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DEPARTMENT OF DEFENSE IN-HOUSE RDT&E ACTIVITIES

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Management Analysis Report . . .

Office for Laboratory Management

Office of the Director of Defense Research and Engineering
Washington, D.C.

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DEPARTMENT OF DEFENSE IN-HOUSE RDT&E ACTIVITIES

Evan D. Anderson

30 October 1970

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Management Analysis Report 70-4

Office for Laboratory Management
Office of the Director of Defense Research and Engineering
Washington, D.C. 20301

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FOREWORD

At the request of the Director of Defense Research and Engineering, the Departments of the Army, the Navy and the Air Force provided comprehensive data on the finances, manpower and facilities of their organizations that perform research, development, test and evaluation (RDT&E). In addition, they briefly described their individual missions, current important programs, and their functions and equipment capabilities. The statistical data relate to the past and current fiscal years, i.e., 1970 and 1971.

Each in-house RDT&E organization of the Department of Defense is described on one page in this compilation. The data for FY 1970 are summarized in tables beginning on page ix.

This edition is the fifth of a series that started in 1966. All information was submitted on key-punched cards and the report's preparation was thus entirely automated, with some manual correction of typographical errors and clarification of obscure abbreviations and contractions. The computer that produced the printed pages had no ampersand (&) and, instead, usually printed a plus sign (+) for the word "and."

All current DoD RDT&E activities are indexed in Appendix IA. Some new organizational names appear in this issue, and others have been changed since last year; for this information, see Appendix IB.

Appendix II containes the definitions given in DoD Instruction 7700.9[1] and employed as the basis for these data. Appendix III lists selected standard abbreviations and acronyms.

A considerable amount of additional information regarding the structure of each laboratory's R&D program, its source of funds, and the composition of its staff was collected, is being analyzed, and will be published separately.

[1] DoD Instruction 7700.9, "Research and Development Resource Data for In-House RDT&E ACTIVITIES," dated 25 July 1969.

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SUMMARY

DEPARTMENT OF DEFENSE R&D LABORATORIES AND TEST ACTIVITIES

PROGRAM DATA FOR FY 1970 (ACTUAL)

	(MILLIONS $)
TOTAL ANNUAL LABORATORY PROGRAM	3877.632
TOTAL IN-HOUSE PROGRAM	2080.366
TOTAL RDT+E PROGRAM	2495.550
TOTAL IN-HOUSE RDT+E	1371.107
TOTAL ANNUAL OPERATING COST	589.369

PERSONNEL DATA (END OF FY 1970)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHD	TOTAL PROFESSIONALS
MILITARY	32639	1056	7693
CIVILIAN	85562	2637	28064
TOTAL	118201	3693	35757

PHYSICAL FACILITIES (END OF FY 1970)

ACRES.....	9476930
SPACE (THOUSANDS OF SQ FT)	
LABORATORY.....	31699.227
ADMINISTRATIVE.....	10325.220
OTHER.....	62123.571
TOTAL.....	104148.018
COST (MILLIONS $)	
REAL PROPERTY.....	3447.620
EQUIPMENT.....	3342.323
TOTAL.....	6789.903

TABLE 1. ARMY RDT+E ACTIVITIES, PROGRAM AND PERSONNEL DATA, FY 1978

INSTALLATION	FUNDING DATA (MILLIONS $) TOTAL	TOTAL IN-HOUSE	TOTAL RDT+E	IN-HOUSE RDT+E	PERSONNEL DATA TOTAL MIL	TOTAL CIV	PHD MIL	PHD CIV	PROF MIL	PROF CIV
LAND WARFARE LABORATORY, ABERDEEN PROVING GROUND, MD.	9.167	5.146	8.473	4.578	18	124	0	3	15	57
BEHAVIORAL SCIENCE RESEARCH LAB., WASHINGTON, D.C.	2.882	1.926	2.882	1.926	4	83	0	23	1	55
ENGINEER TOPOGRAPHIC LAB., FT. BELVOIR, VA.	12.514	5.871	12.329	4.886	11	242	1	10	7	124
ENGINEER WATERWAYS EXPERIMENT STATION, VICKSBURG, MISS.	20.863	18.573	11.952	10.462	36	1118	2	29	43	341
CONSTRUCTION ENGINEERING RESEARCH LAB, URBANA, ILL.	3.319	2.741	2.776	2.414	1	138	1	10	1	48
INSTITUTE OF SURGICAL RESEARCH, BROOKE AMC, FT. SAM HOUSTON, TEX.	2.179	2.179	1.068	1.068	113	74	24	3	59	21
AEROMEDICAL RESEARCH LAB., FT. RUCKER, ALA.	1.216	1.216	0.790	0.790	36	19	16	1	31	2
INSTITUTE OF DENTAL RESEARCH, WALTER REED AMC, WASHINGTON, D.C.	1.074	1.074	0.495	0.495	63	25	2	1	32	8
MEDICAL BIOMECHANICAL RESEARCH LAB., WALTER REED AMC, WASHINGTON, D.C.	0.731	0.731	0.616	0.616	17	32	8	4	9	21
MEDICAL RESEARCH AND NUTRITION LAB., FITZSIMONS G.H., DENVER, COLO.	3.280	3.280	2.244	2.244	117	98	28	13	57	45
MEDICAL EQUIPMENT R&D LAB., FT. TOTTEN, FLUSHING, N.Y.	0.877	0.877	0.727	0.727	15	39	0	0	2	0
MEDICAL RESEARCH LAB., FT. KNOX, KY.	3.047	3.047	1.083	1.083	125	133	9	14	53	31
RESEARCH INSTITUTE OF ENVIRONMENTAL MEDICINE, NATICK, MASS.	3.310	3.310	2.630	2.630	86	116	22	25	56	57
WALTER REED ARMY INSTITUTE OF RESEARCH, WASHINGTON, D. C.	17.843	17.642	11.696	11.495	623	586	155	78	214	200
MEDICAL RESEARCH UNIT, BALBOA HEIGHTS, CANAL ZONE	0.252	0.252	0.163	0.163	9	8	1	0	5	0
MEDICAL RESEARCH UNIT, KUALA LUMPUR, MALAYSIA	0.266	0.266	0.211	0.211	6	0	4	0	6	0
MEDICAL RESEARCH OF INFECTIOUS DISEASES, FT. DETRICK, MD.	5.978	5.857	3.788	2.859	318	89	45	8	48	19
LETTERMAN ARMY INSTITUTE OF RESEARCH, PRESIDIO OF SAN FRANCISCO, CAL.	0.959	0.959	0.493	0.493	84	18	21	3	55	9
AERONAUTICAL RESEARCH LAB, AMES RESEARCH CENTER, MOFFETT FIELD, CAL.	2.569	2.569	2.530	2.530	3	111	2	5	4	33
BALLISTIC RESEARCH LABS, ABERDEEN PROVING GROUND, MD.	19.777	18.271	19.394	17.888	36	681	4	56	38	344
COATING AND CHEMICAL LAB., ABERDEEN PROVING GROUND, MD.	2.309	1.211	2.012	1.031	5	46	2	3	8	28
COLD REGIONS R&E LAB, HANOVER, N.H.	6.731	5.840	6.036	5.145	47	212	4	19	69	75
HARRY DIAMOND LABS, WASHINGTON, D.C.	73.086	32.013	23.804	17.358	18	1318	5	27	11	616
HUMAN ENGINEERING LABS, ABERDEEN PROVING GROUND, MD.	2.910	2.488	2.760	2.332	33	95	3	18	26	53
MATERIALS AND MECHANICS RESEARCH CENTER, WATERTOWN, MASS.	16.112	12.494	11.127	9.495	12	652	6	54	12	211
NUCLEAR DEFENSE LAB, EDGEWOOD ARSENAL, MD.	2.781	2.628	2.553	2.400	40	75	3	14	42	51
NATICK LABS, NATICK, MASS.	27.717	22.579	15.274	12.264	154	1385	18	99	78	503
AVIATION MATERIEL LABS, FT. EUSTIS, VA.	22.988	5.545	22.904	5.541	58	386	0	8	14	132
AVIATION TEST ACTIVITY, EDWARDS AFB, CALIF.	3.385	3.215	2.498	2.488	77	128	0	1	26	33
ELECTRONICS R&D LAB., FT. MONMOUTH, N.J.	170.776	89.688	154.825	75.578	935	3155	18	121	387	1557
MISSILE COMMAND R&D LABS, REDSTONE ARSENAL, ALA.	79.263	39.294	71.877	31.908	67	982	6	46	46	782
MOBILITY EQUIPMENT R&D CENTER, FT. BELVOIR, VA.	72.914	24.168	35.313	16.755	59	1425	2	18	37	491
FRANKFORD ARSENAL LABS, PHILADELPHIA, PA.	34.882	23.354	26.965	15.437	23	1657	1	29	23	549
PICATINNY ARSENAL LABS, DOVER, N.J.	83.953	37.351	63.888	28.114	76	2888	3	54	69	1131
BIOLOGICAL LABS, FT. DETRICK, MD.	25.347	24.288	20.411	19.999	289	1434	25	106	188	388
EDGEWOOD ARSENAL LABS, EDGEWOOD ARSENAL, MD.	43.831	38.768	32.516	28.253	245	1232	66	78	213	675
ROCK ISLAND ARSENAL LABS, ROCK ISLAND, ILL.	23.594	11.341	17.638	7.734	18	796	-0	26	15	291
WATERVLIET ARSENAL LABS., WATERVLIET, N.Y.	18.811	9.447	4.815	4.355	4	452	2	42	2	176
TANK-AUTOMOTIVE COMMAND LABS., WARREN, MICH.	72.846	26.194	25.945	13.438	19	1039	1	5	16	432
DESERET TEST CENTER(LANDS) DUGWAY, UTAH	21.968	19.648	15.927	13.607	468	1899	6	18	88	281
WHITE SANDS MISSILE RANGE, WHITE SANDS, N.M.	116.774	92.693	121.818	77.859	1368	3728	3	7	576	567
ARCTIC TEST CENTER, FT. GREELY, ALASKA	4.987	4.879	2.372	2.283	365	21	0	0	38	2
TROPIC TEST CENTER, FT. CLAYTON, CANAL ZONE	5.896	5.854	2.448	2.398	218	188	0	3	68	27
DEVELOPMENT AND PROOF SERVICES, APG, MD.	27.157	26.831	8.882	8.653	142	1227	0	2	75	192
INFANTRY BOARD, FT. BENNING, GA.	2.127	1.958	1.065	0.888	168	48	0	0	11	3
AIRBORNE, ELECTRONIC AND SPECIAL WARFARE BOARD, FT. BRAGG, N.C.	3.896	3.896	1.442	1.442	216	51	0	0	19	6
AIR DEFENSE BOARD, FT. BLISS, TEX.	5.377	5.282	2.759	2.664	371	113	0	0	61	18
ARMOR AND ENGINEER BOARD, FT. KNOX, KY.	4.899	4.881	2.158	2.068	442	97	0	0	78	5
ARTILLERY BOARD, FT. SILL, OKLA.	3.413	3.381	1.894	0.892	397	37	0	0	86	2
AVIATION TEST BOARD, FT. RUCKER, ALA.	8.534	6.154	5.671	3.291	253	148	1	0	48	25
GENERAL EQUIPMENT TEST ACTIVITY, FT. LEE, VA.	4.769	4.626	2.644	2.501	286	95	1	1	55	32
ELECTRONICS PROVING GROUND, FT. HUACHUCA, ARIZ.	18.162	13.691	12.171	8.033	465	283	1	1	72	87
YUMA PROVING GROUND, YUMA, ARIZ.	22.835	14.985	5.885	5.885	426	777	-0	-0	56	44
ARMY MATERIAL SYSTEMS AND ANALYSIS AGENCY, APG, MD.	14.889	7.853	10.844	6.598	14	254	0	2	15	187
TOTALS	1144.178	719.519	824.683	508.837	9387	30089	586	1054	3210	10899

TABLE 2. ARMY RDT&E FACILITIES DATA, FY 1970

INSTALLATION	SPACE AND PROPERTY: ACRES	SPACE (THOUSANDS OF SQUARE FEET): LABORATORY	ADMIN	OTHER	COST (MILLIONS $): REAL PROPERTY	EQUIPMENT
LAND WARFARE LAB, ABERDEEN PROVING GROUND, MD	80	37.311	2.655	12.628	0.679	0.684
BEHAVIORAL SCIENCE RESEARCH LAB, WASHINGTON, D.C.	0	20.716	4.067	1.893	0.166	1.825
ENGINEER TOPOGRAPHIC LAB., FT. BELVOIR, VA.	0	44.214	9.130	2.667	0.000	10.861
ENGINEER WATERWAYS EXPERIMENT STATION, VICKSBURG, MISS.	2100	1369.000	345.200	224.321	14.078	20.031
CONSTRUCTION ENGINEERING RESEARCH LAB, URBANA, ILL.	15	68.875	32.075	2.073	3.481	1.633
INSTITUTE OF SURGICAL RESEARCH, BROOKE AMC, FT. SAM HOUSTON, TEX.	1	11.662	0.802	28.708	0.412	0.739
AEROMEDICAL RESEARCH LAB., FT. RUCKER, ALA.	0	21.495	5.940	7.470	0.191	0.930
INSTITUTE OF DENTAL RESEARCH, WALTER REED AMC, WASHINGTON, D.C.	0	5.640	5.520	1.570	0.022	0.535
MEDICAL BIOMECHANICAL RESEARCH LAB, WALTER REED AMC, WASHINGTON, D.C.	0	11.463	1.022	0.000	0.880	0.360
MEDICAL RESEARCH AND NUTRITION LAB, FITZSIMONS G.H., DENVER, COLO.	0	80.283	5.138	16.620	3.391	4.416
MEDICAL EQUIPMENT R&D LAB, FT. TOTTEN, FLUSHING, N.Y.	0	7.864	3.577	31.709	0.545	0.466
MEDICAL RESEARCH LAB, FT. KNOX, KY.	19	86.042	5.368	26.700	0.938	3.233
RESEARCH INSTITUTE OF ENVIRONMENTAL MEDICINE, NATICK, MASS	0	70.157	12.356	30.617	0.922	2.616
WALTER REED ARMY INSTITUTE OF RESEARCH, WASHINGTON, D.C.	1170	353.200	57.500	0.000	0.000	12.511
MEDICAL RESEARCH UNIT, BALBOA HEIGHTS, CANAL ZONE	0	5.000	0.000	0.000	0.000	0.061
MEDICAL RESEARCH UNIT, KUALA LUMPUR, MALAYSIA	0	7.000	0.900	0.000	0.100	0.200
MEDICAL RESEARCH OF INFECTIOUS DISEASES, FT DETRICK, MD.	15	88.143	17.622	97.731	8.236	1.930
LETTERMAN ARMY INST. OF RESEARCH, PRESIDIO OF SAN FRANCISCO, CALIF.	0	107.200	12.800	1.600	0.052	2.472
AERONAUTICAL RESEARCH LAB, AMES RESEARCH CENTER, MOFFETT FIELD, CAL.	0	5.621	2.207	0.096	0.000	0.000
BALLISTIC RESEARCH LABS, ABERDEEN PROVING GROUND, MD.	3362	190.717	41.580	24.030	11.065	16.653
COATING AND CHEMICAL LAB., ABERDEEN PROVING GROUND, MD.	1	16.625	1.868	4.269	0.200	0.409
COLD REGIONS R&E LAB, HANOVER, N.H.	769	19.213	9.848	108.415	3.896	4.455
HARRY DIAMOND LABS, WASHINGTON, D.C.	2138	296.807	49.555	286.364	6.431	18.545
HUMAN ENGINEERING LABS, ABERDEEN PROVING GROUND, MD.	10	26.500	17.605	24.658	2.608	2.357
MATERIALS AND MECHANICS RESEARCH CENTER, WATERTOWN, MASS.	48	410.100	122.400	129.000	14.770	11.387
NUCLEAR DEFENSE LAB., EDGEWOOD ARSENAL, MD.	109	35.622	32.599	3.795	1.385	5.592
NATICK LABS., NATICK, MASS.	3206	525.200	69.320	365.680	35.154	11.493
AVIATION MATERIEL LABS., FT. EUSTIS, VA.	108	75.393	38.890	15.788	1.469	5.521
AVIATION TEST ACTIVITY, EDWARDS AFB, CAL.	9	4.280	32.830	98.490	1.140	3.627
ELECTRONICS R&D LAB, FT. MONMOUTH, N.J.	940	852.625	82.803	581.554	41.526	160.764
MISSILE COMMAND R&D LABS., REDSTONE ARSENAL, ALA.	11000	695.768	128.907	92.577	23.650	34.200
MOBILITY EQUIPMENT R&D CENTER, FT. BELVOIR, MD.	1060	246.637	200.490	348.865	23.525	29.718
FRANKFORD ARSENAL LABS., PHILA., PA.	22	558.200	134.000	557.000	2.970	8.936
PICATINNY ARSENAL LABS., DOVER, N.J.	5852	613.522	860.038	2368.504	71.747	47.846
BIOLOGICAL LABS., FT. DETRICK, MD.	1205	1046.390	114.055	829.150	68.929	19.596
EDGEWOOD ARSENAL LABS., EDGEWOOD ARSENAL, MD.	4055	513.536	146.425	184.523	18.591	8.922
ROCK ISLAND ARSENAL LABS., ROCK ISLAND, ILL.	18	352.462	82.525	71.097	1.463	9.840
WATERVLIET ARSENAL LABS., WATERVLIET, N.Y.	4	186.260	23.250	0.000	1.252	3.356
TANK-AUTOMOTIVE COMMAND LABS., WARREN, MICH.	1125	315.908	0.000	0.000	13.183	7.330
DESERT TEST CENTER(LABS) DUGWAY, UTAH	846299	186.483	124.691	1652.334	67.621	36.564
WHITE SANDS MISSILE RANGE, WHITE SANDS, N.M.	4535464	1432.878	321.553	2889.217	139.714	138.373
ARCTIC TEST CENTER, FT. GREELY, ALASKA	726207	11.126	34.584	181.862	34.962	7.625
TROPIC TEST CENTER, FT. CLAYTON, CANAL ZONE	34127	55.007	125.623	175.194	6.100	2.118
DEVELOPMENT AND PROOF SERVICES, APG, MD.	71205	0.000	5.419	974.695	242.861	105.767
INFANTRY BOARD, FT. BENNING, GA.	0	2.250	54.638	19.281	0.400	0.360
AIRBORNE, ELECTRONIC AND SPECIAL WARFARE BOARD, FT. BRAGG, N.C.	0	0.000	36.134	78.358	0.782	2.800
AIR DEFENSE BOARD, FT. BLISS, TEX.	26	35.718	33.478	77.417	1.769	11.344
ARMOR AND ENGINEER BOARD, FT. KNOX, KY	6570	6.200	68.068	328.093	8.300	2.271
ARTILLERY BOARD, FT. SILL, OKLA.	23	4.008	61.245	39.758	0.000	1.030
AVIATION TEST BOARD, FT. RUCKER, ALA.	2149	3.218	19.190	207.155	2.655	11.850
GENERAL EQUIPMENT TEST ACTIVITY, FT. LEE, VA.	453	68.589	121.625	21.360	1.500	2.288
ELECTRONICS PROVING GROUND, FT. HUACHUCA, ARIZ	9231	0.000	219.847	0.000	4.415	33.789
YUMA PROVING GROUND, YUMA, ARIZ.	943864	0.000	72.280	429.186	74.724	46.038
ARMY MATERIAL SYSTEMS AND ANALYSIS AGENCY, APG, MD.	4	9.800	19.421	3.685	0.845	3.331
TOTALS	7213861	11213.922	4030.463	13655.651	962.651	881.801

TABLE 3. NAVY RDT+E ACTIVITIES, PROGRAM AND PERSONNEL DATA, FY 1970

INSTALLATION	FUNDING DATA (MILLIONS $)				PERSONNEL DATA					
	TOTAL	TOTAL IN-HOUSE	TOTAL RDT+E	IN-HOUSE RDT+E	TOTAL MIL	TOTAL CIV	PHD MIL	PHD CIV	PROF MIL	PROF CIV
NAVAL UNDERWATER WEAPONS R&E STATION, NEWPORT, R.I.	33.625	21.985	9.894	6.6	64	1580	0	20	13	602
NAVAL AIR ENGINEERING CENTER, PHILADELPHIA, PA.	74.762	37.360	7.329	4.874	81	2231	1	0	20	360
NAVAL SHIP R&D CENTER, WASHINGTON, D.C.	61.515	36.454	45.933	25.990	25	1933	3	62	25	748
NAVAL RESEARCH LABORATORY, WASHINGTON, D.C.	101.714	94.915	89.133	82.334	90	3626	3	363	10	1370
NAVAL WEAPONS LABORATORY, DAHLGREN, VA.	63.595	48.381	20.098	16.640	122	2499	0	54	30	910
NAVAL AIR TEST CENTER, PATUXENT RIVER, MD.	63.800	58.066	25.840	23.827	1158	2198	0	1	157	421
NAVAL ELECTRONICS LABORATORY CENTER, SAN DIEGO, CALIF.	42.515	40.148	32.707	30.468	126	1412	3	50	45	699
NAVAL EXPLOSIVE ORDNANCE DISPOSAL FACILITY, INDIAN HEAD, MD.	3.620	2.329	1.115	0.757	57	132	0	0	12	13
NAVY TOXICOLOGY UNIT, NNMC, BETHESDA, MD.	0.300	0.300	0.180	0.180	17	8	0	0	6	4
NAVAL WEAPONS CENTER, CHINA LAKE, CALIF.	185.083	102.173	96.359	63.547	723	4851	0	92	26	1409
NAVAL UNIT, FORT DETRICK, FREDERICK, MD.	0.224	0.224	0.099	0.099	13	0	0	0	3	0
NAVAL MEDICAL RESEARCH UNIT NO.1, BERKELEY, CALIF.	0.254	0.254	0.084	0.084	15	3	2	1	6	2
NAVAL ORDNANCE LABORATORY, WHITE OAK, MD.	70.866	54.095	53.080	40.627	53	2907	1	118	27	1016
NAVAL SHIP R+D LAB., PANAMA CITY, FLA.	14.921	12.552	10.821	8.959	163	614	4	11	15	241
NAVAL TRAINING DEVICES CENTER, ORLANDO, FLA.	88.966	22.126	17.922	10.640	49	1148	1	18	23	304
NAVAL SHIP R+D LAB., ANNAPOLIS, MD.	21.633	20.024	17.379	15.904	6	968	0	31	4	446
NAVAL MEDICAL RESEARCH UNIT NO.3, CAIRO, EGYPT	1.750	1.750	1.372	1.372	33	117	7	12	11	18
PACIFIC MISSILE RANGE, POINT MUGU, CALIF.	95.222	64.428	67.659	43.713	860	3057	8	7	94	428
NAVAL ORDNANCE MISSILE TEST FACILITY, WHITE SANDS, N. MEX.	3.576	3.139	1.708	1.490	195	89	2	1	52	4
NAVAL MEDICAL FIELD RESEARCH LAB., CAMP LEJEUNE, N.C.	1.113	1.113	0.755	0.755	29	52	7	3	9	9
NAVAL AIR DEVELOPMENT CENTER, JOHNSVILLE, PA.	88.232	56.205	68.150	44.925	430	2251	8	24	94	989
NAVAL MEDICAL RESEARCH UNIT NO.4, GREAT LAKES, ILL.	1.038	1.038	0.643	0.643	34	45	7	1	13	8
NAVY CLOTHING AND TEXTILE RESEARCH UNIT, NATICK, MASS.	1.216	1.216	0.595	0.595	2	66	2	0	0	24
NAVAL AIR PROPULSION TEST CENTER, TRENTON, N. J.	12.566	11.020	6.572	5.757	10	710	0	0	6	155
NAVAL CIVIL ENGINEERING LABORATORY, PORT HUENEME, CAL.	11.538	7.972	5.684	4.092	16	365	2	32	8	177
NAVAL WEAPONS EVALUATION FACILITY, ALBUQUERQUE, N.MEX.	4.081	4.053	1.432	1.404	236	92	0	1	64	36
NAVAL MEDICAL RESEARCH UNIT NO.2, TAIPEI, TAIWAN	1.905	1.905	1.325	1.325	36	10	11	2	16	3
NAVAL AEROSPACE RECOVERY FACILITY, EL CENTRO, CALIF.	4.684	4.659	3.029	3.004	171	109	1	0	16	21
NAVY WEATHER RESEARCH FACILITY, NORFOLK, VA.	1.885	1.063	1.308	0.868	14	58	2	2	8	29
NAVAL AIR TEST FACILITY, LAKEHURST, N. J.	11.166	11.166	2.236	2.236	155	429	0	0	9	75
NAVY MEDICAL NEUROPSYCHIATRIC RESEARCH UNIT, SAN DIEGO, CALIF.	0.966	0.966	0.836	0.836	9	52	8	7	8	18
NAVAL MISSILE CENTER, POINT MUGU, CALIF.	53.254	41.296	25.614	19.306	727	1580	3	7	52	472
NAVAL PERSONNEL RESEARCH ACTIVITY, SAN DIEGO, CALIF.	3.136	3.136	2.862	2.862	35	195	0	30	35	102
NAVAL MEDICAL RESEARCH INSTITUTE, NNMC, BETHESDA, MD.	6.508	6.508	4.555	4.555	172	245	36	43	81	119
NAVAL BLOOD RESEARCH LAB., N. H., CHELSEA, MASS.	0.407	0.407	0.272	0.272	9	13	3	1	4	2
NAVY SPACE SYSTEMS ACTIVITY, LOS ANGELES, CALIF.	7.591	0.549	7.591	0.549	28	58	1	1	9	19
NAVAL DENTAL RESEARCH INSTITUTE, NTC, GREAT LAKES, ILL.	0.558	0.558	0.313	0.313	17	10	7	2	8	6
ATLANTIC UNDERSEA TEST AND EVALUATION CENTER, W. PALM BEACH, FLA.	13.468	3.013	12.005	2.328	55	88	0	0	6	31
NAVY ELECTRONIC SYSTEMS T&E FACILITY, PATUXENT RIVER, MD.	4.678	4.678	1.598	1.598	35	134	0	0	6	51
NAVAL UNDERSEA R+D CENTER, SAN DIEGO, CALIF.	60.602	39.247	34.116	24.030	371	1462	3	65	27	615
NAVAL PERSONNEL R&D LAB, WASHINGTON, D.C.	3.997	3.997	3.156	3.156	24	231	1	6	14	135
NAVAL AEROSPACE MEDICAL RESEARCH LAB, PENSACOLA, FLA.	3.599	3.599	3.192	3.192	26	114	7	17	10	32
NAVAL SUBMARINE MEDICAL RESEARCH LAB, NEW LONDON, GROTON, CONN.	1.796	1.796	1.226	1.226	23	66	7	11	12	35
NAVY UNDERWATER SOUND LABORATORY, NEW LONDON, CONN.	35.052	26.096	23.886	17.778	61	1306	0	34	10	586
TOTALS	1262.977	857.959	711.663	526.759	6575	39114	149	1130	1104	12724

TABLE 4. NAVY RDT+E FACILITIES DATA, FY 1970

INSTALLATION	SPACE AND PROPERTY: ACRES	SPACE (THOUSANDS OF SQUARE FEET): LABORATORY	ADMIN	OTHER	COST (MILLIONS $): REAL PROPERTY	EQUIPMENT
NAVAL UNDERWATER WEAPONS R&D STATION, NEWPORT, R.I.	202	189.148	133.959	355.278	13.951	13.262
NAVAL AIR ENGINEERING CENTER, PHILADELPHIA, PA.	560	1390.066	157.635	727.159	33.520	19.098
NAVAL SHIP R&D CENTER, WASHINGTON, D.C.	208	811.955	132.118	504.042	50.575	31.059
NAVAL RESEARCH LABORATORY, WASHINGTON, D.C.	2178	2024.770	205.998	694.562	68.694	67.167
NAVAL WEAPONS LABORATORY, DAHLGREN, VA.	4490	482.647	72.296	832.770	37.469	29.994
NAVAL AIR TEST CENTER, PATUXENT RIVER, MD.	6861	741.022	186.064	3094.351	114.810	28.229
NAVAL ELECTRONICS LABORATORY CENTER, SAN DIEGO, CALIF.	1944	571.413	113.084	176.445	12.906	29.968
NAVAL EXPLOSIVE ORDNANCE DISPOSAL FACILITY, INDIAN HEAD, MD.	1084	37.327	26.759	33.914	4.707	0.915
NAVY TOXICOLOGY UNIT, NNMC, BETHESDA, MD.	0	22.600	1.400	1.416	1.870	3.600
NAVAL WEAPONS CENTER, CHINA LAKE, CALIF.	1095805	1680.971	220.422	5215.541	227.449	84.301
NAVAL UNIT, FORT DETRICK, FREDERICK, MD.	0	0.000	2.025	0.081	0.000	0.008
NAVAL MEDICAL RESEARCH UNIT NO.1, BERKELEY, CALIF.	0	1.550	0.360	0.080	0.000	0.259
NAVAL ORDNANCE LABORATORY, WHITE OAK, MD.	1266	355.903	75.036	739.599	46.970	28.321
NAVAL SHIP R+D LAB., PANAMA CITY, FLA.	641	165.304	35.296	292.336	14.352	10.456
NAVAL TRAINING DEVICES CENTER, ORLANDO, FLA.	62	93.500	201.356	121.560	2.794	3.183
NAVAL SHIP R+D LAB., ANNAPOLIS, MD.	66	337.000	42.000	120.000	13.411	8.656
NAVAL MEDICAL RESEARCH UNIT NO.3, CAIRO, EGYPT	5	25.000	7.000	44.000	2.791	0.561
PACIFIC MISSILE RANGE, POINT MUGU, CALIF.	29164	50.000	300.000	2000.000	149.450	88.750
NAVAL ORDNANCE MISSILE TEST FACILITY, WHITE SANDS, N. MEX.	112	84.742	30.719	236.239	6.552	3.361
NAVAL MEDICAL FIELD RESEARCH LAB., CAMP LEJEUNE, N.C.	3	28.225	8.655	15.590	0.490	0.600
NAVAL AIR DEVELOPMENT CENTER, JOHNSVILLE, PA.	750	912.700	97.848	298.743	22.163	38.418
NAVAL MEDICAL RESEARCH UNIT NO.4, GREAT LAKES, ILL.	1	28.732	11.576	13.649	0.365	0.398
NAVY CLOTHING AND TEXTILE RESEARCH UNIT, NATICK, MASS.	2	10.004	7.000	3.000	0.275	0.493
NAVAL AIR PROPULSION TEST CENTER, TRENTON, N. J.	66	410.097	51.520	135.954	44.154	12.990
NAVAL CIVIL ENGINEERING LABORATORY, PORT HUENEME, CAL.	22	120.352	21.977	31.548	4.956	4.902
NAVAL WEAPONS EVALUATION FACILITY, ALBUQUERQUE, N.MEX.	4	17.942	17.942	91.118	1.700	0.374
NAVAL MEDICAL RESEARCH UNIT NO.2, TAIPEI, TAIWAN	2	32.780	38.674	17.826	2.000	0.730
NAVAL AEROSPACE RECOVERY FACILITY, EL CENTRO, CALIF.	101290	33.000	10.000	263.000	8.598	2.494
NAVY WEATHER RESEARCH FACILITY, NORFOLK, VA.	1	11.886	1.401	4.351	0.072	0.422
NAVAL AIR TEST FACILITY, LAKEHURST, N. J.	2500	59.895	30.498	0.002	40.181	6.912
NAVY MEDICAL NEUROPSYCHIATRIC RESEARCH UNIT, SAN DIEGO, CALIF.	0	11.177	4.500	0.000	0.000	0.218
NAVAL MISSILE CENTER, POINT MUGU, CALIF.	3	101.925	150.569	633.941	16.412	38.240
NAVAL PERSONNEL RESEARCH ACTIVITY, SAN DIEGO, CALIF.	1	47.300	4.900	0.000	0.210	0.254
NAVAL MEDICAL RESEARCH INSTITUTE, NNMC, BETHESDA, MD.	4	166.264	12.945	18.828	3.775	3.235
NAVAL BLOOD RESEARCH LAB., N. H., CHELSEA, MASS.	1	6.263	0.161	1.000	0.115	0.421
NAVY SPACE SYSTEMS ACTIVITY, LOS ANGELES, CALIF.	0	2.000	6.000	0.000	0.000	0.025
NAVAL DENTAL RESEARCH INSTITUTE, NTC, GREAT LAKES, ILL.	0	6.997	0.897	8.664	0.000	0.275
ATLANTIC UNDERSEA TEST AND EVALUATION CENTER, W. PALM BEACH, FLA.	1154	73.580	6.536	206.117	21.045	76.738
NAVY ELECTRONIC SYSTEMS T&E FACILITY, PATUXENT RIVER, MD.	852	22.944	2.502	14.295	0.102	0.296
NAVAL UNDERSEA R+D CENTER, SAN DIEGO, CALIF.	37619	316.890	33.457	684.722	36.703	42.274
NAVAL PERSONNEL R&D LAB, WASHINGTON, D.C.	0	22.156	2.703	1.420	0.652	0.389
NAVAL AEROSPACE MEDICAL RESEARCH LAB,PENSACOLA, FLA.	3	96.787	9.604	12.893	2.791	1.366
NAVAL SUBMARINE MEDICAL RESEARCH LAB, NEW LONDON, GROTON, CONN.	2	48.297	1.753	0.000	1.493	1.093
NAVY UNDERWATER SOUND LABORATORY, NEW LONDON, CONN.	126	298.153	33.087	218.430	13.909	15.826
TOTALS	1288852	11947.409	2510.232	17864.460	1013.430	700.531

TABLE 5. AIR FORCE RDT+E ACTIVITIES, PROGRAM AND PERSONNEL DATA, FY 1970

INSTALLATION	FUNDING DATA (MILLIONS $)				PERSONNEL DATA					
	TOTAL	TOTAL IN-HOUSE	TOTAL RDT+E	IN-HOUSE RDT+E	TOTAL MIL	TOTAL CIV	PHD MIL	PHD CIV	PROF MIL	PROF CIV
MATERIALS LAB., WPAFB, OHIO	56.495	8.539	38.495	8.539	57	358	9	38	54	267
AEROSPACE RESEARCH LABORATORIES, WPAFB, OHIO	13.893	8.761	12.656	7.524	81	228	11	57	61	108
FRANK J. SEILER RESEARCH LAB., ACADEMY, COLO.	0.527	0.527	0.503	0.503	24	14	13	1	20	3
CAMBRIDGE RESEARCH LABS., L.G. HANSCOM FLD., MASS.	57.130	30.532	55.046	28.620	178	1054	9	154	76	605
OFFICE OF RESEARCH ANALYSES, HOLLOMAN AFB, N.M.	0.868	0.868	0.631	0.631	15	27	2	5	10	16
6571 AEROMEDICAL LAB., HOLLOMAN AFB, N.M.	1.932	1.531	1.402	1.001	57	27	14	7	23	11
SCHOOL OF AVIATION MEDICINE, BROOKS AFB, TEX.	15.659	12.776	9.569	6.686	521	393	72	45	162	149
6570 AEROSPACE MEDICAL RES. LAB., WPAFB, OHIO	8.930	5.206	7.432	3.708	126	166	27	26	80	96
AEROSPACE MEDICAL LAB. (CLINICAL), LACKLAND AFB, TEX.	0.495	0.442	0.183	0.130	28	2	5	0	11	0
ROME AIR DEVELOPMENT CENTER, GRIFFISS AFB, N. Y.	132.995	25.926	69.168	22.108	326	1215	2	11	186	595
AVIONICS LAB., WPAFB, OHIO	95.115	7.665	95.115	7.665	86	467	5	9	76	274
HUMAN RESOURCES LAB., BROOKS AFB, TEX.	7.407	3.652	5.829	2.674	156	199	9	29	52	86
WEAPONS LAB., KIRTLAND AFB, N.M.	55.791	12.313	55.581	12.291	629	305	47	12	423	103
AEROPROPULSION LAB., WPAFB, OHIO	53.467	5.972	52.560	5.862	58	331	3	5	52	170
FLIGHT DYNAMICS LAB., WPAFB, OHIO	52.206	13.917	51.779	13.917	88	626	10	2	82	338
ROCKET PROPULSION LAB., EDWARDS AFB, CALIF.	39.798	13.977	37.405	11.734	267	415	17	11	124	118
ARMAMENT LAB., EGLIN AFB, FLA.	17.048	6.221	17.048	6.221	140	231	9	7	105	148
FLIGHT TEST CENTER, EDWARDS AFB, CALIF.	65.573	57.613	38.302	31.780	2971	1882	3	0	268	156
SPECIAL WEAPONS CENTER, KIRTLAND AFB, N.M.	39.400	35.078	19.346	15.346	1479	1154	20	3	267	115
AIR PROVING GROUND CENTER, EGLIN AFB, FLA.	310.893	113.853	74.533	59.922	4709	2739	11	11	440	532
MISSILE DEVELOPMENT CENTER, HOLLOMAN AFB, N.M.	61.495	55.617	41.870	36.866	1982	1578	48	8	230	157
ARNOLD ENGINEERING DEVELOPMENT CENTER, TENN.	62.623	4.637	48.523	0.000	95	150	1	1	64	48
EASTERN TEST RANGE, PATRICK AFB, FLA.	237.714	40.428	164.796	18.420	1941	2146	34	1	401	141
SPACE + MISSILE TEST CENTER, VANDENBURG AFB, CALIF.	88.632	39.719	83.275	34.935	596	507	0	0	71	175
TOTALS	1476.094	585.770	981.047	337.083	16610	16214	381	443	3338	4411

TABLE 6. AIR FORCE RDT+E FACILITIES DATA, FY 1970

INSTALLATION	SPACE AND PROPERTY: ACRES	SPACE (THOUSANDS OF SQUARE FEET): LABORATORY	ADMIN	OTHER	COST (MILLIONS $): REAL PROPERTY	EQUIPMENT
MATERIALS LAB., WPAFB, OHIO	9	212.000	22.000	38.000	6.500	9.325
AEROSPACE RESEARCH LABORATORIES, WPAFB, OHIO	50	124.114	28.512	34.719	10.353	11.910
FRANK J. SEILER RESEARCH LAB., ACADEMY, COLO.	0	7.855	2.860	0.240	1.062	1.016
CAMBRIDGE RESEARCH LABS., L.G. HANSCOM FLD., MASS.	921	557.759	21.900	120.426	18.473	31.349
OFFICE OF RESEARCH ANALYSIS, HOLLOMAN AFB, N.M.	0	4.676	1.203	5.607	0.189	0.094
6571 AEROMEDICAL LAB., HOLLOMAN AFB, N.M.	45	61.000	8.000	1393.000	2.774	2.020
SCHOOL OF AVIATION MEDICINE, BROOKS AFB, TEX.	93	425.450	89.484	51.677	13.487	20.986
6570 AEROSPACE MEDICAL RES. LAB., WPAFB, OHIO	30	112.946	51.020	68.747	11.387	21.806
AEROSPACE MEDICAL LAB. (CLINICAL), LACKLAND AFB, TEX.	1	6.614	1.467	1.800	0.154	0.756
ROME AIR DEVELOPMENT CENTER, GRIFFISS AFB, N.Y.	2791	754.733	92.403	176.240	22.861	78.494
AVIONICS LAB., WPAFB, OHIO	215	195.045	5.304	160.528	11.287	10.845
HUMAN RESOURCES LAB., BROOKS AFB, TEX.	13	63.832	20.702	8.428	1.631	2.473
WEAPONS LAB., KIRTLAND AFB, N.M.	391	323.623	12.774	9.153	6.972	24.518
AEROPROPULSION LAB., WPAFB, OHIO	40	368.580	70.400	220.700	13.091	13.612
FLIGHT DYNAMICS LAB., WPAFB, OHIO	90	537.130	56.600	26.000	22.900	18.427
ROCKET PROPULSION LAB., EDWARDS AFB, CALIF.	54400	757.213	149.348	87.165	29.572	26.095
ARMAMENT LAB., EGLIN AFB, FLA.	41	50.100	51.490	36.410	4.082	2.431
FLIGHT TEST CENTER, EDWARDS AFB, CALIF.	279887	562.853	419.038	5232.053	178.878	287.899
SPECIAL WEAPONS CENTER, KIRTLAND AFB, N.M.	3057	228.021	334.514	1659.257	48.605	88.152
AIR PROVING GROUND CENTER, EGLIN AFB, FLA.	465209	653.221	885.840	6829.018	191.059	218.132
MISSILE DEVELOPMENT CENTER, HOLLOMAN AFB, N.M.	106998	933.701	212.795	4365.351	131.038	97.866
ARNOLD ENGINEERING DEVELOPMENT CENTER, TENN.	40119	1113.556	198.831	535.861	350.346	4.956
EASTERN TEST RANGE, PATRICK AFB, FLA.	18264	157.188	359.002	7325.083	372.075	649.666
SPACE + MISSILE TEST CENTER, VANDENBURG AFB, CALIF.	1546	31.543	340.962	2057.499	16.388	134.800
TOTALS	974210	8242.833	3436.449	30442.961	1465.364	1757.628

TABLE 7. ARMY RDT+E A. 'IVITIES, PROGRAM AND PERSONNEL DATA, FY 1978

INSTALLATION		FUNDING DATA (MILLIONS $)				PERSONNEL DATA					
		TOTAL	TOTAL IN-HOUSE	TOTAL RDT+E	IN-HOUSE RDT+E	TOTAL MIL	TOTAL CIV	PHD MIL	PHD CIV	PROF MIL	PROF CIV
ARMED FORCES	RADIOBIOLOGY RES. INSTITUTE BETHESDA, MD	3.428	3.428	2.697	2.697	67	145	20	10	41	30
	TOTALS	3.428	3.428	2.697	2.697	67	145	20	10	41	30

TABLE 8. ARMY RDT+E FACILITIES DATA, FY 1978

INSTALLATION		SPACE AND PROPERTY				COST (MILLIONS $)	
		ACRES	SPACE (THOUSANDS OF SQUARE FEET) LABORATORY	ADMIN	OTHER	REAL PROPERTY	EQUIPMENT
ARMED FORCES	RADIOBIOLOGY RES. INSTITUTE BETHESDA, MD	7	0.044	0.011	0.065	6.135	2.363
	TOTALS	7	0.044	0.011	0.065	6.135	2.363

SUMMARY

DEPARTMENT OF DEFENSE R&D LABORATORIES

PROGRAM DATA FOR FY 1970 (ACTUAL)

	(MILLIONS $)
TOTAL ANNUAL LABORATORY PROGRAM	2475.904
TOTAL IN-HOUSE PROGRAM	1309.656
TOTAL RDT+E PROGRAM	1695.565
TOTAL IN-HOUSE RDT+E	929.132
TOTAL ANNUAL OPERATING COST	334.174

PERSONNEL DATA (END OF FY 1970)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHD	TOTAL PROFESSIONALS
MILITARY	9305	867	4013
CIVILIAN	58601	2548	23710
TOTAL	67906	3415	27723

PHYSICAL FACILITIES (END OF FY 1970)

ACRES	1243130
SPACE (THOUSANDS OF SQ FT)	
LABORATORY	24498.086
ADMINISTRATIVE	5414.776
OTHER	20188.210
TOTAL	50101.072
COST (MILLIONS $)	
REAL PROPERTY	1157.781
EQUIPMENT	1189.605
TOTAL	2353.386

TABLE 1A. ARMY R+D LABORATORIES, PROGRAM AND PERSONNEL DATA, FY 1970

INSTALLATION	FUNDING DATA (MILLIONS $) TOTAL	TOTAL IN-HOUSE	TOTAL RDT+E	IN-HOUSE RDT+E	PERSONNEL DATA TOTAL MIL	TOTAL CIV	PHD MIL	PHD CIV	PROF MIL	PROF CIV
LAND WARFARE LAB, ABERDEEN P.G., MD.	9.167	5.146	8.473	4.578	18	124	0	3	15	57
BEHAVIORAL SCIENCE RESEARCH LAB, WASHINGTON, D.C.	2.882	1.926	2.882	1.926	4	83	0	23	1	55
ENGINEER TOPOGRAPHIC LAB., FT. BELVOIR, VA.	12.514	5.071	12.329	4.886	11	242	1	10	7	124
ENGINEER WATERWAYS EXPERIMENT STATION, VICKSBURG, MISS.	20.063	18.573	11.952	10.462	36	1118	2	29	43	341
CONSTRUCTION ENGINEERING RESEARCH LAB, URBANA, ILL.	3.319	2.741	2.776	2.414	1	130	1	10	1	40
AEROMEDICAL RESEARCH LAB., FT. RUCKER, ALA.	1.216	1.216	0.790	0.790	36	19	16	1	31	2
INSTITUTE OF DENTAL RESEARCH, WALTER REED AMC, WASHINGTON, D.C.	1.074	1.074	0.495	0.495	63	25	2	1	32	8
MEDICAL BIOMECHANICAL RESEARCH LAB, WALTER REED AMC, WASHINGTON, D.C.	0.731	0.731	0.616	0.616	17	32	0	4	9	21
MEDICAL RESEARCH AND NUTRITION LAB, FITZSIMONS G.H., DENVER, COLO.	3.280	3.280	2.244	2.244	117	98	28	13	57	45
MEDICAL EQUIPMENT R&D LAB, FT. TOTTEN, FLUSHING, N.Y.	0.877	0.877	0.727	0.727	15	39	0	0	2	8
MEDICAL RESEARCH LAB, FT. KNOX, KY.	3.047	3.047	1.803	1.803	125	133	9	14	53	31
RESEARCH INSTITUTE OF ENVIRONMENTAL MEDICINE, NATICK, MASS.	3.310	3.310	2.630	2.630	86	116	22	25	86	57
WALTER REED ARMY INSTITUTE OF RESEARCH, WASHINGTON, D.C.	17.843	17.642	11.696	11.495	623	586	155	70	214	200
MEDICAL RESEARCH OF INFECTIOUS DISEASES, FT. DETRICK, MD.	5.978	5.057	3.780	2.859	318	89	45	8	48	19
LETTERMAN ARMY INSTITUTE OF RESEARCH, PRESIDIO OF SAN FRANCISCO, CAL.	0.959	0.959	0.493	0.493	84	18	21	3	55	9
AERONAUTICAL RESEARCH LAB, AMES RESEARCH CENTER, MOFFETT FIELD, CAL	2.569	2.569	2.532	2.532	3	111	2	5	4	33
BALLISTIC RESEARCH LABS, ABERDEEN PROVING GROUND, MD.	19.777	18.271	19.394	17.888	36	681	4	56	30	344
COATING AND CHEMICAL LAB., ABERDEEN PROVING GROUND, MD	2.349	1.211	2.012	1.031	5	46	2	3	8	20
COLD REGIONS R&E LAB, HANOVER, N.H.	6.731	5.840	6.036	5.145	47	212	4	19	69	75
HARRY DIAMOND LABS, WASHINGTON, D.C.	73.086	32.013	23.004	17.350	10	1318	5	27	11	616
HUMAN ENGINEERING LABS, ABERDEEN PROVING GROUND, MD.	2.916	2.488	2.760	2.332	33	95	3	10	26	53
MATERIALS AND MECHANICS RESEARCH CENTER, WATERTOWN, MASS.	16.110	12.454	11.127	9.495	12	652	6	54	12	211
NUCLEAR DEFENSE LAB., EDGEWOOD ARSENAL, MD.	2.781	2.628	2.553	2.400	40	75	3	14	42	51
NATICK LABS., NATICK, MASS	27.717	22.579	15.274	12.264	154	1305	10	99	78	503
AVIATION MATERIEL LABS., FT. EUSTIS, VA.	22.908	5.545	22.904	5.541	50	306	0	0	14	132
ELECTRONICS R&D LAB, FT. MONMOUTH, N.J.	178.776	89.608	154.025	75.570	935	3155	18	121	307	1557
MISSILE COMMAND R+D LABS., REDSTONE ARSENAL, ALA.	79.263	39.294	71.877	31.908	67	982	6	46	46	702
MOBILITY EQUIPMENT R&D CENTER, FT. BELVOIR, VA.	70.914	24.160	35.313	16.755	59	1425	2	16	37	491
FRANKFORD ARSENAL LABS., PHILADELPHIA, PA.	34.882	23.354	26.965	15.437	23	1657	1	29	23	1349
PICATINNY ARSENAL LABS., DOVER, N.J.	83.953	37.351	63.800	28.114	76	2000	3	54	69	1131
BIOLOGICAL LABS., FT. DETRICK, MD.	25.347	24.206	20.411	19.999	209	1434	25	106	108	388
EDGEWOOD ARSENAL LABS., EDGEWOOD ARSENAL, MD.	43.031	38.768	32.516	28.253	245	1232	66	70	213	675
ROCK ISLAND ARSENAL LABS., ROCK ISLAND, ILL	23.594	11.341	17.638	7.734	18	796	-0	26	15	291
WATERVLIET ARSENAL LABS., WATERVLIET, N.Y.	10.011	9.447	4.815	4.355	4	452	2	42	2	176
TANK-AUTOMOTIVE COMMAND LABS., WARREN, MICH.	72.046	26.194	25.945	13.438	19	1039	1	5	16	432
ARMY MATERIAL SYSTEMS AND ANALYSIS AGENCY, APG, MD.	14.009	7.853	10.044	6.590	14	254	0	2	15	187
TOTALS	890.990	507.824	634.629	372.547	3613	22079	465	1018	1799	10434

TABLE 2A. ARMY R+D FACILITIES DATA, FY 1970

INSTALLATION	ACRES	SPACE AND PROPERTY: SPACE (THOUSANDS OF SQUARE FEET) LABORATORY	ADMIN	OTHER	COST (MILLIONS $) REAL PROPERTY	EQUIPMENT
LAND WARFARE LAB, ABERDEEN P.G., MD.	80	37.311	2.655	12.628	0.679	0.684
BEHAVIORAL SCIENCE RESEARCH LAB, WASHINGTON, D.C.	0	26.816	4.067	1.893	0.166	1.825
ENGINEER TOPOGRAPHIC LAB., FT. BELVOIR, VA.	0	44.014	9.130	2.660	0.000	10.861
ENGINEER WATERWAYS EXPERIMENT STATION, VICKSBURG, MISS.	2100	1369.000	345.000	224.301	14.078	20.031
CONSTRUCTION ENGINEERING RESEARCH LAB, URBANA, ILL.	15	68.875	32.075	0.000	3.481	1.633
AEROMEDICAL RESEARCH LAB., FT. RUCKER, ALA.	0	21.495	5.940	7.470	0.191	0.930
INSTITUTE OF DENTAL RESEARCH, WALTER REED AMC, WASHINGTON, D.C.	0	5.640	5.520	1.570	0.000	0.535
MEDICAL BIOMECHANICAL RESEARCH LAB, WALTER REED AMC, WASHINGTON, D.C.	0	11.463	1.022	0.000	0.000	0.360
MEDICAL RESEARCH AND NUTRITION LAB, FITZSIMONS G.H., DENVER, COLO.	0	80.283	5.138	16.620	3.391	4.416
MEDICAL EQUIPMENT R&D LAB, FT. TOTTEN, FLUSHING, N.Y.	0	7.864	3.577	31.709	0.545	0.466
MEDICAL RESEARCH LAB, FT. KNOX, KY.	19	86.542	5.368	26.700	0.938	3.033
RESEARCH INSTITUTE OF ENVIRONMENTAL MEDICINE, NATICK, MASS.	0	70.157	12.356	30.617	6.902	2.616
WALTER REED ARMY INSTITUTE OF RESEARCH, WASHINGTON, D.C.	1170	353.200	57.500	0.000	0.000	12.511
MEDICAL RESEARCH OF INFECTIOUS DISEASES, FT. DETRICK, MD.	15	88.143	17.622	97.731	8.236	1.930
LETTERMAN ARMY INSTITUTE OF RESEARCH, PRESIDIO OF SAN FRANCISCO, CAL.	0	107.200	12.000	1.600	0.052	2.472
AERONAUTICAL RESEARCH LAB, AMES RESEARCH CENTER, MOFFETT FIELD, CAL.	0	9.621	2.207	0.096	0.000	0.000
BALLISTIC RESEARCH LABS, ABERDEEN PROVING GROUND, MD.	3360	198.717	41.500	24.030	11.065	16.653
COATING AND CHEMICAL LAB., ABERDEEN PROVING GROUND, MD.	1	16.625	1.868	4.268	0.200	0.409
COLD REGIONS R&E LAB, HANOVER, N.H.	769	19.013	9.848	108.415	3.896	4.455
HARRY DIAMOND LABS, WASHINGTON, D.C.	2130	296.807	49.655	288.360	6.431	18.548
HUMAN ENGINEERING LABS, ABERDEEN PROVING GROUND, MD.	10	26.500	17.605	24.658	0.608	2.957
MATERIALS AND MECHANICS RESEARCH CENTER, WATERTOWN, MASS.	48	410.100	122.400	129.000	14.770	11.387
NUCLEAR DEFENSE LAB., EDGEWOOD ARSENAL, MD.	109	35.622	32.599	3.795	1.385	5.592
NATICK LABS., NATICK, MASS	3206	525.200	69.320	365.680	35.154	11.493
AVIATION MATERIEL LABS., FT. EUSTIS, VA.	100	75.393	38.890	15.788	1.469	5.521
ELECTRONICS R&D LAB, FT. MONMOUTH, N.J.	940	850.625	82.803	581.554	41.526	160.764
MISSILE COMMAND R+D LABS., REDSTONE ARSENAL, ALA.	11000	695.768	128.907	90.577	23.650	34.000
MOBILITY EQUIPMENT R&D CENTER, FT. BELVOIR, VA.	1063	246.637	200.490	348.865	20.525	29.718
FRANKFORD ARSENAL LABS., PHILADELPHIA, PA.	22	558.200	134.000	557.000	0.970	8.936
PICATINNY ARSENAL LABS., DOVER, N.J.	5852	613.522	860.038	2368.504	71.747	47.846
BIOLOGICAL LABS., FT. DETRICK, MD.	1205	1046.390	114.055	829.150	68.929	19.596
EDGEWOOD ARSENAL LABS., EDGEWOOD ARSENAL, MD.	4055	513.536	146.425	184.523	18.591	8.922
ROCK ISLAND ARSENAL LABS., ROCK ISLAND, ILL.	18	352.462	82.525	71.097	1.463	9.840
WATERVLIET ARSENAL LABS., WATERVLIET, N.Y.	4	186.260	23.250	0.000	1.252	3.356
TANK-AUTOMOTIVE COMMAND LABS., WARREN, MICH.	1125	315.908	0.000	0.000	13.183	7.330
ARMY MATERIAL SYSTEMS AND ANALYSIS AGENCY, APG, MD.	4	9.800	19.421	3.685	0.845	3.331
TOTALS	38233	9380.108	2697.556	6454.544	377.198	474.957

TABLE 3A. NAVY R+D LABORATORIES, PROGRAM AND PERSONNEL DATA, FY 1970

INSTALLATION	FUNDING DATA (MILLIONS $) TOTAL	TOTAL IN-HOUSE	TOTAL RDT+E	IN-HOUSE RDT+E	PERSONNEL DATA TOTAL MIL	TOTAL CIV	PHD MIL	PHD CIV	PROF MIL	PROF CIV
NAVAL UNDERWATER WEAPONS R&E STATION, NEWPORT, R.I.	33.625	21.985	9.894	6.629	64	1580	0	20	13	602
NAVAL AIR ENGINEERING CENTER, PHILADELPHIA, PA.	74.762	37.360	7.329	4.894	81	2231	1	0	20	360
NAVAL SHIP R&D CENTER, WASHINGTON, D.C.	61.515	36.454	45.933	25.990	25	1933	3	62	25	748
NAVAL RESEARCH LABORATORY, WASHINGTON, D.C.	101.714	94.915	89.133	82.334	90	3626	3	363	10	1370
NAVAL WEAPONS LABORATORY, DAHLGREN, VA.	63.595	48.381	20.098	16.640	122	2499	0	54	30	910
NAVAL ELECTRONICS LABORATORY CENTER, SAN DIEGO, CALIF.	42.515	40.148	32.707	30.468	126	1412	3	50	45	699
NAVAL WEAPONS CENTER, CHINA LAKE, CALIF.	189.083	102.173	76.359	63.547	723	4851	0	92	26	1409
NAVAL ORDNANCE LABORATORY, WHITE OAK, MD.	70.866	54.095	53.080	40.627	53	2907	1	118	27	1016
NAVAL SHIP R+D LAB., PANAMA CITY, FLA.	14.921	12.552	10.821	8.959	163	614	4	11	15	241
NAVAL TRAINING DEVICES CENTER, ORLANDO, FLA.	88.966	22.126	17.922	10.640	49	1148	1	18	23	304
NAVAL SHIP R+D LAB., ANNAPOLIS, MD.	21.633	20.024	17.379	15.904	6	968	0	31	4	446
NAVAL MEDICAL RESEARCH UNIT NO.3, CAIRO, EGYPT	1.750	1.750	1.372	1.372	33	117	7	12	11	18
NAVAL MEDICAL FIELD RESEARCH LAB., CAMP LEJEUNE, N.C.	1.113	1.113	0.755	0.755	29	52	7	3	9	9
NAVAL AIR DEVELOPMENT CENTER, JOHNSVILLE, PA.	88.232	56.205	68.150	44.925	430	2251	8	24	94	989
NAVAL MEDICAL RESEARCH UNIT NO.4, GREAT LAKES, ILL.	1.038	1.038	0.643	0.643	34	45	7	1	13	8
NAVY CLOTHING AND TEXTILE RESEARCH UNIT, NATICK, MASS.	1.216	1.216	0.595	0.595	2	66	0	0	0	24
NAVAL CIVIL ENGINEERING LABORATORY, PORT HUENEME, CAL.	11.538	7.972	5.684	4.092	16	365	2	32	8	177
NAVAL MEDICAL RESEARCH UNIT NO.2, TAIPEI, TAIWAN	1.905	1.905	1.325	1.325	36	10	11	2	16	3
NAVY MEDICAL NEUROPSYCHIATRIC RESEARCH UNIT, SAN DIEGO, CALIF.	0.966	0.966	0.836	0.836	9	52	8	7	8	18
NAVAL PERSONNEL RESEARCH ACTIVITY, SAN DIEGO, CALIF.	3.136	3.136	2.862	2.862	35	195	0	30	35	102
NAVAL MEDICAL RESEARCH INSTITUTE, NNMC, BETHESDA, MD.	6.508	6.508	4.555	4.555	172	245	36	43	81	119
NAVAL UNDERSEA R+D CENTER, SAN DIEGO, CALIF.	60.602	39.247	34.116	24.030	371	1462	3	65	27	615
NAVAL PERSONNEL R&D LAB, WASHINGTON, D.C.	3.997	3.997	3.156	3.156	24	231	1	6	14	135
NAVAL AEROSPACE MEDICAL RESEARCH LAB, PENSACOLA, FLA.	3.599	3.599	3.192	3.192	26	114	7	17	10	32
NAVAL SUBMARINE MEDICAL RESEARCH LAB, NEW LONDON, GROTON, CONN.	1.796	1.796	1.226	1.226	23	66	7	11	12	35
NAVY UNDERWATER SOUND LABORATORY, NEW LONDON, CONN.	35.052	26.096	23.886	17.778	61	1306	0	34	10	586
TOTALS	981.643	646.757	553.008	417.974	2803	30346	120	1106	586	10975

TABLE 4A. NAVY R+D FACILITIES DATA, FY 1970

INSTALLATION	SPACE AND PROPERTY: ACRES	SPACE (THOUSANDS OF SQUARE FEET): LABORATORY	ADMIN	OTHER	COST (MILLIONS $): REAL PROPERTY	EQUIPMENT
NAVAL UNDERWATER WEAPONS R&E STATION, NEWPORT, R.I.	202	189.148	133.959	355.278	13.951	13.262
NAVAL AIR ENGINEERING CENTER, PHILADELPHIA, PA.	560	1396.066	157.635	727.159	33.520	19.098
NAVAL SHIP R&D CENTER, WASHINGTON, D.C.	200	811.955	132.110	904.042	50.575	31.059
NAVAL RESEARCH LABORATORY, WASHINGTON, D.C.	2170	2024.770	285.998	694.562	68.694	67.167
NAVAL WEAPONS LABORATORY, DAHLGREN, VA.	4490	482.647	72.296	832.770	32.469	29.994
NAVAL ELECTRONICS LABORATORY CENTER, SAN DIEGO, CALIF.	1944	571.413	113.084	176.445	10.906	29.968
NAVAL WEAPONS CENTER, CHINA LAKE, CALIF.	1895805	1680.971	220.422	5215.541	227.449	84.301
NAVAL ORDNANCE LABORATORY, WHITE OAK, MD.	1666	355.903	75.036	739.599	46.970	28.321
NAVAL SHIP R+D LAB., PANAMA CITY, FLA.	641	165.304	35.296	292.336	14.350	10.456
NAVAL TRAINING DEVICES CENTER, ORLANDO, FLA.	60	93.580	201.356	121.560	2.794	3.183
NAVAL SHIP R+D LAB., ANNAPOLIS, MD.	66	337.300	42.000	120.000	13.411	8.656
NAVAL MEDICAL RESEARCH UNIT NO.3, CAIRO, EGYPT	5	25.000	7.000	44.000	0.791	0.561
NAVAL MEDICAL FIELD RESEARCH LAB., CAMP LEJEUNE, N.C.	3	28.226	6.655	15.590	0.490	0.600
NAVAL AIR DEVELOPMENT CENTER, JOHNSVILLE, PA.	750	910.200	97.840	290.743	22.163	30.410
NAVAL MEDICAL RESEARCH UNIT NO.4, GREAT LAKES, ILL.	1	28.702	11.576	13.649	0.365	0.398
NAVY CLOTHING AND TEXTILE RESEARCH UNIT, NATICK, MASS.	2	10.000	7.000	3.000	0.275	0.495
NAVAL CIVIL ENGINEERING LABORATORY, PORT HUENEME, CAL.	22	120.352	21.977	31.540	4.956	4.902
NAVAL MEDICAL RESEARCH UNIT NO.2, TAIPEI, TAIWAN	2	32.700	30.674	17.826	0.000	0.730
NAVY MEDICAL NEUROPSYCHIATRIC RESEARCH UNIT, SAN DIEGO, CALIF.	0	11.177	4.500	0.000	0.000	0.210
NAVAL PERSONNEL RESEARCH ACTIVITY, SAN DIEGO, CALIF.	1	47.300	4.900	0.000	0.210	0.254
NAVAL MEDICAL RESEARCH INSTITUTE, NNMC, BETHESDA, MD.	4	166.264	12.945	10.020	3.775	3.235
NAVAL UNDERSEA R+D CENTER, SAN DIEGO, CALIF.	37619	316.890	53.457	684.722	36.703	42.274
NAVAL PERSONNEL R&D LAB, WASHINGTON, D.C.	0	22.156	2.703	1.420	0.652	0.389
NAVAL AEROSPACE MEDICAL RESEARCH LAB, PENSACOLA, FLA.	3	96.787	9.604	12.893	2.791	1.366
NAVAL SUBMARINE MEDICAL RESEARCH LAB, NEW LONDON, GROTON, CONN.	2	40.297	1.753	0.000	1.493	1.093
NAVY UNDERWATER SOUND LABORATORY, NEW LONDON, CONN.	126	290.153	33.087	210.430	13.989	15.026
TOTALS	1145760	10264.840	1684.879	11139.940	603.662	436.222

TABLE 5A. AIR FORCE R+D LABORATORIES, PROGRAM AND PERSONNEL DATA, FY 1970

INSTALLATION	FUNDING DATA (MILLIONS $) TOTAL	TOTAL IN-HOUSE	TOTAL RDT+E	IN-HOUSE RDT+E	PERSONNEL DATA TOTAL MIL	TOTAL CIV	PHD MIL	PHD CIV	PROF MIL	PROF CIV
MATERIALS LAB., WPAFB, OHIO	56.495	8.539	38.495	8.539	57	358	9	38	54	267
AEROSPACE RESEARCH LABORATORIES, WPAFB, OHIO	13.893	8.761	12.656	7.524	81	228	11	57	61	188
FRANK J. SEILER RESEARCH LAB., ACADEMY, COLO.	0.527	0.527	0.503	0.503	24	14	13	1	28	3
CAMBRIDGE RESEARCH LABS., L.G. HANSCOM FLD., MASS.	57.138	38.532	55.846	28.624	178	1054	9	154	76	685
6571 AEROMEDICAL LAB., HOLLOMAN AFB, N.M.	1.932	1.531	1.482	1.081	57	27	14	7	23	11
SCHOOL OF AVIATION MEDICINE, BROOKS AFB, TEX.	15.659	12.776	9.569	6.686	521	393	72	45	162	149
6570 AEROSPACE MEDICAL RES. LAB., WPAFB, OHIO	8.934	5.286	7.432	3.788	126	166	27	26	88	96
AEROSPACE MEDICAL LAB. (CLINICAL), LACKLAND AFB, TEX	0.495	0.442	0.183	0.130	28	2	5	0	11	0
ROME AIR DEVELOPMENT CENTER, GRIFFISS AFB, N.Y.	132.995	25.926	69.168	22.186	326	1215	2	11	186	595
AVIONICS LAB., WPAFB, OHIO	95.115	7.665	95.115	7.665	86	467	5	9	76	274
HUMAN RESOURCES LAB., BROOKS AFB, TEX.	7.487	3.652	5.829	2.674	156	199	9	29	52	86
WEAPONS LAB., KIRTLAND AFB, N.M.	55.791	12.313	55.581	12.291	629	385	47	12	423	183
AEROPROPULSION LAB., WPAFB, OHIO	53.467	5.972	52.568	5.062	58	331	3	5	52	178
FLIGHT DYNAMICS LAB., WPAFB, OHIO	52.286	13.917	51.779	13.917	88	626	18	2	82	338
ROCKET PROPULSION LAB., EDWARDS AFB, CALIF.	39.798	13.977	37.485	11.734	267	415	17	11	124	118
ARMAMENT LAB., EGLIN AFB, FLA.	17.848	6.221	17.848	6.221	148	231	9	7	185	148
TOTALS	688.888	157.957	569.771	139.183	2622	6831	267	414	1587	3871

TABLE 6A. AIR FORCE R+D FACILITIES DATA, FY 1970

INSTALLATION	SPACE AND PROPERTY: ACRES	SPACE (THOUSANDS OF SQUARE FEET): LABORATORY	ADMIN	OTHER	COST (MILLIONS $): REAL PROPERTY	EQUIPMENT
MATERIALS LAB., WPAFB, OHIO	9	212.200	22.000	38.000	6.500	9.325
AEROSPACE RESEARCH LABORATORIES, WPAFB, OHIO	50	124.114	28.512	34.719	10.353	11.910
FRANK J. SEILER RESEARCH LAB., ACADEMY, COLO.	0	7.855	2.860	0.240	1.062	1.016
CAMBRIDGE RESEARCH LABS., L.G. HANSCOM FLD., MASS.	921	557.759	21.900	120.426	18.473	31.349
6571 AEROMEDICAL LAB., HOLLOMAN AFB, N.M.	45	61.200	8.000	1393.000	2.774	2.020
SCHOOL OF AVIATION MEDICINE, BROOKS AFB, TEX.	93	425.450	89.484	51.677	13.487	20.986
6570 AEROSPACE MEDICAL RES. LAB., WPAFB, OHIO	30	112.946	51.020	68.747	11.387	21.806
AEROSPACE MEDICAL LAB. (CLINICAL), LACKLAND AFB, TEX	1	6.614	1.467	1.800	0.154	0.756
ROME AIR DEVELOPMENT CENTER, GRIFFISS AFB, N.Y.	2791	754.733	92.403	176.240	22.861	78.494
AVIONICS LAB., WPAFB, OHIO	215	195.045	5.304	160.528	11.287	10.845
HUMAN RESOURCES LAB., BROOKS AFB, TEX.	13	63.832	20.702	8.428	1.831	2.473
WEAPONS LAB., KIRTLAND AFB, N.M.	391	323.623	12.774	9.153	6.972	24.518
AEROPROPULSION LAB., WPAFB, OHIO	40	368.580	70.400	220.700	13.091	13.612
FLIGHT DYNAMICS LAB., WPAFB, OHIO	90	537.130	56.600	26.000	22.900	18.427
ROCKET PROPULSION LAB., EDWARDS AFB, CALIF.	54400	757.213	149.348	87.165	29.572	26.095
ARMAMENT LAB., EGLIN AFB, FLA.	41	50.180	51.490	36.410	4.082	2.431
TOTALS	59130	4558.674	684.264	2433.233	176.786	276.063

INSTALLATION LAND WARFARE LABORATORY, ABERDEEN PROVING GROUND, MD.

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PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1970 (ACTUAL)	1971 (ACT + EST)
TOTAL RDT+E	8.473	6.015
TOTAL PROCUREMENT	0.000	0.000
TOTAL O+M	0.497	0.450
TOTAL OTHER	0.197	0.233
TOTAL ANNUAL LAB	9.167	6.698
TOTAL IN-HOUSE	5.146	5.284
TOTAL IN-HOUSE RDT+E	4.578	4.715
ANNUAL OPERATING COST	2.085	2.348

PERSONNEL DATA (END OF FY 1970)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PROF	NON-PROF
MILITARY	18	0	15	3
CIVILIAN	124	3	57	67
TOTAL	142	3	72	70

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
80	37.311	2.655	12.628	52.594	0.679	0.684

...MISSION
TO PROVIDE A CENTRALIZED QUICK REACTION RESEARCH AND DEVELOPMENT FACILITY FOR ACCOMPLISHING DEVELOPMENT OF SPECIALIZED MILITARY ITEMS AND FOR THE GENERATION OF NEW IDEAS FOR SUCH MATERIAL.

...CURRENT IMPORTANT PROGRAMS
HELICOPTER NAVIGATION
EXPLOSIVES DETECTION
PERSONNEL DETECTION
POSITION MARKING
SURVIVAL TECHNIQUES AND EQUIPMENT

...FUNCTIONS/EQUIPMENT/CAPABILITIES
THE SCOPE OF THE LABORATORY MISSION WAS BROADENED IN FY70 TO ELIMINATE GEOGRAPHICAL RESTRICTIONS. THIS BROADENED MISSION IS COMPLETELY COMPATIBLE WITH THE LABORATORY'S IN-HOUSE CAPABILITY IN ALL MAJOR SCIENTIFIC AREAS. WITH 56 PROFESSIONAL PERSONNEL THE ORGANIZATION CONTAINS 7 SMALL WELL EQUIPPED WORKING LABS IN COMMUNICATIONS/ELECTRONICS, MUNITIONS, MOBILITY, ENVIRONMENT AND SURVIVAL, APPLIED CHEMISTRY, APPLIED PHYSICS AND BIOLOGICAL SCIENCES.
FURTHER, THE LABORATORY HAS IN-HOUSE DESIGN AND PROTOTYPE FABRICATION CAPABILITY IN METALS AND WOOD. THE ORGANIZATION IS ASSIGNED AN EIGHTY ACRE TEST FACILITY FOR DEVELOPMENTAL TESTING OF PERTINENT ITEMS AND IS LOCATED AT APG, MD., WHERE MANY MAJOR TESTING FACILITIES ARE READILY AVAILABLE.

NOT REPRODUCIBLE

INSTALLATION BEHAVIORAL SCIENCE RESEARCH LABORATORY, WASHINGTON, D. C.

DIR J E UHLANER

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1970 (ACTUAL)	1971 (ACT + EST)
TOTAL RDT+E	2.882	2.649
TOTAL PROCUREMENT	0.000	0.000
TOTAL O+M	0.000	0.000
TOTAL OTHER	0.000	0.000
TOTAL ANNUAL LAB	2.882	2.649
TOTAL IN-HOUSE	1.926	2.003
TOTAL IN-HOUSE RDT+E	1.926	2.003
ANNUAL OPERATING COST	0.259	0.190

PERSONNEL DATA (END OF FY 1970)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PROF	NON-PROF
MILITARY	4	0	1	3
CIVILIAN	83	23	55	28
TOTAL	87	23	56	31

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
0	26.816	4.067	1.893	32.776	0.166	1.825

...MISSION
RSCH IN BEHAVIORAL SCI AND OPS RSCH SUPPORTING BROAD AREAS OF PERS MGMT HUM PERF EXPERIMENTATION AND MANNED SYS RSCH. RSCH CONDUCTED IN AND FOR DEPT ARMY TO MEET OBJ OF ARMY-WIDE SIGNIFICANCE AND RSCH DIRECTED TOWARD OPTIMAL EMPLOYMENT OF ARMY PERS IN VARIETY OF MILITARY SETTINGS.

...CURRENT IMPORTANT PROGRAMS
HUMAN FACTORS RSCH ON CAREER DEVELOP OF OFFICER LEADERS
RSCH ON SCREENING ADD DIFFERENTIAL CLASSIFICATION OF EM
EVAL ALTERNATIVE MANP POLS IN PERS OPNS THROUGH MODELS
RSCH ON BEH FUNCTIONS OF CRITICAL HUM PERF IN NT OPNS
RSCH ON MAN MACHINE FUNCTIONS IN INTELL PROCESSING

...FUNCTIONS/EQUIPMENT/CAPABILITIES
PROGRAM COMPRISES 4 RSCH AREAS, (1)PERS MGMT RSCH-SELECTION. THIS EFFORT CONCERNED WITH PRED INDIV HUM PERF EFFECTIVENESS. (2)PERS MGMT RSCH--MNPWR MGMT, CONCERNED WITH EVAL AND SEL PERS MGMT POLS THRU OPNS RSCH MODLING. (3)HUM PERF EXPERIMENTATION. CONCERNED WITH IMPROVING FUNCTIONL PORTIONS OF PERF--CRIT BEH IN JOBS. MOBILE, FULLY AUTOMATED, ON-LINE MAGNETIC TAPE SYSTEM RECORDS AUTOMATICALLY IN REAL TIME TARGET ACQUIS RESPONSES AND SEARCH BEH OF SOLDIERS INVOLVED IN NT OPNS EXPERIMENTATN AND PROVIDES RAPID FEEDBACK FOR MIL USERS. (4) MANNED SYSTEMS RSCH IMPRVS TOTAL SYSTEMS PERFORMANCE AS RELATES TO HUMAN PERFORMANCE--GROUPS OF JOBS. AUTOMATED INFO SYST LAB PROVIDES HIGHLY FLEX AND FUNCTIONAL ACTIVITY FOR RSCH IN SURVEILLANCE, COMMAND AND INTELL SYSTEMS. VARIOUS CONFIGS OF SYST COMPONENTS MAKE POSSIBLE INTERACTIONS AND TRADE OFFS.

INSTALLATION ENGINEER TOPOGRAPHIC LABORATORY, FT. BELVOIR, VA.

CO COL JOHN R OSWALT TECH DIR GILBERT G LORENZ

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1970 (ACTUAL)	1971 (ACT + EST)
TOTAL RDT+E	12.329	11.580
TOTAL PROCUREMENT	0.000	0.000
TOTAL O+M	0.000	0.000
TOTAL OTHER	0.185	0.338
TOTAL ANNUAL LAB	12.514	11.918
TOTAL IN-HOUSE	5.071	5.502
TOTAL IN-HOUSE RDT+E	4.886	5.164
ANNUAL OPERATING COST	0.660	0.660

PERSONNEL DATA (END OF FY 1970)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PROF	NON-PROF
MILITARY	11	1	7	4
CIVILIAN	242	10	124	118
TOTAL	253	11	131	122

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
3	44.014	9.130	2.660	55.804	0.002	10.861

...MISSION
PRINCIPAL FIELD ACTIVITY OF THE ARMY FOR ACCOMPLISHING RESEARCH AND DEVELOPMENT OF EQUIPMENT, PROCEDURES AND TECHNIQUES APPLICABLE TO THE TOPOGRAPHIC SCIENCES TO INCLUDE MAPPING, GEODESY AND MILITARY GEOGRAPHIC INFORMATION.

...CURRENT IMPORTANT PROGRAMS
DEVELOPMENT OF SEMI-AUTOMATIC CARTOGRAPHIC EQUIPMENT.
DEVELOPMENT OF AN ALL-WEATHER RADAR MAPPING SYSTEM.
DEVELOPMENT OF MILITARY GEOGRAPHIC INTELLIGENCE CONCEPTS AND SYSTEMS.
DEVELOPMENT OF A TOPOGRAPHIC INFORMATION DATA BANK.
DEVELOPMENT OF FIELD SURVEYING AND POINT POSITIONING EQUIPMENT.

...FUNCTIONS/EQUIPMENT/CAPABILITIES
THE US ARMY ENGINEER TOPOGRAPHIC LABORATORIES PERFORMS BASIC AND APPLIED RESEARCH, AND EXPLORATORY, ADVANCED, AND ENGINEERING DEVELOPMENT PERTAINING TO TOPOGRAPHIC MAPPING, GEODESY, SURVEYING, GEOGRAPHY AND MILITARY GEOGRAPHIC INTELLIGNECE. IT CARRIES OUT A PROGRAM WHICH CONSISTS OF BOTH INTERNAL AND CONTRACTUAL EFFORTS ADDRESSING THE FEASIBILITY OF CONCEPTS AS WELL AS THE FABRICATION OF PROTOTYPE AND ENGINEERING EQUIPMENT SATISFYING BOTH GENERAL AND SPECIFIC MILITARY FIELD AND BASE PLANT REQUIREMENTS.

INSTALLATION: ENGINEER WATERWAYS EXPERIMENT STATION, VICKSBURG, MISS.

CO COL ERNEST D PEIXOTTO TECH DIR F R BROWN

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1970 (ACTUAL)	1971 (ACT + EST)
TOTAL RDT+E	11.952	13.116
TOTAL PROCUREMENT	0.000	0.000
TOTAL O+M	0.389	0.368
TOTAL OTHER	7.722	6.916
TOTAL ANNUAL LAB	20.063	20.400
TOTAL IN-HOUSE	18.573	19.278
TOTAL IN-HOUSE RDT+E	10.462	11.994
ANNUAL OPERATING COST	3.683	3.800

PERSONNEL DATA (END OF FY 1970)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PROF	NON-PROF
MILITARY	36	2	43	0
CIVILIAN	1118	29	341	777
TOTAL	1154	31	384	777

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
2100	1369.000	345.000	224.301	1938.301	14.078	20.031

...MISSION
MIL+CIV FUNDED ENGR RSCH,DEV INVESTIGATION IN HYD,FLEX+EXPEDIENT PAVEMENTS,SOILS,CONCRETE,NUC WPN EFF,VEH MOBILITY+ENVIRONMENTAL ASPECTS OF MIL OP.CONSULTANT SVC+TECH LIBRARY.TECH SURVL OF CEMENT+POZZOLAN TESTING PROGRAM.SERVES CE,AMC,DASA,AEC,OCD,AF,NAVY + OTHER AGENCIES.

...CURRENT IMPORTANT PROGRAMS
FORMULATION OF NEW+IMP ENG CRITERIA ON ROADS,STORAGE AREAS,HELIPORT+AIRFIELDS.HYD+MATH MODELING TO SOLVE RIVER,TIDAL,WIND-WAVE+STRUC HYD PROBLEMS. NUC & HE RSCH TO DEV CRITERIA FOR ED OF PROTECTIVE STRUC BOTH UGND+UWTR.INVES MEANS OF AQUIRING TERRAIN DATA BY VAR SENSNG+MEASURNG DEVICE. RSCH+DEV OF EXPEDIENT+FLEX PAVEMTS FOR MULTI-WHEEL LDG GEARS OF HV ACFT.

...FUNCTIONS/EQUIPMENT/CAPABILITIES
CDT RDT+E FOR MANY SPONSORS.PERF GEN INVES IN FLD OF HYD,SOIL MECH,CONCRETE,MOBILITY OF MIL VEH NUCWPN EFF+FLEX PAVEMT.THROUGH BR+APPLIED RSCH IN THESE FLD+RLT FLD,THE DEV OF METHODS+TECHNIQUES+THE TESTING OF MAT+EQUIP,IT ASST IN ACCOMPMT OF THE CIV WORKS+MIL MSN OF CE.WES OCCUPIES TWO RESERVATIONS CNTN BLDG,TEST SITES,SPECL EQUIP+OTHER PLANT FAC.TEST SITES FOR SP PURPOSES ARE MAINT IN OTHER AREAS ON A PERM OR TEMP BASIS. FAC INCL FLUMES OF DIFF TYPES+SIZES,WAVE+TIDE GENR MACH,DRILL EQUIP, FULLY EQUIPED SOILS LAB,X-RAY DIFFRACTION AND SPECTROSCOPY APPAR,FULLY EQUIPED CONCRETE LAB,LARGE+SMALL BLAST LOAD GENERATOR,200K DYNAMIC LOADER,MOBILITY TEST CARTS,SINGLE+MULTIPLE WHEEL LOAD CARTS FOR TFC,SUR EFF BLAST FAC,HIGH+LOW FREQ VIBRATORS,PHYS TREATMENT LAB,CALBR LAB,ELCT LAB, A GE-437 COMPUTER + A TECHNICAL LIBRARY.

INSTALLATION CONSTRUCTION ENGINEERING RESEARCH LABORATORY, URBANA, ILL.

DIR E S TOWNSLEY DEP DIR DR L R SHAFFER

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1970 (ACTUAL)	1971 (ACT + EST)
TOTAL RDT+E	2.776	3.367
TOTAL PROCUREMENT	0.000	0.000
TOTAL O+M	0.542	0.540
TOTAL OTHER	0.001	0.000
TOTAL ANNUAL LAB	3.319	3.907
TOTAL IN-HOUSE	2.741	3.412
TOTAL IN-HOUSE RDT+E	2.414	2.932
ANNUAL OPERATING COST	0.758	0.885

PERSONNEL DATA (END OF FY 1970)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PROF	NON-PROF
MILITARY	1	1	1	0
CIVILIAN	130	10	40	90
TOTAL	131	11	41	90

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
15	68.875	32.075	0.000	100.950	3.481	1.633

...MISSION
TO PLAN,EXECUTE AND EVALUATE RESEARCH REQUIRED FOR DETERMINING THE OPT COMBINATION OF ENGINEERING,DESIGN AND CONSTRUCTION IN PROVIDING FACILITIES FOR THE MILITARY ESTABILISHMENT AND OTHER AGENCIES,AND TO DISSEMNATE THE RESULTS OF SUCH RESEARCH.

...CURRENT IMPORTANT PROGRAMS
DEVELOPMENT OF MATERIALS FOR PERMANENT CONSTRUCTION
DEVELOPMENT OF IMPROVED DESIGN,CONSTRUCTION AND MANAGEMENT TECHNIQUES
DEVELOPMENT OF MILITARY HOUSING SYSTEMS
SOCIO-TECHNOLOGICAL-ECONOMIC FORECASTING METHODOLOGY FOR MILITARY CONSTR
DEVELOPMENT OF ENGINEER FUNCTIONAL COMPONENTS SYSTEM

...FUNCTIONS/EQUIPMENT/CAPABILITIES
1000K LOADING SYSTEM 500K UNIV TESTING MACH TEST+EVAL INSTRUMENTATION DATA RECORD+ANAL EQUIPMENT 10MW ELECT LOAD BANK+INST X-RAY EQUIP SEMI-AUTO WELDING EQUIP 28 HYDRAULIC RAMS-560 TONS CAP PAVEMENT MODELS. SYSTEMS BUILDING METHODS COMPUTER-BASED DESIGN AND CONSTRUCTION MANAGEMENT TECHNIQUES COMPUTER UTILITY PAVEMENTS SYSTEMS DESIGN METHODS UTILITY SYSTEM DESIGN TECHNIQUES DEVELOPMENT OF HARDENED FACILITIES DISASTER ENGINEERING DEVELOPMENT OF DATA COLLECTION + ANALYSIS TECHNIQUES ECOLOGICAL+ENVIRONMENTAL MANAGEMENT METHODS HOUSING DEVELOPMENT STRUCTURAL ANALYSIS.

INSTALLATION INSTITUTE OF SURGICAL RESEARCH, BROOKE AMC, FT. SAM HOUSTON, TEX.

CO LTC BASIL A PRUITT JR TECH DIR DR ARTHUR D MASON JR

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1970 (ACTUAL)	1971 (ACT + EST)
TOTAL RDT+E	1.060	1.275
TOTAL PROCUREMENT	0.000	0.000
TOTAL O+M	0.000	0.000
TOTAL OTHER	1.119	1.068
TOTAL ANNUAL LAB	2.179	2.343
TOTAL IN-HOUSE	2.179	2.343
TOTAL IN-HOUSE RDT+E	1.060	1.275
ANNUAL OPERATING COST	0.086	0.095

PERSONNEL DATA (END OF FY 1970)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PROF	NON-PROF
MILITARY	113	24	59	54
CIVILIAN	74	3	21	53
TOTAL	187	27	80	107

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
1	11.662	0.802	28.708	41.172	0.412	0.739

...MISSION
CONDUCT BOTH CLINICAL AND LABORATORY STUDIES IN TREATMENT OF THERMAL AND TRAUMATIC INJURIES. PROVIDE CARE FOR PATIENTS WITH THESE TYPES OF INJURIES. TRAIN OTHERS IN CARE OF SUCH PATIENTS.

...CURRENT IMPORTANT PROGRAMS
STUDY OF POSTBURN HEMODYNAMIC AND PULMONARY CHANGES. EVALUATION AND SYNTHESIS OF TOPICAL AGENTS TO CONTROL INFECTION. STUDY OF ACUTE RENAL FAILURE AND RENAL PHYSIOLOGY. STUDY OF POSTBURN HEMATOLOGY AND IMMUNOLOGY. METABOLIC CHANGES FOLLOWING BURNS AND EFFECTS OF HYPERALIMENTATION.

...FUNCTIONS/EQUIPMENT/CAPABILITIES
OPERATES 60 BEDS FOR SERIOUSLY BURNED AND INJURED PATIENTS. PROVIDES CLINICAL LABORATORY SUPPORT WITH CAPABILITIES IN THE FIELD OF PATHOLOGY (INCLUDING USE OF ELECTRON MICROSCOPE), MICROBIOLOGY, EXPERIMENTAL SURGERY, RENAL PHYSIOLOGY AND BIOCHEMISTRY. MAINTAINS AN ANIMAL COLONY, ELECTRONIC SHOP AND SURGICAL LIBRARY.

INSTALLATION AEROMEDICAL RESEARCH LABORATORY, FT. RUCKER, ALA.

CO COL ROBERT W BAILEY TECH DIR DR E V BALDES

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1970 (ACTUAL)	1971 (ACT + EST)
TOTAL RDT+E	0.790	0.910
TOTAL PROCUREMENT	0.000	0.000
TOTAL O+M	0.020	0.007
TOTAL OTHER	0.406	0.350
TOTAL ANNUAL LAB	1.216	1.267
TOTAL IN-HOUSE	1.216	1.267
TOTAL IN-HOUSE RDT+E	0.790	0.910
ANNUAL OPERATING COST	0.108	0.129

PERSONNEL DATA (END OF FY 1970)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PROF	NON-PROF
MILITARY	36	16	31	5
CIVILIAN	19	1	2	17
TOTAL	55	17	33	22

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
0	21.495	5.940	7.470	34.905	0.191	0.930

...MISSION
MISSION IS TO CONDUCT TIMELY STUDIES ON CURRENT AND ANTICIPATED RESEARCH PROBLEMS OF A FUNDAMENTAL OR IMMEDIATE NATURE RELEVANT TO ARMY AVIATION AND AIRBORNE PHYSICAL PERFORMANCE STANDARDS AND THE MEDICAL ASPECTS OF RETENTION AND SELECTION OF AVIATORS AND PARACHUTISTS.

...CURRENT IMPORTANT PROGRAMS
RESEARCH PSYCHOLOGY APPLIED TO MEDICALLY SIGNIFICANT PROBLEMS IN ARMY AVIATION. MEDICAL RESEARCH APPLIED TO THE PROBLEMS OF ARMY AVIATION. RESEARCH OF VISUAL PROBLEMS MEDICALLY SIGNIFICANT TO ARMY AVIATION. RESEARCH OF PSYCHOACOUSTICAL PROBLEMS MEDICALLY SIGNIFICANT TO ARMY AV. RESEARCH OF BIOENGINEERING PROBLEMS MEDICALLY SIGNIFICANT TO ARMY AV.

...FUNCTIONS/EQUIPMENT/CAPABILITIES
MAJOR FUNCTIONS, TO STUDY THE PHYSIOLOGICAL AND PSYCHOLOGICAL ASPECTS OF AVIATION AND AIRBORNE PERSONNEL IN THE TRAINING AND OPERATIONAL ENVIRONMENT.
MAJOR EQUIPMENT, INCLUDES A SOUNDPROOF HEARING ROOM, ANECHOIC CHAMBER, COLORIMETER, ECG AND EEG MACHINES, A BIOCHEMISTRY LAB AND AN ELECTRONICS AND ENGINEERING FABRICATION SHOP.

INSTALLATION INSTITUTE OF DENTAL RESEARCH, WALTER REED AMC, WASHINGTON, D. C.

CO COL SURINDAR N BHASKAR

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1970 (ACTUAL)	1971 (ACT + EST)
TOTAL RDT+E	0.495	0.495
TOTAL PROCUREMENT	0.000	0.000
TOTAL O+M	0.067	0.070
TOTAL OTHER	0.512	0.673
TOTAL ANNUAL LAB	1.074	1.238
TOTAL IN-HOUSE	1.074	1.238
TOTAL IN-HOUSE RDT+E	0.495	0.495
ANNUAL OPERATING COST	0.200	0.234

PERSONNEL DATA (END OF FY 1970)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PROF	NON-PROF
MILITARY	63	2	32	31
CIVILIAN	25	1	8	17
TOTAL	88	3	40	48

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
0	5.640	5.520	1.570	12.730	0.000	0.535

...MISSION
MAJOR FUNCTIONS ARE TO DEVELOP SIMPLIFIED TECHNIQUES OF DENTAL TREATMENT, CONDUCT INVESTIGATIONS ON PROPERTIES OF DENTAL MATERIALS, AND CONDUCT EDUCATION AND TRAINING PROGRAMS IN DENTISTRY.

...CURRENT IMPORTANT PROGRAMS
WATER LAVAGE
COMBAT RESTORATIVE MATERIALS
CYANOACRYLATES
BIODEGRADABLE MATERIALS
ACCELERATION OF WOUND HEALING

...FUNCTIONS/EQUIPMENT/CAPABILITIES
PRESENT MAJOR EQUIPMENT (ATOMIC ABSORPTION SPECTROPHOTOMETER, INSTRON STRESS/STRAIN TESTING MACHINE, AND HITACHI ELECTRON MICROSCOPE) IS RECEIVING FULL UTILIZATION UNDER EXISTING FACILITY CAPABILITIES. EXPANDED UTILIZATION CAPABILITIES FOR EITHER ARE NONEXISTENT FOR OTHER THAN MISSION RELATED IN-HOUSE ACTIVITIES. ANY EXPANDED CAPABILITIES WOULD HAVE TO BE PROVIDED BY OUT-OF-HOUSE MANPOWER RESOURCES.

INSTALLATION MEDICAL BIOMECHANICAL RESEARCH LABORATORY, WALTER REED AMC, WASHINGTON, D. C.

CO LTC ORLYN C OESTEREICH TECH DIR DR FRED LEONARD

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1970 (ACTUAL)	1971 (ACT + EST)
TOTAL RDT+E	0.616	0.615
TOTAL PROCUREMENT	0.000	0.000
TOTAL O+M	0.000	0.000
TOTAL OTHER	0.115	0.128
TOTAL ANNUAL LAB	0.731	0.743
TOTAL IN-HOUSE	0.731	0.743
TOTAL IN-HOUSE RDT+E	0.616	0.615
ANNUAL OPERATING COST	0.065	0.065

PERSONNEL DATA (END OF FY 1970)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PROF	NON-PROF
MILITARY	17	0	9	8
CIVILIAN	32	4	21	11
TOTAL	49	4	30	19

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
0	11.463	1.022	0.000	12.485	0.880	0.360

...MISSION
TO CONDUCT FUNDAMENTAL AND APPLIED RESEARCH TO DEVELOP MATERIALS AND DEVICES FOR INTERNAL AND EXTERNAL BIOMECHANICAL APPLICATION AND THE FABRICATION OF PROTOTYPE DEVICES OF SPECIALIZED MILITARY NATURE OF MEDICAL INTEREST.

...CURRENT IMPORTANT PROGRAMS
IN-HOUSE LABORATORY INDEPENDENT RESEARCH
BASIC RESEARCH SUPPORT OF MILITARY MED-PATHOLOGY.
RESEARCH BIO-MEDICAL SCIENCES SURGERY
COMBAT SURGERY

...FUNCTIONS/EQUIPMENT/CAPABILITIES
USAMBRL HAS EQUIPMENT AND FACILITIES TO CARRY OUT ITS RESEARCH TO DEVELOP SURGICAL REPAIR MATERIALS TO EFFECT HEMOSTASIS AND REPAIR OF TISSUE OR ORGANS, PROSTHETIC AND ORTHOTIC SYSTEMS, BIOMEDICAL DEVICES AND MAXILLOFACIAL PROSTHESES. THIS INCREASES INSTRUMENTATION FOR LIGHT SCATTERING, CHROMATOGRAPHY, ULTRACENTRIFUGATION RADIOASSAYS, OPTICAL METHODS, DATA, SYNTHESES, STEAM STERILIZATION, OVENS, BATHS, HISTOLOGY AND ELECTRON MICROSCOPY CELL AND TISSUE CULTURE STUDIES, EXPERIMENTAL SURGERY ROOM ISOTOPE, METABOLIC, AUTORADIOGRAPHY, CELL ORGANELLE, RADIOLOGY, X-RAY STUDIES, MACHINE SHOP EQUIPPED WITH WELDING AND METAL WORKING MACHINES.

INSTALLATION: MEDICAL RESEARCH AND NUTRITION LABORATORY, FITZSIMONS GENERAL HOSPITAL, DENVER, COLO.

CO COL JOHN E CANHAM

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1970 (ACTUAL)	1971 (ACT + EST)
TOTAL RDT+E	2.244	2.066
TOTAL PROCUREMENT	0.000	0.000
TOTAL O+M	0.000	0.000
TOTAL OTHER	1.036	1.045
TOTAL ANNUAL LAB	3.280	3.111
TOTAL IN-HOUSE	3.280	3.111
TOTAL IN-HOUSE RDT+E	2.244	2.066
ANNUAL OPERATING COST	0.535	0.585

PERSONNEL DATA (END OF FY 1970)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PROF	NON-PROF
MILITARY	117	28	57	60
CIVILIAN	98	13	45	53
TOTAL	215	41	102	113

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
0	80.283	5.138	16.620	102.041	3.391	4.416

...MISSION
DETERMINE ADEQUACY OF TROOPS' DIET IN ALL ENVIRONMENTS AND RECOMMEND NUTRITIONAL MEASURES FOR OPTIMUM PERFORMANCE. CONDUCT BASIC/APPLIED RESEARCH ON 1. MEDICAL, SURGICAL AND NUTRITION PROBLEMS, 2. COMPUTER TECHNIQUES IN BIO-MED AREAS, 3.FOOD HYGIENE, PHYSIOLOGY OF EXERCISE AND FAT.

...CURRENT IMPORTANT PROGRAMS
HUMAN MICRONUTRIENT RQR UNDER VARIOUS COND OF STRESS AND CLIMATES.
NIGHT VISION-VITAMIN A-PCOL SIZE AND BLOOD PLASMA.
MULTIPLE PHYS, BIOCHEM AND PATH ENVIRONMENTAL STUDIES ON EFFECTS OF HIGH TERRESTRIAL ALT. IDENTIFY CAUSE GI MALABSORPTION SYNDROMES.
FACTORS INFLUENCING WORK PERF, FATIGUE AND MUSCLE PHYS-BIOCHEM.

...FUNCTIONS/EQUIPMENT/CAPABILITIES
INCLUDED ARE HUMAN METABOLIC WARD, GERM-FREE ANIMALS, ACOUSTIC PHYS PERFORMANCE, ELECTRON MICROSCOPY, HIGH ALT LAB.(PIKES PEAK), ENVIRONMENTAL TEST CHAMBER, RCA 301-355 ACPS, AUTO ANALYZERS AND RECORDERS INCLUDING AUTO BETA AND GAMMA COUNTERS, AND SHADOW SHIELD WHOLE BODY COUNTER. RSCH CPBL INCLUDE: NUTRITION SURVEYS AND RATION TESTING, RSCH ON MICROBIOL AGENTS CAUSING RESP DISEASE BIOMED CMPT RSCH INFLUENCE OF HIGH TERRESTRIAL ALT ON PHYS-PSYCH PERFORMANCE, BODY COMPOSITION, METABOLISM AND MODIFYING FACTORS BASIC AND APPLIED STUDIES OF TRACE MINERAL METABOLISM NUTRIENT RQR + INTERRELATIONSHIPS, METABOLIC RESPONSE OF MAN TO NUTRITION AND DISEASE X SURGERY COMPARATIVE PATHOL OF STRESS OF ENVIRONMENT AND NUTRITION AND PHYS AND BIOCHEM STUDIES OF MUSCLE METABOLISM, EXER, AND FATIGUE.

INSTALLATION MEDICAL EQUIPMENT R&D LABORATORY, FT. TOTTEN, FLUSHING, N. Y.

CO COL ROBERT J ROGERS TECH DIR BENJAMIN D PILE

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1970 (ACTUAL)	1971 (ACT + EST)
TOTAL RDT+E	0.727	2.740
TOTAL PROCUREMENT	0.000	0.002
TOTAL O+M	0.000	0.000
TOTAL OTHER	0.150	0.136
TOTAL ANNUAL LAB	0.877	0.876
TOTAL IN-HOUSE	0.877	0.876
TOTAL IN-HOUSE RDT+E	0.727	0.746
ANNUAL OPERATING COST	0.331	0.370

PERSONNEL DATA (END OF FY 1970)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PROF	NON-PROF
MILITARY	15	0	2	13
CIVILIAN	39	0	8	31
TOTAL	54	0	10	44

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
0	7.864	3.577	31.709	43.150	0.545	0.466

...MISSION
CONDUCTS ENGINEERING RESEARCH AND DEVELOPMENT LEADING TO PRODUCTION OF FIELD MILITARY MEDICAL EQUIPMENT FOR THE ARMY AND ON A REQUIRED BASIS FOR THE OTHER SERVICES.

...CURRENT IMPORTANT PROGRAMS
SPRAYER, INSECTICIDE,AERIAL, ULTRA LOW VOLUME
MEDICAL LABORATORY, FIELD
DENTAL FIELD TREATMENT SYSTEM
JET INJECTOR, VETERINARY MEDICINE
FIELD MEDICAL IMAGE AMPLIFIER

...FUNCTIONS/EQUIPMENT/CAPABILITIES
THE LABORATORY OCCUPIES THREE BUILDINGS UTILIZING A TOTAL OF 11,200 SQUARE FEET FOR ADMINISTRATION, 5000 SQUARE FEET FOR T+E, 13,127 FOR SHOP SPACE AND 14,151 FOR STORAGE. DATA DO NOT INCLUDE SUCH AREAS AS LAVORATORIES, CORRIDORS, ETC. EQUIPMENT AND FACILITIES INCLUDE AN ELECTRICAL-ELECTRONICS BRANCH EQUIPPED WITH HAND METERS, OSCILLOSCOPES, GENERATORS, REGULATED POWER SOURCES AND RECORDERS A PHYSICAL TESTING BRANCH EQUIPPED WITH AN INSTRON TESTING MACHINE, AND ENVIRONMENTAL CHAMBERS. A PROTOTYPE FABRICATION FACILITY EQUIPPED WITH LATHES, MILLING MACHINES, SURFACE GRINDERS, SHEARS, POWER BRAKE, POWER ROLLER, SPOT WELDERS,FOUNDRY, HELIARC AND GAS WELDING EQUIPMENT, HEATING, TREATING OVEN, PAINT OVEN, FABRIC SEWING MACHINES, PLASTIC FORMING EQUIPMENT, CARPENTRY AND PATTERN AND MODEL MAKING TOOLS.

INSTALLATION MEDICAL RESEARCH LABORATORY, FT. KNOX, KY.

CO COL NICHOLAS F CONTE

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1970 (ACTUAL)	1971 (ACT + EST)
TOTAL RDT+E	1.803	1.689
TOTAL PROCUREMENT	0.000	0.000
TOTAL O+M	0.472	0.491
TOTAL OTHER	0.772	0.779
TOTAL ANNUAL LAB	3.047	2.959
TOTAL IN-HOUSE	3.047	2.959
TOTAL IN-HOUSE RDT+E	1.803	1.689
ANNUAL OPERATING COST	0.405	0.430

PERSONNEL DATA (END OF FY 1970)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PROF	NON-PROF
MILITARY	125	9	53	72
CIVILIAN	133	14	31	102
TOTAL	258	23	84	174

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
19	86.542	5.368	26.700	118.610	0.938	3.033

...MISSION
RESEARCH + SENSORY PHYSIOLOGY, BIOLOGICAL EFFECT OF COHERENT LIGHT, PHYSIOLOGICAL EFFECTS OF WEAPONS, MECHNICAL, + PHYSICAL SYSTEMS- RESEARCH + TRAINING IN BLOOD COLLECTIONS, PROCESSING, PRESERVATION AND TRANSFUSION- OPERATION OF BLOOD DONOR AND BLOOD BANK FELLOWSHIP.

...CURRENT IMPORTANT PROGRAMS
SENSORY PSYCHOPHYSIOLOGY
BIOLOGICAL EFFECTS OF LASER RADIATION.
METHODOLOGY RELATED TO COLLECTION, PROCESSING, PRESERVATION, SHIPMENT, AND TRANSFUSION OF HUMAN BLOOD.

...FUNCTIONS/EQUIPMENT/CAPABILITIES
THE EQUIPMENT CAPABILITIES OF THE MEDICAL RESEARCH LAB INCLUDE THE FOLLOWING, RUBY AND CO2 LASERS AND AN ELECTRONIC MICROSCOPE. FACILITIES & CAPABILITIES INCLUDE AN ANECHOIC CHAMBER FOR STUDIES INVOLVING SOUND. ADDITIONALLY, THIS UNIT HAS FUNCTIONAL CAPABILITIES IN THE AREAS OF BIOPHYSICS, HEMATOLOGY, ERGONOMICS, BLOOD COLLECTION AND PROCESSING, PSYCHOPHYSIOLOGY AND BIOCHEMISTRY.

INSTALLATION RESEARCH INSTITUTE OF ENVIRONMENTAL MEDICINE, NATICK, MASS.

CO COL JAMES E HANSEN TECH DIR DR DAVID BASS

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1970 (ACTUAL)	1971 (ACT + EST)
TOTAL RDT+E	2.630	2.523
TOTAL PROCUREMENT	0.000	0.000
TOTAL O+M	0.006	0.005
TOTAL OTHER	0.674	0.728
TOTAL ANNUAL LAB	3.310	3.256
TOTAL IN-HOUSE	3.310	3.256
TOTAL IN-HOUSE RDT+E	2.630	2.523
ANNUAL OPERATING COST	0.979	1.096

PERSONNEL DATA (END OF FY 1970)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PROF	NON-PROF
MILITARY	86	22	86	0
CIVILIAN	116	25	57	59
TOTAL	202	47	143	59

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
0	70.157	12.356	30.617	113.130	6.902	2.616

...MISSION
MISSION, TO CONDUCT BASIC AND APPLIED RESEARCH TO DETERMINE HOW HEAT, COLD, HIGH TERRESTRIAL ELEVATION AND WORK AFFECT THE SOLDIER'S LIFE PROCESSES, PERFORMANCE AND HEALTH AND REPORT AND ADVISE THE ARMY AND THE SCIENTIFIC COMMUNITY.

...CURRENT IMPORTANT PROGRAMS
PREVENTION AND TREATMENT OF DISABILITIES ASSOCIATED WITH MILITARY OPERATIONS IN THE HEAT, COLD AND AT HIGH TERRESTRIAL ELEVATIONS. PREDICTION OF THE BIOLOGICAL LIMITS OF MILITARY PERFORMANCE AS A FUNCTION OF ENVIRONMENT, CLOTHING AND EQUIPMENT. MEDICAL PROBLEMS IN MILITARY ARCTIC OPERATIONS. BIOLOGICAL PROCESSES THAT LIMIT HEAVY PHYSICAL WORK.

...FUNCTIONS/EQUIPMENT/CAPABILITIES
CONDUCT RESEARCH AND PROVIDE GUIDANCE TO DESIGNERS, ENGINEERS, TACTICIANS, 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. TREAT COLD CASUALTIES AT BASSETT ARMY HOSP., ALASKA. IN HUMAN AND ANIMAL RESEARCH, USE APPROXIMATELY 50 VOLUNTEER TEST SUBJECTS AND EXTENSIVE CLIMATIC CHAMBERS OF NLABS PLUS MANY INTRINSIC SMALLER CHAMBERS, EXTENSIVE ANIMAL CARE FACILITIES, ELECTRON MICROSCOPE, UNDERWATER RESEARCH POOL, COPPER MANIKINS, AND DIVERSE EQUIPMENT FOR BIOCHEMICAL, BIOPHYSICAL, MEDICAL, PHYSIOLOGICAL, PHARMACOLOGICAL, AND PSYCHOLOGICAL MEASUREMENT.

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

CO COL W H MERONEY

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1970 (ACTUAL)	1971 (ACT + EST)
TOTAL RDT+E	11.696	11.606
TOTAL PROCUREMENT	0.000	0.000
TOTAL O+M	1.619	1.615
TOTAL OTHER	4.528	4.878
TOTAL ANNUAL LAB	17.843	18.099
TOTAL IN-HOUSE	17.642	17.874
TOTAL IN-HOUSE RDT+E	11.495	11.381
ANNUAL OPERATING COST	1.525	1.500

PERSONNEL DATA (END OF FY 1970)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PROF	NON-PROF
MILITARY	623	155	214	409
CIVILIAN	586	70	200	386
TOTAL	1209	225	414	795

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
1170	353.200	57.500	0.000	410.700	0.000	12.511

...MISSION
PERF MED R+D AND CONDUCTS GRAD EDUC IN FLD OF MED, VET MED + APPLIED MED SCI. SERVES AS CONSULTING AND DIAGNOSTIC REF LAB FOR ARMY. PROV ADVISORY SVC ON PROB OF EPIDEMIOLOGY IN MIL MED + ALLIED FLD. PROV TECH QULT CONTL OF BIO PROD DEV. PRODC + DISTR BIO PROD NOT AVAIL COM SOURCES,

...CURRENT IMPORTANT PROGRAMS
TO DISCOVER EFFECTIVE CHEMOPROPHYLACTIC AND CHEMOTHERAPEUTIC AGENTS FOR DRUG REFRACTORY MALARIA. TO EVALUATE IMMUNOPROPHYLAXIS OF MENINGOCOCCAL DISEASE. TO CONTROL ACUTE RESPIRATORY DISEASE IN RECRUITS. TO DEVELOP AN IMPROVED BIO-SENSOR MILITARY DOG. TO DEVELOP IMPROVED SURGICAL MANAGEMENT OF SEVERELY INJURED COMBAT CASUALTIES.

...FUNCTIONS/EQUIPMENT/CAPABILITIES
RESEARCH, TEACHING, AND REFERENCE LABORATORY SERVICES SUMMARIZE MAJOR FUNCTIONS IN THE AREAS OF - PREVENTIVE MEDICINE, INFECTIOUS DISEASES, SURGERY, NEUROPSYCHIATRIC DISEASES, INTERNAL MEDICINE, MEDICAL CHEMISTRY, AND BASIC MEDICAL SCIENCES. HIGHLY SOPHISTICATED MEDICAL EQUIPMENT IN ALL AREAS OF INVESTIGATION- ELECTRON MICROSCOPES, AUTOMATED CHEMICAL ANALYSIS SYSTEMS, CHEMICAL TYPEWRITERS, BEHAVORIAL RESEARCH INSTRUMENTATION. THE WRAIR MAINTAINS LABORATORY AND RESEARCH FACILITIES AT FT. MEADE, MD., EDGEWOOD ARSENAL, MD., 249TH HOSPITAL, JAPAN, SEATO HQ, BANGKOK, THAILAND, AND VIETNAM. THE WRAIR IS CAPABLE OF CONDUCTING RESEARCH IN A VAST NUMBER OF AREAS.

INSTALLATION MEDICAL RESEARCH UNIT, BALBOA HEIGHTS, CANAL ZONE

CO LTC JAMES C BURKE

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1970 (ACTUAL)	1971 (ACT + EST)
TOTAL RDT+E	0.163	0.160
TOTAL PROCUREMENT	0.000	0.000
TOTAL O+M	0.000	0.000
TOTAL OTHER	0.089	0.122
TOTAL ANNUAL LAB	0.252	0.282
TOTAL IN-HOUSE	0.252	0.282
TOTAL IN-HOUSE RDT+E	0.163	0.160
ANNUAL OPERATING COST	0.080	0.090

PERSONNEL DATA (END OF FY 1970)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PROF	NON-PROF
MILITARY	9	1	5	4
CIVILIAN	8	0	0	8
TOTAL	17	1	5	12

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
0	5.000	0.600	0.002	5.600	0.002	0.061

...MISSION
IN CONJUNCTION WITH OTHER U.S. GOVERNMENT AGENCIES, CONDUCTS RESEARCH ON MEDICAL AND ENVIRONMENTAL PROBLEMS OF MILITARY IMPORTANCE IN CENTRAL AND SOUTH AMERICA + PANAMA.

...CURRENT IMPORTANT PROGRAMS
PREVALENCE + DISTRIBUTION OF PARASITIC DISEASE IN LATIN AMERICA.
PATHOGENESIS OF PARASITIC INFECTIONS.
BIONOMICS OF PHLEBOTOMUS FLIES.

...FUNCTIONS/EQUIPMENT/CAPABILITIES
DIRECT + INDIRECT ISOLATION AND IDENTIFICATION OF PARASITIC ORGANISMS + THEIR VECTORS IN CENTRAL AND SOUTH AMERICA. LABORATORY SPACE ADEQUATE FOR THE SCIENTIFIC DISCIPLINES OF ENTOMOLOGY, PARASITOLOGY AND PATHOLOGY. SPECIAL EQUIPMENT AND FACILITIES TO SUPPORT THESE DISCIPLINES INCLUDE: FLUORESCENT MICROSCOPE, AUTO-TECHNICON, CRYOSTAT, PHOTOMICROGRAPHY, LABORATORY ANIMAL QUARTERS, TISSUE CULTURE LINES, LIQUID NITROGEN PLANT AND ACCESS TO DATA-PROCESSING SERVICE.

INSTALLATION MEDICAL RESEARCH UNIT, KUALA LUMPUR, MALAYSIA

CO LTC FRANCIS C CADIGAN

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1970 (ACTUAL)	1971 (ACT + EST)
TOTAL RDT+E	0.211	0.180
TOTAL PROCUREMENT	0.000	0.000
TOTAL O+M	0.000	0.000
TOTAL OTHER	0.055	0.057
TOTAL ANNUAL LAB	0.266	0.237
TOTAL IN-HOUSE	0.266	0.237
TOTAL IN-HOUSE RDT+E	0.211	0.180
ANNUAL OPERATING COST	0.015	0.015

PERSONNEL DATA (END OF FY 1970)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PROF	NON-PROF
MILITARY	6	4	6	0
CIVILIAN	0	0	0	0
TOTAL	6	4	6	0

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
0	7.000	0.900	0.000	7.900	0.100	0.200

...MISSION
TO STUDY INFECTIOUS DISEASES OF POTENTIAL MILITARY IMPORTANCE IN EQUATORIAL ASIA.

...CURRENT IMPORTANT PROGRAMS
STUDY SCRUB TYPHUS TRANSMISSION IN VIRGINS FORESTS.
EVALUATE SUB-HUMAN PRIMATES FOR HUMAN MALARIA HOSTS.
DETERMINE TRANSOVARIAL TRANSMISSION RATE OF RICKETTSIA.
STUDY DIARRHEA IN ABORIGINAL FOREST DWELLERS.
DETERMINE GROWTH REQUIREMENTS FOR PSEUDOMONAS PSEUDOMALLEI.

...FUNCTIONS/EQUIPMENT/CAPABILITIES
CONTINUED RESEARCH EFFORTS ALONG PRESENT LINES WITHIN THE SCOPE OF RESEARCH ACTIVITIES, TO PROVIDE DIAGNOSTIC LABORATORY SUPPORT FOR MALAYSIAN CIVILIAN AND MILITARY MEDICAL SERVICES AND FOR COMMONWEALTH MILITARY MEDICAL SERVICES.
LABORATORY SPACE AND ANIMAL-REARING FACILITIES ARE PROVIDED BY THE INSTITUTE FOR MEDICAL RESEARCH, KUALA LUMPUR, MALAYSIA.

INSTALLATION MEDICAL RESEARCH OF INFECTIOUS DISEASES, FT. DETRICK, MD.

CO COL DAN CROZIER TECH DIR DR WILLIAM R BEISEL

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1970 (ACTUAL)	1971 (ACT + EST)
TOTAL RDT+E	3.780	3.287
TOTAL PROCUREMENT	0.000	0.000
TOTAL O+M	0.000	0.000
TOTAL OTHER	2.198	2.063
TOTAL ANNUAL LAB	5.978	5.350
TOTAL IN-HOUSE	5.057	4.950
TOTAL IN-HOUSE RDT+E	2.859	2.887
ANNUAL OPERATING COST	0.935	0.915

PERSONNEL DATA (END OF FY 1970)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PROF	NON-PROF
MILITARY	318	45	48	270
CIVILIAN	89	8	19	70
TOTAL	407	53	67	340

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
15	88.143	17.622	97.731	203.496	8.236	1.930

...MISSION
CONDUCT STUDIES RELATED TO MEDICAL DEFENSIVE ASPECTS OF BW AND DEVELOP APPROPRIATE BIOLOGICAL PROTECTIVE MEASURES, DIAGNOSTIC PROCEDURES AND THERAPEUTIC METHODS.

...CURRENT IMPORTANT PROGRAMS
RAPID DIAGNOSIS OF INFECTIOUS DISEASE. HOST METABOLIC RESPONSE WITH APPLICATION TO EARLY DETECTION OF ILLNESS. DEVELOPMENT OF IMMUNOPROPHYLACTIC PROCEDURES. ACQUISITION OF DATA FOR ASSESSING EFFECT OF INFECTIOUS DISEASE ON A SOLDIER'S PERFORMANCE. THERAPEUTIC METHODS FOR INFECTIOUS DISEASE MANAGEMENT.

...FUNCTIONS/EQUIPMENT/CAPABILITIES
FACILITICS AND EQUIPMENT ARE AVAILABLE TO STUDY THE BIOCHEMICAL, METABOLIC, IMMUNOCHEMICAL, MICROBIOLOGICAL, PATHOLOGICAL, ULTRASTRUCTURAL AND PHYSICAL CHARACTERISTICS OF VARIOUS MICROORGANISMS. NEW LABORATORY FACILITIES PERMIT INVESTIGATIVE WORK WITH HIGHLY INFECTIOUS ORGANISMS AS WELL AS ROUTINE ONES AND PROVIDE CAPABILITY FOR EXPOSURE OF ANIMALS AND HUMANS TO PRECISELY MEASURED DOSES OF MICROORGANISMS. ALSO AVAILABLE IS SPACE FOR SMALL AND LARGE ANIMAL HOLDINGS, A COBALT SOURCE AND SUPERVOLTAGE X-RAY EQUIPMENT FOR STUDIES RELATED TO INFECTION AND RADIATION. VOLUNTEERS ARE USED TO TEST THE EFFICACY OF VACCINES AND OTHER PROPHYLACTIC AND THERAPEUTIC PROCEDURES.

INSTALLATION LETTERMAN ARMY INSTITUTE OF RESEARCH, PRESIDIO OF SAN FRANCISCO, CALIF.

CO COL WILLIAM A AKERS TECH DIR DR MARION B SULZBERGER

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1970 (ACTUAL)	1971 (ACT + EST)
TOTAL RDT+E	0.493	0.656
TOTAL PROCUREMENT	0.000	0.000
TOTAL O+M	0.000	0.000
TOTAL OTHER	0.466	0.695
TOTAL ANNUAL LAB	0.959	1.351
TOTAL IN-HOUSE	0.959	1.351
TOTAL IN-HOUSE RDT+E	0.493	0.656
ANNUAL OPERATING COST	0.299	0.344

PERSONNEL DATA (END OF FY 1970)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PROF	NON-PROF
MILITARY	84	21	55	29
CIVILIAN	18	3	9	9
TOTAL	102	24	64	38

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
0	107.000	12.800	1.600	121.400	0.052	2.472

...MISSION

LAIR CONDUCTS RESEARCH IN THE FIELDS OF MEDICINE AND DENTISTRY, GUIDES COORDINATION, SUPPORTS RESEARCH PROJECTS OF STAFF MEMBERS OF LETTERMAN GENERAL HOSPITAL SIMILARLY SUPPORTS RESEARCH IN HOSPITALS AT CLASS I INSTALLATIONS MONITORS OTHER RESEARCH AS DIRECTED BY CG, USAMRDC.

...CURRENT IMPORTANT PROGRAMS

ENVIRONMENTAL ASSAULTS AGAINST THE HUMAN SKIN. TISSUE REACTION TO SUTURES EARLY RESTORATION OF ORAL INTEGRITY BACTEREMIA. BIOCHEMICAL MECHANISMS OF PATHOGENESIS IN FUNGAL SKIN INFECTIONS AND DEVELOPING BETTER METHODS FOR DIAGNOSING AND COMBATING SUSCEPTIBILITY TO FUNGAL INFECTIONS. EFFECTS OF HEMOR SHOCK.TEST COMPOUNDED RADIOPHARMACEUTICALS.

...FUNCTIONS/EQUIPMENT/CAPABILITIES

A NEWLY RENOVATED EXPERIMENTAL ANIMAL SURGERY HAS AN ANGERR SCINTILLATION CAMERA FOR STATIC AND DYNAMIC RADIOISOTOPIC STUDIES. NEW LABS ARE EQUIPPED TO DO ENZYMOLOGY, CHROMATOGRAPHY, BACTERIOLOGY, IMMUNOLOGY AND MYCOLOGY. EQUIPMENT LIKE THE ULTRACENTRIFUGE AND THE 8-CHANNEL OSCILLOGRAPHIC INK RECORDING SYSTEM FOR RECORDING EKG/EEG S IS INVALUABLE.

INSTALLATION AERONAUTICAL RESEARCH LABORATORY, AMES RESEARCH CENTER, MOFFETT FIELD, CALIF.

DIR F YAGGY DEP DIR MAJ LOUIE G BERRY

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1970 (ACTUAL)	1971 (ACT + EST)
TOTAL RDT+E	2.530	3.154
TOTAL PROCUREMENT	0.000	0.000
TOTAL O+M	0.000	0.000
TOTAL OTHER	0.039	0.042
TOTAL ANNUAL LAB	2.569	3.196
TOTAL IN-HOUSE	2.569	3.196
TOTAL IN-HOUSE RDT+E	2.530	3.154
ANNUAL OPERATING COST	0.000	0.000

PERSONNEL DATA (END OF FY 1970)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PROF	NON-PROF
MILITARY	3	2	4	0
CIVILIAN	111	5	33	78
TOTAL	114	7	37	78

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
0	9.621	2.207	0.096	11.924	0.002	0.000

...MISSION
CONDUCT BASIC AND APPLIED RSCH IN FIELD OF LOW-SPEED AERONAUTICS.

...CURRENT IMPORTANT PROGRAMS
THEO AND EXP STUDIES OF HELICOPTER ROTOR AERODYNAMIC NOISE
THEO AND EXP STUDIES OF HELICOPTER ROTOR BOUNDARY LAYER FLOWS
WIND TUN INVEST OF PERF AND STABILITY OF TILT ROTORS AT HIGH FWD SPEEDS
THEO AND EXP INVEST OF HINGELESS ROTOR SYSTEMS
THEO AND EXP RSCH TO DEFINE OPTIMUM HELICOPTER ROTOR AIRFOILS

...FUNCTIONS/EQUIPMENT/CAPABILITIES
TRANSLATE FUTURE AUS AERO RQR INTO RSCH PLANS. PLAN AND ACCOMP INDEPENDENT IN-HOUSE RSCH PROJ. PLAN,COORD,PROG,PERF AND/OR MONITOR RSCH PROJ COT JOINTLY WITH NASA AND OTHER AGCYS. KEEP ABREAST OF AERO RSCH STATE-OF-THE ART WORLD-WIDE AND INFO HIGHER AND LATERAL HQ AND OTHER AGCY AND INSTITUTIONS OF PERTINENT DEV. PROV NUCLEUS OF AERO CAPABILITY WITHIN AUS. ACT AS ADVISOR OR CONSULTANT TO AUS OR OTHER AGCY ON MATTERS CONCERNING AERO RSCH. MONITOR,TECHNICALLY,CONTR SPT RSCH PROJECTS. COORD ALL AUS AERO RSCH ACTIVITIES WITH NASA. PART IN PROFESSIONAL AND ACADEMIC CONF, MEETINGS ANDSYMPOSIA. COND SPECIFIC RES FOR OTHER AGCYS ON NON-INTERFERENCE BASIS WITH PROG RSCH.OPERATE AND MAINTAIN NECESSARY EXPERIMENTAL FACILITIES ALLOC BY NASA-AMES RSCH CTR FOR USE OF ASAARL. PERFORM SPECIAL FUNC AS MAY BE DIRECTED BY DEPUTY FOR LABORATORIES,HQ,AMC.

INSTALLATION BALLISTIC RESEARCH LABORATORIES, ABERDEEN PROVING GROUND, MD.

CO COL HOWARD C METZLER CIV DIR DR RUBERT J EICHELBERGER

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1970 (ACTUAL)	1971 (ACT + EST)
TOTAL RDT+E	19.394	17.693
TOTAL PROCUREMENT	0.330	0.250
TOTAL O+M	0.016	0.000
TOTAL OTHER	0.037	0.057
TOTAL ANNUAL LAB	19.777	18.000
TOTAL IN-HOUSE	18.271	16.790
TOTAL IN-HOUSE RDT+E	17.888	16.483
ANNUAL OPERATING COST	4.535	4.500

PERSONNEL DATA (END OF FY 1970)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PROF	NON-PROF
MILITARY	36	4	30	6
CIVILIAN	681	56	344	337
TOTAL	717	60	374	343

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
3360	198.717	41.580	24.030	264.327	11.065	16.653

...MISSION
CONDUCT RSCH AND EXPLORATORY DEVELOPMENT IN THE SCIENCES/TECHNOLOGIES WHICH ARE NECESSARY FOR CONCEIVING DESIGNING DEVELOPING AND EVALUATING WPNS SYSTEMS.PURSUE ORIENTED FUNDAMENTAL RSCH IN PHYSICS CHEM MATH ENGR AND BIOPHYSICS.INVEST PERT BRANCH MILITARY SCI TECH.

...CURRENT IMPORTANT PROGRAMS
STUDIES OF UNUSUAL MATERIAL FOR FRAGMENTATION
MATERIEL GEOMETRY FOR LIGHTWEIGHT ARMOR
COMBUSTIBLE MAT PHENOMENOLOGY-MILITARY FUEL FIRE PROGRAM
RESEARCH IN IGNITION PHENOMENA
VULNERABILITY OF GROUND AND AIRBORNE TARGETS/OFFENSIVE/DEFENSE MEASURES.

...FUNCTIONS/EQUIPMENT/CAPABILITIES
WIND TUNNELS-SUPERSONIC/HYPERSONIC/TRANSONIC RANGE
EXPLOSIVE BLAST CHAMBERS AND HIGH ALTITUDE BLAST SPHERE
SHOCK TUBES-SIMULATION OF NUCL BLAST/CHEMICAL REACTION RATE
EXPLOSIVE PLAT SLAP AND EXPLODING WIRE
EXPLOSIVE FIELD TEST FACILITIES
HIGH SPEED MOTION PHOTOGRAPHY SCHLIEREN INTERFEROMETRY
ELECTRON MICROSCOPE--ELECTRON SPIN RESONANCE-NUCL MAGNETIC RESONANCE.
ELECTROMAGNETIC RADIATION RANGES
ANALOG COMPUTER FOR SIMULATION OF DYNAMICS OF GUN AND RIFLE
PROPULSION AND COMBUSTION CHAMBERS
LASERS FOR PLASMA PROGAGATION AND SIGNATURES
AFTER-GLOW REACTION CHAMBER-UPPER ATMOSPHERE CHEM REACTION RATES

INSTALLATION COATING AND CHEMICAL LABORATORY, ABERDEEN PROVING GROUND, MD.

CO COL HOWARD C METZLER ACT DIR HARRY L AMMLUNG

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1970 (ACTUAL)	1971 (ACT + EST)
TOTAL RDT+E	2.012	1.485
TOTAL PROCUREMENT	0.133	0.124
TOTAL O+M	0.156	0.070
TOTAL OTHER	0.008	0.010
TOTAL ANNUAL LAB	2.309	1.689
TOTAL IN-HOUSE	1.211	0.993
TOTAL IN-HOUSE RDT+E	1.031	0.825
ANNUAL OPERATING COST	0.159	0.141

PERSONNEL DATA (END OF FY 1970)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PROF	NON-PROF
MILITARY	5	2	8	0
CIVILIAN	46	3	20	26
TOTAL	51	5	28	26

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
1	16.625	1.868	4.268	22.761	0.202	2.409

...MISSION
MANAGE + DIRECT THE ASSIGNED PORTION OF AMC MAT + FUELS + LUBES PROGRAM. INCLUDES BASIC + APPLIED RESEARCH IN AUTO CHEMICALS.ORGANIC + SEMI-ORGANIC COATINGS PAINT CLEANING FUELS + LUBES.COORDINATE THE RESEARCH PROGRAM OF AMC IN THE FIELD OF FUELS + LUBES + RELATED MATERIALS,

...CURRENT IMPORTANT PROGRAMS
INVESTIGATION OF THE FLAMMABILITY HAZARDS OF THICKENED FUELS
FUNCTIONAL CLEANING COMPOUNDS + PAINT STRIPPERS
COATINGS TO IMPROVE PROTECTION AND OPERATIONAL RELIABILITY OF MATERIAL
DEVELOPMENT OF A BRAKE FLUID WITH LOW WATER SENSITIVITY
REVISION OF VV-G-76B TO INCORPORATE A LOW EMISSIONS GASOLINE GRADE

...FUNCTIONS/EQUIPMENT/CAPABILITIES
CONDUCT BASIC + APPLIED RESEARCH + ENGINEERING INVESTIGATION IN THE FIELDS OF AUTO CHEMICALS ORGANIC SEMI-ORGANIC CONVERSION COATINGS CLEANERS FUELS + LUBRICANTS.
PARTICIPATE IN PROGRESS REVIEWS IN ASSIGNED FIELDS WITH AMC MAJOR SUBORDINATE COMMANDS + PROJECT MANAGERS.
PARTICIPATE IN THE STANDARDIZATION + INDUSTRIAL PREPAREDNESS PROGRAMS.
PREPARE + MAINTAIN THE PRODUCT QUALIFICATION RECORDS IN ASSIGNED FIELDS.
SPECTROPHOTOMETERS--ACCELERATED WEATHERING MACHINE--CORROSION TEST CABINETS--GAS CHROMATOGRAPHS--PROGRAMED HUMIDITY CHAMBERS--FUEL COKER SUB-ZERO TEST CABINET--STROKING UNIT BRAKE FLUID--TEMPERATURE FLOW CORROSION UNIT.
TWO GENERAL PURPOSE LABORATORY BUILDINGS AND EXPOSURE FARM.

INSTALLATION COLD REGIONS RESEARCH AND ENGINEERING LABORATORY, HANOVER, N. H.

JOSEPH F CASTRO LIEUTENANT COLONEL CE COMMANDING OFFICER AND DIRECTOR

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1970 (ACTUAL)	1971 (ACT + EST)
TOTAL RDT+E	6.036	6.056
TOTAL PROCUREMENT	0.000	0.000
TOTAL O+M	0.274	0.225
TOTAL OTHER	0.421	0.255
TOTAL ANNUAL LAB	6.731	6.536
TOTAL IN-HOUSE	5.840	4.719
TOTAL IN-HOUSE RDT+E	5.145	4.239
ANNUAL OPERATING COST	1.117	1.228

PERSONNEL DATA (END OF FY 1970)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PROF	NON-PROF
MILITARY	47	4	69	0
CIVILIAN	212	19	75	137
TOTAL	259	23	144	137

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
769	19.013	9.848	108.415	137.276	3.896	4.455

...MISSION
RESEARCH AND SURVEILLANCE OF TECHNOLOGY FOR ARMY NEEDS IN COLD REGIONS INCLUDING MATERIALS TECHNIQUES AND EVENTS UNIQUE TO COLD ENVIRONMENTS AND TO DESIGN OF MATERIAL FOR USE THEREIN AND FURNISHING ADVICE AND ASSISTANCE TO ARMY AND DOD.

...CURRENT IMPORTANT PROGRAMS
SITE SELECTION FOR MILITARY STRUCTURES IN ARCTIC AND SUBARCTIC
DESIGN CRITERIA FOR ARCTIC AND SUBARCTIC CONSTRUCTION
DEVELOPMENT OF TECHNICAL AND FIELD MANUALS CONCERNING COLD REGIONS
STUDY 7100 FT ICE CORE BYRD STATION ANTARCTICA
DEVELOP COMPUTER MODELS FOR RIVER THERMAL POLLUTICN

...FUNCTIONS/EQUIPMENT/CAPABILITIES
BASIC PROPERTIES AND MILITARY USES OF SNOW ICE AND FROZEN GROUND
IMPROVED CAPABILITY FOR MILITARY OPERATIONS IN COLD REGIONS
DEVELOPMENT OF FIELD MANUALS FOR ARMY USE
COLD FOG CONTROL AND IR ATTENUATION IN SUCH FOGS
TECHNICAL ADVICE AND ASSISTANCE TO ARMY AND DOD AGENCIES
CRITERIA FOR DESIGN OF MILITARY MATERIEL FOR USE IN EXTREME ENVIRONMENTS
HEAT SINK CONCEPTS AND APPLICATIONS
RAPID EXCAVATION OF FROZEN GROUND
PROVIDE GUIDANCE AND ASSISTANCE TO ARMY AND DOD FOR EXTREME CLIMATES,
UNIQUE MODERN LABORATORY WITH COLD ROOMS AND SPECIAL
APPARATUS FOR TESTS AND ANALYSIS OF SNOW ICE AND FROZEN GROUND
CONDUCT RESEARCH ON MATERIALS TECHNIQUES AND EVENTS FOR EXTREME CLIMATES.

INSTALLATION HARRY DIAMOND LABORATORIES, WASHINGTON, D. C.

CO COL DAVID W EINSEL JR TECH DIR BILLY M HORTON

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1970 (ACTUAL)	1971 (ACT + EST)
TOTAL RDT+E	23.004	19.859
TOTAL PROCUREMENT	47.947	45.162
TOTAL O+M	1.580	0.400
TOTAL OTHER	0.555	0.549
TOTAL ANNUAL LAB	73.086	65.970
TOTAL IN-HOUSE	32.013	29.328
TOTAL IN-HOUSE RDT+E	17.350	16.192
ANNUAL OPERATING COST	8.132	7.800

PERSONNEL DATA (END OF FY 1970)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PROF	NON-PROF
MILITARY	10	5	11	0
CIVILIAN	1318	27	616	702
TOTAL	1328	32	627	702

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
2138	296.807	49.555	288.360	634.722	6.431	18.348

...MISSION
PERFORM RD+E ON INFLUENCE,TIME+COMMAND FUZING/SIGNATURE ANALYSIS+TARGET INTERCEPT PHASE OF TERMINAL GUIDANCE/WEAPON SYSTEM SYNTHESIS/CCM/NUCLEAR WEAPONS EFFECTS/INSTRUM,MEASMT+SIMULATION ON MATERIALS+COMPONENTS/ADV ENERGY TRANSFORMATION+CONTROL SYSTEMS/+FLUID TECHNOLOGY.

...CURRENT IMPORTANT PROGRAMS
DEV+ENG OF PERSONNEL DETECTION SIGNAL PROCESSORS+WEAPONRY RADAR
DEV OF FLUIDIC STABILIZATION SYSTEMS FOR SMALL ARMS+LARGE WEAPONS
ANALYSIS,MODELING+EXPLOITATION OF SOVIET BLOC AIR DEFENSE SYSTEMS
RES+DEV OF HARDENED PROXIMITY FUZING FOR MISSILE REENTRY VEHICLES
RDE+PROGN ON PROXIMITY+ELECTRONIC TIME FUZING FOR ARTILLERY,MORTAR+MINES

...FUNCTIONS/EQUIPMENT/CAPABILITIES
PLAN,MANAGE+CONDUCT PROGRAMS IN SUPPORT OF ASSIGN MISSIONS*MANAGE FLUID TECHNOLOGY DEVELOPMENT*PROVIDE CONSULTING SERVICES,TECHNICAL GUIDANCE+ ASSISTANCE TO AMC/OTHER ELEMENTS OF DA,DOD+OTHER GOVT AGENCIES*MAINTAIN A HIGH DEGREE OF COMPETENCE IN THE APPLICATION OF PHYSICAL SCIENCES TO THE SOLUTION OF MILITARY PROBLEMS*OPERATE+MAINTAIN SEVERAL HIGHLY SPECIALIZED FACILITIES EQUIPPED TO SUPPORT THESE FUNCTIONS,INCLUDING FLASH XRAY+PULSE REACTOR FOR NUCL EFFECTS EVALUATIONS/ANECHOIC CHAMBER+ ANTENNA TEST RANGE FOR RADIO ANTENNAS/HIGH PRESSURE SHOCK TUBES FOR STDY OF HIGH TEMPERATURE GASES/MERCURY ARC PLASMA TUBE,OPTICAL+SPECTROSCOPIC EQUIPMENT/TEST RANGE FOR EXPERIMENTAL EVALUATION OF FUZES,COMPONENTS+ SUBSYSTEMS/LATITUDE MAGNETIC SIMULATOR FOR SIGNATURE ANALYSIS/TELEMETRY EQUIPMENT/+AIR GUN FOR LABORATORY SIMULATION OF WEAPON FIRING FORCES.

INSTALLATION HUMAN ENGINEERING LABORATORIES, ABERDEEN PROVING GROUND, MD.

CO COL HOWARD C METZLER CIV DIR DR JOHN D WEISZ

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1970 (ACTUAL)	1971 (ACT + EST)
TOTAL RDT+E	2.760	3.200
TOTAL PROCUREMENT	0.156	0.156
TOTAL O+M	0.000	0.050
TOTAL OTHER	0.000	0.000
TOTAL ANNUAL LAB	2.916	.400
TOTAL IN-HOUSE	2.488	2.700
TOTAL IN-HOUSE RDT+E	2.332	2.500
ANNUAL OPERATING COST	0.488	0.500

PERSONNEL DATA (END OF FY 1970)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PROF	NON-PROF
MILITARY	33	3	26	7
CIVILIAN	95	10	53	42
TOTAL	128	13	79	49

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
10	26.500	17.605	24.658	68.763	0.608	2.957

...MISSION
CONDUCT BASIC AND APPLIED RESEARCH IN HUMAN FACTORS ENGINEERING.
DEVELOP NEW HUMAN FACTORS ENGINEERING METHODOLOGY.
ESTABLISH AND OPERATE A MANPOWER CHARACTERISTICS DATA BANK.
INTEGRATE ALL MPWR CHARACTERISTICS INTO ARMY MATERIEL DEVELOPMENT PROG.

...CURRENT IMPORTANT PROGRAMS
CONDUCT HUMAN ERROR AND ARTILLERY FIRE EXPERIMENTS.
CONDUCT SMALL ARMS EXPERIMENTS.
INVESTIGATE COMPLEX COMMAND CONTROL INFORMATION DISPLAYS.
CONDUCT AIRCREW STATION ENVIRONMENT EXPERIMENTS.
INVESTIGATE DEPTH PERCEPTION - VISION TECHNIQUES.

...FUNCTIONS/EQUIPMENT/CAPABILITIES
FIXED WING FLIGHT SIMULATORS
HELICOPTER SIMULATORS WHIRLYMITE
COMMAND AND CONTROL INFORMATION HANDLING SIMULATORS
ANECHOIC CHAMBER
PHYSIOLOGY LAB PLUS INSTRUMENTATION
SMALL ARMS TEST FIRING RANGE
ANIMAL SURGICAL FACILITY
NOISE MEASUREMENT AND ANALYSIS INSTRUMENTATION
WOOD WORKING AND METAL WORKING SHOPS
CLOSED CIRCUIT TV INSTRUMENTATION
CENTRAL NERVOUS SYSTEM OUTPUT RECORDING INSTRUMENTATION
HUMAN PERFORMANCE DATA BANK

INSTALLATION MATERIALS AND MECHANICS RESEARCH CENTER, WATERTOWN, MASS.

DIR DR A E GORUM CO LTC J W GILLESPIE

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1970 (ACTUAL)	1971 (ACT + EST)
TOTAL RDT+E	11.127	15.460
TOTAL PROCUREMENT	3.648	2.419
TOTAL O+M	1.335	2.239
TOTAL OTHER	0.000	0.000
TOTAL ANNUAL LAB	16.110	20.118
TOTAL IN-HOUSE	12.454	13.364
TOTAL IN-HOUSE RDT+E	9.495	10.105
ANNUAL OPERATING COST	3.146	3.245

PERSONNEL DATA (END OF FY 1970)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PROF	NON-PROF
MILITARY	12	6	12	0
CIVILIAN	652	54	211	441
TOTAL	664	60	223	441

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
48	410.100	122.400	129.000	661.500	14.770	11.387

...MISSION
MANAGE AMC R+D STRUCTURAL MATERIALS + MECHANICS PROG.CONDUCT TECHNOLOGICAL PROGRAMS IN MATERIALS + MECHANICS USED IN ARMY MATERIEL.EXECUTE PROG IN OWN FACILITIES + BY ASSIGNMENT + FUND TRANSFER TO OTHER AMC LABS + CONTRACTORS.PROVIDE DIRECTION + TECH ASST ON MATERIALS + MECHANICS.

...CURRENT IMPORTANT PROGRAMS
R+D PROGRAMS FOR IMPROVED MATERIEL - ARMOR
R+D PROGRAMS FOR IMPROVED MATERIEL - ABM HARDENING
R+D PROGRAMS FOR IMPROVED MATERIEL - AIRCRAFT
R+D PROGRAMS FOR IMPROVED MATERIEL - MATERIALS-PROCESSING + EVALUATION
R+D PROGRAMS FOR IMPROVED MATERIEL - AMMUNITION

...FUNCTIONS/EQUIPMENT/CAPABILITIES
MANAGE AMC R+D PROG IN MATERIALS + MECHANICS + CONDUCT TECH PROGS IN MATERIALS SYSTEMS + MECHANICS DIRECTED TO ARMY MATERIEL.MANAGE DOD PROG AS EXECUTIVE AGENT-ARMOR TECHNOLOGY.MANAGE + CONDUCT INTEGRATED + DIRECTED BASIC + APPLIED RES ON MATERIALS SUCH AS METALS,CERAMICS,ORGANIC + INORGANIC POLYMERS + COMPOSITES.MANAGE + CONDUCT THEORETICAL + APPLIED STUDIES ON MECHANICS OF MATLS + SYSTEMS.IDENTIFY + INVES BASIC FACTORS INVOLVED IN PROCESSING + APPLICATIONS OF NEW + IMPROVED MATERIALS. OPERATE DOD NDT INFO ANALYSIS CTR.ASSIST IN DESIGN + DEVEL OF PROTOTYPES. DEVELOP METHODS FOR TEST + EVALUATION OF MATERIALS + STRUCTURES.MANAGE ARMY PORTION DEFENSE STANDARDIZATION PROG,CONDUCT ENGINEERING STANDARDIZATION EFFORT.MANAGE AMC MATERIALS TEST PROG.CONDUCT PEMA MANUF METHOD + TECHNOLOGY PROG + ADVISE COMMAND + INDUSTRY ON PROCESSING TECHNIQUES.

INSTALLATION NUCLEAR DEFENSE LABORATORY, EDGEWOOD ARSENAL, MD.

CO COL HOWARD C METZLER CIV CHIEF DR DONALD E ECCLESHALL

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1970 (ACTUAL)	1971 (ACT + EST)
TOTAL RDT+E	2.553	1.934
TOTAL PROCUREMENT	0.000	0.000
TOTAL O+M	0.191	0.145
TOTAL OTHER	0.037	0.021
TOTAL ANNUAL LAB	2.781	2.100
TOTAL IN-HOUSE	2.628	1.980
TOTAL IN-HOUSE RDT+E	2.400	1.814
ANNUAL OPERATING COST	0.754	0.725

PERSONNEL DATA (END OF FY 1970)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PROF	NON-PROF
MILITARY	40	3	42	0
CIVILIAN	75	14	51	24
TOTAL	115	17	93	24

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
109	35.622	32.599	3.795	72.016	1.385	5.592

...MISSION
CONDUCT RESEARCH IN NUCLEAR WPNS EFFECTS INCLUDING INITIAL NUCLEAR RADIATION RESIDUAL RADIATION AND FALLOUT/SHIELDING AND THERMAL RADIATION PHENOMENA PROVIDE TECHNICAL INFORMATION AND ASSISTANCE IN THE FIELDS OF RADIOLOGICAL/NUCLEAR DEFENSE AND HEALTH PHYSICS.

...CURRENT IMPORTANT PROGRAMS
SHIELDING AND RADIATION TRANSPORT/GAMMA NEUTRONS AND X-RAYS
FALLOUT PREDICTION CODES AND SYSTEMS
NEUTRON CROSS SECTIONS NUCLEAR AND RADIATION PHYSICS AND CHEMISTRY
RADIATION MEASUREMENTS/ACCELERATORS REACTORS AND WEAPONS TESTS
ABM NUCLEAR ENVIRONMENT DEFINITION AND ANALYSIS

...FUNCTIONS/EQUIPMENT/CAPABILITIES
DEVELOPMENT OF RADIATION TRANSPORT AND SHIELDING CODES
MEASUREMENT OF NEUTRON AND GAMMA RADIATION AT UNDERGROUND TESTS
DEVELOPMENT OF FALLOUT PREDICTION MODELS AND TECHNIQUES
RESEARCH IN LOW ENERGY NUCLEAR PHYSICS
RADIATION CHEM/SOLID STATE RADIATION MEASUREMENT TECHNIQUES
RESEARCH ON SIMULATED EMISSION OF NUCLEAR RADIATION
MAJOR EQUIPMENT INCLUDES A 15 MEV TANDEM VAN DE GRAAFF ACCELERATOR
750 KEV COCKCROFT-WALTON POSITIVE ION ACCELERATOR
ELECTRON MICROPROBE ANALYZER/PULSED ELECTRON SOURCE/ESR SPECTROMETER
X-RAY DIFFRACTION EQUIP/RAD SOURCES/RAD TEST FIELDS/NEUTRON SPECTROMETER.

INSTALLATION NATICK LABORATORIES, NATICK, MASS.

CO DEAN VAN LYDEGRAF SCI DIR DALE H SIELING

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1970 (ACTUAL)	1971 (ACT + EST)
TOTAL RDT+E	15.274	14.208
TOTAL PROCUREMENT	0.470	0.381
TOTAL O+M	10.604	8.557
TOTAL OTHER	1.369	1.432
TOTAL ANNUAL LAB	27.717	24.578
TOTAL IN-HOUSE	22.579	20.988
TOTAL IN-HOUSE RDT+E	12.264	11.444
ANNUAL OPERATING COST	5.187	4.661

PERSONNEL DATA (END OF FY 1970)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PROF	NON-PROF
MILITARY	154	10	78	76
CIVILIAN	1305	99	503	802
TOTAL	1459	109	581	878

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
3006	525.000	69.320	365.680	960.000	35.154	11.493

...MISSION
ACCOM ASG R-D IN THE PHYS BIOL AND EARTH SCI AND ENG TO MEET MIL RQR IN THE COMMODITY AREAS OF TEX CLO BODY ARMOR ORG MATLS INSECT AND FUNG SUBS. CNTRS FOOD SVC EQUIP FLD SPT EQUIP TENT AND EQUIP AND AIR DEL EQUIP. IN DESIG CMDTY AREAS PROV TECH AND ENG SPT IN CONNEC W/ACCOM OF AE AND STD.

...CURRENT IMPORTANT PROGRAMS
CNTR MEAS STUDIES AGNST VULNER OF PERS AND MATLS TO TACT LASER IRRAD
FOOD SERVICE SYSTEM FOR THE ARMY IN THE FIELD
LOW ALT AIRDROP SYS FOR PERS SUPPLIES AND EQUIPMENT
JSOR MC-ARMY FOR GROUND COMBAT ARMOR VEST
RELIABILITY OF FLEXIBLE PACKAGING FOR FOOD

...FUNCTIONS/EQUIPMENT/CAPABILITIES
COBALT 60 IRRAD FACILITY DESIGNED FOR MAX FLEXIBILITY IN FOOD PROCESSING.
BACTERIOLOGY LAB EQUIP FOR INVESTIGATIONS OF PATHOGENIC MICROORGANISMS.
FLAME PROTECTION LAB AND FACILITY INCLUDING AN OUTDOOR FLAME PIT.
HIGH RESOLUTION MASS SPECTROMETER FOR ANALYSIS OF VOLATILE COMPOUNDS.
FOOD PROCESSING FAC FOR CONTROLLED PREPROCESSING AND PROC BY SEV TECHNIQUES.
LAB SUBSONIC WIND TUNNEL CAPABLE OF VELOCITIES UP TO 110 FEET PER SEC.
HEAT TRANSFER LAB TO STUDY HEAT AND MASS TRANSPORT CHAR OF FABRICS.
ELECTRON LINEAR ACCELERATOR DESIGNED FOR HIGH POWER OUTPUT IN FOOD PROC.
DROP TEST FAC CONS OF 40 TON CAPACITY TRACKED CRANE AND A 50 FT BOOM.
DYEING AND FINISHING LAB FOR CONDUCTING STUDIES OF TEXTILES.
FEBETRON MACHINE USED AS A RADIA SOURCE FOR PULSE RADIOLYSIS STUDIES.
RAIN ROOM DESIGNED TO DUPLICATE RAINFALL CORRESPONDING TO NATURAL RAIN.

INSTALLATION AVIATION MATERIEL LABORATORIES, FT. EUSTIS, VA.

CO COL JOHN R ADIE TECH DIR LARRY M HEWIN

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1970 (ACTUAL)	1971 (ACT + EST)
TOTAL RDT+E	22.904	16.815
TOTAL PROCUREMENT	0.000	0.000
TOTAL O+M	0.004	0.003
TOTAL OTHER	0.000	0.000
TOTAL ANNUAL LAB	22.908	16.818
TOTAL IN-HOUSE	5.545	6.538
TOTAL IN-HOUSE RDT+E	5.541	6.535
ANNUAL OPERATING COST	2.479	2.978

PERSONNEL DATA (END OF FY 1970)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PROF	NON-PROF
MILITARY	50	0	14	36
CIVILIAN	306	2	132	174
TOTAL	356	2	146	210

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
108	75.393	38.890	15.788	130.071	1.469	5.521

...MISSION
CONDUCT EXPLORATORY DEVELOPMENT AND ADVANCED DEVELOPMENT CONNECTED WITH ARMY AIRCRAFT, RELATED COMPONENTS AND EQUIPMENT, AND ASSOCIATED MILITARY SCIENCES.

...CURRENT IMPORTANT PROGRAMS
ADVANCED DEV OF 1500-HP ACFT TURBINE ENGINES ROLLER GEAR TRANSMSN SYSTEMS.
LEAD LAB FOR ADVANCED DEV OF TACTICAL ACFT GUIDANCE SYSTEM.
ADVANCE DEV + SUPPORT OF UTTAS, HLH + ADVANCED ACFT SYSTEMS.
CONDUCT MAINT & RELIABILITY PROGRAMS IN ACFT SYS, SUBSYS + COMPONENTS.
SAFETY + SURVIV PROGRAMS IN ACFT STRUC, CONTROL SYS + FIRE PROTECTION.

...FUNCTIONS/EQUIPMENT/CAPABILITIES
DEV ADV AERO TECHNOLOGY INCL AERODYNAMICS, STRUCTURES, PROPULSION, STABILITY + CONTROL, ECT. DEV NEW FAMILY OF ADV ACFT TURBINE ENGINES. DEV ACFT ADV DSGN ANAL + SYS INTERGRATION METHODS. PROVIDE NEW MEANS/METHODS FOR IMPROVING ACFT MAINT, RELIABILITY, SURVIV & SAFETY. CONDUCT WIND TUNNEL - FLT RSCH ACFT PROG AND ADV DEV OF ACFT SUBSYS - EQUIP- E.G., CARGO HDLG + FLD SUPPORT. CONDUCT LONG RANGE R+D PLANNING.
LABS, STRUCTURES FAB AND RSCH, ARMOR DYNAMICS, INSTR, DATA REDUC, FUEL OIL ANALYSIS, EXPER FAB SHOPS, AND FLT HANGAR.
EQUIP, FILAMENT WINDING, FATIGUE TESTING, VIBRA SYS 5HZ-10KHZ, TENSILE TEST, NON-DESTRUC TEST, 30-CAL TO 20MM BALLISTICS RANGE, FLAME PROPAGATION, A-D CONVERTOR, ELECTRO PLOTTER, IBM 360-44, CALIB, ENVIR TEST CHAMBERS, AUTOMIC ABSORP SPECTR, AND TELEMETERING GND STATION.

INSTALLATION AVIATION TEST ACTIVITY, EDWARDS AIR FORCE BASE, CALIF.

CO LTC EDWARD P PREISENDORFER TECH DIR CMDR JAMES S HAYDEN

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1970 (ACTUAL)	1971 (ACT + EST)
TOTAL RDT+E	2.490	1.819
TOTAL PROCUREMENT	0.175	0.225
TOTAL O+M	0.210	0.188
TOTAL OTHER	0.430	0.664
TOTAL ANNUAL LAB	3.305	2.896
TOTAL IN-HOUSE	3.215	2.847
TOTAL IN-HOUSE RDT+E	2.400	1.770
ANNUAL OPERATING COST	0.700	0.700

PERSONNEL DATA (END OF FY 1970)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PROF	NON-PROF
MILITARY	77	0	26	51
CIVILIAN	120	1	33	87
TOTAL	197	1	59	138

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
9	4.280	32.830	98.490	135.600	1.140	3.627

...MISSION
CONDUCT ENGR FLT EVAL OF AIR VEHICLES AS INTGRATED SYS AND VEH PROPOSED OR CONSIDERED FOR ARMY APPLICATION OR INCORP ADV CONCEPTS WITH POTENTIAL MILI APPLI.PRODUCE TEST DATA ON BASIC AIR VEH PERF,HNDLING QUAL, SYS/SUB SYS INTERFACE AND INTGRATED SYS PERF,MNTNABILITY AND RELIABILITY.

...CURRENT IMPORTANT PROGRAMS
AH1G AIRWTHINESS AND FLT QUAL,HT VELOCITY,WPNS,STAB AND CONTROL TESTS
CH47 AIRWTHINESS AND FLT QUAL,HT VELOCITY,IR TESTS
0H58 AIRWTHINESS AND FLT QUAL,WPNS,HT VELOCITY TESTING
AH56 WITNESS AND MONITOR,PLANNING FOR ARMY PRELIMINARY EVALUATION
0V1C ARMY PRELIMINARY EVALUATIONS I,II,III TESTING

...FUNCTIONS/EQUIPMENT/CAPABILITIES
1-T28 1-C47 1-U8D 3-F51D 10-V1C 1-UH1M 1-UH1C 2-UH1H 1-JUH1H 22-H58A 10-H6A 1-AH1G 1-JCH47C
CENTRAL COMPUTER EMR6135 WITH TELEMETRY
1-AIRBORNE DATA ACQUISITION SYSTEM
1-REMOTE GROUND STATION WITH COMPUTER AND TELEMETRY USED AT OFF SITE TEST LOCATIONS 4-MAGNETIC TAPES ELECTRIC TYPEWRITER FOR TEST REPORT PREPARATION LIMITED INSTRUMENT CALIBRATION CAPABILITY PRESSURE TEMP MB ACCEL FORCE RPM

INSTALLATION ELECTRONICS R&D LABORATORY, FT. MONMOUTH, N. J.

CG MG WALTER E LOTZ JR DEP DR ROBERT S WISEMAN

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1970 (ACTUAL)	1971 (ACT + EST)
TOTAL RDT+E	154.025	98.338
TOTAL PROCUREMENT	15.556	15.000
TOTAL O+M	1.190	1.000
TOTAL OTHER	0.005	0.000
TOTAL ANNUAL LAB	170.776	114.338
TOTAL IN-HOUSE	89.608	77.507
TOTAL IN-HOUSE RDT+E	75.570	63.907
ANNUAL OPERATING COST	16.840	16.600

PERSONNEL DATA (END OF FY 1970)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PROF	NON-PROF
MILITARY	935	18	307	628
CIVILIAN	3155	121	1557	1598
TOTAL	4090	139	1864	2226

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
940	850.625	82.803	581.554	1514.982	41.526	160.764

...MISSION
CONDUCT EXP RESEARCH IN PHYSICAL SCIENCES AND APPLIED RESEARCH AND DEVEL IN ELECT MATL,DEVICES,COMPONENTS,ASSEMBLIES,AVIONICS,SYSTEM ENGINEERING, COMMUNICATIONS EQUIP AND SYSTEMS,ADPE,ELECTRONIC WARFARE,NIGHT VISION, SURVEILLANCE,ATMOSPHERICS,AND ELECTROMAGNETIC COMPAT AND INTERFERENCE.

...CURRENT IMPORTANT PROGRAMS
GROUND AND AIRBORNE,NAVIGATION AND AIR TRAFFIC CONTROL
TACTICAL NETWORK COMBAT RADIO SYSTEM
SURVEILLANCE,TARGET ACQUISITION AND NIGHT VISION RESEARCH AND ENGRG
MICROELECTRONIC AND MICROWAVE MATERIALS, TECHNIQUES AND DEVICES
ELECTRONIC COUNTERMEASURES, ELECTRONIC INTELLIGENCE TECH,STUDIES AND DEV

...FUNCTIONS/EQUIPMENT/CAPABILITIES
THE LABS RESEARCH AND DEVELOP ELECTRONIC COMPONENTS, EQUIPMENTS,AND SYSTEMS IN THEIR RESPECTIVE MISSION AREAS. ABOUT ONE-HALF OF THE WORK LOAD IS ACCOMPLISHED UNDER CONTRACT BY OUTSIDE SOURCES. IN-PRODUCTION AND IN-SERVICE ITEMS ARE COVERED BY LAB ENGINEERING SUPPORT. PROTOTYPE INSTALLATIONS FOR EXISTING DEVICES IN NEW VEHICLES,ETC. TESTING CHAMBERS FOR ENVIRONMENTAL STRESS, SHOCK,ETC, FROM CABINET-SIZE UP TO DRIVE-IN SIZE ARE AVAILABLE. CRYOGENIC FACILITIES ARE AVAILABLE TO THE LABS. COMPLETE FABRICATION SUPPORT IS AVAILABLE -MACHINING, METAL WORKING, PLASTICS, WOODWORKING, PLATING, AND OTHERS. UPWARDS OF 50 AIRCRAFT ARE AVAILABLE FOR TEST-FLYING DEVELOPMENTAL DEVICES. FACILITIES ARE GEOGRAPHICALLY SCATTERED. REMOTE ACCESS TELETYPEWRITERS PROVIDE ACCESS TO THE ECOM COMPUTER FOR SCIENTIFIC PERSONNEL DEVELOPING THEIR OWN COMPUTER PROGRAMS.

INSTALLATION MISSILE COMMAND R&D LABORATORIES, REDSTONE ARSENAL, ALA.

CG MG EDWIN I DONLEY DIR JOHN L MCDANIEL

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1970 (ACTUAL)	1971 (ACT + EST)
TOTAL RDT+E	71.877	58.447
TOTAL PROCUREMENT	6.699	3.600
TOTAL O+M	0.096	0.870
TOTAL OTHER	0.591	0.591
TOTAL ANNUAL LAB	79.263	63.508
TOTAL IN-HOUSE	39.294	32.349
TOTAL IN-HOUSE RDT+E	31.908	27.583
ANNUAL OPERATING COST	5.000	6.000

PERSONNEL DATA (END OF FY 1970)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PROF	NON-PROF
MILITARY	67	6	46	21
CIVILIAN	982	46	702	280
TOTAL	1049	52	748	301

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
11000	695.768	128.907	90.577	915.252	23.652	34.000

...MISSION
PLAN AND DIRECT MATERIEL DEVELOPMENT PROGRAMS AND PROJECTS NOT SELECTED FOR PROJECT OR COMMODITY MANAGEMENT. MANAGE BASIC AND APPLIED RESEARCH PROJECTS. INITIATE AND PERFORM RESEARCH AND COMP DEV TO GENERATE NEW TECH, AND PERFORM FEASIBILITY AND DESIGN STUDIES FOR FUTURE WEAPON SYS.

...CURRENT IMPORTANT PROGRAMS
TERMINAL HOMING SYSTEMS
ADVANCED LAW
PROJECT 8TH CARD
ADVANCED FLSARD AREA AIR DEFENSE SYSTEMS
EQUIPMENT TECHNOLOGY - EQUIPMENT SYSTEMS DEMONSTRATIONS

...FUNCTIONS/EQUIPMENT/CAPABILITIES
PERFORM LONG-RANGE TECH PLANNING. DES, DEV + FAB PROTOTYPE MISSILE SYS. TECH EVAL + SUPERVIS OF CONTRACTOR PROPOSALS + EFFORTS. PLAN + CONDUCT ENG DESIGN TESTS. OPERATE AIGMT + ARPT+M CENTERS. PLAN + DIRECT DEVEL OF TEST EQUIP FOR SYS INSTALLATION + TEST REQUIREMENTS. GUIDANCE + CONTROL CLEAN-ROOM COMPLEX, SIMULATION FACILITY, RF SHIELDED ANECHOIC CHAMBER, DUAL-POSITION TEST STAND, 8000-KW JET FACILITY, HIGH-VELOCITY 2-MV VAN DE GRAAFF, 178-FT-LONG LASER, X-RAY DIFFRACTOMETER + SPECTROGRAPH, PROPELLANT EVAL FACILITY, DYNAMIC MODULES TESTERS, 13 ANALOG COMPUTERS, 4 DIGITAL COMPUTERS. MOMORROW LABS CONTAIN AIG+C, ADV SYS, ADV SENSORS, GSE + S+M LABS 286,000 SQ FT OF SPACE WITH EQUIP VALUED AT $17M. T+RE LAB OCCUPIES 13,700 ACRES WITH FACIL + CAPABIL FOR FLIGHT + TRACK TEST, SYS ENVIRONMENT, COMPONENT TEST EQUIP + ANALYTICAL SERVICES.

INSTALLATION. MOBILITY EQUIPMENT RESEARCH AND DEVELOPMENT CENTER, FT. BELVOIR, VA.

CO COL BENNETT L LEWIS TECH DIR WILLIAM B TAYLOR

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1970 (ACTUAL)	1971 (ACT + EST)
TOTAL RDT+E	35.313	28.300
TOTAL PROCUREMENT	27.129	32.500
TOTAL O+M	8.472	6.700
TOTAL OTHER	0.000	0.000
TOTAL ANNUAL LAB	70.914	65.500
TOTAL IN-HOUSE	24.160	22.368
TOTAL IN-HOUSE RDT+E	16.755	15.768
ANNUAL OPERATING COST	4.101	4.645

PERSONNEL DATA (END OF FY 1970)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PROF	NON-PROF
MILITARY	59	2	37	22
CIVILIAN	1425	16	491	934
TOTAL	1484	18	528	956

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
1060	246.637	200.490	348.865	795.992	20.525	29.718

...MISSION
BASIC AND APP RES DEV AND ENGR TEST ON ASGND EQ-RAIL MARINE AMPHIB BDG ASLT STREAM CROSSING ELEC PWR GEN INDUS ENGS CONST FIREFTG PREFABS HTG AC WASTE DISPOSAL WATER PURIF CAMOU MINE WARFARE BARR-CTRBARR FUELS HDL MHE DEMLS PHYS SEC NEMP ENGR SPT TO MSC QUAN PROC AND MAINT ACTIVITIES.

...CURRENT IMPORTANT PROGRAMS
EARTHMOVING FAMILY OF ENGR CONSTRUCTION EQUIPMENT (FAMECE)
ELEC PWR GEN INCL LIQ FUEL CELLS ENCLD RANKING CYC PLTS-TURBOALTERNATRS
BARRIER-COUNTERBARRIER MINEWARFARE BORDER SECURITY INTEGRATION SYSTEMS
NEMP VULNERABILITY FOR STRATEGIC AND TACTICAL ARMY VEHICLES
LIGHTWEIGHT FLOAT BRIDGE RIBBON BRIDGE

...FUNCTIONS/EQUIPMENT/CAPABILITIES
OFFICES AND LABORATORIES WITH SUPPORTING DATA PROCESSING ENGINEERING AND INSTRUMENTATION SVCS SHOPS TEST COURSES AND TEST LANES. EQUIPMENT AND CAPABILITIES INCLUDE FUEL CELL AND POWER PLANT LABS AC AND HTG LAB ANECHOIC MICROWAVE SCATTERING FACILITY.ECHO FREE ANECHOIC CHAMBER FOR ACOUSTIC HUMING STUDIES.ENERGY CONVERSION RESEARCH FACILITY,HIGH PRESSURE AIR COMPRESSORS.HYDRAULICALLY ACTUATED TEST FRAME FOR BRIDGES. SHOCK TEST TUBE SIMULATING HIGH EXPLOSIVE BLAST EFFECTS ELECTROMAGNETIC EFFECTS SIMULATORS INCLUDING HIGH ALTITUDE BURST EFFECTS,POWER SYSTEMS SIMULATOR,OUTDOOR RAIN TEST SITE,FULL SCALE RAIL CAR HUMP TEST FACILITY AND LARGE AND SMALL TROPICAL TEMPERATURE AND HUMIDITY TEST CHAMBERS.

INSTALLATION FRANKFORD ARSENAL LABORATORIES, PHILADELPHIA, PA.

CO COL EUGENE BARBERO TECH DIR DR SIDNEY ROSS

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1970 (ACTUAL)	1971 (ACT + EST)
TOTAL RDT+E	26.965	23.859
TOTAL PROCUREMENT	7.193	7.596
TOTAL O+M	0.627	0.711
TOTAL OTHER	0.097	0.099
TOTAL ANNUAL LAB	34.882	32.265
TOTAL IN-HOUSE	23.354	21.963
TOTAL IN-HOUSE RDT+E	15.437	13.557
ANNUAL OPERATING COST	2.732	2.400

PERSONNEL DATA (END OF FY 1970)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PROF	NON-PROF
MILITARY	23	1	23	0
CIVILIAN	1657	29	549	1108
TOTAL	1680	30	572	1108

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
22	558.000	134.000	557.000	1249.000	0.972	8.936

...MISSION
COMMODITY CTR FOR SMALL CAL AMMO + PROPELL ACT DEVICES + MULTIPURP TEST EQ RES IN OPTICAL MTLS + NON-FERR METALS +MTL DEGRAD + MYCOLOGY + PWR TRANS FLUIDS + SYNTH LUBS + PROPELL EXPLOS PYROTECH + LASER COUNTERMEAS R+D TRACER AMMO DESIGN + DEVELOP ARTY METAL PARTS + MECH TIME FUZE

...CURRENT IMPORTANT PROGRAMS
AIRCRAFT + ANTIAIRCRAFT + ARTILLERY + COMBAT VEHICLE FIRE CONTROL
AUTOMATIC TEST EQUIPMENT FOR INTERNAL COMBUSTION ENGINE POWERED MATERIEL
SMALL CALIBER AMMUNITION MODERNIZATION PROGRAM
ARMY SMALL CALIBER AMMUNITION RESEARCH AND ENGINEERING PROGRAM
LASER COUNTERMEASURES AND PROTECTION RESEARCH EXPLORATORY DEVELOPMENT

...FUNCTIONS/EQUIPMENT/CAPABILITIES
LASER LAB MONOCHROMETER SPECTROPHOTOMETER SOLID STATE PHYSICS LAB GEIGER TUBE DIFFRACTOMETER ELECTRON MICROSCOPE XTAL GROWING EQ ELECTRON BEAM VACUUM FILM DEPOSITION EQ DATA ACQUISITION EQ NMR EQ DYNAMIC PHOTOELASTIC STRESS ANALYSIS EQ FLEXITRON FLASH X-RAY EQ HIGH SPEED PHOTOGRAPHIC EQ SPACE + ATMOSPHERIC SIMULATOR UNIVAC SS90 COMPUTER + PERIPHERAL EQ SPECIAL CHEM CODING IO EQ INFO NETWORK EQ HYDRAULIC + MECH POWDER MOLD EQ VAC-ARC MELTING FURNACES MICROSCAN X-RAY ANALYZER RADIOISOTOPE LAB MICROBIOLOGY LAB TROPICAL CLIMATE RM EPR SPECTROMETER DIFF SCAN CALORIMETER PROPELLANT PROCESSING LAB SPECIAL EQ FOR IGNITION + PYROTECH R+D 15 FIRING RANGES HIGH EXPLOSIVES SITE 4 PADS FOR POINT FUZE DETONATION BALLISTIC MEAS EQ DOPPLER RADAR SPECTRA PHOTOMETER K-BAND MICROWAVE INTERFEROMETER OPTICAL LAB MICROWAVE ANECHOIC CHAMBER AUTO-CHECKOUT EQ+LAB

INSTALLATION PICATINNY ARSENAL LABORATORIES, DOVER, N. J.

CO COL W A WALKER TECH DIR H W PAINTER

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1970 (ACTUAL)	1971 (ACT + EST)
TOTAL RDT+E	63.800	53.800
TOTAL PROCUREMENT	19.246	14.833
TOTAL O+M	0.907	0.919
TOTAL OTHER	0.000	0.000
TOTAL ANNUAL LAB	83.953	69.552
TOTAL IN-HOUSE	37.351	30.637
TOTAL IN-HOUSE RDT+E	28.114	24.535
ANNUAL OPERATING COST	9.091	8.945

PERSONNEL DATA (END OF FY 1970)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PROF	NON-PROF
MILITARY	76	3	69	7
CIVILIAN	2000	54	1131	869
TOTAL	2076	57	1200	876

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
5852	613.522	860.038	2368.504	3842.064	71.747	47.846

...MISSION
CEN FOR LIFE CYCLE FUNC FR BASIC AND APPLIED RSCH THRU DEVMT AND ENGRG OF NUC AND CONVL MUNS SUCH AS MINES, GRENS, RKT AND MSL WHDS, PROJS, FUZES, EXPLOS, PYRO, PROP, MATS, PHYS AND ENGRG SCIENCE, DIGITAL ANALOG CMPTG. PROCS ALL NUC AND ASG CONVL MUNS. OPS ARMY EODC, DOD PLASTEC.

...CURRENT IMPORTANT PROGRAMS
IMPROVED AMMUNITION-ICM AND RAP
FLECHETTE MUNITIONS
SPRINT, SPARTAN AND LANCE WARHEAD SECTIONS
EXPLOSIVES AND PYROTECHNICS RESEARCH
MUNITIONS FOR ARMY AIRCRAFT WEAPONIZATION

...FUNCTIONS/EQUIPMENT/CAPABILITIES
NUC WPNS, PROTOTYPE FAB AND ASSY, AND EXPLOS AND PROP PLT PLANTS PROV COMPL INTRGED FAC FOR ASSY, INSP AND TEST OF AK AND CONVL MUNS AND COMPS AND THE MFG AND PROCING OF X EXPLOS AND PROP COMP. THE EXPLOS, PYRO, PROP, MATS AND QA LABS HAVE UNUSUAL EQUIP FOR RSCH, RELIABILITY AND QA SUCH AS BETATRON, DYNAMITRON, HIGH SPEED PHOTG AND SHOCK LOAD FAC, HIGH ALT TEST CHAMBERS, ELECTROMAGNETIC RADIATION INST ETC. THE DEVMT AND ENVIRONMENTAL TEST AND EVAL FAC HAVE MAJOR CPBLTY AS STATIC AND DYNAMIC TEST RGS, DROP TOWERS, DUD RECOVY AND DISASSEMBLY, RF VULNERABILITY, COMPL ENVIRONMENTAL SIM, TARGET EFFS, ETC. OTHER EQUIP INCL VIBRATORS FOR LOADS TO 2000 LB, STATIC RKT TEST RG, 2540 TON HYDROSTATIC PRESS, CMPT TAPE CON MFG EQUIP, VARIETY OF FUZE EVAL EQUIP, CLOSED CIRCUIT TV, HIGH ACCEL SLED TRACK.

INSTALLATION BIOLOGICAL LABORATORIES, FT. DETRICK, MD.

CO COL F B MITMAN JR SCI DIR RILEY D HOUSEWRIGHT

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1970 (ACTUAL)	1971 (ACT + EST)
TOTAL RDT+E	20.411	16.456
TOTAL PROCUREMENT	0.431	0.000
TOTAL O+M	2.571	0.883
TOTAL OTHER	1.934	1.172
TOTAL ANNUAL LAB	25.347	18.511
TOTAL IN-HOUSE	24.286	18.511
TOTAL IN-HOUSE RDT+E	19.999	16.456
ANNUAL OPERATING COST	8.548	5.568

PERSONNEL DATA (END OF FY 1970)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PROF	NON-PROF
MILITARY	209	25	198	11
CIVILIAN	1434	106	388	1046
TOTAL	1643	131	496	1147

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
1225	1046.390	114.255	829.150	1989.595	68.929	19.596

...MISSION
OPERATES A RESEARCH CENTER FOR BIOLOGICAL DEFENSE.
PROVIDES ADMINISTRATIVE ADP LOGISTICAL SUPPORT TO TENANT ACTIVITIES ON THE INSTALLATION.

...CURRENT IMPORTANT PROGRAMS
RESEARCH IN MAMMALIAN CELLS AND TISSUES IN IN-VITRO CULTURE SYSTEMS.
ECOLOGY STUDIES ON VECTOR- AND NON-VECTOR-BORNE MICROORGANISMS.
INVESTIGATIONS ON MOLECULAR BIOLOGY OF PATHOGENIC MICROORGANISMS.
R+D ON RAPID WARNING AND DETECTION SYSTEMS FOR DEFENSE AGAINST BIOLOGICAL ATTACK. R+D ON VEGETATION CONTROL AND USE TECHNIQUES.

...FUNCTIONS/EQUIPMENT/CAPABILITIES
MEDICAL BACTERIOLOGY LAB FOR RESEARCH ON INFECTIOUS BACTERIA AND FUNGI.
MICRO-BIOLOGICAL LAB FOR RESEARCH ON INFECTIOUS VIRUSES AND RICKETTSIAE.
LAB FACILITIES FOR RESEARCH IN AERIO-BIOLOGY AND AEROSOL-PHYSICS.
FACILITIES FOR RESEARCH IN ALL AREAS OF PLANT PATHOLOGY AND PLANT PHYSIOLOGY. ENVIRONMENTALLY CONTROLLED AEROSOL TESTING CHAMBERS FOR INFECTIOUS MICROORGANISMS.
ANIMAL FARM AND EXPERIMENTAL ANIMAL HOLDING FACILITIES.
FACILITY FOR DRYING BIOLOGICAL MATERIALS INCLUDING INFECTIOUS MICRO-ORGANISMS.
FACILITY FOR R+D AND EVALUATION OF DEFENSE ORIENTED MATERIAL IN HEALTH AND SAFETY LAB FOR MICROBIOLOGICAL AND RADIATION SURVEILLANCE.

INSTALLATION EDGEWOOD ARSENAL LABORATORIES, EDGEWOOD ARSENAL, MD.

CO COL GEORGE W CONNELL TECH DIR B L HARRIS

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1970 (ACTUAL)	1971 (ACT + EST)
TOTAL RDT+E	32.516	23.093
TOTAL PROCUREMENT	5.208	3.600
TOTAL O+M	3.404	2.573
TOTAL OTHER	1.903	2.153
TOTAL ANNUAL LAB	43.031	31.419
TOTAL IN-HOUSE	38.768	29.224
TOTAL IN-HOUSE RDT+E	28.253	20.898
ANNUAL OPERATING COST	11.404	12.002

PERSONNEL DATA (END OF FY 1970)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PROF	NON-PROF
MILITARY	245	66	213	32
CIVILIAN	1232	70	675	557
TOTAL	1477	136	888	589

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
4055	513.536	146.425	184.523	844.484	18.591	8.922

...MISSION
A CLASS II ACTIVITY CONDUCTING A RESEARCH AND DEVELOPMENT MISSION FOR ARMY CHEMICAL MUNITIONS AND CHEMICAL/BIOLOGICAL DEFENSIVE ITEMS. INCLUDES BASIC RESEARCH AS WELL AS EXPLORATORY, ADVANCED + ENGINEERING DEVELOPMENT OF MATERIEL.

...CURRENT IMPORTANT PROGRAMS
SEARCH FOR BINARY CHEMICAL AGENTS
PROPHYLAXIS AND THERAPY OF CHEMICAL CASUALTIES
DEVELOPMENT OF BINARY CHEMICAL AGENTS MUNITIONS SYSTEMS
DEVELOPMENT OF TACTICAL RIOT CONTROL AGENT DISSEMINATION TECHNIQUES
DEVELOPMENT OF NEW CHEMICAL AGENT DETECTOR KITS

...FUNCTIONS/EQUIPMENT/CAPABILITIES
CONDUCTS DOD RSCH OF ANTIPERS + ANTIMAT CML AGTS/PROPHYLAXIS + TREATMENT OF CML CASUALTIES/BIO EFFECTS OF CML COMPOUNDS ON MAN/CML AGT DISSEM TECHNIQUES/DEV PROTECTIVE EQUIP + WARNING + DETECTION MAT FOR DEFENSE AGAINST CML ATTACK/AERODYNAMIC RSCH/DEV,FILL + TEST EXPERIMENTAL CML MUNITIONS/PRODUCIBILITY + MAINT OF CML DEV MAT/PROCESS + PROD FAC DATA FOR MFG CML FLAME + SMOKE AGENTS.
MAJOR EQUIP IS CONTAINED IN A COMPLEX OF ENGR + LAB AREAS + INCLUDES CML PILOT PLTS, MUN FILLING, ENGR DESIGN + EXP FAB SHOPS AERSOL DISSEM TEST CHAMBERS PYROTECH MIXING, LOADING + HANDLING FAC INDOOR BALLISTIC RANGE SUBSONIC, SUPERSONIC + TRANSONIC WIND TUNNELS A COMPLETE CLINICAL RSCH FACILITY + AN ANIMAL BREEDING + HOLDING FACILITY.

INSTALLATION ROCK ISLAND ARSENAL LABORATORIES, ROCK ISLAND, ILL.

CO MG H A RASMUSSEN CH SCI DR C M HUDSON

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1970 (ACTUAL)	1971 (ACT + EST)
TOTAL RDT+E	17.638	12.625
TOTAL PROCUREMENT	2.334	2.518
TOTAL O+M	3.457	5.172
TOTAL OTHER	0.165	0.197
TOTAL ANNUAL LAB	23.594	20.512
TOTAL IN-HOUSE	11.341	13.315
TOTAL IN-HOUSE RDT+E	7.734	7.946
ANNUAL OPERATING COST	4.948	5.676

PERSONNEL DATA (END OF FY 1970)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PROF	NON-PROF
MILITARY	18	-0	15	3
CIVILIAN	796	26	291	505
TOTAL	814	26	306	508

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
18	352.462	82.525	71.097	506.084	1.463	9.640

...MISSION
ACFT WPN SYS,ARTY + INF WPNS,CREW SERVED WPNS MTD ON ANY TYPE VEH,+ INF + CONVL ARTY LANH DVC FOR BOTH CONVL SHL + H CAP BST RKT ARTY SHL,EXCL FREE RKT,GR,BAL MSL,TGT MSL + RELATED LANH + GSE.CLIPS LK + MAG FLR FOR CONVL AMMO,TK,SP ARTY + ASGD SPV/TRT,CUPOLA,RCL + MT,ELEV + TRAV MECH.

...CURRENT IMPORTANT PROGRAMS
1 MATH MODELING OF DYNAMIC SYSTEMS
2 DEVELOP WEAPON CONCEPTS BY SIMULATION
3 COMPUTER AIDED DESIGN
4 HOLOGRAPHIC WEAPON SYSTEM COMPONENT ANALYSIS
5 ENERGY ABSORPTION SYSTEMS

...FUNCTIONS/EQUIPMENT/CAPABILITIES
FAC CAPABILITIES/RNG FAC PERMIT FIRING ARTY WPN OF 105MM SIZE OR SMALLER USING INRT PJCTL AT 0 DEGREES EL INTO PRF BUTT AT 100 YDS DIST. WPN FIR AT EL USING DISINTEGRATING PJCTL LOADED W/WET SAND.RNG BLDG HSG INDOOR RNG,2ARE 1.. MTR,1 CLIMATIC CHMBR RNG 1000 IN W/CONT HMD TEMP OF -90 DEGREE F/ 2-0DEGREE F,1 100ZIN WPN MT SIM RNG.ANY SA WPN THRU 40MM CAN BE FIRED.LATTER RNG 25 W 20 H PERMITS FIRING FROM TK OR HLCPTR.ACESS TO IBM 360/65 COMPUTATION CENTER.PROTOTYPE SHOP IN SUPPORT OF RDTE. MAJOR EQUIPMENT, WEAPON/MOUNT SIMULATOR WITH ANCILLARY EQUIPMENT, EXPLOSIVE ACTUATED FIRING SIMULATOR HYDRAULIC FLOW SIMULATOR(HYFLOS), SMALL ARMS FIRING FIXTURE ELECTROCHEMICAL MACHINING SYSTEM HOLOGRAPHIC INSPECTION SYSTEM SCANNING INFRARED RADIOMETER IONITRIDING FURNACE ALPHA LUBRICANT TESTER MODEL LFW3 THIN FILM ELLIPSOMETER.

INSTALLATION WATERVLIET ARSENAL LABORATORIES, WATERVLIET, N. Y.

CO COL WILLIAM MULHERON JR TECH DIR DR ROBERT E WEIGLE

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1970 (ACTUAL)	1971 (ACT + EST)
TOTAL RDT+E	4.815	3.928
TOTAL PROCUREMENT	4.239	4.132
TOTAL O+M	0.942	0.751
TOTAL OTHER	0.015	1.373
TOTAL ANNUAL LAB	10.011	10.176
TOTAL IN-HOUSE	9.447	9.817
TOTAL IN-HOUSE [illegible]	4.355	3.581
ANNUAL OPERATING COST	3.063	3.408

PERSONNEL DATA (END OF FY 1970)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PROF	NON-PROF
MILITARY	4		2	2
CIVILIAN	452	42	176	[illegible]
TOTAL	456	44	178	278

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
4	186.260	23.250	0.000	209.510	1.252	3.356

...MISSION
DESIGN + DEV ARTILLERY,TANK,AIR DEFENSE + SECONDARY CANNON ABOVE 20MM + SPARE PARTS SUCH AS BREECH MECHANISMS, MUZZLE DEVICES, BORE EVACUATORS + SCAVENGERS + AUTOLOADERS SYS MGMT, DES + DEV OF MORTARS + REC RIFLES. CONDUCT BASIC + APP RESEARCH + MFG TECH TO SPT THE DEVELOPMENT MISSION.

...CURRENT IMPORTANT PROGRAMS
DEV OF 152MM XM150 GUN-LAUNCHER,MAIN ARMAMENT FOR XM70 MAIN BATTLE TANK DEV 175MM M113E1 TO EXTEND TUBE LIFE THRU IMPROVED FATIGUE RESISTANCE APPLICATION OF FRACTURE MECHANISMS TO FATIGUE LIFE PREDICTIONS FOR CANNON TUBES. DEV OF CANNON, 155MM HOW XM199 FOR 155MM HOW XM198. DEV OF COMPOSITE SYSTEMS WITH METAL MATRICES + INORGANIC FIBERS FOR HI-TEMP APPLICATIONS.

...FUNCTIONS/EQUIPMENT/CAPABILITIES
UNIQUE FACILITIES + CAPABILITIES INCLUDE: HIGH PRESSURE METALLURGY WITH 20-30 K-BAR FLUID EXTRUSION PRESS WHISKER GROWTH + TEST NEUTRON ANALYSIS ISOTOPE COUNTING DYNAMIC TEST OF BREECH COMPONENTS + TUBE SECTIONS FULL SIZE BY PRESSURE-PULSE SIMULATING FIRING LOADS EXP STRESS ANALYSIS THRU 2+3 DIMENSIONAL PHOTOELASTICITY. COMPOSITE MATERIALS ELECTRODEPOSITION, VACUUM COATER + ELECTRON-BEAM VAPOR-DEPOSITION ENCLOSED PROOF RANGE 20MM MAX ELECTRON MICROSCOPY 2.3 ANGSTROMS' RESOLUTION + 250000X MAG. CRYOGENICS HELIUM DEWAR APP TO TEMPS OF 4 (KELVIN).HI-PERFORMANCE SHOCK TEST 1200 LBS TO 1500 G FOR GUN COMPONENTS,HI-TEMP VACUUM FURNACE 3000 C MAX. TIME OF FLIGHT MASS SPECTROMETER, 20000 GAUSS MAGNET FOR TEST OF HIGH + CRYOGENIC TEMP SPECIMENS. ELECTROPLATING,ANODIZING + TITANIUM HARD COAT PROCESSES. ELECTRON MICROPROBE ANALYZER B-UR IN PPM. IBM 360-44 COMPUTER.

INSTALLATION TANK-AUTOMOTIVE COMMAND LABORATORIES, WARREN, MICH.

CG MG S E LOLLIS CH SCI E PETRICK

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1970 (ACTUAL)	1971 (ACT + EST)
TOTAL RDT+E	25.945	35.372
TOTAL PROCUREMENT	33.200	47.100
TOTAL O+M	12.718	9.168
TOTAL OTHER	0.183	0.237
TOTAL ANNUAL LAB	72.046	91.877
TOTAL IN-HOUSE	26.194	21.598
TOTAL IN-HOUSE RDT+E	13.438	12.193
ANNUAL OPERATING COST	8.101	7.524

PERSONNEL DATA (END OF FY 1970)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PROF	NON-PROF
MILITARY	19	1	16	3
CIVILIAN	1039	5	432	607
TOTAL	1058	6	448	610

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
1125	315.908	0.000	0.000	315.908	13.183	7.330

...MISSION
RESPONSIBLE FOR RESEARCH, CONCEPT, DESIGN, DEVELOPMENT, FABRICATION, ADVANCED PRODUCTION ENGINEERING, SUPPORT TO PRODUCTION, FOR PRESENT AND FUTURE VEHICLES SYSTEMS AND SUB-SYSTEMS OF TANK-AUTOMOTIVE MATERIEL AND ITS RELATED SCIENCES.

...CURRENT IMPORTANT PROGRAMS
AUTOMATIC TEST EQPT FOR INTERNAL COMBUSTION ENGINE POWERED MATERIEL.
MIDRANGE AND LONG-RANGE CONCEPT STUDIES ON FUTURE TRANSPORT VEHICLES.
MIDRANGE AND LONG-RANGE CONCEPT STUDIES ON FUTURE CBT AND SP VEHICLES.
LOW VULNERABILITY COMBAT TIRES.
AUTOMATIC RIDE CONTROL FOR TRACKED VEHICLES.

...FUNCTIONS/EQUIPMENT/CAPABILITIES
CONCEPT FORMULATION
VEHICLE SUBSYSTEM INTEGRATION
ANALYTICAL PREDICTION OF MILITARY VEHICLE PERFORMANCE
VEHICLE MOTION SIMULATOR
RIVER SIMULATOR FACILITY AND LAND LOCOMOTION SOIL BINS
DEVELOPMENT OF NUCLEAR RADIATION PROTECTION
VEHICLE SIGNATURE PROGRAM
VEHICULAR NOISE REDUCTION PROGRAM
PARTICLE DYNAMICS LABORATORY
METAL ANAL WITH MICOPROBE ELECTRON MICROSCOPE ANALYZER AND TECHNIQUES
DEVELOPMENT OF IMPROVED ARMOR WELDING AND FABRICATION
LOW TEMPERATURE, SHOCK AND VIBRATION TEST FACILITIES

INSTALLATION DESERET TEST CENTER (LABORATORIES), DUGWAY, UTAH

CO COL L. ROBINSON DIR TESTING COL GEORGE CUSTER

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1970 (ACTUAL)	1971 (ACT + EST)
TOTAL RDT+E	15.927	14.732
TOTAL PROCUREMENT	1.849	0.302
TOTAL O+M	0.320	0.380
TOTAL OTHER	3.864	3.681
TOTAL ANNUAL LAB	21.960	19.093
TOTAL IN-HOUSE	19.640	17.665
TOTAL IN-HOUSE RDT+E	13.607	13.304
ANNUAL OPERATING COST	5.119	6.983

PERSONNEL DATA (END OF FY 1970)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PROF	NON-PROF
MILITARY	460	6	88	372
CIVILIAN	1099	18	201	893
TOTAL	1559	24	289	1270

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
846299	186.483	124.691	1652.334	1963.508	[illegible]	36.564

...MISSION
PLAN,CONDUCT TESTS TO ASSESS MIL VALUE OF CHEM WPNS+CHEM,BIO DEFENSE SYS.
PLAN,CONDUCT TESTS TO SUPPORT R+D.
INVESTIGATE CB TECH METEOROLOGY, ECOLOGY AND EPIDEMIOLOGY.
PROVIDE BASIS FOR NEW OPNS+LOG CONCEPTS FOR EMPLOY OF NEW SYSTEMS.

...CURRENT IMPORTANT PROGRAMS
TEST TECH BINARY G AGENT SYSTEMS.
TEST TECH CHEMICAL INCAPACITATING AGENT SYSTEMS.
HIGH ALTITUDE DIFFUSION STUDIES.
BIOLOGICAL PERSISTENCY + SECONDARY AEROSOL SAMPLING METHODOLOGY.
U- AND G-AGENT PERSISTENCY METHODOLOGY.

...FUNCTIONS/EQUIPMENT/CAPABILITIES
TEST TECH BINARY SYSTEMS CAPACITY.TEST TECH INCAPACITATING AGENTS.
TEST TECH RIOT CONTROL AGENTS.
BIOLOGICAL THREAT EVALUATIONS
DECONTAMINATION PROCEDURES C/B TECHNOLOGY
DETECTION RAPID WARNING SYSTEMS EVALUATION
ENVIRONMENTAL TEST CAPACITY
PHYSICAL TEST CAPABILITY FOR DEVELOPED WEAPONS SYSTEMS
DEFENSIVE EXPOSURE CHAMBER-HUMIDITY TEMPERATURE CONTROLLED
VEHICULAR ACQUISITION TRACKING SYSTEM
GRIDS FOR LARGE SCALE C/B TEST CAPACITY
AUTOMATIC DATA ACQUISITION SYSTEM FOR METEOROLOGICAL PARAMETER MEASUREMENTS

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

CG MG E H DESAUSSURE TECH DIR DR R H DUCAN

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1970 (ACTUAL)	1971 (ACT + EST)
TOTAL RDT+E	101.810	89.808
TOTAL PROCUREMENT	4.497	3.918
TOTAL O+M	0.895	3.744
TOTAL OTHER	9.572	9.583
TOTAL ANNUAL LAB	116.774	104.053
TOTAL IN-HOUSE	92.693	82.108
TOTAL IN-HOUSE RDT+E	77.859	68.078
ANNUAL OPERATING COST	23.148	21.729

PERSONNEL DATA (END OF FY 1970)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PROF	NON-PROF
MILITARY	1368	3	576	792
CIVILIAN	3720	7	567	3153
TOTAL	5088	10	1143	3945

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
4535404	1412.978	321.453	2089.217	4643.648	139.714	138.373

...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, AND ENGINEER AND DEVELOP RANGE INSTRUMENTATION SYSTEMS FOR GATHERING TEST DATA.

...CURRENT IMPORTANT PROGRAMS

MULTI-TARGET DETECTION AND TRACKING
DISTANT OPTICAL ATTITUDE MEASURING SYSTEM
TRANSPONDER DEVELOPMENT
LASER RANGING AND TRACKING SYSTEM
LABORATORY- AND FIELD-INDUCED FATIGUE DAMAGED CORRELATION.

...FUNCTIONS/EQUIPMENT/CAPABILITIES

GROUND AND FLIGHT SAFETY, OBTAINING FLIGHT TRAJECTORY AND EVENT DATA, RECOVERING MISSILES OR PORTIONS THEREOF, REDUCING AND PUTTING INTO READABLE FORMS DATA COLLECTED BY RANGE INSTRUMENTS, ENGINEERING AND DEVELOPMENT OF RANGE INSTRUMENTATION, INDEPENDENTLY TEST AND EVALUATE ARMY WEAPONS SYSTEMS.
EVALUATE GUIDANCE AND CONTROL SYSTEMS, STRUCTURAL INTEGRITY, PROPULSION SYSTEMS, ELECTROMAGNETIC RADIATION EFFECTS, ANALYSIS OF CHEMICAL AND METALLOGRAPHIC EFFECTS, MICROBIOLOGICAL EFFECTS, CLIMATIC ENVIRONMENTAL EFFECTS, TEST AND EVALUATE WARHEADS AND SPECIAL WEAPONS, WEAPONS SIMULATION, NUCLEAR EFFECTS TESTING, ELECTRONIC AND OPTICAL TRACKING SENSORS AND DATA TRANSMISSION REQUIRED TO PROVIDE TEST DATA ON MISSILES AND RELATED PROGRAMS.

INSTALLATION ARCTIC TEST CENTER, FT. GREELY, ALASKA

CO COL EDWIN M RHOADS SCI ADV C W MARKLEY

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1970 (ACTUAL)	1971 (ACT + EST)
TOTAL RDT+E	2.372	2.829
TOTAL PROCUREMENT	0.130	0.247
TOTAL O+M	0.009	0.033
TOTAL OTHER	2.476	2.540
TOTAL ANNUAL LAB	4.987	5.449
TOTAL IN-HOUSE	4.879	5.415
TOTAL IN-HOUSE RDT+E	2.283	2.815
ANNUAL OPERATING COST	1.967	1.967

PERSONNEL DATA (END OF FY 1970)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PROF	NON-PROF
MILITARY	365	0	30	335
CIVILIAN	21	0	2	19
TOTAL	386	0	32	354

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
726207	11.126	34.584	181.862	227.572	34.962	7.625

...MISSION
PLAN CONDUCT REPT ON ENVIRON PHASE OF ENG SVC CHECK CONFIRMATORY OTHER TESTS.EVAL FOR TECOM PROJ MGRS OTHER COMMODITY COMMANDS.PARTICIPATE IN MONITOR TROOP TESTS.PROVIDE ADVICE TO PROPONENT AGNCY DURING DEVELOPMENT OF MATERIEL.

...CURRENT IMPORTANT PROGRAMS
SVC TEST AH-1 HELICOPTER XM28/XM55 ARMAMENT SUBSYSTEM
INTEGRATED ENGR SVC TEST TOW MISSILE SYSTEM
ARCTIC SVC TEST AN-GRC142 RADIO TELETYPEWRITER
ARCTIC SVC TEST COUPLING AIRDROP EXTRACTION FORCE TRANSFER
ARCTIC SVC TEST RELEASE CARGO PARACHUTE MEDIUM CAPACITY

...FUNCTIONS/EQUIPMENT/CAPABILITIES
MAJOR EQUIPMENT AND FACILITIES: 3 MULTIPURPOSE TEST SITES, NETWORK OF VEHICLE MAINTENANCE SHOPS, HELICOPTER, FIXED-WING SUPPORT, A SUPPLY COMPLEX, PHOTOGRAPHIC, GRAPHICS ARTS, INSTRUMENTATION SHOPS, CALIBRATION FACILITIES.
FACILITIES AND CAPABILITIES: SUPPORT TECHNICAL ASSISTANCE FOR TESTING ARMOR, INFANTRY, ARTILLERY, COMMO, AIRCRAFT, GENERAL EQUIPMENT, CBR ITEMS.

INSTALLATION TROPIC TEST CENTER, FT. CLAYTON, CANAL ZONE

CO COL HYRUM DALLINGA TECH ADV FRANK S MENDEZ

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1970 (ACTUAL)	1971 (ACT + EST)
TOTAL RDT+E	2.440	2.241
TOTAL PROCUREMENT	0.065	0.043
TOTAL O+M	0.317	0.305
TOTAL OTHER	1.374	1.366
TOTAL ANNUAL LAB	3.896	3.655
TOTAL IN-HOUSE	3.854	3.600
TOTAL IN-HOUSE RDT+E	2.398	2.186
ANNUAL OPERATING COST	2.048	1.990

PERSONNEL DATA (END OF FY 1970)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PROF	NON-PROF
MILITARY	210	0	60	150
CIVILIAN	100	3	27	73
TOTAL	310	3	87	223

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
34127	55.602	125.623	175.194	356.419	6.102	2.118

...MISSION
PLAN AND CONDUCT ENVIRONMENTAL PHASES OF ENGINEERING, SERVICE, INTEGRATED ENGINEERING/SERVICE EVALUATION, CHECK, AND CONFIRMATORY TESTS. SUPPORT TROPICAL ENVIRONMENTAL TESTS CONDUCTED BY OTHER AGENCIES. CONDUCT RESEARCH IN TROPICAL ENVIRONMENTS.

...CURRENT IMPORTANT PROGRAMS
DETERMINATION OF OPTIMUM TROPICAL STORAGE AND EXPOSURE SITES. DETERMINATION OF CANAL ZONE TERRAIN CHARACTERISTICS RELATED TO MOBILITY TESTING. SERVICE TEST OF AN/GVS3 LASER RANGE FINDER. INTEGRATED ENGINEERING/SERVICE TEST OF 152MM AMMO. INTEGRATED ENGINEERING/SERVICE TEST OF XM51 CB PRESSURIZED SYSTEM.

...FUNCTIONS/EQUIPMENT/CAPABILITIES
EVALUATE AND RECOMMEND AS TO TEST ITEM SUITABILITY FOR PRESCRIBED USE. RECOMMEND TO HQ, USATECOM, RESEARCH PROJECTS IN SUPPORT OF ARMY RDT+E. PLAN AND SUPPORT RDT+E ACTIVITIES FOR DOD OR OTHER GOVERNMENT AGENCIES. NATURAL TROPICAL ENVIRONMENT. FIRING RANGES. NATURAL TERRAIN MOBILITY COURSES. AMMO TEST STORAGE AND FUNCTIONING AREAS. CHEMICAL, BIOLOGICAL, ELECTRONIC, AND CALIBRATION LABORATORIES. JUNGLE GRASS AND COASTAL MATERIAL EXPOSURE SITES. JUNGLE RADIO RANGING SITES. PHOTOGRAPHIC SUPPORT FACILITIES. TECHNICAL OPERATIONS SUPPORT FACILITY, POL TANK FARM.

INSTALLATION: DEVELOPMENT AND PROOF SERVICES, ABERDEEN PROVING GROUND, MD.

CO COL JAMES J JONES TECH DIR R P WITT

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1970 (ACTUAL)	1971 (ACT + EST)
TOTAL RDT+E	8.882	9.879
TOTAL PROCUREMENT	16.251	15.867
TOTAL O+M	1.263	1.322
TOTAL OTHER	0.761	0.820
TOTAL ANNUAL LAB	27.157	27.866
TOTAL IN-HOUSE	26.831	27.442
TOTAL IN-HOUSE RDT+E	8.653	9.589
ANNUAL OPERATING COST	6.828	6.665

PERSONNEL DATA (END OF FY 1970)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PROF	NON-PROF
MILITARY	142	2	75	67
CIVILIAN	1227	2	192	1035
TOTAL	1369	2	267	1102

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
71235	0.000	5.419	974.695	980.114	240.861	105.767

...MISSION
PLAN COND REC + REPT RESULTS OF ENGR + OTHER TESTS OF WPNS WPNS SYS RKTS + GUIDED MSL SYS FIRE CON SURV + TGT ACQ EQUIP ITEMS OF AMMO + COMP MUN CRT VEH + OTHER AUTMV MAT. COMPILE REQUIREMENTS FOR DETM USAGE FACTORS. PROC INS + CON ISS OF ARMOR PLATE FOR TESTS BY USAMC INSTLS + ACTVS.

...CURRENT IMPORTANT PROGRAMS
ENGINEERING TESTING OF 152MM XM411E5 CARTRIDGE
ENG DESIGN TESTS FUZE ELEC TIME XM432 F 2.75IN FOLDG FIN AIRCFT RKT+FUZE ED OF FIRST GENERATION M81-70
ASSESSMENTS OF 105MM GUN PROPELLANT
SEANITEOPS MNSURE PROJECTS FOR SEA NIGHT FIGHTING CAPABILITIES

...FUNCTIONS/EQUIPMENT/CAPABILITIES
PLAN DIR + CON AN R+D PROG FOR TEST INSTR TEST FAC + TEST METHODOLOGY TO SPT CURR + FUTURE ROMTS IN ASSD MSN AREA. DESIGN DEV PROC + ISS BALLISTIC + OTHER TEST INSTR RORD BY TEST PLANS CHANGES IN TEST METHODOLOGY OR IMPROVE OP EFF, TEST AREA 68700 ACRES RANGE TO LAND IMPACT 26000 M RANGE TO WATER IMPACT 30000 M 41 MI OF AUTMV CRS INCL 27 SP ENGR TEST CRS + OBSTACLES VARIETY OF ENVIRON CR COND EQUIP SP CHAMBERS FOR SUBJ EQUIP TO DUST SALT SPRAY OR SOLAR RADN. ISOLATED VIBRATION TEST FAC WHICH PERMITS SHAKING EXPLO EQUIP SIMULTANEOUSLY WITH TEMP CONDITIONING. FAC FOR CON TESTS OF ELEC CON + SUID EQUIP. HIGH FREQUENCY SOURCE WHICH PERMITS TESTING ALL TYPES OF MAT IN PRESENCE OF A HIGH INTENSITY ELEC MAGNETIC RADN IS AVAL. SP FAC FOR TEST OF ARMOR PLATE. SP VEL + TGT EQUIP IS AVAL FOR OPSNS DURING RAPID FIRE AS IS A RKT TRACK FOR CON TML BALLISTIC TESTS.

INSTALLATION INFANTRY BOARD, FT. BENNING, GA.

PRES COL CHARLES B THOMAS

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1970 (ACTUAL)	1971 (ACT + EST)
TOTAL RDT+E	1.065	2.753
TOTAL PROCUREMENT	0.020	2.202
TOTAL O+M	0.000	2.222
TOTAL OTHER	1.062	1.266
TOTAL ANNUAL LAB	2.127	2.219
TOTAL IN-HOUSE	1.950	1.883
TOTAL IN-HOUSE RDT+E	0.888	2.617
ANNUAL OPERATING COST	0.166	2.166

PERSONNEL DATA (END OF FY 1970)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PROF	NON-PROF
MILITARY	168	2	11	157
CIVILIAN	48	0	3	45
TOTAL	216	2	14	202

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
0	2.250	54.238	19.281	75.569	2.402	0.360

...MISSION
PLAN CONDUCT + REPORT TESTS RELATED TO SUITABILITY OF EQUIP FOR ARMY USE.
CONDUCT OR PARTICIPATE IN ENGINEERING + RESEARCH STUDIES AS DIRECTED.
PARTICIPATE IN AND MONITOR TROOP TESTS AS DIRECTED.
PROVIDE ADVICE TO DEVELOPERS DURING THEIR DEVELOPMENT OF INFANTRY EQUIP.

...CURRENT IMPORTANT PROGRAMS
STUDY TO IMPROVE TEST METHODOLOGY + DEVELOP INSTRUMENTED TEST RANGES
SERVICE TEST OF ASSAULT FLAME WEAPON 66MM
INITIAL PRODUCTION TEST OF M561 CARGO TRUCK
SERVICE TEST OF ANTITANK ASSAULT WEAPON XM47 DRAGON
SERVICE TESTS OF NIGHT VISION SIGHTS SECOND GENERATION

...FUNCTIONS/EQUIPMENT/CAPABILITIES
SERVICE TEST EQUIP + ANCILLARY ITEMS USED BY INF FOR FIRE POWER TARGET ACQUISITION GROUND SURVEILLANCE FIRE CONTROL + GROUND MOBILITY FIELD CLOTHING EQUIP + RATIONS AP MINES CB EQUIP FOR INDIVIDUALS + SMALL UNITS.
AIR-DROP TEST OF EQUIP WORN OR CARRIED BY PARACHUTISTS WHILE JUMPING.
PROVIDE REPRESENTATION FOR IN-PROCESS REVIEWS.
ASSIST IN PREPARATION OF AND REVIEW QUALITATIVE MATERIEL REQUIREMENTS.
PLAN DIRECT AND CONTROL PROGRAM IN TEST METHODOLOGY.
EVALUATE + MAKE RECOMMENDATIONS CONCERNING SUITABILITY AND SAFETY OF TEST ITEMS FOR OPERATIONAL USE.
KNOWN DISTANCE SMALL ARMS RANGES MORTAR + ANTITANK RANGES DEFENSE RANGE INSTRUMENTED ATTACK + QUICK FIRE RANGES CLIMATIC CHAMBER.

INSTALLATION AIRBORNE, ELECTRONIC AND SPECIAL WARFARE BOARD, FT. BRAGG, N. C.

PRES COL KARLTON WARMBROD ENGR ADV EDWIN S SPAINHOUR

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1970 (ACTUAL)	1971 (ACT + EST)
TOTAL RDT+E	1.442	1.323
TOTAL PROCUREMENT	0.000	0.000
TOTAL O+M	0.000	0.000
TOTAL OTHER	1.654	1.800
TOTAL ANNUAL LAB	3.096	3.123
TOTAL IN-HOUSE	3.096	3.123
TOTAL IN-HOUSE RDT+E	1.442	1.323
ANNUAL OPERATING COST	0.098	0.095

PERSONNEL DATA (END OF FY 1970)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PROF	NON-PROF
MILITARY	216	0	19	197
CIVILIAN	51	0	6	45
TOTAL	267	0	25	242

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
4	0.000	36.134	78.358	114.492	0.782	2.800

...MISSION
PLAN, CONDUCT, AND REPORT ON SERVICE TESTS AND CHECK TESTS OF AIRBORNE, COMMUNICATIONS, AND ELECTRONICS EQUIPMENT AND SYSTEMS. PARTICIPATE IN ENGINEERING TESTS, INITIAL PRODUCTION TESTS, AND APPROPRIATE PREPRODUCTION TESTS. PROVIDE ADVICE TO OTHER AGENCIES.

...CURRENT IMPORTANT PROGRAMS
SERVICE TEST OF C5A AIRPLANE.
MILITARY POTENTIAL TEST OF RANDOM ACCESS DISCRETE ADDRESS SYS (RADA).
SERVICE TEST OF OV-1D SURVEILLANCE SYSTEM.
CHECK TEST OF PARACHUTE, RESERVE, PERS, TROOP CHEST, BALLISTICALLY DEPLOYED.
SERVICE TEST OF STD AD EQUIP PERS CARGO AT HIGH DZ ELEVATIONS.

...FUNCTIONS/EQUIPMENT/CAPABILITIES
FACILITIES INCLUDE; BOARD HANGAR BUILDING, COMMUNICATIONS-ELECTRONICS TEST FACILITY, CRYTOGRAPHIC TEST FACILITY, AND WOODWORK SHOP.
MAJOR EQUIPMENT INCLUDES, TWO T-28A AND 2 T-28B AIRCRAFT USED IN AERIAL PHOTOGRAPHY MOTION PICTURE, BLACK AND WHITE AND COLOR; 40,000-POUND LOADER, 5-TON WRECKER, 20-TON MOBILE CRANE, 3 SEMITRAILERS, SEVERAL STANDARD VEHICLES, ONE U-6 AIRCRAFT, ONE CARIBOU AIRCRAFT, VARIOUS TYPES OF STANDARD PARACHUTES, STANDARD PLATFORMS, ELEVEN GASOLINE DRIVEN GENERATORS, BALLASTABLE AIRDROP VEHICLES WITH REMOVABLE WEIGHT INCREMENTS, THREE ANEMOMETERS, VARIOUS THERMOMETERS, STOPWATCHES, ELEVEN TACTICAL RADIO SETS, TWO RADIO RECEIVERS, SIX TELETYPEWRITER SETS, TWENTY-TWO SIGNAL GENERATORS, TWO SOUND LEVEL METERS AND ONE SOUND AND VIBRATION ANALYZER.

INSTALLATION AIR DEFENSE BOARD, FT. BLISS, TEX.

PRES COL EDWARD J DALEY

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1970 (ACTUAL)	1971 (ACT + EST)
TOTAL RDT+E	2.759	3.976
TOTAL PROCUREMENT	0.040	0.062
TOTAL O+M	0.045	0.000
TOTAL OTHER	2.533	2.555
TOTAL ANNUAL LAB	5.377	6.593
TOTAL IN-HOUSE	5.282	6.373
TOTAL IN-HOUSE RDT+E	2.664	3.756
ANNUAL OPERATING COST	0.462	0.496

PERSONNEL DATA (END OF FY 1970)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PROF	NON-PROF
MILITARY	371	0	61	310
CIVILIAN	113	0	18	95
TOTAL	484	0	79	405

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
26	35.718	33.478	77.417	146.613	1.769	11.344

...MISSION
PLAN CONDUCT REPORT ON ST +CHECK TEST OF AIR DEF EQUIP + SYS
PARTICIPATE IN ENG TEST INIT PROD TEST PRE-PROD TEST + OTHER TESTS.
PROVIDE ADVICE TO PROPONENT AGENCIES DURING DEVELOPMENT OF EQUIPMENT.

...CURRENT IMPORTANT PROGRAMS
FORWARD AREA ACQUISITION RADAR SERVICE TEST (ST)
CHECK TEST OF IMPROVED HAWK MAINT PACKAGE
PRODUCT INPROVEMENT TEST NIKE-HERCULES SAMCAP MODIFICATION
TAC FIRE
CHAPARRAL SIMULATOR/EVALUATOR TEMPERATURE TEST PHASE

...FUNCTIONS/EQUIPMENT/CAPABILITIES
ASSURE MAX UTILIZATION OF RESOURCES IN ACCOMPLISHMENT OF MISSION.
PLAN CONDUCT, RECORD + REPORT RESULTS OF TESTS + EVALUATIONS OF WPN SYS, FIRE DIST SYS. EVALUATE ITEMS FOR SAFETY SUITABILITY FOR ARMY USE + OR SUITABILITY FOR ISSUANCE TO FLD. COMMENT ON QMDO/QMR/SDR + MAINT PKG. ASSIST IN REVISIONS OF MIL SPECS. PROVIDE TEST REQUIREMENTS FOR TEST PLAN. CONDUCT PROGRAM IN TEST METHODOLOGY TO ASSURE PROPER TEST REPORTS. SUPPORT FLD RSCH STUDIES, TESTS + OPERATIONS. PROVIDE REPRESENTATION FOR ARMY BOARDS, COMMITTEES, AND SYMPOSIA. ASSIST IN PREPARATION OF TRAINING LITERATURE AND SELECTION OF TRAINING AIDS.
EQUIPMENT COMPUTER TAC + INSTRUMENTATION RADAR CINETHEODOLITE PHOTO LAB + FILM READING EQUIPMENT. MONITOR FOR ELECTRIC TEST OF EQUIP + DONA ANA RANGE FOR FIRING FORWARD AREA WPNS TGT DEVICES + TGT DRONES.

NOT REPRODUCIBLE

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

CO COL ALBERT H HISLOP TECH DIR ARNOLD E ELKINS

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1970 (ACTUAL)	1971 (ACT + EST)
TOTAL RDT+E	2.158	1.716
TOTAL PROCUREMENT	0.260	0.147
TOTAL O+M	0.000	0.000
TOTAL OTHER	2.481	2.550
TOTAL ANNUAL LAB	4.899	4.413
TOTAL IN-HOUSE	4.801	4.257
TOTAL IN-HOUSE RDT+E	2.060	1.560
ANNUAL OPERATING COST	0.368	0.372

PERSONNEL DATA (END OF FY 1970)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PROF	NON-PROF
MILITARY	442	0	78	364
CIVILIAN	97	0	5	92
TOTAL	539	0	83	456

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
6570	6.200	68.068	328.093	402.361	8.300	2.271

...MISSION
PLAN, CONDUCT AND REPORT ON SERVICE, CHECK, PROD IMPROVEMENT, MIL POT + ALL OTHER TESTS AS DIRECTED. PARTICIPATE IN ENGR DESIGN TESTS, ENGR TESTS + ENVIRONMENTAL TEST. PROVIDE ADVICE TO OTHER AGENCIES AND DEVELOPERS DURING THEIR DEVELOPMENT OF ARMOR + ENGINEER EQUIPMENT.

...CURRENT IMPORTANT PROGRAMS
SERVICE TEST HEAVY EQUIPMENT TRANSPORTER XM746/XM747.
SERVICE TEST MODIFIED TANK, COMBAT, FT, 150MM GUN, M60A1E2.
MILITARY POTENTIAL TEST, TWISTER, ARTICULATED VEHICLE.
SERVICE TEST, MEMBRANE, HVY DUTY, AIRFIELD SURFACING, XW18.
MATERIAL TEST WRITING PROCEDURES FOR STANDARDIZED TESTING PROCEDURES.

...FUNCTIONS/EQUIPMENT/CAPABILITIES
THE MAJOR EQUIPMENT CAPABILITIES OF THE USAAEB CONSIST OF ADEQUATE STILL AND MOTION PICTURE PHOTOGRAPHIC EQUIPMENT FOR SUPPORT OF MISSION REQUIREMENTS A STATIONERY ELEVATED CAMERA PLATFORM FOR VARIOUS HEIGHTS UP TO 40 FT ABOVE ADJACENT GRADE GENERATOR LOAD BANKS WITH A TOTAL CAPACITY OF 1442 KW MOBILE DYNAMETER WHICH MEASURES DRAW BAR PULL FROM 500 TO 20,000 LBS. THIS BOARD S FACILITIES CONSIST OF 6400 ACRES FOR AUTOMOTIVE PERFORMANCE + DURABILITY TESTING CONTROL OF MCFARLAND-OLIVER RANGE 160 ACRES WITH A FIRING CAPABILITY OF UP TO 2000 METERS. ADDITIONAL RANGE FACILITIES WITH FIRING CAPABILITY FROM 100 TO A MAXIMUM 10,000 METERS, ARE AVAILABLE FROM HOST INSTALLATION ON A SPACE AVAILABLE BASIS SITES FOR STILL WATER FORDING, VEHICLE SWIMMING, FERRYING AND MARINE EQUIPMENT TESTING.

INSTALLATION ARTILLERY BOARD, FT. SILL, OKLA.

PRES COL ROBERT T BLAKE

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1970 (ACTUAL)	1971 (ACT + EST)
TOTAL RDT+E	1.004	0.916
TOTAL PROCUREMENT	0.000	0.000
TOTAL O+M	0.000	0.000
TOTAL OTHER	2.409	2.545
TOTAL ANNUAL LAB	3.413	3.461
TOTAL IN-HOUSE	3.301	3.418
TOTAL IN-HOUSE RDT+E	0.892	0.876
ANNUAL OPERATING COST	0.198	0.188

PERSONNEL DATA (END OF FY 1970)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PROF	NON-PROF
MILITARY	397	0	86	311
CIVILIAN	37	0	2	35
TOTAL	434	0	88	346

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
23	4.008	61.245	39.758	105.011	0.002	1.030

...MISSION
PLAN CONDUCT AND REPORT ON ST CK MIL POTENTIAL AND OTHER TESTS OF FA MATERIAL AS ASG. PARTICIPATE IN AND MONITOR TRP EDT ET AND PROVIDE ADVICE TO PROPONENT AGENCIES AND DEVELOPERS. CONDUCT MPT ST IPT PI TESTS OF FA MATERIEL.

...CURRENT IMPORTANT PROGRAMS
ST CTG HEAT XM622
ST MOBILE WEATHER RADAR AMTPS-41
PI HOW 155MM SP M109 M109E1
PI PERSHING MSL SYS
SPECIAL PURPOSE LANCE GROUND MOBILITY PHASE 2

...FUNCTIONS/EQUIPMENT/CAPABILITIES
FA TEST ITEMS.
MAINTAIN TEST ITEMS DURING TEST PERIOD.
SPECIAL EFFECTS FIELD UTILIZED FOR IMPROVED CONVENTIONAL MUNITIONS.

NOT REPRODUCIBLE

INSTALLATION AVIATION TEST BOARD, FT. RUCKER, ALA.

PRES COL DANIEL G GUST

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1970 (ACTUAL)	1971 (ACT + EST)
TOTAL RDT+E	5.671	5.004
TOTAL PROCUREMENT	0.115	0.123
TOTAL O+M	0.725	0.566
TOTAL OTHER	2.023	1.923
TOTAL ANNUAL LAB	8.534	7.616
TOTAL IN-HOUSE	6.154	5.597
TOTAL IN-HOUSE RDT+E	3.291	2.985
ANNUAL OPERATING COST	0.494	0.538

PERSONNEL DATA (END OF FY 1970)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PROF	NON-PROF
MILITARY	253	1	48	205
CIVILIAN	140	0	25	115
TOTAL	393	1	73	320

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
2149	3.018	19.190	207.155	229.363	2.655	11.850

...MISSION
PLAN, CONDUCT, AND REPORT ON STS AND CKS OF ACFTS, ACFT COMPS AND SUBSYS AND ANCILLARY EQUIP. PART IN LTS, IPTS AND APROP PPTS AS DIRECTED. PROV ADVICE TO PPNT AGENCIES AND MD DURING THE DEV OF ACFTS, ACFT COMPS AND SUBSYS AND ANCILLARY EQUIP.

...CURRENT IMPORTANT PROGRAMS
ST HAC FLIR
INFANT PHASE II MODEL B
COBRA NIGHT SIGHT
OVIP SURVEILLANCE
CH-47C PHASE F TEST

...FUNCTIONS/EQUIPMENT/CAPABILITIES
USAAVNTBD HAS THE FACILITIES AND CAPABILITIES TO PLAN, CONDUCT, RECORD, AND REPORT THE RESULTS OF TESTS AND EVALUATIONS. REVIEW AND COMMENT ON QMDES, QMRS, SDRS, MAINTENANCE PACKAGES AND ASSIST IN THE REVIEW OF MIL SPEC. TO EVALUATE AND RECOMMEND ON THE SAFETY, SUITABILITY FOR ARMY USE AND OR SUITABILITY FOR ISSUANCE TO THE FIELD OF MATERIAL TESTED. SUPPORT FIELD RESEARCH, STUDIES, TEST, AND OPERATIONS OF OTHER USAMC SUBORDINATE ELEMENTS, DA OR DOD AGENCIES. PLAN, DIRECT AND CONTROL PROGRAMS IN METHODOLOGY TO ASSURE PROPER TESTING AND REPORTING IN CURRENT AND FUTURE YEARS. ASSIST IN PREPARATION OF TRAINING LITERATURE AND SELECTION OF TRAINING AIDS. RECOMMEND TO CG, USATECOM, THROUGH ESTABLISHED PROCEDURES RESEARCH AND DEVELOPMENT PROJECTS DESIGNED TO IMPROVE USATECOM TEST AND EVALUATION.

INSTALLATION GENERAL EQUIPMENT TEST ACTIVITY, FT. LEE, VA.

CO COL DAVID J SCHUMACHER TECH ADV DR HOWARD W HEMBREE

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1970 (ACTUAL)	1971 (ACT + EST)
TOTAL RDT+E	2.644	2.405
TOTAL PROCUREMENT	0.133	0.105
TOTAL O+M	0.073	0.014
TOTAL OTHER	1.919	1.950
TOTAL ANNUAL LAB	4.769	4.474
TOTAL IN-HOUSE	4.626	4.325
TOTAL IN-HOUSE RDT+E	2.501	2.256
ANNUAL OPERATING COST	1.450	1.533

PERSONNEL DATA (END OF FY 1970)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PROF	NON-PROF
MILITARY	286	1	55	231
CIVILIAN	95	1	32	63
TOTAL	381	2	87	294

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
453	68.589	121.625	21.360	211.574	1.500	2.288

...MISSION
PLAN CONDUCT + REPORT ON SERVICE TESTS CHECK MP CF ED PI IP SS RE LOTS + MOVAD + OTHER TESTS. PROVIDE REQUIRED TEC + LOG CONSULTATION SVCS TO AMC OTHER TECOM COMDS DA + DD. PLAN DIRECT + CONTROL R+D PROGRAM FOR TEST INSTR FAC + METHODOLOGY TO SUPPORT CURRENT + FUTURE TEST REQUIREMENTS.

...CURRENT IMPORTANT PROGRAMS
TESTING BOAT 27FOOT DIESEL BRIDGE ERECTION
TESTING MEDICAL UNIT SELF-CONTAINED TRANSPORTABLE FOOD SERVICE
TESTING TRUCK FORKLIFT 6000 POUND PRT
TESTING TIRES BELTED RADIAL
TESTING KETTLE HEATING BITUM TRL

...FUNCTIONS/EQUIPMENT/CAPABILITIES
COORDINATE PLAN CONDUCT + REPORT TESTING ACTIVITIES DIRECTED BY USATECOM. IDENTIFY POTENTIAL MAINTENANCE PROBLEMS + DETERMINE COMPATIBILITY OF THE MAN-MACHINE SYSTEM + THE SAFETY OF ITEMS FOR USE BY THE ARMY. RECOMMEND AS APPROPRIATE SUITABILITY OF MATERIEL TESTED FOR TYPE CLASSIFICATION. PROVIDE FOR ATTENDANCE AT IN-PROCESS REVIEW MEETINGS + OTHER CONF AS REQ. FACILITIES INCLUDE EXPERIMENTAL KITCHEN + FOOD TEST FACILITIES DYNAMIC + STATIC RAIN COURSE SIX ACCELERATED WEAR COURSES MHE TEST TRACK HIGHWAY + RAIL TESTING FACILITIES TRANSPORTABILITY LINE HAUL + CARGO LOADING ADAPTABILITY TEST COURSE COMBAT EFFECTIVENESS TEST FACILITY POL STORAGE TANKS RADIOACTIVE MATERIALS STORAGE FACILITY ROUGH TERRAIN TEST COURSE FABRIC EXPOSURE SITE MECHANICAL ENGINEERING + POL EQUIPMENT TEST AREAS MARINE + PORT FACILITIES AT FT.EUSTIS BEACH + OCEAN FRONT AT FT.STORY.

INSTALLATION ELECTRONICS PROVING GROUND, FT. HUACHUCA, ARIZ.

CO COL WALLACE O ENDERLE CH SCI DR GEORGE E SHAFER

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1970 (ACTUAL)	1971 (ACT + EST)
TOTAL RDT+E	12.071	9.202
TOTAL PROCUREMENT	2.823	3.245
TOTAL O+M	0.054	0.000
TOTAL OTHER	3.214	3.010
TOTAL ANNUAL LAB	18.162	15.457
TOTAL IN-HOUSE	13.691	11.933
TOTAL IN-HOUSE RDT+E	8.033	6.224
ANNUAL OPERATING COST	2.681	2.778

PERSONNEL DATA (END OF FY 1970)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PROF	NON-PROF
MILITARY	465	1	72	393
CIVILIAN	283	1	87	196
TOTAL	748	2	159	589

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
9231	0.000	219.847	0.000	219.847	4.415	33.789

...MISSION
OP USAEPG INCL ELECTROMAGNETIC ENVIRONMENTAL ECM VULNERABILITY + SYS TEST FAC. PLAN CDT EVAL + REPORT ON ET OF COMMEL + AVIONICS EQUIP + SVC TEST ON DIV COMMEL EQUIP. PROV TECH + LOG CONSULTATION SVC TO OTHER DOD AGENCIES ON TEST + EVAL ACTIVITIES, IN-PROCESS REVIEWS, SPEC COORD, MAINT, EVAL.

...CURRENT IMPORTANT PROGRAMS
METHODS OF MEASURING REFRACTIVITY ERROR.
AUTOMATIC TEST EQUIPMENT FOR COMMUNICATIONS ELECTRONICS.
INFRARED SYSTEM SENSITIVITY STUDY FOR 1972-80.
INFRARED OPTICAL EVALUATION DATA CONTROL SYSTEM.
INFRARED OPTICAL PROPAGATION STUDY.

...FUNCTIONS/EQUIPMENT/CAPABILITIES
MAINT + OP A TEST FAC FOR COMMUNICATIONS ELECTRONIC EQUIP + SYS. INCL ELECTROMAGNETIC ENVIRONMENTAL TEST FAC ECM VULNERABILITY + SYS TEST FAC. SPT FLD RSCH STUD + OPNS OF OTHER USAMC DA OR DOD AGCYS. RECM AS APPROP SUITABILITY OF MAT TESTED FOR TYPE CLASSIFICATION. REV + CMT ON QMDO QMR SDR + MAINT PACKAGE + ASSIST IN REV OF MIL SPECS. PLAN DIR + CON A/R+D PROG FOR TEST INSTR TEST FAC + TEST METHODOLOGY.

INSTALLATION YUMA PROVING GROUND, YUMA, ARIZ.

CO COL NORMAN L ROBINSON TECH DIR FLOYD E WATTS

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1970 (ACTUAL)	1971 (ACT + EST)
TOTAL RDT+E	5.885	6.484
TOTAL PROCUREMENT	4.254	5.975
TOTAL O+M	1.085	0.790
TOTAL OTHER	10.811	10.856
TOTAL ANNUAL LAB	22.035	24.105
TOTAL IN-HOUSE	14.985	17.305
TOTAL IN-HOUSE RDT+E	5.885	6.484
ANNUAL OPERATING COST	6.800	6.800

PERSONNEL DATA (END OF FY 1970)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PROF	NON-PROF
MILITARY	426	-0	56	370
CIVILIAN	777	-0	44	733
TOTAL	1203	-0	100	1103

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
943864	0.000	72.280	429.186	501.466	74.724	46.038

...MISSION
PLAN, CONDUCT, RPT ENG TEST AIRDROP MAT AND LONG RANGE TUBE ARTY, DESERT ENVIRONMENT TEST OF ARMY MATL AS DIRECTED.
PLAN CONDUCT RPT ENG DESIGN PROC AND PCST PRCD TEST AS DIRECTED.
PLAN CONDUCT RPT ENG DESIGN TEST OF AIRCRAFT WEAPONS SYSTEM.

...CURRENT IMPORTANT PROGRAMS
AIRCRAFT RECOVERY KIT
TRUCK,5-TON,XM809 SERIES
HET 70
HOW,8 FATIGUE, M110E2
NATO STANDARDS TEST

...FUNCTIONS/EQUIPMENT/CAPABILITIES
BALLISTIC MEASUREMENT RANGES
ENGINEERING TEST FACILITIES
VEHICLE FIELD TEST FACILITIES
TEST COURSES
DESERT TERRAIN TEST AREAS
CONTROLLED IMPACT TEST FACILITY
INSTRUMENTED DROP ZONES
RADIO TELEMETRY
DATA PROCESSING CENTER
RANGE TIMING
OPTICAL PHOTO ENG FACILITIES
AVIATION SUPPORT

INSTALLATION ARMY MATERIALS SYSTEMS AND ANALYSIS AGENCY, ABERDEEN PROVING GROUND, MD.

CO COL HOWARD C METZLER TECH DIR DR JOSEPH SPERRAZZA

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1970 (ACTUAL)	1971 (ACT + EST)
TOTAL RDT+E	10.044	10.855
TOTAL PROCUREMENT	0.191	0.118
TOTAL O+M	1.724	1.597
TOTAL OTHER	2.050	0.050
TOTAL ANNUAL LAB	14.009	12.620
TOTAL IN-HOUSE	7.853	8.463
TOTAL IN-HOUSE RDT+E	6.590	7.000
ANNUAL OPERATING COST	1.587	1.786

PERSONNEL DATA (END OF FY 1970)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PROF	NON-PROF
MILITARY	14	0	15	0
CIVILIAN	254	2	187	67
TOTAL	268	2	202	67

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
4	9.800	19.421	3.685	32.906	0.845	3.331

...MISSION
PROVIDE CENTRAL TECH CAPABILITY FOR ALL SYSTEMS ANALYSIS,IMPROVEMENT IN CAPABILITY + PERFORMANCE.ANALYZES EFFECTIVENESS OF NEW/EXISTING MILITARY MATERIEL SYSTEMS LOGISTIC + SUPPORT TO DETERMINE EFFECTIVENESS + POTENTIAL INCREASES THRU UTILIZATION OF MATERIEL PLAN + MANAGE JTCG/ME EFFORT.

...CURRENT IMPORTANT PROGRAMS
ARMY MATERIEL SYSTEMS ANALYSIS AGENCY
ANTI-ARMOR SYSTEMS + ARMOR VULNERABILITY
WEAPONS EFFECTS / TARGET VULNERABILITY
AIRCRAFT WEAPON SYSTEM EFFECTIVENESS
JOINT TECHNICAL COORDINATING GROUP / MUNITIONS EFFECTIVENESS

...FUNCTIONS/EQUIPMENT/CAPABILITIES
(NO EQUIPMENT.)

INSTALLATION NAVAL UNDERWATER WEAPONS RESEARCH AND ENGINEERING STATION, NEWPORT, R. I.

CAPTAIN ROBERT T LUNDY USN COMMANDING GERALD G GOULD TECHNICAL DIRECTOR

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1970 (ACTUAL)	1971 (ACT + EST)
TOTAL RDT+E	9.894	13.662
TOTAL PROCUREMENT	10.066	15.547
TOTAL O+M	11.347	12.249
TOTAL OTHER	2.318	6.515
TOTAL ANNUAL LAB	33.625	47.973
TOTAL IN-HOUSE	21.985	31.167
TOTAL IN-HOUSE RDT+E	6.629	9.154
ANNUAL OPERATING COST	9.459	11.695

PERSONNEL DATA (END OF FY 1970)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PROF	NON-PROF
MILITARY	64	0	13	51
CIVILIAN	1580	20	602	978
TOTAL	1644	20	615	1029

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
202	189.148	133.959	355.278	678.385	13.951	13.262

...MISSION

CONDUCT RESEARCH DEVELOPMENT TEST AND EVALUATION ON UNDERWATER WEAPONS + CONPONENTS. PROVIDE ENGRG ASSISTANCE TO SYSTEMS COMMANDS IN COORDINATION OF PROCUREMENT PROD MAINT + QUALITY ASSURANCE OF ASSIGNED WEAPNS SYSTEMS. PROVIDE SERVICE ENGINEERING FOR ASSIGNED EQUIPMENTS.

...CURRENT IMPORTANT PROGRAMS

TORPEDO MK45/TARGET MK27 CONCURRENT EVALUATION
EXTER/DEXTOR DEEP SUBMERGENCE ASW WEAPONS SYSTEMS
ADVANCED FIRE CONTROL SYSTEMS DEVELOPMENT
TECHNICAL COGNIZANCE AND MANAGEMENT SUPPORT FOR SUBROC WEAPON SYSTEM
DES.COG/IN-SERV.ENGRG.FOR FLEET WEAPONS, FIRE CONTROL SYSTEMS+LAUNCHERS

...FUNCTIONS/EQUIPMENT/CAPABILITIES

PLAN AND CONDUCT PROGRAMS CONCERNED WITH APPLIED RDT+E OF UNDERSEA WARFARE WEAPON SYSTEMS. EXERCISE DESIGN COG AND IN-SERVICE ENGINEERING FOR DESIGNATED SERVICE WEAPONS FIRE CONTROL SYSTEMS AND LAUNCHERS. PLAN AND CONDUCT EAST COAST WEAPON SYSTEM ACCURACY TRIALS (WSAT) AND OTHER SIMILAR TRIALS FOR DESTROYERS AND SUBMARINES. MAJOR UNIQUE EQUIPMENTS AND FACILITIES INCLUDE- A DEPTH TEST FACILITY FOR TESTING PROPULSION SYSTEMS UNDER SIMULATED DEPTHS OF 5600 FEET. A COMPLETE FIRE CONTROL LAB FOR ADVANCED RES + DEV TASKS. A WEAPON-LAUNCHING PIER AND INSTRUMENTED SHALLOW WATER RANGE WHICH EXTENDS TO 5000 YARDS. A LAUNCHER LABORATORY WHICH CAN TEST FIRE FULL-SIZE TORPEDOES UNDER SIMULATED DEPTH CONDITIONS. SYSTEM ANALYSIS AND COMPUTER LABS TO EVALUATE EXISTING AND PROPOSED WEAPONS SYSTEMS AND TO CONDUCT DATA REDUCTION AND ANALYSIS.

INSTALLATION NAVAL AIR ENGINEERING CENTER, PHILADELPHIA, PA.

CO CAPT C T FROSCHER USN TECH DIRECTOR MR J M DUNFORD

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1970 (ACTUAL)	1971 (ACT + EST)
TOTAL RDT+E	7.329	7.033
TOTAL PROCUREMENT	41.984	33.550
TOTAL O+M	19.183	15.594
TOTAL OTHER	6.266	6.722
TOTAL ANNUAL LAB	74.762	62.899
TOTAL IN-HOUSE	37.360	38.685
TOTAL IN-HOUSE RDT+E	4.894	6.463
ANNUAL OPERATING COST	6.398	7.521

PERSONNEL DATA (END OF FY 1970)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PROF	NON-PROF
MILITARY	81	1	20	61
CIVILIAN	2231	0	360	1871
TOTAL	2312	1	380	1932

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
560	1390.066	157.635	727.159	2274.860	33.520	19.098

...MISSION
CONDUCT A PROGRAM OF RESEARCH, DEVELOPMENT, TEST, EVALUATION, SYSTEMS INTEGRATION, LIMITED PRODUCTION, AND FLEET ENGINEERING SUPPORT IN LAUNCHING, RECOVERY AND LANDING AIDS FOR AIRCRAFT AND IN GROUND SUPPORT EQUIPMENT FOR AIRCRAFT AND AIRBORNE WEAPONS SYSTEMS.

...CURRENT IMPORTANT PROGRAMS
CARRIER AIRCRAFT SUPPORT STUDY (CASS)
F-14/CARRIER COMPATIBILITY AND SUPPORT
SHIPBOARD AUTOMATED LIGHTWEIGHT AIRCRAFT RECOVERY SYSTEMS
PROJECT OFFLOAD, REMOVAL OF LOW USAGE GROUND SUPPORT EQUIPMENT FROM CVAS
ADVANCED FIRE FIGHTING SYSTEMS

...FUNCTIONS/EQUIPMENT/CAPABILITIES
CONDUCT RDT+E ON SHIPBOARD AND SHOREBASED A/C LAUNCH, RECOVERY, VISUAL LANDING AIDS, AND SUPPORT EQUIP. AND THEIR RELATED SYSTEMS. DESIGN DEVELOP AND/OR PROCURE EQUIP. AND COMPONENTS TO MAINTAIN AND SUPPORT THESE SYSTEMS. DETERMINE SUPPORT EQUIP. REQUIREMENTS BY PERFORMING ENGR. ANALYSIS OF END ITEMS. MANAGE TEST PROGRAMS FOR EQUIP. TESTED ON VERSATILE AVIONICS SHOP TEST SYSTEM. VERSATILE MACHINE SHOP WITH CONVENTIONAL AND AUTOMATED NUMERICALLY CONTROLLED MACHINE TOOLS, CAPABLE OF PROTOTYPE AND LIMITED PRODUCTION. IBM 360/50 COMPUTER FOR ENGINEERING ANALYSIS. LANDING MAT TEST FACILITY FOR FULL SCALE SIMULATION OF RUNWAY LOADING DURING A/C LANDING. TEST FACILITY FOR COMPLETE EVALUATION OF WIRE ROPE. COMPONENT TEST LAB FOR DEVELOPMENT TESTING OF HYDRAULIC, PNEUMATIC, AND ELEC. EQUIP. UNDER CONDITIONS SIMULATING FLEET USE.

INSTALLATION NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER, WASHINGTON, D. C.

COMMANDER - CAPTAIN R W KING, USN TECHNICAL DIRECTOR - DR A POWELL

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1970 (ACTUAL)	1971 (ACT + EST)
TOTAL RDT+E	45.933	52.752
TOTAL PROCUREMENT	3.953	2.868
TOTAL O+M	2.989	4.432
TOTAL OTHER	8.720	8.953
TOTAL ANNUAL LAB	61.515	64.995
TOTAL IN-HOUSE	36.454	37.539
TOTAL IN-HOUSE RDT+E	25.990	27.747
ANNUAL OPERATING COST	12.643	13.947

PERSONNEL DATA (END OF FY 1970)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PROF	NON-PROF
MILITARY	25	3	25	2
CIVILIAN	1933	62	748	1185
TOTAL	1958	65	773	1185

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
208	811.955	132.115	504.042	1448.115	52.[illegible]	31.357

...MISSION

TO CONDUCT A PROGRAM OF ANALYSIS, RDT&E, SYSTEMS INTEGRATION, FLEET ENGINEERING SUPPORT IN NAVAL SHIP SYSTEMS, AND TO CONDUCT INVESTIGATIONS INTO RELATED FIELDS OF SCIENCE AND TECHNOLOGY.

...CURRENT IMPORTANT PROGRAMS

SUPPORT ULMS SHIP CONTROL AND HULL DESIGN PROGRAMS. DEVELOP STRESS ANALYSIS AND DESIGN TECHNIQUES FOR CROSS STRUCTURE OF CATAMARAN HULLS. DEVELOPMENT OF COMPUTER-AIDED, INTEGRATED SHIP DESIGN SYSTEM (ISDS) WITH INTERACTIVE GRAPHICS. SIGNIFICANT CONTRIBUTIONS TO SUBMARINE SILENCING. DEVELOP TECHNOLOGY AND FORMULATE DESIGN CRITERIA FOR HYDROFOIL CRAFT.

...FUNCTIONS/EQUIPMENT/CAPABILITIES

PLAN AND CONDUCT R D T AND E AND PROVIDE SUPPORT TO THE OPERATING FORCES AND NAVAL AND GOVERNMENT AGENCIES AS ASSIGNED IN THE AREAS OF HYDROMECHANICS, STRUCTURAL MECHANICS, ACOUSTICS AND VIBRATIONS, AERODYNAMICS, APPLIED MATHEMATICS, AND SYSTEMS DEVELOPMENT. NSRDC FACILITIES INCLUDE THE HIGH SPEED, DEEP AND SHALLOW WATER, MANEUVERING-SEAKEEPING, AND ROTATING ARM TOWING BASINS VARIABLE PRESSURE WATER TUNNELS DEEP SUBMERGENCE PRESSURE TEST TANKS SHIP AND PERSONNEL PROTECTION FACILITIES UNDERWATER EXPLOSIONS TEST POND AND PITS SHIP SHOCK SIMULATORS MOBILE NOISE BARGE (MONOB) ACOUSTIC DATA ANALYSIS CENTER ANECHOIC TEST FACILITY VIBRATION GENERATORS AERODYNAMIC TEST FACILITIES - SUBSONIC, TRANSONIC, SUPERSONIC, AND HYPERSONIC WIND TUNNELS COMPUTER FACILITIES AND HYDROFOIL SPECIAL TRIALS UNIT.

INSTALLATION NAVAL RESEARCH LABORATORY, WASHINGTON, D.C.

DIRECTOR CAPT EARLE W SAPP USN DIRECTOR OF RESEARCH DR ALAN BERMAN

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1970 (ACTUAL)	1971 (ACT + EST)
TOTAL RDT+E	89.133	89.996
TOTAL PROCUREMENT	9.633	8.003
TOTAL O+M	1.801	6.532
TOTAL OTHER	1.147	1.697
TOTAL ANNUAL LAB	101.714	100.228
TOTAL IN-HOUSE	94.915	96.120
TOTAL IN-HOUSE RDT+E	82.334	85.888
ANNUAL OPERATING COST	21.714	22.692

PERSONNEL DATA (END OF FY 1970)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PROF	NON-PROF
MILITARY	90	3	10	80
CIVILIAN	3626	363	1370	2256
TOTAL	3716	366	1380	2336

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
2178	2024.770	205.998	694.562	2925.330	68.694	67.167

...MISSION
TO CONDUCT SCIENTIFIC RESEARCH AND DEVELOPMENT IN THE PHYSICAL SCIENCES AND RELATED FIELDS DIRECTED TOWARD NEW AND IMPROVED MATERIALS, EQUIPMENT, TECHNIQUES, AND SYSTEMS FOR THE NAVY.

...CURRENT IMPORTANT PROGRAMS
HIGH ENERGY LASER, GENERATION, PROPAGATION, AND DAMAGE PROGRAM.
ANTI-SURFACE-SHIP MISSILE DEFENSE PROGRAM.
HIGH ALTITUDE EXPLOSION REACTION MODELING AND SIMULATION PROGRAM.
ADVANCED ACOUSTIC ANTI-SUBMARINE WARFARE SURVEILLANCE PROGRAM.
OVER-THE-HORIZON RADAR DECTION AND CLASSIFICATION PROGRAM.

...FUNCTIONS/EQUIPMENT/CAPABILITIES
THIS IS THE NAVY'S PRINCIPAL PHYSICAL SCIENCE RESEARCH LAB. MAJOR AREAS ARE ELECTRONICS RADAR, COMMUNICATIONS, ELECTRONIC WARFARE CHEMISTRY, METALLURGY, PHYSICS GENERAL, OPTICAL, PLASMA, NUCLEAR, MATHEMATICS, ACOUSTICS, OCEANOLOGY. AS THE CORPORATE LABORATORY OF THE NAVY, NRL IS RESPONSIBLE FOR MAINTAINING A PROGRAM WHICH WILL FURNISH THE SCIENTIFIC BASIS FROM WHICH DEVELOPMENT EFFORTS AND OPERATIONAL EQUIPMENTS OR TECHNIQUES WILL EVOLVE, MAJOR FACILITIES AND EQUIPMENT INCLUDE- TWO OCEANOGRAPHIC SHIPS, ONE FOR DEEP OCEAN SEARCH AND RESCUE ONE FOR ACOUSTIC ASW RESEARCH. MAJOR ACOUSTIC STANDARD AND CALIBRATION FACILITIES. HIGH LEVEL RADIATION LABORATORY. THREE NUCLEAR PARTICLE ACCELERATORS. HIGH ENERGY LASER FACILITY. SPACE SIMULATION FACILITY.

INSTALLATION NAVAL WEAPONS LABORATORY, DAHLGREN, VA.

COMMANDER - CAPT STEVEN N.ANSTASION TECHNICAL DIRECTOR - BERNARD SMITH

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1970 (ACTUAL)	1971 (ACT + EST)
TOTAL RDT+E	20.098	24.785
TOTAL PROCUREMENT	26.690	11.593
TOTAL O+M	10.543	12.401
TOTAL OTHER	6.264	8.419
TOTAL ANNUAL LAB	63.595	57.198
TOTAL IN-HOUSE	48.381	33.163
TOTAL IN-HOUSE RDT+E	16.640	15.094
ANNUAL OPERATING COST	8.503	12.395

PERSONNEL DATA (END OF FY 1970)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PROF	NON-PROF
MILITARY	122	0	30	92
CIVILIAN	2499	54	910	1589
TOTAL	2621	54	940	1681

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
4490	482.647	72.296	832.770	1387.713	32.469	29.994

...MISSION
TO CONDUCT A PROGRAM OF WARFARE ANALYSIS,RESEARCH,DEVELOPMENT, TEST,EVALUATION,SYSTEM INTEGRATION,AND FLEET ENGINEERING SUPPORT IN NAVAL WEAPON SYSTEMS, PRINCIPALLY FOR SURFACE WARFARE,AND TO CONDUCT SUPPORTIVE PROGRAMS IN OTHER WARFARE AREAS AND FIELDS OF TECHNOLOGY.

...CURRENT IMPORTANT PROGRAMS
FBM-POLARIS-POSEIDON GUID CONCEPT,DATA,SOFTWARE/BASIC GUID STUDIES ULMS.
SURF SYS-ADV NAVAL GUNS/CANNON-LAUNCHED GUIDED WEAP/NEW KILL MECHANISMS.
EM SYS-MOBILE LAB FLEET RESEARCH/COMBAT EM VULN/OP INTELLIGENCE COLLECT.
WAR ANAL-MARCORPS FIRE SUPP STUDY/MINEFIELD ANAL/ADV ASW SIMUL MODELS.
OTHER-SMS SOFTWARE/CLOSE-IN WEAP/ADV 5-INCH SHELL/CB DEFENSE/TGT VULN.

...FUNCTIONS/EQUIPMENT/CAPABILITIES
BROAD STUDIES OF RQMTS,CAPABILITIES,THREAT+TECHNOLOGY PROJECTIONS.
DEVELOPMENT IN EXPLORATORY,ADVANCED,ENGINEERING,OP,SYSTEM PHASES.
RDT+E SELECT AIR WARF PROGRAMS/STRATEGIC SYS ANAL/ELINT SYS/MARCORPS R+D
CENTRAL TECHNOLOGY SOURCE-NON-NUCLEAR WARHEADS/BALLISTICS/WEAP SAFETY/
TGT VULN/GUNS/ARMOR/EMS/CADS/HI PWR VULN/MATERIALS/CW DEFENSE/COMPUTER
ECH+INFO SCIENCES/DIGITAL FIRE CONTROL PROGRAMMING/SATELLITE GEODESY.
GUN+ORD DEV RANGES LAND,RIVER,FACIL /EMPASS SYS/EM,CHEM,LASER,METAL LAB.
COMPUTERS-GP FACIL CDC6700,IBM7030,IBM36040,IBM1401,UDT,PERIPHERALS/
DIGITAL FC FACIL UNIVAC1212,UNIVAC1218 3 ,UNIVAC1219 3 ,CHANCO,AN-UYK-7,
EAI680 4 ,EAI693 2 ,AN-ASQ-6/SUBSYS SEL840A,PDP8L,PDP8, EAI380,HP2116A/
POSEIDON-POLARIS FC FACILITY/HYBRID FACILITY EAI640,EAR680 2 ,693+TR48/
BATCH+GRAPHICS+CONVERSATIONAL+HYBRID TERMINALS/ANALOG FACIL TRI0 4 .

NOT REPRODUCIBLE

INSTALLATION NAVAL AIR TEST CENTER, PATUXENT RIVER, MD.

RADM HENRY L MILLER MR JOHN B PARADIS

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1970 (ACTUAL)	1971 (ACT + EST)
TOTAL RDT+E	25.840	31.206
TOTAL PROCUREMENT	11.975	12.834
TOTAL O+M	6.926	4.734
TOTAL OTHER	19.059	20.880
TOTAL ANNUAL LAB	63.800	69.654
TOTAL IN-HOUSE	58.066	63.411
TOTAL IN-HOUSE RDT+E	23.827	28.833
ANNUAL OPERATING COST	12.309	13.588

PERSONNEL DATA (END OF FY 1970)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PROF	NON-PROF
MILITARY	1158	0	157	1001
CIVILIAN	2198	1	421	1777
TOTAL	3356	1	578	2778

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
6861	741.022	186.064	3094.351	4021.437	114.812	28.229

...MISSION
COORDINATE AND PERFORM TEST AND EVALUATION OF AIRCRAFT WEAPONS SYSTEMS, THEIR COMPONENTS AND RELATED EQUIPMENT, CONDUCT TEST PILOT TRAINING, PROVIDE TECHNICAL ADVICE AND ASSISTANCE TO BIS, NASC, CONTRACTORS, ETC.

...CURRENT IMPORTANT PROGRAMS
EVALUATION OF NEW AIRCRAFT A7E EA6B AH1J KA6D A4M P3C F14 HARRIER HELO, GROUND SUPPORT EN. CLEARANCE OF VARIOUS STORES + RACKS ON VARIOUS A/C. ELECTRONIC WARFARE EVALS/SHCEHORN/TRIM/EMPASS A6 RF4B F4J A6A TRISAT. DEVELOPMENT AND EVAL OF ASW SYSTEMS P3C, TACTICAL DATA CENTER AND A-NEW. DEVELOPMENT AND EVAL OF ALL WEATHER AND AUTOMATIC CARRIER LANDING SYSTEM

...FUNCTIONS/EQUIPMENT/CAPABILITIES
DEVELOP AND TEST CONCEPTS FOR OPERATING AIRPLANES FROM CARRIERS// EVAL AIRCRAFT MAINTENANCE AND RELIABILITY// PERFORM ACCELERATED SERVICE TESTS AND SMOKE ABATEMENT EVALS//PERFORM ELECTROMAGNETIC COMPATIBILITY TESTS// DEVEL AND EVAL AIRCRAFT ELEC SYSTEMS//RESEARCH AND DEVELOP AIRCRAFT INSTRUMENTATION AND DATA GATHERING DEVICES AND SYSTEMS//ESTABLISH STORE RELEASE ENVELOPES//RECOMMEND DESIGN CHANGES TO AIRCRAFT//CONDUCT NAVY PRELIM EVALS AND FLEET INTROD PROGRAMS//MAJOR FACILITIES//CATAPULTS AND ARRESTING GEARS//INTERFERENCE TEST HANGAR//AVIONICS LAB//INSTRUMENTED THEODOLITE RADAR + ECM RANGE//EXTENSIVE ELEC AND ENVIRONMENTAL LABS// EXTENSIVE INSTRUMENTATION, TELEMETRY, AND COMPUTER CAPABILITY//ENGINE TEST CELLS//OVER 100 TEST AIRCRAFT//LONG RUNWAYS//AIRCRAFT WEIGHING SCALES//HYDROFOIL SEAPLANE TEST CAPABILITY.

INSTALLATION NAVAL ELECTRONICS LABORATORY CENTER, SAN DIEGO, CALIF.

CAPT M D VAN ORDEN DR C E BERGMAN

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1970 (ACTUAL)	1971 (ACT + EST)
TOTAL RDT+E	32.707	40.146
TOTAL PROCUREMENT	1.153	0.255
TOTAL O+M	5.139	6.567
TOTAL OTHER	3.516	2.399
TOTAL ANNUAL LAB	42.515	49.367
TOTAL IN-HOUSE	40.148	44.150
TOTAL IN-HOUSE RDT+E	30.468	35.304
ANNUAL OPERATING COST	9.021	12.283

PERSONNEL DATA (END OF FY 1970)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PROF	NON-PROF
MILITARY	126	3	45	81
CIVILIAN	1412	52	699	713
TOTAL	1538	53	744	794

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
1944	571.413	113.284	176.445	860.942	10.906	29.968

...MISSION
TO CONDUCT A PROGRAM OF WARFARE ANALYSIS,RESEARCH,DEVELOPMENT,TEST, EVALUATION,SYSTEMS INTEGRATION AND FLEET ENGINEERING SUPPORT IN COMMAND CONTROL AND COMMUNICATIONS TECHNOLOGY.

...CURRENT IMPORTANT PROGRAMS
OPERATIONAL APPLICATIONS OF ELECTRO-OPTICS
MESSAGE PROCESSING AND DISTRIBUTION SYSTEM FOR CVAN 68
IMPROVEMENT OF FPM SUBMARINE COMMUNICATIONS
SATELLITE/FLEET DIGITAL DATA LINK COMMUNICATIONS DEVELOPMENT
SYSTEM CONCEPTS FOR INTEGRATED WORLD WIDE OCEAN SURVEILLANCE SYSTEM

...FUNCTIONS/EQUIPMENT/CAPABILITIES
FUNCTIONS-ASSURE MAXIMUM RDT+E CONTRIBUTIONS TO OPERATIONAL CAPABILITY IN COMMAND CONTROL AND COMMUNICATIONS THRU STRONG TECHNICAL DIRECTION, COORDINATION OF DESIGNATED NAVY COMMAND AND CONTROL PROGRAMS. DEVELOP A BALANCED INTEGRATED PROGRAM OF WARFARE ANALYSIS,RESEARCH,DEVELOPMENT, TEST, EVALUATION, SYSTEM INTEGRATION,AND FLEET ENGINEERING SUPPORT.DEVELOP AN OPTIMUM SCIENTIFIC AND PHYSICAL ENVIRONMENT FOR THE ADVANCEMENT OF COMMAND CONTROL AND COMMUNICATIONS TECHNOLOGY.FACILITIES--ADVANCED COMPUTER SCIENCE CENTER,MICROELECTRONICS LAB,ENVIRONMENTAL TEST FACILITY, LASER RESEARCH LAB,SIXTY FOOT DIA RADIO TELESCOPE,ANTENNA MODEL RANGES, HUMAN FACTORS LAB, SYSTEMS EVALUATION FACILITIES,EX USS BUNKER HILL SYSTEMS TEST BED,APPLIED SYSTEMS DEVELOPMENT AND EVALUATION CENTER.

INSTALLATION NAVAL EXPLOSIVE ORDNANCE DISPOSAL FACILITY, INDIAN HEAD, MD.

BOBBY J. BROWN,CDR, USN COMMANDING OFFICER LIONEL A DICKINSON TECH. DIR.

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1970 (ACTUAL)	1971 (ACT + EST)
TOTAL RDT+E	1.115	2.852
TOTAL PROCUREMENT	1.732	1.895
TOTAL O+M	0.146	0.060
TOTAL OTHER	0.627	0.543
TOTAL ANNUAL LAB	3.620	3.350
TOTAL IN-HOUSE	2.329	2.693
TOTAL IN-HOUSE RDT+E	0.757	0.675
ANNUAL OPERATING COST	0.230	0.550

PERSONNEL DATA (END OF FY 1970)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PROF	NON-PROF
MILITARY	57	0	12	45
CIVILIAN	132	0	13	119
TOTAL	189	0	25	164

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
1084	37.327	26.759	33.914	98.000	4.707	0.915

...MISSION
CONDUCT RDT+E IN TECH MATTERS FOR EOD AND RENDER SAFE PROCEDURES FOR CONVENTIONAL AND SPEC WEAPONS GUIDED MISSILES,B+C MUNITIONS,EQUIP,US AND FOREIGN.

...CURRENT IMPORTANT PROGRAMS
EXPLOSIVE ORDANCE DISPOSAL (EOD) PROCEDURE--PUBLICATIONS
EXPLOR DEVEL OF EOD EQUIPMENT FOR PROCEDURES.
ADV DEVEL OF EOD EQUIP FOR PROCEDURES
ADMIN IN-SERVICE ENGINEERING FOR EOD EQUIP.
ADMIN EOD ALLOWANCES FOR PUBLICATIONS AND EQUIPMENTS.

...FUNCTIONS/EQUIPMENT/CAPABILITIES
DEVELP EOD PROCEDURES,PUBLICATIONS FOR JOINT SERVICE. DEVELOP EQUIPMENT REQUIRED TO PERFORM EOD PROCEDURES. TECHNICALLY MANAGE AVAILIBILITY OF REQUIRED EOD EQUIPMENT.
MAJOR EQUIPMENT AND FACILITIES CAPABILITIES--LIBRARY FOR ORDNANCE DATA
ORDNANCE STOWAGE, DISASSEMBLY AND ANALYSIS ORDNANCE SURFACE AND UNDER-WATER TESTS.

INSTALLATION NAVY TOXICOLOGY UNIT, NATIONAL NAVAL MEDICAL CENTER, BETHESDA, MD.

CAPT J SIEGEL MSC USNR

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1970 (ACTUAL)	1971 (ACT + EST)
TOTAL RDT+E	0.180	0.179
TOTAL PROCUREMENT	0.000	0.000
TOTAL O+M	0.000	0.000
TOTAL OTHER	0.120	0.160
TOTAL ANNUAL LAB	0.300	0.339
TOTAL IN-HOUSE	0.300	0.339
TOTAL IN-HOUSE RDT+E	0.180	0.179
ANNUAL OPERATING COST	0.010	0.010

PERSONNEL DATA (END OF FY 1970)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PROF	NON-PROF
MILITARY	17	0	6	11
CIVILIAN	8	0	4	4
TOTAL	25	0	10	15

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
0	2.260	1.400	1.416	5.076	1.872	3.600

...MISSION
EVAL TOXIC POTENTIAL MATERIAL AND EQUIP ABOARD SUBMARINES DEV SOLUTIONS TO TOXICOLOGIC PROBLEMS AFLOAT. CONDUCT RDT&E IN OPERATIONAL TOXICOLOGY AND HEALTH ENGINEERING.

...CURRENT IMPORTANT PROGRAMS
CHRONIC INHALATION TOXICITY OF DICHLOROACETYLENE TO ANIMALS
ACUTE INHALATION TOX OF CO IN RODENTS UNDER HYPERBAROSIS
TOXICITY OF COMBUSTION PRODUCTS OF AIRCRAFT FIRES
TOXICITY OF TRACE CONTAMINANTS IN SUBMARINE ATMOSPHERES
TOX OF POTENTIAL TORPEDO PROPELLANTS AND CHEMILUMINESCENT MATERIALS

...FUNCTIONS/EQUIPMENT/CAPABILITIES
CONDUCT EXPLORATORY STUDIES IN HYPERBARIC TOXICOLOGY CHRONIC AND SUB-ACUTE INHALATION STUDIES OF SUB ATMOS CONTAMINATION. BROAD BASED TOX SCREENING OF POTENTIALLY HAZARDOUS MATERIAL. EQUIP-6 ROCHESTER AMBIENT PRESSURE INHALATION CHAMBERS 6 LEACH 3CL AMBIENT INHALATION CHAMBERS 8.59L 50 PSIG HYPERBARIC EXPOSURE CHAMBER ANALYTIC AUTO BIOCHEM AND GC IR UV INSTR CAPABILITIES-MAJOR TOXICOLOGY SCREENING TECHNIQUES IN-DEPTH LONG TERM INHALE STUDY AND LIMITED HYPERBARIC INHALATION STUDY CHEM LAB WITH 7 POINT ON-LINE AUTO CHAMBER AIR SAMPLING AND ANALYSIS SYSTEM.

INSTALLATION NAVAL WEAPONS CENTER, CHINA LAKE, CALIF.

CAPTAIN M. R. ETHERIDGE, MR. H. G. WILSON, TECHNICAL DIRECTOR

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1970 (ACTUAL)	1971 (ACT + EST)
TOTAL RDT+E	96.359	90.000
TOTAL PROCUREMENT	44.756	42.500
TOTAL O+M	4.458	4.000
TOTAL OTHER	39.510	28.600
TOTAL ANNUAL LAB	185.083	165.100
TOTAL IN-HOUSE	102.173	102.600
TOTAL IN-HOUSE RDT+E	63.547	65.500
ANNUAL OPERATING COST	42.782	44.500

PERSONNEL DATA (END OF FY 1970)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PROF	NON-PROF
MILITARY	723	0	26	697
CIVILIAN	4851	92	1409	3442
TOTAL	5574	92	1435	4139

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
1095805	1680.971	220.422	5215.541	7116.934	227.449	84.301

...MISSION
TO CONDUCT A PROGRAM OF WARFARE ANALYSIS, RESEARCH, DEVELOPMENT, TEST+ EVALUATION, SYSTEMS INTEGRATION AND FLEET ENGINEERING SUPPORT IN NAVAL WEAPONS SYSTEMS PRINCIPALLY FOR AIR WARFARE AND TO CONDUCT INVESTIGATIONS INTO RELATED FIELDS OF SCIENCE AND TECHNOLOGY.

...CURRENT IMPORTANT PROGRAMS
HARPOON--AIR- AND SURFACE-LAUNCHED SHIP ATTACK SYSTEMS
FUEL AIR EXPLOSIVE WEAPON SYSTEM
AGILE-ADVANCED SHORT RANGE AAM SYSTEM
BULLDOG-CLOSE AIR SUPPORT WEAPON SYSTEM
NIGHT ATTACK--FLIE, APC, INDAM.

...FUNCTIONS/EQUIPMENT/CAPABILITIES
FUNCTIONS INCLUDE PROPULSION AND PROPELLANT RESEARCH, EXPLOSIVE RESEARCH, SOLID STATE DEVICE DESIGN, AERCMECHANICAL INVESTIGATICNS, FLIGHT AND LIVE FIRING TEST, ENVIRONMENTAL DETERMINATIONS GUIDANCE AND CONTROL TECHNOLOGY, SYSTEMS AND OPERATIONS ANALYSIS SIMULATION, MISSILE SYSTEMS DEVELOPMENT AND BASIC PHYSICAL AND CHEMICAL RESEARCH, FACILITIES INCLUDE MICHELSON LAB, WARHEAD RESEARCH LAB, GROUND + AIR CRAFT RANGES, SUPERSONIC AND SMALLER TEST TRACKS, SOLID STATE DEVICES LAB, FUZE MODEL RANGE, ATMOSPHERIC APPLICATIONS LAB, AIRCRAFT SURVIVABILITY RANGE, TECHNICAL LIBRARY, MACHINE SHOP, HEAT TREAT + ELECTROPLATING SHOPS, NAVAL AIR FACILITY UNFAMILIAR TARGET RGE, ECHC RGE, AEROBAL + LASSER SIMUL LABS SPECIALIZED EQUIPMENT INCLUDES SCANNING ELECTRO MICROSCOPE UNIVAC 1108 NUMERICAL CONTROLLED MACHINETOOLS, CAPRI RADAR, ANALOG COMP, ANECHOIC CHAMBER.

INSTALLATION NAVAL UNIT, FORT DETRICK, FREDERICK, MD.

CDR N L FREEMAN MSC USN

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1970 (ACTUAL)	1971 (ACT + EST)
TOTAL RDT+E	0.099	0.044
TOTAL PROCUREMENT	0.000	0.000
TOTAL O+M	0.000	0.000
TOTAL OTHER	0.125	0.176
TOTAL ANNUAL LAB	0.224	0.220
TOTAL IN-HOUSE	0.224	0.220
TOTAL IN-HOUSE RDT+E	0.099	0.044
ANNUAL OPERATING COST	0.005	0.014

PERSONNEL DATA (END OF FY 1970)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PROF	NON-PROF
MILITARY	13	0	3	10
CIVILIAN	0	0	0	0
TOTAL	13	0	3	10

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
0	0.000	2.025	0.081	2.106	0.000	0.008

...MISSION
PROMOTE MODERN MED SCIENTIFIC RESEARCH JOINTLY WITH DEPT OF THE ARMY AND EVALUATE IMPROVE AND DEV BIOLOGIC DECONTAMINATION METHODS OF GAS DISSEMINATORS.

...CURRENT IMPORTANT PROGRAMS
DEVELOPMENT OF NEW EXPERIMENTAL VACCINES
ENVIRONMENTAL PREVENTION AND CONTROL OF AIRBORNE DISEASES
CLEANSING OF HOSP EQUIP AND SPACES WITH GASEOUS DISINFECTANTS
BIOLOGICAL DECONTAMINATION PROCEDURES FOR SHORE AND AFLOAT USE
BIODECONTAMINATION OF DEEP SUBMERGENCE VEHICLES HABITATS AND EQUIP

...FUNCTIONS/EQUIPMENT/CAPABILITIES
DEVELOP MATERIALS AND METHODS COMPATIBLE WITH NAVY REQUIREMENTS FOR THE PREVENTION AND CONTROL OF DISEASES OF NATURAL AND UNNATURAL ORIGIN. MAJOR LAB EQUIP AND FACILITIES FOR SAFE HANDLING OF PATHOGENIC MICROORGANISMS MADE AVAILABLE BY ARMY. DISSEMINATORS WITH ANCILLARY EQUIP FOR STERILIZATION OF LABS HOSPITALS SUBMARINES AND DEEP SEA SUBMERGENCE VEHICLES HABITATS AND EQUIP. CAPABILITY IN BIOLOGICAL DECONTAMINATION. VIRAL AND BACTERIAL SEROLOGY VIRAL AND TISSUE CULTURE AND AEROBIOLOGY.

INSTALLATION NAVAL MEDICAL RESEARCH UNIT NO.1, BERKELEY, CALIF.

GOR J W FRESH MC USN

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1970 (ACTUAL)	1971 (ACT + EST)
TOTAL RDT+E	0.084	0.050
TOTAL PROCUREMENT	0.000	0.000
TOTAL O+M	0.000	0.000
TOTAL OTHER	0.170	0.184
TOTAL ANNUAL LAB	0.254	0.234
TOTAL IN-HOUSE	0.254	0.234
TOTAL IN-HOUSE RDT+E	0.084	0.050
ANNUAL OPERATING COST	0.030	0.033

PERSONNEL DATA (END OF FY 1970)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PROF	NON-PROF
MILITARY	15	2	6	9
CIVILIAN	3	1	2	1
TOTAL	18	3	8	10

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
0	1.550	0.360	0.080	1.990	0.000	0.259

...MISSION
RESEARCH ON AIRBORNE INFECTIOUS DISEASES. DIRECT SUPPORT OF LO TEMP PROJ DEV OF AEROSOL HAZARD CONTROL IN DENTAL CLINICS.

...CURRENT IMPORTANT PROGRAMS
STUDIES ON EVIRONMENTAL CONTROL OF RESPIRATORY DISEASE AGENTS
LO TEMP EFFECTS ON SUSCEPTIBILITY TO AIRBORNE INFECTIONS
POTENTIAL AEROSOL HAZARDS DURING DENTAL OPERATORY PROCEDURES
STUDY OF INFECTIONS IN HYPERBARIC CONDITIONS
POTENTIAL DISEASE HAZARDS TO NAVY DIVERS AND ACQUANAUTS

...FUNCTIONS/EQUIPMENT/CAPABILITIES
BACTERIOLOGY MYCOLOGY BIOPHYSICS AND OTHER APPROPRIATE FIELDS RELATIVE TO PARTICULAR PROBLEMS OF AIRBORNE DISEASE OF MIL IIMPORTANCE. STUDY OF PROTEIN ELECTROLYTE LIVER CARDIOPULMONARY AND OTHER FACTORS IN HOST RESPONSE TO INFECTION. IMMUNOLOGIC AND PHYSIOLOGIC STUDIES ON N MENINGITIDIS. TEST AND IMPROVE PLAGUE VACCINE REFERENCE STANDARDS STUDIES ON PATH AND IMMUNITY OF DISEASE. DEV RAPID DIAG PPROC FOR ARBO AND RESPIRATORY VIRUSES.

INSTALLATION NAVAL ORDNANCE LABORATORY, WHITE OAK, MD.

CAPTAIN GEORGE G BALL DR. GREGORY K HARTMANN

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1970 (ACTUAL)	1971 (ACT + EST)
TOTAL RDT+E	53.080	55.000
TOTAL PROCUREMENT	9.339	9.863
TOTAL O+M	2.599	3.071
TOTAL OTHER	5.848	5.290
TOTAL ANNUAL LAB	70.866	73.224
TOTAL IN-HOUSE	54.095	55.858
TOTAL IN-HOUSE RDT+E	40.627	42.000
ANNUAL OPERATING COST	18.435	18.923

PERSONNEL DATA (END OF FY 1970)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PROF	NON-PROF
MILITARY	53	1	27	26
CIVILIAN	2907	118	1016	1891
TOTAL	2960	119	1043	1917

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
1066	355.903	75.036	739.599	1170.538	46.972	28.321

...MISSION
CONDUCT EXPLORATORY, ADVANCED,ENGINEERING AND OPERATIONAL SYS.DEV TEST AND TECH EVAL OF ORD SYS,COMPONENTS AND MATLS PERTAINING TO EXISTING ADVANCED AND PROP WEAPONS,PRINCIPALLY IN AREAS OF STRATEGIC, SURFACE AND UNDERSEA WAREFARE. CONDUCT RESEARCH IN SCIENCES RELATED TO ORDNANCE.

...CURRENT IMPORTANT PROGRAMS
ZAP HYPERVELOCITY WEAPON SYSTEM
TORPEDO MK 48-1 DEVELOPMENT
NEW MINE WARFARE ADVANCES INCLUDING CAPTOR AND THE ADVANCED DESTRUCTOR
NUCLEAR WEAPON EFFECTS RESEARCH INCLUDING VULNERABILITY AND HARDENING
SENSORS FOR INTERDICTION

...FUNCTIONS/EQUIPMENT/CAPABILITIES
CONDUCT INDEPENDENT AND APPLIED RES IN AERO AND HYDROBALLISTICS, EXPLOSIVES, MATERIALS + OTHER FIELDS OF PHYSICS, CHEMISTRY + MATH. CONDUCT PROG OF APPL RES,EXPLOR,ADVANCED,ENGR AND OPERATIONAL SYS DEV OF AND TECH EVAL OF ORD SYS,COMPONENTS AND MATLS PRINCIPALLY IN FIELDS OF MISSILES NUC WPNS MINES,TORPEDOES,FUZES,FIRE CONT.GUIDANCE AND SMALL CRAFT ARMAMENT. PERFORM PROD ENGR ON,AND PREPARE DES DISCLS FOR ITEMS OF ORD DESIGNED AND DEVEL AT NOL. WIND TUNNELS TO M20, BALL RANGES FOR FREE FLT MODEL STUDIES, HYDRO TANK 1.75M GAL CAP FOR STDY REL LGE MODELS AT HIGH SPEED ENTRY. CENTRIFUGE TO STDY U/W EXPLOSIONS, FACIL FOR RES IN CHEM OF EXPLOSIVES AND PROPELLANTS, EXTENSIVE LAB AND FIELD FACILITIES FOR TESTING ORDNANCE UNDER NATURAL AND/OR SIMULATED CONDITIONS, MAGNETIC STRUC FAC TO STUDY MAG CHARACT OF SUBMARINES SHIPS AND SATELLITES.

INSTALLATION NAVAL SHIP R&D LABORATORY, PANAMA CITY, FLA.

CAPT. L.O.G. WHALEY, CO. DR. NORMAN H. JASPER, TECHNICAL DIRECTOR

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1970 (ACTUAL)	1971 (ACT + EST)
TOTAL RDT+E	10.821	12.839
TOTAL PROCUREMENT	1.049	1.080
TOTAL O+M	1.688	1.495
TOTAL OTHER	1.363	1.372
TOTAL ANNUAL LAB	14.921	16.786
TOTAL IN-HOUSE	12.552	14.845
TOTAL IN-HOUSE RDT+E	8.959	11.021
ANNUAL OPERATING COST	4.692	4.922

PERSONNEL DATA (END OF FY 1970)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PROF	NON-PROF
MILITARY	163	4	15	148
CIVILIAN	614	11	241	373
TOTAL	777	15	256	521

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
641	165.304	35.296	292.336	492.936	14.350	10.456

...MISSION
TO SUPPORT THE MISSION OF THE NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER BY CARRYING OUT ASSIGNED RESEARCH AND DEVELOPMENT TASKS IN SCIENTIFIC AND ENGINEERING FIELDS.

...CURRENT IMPORTANT PROGRAMS
DETECTION + CLASSIFICATION OF UNDERWATER OBJECTS INCLUDING BURIED MINES. THEORY + TACTICAL DOCTRINE FOR MINE COUNTERMEASURES. DEFENSE AGAINST SWIMMER ATTACK. INTEGRATED SWIMMER/DIVER SYSTEMS AND RELATED EQUIPMENT. ACOUSTIC WARFARE SYSTEMS FOR SURFACE SHIPS AND SUBMARINES.

...FUNCTIONS/EQUIPMENT/CAPABILITIES
PLAN + CONDUCT RDT+E + PROVIDE SUPPORT TO OPERATING FORCES, NAVAL + GOV AGENCIES IN SURFACE,SUBSURF + AIRBORNE MINE DEFENSE ACOUSTIC + TORPEDO COUNTERMEASURES INSHORE WARFARE AND RELATED SC + ENG. COMPUTERS. $3.5M CM EVALUATOR, SDS 9300 DIGITAL + 2 ADI 256 ANALOGS $1M B5500, 2 GULF RESEARCH PLATFORMS $5M IN 100 + 60 WATER WITH LIVING/LABS FOR 30 + 4 PEOPLE $220K OPTICAL TRACKING SYS, $300K MODEL TOW BASIN, $150K ELECTR TRACK RANGE, UNDERWATER ACOUSTICS FAC- $200K TRACK RANGE. $210K ANALOG DATA ANAL, $500K TRANSDUCER DEV + EVAL. $200K TRANSDUCER TEST POOL, $425K SIM + SIGNATURE GENERATOR, $50K TEST PLATFORM. MAGNETICS FAC $350K SIM, $53K HELMHOLTS COIL, $110K SWEEP SIM, $330K TARGET DETECT + CLASS RANGE, $109K PRES SIGNATURE SIM. $89K WET SUBMERSIBLE, $20K MARINE ANIMAL FAC. $7.5M MAN-RATED OCEAN SIM FAC UNDER CONSTRUCTION.

INSTALLATION NAVAL TRAINING DEVICES CENTER, ORLANDO, FLA.

CAPTAIN F. H. FEATHERSTON CO DR H. H. WOLFE TECHNICAL DIRECTOR

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1970 (ACTUAL)	1971 (ACT + EST)
TOTAL RDT+E	17.922	14.466
TOTAL PROCUREMENT	60.683	53.416
TOTAL O+M	9.821	9.862
TOTAL OTHER	8.540	8.597
TOTAL ANNUAL LAB	88.966	78.539
TOTAL IN-HOUSE	22.126	22.489
TOTAL IN-HOUSE RDT+E	10.640	11.806
ANNUAL OPERATING COST	5.607	5.668

PERSONNEL DATA (END OF FY 1970)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PROF	NON-PROF
MILITARY	49	1	23	26
CIVILIAN	1148	18	304	844
TOTAL	1197	19	327	870

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
60	93.580	201.356	121.560	416.496	2.794	3.183

...MISSION
IMPROVE THE EFFECTIVENESS OF THE NAVAL TRAINING PROGRAM THROUGH THE CONDUCT OF RESEARCH LEADING TO, AND THE DEVELOPMENT AND PRODUCTION OF, TRAINING EQUIPMENT; PROVIDE AND CONTROL LOGISTIC AND MATERIAL SUPPORT OF SUCH EQUIPMENT.

...CURRENT IMPORTANT PROGRAMS
OPTICAL TECHNOLOGIES IN NAVY TRAINING DEVICES
ELECTRONIC TECHNIQUES FOR NAVY TRAINING DEVICES
PROJECTED VISUAL SIMULATION OF THE NAVAL OPERATIONAL ENVIRONMENT
GENERAL SIMULATION MODELING FOR NAVY TRAINING DEVICES
HUMAN FACTORS IN THE DESIGN AND USE OF NAVAL TRAINING SYSTEMS

...FUNCTIONS/EQUIPMENT/CAPABILITIES
EFFORT IS ALLOCATED TO THOSE AREAS OF TECHNOLOGY + METHODOLOGY WHICH SHOW GREATEST PROMISE OF SIGNIFICANT IMPROVEMENT TO TRAINING DEVICE DESIGN. INVESTIGATIONS ARE CONDUCTED BY THE APPLIED OPTICS + EARTH SCIENCES, ELECTRONIC TECHNIQUES RESEARCH, TRAINING SYSTEMS RESEARCH, TRAINING SIMULATION COMPUTER SCIENCES + HUMAN LEARNING RESEARCH LABORATORIES. THESE LABORATORIES- ADVANCE THE STATE OF THE ART IN SIMULATION TECHNOLOGY + METHODOLOGY + MAINTAIN LEADERSHIP IN THE THEORY + CONCEPT OF SIMULATION FOR TRAINING INVESTIGATE, DISSEMINATE + EXCHANGE RESEARCH INFORMATION RELATED TO TRAINING DEVICES SIMULATION TECHNIQUES, + MEANS FOR INTEGRATING MAN + MACHINE + COORDINATE FORMULATION OF RESEARCH REQUIREMENTS TO TO FILL GAPS IN TECHNICAL AND ENGINEERING KNOWLEDGE.

INSTALLATION: NAVAL SHIP R&D LABORATORY, ANNAPOLIS, MD.

CAPTAIN A. BOLNARUK H. V. NUTT

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1970 (ACTUAL)	1971 (ACT + EST)
TOTAL RDT+E	17.379	18.215
TOTAL PROCUREMENT	0.453	0.460
TOTAL O+M	2.479	2.890
TOTAL OTHER	1.322	1.169
TOTAL ANNUAL LAB	21.633	22.534
TOTAL IN-HOUSE	20.024	20.294
TOTAL IN-HOUSE RDT+E	15.904	16.170
ANNUAL OPERATING COST	6.400	6.600

PERSONNEL DATA (END OF FY 1970)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PROF	NON-PROF
MILITARY	6	0	4	2
CIVILIAN	968	31	446	522
TOTAL	974	31	450	524

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
66	337.000	42.000	120.000	499.000	13.411	8.656

...MISSION

TO SUPPORT THE MISSION OF THE NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER BY CARRYING OUT ASSIGNED SHIPS RESEARCH AND DEVELOPMENT TASKS IN SCIENTIFIC AND ENGINEERING FIELDS.

...CURRENT IMPORTANT PROGRAMS

ELECTRICAL CABLES AND FITTINGS
ACOUSTIC SILENCING--SUBMARINES
SHIPBOARD POLLUTION ABATEMENT
SHIPBOARD FIRE PROTECTION
HYDROFOIL CRAFT PROPULSION AND AUXILIARY MACHINERY

...FUNCTIONS/EQUIPMENT/CAPABILITIES

PLAN AND CONDUCT RESEARCH DEVELOPMENT TEST EVALUATION AND PROVIDE SUPPORT TO THE OPERATING FORCES NAVAL AND GOVERNMENT AGENCIES AS ASSIGNED IN THE AREAS OF NAVAL SHIPBOARD MACH SYS SHIPS ATMOSPHERE CONDITIONING AND POLLUTION CONTROL SHIP ELECTRICAL SYS SHIP AUTOMATION AND CONTROL SYS SHIP MATERIAL SHIP SILENCING AND RELATED FIELDS OF SCIENCE AND ENGINEERING.

FACILITIES: OCEAN PRESSURE, SOUND AND VIBRATION MEASUREMENT, ACOUSTICAL RESEARCH FLUID DYNAMICS, MAGNETIC FIELDS, ACOUSTIC DATA INFORMATION CENTER, MACHINE-HUMAN FACTORS AND VISUAL DISPLAYS, TECHNICAL SERVICES, FUEL CELL, WATER CHEMISTRY, METAL FATIGUE, NONDESTRUCTIVE TEST, WELDING ANALYSIS, RUBBER COMPOUND.

INSTALLATION NAVAL MEDICAL RESEARCH UNIT NO.3, CAIRO, EGYPT

CAPT H SPARKS MC USN SR SCI DR H HOOGSTRAAL

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1970 (ACTUAL)	1971 (ACT + EST)
TOTAL RDT+E	1.372	1.544
TOTAL PROCUREMENT	0.000	0.000
TOTAL O+M	0.000	0.000
TOTAL OTHER	0.378	0.360
TOTAL ANNUAL LAB	1.750	1.904
TOTAL IN-HOUSE	1.750	1.904
TOTAL IN-HOUSE RDT+E	1.372	1.544
ANNUAL OPERATING COST	0.278	0.292

PERSONNEL DATA (END OF FY 1970)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PROF	NON-PROF
MILITARY	33	7	11	22
CIVILIAN	117	12	18	99
TOTAL	150	19	29	121

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
5	25.000	7.000	44.000	76.000	2.791	0.561

...MISSION
RESEARCH INTO ETIOLOGY ECOLOGY DISTRIBUTION TRANSMISSION PATHOGENESIS PREVENTION CONTROL AND TREATMENT OF INFECTIOUS AND ENDEMIC DISEASE OF MIL MED INTEREST IN MIDEAST AND AFRICA.

...CURRENT IMPORTANT PROGRAMS
PATHOPHYSIOLOGY OF LOUSE BORNE RELAPSING FEVER
IMMUNOLOGY AND ECOLOGY OF MALARIA IN ETHIOPIA
PATHOPHYSIOLOGY AND THERAPY OF SCHISTOSOMIASIS
ELUCIDATE ROLE OF TICKS AS HUMAN DISEASE VECTOR
ECOLOGY ARBOVIRUS INCLUDING YELLOW FEVER IN ETHIOPIA

...FUNCTIONS/EQUIPMENT/CAPABILITIES
ARBOVIRUS LAB ANIMAL PRODUCTION FACILITIES NUTRITIONAL BIOCHEM TICK BIOCHEM AND PHYSIOLOGY MEDICAL ZOOLOGY AND ENTOMOLOGY CLINICAL INVEST AND MEDICAL WARDS RICKETTSIOLOGY TISSUE CULTURE FACILITIES MENINGOCOCCUS AND ENTERIC BACILLI LAB VETERINARY PATHOLOGY PARASITOLOGY EXPERIMENTAL AND ANATOMIC PATHOLOGY

INSTALLATION PACIFIC MISSILE RANGE, POINT MUGU, CALIF.

COMMANDER- RADM H.S. MOORE/TECHNICAL DIRECTOR- W L MILLER

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1970 (ACTUAL)	1971 (ACT + EST)
TOTAL RDT+E	67.659	64.887
TOTAL PROCUREMENT	4.209	3.443
TOTAL O+M	6.228	5.158
TOTAL OTHER	17.126	17.066
TOTAL ANNUAL LAB	95.222	90.554
TOTAL IN-HOUSE	64.428	64.891
TOTAL IN-HOUSE RDT+E	43.713	44.382
ANNUAL OPERATING COST	24.736	25.242

PERSONNEL DATA (END OF FY 1972)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PROF	NON-PROF
MILITARY	860	8	94	766
CIVILIAN	3057	7	428	2649
TOTAL	3917	15	502	3415

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
29164	50.000	300.000	2000.000	2350.000	149.452	88.750

...MISSION
TO PROVIDE RANGE SUPPORT FOR THE DEPARTMENT OF DEFENSE AND OTHER DESIGNATED GOVERNMENT AGENCIES FOR LAUNCHING TRACKING AND COLLECTING DATA IN GUIDED MISSILE SATELLITE AND SPACE VEHICLE RESEARCH DEVELOPMENT EVALUATION AND TRAINING PROGRAM AND ACTUAL OPERATIONS.

...CURRENT IMPORTANT PROGRAMS
RANGE SUPPORT OF 268 NATIONAL RANGE USER PROGRAMS INCL POLARIS OT +MMIII.
MODIF AND DEV OF RANGE CAPABILITY FOR SUPPORT OF F14A-PHOENIX PROGRAM.
MODIF AND DEV OF FACILITIES FOR SUPPORT OF NAVAL RESERVE COMPONENTS.
DEV OF UNDERWATER T+E RANGE IN HAWAIIAN AREA FOR ASW WEAPONS.
DEV OF RANGE FACILITIES IN HAWAIIAN AREA FOR FLEET EVAL OPERATIONS.

...FUNCTIONS/EQUIPMENT/CAPABILITIES
OPERATE NATIONAL SEA TEST RANGE PT MUGU CAL/KAUAI, HAW/BROAD OCEAN AREA.
OPERATE MISSILE RANGE SAFETY INSTRUMENTATION FACILITIES JOHNSTON ATOLL.
OPERATE BARKING SANDS UNDERWATER RANGE KAUAI, HAWAII.
TRAJ.+ TELEMETRY SYS POINT MUGU/SAN NICOLAS ISLAND CAL BARKING SANDS HAW
SAN NICOLAS ISLAND 14000 ACRES TRACKING LAUNCH PROBES DRONE RECOVERY
11000 AND 5500 FT RUNWAY PT MUGU/10000 FT SAN NICOLAS/12000 FT BARSANHAW.
LOCAL AND WORLD-WIDE COMMUNICATION NETWORKS + AREA FREQ COORD MUGU + HAW.
MAJOR DATA REDUCTION/COMPUTER CENTER AND REAL TIME DATA CENTER PT MUGU.
WEATHER CENTER WITH COMPUTER REDUCTION MUGU MET PROBE FAC HAWAII.
5X10 MILE UNDERSEA TEST RANGE 400-1000 FATHOMS WITH 37 HYDROPHONE ARRAY.
LAUNCH FAC 15KLBS MUGU/20KLBS SAN NICOLAS/6KLBS JOHNSTON IS/MET,BAR SAN
MOBILE SYS OPTICS RADAR 5 TELEMETRY+13 RANGE AIRCRAFT USNS WHEELING AGM8.

INSTALLATION. NAVAL ORDNANCE MISSILE TEST FACILITY, WHITE SANDS, N. MEX.

G D HOWARD CAPTAIN USN COMMANDING OFFICER DR W W BOHN CHIEF ENGINEER

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1970 (ACTUAL)	1971 (ACT + EST)
TOTAL RDT+E	1.708	1.290
TOTAL PROCUREMENT	0.372	0.529
TOTAL O+M	0.000	[illegible]
TOTAL OTHER	1.496	1.620
TOTAL ANNUAL LAB	3.576	3.399
TOTAL IN-HOUSE	3.139	3.221
TOTAL IN-HOUSE RDT+E	1.490	1.132
ANNUAL OPERATING COST	0.670	0.737

PERSONNEL DATA (END OF FY 1970)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PROF	NON-PROF
MILITARY	195	2	52	143
CIVILIAN	89	1	4	85
TOTAL	284	3	56	228

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
112	84.742	30.719	236.239	351.70[illegible]	6.552	3.361

...MISSION
SUPPORT THE NAVY GUIDED MISSILE AND ROCKET PROGRAM INCLUDING GROUND AND FLIGHT TESTING. PARTICIPATE IN THE OPERATION OF THE DEPT OF DEFENSE INTEGRATED MISSILE TEST RANGE AT WHITE SANDS.

...CURRENT IMPORTANT PROGRAMS
FLIGHT-TEST TALOS,TERRIER,TARTAR AND STANDARD MISSILES.
FLIGHT-TEST TALOS ANTIRADIATION MISSILE.
FLIGHT-TEST STANDARD ANTIRADIATION MISSILE.
TACTICAL ELECTRONIC WARFARE DECEPTION PROGRAM.
AEROBEE ROCKET PROGRAM.

...FUNCTIONS/EQUIPMENT/CAPABILITIES
FLIGHT-TEST TALOS TERRIER TARTAR STANDARD SURFACE TO AIR GUIDED MISSILES.
FLIGHT-TEST STANDARD ANTIRADIATION MISSILE, AIR TO SURFACE.
LAUNCH AEROBEE 150 170 AND 350 SOUNDING ROCKETS FOR UPPER ATMOS STUDY.
CONDUCT NAVY AIR WEAPON BOMB TESTS.
CONDUCT FEASIBILITY TEST FOR LOW ALTITUDE SUPERSONIC TARGET.

INSTALLATION NAVAL MEDICAL FIELD RESEARCH LABORATORY, CAMP LEJEUNE, N. C.

CAPT JESSE F ADAMS MC USN

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1970 (ACTUAL)	1971 (ACT + EST)
TOTAL RDT+E	0.755	1.021
TOTAL PROCUREMENT	0.000	0.000
TOTAL O+M	0.000	0.000
TOTAL OTHER	0.358	0.304
TOTAL ANNUAL LAB	1.113	1.325
TOTAL IN-HOUSE	1.113	1.325
TOTAL IN-HOUSE RDT+E	0.755	1.021
ANNUAL OPERATING COST	0.099	0.175

PERSONNEL DATA (END OF FY 1970)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PROF	NON-PROF
MILITARY	29	7	9	20
CIVILIAN	52	3	9	43
TOTAL	81	10	18	63

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
3	28.226	8.655	15.590	52.471	0.490	0.600

...MISSION
CONDUCT R AND D IN MED AND DENT AND ALLIED FIELDS WITH EMPHASIS ON FIELD AND AMPHIBIOUS MEDICINE.

...CURRENT IMPORTANT PROGRAMS
PREV OF HEMOLYSIS CAUSED BY CUSO4 TREAT OF PHOSPHORUS BURNS
PHYSIOLOGIC IMPAIRMENT DUE TO CB PROT CLOTHING IN AMPHIB LANDING
ETIOLOGY OF RESPIRATORY ILLNESS IN MIL PERS
EVALUATION OF FIELD WATER PURIFICATION SYSTEMS
ETIOLOGY OF INFECTIOUS MONONUCLEOSIS

...FUNCTIONS/EQUIPMENT/CAPABILITIES
CONDUCT RESEARCH IN PROBLEMS OF FIELD AND AMPHIBIOUS MEDICINE TEST MED EQUIP SUPPLIES CLOTHING AND EQUIP FOR MIL PERS USE.
APPLIED RESEARCH IN BACTERIOLOGY PHYSIOLOGY STRESS PHYSIOLOGY ENTOMOLOGY ENVIRON BIOLOGY VIROLOGY FIELD MEDICAL EQUIP BIOCHEM AND ANIMAL INVEST

PRESSURE 2-MAN ENVIRONMENTAL CHAMBER, CLIMATIC CHAMBER, MULTIPLEX PHYSIOLOGICAL DATA RECORDER ELECTRONIC PROGRAMMER FLUOROMETERS RESPIROMETER GAS PARTITIONER PYRHELIOGRAPH

INSTALLATION NAVAL AIR DEVELOPMENT CENTER, JOHNSVILLE, PA.

CAPT F W EWALD DR H KRUTTER, TECH DIR

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1970 (ACTUAL)	1971 (ACT + EST)
TOTAL RDT+E	68.150	63.202
TOTAL PROCUREMENT	8.770	6.900
TOTAL O+M	5.641	7.200
TOTAL OTHER	5.671	5.768
TOTAL ANNUAL LAB	88.232	82.868
TOTAL IN-HOUSE	56.205	60.647
TOTAL IN-HOUSE RDT+E	44.925	49.279
ANNUAL OPERATING COST	12.233	13.100

PERSONNEL DATA (END OF FY 1970)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PROF	NON-PROF
MILITARY	432	8	94	336
CIVILIAN	2251	24	989	1262
TOTAL	2681	32	1083	1598

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
750	910.000	97.848	298.743	1306.591	22.163	38.418

...MISSION
CONDUCT RESEARCH,DESIGN,DEV,TEST AND EVAL OF AERONAUTICAL SYSTEMS AND COMPONENTS PERFORM RESEARCH AND DEV IN AVIATION MEDICINE

...CURRENT IMPORTANT PROGRAMS
ADVANCED ACOUSTIC SEARCH SENSOR SYSTEMS.
AIRBORNE VLF COMMUNICATION SYSTEMS
ADVANCED AIRBORNE NAVIGATION SYSTEMS.
LIGHT AIRBORNE MULTIPURPOSE SYSTEM (LAMPS).
AIRCREW LIFE SUPPORT SYSTEMS, PROTECTIVE CLOTHING AND DEVICES.

...FUNCTIONS/EQUIPMENT/CAPABILITIES
RSH, DESIGN, DEVELOP, TEST, LAB AND FLIGHT EVAL, LONG-RANGE AIR WARFARE STUDIES, THEORETICAL ANAL, ENGIN ANAL AND REAS PROTOTYPE DEVELOP OF SYS IN ABN ASW, ATTACK CARRIER WARFARE AND OCEAN SURVEILLANCE ENGIN ANAL ON AERO SYSTEM COMP AND AREAS OF TECHNOLOGY IN ABN ASW SYSTEMS COMMUNICATIONS, NAVIG, DIGITAL COMPUTATION, COUNTERMEAS, AEW, FC, AEROSPACE MED, BIOPHYSICAL EFFECTS OF ACCELERATION, HUMAN FACTORS, AIRCREW PERSONAL AND SAFETY EQUIP SPEC A/C CONFIG CONTROL SYSTEM, ABN WEAPONS HAND EQUIP, ABN PHOTO EQUIP, MATERIALS AND PROCESSES USED IN A/C AIRFRAME STRUCTURES AND SUPPORT TO OTHER ACTIVITIES AS DIRECTED.

INSTALLATION NAVAL MEDICAL RESEARCH UNIT NO.4, GREAT LAKES, ILL.

CAPT R C PERKINPAUGH MC USN

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1970 (ACTUAL)	1971 (ACT + EST)
TOTAL RDT+E	0.643	0.675
TOTAL PROCUREMENT	0.000	0.000
TOTAL O+M	0.000	0.000
TOTAL OTHER	0.395	0.454
TOTAL ANNUAL LAB	1.038	1.129
TOTAL IN-HOUSE	1.038	1.129
TOTAL IN-HOUSE RDT+E	0.643	0.675
ANNUAL OPERATING COST	0.187	0.200

PERSONNEL DATA (END OF FY 1970)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PROF	NON-PROF
MILITARY	34	7	13	21
CIVILIAN	45	1	8	37
TOTAL	79	8	21	58

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
1	28.702	11.576	13.649	53.927	0.365	0.398

...MISSION
CONDUCT R AND D IN BIOMED SERVICES PROVIDE DATA ON DISEASE AND MED PROBLEMS OF MIL IMPORTANCE RECOMMEND CONTROL MEASURES FOR COMMUNICABLE DISEASE PROVIDE TRAINING IN RESEARCH TECHNIQUES

...CURRENT IMPORTANT PROGRAMS
MYCOPLASMAS ASSOCIATED WITH RESPIRATORY DISEASE AND BRONCHOPNEUMONIA
ETIOLOGIC AGENTS OF RESPIRATORY DISEASE IN RECRUITS
HOST STUDIES OF ILLNESS SUSCEPTIBILITY
EVAL ANTIBACTERIAL AGENTS TO ELIMINATE MENINGOCOCCI IN NASOPHARYNX
EVAL VARIOUS INFLUENZA VACCINE IN RECRUITS

...FUNCTIONS/EQUIPMENT/CAPABILITIES
RESEARCH IN ETIOLOGY TRANSMISSION CONTROL AND TREATMENT OF COMMUNICABLE RESPIRATORY DISEASE AID MED ACTIVITIES IDENTIFY EPIDEMIC RESPIRATORY DISEASES STUDY MED PROBLEMS OF RECRUIT TRAIN PERS IN R AND D TECHNIQUE EQUIP-INCUBATORS REFRIGERATION UNITS ULTRACENTRIFUGE LIQUID SCINTILLATION SYSTEM OSCILLATOR SPECTROPHOTOMETERS ELECTRON SCOPE RESEARCH IN ECOLOGY AND CONTROL OF COMMUNICABLE DISEASE MICROPLASMA BACTERIOLOGY BIOCHEM BIOMETRIC EPIDEMIOLOGY IMMUNOLOGY AND VIROLOGY.

INSTALLATION NAVY CLOTHING AND TEXTILE RESEARCH UNIT, NATICK, MASS.

COR J.L. PEER,SC,USN

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1970 (ACTUAL)	1971 (ACT + EST)
TOTAL RDT+E	0.595	0.613
TOTAL PROCUREMENT	0.000	0.000
TOTAL O+M	0.591	0.578
TOTAL OTHER	0.030	0.026
TOTAL ANNUAL LAB	1.216	1.217
TOTAL IN-HOUSE	1.216	1.217
TOTAL IN-HOUSE RDT+E	0.595	0.613
ANNUAL OPERATING COST	0.115	0.120

PERSONNEL DATA (END OF FY 1970)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PROF	NON-PROF
MILITARY	2	0	0	2
CIVILIAN	66	2	24	42
TOTAL	68	2	24	44

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
2	10.000	7.330	3.032	20.362	0.275	0.493

...MISSION
CONDUCT RESEARCH,DEVELOPMENT,TEST AND EVALUATION AND GIVE ENGINEERING SUPPORT IN CLOTHING,TEXTILES AND RELATED FIELDS ASSOCIATED WITH SERVICE CLOTHING AND ENVIRONMENTAL AND SPECIAL PROTECTIVE CLOTHING.

...CURRENT IMPORTANT PROGRAMS
DEEP SEA SWIMMER'S SUIT
DAMAGE CONTROL SUIT
HIGH ENERGY LIQUID MISSILE PROPELLANT PROTECTIVE CLOTHING
BUOYANT ANTI-FRAGMENT AND BULLETPROOF VEST
DECOMPRESSION CHAMBER CLOTHING AND TEXTILE ITEMS

...FUNCTIONS/EQUIPMENT/CAPABILITIES
MAJOR FUNCTIONS--
CONDUCT RDT+E IN TEXTILE MATERIALS,LEATHER,PLASTICS,AND RUBBER.
DEVELOP NAVY CLOTHING,ACCESSORIES,AND RELATED ITEMS.
CONDUCT STUDIES IN ENVIRONMENTAL SCIENCES AND LIFE SUPPORT SYSTEMS.
PREPARE SPECIFICATIONS FOR CLOTHING,TEXTILES,FOOTWARE AND RELATED ITEMS.
COORDINATE STANDARDIZATION IN CLOTHING AREAS.
PROVIDE TECHNICAL SUPPORT TO ALL DOD AGENCIES IN NAVY CLOTHING AREAS.
MAJOR EQUIPMENT AND FACILITIES--
TEXTILE LABORATORIES
COLD TEST CHAMBERS
HYDRO-ENVIRONMENT SIMULATOR
HIGH INTENSITY THERMAL TEST UNIT

INSTALLATION NAVAL AIR PROPULSION TEST CENTER, TRENTON, N. J.

CAPTAIN R. V. HAYES-USN

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1970 (ACTUAL)	1971 (ACT + EST)
TOTAL RDT+E	6.572	10.350
TOTAL PROCUREMENT	4.960	4.400
TOTAL O+M	0.075	0.031
TOTAL OTHER	0.959	0.776
TOTAL ANNUAL LAB	12.566	15.637
TOTAL IN-HOUSE	11.020	11.950
TOTAL IN-HOUSE RDT+E	5.757	7.900
ANNUAL OPERATING COST	7.048	7.652

PERSONNEL DATA (END OF FY 1970)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PROF	NON-PROF
MILITARY	10	0	6	4
CIVILIAN	710	0	155	555
TOTAL	720	0	161	559

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
66	410.097	51.520	135.954	598.371	44.154	12.990

...MISSION
TO TEST AND EVALUATE AIRCRAFT PROPULSTION SYSTEMS-THEIR COMPONENTS AND ACCESSORIES AND FUELS AND LUBRICANTS;AND TO PERFORM APPLIED RESEARCH AND DEVELOPMENT LEADING TO CORRECTION OF DESIGN DEFICIENCIES AND SERVICE PROBLEMS.

...CURRENT IMPORTANT PROGRAMS
XF401-PW-400 PERFORM ALT + ENVIRONMENTAL DEVELOPMENT TEST + EVALUATION.
TF34-GE-2 EXPLOR-QUAL TESTS FOR PERFORMANCE ALT-ENVIRONMENTAL CONDITIONS.
TF30-P-412 PERFORM QUAL TESTS IAW MIL-E-5007C SPEC.
AVN FUELS AND LUBES MIL-L-23699 CHARACTERISTICS-SPEC TESTS AND QUALS.
YT400-CP-400 ENVIRONMENTAL QUAL TESTS.

...FUNCTIONS/EQUIPMENT/CAPABILITIES
PROVIDE A TEST AND EVALUATION CENTER FOR AIRCRAFT PROPULSION SYSTEMS AND PROPULSTION RELATED COMPONENTS.ENVIRONMENTAL CONDTIONS OF FLIGHT AND SERVICE ARE SIMULATED IN TEST CELLS-ON TEST BENCHES-OR IN THE LABORATORY. THE TURBOJET-FAN-LARGE CELLS-CAN SIMULATE ALTITUDES FROM SEA LEVEL TO 80000 FT-WITH TEMPERATURES FROM MINUS 65 DEG TO PLUS 320 DEG F THRUST. STANDS INSTALLED ARE CAPABLE OF MEASURING THRUST TO 50000 LBS. THESE CELLS ARE CAPABLE OF FULLY TESTING THE LARGER JET ENGINES NOW IN NAVY SERVICE. THE TURBOSHAFT CELLS ARE CAPABLE OF SIMULATING ALTITUDES FROM SL TO OVER 40000 FT WITH SPECIFICATION RANGE OF TEMPERATURES. TEST CELL FACILITIES EXIST FOR THE COMPLETE RANGE OF SHSFT POWER ENGINES WITH SUB FACILITIES FOR TEST AND EVALUATION OF ENGINE COMPONENTS-FUELS-LUBRICANTS -AUX POWER SYSTEMS AND ACCESSORIES.

INSTALLATION NAVAL CIVIL ENGINEERING LABORATORY, PORT HUENEME, CAL.

C.O. NORTHEN A WALLS CAPT CEC USN TECH DIR WILLIAM F BURKART

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1970 (ACTUAL)	1971 (ACT + EST)
TOTAL RDT+E	5.684	4.743
TOTAL PROCUREMENT	2.116	2.510
TOTAL O+M	2.765	2.896
TOTAL OTHER	0.973	1.830
TOTAL ANNUAL LAB	11.538	11.979
TOTAL IN-HOUSE	7.972	8.187
TOTAL IN-HOUSE RDT+E	4.092	3.381
ANNUAL OPERATING COST	2.752	2.888

PERSONNEL DATA (END OF FY 1970)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PROF	NON-PROF
MILITARY	16	2	8	8
CIVILIAN	365	32	177	188
TOTAL	381	34	185	196

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
22	120.352	21.977	31.548	173.877	4.956	4.902

...MISSION
TO CONDUCT RESEARCH AND TO DEVELOP TEST + EVALUATE TECHNIQUES,EQUIPMENT MATERIAL + STRUCTURES BEST SUITED FOR THE CONSTRUCTION, MAINTENANCE AND OPERATION OF FACILITIES FOR ADVANCED BASES, AMPHIBIOUS FORCES, SEAFLOOR OPERATIONS AND THE NAVY SHORE ESTABLISHMENT.

...CURRENT IMPORTANT PROGRAMS
NAVY SHORE FACILITIES SUPPORT. NAVY SEAFLOOR INSTALLATIONS AMPHIBIOUS + ADVANCED BASE TECHNOLOGIES. NAVY SHORE ESTABLISHMENT DETERIORATION PROBLEMS. DEVELOPMENTS ASSIGNED BY SUPT OF SALVAGE VIETNAM LABORATORY ASSIST PROGRM.CONSULTATION + TECH ASST TO FIELD ACTIVITIES DEEP OCEAN TECHNOLOGY.RDT+E FOR PROJECT SANGUINE FACILITIES. NUCLEAR PROTECTION TECHNOLOGY.

...FUNCTIONS/EQUIPMENT/CAPABILITIES
MAJOR FUNCTIONS-CONDUCT RESEARCH,DEVELOPMENT,TEST +EVALUATION RELATED TO DESIGN CONSTRUCTION MAINTENANCE + OPERATION OF FIXED STRUCTURES AND EQUIP ON THE SEAFLOOR. CONDUCT RDT+E ON FACILIT SYS + MECHANICAL + ELECTRICAL SYS RELATED TO DESIGN,CONSTRUCTION + MAINTENANCE OF SHORE ESTABLISHMENTS IN ACCORDANCE WITH LAB MISSION.MAJOR FACILITIES-DEEP OCEAN SIMULATION FACILITY WITH 72-INCH INSIDE DIAMETER 10-FT DEEP PRESSURE VESSEL SUSTAINING PRESSURES UP TO 5500 PST DIVING LOCKER + EQUIP FOR TEN DIVERS SHALLOW WATER TEST RANGE MATERIAL SCIENCE SOLID STATE,METELLURGICAL,PHOTOELASTIC SNOW + ICE LABS SIMULATED BLAST FACILITY PHOTOGRAPHIC FACILITY,LORAC B POSITIONING SYS CDC-8090 COMPUTER/TERMINAL WITH A HIGH SPEED CARD READER + LINE PRINTER DIGITAL MAG TAPE + PAPER TAPE T/O,ANALOG TAPE,ADC + DAC CONVERSION + A PEN PLOTTER + TIE WITH CDC-6600/-6400.

INSTALLATION NAVAL WEAPONS EVALUATION FACILITY, ALBUQUERQUE, N.MEX.

W W STRONG,CAPT USN C O F.X.BUSHNER,TECHNICAL DIRECTOR OF PROJECTS.

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1970 (ACTUAL)	1971 (ACT + EST)
TOTAL RDT+E	1.432	1.063
TOTAL PROCUREMENT	0.240	0.286
TOTAL O+M	0.565	0.782
TOTAL OTHER	1.044	2.028
TOTAL ANNUAL LAB	4.081	4.159
TOTAL IN-HOUSE	4.053	4.129
TOTAL IN-HOUSE RDT+E	1.404	1.033
ANNUAL OPERATING COST	0.366	0.350

PERSONNEL DATA (END OF FY 1970)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PROF	NON-PROF
MILITARY	236	0	64	172
CIVILIAN	92	1	36	56
TOTAL	328	1	100	228

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
4	17.942	17.942	91.118	127.002	1.700	0.374

...MISSION
PLAN-COORD NAVY NUCLEAR SAFETY PROGM.CONDUCT NUCLEAR SYST SAFETY STUDIES.REVIEWS ON US.+ FORGN SYSTEMS.PUBLISH NEW-REVISED NUCLR + NON-NUCLR CK LISTS.VERIFY ASSOC LOADING MAN.DETERMINE MLTY CHAR + STOCKPILE ENVIR FOR NEW WPNS.SUPP BD INSP + SURV NUCLEAR WPN TRIALS + SHIP ACCEPT.

...CURRENT IMPORTANT PROGRAMS
COORDINATED NAVY NUCLEAR SAFETY PROGRAM AND DISSEMINATED SAFETY INFO. COMPLETED VARIOUS SHIP AMPH SUB AIRCRAFT NUCLEAR SYSTEMS SAFETY STUDIES. PROVIDED NUCLEAR WEAPONS ACCEPTANCE VULNERABLIITY EMERG DESTRUCT DATA. PUBLISHED NUC NONNUC WEAPONS-AC CHECKLISTS VERIFIED LOADING MANUALS. COMPLETED A7E NUCLEAR WEAPONS TRIALS FOR BOARD OF INSPECTION AND SURVEY.

...FUNCTIONS/EQUIPMENT/CAPABILITIES
PROVIDE DESIGN CRITERIA MILITARY CHARACTERISTICS STOCKPILE-TO-TARGET DATA FOR CNO SPECIFIC OPERATIONAL REQUIREMENTS ON NEW NUC SYSTEMS.PLAN IMPROVED METHODS ASSURING EFFECTIVE NAVY NUCLEAR SAFETY PROGRAM.PLAN CONDUCT SAFETY STUDIES-REVIEWS ON NAVY SYSTEMS.SUPPORT BOARD OF INSPECTION AND SURVEY.CONDUCT VULNERABLIITY ANALYSIS OF NAVY A/C TO NUC EFFECTS AND DEVELOP NEW METHODS FOR EMERG DEST OF WPNS.ADVANCE STATE-OF-ART IN NUC NONNUC CHECKLISTS DEVELOPMENT MANUAL VERIFICATION RELIABILITY CARDS. PERFORM TESTS EVALUATIONS AND PROVIDE TECH SUPP FOR NUC-NONNUC WPN SYST. CONDUCT NUC SYSTEMS SAFETY STUDIES-REVIEWS.PLAN-COORDINATE NAVY NUC SAFETY PROGRAM.CONDUCT NUC SYSTEMS TRIALS FOR BOARD INSPECTION AND SURVEY.

INSTALLATION NAVAL MEDICAL RESEARCH UNIT NO.2, TAIPEI, TAIWAN

CAPT R H WATTEN MC USN CH SCIENTIST R Q BLACKWELL

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1970 (ACTUAL)	1971 (ACT + EST)
TOTAL RDT+E	1.325	1.168
TOTAL PROCUREMENT	0.000	2.000
TOTAL O+M	0.000	0.000
TOTAL OTHER	0.580	2.600
TOTAL ANNUAL LAB	1.905	1.768
TOTAL IN-HOUSE	1.905	1.768
TOTAL IN-HOUSE RDT+E	1.325	1.168
ANNUAL OPERATING COST	0.350	0.315

PERSONNEL DATA (END OF FY 1970)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PROF	NON-PROF
MILITARY	36	11	16	20
CIVILIAN	10	2	3	7
TOTAL	46	13	19	27

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
2	32.700	38.674	17.826	89.200	0.000	0.730

...MISSION
CONDUCT BASIC RESEARCH IN BIOMED SCIENCE PROVIDE DATA ON DISEASES AND MED PROBLEMS OF MIL SIGNIFICANCE RECOMMEND CONTROL MEASURES AND PROVIDE TRAINING IN R&D TECHNIQUE.

...CURRENT IMPORTANT PROGRAMS
SURVEILLANCE OF INFUENZA IN FAR EAST
STUDIES OF FEVERS OF UNKNOWN ORIGIN.
EPIDEMIOLOGY PATH AND TREATMENT OF PHILIPPINE CAPILLARIASIS
STUDY OF DISEASE OF MIL IMPORTANCE IN INDONESIA
NUTRITION METABOLIC AND BIOCHEM STUDIES OF FAR EAST ETHNIC

...FUNCTIONS/EQUIPMENT/CAPABILITIES
CLINICAL STUDY OF DIAG AND TREATMENT OF TROPICAL DISEASE AND EPIDEMIOLOGICAL STUDY OF INFECTIOUS DISEASE. COMPLETE RADIOISOTOPE EQUIP COMPUTER CAPABILITY IN CLINICAL INVESTIGATION MICROBIOLOGY MED PHYSICS MED ECOLOGY BIOCHEM PATH ANIMAL FACILITY.

INSTALLATION NAVAL AEROSPACE RECOVERY FACILITY, EL CENTRO, CALIF.

CO CAPT FRED P CLARK JR USN TECH DIRECTOR HOWARD C FISH

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1970 (ACTUAL)	1971 (ACT + EST)
TOTAL RDT+E	3.029	2.750
TOTAL PROCUREMENT	0.000	0.000
TOTAL O+M	0.000	0.000
TOTAL OTHER	1.655	1.600
TOTAL ANNUAL LAB	4.684	4.350
TOTAL IN-HOUSE	4.659	4.325
TOTAL IN-HOUSE RDT+E	3.004	2.725
ANNUAL OPERATING COST	0.626	0.625

PERSONNEL DATA (END OF FY 1970)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PROF	NON-PROF
MILITARY	171	1	16	155
CIVILIAN	109	0	21	88
TOTAL	280	1	37	243

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
101290	33.000	10.000	263.000	306.000	8.598	2.494

...MISSION
DEVELOP TEST EVALUATE PARACHUTES AND RELATED SYSTEMS HUMAN ESCAPE METHODS AND SYSTEMS RETARDATION AND RECOVERY SYSTEMS RESCUE SURVIVAL AND PERSONAL SAFETY EQUIPMENT SYSTEMS FOR RETARDATION AND RECOVERY OF ORDNANCE, AIRCRAFT, MISSILES AND CAPSULE ASSEMBLIES AND LOGISTIC AERIAL DELIVERY.

...CURRENT IMPORTANT PROGRAMS
DECELERATION PARACHUTE FOR CLASSIFIED AERIAL ORDNANCE WEAPON
FLIGHT PERFORMANCE TEST F-14 AND S3A ROCKET EJECTION SEAT SYSTEMS
FLEET SUPPORT PARACHUTE MAINTENANCE PUBLICATIONS
SUPPORT MCDEC SPIE SYSTEM QUAL AID PROTOTYPE PRODUCTION.
CONDUCT EVAC AND TRAINING DEFINITION MARS IN FLIGHT DRONE RECOV SYSTEM.

...FUNCTIONS/EQUIPMENT/CAPABILITIES
LEAD LAB RDTE PERSONNEL RECOVERY AND RETARDATION SYSTEMS.
DIRECT FLEET SUPPORT INCL IN-SERVICE ENGRG RE UR S ON ASSIGNED EQUIPMTS.
PROVIDE TECH ASST AND LAND AND WATER TEST RANGE SUPPORT NOL WHITE OAK.
PROVIDE INSTRUMENTED RANGES AND FLIGHT TEST SUPPORT NAVAIR CONTRACTORS.
PROVIDE PHOTO INDUST SHOPS MAT LAB.SUPPORT 6511TH PER DODJPTF DIRECTIVE.
ON-SITE QUAL ASSURANCE SUPPORT NASA PARAWING PROJECTS.
PROVIDE TECH ASST NMC RE DEV + QUAL BIOMED PHYSIOLOGICAL INSTRUMENTATION.
SUPPORT NAVAIRDEVCEN RE ESCAPE SYSTEMS AND SEARCH RESCUE AND SURVIVAL EQUIPMENT DEV SYSTEM INTEGRATION AND FLIGHT TEST.
DTE RELATED PARACHUTE GROUND SUPPORT EQUIP AND INSTALLATIONS.
EFFECT PARACHUTE/COMPONENTS STANDARDIZATION OF SPECS DRAWINGS AND PUBS AS CFA DIRECT AND FUND RELATED PFA EFFORTS AS REQUIRED.

INSTALLATION NAVY WEATHER RESEARCH FACILITY, NORFOLK, V .

CAPT W.L.SUMERVELL,JR,USN,CO MR.H.WOBUS,TECH ASST DR.F.KINDLE,RSCH DIR

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1970 (ACTUAL)	1971 (ACT + EST)
TOTAL RDT+E	1.308	1.146
TOTAL PROCUREMENT	0.058	0.030
TOTAL O+M	0.324	0.236
TOTAL OTHER	0.195	0.142
TOTAL ANNUAL LAB	1.885	1.552
TOTAL IN-HOUSE	1.063	1.237
TOTAL IN-HOUSE RDT+E	0.868	0.861
ANNUAL OPERATING COST	3.050	0.024

PERSONNEL DATA (END OF FY 1970)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PROF	NON-PROF
MILITARY	14	2	8	6
CIVILIAN	58	2	29	29
TOTAL	72	4	37	35

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
1	11.886	1.401	4.351	17.638	0.772	0.422

...MISSION
QUANTIFY WEATHER EFFECTS ON CARRIER,AIRSTRIKE,ASW,AAW,VERTREP + PHIB OPS
DESIGN FOG DISPERSAL OPS, + WARM-CLOUD + ICE-PHASE SEEDING EXPERIMENTS.
FURTHER IMPROVEMENTS IN SEASIA WEATHER + TROPICAL CYCLONE FORECASTING.
IMPROVED SURFACE WIND FORECASTS FOR NUMERICAL OCEAN-WAVE PREDICTION.

...CURRENT IMPORTANT PROGRAMS
DETERMINED CRITICAL WEATHER CHARACTERISTICS OF CONTEMPORARY UNREP OPS.
COMPUTER SIMULATION OF FOG/CLOUD + PRECIP MICROPHYSICAL PROCESSES.
IMPROVED SEASIA WINTER WEATHER + TYPHOON MOVEMENT PREDICTION TECHNIQUES.
TROPICAL DYNAMIC WAVE MODEL + COMPUTER PLOTTING OF ATMOS CROSS SECTIONS.
IMPROVED WEATHER SATELLITE PHOTO-INTERPRETATION + PRESENTATION METHODS.

...FUNCTIONS/EQUIPMENT/CAPABILITIES
EXPLOIT VIDEODISC SYSTEM TO IMPROVE WEATHER-DATA DISPLAY + PRESENTATION.
QUANTIFY WEATHER EFFECTS ON ALL USN OPS, CONSULT ON NEW WEAPONS SYSTEMS.
DESIGN + PREPARE RELATED 10-YR USN ATMOS RSCH PLAN. EXTEND WARM-CLOUD/ICE
PHASE PRECIP MODELS/EXPERIMENTS TO MESOSCALE + OPTIMIZE FOR DISPERSAL.
DEVELOP MODELS/TECHNIQUES TO APPLY DYNAMIC PREDICTION ONLY FOR MARITIME
TROPICAL WEATHER FORECASTS.DEVELOP PROTOTYPE DATA DISPLAY/RETRIEVAL
/COMPUTER SYSTEM TO INTERFACE IN OPNL ENVIRONMENT WITH 1971 SATELLITE +
NUMERICAL PREDICTION PRODUCTS.WEATHER RSCH ALL STRATEGIC TROPICAL AREAS.
TRANSLATE NEW DEVELOPMENTS IN METRO-OCEANO ANALYSIS + FORECASTING INTO
SIMPLIFIED TECHNIQUES FOR USE BY FLEET METEOROLOGISTS DEVISE TECHNIQUES
TO SOLVE ANALYSIS/FORECASTING PROBLEMS ARISING FROM NEW OPNL WEAPONS.
EVALUATE ANALYSIS/FORECASTING METHODS DERIVED BY LOCAL NAVWEASERV UNITS

INSTALLATION NAVAL AIR TEST FACILITY, LAKEHURST, N. J.

CAPT CHARLES L AXELL / NICHOLAS IVANOVIC

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1970 (ACTUAL)	1971 (ACT + EST)
TOTAL RDT+E	2.236	0.723
TOTAL PROCUREMENT	1.309	2.463
TOTAL O+M	3.945	3.636
TOTAL OTHER	3.676	3.125
TOTAL ANNUAL LAB	11.166	7.947
TOTAL IN-HOUSE	11.166	7.947
TOTAL IN-HOUSE RDT+E	2.236	0.723
ANNUAL OPERATING COST	0.530	0.550

PERSONNEL DATA (END OF FY 1970)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PROF	NON-PROF
MILITARY	155	0	9	146
CIVILIAN	429	0	75	354
TOTAL	584	0	84	500

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
2500	59.895	30.498	0.000	90.393	40.181	6.912

...MISSION
TO CONDUCT TESTS AND EVAL OF LAUNCHING RECOVERY AND VISUAL LANDING AIDS SYSTEMS AND RELATED EQUIPMENT. PROVIDE TEST SITES FACILITIES FOR DEV TEST OF SI EQUIPMENT. CONDUCT R AND D OF EQUIP AND INSTR USED IN TEST AND EVALUATION OF SI EQUIPMENT.

...CURRENT IMPORTANT PROGRAMS
EVAL OF INTEGRATED CATAPULT CONTROL STATION
CVAN-68 DEV AND EVAL PROGRAM
CVAN-68 JET BLAST DEFLECTOR DEV AND EVAL PROGRAM
CVAN-68 FLUSH DECK NOSE GEAR LAUNCH DEV AND EVAL PROGRAM
MK 7-1 ARRESTING GEAR DECK-SHEAVE COVER INSERT EVAL PROGRAM

...FUNCTIONS/EQUIPMENT/CAPABILITIES
CARRIER CONFIGS DUPLICATED AND SERV OPS SIMULATED WITH NAVAL ACFT.
CAT DEV FAC SHIPBOARD USED TO DEV EVAL NEW ACFT-CARRIER LAUNCH SYSTEMS.
CAT DEV FAC SHOREBASED EXPEDITIONARY CAT FOR DEV MARINE CORPS.
SATS CONCEPT AND REQUIRED ACFT LAUNCHING ACCESSORIES.
ARRESTING GEAR DEV FAC SHIPBOARD CONFIGURED TO SIMULATE STANDARD SHIPBOARD ARRESTING GEAR INSTAL MK5 MOD 3 AND MK7 MOD 1 2 AND 3.
TEST TRACK FAC 5 TO DEV AND/OR EVAL SHOREBASED AND SHIPBRD ARRS SYS.
STEAM PLANT FAC SUPPLIES HIGH-PRESSURE STEAM TO SHIPBOARD CAT SITES.
HYDRAULIC TEST FAC CONSISTS OF TWO HYDRAULIC TEST BENCHES.
DIGITAL AND ANALOG COMPUTATIONAL FAC PROVIDES FOR SCIENTIFIC PROBLEM SOLUTION, MIS AND SCIENTIFIC DATA REDUCTION OF ACQUIRED DATA.
INSTR MAINT/CALIB FAC MOTION/STILL PHOTO CAP AND FILM DEV LAB.

INSTALLATION NAVY MEDICAL NEUROPSYCHIATRIC RESEARCH UNIT, SAN DIEGO, CALIF.

CAPT R J ARTHUR MC USN SCIEN DIR DR W WILKINS

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1970 (ACTUAL)	1971 (ACT + EST)
TOTAL RDT+E	0.836	0.904
TOTAL PROCUREMENT	0.000	0.000
TOTAL O+M	0.000	0.000
TOTAL OTHER	0.130	0.160
TOTAL ANNUAL LAB	0.966	1.064
TOTAL IN-HOUSE	0.966	1.064
TOTAL IN-HOUSE RDT+E	0.836	0.904
ANNUAL OPERATING COST	0.143	0.150

PERSONNEL DATA (END OF FY 1970)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PROF	NON-PROF
MILITARY	9	8	8	1
CIVILIAN	52	7	18	34
TOTAL	61	15	26	35

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
0	11.177	4.500	0.000	15.677	0.602	0.218

...MISSION
CONDUCT RESEARCH IN THE AREA OF NEUROPSYCHIATRY AS IT APPLIES TO THE NAVAL SERVICE.

...CURRENT IMPORTANT PROGRAMS
PSYCHO-PHYSIO EFFECTS OF FATIGUE SLEEP LOSS AND ABNORMAL WORK SITUATIONS.
PREDICT EFFECTIVENESS OF NAV AND MARCOR ENLISTED.
ASSESS AND MANAGE INEFFECTIVENESS RELATED TO PSYCH DIFFICULTIES.
LEVELS OF VIGILANCE AND STATES OF CONSCIOUSNESS.
PREDICT AND MONITOR PERFORMANCE WITH BIOCHEM MEASURES.

...FUNCTIONS/EQUIPMENT/CAPABILITIES
ANALYSIS OF UNDERWATER PSYCHOPHYSIO PROGRAMS AND TASKS.
COMPLETE EEG COMBINED USE FOR SINGLE SEIZURE STUDY AND SLEEP DEPRIVATION.
ON-LINE EEG RECORDING CAPABILITIES.

INSTALLATION NAVAL MISSILE CENTER, POINT MUGU, CALIF.

CAPT. LEWIS A HOPKINS CO- DONALD F SULLIVAN TECH DIR

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1970 (ACTUAL)	1971 (ACT + EST)
TOTAL RDT+E	25.614	29.297
TOTAL PROCUREMENT	11.972	9.526
TOTAL O+M	10.271	7.915
TOTAL OTHER	5.397	5.787
TOTAL ANNUAL LAB	53.254	52.525
TOTAL IN-HOUSE	41.296	41.424
TOTAL IN-HOUSE RDT+E	19.306	21.987
ANNUAL OPERATING COST	0.952	1.005

PERSONNEL DATA (END OF FY 1970)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PROF	NON-PROF
MILITARY	727	3	52	675
CIVILIAN	1580	7	472	1108
TOTAL	2307	10	524	1783

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
3	101.925	150.569	633.941	886.435	16.412	38.240

...MISSION
TO PERFORM TEST, EVALUATION, DEVELOPMENT SUPPORT AND EXERCISE ENGINEERING COGNIZANCE AS ASSIGNED OF NAVAL WEAPONS, WEAPON SYSTEMS AND RELATED DEVICES.

...CURRENT IMPORTANT PROGRAMS
F-14A/PHOENIX DEVELOPMENT TESTING
AIRBORNE ELECTRONIC COUNTERMEASURES R + D
ENGINEERING COGNIZANCE OF AIR-LAUNCHED WEAPONS
T AND E OF AERIAL AND SURFACE TARGETS
AIR-TO-AIR, AIR-TO-SURFACE MISSILE PRODUCTION TESTING

...FUNCTIONS/EQUIPMENT/CAPABILITIES
PERFORM TESTS AND CONDUCT TECH EVALUATIONS OF NAVAL AIRBORNE WEAPON SYS, GUIDED MISSILE SUBSYSTEMS AND RELATED SUPPORT EQUIP. PERFORM BIS TRIALS FOR INTEGRATED AIRBORNE WEAPON SYS. PERFORM PROD MONITORING TESTS OF NEW GUIDED MISSILE LOTS. PROVIDE ENG COGNIZANCE AND FIELD ENG SERVICES ON ASSIGNED OPERATIONAL AIRBORNE WEAPONS AND TARGETS SYSTEMS. PROVIDE ENGINEERING MANAGEMENT AND SUPPORT FOR EW EQUIP DURING DEV AND DEPLOYMENT. PERFORM DEV,T + E OF AIRBORNE AND SURFACE TARGET SYSTEMS. MAJOR FAC-- TEST OPERATIONS FAC LABORATORY FAC INCL ENVIRONMENTAL FAC RADAR REFLECTIVITY FAC ROCKET ENGINE TEST FAC INTEGRATED SYSTEMS SIMULATION FAC TARGET FAC PHOTOGRAPHICS FAC INFRARED LASER AND OPTICS LABS.

INSTALLATION NAVAL PERSONNEL RESEARCH ACTIVITY, SAN DIEGO, CALIF.

CDR KARL EL KUEHNER USN CO / DR EDMUND E DUDEK TECHNICAL DIRECTOR

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1970 (ACTUAL)	1971 (ACT + EST)
TOTAL RDT+E	2.862	3.459
TOTAL PROCUREMENT	0.000	0.000
TOTAL O+M	0.047	0.052
TOTAL OTHER	0.227	0.272
TOTAL ANNUAL LAB	3.136	3.783
TOTAL IN-HOUSE	3.136	3.783
TOTAL IN-HOUSE RDT+E	2.862	3.459
ANNUAL OPERATING COST	0.650	0.742

PERSONNEL DATA (END OF FY 1970)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PROF	NON-PROF
MILITARY	35	0	35	0
CIVILIAN	195	30	102	93
TOTAL	230	30	137	93

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
1	47.300	4.900	0.000	52.200	0.218	0.254

...MISSION
PLANS AND CONDUCTS RESEARCH AND DEVLOPMENT IN PERSONNEL OPERATIONS AND BEHAVIORAL SCIENCES TO DEVELOP NEW CONCEPTS AND IMPROVED METHODS FOR ACQUIRING,CLASSIFYING,TRAINING,DISTRIBUTING,AND RETAINING PERSONNEL AND FOR MAXIMIZING THE UTILIZATION OF NAVY MANPOWER RESOURCES.

...CURRENT IMPORTANT PROGRAMS
1/TRAINING MARGINAL MEN/2/LOFAR ANALYSIS/3/AUTOMATED ENLISTED PERFORMANCE EVALUATION/4/TACTICAL DATA SYSTEMS DISPLAYS/5/ENLISTED CHANGE DATA BANK/6/BUDGET COST MANAGEMENT PROGRAM.

...FUNCTIONS/EQUIPMENT/CAPABILITIES
CONDUCTING RESEARCH AND DEVELOPMENT-1/DESIGN OF TRAINING/2/FEED BACK IN ELECTRONICS TRAINING/3/COMPUTER ASSISTED INSTRUCTION/4/WELDER TRAINING 5/IMPROVE ENLISTED CLASSIFICATION/6/TESTS FOR ON-JOB TRAINING POTENTIAL 7/OCCUPATION INFORMATION FOR RECRUIT TRAINING/8/VALIDATE TACTICAL DATA SYSTEM DISPLAY TECHNIQUES/9/FAULT ISOLATION TECHNIQUES/10/FLEET IMPACT OF AUTOMATED COMMUNICATIONS/11/PROTOTYPE ADVANCEMENT STRENGTH AND TRAINING PLANS SYSTEM/12/ROTATION FLOW MODEL/13/WORK REQUIREMENTS FOR AIRMEN/14/AVIATION OCCUPATIONAL DATA BANK.

INSTALLATION NAVAL MEDICAL RESEARCH INSTITUTE, NATIONAL NAVAL MEDICAL CENTER, BETHESDA, MD.

CAPT T RICHTER MC USN

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1970 (ACTUAL)	1971 (ACT + EST)
TOTAL RDT+E	4.555	4.767
TOTAL PROCUREMENT	0.000	0.000
TOTAL O+M	0.000	0.000
TOTAL OTHER	1.953	1.981
TOTAL ANNUAL LAB	6.508	6.748
TOTAL IN-HOUSE	6.508	6.748
TOTAL IN-HOUSE RDT+E	4.555	4.767
ANNUAL OPERATING COST	0.876	0.810

PERSONNEL DATA (END OF FY 1970)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PROF	NON-PROF
MILITARY	172	36	81	91
CIVILIAN	245	43	119	126
TOTAL	417	79	200	217

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
4	166.264	12.945	18.828	198.037	3.775	3.235

...MISSION

TO CONDUCT BASIC AND APPLIED RESEARCH AND DEVELOPMENT CONCERNED WITH HEALTH, SAFETY AND EFFICIENCY OF NAVAL PERSONNEL.

...CURRENT IMPORTANT PROGRAMS

STUDY TISSUE FUNCT INFECT CHEMOTHERAPY BEHAVIORAL DECREMENT IN HYPERBAR. STUDY DECOMPRESSION SICKNESS AND GAS BUBBLE FORMATION IN TISSUES. TISSUE TYPING AND TRANSPLANTATION IN RESTORATIVE SURGERY. STUDY HEAT AND COLD STRESSES IN HYPERBARIC AND HIGH-HUMIDITY ENVIRONMENT. PHYSIOLOGICAL EFFECTS OF MICROWAVE RADIATION.

...FUNCTIONS/EQUIPMENT/CAPABILITIES

HYPERBARIC MICROBIOLOGY PHYSIOLOGY PSYCHOLOGY AND PHARMACOLOGY STRESS PHYSIOLOGY. SELECT AND EVALUATE MED PERS TRNG PROGRAMS. TISSUE BANK AND ORGAN TRANSPLANT. SHOCK AND RESUSCITATION STUDIES. MICROBIOL IN INFECTIOUS STATES. ORAL SURG AND PATH HUMAN TREADMILL. LIQUID NITROGEN GENERATOR. ELECTRON MICROSCOPE. HYPERBARIC CHAMBER COMPLEX. TISSUE FREEZE DRYING AND STORAGE FACILITY. VIVARIUM.

INSTALLATION NAVAL BLOOD RESEARCH LABORATORY, NAVAL HOSPITAL, CHELSEA, MASS.

CDR C R VALERT MC USNR

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1970 (ACTUAL)	1971 (ACT + EST)
TOTAL RDT+E	0.272	0.262
TOTAL PROCUREMENT	0.000	0.000
TOTAL O+M	0.000	0.000
TOTAL OTHER	0.135	0.164
TOTAL ANNUAL LAB	0.407	0.426
TOTAL IN-HOUSE	0.407	0.426
TOTAL IN-HOUSE RDT+E	0.272	0.262
ANNUAL OPERATING COST	0.053	0.045

PERSONNEL DATA (END OF FY 1970)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PROF	NON-PROF
MILITARY	9	3	4	5
CIVILIAN	13	1	2	11
TOTAL	22	4	6	16

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
1	6.263	0.161	1.000	7.424	0.115	0.421

...MISSION
CONDUCT REARCH AND DEV METHODS FOR LONG-TERM PRESERVATION OF BLOOD AND BLOOD PRODUCTS AND EVAL OF USEFULNESS IN OPERATIONAL AREAS AND HOSPITALS.

...CURRENT IMPORTANT PROGRAMS
EVAL OF IMPROVED METHODS FOR PRESERVING RED CELLS.
EVAL OF IMPROVED METHODS FOR PRESERVING WHITE BLOOD CELLS.
EVAL OF IMPROVED METHODS FOR COMPONENT THERAPY.
EVAL OF METHODS FOR COLLECTION AND PRESERVATION OF PLATELETS.
DEV IMPROVED PROTOCOL FOR CLINICAL EVALUATION OF FROZEN BLOOD.

...FUNCTIONS/EQUIPMENT/CAPABILITIES
PERFORM RDT&E IN METHODS OF PRESERVING BLOOD AND BLOOD PRODUCTS.
LIQUID AND FREEZE PRESERVATION EQUIPENT FOR RED BLOOD CELLS PLATELETS WHITE BLOOD CELLS AND PLASMA FRACTIONS. EQUIPMENT TO EVAL VIABILITY AND FUNCTION OF BLOOD AND BLOOD PRODUCTS.

INSTALLATION NAVY SPACE SYSTEMS ACTIVITY, LOS ANGELES, CALIF.

CAPTAIN D G FAULKNER USN

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1970 (ACTUAL)	1971 (ACT + EST)
TOTAL RDT+E	7.591	6.805
TOTAL PROCUREMENT	0.000	0.000
TOTAL O+M	0.000	0.000
TOTAL OTHER	0.000	0.000
TOTAL ANNUAL LAB	7.591	6.805
TOTAL IN-HOUSE	0.549	0.646
TOTAL IN-HOUSE RDT+E	0.549	0.646
ANNUAL OPERATING COST	0.190	0.220

PERSONNEL DATA (END OF FY 1970)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PROF	NON-PROF
MILITARY	28	1	9	19
CIVILIAN	58	1	19	39
TOTAL	86	2	28	58

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
0	0.000	6.000	0.000	6.000	0.002	0.025

...MISSION
MANAGEMENT OF SYSTEMS DEVELOPMENT OF SATELLITES AND RELATED EQUIPMENT FOR SUPPORT OF THE NAVY.

...CURRENT IMPORTANT PROGRAMS
PROJECT 749
JOINT SERVICE SATELLITE SYSTEM
NAVIGATION SATELLITE INVESTIGATIONS
SATELLITE APPLICATION FOR SEARCH AND RESCUE
SPACE EXPERIMENTS SUPPORT PROGRAM

...FUNCTIONS/EQUIPMENT/CAPABILITIES
FIELD ACTIVITY OF NAVAL AIR SYSTEMS COMMAND
PROVIDE ENGINEERING COMPETENCE AND MANAGEMENT OF ASSIGNED SPACE SYSTEMS.
PROVIDE AN INTERFACE TO NAVAL ACTIVITIES RESPONSIBLE FOR TECHNICAL DEVELOPMENT INVOLVING SPACE SYSTEMS.

PROVIDE GUIDANCE TO NAVAIR ON SCOPE AND CONTENT OF ITS ADVANCED STUDY RESEARCH AND EXPLORATORY PROGRAMS AND FUTURE APPLICATIONS THEREOF.

INSTALLATION NAVAL DENTAL RESEARCH INSTITUTE, NAVAL TRAINING CENTER, GREAT LAKES, ILL.

CAPT KIRK C HUERMAN DC USN

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1970 (ACTUAL)	1971 (ACT + EST)
TOTAL RDT+E	0.313	0.366
TOTAL PROCUREMENT	0.000	0.000
TOTAL O+M	0.015	0.012
TOTAL OTHER	0.230	0.250
TOTAL ANNUAL LAB	0.558	0.628
TOTAL IN-HOUSE	0.558	0.628
TOTAL IN-HOUSE RDT+E	0.313	0.366
ANNUAL OPERATING COST	0.241	0.035

PERSONNEL DATA (END OF FY 1970)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PROF	NON-PROF
MILITARY	17	7	8	9
CIVILIAN	10	2	6	4
TOTAL	27	9	14	13

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
0	6.997	0.897	8.664	16.558	0.002	0.275

...MISSION
CONDUCT RESEARCH IN DENTAL PROBLEMS OF ORAL HEALTH IN NAVAL AND MARCORP PERSONNEL AND DELIVERY OF DENTAL CARE.

...CURRENT IMPORTANT PROGRAMS
ORAL HEALTH OF NAVAL PERSONNEL
CHEM AND ENZYMOLOGY OF CARIES IN CARIES-IMMUNE RECRUITS
BACTERIOLOGY OF SALIVA AND PLAQUE OF CARIES-IMMUNE RECRUITS.
SELF SUPPORTED MOBILE DENTAL VAN FOR FIELD AND GARRISON
BIOCHEM STUDIES OF ORAL FLUID

...FUNCTIONS/EQUIPMENT/CAPABILITIES
ASSESS DENTAL HEALTH STATUS OF RECRUITS. IMPROVE DISEASE PREVENTION AND CARE PROCEDURES. INCREASE QUALITY AND QUANTITY OF CARE IN COMBAT TROOPS INCLUDING FACIAL INJURIES. DEFINE ORAL DISEASE ETIOLOGY AND DEVELOPMENT OF SAFE THERAPEUTIC METHODS. COMPUTERIZE LOCAL DENTAL MANPOWER AND RESOURCES MANAGEMENT. EXPLORE USE OF RAPID DIAGNOSES FROM LUMINESCENCE OF BIOLOGICAL MATERIAL. AMINO ACID ANALYZER. SPECTROPHOTOFLUOROMETER. 4K MEMORY CORE COMPUTER. PROGRAMMED CLIMATE ROOM. MOBILE DENTAL TREATMENT UNIT. ELECTRON MICROSCOPY AND STEREOSCANNING BACTERIAL TAXONOMY SMALL MOLECULE CHARACTERIZATION. VACCINE PRODUCTION AND TESTING. PATIENT MOTIVATION BEHAVIOR. DENTAL EQUIP DESIGN AND FABRICATION.

INSTALLATION: ATLANTIC UNDERSEA TEST AND EVALUATION CENTER, WEST PALM BEACH, FLA.

CO CAPT W P ROTHAMEL USN TECHNICAL DIRECTOR MR D J OMEARA

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1970 (ACTUAL)	1971 (ACT + EST)
TOTAL RDT+E	12.005	12.885
TOTAL PROCUREMENT	0.778	2.588
TOTAL O+M	0.000	2.202
TOTAL OTHER	0.685	0.429
TOTAL ANNUAL LAB	13.468	13.902
TOTAL IN-HOUSE	3.013	2.629
TOTAL IN-HOUSE RDT+E	2.328	2.200
ANNUAL OPERATING COST	0.952	0.950

PERSONNEL DATA (END OF FY 1970)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PROF	NON-PROF
MILITARY	55	2	6	49
CIVILIAN	88	2	31	57
TOTAL	143	2	37	106

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
1154	73.580	6.536	206.117	286.233	21.045	76.738

...MISSION
PROVIDE A DEEP-WATER TEST AND EVALUATION FACILITY FOR MAKING UNDERWATER ACOUSTIC MEASUREMENTS, TESTING SONARS, AND PROVIDING ACCURATE UNDERWATER SURFACE AND AIR TRACKING DATA ON SHIPS AND WEAPONS IN SUPPORT OF THE U S NAVY'S ASW AND UNDERSEA RESEARCH AND DEVELOPMENT PROGRAMS.

...CURRENT IMPORTANT PROGRAMS
MK 48 MODS 1+2 TORPEDO TECH EVAL/OP EVAL TEST.
SURFACE SHIP WEAPONS SYSTEM ACCEPTANCE TRIALS (WSAT)
P3C-MOD 7 AIRCRAFT AVIONICS SYSTEM CALIBRATION TESTS
AN/BQS-13 SUBMARINE SONAR SYSTEM VALIDATION TESTS
AIRBORNE OPTICAL RANGING + DETECTION SYSTEM DEVELOPMENT TESTS

...FUNCTIONS/EQUIPMENT/CAPABILITIES
WEAPONS RANGE--SHIP, AIRCRAFT AND WEAPON TRACKING THREE DIMENSIONAL- IN-AIR + IN-WATER REAL TIME PLOTS + DISPLAYS AND POST-TEST PROCESSED DATA. THREE IN-WATER TRACKING ARRAYS, TWO TRACKING RADARS, FIVE THEODOLITES, A COMMAND DESTRUCT SYSTEM AND A TELELSEE SYSTEM LOCATED AT FIVE SITES ON ANDROS ISLAND, BAHAMAS, LINKED BY MICROWAVE TO COMPUTERS, DISPLAYS AND A COMMAND-CONTROL SYSTEM AT ANDROS MAIN BASE. SONAR RANGE INCREMENT ONE-SENSOR ACCURACY CHECK FORACS V RANGE IN TOTO INSTRUMENTED WITH ACTIVE AND PASSIVE TARGETS AND PRECISION TRACKING SYSTEM. COMPUTER AND COMMAND CONTROL SYSTEM AT ANDROS MAIN BASE PROVIDE DATA TO DETERMINE ERROR IN SURVEILLANCE, NAVIGATION, AND FIRE CONTROL SYSTEMS OF SURFACE SHIPS AND SUBMARINES. ACOUSTIC RANGE--RADIATED NOISE MEASUREMENT SHIPS/SUBMARINES. ACOUSTIC TRACKING + DATA ACQUISITION ARRAY IN TOTO. COMPUTERS MAIN BASE.

INSTALLATION NAVY ELECTRONIC SYSTEMS TEST AND EVALUATION FACILITY,
PATUXENT RIVER, MD.
COMMANDING OFFICER- CDR R. N. WINKEL, TECHNICAL DIRECTOR- R. E. WAXMAN

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1970 (ACTUAL)	1971 (ACT + EST)
TOTAL R+T+E	1.598	1.501
TOTAL PROCUREMENT	0.687	0.899
TOTAL O+M	2.189	2.295
TOTAL OTHER	0.204	0.303
TOTAL ANNUAL LAB	4.678	4.198
TOTAL IN-HOUSE	4.678	4.198
TOTAL IN-HOUSE RDT+E	1.598	1.501
ANNUAL OPERATING COST	3.451	3.502

PERSONNEL DATA (END OF FY 1973)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PROF	NON-PROF
MILITARY	35	2	6	29
CIVILIAN	134	2	51	43
TOTAL	169	2	57	112

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
852	22.944	2.502	14.295	39.741	3.127	3.296

...MISSION
MISSION--TO PROVIDE TECHNICAL + SUPPORT AND SERVICES ON ELECTRONIC SYS EQUIPMENTS AND PERFORM OTHER TASKS AS ASSIGNED BY THE CDR, NAVAL ELEC SYSTEMS COMMAND.

...CURRENT IMPORTANT PROGRAMS
IFF-AIMS TEST, EVALUATION,CERTIFICATION OF EQUIPMENTS/SYSTEMS.
ALOS TEST EVALUATION, CERTIFICATION OF SHIPS SYSTEMS
NAVIGATIONAL AIDS T+E OF SHIPBOARD, SHORE,SATELLITE COMMUNICATIONS
COMMUNICATIONS- T+E OF SHIPBOARD, SHORE SATELLITE COMMUNICATIONS
RADAR T+E OF SEARCH, PRECISION TACTICAL RADARS.

...FUNCTIONS/EQUIPMENT/CAPABILITIES
MAJOR FUNCTIONS-- T+E OF ELECTRONIC EQUIPMENTS/SYSTEMS,DEVELOP SPECS MONITOR PROCUREMENTS- SEL CONTRACT PROPOSALS,PROVIDE CONSULTATION ASSIST WHEN REQUESTED.
MAJOR EQUIP--IFF-AIMS,ACLS,TACAN,GCA,RADAR,HF COMMUNICATIONS,SATELLITE COMMUNICATIONS
FACILITY CAPABILITIES--COMPLETE LABORATORY OPERATIONAL,ENVIRONMENTAL TEST EVALUATION OF ASSIGNED EQUIPMENTS, SYSTEMS, COMPLETELY EQUIPPED WITH STA SPECIAL PURPOSE TEST EQUIPMENT.

INSTALLATION NAVAL UNDERSEA R+D CENTER, SAN DIEGO, CALIF.

COMMANDER - CAPT C. B. BISHOP USN TECHNICAL DIRECTOR - DR. WM J MCLEAN

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1970 (ACTUAL)	1971 (ACT + EST)
TOTAL RDT+E	34.116	36.902
TOTAL PROCUREMENT	14.380	14.600
TOTAL O+M	7.591	7.500
TOTAL OTHER	4.515	10.701
TOTAL ANNUAL LAB	60.602	69.703
TOTAL IN-HOUSE	39.247	48.118
TOTAL IN-HOUSE RDT+E	24.030	25.732
ANNUAL OPERATING COST	13.761	19.860

PERSONNEL DATA (END OF FY 1970)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PROF	NON-PROF
MILITARY	371	3	27	344
CIVILIAN	1462	65	615	847
TOTAL	1833	68	642	1191

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
37619	316.890	33.457	664.722	1035.069	36.703	42.274

...MISSION
TO CONDUCT A PROGRAM OF WARFARE ANALYSIS, RESEARCH, DEVELOPMENT, TEST, EVALUATION, SYSTEMS INTEGRATION, AND FLEET ENGINEERING SUPPORT IN UNDERSEA WARFARE AND TECHNOLOGY,

...CURRENT IMPORTANT PROGRAMS
ADVANCED SONAR TECHNIQUES DEVEL + FLEET SONAR SYSTEMS IMPROVEMENT
OCEAN SCIENCES, INCL MARINE BIOSCIENCES, WITH USW APPLICATION
TORPEDO DEVEL + IN-SERVICE SUPPORT + MODERNIZATION PROGRAM
DEEP SUBMERGENCE RECOVERY + WORK SYSTEMS DEVEL + TEST
FLEET SUPPORT INCL ASW ANALYSIS + EFFECTIVENESS EVAL

...FUNCTIONS/EQUIPMENT/CAPABILITIES
MAJOR FUNCTIONS, FACILITIES, CAPABILITIES--ORIGINATE + DEVELOP NEW CONCEPTS IN UNDERSEA WARFARE + OCEAN TECHNOLOGY. CONDUCT RESEARCH RELATED TO USW PROBLEMS PECULIAR TO PACIFIC AREAS. DEVELOP INTEGRATED USW SYSTEMS, DEEP OCEAN ENGR EQUIP + TECHNIQUES, + FACILITATE THEIR PRODUCTION + FLEET USE. ASSESS ASW FORCES, PROGRAMS, TACTICS. RDT+E LABS SDIEGO, PASADENA, HAWAII SEA TEST + ENGR RANGES SAN CLEMENTE ISLAND, MORRIS DAM, LBEACH ACOUSTIC PROPAGATION RANGE OFF CAL COAST MARINE BIOSCIENCE FAC, PT MUGU CALIBRATION STA, LAKE PEND OREILLE ARCTIC FIELD STA, ALASKA RESEARCH SHIPS + CRAFT INCL USNS S P LEE T-AGS-31 ARCTIC SUBMARINE LAB+ POLAR ICE SIMULATOR TRANSDUCER EVAL CENTER ANECHOIC AT ALL FREQUENCIES ASW COMPUTER SIMULATION CENTER VARIABLE ANGLE LAUNCHER, + OTHERS.

INSTALLATION: NAVAL PERSONNEL RESEARCH AND DEVELOPMENT LABORATORY, WASHINGTON, D. C.
COMMANDING OFFICER CDR R E MCCOY TECHNICAL DIRECTOR F M RAMSES

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1970 (ACTUAL)	1971 (ACT + EST)
TOTAL RDT+	3.156	3.122
TOTAL PROCUREMENT	0.000	0.000
TOTAL O+M	0.841	0.664
TOTAL OTHER	0.000	0.000
TOTAL ANNUAL LAB	3.997	3.766
TOTAL IN-HOUSE	3.997	3.766
TOTAL IN-HOUSE RDT+E	3.156	3.122
ANNUAL OPERATING COST	0.525	0.596

PERSONNEL DATA (END OF FY 1970)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PROF	NON-PROF
MILITARY	24	1	14	10
CIVILIAN	231	6	135	96
TOTAL	255	7	149	106

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
3	22.156	2.703	1.420	26.279	0.052	0.389

...MISSION
CONDUCT RESEARCH DEVELOPMENT TEST EVALUATION BEHAVIORAL AND SOCIAL SCIENCES AND RELATED FIELDS DIRECTED TOWARD NEW AND IMPROVED PERSONNEL AND MANPOWER SYSTEMS TECHNIQUES AND OPERATIONS.

...CURRENT IMPORTANT PROGRAMS
GUIDED MISSILE DESTROYER SIMULATION MODEL
SHORE MANPOWER ALLOCATION AND PRODUCTIVITY MODEL
OCCUPATIONAL DATA DEVELOPMENT
NAVY PREP SCHOOL SELECTION STRATEGY
PERSONNEL REACTIONS INCENTIVES NAVAL CONDITIONS EXPERIENCES

...FUNCTIONS/EQUIPMENT/CAPABILITIES
OCCUPATIONAL ANALYSIS PERSONNEL RECRUITMENT PROCUREMENT SIMULATION MODELING NAVY MANPOWER REQUIREMENTS WEAPONS SYSTEMS PERSONNEL TRAINING REQUIREMENTS CAREER STRUCTURES ATTITUDES MOTIVATION ORGANIZATIONAL EFFECTIVENESS MANPOWER PERSONNEL COST SYSTEMS RCA 301 COMPUTER IBM 1051 DATA LINK TERMINAL OPSCAN 100

INSTALLATION NAVAL AEROSPACE MEDICAL RESEARCH LABORATORY, PENSACOLA, FLA.

CAPT N W ALLEBACH MC USN TECH ADV DR A GRAYBIEL

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1970 (ACTUAL)	1971 (ACT + EST)
TOTAL RDT+E	3.192	2.698
TOTAL PROCUREMENT	0.000	0.000
TOTAL O+M	0.000	0.000
TOTAL OTHER	0.407	0.407
TOTAL ANNUAL LAB	3.599	3.105
TOTAL IN-HOUSE	3.599	3.105
TOTAL IN-HOUSE RDT+E	3.192	2.698
ANNUAL OPERATING COST	0.174	0.180

PERSONNEL DATA (END OF FY 1970)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PROF	NON-PROF
MILITARY	26	7	10	16
CIVILIAN	114	17	32	82
TOTAL	140	24	42	98

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
3	96.787	9.604	12.893	119.284	2.791	1.366

...MISSION

CONDUCT RESEARCH IN AVIATION AND SPACE MEDICINE, AVIATION PSYCHOLOGY AND PHYSIOLOGY. EVALUATE AEROMEDICAL EQUIPMENT. SUPPORT NAVAL AIR TRAINING IN SELECTION, INDOCTRINATION AND INSTRUCTION OF NONMEDICAL AVIATION PERSONNEL. PROVIDE CONSULTATION IN AVIATION MEDICAL MATTERS.

...CURRENT IMPORTANT PROGRAMS

PREVENTION OF DISORIENTATION AND VESTIBULAR DISTURBANCES IN FLIGHT.
AVIATION PERS PROCUREMENT AND SELECTION.
RESPONSE TO IMPACT ACCELERATION.
PHYSIO EFFECTS OF NONIONIZING RADIATION.
EVAL CARDIOVASCULAR DISEASE RISK.

...FUNCTIONS/EQUIPMENT/CAPABILITIES

FLIGHT PERS PHYSICAL FITNESS PSYCHOLOGICAL ATTITUDES AND TOLERANCE TO STRESS STUDIES OF FORCE ACOUSTIC ELECTROMAG RADIATION AND ATMOSPHERIC EVIRONS SLOW ROTATION ROOM HUMAN DISORIENT DEVICE, CORIOLIS ACCELER PLATFORM STILLE WERNER CHAIR SHIP MOTION SIMULATOR ELECTRON MICROSCOPE SUPER CONDUCTION MAGNET LAB EQUIPPED FOR HUMAN AND ANIMAL EXPERIMENTS, AIRCRAFT EQUIPPED FOR INFLIGHT EEG AND ECG ANIMAL HOUSING FACILITIES WITH OR UNIVAC 418.

INSTALLATION NAVAL SUBMARINE MEDICAL RESEARCH LABORATORY,
NEW LONDON, GROTON, CONN.

CDR J BLOOM MC USN SC DIR - DR C F GELL

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1970 (ACTUAL)	1971 (ACT + EST)
TOTAL RDT+E	1.226	1.181
TOTAL PROCUREMENT	0.000	0.222
TOTAL O+M	0.000	0.002
TOTAL OTHER	0.570	0.354
TOTAL ANNUAL LAB	1.796	1.535
TOTAL IN-HOUSE	1.796	1.535
TOTAL IN-HOUSE RDT+E	1.226	1.181
ANNUAL OPERATING COST	0.148	0.150

PERSONNEL DATA (END OF FY 1970)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PROF	NON-PROF
MILITARY	23	7	12	11
CIVILIAN	66	11	35	31
TOTAL	89	18	47	42

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
2	48.297	1.753	0.000	50.050	1.493	1.093

...MISSION
LONGITUDINAL HEALTH STUDY OF SUBMARINE AND DIVING PERS. ANTHROPOMETRIC EVAL OF SUBMARINE PERS FOR SAFETY EQUIP. RESEARCH PHYSIO EFFECTS OF INTERMIT EXPOSURE TO INCREASED CO2 AND O2.

...CURRENT IMPORTANT PROGRAMS
STUDY EFFECTS OF UNDERWATER ENVIRONMENT ON HEARING IN DIVERS.
STUDY EFFECTS OF MIXED GASES-HE AND O2-CN SPEECH IN DIVERS.
STUDY EPIDEMIOLOGIC RELATIONSHIP OF AEROSOLS IN SUBMARINES.
TEST SUBMARINE ESCAPE SUIT FOR ADAPTATION BY NAVY.
FIELD STUDIES OF UNDERWATER VISION AND COLOR VISION.

...FUNCTIONS/EQUIPMENT/CAPABILITIES
DEV SENSORY AIDS FOR UNDERWATER COMMUNICATIONS SELECTION AND RETENTION STUDY OF SUB AND DIVING PERS. DEV AND EVAL SUB AND DIVING SAFETY EQUIP. LONG-RANGE TOX STUDIES IN SUB ENVIRON. HUMAN FACTOR RELATION TO SUB WEAPON SYSTEM EFFECTIVENESS. HYPERBARIC CHAMBER AS CLINICAL TREATMENT DEV. STUDY IMPROVE SELECTION AND PERFORMANCE OF SUB PERS. EXCURSION DIVING FROM GAS-SATURATED STATE STUDY. EFFECT OF SUB SERV STRESS ON ORAL HEALTH.

INSTALLATION NAVY UNDERWATER SOUND LABORATORY, NEW LONDON, CONN.

COMMANDING OFFICER CAPT B D LIMA//TECHNICAL DIRECTOR MR H E NASH

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1970 (ACTUAL)	1971 (ACT + EST)
TOTAL RDT+E	23.886	27.345
TOTAL PROCUREMENT	3.832	1.235
TOTAL O+M	5.675	7.949
TOTAL OTHER	1.659	1.643
TOTAL ANNUAL LAB	35.052	38.172
TOTAL IN-HOUSE	26.096	28.420
TOTAL IN-HOUSE RDT+E	17.778	20.362
ANNUAL OPERATING COST	9.513	10.021

PERSONNEL DATA (END OF FY 1970)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PROF	NON-PROF
MILITARY	61	0	10	51
CIVILIAN	1306	34	586	722
TOTAL	1367	34	596	771

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
126	298.153	33.087	218.430	549.670	13.923	15.826

...MISSION
PERFORM RESEARCH/DEVELOPMENT/TEST AND EVALUATION IN SURFACE AND UNDERSEA SURVEILLANCE/SUBMARINE COMMUNICATIONS/CLASSIFICATION/ OCEANOGRAPHY AND RELATED FIELDS OF SCIENCE AND ENGINEERING.

...CURRENT IMPORTANT PROGRAMS
INCREASE SSBN-SSN SONAR DETECTION/TRACKING/CLASSIFICATION CAPABILITIES.
IMPROVE BOTTOM/BOUNCE AND CONV ZONE CAPABILITIES OF SURFACE SHIP SONAR.
DEVELOPMENT AND SYSTEM ENG OF INTEGRATED SUBMARINE ANTENNA SUBSYSTEM.
RESEARCH IN PHYSICAL/CHEMICAL AND BIOLOGICAL OCEANOGRAPHY.
DEVELOPMENT OF SHIP-SHORE ACOUSTIC COMMUNICATION SYSTEM.

...FUNCTIONS/EQUIPMENT/CAPABILITIES
TO PROVIDE RDT/E SUPPORT TO NAVSHIPS/NAVELEX/NAVORD/NAVOCEANO
MJR EQUIPMENT AND FACILITIES-ANALOG AND DIGITAL COMPUTERS/ENVIRONMENTAL TEST FACILITIES/VACUUM RANGE/HOLOGRAPHY LABORATORY/TRANSDUCER MODEL LAB/ QUIET HYDRODYNAMIC FLOW FACILITY/WIND TUNNEL/UNDERWATER OPTICAL RANGE/ ACOUSTIC DATA REDUCTION FACILITY/RADIO TEST LABORATORY/ACOUSTIC TEST TANK/TRANSDUCER MEASUREMENT AND CALIBRATION FACILITY/ANTENNA EVALUATION FACILITY/TECHNICAL INFORMATION CENTER/OCEANOGRAPHIC AND UNDERWATER ACOUSTIC RESEARCH FIELD ACTIVITY.

INSTALLATION MATERIALS LABORATORY, WRIGHT-PATTERSON AIR FORCE BASE, OHIO

DR A M LOVELACE-DIRECTOR AND DR S W TSAI-CHIEF SCIENTIST

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1970 (ACTUAL)	1971 (ACT + EST)
TOTAL RDT+E	38.495	36.982
TOTAL PROCUREMENT	18.000	11.000
TOTAL O+M	0.000	0.000
TOTAL OTHER	0.000	0.000
TOTAL ANNUAL LAB	56.495	47.982
TOTAL IN-HOUSE	8.539	8.885
TOTAL IN-HOUSE RDT+E	8.539	8.885
ANNUAL OPERATING COST	5.000	5.250

PERSONNEL DATA (END OF FY 1970)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PROF	NON-PROF
MILITARY	57	9	54	3
CIVILIAN	358	38	267	91
TOTAL	415	47	321	94

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
9	212.000	22.000	38.000	272.000	6.502	9.325

...MISSION
PLAN, FORMULATE AND EXECUTE RESEARCH,EXPLORATORY AND ADV. DEVELOPMENT, AND MANUFACTURING METHODS FOR NEW MATERIALS OF ALL CLASSES IN SUPPORT OF THE AF MISSION. ACT AS AFSC FOCAL POINT FOR MATERIALS TECHNOLOGY INFORMATION. INSURE TIMELY TRANSITIONING OF NEW MATERALS AND TECHNOLOGY TO AF SYSTEMS.

...CURRENT IMPORTANT PROGRAMS
MATERIALS AND TECHNIQUES FOR A/C STRUCTURAL INTEGRITY AND RELIABILITY.
MATERIALS AND TECHNIQUES FOR AF WEAPONS SURVIVABILITY AND HARDENING.
TACTICAL AND LIMITED WARFARE MATERIALS AND TECHNOLOGY SUPPORT.
MANUFACTURING TECHNOLOGY OF NEW MATERIALS FOR SYSTEMS APPLICATION.
ADV COMPOSITES, METALS AND ALLOYS FOR AIRFRAME AND PROPULSION STRUCTURES.

...FUNCTIONS/EQUIPMENT/CAPABILITIES
MATERIALS RESEARCH AND DEVELOPMENT FACILITIES AND CAPABILITIES FOR AEROSPACE STRUCTURES, TPS FOR BALLISTIC RV, ROCKET MOTOR NOZZLES AND ENGINES, FLUIDS, LUBRICANTS, FLUID CONTAINMENT, PROPULSION, COATINGS, FIBERS, ARMOR, EM WINDOWS, SENSORS, DISPLAYS, LASERS AND OPTICAL DEVICES ELECTRONIC COMPONENTS, NON-DESTRUCTIVE TESTING, POLYMERS, ADHESIVES, NONMETALLIC MATRIX. COMPOSITES, ELASTOMERS, METALS, ALLOYS, METAL AND CERAMIC COMPOSITES, METAL PROCESSING, INTERMETALLICS, CERAMICS, STATIC AND DYNAMIC BEHAVIOR. JOINING. GRAPHITE. ELECTRONIC AND MAGNETIC MATERIALS. PHYSICAL-CHEMICAL ANALYSIS. OTHER MAJOR MATERIALS FUNCTIONS. MANUFACTURING TECHNOLOGY. SYSTEMS APPLICATIONS. SYSTEMS SUPPORT AND INFORMATION CENTERS--DOD DEFENSE METALS AND CERAMICS, THERMOPHYSICAL AND ELECTRONIC PROPERTIES, METAL MACHINABILITY, AND MECHANICAL PROPERTIES.

INSTALLATION AEROSPACE RESEARCH LABORATORIES, WRIGHT-PATTERSON AIR FORCE BASE, OHIO

COMMAND. OFFICER COL WM K MORAN, JR CHIEF SCIENTIST. HANS J P VON OHAIN

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1970 (ACTUAL)	1971 (ACT + EST)
TOTAL RDT+E	12.656	12.294
TOTAL PROCUREMENT	0.020	0.000
TOTAL O+M	0.000	0.000
TOTAL OTHER	1.237	1.284
TOTAL ANNUAL LAB	13.893	13.578
TOTAL IN-HOUSE	8.761	9.713
TOTAL IN-HOUSE RDT+E	7.524	8.429
ANNUAL OPERATING COST	1.291	1.756

PERSONNEL DATA (END OF FY 1970)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PROF	NON-PROF
MILITARY	81	11	61	20
CIVILIAN	228	57	108	120
TOTAL	309	68	169	140

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
50	124.114	28.512	34.719	187.345	10.353	11.910

...MISSION
CONDUCTS RESCH IN PHYSICAL + ENERG SCIENCES OFFERING GREATEST POTENTIAL TO CONTINUE SUPERIOR AF OPERATIONAL CAPABILITY. PARTICIPATES IN EFFORTS TO REDUCE LEAD TIME BETWEEN DISCOVERY OF NEW KNOWLEDGE + ITS APPLICATION TO ADVANCMT OF AEROSPACE TECHNOLGY + MAINTNCE OF OPERATIONAL SUPERIORITY.

...CURRENT IMPORTANT PROGRAMS
RESEARCH ON AEROMECHANS OF ENERGETIC FLOWS RELEVANT TO V/STOL CONCEPTS. INVESTIGATION OF STRUCT AND PROPERTIES OF SEMICONDUCTS AND METAL OXIDES. FUNDAMENTAL RESCH ON FLUID DYNAMIC ENERGY AND MOMENTUM EXCHNGE PROCESSES. STUDY OF HIGH-TEMPERATURE OXIDATION BEHAVIOR OF METALS AND CERAMICS. RESEARCH ON VOLATILE AND THERMALLY STABLE CHELATES OF METALLIC ELEMENTS.

...FUNCTIONS/EQUIPMENT/CAPABILITIES
ARL CONDUCTS AND SPONSORS FUNDAMENTAL RESEARCH IN STRUCTURE AND PROPERTIES OF SOLIDS CHEMICAL PROPERTIES AND PROCESSES THERMOMECHANICS HIGH-VELOCITY FLUID MECHANICS AEROSPACE SIMULATION TECHNIQUES APPLIED MATHEMATICS PLASMA DYNAMICS GENERAL AND ATOMIC PHYSICS ENERGY CONVERSION AND SOLID STATE PHYSICS. SUPPORT FACILITIES INCLUDE GLASS SHOP, MACHINE SHOP AND 15,000 VOLUME TECHNICAL LIBRARY. EXPERIMENTAL FACILITIES INCLUDE A HIGH REYNOLDS NUMBER SUPERSONIC TUNNEL 4 HYPERSONIC WIND TUNNELS AND A SUPERSONIC COMBUSTION FACILITY TWO VAN DE GRAAFF ACCELERATORS AND AN 8 MEV ICT TANDEM ACCELERATOR A 1000-ATM ARC PLASMA FACILITY A TANDEM ION-MOLECULE MASS SPECTROMETER AND CAPABILITY FOR GROWTH OF THIN PLATELET TYPE II-VI CRYSTALS OF A VERY HIGH DEGREE OF PURITY AND SURFACE PERFECTION.

INSTALLATION FRANK J. SEILER RESEARCH LABORATORY, ACADEMY, COLO.

COMMANDING OFFICER COL MILTON D SPRINKEL C.S. LTCOL HAROLD BICK

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1972 (ACTUAL)	1971 (ACT + EST)
TOTAL RDT+E	0.503	2.485
TOTAL PROCUREMENT	0.000	0.000
TOTAL O+M	0.000	0.000
TOTAL OTHER	0.024	0.024
TOTAL ANNUAL LAB	0.527	2.509
TOTAL IN-HOUSE	0.527	2.509
TOTAL IN-HOUSE RDT+E	0.503	0.485
ANNUAL OPERATING COST	0.022	0.024

PERSONNEL DATA (END OF FY 1970)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PROF	NON-PROF
MILITARY	24	13	20	4
CIVILIAN	14	1	3	11
TOTAL	38	14	23	15

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
0	7.855	2.860	0.242	10.955	1.062	1.016

...MISSION
CONDUCT RESEARCH IN AEROSPACE MECHANICS,APPLIED MATHEMATICS + CHEMISTRY. ENCOURAGE + SUPPORT ACADEMY FACULTY + CADET RESEARCH BY DIRECT PARTICIPATION,PROGRAMMING + USE OF COMPUTERS + SUMMER LAB PROG.FOCAL POINT FOR USAF ACADEMY RESEARCH PROPOSED TO THE BASIC RESEARCH LABORATORIES, AFSC.

...CURRENT IMPORTANT PROGRAMS
FUEL CELL AND BATTERY STUDIES-ALUMINUM ANODES IN MOLTEN SALT ELECTROLYTE SYNTHESIS AND CHARACTERIZATION OF ORGANOMETALLIC MONOMERS + POLYMERS -- OPTIMIZATION PROGRAMING AND CONTROL MATH MODELS GUIDANCE SYSTEMS DIFFERENTIAL GAMES IMPERFECT INFO ,NONLINEAR CONTROL THEORY + ESTIMATES MECH OF FLUIDS LOW DENSITY SHOCK WAVES,RAM-WING THEORY,AERODYNAM SHAPES.

...FUNCTIONS/EQUIPMENT/CAPABILITIES
MATH OPTIMIZATION CONTROL AND GUIDANCE SYSTEMS USING BURROUGHS B5500 COMPUTER. ORGANOMETALLIC + ELECTROCHEMISTRY + NITROALIPHATIC AND FLUORONTROALIPHATIC CHEMISTRY USING 6 POSITION LAB + INSTRUMENT ROOM CONTAINING ANAL NUC MAG RESONATOR SPECTROMETER,X-RAY EQUIPMENT,INFRARED SPECTROPHOTOMETER,MASS SPECTROMETER,AUTOMATIC GAS CHROMATOGRAPH + OTHER EQUIP. FLUID DYNAMICS RESEARCH USING 17 INCH LOW DENSITY SHOCK TUBE AND ASSOCIATED INSTRUMENTATION,2-INCH HIGH-DENSITY SHOCK TUBE + WIND TUNNELS. SUPPORT USAF ACADEMY COMPUTER EDUCATION COURSES AND EDUCATIONAL RESEARCH IN USE OF COMPUTERS, ENGINEERING COURSES + RESEARCH USING BURROUGHS B5500 COMPUTER WITH 20 REMOTE TERMINALS AND CAL COMP PLOTTER.

INSTALLATION CAMBRIDGE RESEARCH LABORATORIES, L. G. HANSCOM FIELD, MASS.

COMMANDER COL. DALE J. FLINDERS CHIEF SCIENTIST DR. JOHN N. HOWARD

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1970 (ACTUAL)	1971 (ACT + EST)
TOTAL RDT+E	55.046	52.897
TOTAL PROCUREMENT	0.152	0.000
TOTAL O+M	0.021	0.021
TOTAL OTHER	1.911	2.959
TOTAL ANNUAL LAB	57.130	53.877
TOTAL IN-HOUSE	30.532	33.825
TOTAL IN-HOUSE RDT+E	28.620	30.865
ANNUAL OPERATING COST	6.500	6.700

PERSONNEL DATA (END OF FY 1970)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PROF	NON-PROF
MILITARY	178	9	76	102
CIVILIAN	1054	154	605	449
TOTAL	1232	163	681	551

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
921	557.759	21.900	120.426	700.085	18.473	31.349

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

...CURRENT IMPORTANT PROGRAMS
IONOSPHERIC MAPPING AND FORECASTING FOR COMMUNICATIONS
SHORT-RANGE TERMINAL FORECASTING
RADIATION HARDENING OF DEVICES AND INTEGRATED CIRCUITS
OPTICAL AND INFRARED BACKGROUND MEASUREMENTS
DENSITY SATELLITE MEAS FOR LOW-ALTITUDE ORBITAL SYSTEMS

...FUNCTIONS/EQUIPMENT/CAPABILITIES
CONDUCTS RESEARCH AND TECHNICAL DEVELOPMENT IN TERRESTRIAL, AEROSPACE, OPTICAL, AND SOLAR PHYSICS, IN EM WAVE PROPAGATION, AND IN ELECTRONICS, ENERGY CONVERSION, SOLID STATE AND INFORMATION SCIENCES RELATING TO AIR FORCE NEEDS. EQUIPMENT AND FACILITIES INCLUDE RADIO AND OPTICAL TELESCOPES FOR SOLAR RESEARCH, S, X, AND L BAND RADARS AND A C-130 AIRCRAFT FOR METEOROLOGICAL RESEARCH, ROCKET AND BALLOON LAUNCH FACILITIES, TWO KC-135 AND A C-130 AIRCRAFT FOR OPTICAL, UPPER ATMOSPHERIC AND NEAR SPACE STUDIES A C-130 AIRCRAFT FOR TERRAIN REMOTE SENSING AND A GRAVITY AND SEISMIC OBSERVATORY FACILITIES FOR GROWTH OF ELECRONIC MATERIALS, A VAN DE GRAAFF ACCELERATOR, COBALT 60 SOURCE, 12-MEV LINAC, 23-FOOT MILLIMETER-WAVE ANTENNA ALL FOR ELECTRONICS-RELATED PROGRAMS, AND A DIRECT-COUPLED COMPUTATIONAL FACILITY.

INSTALLATION OFFICE OF RESEARCH ANALYSES, HOLLOMAN AIR FORCE BASE, N. MEX.

COMMANDER- COL ERNEST J DAVIS,JR. TECHNICAL DIRECTOR- DR GERHARD R EBER

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1970 (ACTUAL)	1971 (ACT + EST)
TOTAL RDT+E	0.631	0.669
TOTAL PROCUREMENT	0.000	0.000
TOTAL O+M	0.000	0.000
TOTAL OTHER	0.237	0.229
TOTAL ANNUAL LAB	0.868	0.898
TOTAL IN-HOUSE	0.868	0.898
TOTAL IN-HOUSE RDT+E	0.631	0.669
ANNUAL OPERATING COST	0.235	0.216

PERSONNEL DATA (END OF FY 1970)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PROF	NON-PROF
MILITARY	15	2	10	5
CIVILIAN	27	5	16	11
TOTAL	42	7	26	16

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
0	4.676	1.203	5.607	11.486	0.189	0.094

...MISSION
TO DEVELOP DECISION INFORMATION TO ASSIST HQ AFSC, DCS/DEVELOPMENT PLANS IN THE TECHNICAL EVALUATION OF PROPOSED SYSTEMS AND CONCEPTS TO IMPROVE AIR FORCE OPERATIONAL CAPABILITY.

...CURRENT IMPORTANT PROGRAMS
MANAGEMENT OF STRATEGIC FORCES MISSION ANALYSIS.
THRUST AUGMENTATION STUDY FOR V/STOL AIRCRAFT.
SPECTRUM ANALYSIS RADAR APPLICATION STUDY.
OPTIMIZATION OF INSTALLED JET ENGINES IN LONG-RANGE LOGISTIC AIRCRAFT.
NUMERICAL ANALYSIS OF COMPRESSIBLE FLOW OVER AXISYMMETRICAL BODIES.

...FUNCTIONS/EQUIPMENT/CAPABILITIES
ACCOMPLISHES OR PARTICIPATES IN MISSION ANALYSES TO IDENTIFY CONCEPTS OF SYSTEMS OR EQUIPMENT WHICH WILL IMPROVE AIR FORCE OPERATIONAL CAPABILITIES. ACCOMPLISHES TECHNOLOGY APPLICATION STUDIES TO IDENTIFY POSSIBLE OPERATIONAL IMPROVEMENTS RESULTING FROM THE EXPLOITATION OF NEW TECHNOLOGY. PARTICIPATES IN THE PREPARATION OF THE RATIONALE PORTION OF CONCEPT FORMULATION PACKAGES/TECHNICAL DEVELOPMENT PLANS OR PROPOSALS FOR ADVANCED DEVELOPMENT PROGRAMS. EVALUATES THE TECHNICAL FEASIBILITY AND/OR EFFECTIVENESS OF PROPOSED TECHNIQUES, EQUIPMENT, OR SYSTEM CONCEPTS. ANALYZES THE SPECTRUM OF ONGOING RESEARCH PROJECTS TO IDENTIFY ANY GAPS AND/OR ATTRACTIVE AREAS WHICH SHOULD BE INVESTIGATED AS POSSIBLE SOURCES OF NEW TECHNOLOGY POSSESSING MILITARY UTILITY. OPERATES A TECHNICAL LIBRARY AND A DOCUMENTS SERVICE CENTER.

INSTALLATION 6571 AEROMEDICAL LABORATORY, HOLLOMAN AIR FORCE BASE, N. MEX.

COL R.G.MCIVER

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1970 (ACTUAL)	1971 (ACT + EST)
TOTAL RDT+E	1.402	2.312
TOTAL PROCUREMENT	0.000	2.202
TOTAL O+M	0.000	2.000
TOTAL OTHER	0.530	0.500
TOTAL ANNUAL LAB	1.932	2.812
TOTAL IN-HOUSE	1.531	2.737
TOTAL IN-HOUSE RDT+E	1.001	2.237
ANNUAL OPERATING COST	1.043	3.113

PERSONNEL DATA (END OF FY 1970)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PROF	NON-PROF
MILITARY	57	14	23	34
CIVILIAN	27	7	11	16
TOTAL	84	21	34	50

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
45	61.000	8.000	1393.002	1462.002	2.774	2.020

...MISSION
TO FUNCTION AS A LIMITED NATIONAL PRIMATE FACILITY.
CONDUCT COMPARATIVE AEROSPACE MEDICAL RESEARCH IN PRIMATES.
TO EVALUATE IMPACT INJURIES AND PROTECTIVE METHODS.
SCHEDULED FOR DEACTIVATION IN DEC 70.

...CURRENT IMPORTANT PROGRAMS
WORK REST CYCLES FOR AIRCREWS/GROUND CREWS
CHRONIC DRUG STUDIES
VISION HAZARDS RESEARCH
PERFORMANCE RESEARCH IN UNUSUAL ENVIRONMENTS
DECELERATION PROTECTION

...FUNCTIONS/EQUIPMENT/CAPABILITIES
AFMDC FACILITIES COMPUTER,CENTRIFUGE,ENVIRONMENTAL CHAMBERS
IMPACT DEVICES: DAISY DECELERATOR,BOPPER SLED,HYGE
CLINICAL LABS; CLINICAL AND EXPERIMENTAL CHEMISTRY PROCEDURES
VETERINARY SUPPORT FACILITIES CLINIC, SURGERY, PATHOLOGY
CIRCADIAN RHYTHM CHAMBER TEMPERATURE AND HUMIDITY CONTROL
MULTI-ANIMAL TESTING CONSOLES
CONSORTIUM HOUSING AND FREE RANGING ENVIRONMENT FOR CHIMPANZEES
AUTOMATED SLEEP STAGING CAPABILITY AN ANALOG-DIGITAL HYBRID COMPUTER
RADIATION LABS: AEC,LOS ALAMOS,NM,AND WHITE SANDS MISSILE RANGE,NM
AUDITION CHAMBER USED FOR NEUROPHYSIOLOGICAL STUDIES

INSTALLATION SCHOOL OF AVIATION MEDICINE, BROOKS AIR FORCE BASE, TEX.

JOSPEH M QUASHNOCK COLONEL USAF MC

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1970 (ACTUAL)	1971 (ACT + EST)
TOTAL RDT+E	9.569	11.519
TOTAL PROCUREMENT	0.002	0.196
TOTAL O+M	0.295	0.398
TOTAL OTHER	5.993	8.866
TOTAL ANNUAL LAB	15.659	20.971
TOTAL IN-HOUSE	12.776	16.317
TOTAL IN-HOUSE RDT+E	6.686	6.865
ANNUAL OPERATING COST	2.442	2.442

PERSONNEL DATA (END OF FY 1970)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PROF	NON-PROF
MILITARY	521	72	162	359
CIVILIAN	393	45	149	244
TOTAL	914	117	311	603

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
93	425.450	89.484	51.677	566.611	13.487	20.986

...MISSION
RESEARCH IN LIFE SUPPORT AEROSPACE MEDICINE
BIOLOGICAL SCIENCES
CLINICAL EVALUATIONS
EDUCATION AND TRAINING

...CURRENT IMPORTANT PROGRAMS
BIOLOGICAL EFFECTS OF COHERENT RF AND NUCLEAR RADIATION
CARE AND SELECTION OF AIR FORCE CREWS
DEVELOPMENT OF AEROMEDICAL EQUIPMENT
DEFINITION AND DEVELOPMENT OF HABITABLE CREW ENVIRONMENTS
EFFECTS OF INFECTIOUS DISEASES ON AIR FORCE OPERATIONS

...FUNCTIONS/EQUIPMENT/CAPABILITIES
USAF SCHOOL OF AEROSPACE MEDICINE - RESEARCH IN AEROSPACE MED PROBLEMS. ENVIRONMENTAL STRESS, DEVELOPMENTAL ENGINEERING, RADIOBIOLOGY, LASER HAZARDS, BIOMETRICS, BIOSCIENCE, BIOMED ENGINEERING FAC AND EPIDEMIOLOGY FACILITIES. TELEMETRY RECEIVING STATION, HUMAN CENTRIFUGE, VARIOUS TEST CELLS AND CHAMBERS, COCKCROFT-WALTON ACCELERATOR NEUTRON GENERATOR, PHILCO 2000 DIGITAL COMPUTER, ROTATIONAL FLIGHT SIMULATOR, KILO-CURIE CO -60 RADIATION SOURCE. AEROSPACE MEDICAL SCIENCE LAB - AEROSPACE MEDICAL CONSULTATIVE SERVICES, AEROMEDICAL EVALUATION. CLINICAL SCIENCE, OCULO-THERMAL, RESEARCH OPTICAL, AUDIOLOGY, VESTIBULAR, PSYCHOBIOLOGY, RADIO-ISOTOPE, AEROSPACE MEDICAL STANDARDS, AND LASER HAZARDS FACILITIES. ZEISS PHOTO-COAGULATOR, VECTORCARDIOGRAPH MACHINE, BALLISTOCARDIOGRAPH MACHINE, PHONOCARDIOGRAPH MACHINE, AND MASS SPECTROMETERS.

INSTALLATION 6570 AEROSPACE MEDICAL RESEARCH LABORATORY, WRIGHT-PATTERSON AIR FORCE BASE, OHIO

COMMANDER-COLONEL C.H.KRATOCHVIL TECH.DIRECTOR DR.F.W.BERNER

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1970 (ACTUAL)	1971 (ACT + EST)
TOTAL RDT+E	7.432	8.337
TOTAL PROCUREMENT	0.000	0.000
TOTAL O+M	0.000	0.000
TOTAL OTHER	1.498	1.570
TOTAL ANNUAL LAB	8.930	9.907
TOTAL IN-HOUSE	5.206	5.690
TOTAL IN-HOUSE RDT+E	3.708	4.120
ANNUAL OPERATING COST	8.705	9.812

PERSONNEL DATA (END OF FY 1970)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PROF	NON-PROF
MILITARY	126	27	80	46
CIVILIAN	166	26	96	70
TOTAL	292	53	176	116

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
30	112.946	51.020	68.747	232.713	11.387	21.006

...MISSION
CONDUCT R+D TO DEFINE MAN'S PERFORMANCE,PHYSIOLOGICAL TOLERANCE,PERSONAL PROT NEEDS,AND DEVELOP PROTECTIVE TECHINQUES AND EQUIP TO SUSTAIN AND ENHANCE HIS PERF IN AF OPERATIONAL ENVIRONMENTS. TO EST DESIGN CRITERIA AND PROVIDE SUPPORT TO SYSTEM DEVELOPMENT IN ABOVE AREAS.

...CURRENT IMPORTANT PROGRAMS
DEFINE TOXIC HAZARDS-ENVIR POLLUTION EFF OF MISSILE OPS -PROPELLANT TEST. DESIGN NEW CONCEPT PRESSURE SUIT-HELMET ASSEMBLY FOR ADVANCED AIRCRAFT. PROVIDE DATA ON MAN INTERFACE IN DESIGN,USE OF MULTISENSOR RECCN EQUIP. INV TECH OF DEPLOYING LONG LINE FROM A/C FOR RESCUE,RECON,COMM,SUPPLY. DETERMINE MAN'S EXP LIMITS,CAPABILITY,PRCT REQ DURING ESCAPE FROM ADV A/C.

...FUNCTIONS/EQUIPMENT/CAPABILITIES
MAJOR FUNCTIONS-1.IDENTIFY,QUANTITATE AND DETERMINE TOXIC HAZARDS AND ENVIRONMENTAL POLLUTION EFFECTS CREATED BY AF OPS.2.PROVIDE NEW CONCEPTS, DESIGN CRITERIA FOR PERSONAL PROT EQUIP--PRESSURE SUITS,G-SUITS,LIFE SUPPORT,RESTRAINT SYSTEMS,HELMETS.3.PROVIDE HUMAN ENGINEERING DATA, PRINCIPLES AND TECHNIQUES APPLICABLE TO DESIGN,TEST,OPN,MAINTENANCE OF AF SYSTEMS AND EQUIP.4.STUDY EFFECTS,DEFINE MAN'S TOLERANCE AND PERF DURING BIODYNAMIC AND COMBINED STRESS OF AF OPS.
MAJOR EQUIP.FACILITIES-HUMAN ENGINEERING RESEARCH LAB,TOXIC HAZARDS RESEARCH LAB,RESEARCH ANIMAL FACILITY,BIODYNAMIC NOISE-VIBRATION-IMPACT-ACCELERATION AND COMBINED STRESS LAB,MAN-RATED ALTITUDE AND ENVIRONMENT CHAMBER SIMULATION FACILITIES.

INSTALLATION: AEROSPACE MEDICAL LABORATORY (CLINICAL),
LACKLAND AIR FORCE BASE, TEX.

COMMANDER BRIG.GEN.EDGAR UNDERWOOD DIRECTOR FRED G.CONRAD COLONEL USAF

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1970 (ACTUAL)	1971 (ACT + EST)
TOTAL RDT+E	0.183	0.183
TOTAL PROCUREMENT	0.000	0.000
TOTAL O+M	0.000	0.000
TOTAL OTHER	0.312	0.312
TOTAL ANNUAL LAB	0.495	0.495
TOTAL IN-HOUSE	0.442	0.442
TOTAL IN-HOUSE RDT+E	0.130	0.130
ANNUAL OPERATING COST	0.848	0.848

PERSONNEL DATA (END OF FY 1970)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PROF	TOTAL PROF
MILITARY	28	5	11	17
CIVILIAN	2	0	0	2
TOTAL	30	5	11	19

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
1	6.614	1.467	1.500	9.681	0.154	2.456

...MISSION
PROVIDE THE USAF MEDICAL CORPS RESEARCH CAPABILITY IN CLINICAL MEDICINE. IMPROVE DIAGNOSTIC METHODS TO SOLVE MEDICAL PROBLEMS UNIQUE TO THE USAF. ENHANCE USAF EFFECTIVENESS BY IMPROVED THERAPY AND PREVENTIVE MEASURES. MAINTAIN A HIGH LEVEL OF HEALTH AND FITNESS AMONG USAF POPULATION.

...CURRENT IMPORTANT PROGRAMS
DEVELOP TECHNIQUES TO ENHANCE SURVIVAL OF ORGAN HOMOTRANSPLANTS.
STUDY GLOMERULAR ANTIBODIES IN ACUTE AND CHRONIC GLOMERULONEPHRITIS.
EVALUATE NEW CANCER CHEMOTHERAPY AND DRUGS USED IN NEW COMBINATIONS.
INVESTIGATE ALDOSTERONE/ANGIOTENSIN IN UNILATERAL RENAL HYPERTENSION.
EVALUATE REHABILITATION CAPABILITIES FOLLOWING MYOCARDIAL INFARCTION.

...FUNCTIONS/EQUIPMENT/CAPABILITIES
PROVIDE USAF MEDICAL CORPS WITH RESEARCH FACILITIES TO CONDUCT MEDICAL, SURGICAL AND DENTAL RESEARCH. MAINTAIN AN OPERATING SUITE WITH VETERINARY SUPPORT. SPECIALTY LABORATORIES IN IMMUNOLOGY, HEPATOLOGY, INFECTIOUS DISEASE, EXERCISE PHYSIOLOGY, ENDOCRINOLOGY AND BIOCHEMISTRY. HAVE CAPABILITY TO PERFORM SOPHISTICATED ASSAYS OF TRACE HUMAN HORMONES INSULIN,GROWTH HORMONE,ANGIOTENSIN,ALDOSTERONE,ETC.,SERUM COMPLEMENT,VIT B12, FOLIC ACID AND LEUKOCYTE HISTOCOMPATIBILITY. TOTAL CAPABILITY TO STUDY EXERCISE PHYSIOLOGY,SERUM ENZYMES,CONDITIONING AND REHABILITATION. MAINTAIN FACILITIES,INSTRUMENTATION AND MONITORING EQUIPMENT TO PURSUE RESEARCH STUDIES AND DEVELOP TECHNIQUES IN CONSONANCE WITH THE HIGHEST STANDARDS OF MEDICAL CARE AND CLINICAL INVESTIGATION,INCLUDING ATOMIC ABSORPTION,LIQUID SCINTILLATION COUNTER,ULTRACENTRIFUGATION AND RECORDERS.

INSTALLATION ROME AIR DEVELOPMENT CENTER, GRIFFISS AIR FORCE BASE, N. Y.

COLONEL ROBERT C. MATHES COMMANDER DR. JOHN S. BURGESS CHIEF SCIENTIST

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1970 (ACTUAL)	1971 (ACT + EST)
TOTAL RDT+E	69.168	69.000
TOTAL PROCUREMENT	25.282	25.500
TOTAL O+M	3.891	4.200
TOTAL OTHER	34.654	32.300
TOTAL ANNUAL LAB	132.995	126.800
TOTAL IN-HOUSE	25.926	26.800
TOTAL IN-HOUSE RDT+E	22.108	23.000
ANNUAL OPERATING COST	6.966	7.000

PERSONNEL DATA (END OF FY-[illegible])

	STRENGTH	PHD'S	TOTAL PROF	NON-PROF
MILITARY	326	2	186	140
CIVILIAN	1215	11	595	620
TOTAL	1541	13	781	760

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
2791	754.733	92.423	176.242	1023.376	22.861	78.494

...MISSION
PLANS AND EXECUTES EXPLORATORY AND ADVANCED DEVELOPMENT PROGRAMS FOR ELECTROMAG INTELLIGENCE AND RECON PROCESSING, DISPLAYS, SURVEILLANCE, RELIABILITY AND COMPATIBILITY, COMMUNICATIONS FOR AIR FORCE, DOD AND OTHER ORGANIZATIONS, PROVIDES TECHNICAL CONSULTATION TO MAJOR AIR COMMANDS.

...CURRENT IMPORTANT PROGRAMS
HIGH PEAK POWER-NANOSECOND PULSE RADAR TECHNIQUES DEVELOPMENT
INTELLIGENCE DATA HANDLING PROGRAMS FOR DOD
INTEGRATED COMMUNICATION NAVIGATION AND IDENTIFICATION TECHNIQUES
SIGNAL PROCESSING TEST FACILITY FOR FINE GRAIN SATELLITE DIAGNOSIS
ELECTROMAGNETIC RELIABILITY AND COMPATABILITY TECH AND FIELD SUPPORT

...FUNCTIONS/EQUIPMENT/CAPABILITIES
PROVIDES A WELL BALANCED COMBINATION OF PROFESSIONAL SKILLS AND EXPERIMENTAL FACILITIES TO MARRY THEORETICAL STUDIES TO POTENTIAL APPLICATION. BY COMBINATION OF AIRBORNE LABORATORY MEASUREMENT IN INSTRUMENTED FLIGHT-TEST AIRCRAFT AND FLEXIBLE ON-BASE AND OFF-BASE EXPERIMENTAL SITES, A HIGH DEGREE OF SOPHISTICATION IS ACHIEVED FOR CONDUCTING GROUND ELECTROMAGNETIC STUDIES AND EXPERIMENTS. CAPABILITIES ARE AVAILABLE FOR CONDUCTING HIGH AND LOW-POWER EXPERIMENTS OVER ELECTROMAGNETIC SPECTRUM FROM EXTREMELY LOW FREQUENCIES TO LIGHT. SCIENTIFIC STUDIES ARE PERFORMED USING ONE OF THE NATION'S LARGEST ON-LINE TIME-SHARING COMPUTERS. RESOURCES ARE PRIMARILY USED IN EXPLORATORY AND ADVANCED DEVELOPMENTS AND EXTENDING TO TECHNICAL SUPPORT THIRTY-FIVE OTHER AIR FORCE AND DOD ORGANIZATIONS.

INSTALLATION AVIONICS LABORATORY, WRIGHT-PATTERSON AIR FORCE BASE, OHIO

COL JOHN E KULPA JR COMMANDER

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1970 (ACTUAL)	1971 (ACT + EST)
TOTAL RDT+E	95.115	92.200
TOTAL PROCUREMENT	0.000	0.000
TOTAL O+M	0.000	0.000
TOTAL OTHER	0.000	0.000
TOTAL ANNUAL LAB	95.115	92.200
TOTAL IN-HOUSE	7.665	8.115
TOTAL IN-HOUSE RDT+E	7.665	8.115
ANNUAL OPERATING COST	2.650	3.172

PERSONNEL DATA (END OF FY 1970)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PROF	NON-PROF
MILITARY	86	[illegible]		[illegible]
CIVILIAN	467	9	274	193
TOTAL	553	14	350	203

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
215	195.245	5.104	162.528	362.877	11.287	12.845

...MISSION
PLAN,FORMULATE AND EXECUTE EXPLOR AND ADV DEV PGMS IN COMMUNICATIONS, LASERS AND MOLECULAR ELECTRONICS,ELECTROMAGNETIC WARFARE AND VEHICLE ENVIRONMENT,CAMOUFLAGE AND ANTENNAS,NAVIGATION,GUIDANCE AND WEAPON DELIVERY AND AEROSPACEBORNE RECONNAISSANCE AND SURVEILLANCE.

...CURRENT IMPORTANT PROGRAMS
EXPLOIT TECHNIQUES FOR TGT DETECTION+TGT DESIGNATION+WEAPON DELIVERY.
PEN-TRATION AIDS+OPTICAL COUNTERM ASURES FOR MANNED AIRCRAFT.
AIR-AY-AIR NON-COOPERATIVE IFF.
POLY-FREQUENCY+POLY-POSITION HIGH-RESOLUTION RADAR.
DEV L INTEGRATED AVIONIC CONCEPTS.

...FUNCTIONS/EQUIPMENT/CAPABILITIES
CONDUCTS IN-HSE R+D TO MAINTAIN A HIGH DEGREE OF TECHNICAL COMPETENCE. ACTS AS AFSC FOCAL POINT FOR INFO IN ASSIGNED TECHNICAL AREAS.EXECUTES ASSIGNED PROJECTS FOR AND WORKS CLOSELY WITH ARMY,NAVY,NASA,ARPA,+OTHER GOVT AGENCIES.SUPPORTS AFSC PROGRAMS AND INSURES THE RAPID APPLICATION OF RESEARCH+TECHNOLOGY TO ADVANCED SYSTEMS.PROVIDES TECHNICAL SUPPORT TO CURRENT+FUTURE SYSTEMS PROGRAMS+OPERATIONAL SUPPORT PROJECTS IN AREAS OF ASSIGNED MISSION.PERFORM CONCEPTUAL PLANNING,ANALYSIS+STUDIES.MAJOR FAC/EQUIP ARE-OPTICAL RESEARCH FACILITY WITH A 100-INCH-APERTURE OPTICAL COLLIMATOR-DYNAMIC ANALYZER FOR ADVANCED RECON SYSTEMS-CELESTIAL GUIDANCE RESEARCH LAB WITH A 12-IN CASSEGRAIN TELESCOPE UNDER A 16-FT DIA OBSERVATORY DOME-LASER RESEARCH FAC-ELECTROOPTICAL EXP OBSERVATORY-SOLID STATE+INTEGRATED CIRCUITS LAB-ELECTROMAGNETIC TECHS+COUNTERMEASURES LAB.

INSTALLATION HUMAN RESOURCES LABORATORY, BROOKS AIR FORCE BASE, TEX.

JOHN G DAILEY COLONEL USAF CMDRS AFHRL CHIEF SCIENTIST POS IS VACANT

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1970 (ACTUAL)	1971 (ACT + EST)
TOTAL RDT+E	5.829	9.355
TOTAL PROCUREMENT	0.600	0.000
TOTAL O+M	0.000	2.208
TOTAL OTHER	0.978	2.978
TOTAL ANNUAL LAB	7.407	10.333
TOTAL IN-HOUSE	3.652	3.882
TOTAL IN-HOUSE RDT+E	2.674	2.904
ANNUAL OPERATING COST	0.742	0.742

PERSONNEL DATA (END OF FY 1970)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PROF	NON-PROF
MILITARY	156	[illegible]	[illegible]	104
CIVILIAN	199	29	86	113
TOTAL	355	38	138	217

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
13	63.832	28.702	0.428	92.962	1.831	2.473

...MISSION
PRINCIPAL AF INTERFACE WITH SCIENCE,INDUSTRY, + OTHER GOVT AGENCIES FOR MANAGEMENT OF BASIC,EXPLORATORY,AND ADVANCED DEVELOPMENT RED PROGRAM IN PERSONNEL SELECTION, MANAGEMENT AND TRAINING, AND THE EVALUATION OF NEW TECHNICAL DEVELOPMENTS FOR APPLICATION TO AF PROBLEMS.

...CURRENT IMPORTANT PROGRAMS
HUMAN FACTORS IN DESIGN OF TRAINING SYSTEMS
SIMULATION TECHNIQUES FOR AEROSPACE CREW TRAINING
PERSONNEL SELECTION AND MANAGEMENT R + D
DESCRIBING,EVALUATING + STRUCTURING AF OCCUPATIONS.
AUDIO VISUAL EQUIPMENT, RESEARCH SIMULATOR COCKPIT

...FUNCTIONS/EQUIPMENT/CAPABILITIES
FUNCTIONAL AREAS OF OCCUPATIONAL ANALYSIS,PERSONNEL PROCUREMENT, PERSONNEL CLASSIFICATION , RETENTION AND SEPARATION
PERSONNEL SYSTEM SIMULATION MODELS, MANPOWER RQMTS OF AF WEAPON SYSTEMS
TRAINING TECHNIQUES, DESIGN OF SIMULATORS AND OTHER TRAINING DEVICES
CAPABILITIES+ STUDY TRAINING PROBLEMS ASSOCIATED WITH VEHICULAR CONTROL OPERATOR TASKS,CHECKOUT AND MAINTENANCE OF ELECTRONIC EQUIPMENT.
TECHNICAL AND PROFESSIONAL LIBRARY, PERSONNEL TESTING ROOMS
EOOD MANPOWER DEVELOPMENT PROGRAM EVALUATION AND IMPROVEMENT.
INFINITY OPTICS DISPLAY, RAYTHEON PB440 DIGITAL COMPUTER
IBM 7040 ELECTRONIC DATA PROCESSING SYSTEM W/6 TAPES DISC FILE+ CARD READER/PUNCH PRINTER AND INQUIRY STATION/VISUAL DISPLAY DEVICE, CRT,
ELECTRONICS ASSOCIATES TR48 ANALOG COMPUTER

INSTALLATION WEAPONS LABORATORY, KIRTLAND AIR FORCE BASE, N. MEX.

COMMANDER, COL ROBERT W ROWDEN. CHIEF SCIENTIST, MAJ WILLIAM A WHITAKER

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1970 (ACTUAL)	1971 (ACT + EST)
TOTAL RDT+E	55.581	55.200
TOTAL PROCUREMENT	0.200	0.000
TOTAL O+M	0.193	0.155
TOTAL OTHER	0.017	0.045
TOTAL ANNUAL LAB	55.791	55.400
TOTAL IN-HOUSE	12.313	12.100
TOTAL IN-HOUSE RDT+E	12.291	12.050
ANNUAL OPERATING COST	1.500	1.650

PERSONNEL DATA (END OF FY 1970)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PROF	NON-PROF
[illegible]	[illegible]	47	423	[illegible]
CIVILIAN	309	12	[illegible]	[illegible]
TOTAL	934	59	526	408

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
391	323.623	12.774	9.153	345.550	6.972	24.518

...MISSION
PLAN AND EXECUTE RSCH, EXPLOR, AND ADV DEV PGMS IN NUCLEAR WPNS EFFECTS AND COMPONENTS, ADV WPNS TECH, RADIATION HAZARDS, NUCLEAR AND ADV WPNS DELIVERY TECHNIQUES, NUCLEAR SAFETY, AND CIVIL ENGR. SPECIFY AND ASSESS SYS HARDNESS. PROVIDE TECH AND MGT ASSIST IN SYS DEV, TEST, MOD AND OPN.

...CURRENT IMPORTANT PROGRAMS
DEVELOP NUCLEAR EFFECTS SIMULATORS FOR S/V TESTING.
DEVELOPMENT OF ADVANCED WEAPON SYSTEMS.
LEAD LABORATORY FOR THE AF INTEGRATED NUCLEAR EFFECTS PROGRAM.
DEVELOP METHODS TO PREDICT RADIATION HARDNESS OF SEMICONDUCTORS.
ADVANCED DEVELOPMENT OF AF CIVIL ENGINEERING TECHNOLOGY.

...FUNCTIONS/EQUIPMENT/CAPABILITIES
NUCLEAR WEAPONS EFFECTS RESEARCH, SIMULATION, SAFETY, TEST PARTICIPATION AND ANALYSIS OF WEAPONS SYSTEMS SURVIVABILITY/VULNERABILITY ARE CONDUCTED IN NUCLEAR ENGINEERING TEST LABORATORIES AND PHYSICS LABORATORIES. SIMULATION TESTS ON MISSILES AND COMPONENTS USE ELECTROMAGNETIC PULSE SIMULATORS, GAS GUNS AND PULSE POWER AND X-RAY DEVICES. CIVIL ENGINEERING RESEARCH, EXPLORATORY AND ADVANCED DEVELOPMENT USE SOILS, ENVIRONMENTAL, AND CHEMICAL LABORATORIES AND SHOCK TUBES FOR SIMULATION AND TESTS. LASER RESEARCH, APPLICATION AND DEVELOPMENT IN THE LASER/OPTICS LABORATORY USE LARGE AND HIGH POWER DEVICES. TECHNICAL LIBRARY, METALLURGY AND METROLOGY LABORATORIES, AN EQUIPMENT POOL OF VARIED DIAGNOSTIC AND METERING DEVICES, DUAL CDC-6600 COMPUTER AND MULTI-CHANNEL RECORDING AND DATA REDUCTION SUPPORT RESEARCH AND TESTS.

INSTALLATION AEROPROPULSION LABORATORY, WRIGHT-PATTERSON AIR FORCE BASE, OHIO

COL T P MOTT-SMITH CMDR. M P DUNNAM DEP DIR

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1970 (ACTUAL)	1971 (ACT + EST)
TOTAL RDT+E	52.560	52.293
TOTAL PROCUREMENT	0.000	0.000
TOTAL O+M	0.000	0.000
TOTAL OTHER	0.907	0.500
TOTAL ANNUAL LAB	53.467	52.793
TOTAL IN-HOUSE	5.972	5.979
TOTAL IN-HOUSE RDT+E	5.062	5.079
ANNUAL OPERATING COST	0.810	0.807

PERSONNEL DATA (END OF FY 1970)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PROF	NON-PROF
MILITARY	58	3	52	6
CIVILIAN	331	5	170	161
TOTAL	389	8	222	167

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
48	368.540	72.400	220.700	659.680	13.091	13.612

...MISSION
PLAN,FORMULATE AND EXECUTE EXPLORATORY AND ADVANCED DEVELOPMENT PROGRAMS IN AIR-BREATHING AND ELECTRIC PROPULSION,FLIGHT POWER AND AIRCRAFT FUELS, LUBRICANTS AND HAZARDS. ENSURE THE RAPID APPLICATION OF RESEARCH AND TECHNOLOGY TO ADVANCED SYSTEMS.

...CURRENT IMPORTANT PROGRAMS
TURBOFAN COMPRESSOR STABILITY LOSS ASSESSMENT
AIRCRAFT FUEL SYSTEM VULNERABILITY/JP-4 JP-8 EVALUATION
NUCLEAR RADIATION HARDENED SOLAR CELL ARRAY
INTEGRATION OF COMPONENTS FOR RAMJET-POWERED MISSILES
HIGH STAGE LOADING COMPRESSOR

...FUNCTIONS/EQUIPMENT/CAPABILITIES
ION ENGINE FACILITY-VACUUM CHAMBER 8 FT DIA. BY 25 FEET LONG
TURBOSHAFT ENGINE ALT CELL-FUEL CONTROL SYNTHESIS-CENTRAL DATA SYSTEM
SPACE PUMP & VACUUM AND LIQUID METAL LOOP FACILITY 27 FT DIA BY 37 FT H
ENERGY CONVERSION/TRANSFER FACILITY-PROGRAMMABLE BATTERY TEST RACKS
LUBRICANTS RESEARCH FACILITY-GEAR RIGS, BEARING RIG, SEAL TEST RIGS
FUEL RESEARCH LABORATORY-CORROSION TESTING, AGING CHAMBERS, FUEL CHAMBER
ROTOR TEST FACILITY-UP TO 4000 HP-55 FT DIA UP TO 50000 LB THRUST
TURBINE ENGINE TEST STANDS-12 SEA LEVEL STANDS TO 50000 LB THRUST
TURBOJET ENGINE ALTITUDE CELL TO 3000 LB THRUST,52000 FT,MACH 1.5
PROPELLER WHIRL RIGS-FOUR RIGS TO 30000 HP, GYROSCOPIC TEST CHAMBER
RAMJET RESEARCH SHOCK TUNNEL-120 IN. DIA TEST SECTION-MACH 10-25.8 MS
HEAT TRANSFER RESEARCH FACILITY-HYDROGEN COOLED TURBINE ENGINE BLADES

INSTALLATION FLIGHT DYNAMICS LABORATORY, WRIGHT-PATTERSON AIR FORCE BASE, OHIO

COL J.R.MYERS COMD. OFFICER DR.DEMETRIUS ZONARS CHIEF SCIENTIST

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1970 (ACTUAL)	1971 (ACT + EST)
TOTAL RDT+E	51.779	48.711
TOTAL PROCUREMENT	0.000	2.000
TOTAL O+M	0.427	2.500
TOTAL OTHER	0.000	0.000
TOTAL ANNUAL LAB	52.206	49.211
TOTAL IN-HOUSE	13.917	16.101
TOTAL IN-HOUSE RDT+E	13.917	16.101
ANNUAL OPERATING COST	3.872	4.066

PERSONNEL DATA (END OF FY 1970)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PROF	NON-PROF
MILITARY	88	12	82	6
CIVILIAN	626	2	338	288
TOTAL	714	12	420	294

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
92	537.130	56.600	26.000	619.730	22.900	16.427

...MISSION
DEVEL OF CONTROL CONFIGURED FLT VEH DES FOR ACTIVE FLUTTER,RIDE AND MANUVER CONTROL, AIR CUSHION LANDING GEAR DEVEL, DETERM OF DYNAMIC CHARACTERISTICS OF COMPOSITE STRUCTURES, EXPER TO OBTAIN DES CRITERIA ON DELAY BUFFET ONSET TRANSONIC SPEEDS. DEF OF GND AND FLT DYN ENVIRONMENT.

...CURRENT IMPORTANT PROGRAMS
DETERMINED DESIGN CRITERIA FOR JOINTS IN FILAMENT COMPOSITE STRUCTURES. COMPL FIELD TESTS ESTAB AURAL DETECTION CRITERIA FOR QUIET AIRCRAFT. PREPARED DESIGN GUIDELINES RE FRACTURE MECHANICS FOR AIRCRAFT APPLICATION. GROUND SIMULATION OF B-1A FLT CONTROL SYS FOR 3 CONTRACTORS DESIGNS. FLIGHT DEMONSTRATION POWERED EJECTION SEPT FOR INCREASED CREW SURVIVAL.

...FUNCTIONS/EQUIPMENT/CAPABILITIES
DE EXTERNAL STORES INCL AERODYN CHARACTERISTICS AND AIRCRAFT INTERFACE DEVELOP FLIGHT CONTROL SYSTEM AND PILOT'S DISPLAY FOR LANDING SYSTEM FOR ZERO ZERO WEATHER, DEVELOP OPTIMAL FLIGHT VEHICLE DESIGN CRITERIA FOR NON-NUCLEAR COMBAT SURVIVABILITY. DESIGN FLIGHT CONTROL SYSTEM FOR TACTICAL AIR TO GROUND AND AIR TO AIR PRECISION WEAPON DELIVERY. DEMONSTRATE FULL SCALE AIR CUSHION LANDING GEAR PERMITTING MAXIMUM FLEXIBILITY IN SITES FOR GROUND CARGO DELIVERY BY AIRCRAFT. INTEGRATE TECHNOLOGIES FOR DESIGN OF ACFT FOR OPTIMAL TRANSONIC COMBAT EFFECTIVENESS PLAN AND EXECUTE USAF EXPLORATORY AND ADVANCED DEV PROGRAMS FOR AEROSPCE FLT VEHICLE STRUCTURES FLT MECHANICS FLT CONTROL VEHICLE DYNAMICS AND VEHICLE EQUIPMENT. PROVIDE TECH OR MGT ASSIST IN SUPPORT OF STUDIES ANALYSES DEV PLANS TEST EVALUATION MODIFICATION OF AEROSPACE SYS AND EQUIP.

NOT REPRODUCIBLE

INSTALLATION: ROCKET PROPULSION LABORATORY, EDWARDS AIR FORCE BASE, CALIF.

COL HOWARD M. ESTES, JR., COMDG OFFICER D. M. ROSS, DEPUTY DIRECTOR

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1970 (ACTUAL)	1971 (ACT + EST)
TOTAL RDT+E	37.405	27.600
TOTAL PROCUREMENT	0.000	0.000
TOTAL O+M	0.000	0.000
TOTAL OTHER	2.393	2.385
TOTAL ANNUAL LAB	39.798	29.985
TOTAL IN-HOUSE	13.977	12.805
TOTAL IN-HOUSE RDT+E	11.734	10.600
ANNUAL OPERATING COST	0.295	0.280

PERSONNEL DATA (END OF FY 1970)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PROF	NON-PROF
MILITARY	267	17	124	143
CIVILIAN	415	11	118	297
TOTAL	682	28	242	440

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
54400	757.213	149.346	87.165	993.726	29.572	26.095

...MISSION
PLAN, FORMULATE, PRESENT, AND EXECUTE THE AFSC EXPLOR AND ADV DEVELOPMENT PROGRAMS IN ROCKET PROPULSION SYS, COMPONENTS, PROPELLANTS AND ASSTLO AND EQUIP. CONDUCT IN-HOUSE RSCH. ACT AS AFSC FOCAL POINT FOR INFORMATION IN THE ASSIGNED TECHNICAL AREAS.

...CURRENT IMPORTANT PROGRAMS
INCREASE ICBM PAYLOAD SURVIVABILITY AND PENTRATION CAPABILITY. INCREASE LIFE, STATION KPG, AND POINT ACCURACY OF SATELLITE SYS. INCREASE ABILITY OF STRATEGIC ACFT TO PENTRATE TO THE TARGET. PROVIDE MAX PROPULSIVE MANEUVERING FOR SPACECRAFT. HI-PERFORMANCE LOW-COST REUSABLE PROPULSION FOR PLACING PAYLOADS IN SYNCH ORBITS.

...FUNCTIONS/EQUIPMENT/CAPABILITIES
A COMPONENT TEST LAB AND CENTRIFUGE FOR TESTING SMALL PROPULSION SYS AND COMPONENTS UNDER SIMULATED SPACE ENVIRONMENTS. FACILITIES FOR FORMULATG AND TESTING IN RKT MOTORS SMALL QUANTITIES OF NEW SOLID AND LIQUID PROPELLANTS. A CHEM LABORATORY FOR SYNTHESIS, ANALYSIS, AND FORMULATION OF NEW PROPELLANTS. A SOLID MOTOR TEST AND EVAL COMPLEX FOR INVESTIGATION OF COMBUSTION, AGING, STRUCTURAL INTEGRITY AND EXHAUST PLUMES. AMBIENT AND ALTITUDE TESTING OF TOXIC RKTS UP TO 100,000 LB THRUST. HOT AIR CAPABILITY TO TEST AIR-BREATHING PROPULSION UP TO MACH 4.0, 100,000 FT ALT. A FACILITY FOR TESTING RKT ENGINES UP TO 12,000,000 LB THRUST. IN-HOUSE ANALYTICAL CAPABILITY FOR W/S PROPULSION SYS OPTIMIZATION, TRADE-OFF AND MISSION STUDIES. A COMPUTER FACILITY FOR DESIGN, ANALYSIS, AND TEST, DATA REDUCTION. FABRICATION SHOPS FOR EXPER TEST HDWRE AND TEST SYSTEMS.

INSTALLATION ARMAMENT LABORATORY, EGLIN AIR FORCE BASE, FLA.

COLONEL BENTON K PARTIN,COMMANDER BERNARD A KULP CHIEF SCIENTIST

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1970 (ACTUAL)	1971 (ACT + EST)
TOTAL RDT+E	17.048	23.512
TOTAL PROCUREMENT	0.000	0.000
TOTAL O+M	0.000	0.000
TOTAL OTHER	0.000	0.000
TOTAL ANNUAL LAB	17.048	23.512
TOTAL IN-HOUSE	6.221	9.452
TOTAL IN-HOUSE RDT+E	6.221	9.452
ANNUAL OPERATING COST	0.000	0.000

PERSONNEL DATA (END OF FY 1970)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PROF	NON-PROF
MILITARY	140	9	105	35
CIVILIAN	231	7	148	83
TOTAL	371	16	253	118

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
41	52.100	51.492	36.410	138.002	4.782	2.431

...MISSION
PERFORMS EXPLORATORY ADVANCED AND ENGINEERING DEVELOPMENT ON NONNUCLEAR MUNITIONS AND WEAPONS,TARGETS AND SCORERS,AND IN THOSE TECHNOLOGIES ASSOCIATED WITH ARMAMENT EFFECTIVENESS INCLUDING AIR-LAUNCHED MISSILES AND CONTROL AND WEAPONS DELIVERY SUBSYSTEMS.

...CURRENT IMPORTANT PROGRAMS
EXPLOSIVE FUEL MUNITIONS
TARGET-ACTIVATED MUNITIONS
ILLUMINATION AND TARGET MARKING
HIGH-ALTITUDE SUPERSONIC TARGET
CLOSE AIR SUPPORT GUIDED WEAPONS SYSTEM

...FUNCTIONS/EQUIPMENT/CAPABILITIES
PYROTECHNIC FACILITY RESEARCH ON FLARES TARGET MARKERS
BOTANICAL FACILITY ECOLOGY STUDIES DEFOLIANT, PESTICIDES RESEARCH
HYDRODYNAMIC FACILITY RESEARCH ON EXPLOSIVES
RELATIVE MOTION FACILITY SIMULATES DYNAMIC AND PASSIVE SCORING SYSTEMS
AIRCRAFT GUNS AND ROCKETS
AREA-DENIAL MUNITIONS MULTILAYERED EXPLOSIVE WARHEADS
ANTIMATERIEL AND ANTIPERSONNEL MUNITIONS
HIGH-ALTITUDE AND HIGH SPEED TARGETS
HARD STRUCTURE MUNITIONS
FUZE LABORATORY FACILITY
INCENDIARY POLYMER AND FLAME FUELS LABORATORY
SUBSONIC WIND TUNNEL

INSTALLATION: FLIGHT TEST CENTER, EDWARDS AIR FORCE BASE, CALIF.

COL ROBERT M WHITE, COMMANDER.

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1970 (ACTUAL)	1971 (ACT + EST)
TOTAL RDT+E	38.322	39.600
TOTAL PROCUREMENT	0.730	0.000
TOTAL O+M	0.898	0.900
TOTAL OTHER	25.643	25.700
TOTAL ANNUAL LAB	65.573	66.200
TOTAL IN-HOUSE	57.613	58.700
TOTAL IN-HOUSE RDT+E	31.780	32.800
ANNUAL OPERATING COST	12.531	12.600

PERSONNEL DATA (END OF FY 1970)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PROF	NON-PROF
MILITARY	2971	3	268	2703
CIVILIAN	1882	0	156	1726
TOTAL	4853	3	424	4429

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
279887	562.853	419.038	5232.053	6213.944	178.878	287.899

...MISSION
PLAN/CONDUCT QUANTITATIVE ENG, DEV, TEST + EVAL OF MANNED/UNMANNED AERO VEH. EVAL INCL AERODYN PERF/STAB/CONTR, SYS + SUBSYS, GND SPT EQUIP. MAINTBLTY/RELIBLTY, ACFT ARRESTORS, AERO DECELRTRS, CONDUCT RSCH TO SPT MSN. OPR AF O RSCH PILOT SCH. SPT NASA, DOD TENANTS + GOVT CONTRACTORS.

...CURRENT IMPORTANT PROGRAMS
DOD AIMS PROGRAM TEST OF AUTOMATIC ALTITUDE REPORTING AND SECURE IFF
C-5A AERIAL DEL SYS TEST, RELIABILITY/MAINTAINABILITY, CAT I AND II TEST
F/FB-111A;D,E SPEC WEAPONS TEST, PERF,STAB AND CONT AND SYSTEMS CAT I/II
A-7D FLIGHT TEST PROGRAM
JOINT AF/NASA YF-12 PROGRAM

...FUNCTIONS/EQUIPMENT/CAPABILITIES
TECHNICAL FACILITIES AND EQUIPMENTS ARE AVAILABLE TO PROVIDE A COMPLETE RANGE OF SERVICES FOR CONDUCTING CATEGORY FLIGHT TESTING OF AERONAUTICAL SYSTEMS CONDUCT FLIGHT EVALUATION AND RECOVERY OR RETRIEVAL OF RESEARCH VEHICLES, TRAIN AEROSPACE RESEARCH PILOTS. ENGINEERING LABS, REALTIME INSTRUMENTED RANGES, DATA COLLECTION, REDUCTION AND ANALYSIS LABS, PHOTO /TV, ACFT/ENGINE/MAINT, TEST EQUIP, AND ELECTRONICS SHOPS ALONG WITH A COMPLEX OF DRY LAKES FOR RECOVERY AND EMERGENCY LANDING PROVIDE VARIOUS SUPPORT ALL TEST PROGRAMS. OTHER MAJOR FACILITIES ARE, PRECISION IMPACT, GUNNERY/BOMB, PHOTO RESOLUTION AND IR, RADAR FIDELITY, TACTICAL, + OPTICAL RANGES. CONTRACTOR-ASSIGNED HANGARS. SHOPS, LABS, AND OFFICE SPACE MUNITIONS STORAGE AND CHECKOUT JOINT PARACHUTE TEST FACILITY AT EL CENTRO NAF ENGINEERING SIMULATION LAB AND BARRIER/ARRESTING GEAR COMPLEX.

INSTALLATION SPECIAL WEAPONS CENTER, KIRTLAND AIR FORCE BASE, N. MEX.

CO COLONEL A.G. SWAN TECH ADVISOR D.E. CHADWICK

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1970 (ACTUAL)	1971 (ACT + EST)
TOTAL R+D+	19.346	43.476
TOTAL PROCUREMENT	0.004	0.013
TOTAL O+M	1.599	5.503
TOTAL OTHER	18.459	19.827
TOTAL ANNUAL LAB	39.408	68.819
TOTAL IN-HOUSE	35.078	62.626
TOTAL IN-HOUSE RDT+E	15.346	36.233
ANNUAL OPERATING COST	10.145	12.150

PERSONNEL DATA (END OF FY 1970)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PROF	NON-PROF
MILITARY	1479	20	267	1212
CIVILIAN	1154	3	115	1039
TOTAL	2633	23	382	2251

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
7057	228.021	334.514	1659.257	2221.792	48.605	88.152

...MISSION
CONDUCTS AIRCRAFT COMPATIBILITY TESTING OF SPECIAL WEAPONS AND SUPPORT EQUIPMENT PLANS AND PROVIDES AIR SUPPORT FOR NUCLEAR WEAPON TESTING CONDUCTS SURVIVABILITY/VULNERABILITY TESTS AND ANALYSES OF WPN SYSTEMS TO NUCLEAR/WPN EFFECTS AND SUPPORTS AEC/DOD NUCLEAR TESTS.

...CURRENT IMPORTANT PROGRAMS
PROJECT EMERY, UNDERGROUND NUCLEAR TESTING
SURVIVABILITY EVALUATION AERONAUTICAL SYSTEMS
TRANSIENT RADIATION EFFECTS TESTING FOR MINUTEMAN AND SAFEGUARD MISSILES
SEEK SKY/CRUNCH
MK12 MOD-0 GUIDED WEAPON

...FUNCTIONS/EQUIPMENT/CAPABILITIES
MAJOR EQUIPMENT; MARX EMP SIMULATOR, EMP DIPOLE SIMULATOR, SFXR PULSE RAD 1590 AND SFXR FX100 TREF SIMULATOR SEISMIC IMPULSE MACH CLASS 100 CLEAN ROOM INSTRUMENTATION VANS ELECTRONIC SHOP STATIC TEST EQUIPMENT AND DYNAMIC TEST EQUIPMENT CLIMATIC TEST EQUIPMENT TELEMETRY ACQUISITION SYSTEM AIRBORNE EMP SIMULATOR AND AUDIO-VISUAL EQUIPMENT.
MAJOR FACILITIES; ELECTROMAGNETIC PULSE SIMULATION FACILITY, ENGINEERING AND INSTRUMENTATION FACILITY TRANSIENT RADIATION EFFECTS FACILITY SEISMIC IMPULSE FACILITY NUCLEAR WEAPONS FLIGHT TEST FACILITY WEAPONS PARACHUTE TEST FACILITY AND TELEMETRY FACILITY.

INSTALLATION AIR PROVING GROUND CENTER, EGLIN AIR FORCE BASE, FLA.

COMDR MG J.C.MAXWELL CHIEF SCIENTIST MR T.H.DALEHITE

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1970 (ACTUAL)	1971 (ACT + EST)
TOTAL RDT+E	74.533	92.970
TOTAL PROCUREMENT	182.429	175.000
TOTAL O+M	2.144	2.200
TOTAL OTHER	51.787	41.222
TOTAL ANNUAL LAB	310.893	311.392
TOTAL IN-HOUSE	113.853	113.242
TOTAL IN-HOUSE RDT+E	59.922	69.820
ANNUAL OPERATING COST	29.302	29.884

PERSONNEL DATA (END OF FY 1970)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PROF	NON-PROF
MILITARY	4709	11	443	4269
CIVILIAN	2739	11	532	2207
TOTAL	7448	22	972	6476

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
465209	653.221	885.640	6829.018	8368.079	191.059	218.132

...MISSION
EXPL ADV ENGR DEV AND TEST EVAL INITIAL ACQUISITION OF NONNUCLEAR MUNS. CONDUCTS TESTS + EVALUATIONS IN FOLLOWING AREAS; EMW,AFWET,COM-CONTROL INTRUSION/INTERDICTION,ELECTRO/OPTICAL,CLIMATIC SIMULATION,VERTICAL PROBES. SUPPORTS SEA TESTS + TESTS OF OTHER USAF,DOD, + GOV. AGENCIES.

...CURRENT IMPORTANT PROGRAMS
MODULAR WEAPONS SERIES
CLOSE AIR SUPPORT WEAPONS SYSTEM
THREAT SIMULATIONS
CBU-42 WAAPM(WIDE AREA ANTIPERSONNEL MINE)
CBU-38 RINGTAIL

...FUNCTIONS/EQUIPMENT/CAPABILITIES
A CAPABILITY OF SCIENTIFIC-ENGINEERING PERSONNEL AND LABORATORIES FOR EXPLORATORY + ADVANCED DEVELOPMENT IN THE AREA OF NONNUCLEAR MUNITIONS. ARMAMENT SYS TEST ENVIRONMENT COVERING 728 SQ MI WITH LARGE ADJACENT WATER AREA. HAS 29 TEST AREAS WITH INSTRUMENTED FACILITIES INCLUDING PRECISION TRACKING RADARS AND PHOTO+OPTICS. IS USED FOR MUNITIONS TESTS. ELECTROMAGNETIC TEST ENVIRONMENT IS AN INSTRUMENTED COMPLEX OF THREAT RADARS FOR EVALUATION OF EMW DEVICES AND TECHNIQUES. WEAPONS EFFECTIVENESS AND SYS TEST ENVIRONMENT PROVIDES A REALISTIC ENVIRONMENT FOR TESTING A WPNS SYS AGAINST AN ACTIVE DEFENSE SYSTEM. A CLIMATIC LAB CAPABLE OF TESTING COMPLETE WEAPON SYSTEMS. A PROBE LAUNCH FACILITY FOR LAUNCHING SCIENTIFIC PROBES.A SCIENTIFIC DATA PROCESSING FACILITY. A PHOTO LAB. AN INSTRUMENTATION/DESIGN/FABRICATION FACILITY.

INSTALLATION MISSILE DEVELOPMENT CENTER, HOLLOMAN AIR FORCE BASE, N. MEX.

CO COLONEL J.C. MANATT CHIEF SCIENTIST E.A. STEINHOFF

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1970 (ACTUAL)	1971 (ACT + EST)
TOTAL RDT+E	41.870	0.000
TOTAL PROCUREMENT	0.000	0.000
TOTAL O+M	3.926	0.000
TOTAL OTHER	15.699	0.000
TOTAL ANNUAL LAB	61.495	0.000
TOTAL IN-HOUSE	55.617	0.000
TOTAL IN-HOUSE RDT+E	36.866	0.000
ANNUAL OPERATING COST	12.488	0.000

PERSONNEL DATA (END OF FY 1970)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PROF	NON-PROF
MILITARY	1982	48	230	1752
CIVILIAN	1578	8	157	1421
TOTAL	3560	56	387	3173

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
106998	933.701	212.795	4365.351	5511.847	131.038	97.866

...MISSION
PROVIDES AIR FORCE SUPPORT TO WHITE SANDS MISSILE RANGE.
OPERATES THE CENTRAL INERTIAL GUIDANCE FACILITY.
OPERATES THE HIGH-SPEED TEST TRACK.
OPERATES THE RADAR TARGET SCATTER SITE.

...CURRENT IMPORTANT PROGRAMS
A7331 FIREFLY
2875 SRY TRACKER
3461 BQM-34A DRONE
13381 MINUTEMAN SLED
62FAG AMRES ENVIR SLED

...FUNCTIONS/EQUIPMENT/CAPABILITIES
HIGH-SPEED TEST TRACK FACILITY INCLUDING ROCKET PROULSION TEST STAND, AND RAIN AND DUST EROSION SYSTEMS. GUIDANCE TEST FACILITY INCLUDING 100- AND 260-INCH CENTRIFUGES, 3-AXIS FLIGHT SIMULATOR, STELLAR SIMULATOR, AND ENVIRONMENTAL TEST CHAMBERS, DRONE TEST SUPPORT FACILITY WITH BQM-34 AND LAUNCH FACILITIES-AIRCRAFT SYS TEST FACILITY WITH AIRCRAFT AND SUPPORT EQUIPMENT INCLUDING ELECTRO-OPTICAL TARGETS. MISSILE LAUNCH FACILITY WITH LAUNCHERS AND SPIN BALANCE MACHINE. COMPUTATION FACILITY INCLUDING CDC-3600-3800 COMPUTER SYS, HYBRID ANALOG COMPUTER, AND PRE-COMPUTER DATA-PROCESSING EQUIPMENT PHOTO-OPTICAL FACILITY INCLUDING GROUND AND AERIAL CAMERAS INCLUDING PHOTO COVERAGE OF HIGH SPEED TEST TRACK AND PHOTO PROC LAB RADAR TARGET SCATTER FAC INCL ELECTRONIC SYS TO SIMULATE RADAR REFLX.

INSTALLATION ARNOLD ENGINEERING DEVELOPMENT CENTER, TENN.

BRIG. GEN. JESSUP D. LOWE, MR. DON R. EASTMAN

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1972 (ACTUAL)	1971 (ACT + EST)
TOTAL RDT+E	48.523	51.437
TOTAL PROCUREMENT	0.377	0.002
TOTAL O+M	0.204	0.000
TOTAL OTHER	13.519	8.324
TOTAL ANNUAL LAB	62.623	59.761
TOTAL IN-HOUSE	4.637	4.861
TOTAL IN-HOUSE RDT+E	0.000	2.000
ANNUAL OPERATING COST	3.388	3.558

PERSONNEL DATA (END OF FY 1970)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PROF	NON-PROF
MILITARY	95	1	64	31
CIVILIAN	150	1	48	102
TOTAL	245	2	112	133

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
42119	1113.556	198.831	535.861	1848.248	350.346	4.956

...MISSION
PRIMARY MISSION IS TO SUPPORT THE TIMELY ACQUISITION OF SUPERIOR AERO-SPACE SYSTEMS BY CONDUCTING ENVIROMENTAL TESTS SIMULATING ACTUAL FLIGHT CONDITIONS AS WELL AS POSSIBLE. SECONDARY MISSION IS TO KEEP EXISTING FACILITIES MODERN, DELELOP NEW TEST TECHNIQUES AND PLAN ADV FACILITIES.

...CURRENT IMPORTANT PROGRAMS
WIND TUNNEL TESTS OF F-15 ACFT CONFIG AND PH2 ENGINE TEST CONTINUE.
PREPARATIONS CONTINUE FOR GE-4 SST ENGINE TESTS.
TESTS CONTINUE ON REENTRY VEHICLE CONFIGURATION FOR ABRES PROGRAM.
MINUTEMAN III ROCKET MOTOR DEVEL AND QUAL TESTS CONTINUE.
OTHER TESTS INCLUDE F-111, A-7, F-4, AIM-82, SRAM, VIKING, AND SAFEGUARD.

...FUNCTIONS/EQUIPMENT/CAPABILITIES
AEDC IS COMPOSED OF ABOUT 32 MAJOR TEST FACILITIES HAVING A CAPITAL VALUE OF MORE THAN 400M DOLLARS. INCLUDED ARE 14 WIND TUNNELS WITH TEST SIZES TO 16 FT SQ AND SPEEDS RANGING FROM SUBSONIC TO MACH NO. 22. FIVE TURBINE ENGINE TEST CELLS WHICH CAN PROVIDE TRUE SIMULATION TO ABOVE MACH 3, FIVE ROCKET ALTITUDE TEST CELLS, THE LARGEST RATED AT ONE-HALF MILLION LB. THRUST, THREE HYPERBALLISTIC RANGES, AND FOUR SPACE SIMULATION CHAMBERS, THE LARGEST BEING 42 FT IN DIAM AND 82 FT HIGH. THESE TEST FAC. HAVE SUPPORTED THE DEVELOPMENT AND QUALIFICATION OF EVERY MAJOR AERONAUTICAL, MISSILE, AND SPACE SYSTEM INITIATED SINCE 1954. THROUGH ADEQUATE PLANNING OF AN ENVIRONMENTAL TEST PROGRAM IN THESE FACILITIES, DEVELOPMENT PROGRAM MANAGERS CAN HELP TO ASSURE THAT SYSTEM DESIGN DEFICIENCES ARE FOUND EARLY,PREVENTING COST AND SCHEDULE OVERRUNS.

INSTALLATION: EASTERN TEST RANGE, PATRICK AIR FORCE BASE, FLA.

MAJOR GEN D M JONES

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1970 (ACTUAL)	1971 (ACT + EST)
TOTAL RDT+E	164.796	137.004
TOTAL PROCUREMENT	0.574	0.034
TOTAL O+M	2.611	2.669
TOTAL OTHER	69.733	50.015
TOTAL ANNUAL LAB	237.714	189.722
TOTAL IN-HOUSE	40.428	37.886
TOTAL IN-HOUSE RDT+E	18.420	17.000
ANNUAL OPERATING COST	23.799	21.265

PERSONNEL DATA (END OF FY 1970)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PROF	NON-PROF
MILITARY	1941	34	401	1540
CIVILIAN	2146	1	141	2005
TOTAL	4087	35	542	3545

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
18264	157.188	359.002	7325.083	7841.273	372.075	649.666

...MISSION
BALLISTIC MISSILE TESTING R+D
SPACE LAUNCH
DASC
OT/FOT

...CURRENT IMPORTANT PROGRAMS
MINUTEMAN 3
ATLAS/AGENA USAF PROGRAMS
TITAN 3
POLARIS
POSEIDON

...FUNCTIONS/EQUIPMENT/CAPABILITIES
GUIDANCE EVALUATION/MISTRAM
TRACKING SHIP
TELEMETRY
RADAR TRACKING/MIPIR
IMPACT SCORING
TELEMETRY SHIP
TELEMETRY AIRCRAFT
PHOTOGRAPHY
DATA PROCESSING
SPACE AND MISSILE LAUNCH FACILITIES
COMMUNICATIONS
COMMAND/CONTROL RANGE SAFETY

INSTALLATION: SPACE AND MISSILE TEST CENTER, VANDENBURG AIR FORCE BASE, CALIF.

COMDR M/G LOUIS L WILSON JR CIV TECH DIRECTOR MR S R RADOM

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1970 (ACTUAL)	1971 (ACT + EST)
TOTAL RDT+E	83.275	78.842
TOTAL PROCUREMENT	0.573	3.200
TOTAL O+M	0.000	2.000
TOTAL OTHER	4.784	6.895
TOTAL ANNUAL LAB	88.632	88.937
TOTAL IN-HOUSE	39.719	34.769
TOTAL IN-HOUSE RDT+E	34.935	27.874
ANNUAL OPERATING COST	61.800	61.782

PERSONNEL DATA (END OF FY 1970)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PROF	NON-PROF
MILITARY	596	2	71	525
CIVILIAN	527	2	175	352
TOTAL	1123	2	246	877

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
1546	31.543	348.962	2057.499	2438.024	16.388	134.800

1..MISSION
PROVIDE FIELD TEST MANAGEMENT PRELAUNCH AND CONDUCT OF LAUNCH OPERATIONS AND SUPPORT FOR PROGRAMS FOR WHICH IT HAS BEEN DESIGNATED TEST AGENCY. PLAN PROGRAM MANAGE OPERATE AND MAINTAIN THE WESTERN TEST RANGE IN SUPPORT OF DOD NASA AND OTHER RANGE USERS.

2..CURRENT IMPORTANT PROGRAMS
ACTIVATION OF NEW DOWNRANGE SITE IN SUPPORT OF MINUTEMAN 3 PROGRAM.
DEVELOPMENT OF RANGE CAPABILITIES IN SUPPORT OF GIANT PATRIOT PROGRAM.
SUPPORT AND CONDUCT TARGET LAUNCHES IN SUPPORT OF SAFEGUARD SYSTEM TESTS.
DEVELOP CAPABILITIES FOR SUPPORT OF TITAN 3D LAUNCH PROGRAMS.
SUPPORT AND CONDUCT MINUTEMAN III R&D DASO AND OT PROGRAM LAUNCHES.

3..FUNCTIONS/EQUIPMENT/CAPABILITIES
CAPABLE OF SUPPORT OF BALLISTIC PROBE AND SATELLITE LAUNCH PROGRAMS.
AVAILABLE FOR LAUNCH AZIMUTHS RANGE FROM 165 TO 330 DEGREES.
CAPABILITIES INCLUDE LAUNCH SUPPORT FIELD TEST MANAGEMENT TRACKING COMMAND CONTROL TELEMETRY PHOTOGRAPHY DATA REDUCTION IMPACT SCORING AND RECOVERY AND COMMUNICATIONS SYSTEMS.

INSTALLATION: ARMED FORCES RADIOBIOLOGY RESEARCH INSTITUTE, BETHESDA, MD.

HUGH R. MITCHELL COL USAF MC HAROLD O. WYCKOFF PHD

PROGRAM DATA BY FISCAL YEAR (MILLION $)

PROGRAM	1970 (ACTUAL)	1971 (ACT + EST)
TOTAL RDT+E	2.697	2.852
TOTAL PROCUREMENT	0.000	0.000
TOTAL O+M	0.000	0.000
TOTAL OTHER	0.731	0.830
TOTAL ANNUAL LAB	3.428	3.682
TOTAL INHOUSE	3.428	3.682
TOTAL INHOUSE RDT+E	2.697	2.852
ANNUAL OPERATING COST	1.148	1.196

PERSONNEL DATA (END OF FY 1970)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHD'S	TOTAL PROF	NON-PROF
MILITARY	67	22	41	26
CIVILIAN	145	12	30	115
TOTAL	212	32	71	141

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER	TOTAL	COST (MILLION $) REAL PROP	EQUIP
7	0.044	0.011	0.065	0.122	6.135	2.363

...MISSION
THE MISSION OF AFRRI SHALL BE TO CONDUCT SCIENTIFIC RESEARCH IN THE FIELD OF RADIOBIOLOGY AND RELATED MATTERS THAT ARE ESSENTIAL TO THE MEDICAL SUPPORT OF THE UNITED STATES MILITARY SERVICES, TO NATIONAL WELFARE, AND TO THE WELL-BEING OF MANKIND

...CURRENT IMPORTANT PROGRAMS
PREDICTION OF HUMAN INDIVIDUAL RADIOSENSITIVITY
PHYSIOLOGICAL MECHANISMS OF SPLIT DOSE INCAPACITATION RESPONSE
DRUG MODIFICATION OF RADIATION INDUCED INCAPACITATION
STIMULATION OF MARROW RECOVERY POSTIRRADIATION
FISSION NEUTRON EFFECT ON INCAPACITATION AND GASTROINTESTINAL SYSTEM

...FUNCTIONS/EQUIPMENT/CAPABILITIES
FUNCTIONS- 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, 50,000-CURIE COBALT-60 IRRADIATOR, POSITIVE ION ACCELERATOR, ELECTRON MICROWAVE LINEAR ACCELERATOR, AND X-RAY MACHINES, WITH AN ASSOCIATED EXPOSURE ROOM COMPLEX. 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.

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APPENDIX I. INDEXES OF ORGANIZATIONS

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Department of the Army

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Engineer Reactor Group Ft. Belvoir, Va.	Deleted.
Land Warfare Laboratory Aberdeen Proving Ground, Md.	Formerly: Limited War Laboratory
Medical Research Unit, Europe Landstuhl, Germany	Deleted.

Department of the Navy

Naval Aerospace Medical Research Laboratory Pensacola, Fla.	Formerly: Naval Aerospace Medical Institute
Naval Applied Science Laboratory Brooklyn, N. Y.	Closed.
Naval Ordnance Unit	Deleted.
Naval Radiological Defense Laboratory San Francisco, Calif.	Closed.
Naval Security Engineering Facility Washington, D. C.	Deleted.
Naval Submarine Medical Research Laboratory New London, Groton, Conn.	Formerly: Naval Submarine Medical Center

Department of the Air Force

Air Force Epidemiological Laboratory Lackland Air Force Base, Tex.	Deleted.
Space and Missile Test Center Vandenburg Air Force Base, Calif.	Formerly: Western Test Range

*Changes since publication of MAR 69-4, 30 October 1969.

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APPENDIX II

Definitions

1. *In-House RDT&E Activities*--Those organizational entities engaged in performing work in any or all of the categories of research, development, test or evaluation. The RDT&E effort, however, should represent a minimum of 25 percent of the total effort of each entity reporting in order to be considered as an RDT&E activity.

2. *Professionals*--Full-time government scientific and engineering personnel actively engaged in RDT&E 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 (GS), August 1965:

015	411	440	806	861	894	1321	1384
180	412	470	808	870	896	1330	1390
190	413	471	810	871	1301	1340	1520
193	414	601	819	880	1306	1350	1529
401	415	602	830	881	1310	1360	1530
403	430	680	840	890	1313	1370	1640
405	434	701	850	892	1315	1372	
410	435	801	855	893	1320	1382	

Military professionals, both officer and enlisted, actively engaged in RDT&E activities should be identified with the functions described in the above-referenced civilian job series. Generally, these jobs are referenced in Department of Defense Occupational Conversion Tables DoD 1312.1-0, DoD 1312.1-E under DoD groups 5 and 6 of DoD 1312.1-0, and various other groups of DoD 1312.1-E, published under the provisions of DoD Instruction 1312.1. Lawyers, accountants, chaplains, social workers and educators should be excluded.

3. *Technicians*--Generally nonprofessionals working on an RDT&E 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 (GS), August 1965:

181	647	683	1311
404	648	802	1341
421	649	817	1371
644	650	818	1374
645	659	856	1521

Discretion will have to be exercised by each R&D 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.

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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 will include those costs incurred by the acquisition (including installation when applicable) of all property other than real property. It will include personal property such as machine tools, environmental test equipment, furniture, laboratory equipment, vehicles, etc. Items having a unit cost of less than $200 may be excluded.

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. Excluded from the in-house total are expenses for planning and administering programs by DoD personnel (including military) of contracts and grants for out-of-house work.

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
AEC -- Atomic Energy Commission
AEDC -- Arnold Engineering Development Center
AFMDC -- Air Force Missile Development Center
AFSC -- Air Force Systems Command
AFWET -- Air Force weapons effectiveness testing
AMC -- Army Materiel Command
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
DASA -- Defense Atomic Support Agency
DoD -- Department of Defense
DZ -- drop zone

ECM -- electronic countermeasures
ECOM -- Electronics Command, Army
ED -- engineering development
EDT -- engineering development and test
EEG -- electroencephalogram
EKG -- electrocardiogram
ELINT -- electronic intelligence
EMP -- electromagnetic propagation
EMW -- electromagnetic warfare
EODC -- Explosive Ordnance Disposal Center
ET -- engineering test
EW -- electronic warfare

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 -- U. S. Army Test and Evaluation Command
UTTAS -- utility tactical transport aircraft system
USW -- undersea warfare
UV -- ultraviolet

V/STOL -- vertical/short takeoff and landing