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Catalog of Federal Metrology and Calibration Capabilities

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The National Bureau of Standards' was established by an act of Congress March 3, 1901. The Bureau's overall goal is to strengthen and advance the Nation's science and technology and facilitate their effective application for public benefit. To this end, the Bureau conducts research and provides: (1) a basis for the Nation's physical measurement system, (2) scientific and technological services for industry and government, (3) a technical basis for equity in trade, and (4) technical services to promote public safety. The Bureau's technical work is performed by the National Measurement Laboratory, the National Engineering Laboratory, and the Institute for Computer Sciences and Technology.

THE NATIONAL MEASUREMENT LABORATORY provides the national system of physical and chemical and materials measurement; coordinates the system with measurement systems of other nations and furnishes essential services leading to accurate and uniform physical and chemical measurement throughout the Nation's scientific community, industry, and commerce; conducts materials research leading to improved methods of measurement, standards, and data on the properties of materials needed by industry, commerce, educational institutions, and Government; provides advisory and research services to other Government Agencies; develops, produces, and distributes Standard Reference Materials; and provides calibration services. The Laboratory consists of the following centers:

Absolute Physical Quantities² — Radiation Research — Thermodynamics and Molecular Science — Analytical Chemistry — Materials Science.

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Systems and Software — Computer Systems Engineering — Information Technology.

¹Headquarters and Laboratories at Gaithersburg, Maryland, unless otherwise noted; mailing address Washington, D.C. 20234. ²Some divisions within the center are located at Boulder, Colorado, 80303.

Catalog of Federal Metrology and Calibration Capabilities

National Bureau of Standards JUN 19 1979

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Kathryn O. Leedy

Office of Measurement Services National Measurement Laboratory National Bureau of Standards Washington, D.C. 20234



U.S. DEPARTMENT OF COMMERCE, Juanita M. Kreps, Secretary Jordan J. Baruch, Assistant Secretary for Science and Technology NATIONAL BUREAU OF STANDARDS, Ernest Ambler, Director

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CATALOG OF

FEDERAL METROLOGY AND CALIBRATION CAPABILITIES

Kathryn O. Leedy PMTE Project Office of Measurement Services National Bureau of Standards Washington, DC 20234

ABSTRACT

This publication lists Federal laboratories involved in metrology and calibration. Included is the name of a person at each laboratory to contact for more information as well as the laboratory telephone number and address. The capabilities of each laboratory are indicated in a tabular listing by agency. To provide geographical distribution, the laboratories are listed by States. In addition, the laboratories are shown on a map by coded number. Other references are described.

Key words: Calibration; Federal Government; laboratory; measurement; metrology; precision; test equipment.

I. INTRODUCTION

This is a directory of Federal measurement standards laboratories. For each laboratory listed, it includes the laboratory name and location, a point of contact with telephone number, and the laboratory capabilities. A geographical distribution is also given.

This information is assembled and maintained by the Office of Measurement Services at the National Bureau of Standards in conjunction with its program on the Federal use of precision measuring and test equipment (PMTE). The overall objective of this program is to coordinate improvements in the management and use of such equipment. In addition to compiling this catalog, NBS also hosts meetings to promote cooperation and information exchange among Federal agencies, holds workshops to discuss particular metrology problems, and issues handbooks to encourage uniform procedures.

This catalog will eventually include all Federal metrology laboratories concerned with calibrations on the primary or secondary standards level. The initial edition, however, contains only information assembled at the time of publication. Subsequent updated editions will be issued regularly. To receive copies, return the attached form or contact the Office of Measurement Services and ask to be on the "Capabilities Catalog Mailing List."

> National Bureau of Standards Office of Measurement Services Physics B362 Washington, DC 20234 (301) 921-2305

This catalog is a compilation of information received from the agencies and laboratories listed. It should not be construed as an endorsement or rating of the individual laboratories by the National Bureau of Standards.

II. HOW TO USE THIS CATALOG

To locate a particular laboratory, consult the directory in Section III. Here the laboratories are listed alphabetically within the sections for each agency. A code number is assigned each laboratory for use in the geographical index (see Section V).

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To obtain policy information from any of the agencies listed, contact the person listed for each agency in Section III.

To identify a laboratory with a particular capability, review the charts in Section IV. Here the laboratories are listed by name within the sections for each agency. The categories of capability are listed across the top of the chart (an explanation of the categories is given in Section VI). For each capability of a laboratory, there is a mark in the corresponding category column. Note also that there is a code after the laboratory that indicates if it is a member of the National Conference of Standards Laboratories (NCSL) and if the lab publishes its own capability catalog.

Capability catalogs of individual Federal laboratories may be obtained directly from the laboratories or, in some cases, from the NBS Office of Measurement Services. NBS can also provide NCSL membership kits (for more information on NCSL, see Section VII).

To locate laboratories in a given geographical area, consult Section V. It lists the laboratories by state and includes a map of the United States with the location of each laboratory noted by its number code.

Section VI describes the capability categories used in Section IV. Other sources of information are given in Section VII. Included are descriptions of the National Conference of Standards Laboratories and the Government-Industry Data Exchange Program (GIDEP) system. Readers are asked to suggest improvements for the next edition of the "Catalog of Federal Metrology and Calibration Capabilities." Please fill out and return the attached information form.

III. LABORATORY DIRECTORY

DEPARTMENT OF DEFENSE

Policy information:

Herbert L. Leonard, Jr. Chairman, JTCG-METCAL Wright-Patterson AFB, OH 45433

(513) 257-6163

A1

Alternative Policy Contacts: A3 Clark AB Phil				
Air Force Herbert L. Leonard, Jr.		3 CRS/MACMP APO SF 96274		
Chairman, JTCG-METCAL Wright-Patterson AFB, OH 45433		T. Narasaki AV: 822-33694		
(513) 257-6163				
<u>Army</u> Jack Rivers	A 4	Elmendorf AFB 343 CRS/MACP AK 99506		
Directorate for Quality Assurance DRCQA-PC 5001 Eisenhower Avenue Alexandria, VA 22333		S. Barankiewicz (907) 752-3314 AV: (317) 752-3483		
(202) 274-9868				
Navy	A5	Hill AFB OO-ALC/MACL UT 84406		
Joe Siedlecki MAT04T-2		B. Peterson		
HQ, Naval Material Command Washington, DC 20360		(801) 777-2307 AV: 458-2307		
(202) 692-2035				
AIR FORCE	A6	Kelly AFB SA-ALC/MATL TX 78241		
Laboratories:		G. Granato		
Air Force Measurement Standards Laboratories AGMC/ML		(512) 925-8625 AV: 945-8625		
Newark AFS Newark, OH 43055	A7	McClellan AFB SM-ALC/MAIL CA 95652		
Lt. Col. C. Chrisman (614) 522-7495 AV: 580-7495		M. Bertolino		
		(916) 643-3121 AV: 633-3121		
Type IIA Laboratories:				
A2 Bitburg AB GE 36 TFW/MAAML APO, NY 09132	A8	Newark AFS AGMC/MANL OH 43055		
J. Sappe 06561-6-7765/7841 AV: 455-7765/7841		G. Lovejoy (614) 522-7283 AV: 580-7346		

A9 Robins AFB WR-ALC/MANL GA 31098

> R. Grant (912) 926-3082 AV: 468-3082 x2524

Alo Tinker AFB OC-ALC/MATL OK 73145

> C. Stueve (405) 734-2959 AV: 735-2959

Type IIB-1 Laboratories:

All Chanute AFB 3345 CMS/MAA/PMEL IL 61868

> W. Allen (217) 495-2446 AV: 862-2446 x2167

A12 Ellsworth AFB 28 AMS/MAAP SD 57706

> N. Sperle (605) 399-7966 AV: 747-7966 x7549

A13 F E Warren AFB 90 FMMS/MBAL WY 82001

> W. Spence (307) 775-2278 AV: 481-2364 x2278

Al4 Malmstrom AFB 341 FMMS/MBAL MT 59402

> J. Hawkins, Jr. (406) 731-3703/3097 AV: 632-3703

A15 Minot AFB 5 AMS/MAAP ND 58705

> R. Hoffman (701) 727-4761 x3225 AV: 344-3225

A16 Whiteman AFB 351 FMMS/MBAL M0 65305

> P. Davis (816) 687-1110 x3415/3595 AV: 975-3415 x3595

Type IIB-2 Laboratories:

A17 Albrook AFS CZ 24 CAMS/MACL APO NY 09825

> H. Vela AV: 86-4138

A18 Altus AFB 443 AMS/MAAP 0K 73521

> L. Crovo (405) 481-6685 AV: 866-6685

Alg Andersen AFB Guam 43 AMS/MAAP APO SF 96334

> J. Brown AV: (315) 366-5260/5269

A20 Andrews AFB OL-A, 89 FMS/MAAP MD 20331

> J. Fuentes (202) 767-5295/4336 AV: 297-5295/4336

A21 Aviano AB Italy 40 CAMS/MAAML APO NY 09293

> J. Nevious 0434-651141 AV: 632-5631/5563

A22 Barksdale AFB 2 AMS/MAAP LA 71110

> H. Strickland (318) 456-3842 AV: 781-3842

A23 Beale AFB 9 AMS/MAAP CA 95903

> R. Dant (916) 634-2293/2336 AV: 368-2293/2336

A24 Bergstrom AFB 67 AMS/MAAL TX 78743

> G. Elam (512) 385-4100 x2693/2694 AV: 685-2693/2694

A25 Blytheville AFB 97 AMS/MAAP AR 72315

> R. Babb (501) 762-7487/7558 AV: 637-7478 x7558

A26 Camp New Amsterdam AB NE 32 TFS/MAAML APO NY 09292

> R. O'Boyle, Jr. 08384-1944 AV: x415/429

A27 Cannon AFB 27 CRS/MACE NM 88101

> A. Koshkorian (505) 784-3311 x2672/2673 AV: 681-2676/2673

A28 Carswell AFB 7 AMS/MAAP TX 76127

> D. Fallon (817) 735-7574/7787 AV: 739-7574/7787

.

- A29 Castle AFB 93 AMS/MAAP CA 95342
 - R. Nielsen (209) 726-2811 x2302 AV: 347-2811 x2302
- A30 Charleston AFB 437 AMS/MAAP SC 29404
 - W. Aten (803) 554-3281 x3683 AV: 583-3281 x3683
- A31 Ching Chuan Kang Taiwan 6217 AB SQ/MAP APO SF 96319
 - J. Ingram AV: 723-0-3014/2822
- A32 Columbus AFB 14 FMS/MAAP MS 39701

J. Williamson (601) 434-7551 AV: 742-7551 x7883

A33 Davis Monthan AFB 355 CRS/MACL AZ 85707

> F. Buser (602) 748-4250 x5553 AV: 361-4250 x5553

A34 Dover AFB 436 MAW/MAAP DE 19901

> E. Bresnyan (302) 678-7011 x6766/7293 AV: 455-6766/7293

A35 Duluth Intl Aprt 4787 MATS/LGMEP MN 55814

> R. Brown (218) 727-8211 x2580/2589 AV: 825-2580/2589

A36 Dyess AFB 96 AMS/MAAP TX 79607

> L. Snellings (915) 696-4148 x2534 AV: 461-4148 x2534

A37 Eielson AFB 5010 CAMS/MACP AK 99702

> D. Linnen (907) 377-4292 AV: 317-372-3115

A38 England AFB 23 CRS/MACL LA 71301

> B. Schultz (318) 448-5164/5165 AV: 683-5164/5165

A39 Fairchild AFB 92 AMS/MAAP WA 99011

> F. Browne (509) 247-7212 x5270/2332 AV: 352-5270/2332

A40 Feltwell England 48 AMS/MAAML APO NY 09179

> M. Glisson AV: 226-3867/3673

A41 Forbes AFB 190 DSEG/PMEL KS 66620

> R. Eckelberry (316) 862-1234 ×4067 AV: 720-4067

A42 George AFB 35 AMS/MAAL CA 92392

> J. Hopkins (714) 269-3171 AV: 353-3171/3476

A43 Grand Forks AFB 319 AMS/MAAP ND 58205

> F. Bandy (701) 594-6641/6642 AV: 362-6641/6642

A44 Grissom AFB 305 AMS/MAAP IN 46971

> G. Dalum (317) 689-2362/2363 AV: 928-2362/2363

A45 Hahn AB GE 50 CRS/MACML APO NY 09109

> L. Mullinax 06543-5-7122/7656 AV: 453-7112/7656

A46 Hickam AFB 15 AMS/LGMAMP HI 96853

> M. Iseri (808) 449-1318 AV: 430-0111

A47 Homestead AFB 31 CRS/MACL FL 33030

> R. Yager (305) 257-7845 AV: 791-7845

A48 Incirlik CDI Turkey TUSLOG DET 192/MAAML APO NY 09289

> C. Houston AV: 676-3120/6352

A49 K I Sawyer AFB 410 AMS/MAAP MI 49842

> R. Koch (906) 346-2117 AV: 472-2117/2389

A50 Kadena AB Okinawa 18 CRS/MACMP APO NY 96239

W. Phillips AV: 630-1110 44215/42556

A51 Karamursel CDI Turkey TUSLOG DET 94/LGMP APO NY 09324

> W. Fedorwicz AV: 675-3353/3352

A52 Keesler AFB 3380 AMS/MAAP MS 39534

> I. Arguelles (601) 377-3695 AV: 868-3695

A53 Keflavik Aprt Iceland 57 FIS/LGMCEP APO NY 09571

> G. Coon AV: 228-0217-7724/5281

A54 Kunsan AB Korea 8 CRS/MACMP APO SF 96264

> 0. Eyer AV: 274-4101/4591

A55 Lajes Field Azores 1605 CAMS/LGMA APO NY 09406 W. King

AV: 895-3490 x3273

A56 Langley AFB 1 CRS/MACL VA 23665

> W. Taylor (804) 764-3758/4696 AV: 432-3758/4696

- A57 Laughlin AFB 47 FMS/MAAP TX 78840
 - S. Phillips (512) 298-5714 AV: 735-5714
- A58 Little Rock AFB 314 AMS/MAAP AR 72076
 - W. Doyle (501) 988-6766/3492 AV: 731-6766/3492
- A59 Loring AFB 42 AMS/MAAP ME 04750

D. Meyers (207) 999-6287/7228 AV: 920-6287/7228

A60 Lowry AFB 3415 CMS/MAABL C0 80230

> R. Bado (303) 388-3966 AV: 926-3966

A61 Luke AFB 58 CRS/MACL AZ 85309

> D. Dittus (602) 935-7411 x2177/2108 AV: 853-2177/2108

A62 MacDill AFB 56 CRS/MACL FL 33608

> D. Alexander (813) 830-4254/3706 AV: 968-4254/3706

A63 Mather AFB 323 AMS/MAAP CA 95655

> J. Colosimo (916) 364-2270 AV: 828-2270

A64 Maxwell AFB 3800 ABW/MAAP AL 36112

> R. Barbaree (205) 293-7445/6554 AV: 875-7445/6554

A65 McChord AFB 62 AMS/MAAP WA 98438

> G. Baxter (206) 984-5492/2396 AV: 976-5492/2396

A66 McConnell AFB 384 AMS/MAAP KS 67221

> 0. Moos II (316) 681-6405/5151 AV: 962-6405/5151

A67 McGuire AFB 438 AMS/MAAP NJ 08641

> A. Burke (609) 724-2939/3441 AV: 440-2939/3441

A68 Misawa AB Japan 6920 ABG/LGM/PMEL APO SF 96519

> L. Dortch 248-1101 AV: 226-3389/5229

A69 Moody AFB 347 CRS/MACL GA 31601

> J. Stewart (912) 333-4211 x3696 AV: 460-3696/3514

A70 Mt. Home AFB 366 CRS/MACE ID 83648

.

W. Mallace (208) 828-6324 AV: 857-6324/6414

- A71 Muniz ANGB PR 156 TFG/LGM PR 00914
 - J. Reyes (809) 791-4115 AV: 860-9142
- A72 Myrtle Beach AFB 354 CRS/MACL SC 29577

J. Wright (803) 238-7950/7244 AV: 748-7950/7244

A73 Nellis AFB 57 CRS/MACL NV 89191

> M. Miller (702) 643-1800 x4027/4963 AV: 682-4027/4963

A74 Norton AFB 63 AMS/MAAP CA 92409

> P. Assini (714) 382-4320/3161 AV: 876-4320/3161

A75 Offutt AFB 55 AMS/MAAP NB 68113

> C. Green (402) 292-6041/5261 AV: 271-6041/5261

A76 Osan AB Korea 51 CRS/MACMP APO SF 96570

> J. Hopkins AV: 284-5105/4246

A77 Otis AFB 102 CAMRON SQ/LGM-P MA 02542 G. Stimus (617) 968-5125 AV: 557-5125 A78 Pease AFB 509 AMS/MAAP NH 03801 C. Lutz (603) 436-0100 x1723/2547 AV: 852-1723/2547 A79 Peterson AFB 46 CAMS/LGMFE CO 80914 K. Davis (303) 591-4496/4420 AV: 692-4496/4420 **A80** Plattsburgh AFB 380 AMS/MAAP NY 12903 R. Reed (518) 565-5270 AV: 689-5273/5274 A81 Pope AFB 317 TAW/MAAP NC 28308 D. Gordon (919) 394-4109 AV: 486-4109 x2475 A82 Ramstein AB Germany 86 AMS/MAAML APO NY 09012 R. Leach AV: 494-2491 x5525 A83 Randolph AFB 12 FMS/MAA TX 78148 R. Rangel (512) 652-3961

AV: 487-3961

A84 Reese AFB 64 FMS/MAAP/19 TX 79489 C. Huenergardt (806) 885-3480 x2158 AV: 838-3480 x2158 A85 Rickenbacker AFB 301 AMS/MAAP OH 43217 J. Wright (614) 492-4324 AV: 950-4324 A86 San Vito Dei Normanni 6719 AB SQ/LGM/PMEL IT APO NY 09240 D. Niemann AV: 622-1110 x3308 A87 Scott AFB 375 CAMS/MAAP 62225 IL H. Crooks (618) 256-3721 AV: 638-3721 **A88** Selfridge ANGB Det 1 HQ M1 ANG/MABP MI 48045 G. Strassburg (313) 466-5817 AV: 273-5817 x4302 A89 Seymour Johnson AFB 4 CRS/MACL NC 27531 A. Griffin (919) 736-0000 x5762/5493 AV: 488-5762/5493

A90 Shaw AFB 363 CRS/MACL SC 29152

> H. Caudle (803) 668-8110 x2656/2604 AV: 965-2656 x2604

A91 Shemya AFB AK 5073 ABG/PMEL APO Seattle 98736

J. Maier (907) 572-3000 x7283 AV: 572-7283

A92 Sheppard AFB 3750 CMS/MAAP/234 TX 76311

> H. Miller (817) 851-2693 AV: 736-2693

A93 Tempelhof Cent Aprt GER 7350 AB GP/MAAML APO NY 09611

> G. Dalldorf AV: 411-5367 x5086

A94 Thule AB Greenland BMEWS, FSI/FSTP APO NY 09023

> D. Roberts AV: 9-308

A95 Torrejon AB Spain 401 TFW/MAAML APO NY 09283

> H. Burrell AV: 723-6844 x7075

A96 Travis AFB 60 AMS/MAAP CA 94535 L. Johns (707) 438-3244 x3245 AV: 837-3244 x3245 A97 Tyndall AFB 4756 AMS/MAAP FL 32403

> P. Patterson (904) 283-2764 AV: 970-2764 x2484

A98 Upper Heyford England 20 AMS/MAAML APO NY 09194

> R. Madden AV: 263-4949 x4241

A99 USAFA CO USAFA/DFIT-ML CO 80840

> F. Perry (303) 472-4047 AV: 259-4047 x4137

A100 Vance AFB 71 FTW/NW-DAM/PMEL 0K 73701

> L. Watson (405) 237-2121 x7250 AV: 962-7250

AlO1 Williams AFB 82 FTW/MAAP AZ 85224

> E. Lane (602) 988-2611 x6770 AV: 474-6770

A102 Wurtsmith AFB 379 AMS/MAAP MI 48753

> T. Brown (517) 739-6282 AV: 623-6282

Alo3 Yokota AB Japan 610 MASS/LGMAP APO SF 96328

> R. Renner AV: 255-7156

Type IIC laboratories:

A104 Edwards AFB 6515 AMS/LGMAP CA 93523

> R. Hesselgrave (805) 277-4291 x3751 AV: 350-4291 x3751

A105 Eglin AFB 3242 AMS/LGMEP FL 32542

> D. Burch (904) 882-3546 x5631 AV: 872-3546 x5631

- A106 Griffis AFB 416 AMS/MAAP NY 13441
 - A. Campbell (315) 330-4807 AV: 587-4807 x4948
- A107 Hanscom AFB 3245 ABG/LGK MA 01731

W. Frost (617) 861-2661/2662 AV: 478-2661/2662

A108 Holloman AFB 49 CRS/MACL NM 88330

> R. Osborne (505) 479-6511 x3806 AV: 867-3806

A109 Kirtland AFB 1550 FMS/MAAP NM 87117

> L. Baggette (505) 264-0011 x4-9939 AV: 964-9939

AllO Patrick AFB Det 1, SAMTEC/PMEL/P FL 32925

> J. George (305) 853-9412 AV: 467-9412

Alll Patrick AFB Det 1, SAMTEC/PMEL/E FL 32925

> R. Schnepf (305) 494-2504 AV: 854-2504

- All2 Vandenberg AFB SAMTEC/Bldg 1737/PMEL CA 93437
 - W. Schone (805) 866-6595 AV: 276-6595
- All3 Wright-Patterson AFB 4950 Test Wing/MADE 0H 45433

B. Lehmenkuler (513) 257-7707 AV: 787-7707

ARMY

Type I Laboratory:

B1 Army Standards Laboratory Commander U.S. Army Missile Materiel Readiness Command U.S. Army Metrology and Calibration Center ATTN: DRSMI-MS, Bldg. 5435 Redstone Arsenal, AL 35809

J. C. McKinney, Jr. (205) 876-7718

- Laboratories:
- B2 Area Calibration Laboratory, Korea Commander Materiel Support Center (Waegan) ATTN: EANC-MSC-C APO San Francisco, CA 96460

M. Dayton TAEGU MIL 265-8531/8518

B3 Army Area Calibration Laboratory Commander Letterkenny Army Depot ATTN: SDSLE-QC Chambersburg, PA 17201

Donald L. Flory (717) 263-6012 AV: 242-6012

B4 Area Calibration Laboratory Commander Tobyhanna Army Depot ATTN: SDSTO-QT Tobyhanna, PA 18466

> Joseph A. Reina (717) 894-8301 x7594 AV: 247-9594

B5 CRSC, Augsburg Commander ATTN: AETSSC-SS-CRSCA APO NY 09178

> J. Vines FLAK MIL 2582-4690/4699

- B6 CRSC, Pirmasens Commander ATTN: AERKD-R APO NY 09138
 - J. Santana Pirmasens MIL 2211-8312/7264
- B7 CRSC, Schwanheim Commander ATTN: AETVSC-ST-CU APO NY 09057

D. Tolton Frankfurt MIL 2311-8255/8237

B8 Lexington-Blue Grass Depot Activity Lexington, KY 40511

> Douglas L. Hanna (606) 293-3931/3455 AV: 745-3931/3455

NAVY

Type I Laboratories:

- Cl Western Standards Laboratory Code 700 Naval Air Rework Facility, North Island San Diego, CA 92135
 - 0. J. Belzer (714) 437-6991 AV: 951-6991
- C2 Eastern Standards Laboratory ESA-53, Bldg. 219-2 Naval Weapon Engineering Support Activity Washington Navy Yard Washington, DC 20374
 - D. Spangenburg (202) 433-3078 AV: 288-2346
 - Type II Laboratories:
- C3 Commanding Officer Naval Air Rework Facility US Naval Air Station Navy Standards Lab, Type II, 660 Alameda, CA 94501

C. Peeler/L. Noe (415) 869-2461 AV: 686-2461

C4 Commanding Officer Naval Air Rework Facility Technical Services Section 35220 Bldg. V-88 Norfolk, VA 23511

Wiggins AV: 690-4288

C5 Commanding Officer Naval Air Rework Facility, NAS Type II Standards Lab Attn: Code 370 Bldg. 3220, Rm. 111 Pensacola, FL 32508

> (904) 452-2277 AV: 922-2277

- C6 Naval Plant Representative Office-NPRO Navy Stds Lab - Type II Code GLSE P. 0. Box 2505 Pomona, CA 91766 T. Moran (714) 629-5111 x253 AV: 360-2811
- C7 Commanding Officer US Navy Underwater Systems Center Attn: Navy Standards Lab Type II Newport, RI 02840

L. Gabriel (401) 841-3239 AV: 948-3239/3658

C8 Commander Pearl Harbor Naval Shipyard Navy Standards Lab, Type II (Code 916) Box 400 Pearl Harbor, HI 96860

> W. Gould AV: 430-0111 x471-3208

Navy Calibration Laboratories:

C9 Commander Charleston Naval Shipyard Attn: Metrology Branch FAC Code 134.3, Bldg. 177 Charleston, SC 29408

> W. Probst (803) 743-6303 AV: 794-6303

C10 Commander Long Beach Naval Shipyard Attn: Navy CAL FAC, Code 134.2 Long Beach, CA 90802

> D. McBride (213) 547-6350 AV: 360-6350

- Cll Commander Mare Island Naval Shipyard Attn: Metrology Laboratory, Code 134.3 Vallejo, CA 94592
 - D. Jones (707) 646-4565 AV: 253-4565
- C12 Commanding Officer US Marine Corps Air Station (H) (FUTEMA, OKINAWA) Attn: NAV CALAB Annex P. O. Box 490 FPO Seattle 98772

J. R. Chiders AV: 631-3091

Cl3 Commanding Officer US Marine Corps Air Station (IWAKUNI, JPN) Attn: NAV CALAB Annex FPO Seattle, 98764

> A. Romanello AV: 236-4284

Cl4 Commanding Officer US Marine Corps Air Station Attn: US Navy CALAB Annex Kaneohe Bay, HI 96863

> D. P. Marshall AV: 257-2148

C15 Commanding General MCLSB Atlantic Attn: Code 360 Albany, GA 31704

> J. Adair (912) 439-5367 AV: 460-5367

C16 Commanding General MCLSB Pacific Attn: Code B360 Calibration Br. Barstow, CA 92311

> (714) 577-2220 AV: 282-2220

- C17 Commanding Officer Naval Air Engineering Center Test Dept. Code 947 Lakehurst, NJ 08733
 - E. La Cava (201) 323-7738 AV: 624-7738
- C18 Commanding Officer US Naval Air Facility (SIGONELLA, ITALY) Attn: Navy Calibration Lab Box 2607 FPO New York 09523

AV: 314-624-5206

C19 Commanding Officer Naval Air Rework Facility Attn: Navy CALAB, Code 942 Marine Corps Air Station Cherry Point, NC 28533

> (919) 466-3318 AV: 582-3318/3390

C20 Commanding Officer Naval Air Rework Facility Naval Air Station Attn: Navy CALAB, Code 320 Jacksonville, FL 32212

> J. R. Smith (904) 772-3216 AV: 942-3216

- C21 Commanding Officer Naval Air Rework Facility Attn: Code 943, Bldg. 463 US NAS North Island San Diego, CA 92135
 - C. D. Spiron (714) 437-5011 AV: 951-5011
- C22 Commanding Officer US Naval Air Station Agana (GUAM) Attn: OIC Navy CALAB P. O. Box 87 FPO San Francisco 96637

J. D. Webb AV: 342-2114

- C23 Commanding Officer US Naval Air Station (BERMUDA) Attn: AMD CALAB FPO New York 09560
 - AV: 938-3460
- C24 Commanding Officer Naval Air Station (CUBI PT. PHIL) Attn: Navy CALAB P. O. Box 16 FPO San Francisco 96654
 - H. Livingston AV: 5-3702
- C25 Commanding Officer US Naval Air Station, Whidbey Island Attn: Navy CALAB Oak Harbor, WA 98278
 - (206) 257-2211 AV: 820-2141
- C26 Commanding Officer Naval Air Test Center Attn: TSD Division Naval Air Station Patuxent River, MD 20670

(301) 863-4231 AV: 356-4231

C27 Commanding Officer US Naval Avionics Facility Attn: Navy CALAB 21st & Arlington Ave. Indianapolis, IN 46218

> T. Pearson (317) 353-3931 AV: 724-3931

C28 Commanding Officer NAVELEXSYSENGCEN Charleston Attn: Code 504 4400 Goer Road North Charleston, SC 25406

T. Vargis (803) 743-2030 x517 AV: 794-2045 x517 C29 Commanding Officer NAVELEXSYSENGCEN Portsmouth Attn: FCTR, Code 330 P. 0. Box 55 Portsmouth, VA 23705

> R. Edinger (804) 444-4501 AV: 690-4501

C30 Commanding Officer US Naval Ordnance Station Attn: NAVCA:AB Indian Head, MD 20640

> M. Stone (301) 743-4831 AV: 364-4831

C31 Commanding Officer US Naval Ordnance Station Attn: Code 403 Louisville, KY 40214

> B. Rhodes (502) 367-5368 AV: 989-5368

C32 Commanding Officer Naval Ship Repair Facility (GUAM) Attn: Navy CAL FAC, 136 FPO San Francisco, 96630

> A. Cabrera AV: 322-1110

C33 Commanding Officer Naval Ship Repair Facility (SUBIC BAY, PHIL) Attn: Navy CAL FAC, Code 950C FPO San Francisco 96651

> F. Collins AV: 844-1101

C34 Commanding Officer US Naval Ship Repair Facility (YOKOSUKA, JPN) Attn: Navy CAL FAC Code 370 Box 8 FPO Seattle 98762

> Hickling AV: 234-3140

C35 Commanding Officer US Naval Station (ADAK, AL) Attn: Navy Calibration Lab Annex P. O. Box 49 FPO Seattle 98791

> B. P. Wagner AV: 579-3480

C36 Commanding Officer US Naval Station (ROTA, SPAIN) Attn: Navy Calibration Lab Box 15 FPO New York 09540

AV: 727-2599 x2588

C37 Officer in Charge Naval Surface Weapons Center White Oak Laboratory Attn: Calibration Lab Silver Springs, MD 20910

> B. Ludwick (301) 394-2181

C38 Commanding Officer US Naval Weapons Center Attn: Code 3683 China Lake, CA 93555

> (714) 939-2103 AV: 245-2103

C39 Commanding Officer US Naval Weapons Station Attn: Navy CALAB - QEL Concord, CA 94520 P. Ferman (415) 671-5376

AV: 253-5376

C40 Commanding Officer Naval Weapons Station, Earle Attn: NAVCALAB, Building C-3 Colts Neck, NJ 07722

> C. Campbell (201) 462-9500 x370 AV: 449-1370

- C41 Commanding Officer Naval Weapons Support Center NAVCALAB Code 404, Building 39 Crane, IN 47522
 - L. McPike (812) 854-1379 AV: 482-1379
- C42 Commanding Officer Naval Weapons Station Attn: NAVCALAB Code 31 Seal Beach, CA 90740

A. Richardson (213) 594-7394 AV: 350-9394

C43 Commanding Officer US Naval Weapons Station Attn: NAVCALAB/QEL Yorktown, VA 23491

> J. Blandford (703) 887-4583 AV: 953-4583

C44 Commanding Officer US Navy Torpedo Station Attn: Metrology Branch A/314 Quality Evaluation & Eng Lab Dept. Keyport, WA 98345

> D. Eide (206) 396-2279 AV: 744-2279

C45 Commander Norfolk Naval Shipyard Attn: ELEC/ELEX Stds Lab Code 134.3 Portsmouth, VA 23709

> G. Waters (804) 393-5209 AV: 961-5209

C46 Commanding Officer Pacific Missile Test Center Standards Lab Branch Code 4132 Point Mugu, CA 93042

> J. Hilbert (805) 982-7926 AV: 351-7926

C47 Commander Philadelphia Naval Shipyard Attn: Navy CAL FAC, Code 134 Philadelphia, PA 19112

> H. Lawyer (215) 755-3457 AV: 443-3457

C48 Commander Portsmouth Naval Shipyard Attn: Navy Calibration Facility, Code 134.2 Bldg. 240 Portsmouth, NH 03801

C. Gustafson (207) 439-1000 x2317 AV: 684-1640

C49 Commander Puget Sound Naval Shipyard Attn: Navy CAL FAC, Code 134.2 Bremerton, WA 98314

> J. B. Livingston (206) 478-2397 AV: 439-2397

1.

DEPARTMENT OF ENERGY

Policy information:

Department of Energy MS E201 Washington, DC 20545

Kenneth Golliher (301) 353-3028 FTS: 233-3028

Field Office:

Albuquerque Operation Office P. O. Box 5400 Albuquerque, NM 87115

George Polallis (505) 264-4648 FTS: 475-4648

Laboratories:

Dl The Bendix Corporation Kansas City Division P. O. Box 1159 Kansas City, Missouri 64141

> J. F. Hadley (816) 997-3159 FTS: 926-3159

D2 General Electric Company Neutron Devices Department P. O. Box 11508 St. Petersburg, FL 33733

> N. D. Stanisavljevich (813) 544-2511, x350 FTS: 350-8350

D3 Los Alamos Scientific Laboratory Metrology Laboratory Mail Stop 472 Los Alamos, NM 87545

> E. W. Colston (505) 667-7216 FTS: 843-7216

D4 Mason and Hanger-Silas Mason Co. P. O. Box 30020 Amarillo, TX 79177

> R. A. Wilcox (806) 355-1581, x2436 FTS: 572-2436

- D5 Monsanto Research Corporation Mound Facility P. O. Box 32 Miamisburg, OH 45342
 - H. E. Bent (513) 866-7444, x7403 FTS: 774-7403
- D6 Rockwell International Rocky Flats Plant P. O. Box 464 Golden, CO 80401

R. A. Hilbig (303) 497-2575 FTS: 322-2575

D7 Sandia Laboratories Metrology Laboratory Organization 8413-1 P. O. Box 969 Livermore, CA 94550

> J. L. Wilson (415) 422-2681 FTS: 532-2681

- D8 Sandia Laboratories Primary Standards Laboratory Department 2550 Albuquerque, NM 87185
 - E. G. Franzak (505) 264-3334 FTS: 475-3334

Field Office:

Bartlesville Energy Technology Center P. O. Box 1398 Bartlesville, OK 74003

John E. White (918) 336-2400 FTS: 735-4377

Laboratory:

D9 Bartlesville Energy Technology Center P. 0. Box 1398 Bartlesville, OK 74003

> Kenneth J. Hughes (918) 336-2400 x202 FTS: 735-4202

Field Office:

Chicago Operation Office 9800 South Cass Avenue Argonne, IL 60439

Robert Bauer

Laboratories:

D10 Ames Laboratory Iowa State University Ames, IA 50011

> Thomas Rush (515) 294-1780 FTS: 865-1780

Dll Argonne National Laboratory 9700 South Cass Avenue Argonne, IL 60439

> Jess D. Cioffoletti (312) 972-5705

D12 Brookhaven National Laboratory Upton, NY 11973

> Gerry C. Kinne (516) 345-3334 FTS: 666-3334

D13 Fermi National Accelerator Laboratory P. O. Box 500 Batavia, IL 60510

H. Hinterberger (312) 840-3394

D14 New Brunswick Laboratory 9800 S. Cass Avenue, Building 350 Argonne, IL 60439

> James M. Scarborough _ (312) 972-2445 FTS: 972-2445

Field Office:

D15 Grand Forks Energy Technology Center Box 8213 University Station Grand Forks, ND 58201

> Harold H. Schobert (701) 795-8171 FTS: 783-6363

Laboratory:

See above

Field Office:

Grand Junction Office P. O. Box 2569 Grand Junction, CO 81501

Ben Bowyer (303) 242-8621 FTS: 322-9201

Laboratories:

D16 Bendix Field Engineering Corporation P. O. Box 1569 Grand Junction, CO 81501

> R. B. Chessmore (303) 242-8621 FTS: 322-9515

Field Office:

Idaho Operations Office 550 Second Street Idaho Falls, ID 83401

J. H. Barry (208) 526-0196 FTS: 583-0193

Laboratory:

D17 EG&G Idaho, Inc. Idaho National Engineering Laboratory P. O. Box 1625 Idaho Falls, Idaho 83401

> M. J. Sexey (208) 526-1431 FTS: 583-1684

Field Office:

D18 Laramie Energy Technology Center P. O. Box 3395 University Station Laramie, WY 82071

> W. H. Weaver (307) 721-2404 FTS: 328-4404

Laboratory:

See above.

Field Office:

D19 Morgantown Energy Technology Center P. O. Box 880 Collins Ferry Road Morgantown, WV 26505

> John D. Pearson (304) 599-7172 FTS: 923-7172

Laboratory:

See above.

Field Office:

Nevada Operations Office P. O. Box 14100 Las Vegas, NV 89114

Shed R. Elliott (702) 734-3237 FTS: 598-3237

Laboratories:

D20 EG&G Energy Measurements Group 680 East Sunset Road Las Vegas, NV 89119

W. C. Roper, Jr. (702) 647-5301

- D21 Holmes & Narver, Inc. OCTD/NTS Cable/Connector Test Facility P. O. Box I Mercury, NV 89023
 - Anthony Swanic (702) 986-0674 FTS: 546-0674

D22 Reynolds Electrical & Engineering Co., Inc. P. O. Box 14400 Mail Stop 625 Las Vegas, NV 89114

> David Fine (702) 986-9860 FTS: 546-9860

Field Office:

Oak Ridge Operations P. O. Box E Oak Ridge, TN 37830

Charles A. Keller

Laboratories:

- D23 Goodyear Atomic Corporation Portsmouth Gaseous Diffusion Plant P. O. Box 628 Piketon, OH 45661
 - R. W. Brown (614) 289-2331 x2396 FTS: 975-2396
- D24 National Lead Company of Ohio Mechanical Department P. O. Box 39158 Cincinnati, OH 45239
 - Carl E. Polson (513) 738-1151 FTS: 774-8478
- D25 Oak Ridge Associated Universities Post Office Box 117 Oak Ridge, TN 37830

James D. Berger (615) 483-8411 FTS: 850-4642

D26 Oak Ridge National Laboratory P. O. Box X Building 3500 Oak Ridge, TN 37830

> R. L. Anderson (615) 483-8611 x3-1651 FTS: 850-1651

D27 Union Carbide Corp., Nuclear Division Analytical Services Department Box P. ORGDP Mail Stop 452 Oak Ridge, TN 37830 O. H. Howard

0. H. Howard (615) 574-9611 FTS: 624-9611

D28 Union Carbide Paducah Gaseous Diffusion Plant P. O. Box 1410 Paducah, KY 42001

> E. E. Kuhen (502) 444-6311 FTS: 355-6491

D29 Union Carbide Corp., Nuclear Division K-25 Plant, Materiel Quality Evaluation Department P. O. Box P. ORGDP Mail Stop 324 Oak Ridge, TN 37830

E. Y. Kimmerly (615) 483-8611 x3714

D30 Union Carbide Corporation
 Dimensional Standards Laboratory
 Physical and Electrical Standards Laboratory
 Y-12 Plant
 P. O. Box Y, Building 9723-11A
 Oak Ridge, TN 37830

S. W. Lockett (615) 483-8611 x5063 FTS: 850-5063

Field Office:

D31 Pittsburgh Energy Technology Center 4800 Forbes Avenue Pittsburgh, PA 15213

> A. G. Sharkey, Jr. (412) 892-2400 x310 FTS: 726-2310

Laboratory:

See above.

Field Office:

Richland Operations Office P. O. Box 550 Richland, WA 99352

Michael Tiernan (509) 942-7285 FTS: 444-7285

Laboratories:

D32 Pacific Northwest Laboratories P. O. Box 999 Richland, WA 99352

> D. M. Fleming (509) 942-0041

D33 Westinghouse Hanford Physical and Electrical Standards Laboratory P. O. Box 1970 Richland, WA 99352

> R. J. Ausere (509) 942-3456

Field Office:

San Francisco Operations Office 1333 Broadway Oakland, CA 94612

Calvin Jackson (415) 273-7963 FTS: 536-7963

Laboratories:

D34 Lawrence Berkeley Laboratory One Cyclotron Road Berkeley, CA 94720

> Lee Wagner (415) 843-2740 x5443 FTS: 451-5443

D35 Lawrence Livermore Laboratory University of California P. O. Box 808 Livermore, CA 94550

> Don W. Moon (415) 422-8360 FTS: 532-8360

- D36 Rockwell International Energy Systems Group Calibration & Standards 8900 DeSoto Avenue Canoga Park, CA 91304
 - Gordon A. King (213) 341-1000 x2807 FTS: 791-1120 x2807
- D37 Stanford Linear Accelerator Center Stanford University P. 0. Box 4349 Stanford, CA 94305
 - R. B. Neal (415) 854-3300

Field Office:

Savannah River Operations Office P. O. Box A Aiken, SC 29801

N. Stetson (803) 725-2277 FTS: 239-2277

Laboratory:

D38 E. I. du Pont de Nemours and Co. Savannah River Laboratory Aiken, SC 29801

> R. S. Dorsett (803) 649-6211 x3049 FTS: 239-3049

Field Office:

Bonneville Power Administration P. O. Box 3621 Portland, OR 97208

Marvin Klinger (503) 234-3361 FTS: 429-3361 Laboratory:

 D39 Bonneville Power Administration Instrumentation and Standards Section
 P. 0. Box 491
 Vancouver, WA 98660

> Thomas L. Williams (206) 696-0351 x586

DEPARTMENT OF TRANSPORTATION

Policy information:

Department of Transportation Office of Installation and Logistics M-65 400 7th Street, SW Washington, DC 20590

R. M. Kee (202) 426-4244

Laboratories:

El Civil Aeromedical Institute Mike Monroney Aeronautical Center P. 0. 25082, Code AAM-550 6500 South MacArthur Oklahoma City, OK 73125

> Edward Podolak (202) 426-3177

E2 Standards and Calibration Laboratory Federal Aviation Administration National Aviation Facilities Experimental Center Code ANA-323 Atlantic City, NJ 08405

> I. S. McDaniel (609) 641-8200 x3566 FTS: 346-3566

E3 Transportation Test Center Calibration Lab Federal Rail Administration Transportation Test Center Code RTC-32 Pueblo, C0 81001

> Larry McIrvin/Bill Walters (303) 545-5660 x357 FTS: 326-9357

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

Policy information:

Harry Quong Manager, Reliability & Quality Assurance NASA Headquarters Code DP-4 Washington, DC 20546

(202) 755-3111 FTS: 755-3111

Centers:

F1 Ames Research Center Electronic Instrument Services Branch Code RSE Moffett Field, CA 94035

Peter Haro (415) 965-5468 FTS: 448-5468

F2 Hugh L. Dryden Flight Research Center Aeronautics Research Instruments Lab. P. O. Box 273 Edwards, CA 93523

Harry Curley (805) 258-3311 x642 FTS: 948-8642

F3 Goddard Space Flight Center Quality Support Office Greenbelt, MD 20771

> Walter Owens (301) 344-6134 FTS: 344-6134

F4 Jet Propulsion Laboratory Instrumentation Section 4800 Oak Grove Drive Pasadena, CA 91103

> Robert E. Martin (213) 354-3145 FTS: 792-3145

F5 Lyndon B. Johnson Space Center Engineering Standards & Calibration Lab. Houston, TX 77058

Joseph H. Tilghman (713) 483-2791 FT3: 525-2791

F6 John F. Kennedy Space Center Calibration Branch Kennedy Space Center, FL 32899

> Thomas J. Broskie (305) 867-4737 FTS: 823-4737

F7 Langley Research Center Instrument Research Division Langley Station Hampton, VA 23663

> H. B. Edwards (804) 827-3907 FTS: 928-3907

F8 Lewis Research Center Equipment & Instrument Utilization Branch 21000 Brosksark Road Cleveland, GH 44135

Basil P. Kluchnik (216) 433-6918 FTS: 294-6918 F9 George C. Marshall Space Flight Center Standard & Calibration Branch Marshall Space Flight Center, AL 35812

G. T. Carpenter (205) 453-0246 FTS: 872-0246

F10 National Space Technology Laboratories NSTL Station, MS 39529

·the

Mark Payne (601) 688-2000 FTS: 494-2000

F11 Wallops Flight Center Wallops Island, VA 23337

> J. B. Aaron (804) 824-3411 x648 FTS: 928-5648

IV. LABORATORY CAPABILITIES

DEPARTMENT OF DEFENSE	C, N	Electrical-DC/LF	Electrical-RF/Microwave	Magnetics, Dielectrics	Time and Frequency	Mass, Force, Density	Dimensional, Optics, Surface	Acoustics, Sound, Noise, Vibration	Liquid Gas Flow	Humidity	Temperature	Pressure, Vacuum	Ionization Radiation, Radioactivity	Medical Instrumentation	Automated Measuring Equipment	Material & Products Testing	Chemical Analysis	Radiometry and Photometry
AIR FORCE																		
Newark AFS	СN	Х	Х	Х	Х	Х	Х	х	Х		Х	Х	Х					
Type II A Laboratories (see listing on page 3)		Х	Х	Х	х	Х	х	х	Х	х	Х	Х	х					
Type II B-1 Laboratories (see listing on page 4)	N	Х	Х		х	Х	Х		Х		х	х	х		Х			
Type II B-2 Laboratories (see listing on page 4)		Х	х		х	Х	Х		Х		Х	х	х					
Type II C Laboratories (see listing on page 11)	Ν	X	Х	X	Х	X	X	X	X		X	X	X					

DEPARTMENT OF DEFENSE (CONTINUED)	C, N	Electrical-DC/LF	Electrical-RF/Microwave	Magnetics, Dielectrics	Time and Frequency	Mass, Force, Density	Dimensional, Optics, Surface	Acoustics, Sound, Noise, Vibration	Liquid Gas Flow	Humidity	Temperature	Pressure, Vacuum	Ionization Radiation, Radioactivity	Medical Instrumentation	Automated Measuring Equipment	Material & Products Testing	Chemical Analysis	Radiometry and Photometry
ARMY																		
Area Calibration Laboratory, Korea	с	Х	Х	Х	х	Х	Х	х	Х	Х	Х	Х	Х					х
Area Calibration Laboratory, Letterkenny Army Depot	с	Х	Х		х	Х	Х	х	Х	х	Х	Х	Х	Х	Х			Х
Area Calibration Laboratory, Tobyhanna Army Depot	с	Х	Х		х	Х	Х	х	Х	х	х	Х						
Army Standards Laboratory, Redstone Arsenal	CN	х	Х	Х	х	Х	Х	х	Х	х	Х	Х	Х		Х		Х	Х
CRSC, Augsburg	С	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х						Х
CRSC, Pirmasens	С	Х	Х	Х	Х	Х	Х	х	Х	Х	Х	Х	Х					Х
CRSC, Schwanheim	С	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х			Х			Х
Lexington-Blue Grass Depot		Х	Х	Х	Х	X	Х	Х	Х	Х	Х	Х	Х					

DEPARTMENT OF DEFENSE (CONTINUED)	C, N	Electrical-DC/LF	Electrical-RF/Microwave	Magnetics, Dielectrics	Time and Frequency	Mass, Force, Density	Dimensional, Optics, Surface	Acoustics, Sound, Noise, Vibration	Liquid Gas Flow	Humidity	Temperature	Pressure, Vacuum	Ionization Radiation, Radioactivity	Medical Instrumentation	Automated Measuring Equipment	Material & Products Testing	Chemical Analysis	Radiometry and Photometry
NAVY																		
Navy Standards Laboratories Type I (see listing on page 13)		x	X	X	x	X	х	x	х	x	х	x			x			x
Navy Standards Laboratories Type II (see listing on page 13)		х	X		x	X	x	х	X	x	х	х			X	ĺ		x
Navy Calibration Laboratories (see listing on page 13)		х	x	ĺ	х	x	X	х	x		Х	х						
A Hara Laboratory Comphiliti															_			

DEPARTMENT OF ENERGY	C, N	Electrical-DC/LF	Electrical-RF/Microwave	Magnetics, Dielectrics	Time and Frequency	Mass, Force, Density	Dimensional, Optics, Surface	Acoustics, Sound, Noise, Vibration	Liquid Gas Flow	Humidity	Temperature	Pressure, Vacuum	Ionization Radiation, Radioactivity	Medical Instrumentation	Automated Measuring Equipment	Material & Products Testing	Chemical Analysis	Radiometry and Photometry
Albuquerque Operations Office									-					v				
Bendix Corp., Kansas City Div.	CN	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	X
General Electric Co., Neutron Devices Department	CN	Х			х	Х	х	х	Х	Х	Х	Х	х	х	Х	Х	х	
Los Alamos Scientific Lab.		Х			Х	Х	Х	Х	Х	Х	Х	Х	Х			Х	Х	Х
Monsanto Research Corporation Mound Facility	CN	Х			х	Х	х	х	х	х	Х	Х	х		Х	Х	х	
Mason & Hanger-Silas Mason Co.	CN	Х	Х		Х	Х	Х			х	Х	Х			Х	Х	Х	
Rockwell International, Rocky Flats Plant	CN	Х			х	Х	х		Х	x	Х	Х	х	х		Х	х	х
Sandia Laboratories Metrology Laboratory	CN	Х			x	Х	х			х	Х	Х		:	Х			
Sandia Laboratories Primary Standards Laboratory	CN	Х	Х	х	х	Х	Х	x	х	х	Х	Х	х		Х	Х	х	х
Bartlesville Energy Tech- nology Center																		
Bartlesville Laboratory						Х			Х		Х	Х	Х				х	

DEPARTMENT OF ENERGY (CONTINUED)	C, N	Electrical-DC/LF	Electrical-RF/Microwave	Magnetics, Dielectrics	Time and Frequency	Mass, Force, Density	Dimensional, Optics, Surface	Acoustics, Sound, Noise, Vibration	Liquid Gas Flow	Humidity	Temperature	Pressure, Vacuum	Ionization Radiation, Radioactivity	Medical Instrumentation	Automated Measuring Equipment	Material & Products Testing	Chemical Analysis	Radiometry and Photometry
Chicago Operations Office																		
Ames Laboratory		x			х			x	Х		Х		х		•		х	
Argonne National Laboratory	Ν	х	Х	х	х	х	Х	x	х	х	Х	Х	х	Х	Х	Х	х	х
Brookhaven National Labora- tory																		
Fermi National Accelerator Lab		х	х	х	x	х	х					Х	х			x		
New Brunswick Laboratory	С																Х	
Grand Forks Energy Tech- nology Center																		
Grand Forks Laboratory		х																
Grand Junction Office																		
Bendix Field Engineering Corp.	С			1									х				х	х
Idaho Operations Office																		
EG&G Idaho	CN	х			х	Х	Х		Х	х	Х	Х	Х		Х	Х	х	
Laramie Energy Technology Ctr.																		
Laramie Energy Technology Ctr.				i					Х		Х						ź	

DEPARTMENT OF ENERGY (CONTINUED)	C, N	Electrical-DC/LF	Electrical-RF/Microwave	Magnetics, Dielectrics	Time and Frequency	Mass, Force, Density	Dimensional, Optics, Surface	Acoustics, Sound, Noise, Vibration	Liquid Gas Flow	Humidity	Temperature	Pressure, Vacuum	Ionization Radiation, Radioactivity	Medical Instrumentation	Automated Measuring Equipment	Material & Products Testing	Chemical Analysis	Radiometry and Photometry
Morgantown Energy Technology Center																		
Morgantown Energy Tech. Ctr.		Х						Х	Х			Х	Х		Х		Х	
Nevada Operations Office																		
EG&G, Las Vegas	CN	Х	Х		Х	Х	Х	Х		Х	Х	Х	Х			Х		Х
Holmes & Narver		Х	Х	Х	Х	Х	Х				Х	Х			Х	Х		Х
Reynolds	N					Х	Х	Х	Х		Х	Х	Х	Х		Х	Х	Х
Oak Ridge Operations																		
Goodyear Atomic, Portsmouth																	Х	
National Lead Company of Ohio		х				Х					Х	Х						
Oak Ridge Associated Universities													Х					
Oak Ridge National Laboratory	CN	Х			Х	Х	Х		Х	Х	Х	Х			Х	Х	Х	Х
Union Carbide, Analytical Services													Х				х	

DEPARTMENT OF ENERGY (CONTINUED)	C, N	Electrical-DC/LF	Electrical-RF/Microwave	Magnetics, Dielectrics	Time and Frequency	Mass, Force, Density	Dimensional, Optics, Surface	Acoustics, Sound, Noise, Vibration	Liquid Gas Flow	Humidity	Temperature	Pressure, Vacuum	Ionization Radiation, Radioactivity	Medical Instrumentation	Automated Measuring Equipment	Material & Products Testing	Chemical Analysis	Radiometry and Photometry
Union Carbide, Paducah Plant			Х			Х					Х	Х						
Union Carbide, K-25 Plant					Х	Х		Х	Х			Х				Х		
Union Carbide, Y-12 Plant	CN	Х		Х	Х	Х	Х	Х	Х	Х	Х	Х	Х		Х	Х	Х	Х
Pittsburgh Energy Technology Center																		
Pittsburgh Energy Technology Center																х	х	
Richland Operations Office																		
Pacific Northwest Labs	С												Х					
Westinghouse Hanford Lab	CN	Х			Х	Х	х		Х	х	Х	Х		-	Х			Х
San Francisco Operations Office																		
Lawrence Berkeley Laboratory		Х		Х	Х		Х				Х	Х	Х				Х	Х
Lawrence Livermore Lab.	N	Х	Х	Х	Х	Х	Х	Х			Х	Х	Х		Х	х	Х	х
Rockwell International		Х			Х	Х	Х		Х		Х	Х	Х				Х	
Stanford Linear Accelerator Center		Х	Х	х	Х	Х	х	х	Х	х	Х	Х	х	Х			Х	x

DEPARTMENT OF ENERGY (CONTINUED)	C, N	Electrical-DC/LF	Electrical-RF/Microwave	Magnetics, Dielectrics	Time and Frequency	Mass, Force, Density	Dimensional, Optics, Surface	Acoustics, Sound, Noise, Vibration	Liquid Gas Flow	Humidity	Temperature	Pressure, Vacuum	Ionization Radiation, Radioactivity	Medical Instrumentation	Automated Measuring Equipment	Material & Products Testing	Chemical Analysis	Radiometry and Photometry
Savanah River Operations Center E. I. du Pont de Nemours & Co. Savanah River Laboratory Bonneville Power Admin. Bonneville Laboratory	CN	x			X	x	X			x	x	x	X		x		x	X

DEPARTMENT OF TRANSPORTATION	C, N	Electrical-DC/LF	Electrical-RF/Microwave	Magnetics, Dielectrics	Fime and Frequency	Mass, Force, Density	Dimensional, Optics, Surface	Acoustics, Sound, Noise, Vibration	Liquid Gas Flow	Humidity 🐁	Temperature	Pressure, Vacuum	Ionization Radiation, Radioactivity	Medical Instrumentation	Automated Measuring Equipment	Material & Products Testing	Chemical Analysis	Radiometry and Photometry
Civil Aeromedical Institute Oklahoma City, Oklahoma Standards and Calibration Laboratory - Atlantic City, New Jersey	С	X	X X		x x	x x	X	x x		x	x x	x x	X		Х	x x	x	х
Transportation Test Center Calibration Laboratory – Pueblo, Colorado	CN	Х			х	Х	X	Х			Х	Х				x	Х	

M	٨	c	A
N	А	2	A

NASA	C, N	Electrical-DC/LF	Electrical-RF/Microwave	Magnetics, Dielectrics	Time and Frequency	Mass, Force, Density	Dimensional, Optics, Surface	Acoustics, Sound, Noise, Vibration	Liquid Gas Flow	Humidity	Temperature ·	Pressure, Vacuum	Ionization Radiation, Radioactivity	Medical Instrumentation	Automated Measuring Equipment	Material & Products Testing	Chemical Analysis	Radiometry and Photometry
Ames Research Center																		
Dryden Flight Research Center																		
Goddard Space Flight Center	С	Х	Х		Х	Х	Х				Х	Х						
Jet Propulsion Laboratory	C	Х	Х	Х	X	Х	Х	Х			Х	Х						
Johnson Space Center	CN	Х	Х		Х	Х	Х	Х	Х	Х	Х	Х			Х		Х	Х
Kennedy Space Center	CN	Х	Х	Х	Х	Х	Х	Х	Х	х	Х	Х	Х	Х	Х		Х	Х
Langley Research Center	C	Х	Х		Х	Х	Х	X	Х	Х	Х	Х	Х		Х			Х
Lewis Research Center	c	Х	Х		Х	Х		Х	Х		Х	Х			Х			
Marshall Space Flight Center	CN	х	Х		х	Х	х	х	Х	х	Х	х						
National Space Technology Laboratories	с	х	Х		x	Х	Х	х	Х	Х	Х	Х				Х	х	х
Wallops Flight Center	с	Х	Х	Х	Х	Х					Х	Х					Х	

V. GEOGRAPHICAL LISTING

This section is designed to assist in the location of a laboratory in a given geographical area. First there is a listing of laboratories by states. Each laboratory, listed by name only, is assigned a code. This code can be used to obtain further information about the laboratory by consulting the listings in Section III. The appropriate pages are given as follows:

CODE	PAGE
А	3
В	12
С	13
D	18
E	23
F	24

A map showing the location of each of the laboratories is given in Figure 1. The codes shown are those described above.

LABORATORY LISTING BY STATE

Code

Name

Zip Code

ALABAMA

B1 F9 A64	US Army Metrology & Calibration Center George C. Marshall Space Flight Center Maxwell Air Force Base	35809 35812 36112
	ALASKA	
A37 A4 C35 A91	Eielson Air Force Base Elmendorf Air Force Base Naval Station, ADAK, AK (FPO SE) Shemya AFB, AK (APO SE)	99702 99506 98791 98736
	ARIZONA	
A33 A61 A101	Davis Monthan Air Force Base Luke Air Force Base Williams Air Force Base	85707 85309 85224
	ARKANSAS	
A25 A 5 8	Blytheville Air Force Base Little Rock Air Force Base	72315 72076
	CALIFORNIA	
F1 A23 A29 A104 A42 F2 F4 D34 D35 C10 C11 A63 A7 C16 C3 C21 C6 C38 C39 C42 A74 C46 D36 D7 D37 A96 A112 C1	Ames Research Center Beale Air Force Base Castle Air Force Base Edwards Air Force Base George Air Force Base Hugh L. Dryden Flight Research Center Jet Proplusion Laboratory Lawrence Berkeley Laboratory Lawrence Livermore Laboratory Long Beach Naval Shipyard Mare Island Naval Shipyard Mather Air Force Base McClellan Air Force Base McClellan Air Force Base McClellan Air Rework Facility, Alameda Naval Air Rework Facility, North Island Naval Air Rework Facility, North Island Naval Plant Representative Office, Pomona Naval Weapons Center, China Lake Naval Weapons Station, Concord Naval Weapons Station, Seal Beach Norton Air Force Base Pacific Missle Test Center Rockwell International Sandia Laboratories Stanford Linear Accelerator Center Travis Air Force Base Western Standards Laboratory	94035 95903 95342 93523 92392 93523 91103 94720 94550 90802 94592 95655 95652 95655 95652 92311 94501 92135 91766 93555 94520 90740 92409 93042 91304 94505 94535 94535 94535
	27	

Name

Code

Zip Code

COLORADO

D16 A60 A79 D6 E3 A99	Bendix Field Engineering Corporation Lowry Air Force Base Peterson Air Force Base Rockwell International Transportation Test Center Calibration Lab USAFA Co.	81501 80230 80914 80401 81001 80840
	DELAWARE	
A34	Dover Air Force Base	19901
	DISTRICT OF COLUMBIA	
C2	Eastern Standards Laboratory	20374
	FLORIDA	
A105 D2 A47 F6 A62 C5 C20 A110 A111 A97	Eglin Air Force Base General Electric Company Homestead Air Force Base John F. Kennedy Space Center MacDill Air Force Base Naval Air Rework Facility, Pensacola Naval Air Rework Facility, Jacksonville Patrick Air Force Base ATTN: J. George Patrick Air Force Base ATTN: R. Schnepf Tyndall Air Force Base	32542 33733 33030 32899 33608 32508 32212 32925 32925 32925 32403
	GEORGIA	
C15 A69 A9	MCLSB Atlantic Moody Air Force Base Robins Air Force Base	31704 31601 31098
	HAWAII	
A46 C8 C14	Hickam Air Force Base Pearl Harbor Naval Shipyard US Marine Corps Air Station	96853 96860 96863
	IDAHO	
D17 A70	EG&G Idaho, Inc. Mt. Home Air Force Base	83401 83648
	ILLINOIS	
D11 A11 D13 D14 A87	Argonne National Laboratory Chanute Air Force Base Fermi National Accelerator Laboratory New Brunswick Laboratory Scott Air Force Base	60439 61868 60510 60439 62225

Code	Name	Zip Code
	INDIANA	
A44 C27 C41	Grissom Air Force Base Naval Avionics Facility Naval Weapons Support Center, Crane	46971 46218 47522
	IOWA	
D10	Ames Laboratory	50011
	KANSAS	
A41 A66	Forbes Air Force Base McConnell Air Force Base	66620 67221
	KENTUCKY	
B8 C31 D28	Lexington-Blue Grass Depot Activity Naval Ordnance Station Union Carbide	40511 40214 42001
	LOUISIANA	
A22 A38	Barksdale Air Force Base England Air Force Base	71110 71301
	MAINE	
A59	Loring Air Force Base	04750
	MARYLAND	
A20 F3 C26 C30 C37	Andrews Air Force Base Goddard Space Flight Center Naval Air Test Center, Patuxent River Naval Ordnance Station, Indian Head White Oak Laboratory	20331 20771 20670 20640 20910
	MASSACHUSETTS	
A107 A77	Hanscom Air Force Base Otis Air Force Base	01731 02542
	MICHIGAN	
A49 A88 A102	K. I. Sawyer Air Force Base Selfridge ANGB Wurtsmith Air Force Base	49842 48045 48753
	MINNESOTA	
A35	Duluth International Airport	55814
	MISSISSIPPI	
A32 A52 F10	Columbus Air Force Base Kessler Air Force Base National Space Technology Laboratories	39 701 39534 39529

39

Code	Name	Zip Code
	MISSOURI	
D1 A16	The Bendix Corporation Whiteman Air Force Base	64141 65305
	MONTANA	
A14	Malmstrom Air Force Base	59402
	NEBRASKA	
A75	Offutt Air Force Base	68113
	<u>NEVADA</u>	
D20 D21 A73 D22	EG&G Energy Measurements Group Holmes & Narver, Inc. Nellis Air Force Base Reynolds Electrical & Engineering Co., Inc.	89119 89023 89191 89114
	NEW HAMPSHIRE	
A78 C48	Pease Air Force Base Portsmouth Naval Shipyard	03801 03801
	NEW JERSEY	
A67 C17 C40 E2	McGuire Air Force Base Naval Air Engineering Center, Lakehurst Naval Weapons Station, Earle Standards & Calibration Laboratory	08641 08733 07722 08405
	NEW MEXICO	
A27 A108 A109 D3 D8	Cannon Air Force Base Holloman Air Force Base Kirtland Air Force Base Los Alamos Scientific Laboratory Sandia Laboratories	88101 88330 87117 87545 87185
	NEW YORK	
D12 A106 A80	Brookhaven National Laboratory Griffis Air Force Base Plattsburgh Air Force Base	11973 13441 12903
	NORTH CAROLINA	
C19 A81 A89	Naval Air Rework Facility, Cherry Point Pope Air Force Base Seymour Johnson Air Force Base	28533 28308 27531
	NORTH DAKOTA	
A43 D15 A15	Grand Forks Air Force Base Grand Forks Energy Technology Center Minot Air Force Base	58201 58205 58705

Code

N	а	m	é
	u		1

Zip Code

TEXAS

Bergstrom Air Force Base	78743
Carswell Air Force Base	76127
Dyess Air Force Base	79607
Kelly Air Force Base	78241
Laughlin Air Force Base	78840
Lyndon B. Johnson Space Center	77058
Mason and Hanger-Silas Mason Company	79117
Randolph Air Force Base	78148
Reese Air Force Base	79489
Sheppard Air Force Base	76311
	Carswell Air Force Base Dyess Air Force Base Kelly Air Force Base Laughlin Air Force Base Lyndon B. Johnson Space Center Mason and Hanger-Silas Mason Company Randolph Air Force Base Reese Air Force Base

UTAH

A5	Hill Air Force Base	84406

VIRGINIA

A56	Langley Air Force Base	23665
F7	Langley Research Center	23665
C4	Naval Air Rework Facility, Norfolk	23511
C29	NAVELEXSYSENGCEN Portsmouth	23705
C43	Naval Weapons Station, Yorktown	23491
C45	Norfolk Naval Shipyard	23709
F11	Wallops Flight Center	23337

WASHINGTON

D39	Bonneville Power Administration	98660
A39	Fairchild Air Force Base	99011
A65	McChord Air Force Base	98438
C25	Naval Air Station, Whidbey Island	98278
C44	Navy Torpedo Station	98345
D32	Pacific Northwest Laboratories	99352
C49	Puget Sound Naval Shipyard	98314
D33	Westinghouse	99352

WEST VIRGINIA

D19	Morgantown Energy Technology Center	26505
	WYOMING	
010		00001

A ! 3	F. E. Warren Air Force Base	82001
D18	Laramie Energy Technology Center	82701

Code

Name

Zip Code

OHIO

A1	Air Force Measurement Standards Laboratories	43055
D23	Goodyear Atomic Corporation	45661
F8	Lewis Research Center	44135
D5	Monsanto Research Corporation	45342
D24	National Lead Company of Ohio	45239
A8	Newark Air Force Base	43055
A85	Rickenbacker Air Force Base	43217
A113	Wright-Patterson Air Force Base	45433
	OKLAHOMA	

A18Altus Air Force Base73521D9Bartlesville Energy Technology Center74003E1Civil Aeromedical Institute73125A10Tinker Air Force Base73145A100Vance Air Force Base73701

PENNSYLVANIA

B4	Area Calibration Laboratory, Tobyhanna	18466
B3	Army Area Calibration Laboratory, Letterkenney	17201
C47	Philadelphia Naval Shipyard	19112
D31	Pittsburgh Energy Technology Center	15213

RHODE ISLAND

C7 US Navy Underwater Systems Center 028	nderwater Systems Center 028	02840
--	------------------------------	-------

SOUTH CAROLINA

A30	Charleston Air Force Base	29404
C9	Charleston Naval Shipyard	29408
D38	E. I. Du Pont De Nemours and Company	29801
A72	Myrtle Beach Air Force Base	29577
C28	NAVELEXSYSENGCEN Charleston	25406
A90	Shaw Air Force Base	29152

SOUTH DAKOTA

A12	Ellsworth Air Force Base	57706

TENNESSEE

D25 D26	Oak Ridge Associated Universities Oak Ridge National Laboratory	37830 37830
D27	Union Carbide Corporation, Nuclear Division	
	ATTN: O. H. Howard	37830
D29	Union Carbide Corporation, Nuclear Division	
	ATTN: E. Y. Kimmerly	37830
D30	Union Carbide Corporation, Nuclear Division	
	ATTN: S. W. Lockett	37830

LABORATORIES OUTSIDE THE UNITED STATES

Code

Name

Zip Code

ATLANTIC

A55	Lajes Field Azores	APO	NY	09406
C23	US Naval Air Station, Bermuda	FPO	NY	09560
A17	Albrook AFS CZ	APO	NY	09825
A94	Thule AB Greenland	APO	NY	09023
A53	Keflavik APRT Iceland	APO	NY	09571
A71	Muniz ANGB PR		PR	00914

ASIA

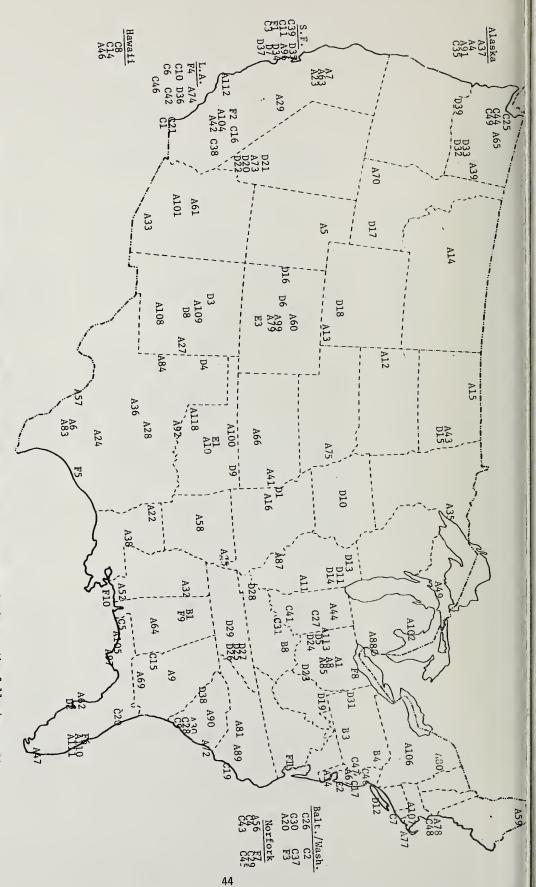
A19	Andersen AFB Guam	APO SF 96334
C22	US Naval Air Station Agana, Guam	FPO SF 96637
C32	Naval Ship Repair Facility, Guam	FP0 SF 96630
C13	Marine Corps Air Station, Iwakuni, Japan	FPO SE 98764
A68	Misawa AB Japan	APO SF 96519
C34	US Naval Ship Repair Facility, Yokosuka, Japan	FPO SE 98762
A103	Yokota AB Japan	APO SF 96328
B2	Area Calibration Laboratory, Korea	APO SF 96460
A54	Kunsan AB Korea	APO SF 96264
A76	Osan AB Korea	APO SF 96570
A50	Kadena AB Okinawa	APO NY 96239
C12	Marine Corps Air Station (H), Futema, Okinawa	FPO SE 98772
A3	Clark AB Phil	APO SF 96274
C24	Naval Air Station, Cubi Pt. Phil	FPO SF 96654
C33	Naval Ship Repair Facility, Subic Bay, Phil	FPO SF 96651
A31	Ching Chuan Kang Taiwan	APO SF 96319

EUROPE

A40	Feltwell England	APO NY 09179
A98	Upper Heyford England	APO NY 09194
A2	Bitburg AB GE	APO NY 09132
B5	CRSC, Augsburg	APO NY 01978
B6	CRSC, Pirmasens	APO NY 09138
B7	CRSC, Schwanheim	APO NY 09057
A45	Hahn AB GE	APO NY 09109
A82	Ramstein AB Germany	APO NY 09012
A93	Tempelhof Cent APRT Ger	APO NY 09611
A21	Aviano AB Italy	APO NY 09293
C18	US Naval Air Facility, Sigonella, IT	FPO NY 09523
A86	San Vito Dei Normanni, IT	APO NY 09240
A26	Camp New Amsterdam AB NE	APO NY 09292
C36	US Naval Station, Rota, Spain	FPO NY 09540
A95	Torrejon AB Spain	APO NY 09283
A48	Incirlik CDI Turkey	APO NY 09289
A51	Karamursel CDI Turkey	APO NY 09324

cω≯	CODE
12 13	PAGE
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23 24	18

Figure 1: Laboratory locations. For complete information see the listings beginning on the following pages:



VI. CATEGORY DESCRIPTIONS

In order that the user of this catalog may better interpret the laboratory capabilities as indicated by the categories listed in Section IV, the following examples are given. They are intended only to indicate the type of measurement to be included in each category and are not to be considered an all-inclusive listing.

- 1. ELECTRICAL DC/LF DC Voltage AC Voltage (low freq.) DC Voltage ratio AC Current (low freq.) DC Current Capacitance Resistance Inductance
- 2. ELECTRICAL RF/MICROWAVE AC Voltage Capacitance AC Voltage ratio Inductance AC Current Reflection coefficient Phase Angle RF power Attenuation Laser power
- MAGNETICS, DIELECTRICS Magnetic field Magnetic material properties Dielectric material properties
- 4. TIME & FREQUENCY Time Frequency
- 5. MASS, FORCE, DENSITY Mass Acceleration Density Shock Force Vibration Torque
- 6. DIMENSIONAL, OPTICS, SURFACES Length Refractive index Inside diameter Optical lens evaluation Roundness, concentricity Optical alignment Angle Flatness Volume Surface roughness Thread Hardness
- ACOUSTICS, SOUND, NOISE VIBRATION Acoustics Sound pressure level Microphone sensitivity
- LIQUID & GAS FLOW Liquid flow Gas flow
 Hydraulics Air speed
- 9. HUMIDITY Relative humidity Absolute himidity
- 10. TEMPERATURE Temperature

- 11. PRESSURE, VACUUM Pressure Vacuum Altimetry
- 12. IONIZING RADIATION, RADIOACTIVITY Alpha, Beta, and Gamma measurements Neutron measurements X-ray exposure
- 13. MEDICAL INSTRUMENTATION EKG portable recorders EKG strip chart recorders Defibrillators
- 14. AUTOMATED MEASURING EQUIPMENT Commercial automated calibration systems
- 15. MATERIALS & PRODUCTS TESTING Concrete Rubber Building materials Structures Paper
- 16. CHEMICAL ANALYSIS Spectrophotometry Gas chromatography Spectrophotofluorometry

pH test Water pollution Air pollution

17. RADIOMETRY AND PHOTOMETRY Luminous intensity Total irradiance Color temperature Brightness temperature

Solar radiometry Optical density

VII. OTHER INFORMATION SOURCES

1. National Conference of Standards Laboratories

The National Conference of Standards Laboratories (NCSL) is a continuing, nonprofit, laboratoryoriented organization which promotes cooperative efforts toward solving the common problems faced by standards laboratories in their organization and operation. It was established in 1961 under the sponsorship of the National Bureau of Standards. Its membership consists of academic, scientific, industrial, commercial, and government laboratories concerned with measuring physical quantities, calibrating standards and instruments, and developing standards of practice. It provides liaison with technical societies, trade associations, and educational institutions interested in these activities.

NCSL pursues its goals through joint voluntary action. It holds conferences and workshops, collects and disseminates information about current practices, prepares source material for preferred technical procedures, determines pertinent statistical information related to measurement standards and calibration activities, and helps laboratories to arrange measurement agreement audits.

NCSL prepares and distributes "A Directory of Standards Laboratories" which lists member and other standards laboratories. Each laboratory listing includes the laboratory address, name and telephone number of a point of contact, and an indication of the capabilities of the laboratory. Although the majority listed are private laboratories, also included are some Federal and State government laboratories.

The NCSL directory and membership lists may be obtained from:

NCSL Secretariat c/o National Bureau of Standards Attention: L. Kenneth Armstrong Boulder, CO 80303 (303) 499-1000 x3787

NCSL information is also available from the NBS Office of Measurement Services.

2. Government-Industry Data Exchange Program

The Government-Industry Data Exchange Program (GIDEP) is a cooperative effort to save time and money by making maximum use of existing knowledge. The program allows exchange of technical data essential in the research, design, development, production, and operational phases of the life cycle of systems and equipment.

The program is centrally managed and funded by the Government. Its participating organizations are the United States Army, Navy, Air Force, Marine Corps, Defense Supply Agency, General Services Administration, National Aeronautics and Space Administration, Department of Energy, and the National Security Agency, as well as the Canadian Department of Defence and hundreds of industrial organizations.

Participants in GIDEP have access to the four major data banks listed below. Proper use of these data banks can help improve quality and reliability and reduce costs in the development and manufacture of complex systems and equipment.

- o Engineering Data Bank
- o Failure Rate Data Bank
- o Metrology Data Bank
- o Failure Experience Data Bank

Participation requirements or additional information about GIDEP may be obtained from:

Director GIDEP Operations Center Corona, CA 91720 (714) 736-4677

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	(3) Additional types of information about the laboratories wh	ich would be useful
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calibration. I contact for mor and address. T tabular listing laboratories ar	n lists Federal laboratorie ncluded is the name of a pe e information as well as the he capabilities of each labo by agency. To provide geo e listed by States. In add by coded number. Other ref	rson at each labo e laboratory tele oratory are indic graphical distrib ition, the labora	pratory to phone numb cated in a pution, the atories are	er
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Note: The Journal was formerly published in two sections: Section A "Physics and Chemistry" and Section B "Mathematical Sciences."

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Annual subscription: Domestic, \$11.00; Foreign \$13.75

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National Standard Reference Data Series—Provides quantitative data on the physical and chemical properties of materials, compiled from the world's literature and critically evaluated. Developed under a world-wide program coordinated by NBS. Program under authority of National Standard Data Act (Public Law 90-396). NOTE: At present the principal publication outlet for these data is the Journal of Physical and Chemical Reference Data (JPCRD) published quarterly for NBS by the American Chemical Society (ACS) and the American Institute of Physics (AIP). Subscriptions, reprints, and supplements available from ACS, 1155 Sixteenth St. N.W., Wash., D.C. 20056.

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scope or definitive in treatment of the subject area. Often serve as a vehicle for final reports of work performed at NBS under the sponsorship of other government agencies.

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Consumer Information Series—Practical information, based on NBS research and experience, covering areas of interest to the consumer. Easily understandable language and illustrations provide useful background knowledge for shopping in today's technological marketplace.

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