTEMS, AND RELATED OPERATIONAL PROCEDURES FOR THE NAVY

...CURRENT IMPORTANT PROGRAMS
NATO SEAGNAT
EFFECTIVENESS OF NAVAL ELECTRONICS WARFARE SYSTEMS
ADVANCED ACOUSTIC ANTI-SUBMARINE WARFARE SURVEILLANCE PROGRAM
SATELLITE PROGRAMS
ADVANCED HIGH PERFORMANCE MATERIALS

...FUNCTIONS/EQUIPMENT/CAPABILITIES
PRINCIPAL RESEARCH AND DEVELOPMENT LABORATORY OF THE NAVY. PRIMARY AREAS ARE MATERIALS SCIENCE AND TECHNOLOGY, SPACE SCIENCE AND TECHNOLOGY, RADAR, ELECTRONIC WARFARE, LASER TECHNOLOGY, OPTICS, OPTICAL WARFARE, ELECTRONIC DEVICES, PLASMA AND NUCLEAR PHYSICS, INTELLIGENCE SUPPORT, UNDERSEA SURVEILLANCE, ENVIRONMENTAL SCIENCE AND TECHNOLOGY. MAJOR FACILITIES INCLUDE ONE SHIP FOR ACOUSTIC ASW RESEARCH, ACOUSTIC BATHYMETRY, AND DEEP OCEAN SEARCH. MAJOR ACOUSTIC STANDARD AND CALIBRATION FACILITIES. HIGH LEVEL RADIATION LABORATORY. THREE NUCLEAR PARTICLE ACCELERATORS. DIVERSE HIGH ENERGY LASERS. 200 KILOGAUSS HIGH FIELD MAGNET FACILITY. SPACE SIMULATION FACILITIES. MAJOR PLASMA PHYSICS FACILITIES. ELECTRONIC WARFARE CENTRAL TARGET SIMULATOR.

INSTALLATION: SUBMARINE MEDICAL RESEARCH LABORATORY GROTON,CT.

CO. CDR. R.A. MARGULIES

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1979 (ACTUAL)	1980 (ACT + EST)
TOTAL RDT&E	1.960	2.023
TOTAL PROCUREMENT	0.000	0.000
TOTAL O&M	0.076	0.000
TOTAL OTHER	0.451	0.475
TOTAL ANNUAL LAB	2.487	2.498
TOTAL INHOUSE	2.487	2.498
TOTAL INHOUSE RDT&E	1.960	2.023
ANNUAL OPERATING COST	0.592	0.658

PERSONNEL DATA (END OF FY 1979)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON-PROF
MILITARY	30	10	14	16
CIVILIAN	62	12	33	29
TOTAL	92	22	47	45

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
1	40.514	14.099	0.000	54.613	1.10	1.806

...MISSION
TO CONDUCT MEDICAL RESEARCH AND DEVELOPMENT AS IT RELATES TO SUBMARINE, SHIPBOARD,AND DIVING ENVIRONMENTS.

...CURRENT IMPORTANT PROGRAMS
COMPUTER ASSISTED DIAGNOSIS PROGRAMS FOR CORPSMEN ABOARD NUCLEAR SUBS. AUDITORY AND VISUAL TESTS AND EVALUATION OF SUBMARINERS AND DIVERS- HUMAN FACTORS EVALUATION OF CREWS IN SUBMARINE INFORMATION PROCESSING. PHYSIOLOGICAL,PSYCHOLOGICAL AND COMMUNICATIONS RESEARCH IN COLD WEATHER. HUMAN FACTORS,VISION,AUDITORY RSCH IN IMPROVED SONAR PROCESSING EQUIP.

...FUNCTIONS/EQUIPMENT/CAPABILITIES
BASIC AND APPLIED RESEARCH COMPETENCE IN CARDIOPULMONARY,THERMAL,AND HYPERBARIC PHYSIOLOGY,BIOCHEMISTRY,AUDITION,VISION,HUMAN FACTORS ENG., PERSONNEL ASSESSMENT,HYPERBARIC AND MECHNICAL SERVICES,ELECTRICAL IN-STRUMENTATION AND REPAIRS,COMPUTER APPLICATIONS,VETERINARY SCIENCES, SUB.MED.RESEARCH LIBRARY,GRAPHIC ARTS,PHOTOGRAPHY,MODEL MAKING,HYPERBAR-IC CHAMBERS,HUMAN-150 PSI,ANIMAL-300 PSI AND 1000 PSI,ENVIR.CONTROL CHAMBERS,MEDICAL EXAM SUITE,SURGICAL SUITE,COMPUTER APPLICATION FACILITY ,CLOSED CIRCUTRY SYSTEM,GAS CHROMATOGRAPHS,EEG,DOPPLER SYSTEM,SONAR STACK SIMULATION TEST SYSTEM,FLUIDIC CONTROL CONSOLE,AIR ION MONITORING SYSTEM,UNDERWATER TV SYSTEM.

INSTALLATION: SURFACE WEAPONS CENTER SILVER SPRING,MD.

CO. CAPT P.L. ANDERSON TECH.DIR. MR J E COLVARD

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1979 (ACTUAL)	1980 (ACT + EST)
TOTAL RDT&E	213.932	207.035
TOTAL PROCUREMENT	32.001	22.968
TOTAL O&M	35.018	40.961
TOTAL OTHER	27.655	21.166
TOTAL ANNUAL LAB	308.606	292.130
TOTAL INHOUSE	149.335	176.476
TOTAL INHOUSE RDT&E	97.873	113.869
ANNUAL OPERATING COST	62.979	72.479

PERSONNEL DATA (END OF FY 1979)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON-PROF
MILITARY	125	3	61	64
CIVILIAN	4607	231	2117	2490
TOTAL	4732	234	2178	2554

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
5380	1656.578	175.258	1285.183	3117.019	90.47	85.325

...MISSION
THE PRINCIPAL NAVY RESEARCH,DEVELOPMENT & EVALUATION CENTER FOR SURFACE SHIP COMBAT SYSTEMS,ORDNANCE,MINES,AND STRATEGIC SYSTEMS SUPPORT.

...CURRENT IMPORTANT PROGRAMS
STRATEGIC SYSTEMS-TRIDENT,POSEIDON,MK500 RB,NWE,SMMT,SAFETY,SHP WPN SEC.
COMBAT SYSTEMS-SEAFIRE,TERRIER,TARTAR,AEGIS,MK86FC,MAG SILENCNG,SWMRWPN.
WEAPON SYSTEMS-MPWS,CW CM,51N/54 AMMO,HIPWR RAD,EXPL MAT,IR SRCH TRCK.
UNDERWATER SYSTEMS-MINES,MK60,CAPTOR,QUICKSTRIKE,RPLS,ASW,MKXX TORP.
ELECTRONIC SYSTEMS-EMPASS,EMP,SLQ32,OTH,FEWSG,GUID CNTRL,LHA INTEL CNTR.

...FUNCTIONS/EQUIPMENT/CAPABILITIES
FACILITIES INCLUDE-WIND TUNNELS TO MACH 20.BALLISTIC RANGES.1.75 MILLION GAL HYDROBALLISTIC TANK.MAGNETIC STRUCTURE FACILITY FOR SHIP & SUB MODEL & SATELLITES.FBM DISCPAC PRODUCTION FACILITY.FACILITIES FOR ASSURANCE OF COMPUTER PROGRAMS FOR STRATEGIC AND TACTICAL MISSILE SYS,INTELLIGENCE PROCESSING SYS.GUNNERY AND MISSILE RANGE COMPLEX INCLUDING LAND-BASED DEVELOPMENT SITES FOR WEAPON CONTROL SYS.ELECTROMAGNETIC VULNERABILITY FACILITIES BOTH NUCLEAR & NON-NUCLEAR EFFECTS.FACILITIES FOR WARHEAD CHARACTERIZATION & DAMAGE TO TARGETS,DEVELOP & TEST FACILITIES FOR LASER AND ELECTRO-OPTICS SUBSYSTEMS,NONDESTRUCTIVE TESTING FACILITIES,DEEP WATER OFFSHORE FACILITIES FOR MINE SYS MOBILE TACTICAL WAR GAME FAC, EXPLOSIVES DEVELOPMENT FACILITIES,EXTENSIVE SCIENTIFIC COMPUTER FACILITY FUZES,EXPLOSIVES,MATERIAL,AND MARINE CORPS SUPPORT FACILITIES.

INSTALLATION: UNDERSEA RANGES DEPARTMENT NEWPORT,RI.

CO. CAPT. A.S. MCLARSEN SCI. DIR. MR.C.S. SOLIOZY

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1979 (ACTUAL)	1980 (ACT + EST)
TOTAL RDT&E	25.028	28.793
TOTAL PROCUREMENT	0.339	0.265
TOTAL O&M	6.408	6.410
TOTAL OTHER	0.846	0.741
TOTAL ANNUAL LAB	32.621	36.209
TOTAL INHOUSE	22.800	21.924
TOTAL INHOUSE RDT&E	21.828	20.958
ANNUAL OPERATING COST	0.000	0.000

PERSONNEL DATA (END OF FY 1979)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON-PROF
MILITARY	44	0	8	36
CIVILIAN	38	1	26	12
TOTAL	82	1	34	48

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
1042	75.603	17.339	304.964	397.906	24.18	1.305

...MISSION
TO RROVIDE DEEP WATER DEV & OPRTNL T&E FCLTYS FOR UNDRWTR ACSTIC MESRMNTS,TSTNG,& CALBRTNG SONRS.PROVIDE ACURAT UNDRWTR,SRFCE, IN-AIR TRCKNG DATA ON SHIPS,SUBS,AIRCRFT,& WPN SYSTMS.

...CURRENT IMPORTANT PROGRAMS
MK48 WEAPON SYSTEMS TRAINING CERTIFICATION PROGRAM
SHIP SILENCING PROGRAM
FLEET TRAINING/SUBROC,SUBEX,SHAREM
AIRBORNE MINEX & TORPEX/RANGEX
R&D TESTS/CAPTOR/MP SONAR/TOWED ARRAYS/LAMPS/BQQ 5/DICASS

...FUNCTIONS/EQUIPMENT/CAPABILITIES
HIGHLY ADVANCED & INSTRUMENTED ASW WEAPONS,SONAR & FORACS TEST MEASUREMENT RANGES IN SUPPORT OF NAVY ASW & UNDERSEA R&D PROGRAMS,& ASW FLEET ASSESMENT & OPERATIONAL READINESS.

INSTALLATION: UNDERWATER SYSTEMS CENTER NEWPORT,RI.

CO. CAPT. A.S. MCLAREN TECH.DIR.DR.C.NICHOLAS PRYOR,

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1979 (ACTUAL)	1980 (ACT + EST)
TOTAL RDT&E	133.843	157.026
TOTAL PROCUREMENT	78.054	72.072
TOTAL O&M	1.816	69.124
TOTAL OTHER	14.722	12.602
TOTAL ANNUAL LAB	286.435	310.824
TOTAL INHOUSE	113.554	140.433
TOTAL INHOUSE RDT&E	56.111	73.082
ANNUAL OPERATING COST	34.325	39.255

PERSONNEL DATA (END OF FY 1979)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON-PROF
MILITARY	99	1	26	73
CIVILIAN	2701	98	1397	1304
TOTAL	2800	99	1423	1377

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
367	1059.983	241.839	581.567	1883.389	45.97	53.078

...MISSION
TO BE THE PRINCIPAL NAVY RDT&E CENTER FOR SUBMARINE WARFARE & SUBMARINE WEAPON SYSTEMS.

...CURRENT IMPORTANT PROGRAMS
ADVNCD TECHNGY IN U/W ACOUTCS,OCEAN ENGRNG,INFO PROCSNG,WEAPONRY
DESGN,DEV EVAL U/W COMBAT SUB SYSTMS INCDNG SUDFC SHIP SONAR MODRNZTN
RDT&E FOR OVERALL U/W COMBAT SYSTEMS (TRIDENT,688,ETC)
DESGN,DEV & EVAL OF U/W TARGET SYSTEMS & MOBILE/FIXD U/W TEST RANGES
INTRODUCE TO FLEET & IN-SERVICE ENGINEERING OF MK 48

...FUNCTIONS/EQUIPMENT/CAPABILITIES
PRIMARY IN-HSE R&D CAPABLITY FOR NAVY & MARNE CRP SYSTEMS,SUBSYSTEMS &T-ECHNLGYS FOR SONAR SYSTMS(HULL-TOWD/SUB COMCTNS SYSTMS INTEGRTN/SUB ANT-NA SYSTMS/UWTR WEAPN SYSTMS/UWTR TARGT SYSTMS/UWTR ACOUSTC PROPGTN(LANT & MED)UWTR RNGE TECHNLGY/READINESS OF IN-SRVCE SHIPBORD UWTR SYSTMS/ASW SUP,CINCLNT.TORPEDO TEST RNGES(FIXED/PORTBLE)SHLOW & DP WTR.ASW WEPON F-IRE CNTRL R&D FACILITY.ASW WEPON LAUNCHNG DEVCE R&D FACLTY.QLTY ENGRNG, EVALTN & RELIABLTY LAB.BERMUDA RSSH FACLTY.TORPDO PROPULSN TEST FACLTY. ELECTROMAGTIC FACILITY.SYSTMS CRTIFCTN & INTGRTN FACILTY.ACOUSTC MSRMNT& XDUCER R&E FACLTY,TORPEDO TEST RANGE.INSTRMNTN SHETER.ACOUSTC RNGE.AUT-EC.AZORES FIXD ACOUSTIC RANGE.

INSTALLATION: WEAPONS CENTER CHINA LAKE,CA.

CO. CAPT. W. B. HAFF TECH.DIR.MR.R.M. HILLYER

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1979 (ACTUAL)	1980 (ACT + EST)
TOTAL RDT&E	181.390	201.846
TOTAL PROCUREMENT	49.970	45.904
TOTAL O&M	20.811	11.590
TOTAL OTHER	31.780	31.162
TOTAL ANNUAL LAB	283.951	290.502
TOTAL INHOUSE	151.279	183.444
TOTAL INHOUSE RDT&E	102.713	127.780
ANNUAL OPERATING COST	40.962	45.545

PERSONNEL DATA (END OF FY 1979)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON-PROF
MILITARY	583	0	29	554
CIVILIAN	3957	123	1387	2570
TOTAL	4540	123	1416	3124

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
1127016	1155.058	400.259	5120.635	6675.952	226.91	98.172

...MISSION
THE PRINCIPAL NAVY RDT&E CENTER FOR AIR WARFARE SYSTEMS (EXCEPT ANTI-SUBMARINE WARFARE SYSTEMS) AND MISSILE WEAPON SYSTEMS, AND THE NATIONAL RANGE/FACILITY FOR PARACHUTE TEST AND EVALUATION.

...CURRENT IMPORTANT PROGRAMS
ANTI-AIR MISSILES AIM-9H/L/M SIDEWINDER, AIM/RIM-7F/M SPARROW, MSL COMPT ANTI-SURFACE WEAPONS A/RGM-84 HARPOON, FAE, ADVANCED TACTICAL MISSILES ELECTRONIC WARFARE AGM-88 HARM ANTI-RADIATION MISSILE, SIMULATION, EQUIP TAC A/C SYSTEMS INTEGRATION A-7E, A-6E, AV-8B, F/A-18, A/C SURV/VULN T AND E AIR/SURFACE-LAUNCHED WPNS, TACTICS, A/C WPN SYSTEMS, SUB/SYSTEMS

...FUNCTIONS/EQUIPMENT/CAPABILITIES
CONDUCT IN-HOUSE RESEARCH AND ESTABLISH AND MAINTAIN PRIMARY IN-HOUSE DEVELOPMENT, TEST, EVALUATION, AND IN-SERVICE ENGINEERING SUPPORT FOR SPECIFIC NAVY, MARINE CORPS AND JOINT SERVICE PRODUCTS SUCH AS ANTI-AIR MISSILES, ANTI-SURFACE WEAPONS, DEFENSE PENETRATION SYSTEMS, INTEGRATED TACTICAL AIRCRAFT SYSTEMS. FACILITIES INCLUDE MICHELSON LAB, ELECTRONIC WARFARE THREAT ENVIRONMENT SIMULATOR, SOLID STATE DEVICES LAB, ENCOUNTER SIMULATION LAB, PROPULSION RESEARCH LAB, MICROELECTRONICS FACILITY, EXPLOSIVES R&D FACILITY, GROUND AND AIRCRAFT RANGES, EXTERIOR AND TERMINAL BALLISTICS RANGES, ARMITAGE AIR FIELD, AIRCRAFT SURVIVABILITY FACILITY, SUPERSONIC TEST TRACKS, MICROWAVE ANECHOIC FACILITIES, AND LASER LAB.

INSTALLATION: WEAPONS EVALUATION FACILITY ALBUQUERQUE,N.M.

CO. CAPT. D. R. WEICHMAN TECH. DIR. DR E. G. GREWIS

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1979 (ACTUAL)	1980 (ACT + EST)
TOTAL RDT&E	2.193	2.839
TOTAL PROCUREMENT	0.888	0.950
TOTAL O&M	1.493	1.539
TOTAL OTHER	2.973	3.203
TOTAL ANNUAL LAB	7.547	8.531
TOTAL INHOUSE	6.741	7.682
TOTAL INHOUSE RDT&E	1.732	2.345
ANNUAL OPERATING COST	1.103	1.228

PERSONNEL DATA (END OF FY 1979)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON-PROF
MILITARY	147	1	15	132
CIVILIAN	107	2	39	68
TOTAL	254	3	54	200

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
7	0.400	53.592	94.926	148.918	9.60	0.998

...MISSION
MISSION-PERFORM TEST, EVALUATION AND TECHNICAL SUPPORT FOR USN NUCLEAR WEAPON SYSTEMS. PLAN AND COORDINATE THE NAVY NUCLEAR WEAPONS SAFETY PROGRAM. PROVIDE TECHNICAL ASSISTANCE AND ADVICE TO PRESIDENT, BOARD OF INSPECTION AND SURVEY. ACT AS SUB-AREA COORDINATOR FOR COMELEVEN.

...CURRENT IMPORTANT PROGRAMS
PARTICIPATE IN THE DOE-DOD DEVELOPMENTAL PROGRAM FOR TOMAHAWK.
PARTICIPATE IN THE DOE-DOD DEVELOPMENTAL PROGRAM FOR STANDARD MISSILE-2.
PARTICIPATE IN DEVELOPING A NUC WPNS CAPABILITY FOR THE F/A-18 AIRCRFT.
PARTICIPATE IN A CONCEPTIONAL STUDY FOR A NEW ASW WEAPON SYSTEM.
PARTICIPATE IN THE JOINT USN/USAF AIRBORNE LASER DEVELOPMENT PROGRAM.

...FUNCTIONS/EQUIPMENT/CAPABILITIES
CAPABILITIES-ON USN NUCLEAR WEAPON SYSTEMS: CONDUCT SAFETY STUDIES, SAFETY ANALYSES, SURVIVABILITY AND EFFECTS STUDIES, ANALYZE ACCIDENTS/INCIDENTS,UNSATISFACTORY REPORTS, AND CAPABILITY INSPECTION REPORTS. DEVELOP EMERGENCY DESTRUCT/DENIAL/DISABLE PROCEDURES. ASSIST ON INSPECTION AND SURVEY OF NUCLEAR CAPABLE SHIPS AND AIRCRAFT. DEVELOP AIRCRAFT LOADING MANUALS AND CHECKLISTS. PARTICIPATE IN DOE-DOD DEVELOPMENT EFFORT. EVALUATE AIRCRAFT SUSPENSION, RELEASE AND ARMING SYSTEMS, BOMB DUMMY UNITS, LOADING, HANDLING AND TRAINING SHAPES. DEVELOP MILITARY CHARACTERISTICS, INTERFACE DRAWINGS, SAFETY AND ENVIRONMENTAL CRITERIA. REPRESENT USN AND /OR CONDUCT VARIOUS MEETINGS OR SPECIAL DEVELOPMENT OR APPLICATION STUDIES. ACT AS DOE, DNA, AND OTHER SERVICE CO-TACT. DEVELOP A-D/OR REVIEW TECHNICAL PUBLICATIONS. SUPPORT NLO JOINT NUC WPNS PUBLICATION SYSTEM.

INSTALLATION: AERO PROPULSION LABORATORY WPAFB,OH.

CDR.COL. GEORGE E. STRAND CH. SCI. LTCOL CHARLE E. SIMON(ACTG)

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1979 (ACTUAL)	1980 (ACT + EST)
TOTAL RDT&E	90.310	99.193
TOTAL PROCUREMENT	0.000	0.000
TOTAL O&M	0.000	0.000
TOTAL OTHER	0.988	1.057
TOTAL ANNUAL LAB	91.298	100.250
TOTAL INHOUSE	15.025	15.392
TOTAL INHOUSE RDT&E	14.037	14.335
ANNUAL OPERATING COST	3.498	3.828

PERSONNEL DATA (END OF FY 1979)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON-PROF
MILITARY	51	3	32	19
CIVILIAN	383	28	213	170
TOTAL	434	31	245	189

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
40	229.490	41.784	105.665	376.939	56.10	193.130

...MISSION
PLAN, FORMULATE AND EXECUTE RESEARCH AND EXPLORATORY, ADVANCED AND PROTOTYPE DEVELOPMENT PROGRAMS IN AIR-BREATHING PROPULSION, AEROSPACE POWER GENERATION AND DISTRIBUTION, AIRCRAFT FUELS, FUEL AND LUBRICATION SYSTEMS, AND FIRE PROTECTION. PROVIDE OPERATIONAL AND SYSTEMS SUPPORT.

...CURRENT IMPORTANT PROGRAMS
ADVANCED TURBINE ENGINE TECHNOLOGY DEMONSTRATORS
OPTIMDUE AVAILABILITY AND COST OF AVIATION TURBINE FUELS
VARIABLE CYCLE ENGINES FOR MULTI-MISSION AIRCRAFT
RAMJETS FOR TACTICAL AND STRATEGIC MISSILES
AIRBORNE HIGH POWER GENERATION AND CONDITIONING

...FUNCTIONS/EQUIPMENT/CAPABILITIES
TURBINE ENGINE CONTROL TEST FAC, BATTERY DEVELOPMENT AND TEST FAC, MHD GENERATOR, LUBRICANT RIGS, SEAL TEST RIGS, BEARING RIGS, FUEL HANDLING FAC, FIRE RESEARCH LAB, COKER LAB, FUEL ANALYSIS LAB, COMBUSTION FAC, ROTOR TEST FAC, 6 SEA LEVEL TEST STANDS TO 60,000 LB THRUST, 2 TURBINE ENGINE ALTITUDE CELLS TO 5,000 LB THRUST-MACH 1.5-50,000 FT, 2 PROPELLER WHIRL RIGS TO 10,000 HP, DIRECT CONNECT RAMJET TEST FAC, RAMJET COMPONENTS LAB, ELECTRO AERODYNAMIC LASER, HIGH TEMPERATURE TURBINE COMPONENT TEST FAC, SAND EROSION RIG, AIRCRAFT ELECTRICAL POWER FAC WITH THREE 350 HP DRIVE SOURCES AND AIRCRAFT SIMULATORS, VACUUM CHAMBERS, SUPERCONDUCTIVITY LAB, HIGH POWER LAB TO 5 MW, THERMAL ENERGY STORAGE LAB, HYDRAULICS LAB3 PLASMA PHYSICS LAB, HOLOGRAPHY LAB, COMPRESSOR TEST FAC, SOLAR CELL LAB

INSTALLATION: AEROSPACE MEDICAL RESEARCH LABORATORY WPAFB,OH.

CDR. COL. ROY L. DEHART

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1979 (ACTUAL)	1980 (ACT + EST)
TOTAL RDT&E	15.297	16.313
TOTAL PROCUREMENT	0.000	0.000
TOTAL O&M	0.000	0.000
TOTAL OTHER	0.000	0.000
TOTAL ANNUAL LAB	15.297	16.313
TOTAL INHOUSE	6.561	6.614
TOTAL INHOUSE RDT&E	6.561	6.614
ANNUAL OPERATING COST	0.750	0.750

PERSONNEL DATA (END OF FY 1979)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON-PROF
MILITARY	135	16	56	79
CIVILIAN	154	22	94	60
TOTAL	289	38	150	139

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
30	73.614	5.247	87.764	166.625	21.20	27.835

...MISSION
ACCOMPLISH BEHAVIORAL AND BIOMEDICAL RESEARCH AND DEVELOPMENT TO DEFINE HUMAN TOLERANCE AND DEGRADATION OF HUMAN PERFORMANCE UNDER THE CONDITION OF ENVIRONMENTAL STRESS ASSOCIATED WITH AEROSPACE OPERATIONS AND PROVIDE SUPPORT TO SYSTEM DEVELOPMENT IN THE ABOVE AREAS.

...CURRENT IMPORTANT PROGRAMS
DEFINE TOXIC HAZARDS,ENVIR POLLUTION EFF OF MISSLE OPS-PROPELLANT TEST.
DEFINE EFFECT OF CREW PERF ON MANNED WEAPON SYSTEM EFFECTIVENESS.
DEV OPTICAL COUNTERMEASURE MECHANISMS FOR ADV DEV PROGRAM APPLICATIONS.
EFF OF OPERATIONAL NOISE AND VIBRATION ENVIRONMENTS ON AF PERSONNEL-OPS.
DEVELOP HUMAN PERFORMANCE ESTIMATES IN CHEMICAL WARFARE ENVIRONMENTS.

...FUNCTIONS/EQUIPMENT/CAPABILITIES
HUMAN DECELERATION SYSTEM TO SIMULATE THE COMPLEX ACCELERATION ENVIRON ASSOCIATED WITH EJECTION AND CRASH LANDING.DYNAMIC ENVIRONMENT SIMULATOR A SIX DEGREE OF FREEDOM MAN-RATED CENTRIFUGE USED TO SIMULATE SUSTAINED ACCELERATIONS SUCH AS THOSE ENCOUNTERED IN AIR COMBAT MANEUVERING.THOMAS DOMES-EIGHT ALTITUDE EXPOSURE CHAMBERS TO SIMULATE EXOTIC ARTIFICIAL ATMOSPHERIC CONDITIONS.HUMAN ENGINEERING SYSTEMS SIMULATOR FACILITY USED TO PERFORM REAL-TIME MAN-IN-THE-LOOP EXPERIMENTS AND DATA ANALYSIS. ANECHOIC AND REVERBERATION CHAMBERS TO ENABLE EXPERIMENTAL INVESTIGATIONS OF POTENTIALLY HAZARDOUS NOISE TO DETERMINE EFFECTS ON BODY FUNCTION AND PERFORMANCE.VIVARIUM-LABORATORY RESEARCH ANIMAL FACILITY.

INSTALLATION: ARMAMENT DIVISION EGLIN AFB,FL.

CDR. MAJ. ROBERT M. BOND

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1979 (ACTUAL)	1980 (ACT + EST)
TOTAL RDT&E	372.980	408.432
TOTAL PROCUREMENT	789.963	513.771
TOTAL O&M	7.765	7.531
TOTAL OTHER	77.819	80.904
TOTAL ANNUAL LAB	1,248.527	1,010.638
TOTAL INHOUSE	231.403	245.327
TOTAL INHOUSE RDT&E	147.406	160.856
ANNUAL OPERATING COST	54.537	49.192

PERSONNEL DATA (END OF FY 1979)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON-PROF
MILITARY	4646	28	851	3795
CIVILIAN	1743	37	801	942
TOTAL	6389	65	1652	4737

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
464219	320.295	976.427	10639.000	11935.722	290.40	163.727

...MISSION
RESPONSIBLE FOR AIR-LAUNCH TACTICAL AND AIR DEF MSLS, NONNUC MUN, GUIDED WEAP, ELEC-OPTICAL WEP DEL SYS, A/C GUN, AMMO, RELATED EQUIP RESPON FOR BASIC TECHNOLOGY, DEVEL, TEST INITIAL ACQ AND DEPLOY. TEST MISSION INCL LEAD CENTER IN MUN, EMW, INTRUSION/INTERDICTION, AND CLIMATIC SIMULATION

...CURRENT IMPORTANT PROGRAMS
WIDE AREA ANTI-ARMOR MUNTION
PRECISION GUIDANCE MUNTIONS
ADVANCED MEDIUM RANGE AIR-TO-AIR MISSILE
LOW ALTITUDE AIRFIELD ATTACK SYSTEM
COMBINED EFFECTS MUNTION

...FUNCTIONS/EQUIPMENT/CAPABILITIES
SCIENTIFIC/ENGINEERING PERSONNEL AND LABORATORY FACILITIES CAPABLE OF EXPLOR, ADV, ENG DEV OF NONNUCLEAR MUNITIONS EQUIP. ARMAMENT SYSTEMS TEST ENVIRONMENT COVERING 725 SQ MI WITH LARGE ADJACENT WATER AREA HAS 28 TEST AREAS WITH INSTRUMENTED FACILITIES INCLUDING PRECISION TRACKING RADAR AND PHOTO-OPTICS IS USED FOR MUNITON S TESTING AND ELECTROMAGNET IC TEST ENVIRONMENT AN INSTRUMENTED COMPLEX OF THREAT SYSTEMS FOR EVAL WPN SYST EFFECTIVENESS PROVIDES A REALISTIC ENVIRONMENT FOR TESTING A WPN SYST AGAINST AN ACTIVE DEFENSE SYSTEM A CLIMATIC LAB CAPABLE OF TESTING COMPLETE WPN SYSTEMS, A COMPUTER SCIENCE LAB, A PHYSICAL SCIENCE LAB, A PHOTO LAB, AN INSTRUMENTATION/DESIGN/FABRICATION FACILITY, AERO-BALLISTIC RESEARCH FACILITY, HIGH EXPLOSIVE R/D FACILITY, A MISSILE SIMULATION AND TEST LABORATORY.

INSTALLATION: ARNOLD ENGINEERING DEVELOPMENT CENTER TULLAHOMA,TN.

CDR. COL. MICHAEL H.ALEXANDER CH.SCI. DR.BRUCE REESE

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1979 (ACTUAL)	1980 (ACT + EST)
TOTAL RDT&E	124.567	137.488
TOTAL PROCUREMENT	0.000	0.000
TOTAL O&M	0.022	0.021
TOTAL OTHER	6.872	9.588
TOTAL ANNUAL LAB	131.461	147.097
TOTAL INHOUSE	16.375	14.213
TOTAL INHOUSE RDT&E	14.429	12.093
ANNUAL OPERATING COST	29.879	31.983

PERSONNEL DATA (END OF FY 1979)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON-PROF
MILITARY	87	5	48	39
CIVILIAN	136	5	43	93
TOTAL	223	10	91	132

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
39081	1092.409	182.573	561.154	1836.136	378.77	60.850

...MISSION
PRIMARY MISSION IS TO SUPPORT THE TIMELY ACQUISITION OF SUPERIOR AEROSPACE SYSTEMS BY CONDUCTING RESEARCH AND DEVELOPMENT TESTS IN GROUND ENVIRONMENTAL TEST FACILITIES WHICH SIMULATE THE ACTUAL CONDITIONS THAT THE HARDWARE WILL EXPERIENCE IN PERFORMING ITS MISSION

...CURRENT IMPORTANT PROGRAMS
CONTUNUED F/16 STORE SEPARATION TESTS AND ENGINE COMPONENT IMPROVEMENT
CONDUCTED DEVELOPMENT TESTS OF F/16,M/X,IUS,SPACE DEFENSE SYSTEMS
CONDUCTED ALCM ENGINE QUALIFICATIONS TESTS AND INLET-ENG COMPATIBILITY
CONTINUED EXTENSIVE MINUTEMAN PQA AND AGING AND SURVEILLANCE TESTS
OTHER SIGNIF TESTS:F/101 DFE,ABRES,SPACE SHUTTLE,BIRD IMPACT,ROCKT PLUME

...FUNCTIONS/EQUIPMENT/CAPABILITIES
AEDC IS COMPRISED OF ABOUT 40 TEST UNITS,INCLUDED ARE WIND TUNNELS WITH TEST SECTIONS TO 16 FT SQ AND SPEEDS FROM SUBSONIC TO MACH 22; TURBINE ENGINE TEST CELLS WHICH PROVIDE SIMULATION TO MACH 3,ROCKET TEST CELLS, THE LARGEST RATED AT .5 MILLION LBS THRUST AT ALTITUDE;SPACE SIMULATION CHAMBERS TO 42 FT DIA AND 82 FT HIGH;HYPERBALLISTIC RANGES; DUST AND SNOW EROSION FACILITY; BIRD IMPACT FACILITY; SEVERAL CAPTIVE TRAJECTORY SYSTEMS. THESE FACILITIES HAVE ESSENTIALLY SUPPORTED THE DEVELOPMENT AND QUALIFICATION OF EVERY MAJOR AERONAUTICAL, MISSILE, AND SPACE SYSTEM DEVELOPMENT SINCE 1954. BY PLANNING FOR AN ADEQUATE GROUND ENVIRONMNETAL TEST PROGRAM IN THESE FACILITIES, DEVELOPMENT PROGRAM MANAGERS CAN ASSURE THAT SYSTEM DEFICIENCIES ARE FOUND EARLY, PREVENTING COST AND SCHEDULE OVERRUNS

INSTALLATION: AVIONICS LABORATORY WPAFB,OH.

CDR.COL.R.F.LOPINA CH.SCI.DR.J.C.RYLES

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1979 (ACTUAL)	1980 (ACT + EST)
TOTAL RDT&E	139.592	146.448
TOTAL PROCUREMENT	0.070	0.100
TOTAL O&M	0.500	0.600
TOTAL OTHER	3.129	3.340
TOTAL ANNUAL LAB	143.291	150.488
TOTAL INHOUSE	31.991	32.279
TOTAL INHOUSE RDT&E	28.862	28.939
ANNUAL OPERATING COST	4.326	4.076

PERSONNEL DATA (END OF FY 1979)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON-PROF
MILITARY	170	8	108	62
CIVILIAN	774	32	427	347
TOTAL	944	40	535	409

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
229	250.901	8.775	412.829	672.505	24.06	68.460

...MISSION
MAINTAINS AN AVIONICS TECHNOLOGY BASE THROUGH RESEARCH AND EXPLORATORY AND ADVANCED DEVELOPMENT. DEVELOPS AND DEMONSTRATES COST-EFFECTIVE AVIONICS CONCEPTS TO REDUCE ACQUISITION AND OPERATING COST AND IMPROVE OPERATIONAL CAPABILITIES. SUPPORTS OPERATIONAL CMDS AND PRODUCT DIVISIONS.

...CURRENT IMPORTANT PROGRAMS
GPS USER EQUIPMENT - ANTI-JAMMING TECH AND PERFORMANCE EVALUATION
VERY HIGH SPEED INTEGRATED CIRCUITS TECHNOLOGY
ELECTRO-OPTICAL COUNTERMEASURES-TECHNOLOGY TO DEFEAT OPTICAL THREATS
DIGITAL AVIONICS INFORMATION SYSTEM-INTEGRATED SYS ARCHITECTURE
ELECTRONICALLY AGILE RADAR-MULTIMODE RADAR FOR STRATEGIC APPLICATIONS

...FUNCTIONS/EQUIPMENT/CAPABILITIES
MAINTAINS A WIDE RANGE OF AVIONICS SIMULATION, EVALUATION, DESIGN AND FABRICATION CAPABILITIES ACROSS THE BROAD MISSION RANGE. AVSAIL IS FOR ANALYSIS AND SIMULATION OF MULTIPLEX DIGITAL AVIONICS CONCEPTS,CSEL TOGETHER WITH IMAGE PROCESSING FAC AND SATCOM R/T CAN EVALUATE A-A,A-G AND SATELLITE DATA LINK PERFORMANCE. CAD/IC FAC IS USED TO DESIGN AND FABRICATE SPECIALIZED INTEGRATED/HYBRID CIRCUITS AND PRINTED WIRING BOARDS. DEES,EDE AND EWAC CAN SIMULATE REAL WORLD SIGNAL/JAMMING ENVIRONMENT FOR EVALUATION OF ELECTRONIC WARFARE SYSTEMS. TARGETING SYS CHARACTERIZATION FAC CAN CORRELATE E-O SYSTEMS PERFORMANCE WITH MEASURED WEATHER CONDITIONS. DYNAMIC ANALYZER EVALUATES RECON SENSORS IN REALISTIC FLIGHT ENVIRONMENT. LABS ARE MAINTAINED FOR EVALUATION OF AIRBORNE AND SPACECRAFT SENSORS AND COMPONENTS FROM OPTICAL TO RADIO FREQUENCIES.

INSTALLATION: EASTERN SPACE & MISSILE CENTER PATRICK AFB,FL.

CDR. COL JOHN S. BURKLUND

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1979 (ACTUAL)	1980 (ACT + EST)
TOTAL RDT&E	0.000	0.000
TOTAL PROCUREMENT	6.008	4.594
TOTAL O&M	176.248	183.781
TOTAL OTHER	2.403	2.403
TOTAL ANNUAL LAB	184.659	190.778
TOTAL INHOUSE	53.592	47.625
TOTAL INHOUSE RDT&E	0.000	0.000
ANNUAL OPERATING COST	16.824	13.355

PERSONNEL DATA (END OF FY 1979)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON-PROF
MILITARY	942	2	120	822
CIVILIAN	1196	1	79	1117
TOTAL	2138	3	199	1939

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
18133	129.369	1213.525	4510.214	5853.108	370.31	406.696

...MISSION
SUPPORT OF LAUNCH PROGRAMS AND AIR/GROUND-LAUNCHED MISSILE SYSTEMS FROM CCAFS AND KSC, OPERATION OF THE ARIS IN SUPPORT OF JCS REQUIREMENTS, SUPPORT OF AEROSPACE DEFENSE COMMAND ON-ORBIT TRACKING REQUIREMENTS AND SUPPORT OF SPECIAL PROJECTS, DOCUMENTED R&D TESTS AND TENANT ACTIVITIES.

...CURRENT IMPORTANT PROGRAMS
FBM PROGRAMS - POSEIDON, TRIDENT AND CHEVALINE
MIL SPACE SUPPORT PROGRAMS - TITAN IIIC AND TITAN 34D/IUS
MIL MISSILE SUPPORT PROGRAMS - SRAM/DT&E AND PERSHING
NASA - THOR/DELTA, ATLAS/CENTAUR AND SPACE SHUTTLE PROGRAMS
DOD SPACE TRANSPORTATION SYSTEM

...FUNCTIONS/EQUIPMENT/CAPABILITIES
ETR CAPABILITIES INCLUDE: ASSEMBLY, PRE-LAUNCH TESTING AND LAUNCH PERFORMANCE EVALUATION OF BALLISTIC MISSILES, LAUNCH VEHICLES, SPACECRAFT AND SATELLITES TO INCLUDE TRACKING, LONG DISTANCE COMMUNICATIONS, DATA TRANSMISSION, COLLECTION AND REDUCTION. EQUIPMENT AND FACILITIES INCLUDE MAINLAND AND DOWN-RANGE INSTRUMENTATION AND COMMUNICATIONS, INSTRUMENTED SHIPS, SCIENTIFIC DATA PROCESSING EQUIPMENT AND FACILITIES, PHOTO/ELECTRO-OPTICAL SYSTEMS AND SERVICES, MISSILE IMPACT LOCATION SYSTEMS, METEOROLOGICAL WEATHER STATIONS AND EQUIPMENT, AND RANGE TIMING SYSTEMS. EASTERN SPACE AND MISSILE CENTER OPERATES AND MAINTAINS CCAFS, MAINLAND SITES AND DOWN-RANGE STATIONS. SUPPORT FUNCTIONS INCLUDE LAUNCH SUPPORT SERVICES AND OVERALL MANAGEMENT OF THE ETR, INCLUDING CONTRACTOR OPERATIONS, PLANT ENGINEERING, LABS, SHOPS AND OTHER SPECIAL SERVICES.

INSTALLATION: ENGINEERING & SERVICES CNTR / RD TYNDALL AFB,FL.

CDR. COL.JOSEPH S. PIZZUTO

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1979 (ACTUAL)	1980 (ACT + EST)
TOTAL RDT&E	6.173	8.165
TOTAL PROCUREMENT	0.000	0.000
TOTAL O&M	0.481	0.500
TOTAL OTHER	1.191	1.250
TOTAL ANNUAL LAB	7.845	9.915
TOTAL INHOUSE	1.968	2.370
TOTAL INHOUSE RDT&E	0.301	0.620
ANNUAL OPERATING COST	0.150	0.150

PERSONNEL DATA (END OF FY 1979)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON-PROF
MILITARY	89	5	45	44
CIVILIAN	15	2	11	4
TOTAL	104	7	56	48

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
3	4.981	2.400	9.751	17.132	1.60	1.202

...MISSION
AIR FORCE LEAD AGENCY FOR RESEARCH, DEVELOPMENT, TEST & EVALUATION IN THE AREAS OF CIVIL ENGINEERING & ENVIRONMENTAL QUALITY. FOCAL POINT FOR FACILITIES ENERGY RDTE.

...CURRENT IMPORTANT PROGRAMS
RAPID RUNWAY REPAIR AND NEW AIRCRAFT OPERATIONAL SURFACES
ENVIRONMENTAL QUALITY AND ASSESSMENT RESEARCH AND DEVELOPMENT
SURVIVABILITY/VULNERABILITY OF FACILITIES
ENERGY CONSERVATION AND ALTERNATE ENERGY SOURCES
FIRE PROTECTION

...FUNCTIONS/EQUIPMENT/CAPABILITIES
ESL HAS ACCESS TO LABORATORIES AND TEST FACILITIES TO PERFORM QUALITATIVE AND QUANTITATIVE MEASUREMENTS ON CORROSION, ENGINEERING MATERIALS, PAVEMENTS, SOIL MECHANICS, AIR QUALITY, WASTE TREATMENT PROCESSES, FIRE EXTINGUISHING AGENTS, AND HARDENED AIRCRAFT SHELTERS. EQUIPMENT INCLUDES FLAME AND ABSORPTION SPECTROPHOTOMETERS, WATER/WASTE STANDARD METHODS TEST EQUIPMENT, AND A MICROPROCESSOR DEVELOPMENT SYSTEM . REMOTE TERMINAL ACCESS IS AVAILABLE TO A CDC 6600 SCIENTIFIC COMPUTER WITH OFF-LINE PLOTTING CAPABILITY. A RUNWAY REPAIR/ALTERNATE LAUNCH SURFACE TEST SITE HAS A 200 X 600 FOOT TYPICAL RUNWAY SECTION.

INSTALLATION: FLIGHT DYNAMICS LABORATORY WPAFB,OH.

CDR.COL.R.C. BARLOW DEP.DIR.MR.K.I. COLLIER

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1979 (ACTUAL)	1980 (ACT + EST)
TOTAL RDT&E	93.702	100.330
TOTAL PROCUREMENT	0.000	0.000
TOTAL O&M	0.383	0.485
TOTAL OTHER	3.094	13.111
TOTAL ANNUAL LAB	97.179	113.926
TOTAL INHOUSE	37.894	36.918
TOTAL INHOUSE RDT&E	34.597	33.522
ANNUAL OPERATING COST	13.177	13.836

PERSONNEL DATA (END OF FY 1979)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON-PROF
MILITARY	198	11	115	83
CIVILIAN	722	22	443	279
TOTAL	920	33	558	362

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
92	518.859	5.408	143.317	667.584	26.18	50.516

...MISSION
PLAN AND EXECUTE USAF RESEARCH EXPLORATORY AND ADVANCED DEV PROGRAMS FOR AEROSPACE FLT VEHICLE STRUCTURES AERODYNAMICS FLT CONTROL VEHICLE DYN AND VEHICLE EQUIP. LEAD AFSC LAB FOR EXPER FLT VEHICLES. AFSC FOCAL PT FOR NONNUCLEAR SURVIVABILITY PROG. EVALUATE CONTRACTOR I R AND D PROG.

...CURRENT IMPORTANT PROGRAMS
ADVANCED COMPOSITE STRUCTURES
ADVANCED FIGHTER TECHNOLOGY INTEG
COMBINED ENVIRONMENT RELIABILITY TEST
DIGITAL FLIGHT CONTROL SYSTEM
FLIGHT VEHICLE TECHNOLOGY

...FUNCTIONS/EQUIPMENT/CAPABILITIES
STRUCTURAL TESTING OF F-15 VERTICAL TAIL AND F-16 HORIZONTAL TAIL WITH PROGRAM CONTROLLED SIMULATION OF FORCE AND THERMAL FLT ENVIRONMENTS WERE ACCOMPLISHED IN THE STRUCTURES TEST FACILITY.LANDING GEAR TEST FACILITY, WHICH DYNAMICALLY SIMULATES LANDING GEAR COMPONENT PERFORMANCE,PERMITTED INITIATION OF GETOL,TEST FIXTURE DEVELOPMENT,TEST/EVALUATION.DEVELOPMENT OF CONTROL LOSS FOR AFTI-16 AND THE EVALUTAION AND VALIDATION OF IFFC-1 CONCEPT FOR F-15 WERE PERFORMED IN THE ENGINEERING FLT SIMULATION FAC. BALLISTIC RANGES ASSESSED VULNERABILITY OF AIRCRAFT DRY BAYS TO MISSLE WARHEAD FRAGMENT IMPACT BY SIMULATING THREAT FUEL STRUCTURAL AND AERODY NAMIC ENVIRONMENTS. THE FAVORABLE INTERFERENCE CONCEPT WAS EXPERIMENTALLY VERIFIED.

INSTALLATION: FLIGHT TEST CENTER EDWARDS AFB, CA.

COR.BG.P.J. CONLEY, JR. TECH.DIR. MR F.N. STOLIKER

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1979 (ACTUAL)	1980 (ACT + EST)
TOTAL RDT&E	93.354	100.274
TOTAL PROCUREMENT	1.557	0.832
TOTAL O&M	8.910	11.483
TOTAL OTHER	52.683	50.193
TOTAL ANNUAL LAB	156.504	162.782
TOTAL INHOUSE	119.136	131.687
TOTAL INHOUSE RDT&E	70.324	77.571
ANNUAL OPERATING COST	42.830	45.057

PERSONNEL DATA (END OF FY 1979)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON-PROF.
MILITARY	3461	1	136	3325
CIVILIAN	1675	3	194	1481
TOTAL	5136	4	330	4806

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
227071	102.125	263.504	6737.323	7102.952	279.06	124.052

...MISSION
TESTS MANNED/UNMANNED AEROSPACE VEH,INCL ALL-WEATHER. FLT EVAL AEROSPACE RSCH VEH AND DEV TEST AERODYNAMIC DECELERATORS. USAF TEST PILOT SCHOOL. SUPPORTS USAF,DOD,GOV,FOREIGN AND CONTRACTOR TEST/EVAL. UTAH TEST AND TRAINING RANGE AND EDWARDS FLIGHT TEST RANGE

...CURRENT IMPORTANT PROGRAMS
ALCM DT AND E
F-16 DT AND E
A-10 DT AND E
F-15 DT AND E
B/1 DT AND E

...FUNCTIONS/EQUIPMENT/CAPABILITIES
FACILITIES AND EQUIP ARE AVAILABLE FOR COMPLETE RANGE OF SERVICES TO CONDUCT DT AND E FLT TESTS OF AERONAUTICAL SYS OVER LONG DISTACES,TO CONDUCT FLT EVAL AND RECOVER RSCH VEH,AND TO TRAIN TEST PILOTS.FLIGHT TEST MISSION CONTROL COMPLEX,ENGRG FACILITIES, REAL-TIME INSTRUMENTED RANGES,DATA COLLECTION,REDUCTION AND ANALYSIS FAC, PHOTO/TV,ACFT/ENGINE MAINT,TEST EQUIP,ELECTRONIC SHOPS,AND DRY LAKES FOR RECOVERY AND EMERGENCY LANDINGS PROVIDE SUPPORT FOR ALL PROGRAMS. OTHER FACILITIES ARE PRECISION IMPACT GUNNERY/BOMBING,INFRARED/PHOTO RESOLUTION,RADAR FIDELITY,TACTICAL AND OPTICAL RANGES,ENGR SIMULATOR, MUNITIONS STORAGE AND CHECKOUT AND CONTRACTOR-ASSIGNED HANGARS,SHOPS, OFFICE SPACE,ETC.

INSTALLATION: FRANK J SEILER RESEARCH LABORATORY USAF ACADEMY,CO.

CDR.LT.COL.W.D.SIURU CH.SCI.(ACTING) CAPT.D.R.STEVENS

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1979 (ACTUAL)	1980 (ACT + EST)
TOTAL RDT&E	0.638	0.651
TOTAL PROCUREMENT	0.000	0.000
TOTAL O&M	0.000	0.000
TOTAL OTHER	0.620	0.657
TOTAL ANNUAL LAB	1.258	1.308
TOTAL INHOUSE	1.258	1.308
TOTAL INHOUSE RDT&E	0.638	0.651
ANNUAL OPERATING COST	0.050	0.055

PERSONNEL DATA (END OF FY 1979)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON-PROF
MILITARY	24	17	21	3
CIVILIAN	9	1	6	3
TOTAL	33	18	27	6

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
1	19.003	1000.000	0.000	1019.003	1.72	1.689

...MISSION
CONDUCT RESEARCH IN AEROSPACE MECHANICS,APPLIED MATHEMATICS & CHEMISTRY. ENCOURAGE & SUPPORT ACADEMY FACULTY & CADET RESEARCH BY DIRECT PARTICIPATION. MONITOR FACULTY CONSULTANT PROG,SUMMER RSCH PROG.FOCAL POINT FOR USAF ACADEMY RESEARCH PROPOSED TO DL RESEARCH & TECHNOLOGY LABS (AFSC).

...CURRENT IMPORTANT PROGRAMS
BATTERY RESEARCH & ELECTROCHEMISTRY OF MOLTEN SALTS, ENERGETIC MATERIALS RESEARCH, CHEMICAL MOLECULAR DYNAMICS OF LASERS AND PLUMES.
APPLIED OPERATIONS RESEARCH, INERTIAL GUIDANCE TESTING, ADVANCED SENSOR DEVELOPMENT, MICROPROCESSOR RESEARCH.
FLUID DYNAMICS, UNSTEADY AERODYNAMICS.

...FUNCTIONS/EQUIPMENT/CAPABILITIES
MOLTEN SALT MELT STRUCTURE,CONDUCTIVITY&ELECTRODE REACTIONS. EXPLOSIVE & PROPELLANT SYNTH,DECOMPOSITION MECHANISMS&DETONATION PHENOMENA. GENERATION,MSMT,SPECTROSCOPY&MO CALC. OF EXCITED STATE SPECIES. IR,UV,NMR,EPR, X-RAY&MASS SPECTS,GAS&LIQ CHROMATOGRAPHS,ELECTRON MICROSCOPE, SPECIAL SPECTROMETERS & CONDUCTIVITY EQUIP.,ASSOC FACILITIES FOR WET CHEMISTRY. ADVANCED ANALYSIS & EVALUATION TECHNIQUES FOR INERTIAL GUIDANCE SENSORS USING 2-AXIS TEST TABLE (GYRO), AUTOMATIC AZIMUTH ALIGNMENT EQUIPMENT & ELECTRONIC CONTROL EQUIP FOR 50 SERIES INERTIAL DEVICES LOCATED IN A CLASS 1000 CLEAN LAB ON 80 TON AIR SUPPORTED STABLE PLATFORM. PDP 11/45 MINI COMPUTER & SOFTWARE TO AUTOMATE GYRO RESEARCH.
AERODYNAMIC RESEARCH IN USAFA SUBSONIC & TRISONIC WIND TUNNELS, HOLOGRAPHIC & OTHER OPTICAL FLOW VISUALIZATION INSTRUMENTATION.

INSTALLATION: GEOPHYSICS LABORATORY HANSCOM AFB,MA.

CDR. COL. JAMES E. BAKER CH.SCI.DR. JOHN N. HOWARD

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1979 (ACTUAL)	1980 (ACT + EST)
TOTAL RDT&E	51.065	55.390
TOTAL PROCUREMENT	0.000	0.000
TOTAL O&M	0.000	0.000
TOTAL OTHER	9.643	10.580
TOTAL ANNUAL LAB	60.708	65.970
TOTAL INHOUSE	30.143	31.534
TOTAL INHOUSE RDT&E	26.000	27.820
ANNUAL OPERATING COST	6.000	6.600

PERSONNEL DATA (END OF FY 1979)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON-PROF
MILITARY	120	7	41	79
CIVILIAN	498	74	271	227
TOTAL	618	81	312	306

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
368	391.903	15.006	25.883	432.792	9.71	29.700

...MISSION
CONDUCTS AND SUPPORTS AF RELEVANT RESEARCH AND EXPLORATORY DEVELOPMENT IN ENVIRONMENTAL AND PHYSICAL SCIENCES WITH MAJOR EMPHASIS ON GEOPHYSICS. ALSO CONDUCTS AND SUPPORTS SPECIFICALLY ASSIGNED ADVANCED DEVELOPMENT EFFORTS.

...CURRENT IMPORTANT PROGRAMS
SPACECRAFT CHARGING TECHNOLOGY
SURFACE WEATHER OBSERVING AUTOMATION
STRATOSPHERIC ENVIRONMENTAL IMPACT ASSESSMENTS
OPTICAL, INFRARED AND UV BACKGROUNDS FOR SURVEILLANCE SYSTEMS
GEODETIC AND GEOKINETIC EFFECTS ON MISSILE CEP

...FUNCTIONS/EQUIPMENT/CAPABILITIES
CONDUCTS RESEARCH AND TECHNICAL DEVELOPMENT IN TERRESTRIAL SCIENCES, METEOROLOGY, AERONOMY, AND OPTICAL, SPACE AND SOLAR PHYSICS RELATING TO AIR FORCE NEEDS. EQUIPMENT AND FACILITIES INCLUDE RADIO TELESCOPES FOR SOLAR RESEARCH; ONE C-130 AIRCRAFT FOR METEOROLOGICAL RESEARCH; ROCKET AND BALLOON LAUNCH FACILITIES; TWO KC-135 AIRCRAFT FOR OPTICAL, UPPER ATMOSPHERIC AND NEAR EARTH SPACE STUDIES; AND TWO CDC 6600 COMPUTER SYSTEMS.

INSTALLATION: HUMAN RESOURCES LABORATORY BROOKS AFB,TX.

CDR.COL. RONALD H.TERRY VICE CDR.COL.KENNETH E.STOUT

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1979 (ACTUAL)	1980 (ACT + EST)
TOTAL RDT&E	22.477	19.017
TOTAL PROCUREMENT	0.120	0.000
TOTAL O&M	0.930	0.984
TOTAL OTHER	2.636	2.821
TOTAL ANNUAL LAB	26.163	22.822
TOTAL INHOUSE	10.728	11.743
TOTAL INHOUSE RDT&E	8.077	8.913
ANNUAL OPERATING COST	1.061	1.489

PERSONNEL DATA (END OF FY 1979)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON-PROF
MILITARY	127	12	84	43
CIVILIAN	238	42	144	94
TOTAL	365	54	228	137

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
13	76.369	49.759	54.680	180.808	5.48	33.182

...MISSION
PRINCIPAL AFSC ORGANIZATION CHARGED WITH PLANNING AND EXECUTING EXPLORATORY AND ADVANCED DEVELOPMENT PROGRAMS FOR SELECTION, MOTIVATION, TNG, RETENTION, EDUCATION, UTILIZATION AND CAREER DEVELOPMENT OF AF MILITARY PERSONNEL; COMPOSITION OF PERSONNEL FORCE; AND TNG EQUIPMENT.

...CURRENT IMPORTANT PROGRAMS
ADVANCED DEVELOPMENT IN THE USE OF SIMULATION FOR UNDERGRADUATE PILOT AND AEROSPACE CREW TNG. IMPROVED PERSONNEL SELECTION, CLASSIFICATION, EVALUATION AND UTILIZATION TECHNIQUES. HUMAN FACTORS IN DESIGN OF WPN SYSTEMS. DESCRIBING, EVALUATING AND STRUCTURING AF OCCUPATIONS. IMPROVED TECHNICAL TNG THROUGH ADVANCED INSTRUCTIONAL SYSTEMS.

...FUNCTIONS/EQUIPMENT/CAPABILITIES
OCCUPATIONAL ANALYSIS; PERSONNEL PROCUREMENT, CLASSIFICATION, RETENTION AND SEPARATION; COMPUTER SIMULATION MODELS FOR PERSONNEL SYSTEMS; MANPOWER RQMTS OF AF WEAPONS SYS; TNG TECHNIQUES; DESIGN OF SIMULATORS AND OTHER TRAINING DEVICES; CONDUCT TRNG RESEARCH ASSOCIATED WITH PILOT TRNG USING SOPHISTICATED HIGH-FIDELITY A/C SIMULATORS; ADVANCED INSTRUCTIONAL SYS FOR INDIVIDUALLY PACED COMPUTER AIDED TECH INSTRUCTION; ADVANCED SIMULATOR FOR UPT; ADVANCED INSTRUCTIONAL SYSTEM; SIMULATION AND TRAINING ADVANCED RESEARCH SYSTEM; SIMULATION FOR MAINTENANCE TRAINING. TECHNICAL LIBRARY, PERSONNEL TESTING ROOMS; COMPUTER, UNIVAC 1108 ELECTRONIC DATA PROCESSING SYSTEM WITH 2 CPUS, 16 TAPE DRIVES, 16 DISC DRIVES 21 UNISCOPE INTERACTIVE TERMINALS, GRAPHICS DISPLAY CONSOLE, 2 PRINTERS, CARD READER, CARD PUNCH. ELEC ASSOC TR 48 ANALOG COMPUTER.

INSTALLATION: MATERIALS LABORATORY WPAFB,OH.

VACANT CH.SCI. DR. NORMAN TALLAN

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1979 (ACTUAL)	1980 (ACT + EST)
TOTAL RDT&E	63.389	56.882
TOTAL PROCUREMENT	26.564	56.200
TOTAL O&M	0.000	0.000
TOTAL OTHER	1.204	1.290
TOTAL ANNUAL LAB	91.157	114.372
TOTAL INHOUSE	16.745	18.848
TOTAL INHOUSE RDT&E	15.541	17.558
ANNUAL OPERATING COST	4.846	6.064

PERSONNEL DATA (END OF FY 1979)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON-PROF
MILITARY	54	8	47	7
CIVILIAN	359	56	239	120
TOTAL	413	64	286	127

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
15	228.809	39.681	117.009	385.499	23.34	17.041

...MISSION
PLAN/EXECUTE EXPLORATORY AND ADVANCED DEVELOPMENT, AND ASSIGNED BASIC RSCH,PROGS. FOR MATERIALS. PROVIDE TECH./MANAGEMENT ASSISTANCE FOR STUDIES, ANALYSES, DEVELOPMENT PLANNING, ACQUISION, TEST, EVALUATION MOD. AND OPN. OF AEROSPACE SYSTEMS. MANAGE/DIRECT A.F. DIRECT MFG. PROG.

...CURRENT IMPORTANT PROGRAMS
ADVANCED DEVELOPMENT OF LASER HARDENED MATERIALS
MANUFACTURING TECHNOLOGY COST REDUCTION PROGRAM FOR METALS,NONMETALS AND THERMAL PROTECTION MATERIALS FOR REENTRY VEHICLES
PROPULSION MATERIALS
SYSTEMS SUPPORT

...FUNCTIONS/EQUIPMENT/CAPABILITIES
MATERIALS RESEARCH AND DEVELOPMENT FACILITIES AND CAPABILITIES FOR - AEROSPACE STRUCTURES, THERMAL PROTECTION SYSTEMS FOR BALLISTIC REENTRY VEHICLES AND ENGINES, FLUIDS, LUBRICANTS, FLUID CONTAINMENT, PROPULSION, COATINGS, FIBERS, EM WINDOWS, SENSORS, DISPLAYS, LASER WINDOWS, AND OPT DEVICES, ELECT COMPONENTS, NON-DESTRUCTIVE TESTING, POLYMERS, ADHESIVES, NONMETALLIC MATRIX COMPONENTS, ELASTOMERS, METALS, ALLOYS, METAL COMPOSITES, METAL PROCESSING, INTERMETALLICS, CERAMICS, STATIC AND DYNAMIC BEHAVIOR, JOINING, GRAPHITE, ELECTRONIC, PHYSICAL, CHEMICAL ANALYSIS. OTHER MAJOR MATERIALS FUNCTIONS -MANUFACTURING TECHNOLOGY, SYSTEM APPLICATION, SYSTEM SUPPORT, THERMAL PROTECTION MATERIALS.

INSTALLATION: OFFICE OF SCIENTIFIC RESEARCH WASHINGTON,D.C.

DIR.DR. LAWRENCE C. KRAVITZ

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1979 (ACTUAL)	1980 (ACT + EST)
TOTAL RDT&E	100.130	113.434
TOTAL PROCUREMENT	0.000	0.000
TOTAL O&M	0.000	0.000
TOTAL OTHER	1.048	1.121
TOTAL ANNUAL LAB	101.178	114.555
TOTAL INHOUSE	23.282	25.661
TOTAL INHOUSE RDT&E	22.234	24.540
ANNUAL OPERATING COST	0.000	0.000

PERSONNEL DATA (END OF FY 1979)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON-PROF
MILITARY	45	7	17	28
CIVILIAN	99	19	23	76
TOTAL	144	26	40	104

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
0	0.000	41.300	1.700	43.000	0.00	0.000

...MISSION
MANAGES THE AF RESEARCH PROGRAM,PREVENTS TECHNOLOGICAL SURPRISE,ASSISTS IN SOLVING TECHNOLOGICAL PROBLEMS,PROVIDES RESEARCH OPTIONS,ENHANCES THE CONTINUED SUPERIORITY OF THE AF OPERATIONAL CAPABILITY,ASSISTS IN TRANSITION OF PRODUCTS OF THAT RESEARCH TO DEVELOPMENT ACTIVITIES.

...CURRENT IMPORTANT PROGRAMS
DIRECTED ENERGY
STRATEGIC SYSTEMS RESEARCH
SYSTEMS AUTOMATION
COMMAND AND CONTROL
ENERGY EFFICIENT AERONAUTICS

...FUNCTIONS/EQUIPMENT/CAPABILITIES
MANAGE THE AIR FORCE RESEARCH PROGRAM AND SPONSER EXTRAMURAL RESEARCH.

INSTALLATION: ROCKET PROPULSION LABORATORY EDWARDS AFB,CA.

CDR.COL.WILLIAM F.MORRIS CH. SCI. DR.RICHARD R.WEISS

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1979 (ACTUAL)	1980 (ACT + EST)
TOTAL RDT&E	36.145	38.005
TOTAL PROCUREMENT	0.002	0.205
TOTAL O&M	0.000	0.000
TOTAL OTHER	2.300	2.400
TOTAL ANNUAL LAB	38.447	40.610
TOTAL INHOUSE	13.468	14.169
TOTAL INHOUSE RDT&E	11.166	11.564
ANNUAL OPERATING COST	0.550	0.600

PERSONNEL DATA (END OF FY 1979)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON-PROF
MILITARY	176	2	64	112
CIVILIAN	255	13	90	165
TOTAL	431	15	154	277

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
68345	419.046	86.848	4.780	510.674	125.00	23.487

...MISSION
CONDUCT THE AIR FORCE'S ROCKET PROPULSION EXPLORATORY AND ADV DEVEL PROGRAMS TO PROVIDE ADV TECH FOR FUTURE ICBMS, STRATEGIC AND TACTICAL AIR LAUNCHED MISSILES, SPACE VEHICLES, AND SATELLITES. PROVIDES ROCKET PROPULSION TECHNOLOGICAL SUPPORT TO DOD AND NON-DOD AGENCIES.

...CURRENT IMPORTANT PROGRAMS
PROVIDE REDUCED RISK PROPULSION OPTIONS FOR MX FULL SCALE DEVEL. PROVIDE SOLID ROCKET SIGNATURE, PERFORMANCE, AND ENERGY MGT OPTIONS FOR A/L LAUNCHED MISSILES DEMO 30 TO 50 PERCENT REDUCTION IN COST OF HIGH PRODUCTION RATE SOLID ROCKETS. DEMO AN IMPROVED PERFORMANCE KICK MOTOR TECHNOLOGY FOR SPACE APPL. DEMO LONG LIFE MONOPROPELLANT SATELLITE THRUSTERS.

...FUNCTIONS/EQUIPMENT/CAPABILITIES
A PHYSICAL SCIENCE LAB FOR SYNTHESIS, ANALYSIS AND FORMULATION OF NEW PROPELLANTS. FACILITIES FOR MIXING, CASTING, CURING AND TESTING SOLID ROCKET MOTORS. A SOLID MOTOR TEST AND EVAL COMPLEX FOR INVESTIGATION OF COMBUSTION, AGING, STRUCTURAL INTEGRITY, BALLISTIC PERFORMANCE AND HIGH TEMP COMPONENTS. LAB FOR TESTING SMALL ATTITUDE CONTROL AND SATELLITE PROPULSION SYSTEMS AND COMPONENTS UNDER SIMULATED SPACE ENVIRONMENTS. ALTITUDE TESTING OF LIQUID AND SOLID ROCKETS UP TO 50,000 POUNDS THRUST. AMBIENT TESTING OF LIQUID OR SOLID ROCKETS UP TO 500,000 POUNDS THRUST. IN-HOUSE ANALYTICAL CAPABILITY FOR DESIGN, ANALYSIS, AND TEST DATA REDUCTION. SHOPS FOR FABRICATING TEST HARDWARE AND TEST SYSTEMS. A FULL SCALE REENTRY NOSETIP TEST FACILITY.

INSTALLATION: ROME AIR DEVELOPMENT CENTER GRIFFISS AFB,N.Y.

CDR.COL. DONALD J. STUKEL CH.SCI.DR. JOHN S. BURGESS

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1979 (ACTUAL)	1980 (ACT + EST)
TOTAL RDT&E	159.571	179.972
TOTAL PROCUREMENT	15.594	5.498
TOTAL O&M	27.244	21.056
TOTAL OTHER	4.155	3.345
TOTAL ANNUAL LAB	206.564	209.871
TOTAL INHOUSE	27.201	28.611
TOTAL INHOUSE RDT&E	23.974	25.166
ANNUAL OPERATING COST	8.832	8.870

PERSONNEL DATA (END OF FY 1979)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON-PROF
MILITARY	232	7	109	123
CIVILIAN	1091	56	592	499
TOTAL	1323	63	701	622

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
1517	772.193	87.767	168.762	1028.722	30.35	52.996

...MISSION
CONDUCTS RESEARCH,EXPLORATORY AND ADVANCED DEVELOPMENT,TEST AND SELECTED ACQUISITION PROGRAMS IN SUPPORT OF COMMAND,CONTROL AND INTELLIGENCE -C-CUBED I- ACTIVITIES

...CURRENT IMPORTANT PROGRAMS
FACP AUTOMATION/RADAR INTERNETTING
MULTIMISSION SPACEBORNE RADAR
TACTICAL INTELLIGENCE PROCESSING
COMMUNICATIONS ECCM
EQUIPMENT/SYSTEM TESTABILITY TECHNIQUES

...FUNCTIONS/EQUIPMENT/CAPABILITIES
PRINCIPLE TECHNICAL AREAS ARE COMMUNICATIONS,ELECTROMAGNETIC GUIDANCE AND CONTROL,SURVEILLANCE OF GROUND AND AEROSPACE OBJECTS,INTELLIGENCE DATA COLLECTION AND HANDLING,INFORMATION SYSTEM TECHNOLOGY,IONOSPHERIC PROPAGATION,SOLID STATE SCIENCES,MICROWAVE PHYSICS AND ELECTRONIC RELIABILITY,MAINTAINABILITY AND COMPATIBILITY.MAJOR IN-HOUSE FACILITIES ARE:RECCONNIASSANCE EXPLOITATION FACILITY,HIGH POWER FACILITY,DIGITAL COMMUNICATIONS EXPERIMENTAL FACILITY,R AND D COMPUTER FACILITY CONSISTING OF TWO HONEYWELL 6180 COMPUTERS,RELIABILITY ANALYSIS CENTER, RADIATION EFFECTS FACILITY,CARTOGRAPHIC TEST FACILITY,ECCM AND SIGNAL PROCESSING LABORATORY,SOLID STATE DEVICE FAILURE ANALYSIS FACILITY EXPERIMENTAL DEVICE FABRICATION FACILITY,AND AN ELECTROMAGNETIC VULNERABILITY FACILITY FOR WEAPONS TESTING.

INSTALLATION: SCHOOL OF AEROSPACE MEDICINE BROOKS AFB,TX.

CDR. COL. L. J. ENDERS DEP. DIR. DR. BILLY E. WELCH

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1979 (ACTUAL)	1980 (ACT + EST)
TOTAL RDT&E	16.734	17.219
TOTAL PROCUREMENT	0.000	0.000
TOTAL O&M	0.000	0.000
TOTAL OTHER	5.770	6.175
TOTAL ANNUAL LAB	22.504	23.394
TOTAL INHOUSE	15.823	16.354
TOTAL INHOUSE RDT&E	10.053	10.179
ANNUAL OPERATING COST	2.000	2.345

PERSONNEL DATA (END OF FY 1979)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON-PROF
MILITARY	393	57	109	284
CIVILIAN	273	36	99	174
TOTAL	666	93	208	458

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
74	363.855	77.980	53.176	495.011	17.58	20.401

...MISSION
CONDUCT EXPLORATORY RESEARCH AND DEVELOPMENT PROGRAMS IN AEROSPACE BIOTECHNOLOGY; INCLUDES LIFE SUPPORT, AEROSP MEDICINE, BIOMEDICAL PROGRAMS AND RADIOBIOLOGY. PROVIDE MEDICAL EVALUATION AND CONSULTATION FOR AIRCREWS TO ASSURE RETENTION OF FLYING STATUS.

...CURRENT IMPORTANT PROGRAMS
CREW READINESS AND CREW PROTECTION TECHNOLOGY FOR ADVANCED SYSTEMS
MEDICAL AND BIOMEDICAL ASPECTS OF AEROSPACE OPERATIONS
HEALTH EVALUATION AND RISK TABULATION (HEART)
RADIOBIOLOGY IN AEROSPACE OPERATIONS
MODELING BIOLOGICAL SYSTEMS/MAN-ATMOSPHERE ENVIRONMENT INTERACTION

...FUNCTIONS/EQUIPMENT/CAPABILITIES
RESEARCH IN AEROSP MEDICAL PROBLEMS, LIFE SUPPORT, ENVIRONMENTAL STRESS, RADIOBIOLOGY, LASER, BIOMETRICS, BIOMEDICAL ENGINEERING, RDT&E ON MEDICAL EQUIPMENT AND SYSTEMS. WHOLE BODY COUNTER, HUMAN CENTRIFUGE, TESTING CELLS, RESEARCH CHAMBERS, TELETHERAPY COBALT 60 RADIATION SOURCE, RADIOFREQUENCY RADIATION FACILITY, ELECTRON MICROSCOPE SYSTEM, REMOTE INTERACTIVE GRAPHIC TERMINAL SYSTEM, THERMAL CHAMBER, CARDIAC CATH. LAB, AEROSP MED SCIENCE LAB, LASER HAZARD FACILITIES, AEROMEDICAL LIBRARY, AEROSP MED EVALUATION AND CONSULTATIVE SERVICES, OPTICAL RESEARCH AUDIOLOGY, VESTIBULAR STUDIES, PSYCHOBIOLOGY, RADIOISOTOPE, AEROMED STANDARDS, MODELING, BIOMED RESEARCH, MEDICAL REPOSITORIES, RADIATION SCIENCES RESEARCH, BIODYNAMICS RESEARCH, DEVELOP. ENGINEERING.

INSTALLATION: WEAPONS LABORATORY KIRTLAND AFB,N.M.

DIR.DR. W.L. LEHMANN COR. COL.R.T. WHITE

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1979 (ACTUAL)	1980 (ACT + EST)
TOTAL RDT&E	178.185	168.522
TOTAL PROCUREMENT	0.000	0.000
TOTAL O&M	0.017	0.017
TOTAL OTHER	11.661	12.477
TOTAL ANNUAL LAB	189.863	181.016
TOTAL INHOUSE	64.683	63.468
TOTAL INHOUSE RDT&E	53.005	50.974
ANNUAL OPERATING COST	12.312	13.174

PERSONNEL DATA (END OF FY 1979)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON-PROF
MILITARY	647	56	388	259
CIVILIAN	464	49	240	224
TOTAL	1111	105	628	483

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
702	553.823	105.574	125.118	784.515	76.06	69.493

...MISSION
RESPONSIBLE FOR EXPLORATORY, ADVANCED, AND ENGINEERING DEVELOPMENT IN NUCLEAR WEAPONS EFFECTS, COMPONENTS, RADIATION HAZARDS, NUCLEAR SURVIVABILITY/VULNERABILITY, HIGH ENERGY LASER SYSTEMS, ADVANCED WEAPON TECHNOLOGY, AND LASER WEAPON TECHNOLOGY.

...CURRENT IMPORTANT PROGRAMS
ADVANCED RADIATION TECHNOLOGY
ADVANCED WEAPON TECHNOLOGY
NUCLEAR SURVIVABILITY/VULNERABILITY ANALYSIS AND TESTING
NUCLEAR SAFETY ANALYSIS AND DESIGN CRITERIA
NUCLEAR WEAPONS EFFECTS ANALYSIS AND TESTING

...FUNCTIONS/EQUIPMENT/CAPABILITIES
NUCLEAR WEAPONS EFFECTS SIMULATION, SAFETY, COMPONENT ASSESSMENT AND ANALYSIS OF WEAPONS SYSTEMS NUCLEAR HARDNESS ARE CONDUCTED IN ENGINEERING TEST LABORATORIES AND PHYSICS LABORATORIES. SIMULATION TESTS ON MISSILES, AIRCRAFT, AND COMPONENTS USE ELECTROMAGNETIC PULSE SIMULATORS, GAS GUNS, AND X-RAY DEVICES. CIVIL ENGINEERING PROGRAMS USE SHOCK TUBES AND HIGH EXPLOSIVES FOR SIMULATION OF NUCLEAR BLAST AND SHOCK. LASER SYSTEMS DEVELOPMENT USES LASER/OPTICS LABORATORIES AND TEST RANGES WITH LARGE, HIGH POWER DEVICES. A TECHNICAL LIBRARY, METALLURGY AND METROLOGY LABORATORIES, 2 CYBER 176 AND 1 CDC-6600 COMPUTERS WITH REMOTE ACCESS TERMINALS AND MULTI-CHANNEL SENSING/RECORDING AND DATA REDUCTION SUPPORT ALL REQUIRING RDT/E PROGRAMS.

INSTALLATION: WESTERN SPACE AND MISSILE CENTER VANDENBERG AFB,CA.

CDR.COL.W.M. BURKETT TECH. DIR.DR J.A. MEANS

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1979 (ACTUAL)	1980 (ACT + EST)
TOTAL RDT&E	1.900	0.900
TOTAL PROCUREMENT	5.079	6.586
TOTAL O&M	72.860	82.258
TOTAL OTHER	7.261	7.867
TOTAL ANNUAL LAB	87.100	97.611
TOTAL INHOUSE	87.100	97.611
TOTAL INHOUSE RDT&E	1.900	0.900
ANNUAL OPERATING COST	0.296	0.326

PERSONNEL DATA (END OF FY 1979)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON-PROF
MILITARY	356	4	231	125
CIVILIAN	368	0	152	216
TOTAL	724	4	383	341

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
55586	36.000	617.000	1199.000	1852.000	260.00	49.900

...MISSION
MANAGE FIELD TEST AND LAUNCH OPERATIONS FOR SPACE DIVISION/OTHERS. DEVELOP MANAGE AND OPERATE THE WESTERN TEST RANGE AS A DESIGNATED NATIONAL RANGE.

...CURRENT IMPORTANT PROGRAMS
ADVANCED BALLISTIC REENTRY SYSTEMS PROGRAMS.
MINUTEMAN II OPERATIONAL TESTING PROGRAM.
MINUTEMAN III R AND D AND OPERATIONAL TESTING PROGRAM.
CLASSIFIED AND UNCLASSIFIED SPACE PGMS USING TITAN,ATLAS,THOR, AND SCOUT BOMARC MISSILE,TOMAHAWK CRUISE MISSILE,AIR-LAUNCHED CRUISE MISSILE.

...FUNCTIONS/EQUIPMENT/CAPABILITIES
WSMC CAPABILITIES INCLUDE TEST LAUNCH AND RANGE SUPPORT.TEST LAUNCH INCLUDES: ASSEMBLY AND PRELAUNCH TESTING OF LAUNCH VEHICLE SYSTEMS USING ATLAS,TITAN AND MM BOOSTERS; AGENA AND TITAN III UPPER STAGES; PAYLOAD AND VEHICLE INTEGRATION/CHECKOUT; AND LAUNCH CONTROL. WESTERN TEST RANGE SUPPORT INCLUDES NEAR AND FAR TERM RANGE INSTRUMENTATION PLANNING, AND DATA GATHERING ON BALLISTIC/SPACE/GUIDED MISSILE/PROBE LAUNCHES,AIRCRAFT AND OTHER TESTS AT UPRANGE AND DOWNRANGE LOCATIONS. RADAR,TELEMETRY, OPTICAL, DATA PROCESSING, COMMUNICATIONS AND COMMAND CONTROL SYSTEMS ARE AVAILABLE. LAUNCH AZIMUTHS VARY FROM 140 TO 313 DEGREES. AERONAUTICAL TESTS ARE CONDUCTED IN AN INSTRUMENTED OFFSHORE OPERATING AREA. LAUNCH FACILITIES AND RANGE INSTRUMENTATION CAN BE RECONFIGURED TO MEET PROGRAM REQUIREMENTS.

INSTALLATION: 4950 TEST WING WPAFB,OH.

CDR.COL.D.T. WARD TECH.DIR.MR. P.J. CORCORAN

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1979 (ACTUAL)	1980 (ACT + EST)
TOTAL RDT&E	51.984	56.759
TOTAL PROCUREMENT	0.000	0.000
TOTAL O&M	2.221	2.332
TOTAL OTHER	0.013	0.014
TOTAL ANNUAL LAB	54.218	59.105
TOTAL INHOUSE	43.381	46.686
TOTAL INHOUSE RDT&E	41.147	44.340
ANNUAL OPERATING COST	0.015	0.015

PERSONNEL DATA (END OF FY 1979)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON-PROF
MILITARY	854	2	169	685
CIVILIAN	1028	0	98	930
TOTAL	1882	2	267	1615

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
227	0.000	68.176	961.590	1029.766	15.35	406.133

...MISSION
DOD MAJ TEST FAC. PERFORMS T&E ON MIL SYS, SUBSYS, AND COMP. OPER & MAIN ASGN TEST SUP ACFT AND ANCIL EQUIP. MANAGES A CENTRAL FAC FOR MAJ MOD OF AFSC ACFT. OPER SHOP FAC IN SUP OF CMD ACFT CLASS II MODS AND AFWAL R&D PROGMS. PROVIDES FLT TST ENGRG, TECH DATA ACQ, AND TECH PHOTO SVCS.

...CURRENT IMPORTANT PROGRAMS
POSEIDON
ARIA SUPPORT TO AIR LAUNCH CRUISE MISSILE
LASER INFRARED DEMONSTRATOR SYSTEM
AFFTC TANKER SUPPORT
COHERENT EMITTER LOCATION TEST BED

...FUNCTIONS/EQUIPMENT/CAPABILITIES
43 TEST SUPPORT AIRCRAFT (8 ARIA EC-135)
ALL AFSC MAJOR CLASS II AIRCRAFT MODIFICATIONS
MISSILE LAUNCH/REENTRY TRACKING AND DATA RELAY
WORLDWIDE TEST SUPPORT CAPABILITY
1400 SQUARE MILE RESTRICTED TEST AREA IN OHIO
FLIGHT TEST ENGINEERING (AERO-MECHANICAL, AVIONICS, AND ARIA
TEST DATA ACQUISITION/PROCESSING/ANALYSIS
3 OPERATIONAL SQS(FLIGHT CREWS) AND 3 MAINTENANCE SQS
SPECIALIZED SHOP EQUIP METAL/WOOD WORKING, MODELING, & DATA AUTOMATION
TECHNICAL PHOTOGRAPHIC INSTRUMENTATION & PROCESSING
CENTRAL AFSC AT WPAFB PMEL SERVICES
ASD LABORATORY MATERIAL CONTROL ACTIVITY

INSTALLATION: 6585TH TEST GROUP HOLLOMAN AFB, N.M.

VACANT

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1979 (ACTUAL)	1980 (ACT + EST)
TOTAL RDT&E	16.292	16.026
TOTAL PROCUREMENT	0.000	0.000
TOTAL O&M	4.355	4.545
TOTAL OTHER	4.709	5.039
TOTAL ANNUAL LAB	25.356	25.610
TOTAL INHOUSE	14.444	14.164
TOTAL INHOUSE RDT&E	9.735	9.125
ANNUAL OPERATING COST	0.100	0.120

PERSONNEL DATA (END OF FY 1979)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON-PROF
MILITARY	325	3	74	251
CIVILIAN	286	3	97	189
TOTAL	611	6	171	440

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
6602	386.000	7.000	163.000	556.000	102.66	53.700

...MISSION
DOD FOCAL POINT FOR FLIGHT, LAB AND SLED T&E OF INERTIAL GUIDANCE SYS & COMPONENTS. HIGH SPEED TRACK FOR AERODYNAMIC, EJECTION, IMPACT, RAIN-FIELD, GUIDANCE & BLAST INTERACTION. RADAR CROSS SEC & ANTENNA PATTERNS OF A/C, SPACECRAFT, RVS. A/C SPT FOR IN-HOUSE & TRANSIENT REQUIREMENTS.

...CURRENT IMPORTANT PROGRAMS
RADAR CROSS SECTION MEASUREMENTS OF THE JOINT CRUISE MSL
MX MSL GUIDANCE SYS AND COMPONENTS TESTING
B-52 OFFENSIVE AVIONICS SYSTEM TESTING
ADVANCED GUIDANCE TECHNOLOGY TESTING IN SPT OF ABRES
AIRCRAFT NAVIGATION SYS VERIFICATION, PROJECT 6886

...FUNCTIONS/EQUIPMENT/CAPABILITIES
PRECISION REFERENCE/DATA COLLECTION, ENVIRONMENTAL CHAMBERS
INERTIAL NAV TEST VAN 508788 FT TEST TRACK (2-RAIL, 35588 FT, 3-RAIL 15200 FT), 5 BLOCKHOUSES, 2 INSTRMN STATIONS, 9000 FT TRACKSIDE, 2000 FT BALL RAINFIELD. ROCKET SLED / PROPULSION SYSTEM INV. RADAR TAGET SCAT-TER FACILITY TO MEASURE RADAR CROSSECTION / ANTENNA PTRNS FROM 30 MHZ TO 95 GHZ.
MEASURE MONOSTATIC / BISTATIC AMP, PHASE, DOPPLER, GLINT AND JET ENGINE MODULATION. IR SIGNATURE MEASUREMENT CAPABILITY.

INSTALLATION: ARMED FORCES RADIOBIOLOGY RSCH.INSTITUTE BETHESDA,MD.

CDR.CAPT.PAUL E.TYLER

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1979 (ACTUAL)	1980 (ACT + EST)
TOTAL RDT&E	7.578	8.120
TOTAL PROCUREMENT	0.000	0.000
TOTAL O&M	0.000	0.000
TOTAL OTHER	1.943	2.262
TOTAL ANNUAL LAB	9.521	10.382
TOTAL INHOUSE	9.521	10.382
TOTAL INHOUSE RDT&E	7.578	8.120
ANNUAL OPERATING COST	1.836	1.973

PERSONNEL DATA (END OF FY 1979)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON-PROF
MILITARY	88	32	58	30
CIVILIAN	128	20	42	86
TOTAL	216	52	100	116

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
10	42.335	21.049	56.834	120.218	7.91	5.532

...MISSION
THE MISSION OF AFRRI SHALL BE TO
CONDUCT SCIENTIFIC RESEARCH IN THE FIELD OF RADIOBIOLOGY AND IN THE
RELATED MATTERS THAT ARE ESSENTIAL TO THE
MEDICAL SUPPORT OF THE DEPARTMENT OF DEFENSE

...CURRENT IMPORTANT PROGRAMS
DEFINE PHYSIOLOGICAL/PATHOLOGICAL RESPONSE IN HUMANS TO RADIATION.
ASSESS EFFECTS OF COMBINED INJURIES, MILITARY FORCES/NONCOMBATANTS.
DATA FOR PREDICTION OF COMBAT INEFFECTIVENESS AND CASUALTY PRODUCTION.
TREATMENT METHODS FOR CASUALTIES FROM RADIATION/COMBINED INJURY.
INSTRUCTION TO ARMED SERVICES ON TREATMENT OF NUCLEAR CASUALTIES.

...FUNCTIONS/EQUIPMENT/CAPABILITIES
FUNTIONS: OPERATE FACILITIES FOR CONDUCTING RADIOBIOLOGY RESEARCH AND
DISSEMINATING RESULTS: CONDUCT ADVANCED TRAINING: OPERATE FACILITIES FOR
PRODUCTION OF SHORT-LIVED RADIOISOTOPES: AND PERFORM OTHER SUCH RESEARCH
FUNCTIONS AS REQUIRED. MAJOR EQUIPMENT INCLUDES: PULSE AND STEADY STATE
NUCLEAR REACTOR, 2000,000-CURIE COBALT-60 IRRADIATOR,
ELECTRON LINEAR ACCELERATOR ASSOCIATED EXPOSURE ROOM COMPLEXES
SUPPORT SERVICES INCLUDE: MEASUREMENT OF RADIATION FIELDS, PROVISION AND
CARE OF LABORATORY ANIMALS, EQUIPMENT DESIGN AND FABRICATION ASSISTANCE,
REAL-TIME DATA ACQUISITION SYSTEM, TELEVISION AND FILM DOCUMENTATION OF
EXPERIMENTS, PERSONNEL AND ENVIRONMENTAL MONITORING, EDITORIAL
ASSISTANCE IN REPORT PREPARATION, AND A LARGE TECHNICAL LIBRARY

APPENDIX I

DISESTABLISHMENT, ESTABLISHMENT OR CHANGES IN ORGANIZATION OR NAME*

DEPARTMENT OF THE ARMY

AS OF OR PRIOR TO 1 OCTOBER 1979

AIRCRAFT DEVELOPMENT TEST ACTIVITY Fort Rucker, AL	DISESTABLISHED
AVIATION DEVELOPMENT TEST ACTIVITY Fort Rucker, AL	ESTABLISHED Name change from Aircraft Development Test Activity
BIOMEDICAL R&D LABORATORY Aberdeen Proving Ground, MD	ESTABLISHED Formerly part of Chemical Systems Laboratory
ELECTRONICS R&D TECHNOLOGY SUPPORT ACTIVITY Ft Monmouth, NJ	DISCONTINUED from this publication. Does not meet criteria for RDT&E funding.

DEPARTMENT OF THE NAVY

MEDICAL RESEARCH UNIT NO. 2 Manila, Philippines	ESTABLISHED
MEDICAL RESEARCH UNIT NO. 2 Taipei, Taiwan	DISESTABLISHED
NAVAL AIR ENGINEERING CENTER Lakehurst, NJ	DISCONTINUED from this publication. Does not meet criteria for RDT&E funding.

DEPARTMENT OF THE AIR FORCE

AEROSPACE MEDICAL R&D LABORATORY Wright Patterson AFB, Ohio	ESTABLISHED Name change from 6570 Aerospace Medical R&D Lab

APPENDIX I

DISESTABLISHMENT, ESTABLISHMENT OR CHANGES IN ORGANIZATION OR NAME*

DEPARTMENT OF THE AIR FORCE (contd)

	AS OF OR PRIOR TO 1 OCTOBER 1979
ARMAMENT DEVELOPMENT AND TEST CENTER Eglin AFB, Florida	DISESTABLISHED
ARMAMENT DIVISION Eglin AFB, Florida	ESTABLISHED Name change from Armament Development and Test Center
EASTERN SPACE & MISSILE CENTER Patrick AFB, Florida	ESTABLISHED Changed from Space and Missile Test Center (Det 1)
ENGINEERING SERVICES CENTER DET 1 Tyndale AFB, Florida	DISESTABLISHED
ENGINEERING SERVICES CENTER/RD Tyndale AFB, Florida	ESTABLISHED Name change from Engineering Services Center Det 1,
SPACE AND MISSILE TEST CENTER Vandenburg AFB, CA	DISESTABLISHED
SPACE AND MISSILE TEST CENTER (DET 1) Patrick AFB, Florida	DISESTABLISHED
WESTERN SPACE AND MISSILE CENTER Vandenburg AFB, CA	ESTABLISHED Name change from Space & Missile Test Center
6570 AEROSPACE MEDICAL R&D LABORATORY Wright Patterson AFB, Ohio	DISESTABLISHED

* Changes since publication of Department of Defense In-House RDT&E Activities, 30 October 1978.

APPENDIX II

Definitions

1. IN-HOUSE RDTE ACTIVITIES--Those organizational entities engaged in performing work in any or all of the categories of research, development, test, and evaluation. The RDTE effort, however, should represent a minimum of 25 percent of the total effort of each entity reporting in order to be considered as an RDTE activity.

2. PROFESSIONALS--Full-time government scientific and engineering personnel actively engaged in RDTE activities. In the case of civilians this will include all those holding positions that fall into the following categories under the Civil Service Occupational Groups and Series of Classes, General Schedule:

101	Social Science
150	Geography
180	Psychology
184	Sociology
190	General Anthropology
193	Archeology
401	Biology
403	Microbiology
405	Pharmacology
408	Ecology
410	Zoology
413	Physiology
414	Entomology
430	Botany
434	Plant Pathology
435	Plant Physiology
436	Plant Quarantine & Pest Control
437	Horticulture
440	Genetics
454	Range Conservation
457	Soil Conservation
460	Forestry
470	Soil Science
471	Agronomy
480	General Fish & Wildlife
482	Fishery Biology
486	Wildlife Biology
487	Husbandry
498	Home Economics
601	General Health
602	Medical Officer
644	Medical Technologist
660	Pharmacist
662	Optometrist
665	Speech Pathology and Audiology
668	Podiatrist
680	Dental Officer
690	Industrial Hygiene
695	Food and Drug Officer
696	Food and Drug Inspection
701	Veterinary Medical Science
801	General Engineering
803	Safety Engineering
804	Fire Prevention Engineering
806	Materials Engineering
807	Landscape Architecture
808	Architecture
810	Civil Engineering
819	Sanitary Engineering
830	Mechanical Engineering
840	Nuclear Engineering
850	Electrical Engineering
855	Electronic Engineering
861	Aeronautics Engineering
871	Naval Architecture
880	Mining Engineering
881	Petroleum Production and Natural Gas Engr.
890	Argiculture Engineering
892	Ceramic Engineering
893	Chemical Engineering
894	Welding Engineering
896	Industrial Engineering
1221	Patent Adviser
1223	Patent Classifying
1224	Patent Examining
1225	Patent Interference Examining

1226	Design Patent Examining	1370	Cartography
1301	Physical Science Administration	1372	Geodesy
		1380	Forest Products Technology
1306	Health Physics	1382	Food Technology
1310	Physics	1384	Textile Technology
1313	Geophysics	1386	Photographic Technology
1315	Hydrology	1510	Actuary
1320	Chemistry	1515	Operations Research
1321	Metallurgy	1520	Mathematics
1330	Astronomy and Space Science	1529	Mathematical Statistician
1340	Meteorology	1530	Statistics
1350	Geology	1540	Cryptography
1360	Nautical Science	1550	Computer Sciences

Military professionals, both officer and enlisted, actively engaged in RDTE activities should be identified with the functions described in the above referenced civilian job series. Lawyers, accountants, chaplains, social workers, and educators should be excluded.

3. TECHNICIANS--Generally nonprofessionals working on an RDTE project or program in support of a professional. In the case of civilians, it will include, but will not necessarily be limited to, those holding positions that fall into the following categories of the Civil Service Occupational Groups and Series of Classes, General Schedule:

181	Psychological Technician	682	Dental Hygiene
404	Biological Laboratory Technician	683	Dental Laboratory Technicians
		698	Environmental Health Technician
421	Plant Pest Control Technician	699	Medical Aid
455	Range Technician	704	Animal Health Technician
458	Soil Conservation Technician	802	Engineering Technician
462	Forestry Technician	817	Surveying Technician
622	Medical Aid (Sterile Supplies)	818	Engineering Drafting
625	Morgue Attendant	856	Electronic Technician
636	Physican Medicine & Rehabilitation Therapy Asst	895	Industrial Engineering Technician
		1311	Physical Science Technician
642	Nuclear Medicine Technician	1316	Hydrologic Technician
645	Medical Technician	1341	Meterological Technician
646	Pathology Technician	1371	Cartographic Aid
647	Medical Radiology Technician	1374	Geodetic Technician
649	Medical Machine Technician	1521	Mathematics Technician
650	Medical Technical Asst	1531	Statistical Clerical & Administrative
661	Pharmacy Technician	1541	Cryptanalysis
667	Orthopotist and Prosthetist		
681	Dental Assistant		

Discretion will have to be exercised by each RDT&E activity in determining the number of military technicians. Generally, they should follow the guidelines established in defining civilian technicians and can be identified in DOD 1312.1-E.

4. REAL PROPERTY COST--Each reporting activity will be responsible for determining and reporting the cost of real property. This cost should be established in accordance with the guidelines and definitions in DOD Instruction 4165.14. This should also include the cost of installed equipment.

5. EQUIPMENT COST--Each reporting activity will be responsible for determining and reporting the cost of personal property. This cost should be established in accordance with the guidelines and definitions in DOD Instruction 4165.14. This should also include the cost of installed equipment.

6. SPACE--The data to be furnished should include only walled and roofed building space. It should not include such things as parking lots, open storage areas, lean-tos, etc. The source of data may be the annual report submitted in compliance with the requirements of DOD Instruction 4165.14.

7. IN-HOUSE OBLIGATIONS--Obligations reported under this category are for activities performed, or to be performed, by the organizational entity. Their work is carried on directly by their own personnel. Particular care should be taken to include under in-house performance the cost of supplies and equipment essentially of an off-the-shelf nature that are procured for use in in-house research and development, plus such things as travel, publications, and other types of services in support of in-house functions and M.P.A. Excluded from the in-house total are expenses for planning and administering programs by DOD personnel of contracts and grants for out-of-house work and M.C.A.

8. OUT-OF-HOUSE OBLIGATIONS--Obligations reported under this category are for activities performed, or to be performed, by other than the organizational entity. Out-of-house performers may include other departmental or DOD organizational entities, industrial firms, educational institutions, not-for-profit institutions, and private individuals. Included as out-of-house work are all expenses paid the out-of-house performers, as well as the expenses incurred in planning and administering these programs by personnel of the organizational entity. This would also include travel and other supporting services.

9. ANNUAL OPERATING COST--This should generally reflect the overhead cost of operating the laboratory or facility. It should include such things as costs of utilities, rents, janitorial services, guard and fire protection, support services such as supply personnel, printing, maintenance of buildings and grounds, etc. It should not include the salaries of direct labor personnel such as scientists, engineers, technicians, draftsmen, machinists, etc.

APPENDIX III

Selected Standard Abbreviations and Acronyms

AAM -- air-to-air missile
AAW -- antiair warfare
ADPE -- automatic data-processing equipment
AEDC -- Arnold Engineering Development Center
AFMDC -- Air Force Missile Development Center
AFSC -- Air Force Systems Command
AFWET -- Air Force weapons effectiveness testing
APG -- Aberdeen Proving Ground
ARPA -- Advanced Research Projects Agency
ASW -- antisubmarine warfare
AUS -- Army United States

BIS -- Board of Inspection and Survey
BW -- biological warfare

CBR -- chemical, biological radiological
CE -- Chief of Engineers, Army
CG -- commanding general
CNO -- Chief of Naval Operations
COMMEL -- communications electronics

DA -- Department of the Army
DARCOM -- Department of the Army Materiel and Readiness Command
DASA -- Defense Atomic Support Agency
DOD -- Department of Defense
DZ -- drop zone

ECM -- electronic countermeasures
ED -- engineering development
EDT -- engineering development & test
EEG -- electroencephalogram
EKG -- electrocardigram
ELINT -- electronic intelligence
EMP -- electromagnetic propagation
EMW -- electromagnetic warfare
EODC -- Explosive Ordnance Disposal Center
ET -- engineering test
FA -- field artillery
FBM -- fleet ballistic missile

GCA -- ground-controlled approach

HF -- high-frequency

IFF -- identification, friend or foe
IR - infrared

MPT -- military potential test

NAF -- Naval Air Facility
NASA -- National Aeronautics and Space Administration
NASC -- Naval Air Systems Command
NAVORD -- Naval Ordnance Systems Command
NAVSHIP -- Naval Ship Systems Command
NEMP -- nuclear electromagnetic propagation

PI -- product improvement
POL -- petroleum oil, lubricants

QA -- quality assurance
QMDO -- qualitative materiel development objective
QMR -- qualitative materiel requirement

RDT&E -- Research, development, test and evaluation
RF -- radio frequency
RV -- reentry vehicle

SATS -- short airfield tactical support
SDR -- small development requirement
SI -- ship installation
SP -- self-propelled
ST -- service test

T&E -- test and evaluation

TOTO -- Tongue-of-the Ocean

UDT -- underwater demolition team
ULMS -- Undersea Long-Range Missile System
USATECOM -- US Army Test and Evaluation Command
UTTAS -- utility tactical transport aircraft system
USW -- undersea warfare
UV -- ultraviolet

V/STOL -- vertical/short takeoff and landing

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