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E82-10251

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Remote Sensing Procurement Package

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Remote Sensing Industry Directory

JUNE 1981

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INTRODUCTION

This directory is part of a package of tools designed to assist state and local governments with remote sensing procurements. The complete Remote Sensing Procurement Package consists of four parts.

- o Remote Sensing Procurement: An Executive Summary -- A short brochure written for elected officials and chief executives, that discusses the benefits of a structured remote sensing procurement process and describes the package organization, content, and scope.
- o Remote Sensing Procurement: A Management Report for State and Local Governments -- A somewhat longer document, written for chief executives and senior administrators, that provides an overview of the remote sensing procurement process and explains how to plan, organize, staff, and implement a remote sensing procurement project.
- o Remote Sensing Procurement: A Technical Guide for State and Local Governments -- A step-by-step procedural guide to the techniques of remote sensing procurement, written for administrators, information managers, planners, and procurement specialists who will be directly involved in evaluating bids or proposals, negotiating, awarding, and administering a contract, or evaluating remote sensing procurements.
- o Remote Sensing Procurement: The Remote Sensing Industry Directory -- A directory of over 140 firms and organizations which contains detailed information in the types of products, services and equipment which they offer. Also included for each firm or organization are addresses, phone numbers, contact person(s), and experience in the remote sensing field.

SURVEY METHODOLOGY

The information in this directory was obtained from a mail survey of remote sensing firms and organizations which was conducted between the months of June, 1980, and August, 1980. An extensive questionnaire was developed and mailed to over 500 organizations. The original

mailing list was compiled from professional association membership lists, and various remote sensing conference and workshop attendance lists. In addition, notices were placed in several remote sensing newsletters requesting interested firms to contact PTI in order to be included in the mailing list. Over 65 firms and organizations responded to these notices and subsequently were also placed on the mailing list. The Directory contains information on the 143 firms and organizations who returned completed questionnaires. Directory users should be aware that the information contained in the Directory has not been independently verified. All information was supplied by the survey respondent.

DIRECTORY ORGANIZATION

Firms and organizations included in the Directory are listed in alphabetical order. Information on each of these firms is contained on four separate pages. Each page covers a separate category of information. They are as follows:

1. Summary Information
2. Facilities and Special Equipment
3. Products and Services Provided
4. Remote Sensing Equipment/Systems Provided

1. Summary Information

One page of summary information has been compiled for each firm or organization represented in the Directory. This page contains the following:

- o Organization name and address
- o Years in business
- o Projects completed

- o Region served (Specified as U.S. International, or Federal Region. (See Table 1 to identify the states included in each Federal Region I through X).
- o Qualification as a small business contractor
- o Qualification as a minority owned business
- o Total applicable employees (number of employees directly involved in remote sensing)
- o Types of remote sensing technologies typically used or if the firm manufactures or sells software or hardware the type of remote sensing that is compatible with the equipment
- o Personnel and skills represented in the organization
- o A brief statement of capabilities

2. Facilities and Special Equipment

This page contains detailed information on the types of facilities and equipment owned by the organization. This information is catalogued according to the following categories.

- o Aircraft
- o Cameras/Scanners/Other Remote Sensors
- o Field Survey Equipment
- o Photographic Processing Equipment
- o Photogrammetric Processing Equipment
- o Image Interpretation/Viewing/Mapping (non-digital)
- o Image Interpretation/Viewing/Mapping (digital)
- o Digitizing/Plotting/Graphics
- o Other Computer Processing
- o Other Equipment or Facilities

3. Products and Services Provided

The third page contains information on the specific types of pro-

TABLE 1

Federal Regions

Region I	Maine Vermont New Hampshire	Massachusetts Connecticut Rhode Island
Region II	New York New Jersey Delaware	
Region III	Pennsylvania West Virginia Virginia	Maryland District of Columbia
Region IV	Kentucky Tennessee North Carolina South Carolina	Mississippi Alabama Georgia Florida
Region V	Michigan Wisconsin Illinois	Indiana Ohio Minnesota
Region VI	New Mexico Texas Oklahoma	Arkansas Louisiana
Region VII	Nebraska Iowa	Kansas Missouri
Region VIII	Montana North Dakota South Dakota	Wyoming Utah Colorado
Region IX	California Nevada	Arizona Hawaii
Region X	Washington Oregon	Idaho Alaska

ducts and services offered by the respondent. Products and Services offered are listed according to the following categories.

- o Image Products
- o Enhanced and Corrected Imagery
- o Photogrammetric Products
- o Interpreted, Thematic Products
- o Project Planning and Support Services
- o Aerial Survey
- o Image Processing, Interpretation and Analysis
- o Photogrammetric Engineering
- o Reproduction
- o Other Services

In addition, specific items or services which require a custom price quotation or are subcontracted are designated with a letter code. All items preceded by the letter (c) require custom price quotations. All items preceded by the letter (s) are subcontracted. Thus in the following example the first four products require a custom price quotation; the following eight products beginning with Orthophotos are subcontracted.

PHOTOGRAMMETRIC PRODUCTS

(c) Engineering Cross Sections; Earthwork Measurements; Digital Data Bases; Planimetric Maps; (s) Orthophotos; Topographic Maps; Stockpile Measurements; Digital Terrain Models; Photo-Contour Maps; Plan and Profile Sheets; Volumetric Calculations; Distance & Angle Measurements

When no letter code precedes a series of items, as in the following example, they are available from a standard price list.

ENHANCED AND CORRECTED IMAGERY

All following include both Photo & Digital: Multitemporal Composites; Contrast Enhanced; Geometric Correction; Density Slice; Change Detection; Multisensor Composites; Radiometric Correction; Image Resampling; Pseudo Stereo.

4. Remote Sensing Equipment/Systems Provided

The final page contains a detailed listing of the types of hardware, software, and integrated systems which are manufactured, sold, or leased to clients by firms which manufacture or sell equipment or systems. If the firm or organization does not supply equipment or systems, this page is omitted. This information is catalogued according to the following categories.

- o Remote Sensor Systems
- o Viewing Equipment
- o Photogrammetric Equipment
- o Digital Image Processing Equipment
- o Software
- o Integrated Systems
- o Other Equipment

Index

This section of the Directory contains several indices to aid in locating firms and organizations included in the Directory. Directory respondents have been catalogued according to geographic region served and type of remote sensing technology used. In addition a list of all hardware and software suppliers and a list of university affiliated remote sensing organizations is also included in the Index.

REMOTE SENSING INDUSTRY DIRECTORY

MASTER ADDRESS LIST

COMPANY NAME

ACCU-AIR SURVEYS, INC.
1220 "A" AVE, P.O BOX 763
SEYMOUR, IN 47274
(812) 522-2300

AERIAL CARTOGRAPHICS OF AMERICA, INC.
7000 Lake Ellenor Dr. Suite 111
Orlando, FL 32809
(305) 851-7880

AERIAL DATA REDUCTION ASSOCIATES, INC
9285 Commerce Highway - P.O Box 557
Pennsauken, NJ 08110
(609) 663-7200

AERIAL INFORMATION SYSTEMS, INC.
23537 Crest Forest Dr./P.O. Box 790
Crestline, CA 92325
(714) 338-4615/338-4034

AERIAL SURVEY & PHOTO, INC.
RFD #1, Box 14
Skowhegan, ME 04976
(207) 474-8686

**AERO SERVICE DIVISION, WESTERN GEOPHYSICAL
COMPANY OF AMERICA**
P.O. Box 1939
Houston, TX 77001
(713) 794-5800

AERO METRIC ENGINEERING, INC.
4708 N. 40th Street
Sheboygan, WI 53081
(414) 456-3631

AEROCON PHOTOGRAMMETRIC SURVEYS, INC.
30575 Euclid Ave.
Wickliffe, OH 44092
(216) 585-2500

AEROECO (AERIAL ECOLOGICAL ANALYSTS)
2303 Archdale Rd.
Reston, VA 22091
(703) 860-4673

AEROGRAPHICS CORP.
1575 Smithtown Ave. P.O. 248
Bohemia, NY 11716
(516) 589-6045

AGIMAGES
P.O. Box 395
Davis, CA 95616
(916) 756-6028

AIR PHOTOGRAPHICS, INC.
Route 4, Box 500-Martinsburg Airport
Martinsburg, WV 25401
(304) 263-6076

AIRVIEW SPECIALISTS CORPORATION
3419 Churin Dr.
Mountain View, CA 94040
(415) 965-4433

ALAN GORDON ENTERPRISES, INC. SEE GORDON

ARIX, A PROFESSIONAL CORP.
2021 Clubhouse Drive
Greeley, CO 80631
(303) 330-2749

ART-O-GRAPH
529 South 7th
Minneapolis, MN 55415
(612) 336-1661

AUTOMATED SCIENCES GROUP, INC.
8555 Sixteenth Street
Silver Spring, MD 20910
(301) 587-8750

AVIS AIRMAP, INC.
Avis Park @ Washington Street
Beverly, MA 02184
(617) 848-8000

MASTER ADDRESS LIST (CONT.)

COMPANY NAME

BAKER, JR. INC., MICHAEL
4301 Dutch Ridge Rd.
P.O. Box 280
Beaver, PA 15009
(412) 495-7711

BAUSCH AND LOMB INC.
1400 N. Goodman Street
Rochester, NY
(716) 338-6466

BECHTOLD SATELLITE TECHNOLOGY CORP. (BESTEC)
667 Brea Canyon Rd., #26
Walnut, CA 91789
(714) 598-6037

BROOMALL INDUSTRIES, INC.
700 Abbott Dr.
Broomall, PA 19008
(215) 328-1040

BURNS, P.E. JOSEPH P.
P.O. Box 24052
Edina (Mpls.), MN 55424
(612) 922-2450

**BUTLER UNIVERSITY, HOLCOMB
RESEARCH INSTITUTE**
Butler University, 4600 Sunset
Indianapolis, IN 46208
(317) 283-9555

CALSPAN CORPORATION
P.O. Box 400
Buffalo, NY 1-225
(716) 632-7500

CARTWRIGHT AERIAL SURVEYS, INC.
Executive Airport, 6151 Freepport Blvd.
Sacramento, CA 95822
(916) 421-3465

CHAS. T. MAIN, INC., SEE MAIN, INC.

CHICAGO AERIAL SURVEY
2140 Wolf Rd.
Des Plaines, IL 60018
(312) 298-1480

CH2M HILL, INC.
P.O. Box 2088
Redding, CA 96099
(916) 243-5831

COMPUTER SCIENCES CORPORATION
8728 Colasville Rd.
Silver Spring, MD 20910
(310) 589-1545

COMPUTER TALK INC.
24020 HWG 74
Idledale, CO 80453
(303) 697-5485

COMTAL CORPORATION
505 West Woodbury Rd
Altadena, CA 91001
(213) 797-1175

**CORNELL UNIVERSITY REMOTE SENSING
PROGRAM**
School of Civil & Environmental Eng.,
Hollister Hall
Ithaca, NY 14853
(607) 256-4330

**CORNWELL, SALLY BAY, EXECUTIVE
CONSULTING**
Address not given
(303) 499-0349

DEADALUS ENTERPRISES, INC.
P.O. Box 1869 (300 Parkland Plaza)
Ann Arbor, MI 48106
(303) 769-5649

DAMES & MOORE
7101 Wisconsin Ave, Suite 700
Washington, D.C, 20014
(301) 652-2215

DATA TECHNOLOGY, INC.
4 Gill Street
Woburn, MA 01801
(617) 935-8820

MASTER ADDRESS LIST (CONT.)

COMPANY NAME

DAVID C. SMITH & ASSOC. SEE SMITH
& ASSOC.

DEANZA SYSTEMS, INC.
118 Charcot Ave.
San Jose, CA 95131
(408) 263-7155

EARTH SATELLITE CORPORATION
7222 47th Street (Chevy Chase)
Washington, D.C. 20015
(301) 652-7130

EARTH SCIENCE CONSULTING AND
TECHNOLOGY CORPORATION
3001 Red Hill Ave.
Bldg. II, Suite 212
Costa Mesa, CA 92626
(714) 751-3730

EASTMAN KODAK COMPANY
343 State Street
Rochester, NY 14650
(716) 724-4000

ECOSYSTEMS INTERNATIONAL, INC.
P.O. Box 225
Gambrills, MD 21054
(301) 987-4976

EGBERT SCIENTIFIC SOFTWARE
J-74 Driftwood Cove (P.O. Box 42)
Greenport, NY 11944
(516) 477-1357

ENVIRONMENTAL RESEARCH &
TECHNOLOGY, INC.
696 Virginia Rd.
Concord, MA 01742
(617) 369-8910

ENVIRONMENTAL RESOURCE GROUP (ERG)
6380 Wilshire Blvd., Suite 804
Los Angeles, CA 90048
(213) 653-1086

EXECUTIVE RESOURCE ASSOCIATES, INC.
1911 Jefferson Davis Highway, Suite 902A
Arlington, VA 22202
(703) 522-5706

EXPLORATION RESEARCH ASSOCIATES, INC.
1701 Clinton Street Suite 212
Los Angeles, CA 90026
(213) 483-5127

FOSTER & COMPANY, JERRY
3611 Oak Lawn #206
Dallas, TX 75219
(214) 521-9630

FUGRO GEOMETRICS, INC.
2200 East 27th Street
Long Beach, CA 90806
(213) 595-4865

FUGRO, INCORPORATED
3777 Long Beach Blvd.
Long Beach, CA 90807
(213) 595-6611

GENERAL ELECTRIC COMPANY, SPACE
SYSTEM DIVISION
5030 Herzel Place
Beltsville, MD 20705
(301) 937-3500

GEODETTIC SERVICES, INC.
1511 S. Riverview Drive
Melbourne, FL 32901
(305) 724-6831

GEORGIA TECH EES
EES/EML - Baker Bldg.
Atlanta, GA 30332
(404) 894-3357

GERBER SCIENTIFIC INSTRUMENT COMPANY
(GSI)
P.O. Box 305
Hartford, CT 06101
(203) 644-1551

GIBBS & HILL
393 Seventh Ave
New York, NY 10001
(212) 760-8426

GORDON ENTERPRISES, INC., ALAN
5362 Cahuenga Blvd.
No. Hollywood, CA 91601
(213) 985-5500

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COMPANY NAME

GREENHORNE & O'MARA, INC.
6715 Kenilworth Ave
Riverdale, MD 20840
(301) 277-2121

HAMMON, JENSEN, WALLEN & ASSOCIATES, INC.
8407 Edgewater Drive
Oakland, CA 94621
(415) 638-6122

HARDEN ASSOCIATES, INC., M.J.
1019 Admiral Blvd.
Kansas City, MO 64106
(816) 842-0141

HARZA ENGINEERING COMPANY
150 S. Wacker Drive
Chicago, IL 60606
(312) 855-7000

HEIMBUCH-STANTURF, INC.
119 King Rd West
Ithaca, NY 14850
(607) 277-4608

HENDERSON AERIAL SURVEYS, INC.
5125 West Broad Street
Columbus, OH 43228
(614) 878-3925

HUNTING SURVEYS & CONSULTANTS
790 Madison Ave
New York, NY 10021
(212) 988-9600

INTERNATIONAL MAPPING UNLIMITED
4343 39th Street, N.W.
Washington, D.C. 20016
(202) 244-4032

INTERPRETATION SYSTEMS INCORPORATED
6322 College Blvd.
Overland Park, KS 66211
(913) 642-8700

ITEK OPTICAL SYSTEMS
10 Maguire Rd
Lexington, MA 02154
(617) 276-2502

JAMES W. SEWALL COMPANY, SEE SEWALL CO.

JAX STATE GEO-CARTOGRAPHIC SERVICES
Dept. Of Geography; Jacksonville
State University 36265
(205) 435-9820 ext 301

JERRY FOSTER & COMPANY, SEE FOSTER & CO.

JOSEPH BURNS, P.E., SEE BURNS, P.E.

KEDDAL & ASSOCIATES, INC.
1900 Sleepy Hollow Rd.
Library, PA 15129
(412) 835-1115

KERN INSTRUMENTS, INC.
Geneva Rd.
Brewster, NY 10509
(914) 279-5095

KEUFFEL & ESSER COMPANY
20 Whippany Rd.
Morristown, NJ
(201) 285-5281

KIMBALL & ASSOCIATES, ROBERT L.
615 West Highland Ave.
Edensburg, PA 15931
(814) 472-7700

KOOGLE & POULS ENGINEERING, INC.
8338-A Comanche, N.E.
Albuquerque, NM
(505) 294-5051

KREIG & ASSOCIATES, INC. R.A.
Suite K, 1709 S. Bragaw
Anchorage, AK 99504
(907) 276-2025

L. ROBERT KIMBALL & ASSOC., SEE KIMBALL
& ASSOC.

LA. STATE UNIVERSITY, REMOTE SENSING &
IMAGE PROCESSING
Louisiana State University
Baton Rouge, LA 70803
(504) 388-8417

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M & S COMPUTING, INC.
P.O. Box 5183
Huntsville, AL 35805
(205) 772-3411

MAIN, INC., CHAS. T.
P.O. Box 240236
Charlotte, N.C. 28224
(704) 554-1100

MARS, INC.
3644 East McDowell Rd.
Phoenix, AZ 85008
(602) 267-8008

MARTEL LABORATORIES, INC.
1025 Cromwell Bridge Rd
Baltimore, MD 21204
(301) 825-7790

MARTINEZ ORTHO-MAPPING CORPORATION
240 E. Fillmore Ave
St. Paul, MN 55107
(612) 291-1127

MARTA TECHNOLOGY, INC.
120C Albright Way
Los Gatos, CA 95030
(408) 866-6606

MEAD TECHNOLOGY LABORATORIES
3481 Dayton-Xenia Rd.
Dayton, OH 45432
(513) 426-3111

METREX MANAGEMENT CORPORATION
131 N. San Gabriel Blvd.
Pasadena, CA 91107
(213) 449-8162

METRICS, INC.
290 Interstate North, Suite 116
Atlanta, GA 30339
(404) 955-1975

MICHAEL BAKER, JR., INC., SEE BAKER,
JR., INC.

MISSISSIPPI STATE UNIVERSITY
P.O. Box FD
Mississippi State, MS 39762
(601) 325-2946

NATIONAL PARK SERVICES, REMOTE SENSING
DIVISION, UNIVERSITY OF NEW MEXICO
P.O. Box 26176
Albuquerque, NM 87125
(505) 277-4165

NORTHERN AERIAL SURVEY
3025 Airport Rd.
Hasting, MI 49058
(616) 945-3216

NORTH PACIFIC AERIAL SURVEYS, INC.
4241 "B" Street
Anchorage, AK 99503
(907) 274-3548

OKLAHOMA STATE UNIVERSITY CENTER FOR
APPLICATIONS OF REMOTE SENSING
Engineering South 403
Stillwater, OK 74078
(405) 624-5178

OMI CORPORATION OF AMERICA
1319 Powhatan Street
Alexandria, VA 22314
(703) 549-9191

OPTRONICS INTERNATIONAL, INC.
7 Stuart Rd.
Chelmsford, MA 01824
(617) 256-4511

OWEN AYRES & ASSOCIATES, INC.
2132 Pankratz Street
Madison, WI 53704
(608) 249-0471

PAN AMERICAN SURVEYS, INC.
8755 S.W. 131 Street
Miami, FL 33176
(305) 235-7051

PHOTO SCIENCE, INC.
7840 Airpark Rd.
Gaithersburg, MD 20760
(301) 948-8550

PHOTOGRAPHIC INTERPRETATION CORPORATION
Box 868
Hanover, NH 03755
(603) 643-2268

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PICKERING RESEARCH CORPORATION 1444 Wentworth Ave., P.O. Box 986 Pasadena, CA 91102 (213) 795-7557	ROBINSON AERIAL SURVEYS, INC. 43 Sparta Ave Newton, NJ 07860 (201) 383-2511
PRECISION PHOTO LABORATORIES 5758 N. Webster Street Dayton, OH 45414 (513) 898-7450	SALLY BAY CORNWELL, SEE CORNWELL, SALLY BAY
PURDUE, LABORATORY FOR APPLICATIONS OF REMOTE SENSING, LARS 1220 Potter Dr. West Lafayette, IN 47906 (317) 749-2052	SAN JOSE STATE UNIVERSITY, CARTEMS LABORATORY, DEPARTMENT OF GEOGRAPHY Washington Square San Jose, CA 95192 (408) 277-3463
R.A. KREIG & ASSOCIATES, INC. SEE KREIG & ASSOCIATES, R.A.	SEISCOM DELTA, INC., DIGITAL IMAGES DIVISION P.O. Box 36928 Houston, TX 77036 (713) 789-6020
RAMTEK 7979 Old Georgetown Rd. Suite 900 Bethesda, MD 20014 (301) 656-0557	SEWALL COMPANY, JAMES W. 147 Center Street Old Town, ME 04468 (207) 827-4456
RAPID COLOR, INC. 1236 S. Central Ave. Glendale, CA 91204 (213) 240-6100	SIDWELL COMPANY, INC. 28W240 North Ave. West Chicago, IL 60185 (312) 231-0206
RCA GOVERNMENT SYSTEMS DIVISION Rt. #38 Cherry Hill, NJ 08358 (609) 338-4188	SMITH ASSOCIATES, DAVID C. 1734 S.E Tacoma Portland, OR 97202 (503) 232-5285
RESOURCE INFORMATION ASSOCIATES, INC. P.O. Box 95 Charlotte, MI 48813 (517) 543-5525	SMYTH GEOLOGIST, INC., C.S. 14044 NE Eighth Street Bellevue, WA 98007 (206) 746-0333
RESOURCE DEVELOPMENT ASSOCIATES 1101 N. San Antonio Rd, Suite 301 Mountain View, CA 94043 (415) 961-9477	SOUTH DAKOTA STATE UNIVERSITY, REMOTE SENSING INSTITUTE Wenona Hall South Dakota State Univ. Brookings, SD 57007 (605) 688-4184
RICHARDS CORPORATION 1545 Spring Hill Rd. McLean, VA 22101 (703) 893-8400	

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P.O. Box 1608
Fairbanks, AK 99701
(907) 479-2924

SPACE-TEK
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Redding, CA 96002
(916) 243-3024

SPATIAL DATA SYSTEMS
508 S. Fairview Ave., P.O. Box 249
Goleta, CA 93017
(805) 967-2328

SPECTRAL DATA CORP.
112 Parkway Drive S.
Hauppauge, NY 11787
(516) 543-4441

STONEROCK AERIAL SURVEYS
7990 M-15
Clarkston, MI
(313) 625-4890

SURDEX CORPORATION
520 Mercury Blvd.
Chesterfield, MO 63017
(314) 532-3427

SYSTEM PLANNING CORPORATION
1500 Wilson Blvd.
Arlington, VA 22209
(703) 541-2844

SYSTEMHOUSE
99 Bank Street, 3rd Floor
Ottawa, Ontario K1P 6B9
(613) 236-9734

TECHNICOLOR GRAPHIC SERVICES INC.
P.O. Box 1242
Sioux Falls, SD 57101
(605) 594-6511

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Tullahoma, TN 37388

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TRW DEFENSE AND SPACE SYSTEMS GROUP
One Space Park
Redondo Beach, CA 90278
(213) 535-4321

UNIVERSITY OF ALASKA, NORTHERN REMOTE
SENSING LABORATORY
Geophysical Institute
Fairbanks, AK 99701
(907) 479-7363

UNIVERSITY OF ARIZONA
Tucson, AZ 85721
(602) 626-4242

UNIVERSITY OF DELAWARE, CENTER FOR
REMOTE SENSING
College of Marine Studies
Newark, DE 19711
(302) 730-2336

UNIVERSITY OF FLORIDA, REMOTE SENSING
APPLICATIONS LABORATORY
346 Weil Hall
Gainesville, FL 32611
(904) 392-1436/ (904) 392-6590

UNIVERSITY OF KANSAS APPLIED REMOTE
SENSING PROGRAM (KARS)
2291 Irving Hill Rd.
Lawrence, KS 66045
(913) 864-4775

MASTER ADDRESS LIST (CONT.)

COMPANY NAME

UNIVERSITY OF NEW MEXICO, TECHNOLOGY
APPLICATIONS CENTER
Albuquerque, NM 87131
(505) 277-3622

UNIVERSITY OF NEBRASKA, REMOTE
SENSING APPLICATIONS LAB.
Omaha, NB 68182
(402) 554-2725

UNIVERSITY OF SOUTH CAROLINA COMPUTER
GRAPHICS
2712 Middleburg Dr., Suite 104
Columbia, SC 29204
(803) 777-7236

UNIVERSITY OF TENNESSEE SPACE INSTITUTE
Tullahoma, TN 37388
(615) 455-0631

UNIVERSITY OF WASHINGTON, DEPT OF CIVIL
ENGINEERING
121 More Hall (FX-10)
Seattle, WA 98195
(206) 543-2684

VIRGINIA INSTITUTE OF MARINE SCIENCE
REMOTE SENSING CENTER
Gloucester Point, VA 23062
(804) 642-2111

VERNON GRAPHICS, INC.
400 Executive Blvd.
Elmsford, NY 10523
(914) 592-4890

W.A.C. CORPORATION
520 Conger St.
Eugene, OR 97402
(503) 342-5169

WASHINGTON STATE DEPARTMENT OF NATURAL
RESOURCES
Resource Inventory Section QW-21
Olympia, WA 98504
(206) 753-5338

WALKER & ASSOCIATES, INC.
6264 Stanley Ave. S.
P.O. Box c-81430
Seattle, WA 98108
(206) 763-9858

WILSON & COMPANY, ENGINEERS &
ARCHITECTS
631 E. Crawford
Salina, KS
(913) 827-0433

WISE-L CONSULTANTS, LTD.
2115 Aspen Ave., N.W.
Albuquerque, NM 87104
(505) 243-2117

WOODWARD-CLYD CONSULTANTS
1350 Baur Blvd.
St. Louis, MO 63132
(314) 997-5700

WOOLPERT CONSULTANTS
2324 Stanley Ave
Dayton, OH 45404
(513) 461-5660

REMOTE SENSING INDUSTRY DIRECTORY

REMOTE SENSING FIRMS SERVING U.S.

COMPANY NAME

AERIAL INFORMATION SYSTEMS, INC.
AERO SERVICE DIV. WESTERN GEOPHY. CO. OF AM.
AEROCEN PHOTOGRAMMETRIC SURVEYS, INC.
AERODECO (AERIAL ECOLOGICAL ANALYSTS)
AERIMAGES
AIRVIEW SPECIALISTS CORPORATION
ALAN GORDON ENTERPR., INC. SEE GORDON ENTERP.
ART-O-GRAPH
AUTOMATED SCIENCES GROUP, INC.
BAKER, JR., INC., MICHAEL
BAUSCH AND LOMB, INC.
BECHTEL SATELLITE TECHNOLOGY CORP. (BESTEC)
BROOKMALL INDUSTRIES, INC.
BURNS, P.E., JOSEPH P.
BUTLER UNIV., HOLCOMB RESEARCH INSTITUTE
CALSPAN CORPORATION
CAPTWRIGHT AERIAL SURVEYS, INC.
CHAS. T. MAIN, INC., SEE MAIN, INC.
CHICAGO AERIAL SURVEY
CH2M HILL, INC.
COMPUTER SCIENCES CORPORATION
COMPUTER TALK INC.
COMTEL CORPORATION
CORNELL UNIVERSITY REMOTE SENSING PROGRAM
CORNWELL, SALLY BAY, EXECUTIVE CONSULTING
DAEDALUS ENTERPRISES, INC.
DAMES & MOORE
DATA TECHNOLOGY, INC.
DAVID C. SMITH & ASSOC. SEE SMITH & ASSOCC.
DEANZA SYSTEMS, INC.
EARTH SATELLITE CORPORATION
EASTMAN KODAK COMPANY
ECCSYSTEMS INTERNATIONAL, INC.
EGBERT SCIENTIFIC SOFTWARE
ENVIRONMENTAL RESEARCH & TECHNOLOGY, INC.
EXPLORATION RESEARCH ASSOCIATES INC.
FOSTER & COMPANY, JERRY
FUGRO GEOMETRICS, INC.
FUGRO, INC.
GENERAL ELECTRIC COMPANY, SPACE SYSTEMS DIV.
GEODETIC SERVICES, INC.
GEORGIA TECH. EES
GERBER SCIENTIFIC INSTRUMENT CO.
GIBBS & HILL
GORDON ENTERPRISES, INC., ALAN
GREENHORNE & O'MARA, INC.

HAMMON, JENSEN, MALLEN & ASSOCIATES, INC.
HEIMBUCH-STANTURF, INC.
HUNTING SURVEYS & CONSULTANTS
INTERNATIONAL MAPPING UNLIMITED
INTERPRETATION SYSTEMS INCORPORATED
ITEK OPTICAL SYSTEMS
JAMES W. SEWALL COMPANY, SEE SEWALL CO.
JERRY FUSTER & COMPANY, SEE FOSTER & CO.
JOSEPH BURNS, P.E., SEE BURNS, P.E.
KERN INSTRUMENTS, INC.
KIMBALL AND ASSOCIATES, ROBERT L.
KUGLE & POULS ENGINEERING, INC.
L. ROBERT KIMBALL & ASSOC., SEE KIMBALL & AS.
LA. ST. U., REMOTE SENSING & IMAGE PROCESS.,
M & S COMPUTING
MAIN, INC., CHAS. T.
MARS, INC.
MARTEL LABORATORIES, INC.
MARTINEZ ORTHO-MAPPING CORPORATION
MATRA TECHNOLOGY INC.
MEAD TECHNOLOGY LABORATORIES
METREX MANAGEMENT CORPORATION
METRICS, INC.
MICHAEL BAKER, JR., INC., SEE BAKER, JR., INC
NATIONAL PARK SVCS, R.S. DIV. UNIV OF N.M.
OKLAHOMA ST. U., CENTR. FOR APPL. OF R.S.
UMI CORPORATION OF AMERICA
OPTRONICS INTERNATIONAL, INC.
OWEN AYRES & ASSOCIATES, INC.
PHOTO SCIENCE, INC.
PHOTOGRAPHIC INTERPRETATION CORPORATION
PICKERING RESEARCH CORPORATION
PRECISION PHOTO LABORATORIES
PURDUE, LAB FOR APPL. OF REMOTE SENSING, LARS
RAMTEK
RAPID COLOR, INC.
RCA GOVERNMENT SYSTEMS DIVISION
RESOURCE INFORMATION ASSOCIATES, INC.
RESOURCES DEVELOPMENT ASSOCIATES
RICHARDS CORPORATION
ROBINSON AERIAL SURVEYS, INC.
SALLY BAY CURNWELL, SEE CURNWELL, SALLY BAY
SAN JOSE ST. U., CARTERS LAB., DEPT OF GEOG.
SEISCOM DELTA, INC., DIGITAL IMAGES DIV.
SEWALL COMPANY, JAMES W.
SMITH & ASSOCIATES, DAVID C.
SOUTH DAK. STATE U., REMOTE SENSING INST..
SPACE-TEK
SPATIAL DATA SYSTEMS
SPECTRAL DATA CORP.
SURDEX CORPORATION

ORIGINAL PAGE IS
OF POOR QUALITY

SYSTEM PLANNING CORPORATION
SYSTEMHOUSE
TECHNICOLOR GRAPHIC SERVICES, INC.
TECHNOLOGY DEVELOPMENT CORPORATION
TELLURUMETER-USA
TOPOGRAPHIC SCIENCES CORPORATION
TRW DEFENSE AND SPACE SYSTEMS GROUP
UNIV. OF ARIZONA
UNIV. OF DELAWARE, CENTER FOR REMOTE SENSING
UNIV. OF KANSAS APPLIED R.S. PROGRAM (KARS)
UNIV. OF N.M., TECHNOLOGY APPLICATIONS CTR.
UNIV. OF NEB., REMOTE SENSING APPL. LAB.
UNIV. OF TENN., SPACE INSTITUTE
UNIV. OF WASHINGTON, DEPT. OF CIVIL ENG.
VERNON GRAPHICS, INC.
WOODWARD-CLYDE CONSULTANTS

REGION I

COMPANY NAME

AERIAL DATA REDUCTION ASSOCIATES, INC.
AEROGRAHICS CORP.
AIR PHOTOGRAPHICS, INC.
AVIS AIRMAP, INC.
WOODPERT CONSULTANTS

REGION II

COMPANY NAME

AERIAL DATA REDUCTION ASSOCIATES, INC.
AEROGRAHICS CORP.
AIR PHOTOGRAPHICS, INC.
AVIS AIRMAP, INC.
EARTH SCIENCE CONSULTING & TECH. CORP.
KEDDAL & ASSOCIATES, INC., R.M.
WOODPERT CONSULTANTS

REGION III

COMPANY NAME

AERIAL DATA REDUCTION ASSOCIATES, INC.
AEROGRAHICS CORP.
AIR PHOTOGRAPHICS, INC.
AVIS AIRMAP, INC.

EARTH SCIENCE CONSULTING & TECH. CORP.
HENDERSON AERIAL SURVEYS, INC.
KEDDAL & ASSOCIATES, INC., R.M.
TEKRA COGNITA
UNIV. OF S.C., COMPUTER GRAPHICS
VA. INSTITUTE OF MARINE SCIENCE, R.S. CENTER
WOOLPERT CONSULTANTS

REGION IV

COMPANY NAME

AERIAL CARTOGRAPHICS OF AMERICA, INC.
AERIAL DATA REDUCTION ASSOCIATES, INC.
AEROGRAPHICS CORP.
HENDERSON AERIAL SURVEYS, INC.
JAX ST. GEO-CARTOGRPH. SVCS. JACKSONVILLE STU
KEDDAL & ASSOCIATES, INC., R.M.
MISSISSIPPI STATE UNIVERSITY
PAN AMERICAN SURVEYS, INC.
SIDWELL COMPANY, INC.,
UNIV. OF FL., REMOTE SENSING APPL. LAB.
UNIV. OF S.C., COMPUTER GRAPHICS
WOOLPERT CONSULTANTS

REGION V

COMPANY NAME

AEROGRAPHICS CORP.
MARZA ENGINEERING COMPANY
HENDERSON AERIAL SURVEYS, INC.
KEDDAL & ASSOCIATES, INC., R.M.
NORTHERN AERIAL SURVEY
SIDWELL COMPANY, INC.,
STONEBUCK AERIAL SURVEYS, LTD.
WOOLPERT CONSULTANTS

REGION VI

COMPANY NAME

AERIAL CARTOGRAPHICS OF AMERICA, INC.
EARTH SCIENCE CONSULTING & TECH. CORP.
ENVIRONMENTAL RESOURCES GROUP (ERG)

ORIGINAL PAGE IS
OF POOR QUALITY

MISSISSIPPI STATE UNIVERSITY
SIDWELL COMPANY, INC.,
WISE-L CONSULTANTS, LTD.
WUOLPERT CONSULTANTS

REGION VII

COMPANY NAME

EARTH SCIENCE CONSULTING & TECH. CORP.
HARDEN ASSOCIATES, INC., M.J.
MENDERSON AERIAL SURVEYS, INC.
SIDWELL COMPANY, INC.,
WILSON & COMPANY, ENGINEERS & ARCHITECTS
WUOLPERT CONSULTANTS

REGION VIII

COMPANY NAME

ARIX, A PROFESSIONAL CORP.
EARTH SCIENCE CONSULTING & TECH. CORP.
ENVIRONMENTAL RESOURCES GROUP (ERG)
MANZA ENGINEERING COMPANY
SIDWELL COMPANY, INC.,
SMYTH GEOLOGIST, INC., C.S.
TREMOLY ASSOCIATES
WALKER & ASSOCIATES, INC.
WISE-L CONSULTANTS, LTD.

REGION IX

COMPANY NAME

ARIX, A PROFESSIONAL CORP.
CH2M HILL, INC.
EARTH SCIENCE CONSULTING & TECH. CORP.
ENVIRONMENTAL RESOURCES GROUP (ERG)
TERRA COGNITA
WALKER & ASSOCIATES, INC.

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OF POOR QUALITY

REGION X

COMPANY NAME

AERO-METRIC ENGINEERING, INC.
EARTH SCIENCE CONSULTING & TECH. CORP.
ENVIRONMENTAL RESOURCES GROUP (ERG)
HARZA ENGINEERING COMPANY
KREIG & ASSOCIATES, INC., R.A.
NORTHERN PACIFIC AERIAL SURVEYS, INC.
SMYTH GEOLOGIST, INC., C.S.
SPACE SYSTEMS
UNIV. OF ALASKA, NO. REMOTE SENSING LAB.
W.A.C. CORPORATION
WA. STATE DEPT OF NATURAL RESOURCES
WALKER & ASSOCIATES, INC.

REMOTE SENSING INDUSTRY DIPECTORY
LOW & MEDIUM ALTITUDE AERIAL PHOTO

COMPANY NAME

AERIAL CARTOGRAPHICS OF AMERICA, INC.
AERIAL DATA REDUCTION ASSOCIATES, INC.
AERIAL INFORMATION SYSTEMS, INC.
AERIAL SURVEY & PHOTO, INC.
AERIAL SERVICE DIV. WESTERN GEOPHY. CO. OF AM.
AERIAL-METRIC ENGINEERING, INC.
AERICON PHOTOGRAMMETRIC SURVEYS, INC.
AERICEO (AERIAL ECOLOGICAL ANALYSTS)
AEROGRAFICS CORP.
AGIMAGES
AIR PHOTOGRAPHICS, INC.
AIRVIEW SPECIALISTS CORPORATION
ARIX, A PROFESSIONAL CORP.
ART-O-GRAPH
AVIS AIRMAP, INC.
BAKER, JR., INC., MICHAEL
BAUSCH AND LOMB, INC.
BECHTOLD SATELLITE TECHNOLOGY CORP. (BESTEC)
BUTLER UNIV., HOLCOMB RESEARCH INSTITUTE
CALSPAN CORPORATION
CAPTWRIGHT AERIAL SURVEYS, INC.
CHAS. T. MAIN, INC., SEE MAIN, INC.
CHICAGO AERIAL SURVEY
CH2M HILL, INC.
CORNELL UNIVERSITY REMOTE SENSING PROGRAM
CORNWELL, SALLY BAY, EXECUTIVE CONSULTING
CAECALUS ENTERPRISES, INC.
DAMES & MOORE
DAVID C. SMITH & ASSOC. SEE SMITH & ASSOC.
EARTH SATELLITE CORPORATION
EARTH SCIENCE CONSULTING & TECH. CORP.
ECCSYSTEMS INTERNATIONAL, INC.
EGBERT SCIENTIFIC SOFTWARE
ENVIRONMENTAL RESEARCH & TECHNOLOGY, INC.
ENVIRONMENTAL RESOURCES GROUP (ERG)
EXPLORATION RESEARCH ASSOCIATES INC.
FOSTER & COMPANY, JEFFRY
FUGRO GEOMETRICS, INC.
FUGRO, INC.
GENERAL ELECTRIC COMPANY, SPACE SYSTEMS DIV.
GEODETIC SERVICES, INC.
GEORGIA TECH. EES
GIBES & HILL
GREENHORNE & C'ARA, INC.
HAMMON, JENSEN, HALLEN & ASSOCIATES, INC.

HARZA ENGINEERING COMPANY
HEIMBUCH-STANTURF, INC.
HENDERSON AERIAL SURVEYS, INC.
HUNTING SURVEYS & CONSULTANTS
INTERNATIONAL MAPPING UNLIMITED
INTERPRETATION SYSTEMS INCORPORATED
ITEK OPTICAL SYSTEMS
JAMES W. SEWALL COMPANY, SEE SEWALL CO.
JAX ST. GEO-CARTOGRAPH. SVCS. JACKSONVILLE STU
JEFFY FOSTER & COMPANY, SEE FOSTER & CO.
KIMBALL AND ASSOCIATES, ROBERT L.
KUCCLE & POULS ENGINEERING, INC.
KREIG & ASSOCIATES, INC., R.A.
L. ROBERT KIMBALL & ASSOC., SEE KIMBALL & AS.
LA. ST. U., REMOTE SENSING & IMAGE PROCESS.,
MAIN, INC., CHAS. T.
MARS, INC.
MARTEL LABORATORIES, INC.
MARTINEZ ORTHO-MAPPING CORPORATION
MATEA TECHNOLOGY INC.
MEAD TECHNOLOGY LABORATORIES
METREX MANAGEMENT CORPORATION
METRICS, INC.
MICHAEL BAKER, JR., INC., SEE BAKER, JR., INC
MISSISSIPPI STATE UNIVERSITY
NATIONAL PARK SVCS, R.S. DIV. UNIV OF N.M .
NORTHERN AERIAL SURVEY
NORTHERN PACIFIC AERIAL SURVEYS, INC.
OKLAHOMA ST. U., CENTR. FOR APPL. OF R.S.
OPTONICS INTERNATIONAL, INC.
OWEN AYRES & ASSOCIATES, INC.
PAN AMERICAN SURVEYS, INC.
PHOTO SCIENCE, INC.
PHOTOGRAPHIC INTERPRETATION CORPORATION
PRECISION PHOTO LABORATORIES
PURDUE, LAB FOR APPL. OF REMOTE SENSING, LARS
RESOURCE INFORMATION ASSOCIATES, INC.
RESOURCES DEVELOPMENT ASSOCIATES
ROBINSON AERIAL SURVEYS, INC.
SALLY BAY CORNWELL, SEE CORNWELL, SALLY BAY
SAN JOSE ST. U., CARTERS LAB., DEPT OF GEOG.
SEWALL COMPANY, JAMES W.
SICHELL COMPANY, INC.,
SMITH & ASSOCIATES, DAVID C.
SOUTH DAK. STATE U., REMOTE SENSING INST..
SPACE SYSTEMS
SPACE-TEK
SPECTRAL DATA CORP.
STONEROCK AERIAL SURVEYS, L.T.C.
SURDEX CORPORATION
SYSTEM PLANNING CORPORATION
SYSTEMHOUSE

TECHNICOLOR GRAPHIC SERVICES, INC.
TECHNOLOGY DEVELOPMENT CORPORATION
TERRA COGNITA
TOPOGRAPHIC SCIENCES CORPORATION
TRW DEFENSE AND SPACE SYSTEMS GROUP
UNIV. OF ALASKA, NO. REMOTE SENSING LAB.
UNIV. OF ARIZONA
UNIV. OF DELAWARE, CENTER FOR REMOTE SENSING
UNIV. OF FL., REMOTE SENSING APPL. LAB.
UNIV. OF KANSAS APPLIED R.S. PROGRAM (KARS)
UNIV. OF N.H., TECHNOLOGY APPLICATIONS CTR.
UNIV. OF NEB., REMOTE SENSING APPL. LAB.
UNIV. OF S.C., COMPUTER GRAPHICS
UNIV. OF TENN., SPACE INSTITUTE
*UNIV. OF WASHINGTON, DEPT. OF CIVIL ENG.
VA. INSTITUTE OF MARINE SCIENCE, R.S. CENTER
VERNON GRAPHICS, INC.
W.A.C. CORPORATION
WA. STATE DEPT OF NATURAL RESOURCES
*WALKER & ASSOCIATES, INC.
WILSON & COMPANY, ENGINEERS & ARCHITECTS
WISE-L CONSULTANTS, LTD.
WOODWARD-CLYDE CONSULTANTS
WULPERT CONSULTANTS

HIGH ALTITUDE AERIAL PHOTO

COMPANY NAME

AERIAL CARTOGRAPHICS OF AMERICA, INC.
AERIAL DATA REDUCTION ASSOCIATES, INC.
AERIAL INFORMATION SYSTEMS, INC.
AERO-METRIC ENGINEERING, INC.
AEROCOR PHOTOGRAMMETRIC SURVEYS, INC.
AERDECO (AERIAL ECOLOGICAL ANALYSTS)
AEROGRAFICS CORP.
AIR PHOTOGRAPHICS, INC.
AIRVIEW SPECIALISTS CORPORATION
AVIS AIRMAP, INC.
BALSCH AND LOMB, INC.
BECHTOLD SATELLITE TECHNOLOGY CORP. (BESTEC)
BUTLER UNIV., HOLCOMB RESEARCH INSTITUTE
CALSPAN CORPORATION
CARTWRIGHT AERIAL SURVEYS, INC.
CHAS. T. MAIN, INC., SEE MAIN, INC.
CHICAGO AERIAL SURVEY
CH2M HILL, INC.
CORNELL UNIVERSITY REMOTE SENSING PROGRAM

*LOW ALTITUDE AERIAL PHOTO ONLY

CORNWELL, SALLY BAY, EXECUTIVE CONSULTING
CAMES & MOORE
DAVID C. SMITH & ASSOC. SEE SMITH & ASSOC.
EARTH SATELLITE CORPORATION
EARTH SCIENCE CONSULTING & TECH. CORP.
ECOSYSTEMS INTERNATIONAL, INC.
EGBERT SCIENTIFIC SOFTWARE
ENVIRONMENTAL RESEARCH & TECHNOLOGY, INC.
ENVIRONMENTAL RESOURCES GROUP (ERG)
EXPLORATION RESEARCH ASSOCIATES INC.
FOSTER & COMPANY, JERRY
FUGRO GEOMETRICS, INC.
FUGRO, INC.
GENERAL ELECTRIC COMPANY, SPACE SYSTEMS DIV.
GEODETIC SERVICES, INC.
GEORGIA TECH. EES
GIERS & HILL
GREENHORNE & O'MARA, INC.
HAMMON, JENSEN, WALLEN & ASSOCIATES, INC.
HAFZA ENGINEERING COMPANY
HEIMBUCH-STANTURF, INC.
HUNTING SURVEYS & CONSULTANTS
INTERPRETATION SYSTEMS INCORPORATED
ITEK OPTICAL SYSTEMS
JAMES W. SEWALL COMPANY, SEE SEWALL CO.
JAX ST. GEO-CARTOGRAPH. SVCS. JACKSONVILLE STU
JERRY FOSTER & COMPANY, SEE FOSTER & CO.
KIMBALL AND ASSOCIATES, ROBERT L.
KOCGLE & POULS ENGINEERING, INC.
KREIG & ASSOCIATES, INC., R.A.
L. ROBERT KIMBALL & ASSOC., SEE KIMBALL & AS.
LA. ST. U., REMOTE SENSING & IMAGE PROCESS.,
MAIN, INC., CHAS. T.
MARTEL LABORATORIES, INC.
MARTINEZ ORTHO-MAPPING CORPORATION
MATRA TECHNOLOGY INC.
METREX MANAGEMENT CORPORATION
METRICS, INC.
MISSISSIPPI STATE UNIVERSITY
NATIONAL PARK SVCS, R.S. DIV. UNIV OF N.M.
NORTHERN PACIFIC AERIAL SURVEYS, INC.
OKLAHOMA ST. U., CENTR. FOR APPL. OF R.S.
OPTRONICS INTERNATIONAL, INC.
OWEN AYRES & ASSOCIATES, INC.
PHOTOGRAPHIC INTERPRETATION CORPORATION
PRECISION PHOTO LABORATORIES
PURDUE, LAB FOR APPL. OF REMOTE SENSING, LARS
RESOURCE INFORMATION ASSOCIATES, INC.
RESOURCES DEVELOPMENT ASSOCIATES
SALLY BAY CORNWELL, SEE CORNWELL, SALLY BAY
SAN JOSE ST. U., CARTEMS LAB., DEPT OF GEOG.

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SEWALL COMPANY, JAMES W.
SMITH & ASSOCIATES, DAVID C.
SOUTH DAK. STATE U., REMOTE SENSING INST..
SPACE SYSTEMS
SPACE-TEK
SURDEX CORPORATION
SYSTEM PLANNING CORPORATION
SYSTEMHOUSE
TECHNICAL GRAPHIC SERVICES, INC.
TECHNOLOGY DEVELOPMENT CORPORATION
TERRA COGNITA
TOPOGRAPHIC SCIENCES CORPORATION
TRW DEFENSE AND SPACE SYSTEMS GROUP
UNIV. OF ALASKA, NO. REMOTE SENSING LAB.
UNIV. OF ARIZONA
UNIV. OF DELAWARE, CENTER FOR REMOTE SENSING
UNIV. OF FL., REMOTE SENSING APPL. LAB.
UNIV. OF KANSAS APPLIED R.S. PROGRAM (KARS)
UNIV. OF N.M., TECHNOLOGY APPLICATIONS CTR.
UNIV. OF NEB., REMOTE SENSING APPL. LAB.
UNIV. OF S.C., COMPUTER GRAPHICS
UNIV. OF TENN., SPACE INSTITUTE
VA. INSTITUTE OF MARINE SCIENCE, R.S. CENTER
VERNON GRAPHICS, INC.
W.A.C. CORPORATION
WA. STATE DEPT OF NATURAL RESOURCES
WALKER & ASSOCIATES, INC.
WILSON & COMPANY, ENGINEERS & ARCHITECTS
WISE-L CONSULTANTS, LTD.
WIDUWAKO-CLYDE CONSULTANTS
WOLPERT CONSULTANTS

AERIAL MULTISPECTRAL SCANNER

COMPANY NAME

AERIAL INFORMATION SYSTEMS, INC.
AEROLCO (AERIAL ECOLOGICAL ANALYSTS)
AIRVIEW SPECIALISTS CORPORATION
AUTOMATED SCIENCES GROUP, INC.
BAUSCH AND LOMB, INC.
BUTLER UNIV., MCLCUMB RESEARCH INSTITUTE
CALSPAN CORPORATION
CARTWRIGHT AERIAL SURVEYS, INC.
CHICAGO AERIAL SURVEY
COMPUTER SCIENCES CORPORATION
CORNELL UNIVERSITY REMOTE SENSING PROGRAM
CORNELL, SALLY DAY, EXECUTIVE CONSULTING

DAEDALUS ENTERPRISES, INC.
JAMES & MOORE
EARTH SATELLITE CORPORATION
EARTH SCIENCE CONSULTING & TECH. CORP.
ECOSYSTEMS INTERNATIONAL, INC.
EGBERT SCIENTIFIC SOFTWARE
ENVIRONMENTAL RESEARCH & TECHNOLOGY, INC.
GENERAL ELECTRIC COMPANY, SPACE SYSTEMS DIV.
GEORGIA TECH. EES
GIBBS & HILL
GREENHORNE & U'MARA, INC.
HAKZA ENGINEERING COMPANY
HEIMBUCH-STANTURF, INC.
HUNTING SURVEYS & CONSULTANTS
INTERPRETATION SYSTEMS INCORPORATED
ITEK OPTICAL SYSTEMS
KIMBALL AND ASSOCIATES, ROBERT L.
L. ROBERT KIMBALL & ASSOC., SEE KIMBALL & AS.
LA. ST. U., REMOTE SENSING & IMAGE PROCESS.
MARTEL LABORATORIES, INC.
METRICS, INC.
NATIONAL PARK SVCS, R.S. DIV. UNIV OF N.M.
OKLAHOMA ST. U., CENTR. FOR APPL. OF R.S.
OPTRONICS INTERNATIONAL, INC.
PURDUE, LAB FOR APPL. OF REMOTE SENSING, LARS
RAMTEK
RCA GOVERNMENT SYSTEMS DIVISION
RESOURCES DEVELOPMENT ASSOCIATES
SALLY BAY CORNWELL, SEE CORNWELL, SALLY BAY
SAN JOSE ST. U., CARTEMS LAB., DEPT OF GEOG.
SOUTH DAK. STATE U., REMOTE SENSING INST..
SYSTEM PLANNING CORPORATION
TECHNICOLOR GRAPHIC SERVICES, INC.
TERRA COGNITA
TOPOGRAPHIC SCIENCES CORPORATION
UNIV. OF ARIZONA
UNIV. OF DELAWARE, CENTER FOR REMOTE SENSING
UNIV. OF FL., REMOTE SENSING APPL. LAB.
UNIV. OF N.M., TECHNOLOGY APPLICATIONS CTR.
UNIV. OF WASHINGTON, DEPT. OF CIVIL ENG.
VA. INSTITUTE OF MARINE SCIENCE, R.S. CENTER
WOODWARD-CLYDE CONSULTANTS

ORIGINAL PAGE IS
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AERIAL THERMAL INFRARED SCANNER

COMPANY NAME

AERO SERVICE DIV. WESTERN GEOPHY. CO. OF AM.
AERJECO (AERIAL ECOLOGICAL ANALYSTS)
AIRVIEW SPECIALISTS CORPORATION
AUTOMATED SCIENCES GROUP, INC.
BAUSCH AND LOMB, INC.
DUILLER UNIV., HOLCUME RESEARCH INSTITUTE
CALSPAN CORPORATION
CARTWRIGHT AERIAL SURVEYS, INC.
CHICAGO AERIAL SURVEY
COMPUTER SCIENCES CORPORATION
CORNELL UNIVERSITY REMOTE SENSING PROGRAM
CORNWELL, SALLY BAY, EXECUTIVE CONSULTING
DAEDALUS ENTERPRISES, INC.
DAMES & MOORE
EARTH SATELLITE CORPORATION
EARTH SCIENCE CONSULTING & TECH. CORP.
ECOSYSTEMS INTERNATIONAL, INC.
EGBERT SCIENTIFIC SOFTWARE
ENVIRONMENTAL RESEARCH & TECHNOLOGY, INC.
FUGRO, INC.
GENERAL ELECTRIC COMPANY, SPACE SYSTEMS DIV.
GEORGIA TECH. EES
GIBBS & HILL
GREENHURNE & DIMAKA, INC.
HUNTING SURVEYS & CONSULTANTS
INTERPRETATION SYSTEMS INCORPORATED
ITER OPTICAL SYSTEMS
KIMBALL AND ASSOCIATES, ROBERT L.
L. ROBERT KIMBALL & ASSOC., SEE KIMBALL & AS.
LA. ST. U., REMOTE SENSING & IMAGE PROCESS.,
PARKS, INC.
MARTEL LABORATORIES, INC.
MATRA TECHNOLOGY INC.
MEAD TECHNOLOGY LABORATORIES
METRICS, INC.
NATIONAL PARK SVCS, R.S. DIV. UNIV OF N.M.
OKLAHOMA ST. U., CENTR. FOR APPL. OF R.S.
OPTRONICS INTERNATIONAL, INC.
PHOTO SCIENCE, INC.
PHOTOGRAPHIC INTERPRETATION CORPORATION
PURDUE, LAB FOR APPL. OF REMOTE SENSING, LARS
RAMTEK
RCA GOVERNMENT SYSTEMS DIVISION
RESOURCES DEVELOPMENT ASSOCIATES
SALLY BAY CORNWELL, SEE CORNWELL, SALLY BAY
SOUTH CAR. STATE U., REMOTE SENSING INST.

SYSTEM PLANNING CORPORATION
TECHNICOLOR GRAPHIC SERVICES, INC.
TERRA COGNITA
TOPOGRAPHIC SCIENCES CORPORATION
TREMBLY ASSOCIATES
UNIV. OF ALASKA, NO. REMOTE SENSING LAB.
UNIV. OF ARIZONA
UNIV. OF DELAWARE, CENTER FOR REMOTE SENSING
UNIV. OF KANSAS APPLIED R.S. PROGRAM (KARS)
UNIV. OF N.M., TECHNOLOGY APPLICATIONS CTR.
UNIV. OF NEB., REMOTE SENSING APPL. LAB.
UNIV. OF WASHINGTON, DEPT. OF CIVIL ENG.
VA. INSTITUTE OF MARINE SCIENCE, R.S. CENTER
WA. STATE DEPT OF NATURAL RESOURCES
WOODWARD-CLYDE CONSULTANTS

KADAK

COMPANY NAME

AERIAL INFORMATION SYSTEMS, INC.
AERU SERVICE DIV. WESTERN GEOPHY. CO. OF AM.
AIRVIEW SPECIALISTS CORPORATION
BAUSCH AND LOMB, INC.
BECHTOLD SATELLITE TECHNOLOGY CORP. (BESTEC)
BUTLER UNIV., HULCOMB RESEARCH INSTITUTE
COMPUTER SCIENCES CORPORATION
CORNELL UNIVERSITY REMOTE SENSING PROGRAM
CORNWELL, SALLY BAY, EXECUTIVE CONSULTING
JAMES & MOORE
EARTH SATELLITE CORPORATION
EARTH SCIENCE CONSULTING & TECH. CORP.
ECOSYSTEMS INTERNATIONAL, INC.
LGBERT SCIENTIFIC SOFTWARE
ENVIRONMENTAL RESEARCH & TECHNOLOGY, INC.
FUGRO, INC.
GENERAL ELECTRIC COMPANY, SPACE SYSTEMS DIV.
GREENHORNE & O'MARA, INC.
HARZA ENGINEERING COMPANY
HUNTING SURVEYS & CONSULTANTS
INTERPRETATION SYSTEMS INCORPORATED
ITEK OPTICAL SYSTEMS
LA. ST. U., REMOTE SENSING & IMAGE PROCESS.,
M & S COMPUTING
MARS, INC.
MEAD TECHNOLOGY LABORATORIES
OKLAHOMA ST. U., CENTR. FOR APPL. OF R.S.
OPTRONICS INTERNATIONAL, INC.

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OF POOR QUALITY

PHOTOGRAPHIC INTERPRETATION CORPORATION
PURDUE, LAB FOR APPL. OF REMOTE SENSING, LAKE
RAMTEK
RCA GOVERNMENT SYSTEMS DIVISION
RESOURCES DEVELOPMENT ASSOCIATES
SALLY BAY CURNWELL, SEE CURNWELL, SALLY BAY
SMYTH GEOLOGIST, INC., C.S.
SOUTH DAK. STATE U., REMOTE SENSING INST.
SPACE SYSTEMS
SYSTEM PLANNING CORPORATION
UNIV. OF ALASKA, NO. REMOTE SENSING LAB.
UNIV. OF ARIZONA
UNIV. OF KANSAS APPLIED R.S. PROGRAM (KARS)
VA. INSTITUTE OF MARINE SCIENCE, R.S. CENTER
WOODWARD-CLYDE CONSULTANTS

LASER SCANNER

COMPANY NAME

AERJECO (AERIAL ECOLOGICAL ANALYSTS)
COMPUTER SCIENCES CORPORATION
CURNWELL, SALLY BAY, EXECUTIVE CONSULTING
EARTH SCIENCE CONSULTING & TECH. CORP.
GENERAL ELECTRIC COMPANY, SPACE SYSTEMS DIV.
GREENHURNE & U'MAKA, INC.
ITEK OPTICAL SYSTEMS
MEAD TECHNOLOGY LABORATORIES
OPTRONICS INTERNATIONAL, INC.
RCA GOVERNMENT SYSTEMS DIVISION
SALLY BAY CURNWELL, SEE CURNWELL, SALLY BAY
UNIV. OF ARIZONA
UNIV. OF DELAWARE, CENTER FOR REMOTE SENSING

GEOPHYSICAL SURVEY

COMPANY NAME

AERO SERVICE DIV. WESTERN GEOPHY. CO. OF AM.
AIRVIEW SPECIALISTS CORPORATION
AIRT-O-GRAPH
LAUSCH AND LOMB, INC.
BECHTOLD SATELLITE TECHNOLOGY CORP. (BESTEC)
OUTLER UNIV., HULCOMB RESEARCH INSTITUTE
CHAS. T. MAIN, INC., SEE MAIN, INC.
COMPUTER SCIENCES CORPORATION

COMPUTER TALK INC.
CORNELL UNIVERSITY REMOTE SENSING PROGRAM
CORNWELL, SALLY BAY, EXECUTIVE CONSULTING
DAEDALUS ENTERPRISES, INC.
DAMES & MOORE
EARTH SATELLITE CORPORATION
EARTH SCIENCE CONSULTING & TECH. CORP.
EXPLORATION RESEARCH ASSOCIATES INC.
FUGRO GEOMETRICS, INC.
FUGRO, INC.
GENERAL ELECTRIC COMPANY, SPACE SYSTEMS DIV.
GEORGIA TECH. EES
GIBBS & HILL
HUNTING SURVEYS & CONSULTANTS
INTERPRETATION SYSTEMS INCORPORATED
ITEK OPTICAL SYSTEMS
MAIN, INC., CHAS. T.
MARKS, INC.
MARTEL LABORATORIES, INC.
NATIONAL PARK SVCS, R.S. DIV. UNIV OF N.M.
OPTRONICS INTERNATIONAL, INC.
PURDUE, LAB FOR APPL. OF REMOTE SENSING, LARS
SALLY BAY CORNWELL, SEE CORNWELL, SALLY BAY
SEISCOM DELTA, INC., DIGITAL IMAGES DIV.
SMYTH GEOLOGIST, INC., C.S.
UNIV. OF ARIZONA
WOODWARD-CLYDE CONSULTANTS
WOOLPERT CONSULTANTS

LANDSAT MSS

COMPANY NAME

AERIAL INFORMATION SYSTEMS, INC.
AERC SERVICE DIV. WESTERN GEOPHY. CO. OF AM.
AERTECO (AERIAL ECOLOGICAL ANALYSTS)
AIRVIEW SPECIALISTS CORPORATION
AUTOMATED SCIENCES GROUP, INC.
AVIS AIRMAP, INC.
BAUSCH AND LOMB, INC.
BECHTOLD SATELLITE TECHNOLOGY CORP. (BESTEC)
RUTLER UNIV., HOLCOMB RESEARCH INSTITUTE
CALSPAN CORPORATION
CHAS. T. MAIN, INC., SEE MAIN, INC.
CH2M HILL, INC.
COMPUTER SCIENCES CORPORATION
CORNELL UNIVERSITY REMOTE SENSING PROGRAM
CORNWELL, SALLY BAY, EXECUTIVE CONSULTING
DAMES & MOORE
EARTH SATELLITE CORPORATION

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OF POOR QUALITY

EARTH SCIENCE CONSULTING & TECH. CORP.
ECOSYSTEMS INTERNATIONAL, INC.
EGBERT SCIENTIFIC SOFTWARE
ENVIRONMENTAL RESEARCH & TECHNOLOGY, INC.
ENVIRONMENTAL RESOURCES GROUP (ERG)
EXPLORATION RESEARCH ASSOCIATES INC.
FUGRO, INC.
GENERAL ELECTRIC COMPANY, SPACE SYSTEMS DIV.
GEORGIA TECH. EES
GIBES & HILL
GREENHORNE & O'MARA, INC.
HARZA ENGINEERING COMPANY
HEIMBLICH-STANTURF, INC.
HUNTING SURVEYS & CONSULTANTS
INTERNATIONAL MAPPING UNLIMITED
INTERPRETATION SYSTEMS INCORPORATED
ITEK OPTICAL SYSTEMS
JAMES W. SEWALL COMPANY, SEE SEWALL CO.
JAX ST. GEO-CARTOGRPH. SVCS. JACKSONVILLE STU
KREIG & ASSOCIATES, INC., R.A.
LA. ST. U., REMOTE SENSING & IMAGE PROCESS.,
M & S COMPUTING
MAIN, INC., CHAS. T.
MAFS, INC.
MARTEL LABORATORIES, INC.
MATRA TECHNOLOGY INC.
METRICS, INC.
MISSISSIPPI STATE UNIVERSITY
NATIONAL PARK SVCS, F.S. DIV. UNIV OF N.M .
OKLAHOMA ST. U., CENTR. FOR APPL. OF R.S.
OPTRONICS INTERNATIONAL, INC.
PHOTO SCIENCE, INC.
PHOTOGRAPHIC INTERPRETATION CORPORATION
PICKERING RESEARCH CORPORATION
PURDUE, LAB FOR APPL. OF REMOTE SENSING, LARS
RAMTEK
RESOURCE INFORMATION ASSOCIATES, INC.
RESOURCES DEVELOPMENT ASSOCIATES
SALLY BAY CORNWELL, SEE CORNWELL, SALLY BAY
SAN JOSE ST. U., CARTEMS LAB., DEPT OF GEOG.
SEISCOM DELTA, INC., DIGITAL IMAGES DIV.
SEWALL COMPANY, JAMES W.
SMYTH GEOLOGIST, INC., C.S.
SOUTH DAK. STATE U., REMOTE SENSING INST..
SPACE SYSTEMS
SPACE-TEK
SPECTRAL DATA CORP.
SYSTEM PLANNING CORPORATION
TECHNICOLOR GRAPHIC SERVICES, INC.
TECHNOLOGY DEVELOPMENT CORPORATION
TERRA COGNITA

TOPOGRAPHIC SCIENCES CORPORATION
TRW DEFENSE AND SPACE SYSTEMS GROUP
UNIV. OF ALASKA, NO. REMOTE SENSING LAB.
UNIV. OF ARIZONA
UNIV. OF DELAWARE, CENTER FOR REMOTE SENSING
UNIV. OF FL., REMOTE SENSING APPL. LAB.
UNIV. OF KANSAS APPLIED R.S. PROGRAM (KARS)
UNIV. OF N.M., TECHNOLOGY APPLICATIONS CTR.
UNIV. OF NEB., REMOTE SENSING APPL. LAB.
UNIV. OF S.C., COMPUTER GRAPHICS
UNIV. OF TENN., SPACE INSTITUTE
UNIV. OF WASHINGTON, DEPT. OF CIVIL ENG.
VA. INSTITUTE OF MARINE SCIENCE, R.S. CENTER
WA. STATE DEPT OF NATURAL RESOURCES
WOODWARD-CLYDE CONSULTANTS

LANDSAT KBV

COMPANY NAME

AERIAL INFORMATION SYSTEMS, INC.
AEROCED (AERIAL ECOLOGICAL ANALYSTS)
AIRVIEW SPECIALISTS CORPORATION
AUTOMATED SCIENCES GROUP, INC.
BAUSCH AND LOMB, INC.
BECHTOLD SATELLITE TECHNOLOGY CORP. (BESTEC)
BUTLER UNIV., HOLCOMB RESEARCH INSTITUTE
CHAS. T. MAIN, INC., SEE MAIN, INC.
CHAM HILL, INC.
COMPUTER SCIENCES CORPORATION
CORNELL UNIVERSITY REMOTE SENSING PROGRAM
CORNWELL, SALLY BAY, EXECUTIVE CONSULTING
DAMES & MOORE
EARTH SATELLITE CORPORATION
EARTH SCIENCE CONSULTING & TECH. CORP.
ECOSYSTEMS INTERNATIONAL, INC.
EGBERT SCIENTIFIC SOFTWARE
ENVIRONMENTAL RESEARCH & TECHNOLOGY, INC.
FUGRO, INC.
GENERAL ELECTRIC COMPANY, SPACE SYSTEMS DIV.
GEORGIA TECH. EES
GREENHORNE & O'MARA, INC.
HARZA ENGINEERING COMPANY
HUNTING SURVEYS & CONSULTANTS
INTERPRETATION SYSTEMS INCORPORATED
ITEK OPTICAL SYSTEMS
JAX ST. GEO-CARTOGRPH. SVCS. JACKSONVILLE STU
LA. ST. U., REMOTE SENSING & IMAGE PROCESS.,
M & S COMPUTING

MAIN, INC., CHAS. T.
MARS, INC.
METRICS, INC.
NATIONAL PARK SVCS, R.S. DIV. UNIV OF N.M .
OKLAHOMA ST. U., CENTR. FOR APPL. OF R.S.
OPTRONICS INTERNATIONAL, INC.
PHOTO SCIENCE, INC.
PHOTOGRAPHIC INTERPRETATION CORPORATION
PURDUE, LAB FOR APPL. OF REMOTE SENSING, LARS
RAMTEK
RESOURCES DEVELOPMENT ASSOCIATES
SALLY BAY CORNWELL, SEE CORNWELL, SALLY BAY
SAN JOSE ST. U., CARTEMS LAB., DEPT OF GEUG.
SEISCOM DELTA, INC., DIGITAL IMAGES DIV.
SMYTH GEOLOGIST, INC., C.S.
SOUTH DAK. STATE U., REMOTE SENSING INST..
SPACE SYSTEMS
SPACE-TEK
SPECTRAL DATA CORP.
TECHNICOLOR GRAPHIC SERVICES, INC.
TECHNOLOGY DEVELOPMENT CORPORATION
TEKRA COGNITA
TOPOGRAPHIC SCIENCES CORPORATION
TRW DEFENSE AND SPACE SYSTEMS GROUP
UNIV. OF ALASKA, NO. REMOTE SENSING LAB.
UNIV. OF ARIZONA
UNIV. OF FL., REMOTE SENSING APPL. LAB.
UNIV. OF KANSAS APPLIED R.S. PROGRAM (KARS)
UNIV. OF N.M., TECHNOLOGY APPLICATIONS CTR.
UNIV. OF NEB., REMOTE SENSING APPL. LAB.
UNIV. OF TENN., SPACE INSTITUTE
VA. INSTITUTE OF MARINE SCIENCE, R.S. CENTER
WA. STATE DEPT OF NATURAL RESOURCES
WOODWARD-CLYDE CONSULTANTS

SEASAT

COMPANY NAME

AIRVIEW SPECIALISTS CORPORATION
AUTOMATED SCIENCES GROUP, INC.
BAUSCH AND LOMB, INC.
BECHTOLD SATELLITE TECHNOLOGY CORP. (BESTEC)
BUTLER UNIV., MULCOMB RESEARCH INSTITUTE
COMPUTER SCIENCES CORPORATION
CORNWELL, SALLY BAY, EXECUTIVE CONSULTING
EARTH SATELLITE CORPORATION
EARTH SCIENCE CONSULTING & TECH. CORP.
EGBERT SCIENTIFIC SOFTWARE

ENVIRONMENTAL RESEARCH & TECHNOLOGY, INC.
GENERAL ELECTRIC COMPANY, SPACE SYSTEMS DIV.
HUNTING SURVEYS & CONSULTANTS
INTERPRETATION SYSTEMS INCORPORATED
MAKS, INC.
MARTEL LABORATORIES, INC.
OPTRONICS INTERNATIONAL, INC.
PHOTO SCIENCE, INC.
RAMTEK
RESOURCES DEVELOPMENT ASSOCIATES
SALLY BAY CORNWELL, SEE CORNWELL, SALLY BAY
SMYTH GEOLOGIST, INC., C.S.
SPACE SYSTEMS
SYSTEM PLANNING CORPORATION
UNIV. OF ARIZONA
UNIV. OF DELAWARE, CENTER FOR REMOTE SENSING
UNIV. OF FL., REMOTE SENSING APPL. LAB.
UNIV. OF KANSAS APPLIED R.S. PROGRAM (KARS)
VA. INSTITUTE OF MARINE SCIENCE, R.S. CENTER
WOODWARD-CLYDE CONSULTANTS

HCMM

COMPANY NAME

AIRVIEW SPECIALISTS CORPORATION
BAUSCH AND LOMB, INC.
BUTLER UNIV., HULCUMB RESEARCH INSTITUTE
CALSPAN CORPORATION
COMPUTER SCIENCES CORPORATION
CORNWELL, SALLY BAY, EXECUTIVE CONSULTING
EARTH SATELLITE CORPORATION
ENVIRONMENTAL RESEARCH & TECHNOLOGY, INC.
GENERAL ELECTRIC COMPANY, SPACE SYSTEMS DIV.
HUNTING SURVEYS & CONSULTANTS
INTERPRETATION SYSTEMS INCORPORATED
LA. ST. U., REMOTE SENSING & IMAGE PROCESS.,
OPTRONICS INTERNATIONAL, INC.
SALLY BAY CORNWELL, SEE CORNWELL, SALLY BAY
SMYTH GEOLOGIST, INC., C.S.
SOUTH DAK. STATE U., REMOTE SENSING INST..
UNIV. OF ALASKA, NG. REMOTE SENSING LAB.
UNIV. OF ARIZONA
UNIV. OF NEB., REMOTE SENSING APPL. LAB.
WOODWARD-CLYDE CONSULTANTS

SKYLAB

COMPANY NAME

AEROECU (AERIAL ECOLOGICAL ANALYSTS)
AIRVIEW SPECIALISTS CORPORATION
BAUSCH AND LOMB, INC.
BECHTOLD SATELLITE TECHNOLOGY CORP. (BESTEC)
BUTLER UNIV., MULCOMB RESEARCH INSTITUTE
CALSPAN CORPORATION
CHAS. T. MAIN, INC., SEE MAIN, INC.
CORNELL UNIVERSITY REMOTE SENSING PROGRAM
CORNWELL, SALLY BAY, EXECUTIVE CONSULTING
DAMES & MOORE
EARTH SATELLITE CORPORATION
EARTH SCIENCE CONSULTING & TECH. CORP.
ECOSYSTEMS INTERNATIONAL, INC.
LGBERT SCIENTIFIC SOFTWARE
ENVIRONMENTAL RESEARCH & TECHNOLOGY, INC.
ENVIRONMENTAL RESOURCES GROUP (ERG)
EXPLORATION RESEARCH ASSOCIATES INC.
FUGRO, INC.
GENERAL ELECTRIC COMPANY, SPACE SYSTEMS DIV.
GIBBS & HILL
HARZA ENGINEERING COMPANY
HUNTING SURVEYS & CONSULTANTS
INTERPRETATION SYSTEMS INCORPORATED
ITEK OPTICAL SYSTEMS
JAX ST. GEO-CARTOGRAPH. SVCS. JACKSONVILLE STU
MAIN, INC., CHAS. T.
MAKS, INC.
METRICS, INC.
NATIONAL PARK SVCS, R.S. DIV. UNIV OF N.M.
OKLAHOMA ST. U., CENTR. FOR APPL. OF R.S.
OPTRONICS INTERNATIONAL, INC.
PHOTO SCIENCE, INC.
PHOTOGRAPHIC INTERPRETATION CORPORATION
PURDUE, LAB FOR APPL. OF REMOTE SENSING, LARS
RAMTEK
RESOURCE INFORMATION ASSOCIATES, INC.
RESOURCES DEVELOPMENT ASSOCIATES
SALLY BAY CORNWELL, SEE CORNWELL, SALLY BAY
SAN JOSE ST. U., CARTEMS LAB., DEPT OF GEOG.
SMYTH GEOLOGIST, INC., C.S.
SOUTH DAK. STATE U., REMOTE SENSING INST.
SPACE SYSTEMS
SPACE-TEK
SPECTRAL DATA CORP.
TECHNICOLOR GRAPHIC SERVICES, INC.
TECHNOLOGY DEVELOPMENT CORPORATION

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TERRA CIGNITA
UNIV. OF ARIZONA
UNIV. OF DELAWARE, CENTER FOR REMOTE SENSING
UNIV. OF KANSAS APPLIED R.S. PROGRAM (KARS)
UNIV. OF N.H., TECHNOLOGY APPLICATIONS CTR.
UNIV. OF NEB., REMOTE SENSING APPL. LAB.
UNIV. OF TENN., SPACE INSTITUTE
VA. INSTITUTE OF MARINE SCIENCE, R.S. CENTER
WOODWARD-CLYDE CONSULTANTS

WEATHER SATELLITE

COMPANY NAME

AIRVIEW SPECIALISTS CORPORATION
BAUSCH AND LOMB, INC.
DELHOLD SATELLITE TECHNOLOGY CORP. (BESTEC)
DUTLER UNIV., MULCUMB RESEARCH INSTITUTE
CALSPAN CORPORATION
COMPUTER SCIENCES CORPORATION
CORNELL UNIVERSITY REMOTE SENSING PROGRAM
CORNWELL, SALLY BAY, EXECUTIVE CONSULTING
EARTH SATELLITE CORPORATION
ECOSYSTEMS INTERNATIONAL, INC.
EGBERT SCIENTIFIC SOFTWARE
ENVIRONMENTAL RESEARCH & TECHNOLOGY, INC.
EXECUTIVE RESOURCES ASSOCIATES, INC.
GENERAL ELECTRIC COMPANY, SPACE SYSTEMS DIV.
MARZA ENGINEERING COMPANY
INTERPRETATION SYSTEMS INCORPORATED
LA. ST. U., REMOTE SENSING & IMAGE PROCESS.,
OKLAHOMA ST. U., CTR. FOR APPL. OF R.S.
OPTRONICS INTERNATIONAL, INC.
PHOTU SCIENCE, INC.
PURDUE, LAB FOR APPL. OF REMOTE SENSING, LARS
RAMTER
RCA GOVERNMENT SYSTEMS DIVISION
RESOURCES DEVELOPMENT ASSOCIATES
SALLY BAY CORNWELL, SEE CORNWELL, SALLY BAY
SMYTH GEOLOGIST, INC., C.S.
SOUTH DAK. STATE U., REMOTE SENSING INST..
SYSTEM PLANNING CORPORATION
UNIV. OF ALASKA, NO. REMOTE SENSING LAB.
UNIV. OF ARIZONA
VA. INSTITUTE OF MARINE SCIENCE, R.S. CENTER

DIGITAL IMAGE INTERPRETATION

COMPANY NAME

AERIAL INFORMATION SYSTEMS, INC.
AERU SERVICE DIV. WESTERN GEOPHY. CO. OF AM.
AERJECO (AERIAL ECOLOGICAL ANALYSTS)
AIRVIEW SPECIALISTS CORPORATION
AUTOMATED SCIENCES GROUP, INC.
BAKER, JR., INC., MICHAEL
BUTLER UNIV., HULCUMB RESEARCH INSTITUTE
CALSPAN CORPORATION
CARTWRIGHT AERIAL SURVEYS, INC.
CHAS. T. MAIN, INC., SEE MAIN, INC.
CHICAGO AERIAL SURVEY
COMPUTER SCIENCES CORPORATION
COMPUTER TALK INC.
CUMTAL CORPORATION
CORNELL UNIVERSITY REMOTE SENSING PROGRAM
CURNWELL, SALLY BAY, EXECUTIVE CONSULTING
DAEDALUS ENTERPRISES, INC.
DAMES & MOORE
EARTH SATELLITE CORPORATION
EARTH SCIENCE CONSULTING & TECH. CORP.
ECOSYSTEMS INTERNATIONAL, INC.
EGBERT SCIENTIFIC SOFTWARE
FUGRO, INC.
GENERAL ELECTRIC COMPANY, SPACE SYSTEMS DIV.
GEORGIA TECH. EES
GIBBS & HILL
GREENHURNE & UMARA, INC.
HAKZA ENGINEERING COMPANY
HUNTING SURVEYS & CONSULTANTS
INTERNATIONAL MAPPING UNLIMITED
INTERPRETATION SYSTEMS INCORPORATED
ITEK OPTICAL SYSTEMS
JAMES W. SEWALL COMPANY, SEE SEWALL CO.
LA. ST. U., REMOTE SENSING & IMAGE PROCESS.,
M & S COMPUTING
MAIN, INC., CHAS. T.
MARTEL LABORATORIES, INC.
MEAD TECHNOLOGY LABORATORIES
METREX MANAGEMENT CORPORATION
METRICS, INC.
MICHAEL BAKER, JR., INC., SEE BAKER, JR., INC
MISSISSIPPI STATE UNIVERSITY
NATIONAL PARK SVCS, R.S. DIV. UNIV OF N.M .
OKLAHOMA ST. U., CENTR. FOR APPL. OF R.S.
OPTRONICS INTERNATIONAL, INC.
PHOTO SCIENCE, INC.

PICKERING RESEARCH CORPORATION
PURDUE, LAB FOR APPL. OF REMOTE SENSING, LARS
RAMTEK
RCA GOVERNMENT SYSTEMS DIVISION
RESOURCES DEVELOPMENT ASSOCIATES
SALLY BAY CORNWELL, SEE CORNWELL, SALLY BAY
SEISCUM DELTA, INC., DIGITAL IMAGES DIV.
SEWELL COMPANY, JAMES W.
SMYTH GEOLOGIST, INC., C.S.
SOUTH DAK. STATE U., REMOTE SENSING INST..
SPACE SYSTEMS
SPECTRAL DATA CORP.
SYSTEM PLANNING CORPORATION
TECHNICOLOR GRAPHIC SERVICES, INC.
TECHNOLOGY DEVELOPMENT CORPORATION
TERRA COGNITA
TRA DEFENSE AND SPACE SYSTEMS GROUP
UNIV. OF ALASKA, NU. REMOTE SENSING LAB.
UNIV. OF ARIZONA
UNIV. OF DELAWARE, CENTER FOR REMOTE SENSING
UNIV. OF KANSAS APPLIED R.S. PROGRAM (KARS)
UNIV. OF N.M., TECHNOLOGY APPLICATIONS CTR.
UNIV. OF NEB., REMOTE SENSING APPL. LAB.
UNIV. OF S.C., COMPUTER GRAPHICS
UNIV. OF TENN., SPACE INSTITUTE
VA. INSTITUTE OF MARINE SCIENCE, R.S. CENTER
WA. STATE DEPT OF NATURAL RESOURCES
WOODWARD-CLYDE CONSULTANTS
WOULPERT CONSULTANTS

MANUAL IMAGE INTERPRETATION

COMPANY NAME

AERIAL CARTOGRAPHICS OF AMERICA, INC.
AERIAL INFORMATION SYSTEMS, INC.
AERC SERVICE DIV. WESTERN GEOPHY. CO. OF AM.
AERTECO (AERIAL ECOLOGICAL ANALYSTS)
AIRVIEW SPECIALISTS CORPORATION
AVIS AIRMAP, INC.
BAKER, JR., INC., MICHAEL
BAUSCH AND LOMB, INC.
BECHTEL SATELLITE TECHNOLOGY CORP. (BESTEC)
BUTLER UNIV., HOLCOMB RESEARCH INSTITUTE
CALSPAN CORPORATION
CARTWRIGHT AERIAL SURVEYS, INC.
CHAS. T. MAIN, INC., SEE MAIN, INC.
CHICAGO AERIAL SURVEY
COMPUTER SCIENCES CORPORATION

COMPUTER TALK INC.
CORNELL UNIVERSITY REMOTE SENSING PROGRAM
CORNWELL, SALLY BAY, EXECUTIVE CONSULTING
DAEDALUS ENTERPRISES, INC.
DAPES & MOORE
EARTH SATELLITE CORPORATION
EARTH SCIENCE CONSULTING & TECH. CORP.
ECOSYSTEMS INTERNATIONAL, INC.
ENVIRONMENTAL RESEARCH & TECHNOLOGY, INC.
ENVIRONMENTAL RESOURCES GROUP (ERG)
EXPLORATION RESEARCH ASSOCIATES INC.
FUGRO GEOMETRICS, INC.
FUGRO, INC.
GENERAL ELECTRIC COMPANY, SPACE SYSTEMS DIV.
GIBBS & HILL
GREENHORNE & O'MARA, INC.
HAMMON, JENSEN, WALKEN & ASSOCIATES, INC.
HARZA ENGINEERING COMPANY
HEIMBUCH-STANTURF, INC.
HUNTING SURVEYS & CONSULTANTS
INTERPRETATION SYSTEMS INCORPORATED
JAMES W. SEWALL COMPANY, SEE SEWALL CO.
KREIG & ASSOCIATES, INC., R.A.
LA. ST. U., REMOTE SENSING & IMAGE PROCESS.,
MAIN, INC., CHAS. T.
MARS, INC.
MARTEL LABORATORIES, INC.
MEAD TECHNOLOGY LABORATORIES
METREX MANAGEMENT CORPORATION
METRICS, INC.
MICHAEL BAKER, JR., INC., SEE BAKER, JR., INC
MISSISSIPPI STATE UNIVERSITY
NATIONAL PARK SVCS, R.S. DIV. UNIV OF N.M.
NORTHERN AERIAL SURVEY
OKLAHOMA ST. U., CENTR. FOR APPL. OF R.S.
OPTRONICS INTERNATIONAL, INC.
OWEN AYRES & ASSOCIATES, INC.
PHOTO SCIENCE, INC.
PHOTOGRAPHIC INTERPRETATION CORPORATION
PURDUE, LAB FOR APPL. OF REMOTE SENSING, LARS
RESOURCE INFORMATION ASSOCIATES, INC.
RESOURCES DEVELOPMENT ASSOCIATES
ROBINSON AERIAL SURVEYS, INC.
SALLY BAY CORNWELL, SEE CORNWELL, SALLY BAY
SEISCOM DELTA, INC., DIGITAL IMAGES DIV.
SEWALL COMPANY, JAMES W.
SOUTH DAK. STATE U., REMOTE SENSING INST..
SPACE SYSTEMS
SPACE-TEK
SPECTRAL DATA CORP.
TECHNICOLOR GRAPHIC SERVICES, INC.

TECHNOLOGY DEVELOPMENT CORPORATION
TERRA COGNITA
TOPOGRAPHIC SCIENCES CORPORATION
UNIV. OF ALASKA, NO. REMOTE SENSING LAB.
UNIV. OF ARIZONA
UNIV. OF DELAWARE, CENTER FOR REMOTE SENSING
UNIV. OF KANSAS APPLIED R.S. PROGRAM (KARS)
UNIV. OF N.M., TECHNOLOGY APPLICATIONS CTR.
UNIV. OF NEB., REMOTE SENSING APPL. LAB.
UNIV. OF S.C., COMPUTER GRAPHICS
UNIV. OF TENN., SPACE INSTITUTE
UNIV. OF WASHINGTON, DEPT. OF CIVIL ENG.
VA. INSTITUTE OF MARINE SCIENCE, R.S. CENTER
VERNON GRAPHICS, INC.
WA. STATE DEPT OF NATURAL RESOURCES
WISE-L CONSULTANTS, LTD.
WOODWARD-CLYDE CONSULTANTS
WOOLPERT CONSULTANTS

ORIGINAL PAGE IS
OF POOR QUALITY

REMOTE SENSING INDUSTRY DIRECTORY
UNIVERSITY AFFILIATED REMOTE SENSING PRUGRAMS

COMPANY NAME

BUTLER UNIV., HOLCOMB RESEARCH INSTITUTE
CORNELL UNIVERSITY REMOTE SENSING PROGRAM
GEORGIA TECH. EES
JAX ST. GEU-CARTOGRPH. SVCS. JACKSONVILLE STU
LA. ST. U., REMOTE SENSING & IMAGE PRUCSS.,
MISSISSIPPI STATE UNIVERSITY
NATIONAL PARK SVCS, R.S. DIV. UNIV OF N.M .
OKLAHOMA ST. U., CENTR. FOR APPL. OF R.S.
PURDUE, LAB FOR APPL. OF REMOTE SENSING, LARS
SAN JOSE ST. U., CARTEMS LAB., DEPT OF GEOG.
SOUTH DAK. STATE U., REMOTE SENSING INST..
UNIV. OF ALASKA, NO. REMOTE SENSING LAB.
UNIV. OF ARIZONA
UNIV. OF DELAWARE, CENTER FOR REMOTE SENSING
UNIV. OF FL., REMOTE SENSING APPL. LAB.
UNIV. OF KANSAS APPLIED R.S. PROGRAM (KARS)
UNIV. OF N.M., TECHNOLOGY APPLICATIONS CTR.
UNIV. OF NEB., REMOTE SENSING APPL. LAB.
UNIV. OF S.C., COMPUTER GRAPHICS
UNIV. OF TENN., SPACE INSTITUTE
UNIV. OF WASHINGTON, DEPT. OF CIVIL ENG.
VA. INSTITUTE OF MARINE SCIENCE, R.S. CENTER

REMOTE SENSING INDUSTRY DIRECTORY
SUPPLIERS OF REMOTE SENSING EQUIPMENT AND SYSTEMS

COMPANY NAME

AERO SERVICE DIV. WESTERN GEOPHY. CO. OF AM.
AERTECO (AERIAL ECOLOGICAL ANALYSTS)
AIP PHOTOGRAPHICS, INC.
ALAN GORDON ENTERPR., INC. SEE GORDON ENTERP.
ART-G-GRAPH
AUTOMATED SCIENCES GROUP, INC.
AVIS AIRMAP, INC.
BALSCH AND LOMB, INC.
BRCCMALL INDUSTRIES, INC.
CARTWRIGHT AERIAL SURVEYS, INC.
COMPUTER SCIENCES CORPORATION
COMPUTER TALK INC.
COMTAL CORPORATION
DAEDALUS ENTERPRISES, INC.
DATA TECHNOLOGY, INC.
DEANZA SYSTEMS, INC.
EARTH SATELLITE CORPORATION
EASTMAN KODAK COMPANY
ECCSYSTEMS INTERNATIONAL, INC.
EGPERT SCIENTIFIC SOFTWARE
EXPLORATION RESEARCH ASSOCIATES INC.
GENERAL ELECTRIC COMPANY, SPACE SYSTEMS DIV.
GEODETIC SERVICES, INC.
GEORGIA TECH. EES
GERBER SCIENTIFIC INSTRUMENT CO.
GIBBS & HILL
GORDON ENTERPRISES, INC., ALAN
INTERPRETATION SYSTEMS INCORPORATED
ITEK OPTICAL SYSTEMS
JAMES W. SEWALL COMPANY, SEE SEWALL CO.
KEFN INSTRUMENTS, INC.
KELFFEL & ESSER COMPANY
M & S COMPUTING
MATRA TECHNOLOGY INC.
MEAD TECHNOLOGY LABORATORIES
METREX MANAGEMENT CORPORATION
METRICS, INC.
CMI CORPORATION OF AMERICA
OPTONICS INTERNATIONAL, INC.
PICKERING RESEARCH CORPORATION
PRECISION PHOTO LABORATORIES
SAMTEK
RCA GOVERNMENT SYSTEMS DIVISION
RESOURCE INFORMATION ASSOCIATES, INC.
RICHARDS CORPORATION
SEISCOM DELTA, INC., DIGITAL IMAGES DIV.

SEWALL COMPANY, JAMES W.
SMYTH GEOLOGIST, INC., C.S.
SPATIAL DATA SYSTEMS
SPECTRAL DATA CORP.
SYSTEM PLANNING CORPORATION
SYSTEMHOUSE
TELLUROMETER-USA
TERRA COGNITA
TREMBLY ASSOCIATES
TRW DEFENSE AND SPACE SYSTEMS GROUP
UNIV. OF NEB., REMOTE SENSING APPL. LAB.
UNIV. OF WASHINGTON, DEPT. OF CIVIL ENG.
W.A.C. CORPORATION

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DIRECTORY OF REMOTE SENSING FIRMS & ORGANIZATIONS

NAME: ACCU-AIR SURVEYS, INC.

ADDRESS(ES) & CONTACT(S)

1220 "A" Avenue, P.O. Box 763
Seymour, Indiana 47274
(812) 522-2300
Weldon Carlin

YEARS IN BUSINESS: _____

PROJECTS COMPLETED: _____

REGION SERVED: _____

TYPES OF REMOTE SENSING TECHNOLOGIES:

PERSONNEL & SKILLS REPRESENTED:

STATEMENT OF CAPABILITIES:

Accu-Air Surveys, Inc. was established in 1970 with the hope of providing clients with aerial photography and topographic maps to meet their specifications. Today, we maintain a staff of qualified personnel and precision photogrammetric equipment to provide these requirements economically.

NAME: AERIAL CARTOGRAPHICS of America, Inc.

ADDRESS(ES) & CONTACT(S)

7000 Lake Ellenor Drive, Suite 111
Orlando, FL (32809)
(305) 851-7880
Novie P. Cleveland, Pres.

YEARS IN BUSINESS: 30

PROJECTS COMPLETED: 10,000

REGION SERVED: IV, VI

TYPES OF REMOTE SENSING TECHNOLOGIES:

Low Altitude Aerial Photo
Med Altitude Aerial Photo

PERSONNEL & SKILLS REPRESENTED:

Management (2)
Professional (2)
Technical (11)
Cartographers (1)

STATEMENT OF CAPABILITIES:

SMALL BUSINESS CONTRACTOR? Yes

MINORITY-OWNED BUSINESS? _____

TOTAL APPLICABLE EMPLOYEES: 15

High Altitude Aerial Photo
Manual Image Interpretations

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FACILITIES AND SPECIAL EQUIPMENT

AIRCRAFT

Cessna TU 206; Cessna 310K

CAMERAS, SCANNERS, AND OTHER REMOTE SENSORS

Ziess RMK 15/23; Wild RCA; 12" Fairchild

FIELD SURVEY EQUIPMENT

PHOTOGRAPHIC PROCESSING EQUIPMENT

52" Hope, Color, Roller Transport; C-41 Hope, Color Film; Kodak 244;
Durst 2000 CLS Enlarger; Fotar 10x10" Enlarger; Color LogeTronic printer (2)
40" Process Camera.

PHOTOGRAMMETRIC PROCESSING EQUIPMENT

Galileo Santoni GG; Kern PG 25SL

IMAGE INTERPRETATION, VIEWING AND MAPPING (NON-DIGITAL)

IMAGE INTERPRETATION, VIEWING AND MAPPING (DIGITAL)

DIGITIZING, PLOTTING AND GRAPHICS

OTHER COMPUTER PROCESSING

OTHER

PRODUCTS AND SERVICES PROVIDED

IMAGE PRODUCTS

Black & White, Color, Color Infrared, Color Composite Prints; (c) Black & White, Color, Color Infrared, Color Composite Transparencies; Photo Mosaics; Photo Atlas Sheets; Halftone Image Prints.

ENHANCED AND CORRECTED IMAGERY

PHOTOGRAMMETRIC PRODUCTS

(s) Orthophotos; (c) Topographic Maps, Engineering Cross Sections, Stockpile Measurements, Earthwork Measurements, Planimetric Maps, Photo-Contour Maps, Plan and Profile Sheets, Volumetric Calculations, Distance & Angle Measurements.

INTERPRETED, THEMATIC PRODUCTS

(c) Land Use Maps, Acreage Tabulations

PROJECT PLANNING AND SUPPORT SERVICES

Problem Definition, Feasibility Analysis, Air Support Operations; (s) Ground Control Survey, Map Digitizing, Ground Truth Survey.

AERIAL SURVEY

Low Altitude Photography, Thermal Infrared, High Altitude Photography.

IMAGE PROCESSING, INTERPRETATION AND ANALYSIS

Photographic Laboratory Processing

PHOTOGRAMMETRIC ENGINEERING

Planimetric Mapping, Cross-Sectioning, Stereocompilation, Topographic Mapping-Small Scale, Topographic Mapping-Large Scale, Volumetric Calculation; (s) Aerotriangulation, Orthophotomapping, Stereo Digitizing.

REPRODUCTION

Drafting & Scribing, Cartographic Reproduction, Printing; (s) Automated Drafting/Plotting

OTHER SERVICES

Consultant Computer Graphics

NAME: AERIAL DATA REDUCTION ASSOCIATES, INC.

AERIAL DATA REDUCTION ASSOCIATES, INC.

ADDRESS(ES) & CONTACT(S)

9285 Commerce Highway - P.O. Box 557
Pennsauken, New Jersey 08110
(609) 663-7200
David K. Nale, Regional Manager

11 North Road
Peace Dale, Rhode Island 02883

YEARS IN BUSINESS: 10

SMALL BUSINESS CONTRACTOR? Yes

PROJECTS COMPLETED: 2,000

MINORITY-OWNED BUSINESS? _____

REGION SERVED: I, II, III, IV

TOTAL APPLICABLE EMPLOYEES: 52

TYPES OF REMOTE SENSING TECHNOLOGIES:

Low Altitude Aerial Photo; Med Altitude Aerial Photo; High Altitude Aerial Photo;

PERSONNEL & SKILLS REPRESENTED:

Management (8); Professional (3); Technical (41)

STATEMENT OF CAPABILITIES:

Aerial photography; stereo photogrammetric compilation; analytic aerotriangulation;
ground control surveys; photo lab services; photo interpretation; photo mosaics.

FACILITIES AND SPECIAL EQUIPMENT

AIRCRAFT

CAMERAS, SCANNERS, AND OTHER REMOTE SENSORS

FIELD SURVEY EQUIPMENT

Hewlett Packard 3800, 3810 (2)
Wild Level (1)
Wild T-2 (1)

PHOTOGRAPHIC PROCESSING EQUIPMENT

Log E Robertson Camera, Vacuum Printer (4) Fully equipped Dark Rooms (3)
K & E Kargl Horizontal Enlarger
Contact Printer 6' x 4'

PHOTOGRAMMETRIC PROCESSING EQUIPMENT

Kern PG2-ATs (5) Auto-trol 3990 Digitizing System (1)
Kelsh OCM (2) Dell Foster RSS-4DP/R-S Remote Sensor
Heig-Streit Coordinatograph (1) System (1)

IMAGE INTERPRETATION, VIEWING AND MAPPING (NON-DIGITAL)

Light Tables (12)

IMAGE INTERPRETATION, VIEWING AND MAPPING (DIGITAL)

Kern ER34 Digitizer (1) Broomall Industries D-100 Digitizer (1)
Wild Point Marking Devices (2)
Kern Monocomparator (3)

DIGITIZING, PLOTTING AND GRAPHICS

PDP-11/40 Computer (1)
PDP-11/44 Computer (on order) (1)

OTHER COMPUTER PROCESSING

OTHER

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AERIAL DATA REDUCTION ASSOCIATES, INC.

PRODUCTS AND SERVICES PROVIDED

IMAGE PRODUCTS

B&W Negative Transparencies, Positive Transparencies, Contact Prints & Enlarged Prints;
(c) Photo Mosaics; Photo Atlas Sheets; Halftone Image Prints; Digital Magnetic Tape

ENHANCED AND CORRECTED IMAGERY

PHOTOGRAMMETRIC PRODUCTS

(c) Orthophotos; Topographic Maps; Engineering Cross Sections; Stockpile Measurements;
Earthwork Measurements; Digital Data Bases; Planimetric Maps; Photo-Contour Maps;
Plan and Profile Sheets; Volumetric Calculations; Distance & Angle Measurements

INTERPRETED, THEMATIC PRODUCTS

(c) Land Use Maps; Vegetation/Forestry Maps; Utility Maps; Acreage Tabulations;
Transportation Maps; Soils Maps; Tax Maps; Digital Magnetic Tapes

PROJECT PLANNING AND SUPPORT SERVICES

Problem Definition; Feasibility Analysis; Selection of Existing Imagery; Ground Control
Survey; Map Digitizing; Data Base Preparation; Air Support Operations; Data Management;
(c) Ground Truth Survey

AERIAL SURVEY

(c) Low Altitude Photography; Thermal Infrared; High Altitude Photography; Multispectral
Scanner

IMAGE PROCESSING, INTERPRETATION AND ANALYSIS

Photographic Laboratory Processing; Manual Image Interpretation; (c) Interactive
Digital Image/Analysis/Classification

PHOTOGRAMMETRIC ENGINEERING

Aerotriangulation; Orthophotomapping; Planimetric Mapping; Stereo Digitizing; Cross-
Sectioning; Stereocompilation; Topographic Mapping-Small Scale; Topographic Mapping-
Large Scale; Volumetric Calculation

REPRODUCTION

Drafting & Scribing; Cartographic Reproduction; Automated Drafting/Plotting; Printing

OTHER SERVICES

Consultant Services; Computer Services; (c) Interactive Computer Graphics

NAME: AERIAL INFORMATION SYSTEMS, INC.

ADDRESS(ES) & CONTACT(S)

23537 Crest Forest Dr./P.O. Box 790
Crestline, California 92325
(714) 338-4615/338-4034
Eric Harnden, President

AIS/ESRI Affiliate:

380 New York St.
Redlands, California 92325
(714) 793-2853
Laura Dangermond
YEARS IN BUSINESS: 5

PROJECTS COMPLETED: 35

REGION SERVED: U.S. & Int'l.

TYPES OF REMOTE SENSING TECHNOLOGIES:

Low Altitude Aerial Photo; Med Altitude Aerial Photo; High Altitude Aerial Photo;
Aerial Multispectral Scanner; Radar; Landsat MSS; Landsat RBV; Digital Image
Interpretations; Manual Image Interpretations

PERSONNEL & SKILLS REPRESENTED:

Management (5); Professional (10); Technical (15)

Cartographers; Computer Equip. Oper.; Computer Programmers; Draftsmen; Field Surveyors;
Soil Scientists; Social Scientists; Photointerpreters; Photolab Technicians;
Physical Scientists; Planners; Geographers

STATEMENT OF CAPABILITIES:

Aerial Information Systems is an environmental inventory and mapping firm. Environmental information collected and interpreted from aerial imagery, field survey, and collateral is reformatted, integrated and mapped using the Integrated Terrain Unit Map (ITUM) process. This process, developed by AIS, integrates, and synthesizes differing environmental factors using geographic units (terrain units). Each unit is a polygon, numerically coded according to its specific environmental characteristics. Each ITUM is then digitized by a computer. An automated data bank can be used to make complete maps of the coded factors. Mathematical modeling can be used to complete the maps. AIS has shown NASA, USFS and many national and international companies the ITUM process.

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AERIAL INFORMATION SYSTEMS, INC.

AERIAL INFORMATION SYSTEMS, INC.

FACILITIES AND SPECIAL EQUIPMENT

PRODUCTS AND SERVICES PROVIDED

AIRCRAFT

IMAGE PRODUCTS

CAMERAS, SCANNERS, AND OTHER REMOTE SENSORS

(s) B&W, Color, Color Infrared, and Color Composite Negative Transparencies, Positive Transparencies, Contact Prints and Enlarged Prints; (c) Photo Mosaics; Digital Mosaics; (s) Photo Atlas Sheets

FIELD SURVEY EQUIPMENT

ENHANCED AND CORRECTED IMAGERY

(c) Photo Multitemporal Composites; Photo Contrast Enhanced; Photo Density Slice; Photo Change Detection; Photo Multisensor Composites; Digital Contrast Enhanced; Digital Geometric Correction; Geometric Density Slice; Digital Change Detection; Digital Image Resampling

PHOTOGRAPHIC PROCESSING EQUIPMENT

Complete photo dark room. Black and white and color processing

PHOTOGRAMMETRIC PRODUCTS

(c) Orthophotos; Topographic Maps; Stockpile Measurements; Earthwork Measurements; Digital Data Bases; Planimetric Maps; Photo-Contour Maps; Volumetric Calculations; (s) Digital Terrain Models; Distance & Angle Measurements

PHOTOGRAMMETRIC PROCESSING EQUIPMENT

INTERPRETED, THEMATIC PRODUCTS

(c) Color Thematic Maps; Land Use Maps; Vegetation/Forestry Maps; Contour Weather Maps; Utility Maps; Acreage Tabulations; Geocoded Data Bases; Thematic Map Overlays; Geologic Maps; Transportation Maps; Soils Maps; Tax Maps; Digital Magnetic Tapes; Integrated Terrain Unit Maps; Census Tract Maps

IMAGE INTERPRETATION, VIEWING AND MAPPING (NON-DIGITAL)

Scanning mirror stereoscopes (1x1.5x3x6x) (3)
Lighttables (11)
1" S Color combiner (1)

PROJECT PLANNING AND SUPPORT SERVICES

Problem Definition; Feasibility Analysis; Selection of Existing Imagery; Ground Control Survey; Data Base Preparation; Sensor Selection/Evaluation; Sampling Strategy Design; Ancillary Data Collection; Ground Truth Survey; (s) Map Digitizing; Air Support Operations; Data Management

IMAGE INTERPRETATION, VIEWING AND MAPPING (DIGITAL)

DeAnza Image Processor (1)

AERIAL SURVEY

(s) Low Altitude Photography; Radar; Geophysical; High Altitude Photography; Multispectral Scanner

DIGITIZING, PLOTTING AND GRAPHICS

Talos Digitizers (4)
3 Color pen plotter (1)
Versatec electrostatic printer (1)

Dicomed grid color printer (1)

OTHER COMPUTER PROCESSING

Prime Computer (1)
Apple II Mini Computer (1)

IMAGE PROCESSING, INTERPRETATION AND ANALYSIS

Manual Image Interpretation; (s) Digital Image Processing; Batch Digital Image/Analysis/Classification; Interactive Digital Image/Analysis/Classification; Photographic Laboratory Processing

OTHER

K and E Kargl optical pantograph (1)

PHOTOGRAMMETRIC ENGINEERING

REPRODUCTION

Drafting & Scribing; Cartographic Reproduction; (s) Automated Drafting/Plotting; Printing

OTHER SERVICES

Remote Sensing Research; Remote Sensing Training; Statistical Modeling; Consultant Services; (s) Interactive Computer Graphics; Computer Services; Turnkey Systems Sales/Leasing/Service; Hardware Design/Development; Software Design/Development; Equipment Sales/Leasing/Service; Software Sales/Leasing

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NAME: AERO SERVICE DIVISION, WESTERN GEOPHYSICAL COMPANY OF AMERICA

ADDRESS(ES) & CONTACT(S)

P. O. Box 1939
Houston, Texas 77001
(713) 784-5800
George A. Brookes

218 Church Road
Elkins Park, Pennsylvania 19117
(215) 635-2525
Homer Jensen

5680 South Syracuse Circle, Suite 300
Englewood, Colorado 80110
(303) 779-4024
Richard O. Crosby

YEARS IN BUSINESS: 50

SMALL BUSINESS CONTRACTOR? No

PROJECTS COMPLETED: Thousands

MINORITY-OWNED BUSINESS? No

REGION SERVED: U.S., Int'l.

TOTAL APPLICABLE EMPLOYEES: 270

TYPES OF REMOTE SENSING TECHNOLOGIES:

Low Altitude Aerial Photo; Med Altitude Aerial Photo, Aerial Thermal Infrared Scanner;
Radar; Geophysical Survey; Landsat MSS; Digital Image Interpretations; Manual Image
Interpretations.

PERSONNEL & SKILLS REPRESENTED:

Management (45); Professional (84); Technical (71); Other (70); Cartographers (8);
Computer Equip Operators (14); Computer Programmers (6); Draftsmen (31); Engineers
(civil, environ.) (2); Field Surveyors (10); Image Processing Equip Oper. (5);
Photogrammatists (3); Photogrammetric Equip Oper. (33); Photointerpreters (8);
Photolab Technicians (8); Pilots (11); Planners (4); Geographers (9).

STATEMENT OF CAPABILITIES:

Airborne Geophysical Surveys, Synthetic Aperture Radar Surveys, Photogrammetric
Mapping of all types, Landsat Image Processing, Geophysical and Image Interpretation,
Photographic Printing, Enlarging & Mosaicking, Image Digitizing/Plotting.

AERO SERVICE DIVISION, WESTERN GEOPHYSICAL COMPANY OF AMERICA
FACILITIES AND SPECIAL EQUIPMENT

AIRCRAFT

Caravelle (1); DC-3 (1); Piper Navajo PA 31 (3); Cessna Titan 404 (2)

CAMERAS, SCANNERS, AND OTHER REMOTE SENSORS

Wild Heerbrug RC-8 (3); Wild Heerbrug RC-9 (2); GEMS 1000 Synthetic Aperture
Radar (1); Daedalus Thermal Scanner 1230-Type (1)

FIELD SURVEY EQUIPMENT

Wild N-2 Level (4); Wild N-3 Level (10); Hewlett-Packard EDM-3800 (4); K & E
Ranger IV (1); AGA Geodimeter Model 6 (1); Wild T-3 Theodolite (4); Wild Illumi-
nated Traverse Targets (3); Wild T-2 Theodolite (10); Cubic Electrotapes Model
DM-20 (3); Wild T-1 Theodolite (1); K & E Topographic Alidade (2); Hewlett-
Packard Calculator Model 9815A (2)

PHOTOGRAPHIC PROCESSING EQUIPMENT

Log-E-Robertson Copy Camera Tri-Color 41 (1); K & E Horizontal Enlarger HE-12 (1);
Wild Correction Diapositive U-4 (1); Rectifier-Enlarger SEG-V (1); 30" x 40"
Vacuum Frame (1); 54" x 72" Vacuum Frame (1); Versamat Aerial Filz Processor
IICM (1); 42" DuPont Film Processor ERF (1); Log-E Strip Printer SP10/70-C (1);
Log-E Contact Printer MK-IV (1); Durst Color Enlarger L-184 (1); Colenta 42"
Color Processor (1); 48" Log-E Film Processor LD-48 (1)

DIGITIZING, PLOTTING AND GRAPHICS

Wild A-10 Autograph (2); Wild A-8 Aviograph (6); Wild B-8 Aviograph (6); Kelsh
Orthoscan System (1); WILD PUG 3 (1); WILD PUG 3 with zoom (1); Zeiss P.S.K.
Stereo Comparator (1); H. Dell Foster-Mono Comparator (1); 48" x 60" back lit
digitizing tables each with a 19" Cathode ray tube display and teletype without
keyboard; Century 114 disc drive with 30 million character storage capacity (1);
25" per second magnetic tape drive (1); Data General Nova II mini-computer (1);
KSR35 Teletype with Keyboard (1)

OTHER COMPUTER PROCESSING

Digital Decwriter II Computer control console & printer (1); Talos 44" x 60"
back lit digitizing tables (5); PDP 1103 micro-computer station drivers (5);
Learlear Siegler ADM-3 CRT screens (6); Tektronix 4014-1 CRT screens (5); PDP
11/34 mini-computer as common controller; CDC 9761 80 Megabytes Disk Drives (2);
Magnetic Tape unit 1600/800 BPI, 9 Track 45 IFS (1); MODEM computer to telephone
interface (1); Data General Eclipse mini-computer Model S-200 (1); Century 114
disc drives interfaced in tandem (2); Decwriter II Model 35 (1); 19" Cathode ray
tubes with keyboard (1); 14" Cathode ray tubes with keyboard (2); 45" per second
magnetic tape drive (1)

OTHER

Wild B-8 Stereo instrument interfaced in three dimensional mode to the Eclipse
mini-computer (4); 48" x 60 back lit digitizing tables (3); IBM 360/44 (2);
256K Core (2); Magnetic Tape Unit (9); 29 Megabyte Disk Drive (8); 1100 Line/
Minute Printer (2) Card Reader-Punch (2); Calcomp Flatbed (2); Calcomp Drum (2);
Xynetics Flatbed (1); Optronics Drum (Color Plotter/Digitizer)

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AERO SERVICE DIVISION, WESTERN GEOPHYSICAL COMPANY OF AMERICA

PRODUCTS AND SERVICES PROVIDED

IMAGE PRODUCTS

(c)B&W, Color, Color Infrared, Color Composite Negative Transparencies, Positive Transparencies, Contact Prints, Enlarged Prints; (c)Photo Mosaics, Photo Atlas Sheets, Thermograms, Digital Mosaics, Halftone Image Prints, Digital Magnetic Tape, Glass Diapositives.

ENHANCED AND CORRECTED IMAGERY

(c)Multitemporal Composites, Contrast Enhanced, Geometric Correction, Multisensor Composites, Radiometric Correction Photo Images; (c)Contrast Enhanced, Geometric Correction, Density Slice, Multisensor Composites, Radiometric Correction, Image Resampling, Edge Enhancement, Principal Components, Ratioing Digital Process.

PHOTOGRAMMETRIC PRODUCTS

(c)Orthophotos, Topographic Maps, Engineering Cross Sections, Stockpile Measurements, Earthwork Measurements, Digital Terrain Models, Digital Data Bases, Planimetric Maps, Photo-Contour Maps, Plan and Profile Sheets, Volumetric Calculations, Distance&Angle Measurements.

INTERPRETED, THEMATIC PRODUCTS

(c)Color Thematic Maps, Land Use Maps, Vegetation/Forestry Maps, Utility Maps, Acreage Tabulations, Geocoded Data Bases, Thematic Map Overlays, Geologic Maps, Soils Maps, Tax Maps, Digital Magnetic Tapes.

PROJECT PLANNING AND SUPPORT SERVICES

Problem Definition; Feasibility Analysis; Selection of Existing Imagery; Ground Control Survey; Map Digitizing; Data Base Preparation; Air Support Operations; Sensor Selection; Evaluation; Sampling Strategy Design; Ancillary Data Collection; Ground Truth Survey; Gray Level Digitizing; Data Management.

AERIAL SURVEY

Low Altitude Photography; Thermal Infrared; Radar; Geophysical; Multispectral Scanner.

IMAGE PROCESSING, INTERPRETATION AND ANALYSIS

Digital Image Processing; Batch Digital Image/Analysis/Classification; Photographic Laboratory Processing; Manual Image Interpretation.

PHOTOGRAMMETRIC ENGINEERING

Aerotriangulation; Orthophotomapping; Planimetric Mapping; Stereo Digitizing; Cross-Sectioning; Stereocompilation; Topographic Mapping-Small Scale; Topographic Mapping-Large Scale; Volumetric Calculation.

REPRODUCTION

Drafting & Scribing; Cartographic Reproduction; Automated Drafting/Plotting; Printing.

OTHER SERVICES

Remote Sensing Research; Remote Sensing Training; Consultant Services; Interactive Computer Graphics; Computer Services; Turnkey Systems Sales/Leasing/Service; Software Design/Development; Software Sales/Leasing.

AERO SERVICE DIVISION, WESTERN GEOPHYSICAL COMPANY OF AMERICA

REMOTE SENSING EQUIPMENT/SYSTEMS PROVIDED

REMOTE SENSOR SYSTEMS

VIEWING EQUIPMENT

PHOTOGRAMMETRIC EQUIPMENT

DIGITAL IMAGE PROCESSING EQUIPMENT

SOFTWARE

Sell and Lease Geometric Correction, Radiometric Correct, Image Enhancement, Multispectral Classification.

INTEGRATED SYSTEMS

OTHER EQUIPMENT

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NAME: AERIAL SURVEY & PHOTO, INC.

AERIAL SURVEY & PHOTO, INC.

ADDRESS(ES) & CONTACT(S)

RFD #1, Box 14
Skowhegan, Maine 04976
(207) 474-8686
Forrest Stevens

FACILITIES AND SPECIAL EQUIPMENT

AIRCRAFT

Cessna U206 (1)

CAMERAS, SCANNERS, AND OTHER REMOTE SENSORS

Wild RC/8 (1)

FIELD SURVEY EQUIPMENT

Hewlett Packard EDM (2)
Wild T2 (2)
Zeiss Auto Level (1)
PHOTOGRAPHIC PROCESSING EQUIPMENT
Complete In-House B/W Processing Equipment

PHOTOGRAMMETRIC PROCESSING EQUIPMENT

IMAGE INTERPRETATION, VIEWING AND MAPPING (NON-DIGITAL)

Kelsh (3 projector) (2)

IMAGE INTERPRETATION, VIEWING AND MAPPING (DIGITAL)

DIGITIZING, PLOTTING AND GRAPHICS

Brown copy Camera (1)

OTHER COMPUTER PROCESSING

OTHER

Film Dryer (1)
Drum Dryer (1)

YEARS IN BUSINESS: 5

PROJECTS COMPLETED: 450

REGION SERVED: I, II, & III

TYPES OF REMOTE SENSING TECHNOLOGIES:

Low Altitude Aerial Photo; Med Altitude Aerial Photo

SMALL BUSINESS CONTRACTOR? _____

MINORITY-OWNED BUSINESS? _____

TOTAL APPLICABLE EMPLOYEES: 3

PERSONNEL & SKILLS REPRESENTED:

Management (2); Professional (3); Technical (8); Other (1)

Draftsmen (2); Field Surveyors (4); Photogrammatists (1); Photogrammetric Equip. Oper. (2); Photointerpreters (1); Photolab Technicians (1); Pilots (1)

STATEMENT OF CAPABILITIES:

We are geared to handle any flying assignments up to 30,000' altitude and provide in-house best compilation, drafting or enlargement to suit the client's needs or applications. We are presently flying and providing aerial photography to a wide circle of clients throughout New England.

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NAME: AERO-METRIC ENGINEERING, INC.

AERIAL SURVEY & PHOTO INC.

ADDRESS(ES) & CONTACT(S)

4708 North 40th Street
Sheboygan, Wisconsin 53081
(414) 456-3631
Bernard S. Schur

PRODUCTS AND SERVICES PROVIDED

IMAGE PRODUCTS

B&W, Color, and Color Infrared Contact Prints and Enlarged Prints; (c) B&W, Color, Color Infrared and Color Composite Negative Transparencies and Positive Transparencies; (c) Color Composite Contact Prints and Enlarged Prints; Photo Mosaics; Halftone Image Prints
ENHANCED AND CORRECTED IMAGERY

YEARS IN BUSINESS: 11

SMALL BUSINESS CONTRACTOR? Yes

PROJECTS COMPLETED: _____

MINORITY-OWNED BUSINESS? _____

REGION SERVED: U.S.

TOTAL APPLICABLE EMPLOYEES: 70

PHOTOGRAMMETRIC PRODUCTS

Orthophotos; Topographic Maps; Stockpile Measurements; Earthwork Measurements; Planimetric Maps; Photo-Contour Maps; Plan and Profile Sheets; Volumetric Calculations; Distance & Angle Measurements

INTERPRETED, THEMATIC PRODUCTS

Vegetation/Forestry Maps; Acreage Tabulations; Tax Maps

TYPES OF REMOTE SENSING TECHNOLOGIES:

Low Altitude Aerial Photo; Med Altitude Aerial Photo; High Altitude Aerial Photo;

PROJECT PLANNING AND SUPPORT SERVICES

PERSONNEL & SKILLS REPRESENTED:

Management (5); Professional (6); Technical (6); Other (53)
Cartographers (6); Computer Equip. Oper. (1); Computer Programmers (1); Draftsmen (6); Engineers (civil, environ.) (1); Field Surveyors (25); Photogrammatists (6); Photogrammetric Equip. Oper. (11); Photointerpreters (3); Photolab Technicians (7); Pilots (3)

AERIAL SURVEY

Low Altitude Photography

IMAGE PROCESSING, INTERPRETATION AND ANALYSIS

STATEMENT OF CAPABILITIES:

Full Service Photogrammetric Mapping Firm.

PHOTOGRAMMETRIC ENGINEERING

Planimetric Mapping; Cross-Sectioning; Stereocompilation; Topographic Mapping-Small Scale; Topographic Mapping-Large Scale; Volumetric Calculation; (s) Aerotriangulation; Orthophotomapping

REPRODUCTION

Drafting & Scribing; Cartographic Reproduction; Printing; (s) Automated Drafting/Plotting

OTHER SERVICES

Consultant Services

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FACILITIES AND SPECIAL EQUIPMENT

AIRCRAFT

Rockwell Aero-Commander Twin Engine Aircraft (2); Piper Turbo-Aztec Twin Engine Aircraft (1)

CAMERAS, SCANNERS, AND OTHER REMOTE SENSORS

Zeiss-Jena MRB 15/2323 -6" Precision Lens (3)

FIELD SURVEY EQUIPMENT

Laser Ranger Electronic Distance Measuring Instrument (1); Geodimeter Model No. 76 Electronic Distance Measuring Instruments (3); Wild Model D13S Electronic Distance Measuring Instrument (1); Hewlett Packard Model 3820A Electronic Total Station (1); Topcon Model DM-C-2 (1); Wild T-2 Theodolites (5); Wild T-1A Theodolites and Precision Targets (3); Ni - 007 Zeiss-Jena Precision Levels (4); NI - 25 Zeiss-Jena Automatic Level (1); DEC 1134 Computer (1); Cushman Trackster - All Terrain Vehicle (1); Ski-Doo Snowmobile (2); Four Wheel Drive Vehicles equipped with a complete Complement of Survey Equipment (3); Two Wheel Drive Vehicles equipped with a complete Complement of Survey Equipment (6)

PHOTOGRAPHIC PROCESSING EQUIPMENT

31" Brown Admiral Overhead Copy Camera (1); Log Etronic Mark III Color Printer (1); Durst CLS-2000 Enlarger (1); Durst V-184 Enlarger (1); Hope Model 129 Automatic Color Processor (1); Hope Model 146 Automatic Black and White Processor (2); Dupont ERF Black and White Processor (1); Clydesdale 66" x 81" Vacuum Frame (1); Clydesdale 42" x 52" Vacuum Frame (1); Dietzgen Diazit 42" Diazo Printer (1); Speedmaster Color Analyzer (1); Speedmaster Color Transmission Denistometer (1); Speedmaster Color Reflection Denistometer (1); 3M 527W Master Wipe Film Cleaner (1); Brown Register Punch (1); Gordon 682GE Aerial Film Titling and Numbering Machine (1)

DIGITIZING, PLOTTING AND GRAPHICS

Zeiss-Jena Stereometrograph Model "E" (1); Zeiss-Jena Stereometrograph Model "D" (1); Zeiss-Jena Topocart "C" (1); Zeiss-Jena Topocart "B" (2); Wild A-8 First Order Plotter (1); Wild B-8 Second Order Plotter (1); Kelsh Third Order Plotter (1); Zeiss-Jena Orthophot Units (2); Data Technology DT-3454, 34" x 54" Flat Bed Plotters (2); Hasp SP-1025A Data Collectors with Hasp P-2501 Photogrammetric Systems and CRT Terminal with on Line Connection to a PDP 1134 Compter (2); Zeiss Precision Coordinatograph Drawing Plotters (5); Altek AC-74 MK II 4 Axis Digitizer with Digi-Data Mag Tape (1); Auto-Trol XYZ Digitizer (1); Wild PUB IV (1); Kern MK-2 Monocomparator (1)

OTHER COMPUTER PROCESSING

Analytical Aero-Triangulation Systems (1)

OTHER

108" x 60" Layout Light Tables (2); Hamilton Dial A Light "L" Drafting Tables (10) (Complete Complement of Drafting Equipment to accomplish the Scribe Draft System.)

PRODUCTS AND SERVICES PROVIDED

IMAGE PRODUCTS

- (c) B&W, Color, Color Infrared, Color Composite Negative Transparencies, Positive Transparencies, Contact Prints, and Enlarged Prints; Photo Mosaics; Photo Analog Sheets; Halftone Image Prints; Digital Magnetic Tape

ENHANCED AND CORRECTED IMAGERYPHOTOGRAMMETRIC PRODUCTS

(c) Orthophotos; Topographic MaPs; Entineering Cross Sections; Stockpile Measurements; Earthwork Measurements; Digital Terrain Models; Digital Data Bases; Planimetric Maps; Photo-Contour Maps; Plan and Profile Sheets; Volumetric Calculations; Distance & Angle Measurements; Close Range Photogrammetry

INTERPRETED, THEMATIC PRODUCTS

(c) Land Use Maps; Vegetation/Forestry Maps; Utility Maps; Acreage Tabulations; Transportation Maps; Tax MaPs; Digital Magnetic Tapes

PROJECT PLANNING AND SUPPORT SERVICES

Problem Definition; Feasibility Analysis; Selection of Existing Imagery; Ground Control Survey; Map Digitizing; Data Base Preparation; Air Support Operations; Ground Truth Survey

AERIAL SURVEY

Low Altitude Photography; Thermal Infrared; High Altitude Photography; (c) Radar; Geophysical; Multispectral Scanner

IMAGE PROCESSING, INTERPRETATION AND ANALYSIS

Photographic Laboratory Processing

PHOTOGRAMMETRIC ENGINEERING

Aerotriangulation; Orthophotomapping; Planimetric Mapping; Stereo Digitizing; Cross-Sectioning; Stereocompilation; Topographic Mapping-Small Scale; Topographic Mapping-Large Scale; Volumetric Calculation; Close Range Photogrammetry

REPRODUCTION

Drafting & Scribing; Cartographic Reproduction; Automated Drafting/Plotting; Printing

OTHER SERVICES

Consultant Services; Computer Services; (c) Interactive Computer Graphics

NAME: AEROCON PHOTOGRAMMETRIC SURVEYS, INC.

AEROCON PHOTOGRAMMETRIC SURVEYS, INC.

ADDRESS(ES) & CONTACT(S)

30575 Euclid Ave.
Wickliffe, Ohio 44092
(216) 585-2500
J.C. Patterson

YEARS IN BUSINESS: 14

SMALL BUSINESS CONTRACTOR? Yes

PROJECTS COMPLETED: 2,000

MINORITY-OWNED BUSINESS? _____

REGION SERVED: U.S.

TOTAL APPLICABLE EMPLOYEES: 12

TYPES OF REMOTE SENSING TECHNOLOGIES:

Low Altitude Aerial Photo; Med Altitude Aerial Photo; High Altitude Aerial Photo

PERSONNEL & SKILLS REPRESENTED:

Management (3); Professional (3); Technical (6)

Draftsmen (3); Engineers (civil, environ.); Photogrammatists (2); Photogrammetric Equip. Oper. (3); Photolab Technicians (2); Pilots (1)

STATEMENT OF CAPABILITIES:

FACILITIES AND SPECIAL EQUIPMENT

AIRCRAFT (1)

Cessna TV 206

CAMERAS, SCANNERS, AND OTHER REMOTE SENSORS (1)

Zeiss Jena

FIELD SURVEY EQUIPMENT (3)

EDM; Theodolite; Level

PHOTOGRAPHIC PROCESSING EQUIPMENT (4)

PHOTOGRAMMETRIC PROCESSING EQUIPMENT (5)

IMAGE INTERPRETATION, VIEWING AND MAPPING (NON-DIGITAL)

IMAGE INTERPRETATION, VIEWING AND MAPPING (DIGITAL)

DIGITIZING, PLOTTING AND GRAPHICS (1)

K&E Dell Foster

OTHER COMPUTER PROCESSING

OTHER

ORIGINAL PAGE IS
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AEROCON PHOTOGRAMMETRIC SURVEYS, INC.

PRODUCTS AND SERVICES PROVIDED

IMAGE PRODUCTS

(c) B&W Negative Transparencies, Positive Transparencies, Contact Prints, and Enlarged Prints; (s) Color, Color Infrared, and Color Composite Negative Transparencies, Positive Transparencies, Contact Prints, and Enlarged Prints; (c) Photo Mosaics; Photo Atlas Sheets; Halftone Image Prints
ENHANCED AND CORRECTED IMAGERY

PHOTOGRAMMETRIC PRODUCTS

(c) Orthophotos; Topographic Maps; Engineering Cross Sections; Stockpile Measurements; Earthwork Measurements; Digital Terrain Models; Digital Data Bases; Planimetric Maps; Photo-Contour Maps; Plan and Profile Sheets; Volumetric Calculations; Distance & Angle Measurements

INTERPRETED, THEMATIC PRODUCTS

(c) Land Use Maps; Utility Maps; Acreage Tabulations; Transportation Maps; Tax Maps

PROJECT PLANNING AND SUPPORT SERVICES

Problem Definition; Feasibility Analysis; Selection of Existing Imagery; Ground Control Survey; Map Digitizing; Data Base Preparation; Air Support Operations

AERIAL SURVEY

Low Altitude Photography; High Altitude Photography

IMAGE PROCESSING, INTERPRETATION AND ANALYSIS

PHOTOGRAMMETRIC ENGINEERING

Aerotriangulation; Orthophotomapping; Planimetric Mapping; Stereo Digitizing; Cross-Sectioning; Stereocompilation; Topographic Mapping-Small Scale; Topographic Mapping-Large Scale; Volumetric Calculation

REPRODUCTION

Drafting & Scribing; Cartographic Reproduction; Printing; (s) Automated Drafting/Plotting

OTHER SERVICES

Consultant Services

NAME: AEROECO (Aerial Ecological Analysts)

ADDRESS(ES) & CONTACT(S)

2303 Archdale Road
Reston, Virginia 22091
(703) 860-4673
Robert T. Macomber

YEARS IN BUSINESS: 15

SMALL BUSINESS CONTRACTOR? Yes

PROJECTS COMPLETED: 72

MINORITY-OWNED BUSINESS? _____

REGION SERVED: U.S. & Int'l.

TOTAL APPLICABLE EMPLOYEES: 6

TYPES OF REMOTE SENSING TECHNOLOGIES:

Low Altitude Aerial Photo; Med Altitude Aerial Photo; High Altitude Aerial Photo; Aerial Multispectral Scanner; Aerial Thermal Infrared Scanner; Laser Scanner; Landsat MSS; Landsat RBV; Skylab; Digital Image Interpretations; Manual Image Interpretations

PERSONNEL & SKILLS REPRESENTED:

Management (2); Professional (2); Technical (2)

Cartographers (1); Photogrammatists (1); Photogrammetric Equip. Oper. (2); Photointerpreters (2); Photolab Technicians (1); Pilots (2)

STATEMENT OF CAPABILITIES:

Aerial Ecological Analysts (AeroEco) was chartered in 1976 to conduct remote sensing surveys from aerial photography and photo interpretation. Current capabilities include small, medium and large scale photo procurement, thermal and multispectral data acquisition and ground truth data verification. Image enhancement, photo interpretation and map production functions are supported by a photo lab and consultant, cartographers. The firm specializes in design and implementation of operational resource mapping programs in the field of water resources in the coastal zone.

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FACILITIES AND SPECIAL EQUIPMENT

AIRCRAFT

CESSNA TURBO 206 Photo Aircraft (1)
 Piper SuperCub Reconnaissance Aircraft (1)
 LearJet 24D High Alt. Photo Aircraft (1)
 Amphibious Float Equipped Water Sample A/C (1)
CAMERAS, SCANNERS, AND OTHER REMOTE SENSORS
 Wild Metric Mapping Camera (1) I'S Multispectral Camera (1)
 Hasselblad Oblique Camera (1)
 Nikon (1)
 Bendix LN-3 Thermal Scanner (1)
FIELD SURVEY EQUIPMENT

PHOTOGRAPHIC PROCESSING EQUIPMENT

Aerial Film Processor (1) Aerial Film Enlarger (1)
 Aerial Electronic Dodging Contact Printer (1)
 Log-Etronics Paper Processor (1)

PHOTOGRAMMETRIC PROCESSING EQUIPMENT

Rectifying Enlarger (1)
 Log-Etronic Diapositive/Plate Contact Printer (1)

IMAGE INTERPRETATION, VIEWING AND MAPPING (NON-DIGITAL)

Bausch & Lomb Zoom Stereoscope w/ Richards Light Table (1)
 Map-o-Graph (1)
 Zoom Transfer Scope (1)
 Light Tables & Stereoscopes (1)

IMAGE INTERPRETATION, VIEWING AND MAPPING (DIGITAL)

Bendix MDAS

DIGITIZING, PLOTTING AND GRAPHICSOTHER COMPUTER PROCESSINGOTHER

PRODUCTS AND SERVICES PROVIDED

IMAGE PRODUCTS

B&W Contact Prints; B&W Enlarged Prints; (c) B&W Negative and Positive Transparencies; (c) Color, Color Infrared, and Color Composite Negative Transparencies, Positive Transparencies, Contact Prints and Enlarged Prints; (c) Photo Mosaics; Photo Atlas Sheets; Thermograms; Halftone Image Prints
ENHANCED AND CORRECTED IMAGERY
 (c) Photo Multitemporal Composites; Photo Contrast Enhanced; Photo Geometric Correction; Photo Density Slice; Photo Change Detection

PHOTOGRAMMETRIC PRODUCTS

(c) Engineering Cross Sections; Stockpile Measurements; Photo-Contour Maps; Distance & Angle Measurements; Rectified Photo Maps

INTERPRETED, THEMATIC PRODUCTS

(c) Color Thematic Maps; Land Use Maps; Vegetation/Forestry Maps; Utility Maps; Acreage Tabulations; Geocoded Data Bases; Thematic Map Overlays; Transportation Maps; Tax Maps

PROJECT PLANNING AND SUPPORT SERVICES

Problem Definition; Feasibility Analysis; Selection of Existing Imagery; Data Base Preparation; Air Support Operations; Sensor Selection/Evaluation; Sampling Strategy Design; Ancillary Data Collection; Ground Truth Survey; Gray Level Digitizing; Data Management; (s) Map Digitizing

AERIAL SURVEY

Low Altitude Photography; Thermal Infrared; High Altitude Photography; Multispectral Scanner; (s) Radar

IMAGE PROCESSING, INTERPRETATION AND ANALYSIS

Photographic Laboratory Processing; Manual Image Interpretation; (s) Digital Image Processing; Interactive Digital Image/Analysis/Classification

PHOTOGRAMMETRIC ENGINEERING

Orthophotomapping

REPRODUCTION

Drafting & Scribing; Cartographic Reproduction; (s) Printing

OTHER SERVICES

Remote Sensing Research; Remote Sensing Training; Consultant Services; (s) Interactive Computer Graphics

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AEROECO

REMOTE SENSING EQUIPMENT/SYSTEMS PROVIDED

REMOTE SENSOR SYSTEMS

VIEWING EQUIPMENT

PHOTOGRAMMETRIC EQUIPMENT

DIGITAL IMAGE PROCESSING EQUIPMENT

SOFTWARE

INTEGRATED SYSTEMS

OTHER EQUIPMENT

Sell Aerial Film and Photo Processing Equipment

NAME: AEROGRAFICS CORP.

ADDRESS(ES) & CONTACT(S)

1575 Smithtown Ave., P.O. Box 248
Bohemia, New York 11716
(516) 589-6045
Thomas J. Rohan, Jr.

YEARS IN BUSINESS: 7

PROJECTS COMPLETED: thousands

REGION SERVED: I, II, III, IV, & V

TYPES OF REMOTE SENSING TECHNOLOGIES:

Low Altitude Aerial Photo; Med Altitude Aerial Photo; High Altitude Aerial Photo;

SMALL BUSINESS CONTRACTOR? Yes

MINORITY-OWNED BUSINESS? _____

TOTAL APPLICABLE EMPLOYEES: 12

PERSONNEL & SKILLS REPRESENTED:

Management (3) Technical (9)

Image Processing Equip. Oper. (2); Photolab Technicians (2); Pilots (3)

STATEMENT OF CAPABILITIES:

Normal remote sensing capabilities. Aircraft may be adapted for custom applications, etc.

AEROGRAPHICS CORP.

FACILITIES AND SPECIAL EQUIPMENT

AIRCRAFT

CESSNA 310 (1)
CESSNA 180 (2)
CESSNA 206 (1)

CAMERAS, SCANNERS, AND OTHER REMOTE SENSORS

Wild RC-8 (3)

FIELD SURVEY EQUIPMENT

PHOTOGRAPHIC PROCESSING EQUIPMENT

Oscar Fishers (2)
Dupont ERF (1)

PHOTOGRAMMETRIC PROCESSING EQUIPMENT

LOG-E (2)

IMAGE INTERPRETATION, VIEWING AND MAPPING (NON-DIGITAL)

IMAGE INTERPRETATION, VIEWING AND MAPPING (DIGITAL)

DIGITIZING, PLOTTING AND GRAPHICS

OTHER COMPUTER PROCESSING

OTHER

AEROGRAPHICS CORP.

PRODUCTS AND SERVICES PROVIDED

IMAGE PRODUCTS

B&W, Color, Color Infrared, Color Composite Neg. & Pos. Transparencies, Contact & Enlarged Prints; Halftone Image Prints; (c) Photo Mosaics

ENHANCED AND CORRECTED IMAGERY

(c) Contrast Enhanced

PHOTOGRAMMETRIC PRODUCTS

INTERPRETED, THEMATIC PRODUCTS

PROJECT PLANNING AND SUPPORT SERVICES

Problem Definition; Feasibility Analysis; Selection of Existing Imagery; Air Support Operations; Sensor Selection/Evaluation

AERIAL SURVEY

Low Altitude Photography; High Altitude Photography

IMAGE PROCESSING, INTERPRETATION AND ANALYSIS

Photographic Laboratory Processing

PHOTOGRAMMETRIC ENGINEERING

REPRODUCTION

Cartographic Reproduction

OTHER SERVICES

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NAME: AGIMAGES

AGIMAGES

ADDRESS(ES) & CONTACT(S)

P.O. Box 395
Davis, California 95616
(916) 756-6028
T. Matsumoto

YEARS IN BUSINESS: 4

SMALL BUSINESS CONTRACTOR? Yes

PROJECTS COMPLETED: 25

MINORITY-OWNED BUSINESS? _____

REGION SERVED: U.S. & Int'l.

TOTAL APPLICABLE EMPLOYEES: 5

TYPES OF REMOTE SENSING TECHNOLOGIES:

Low Altitude Aerial Photo; Med Altitude Aerial Photo

PERSONNEL & SKILLS REPRESENTED:

Management (2); Professional (2); Technical (1)

Soil Scientists; Photointerpreters; Pilots

STATEMENT OF CAPABILITIES:

AgImages provides aerial photography, photointerpretation and consulting services to the agricultural community. Low and medium altitudes photography are conducted and crop health and soil maps are photointerpreted for use by our clients. The concept of AgImages is to collect, develop and evaluate agricultural technology and incorporate them into a program of practical application at the farm level.

FACILITIES AND SPECIAL EQUIPMENT

AIRCRAFT

(2)
(type unspecified)

CAMERAS, SCANNERS, AND OTHER REMOTE SENSORS

(4)
(type unspecified)

FIELD SURVEY EQUIPMENT

(2)
(type unspecified)

PHOTOGRAPHIC PROCESSING EQUIPMENT

PHOTOGRAMMETRIC PROCESSING EQUIPMENT

IMAGE INTERPRETATION, VIEWING AND MAPPING (NON-DIGITAL)

IMAGE INTERPRETATION, VIEWING AND MAPPING (DIGITAL)

DIGITIZING, PLOTTING AND GRAPHICS

OTHER COMPUTER PROCESSING

OTHER

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AGIMAGES

PRODUCTS AND SERVICES PROVIDED

IMAGE PRODUCTS

(c) B&W Positive Transparencies and Enlarged Prints; Color Positive Transparencies and Enlarged Prints; Color Infrared Positive Transparencies, Enlarged Prints; (s) Color Infrared Contact Prints
ENHANCED AND CORRECTED IMAGERY

Photo Change Detection

PHOTOGRAMMETRIC PRODUCTS

Planimetric Maps

INTERPRETED, THEMATIC PRODUCTS

Soils Maps

PROJECT PLANNING AND SUPPORT SERVICES

AERIAL SURVEY

Low Altitude Photography

IMAGE PROCESSING, INTERPRETATION AND ANALYSIS

PHOTOGRAMMETRIC ENGINEERING

REPRODUCTION

Printing

OTHER SERVICES

Remote Sensing Research; Remote Sensing Training; Consultant Services

NAME: AIR PHOTOGRAPHICS, INC.

ADDRESS(ES) & CONTACT(S)

Route 4, Box 500 - Martinsburg Airport
Martinsburg, West Virginia 25401
(304) 263-6976
John Houyoux

2421 Linden Lane
Silver Spring, Maryland 20910
(301) 588-2788
Maureen Thompson

Main @ 20th Streets - P.O. Box 786
Purcellville, Virginia 22132
(703) 338-7101
Willard Nieth

YEARS IN BUSINESS: 20

PROJECTS COMPLETED: 12,000 (est.)

REGION SERVED: I, II, III

TYPES OF REMOTE SENSING TECHNOLOGIES:

Low Altitude Aerial Photo
Med Altitude Aerial Photo
High Altitude Aerial Photo

SMALL BUSINESS CONTRACTOR? Yes

MINORITY-OWNED BUSINESS? No

TOTAL APPLICABLE EMPLOYEES: 9

PERSONNEL & SKILLS REPRESENTED:

Management (3); Professional (3); Technical (3); Cartographers (1); Photogrammatists (1); Photolab Technicians (9); Pilots (3).

STATEMENT OF CAPABILITIES:

The company was formed in August of 1960. Its principal objective is to provide an aerial photographic and photo laboratory service. Our normal service area is bounded by Maine (north), South Carolina (south) and as far west as Ohio. Both vertical and oblique aerial photography are provided. Altitudes range from 1000 to 24,000 feet ASL. Laboratory services include enlarging (including murals), copying, contact printing and mosaic preparation. We also specialize in an up-to-date aerial photo library of the adjacent D.C., Maryland, Virginia & West Virginia areas.

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FACILITIES AND SPECIAL EQUIPMENT

AIRCRAFT

Piper Aztec (twin) (2)
Cessna 206 (single) (1)

CAMERAS, SCANNERS, AND OTHER REMOTE SENSORS

Wild RC-10 aerial cameras (3)
Various oblique aerial cameras (3)

FIELD SURVEY EQUIPMENT

PHOTOGRAPHIC PROCESSING EQUIPMENT

Morse film processing tanks, motor (sets) (2)
Paper and print processors (2)

PHOTOGRAMMETRIC PROCESSING EQUIPMENT

Log-E Automatic dodging printer (2)

IMAGE INTERPRETATION, VIEWING AND MAPPING (NON-DIGITAL)

IMAGE INTERPRETATION, VIEWING AND MAPPING (DIGITAL)

DIGITIZING, PLOTTING AND GRAPHICS

OTHER COMPUTER PROCESSING

OTHER

Borrowdale copy camera - up to 40" x 60" copy negative (1)

PRODUCTS AND SERVICES PROVIDED

IMAGE PRODUCTS

B&W Neg. & Pos. Transparencies, Contact & Enlarged Prints; Halftone Image Prints;
(c) Photo Mosaics; (s) Color and Color Infrared Neg. & Pos. Transparencies, Contact &
Enlarged Prints

ENHANCED AND CORRECTED IMAGERY

PHOTOGRAMMETRIC PRODUCTS

INTERPRETED, THEMATIC PRODUCTS

PROJECT PLANNING AND SUPPORT SERVICES

Problem Definition; Feasibility Analysis; Selection of Existing Imagery; Air Support
Operations.

AERIAL SURVEY

Low Altitude Photography; High Altitude Photography.

IMAGE PROCESSING, INTERPRETATION AND ANALYSIS

Photographic Laboratory Processing

PHOTOGRAMMETRIC ENGINEERING

REPRODUCTION

OTHER SERVICES

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AIR PHOTOGRAPHICS, INC.

REMOTE SENSING EQUIPMENT/SYSTEMS PROVIDED

REMOTE SENSOR SYSTEMS

Lease Reconnaissance Cameras; Lease Handheld Aerial Cameras

VIEWING EQUIPMENT

Sell Stereoscopes

PHOTOGRAMMETRIC EQUIPMENT

DIGITAL IMAGE PROCESSING EQUIPMENT

SOFTWARE

INTEGRATED SYSTEMS

OTHER EQUIPMENT

NAME: AIRVIEW SPECIALISTS CORPORATION

ADDRESS(ES) & CONTACT(S)

3419 Churin Drive
Mountain View, CA 94040
(415) 965-4433
Robin I. Welch

Ames Research Center
Moffett Field, CA 94035
(415) 965-5232
Robin I. Welch

YEARS IN BUSINESS: 26

PROJECTS COMPLETED: 120

REGION SERVED: U.S., Int'l.

SMALL BUSINESS CONTRACTOR? Yes

MINORITY-OWNED BUSINESS? N/A

TOTAL APPLICABLE EMPLOYEES: 5

TYPES OF REMOTE SENSING TECHNOLOGIES:

Low Altitude Aerial Photo	Landsat RBV
Med Altitude Aerial Photo	Seasat
High Altitude Aerial Photo	HCOM
Aerial Multispectral Scanner	Skylab
Aerial Thermal Infrared Scanner	Weather Satellite
Radar	Digital Image Interpretations
Geophysical Survey	Manual Image Interpretations
Landsat MSS	

PERSONNEL & SKILLS REPRESENTED:

Management(2); Professional(2); Technical(1); Engineers(civil, environ.),
Photogrammatists, Photointerpreters, Physical Scientists, Pilots.
(# not provided).

STATEMENT OF CAPABILITIES:

Primary experience is in developing and utilizing advanced remote sensing technology and systems through research, consulting, teaching and operational activities in a wide range of earth resource applications. Expertise is focused on assisting others in establishing a capability and facility for remote sensing research and operations and in actual project management and operations in project design, data acquisition, processing and handling, photo interpretation, field and flight operations, mapping and training of technicians and managers. Emphasis is on an integrated man/computer approach to data processing for space, aircraft and ground data information in a multiple resource/multiple use setting.

FACILITIES AND SPECIAL EQUIPMENT

AIRCRAFT

(1) (Specific types not provided)

CAMERAS, SCANNERS, AND OTHER REMOTE SENSORS

(3) (Specific types not provided)

FIELD SURVEY EQUIPMENTPHOTOGRAPHIC PROCESSING EQUIPMENTPHOTOGRAMMETRIC PROCESSING EQUIPMENTIMAGE INTERPRETATION, VIEWING AND MAPPING (NON-DIGITAL)

(4) (Specific types not provided)

IMAGE INTERPRETATION, VIEWING AND MAPPING (DIGITAL)

(1) (Specific types not provided)

DIGITIZING, PLOTTING AND GRAPHICS

(1) (Specific types not provided)

OTHER COMPUTER PROCESSING

(1) (Specific types not provided)

OTHER

PRODUCTS AND SERVICES PROVIDED

IMAGE PRODUCTS

(c)B&W, Color, Color Infrared, Color Composite Negative Transparencies, Positive Transparencies, Contact Prints, Enlarged Prints; (s) Photo Mosaics, Photo Alz: Sheets, Analog Magnetic Tape, Thermograms, Digital Mosaics, Halftone Image Prints, Digital Magnetic Tape.

ENHANCED AND CORRECTED IMAGERY

(c)Photo Multitemporal Composites; (s)Digital Multitemporal Composites; (s) Digital Contrast Enhanced, Digital Geometric Correction, Digital Density Slice; (c)Photo Change Detection; (s)Digital Change Detection, Digital Multisensor Composites, Digital Radiometric Correction, Digital Image Resampling, Digital Pseudo Stereo.

PHOTOGRAMMETRIC PRODUCTS

(s)Orthophotos; (s)Topographic Maps; (c)Digital Data Bases; (s)Planimetric Maps; (s)Photo-Contour Maps; (s)Plan and Profile Sheets; (c)Volumetric Calculations; (s)Distance&Angle Measurements.

INTERPRETED, THEMATIC PRODUCTS

(c)Color Thematic Maps; (c)Land Use Maps; (c)Vegetation/Forestry Maps; (c)Utility Maps; (c)Acreage Tabulations; (s)Geocoded Data Bases; (c)Thematic Map Overlays; (s)Geologic Maps; (c)Transportation Maps; (c)Soils Maps; (s)Tax Maps; (s)Digital Magnetic Tapes.

PROJECT PLANNING AND SUPPORT SERVICES

Problem Definition; Feasibility Analysis; Selection of Existing Imagery; Ground Control Survey; Data Base Preparation; Air Support Operations; Sensor Selection/Evaluation; Sampling Strategy Design; Ancillary Data Collection; Ground Truth Survey; Gray Level Digitizing; Data Management; (s) Map Digitizing

AERIAL SURVEY

Low Altitude Photography; (s)Thermal Infrared; (s)Radar; (s)Geophysical; (s)High Altitude Photography; (s)Multispectral Scanner.

IMAGE PROCESSING, INTERPRETATION AND ANALYSIS

Digital Image Processing; Batch Digital Image/Analysis/Classification; Interactive Digital Image/Analysis/Classification; Manual Image Interpretation; (s) Photographic Laboratory Processing

PHOTOGRAMMETRIC ENGINEERING

(s)Aerotriangulation, Orthophotomapping, Planimetric Mapping, Stereo Digitizing, Cross-Sectioning, Stereocompilation, Topographic Mapping-Small Scale, Topographic Mapping-Large Scale, Volumetric Calculation.

REPRODUCTION

(s)Drafting & Scribing, Cartographic Reproduction, Automated Drafting/Plotting, Printing.

OTHER SERVICES

Remote Sensing Research; Remote Sensing Training; Statistical Modeling; Consultant Services; Software Design/Development; (s) Interactive Computer Graphics; Computer Services

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ARIX, A PROFESSIONAL CORP.

NAME: ARIX, A PROFESSIONAL CORP.

ADDRESS(ES) & CONTACT(S)

2021 Clubhouse Drive
Greeley, CO 80631
(303) 330-2749
Robert O. Thomas, Vice President

625 East Madison
Riverton, Wyoming 82501
(307) 856-6505
Robert O. Regon, Office Manager

760 Horizon Drive
Grand Junction, Colorado 81501
(303) 243-7569
Gordon Bruchner, Vice President

YEARS IN BUSINESS: 10

SMALL BUSINESS CONTRACTOR? Yes

PROJECTS COMPLETED: 300

MINORITY-OWNED BUSINESS? _____

REGION SERVED: VIII, IX

TOTAL APPLICABLE EMPLOYEES: 6

TYPES OF REMOTE SENSING TECHNOLOGIES:

Low Altitude Aerial Photo
Med Altitude Aerial Photo

PERSONNEL & SKILLS REPRESENTED:

Management (1); Professional (1); Technical (4); Draftsmen (1); Field Surveyors (1);
Photogrammatists (1); Photogrammetric Equip Oper. (1); Photolab Technicians (2).

STATEMENT OF CAPABILITIES:

Ten years experience in photogrammetrics. Small to medium sized mapping project.
Complete photo lab and ortho capabilities. Third order stereo plotters and
digitizer.

FACILITIES AND SPECIAL EQUIPMENT

AIRCRAFT

CAMERAS, SCANNERS, AND OTHER REMOTE SENSORS

FIELD SURVEY EQUIPMENT

Theodolites (12); Levels (16); EDM (8).

PHOTOGRAPHIC PROCESSING EQUIPMENT

Kodak 242 Processor (1); Log E Printer (1).

PHOTOGRAMMETRIC PROCESSING EQUIPMENT

IMAGE INTERPRETATION, VIEWING AND MAPPING (NON-DIGITAL)

IMAGE INTERPRETATION, VIEWING AND MAPPING (DIGITAL)

DIGITIZING, PLOTTING AND GRAPHICS

Auto Trol Digitizer (1)

OTHER COMPUTER PROCESSING

OTHER

Complete photo lab facilities--copy camera, enlarger, etc.

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ARIX, A PROFESSIONAL CORP.

NAME: ART-O-GRAPH

PRODUCTS AND SERVICES PROVIDED

IMAGE PRODUCTS

B&W Contact and Enlarged Prints; Halftone image Prints; (c) B&W Pos. & Neg. Transp.; Photo Mosaics; (s) Color, Color Infrared, Color Composite Neg. & Pos. Transp., Contact & Enlarged Prints; Photo Atlas Sheets; Analog Magnetic Tape; Thermograms; Digital Mosaics; Digital Magnetic Tape

ADDRESS(ES) & CONTACT(S)

529 South 7th.
Minneapolis, MN 55415
(612) 336-1661
Paul Stormo

ENHANCED AND CORRECTED IMAGERY

PHOTOGRAMMETRIC PRODUCTS

(c) Orthophotos; (c) Topographic Maps; (c) Engineering Cross Sections; (c) Stockpile Measurements; (c) Earthwork Measurements; (s) Digital Terrain Models; (s) Digital Data Bases; (c) Planimetric Maps; (c) Photo-Contour Maps; (c) Plan and Profile Sheets; (c) Volumetric Calculations; (c) Distance&Angle Measurements.

INTERPRETED, THEMATIC PRODUCTS

(c) Utility Maps; (c) Tax Maps.

PROJECT PLANNING AND SUPPORT SERVICES

Problem Definition; Feasibility Analysis; Selection of Existing Imagery; Ground Control Survey; Map Digitizing; Data Base Preparation; Ground Truth Survey; (s) Air Support Operations

AERIAL SURVEY

(s) Low Altitude Photography; (s) Thermal Infrared; (s) High Altitude Photography.

IMAGE PROCESSING, INTERPRETATION AND ANALYSIS

Photographic Laboratory Processing; Manual Image Interpretation.

PHOTOGRAMMETRIC ENGINEERING

Orthophotomapping; Planimetric Mapping; Stereo Digitizing; Cross-Sectioning; Stereocompilation; Topographic Mapping-Small Scale; Topographic Mapping-Large Scale; Volumetric Calculation; (s) Aerotriangulation

REPRODUCTION

Drafting & Scribing; Cartographic Reproduction; (s) Automated Drafting/Plotting; Printing.

OTHER SERVICES

YEARS IN BUSINESS: 20

PROJECTS COMPLETED: N/A

REGION SERVED: U.S., Int'l.

TYPES OF REMOTE SENSING TECHNOLOGIES:

Low Altitude Aerial Photo; Med Altitude Aerial Photo, Geophysical Survey

SMALL BUSINESS CONTRACTOR? _____

MINORITY-OWNED BUSINESS? _____

TOTAL APPLICABLE EMPLOYEES: _____

PERSONNEL & SKILLS REPRESENTED:

STATEMENT OF CAPABILITIES:

Manufacture and market scale changing projectors with capability to enlarge or reduce 5 times. Can project opaque copy, 9" x 9" film, 35mm, 70mm, and microfiche. Equipment is easy to operate and simple to learn.

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ART-O-GRAPH

REMOTE SENSING EQUIPMENT/SYSTEMS PROVIDED

REMOTE SENSOR SYSTEMS

VIEWING EQUIPMENT

Sell Scale Change Projectors

PHOTOGRAMMETRIC EQUIPMENT

Sell Scale Change Projectors

DIGITAL IMAGE PROCESSING EQUIPMENT

SOFTWARE

INTEGRATED SYSTEMS

OTHER EQUIPMENT

NAME: AUTOMATED SCIENCES GROUP, INC.

ADDRESS(ES) & CONTACT(S)

8555 Sixteenth Street
Silver Spring, MD 20910
(301) 587-8750
Arnold Avant or James Vandergraft

YEARS IN BUSINESS: 1

PROJECTS COMPLETED: 3 in progress

REGION SERVED: U.S.

TYPES OF REMOTE SENSING TECHNOLOGIES:

Aerial Multispectral Scanner
Aerial Thermal Infrared Scanner
Landat MSS

Landsat RBV
Seasat
Digital Image Interpretations

PERSONNEL & SKILLS REPRESENTED:

Management(3); Professional(2); Technical(2); Computer Programmers, Engineers(civil, environ.), Engineers(electrical, Physical Scientists (# not provided).

STATEMENT OF CAPABILITIES:

ASG is a full service consulting firm with a staff of over 90 full-time employees, of which more than 35% have advanced degrees. Specific areas of expertise include: digital image enhancement and analysis, satellite image processing, mathematical modeling and simulation, data analysis and filtering, statistical analysis and forecasting, minicomputer applications. Current projects include processing and enhancement of TIROS-N data.

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AUTOMATED SCIENCES GROUP, INC.

NAME: AVIS AIRMAP, INC.

PRODUCTS AND SERVICES PROVIDED

IMAGE PRODUCTS

ADDRESS(ES) & CONTACT(S)

Avis Park @ Washington Street
Braintree, Massachusetts 02184
(617) 848-8000
Dr. Gordon R. Derman

ENHANCED AND CORRECTED IMAGERY

YEARS IN BUSINESS: 14

SMALL BUSINESS CONTRACTOR? Yes

PHOTOGRAMMETRIC PRODUCTS

PROJECTS COMPLETED: 200

MINORITY-OWNED BUSINESS? Yes

INTERPRETED, THEMATIC PRODUCTS

REGION SERVED: I, II, III

TOTAL APPLICABLE EMPLOYEES: 33

PROJECT PLANNING AND SUPPORT SERVICES

Problem Definition; Feasibility Analysis; Map Digitizing; Data Base Preparation;
Gray Level Digitizing; Data Management.

TYPES OF REMOTE SENSING TECHNOLOGIES:

Low Altitude Aerial Photo; Med Altitude Aerial Photo; High Altitude Aerial Photo;
Landsat MSS; Manual Image Interpretations

AERIAL SURVEY

PERSONNEL & SKILLS REPRESENTED:

Management (2); Professional (5); Technical (16); Other (10)
Cartographers (6); Computer Programmers (1); Draftsmen (4); Engineers (civil, environ.
(1); Field Surveyors (8); Photogrammatists (4); Photogrammetric Equip. Oper. (5);
Photointerpreters (3); Geographers (1)

IMAGE PROCESSING, INTERPRETATION AND ANALYSIS

Digital Image Processing; Batch Digital Image/Analysis/Classification; Interactive
Digital Image/Analysis/Classification.

STATEMENT OF CAPABILITIES:

Avis Airmap, Inc. provides a wide spectrum of measurement services to Government
and industry including Aerial Survey, Photo-interpretation, Stereo-photogrammetric
Mapping, Close-Range Photogrammetry and Land Surveys. The firm has 14 years
of experience in color aerial photointerpretation. They have developed several
computer-assisted mapping systems including semi-automatic plotting - storage
of map data, analytical triangulation and inter-active graphics. The firm uses
color infrared film extensively both for interpretation and mapping.

PHOTOGRAMMETRIC ENGINEERING

REPRODUCTION

OTHER SERVICES

Remote Sensing Research; Statistical Modeling; Consultant Services; Interactive
Computer Graphics; Computer Services; Turnkey Systems Sales/Leasing/Service;
Software Design/Development; Equipment Sales/Leasing/Service; Software Sales/Leasing.

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AVIS AIRMAP, INC.

AVIS AIRMAP, INC.

FACILITIES AND SPECIAL EQUIPMENT

PRODUCTS AND SERVICES PROVIDED

AIRCRAFT

(Leased) Twin-engine TC AZTECS (2)

CAMERAS, SCANNERS, AND OTHER REMOTE SENSORS

(Leased) Wild-RC-10 (3)

FIELD SURVEY EQUIPMENT

EDM, Auto Levels (4)

PHOTOGRAPHIC PROCESSING EQUIPMENT

PHOTOGRAMMETRIC PROCESSING EQUIPMENT
Zeiss Jena Topocarts (3)

IMAGE INTERPRETATION, VIEWING AND MAPPING (NON-DIGITAL)

Miscellaneous (2)

IMAGE INTERPRETATION, VIEWING AND MAPPING (DIGITAL)
Zeiss Jena Topocarts with Computerized Attachments (1)

DIGITIZING, PLOTTING AND GRAPHICS

OTHER COMPUTER PROCESSING

OTHER

IMAGE PRODUCTS

B & W, Color, and Color Infrared Negative Transparencies, Pos. Transparencies, Contact Prints and Enlarged Prints; Photo Mosaics; Photo Atlas Sheets; Halftone Image Prints; Digital Magnetic Tape; Digital Terrain Models; Auto Plots of DDM's

ENHANCED AND CORRECTED IMAGERY

PHOTOGRAMMETRIC PRODUCTS

Orthophotos; Topographic Maps; Engineering Cross Sections; Stockpile Measurements; Earthwork Measurements; Digital Terrain Models; Digital Data Bases; Planimetric Maps; Photo-Contour Maps; Plan and Profile Sheets; Volumetric Calculations; Distance & Angle Measurements; Close-range Photogrammetry

INTERPRETED, THEMATIC PRODUCTS

Color Thematic Maps; Land Use Maps; Vegetation/Forestry Maps; Utility Maps; Acreage Tabulations; Geocoded Data Bases; Thematic Map Overlays; Geologic Maps; Transportation Maps; Soils Maps; Tax Maps; Digital Magnetic Tapes

PROJECT PLANNING AND SUPPORT SERVICES

Problem Definition; Feasibility Analysis; Selection of Existing Imagery; Ground Control Survey; Map Digitizing; Air Support Operations; Sensor Selection/Evaluation; Ancillary Data Collection; Ground Truth Survey; Data Management; (s) Sampling Strategy Design; Gray Level Digitizing

AERIAL SURVEY

Low Altitude Photography; High Altitude Photography; (s) Thermal Infrared; Geophysical; Multispectral Scanner

IMAGE PROCESSING, INTERPRETATION AND ANALYSIS

Photographic Laboratory Processing; Manual Image Interpretation; (s) Digital Image Processing; Batch Digital Image/Analysis/Classification; Interactive Digital Image/Analysis/Classification

PHOTOGRAMMETRIC ENGINEERING

Aerotriangulation; Orthophotomapping; Planimetric Mapping; Stereo Digitizing; Cross-Sectioning; Stereocompilation; Topographic Mapping-Small Scale; Topographic-Large Scale; Volumetric Calculation; Close-range Photogrammetry

REPRODUCTION

Drafting & Scribing; Cartographic Reproduction; Automated Drafting/Plotting; (s) Printing

OTHER SERVICES

Remote Sensing Research; Remote Sensing Training; Consultant Services; Interactive Computer Graphics; Computer Services; Software Design/Development; Software Sales/Leasing (s) Statistical Modeling

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NAME: MICHAEL BAKER, JR., INC.

ADDRESS(ES) & CONTACT(S)

4301 Dutch Ridge Road
P. O. Box 280
Beaver, PA 15009
(412) 495-7711
Wayne A. Cornelius, Vice President

3025 South Parker Road
Aurora, CO 20014
(303) 750-1958
William O. Baker, Vice President

3957-67 Northview Drive, P. O. Box 9997
Jackson, Mississippi 39206
(601) 362-5481

Franz L. Cowart, Vice President

YEARS IN BUSINESS: 30SMALL BUSINESS CONTRACTOR? NoPROJECTS COMPLETED: 2,000MINORITY-OWNED BUSINESS? NoREGION SERVED: U.S.TOTAL APPLICABLE EMPLOYEES: 137TYPES OF REMOTE SENSING TECHNOLOGIES:

Low Altitude Aerial Photo
Med Altitude Aerial Photo
Digital Image Interpretations
Manual Image Interpretations

PERSONNEL & SKILLS REPRESENTED:

Management(10); Professional(10); Technical(67); Other(50); Cartographers(12);
Computer Equip Operators(2); Computer Programmers(2); Draftsmen(20); Engineers
(civil, environ.) (6); Engineers(electrical)(1); Field Surveyors(40); Soil Scien-
tists(3); Photogrammatists(5); Photogrammetric Equip Oper.(22); Photointerpreters(8);
Photolab Technicians(5); Pilots(3); Planners(2); Geographers(3); Soil Scientists(3).

STATEMENT OF CAPABILITIES:

Michael Baker, Jr., Inc. is a diversified consulting engineering firm with offices
throughout the United States. The Survey and Mapping Division presently employs
137 people performing a variety of aerial survey and mapping work. The total
employment of the company is presently 828 and, therefore, many engineering,
architectural and scientific disciplines are available to supplement the Survey
and Mapping Division.

FACILITIES AND SPECIAL EQUIPMENT

AIRCRAFT

Aero-Commanders (2)

CAMERAS, SCANNERS, AND OTHER REMOTE SENSORS

Zeiss RMK 15/23 (2)

FIELD SURVEY EQUIPMENT

All types -- conventional and EDM (200)

PHOTOGRAPHIC PROCESSING EQUIPMENT

Total B/W including Kodak Supermatic and Dupont ERS Automatic Processors (2)

PHOTOGRAMMETRIC PROCESSING EQUIPMENT

Logetronic Mark III (2); Versamat 411-C (1); K&E HE-12 Horizontal Enlarger (1).

IMAGE INTERPRETATION, VIEWING AND MAPPING (NON-DIGITAL)

Kelsh Plotters (10); Santoni IIC (1).

IMAGE INTERPRETATION, VIEWING AND MAPPING (DIGITAL)

Wild B8S (2); Kern PC 2 AT (1); Kelsh K-600 (1).

DIGITIZING, PLOTTING AND GRAPHICS

M & S Interactive Graphics System (1); Calcomp Flatbed Plotter (1).

OTHER COMPUTER PROCESSING

IBM 370/115 Computer (1)

OTHER

PUG (2); Space-Optic Monocomparator (1).

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MICHAEL BAKER, JR., INC.

PRODUCTS AND SERVICES PROVIDED

IMAGE PRODUCTS

(c) Black & White, Color, Color Infrared Negative Transparencies, Positive Transparencies, Contact Prints and Enlarged Prints; (c) Photo Mosaics; (c) Photo Atlas Sheets; (c) Digital Mosaics; (c) Halftone Image Prints; (2) Digital Magnetic Tape.

ENHANCED AND CORRECTED IMAGERY

PHOTOGRAMMETRIC PRODUCTS

(c) Orthophotos; (c) Topographic Maps; (c) Engineering Cross Sections; (c) Stockpile Measurements; (c) Earthwork Measurements; (c) Digital Terrain Models; (c) Digital Data Bases; (c) Planimetric Maps; (c) Photo-Contour Maps; (c) Plan & Profile Sheets; (c) Volumetric Calculations; (c) Distance & Angle Measurements

INTERPRETED, THEMATIC PRODUCTS

(c) Land Use Maps; (c) Vegetation/Forestry Maps; (c) Utility Maps; (c) Acreage Tabulations; (c) Geocoded Data Bases; (c) Geologic Maps; (c) Transportation Maps; (c) Soils Maps; (c) Tax Maps; (c) Digital Magnetic Tapes

PROJECT PLANNING AND SUPPORT SERVICES

Problem Definition; Feasibility Analysis; Selection of Existing Imagery; Ground Control Survey; Map Digitizing; Data Base Preparation; Air Support Operations; Ground Truth Survey; Data Management.

AERIAL SURVEY

Low Altitude Photography; Med Altitude Photography; (s) Thermal Infrared; High Altitude Photography

IMAGE PROCESSING, INTERPRETATION AND ANALYSIS

PHOTOGRAMMETRIC ENGINEERING

Aerotriangulation; Orthophotomapping; Planimetric Mapping; Stereo Digitizing; Cross-Sectioning; Stereocompilation; Topographic Mapping-Small Scale; Topographic Mapping-Large Scale; Volumetric Calculation.

REPRODUCTION

Drafting & Scribing; Cartographic Reproduction; Automated Drafting/Plotting; Printing.

OTHER SERVICES

Consultant Services; Interactive Computer Graphics; Computer Services; Software Design/Development/Software Sales/Leasing.

NAME: BAUSCH AND LOMB INC.

ADDRESS(ES) & CONTACT(S)

1400 N. Goodman Street
Rochester, NY 14602
(716) 338-6466
Rex McHail or Bruce Williams

Toronto, Canada
Munich, Germany
Hong Kong, China

Los Angeles, CA
Cleveland, OH
Freedom, ME
Washington, D.C.

YEARS IN BUSINESS: 30

SMALL BUSINESS CONTRACTOR? _____

PROJECTS COMPLETED: N/A

MINORITY-OWNED BUSINESS? _____

REGION SERVED: U.S., Int'l.

TOTAL APPLICABLE EMPLOYEES: _____

TYPES OF REMOTE SENSING TECHNOLOGIES:

Low Altitude Aerial Photo; Med Altitude Aerial Photo; High Altitude Aerial Photo; Aerial Multispectral Scanner; Aerial Thermal Infrared Scanner; Radar; Geophysical Survey; Landsat MSS; Landsat RBV; Seasat; HCMM; Skylab; Weather Satellite; Manual Image Interpretations.

PERSONNEL & SKILLS REPRESENTED:

STATEMENT OF CAPABILITIES:

Bausch & Lomb offers direct viewing instruments for the remote sensing industry for analysis and data transfer. Image analysis equipment includes Zoom 95, Zoom 240 and Zoom 500 stereoscopes and light tables offering magnification up to 135X. The line of Zoom Transfer Scope™ equipment offers efficient transfer capability from photos to data bases of different scales. The Stereo Zoom Transfer Scope™ model is the most flexible, offering both analysis and transfer capability using any materials with magnification over 16X.

BAUSCH AND LOMB INC.

REMOTE SENSING EQUIPMENT/SYSTEMS PROVIDED

REMOTE SENSOR SYSTEMS

VIEWING EQUIPMENT

Sell Monocular Magnifiers; Sell Transfer Scopes* (*Zoom Transfer ScopeTM Equipment);
Sell Stereoscopes.

PHOTOGRAMMETRIC EQUIPMENT

DIGITAL IMAGE PROCESSING EQUIPMENT

SOFTWARE

INTEGRATED SYSTEMS

OTHER EQUIPMENT

NAME: BECHTOLD SATELLITE TECHNOLOGY CORP. (BESTEC)

ADDRESS(ES) & CONTACT(S)

667 Brea Canyon Rd., #26
Walnut, CA 91789
(714) 598-6037
Ira C. Bechtold, President

YEARS IN BUSINESS: 6

PROJECTS COMPLETED: 60

REGION SERVED: US; Int'l.

TYPES OF REMOTE SENSING TECHNOLOGIES:

Low Altitude Aerial Photo
Med Altitude Aerial Photo
High Altitude Aerial Photo
Radar
Geophysical Survey

SMALL BUSINESS CONTRACTOR? Yes

MINORITY-OWNED BUSINESS? No

TOTAL APPLICABLE EMPLOYEES: 5

Landsat MSS
Landsat RBV
Seasat
Skylab
Weather Satellite
Manual Image Interpretations

PERSONNEL & SKILLS REPRESENTED:

Management (1)
Professional (2)
Technical (2)

STATEMENT OF CAPABILITIES:

BESTEC is a geologic consulting firm involved in petroleum, geothermal, mineral exploration and geologic hazard studies for government and private industry. Thorough study of all data sources (maps and literature); analysis of Landsat, Skylab, U-2, and low-level aerial photography; and field work forms the basis for interpretation. Complete reports with maps, overlays, and imagery (if needed) are supplied. Specific site analysis is stressed for practical application to client's needs, but each investigation involves comprehensive regional tectonic analysis.

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FACILITIES AND SPECIAL EQUIPMENT

AIRCRAFT

None

CAMERAS, SCANNERS, AND OTHER REMOTE SENSORS

None

FIELD SURVEY EQUIPMENT

Proton-precision Magnetometer(1); Scintillometers(2); Geiger Counters(2);
4-wheel drive vehicle(1); ultraviolet equipment(1).

PHOTOGRAPHIC PROCESSING EQUIPMENT

Cibachrome processor(1).

PHOTOGRAMMETRIC PROCESSING EQUIPMENT

None

IMAGE INTERPRETATION, VIEWING AND MAPPING (NON-DIGITAL)

International Imaging Systems multispectral viewer(1); stereoscopes(2).

IMAGE INTERPRETATION, VIEWING AND MAPPING (DIGITAL)

None

DIGITIZING, PLOTTING AND GRAPHICS

None

OTHER COMPUTER PROCESSING

None

OTHER

Geological/Sciences Libraries(2).

PRODUCTS AND SERVICES PROVIDED

IMAGE PRODUCTS

(c) Color Composite Enlarged Prints.

ENHANCED AND CORRECTED IMAGERY

PHOTOGRAMMETRIC PRODUCTS

INTERPRETED, THEMATIC PRODUCTS

(c) Thematic Map Overlays; (c) Geologic Maps; (s) Digital Magnetic Tapes;
(c) Resource Potential Maps.

PROJECT PLANNING AND SUPPORT SERVICES

Problem Definition; Feasibility Analysis; Selection of Existing Imagery; Data Base
Preparation; Sensor Selection/Evaluation; Sampling Strategy Design; Ancillary Data
Collection; Ground Truth Survey; (s) Air Support Operations

AERIAL SURVEY

(s) Geophysical

IMAGE PROCESSING, INTERPRETATION AND ANALYSIS

Manual Image Interpretation; Photographic Laboratory Processing; (s) Photographic
Image Processing

PHOTOGRAMMETRIC ENGINEERING

REPRODUCTION

Drafting & Scribing; Cartographic Reproduction; Printing; (s) Cartographic Reproduction;
Printing

OTHER SERVICES

Remote Sensing Research; Consultant Services.

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NAME: BROOMALL INDUSTRIES, INC.

BROOMHALL INDUSTRIES, INC.

ADDRESS(ES) & CONTACT(S)

700 Abbott Drive
Broomall, PA 19008
(215) 328-1040
Kenneth W. Planty

FACILITIES AND SPECIAL EQUIPMENT

AIRCRAFT

CAMERAS, SCANNERS, AND OTHER REMOTE SENSORS

FIELD SURVEY EQUIPMENT

PHOTOGRAPHIC PROCESSING EQUIPMENT

PHOTOGRAMMETRIC PROCESSING EQUIPMENT

IMAGE INTERPRETATION, VIEWING AND MAPPING (NON-DIGITAL)

IMAGE INTERPRETATION, VIEWING AND MAPPING (DIGITAL)

DIGITIZING, PLOTTING AND GRAPHICS

Manual Digitizers (5+); Auto Digitizers (3+); Auto Plotters (3+); Graphic CRTs (12+).

OTHER COMPUTER PROCESSING

OTHER

YEARS IN BUSINESS: _____

SMALL BUSINESS CONTRACTOR? Yes

PROJECTS COMPLETED: _____

MINORITY-OWNED BUSINESS? _____

REGION SERVED: U.S., Int'l.

TOTAL APPLICABLE EMPLOYEES: 49

TYPES OF REMOTE SENSING TECHNOLOGIES:

Graphics Digitizing

PERSONNEL & SKILLS REPRESENTED:

Management (10); Professional (2); Technical (22); Other (15); Computer Equip Operators (4); Computer Programmers (3); Draftsmen (3); Engineers(electrical) (2).

STATEMENT OF CAPABILITIES:

Manufacture and sell state-of-the-art automatic optical/laser graphics scanning/ digitizing subsystems and interactive systems. Also provide a digitizing service bureau.

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BROOMHALL INDUSTRIES, INC.

BROOMHALL INDUSTRIES, INC.

PRODUCTS AND SERVICES PROVIDED

IMAGE PRODUCTS

Services are provided as required per contract requirements.

ENHANCED AND CORRECTED IMAGERY

PHOTOGRAMMETRIC PRODUCTS

(standard and custom price) Digital Data Bases.

INTERPRETED, THEMATIC PRODUCTS

PROJECT PLANNING AND SUPPORT SERVICES

Map Digitizing. Services are provided as required per contract requirements.

AERIAL SURVEY

IMAGE PROCESSING, INTERPRETATION AND ANALYSIS

PHOTOGRAMMETRIC ENGINEERING

REPRODUCTION

Services are provided as required per contract requirements.

OTHER SERVICES

Consultant Services; Interactive Computer Graphics; Computer Services; Turnkey Systems Sales/Leasing/Service; Hardware Design/Development; Software Design/Development; Equipment Sales/Leasing/Service; Software Sales/Leasing; Map Digitizing.

REMOTE SENSING EQUIPMENT/SYSTEMS PROVIDED

REMOTE SENSOR SYSTEMS

VIEWING EQUIPMENT

PHOTOGRAMMETRIC EQUIPMENT

DIGITAL IMAGE PROCESSING EQUIPMENT

SOFTWARE

INTEGRATED SYSTEMS

OTHER EQUIPMENT

Sell and Lease X-Y Coordinate Digitizer, Interactive Graphics, Plotters, Automatic Graphics Digitizers.

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NAME: JOSEPH P. BURNS, P.E.

JOSEPH P. BURNS, P.E.

ADDRESS(ES) & CONTACT(S)

P.O. Box 24052
Edina (Mpls.), MN 55424
(612) 922-2450
J.P. Burns

YEARS IN BUSINESS: 42

SMALL BUSINESS Consultant Yes

PROJECTS COMPLETED: 3,000

MINORITY-OWNED BUSINESS? _____

REGION SERVED: U.S. & Int'l.

TOTAL APPLICABLE EMPLOYEES: 1

TYPES OF REMOTE SENSING TECHNOLOGIES:

N/A

PERSONNEL & SKILLS REPRESENTED:

N/A

STATEMENT OF CAPABILITIES:

Consulting services in photogrammetry based on 40 years of varied aerial mapping experience in private and public agencies. 20 years as executive, stockholder in large aerial firm operating internationally. 20 years as engineer, supervisor with Topographic Division, U.S. Geological Survey. Past President, American Society of Photogrammetry (1971-72)

PRODUCTS AND SERVICES PROVIDED

IMAGE PRODUCTS

ENHANCED AND CORRECTED IMAGERY

PHOTOGRAMMETRIC PRODUCTS

Consulting services only: Aerotriangulation; Orthophotomapping; Planimetric Mapping; Stereo Digitizing; Cross-Sectioning; Stereocompilation; Topographic Mapping-Small Scale; Topographic Mapping-Large Scale

INTERPRETED, THEMATIC PRODUCTS

PROJECT PLANNING AND SUPPORT SERVICES

AERIAL SURVEY

IMAGE PROCESSING, INTERPRETATION AND ANALYSIS

PHOTOGRAMMETRIC ENGINEERING

REPRODUCTION

OTHER SERVICES

Consultant Services

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NAME: BUTLER UNIVERSITY, HOLCOMB RESEARCH INSTITUTE

BUTLER UNIVERSITY, HOLCOMB RESEARCH INSTITUTE

ADDRESS(ES) & CONTACT(S)

Butler University, 4600 Sunset
Indianapolis, Indiana 46208
(317) 283-9555
Richard F. Hyde

PRODUCTS AND SERVICES PROVIDED

YEARS IN BUSINESS: 8

SMALL BUSINESS CONTRACTOR? _____

PROJECTS COMPLETED: 26

MINORITY-OWNED BUSINESS? _____

REGION SERVED: U.S. Int'l.

TOTAL APPLICABLE EMPLOYEES: 11

TYPES OF REMOTE SENSING TECHNOLOGIES:

Low Altitude Aerial Photo; Med Altitude Aerial Photo; High Altitude Aerial Photo; Aerial Multispectral Scanner; Aerial Thermal Infrared Scanner; Radar; Geophysical Survey; Landsat MSS; Landsat RBV; Seasat; HCMM; Skylab; Weather Satellite; Digital Image Interpretations; Manual Image Interpretations; Simulated Spectral Data.

PERSONNEL & SKILLS REPRESENTED:

Management (1); Professional (2); Technical (4); Other (4); Cartographers, Computer Equip Operators, Computer Programmers, Draftsmen, Image Processing Equip Oper., Soil Scientists, Social Scientists, Photointerpreters, Physical Scientists, Pilots, Planners, Geographers (# not indicated).

STATEMENT OF CAPABILITIES:

We have applied most types of remote sensing to resource research projects. We take our own aerial color and infrared photography, process digital data such as Landsat, and interpret some. Maps are constructed to record the interpretations and classifications and these data frequently become map files in our geographic information system for processing.

IMAGE PRODUCTS

(s)B&W, Color, Color Infrared, Color Composite Negative Transp., Positive Transp., Contact Prints, Enlarged Prints; (s)Photo Mosaics, Photo Atlas Sheets, Analog Magnetic Tape, Thermograms, Digital Mosaics, Halftone Image Prints, Digital Magnetic Tape.

ENHANCED AND CORRECTED IMAGERY

(c)Multitemporal Composites, Contrast Enhanced, Geometric Correction, Density Slice, Change Detection, Multisensor Composites, Radiometric Correction, Image Resampling, Pseudo Stereo Digital Imagery.

PHOTOGRAMMETRIC PRODUCTS

Orthophotos, Topographic Maps, Digital Terrain Models, Digital Data Bases, Photo-Contour Maps, Distance & Angle Measurements

INTERPRETED, THEMATIC PRODUCTS

Color Thematic Maps, Land Use Maps, Vegetation/Forestry Maps, Contour Weather Maps, Acreage Tabulations, Geocoded Data Bases, Thematic Map Overlays, Geologic Maps, Transportation Maps, Soils Maps, Tax Maps, Digital Magnetic Tapes

PROJECT PLANNING AND SUPPORT SERVICES

Problem Definition; Feasibility Analysis; Selection of Existing Imagery; Ground Control Survey; Map Digitizing; Data Base Preparation; Sensor Selection/Evaluation; Sampling Strategy Design; Ancillary Data Collection; Ground Truth Survey; Gray Level Digitizing; Data Management; (s) Air Support Operations.

AERIAL SURVEY

(s) Low altitude photography, Thermal Infrared, Radar, Geophysical, High Altitude Photography, Multispectral Scanner.

IMAGE PROCESSING, INTERPRETATION AND ANALYSIS

Digital Image Processing; Batch Digital Image/Analysis/Classification; Interactive Digital Image/Analysis/Classification; Manual Image Interpretation; (s) Photographic Laboratory Processing.

PHOTOGRAMMETRIC ENGINEERING

(s)Aerotriangulation, Orthophotomapping, Planimetric Mapping, Stereo Digitizing, Cross-Sectioning, Stereocompilation, Topographic Mapping-Large Scale, Volumetric Calculation; Topographic Mapping-Small Scale.

REPRODUCTION

Drafting & Scribing; Automated Drafting/Plotting; (s)Cartographic Reproduction, Printing.

OTHER SERVICES

Remote Sensing Research; Remote Sensing Training; Statistical Modeling; Consultant Services; Interactive Computer Graphics; Computer Services; Hardware Design/Development; Software Design/Development; Software Sales/Leasing; (s)Consultant Services.

BUTLER UNIVERSITY, HOLCOMB RESEARCH INSTITUTE

FACILITIES AND SPECIAL EQUIPMENT

AIRCRAFT

(1) (Specific types not provided)

CAMERAS, SCANNERS, AND OTHER REMOTE SENSORS

(3) (Specific types not provided)

FIELD SURVEY EQUIPMENT

PHOTOGRAPHIC PROCESSING EQUIPMENT

PHOTOGRAMMETRIC PROCESSING EQUIPMENT

IMAGE INTERPRETATION, VIEWING AND MAPPING (NON-DIGITAL)

(1) (Specific types not provided)

IMAGE INTERPRETATION, VIEWING AND MAPPING (DIGITAL)

(1) Specific types not provided)

DIGITIZING, PLOTTING AND GRAPHICS

(1) (Specific types not provided)

OTHER COMPUTER PROCESSING

(1) (Specific types not provided.)

OTHER

NAME: CALSPAN CORPORATION

ADDRESS(ES) & CONTACT(S)

P.O. Box 400
Buffalo, New York 14225
(716) 632-7500

YEARS IN BUSINESS: 32

PROJECTS COMPLETED: Hundreds

REGION SERVED: U.S. & Int'l.

TYPES OF REMOTE SENSING TECHNOLOGIES:

Low Altitude Aerial Photo; Med Altitude Aerial Photo; High Altitude Aerial Photo;
Aerial Multispectral Scanner; Aerial Thermal Infrared Scanner; Landsat MSS; HCMM;
Skylab; Weather Satellite; Digital Image Interpretations; Manual Image Interpretations;
Photometric Interpretations

PERSONNEL & SKILLS REPRESENTED:

Management (3); Professional (7); Technical (1)

Computer Equip. Oper.; Image Processing Equip. Oper.; Social Scientists; Photo-
interpreters; Physical Scientists; The following are provided by other departments
of Calspan: Cartographers, Draftsmen, Electrical Engineers, Photolab Technicians,
Pilots, Geographers.

STATEMENT OF CAPABILITIES:

Calspan provides remote sensing services where classical methods of analysis
(photo/imagery interpretation and digital analysis of raw data) cannot provide
the desired user information. Classical methods of analysis are limited, but
after decades of R&D Calspan has found methods (Patents: 3,849,006; 3,970,848;
and 4,037,048) to compensate for the major limitations. Analysis capabilities
cover any aerial or space imaging sensor operating in the visible through thermal
regions of the electromagnetic spectrum. Special sensor modifications and
development of analysis hardware/software are also offered. Aerial and field
surveys are conducted as required.

ORIGINAL PAGE IS
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FACILITIES AND SPECIAL EQUIPMENT

AIRCRAFT

Aztec C (1)
 B-26s (2)
 Lear Jet (1)
CAMERAS, SCANNERS, AND OTHER REMOTE SENSORS

T-11 (1)
 Hasselblad 500 EL's (5)
 Modified Bendix LN-3 Thermal Scanner (1)

FIELD SURVEY EQUIPMENT

A variety of radiometers, photometers and photographic equipment

PHOTOGRAPHIC PROCESSING EQUIPMENT

Pako (1)
 Versimat (1)

PHOTOGRAMMETRIC PROCESSING EQUIPMENT

N/A

IMAGE INTERPRETATION, VIEWING AND MAPPING (NON-DIGITAL)

Photometric Interpretation Console (1)
 SDS Model 702 (1)
 Zoom Transfer Scope (1)

IMAGE INTERPRETATION, VIEWING AND MAPPING (DIGITAL)DIGITIZING, PLOTTING AND GRAPHICS

Modified Mann Microdensitometer/Interdata 7/32 (1)
 HP9830 + 9862A + 9864A (1)
 A commercial graphic arts department

OTHER COMPUTER PROCESSING

IBM 370 (1)

OTHER

Photometric Interpretation Lab (1)

PRODUCTS AND SERVICES PROVIDED

IMAGE PRODUCTS

(c) B&W, Color, Color Infrared, Color Composite Negative Transparencies, Positive Transparencies, Contact Prints, Enlarged Prints. (c) Analog Magnetic Tape, Thermograms, Digital Mosaics, Halftone Image Prints, Digital Magnetic Tape, special products as required
ENHANCED AND CORRECTED IMAGERY

(c) Photo Multitemporal Composites, Contrast Enhanced, Geometric Correction, Density Slice, Change Detection, Multisensor Composites, Radiometric Correction, Reflectance Enhancements; (c) Digital Geometric Correction, Density Slice, Change Detection, Radiometric Correction, Reflectance Enhancements
PHOTOGRAMMETRIC PRODUCTS

INTERPRETED, THEMATIC PRODUCTS

(c) Color Thematic Maps; Land Use Maps; Vegetation/Forestry Maps; Acreage Tabulations; Thematic Map Overlays; Digital Magnetic Tapes; Steam Line Thermograms; Power Plant Thermal Discharges

PROJECT PLANNING AND SUPPORT SERVICES

Problem Definition; Feasibility Analysis; Selection of Existing Imagery; Ground Control Survey; Map Digitizing; Data Base Preparation; Air Support Operations; Sensor Selection/Evaluation; Sampling Strategy Design; Ancillary Data Collection; Ground Truth Survey; Gray Level Digitizing; Data Management

AERIAL SURVEY

Low Altitude Photography; Thermal Infrared; Video

IMAGE PROCESSING, INTERPRETATION AND ANALYSIS

Digital Image Processing; Batch Digital Image/Analysis/Classification; Photographic Laboratory Processing; Manual Image Interpretation; Analogue of Digital Photometric Interpretation

PHOTOGRAMMETRIC ENGINEERINGREPRODUCTION

Drafting & Scribing

OTHER SERVICES

Remote Sensing Research; Remote Sensing Training; Statistical Modeling; Consultant Services; Computer Services; Hardware Design/Development; Software Design/Development

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NAME: CARTWRIGHT AERIAL SURVEYS, INC.

CARTWRIGHT AERIAL SURVEYS, INC.

ADDRESS(ES) & CONTACT(S)

Executive Airport, 6151 Freeport Blvd.
Sacramento, California 95822
(916) 421-3465
Vern W. Cartwright, President

FACILITIES AND SPECIAL EQUIPMENT

YEARS IN BUSINESS: 34

SMALL BUSINESS CONTRACTOR? Yes

PROJECTS COMPLETED: 10,000

MINORITY-OWNED BUSINESS? _____

REGION SERVED: Int'l.

TOTAL APPLICABLE EMPLOYEES: 37

TYPES OF REMOTE SENSING TECHNOLOGIES:

Low Altitude Aerial Photo; Med Altitude Aerial Photo; High Altitude Aerial Photo; Aerial Multispectral Scanner; Aerial Thermal Infrared Scanner; Digital Image Interpretations; Manual Image Interpretations

PERSONNEL & SKILLS REPRESENTED:

Management (5); Professional (5); Technical (23); Other (4);

Cartographers (2); Computer Equip. Operators (2); Cmptr. Programmers (2); Draftsmen (2); Engineers civil, environ. (2); Field Surveyors (1); Image Processing Equip. Oper. (1); Photogrammatists (2); Photogrammetric Equip. Oper. (4); Photointerpreters (2); Photolab Technicians (4); Pilots (3); Geographers (2); Other Geographers and Soil Scientists

STATEMENT OF CAPABILITIES:

Cartwright Aerial Surveys, Inc., organized in 1946 by Vern W. Cartwright, is a professional mapping organization which has provided private industry and government agencies worldwide with services in aerial photography, photogrammetry and remote sensing. Recent expansion has enhanced the firm's capabilities in computer cartography and analytical aerotriangulation and has complemented the entire interactive graphics department.

Modern facilities, including photo lab, drafting and computer rooms, aircraft hangar (which houses a Cessna 206 and Beechcraft Baron) and various offices, were designed to accommodate the key operations of this company and are located at Sacramento's Executive Airport.

AIRCRAFT

Turbo Beechcraft Baron (1); Turbo Cessna 206 (1); Lear Jet (leased when needed) (1);

CAMERAS, SCANNERS, AND OTHER SENSORS

Zeiss RMK/A 14/12 Metric 9 x 9 Camera (2); Zeiss RMK/A 21/23 Metric 9 x 9 Camera (1); Bendix Thermal (8 to 14 Micron) Scanner (1); I²S Multispectral (4 lens) Camera (1); Hasselblad 70mm Camera (with 100' magazines) (4); Curtis 9 x 18 format 24" F.L. (1); Fairchild 9 x 18 format 12" F.L. (1); Fairchild 9 x 18 format 36" F.L. (1); Maurer Sequential 70mm Camera (1); Bomb Spotter (A-4) 35mm (1)

FIELD SURVEY EQUIPMENT

Complete portable photographic laboratory (1); Barnes PRT-5 Radiometers (4)

PHOTOGRAPHIC PROCESSING EQUIPMENT

Zeiss SEG-V Enlarger (1); Lanston 43' Copy Camera (1); Plan Line Camera (1); Peco Color Processor (1); Eastman Kodak VERSAMAT Processor (2); DuPont Graphic Arts Processor (1); Multicolor Large Format Dye Whirler (1); Quality Control Spectrometer (1); Logetronic Continuous Printers (3); Mark IV Logetronic Printers (1)

PHOTOGRAMMETRIC PROCESSING EQUIPMENT

Santoni IIC Stereoplotters (3); Santoni ICC Stereoplotters with Orthophoto (1); H. Dell Foster Monocomparator and Wild Zoom Pug (2);

IMAGE INTERPRETATION, VIEWING AND MAPPING (NON-DIGITAL)

ITEK 40" x 40" Correlation Viewers (8); Santoni Micro Comparator (1); Zoom Three Dimensional Stereoscope (2)

IMAGE INTERPRETATION, VIEWING AND MAPPING (DIGITAL)

All items listed in photogrammetric and image interpretation above have digital capabilities (16)

DIGITIZING, PLOTTING AND GRAPHICS

40 x 70 Digitizers (4); 40 x 70 Flatbed plotter (1); Macro input stations (4)

OTHER COMPUTER PROCESSING

NOVA 4x (256K) Computer (1); NOVA 1200 (64K) Computer (1)

OTHER

H. Dell Foster Interactive Graphics System (1); Sangamo Instrumentation Recorder for IR Scanner (1); Filmaster Titlers (3); Electronic Scanning Reduction Printer (1)

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CARTWRIGHT AERIAL SURVEYS, INC.

CARTWRIGHT AERIAL SURVEYS, INC.

PRODUCTS AND SERVICES PROVIDED

REMOTE SENSING EQUIPMENT/SYSTEMS PROVIDED

IMAGE PRODUCTS

B&W, Color, Color Infrared, Color Composite Negative Transparencies, Positive Transparencies, Contact Prints, and Enlarged Prints. Photo mosaics; Photo Atlas Sheets; Analog Magnet Tape; Thermograms; Digital Mosaics; Halftone Image Prints; Digital Magnetic Tape

ENHANCED AND CORRECTED IMAGERY

Photo Multitemporal Composites, Contrast Enhanced, Geometric Correction, Density Slice, Multisensor Composites, Image Resampling; Digital Geometric Correction; (s) Digital Multitemporal Composites, Contrast Enhanced, Density Slice, Pseudo Stereo

PHOTOGRAMMETRIC PRODUCTS

(c) Orthophotos, Topographic Maps, Engineering Cross Sections, Stockpile Measurements, Earthwork Measurements, Digital Terrain Models, Digital Data Bases, Planimetric Maps, Photo-Contour Maps, Plan and Profile Sheets, Volumetric Calculations, Distance & Angle Measurements

INTERPRETED, THEMATIC PRODUCTS

(c) Color Thematic Maps, Land Use Maps, Vegetation/Forestry Maps, Contour Weather Maps, Utility Maps, Acreage Tabulations, Geocoded Data Bases, Thematic Map Overlays, Geologic Maps, Transportation Maps, Soils Maps, Tax Maps, Digital Magnetic Tapes

PROJECT PLANNING AND SUPPORT SERVICES

Problem Definition; Feasibility Analysis; Selection of Existing Imagery; Map Digitizing; Data Base Preparation; Air Support Operations; Sensor Selection/Evaluation; Sampling Strategy Design; (s) Ground Control Survey, Ancillary Data Collection, Ground Truth Survey, Gray Level Digitizing

AERIAL SURVEY

Low Altitude Photography; Thermal Infrared; Geophysical; High Altitude Photography; Multispectral Scanner; (s) Radar

IMAGE PROCESSING, INTERPRETATION AND ANALYSIS

Photographic Laboratory Processing; Manual Image Interpretation; Interactive Graphics Software; (s) Digital Image Processing, Batch Digital Image/Analysis/Classification, Interactive Digital Image/Analysis/Classification

PHOTOGRAMMETRIC ENGINEERING

Aerotriangulation; Orthophotomapping; Planimetric Mapping; Stereo Digitizing; Cross-sectioning; Stereocompilation; Topographic Mapping-Small Scale; Topographic Mapping-Large Scale; Volumetric Calculation; D.T.M.

REPRODUCTION

Drafting & Scribing; Cartographic Reproduction; Automated Drafting/Plotting; Printing

OTHER SERVICES

Remote Sensing Research; Consultant Services; Interactive Computer Graphics; Computer Services; Software Design/Development; Software Sales/Leasing; Geo Data Banks; (s) Remote Sensing Training, Statistical Modeling, Turnkey Systems Sales/Leasing/Service, Hardware Design/Development, Equipment Sales/Leasing/Service

REMOTE SENSOR SYSTEMS

Sell Automatic Film Numbering Equipment; Lease Multispectral Cameras, Multispectral Scanners, Automatic Film Numbering Equipment

VIEWING EQUIPMENT

PHOTOGRAMMETRIC EQUIPMENT

DIGITAL IMAGE PROCESSING EQUIPMENT

SOFTWARE

INTEGRATED SYSTEMS

OTHER EQUIPMENT

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NAME: CHICAGO AERIAL SURVEY

CHICAGO AERIAL SURVEY

ADDRESS(ES) & CONTACT(S)

2140 Wolf Road
Des Plaines, Illinois 60018
(312) 298-1480 (800) 323-6020
Glenn C. Summerfelt, Vice President

FACILITIES AND SPECIAL EQUIPMENT

AIRCRAFT

Cessna 310 (1); Cessna 207 (1)

CAMERAS, SCANNERS, AND OTHER REMOTE SENSORS

Zeiss RMKA 15/23, 6" (2); Zeiss RMKA 8.5/23, 3-1/2" (1); T-5, 6" camera (1); KA-2, 12" camera (1); K-17, 12" camera (1); K-18, 24" camera with 9" x 18" format (1); K-22, 12" cameras (2); Sonne continuous strip camera (1)

FIELD SURVEY EQUIPMENT

Hewlett Packard Model 3800's (4); Cubic electrotape unit, Model DM-20 (remote and master) (1); Wild Model T-2 theodolites (5); Wild Model N-3 first order precision levels (2); Wild Model NA-2 automatic levels (2); Wild Model N-2 second order precision levels (2); Tapes, tension handles, spring balances, clinometers, and other supporting equipment; Wild precise traverse targets (4); 15' folding aluminum stadia boards (4); 12' one-piece Invar level rods (precise) (2); Roelex solar prism (1); Johnson walkie-talkie radio sets (6); 14' aluminum boat (1)

PHOTOGRAPHIC LABORATORY EQUIPMENT

W.A. Brown copy camera (1); Log-E-Tornic printer, Mark II (1); Log-E-Tronic SP-10-70 (1); 14" x 17" McIntyre (1); horizontal K&E, HE-12 (1); Durst enlarger (1); DuPont ERF film and paper automatic processors (2); Colight 4' x 6' vacuum printer frame, Borrowdale 50" x 60" vacuum frame, 42" x 52" vacuum printing frame (1 each); Zeiss (400' roll) developing units (2); Simplex 50" double drum dryer (1); Zeiss aerial film dryer (1); Ditto diazo reproduction machine with 54" throat (1); Varsity headline typewriter (1); Dry mounting presses (48" x 60" and 18" x 22") (2); complete facilities for mosaicing, indexing, and binding; Brown automatic film and paper dispensers (2); Speedmaster densitometer, Model T80B (1); Sonne strip printer, Model W10A

PHOTOGRAMMETRIC PROCESSING EQUIPMENT

H. Dell Foster RSS-600 mono-digital comparator (1)

IMAGE INTERPRETATION, VIEWING AND MAPPING (NON-DIGITAL)

Zeiss C-100 Planicomp analytical stereo instrument, first order (1); Galileo-Santoni Model IV stereo-cartograph universal, first order (1); Galileo-Santoni MIII stereo instrument, first order (1); Kern PG-2 (2); K-5 Kelsh plotter (1) Kelsh plotter (1)

IMAGE INTERPRETATION, VIEWING AND MAPPING (DIGITAL)

Wild B-8 stereo instrument (interfaced to H. Dell Foster ETP automated plotter) (1); Jena Topocart orthophot (3); M&S Computing, Inc., Interactive Graphics Design System with Data Management and Retrieval System (IGDS/DMRS) (1); Lear Siegler ADM-3A terminals (2); Tektronics 4010 terminal, 600 LPM Documentation liner printer (1); Xynetics 1101 Automated Drafting System with C-62 controller (1)

YEARS IN BUSINESS: 58

SMALL BUSINESS CONTRACTOR? _____

PROJECTS COMPLETED: 2,000 +

MINORITY-OWNED BUSINESS? _____

REGION SERVED: U.S. & Int'l.

TOTAL APPLICABLE EMPLOYEES: 135

TYPES OF REMOTE SENSING TECHNOLOGIES:

Low Altitude Aerial Photo; Med Altitude Aerial Photo; High Altitude Aerial Photo; Aerial Multispectral Scanner; Aerial Thermal Infrared Scanner; Digital Image Interpretations; Manual Image Interpretations

PERSONNEL & SKILLS REPRESENTED:

Management (25); Professional (50); Technical (50); Other (10)

Cartographers; Computer Equip. Oper.; Computer Programmers; Draftsmen; Engineers (civil, environ.); Field Surveyors; Image Processing Equip. Oper.; Photogrammatists; Photogrammetric Equip. Oper.; Photointerpreters; Photolab Technicians; Pilots; Planners; Geographers

STATEMENT OF CAPABILITIES:

By effectively combining classical photogrammetric technology with analytical stereo instrumentation, interactive graphics, and computerized data base systems, CHICAGO AERIAL SURVEY (CAS) has gained a leading position in providing Resource Information Services. CAS has over 50 years experience serving Federal and Local Governmental Agencies, Consulting Engineers, Public Utilities, Resource Companies (Forestry, Coal, Oil), Industrial and Private Institutions. Services include: Digital Terrain Services and Data Bases, Facilities and Resource Mapping, Volumetric Analysis, Computer Plotted Mapping, Aerial Photography (High/Low - Vertical/Oblique), Field Surveys, Aerotriangulation, Photogrammetric Map Compilation (Plan, Topo, Plan and Profile), Orthophoto Mapping, Cartographic Scribing, and Photo Lab Processing.

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CHICAGO AERIAL SURVEY

DIGITIZING, PLOTTING AND GRAPHICS

Texas Inst. Silent 700 terminal interfaced to the H. Dell Foster ETP automated plotter (1); H. Dell Foster ETP automated plotter (1); H. Dell Foster graphic digital readout systems (3)

OTHER COMPUTER PROCESSING

Data 100 remote batch terminal interfaced to the UCS-6600 and UCS-7600 computers (batch) (1); simultaneous (bundle) adjustment program; IBM-026 card punch units (3); PDS-1020 minicomputer (1)

OTHER

Normal drafting equipment and supplies. 13 light tables

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PRODUCTS AND SERVICES PROVIDEDIMAGE PRODUCTS

B & W Negative Transparencies, Positive Transparencies, Contact Prints, & Enlarged Prints; (s) Color, Color Infrared, & Color Composite Negative Transparencies, Positive Transparencies, Contact Prints, & Enlarged Prints; Halftone Image Prints; (c) Digital Magnetic Tape

ENHANCED AND CORRECTED IMAGERYPHOTOGRAMMETRIC PRODUCTS

(c) Orthophotos; Topographic Maps; Engineering Cross Sections; Stockpile Measurements; Earthwork Measurements; Digital Terrain Models; Digital Data Bases; Planimetric Maps; Photo-Contour Maps; Plan and Profile Sheets; Volumetric Calculations; Distance & Angle Measurements

INTERPRETED, THEMATIC PRODUCTS

(c) Land Use Maps; Vegetation/Forestry Maps; Utility Maps; Acreage Tabulations; Geocoded Data Bases; Transportation Maps; Digital Magnetic Tapes

PROJECT PLANNING AND SUPPORT SERVICES

Problem Definition; Feasibility Analysis; Selection of Existing Imagery; Ground Control Survey; Map Digitizing; Data Base Preparation; Air Support Operations; Ground Truth Survey; Data Management

AERIAL SURVEY

Low Altitude Photography; Thermal Infrared

IMAGE PROCESSING, INTERPRETATION AND ANALYSIS

Digital Image Processing; Batch Digital Image/Analysis/Classification; Interactive Digital Image/Analysis/Classification; Photographic Laboratory Processing; Manual Image Interpretation

PHOTOGRAMMETRIC ENGINEERING

Aerotriangulation; Orthophotomapping; Planimetric Mapping; Stereo Digitizing; Cross-Sectioning; Stereocompilation; Topographic Mapping-Small Scale; Topographic Mapping-Large Scale; Volumetric Calculation; Digital Terrain Modeling

REPRODUCTION

Drafting & Scribing; Cartographic Reproduction; Automated Drafting/Plotting; Printing

OTHER SERVICES

Consultant Services; Interactive Computer Graphics; Software Sales/Leasing

NAME: CH2M HILL, INC.

CH2M HILL

ADDRESS(ES) & CONTACT(S)

P.O. Box 2088
Redding, California 96099
(916) 243-5831
Donald R. Mayer

For other locations see attached list

YEARS IN BUSINESS: _____

SMALL BUSINESS CONTRACTOR? No

PROJECTS COMPLETED: _____

MINORITY-OWNED BUSINESS? _____

REGION SERVED: U.S. & Intl.

TOTAL APPLICABLE EMPLOYEES: _____

TYPES OF REMOTE SENSING TECHNOLOGIES:

Low Altitude Aerial Photo; Med Altitude Aerial Photo; High Altitude Aerial Photo;
Landsat MSS; Landsat RBV; Manual Image Interpretations

PERSONNEL & SKILLS REPRESENTED:

Cartographers; Computer Equip. Oper.; Computer Programmers; Draftsmen; Engineers
(civil, environ., electrical); Field Surveyors; Soil Scientists; Social Scientists;
Photogrammatists; Photogrammetric Equip. Oper. Photointerpreters; Photolab
Technicians; Pilots; Planners; Geographers

STATEMENT OF CAPABILITIES:

CH2M HILL applies remote sensing to engineering, planning, and environmental studies. Examples of applications are: Agriculture--Inventories of crops and land uses; detection of disease or salinity; planning for irrigation, fertilizer, pesticide, and labor and equipment needs. Urban Planning--Inventories and assessment of land use, monitoring growth, prediction of utility requirements. Forestry--Resource inventory and classification, mapping, yield predictions, detection of disease, and fire damage assessment. Water Resources--Sedimentation analyses, pollution source monitoring, delineation of land/water boundaries and flood basins, assessment of potential flood damage value, identification of seepage areas and phreatophytes.

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ADDITIONAL LOCATIONS

NORTHWEST OFFICES

Anchorage, Alaska 99501	310 K Street	907/278-2551
Belleuve, Washington 98004	1500 - 114th Avenue, S.E.	206/453-5000
Boise, Idaho 83707	700 Clearwater Lane	208/345-5310
Calgary, Alberta T2P 1G7	640 8th Avenue, S.W.	403/269-6758
Corvallis, Oregon 97330	1600 S.W. Western Blvd.	503/752-4271
Portland, Oregon 97201	200 S.W. Market Street	503/224-9190
Spokane, Washington 99201	W. 905 Riverside Ave., #507	509/747-2000
Yakima, Washington 98903	1800 Rainier Place	509/248-9210

SOUTHWEST OFFICES

Costa Mesa, California 92626	666 Baker St., Suite 253	714/549-7511
Redding, California 96001	1525 Court Street	916/243-5831
Sacramento, California 95814	555 Capitol Mall	916/441-3955
San Diego, California 92101	110 W. C St., Suite 905	714/239-9661
San Francisco, California 94111	450 Sansome Street	415/398-8950

MIDWEST OFFICES

Denver, Colorado 80222	I-25 at Orchard Place	303/771-0900
Milwaukee, Wisconsin 53222	2929 N. Mayfair Road	414/774-5530
Minneapolis, Minnesota 55420	7851 Metro Parkway, #205	612/854-1100
St. Louis, Missouri 63108	12 Maryland Plaza	314/361-4600

EASTERN OFFICES

Atlanta, Georgia 30308	401 W. Peachtree St., N.E.	404/588-1990
Boca Raton, Florida 33432	1700 S.W. 12th Avenue	305/395-3800
Clearwater, Florida 33516	1454 U.S. Highway 19, So.	813/536-9454
Columbia, South Carolina 29210	Dutch Center, 810 Dutch Square Blvd	803/798-4511
Gainesville, Florida 32601	7201 N.W. 11th Place	904/377-2442
Montgomery, Alabama 36104	807 S. McDonough Street	205/834-2870
Naples, Florida 33940	1063 Fifth Avenue, No.	813/262-6693
Philadelphia, Penna. 19103	1819 JFK Boulevard	215/561-6650
Reston, Virginia 22090	1930 Isaac Newton Sq., E.	703/471-9710

INTERNATIONAL OFFICES

Portland, Oregon 97201	200 S.W. Market Street	503/224-9190
Headquarters		
Cairo, Egypt		
Calgary, Alberta, Canada		
Damascus, Syria		
Damman, Saudia Arabia		
Port of Spain, Trinidad, West Indies		

CH2M HILL, Inc.

FACILITIES AND SPECIAL EQUIPMENT

AIRCRAFT

Photo plane: Cessna 185 (1)

CAMERAS, SCANNERS, AND OTHER REMOTE SENSORS

Zeiss Ikon A 15/23 aerial camera (1); Wild RC8 automatic film camera (6" Aviogon lens) (1); ACTI special Model 405 copious camera with GAM III photoelectric exposure computer system (1); ACTI 4250H Centaur precision overhead process camera (1)

FIELD SURVEY EQUIPMENT

K&E Autoranger (4); K&E Ranger IV (1); MRA-3 Tellurometer systems (2); HDM 70's (3); Wild D1-10 electronic distance measuring (EDM) device (1); Wild D1-4 EDM (1); Hewlett Packard 3808-A (1); Hewlett Packard 7800 EDM's (4); Cubic DM-60 cubitape (4); MAC 1 (1); Spectra Physics laser unit (1); Transits: David White, Deitzgen, Fennel, K&E, Leitz, Tamaya (23); Wild T-3 (1); Wild T-2 theodolites (9); Wild T-1 and T-1A theodolites (11); Wild T-1AE theodolites (7); Wild T-16 (2); K&E theodolite (1); Topcon T1-10E theodolite (1); Zeiss Ni2 levels (17); Wild NA2 levels (2); Wild N3 levels (2); Levels: Berger, Buff, Dietzen, Fennel, Gurley, Leitz, Watts (26); Fathometer depth recorders: Bendix DR 19 and Raytheon DE 119D (3); Motorola Mini-Ranger III (1); Subtense bars (2); Schonstedt model GA22 and GA52 pipefinders (10); Fisher M-Scope pipefinders (3)

PHOTOGRAPHIC PROCESSING EQUIPMENT

Berkey Ascorlux pulsive Xenon lamp (1); 45" x 110" vacuum frame (1); K&E HE-12 rectifier (1); Durst enlarger with open-face vacuum projection board (1); Log-Etronic printer (1); DuPont Cronaflex engineering film processor (1)

PHOTOCGRAMMETRIC PROCESSING EQUIPMENT

Wild Aviomap Model AM with digitizing equipment (1); Zeiss Planicart, Model E2 (1); Santoni Orthophoto-Simplex Plotter Model 11c (1); Santoni Stereo-Simplex Plotter Model 11c with electronic Data Tech digitizing system (1); Exaggerated profile plotter (1); Haag-Streit Coordinatograph (48" x 48") (1); Zena Trans-mark B laser point-transfer instrument (1); Wild PUG-4 zoom point-transfer instrument (1); Kern MK2 monocomparator interfaced to DECSYSTEM-10 computer (1); Baush and Lomb zoom transfer scope (1); Kelsh plotter with stereo image alternator (1)

PRODUCTS AND SERVICES PROVIDED

IMAGE PRODUCTS

(c) B&W, Color, and Color Infrared Negative Transparencies, Positive Transparencies, Contact Prints, and Enlarged Prints; Photo Mosaics; Photo Atlas Sheets; Halftone Image Prints; (s) Color Composite Negative Transparencies, Positive Transparencies, Contact Prints, and Enlarged Prints; Analog Magnetic Tape; Thermograms; Digital Mosaics; Digital Magnetic Tape

ENHANCED AND CORRECTED IMAGERYPHOTOCGRAMMETRIC PRODUCTS

(c) Orthophotos; Topographic Maps; Engineering Cross Sections; Stockpile Measurements; Earthwork Measurements; Digital Terrain Models; Digital Data Bases; Planimetric Maps; Photo-Contour Maps; Plan and Profile Sheets; Volumetric Calculations; Distance & Angle Measurements

INTERPRETED, THEMATIC PRODUCTS

(c) Land Use Maps; Vegetation/Forestry Maps; Contour Weather Maps; Utility Maps; Acreage Tabulations; Soils Maps; Tax Maps; (s) Color Thematic Maps

PROJECT PLANNING AND SUPPORT SERVICES

Problem Definition; Feasibility Analysis; Selection of Existing Imagery; Ground Control Survey; Map Digitizing; Data Base Preparation; Air Support Operations; Sensor Selection/Evaluation; Sampling Strategy Design; Ancillary Data Collection; Ground Truth Survey; Gray Level Digitizing; Data Management

AERIAL SURVEY

Low Altitude Photography; High Altitude Photography; (s) Thermal Infrared; Geophysical; Multispectral Scanner

IMAGE PROCESSING, INTERPRETATION AND ANALYSIS

Photographic Laboratory Processing; Manual Image Interpretation; (s) Digital Image Processing; Batch Digital Image/Analysis/Classification; Interactive Digital Image/Analysis/Classification

PHOTOCGRAMMETRIC ENGINEERING

Aerotriangulation; Orthophotomapping; Planimetric Mapping; Stereo Digitizing; Cross-Sectioning; Stereocompilation; Topographic Mapping-Small Scale; Topographic Mapping-Large Scale; Volumetric Calculation

REPRODUCTION

Drafting & Scribing; Cartographic Reproduction; Printing

OTHER SERVICES

Remote Sensing Research; Statistical Modeling; Consultant Services

NAME: COMPUTER SCIENCES CORPORATION

COMPUTER SCIENCES CORPORATION

ADDRESS(ES) & CONTACT(S)

8728 Colesville Road
Silver Spring, Maryland 20910
(301) 589-1545
Robert W. Cecil

10210 Greenbelt Road
Seabrook, Maryland 20801
(301) 794-6360
Clinton A. Frum

YEARS IN BUSINESS: 10

SMALL BUSINESS CONTRACTOR? _____

PROJECTS COMPLETED: over 25

MINORITY-OWNED BUSINESS? _____

REGION SERVED: U.S.

TOTAL APPLICABLE EMPLOYEES: 170

TYPES OF REMOTE SENSING TECHNOLOGIES:

Aerial Multispectral Scanner; Aerial Thermal Infrared Scanner;
Radar; Laser Scanner; Geophysical Survey; Landsat MSS; Landsat RBV;
Seasat; HCMM; Weather Satellite; Digital Image Interpretations;
Manual Image Interpretations

PERSONNEL & SKILLS REPRESENTED:

Management (10); Professional (50); Technical (100); Other (10)

Computer Equip. Operators; Computer Programmers; Draftmen; Image Processing
Equip. Oper.; Photointerpreters; Photolab Technicians; Physical Scientist;
Geographers; Soil Scientists

STATEMENT OF CAPABILITIES:

CSC employs over 14,000 persons who specialize in the design and development of computer based systems. Specialties include systems engineering, system integration, telecommunications, custom software development, scientific and mathematical analysis, modeling and simulation, turnkey system installation, and facilities management. The company has particular strengths in remote sensing, digital image processing, interactive graphics, photographic product generation, and high speed data processing. It has a major involvement in aircraft and satellite-borne remote sensors for programs including Landsat, SMS/GOES, HCMM, SEASAT, NIMBUS, and TIROS. Disciplines supported include geology, hydrology, oceanography, meteorology, geophysics, and climatology.

PRODUCTS AND SERVICES PROVIDED

IMAGE PRODUCTS

ENHANCED AND CORRECTED IMAGERY

PHOTOGRAMMETRIC PRODUCTS

INTERPRETED, THEMATIC PRODUCTS

PROJECT PLANNING AND SUPPORT SERVICES

Problem Definition; Feasibility Analysis; Selection of Existing Imagery;
Data Base Preparation; Sensor Selection/Evaluation; Sampling Strategy
Design; Data Management

AERIAL SURVEY

IMAGE PROCESSING, INTERPRETATION AND ANALYSIS

Digital Image Processing; Batch Digital Image/Analysis/Classification;
Interactive Digital Image/Analysis/Classification; Photographic Laboratory
Processing; Manual Image Interpretation

PHOTOGRAMMETRIC ENGINEERING

REPRODUCTION

OTHER SERVICES

Remote Sensing Research; Remote Sensing Training; Statistical Modeling;
Consultant Services; Interactive Computer Graphics; Computer Services;
Turnkey Systems Sales/Leasing/Service; Software Design/Development;
Software Sales/Leasing

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COMPUTER SCIENCES CORPORATION

NAME: COMPUTER TALK INC.

REMOTE SENSING EQUIPMENT/SYSTEMS PROVIDED

ADDRESS(ES) & CONTACT(S)

24020 HWG 74
Idledale, Colorado 80453
(303) 697-5485
W. M. Barnes

1408 Hague Avenue
St. Paul, MN
(612) 646-7340
E.D. Bower

YEARS IN BUSINESS: 8

SMALL BUSINESS CONTRACTOR?

PROJECTS COMPLETED: 23

MINORITY-OWNED BUSINESS?

REGION SERVED:

TOTAL APPLICABLE EMPLOYEES: 23

TYPES OF REMOTE SENSING TECHNOLOGIES:

Geophysical Survey; Digital Image Interpretations; Manual Image Interpretations.

REMOTE SENSOR SYSTEMS

VIEWING EQUIPMENT

PHOTOGRAMMETRIC EQUIPMENT

DIGITAL IMAGE PROCESSING EQUIPMENT

SOFTWARE

Sell Geometric Correction; Radiometric Correction; Image Enhancement;
Multispectral Classification; Geometric Correction; Radiometric Correction;
Image Enhancement; Multispectral Classification

INTEGRATED SYSTEMS

PERSONNEL & SKILLS REPRESENTED:

Management (2); Professional (1); Technical (3); Other (17); Computer Programmers (1);
Draftsmen (1); Engineers(electrical)(1).

OTHER EQUIPMENT

STATEMENT OF CAPABILITIES:

We manufacture custom, digitizer, plotting, interactive digitizing, graphic and
sensing systems, which are used to automate business and industrial applications.

COMPUTER TALK INC.

REMOTE SENSING EQUIPMENT/SYSTEMS PROVIDED

REMOTE SENSOR SYSTEMS

VIEWING EQUIPMENT

PHOTOGRAMMETRIC EQUIPMENT

DIGITAL IMAGE PROCESSING EQUIPMENT

Sell B&W Image Displays, Image Digitizers, Color Image Displays.

SOFTWARE

INTEGRATED SYSTEMS

Sell Geometric Correction, Image Enhancement.

OTHER EQUIPMENT

Sell X-Y Coordinate Digitizer, Interactive Graphics Systems, Measurement Equipment, Plotters, Geographic Information Systems.

NAME: COMTAL CORPORATION

ADDRESS(ES) & CONTACT(S)

505 West Woodbury Road
Altadena, CA 91001
(213) 797-1175
Harvey J. Raider

YEARS IN BUSINESS: 7

PROJECTS COMPLETED: _____

REGION SERVED: U.S., Int'l.

TYPES OF REMOTE SENSING TECHNOLOGIES:

Digital Image Interpretations

SMALL BUSINESS CONTRACTOR? _____

MINORITY-OWNED BUSINESS? _____

TOTAL APPLICABLE EMPLOYEES: _____

PERSONNEL & SKILLS REPRESENTED:

System designers, hardware, software

STATEMENT OF CAPABILITIES:

Manufacturer of sophisticated image enhancement and exploitation systems with real time arithmetic and multispectral capability.

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COMTAL CORPORATION

COMTAL CORPORATION

PRODUCTS AND SERVICES PROVIDED

REMOTE SENSING EQUIPMENT/SYSTEMS PROVIDED

IMAGE PRODUCTS

ENHANCED AND CORRECTED IMAGERY

Multitemporal Composites, Contrast Enhanced, Density Slice, Multisensor Composites, Radiometric Correction, Image Resampling, Pseudo Stereo Digital Imagery

PHOTOGRAMMETRIC PRODUCTS

INTERPRETED, THEMATIC PRODUCTS

PROJECT PLANNING AND SUPPORT SERVICES

AERIAL SURVEY

IMAGE PROCESSING, INTERPRETATION AND ANALYSIS

Digital Image Processing; Interactive Digital Image/Analysis/Classification.

PHOTOGRAMMETRIC ENGINEERING

REPRODUCTION

OTHER SERVICES

Interactive Computer Graphics; Turnkey Systems Sales/Leasing/Service; Hardware Design/Development; Software Design/Development; Equipment Sales/Leasing/Service.

REMOTE SENSOR SYSTEMS

VIEWING EQUIPMENT

PHOTOGRAMMETRIC EQUIPMENT

DIGITAL IMAGE PROCESSING EQUIPMENT

Sell and Lease B&W Image Displays, Image Digitizers, Color Image Displays.

SOFTWARE

INTEGRATED SYSTEMS

Sell and Lease Image Enhancement, Multispectral Classification.

OTHER EQUIPMENT

Sell and Lease Interactive Graphics Systems.

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CORNELL UNIVERSITY REMOTE SENSING PROGRAM

PRODUCTS AND SERVICES PROVIDED

IMAGE PRODUCTS

ENHANCED AND CORRECTED IMAGERY

PHOTOGRAMMETRIC PRODUCTS

INTERPRETED, THEMATIC PRODUCTS

(c) Color Thematic Maps; Land Use Maps; Acreage Tabulations; Thematic Map Overlays; Geologic Maps; Soils Maps

PROJECT PLANNING AND SUPPORT SERVICES

Problem Definition; Feasibility Analysis; Selection of Existing Imagery; Sensor Selection/Evaluation; Sampling Strategy Design; Ancillary Data Collection; Ground Truth Survey; Data Management; (s) Ground Control Survey; Air Support Operations

AERIAL SURVEY

(s) Low Altitude Photography; Thermal Infrared; Radar; Geophysical; High Altitude Photography; Multispectral Scanner

IMAGE PROCESSING, INTERPRETATION AND ANALYSIS

Digital Image Processing; Batch Digital Image/Analysis/Classification; Manual Image Interpretation; (s) Interactive Digital Image/Analysis/Classification; Photographic Laboratory Processing

PHOTOGRAMMETRIC ENGINEERING

(s) Aerotriangulation; Orthophotomapping; Stereo Digitizing; Cross-Sectioning; Stereocompilation; Topographic Mapping--Small Scale; Topographic Mapping--Large Scale; Volumetric Calculation

REPRODUCTION

(s) Drafting & Scribing; Cartographic Reproduction; Automated Drafting/Plotting; Printing

OTHER SERVICES

Remote Sensing Research; Consultant Services; (s) Interactive Computer Graphics

NAME: SALLY BAY CORNWELL, EXECUTIVE CONSULTING

ADDRESS(ES) & CONTACT(S)

Address not given
(303) 499-0349
Sally Bay Cornwell

YEARS IN BUSINESS: 6

PROJECTS COMPLETED: _____

REGION SERVED: U.S. & Int'l.

SMALL BUSINESS CONTRACTOR? Yes

MINORITY-OWNED BUSINESS? Yes

TOTAL APPLICABLE EMPLOYEES: 1

TYPES OF REMOTE SENSING TECHNOLOGIES:
On a consulting, not technical basis:

Low Altitude Aerial Photo; Med Altitude Aerial Photo; High Altitude Aerial Photo; Aerial Multispectral Scanner; Aerial Thermal Infrared Scanner; Radar; Laser Scanner; Geophysical Survey; Landsat MSS; Landsat RBV; Seasat; JCOMM; Skylab; Weather Satellite; Digital Image Interpretations; Manual Image Interpretations

PERSONNEL & SKILLS REPRESENTED:

Management (1)

STATEMENT OF CAPABILITIES:

I offer experience in state/local information systems, "user needs assessments" for natural resources related data, and computer/remote sensing technology transfer expertise in natural resources programs.

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NAME: DAEDALUS ENTERPRISES, INC.

DAEDALUS ENTERPRISES, INC.

ADDRESS(ES) & CONTACT(S)

P. O. Box 1869 (300 Parkland Plaza)
Ann Arbor, MI 48106
(303) 769-5649
Thomas R. Ory, VP-Marketing

FACILITIES AND SPECIAL EQUIPMENT

AIRCRAFT

CAMERAS, SCANNERS, AND OTHER REMOTE SENSORS

(4) (Specific types not provided)

FIELD SURVEY EQUIPMENT

PHOTOGRAPHIC PROCESSING EQUIPMENT

(1) (Specific types not provided)

PHOTOGRAMMETRIC PROCESSING EQUIPMENT

IMAGE INTERPRETATION, VIEWING AND MAPPING (NON-DIGITAL)

(1)(Specific types not provided)

IMAGE INTERPRETATION, VIEWING AND MAPPING (DIGITAL)

(1) (Specific types not provided)

DIGITIZING, PLOTTING AND GRAPHICS

OTHER COMPUTER PROCESSING

(1) (Specific types not provided)

OTHER

Analog tape to film conversion including color products (2)
Digital HDDT to CCT tape conversion system (1)

YEARS IN BUSINESS: 12

PROJECTS COMPLETED: 250

REGION SERVED: U.S. & Int'l.

SMALL BUSINESS CONTRACTOR? Yes

MINORITY-OWNED BUSINESS? No

TOTAL APPLICABLE EMPLOYEES: 39

TYPES OF REMOTE SENSING TECHNOLOGIES:

Low Altitude Aerial Photo; Med Altitude Aerial Photo; Aerial Multispectral Scanner; Aerial Thermal Infrared Scanner; Geophysical Survey; Digital Image Interpretations; Manual Image Interpretations; Analog Tape Playback Services.

PERSONNEL & SKILLS REPRESENTED:

Management (7); Professional (15); Technical (15); Other (2); Computer Equip Operators (1); Draftsmen (2); Engineers (electrical) (10); Image Processing Equip Operator (1); Photointerpreters(1); Photolab Technicians (1); Planners (1); Geologist (1); Meteorologist (1).

STATEMENT OF CAPABILITIES:

Daedalus Enterprises, recognized as the world's leading manufacturer of commercial airborne line scanners, has over 50 scanners operational in 16 countries. Daedalus offers both analog and digital thermal infrared scanners. In addition, the Company manufactures an 11-channel Landsat compatible multispectral scanner. Daedalus also provides international survey service programs which investigate new and innovative applications of airborne remote sensing technology.

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PRODUCTS AND SERVICES PROVIDED

REMOTE SENSING EQUIPMENT/SYSTEMS PROVIDED

IMAGE PRODUCTS

(c)B&W, Color, Color Infrared, Color Composite Negative Transparencies, Positive Transparencies, Contact Prints, Enlarged Prints; (c)Photo Mosaics, Analog Magnetic Tape, Thermograms, Halftone Image Prints, Digital Magnetic Tape.

ENHANCED AND CORRECTED IMAGERY

(c)Multitemporal Composites, Multisensor Composites, Radiometric Correction, Image Resampling Photo Imagery; (s)Multitemporal Composites, Contrast Enhanced, Geometric Correction, Density Slice, Change Detection, Multisensor Composites, Radiometric Correction, Image Resampling, Pseudo Stereo Digital Process.

PHOTOGRAMMETRIC PRODUCTS

INTERPRETED, THEMATIC PRODUCTS

(s)Color Thematic Maps, Land Use Maps, Vegetation/Forestry Maps, Acreage Tabulations, Geocoded Data Bases, Thematic Map Overlays, Geologic Maps, Transportation Maps, Soils Maps; (c)Digital Magnetic Tapes.

PROJECT PLANNING AND SUPPORT SERVICES

Problem Definition; Feasibility Analysis; Selection of Existing Imagery; Sensor Selection/Evaluation; Sampling Strategy Design; Gray Level Digitizing; Data Management; (s)Ground Control Survey, Map Digitizing, Data Base Preparation, Air Support Operations, Ancillary Data Collection, Ground Truth Survey, Gray Level Digitizing.

AERIAL SURVEY

Thermal Infrared, Multispectral Scanner; (s)Low Altitude Photography, Geophysical, High Altitude Photography.

IMAGE PROCESSING, INTERPRETATION AND ANALYSIS

Photographic Laboratory Processing; Manual Image Interpretation; (s)Digital Image Processing, Batch Digital Image/Analysis/Classification, Interactive Digital Image/Analysis/Classification, Photographic Laboratory Processing.

PHOTOGRAMMETRIC ENGINEERING

REPRODUCTION

Drafting & Scribing; (s)Cartographic Reproduction, Automated Drafting/Plotting, Printing

OTHER SERVICES

Remote Sensing Research; Consultant Services, Hardware Design/Development; Equipment Sales/Leasing/Service; (s)Interactive Computer Graphics, Computer Services.

REMOTE SENSOR SYSTEMS

Sell and Lease Aerial TIR Scanners, Multispectral Scanners

VIEWING EQUIPMENT

PHOTOGRAMMETRIC EQUIPMENT

DIGITAL IMAGE PROCESSING EQUIPMENT

Sell and Lease Film Output Recorders

SOFTWARE

INTEGRATED SYSTEMS

OTHER EQUIPMENT

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NAME: DAMES & MOOREADDRESS(ES) & CONTACT(S)

7101 Wisconsin Avenue, Suite 700
Washington, D.C. 20014
(301) 652-2215

A.D. Beccasio, Principal, Remote Sensing

1626 Cole Boulevard
Golden, Colorado 80401
(303) 931-2600

Larry Welborn, Senior Engineer

1100 Glendon Avenue, Suite 100
Los Angeles, California 90024
(213) 879-9700

John Robinson, Manager of Planning Systems

Other U.S. Locations:

Chicago, Illinois Salt Lake City, Utah
Cranford, New Jersey Boca Raton, Florida
San Francisco, California Houston, Texas
Cincinnati, Ohio
Atlanta, Georgia

Foreign Locations:

London, England Toronto, Canada
Riyadh, Saudi Arabia

SMALL BUSINESS CONTRACTOR? NoMINORITY-OWNED BUSINESS? NoTOTAL APPLICABLE EMPLOYEES: 11PRODUCTS AND SERVICES PROVIDEDIMAGE PRODUCTS

(s) B&W, Color, Color Infrared, and Color Composite Negative Transparencies, Positive Transparencies, Contact Prints, and Enlarged Prints; (s) Photo Mosaics; Photo Atlas; Sheets; Analog Magnetic Tape; Thermograms; Halftone Image Prints; Digital Magnetic Tape

ENHANCED AND CORRECTED IMAGERY

All following include both Photo & Digital: Multitemporal Composites; Contrast Enhanced; Geometric Correction; Density Slice; Change Detection; Multisensor Composites; Radiometric Correction; Image Resampling; Pseudo Stereo

PHOTOGRAMMETRIC PRODUCTS

(c) Engineering Cross Sections; Earthwork Measurements; Digital Data Bases; Planimetric Maps; (s) Orthophotos; Topographic Maps; Stockpile Measurements; Digital Terrain Models; Photo-Contour Maps; Plan and Profile Sheets; Volumetric Calculations; Distance & Angle Measurements

INTERPRETED, THEMATIC PRODUCTS

(c) Color Thematic Maps; Land Use Maps; Vegetation/Forestry Maps; Utility Maps; Acreage Tabulations; Geocoded Data Bases; Thematic Map Overlays; Geologic Maps; Transportation Maps; Soils Maps

PROJECT PLANNING AND SUPPORT SERVICES

Problem Definition; Feasibility Analysis; Selection of Existing Imagery; Map Digitizing; Data Base Preparation; Sensor Selection/Evaluation; Sampling Strategy Design; Ancillary Data Collection; Ground Truth Survey; Gray Level Digitizing; Data Management; (s) Ground Control Survey; Air Support Operations

AERIAL SURVEY

Geophysical; (s) Low Altitude Photography; Thermal Infrared; Radar; High Altitude Photography; Multispectral Scanner

IMAGE PROCESSING, INTERPRETATION AND ANALYSIS

Digital Image Processing; Batch Digital Image/Analysis/Classification; Manual Image Interpretation; (s) Interactive Digital Image/Analysis/Classification; Photographic Laboratory Processing

PHOTOGRAMMETRIC ENGINEERING

Planimetric Mapping; (s) Orthophotomapping; Stereo Digitizing; Topographic Mapping-Small Scale; Topographic Mapping-Large Scale; Volumetric Calculation

REPRODUCTION

Drafting & Scribing; Cartographic Reproduction; (s) Automated Drafting/Plotting; Printing

OTHER SERVICES

Remote Sensing Research; Remote Sensing Training; Consultant Services; Computer Services; Software Design/Development; (s) Interactive Computer Graphics

YEARS IN BUSINESS: 8PROJECTS COMPLETED: over 200REGION SERVED: U.S. & Int'l.TYPES OF REMOTE SENSING TECHNOLOGIES:

Low Altitude Aerial Photo; Med Altitude Aerial Photo; High Altitude Aerial Photo; Aerial Multispectral Scanner; Aerial Thermal Infrared Scanner; Radar; Geophysical Survey; Landsat MSS; Landsat RBV; Skylab; Digital Image Interpretations; Manual Image Interpretations

PERSONNEL & SKILLS REPRESENTED:

Management (2); Professional (6); Technical (3)

Cartographers; Computer Equip. Oper.; Computer Programmers; Draftsmen; Engineers (civil, environ.); Soil Scientists; Social Scientists; Photointerpreters; Photolab Technicians; Physical Scientists; Planners; Geographers; Geologists; Ecologists; Hydrologists

STATEMENT OF CAPABILITIES:

Dames & Moore remote sensing capabilities cover a broad range of application areas, including major facility siting, waste disposal siting, planning, terrain analysis, and resource inventories, transmission line and highway route assessments, flood plain studies, environmental analyses, and mineral resources exploration. Project areas typically range from thousands of square kilometers for regional studies to less than one kilometer for site specific investigations. We use LANDSAT, Skylab, and aircraft imagery of various types, including photographic, scanner, thermal infrared and SLAR in support of project activities.

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DAMES & MOORE

FACILITIES AND SPECIAL EQUIPMENT

AIRCRAFT

CAMERAS, SCANNERS, AND OTHER REMOTE SENSORS

FIELD SURVEY EQUIPMENT

Yes

PHOTOGRAPHIC PROCESSING EQUIPMENT

Yes

PHOTOGRAMMETRIC PROCESSING EQUIPMENT

IMAGE INTERPRETATION, VIEWING AND MAPPING (NON-DIGITAL)

Yes

IMAGE INTERPRETATION, VIEWING AND MAPPING (DIGITAL)

DIGITIZING, PLOTTING AND GRAPHICS

Yes

OTHER COMPUTER PROCESSING

OTHER

Cartographic Scribing Facility

NAME: DATA TECHNOLOGY, INC.

ADDRESS(ES) & CONTACT(S)

4 Gill Street
Woburn, Massachusetts 01801
(617) 935-8820
Dean A. Coe

530 Atlantic Avenue
Boston, Massachusetts
(617) 451-0430
Dean A. Coe

YEARS IN BUSINESS: 10

PROJECTS COMPLETED: N/A

REGION SERVED: U.S. & Int'l.

TYPES OF REMOTE SENSING TECHNOLOGIES:

SMALL BUSINESS CONTRACTOR? Yes

MINORITY-OWNED BUSINESS? No

TOTAL APPLICABLE EMPLOYEES: 4

PERSONNEL & SKILLS REPRESENTED:

Professional (4)

Computer Programmers (2); Electrical Engineer (1); Photogrammatists (1)

STATEMENT OF CAPABILITIES:

DATA TECHNOLOGY's dedication to photogrammetry and remote sensing is best represented by the well accepted DT3454 flatbed plotter. It is available with a stereoplotter interface and/or a computer interface. Other major devices and systems include a variety of optical encoders, computer aided photogrammetric system (CAPS) and a computer drafter aid system (C.D.A.), both based on DEC systems.

DATA TEChnology, Inc.

PRODUCTS AND SERVICES PROVIDED

IMAGE PRODUCTS

ENHANCED AND CORRECTED IMAGERY

PHOTOGRAMMETRIC PRODUCTS

INTERPRETED, THEMATIC PRODUCTS

PROJECT PLANNING AND SUPPORT SERVICES

AERIAL SURVEY

IMAGE PROCESSING, INTERPRETATION AND ANALYSIS

PHOTOGRAMMETRIC ENGINEERING

REPRODUCTION

OTHER SERVICES

Interactive Computer Graphics; Computer Services; Turnkey Systems Sales/Leasing/Service;
Hardware Design/Development; Software Design/Development; Equipment Sales/Leasing/Service
Software Sales/Leasing

DATA TEChnology, Inc.

REMOTE SENSING EQUIPMENT/SYSTEMS PROVIDED

REMOTE SENSOR SYSTEMS

VIEWING EQUIPMENT

PHOTOGRAMMETRIC EQUIPMENT

DIGITAL IMAGE PROCESSING EQUIPMENT

SOFTWARE

INTEGRATED SYSTEMS

OTHER EQUIPMENT

Sell & Lease Interactive Graphics Systems; Measurement Equipment; Plotters;
Photogrammetric Computer Systems

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NAME: DeANZA SYSTEMS, INC.

DeANZA SYSTEMS, INC.

ADDRESS(ES) & CONTACT(S)

118 Charcot Avenue
San Jose, CA 95131
(408) 263-7155
C. W. Nordby

100 First Avenue N.E. #114G
Cedar Rapids, IA 52401
(319) 366-5758
Robert Pehkonen

3918 Prosperity Avenue #204
Fairfax, Virginia 22031
(703) 560-6210
Dave Drewry

Newbury Park, CA
Geneva, Switzerland
Tokyo, Japan
Sydney, Australia
Munich, W. Germany

YEARS IN BUSINESS: _____

SMALL BUSINESS CONTRACTOR? _____

PROJECTS COMPLETED: _____

MINORITY-OWNED BUSINESS? _____

REGION SERVED: _____

TOTAL APPLICABLE EMPLOYEES: _____

TYPES OF REMOTE SENSING TECHNOLOGIES:

PERSONNEL & SKILLS REPRESENTED:

STATEMENT OF CAPABILITIES:

Image Display and Processing Systems with resolution of 256x256x8 up to 1024x1024x48 bits. Raster scan systems with 256 levels of gray scale or up to 16 M colors (2²⁴) High speed image array processors, video signal digitizers and associated peripherals. Digital Equipment Corp, PDP11 UNIBUS compatible interfaces standard. Other computer interfaces optionally available.

REMOTE SENSING EQUIPMENT/SYSTEMS PROVIDED

REMOTE SENSOR SYSTEMS

VIEWING EQUIPMENT

PHOTOGRAMMETRIC EQUIPMENT

DIGITAL IMAGE PROCESSING EQUIPMENT

Sell B&W Image Displays, Image Digitizers, Color Image Displays.

SOFTWARE

INTEGRATED SYSTEMS

OTHER EQUIPMENT

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NAME: EARTH SATELLITE CORPORATION

EARTH SATELLITE CORPORATION

ADDRESS(ES) & CONTACT(S)

7222 47th Street (Chevy Chase)
Washington, D.C. 20015
(301) 652-7130
Dr. Charles Sheffield

2150 Shattuck Avenue
Berkeley, CA 94704
(415) 845-5140
Dr. Philip Langley

YEARS IN BUSINESS: 11

SMALL BUSINESS CONTRACTOR? Yes

PROJECTS COMPLETED: 250+

MINORITY-OWNED BUSINESS? No

REGION SERVED: U.S., Int'l.

TOTAL APPLICABLE EMPLOYEES: 67

TYPES OF REMOTE SENSING TECHNOLOGIES:

Low Altitude Aerial Photo; Med Altitude Aerial Photo; High Altitude Aerial Photo; Aerial Multispectral Scanner; Aerial Thermal Infrared Scanner; Radar; Geophysical Survey; Landsat MSS; Landsat RBV; Seasat; HCMM; Skylab; Weather Satellite; Digital Image Interpretations; Manual Image Interpretations.

PERSONNEL & SKILLS REPRESENTED:

Management (5); Professional (39); Technical (15); Other (8); Cartographers (4); Computer Equip Operators (2); Computer Programmers (3); Draftsmen (2); Image Processing Equip Oper. (1); Soil Scientists (1); Photogrammatists (2); Photointerpreters* (*48 employees have PI skills in addition to principal skill.); Photolab Technicians (6); Physical Scientists (1); Planners (2); Geographers (8); Geologists (12); Foresters/Botanists (5); Meteorologists (4); Agronomist (1); Administrative/Management (13).

STATEMENT OF CAPABILITIES:

Products and consulting services in remote sensing; crop forecasting services, computer enhanced Landsat images, geographic information systems, oil and gas exploration services, timber inventories, meteorological services, land cover/land use inventories, cartography and photo processing services, geology and ground water surveys, integrated resource surveys.

FACILITIES AND SPECIAL EQUIPMENT

AIRCRAFT

Subcontract

CAMERAS, SCANNERS, AND OTHER REMOTE SENSORS

Hasselblad EL-500 (1)
Misc. 35mm SLR cameras (4)

FIELD SURVEY EQUIPMENT

Various ground truth survey instruments

PHOTOGRAPHIC PROCESSING EQUIPMENT

Complete Color and B&W Research and Production Photo Processing Laboratory (1)

PHOTOGRAMMETRIC PROCESSING EQUIPMENT

Area calculator, point markets, comparator, stereo transfer multiscopes.

IMAGE INTERPRETATION, VIEWING AND MAPPING (NON-DIGITAL)

Additive color viewer, mapograph, light tables, stereoscopes, transfer scopes, density slicers, magnifiers, drafting equipment, sketch master, etc.

IMAGE INTERPRETATION, VIEWING AND MAPPING (DIGITAL)

I²S Digidol (1)

I²S Digital Image Combiner (1)

DIGITIZING, PLOTTING AND GRAPHICS

Electronic Graphics Calculator
HP 9100 Calculator, printer, plotter

OTHER COMPUTER PROCESSING

LANDPAK Geographic Information System (1)

OTHER

Prime 456 Computer with peripherals (1)
Optronics P-1500 photowriter (1)

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EARTH SATELLITE CORPORATION

PRODUCTS AND SERVICES PROVIDED

IMAGE PRODUCTS

B&W, Color, Color Infrared, Color Composite Contact Prints and Enlarged Prints;
(c) B&W, Color, Color Infrared, Color Composite Neg. & Pos. Transparencies; Photo
Mosaics; Photo Atlas Sheets; Thermograms; Digital Mosaics; Halftone Image Prints;
Digital Magnetic Tape; Photomaps

ENHANCED AND CORRECTED IMAGERY

Photo & Digital Contrast Enhanced; Digital: Density Slice; Radiometric Correction; Image
Resampling; Pseudo Ratio and Ratios; Eigen (principal component); (c) Photo: Geometric
Correction; Density Slice; Radiometric Correction; Image Resampling; Pseudo Ratio and
Ratios; Eigen (principal component); Photo & Digital: Multitemporal Composites; Change
Detection; Multisensor Composites; Pseudo Stereo

PHOTOGRAMMETRIC PRODUCTS

(s) Orthophotos, Topographic Maps, Engineering Cross Sections, Stockpile Measurements,
Earthwork Measurements, Phot-Contour Maps, Plan and Profile Sheets; (c) Digital
Terrain Models, Digital Data Bases, Planimetric Maps, Volumetric Calculations,
Distance & Angle Measurements.

INTERPRETED, THEMATIC PRODUCTS

(c) Color Thematic Maps, Land Use Maps, Vegetation/Forestry Maps, Contour Weather Maps,
Utility Maps, Acreage Tabulations, Geocoded Data Bases, Thematic Map Overlays,
Geologic Maps, Transportation Maps, Soils Maps, Tax Maps, Digital Magnetic Tapes,
Integrated Resource Surveys.

PROJECT PLANNING AND SUPPORT SERVICES

Problem Definition; Feasibility Analysis; Selection of Existing Imagery; Ground
Control Survey; Map Digitizing; Data Base Preparation; Sensor Selection/Evaluation;
Sampling Strategy Design; Ancillary Data Collection; Ground Truth Survey; Gray
Level Digitizing; Data Management; (s) Air Support Operations.

AERIAL SURVEY

(s) Low Altitude Photography, Thermal Infrared, Radar, Geophysical, High Altitude
Photography, Multispectral Scanner.

IMAGE PROCESSING, INTERPRETATION AND ANALYSIS

Digital Image Processing; Batch Digital Image/Analysis/Classification; Interactive
Digital Image/Analysis/Classification; Photographic Laboratory Processing; Manual
Image Interpretation.

PHOTOGRAMMETRIC ENGINEERING

Aerotriangulation; Planimetric Mapping; Stereo Digitizing; Volumetric Calculation;
Area Calculations; (s) Orthophotomapping, Cross-Sectioning, Stereocompilation, Topo-
graphic Mapping-Small Scale, Topographic Mapping-Large Scale.

REPRODUCTION

Drafting & Scribbling; Cartographic Reproduction; Automated Drafting/Plotting;
(s) Printing.

OTHER SERVICES

Remote Sensing Research; Remote Sensing Training; Statistical Modeling; Consultant
Services; Interactive Computer Graphics; Computer Services; Turnkey Systems Sales/
Leasing/Service; Software Design/Development; Software Sales/Leasing; System Design/
Development; Sales/Leasing; (s) Hardware Design/Development, Equipment Sales/
Leasing/Service.

EARTH SATELLITE CORPORATION

REMOTE SENSING EQUIPMENT/SYSTEMS PROVIDED

REMOTE SENSOR SYSTEMS

VIEWING EQUIPMENT

PHOTOGRAMMETRIC EQUIPMENT

DIGITAL IMAGE PROCESSING EQUIPMENT

SOFTWARE

Sell Geometric Correction, Radiometric Correction, Image Enhancement, Multispectral
Classification.

INTEGRATED SYSTEMS

Sell Geometric Correction, Radiometric Correction, Image Enhancement, Multispectral
Classification.

OTHER EQUIPMENT

Sell Interactive Graphics Systems, Geographic Information Systems, Crop Forecasting
Systems, Image Processing Systems.

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NAME: EARTH SCIENCE CONSULTING AND TECHNOLOGY CORPORATION (ESCA-TECH CORP.)

ESCA-TECH CORP.

ADDRESS(ES) & CONTACT(S)

3001 Red Hill Ave.
Bldg. II, Suite 212
Costa Mesa, California 92626
(714) 751-3730
James L. Craddock, Senior Vice President
Mike Mel

Other locations: Albuquerque, New Mexico
Ridgeway, Colorado
Anchorage, Alaska

33749 9th Ave., South
Federal Way, Washington 98003
(206) 838-9192
Jacques Loraine
YEARS IN BUSINESS: 6

SMALL BUSINESS CONTRACTOR? Yes

PROJECTS COMPLETED: 30

MINORITY-OWNED BUSINESS? Yes

REGION SERVED: II, III, VI, VII, VIII, IX, X & Int'l.

TOTAL APPLICABLE EMPLOYEES: 20

TYPES OF REMOTE SENSING TECHNOLOGIES:

Low Altitude Aerial Photo; Med Altitude Aerial Photo; High Altitude Aerial Photo;
Aerial Multispectral Scanner; Aerial Thermal Infrared Scanner; Radar; Laser Scanner;
Geophysical Survey; Landsat MSS; Landsat RBV; Seasat; Skylab; Digital Image
Interpretations; Manual Image Interpretations; Digital Data Link

PERSONNEL & SKILLS REPRESENTED:

Management (2); Professional (16); Other (2)
Cartographers; Computer Equip. Oper.; Computer Programmers; Draftsmen; Engineers (civil, environ.); Image Processing Equip. Oper.; Soil Scientists; Social Scientists;
Photogrammatists; Photogrammetric Equip. Oper.; Photointerpreters; Photolab Technicians;
Geographers; Foresters; Archeologists; Geologists; Botanists

STATEMENT OF CAPABILITIES:

SATELLITE AND AERIAL PHOTOINTERPRETATION - Analysis of remote sensor imagery has long been an important tool for scientific studies in several disciplines at ESCA-Tech. Image interpretations are performed in a number of disciplines, including geology, oceanography, forestry, ecology, and geography.

Previous experience includes execution of aerial surveys, field data collection, and analysis of a variety of image types, including all types of photography, ultraviolet, infrared, passive microwave, radar, and multispectral scanner images. ESCA-Tech has also performed a number of projects using LANDSAT, SKYLAB, and SEASAT satellite imagery which involved digital computer image processing for image enhancement and automated information extraction.

(cont'd.)

STATEMENT OF CAPABILITIES: (cont'd.)

The remote sensing lab maintained by ESCA-Tech includes such equipment as a 32 color Spatial Data system, Joyce-Loebl scanning microdensitometer, precision spot densitometer, zoom transferscope, stereoscopes, stereomicroscope, light tables, and associated interpretation equipment. We also maintain working relationships with aerial survey firms and have the capability to initiate photographic, thermal infrared and other remote sensor surveys on short notice.

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ESCA-TECH CORP.

FACILITIES AND SPECIAL EQUIPMENT

CAMERAS, SCANNERS, AND OTHER REMOTE SENSORS

Hasselblad 500EL 70mm Cameras (100 ft. magazine w/motor drive); 35 mm SLR Cameras

PHOTOGRAPHIC PROCESSING EQUIPMENT

50" x 70" Millington Vacuum Frame (1); 20" x 24" B.T.C. Film Punch (1); 5KW Berkey Addalux High-Intensity Printing Light (1); K&M Point Light Source (1)

PHOTOGRAMMETRIC PROCESSING EQUIPMENT

K.E.K. Direct Viewing Stereoplotter (1)

IMAGE INTERPRETATION, VIEWING AND MAPPING (NON-DIGITAL)

Zeiss Stereotope Direct Viewing Plotter (1); 36" x 48" Light Table (1); 37" x 50" Hamilton Dial-A-Light Light Tables (4); 32 Color Spatial System (1); Fairchild F-71 Stereoscopes (4); Field Stereoscopes (12); Stationary Light Tables (4); Bausch and Lomb Zoom Transferscope (1); Portable Light Tables (3)

IMAGE INTERPRETATION, VIEWING AND MAPPING (DIGITAL)

Joyce-Lobel Scanning Microdensitometer (1); MacBeth Precision Spot Densitometer (1)

OTHER COMPUTER PROCESSING

Numonics Model 1224 Electronic Digitizer (1); Apple II Computer with Incremental Digitizing Pad (1); K&E Mark II Drafting Machine (Vertical Arm) (1); Miscellaneous Inking Tools: Rigid Gravers, Swiven Gravers, Freehand Gravers;

OTHER

Leroy Lettering Set (1); Koh-i-noor Lettering Set (1); 60X Measuring Microscope (Linoscope) (1); Miscellaneous Inking Tools: Ruling Pens, Contour Pens, Railroad Pens; Drafting Sundries: Registration Pens, Templates, Triangles; Art-O-Graph Reflecting Projector (1)

PRODUCTS AND SERVICES PROVIDED

IMAGE PRODUCTS

(c) Photo Mosaics; Photo Atlas Sheets; Analog Magnetic Tape; Thermograms; Digital Mosaics; Halftone Image Prints; (s) B&W, Color, Color Infrared, and Color Composite Negative Transparencies, Positive Transparencies, Contact Prints, and Enlarged Prints

ENHANCED AND CORRECTED IMAGERY

Photo and Digital: Geometric Correction; Change Detection; Pseudo Color; Photo Image Resampling; (c) Digital Image Resampling; Photo and Digital: Multitemporal Composites; Density Slice; Multisensor Composites

PHOTOGRAMMETRIC PRODUCTS

Topographic Maps; Stockpile Measurements; Earthwork Measurements; Digital Terrain Models; Planimetric Maps; Photo-Contour Maps; Plan and Profile Sheets; Volumetric Calculations; Distance & Angle Measurements; (s) Topographic Maps; Engineering Cross Sections; Digital Data Bases

INTERPRETED, THEMATIC PRODUCTS

Color Thematic Maps; Land Use Maps; Vegetation/Forestry Maps; Contour Weather Maps; Utility Maps; Acreage Tabulations; Geocoded Data Bases; Thematic Map Overlays; Geologic Maps; Transportation Maps; Soils Maps; Tax Maps; (s) Digital Magnetic Tapes

PROJECT PLANNING AND SUPPORT SERVICES

Problem Definition; Feasibility Analysis; Selection of Existing Imagery; Map Digitizing; Data Base Preparation; Sensor Selection/Evaluation; Sampling Strategy Design; Ancillary Data Collection; Ground Truth Survey; Data Management; (s) Ground Control Survey; Air Support Operations; Gray Level Digitizing

AERIAL SURVEY

(s) Low Altitude Photography; Thermal Infrared; Radar; Geophysical; High Altitude Photography; Multispectral Scanner

IMAGE PROCESSING, INTERPRETATION AND ANALYSIS

Batch Digital Image/Analysis/Classification; Interactive Digital Image/Analysis/Classification; Photographic Laboratory Processing; Manual Image Interpretation; (s) Digital Image Processing

PHOTOGRAMMETRIC ENGINEERING

Aerotriangulation; Orthophotomapping; Planimetric Mapping; Stereo Digitizing; Cross-Sectioning; Stereocompilation; Topographic Mapping-Small Scale; Topographic Mapping-Large Scale; Volumetric Calculation

REPRODUCTION

Drafting & Scribing; Cartographic Reproduction; Automated Drafting/Plotting; Printing

OTHER SERVICES

Remote Sensing Research; Remote Sensing Training; Statistical Modeling; Consultant Services; Hardware Design/Development; Software Design/Development; (s) Interactive Computer Graphics; Computer Services

NAME: EASTMAN KODAK COMPANY

ADDRESS(ES) & CONTACT(S)

343 State Street
Rochester, New York 14650
(716) 724-4000

YEARS IN BUSINESS: _____

PROJECTS COMPLETED: _____

REGION SERVED: _____

TYPES OF REMOTE SENSING TECHNOLOGIES:

PERSONNEL & SKILLS REPRESENTED:

STATEMENT OF CAPABILITIES:

"Eastman Kodak Company does not engage in aerial photography or remote sensing. We manufacture products used in this field, such as; photographic films, plates, papers, chemicals, processors, and related equipment."

NAME: ECOSYSTEMS INTERNATIONAL, INC.

ADDRESS(ES) & CONTACT(S)

P.O. Box 225
Gambrills, Maryland 21054
(301) 987-4976
Carroll F. Sauer

Foreign Location:
c/o ITALECO
Via Messina 46
Rome, Italy

YEARS IN BUSINESS: 8

PROJECTS COMPLETED: 20

REGION SERVED: U.S., Int'l.

TYPES OF REMOTE SENSING TECHNOLOGIES:

Low Altitude Aerial Photo; Med Altitude Aerial Photo; High Altitude Aerial Photo; Aerial Multispectral Scanner; Aerial Thermal Infrared Scanner; Radar; Landsat MSS; Landsat RBV; Skylab; Weather Satellite; Digital Image Interpretations; Manual Image Interpretations; Mixed Interpretation.

PERSONNEL & SKILLS REPRESENTED:

Management(3); Professional (8); Technical (5); Other (5); Cartographers, Computer Equip Operators, Computer Programmers, Draftsmen, Engineers(civil, environ., electrical), Field Surveyors, Image Processing Equip Oper., Soil Scientists, Photointerpreters, Photolab Technicians, Physical Scientists, Planners, Agriculturists, Land Use Specialists (# not indicated).

STATEMENT OF CAPABILITIES:

ECOSystems provides a wide range of remote sensing services including image analysis and interpretation and application to such fields as Agriculture, Geology, Land Use Planning, Hydrology, Water and Air Quality and Resources, Natural Resources, Soil Conservation and Oceanography. The analysis package developed by ECOSystems is low cost both in terms of hardware (less than \$40,000) and Analysis cost. Capabilities include Remote Sensing Systems, Environmental Systems, Data and Communication Systems, Modelling and Simulation Packages, Engineering Economics, Market and Business Analysis; Applications Development, Technology Transfer and Training and Information Extraction Services.

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FACILITIES AND SPECIAL EQUIPMENTAIRCRAFT

Leased as needed.

CAMERAS, SCANNERS, AND OTHER REMOTE SENSORSFIELD SURVEY EQUIPMENTPHOTOGRAPHIC PROCESSING EQUIPMENTPHOTOGRAMMETRIC PROCESSING EQUIPMENTIMAGE INTERPRETATION, VIEWING AND MAPPING (NON-DIGITAL)

ECOSystems Universal Image Analyzer

IMAGE INTERPRETATION, VIEWING AND MAPPING (DIGITAL)

ECOSystems Universal Image Analyzer

DIGITIZING, PLOTTING AND GRAPHICS

Digital PDP 11/34
Apple II & III Color Graphics

OTHER COMPUTER PROCESSING

ECOS - Environmental Control Observation System

OTHERPRODUCTS AND SERVICES PROVIDEDIMAGE PRODUCTS

(c)B&W, Color, Color Composite Neg. Transp., Pos. Transp.; (c)B&W, Color Cont. Prints; (c)B&W Enlgd. Prints; (s)Color Enlgd. Prints; (s)Color Infrared Neg. Transp., Pos. Transp., Cont. Prints, Enlgd. Prints; (c)Color Composite Contact Prints, Enlgd. Prints; (c)Photo Mosaics, Photo Atlas Sheets, Analog Magnetic Tape, Thermograms, Halftone Image Prints; (c)Digital Mosaics, Digital Magnetic Tape.

ENHANCED AND CORRECTED IMAGERY

(c)Multitemporal Composites Photo Imagery; (s)Contrast Enhanced, Geometric Correction, Density Slice, Change Detection, Multisensor Composites, Radiometric Correction, Image Resampling, Pseudo Stereo Photo Imagery.

PHOTOGRAMMETRIC PRODUCTS

(s)Orthophotos, Topographic Maps, Engineering Cross Sections, Stockpile Measurements, Earthwork Measurements, Planimetric Maps, Photo-Contour Maps, (c)Digital Terrain Models, Digital Data Bases, Plan and Profile Sheets, Volumetric Calculations, Distance & Angle Measurements, Digital Contour Lines.

INTERPRETED, THEMATIC PRODUCTS

(c)Color Thematic Maps, Land Use Maps, Vegetation/Forestry Maps, Contour Weather Maps, Utility Maps, Acreage Tabulations, Geocoded Data Bases, Thematic Map Overlays, Geologic Maps, Transportation Maps, Soils Maps, Tax Maps, Digital Magnetic Tapes.

PROJECT PLANNING AND SUPPORT SERVICES

Problem Definition; Feasibility Analysis; Selection of Existing Imagery; Map Digitizing; Data Base Preparation; Sensor Selection/Evaluation; Sampling Strategy Design; Ancillary Data Collection; Gray Level Digitizing; Data Management; (s)Ground Control Survey, Air Support Operations, Ground Truth Survey.

AERIAL SURVEY

(s)Low Altitude Photography, Thermal Infrared, Radar, Geophysical, High Altitude Photography, Multispectral Scanner.

IMAGE PROCESSING, INTERPRETATION AND ANALYSIS

Digital Image Processing; Batch Digital Image/Analysis/Classification; Interactive Digital Image/Analysis/Classification; Photographic Laboratory Processing; Manual Image Interpretation.

PHOTOGRAMMETRIC ENGINEERING

(s)Aerotriangulation, Orthophotomapping, Planimetric Mapping, Stereo Digitizing, Cross-Sectioning, Stereocompilation, Topographic Mapping-Small Scale, Topographic Mapping-Large Scale, Volumetric Calculation.

REPRODUCTION

Drafting & Scribing, Cartographic Reproduction; Automated Drafting/Plotting; Printing; (s)Automated Drafting/Plotting, Printing.

OTHER SERVICES

Remote Sensing Research; Remote Sensing Training; Statistical Modeling; Consultant Services; Interactive Computer Graphics; Computer Services; Turnkey Systems Sales/Leasing/Service; Hardware Design/Development; Software Design/Development; Software Sales/Leasing; (s)Equipment Sales/Leasing/Service.

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ECOSYSTEMS INTERNATIONAL, INC.

REMOTE SENSING EQUIPMENT/SYSTEMS PROVIDED

REMOTE SENSOR SYSTEMS

VIEWING EQUIPMENT

Sell and lease image analyzers

PHOTOGRAMMETRIC EQUIPMENT

DIGITAL IMAGE PROCESSING EQUIPMENT

SOFTWARE

Sell and lease geometric correction, radiometric correction, image enhancement, multispectral classification

INTEGRATED SYSTEMS

OTHER EQUIPMENT

Sells and leases interactive graphics systems

NAME: EGBERT SCIENTIFIC SOFTWARE

ADDRESS(ES) & CONTACT(S)

J-74 Driftwood Cove (P.O. Box 42)
Greenport, NY 11944
(516) 477-1357
Dwight D. Egbert, President

YEARS IN BUSINESS: 1 1/2

PROJECTS COMPLETED: 6

REGION SERVED: U.S., Int'l.

TYPES OF REMOTE SENSING TECHNOLOGIES:

Low Altitude Aerial Photo, Med Altitude Aerial Photo; High Altitude Aerial Photo; Aerial Multispectral Scanner; Aerial Thermal Infrared Scanner; Radar; Lansat Mss; Landsat RBV; Seasat; Skylab; Weather Satellite; Digital Image Interpretations.

PERSONNEL & SKILLS REPRESENTED:

Engineers(electrical) (1)

STATEMENT OF CAPABILITIES:

In October 1979, ESS began delivery of IMPAC, a very low cost image analysis microcomputer package. IMPAC is not an "enhancement" system or an intelligent terminal. As a completely stand-alone computer system, it is capable of interactively creating and displaying full color multispectral classification maps, has full statistical analysis capabilities (including histogram generation), and provides image ratioing and transformation. A complete IMPAC system with microcomputer, terminal, printer, color TV, disk memory, installation, and training costs \$10,000 to \$15,000.

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EGBERT SCIENTIFIC SOFTWARE

REMOTE SENSING EQUIPMENT/SYSTEMS PROVIDED

NAME: ENVIRONMENTAL RESEARCH & TECHNOLOGY, INC.

ADDRESS(ES) & CONTACT(S)

696 Virginia Road
Concord, MA 01742
(617) 369-8910
Mr. Michael D. Smallwood

P.O. Box 2105, 1716 Heath Parkway
Fort Collins, Colorado 80522
Dr. Steve Martin
(303) 493-8878

Suite 360, 2625 Townsgate Road
Westlake Village, CA 91361
(805) 497-0821
Dr. George Hidy

Houston, Texas
Billings, Montana
Lombard, Illinois

YEARS IN BUSINESS: 10

SMALL BUSINESS CONTRACTOR? No

PROJECTS COMPLETED: 100

MINORITY-OWNED BUSINESS? No

REGION SERVED: U.S., Int'l.

TOTAL APPLICABLE EMPLOYEES: 7

TYPES OF REMOTE SENSING TECHNOLOGIES:

Low Altitude Aerial Photo; Med Altitude Aerial Photo; High Altitude Aerial Photo;
Aerial Multispectral Scanner; Aerial Thermal Infrared Scanner; Radar; Landsat MSS;
Landsat RBV; Seasat; HCMM; Skylab; Weather Satellite; Manual Image Interpretations.

PERSONNEL & SKILLS REPRESENTED:

Management (2); Professional (2); Technical (2); Other (1); Cartographers,
Computer Programmers, Image Processing Equip. Oper., Photointerpreters, Photolab
Technicians, Physical Scientists, Planners, Geographers (# not indicated).

STATEMENT OF CAPABILITIES:

In response to the need for remote sensing services to aid resource planning in all forms, ERT has assembled a group of scientists experienced in designing and conducting remote sensing studies for a wide variety of projects. As a multi-disciplinary environmental consulting organization, ERT has the capabilities to provide services both in remote sensing and in the detailed field verificatic studies that may be required.

ERT has dedicated its program in remote sensing to the transfer of applications to the widest possible sphere of the user community. In its unique position as member of both the technical applications development family and as provider of services to both government and private sector clients, ERT is particularly well suited for, and will continue to participate as much as possible in, the rapid and meaningful transfer to users of the technical and economic benefits of state-of-the-art earth resources remote sensing developments.

ERT was founded in 1968 with the primary objective of providing services and products in the environmental sciences. The firm maintains its corporate offices in Concord,

REMOTE SENSOR SYSTEMS

VIEWING EQUIPMENT

PHOTOGRAMMETRIC EQUIPMENT

DIGITAL IMAGE PROCESSING EQUIPMENT

Sell and Lease Image Digitizers, Color Image Displays.

SOFTWARE

Sell and Lease Multispectral Classification.

INTEGRATED SYSTEMS

Sell and Lease Multispectral Classification.

OTHER EQUIPMENT

STATEMENT OF CAPABILITIES: (cont.)

Massachusetts with additional technical offices in Fort Collins, Colorado; Lombard, Illinois; Westlake, California; and Lexington, Massachusetts.

ERT has extensive experience in performing environmental studies having completed more than 500 projects. In these projects the firm has applied its in-house capabilities in air pollution meteorology, water quality and resource management, Hydrology, geology, acoustics and noise control, terrestrial ecology, land use and transportation planning, economics, sociology and demographics. In addition to a staff of more than 700 professionals in the environmental disciplines, ERT maintains over 200,000 square feet of office space. Support facilities include air, water, noise, biology, electronics, remote sensing, photography and chemistry laboratories; computer facilities, a printing and publications shop and instrumentation service facilities.

The size and facilities of ERT enable it to offer total environmental services using in-house resources exclusively. This has permitted us to satisfy both large and small scale needs in the most efficient manner possible.

FACILITIES AND SPECIAL EQUIPMENT

AIRCRAFT

CAMERAS, SCANNERS, AND OTHER REMOTE SENSORS

FIELD SURVEY EQUIPMENT

All standard equipment associated with comprehensive terrestrial and aquatic ecology surveys.

PHOTOGRAPHIC PROCESSING EQUIPMENT

Fully equipped color and black and white photo lab.

PHOTOGRAMMETRIC PROCESSING EQUIPMENT

IMAGE INTERPRETATION, VIEWING AND MAPPING (NON-DIGITAL)

Old Delft stereoscopes, light tables, mirror stereoscopes, Bausch & Lomb stereoscopes, B&L ZTS, map-o-graph, variscan projector.

IMAGE INTERPRETATION, VIEWING AND MAPPING (DIGITAL)

Automated contouring program.

DIGITIZING, PLOTTING AND GRAPHICS

Numonics digitizer, drafting tables and equipment.

OTHER COMPUTER PROCESSING

Raster to vector (polygon) conversion software.

OTHER

ENVIRONMENTAL RESEARCH & TECHNOLOGY, INC.

PRODUCTS AND SERVICES PROVIDED

IMAGE PRODUCTS

ENHANCED AND CORRECTED IMAGERY

PHOTOGRAMMETRIC PRODUCTS

(c) Digital Data Bases

INTERPRETED, THEMATIC PRODUCTS

(c) Color Thematic Maps, Land Use Maps, Vegetation/Forestry Maps, Contour Weather Maps, Utility Maps, Acreage Tabulations, Geocoded Data Bases, Thematic Map Overlays, Transportation Maps, Digital Magnetic Tapes.

PROJECT PLANNING AND SUPPORT SERVICES

Problem Definition; Feasibility Analysis; Selection of Existing Imagery; Map Digitizing; Sensor Selection/Evaluation; Sampling Strategy Design; Ancillary Data Collection; Ground Truth Survey; Data Management; (s) Ground Control Survey, Data Base Preparation, Air Support Operations, Gray Level Digitizing.

AERIAL SURVEY

IMAGE PROCESSING, INTERPRETATION AND ANALYSIS

Photographic Laboratory Processing; Manual Image Interpretation.

PHOTOGRAMMETRIC ENGINEERING

REPRODUCTION

Drafting & Scribing; Printing

OTHER SERVICES

Remote Sensing Research; Remote Sensing Training; Statistical Modeling; Consultant Services; Computer Services; (s) Interactive Computer Graphics.

NAME: ENVIRONMENTAL RESOURCES GROUP (ERG)

ADDRESS(ES) & CONTACT(S)

6380 Wilshire Blvd., Suite 804
Los Angeles, CA 90048
(213) 653-1086
R. Keith Julian

YEARS IN BUSINESS: 3

PROJECTS COMPLETED: 11

REGION SERVED: VI, VIII, IX, X

TYPES OF REMOTE SENSING TECHNOLOGIES:

Low Altitude Aerial Photo; Med. Altitude Aerial Photo; High Altitude Aerial Photo; High Altitude Aerial Photo; Landsat MSS; Skylab, Manual Image Interpretations.

PERSONNEL & SKILLS REPRESENTED:

Management (1); Professional (18); Technical (1); Cartographers (1); Draftsmen (1) Engineers (civil, environ.) (3); Social Scientists (2); Photointerpreters (1); Planners (2); Geographers (3); Biologists (3); Archaeologists (2); Air and Water Quality Specialists (3).

STATEMENT OF CAPABILITIES:

ERG can provide a range of remote sensing interpretation, planning, and utilization services as well as necessary subcontracting and consultation for remote sensing products. ERG's disciplinary expertise includes land use planning and analysis, cultural resource survey, economic feasibility and location studies, biologic and agricultural resource analysis, and general environmental assessment using remote sensing techniques.

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FACILITIES AND SPECIAL EQUIPMENT

PRODUCTS AND SERVICES PROVIDED

AIRCRAFT

IMAGE PRODUCTS

CAMERAS, SCANNERS, AND OTHER REMOTE SENSORS

(s) B&W, Color, Color Infrared, Color Composite Neg. & Pos. Transparencies, Contact & Enlarged Prints; Photo Mosaics; Photo Atlas Sheets; Analog Magnetic Tape; Thermograms; Digital Mosaics; Halftone Image Prints; Digital Magnetic Tape

FIELD SURVEY EQUIPMENT

ENHANCED AND CORRECTED IMAGERY

(s)Multitemporal Composites, Contrast Enhanced, Geometric Correction, Density Slice, Change Detection, Multisensor Composites, Radiometric Correction, Image Resampling, Pseudo Stereo Photo and Digital Imagery.

PHOTOGRAPHIC PROCESSING EQUIPMENT

(Limited)

PHOTOGRAMMETRIC PRODUCTS

(s)Orthophotos, Topographic Maps, Engineering Cross Sections, Stockpile Measurements, Earthwork Measurements, Digital Terrain Models, Digital Data Bases, Planimetric Maps, Photo-Contour Maps, Plan and Profile Sheets, Volumetric Calculations, Distance & Angle Measurements.

PHOTOGRAMMETRIC PROCESSING EQUIPMENT

INTERPRETED, THEMATIC PRODUCTS

(c)Color Thematic Maps, Land Use Maps, Vegetation/Forestry Maps, Utility Maps, Acreage Tabulations, Thematic Map Overlays, Geologic Maps, Transportation Maps, Soils Maps, Tax Maps.

IMAGE INTERPRETATION, VIEWING AND MAPPING (NON-DIGITAL)

(X) (Specific type not provided)

PROJECT PLANNING AND SUPPORT SERVICES

Problem Definition; Feasibility Analysis; Selection of Existing Imagery; Data Base Preparation; Sensor Selection/Evaluation; Sampling Strategy Design; Ancillary Data Collection; Data Management; (s)Ground Control Survey, Map Digitizing, Air Support Operations, Ground Truth Survey.

IMAGE INTERPRETATION, VIEWING AND MAPPING (DIGITAL)

AERIAL SURVEY

(s)Low Altitude Photography, Thermal Infrared, Geophysical, High Altitude Photography, Multispectral Scanner.

DIGITIZING, PLOTTING AND GRAPHICS

IMAGE PROCESSING, INTERPRETATION AND ANALYSIS

Photographic Laboratory Processing; Manual Image Processing; (s) Digital Image Processing; Batch Digital Image/Analysis/Classification; Interactive Digital Image/Analysis/Classification

OTHER COMPUTER PROCESSING

PHOTOGRAMMETRIC ENGINEERING

(s)Orthophotomapping, Planimetric Mapping, Stereo Digitizing, Stereocompilation, Topographic Mapping-Small Scale, Topographic Mapping-Large Scale, Volumetric Calculation.

OTHER

Cartographic Production Lab

REPRODUCTION

Drafting & Scribing; Cartographic Reproduction; (s)Automated Drafting/Plotting, Printing.

OTHER SERVICES

Remote Sensing Research; Statistical Modeling; Consultant Services; (s)Computer Services.

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NAME: EXECUTIVE RESOURCE ASSOCIATES, INC.

ADDRESS(ES) & CONTACT(S)

1911 Jefferson Davis Highway, Suite 902A
Arlington, Virginia 22202
(703) 522-5706
Louis B. C. Fong, Executive Director, Center for
Engineering and Technology.

YEARS IN BUSINESS: 10+*

SMALL BUSINESS CONTRACTOR? Yes

PROJECTS COMPLETED: _____

MINORITY-OWNED BUSINESS? Yes

REGION SERVED: _____

TOTAL APPLICABLE EMPLOYEES: _____

*Senior Associates are recent civil service retirees.

TYPES OF REMOTE SENSING TECHNOLOGIES:

Weather Satellite.

PERSONNEL & SKILLS REPRESENTED:

Management (1); Professional (3); Engineers(civil, environ.) (1); Engineers(electrical)
(2); Physical Scientists(1).

STATEMENT OF CAPABILITIES:

ERA, Inc. is a broad-based international management consulting firm organized to provide management services in the following areas: computer sciences, management information systems, systems analysis & management, feasibility studies, planning and program management, organization development, health care management, management development & training, space engineering & technology needs analysis surveys, industrial security, energy conservation, electric power systems.

PRODUCTS AND SERVICES PROVIDED

IMAGE PRODUCTS

ENHANCED AND CORRECTED IMAGERY

PHOTOGRAMMETRIC PRODUCTS

INTERPRETED, THEMATIC PRODUCTS

PROJECT PLANNING AND SUPPORT SERVICES

AERIAL SURVEY

IMAGE PROCESSING, INTERPRETATION AND ANALYSIS

PHOTOGRAMMETRIC ENGINEERING

REPRODUCTION

OTHER SERVICES

Consultant Services; Computer Services; Software Design/Development; Planning and Program Management; Systems Management.

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NAME: EXPLORATION RESEARCH ASSOCIATES INC.

ADDRESS(ES) & CONTACT(S)

1701 Clinton Street/Suite 212
Los Angeles, CA 90026
(213) 483-5127
Mark A. Liggett, President

YEARS IN BUSINESS: 8

PROJECTS COMPLETED: 100

REGION SERVED: VI, VIII, IX, X, Int'l.

TYPES OF REMOTE SENSING TECHNOLOGIES:

Low Altitude Aerial Photo; Med. Altitude Aerial Photo, High Altitude Aerial Photo;
Geophysical Survey; Landsat MSS; Skylab; Manual Image Interpretations.

PERSONNEL & SKILLS REPRESENTED:

Professional (5); Technical (1); Draftsmen (1); Physical Scientists (Geologists) (5).

STATEMENT OF CAPABILITIES:

Exploration Research Associates is an independent consulting firm specializing in integration of remote sensing technology with geological, geophysical and geochemical survey methods for reconnaissance mineral, geothermal energy, and ground water exploration programs.

The company has an extensive collection of satellite and high-altitude aircraft imagery, specialized photomechanical image processing and analysis equipment, petrographic and photomicrographic facilities, plane-table surveying equipment, and field vehicles. The company's research library includes over 10,000 indexed technical references on regional geology and mineral occurrences.

EXPLORATION RESEARCH ASSOCIATES, INC.

FACILITIES AND SPECIAL EQUIPMENT

AIRCRAFT

Subcontract

CAMERAS, SCANNERS, AND OTHER REMOTE SENSORS

Subcontract

FIELD SURVEY EQUIPMENT

4-wheel drive field vehicles (3)
Scintillometers (2)
Surveying equipment (1)

PHOTOGRAPHIC PROCESSING EQUIPMENT

Subcontract

PHOTOGRAMMETRIC PROCESSING EQUIPMENT

Subcontract

IMAGE INTERPRETATION, VIEWING AND MAPPING (NON-DIGITAL)

Spectral Data Corp., Multispectral Viewer (1)
Large format stereoscopes (4)
Richards light table and film transport (1)

IMAGE INTERPRETATION, VIEWING AND MAPPING (DIGITAL)

Subcontract

DIGITIZING, PLOTTING AND GRAPHICS

Subcontract

OTHER COMPUTER PROCESSING

Subcontract

OTHER

Petrographic microscope (1)
Geotechnical research library (10,000 references) (1)
LANDSAT, Skylab & U-2 aircraft imagery collection (2,500 images) (1)

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EXPLORATION RESEARCH ASSOCIATES, INC.

NAME: JERRY FOSTER & COMPANY

PRODUCTS AND SERVICES PROVIDED

IMAGE PRODUCTS

(s)B&W, Color, Color Infrared Neg. Transp., Pos. Transp., Cont. Prints, Enlgd Prints;
(c)Color Composite Neg. Transp., Pos. Transp., Cont. Prints, Enlgd Prints; (c)Photo
Mosaics; (s)Photo Atlas Sheets, Analog Magnetic Tape, Thermograms, Digital Mosaics,
Halftone Image Prints, Digital Magnetic Tape.

ENHANCED AND CORRECTED IMAGERY

Multitemporal Composites, Contrast Enhanced, Change Detection, Multisensor Composites,
Spectral ratioing Photo Imagery; Geometric Correction, Density Slice, Radiometric
Correction, Image Resampling, Pseudo Stereo Digital Imagery.

PHOTOGRAMMETRIC PRODUCTS

(s)Orthophotos, Topographic Maps, Stockpile Measurements, Earthwork Measurements,
Digital Terrain Models, Digital Data Bases, Planimetric Maps, Photo-Contour Maps,
Volumetric Calculations, Distance & Angle Measurements; (c)Engineering Cross
Sections, Plan and Profile Sheets, Geological Maps, Ore Reserve Maps.

INTERPRETED, THEMATIC PRODUCTS

(c)Land Use Maps, Vegetation/Forestry Maps, Geocoded Data Bases, Thematic Map
Overlays, Geologic Maps, Soils Maps, Mineral & Geothermal Prospects, Hydrological
Maps.

PROJECT PLANNING AND SUPPORT SERVICES

Problem Definition; Feasibility Analysis; Selection of Existing Imagery; Ground
Control Survey; Data Base Preparation; Sensor Selection/Evaluation; Sampling
Strategy Design; Ancillary Data Collection; Ground Truth Survey; Data Management;
(s)Map Digitizing, Air Support Operations, Gray Level Digitizing.

AERIAL SURVEY

(s)Low Altitude Photography, Thermal Infrared, Radar, Geophysical, High Altitude
Photography, Multispectral Scanner.

IMAGE PROCESSING, INTERPRETATION AND ANALYSIS

Photographic Laboratory Processing; Manual Image Processing; (s) Digital Image Pro-
cessing; Batch Digital Image/Analysis/Classification; Interactive Digital Image/
Analysis/Classification

PHOTOGRAMMETRIC ENGINEERING

Geological Mapping; (s)Aerotriangulation, Orthophotomapping, Planimetric Mapping,
Stereo Digitizing, Cross-Sectioning, Stereocompilation, Topographic Mapping-Small
Scale, Topographic Mapping-Large Scale, Volumetric Calculation.

REPRODUCTION

Drafting & Scribing; (s)Cartographic Reproduction, Automated Drafting/Plotting,
Printing.

OTHER SERVICES

Remote Sensing Research; Remote Sensing Training; Consultant Services; (s)Statistic-
al Modeling, Interactive Computer Graphics, Computer Services.

ADDRESS(ES) & CONTACT(S)

3611 Oak Lawn #206
Dallas, Texas 75219
(214) 521-9630
Jerry Foster

YEARS IN BUSINESS: 4

PROJECTS COMPLETED: 200

REGION SERVED: U.S.

TYPES OF REMOTE SENSING TECHNOLOGIES:

Low Altitude Aerial Photo; Med Altitude Aerial Photo; High Altitude Aerial Photo;
Oblique Aerial Photo

PERSONNEL & SKILLS REPRESENTED:

Management (1); Professional (1); Technical (1)

Image Processing Equip. Oper.; Photolab Technicians; Pilots

STATEMENT OF CAPABILITIES:

In business since 1976, with 16 years previous experience, I/we provide vertical
and oblique aerial photography to government and industry. We specialize in custom
mosaics and rectified prints and film positives. We perform photo lab services
for other aerial mapping firms. We maintain a current negative file on the Dallas
Fort Worth Metroplex.

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FACILITIES AND SPECIAL EQUIPMENT

AIRCRAFT (1)

Specific type not provided.

CAMERAS, SCANNERS, AND OTHER REMOTE SENSORS (4)

Specific types not provided.

FIELD SURVEY EQUIPMENT

PHOTOGRAPHIC PROCESSING EQUIPMENT (2)

Specific types not provided.

PHOTOGRAMMETRIC PROCESSING EQUIPMENT

IMAGE INTERPRETATION, VIEWING AND MAPPING (NON-DIGITAL)

IMAGE INTERPRETATION, VIEWING AND MAPPING (DIGITAL)

DIGITIZING, PLOTTING AND GRAPHICS

OTHER COMPUTER PROCESSING

OTHER

PRODUCTS AND SERVICES PROVIDED

IMAGE PRODUCTS

B&W Enlarged Prints; (c) B&W Negative Transparencies and Contact Prints; Color and Color Infrared Negative Transparencies, Positive Transparencies; Contact Prints, and Enlarged Prints; Photo Mosaics; Photo Atlas Sheets; Halftone Image Prints
ENHANCED AND CORRECTED IMAGERY

PHOTOGRAMMETRIC PRODUCTS

(c) Plan and Profile Sheets

INTERPRETED, THEMATIC PRODUCTS

(c) Tax Maps

PROJECT PLANNING AND SUPPORT SERVICES

Problem Definition; Selection of Existing Imagery; Air Support Operations;
(s) Data Base Preparation

AERIAL SURVEY

Low Altitude Photography; High Altitude Photography

IMAGE PROCESSING, INTERPRETATION AND ANALYSIS

Photographic Laboratory Processing

PHOTOGRAMMETRIC ENGINEERING

REPRODUCTION

OTHER SERVICES

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NAME: FUGRO GEOMETRICS, INC.

FUGRO GEOMETRICS, INC.

ADDRESS(ES) & CONTACT(S)

2200 East 27th Street
Long Beach, CA 90806
(213) 595-4865
Jack Van Eden/Dudley W. Line

444 NE Ravenna Blvd
Seattle, Washington 98115
(206) 522-1028
Mr. George Lamb

2777 Long Beach Blvd.
Long Beach, CA 90807
(213) 595-4865
Mr. Jack J. Schoustra

Denver, Colorado
Warren, New Jersey
Leidschendam, The Netherlands.

YEARS IN BUSINESS: 3 $\frac{1}{2}$

SMALL BUSINESS CONTRACTOR? _____

PROJECTS COMPLETED: 350

MINORITY-OWNED BUSINESS? _____

REGION SERVED: U.S., Intl.

TOTAL APPLICABLE EMPLOYEES: 42

TYPES OF REMOTE SENSING TECHNOLOGIES:

Low Altitude Aerial Photo; Med Altitude Aerial Photo; High Altitude Aerial Photo;
Geophysical Survey; Manual Image Interpretations.

PERSONNEL & SKILLS REPRESENTED:

Management (5); Professional (5); Technical (32); Cartographers (6); Computer Equip Operators (3); Computer Programmers (1); Draftsmen (2); Engineers(civil, environ.) (1) Field Surveyors (4); Photogrammatists (5); Photogrammetric Equip Oper. (10); Photointerpreters (2); Photolab Technicians (4); Pilots (1); Geographers (3); Other (150)

STATEMENT OF CAPABILITIES:

Fugro Geometrics was formed in 1977 as a subsidiary of Fugro, Inc. Consulting Engineers and Geologists, to complement Fugro's experience in engineering geology, soil mechanics and earth resources assessment. This combination results in a unique comprehensive service providing industry and government with a firm planning basis for resource exploration, mining, transportation corridors, land development, facility installations, utilities, terminals, and conservation works.

FACILITIES AND SPECIAL EQUIPMENT

AIRCRAFT

Aero Commander 680E (1)
Survey Aircraft N1006S

CAMERAS, SCANNERS, AND OTHER REMOTE SENSORS

Geometrics G-803 proton magnetometer (1)
Scintrex GAD-6 spectrometer (1)
Scintrex GSA-144 gamma ray detectors (1024 in²) (2)

FIELD SURVEY EQUIPMENT

Four-wheel drive trucks (2)
EDM's (Geodimeter 78, AGA) (2)
Wild T-2 Theodolites/Wild T-3 Theodolites (2/3)

PHOTOGRAPHIC PROCESSING EQUIPMENT

Acti Copius computer controlled copy camera 4' x 7' (1)
Fairchild rectification camera (1)
LogEtronic Mark III automatic dodger/DuPont Cronaflex Automatic Processor (1/1)

PHOTOGRAMMETRIC PROCESSING EQUIPMENT

Kern PG2/AT/DC2B semi-automated plotters (4)
Wild B-8 Aviograph (1)
Zoom point transfer device (Kern & Wild) (2)

IMAGE INTERPRETATION, VIEWING AND MAPPING (NON-DIGITAL)

Bausch & Lomb Zoom stereoscope (1)
Mirror Stereoscopes (2)

IMAGE INTERPRETATION, VIEWING AND MAPPING (DIGITAL)

Kern PG2/AT/DC2B with Kennedy Model 9832 tapes (4)

DIGITIZING, PLOTTING AND GRAPHICS

CalComp 936 Drum Plotter (1)

OTHER COMPUTER PROCESSING

Terminals to Univac 1108 (2)

OTHER

M&S Interactive Graphics system (IGDS07) (1)
(Fugro B.V., The Netherlands)

See Attached Statement of Capabilities

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FUGRO GEOMETRICS, INC.

PRODUCTS AND SERVICES PROVIDED

IMAGE PRODUCTS

B&W, Color, Color Infrared Neg. Transp., Contact Prints, Enlarged Prints; Color Infrared Pos. Transp.; (c)Color Composite Neg. Transp., Cont. Prints, Enlarged Prints; (c)B&W Pos. Transp.; (c)Photo Mosaics, Photo Atlas Sheets, Analog Magnetic Tape, Halftone Image Prints, Digital Magnetic Tape, Line Maps; (s)Thermograms.

ENHANCED AND CORRECTED IMAGERY

Contrast Enhanced, Geometric Correction, Radiometric Correction, Pseudo Stereo Photo Imagery; (c)Contrast Enhanced, Geometric Correction, Radiometric Correction, Psuedo Stereo Digital Imagery.

PHOTOGRAMMETRIC PRODUCTS

(c)Orthophotos, Topographic Maps, Engineering Cross Sections, Stockpile Measurements, Earthwork Measurements, Digital Terrain Models, Digital Data Bases, Planimetric Maps, Photo-Contour Maps, Plan and Profile Sheets, Volumetric Calculations, Distance & Angle Measurements, Close Range, Analytical Data.

INTERPRETED, THEMATIC PRODUCTS

(c)Utility Maps, Acreage Tabulations, Geologic Maps, Transportation Maps, Soils Maps, Digital Magnetic Tapes; (s) Geocoded Data Bases.

PROJECT PLANNING AND SUPPORT SERVICES

Problem Definition; Feasibility Analysis; Selection of Existing Imagery; Ground Control Survey; Map Digitizing; Air Support Operations; Sensor Selection/Evaluation; Sampling Strategy Design; Ancillary Data Collection; Ground Truth Survey; (s)Data Base Preparation; Data Management.

AERIAL SURVEY

Low Altitude Photography; Geophysical; (s)Thermal Infrared, Radar, High Altitude Photography, Multispectral Scanner.

IMAGE PROCESSING, INTERPRETATION AND ANALYSIS

Digital Image Processing; Photographic Laboratory Processing; Manual Image Interpretation; (s)Interactive Digital Image/Analysis/Classification.

PHOTOGRAMMETRIC ENGINEERING

Aerotriangulation; Orthophotomapping; Planimetric Mapping; Stereo Digitizing; Cross-Sectioning; Stereocompilation; Topographic Mapping-Small Scale; Topographic Mapping-Large Scale; Volumetric Calculation; Close Range.

REPRODUCTION

Drafting & Scribing; Cartographic keproduction; Automated Drafting/Plotting; (s)Printing.

OTHER SERVICES

Remote Sensing Training; Statistical Modeling; Consultant Services; Interactive Computer Graphics; Computer Services; Turnkey Systems Sales/Leasing/Service; Software Design/Development.

NAME: FUGRO, INC.

ADDRESS(ES) & CONTACT(S)

3777 Long Beach Blvd. (Fugro, Inc.)
Long Beach, CA 90807
(213) 595-6611
Mr. Jack J. Schoustra, Dr. J. Carl Stepp

444 NE Ravenna Blvd. (Fugro Northwest, Inc.)
Seattle, Washington 98115
(206) 522-1028
Mr. George Lamb, Mr. Kevin Freeman

2200 Easth 27th Street (Fugro Geometrics, Inc.)
Long Beach, CA 90806
(213) 595-4865
Mr. Jack Van Eden, Mr. Dudley W. Line

Denver, Colorado
Warren, New Jersey
Taipei, Taiwan

YEARS IN BUSINESS: 3 $\frac{1}{2}$

SMALL BUSINESS CONTRACTOR? No

PROJECTS COMPLETED: 350

MINORITY-OWNED BUSINESS? No

REGION SERVED: U.S., Int'l.

TOTAL APPLICABLE EMPLOYEES: 54

TYPES OF REMOTE SENSING TECHNOLOGIES:

Low Altitude Aerial Photo; Med Altitude Aerial Photo; High Altitude Aerial Photo; Aerial Thermal Infrared Scanner; Radar; Geophysical Survey; Landsat MSS; Landsat RBV; Skylab; Digital Image Interpretations; Manual Image Interpretations.

PERSONNEL & SKILLS REPRESENTED:

Management (6); Professional (11); Technical (37); Cartographers (6); Computer Equip Operators (3); Computer Programmers (1); Draftsmen (2); Engineers(civil, environ.) (1); Field Surveyors (4); Photogrammatists (5); Photogrammetric Equip. Oper. (10); Photointerpreters (2); Photolab Technicians (4); Physical Scientists (10); Pilots (1); Geographers (5).

STATEMENT OF CAPABILITIES:

Fugro has complete in-house capabilities for obtaining aerial photography; field control surveys' analytical aerotriangulation; photo lab reproduction; compilation of controlled photo mosaics, planimetric and topographic maps; close-range photogrammetry, cross-sections or profiles; earthwork computations, digital terrain models, airborne magnetometer and airborne airborne radiometric surveys, Photogeology and photo interpretation. In association with outside consultants, we can provide high altitude aerial photography, thermal infrared scanning, multispectral photography, landsat interpretations, orthophotography and side looking radar imagery, geologic, engineering, hydrologic and environmental interpretations. These services are offered on a worldwide basis.

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FUGRO, INC.

FUGRO, INC.

FACILITIES AND SPECIAL EQUIPMENT

AIRCRAFT

Aero Commander 680E (1)
Survey Aircraft N1006S

CAMERAS, SCANNERS, AND OTHER REMOTE SENSORS

Geometrics G-803 proton magnetometer (1)
Scintrex GAD-6 spectrometer (1)
Scintrex GSA-144 gamma ray detectors (1024 in²) (2)

FIELD SURVEY EQUIPMENT

Four-wheel drive trucks (2)
EDM's (Geodimeter 78, AGA) (2)
Wild T-2 Theodolites/Wild T-3 theodolites(2/3)

PHOTOGRAPHIC PROCESSING EQUIPMENT

Acti Copius computer controlled copy camera 4' x 7' (1)
Fairchild rectification camera (1)
LogEtronic Mark III automatic dodger/DuPont Cronaflex Automatic Processor (1/1)

PHOTOGRAMMETRIC PROCESSING EQUIPMENT

Kern PG2/AT/DC2B semi-automated plotters (4)
Wild B-8 Aviogap (1)
Zoom point transfer device (Kern & Wild) (2)

IMAGE INTERPRETATION, VIEWING AND MAPPING (NON-DIGITAL)

Bausch & Lomb Zoom stereoscope (Model SIS-95) (1)
Mirror and Abrams CB-1 Stereoscopes (10)

IMAGE INTERPRETATION, VIEWING AND MAPPING (DIGITAL)

Kern PG2/AT/DC2B with Kennedy Model 9832 tapes (4)

DIGITIZING, PLOTTING AND GRAPHICS

CalComp 936 Drum Plotter (1)

OTHER COMPUTER PROCESSING

Terminals to Univac 1108 (2)

OTHER

PRODUCTS AND SERVICES PROVIDED

IMAGE PRODUCTS

B&W, Color, Color Infrared Neg Transp, Cont. Prints, Enlrgd Prints; Color Infrared Pos. Transp.; (c)B&W Pos. Transp.; (c)Color Composite Neg. Transp., Cont. Prints, Enlarged Prints; (c)Photo Mosaics, Photo Atlas Sheets, Analog Magnetic Tape, Halftone Image Prints, Digital Magnetic Tape, Line Maps; (s) Thermograms.
ENHANCED AND CORRECTED IMAGERY
(c)Contrast Enhanced, Geometric Correction, Radiometric Correction Pseudo Stereo Digital Imagery.

PHOTOGRAMMETRIC PRODUCTS

(c)Orthophotos, Topographic Maps, Engineering Cross Sections, Stockpile Measurements, Earthwork Measurements, Digital Terrain Models, Digital Data Bases, Planimetric Maps, Photo-Contour Maps, Plan and Profile Sheets, Volumetric Calculations, Distance & Angle Measurements, Close-range, Analytical Data.

INTERPRETED, THEMATIC PRODUCTS

(c)Utility Maps, Acreage Tabulations, Geologic Maps, Transportation Maps, Soils Maps, Digital Magnetic Tapes; (s) Geocoded Data Bases.

PROJECT PLANNING AND SUPPORT SERVICES

Problem Definition; Feasibility Analysis; Selection of Existing Imagery; Ground Control Survey; Map Digitizing; Air Support Operations; Sensor Selection/Evaluation; Sampling Strategy Design; Ancillary Data Collection; Ground Truth Survey; (s)Data Base Preparation, Data Management.

AERIAL SURVEY

Low Altitude Photography; Geophysical; (s)Thermal Infrared, Radar, High Altitude Photography, Multispectral Scanner.

IMAGE PROCESSING, INTERPRETATION AND ANALYSIS

Digital Image Processing; Photographic Laboratory Processing; Manual Image Interpretation; (s)Interactive Digital Image/Analysis/Classification.

PHOTOGRAMMETRIC ENGINEERING

Aerotriangulation; Orthophotomapping; Planimetric Mapping; Stereo Digitizing; Cross-Sectioning; Stereocompilation; Topographic Mapping-Small Scale; Topographic Mapping-Large Scale; Volumetric Calculation; Close Range.

REPRODUCTION

Drafting & Scribing; Cartographic Reproduction; Automated Drafting/Plotting; Printing.

OTHER SERVICES

Remote Sensing Training; Statistical Modeling; Consultant Services; Interactive Computer Graphics; Computer Services; Turnkey Systems Sales/Leasing/Service; Software Design/Development.

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NAME: GENERAL ELECTRIC COMPANY, SPACE SYSTEM DIVISION

GENERAL ELECTRIC COMPANY, SPACE SYSTEM DIVISION

ADDRESS(ES) & CONTACT(S)

5030 Herzel Place
Beltsville, MD 20705
(301) 937-3500
William J. Conroy

P.O. Box 8555
Philadelphia, PA 19010
(215) 962-2000
Charles J. Dannemann

4701 Forbes Blvd.
Lanham, MD 20801
(301) 459-2900
William J. Conroy

YEARS IN BUSINESS: 20

SMALL BUSINESS CONTRACTOR? No

PROJECTS COMPLETED: 100+

MINORITY-OWNED BUSINESS? No

REGION SERVED: US, Int'l

TOTAL APPLICABLE EMPLOYEES: 50

TYPES OF REMOTE SENSING TECHNOLOGIES:

Low Altitude Aerial Photo, Med Altitude Aerial Photo, High Altitude Aerial Photo, Aerial Multispectral Scanner, Aerial Thermal Infrared Scanner, Radar, Laser Scanner, Geophysical Survey, Landsat MSS, Landsat RBV, Seasat, HCMM, Skylab, Weather Satellite, Digital Image Interpretations, Manual Image Interpretations, Mosaicing Images, Combining Aerial Photos and Landsat

PERSONNEL & SKILLS REPRESENTED:

Management (5), Professional (25), Technical (15), Other (5); Cartographers, Computer Equip Operators, Computer Programmers, Draftsmen, Engineers (civil, environ.), Engineers (electrical), Field Surveyors, Image Processing Equip Oper, Soil Scientists, Social Scientists, Photogrammatists, Photogrammetric Equip Oper, Photointerpreters, Photolab Technicians, Physical Scientists, Planners, Geographers, Agronomists, Foresters, Geologists.

STATEMENT OF CAPABILITIES:

GE offers remote sensing products, services and systems. Products and services: digitally enhanced imagery (Satellite and Aircraft), thematic classification and analysis, photo interpretation, end use analysis (e.g., environmental impact, geologic analysis) and remote sensing training. Standard products: a geologic analysis package, GEOPAR; a standard classification package; and standard enhanced imagery. Application data system: digital image extraction processing systems (Image 100, Image 270, and Image 970); customized hardware and software. User mission studies based on practical experience with remote sensing and a familiarity with the evolving technology. Digital Image Analysis Laboratory, and interactive and batch image processing system, used by our discipline scientists on customer projects and customers on an hourly rate. Complete photo science laboratory offers precision custom and standard production photo services.

FACILITIES AND SPECIAL EQUIPMENT

AIRCRAFT

CAMERAS, SCANNERS, AND OTHER REMOTE SENSORS

FIELD SURVEY EQUIPMENT

PHOTOGRAPHIC PROCESSING EQUIPMENT

Complete Photo Lab

PHOTOGRAMMETRIC PROCESSING EQUIPMENT

IMAGE INTERPRETATION, VIEWING AND MAPPING (NON-DIGITAL)

IMAGE INTERPRETATION, VIEWING AND MAPPING (DIGITAL)

GE Image 100 Multispectral Analyzer

DIGITIZING, PLOTTING AND GRAPHICS

Gould 5000 Printer/Plotter, Optronics 5500, Graphpen GP3 Coordinate Digitizer Table, Tectronics 4012 and 4025 Graphics Terminal.

OTHER COMPUTER PROCESSING

PDP 11/35, 3 MDS Bucode (Model 4025) May Tape Drives, DEC RP06 Mass Storage Disc

OTHER

Dicomed D47, Transparency Scanner/Digitizer

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PRODUCTS AND SERVICES PROVIDED

REMOTE SENSING EQUIPMENT/SYSTEMS PROVIDED

IMAGE PRODUCTS

Black & White, Color, Color Composite, Negative Transparencies, Positive Transparencies, Contact Prints, Enlarged Prints; Photo Mosaics; (c) Color Infrared, Negative Transparencies, Positive Transparencies, Contact Prints, Enlarged Prints; Digital Mosaics; Halftone Image Prints; Digital Magnetic Tape; Ph. Mosaic's

ENHANCED AND CORRECTED IMAGERY

Digital: Contrast Enhanced; Geometric Correction; Density Slice; Spatial Enhanced
(c) Photo: Contrast Enhanced; Geometric Correction; Density Slice; Spatial Enhanced;
(c) Photo and Digital: Multitemporal Composites; Change Detection; Multisensor Composites; Radiometric Correction; Image Resampling

PHOTOGRAMMETRIC PRODUCTS

(c) Distance and Angle Measurements

INTERPRETED, THEMATIC PRODUCTS

Color Thematic Maps, Geologic Maps
(c) Land Use Maps; Vegetation/Forestry Maps; Acreage Tabulations; Thematic Map Overlays; Transportation Maps; Soils Maps; Digital Magnetic Tapes

PROJECT PLANNING AND SUPPORT SERVICES

Problem Definition; Feasibility Analysis; Selection of Existing Imagery; Map Digitizing; Data Base Preparation; Sensor Selection/Evaluation; Sampling Strategy Design; Ground Truth Survey; Gray Level Digitizing; Data Management (s) Ground Control Survey; Air Support Operations; Ancillary Data Collection

AERIAL SURVEY

(s) Low altitude photography; Thermal Infrared; Radar; Geophysical; High Altitude Photography; Multispectral Scanner

IMAGE PROCESSING, INTERPRETATION AND ANALYSIS

Digital Image Processing; Batch Digital Image/Analysis/Classification; Interactive Digital Image/Analysis/Classification; Photographic Laboratory Processing; Manual Image Interpretation

PHOTOGRAMMETRIC ENGINEERING

(s) Aerotriangulation; Orthophotomapping; Planimetric Mapping; Stereo Digitizing; Cross-Sectioning; Stereocompilation; Topographic Mapping-Small Scale; Topographic Mapping Large Scale; Volumetric Calculation

REPRODUCTION

Drafting & Scribing; Printing (s) Cartographic Reproduction; Automated Drafted/Plotting

OTHER SERVICES

Remote Sensing Research; Remote Sensing Training; Statistical Modeling; Consultant Services; Computer Services; Turkey Systems Sales/Leasing/Service; Hardware Design/Development; Software Design/Development; Equipment Sales/Leasing/Service; Software Sales Leasing; (s) Interactive Computer Graphics

REMOTE SENSOR SYSTEMS

Sell Satellites

VIEWING EQUIPMENT

PHOTOGRAMMETRIC EQUIPMENT

DIGITAL IMAGE PROCESSING EQUIPMENT

Sell B&W Image Displays, Color Image Displays, Digital Image Processing System

SOFTWARE

Sell Geometric Correction, Radiometric Correction, Image Enhancement, Multispectral Classification

INTEGRATED SYSTEMS

Sell Geometric Correction, Radiometric Correct, Image Enhancement, Multispectral Classification

OTHER EQUIPMENT

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NAME: GEODETIC SERVICES, INC.

GEODETIC SERVICES, INC.

ADDRESS(ES) & CONTACT(S)

1511 S. Riverview Drive
Melbourne, FL 32901
(305) 724-6831
Duane C. Brown or John A. Strahle.

YEARS IN BUSINESS: 12

SMALL BUSINESS CONTRACTOR? Yes

PROJECTS COMPLETED: 350

MINORITY-OWNED BUSINESS?

REGION SERVED: U.S., Int'l.

TOTAL APPLICABLE EMPLOYEES: 14

TYPES OF REMOTE SENSING TECHNOLOGIES:

Low Altitude Aerial Photo; Med. Altitude Aerial Photo, High Altitude Aerial Photo.

PERSONNEL & SKILLS REPRESENTED:

Management (2); Professional (5); Technical (5); Other (1); Computer Equip Operators, Computer Programmers, Engineers(electrical), Field Surveyors, Photogrammetrists, Photogrammetric Equip Oper., Photolab Technicians (# not provided).

STATEMENT OF CAPABILITIES:

Geodetic Service, Inc. offers specialized services to government and industry in the disciplines of analytical aerotriangulation, industrial (close range) photogrammetry and satellite Doppler surveying.

For applications to industrial photogrammetry, GSI has perhaps the most extensive inventory of specialized equipment in existence. Proprietary programs and procedures yield extremely high accuracies - as high as 1 part in 200,000 of the maximum dimension of the object photographed.

In its satellite Doppler surveying service (based on the short arc method of adjustment), GSI routinely produces accuracies in relative positioning of a few decimeters. GSI's services have been employed by clients in support of mapping and geodetic projects throughout the world.

FACILITIES AND SPECIAL EQUIPMENT

AIRCRAFT

CAMERAS, SCANNERS, AND OTHER REMOTE SENSORS

Aerial Mapping Camera Zeiss RMK 8.5/23 (1)
Remotely Controlled Automatic Plate Changing Cameras (3)
Close Range Metric Cameras for Structural Measurements (7)

FIELD SURVEY EQUIPMENT

JMR 1 Satellite Doppler Receivers (4)
Topcon Level (1)
Paulin Surveying Barograph (5)

PHOTOGRAPHIC PROCESSING EQUIPMENT

Specialized Plate Processing Facility (1)

PHOTOGRAMMETRIC PROCESSING EQUIPMENT

H. Dell Foster Monocomparator (1)
David Mann Monocomparator (1)
Wild PUG Stereoscopic Point Transfer Instrument (3)

IMAGE INTERPRETATION, VIEWING AND MAPPING (NON-DIGITAL)

Bausch and Lomb Zoom Transfer Scope (1)

IMAGE INTERPRETATION, VIEWING AND MAPPING (DIGITAL)

DIGITIZING, PLOTTING AND GRAPHICS

Bendix Digitizer (48" x 60") (1)

OTHER COMPUTER PROCESSING

Systems Engineering Laboratories 32/55 Computer, 256K Bytes Memory (1)

OTHER

Engineering Offices and Facilities, 7000 sq. ft.

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GEODETIC SERVICES, INC.

GEODETIC SERVICES, INC

PRODUCTS AND SERVICES PROVIDED

REMOTE SENSING EQUIPMENT/SYSTEMS PROVIDED

IMAGE PRODUCTS

REMOTE SENSOR SYSTEMS

Sell and Lease Metric Cameras.

ENHANCED AND CORRECTED IMAGERY

VIEWING EQUIPMENT

PHOTOGRAMMETRIC PRODUCTS

(c) Engineering Cross Sections, Volumetric Calculations, Structural Measurement by Close Range Photogrammetry.

PHOTOGRAMMETRIC EQUIPMENT

INTERPRETED, THEMATIC PRODUCTS

DIGITAL IMAGE PROCESSING EQUIPMENT

PROJECT PLANNING AND SUPPORT SERVICES

Problem Definition; Feasibility Analysis; Ground Control Survey; Sensor Selection/Evaluation; Sampling Strategy Design.

SOFTWARE

INTEGRATED SYSTEMS

AERIAL SURVEY

(s)Low Altitude Photography, High Altitude Photography.

OTHER EQUIPMENT

Lease JMR 1 Doppler Receivers.

IMAGE PROCESSING, INTERPRETATION AND ANALYSIS

PHOTOGRAMMETRIC ENGINEERING

Aerotriangulation; Volumetric Calculation; Structural Measurements.

REPRODUCTION

OTHER SERVICES

Consultant Services; Turnkey Systems Sales/Leasing/Service(Close Range Photogrammetry); Hardware Design/Development; Software Design/Development; Equipment Sales/Leasing/Service; Satellite Doppler Positioning; Reduction of Data from Doppler Receivers.

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NAME: GEORGIA TECH EES

GEORGIA TECH EES

ADDRESS(ES) & CONTACT(S)

EES/EML - Baker Bldg.
Atlanta, Georgia 30332
(404) 894-3357
Nickolas L. Faust

FACILITIES AND SPECIAL EQUIPMENT

AIRCRAFT

Convair 240

CAMERAS, SCANNERS, AND OTHER REMOTE SENSORS

FIELD SURVEY EQUIPMENT

PHOTOGRAPHIC PROCESSING EQUIPMENT

Photo Lab (1)

PHOTOGRAMMETRIC PROCESSING EQUIPMENT

IMAGE INTERPRETATION, VIEWING AND MAPPING (NON-DIGITAL)

Light tables, Zoom Stereoscope (3)

IMAGE INTERPRETATION, VIEWING AND MAPPING (DIGITAL)

Complete Image Processing Systems, based on Eclipse Minicomputers (2).

DIGITIZING, PLOTTING AND GRAPHICS

Digitizer (1); Plotters (3); Line Graphics Plotters (soft) (10); Printer/Plotter (1); Dot Matrix Printers (2)

OTHER COMPUTER PROCESSING

Array Processors (3); Modified IMGRID Geodata Base System, Modified MOSS Geodata Base System (2).

OTHER

16-bit Minicomputer systems (15); Microcomputer systems; VAX 32-bit minicomputer; SEL32-bit minicomputer.

YEARS IN BUSINESS: 8

SMALL BUSINESS CONTRACTOR? _____

PROJECTS COMPLETED: 16

MINORITY-OWNED BUSINESS? _____

REGION SERVED: U.S., Int'l.

TOTAL APPLICABLE EMPLOYEES: 10

TYPES OF REMOTE SENSING TECHNOLOGIES:

Low Altitude Aerial Photo; Med Altitude Aerial Photo; High Altitude Aerial Photo; Aerial Multispectral Scanner; Aerial Thermal Infrared Scanner; Geophysical Survey; Landsat MSS; Landsat RBV; Digital Image Interpretations.

PERSONNEL & SKILLS REPRESENTED:

Management (2); Professional (5); Technical (3); Cartographers, Computer Programmers Engineers (electrical), Image Processing Equip Oper., Planners, Geographers (# not indicated).

STATEMENT OF CAPABILITIES:

Computer processing of Landsat data and integration into polygon and gridded geographic data bases. EES has successfully processed Landsat data for total state of Georgia and locations worldwide. Research and development and design of special purpose Landsat/Geodata base hardware and software using minicomputers, array processors, color image processing systems, etc. Design and implementation of software and hardware for geophysical exploration using Landsat and other geophysical data. Training courses and technology transfer move R&D work into operational status.

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GEORGIA TECH EES

PRODUCTS AND SERVICES PROVIDED

IMAGE PRODUCTS

(s)Color, Color Infrared, Color Composite Neg, Transp., Pos. Transp., Cont. Prints, Enlgd. Prints; B&W Cont. Prints, Enlgd. Prints; (s)Halftone Image Prints; (c)Digital Magnetic Tape.

ENHANCED AND CORRECTED IMAGERY

(c)Multitemporal Composites, Contrast Enhanced, Geometric Correction, Density Slice, Change Detection, Radiometric Correction, Image Resampling Digital Imagery.

PHOTOGRAMMETRIC PRODUCTS

(c)Digital Terrain Models, Digital Data Bases.

INTERPRETED, THEMATIC PRODUCTS

(c)Color Thematic Maps, Land Use Maps, Vegetation/Forestry Maps, Utility Maps, Acreage Tabulations, Geocoded Data Bases, Thematic Map Overlays, Transportation Maps, Soils Maps, Tax Maps, Digital Magnetic Tapes.

PROJECT PLANNING AND SUPPORT SERVICES

Problem Definition; Feasibility Analysis; Selection of Existing Imagery; Map Digitizing; Data Base Preparation; Sensor Selection/Evaluation; Sampling Strategy Design; Ancillary Data Collection; Ground Truth Survey; Data Management.

AERIAL SURVEY

IMAGE PROCESSING, INTERPRETATION AND ANALYSIS

Digital Image Processing; Batch Digital Image/Analysis/Classification; Interactive Digital Image/Analysis/Classification; Photographic Laboratory Processing; (s)Manual Image Interpretation.

PHOTOGRAMMETRIC ENGINEERING

REPRODUCTION

OTHER SERVICES

Remote Sensing Research; Remote Sensing Training; Consultant Services; Interactive Computer Graphics; Turnkey Systems Sales/Leasing/Service; Hardware Design/Development; Software Design/Development.

GEORGIA TECH EES

REMOTE SENSING EQUIPMENT/SYSTEMS PROVIDED

REMOTE SENSOR SYSTEMS

VIEWING EQUIPMENT

PHOTOGRAMMETRIC EQUIPMENT

DIGITAL IMAGE PROCESSING EQUIPMENT

SOFTWARE

INTEGRATED SYSTEMS

Sell R&Donly Geometric Correction; Sell Radiometric Correct, Image Enhancement, Multispectral Classification.

OTHER EQUIPMENT

Sell R&Donley Plotters.

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NAME: THE GERBER SCIENTIFIC INSTRUMENT COMPANY (GSI)

THE GERBER SCIENTIFIC INSTRUMENT COMPANY (GSI)

ADDRESS(ES) & CONTACT(S)

P. O. Box 305
Hartford, CT 06101
(203) 644-1551
Fred Dudley

6925 Canby Avenue, Suite 110
Reseda, CA 91335
(213) 705-8200
Tony Paukstis

1300 Piccard Drive, Suite LL4
Rockville, MD 20850
(301) 840-0555
Dave Wick

Burr Ridge, IL
Garland, TX
Denver, Colorado

Brussels, Belgium; Tokyo, Japan; Melbourne, Australia

YEARS IN BUSINESS: 0

SMALL BUSINESS CONTRACTOR? No

PROJECTS COMPLETED: 0

MINORITY-OWNED BUSINESS? No

REGION SERVED: U.S., Int'l.

TOTAL APPLICABLE EMPLOYEES: _____

TYPES OF REMOTE SENSING TECHNOLOGIES:

PERSONNEL & SKILLS REPRESENTED:

Computer Equip Operators, Computer Programmers, Draftsmen, Engineers(electrical),
Photolab Technicians (# not provided).

STATEMENT OF CAPABILITIES:

Drawings of complex machinery, electronic circuits, vehicles, construction projects and other industrial activities demand an accuracy and speed beyond the capabilities of human hands. GSI has combined mechanical drafting machines and photoplotters of extreme precision, accuracy, and speed with the technology of computers to meet industry's complex drawing needs. Gerber's computer-controlled drafting machines are used extensively throughout the world to produce engineering drawings for automobiles, aircraft, ships, electronic products, buildings and maps. Gerber photoplotters have become basic business tools in the electronics industry to generate master artwork for printed circuit boards and microcircuits.

REMOTE SENSING EQUIPMENT/SYSTEMS PROVIDED

REMOTE SENSOR SYSTEMS

VIEWING EQUIPMENT

PHOTOGRAMMETRIC EQUIPMENT

DIGITAL IMAGE PROCESSING EQUIPMENT

SOFTWARE

INTEGRATED SYSTEMS

OTHER EQUIPMENT

Sell and Lease X-Y Coordinate Digitizer, Interactive Graphics, Plotters.

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NAME: GIBBS & HILLADDRESS(ES) & CONTACT(S)

393 Seventh Avenue
New York, New York 10001
(212) 760-8426
Donald R. Johnston

8420 West Dodge Road
Omaha, Nebraska 68114
(402) 391-0330

9229 L.B.J. Freeway, Suite 200
Dallas, Texas 75243
(214) 783-0209

YEARS IN BUSINESS: 3SMALL BUSINESS CONTRACTOR? NoPROJECTS COMPLETED: _____MINORITY-OWNED BUSINESS? NoREGION SERVED: U.S. & Int'l.TOTAL APPLICABLE EMPLOYEES: 18TYPES OF REMOTE SENSING TECHNOLOGIES:

Low Altitude Aerial Photo; Med Altitude Aerial Photo; High Altitude Aerial Photo;
Aerial Multispectral Scanner; Aerial Thermal Infrared Scanner; Geophysical Survey;
Landsat MSS; Skylab; Digital Image Interpretations; Manual Image Interpretations

PERSONNEL & SKILLS REPRESENTED:

Management (2); Professional (3); Technical (5); Other (8)

Cartographers (3); Computer Equip. Oper. (40); Computer Programmers (25);
Draftsmen (566); Engineers (civil, environ.) (17); Engineers (electrical) (126);
Field Surveyors (14); Image Processing Equip. Oper. (2); Soil Scientists (1);
Social Scientists (2); Photointerpretors (2); Photolab Technicians (2); Planners (10);
Geographers (5)

STATEMENT OF CAPABILITIES:

Gibbs & Hill is an international power engineering firm having designed over 200 power plants and many thousands of miles of transmission lines. The firm provides technology in all forms of energy conversion, water treatment and transportation systems. The Geographic Information Services Department provides mapping and management services for resource development, siting, environmental, planning, and marketing studies. Included is interactive handling of all forms of spatial data, map production, Landsat and photo interpretation, and full-color photo lab.

FACILITIES AND SPECIAL EQUIPMENT

AIRCRAFTCAMERAS, SCANNERS, AND OTHER REMOTE SENSORS (2)FIELD SURVEY EQUIPMENT (2)PHOTOGRAPHIC PROCESSING EQUIPMENT (1)PHOTOGRAMMETRIC PROCESSING EQUIPMENTIMAGE INTERPRETATION, VIEWING AND MAPPING (NON-DIGITAL) (1)IMAGE INTERPRETATION, VIEWING AND MAPPING (DIGITAL) (1)DIGITIZING, PLOTTING AND GRAPHICS (2)OTHER COMPUTER PROCESSING (2)OTHER

One of the largest A/E - CAD/CAM facilities, complete model shop

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PRODUCTS AND SERVICES PROVIDED**IMAGE PRODUCTS**

(c) B&W, Color, & Color Infrared Neg. & Pos. Transparencies, Contact & Enlarged Prints;
 (s) Photo Mosaics; Photo Atlas Sheets; Analog Magnetic Tape; Thermograms; Digital
 Mosaics; Halftone Image Prints; Digital Magnetic Tape

ENHANCED AND CORRECTED IMAGERY

(c) Photo Density Slice; Photo & Digital Change Detection; (s) Photo & Digital:
 Multitemporal Composites; Contrast Enhanced; Geometric Correction; Multisensor Composites;
 Radiometric Correction; Image Resampling; Pseudo Stereo; Digital Density Slice

PHOTOGRAMMETRIC PRODUCTS

(c) Engineering Cross Sections; Stockpile Measurements; Earthwork Measurements;
 Digital Terrain Models; Digital Data Bases; Planimetric Maps; Plan and Profile Sheets;
 Volumetric Calculations; (s) Photo-Contour Maps

INTERPRETED, THEMATIC PRODUCTS

(c) Color Thematic Maps; Land Use Maps; Vegetation/Forestry Maps; Contour Weather Maps;
 Utility Maps; Acreage Tabulations; Geocoded Data Bases; Thematic Map Overlays; Geologic
 Maps; Transportation Maps; Soils Maps; Tax Maps; Digital Magnetic Tapes; Bathymetric Maps

PROJECT PLANNING AND SUPPORT SERVICES

Problem Definition; Feasibility Analysis; Selection of Existing Imagery; Ground Control
 Survey; Map Digitizing; Data Base Preparation; Air Support Operations; Sensor Selection/
 Evaluation; Sampling Strategy Design; Ancillary Data Collection; Ground Truth Survey;
 Data Management; (s) Ancillary Data Collection; Ground Truth Survey

AERIAL SURVEY

(s) Low Altitude Photography; Thermal Infrared; Radar; Geophysical; High Altitude
 Photography; Multispectral Scanner

IMAGE PROCESSING, INTERPRETATION AND ANALYSIS

Digital Image Processing; Interactive Digital Image/Analysis/Classification;
 Photographic Laboratory Processing; Manual Image Interpretation

PHOTOGRAMMETRIC ENGINEERING

Planimetric Mapping; Cross-Sectioning; Topographic Mapping-Small Scale; Topographic
 Mapping-Large Scale; Volumetric Calculation; (s) Aerotriangulation; Orthophotomapping;

REPRODUCTION

Drafting & Scribing; Cartographic Reproduction; Automated Drafting/Plotting; Printing

OTHER SERVICES

Remote Sensing Research; Remote Sensing Training; Statistical Modeling; Consultant
 Services; Interactive Computer Graphics; Computer Services; Turnkey Systems Sales/
 Leasing/Service; Hardware Design/Development; Software Design/Development; Equipment
 Sales/Leasing/Service; Software Sales/Leasing

REMOTE SENSING EQUIPMENT/SYSTEMS PROVIDED**REMOTE SENSOR SYSTEMS****VIEWING EQUIPMENT****PHOTOGRAMMETRIC EQUIPMENT****DIGITAL IMAGE PROCESSING EQUIPMENT****SOFTWARE****INTEGRATED SYSTEMS**

Sell & Lease Geometric Correction

OTHER EQUIPMENT

Sell & Lease: X-Y Coordinate Digitizer; Interactive Graphics Systems; Geographic
 Information Systems

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NAME: ALAN GORDON ENTERPRISES, INC.

ALAN GORDON ENTERPRISES, INC.

ADDRESS(ES) & CONTACT(S)

5362 Cahuenga Blvd.
No. Hollywood, CA 91601
(213) 985-5500
Don Sahlein

1430 Cahuenga Blvd.
Hollywood, CA 90028
(213) 466-3561
Grant Loucks

YEARS IN BUSINESS: _____

PROJECTS COMPLETED: _____

REGION SERVED: _____

TYPES OF REMOTE SENSING TECHNOLOGIES:

PERSONNEL & SKILLS REPRESENTED:

STATEMENT OF CAPABILITIES:

REMOTE SENSING EQUIPMENT/SYSTEMS PROVIDED

REMOTE SENSOR SYSTEMS

Sell Reconnaissance Cameras, Panoramic Cameras, Metric Cameras, Multispectral Cameras, Handheld Aerial Cameras, Radar Recording Cameras. Lease Metric Cameras, Multispectral Cameras, Handheld Aerial Cameras, Radar Recording Cameras.

VIEWING EQUIPMENT

Sell Monocular Magnifiers, Transfer Scopes, Stereoscopes, Sell and Lease: Stereo Comparagraph, Stereoscope Accessories, Sketchmaster, Slotted Templet Cutter, Slotted Templet Set

PHOTOGRAMMETRIC EQUIPMENT

Sell Stereo Plotters, Point Transfer Devices, Orthoprojectors.

DIGITAL IMAGE PROCESSING EQUIPMENT

SOFTWARE

INTEGRATED SYSTEMS

OTHER EQUIPMENT

Sell Aerial Film, Measurement Equipment, Photo Processing Equip., Plotters, Field Equip., Sell and Lease: Camera Accessories, Intervalometers, Magazines, Filters, Mounts, all Aerial Film Printing: Processing, Titlers, Cutting, Splicing, Viewing

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NAME: GREENHORNE & O'MARA, INC.

GREENHORNE & O'MARA, INC.

ADDRESS(ES) & CONTACT(S)

6715 Kenilworth Avenue
Riverdale, MD 20840
(301) 277-2121
Michael G. Pavlides

604 South Oakwood Avenue
Beckley, West Virginia 25801
(304) 253-8672
Joseph T. Skinner

7718 Lincoln Highway
North Huntingdon, PA 15642
(412) 863-2400
Bernard W. Solomon

Annapolis, MD
Rockville, MD
Fairfax, VA

YEARS IN BUSINESS: 12

SMALL BUSINESS CONTRACTOR? Yes

PROJECTS COMPLETED: 100

MINORITY-OWNED BUSINESS? No

REGION SERVED: U.S.

TOTAL APPLICABLE EMPLOYEES: 68

TYPES OF REMOTE SENSING TECHNOLOGIES:

Low Altitude Aerial Photo; Med Altitude Aerial Photo; High Altitude Aerial Photo;
Aerial Multispectral Scanner; Aerial Thermal Infrared Scanner; Radar; Laser Scanner;
Landsat MSS; Landsat RBV; Digital Image Interpretations; Manual Image Interpretations.

PERSONNEL & SKILLS REPRESENTED:

Management (5); Professional (18); Technical (20); Other (25); Cartographers (42);
Computer Equip Operators (3); Computer Programmers (7); Draftsmen (35); Engineers
(civil, environ.)(55); Field Surveyors (60); Image Processing Equip Oper. (2);
Social Scientists(2); Photogrammatists (6); Photogrammetric Equip Oper.(6);
Photointerpreters (20); Photolab Technicians (6); Physical Scientists (10);
Pilots (2); Planners (5); Geographers (11).

STATEMENT OF CAPABILITIES:

Provide services in Photo Interpretation, Remote Sensing, Cartography & Graphics,
Aerial Photogrammetry, Geography, Geology, Earth Sciences, Environmental Science,
Technical Writing & Editing, Word Processing, Architecture, Land & Site Planning,
Land Surveying, and all facets of Civil Engineering including Water Resources,
Development & Environmental Engineering.

FACILITIES AND SPECIAL EQUIPMENT

AIRCRAFT

CAMERAS, SCANNERS, AND OTHER REMOTE SENSORS

FIELD SURVEY EQUIPMENT

Trucks and full complement of equipment (10) Slump Cone (1)
HP Ranger-Electric measuring device (1) Chase Air Meter (1)
Watercraft (1)
Speedy Moisture Test Kit (1)

PHOTOGRAPHIC PROCESSING EQUIPMENT

Douhitt Vacuum Frames (with point light source) (2)
Buckingham Graphics model 3040 Peel Coat Dryer (1)
Macbeth Dagger Light (1)
Thiemer Violus Hi-Intensity Light Source (Metal Halide) (1) CONT'D
PHOTOGAMMETRIC PROCESSING EQUIPMENT

IMAGE INTERPRETATION, VIEWING AND MAPPING (NON-DIGITAL)

IMAGE INTERPRETATION, VIEWING AND MAPPING (DIGITAL)

DIGITIZING, PLOTTING AND GRAPHICS

OTHER COMPUTER PROCESSING

OTHER

Typesetting/Word Processing Equipment:
IBM "Electronic Selectric Composer" (1)
Addressograph-Multigraph "AM 860" Headliner (1)
Xerox 850-CRT Word Processing Systems (4)
Qyx Level III Electronic Typewriter (1)
Compugraphic "Eastycoat 14" Waxer (2)

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FACILITIES AND SPECIAL EQUIPMENT

AIRCRAFTCAMERAS, SCANNERS, AND OTHER REMOTE SENSORSFIELD SURVEY EQUIPMENTPHOTOGRAPHIC PROCESSING EQUIPMENT

NuArc H65T Hi-Intensity Light Source (Carbon Arc Light) (1)

Berkey 2583-17 Stripping Punch (Triangular Control) (1)

Hot Water immersion header (1)

Durst Enlarger (1)

PHOTOGRAMMETRIC PROCESSING EQUIPMENT

Morris Contact Printer (1)

Curtis Aerial Film Dryer (1)

IMAGE INTERPRETATION, VIEWING AND MAPPING (NON-DIGITAL)IMAGE INTERPRETATION, VIEWING AND MAPPING (DIGITAL)DIGITIZING, PLOTTING AND GRAPHICSOTHER COMPUTER PROCESSINGOTHER

FACILITIES AND SPECIAL EQUIPMENT

AIRCRAFT

n206 Cessna Turbocharged Skywagon (High altitude, long range, all weather navigational) (1)

CAMERAS, SCANNERS, AND OTHER REMOTE SENSORS

Zeiss RMK 15/23 Aerial Camera (color Corrected lens, IR Film Adaptor) (1) Parks Precision 6" F/L Aerial Camera (1)

FIELD SURVEY EQUIPMENT

Topcon DM-C2 (1) Hewlett-Packard Electric Distance Meters (HP500A) (3), T-2 Wild Theodolites (4), Precision Rods and 2nd order level equipment (2 metric rods, 3 Wild TIA levels), Trucks and full complement of equipment (10), Slump Cone (1), HP Ranger-Electric measuring device (1), Chase Air Meter (1), Watercraft (1), Speedy Moisture Test Kit (1)

PHOTOGRAPHIC PROCESSING EQUIPMENTLogE Robertson Copy and Enlarging/Reducing Camera (copy board 48"x72", Film Holder 54"x48", accuracy $\pm .001$) (1), DuPont ERF Cronoflex II Film Processor (1), NuArc VF46F Vacuum Frame (with point light source) (1), Douhitt Vacuum Frames (with point light source) (2), Buckingham Graphics model 3040 Peel Coat Dryer (1), Macbeth Dagger Light (1), NuArc H65T Hi-Intensity Light Source (Carbon Arc Light) (1), Berkey 2583-17 Stripping Punch (Triangular Control) (1), Hot Water immersion header (1), Morris Contact Printer (1), Durst Enlarger (1), Curtis Aerial Film Dryer (1)IMAGE INTERPRETATION, VIEWING AND MAPPING (NON-DIGITAL)

Kelsh three projector stereo plotter (1), Microscope camera (1), Kern PG2-AT stereo plotter (1), Kern PG-2 SFL stereo plotter (1), Sci-Tex Laser Scanner (1)

IMAGE INTERPRETATION, VIEWING AND MAPPING (DIGITAL)

H.Dell Foster Digitizer -3 axis (1), Kern PG2-AT-BC2B Digital Computerized stereo plotter (1)

DIGITIZING, PLOTTING AND GRAPHICS

Kern PG2-AT stereo plotter (1), Kern PG2-AT-BC2B Digital Computerized stereo Plotter (1), Kern GS2-SFL stereo plotter (1)

OTHER COMPUTER PROCESSING

CDC System 1872 computer (1), CDC 752-10 CRTs (3), Magnetic Tape Drive/Disk storage units (3), High Speed Printers (2), calcomp 80: Drum Plotter (1), Timesharing with CDC systems 6400, 6600, 7600, Cyber 175 (Have had previous experience in developing Geographic Information Systems and currently provide this service.)

OTHER

Photo Interpretation Equipment: MS-27 Lietz Mirror Stereoscopes with Swing-In 1.5x magnifier, 3x binoculars and stereometer parallax measuring bar (2), Art-O-Graph Scale Change Projector (1), Five Drawer Flat Files (metal & wood) (50), Light Tables (dimensions indicate lighted area), Cartographic Equipment: Benedum Scribing Tool Sets (40), LeRoy Sets (15), Rapidograph Pen Sets (15), Locking Scribing Tool Cabinets (8); Typesetting/Word Processing Equipment: IBM "Electronic Selectric Composer" (1), Addressograph-Multigraph "AM 860" Headliner (1), Xerox 850-CRT Word Processing Systems (4), Qyx Level III Electronic Typewriter (1), Compugraphic "Easycoat 14" Waxer (2)

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GREENHORNE & O'MARA, INC.

PRODUCTS AND SERVICES PROVIDED

IMAGE PRODUCTS

B&W, Color Infrared Neg. Transp. Pos. Transp. Contact Prints, Enlarged Prints;
(s)Color, Color Composite Neg. Transp., Positive Transp., Cont. Prints, Enlarged Prints;
Photo Mosaics; Photo Atlas Sheets; Halftone Image Prints; (s)Digital Mosaics; Digital
Magnetic Tape.

ENHANCED AND CORRECTED IMAGERY

Multitemporal Composites, Contrast Enhanced, Geometric Correction, Density Slice,
Change Detection, Pseudo Stereo Photo Imagery; (s)Multisensor Composites Photo Imagery;
(s)Multitemporal Composites, Contrast Enhanced, Geometric Correction, Multisensor
Composites Digital Imagery.

PHOTOGRAMMETRIC PRODUCTS

Orthophotos; Topographic Maps; Engineering Cross Sections; Stockpile Measurements
Earthwork Measurements; Digital Terrain Models; Digital Data Bases; Planimetric Maps;
Photo-Contour Maps; Plan and Profile Sheets; Volumetric Calculations; Distance & Angle
Measurements.

INTERPRETED, THEMATIC PRODUCTS

Color Thematic Maps; Land Use Maps; Vegetation/Forestry Maps; Contour Weather Maps;
Utility Maps; Acreage Tabulations; Geocoded Data Bases; Thematic Map Overlays;
Geologic Maps; Transportation Maps; Soils Maps; Tax Maps; Digital Magnetic Tapes.

PROJECT PLANNING AND SUPPORT SERVICES

Problem Definition; Feasibility Analysis; Selection of Existing Imagery; Ground
Control Survey; Data Base Preparation; Air Support Operations; Sensor Selection/Evalua-
tion; Sampling Strategy Design; Ancillary Data Collection; Ground Truth Survey; Data
Management; (s)Map Digitizing, Gray Level Digitizing.

AERIAL SURVEY

Low Altitude Photography; High Altitude Photography; CIR; (s)Thermal Infrared, Radar,
Geophysical, Multispectral Scanner.

IMAGE PROCESSING, INTERPRETATION AND ANALYSIS

Photographic Laboratory Processing; Manual Image Interpretation; (s) Digital Image
Processing; Batch Digital Image/Analysis/Classification; Interactive Digital Image/
Analysis/Classification

PHOTOGRAMMETRIC ENGINEERING

Aerotriangulation; Orthophotomapping; Planimetric Mapping; Stereo Digitizing; Cross-
Sectioning; Stereocompilation; Topographic Mapping-Small Scale; Topographic Mapping-
Large Scale; Volumetric Calculation; R&D Mapping(microscope camera).

REPRODUCTION

Drafting & Scribing; Cartographic Reproduction; Automated Drafting/Plotting;
Printing.

OTHER SERVICES

Remote Sensing Research; Remote Sensing Training; Statistical Modeling; Consultant
Services; Interactive Computer Graphics; Computer Services; (s)Turnkey Systems
Sales/Leasing/Service, Hardware Design/Development, Software Design/Development,
Equipment Sales/Leasing/Service, Software Sales/Leasing.

NAME: HAMMON, JENSEN, WALLEN & ASSOCIATES, INC.

ADDRESS(ES) & CONTACT(S)

8407 Edgewater Drive
Oakland, California 94621
(415) 638-6122
Axel R. Hoffman

665 F Street
Arcata, CA

YEARS IN BUSINESS: 30

PROJECTS COMPLETED: 3,000

REGION SERVED: U.S., Int'l.

TYPES OF REMOTE SENSING TECHNOLOGIES:

Low Altitude Aerial Photo
Med Altitude Aerial Photo
High Altitude Aerial Photo
Manual Image Interpretations

PERSONNEL & SKILLS REPRESENTED:

Management (2); Professional (3); Technical (5); Cartographers, Computer Equip
Operators, Computer Programmers, Draftsmen, Engineers(civil, environ), Field Surveyors,
Photogrammatists, Photogrammetric Equip Oper., Photointerpreters, Photolab Technician,
Pilots, Geographers (# not indicated).

STATEMENT OF CAPABILITIES:

Hammon, Jense, Wallen and its subsidiary, Pacific Aerial Surveys, is an aerial
photography, mapping and forestry consulting firm. Our mapping services cover the
complete range of mapping from aerial photography, surveying, aerotriangulation,
compilation, drafting to reproduction. Recently, we extended our capabilities into
the computer cartography field. Our forestry department has utilized remote
sensing for over 30 years and developed many techniques and procedures over this
time period. At present, we are implementing software on an in-house computer
system for Landsat tape processing.

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FACILITIES AND SPECIAL EQUIPMENT

AIRCRAFT

CESSNA 206, Turbocharged (1)

CAMERAS, SCANNERS, AND OTHER REMOTE SENSORS

Zeiss RMK A 15/23 (1)
RMK A 21/23 (1)

FIELD SURVEY EQUIPMENT

Hewlett-Packard 3820A (1)
Wild T2 (3)
Zeiss N12 (2)

PHOTOGRAPHIC PROCESSING EQUIPMENT

Kodak Supermatic Processor (1)
Log-Etronics (1)

PHOTOGRAMMETRIC PROCESSING EQUIPMENT

Zeiss Topocart (1)
Santoni G6 (1)
Kern MK2 (1)

IMAGE INTERPRETATION, VIEWING AND MAPPING (NON-DIGITAL)

Stereoscopes (10)
Enlarger (2)

IMAGE INTERPRETATION, VIEWING AND MAPPING (DIGITAL)

DIGITIZING, PLOTTING AND GRAPHICS

Talos Digitizer (1)
Data Technology Plotter (1)
PDP II Computer + Graphics Software (1)

OTHER COMPUTER PROCESSING

OTHER

Zeiss Orthophotoscopes (1)
K & E Rectifier (1)

PRODUCTS AND SERVICES PROVIDED

IMAGE PRODUCTS

B&W, Color, Color Infrared Neg. Transp., Pos. Transp., Cont. Prints, Enlarged Prints;
(c)Color Composite Neg. Transp., Pos. Trans., Cont. Prints, Enlarged Prints; (c) Photo
Mosaics, Photo Atlas Sheets, Digital Mosaics, Halftone Image Prints, (s) Digital
Magnetic Tape.
ENHANCED AND CORRECTED IMAGERY

(c) Geometric Correction, Pseudo Stereo Photo Imagery; (s) Geometric Correction Digital
Imagery.

PHOTOGRAMMETRIC PRODUCTS

(c) Orthophotos, Topographic Maps, Engineering Cross Sections, Stockpile Measurements,
Earthwork Measurements, Digital Terrain Models, Digital Data Bases, Planimetric Maps,
Photo-Contour Maps, Plan and Profile Sheets, Volumetric Calculations, Distance &
Angle Measurements.

INTERPRETED, THEMATIC PRODUCTS

(c) Land Use Maps, Vegetation/Forestry Maps, Utility Maps, Acreage Tabulations,
Geocoded Data Bases, Thematic Map Overlays; (s) Geologic Maps, Transportation Maps,
Soils Maps, Digital Magnetic Tapes; (c) Tax Maps.

PROJECT PLANNING AND SUPPORT SERVICES

Problem Definition; Feasibility Analysis; Selection of Existing Imagery; Ground Control
Survey; Map Digitizing; Data Base Preparation; Air Support Operations; Sensor
Selection/Evaluation; Sampling Strategy Design; Ground Truth Survey; Data Management;
(s) Ancillary Data Collection, Gray Level Digitizing.

AERIAL SURVEY

Low Altitude Photography; (s) Thermal Infrared, High Altitude Photography.

IMAGE PROCESSING, INTERPRETATION AND ANALYSIS

Photographic Laboratory Processing; Manual Image Interpretation; (s) Digital Image
Processing.

PHOTOGRAMMETRIC ENGINEERING

Aerotriangulation; Orthophotomapping; Planimetric Mapping; Stereo Digitizing; Cross-
Sectioning; Stereocompilation; Topographic Mapping-Small Scale; Topographic Mapping-
Large Scale; Volumetric Calculation; Digital Mapping.

REPRODUCTION

Drafting & Scribing; Cartographic Reproduction; Automated Drafting/Plotting;
(s) Printing.

OTHER SERVICES

Remote Sensing Training; Statistical Modeling; Consultant Services; Interactive
Computer Graphics; Computer Services; Software Design/Development; Software Sales/
Leasing.

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NAME: M. J. HARDEN ASSOCIATES, INC.

ADDRESS(ES) & CONTACT(S)

1019 Admiral Blvd.
Kansas City, Missouri 64106
(816) 842-0141
Robert V. Boushabla, Pres.

YEARS IN BUSINESS: _____

PROJECTS COMPLETED: _____

REGION SERVED: _____

TYPES OF REMOTE SENSING TECHNOLOGIES:

SMALL BUSINESS CONTRACTOR? _____

MINORITY-OWNED BUSINESS? _____

TOTAL APPLICABLE EMPLOYEES: 40

PERSONNEL & SKILLS REPRESENTED:

(not directly involved in remote sensing)

Management(3); Professional (2); Technical (35); Cartographers (2); Computer Equip Operators (3); Computer Programmers (1); Draftsmen (4); Engineers (civil, environ.) (1); Photogrammatists (2); Photogrammetric Equip Oper. (9); Photointerpretors (2); Photolab Technicians (6); Pilots (2); Aerial Cameraman (2).

STATEMENT OF CAPABILITIES:

Aerial photography; ground control surveys; analytical aero-triangulation; stereo-compilation; drafting; photo lab reproductions; interactive computer graphics; stockpile inventories.

FACILITIES AND SPECIAL EQUIPMENT

AIRCRAFT

Cessna 206 (1)
Aero Commander (1)

CAMERAS, SCANNERS, AND OTHER REMOTE SENSORS

Zeiss RMK-A-15/23 6" (2)

FIELD SURVEY EQUIPMENT

Everything.

PHOTOGRAPHIC PROCESSING EQUIPMENT

Brown Admiral 31" copy camera; K & E HE-12 Camera; Log-E-Tronic Printers (2).

PHOTOGRAMMETRIC PROCESSING EQUIPMENT

IMAGE INTERPRETATION, VIEWING AND MAPPING (NON-DIGITAL)

IMAGE INTERPRETATION, VIEWING AND MAPPING (DIGITAL)

DIGITIZING, PLOTTING AND GRAPHICS

M & S Interactive Graphic System with 4 stations, 2 stereo-plotter interfaces.

OTHER COMPUTER PROCESSING

OTHER

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M. J. HARDEN, ASSOCIATES, INC.

PRODUCTS AND SERVICES PROVIDED

IMAGE PRODUCTS

(c)B&W, Color, Color Infrared Neg. Transp., Pos. Transp., Cont. Prints, Enlgd. Prints;
(s)Color Composite Neg. Transp., Pos. Transp., Cont. Prints, Enlgd. Prints.; (c)Photo
Mosaics, Photo Atlas Sheets, Halftone Image Prints.

ENHANCED AND CORRECTED IMAGERY

PHOTOGRAMMETRIC PRODUCTS

(c)Orthophotos, Topographic Maps, Engineering Cross Sections, Stockpile Measurements,
Earthwork Measurements, Digital Data Bases, Planimetric Maps, Photo-Contour Maps,
Plan and Profile Sheets, Volumetric Calculations, Distance & Angle Measurements.

INTERPRETED, THEMATIC PRODUCTS

(c)Utility Maps, Acreage Tabulations, Geocoded Data Bases, Tax Maps, Digital Mag-
netic Tapes.

PROJECT PLANNING AND SUPPORT SERVICES

Problem Definition; Feasibility Analysis; Ground Control Survey; Map Digitizing;
Data Base Preparation; Air Support Operations; Ground Truth Survey.

AERIAL SURVEY

Low Altitude Photography; Thermal Infrared; High Altitude Photography.

IMAGE PROCESSING, INTERPRETATION AND ANALYSIS

PHOTOGRAMMETRIC ENGINEERING

Aerotriangulation; Orthophotomapping; Planimetric Mapping; Stereo Digitizing; Cross-
Sectioning; Stereocompilation; Topographic Mapping-Small Scale; Topographic Mapping-
Large Scale; Volumetric Calculation.

REPRODUCTION

Drafting & Scribing; Cartographic Reproduction; Automated Drafting/Plotting.

OTHER SERVICES

Consultant Services; Interactive Computer Graphics.

NAME: HARZA ENGINEERING COMPANY

ADDRESS(ES) & CONTACT(S)

150 S. Wacker Drive
Chicago, IL 60606
(312) 855-7000
Elaine I. Marinello

Phoenix, AZ
Minneapolis, MN
Denver, CO

Venezuela
Argentina
Pakistan
Jordan
Brazil
Egypt

YEARS IN BUSINESS: 3

SMALL BUSINESS CONTRACTOR? No

PROJECTS COMPLETED: _____

MINORITY-OWNED BUSINESS? No

REGION SERVED: Int'l., V, VII X

TOTAL APPLICABLE EMPLOYEES: 65

TYPES OF REMOTE SENSING TECHNOLOGIES:

Low Altitude Aerial Photo; Med Altitude Aerial Photo; High Altitude Aerial Photo;
Aerial Multispectral Scanner; Radar; Landsat MSS; Landsat RBV; Skylab; Weather
Satellite; Digital Image Interpretations(Landsat MSS); Manual Image Interpretations
(Landsat, Radar, Aerial Photos and Imagery).

PERSONNEL & SKILLS REPRESENTED:

Management (3); Professional (37); Technical (17); Other (8); Cartographers (1);
Computer Equip Operators (2); Computer Programmers (2); Draftsmen (2); Engineers
(civil, environ.) (10); Engineers (electrical) (3); Field Surveyors (2); Soil
Scientists (4); Social Scientists (1); Photointerpreters (10); Physical Scientists
(10); Planners (5); Geographers (2); Geologists (5); Hydrologists (3).

STATEMENT OF CAPABILITIES:

Manual and automatic classification of land and vegetative cover types, surface
geologic features, drainage networks, water quality parameters. Generation of color-
coded digital classification maps. Applications: watershed management; environmental
monitoring; water quality analysis; stability analysis; transmission line routing;
visual impact analysis; recreation planning; streamflow forecasting; reservoir rim
demarcation.

FACILITIES AND SPECIAL EQUIPMENT

AIRCRAFT

CAMERAS, SCANNERS, AND OTHER REMOTE SENSORS

FIELD SURVEY EQUIPMENT

PHOTOGRAPHIC PROCESSING EQUIPMENT

Diazo Contact Print Processor (1)

PHOTOGRAMMETRIC PROCESSING EQUIPMENT

IMAGE INTERPRETATION, VIEWING AND MAPPING (NON-DIGITAL)

Stereo-Microscope (1)
Stereoscopes (3)

IMAGE INTERPRETATION, VIEWING AND MAPPING (DIGITAL)

Harris 800 (1)
Amdahl V8 (1)

DIGITIZING, PLOTTING AND GRAPHICS

Tektronix Graphics Terminal (1)
Calcomp Plotter (1)

OTHER COMPUTER PROCESSING

OTHER

PRODUCTS AND SERVICES PROVIDED

IMAGE PRODUCTS

(c) Color Composite Pos. Transp.; Photo Mosaics; Digital Mosaics; Digital Magnetic Tape; (s) B&W, Color, Color Infrared Neg. Transp., Pos. Transp., Cont. Prints, Enlarged Prints; Color Composite Cont. Prints, Enlarged Prints

ENHANCED AND CORRECTED IMAGERY

Pseudo Stereo Photo Imagery; Density Slice Digital Imagery.

PHOTOGRAMMETRIC PRODUCTS

Engineering Cross Sections; Digital Terrain Models; Volumetric Calculations; (s) Planimetric Maps, Photo-Contour Maps.

INTERPRETED, THEMATIC PRODUCTS

Land Use Maps; Vegetation/Forestry Maps; Acreage Tabulations; Geologic Maps; Soils Maps.

PROJECT PLANNING AND SUPPORT SERVICES

Problem Definition; Feasibility Analysis; Selection of Existing Imagery; Ground Control Survey; Map Digitizing; Ground Truth Survey; Gray Level Digitizing; Data Management; (s) Map Digitizing.

AERIAL SURVEY

(s) Low Altitude Photography, Thermal Infrared, Radar, Geophysical, High Altitude Photography, Multispectral Scanner.

IMAGE PROCESSING, INTERPRETATION AND ANALYSIS

Digital Image Processing; Manual Image Interpretation.

PHOTOGRAMMETRIC ENGINEERING

(s) Aerotriangulation, Orthophotomapping, Planimetric Mapping, Stereo Digitizing, Cross-Sectioning, Stereocompilation, Topographic Mapping-Small Scale, Topographic Mapping-Large Scale, Volumetric Calculation.

REPRODUCTION

Drafting & Scribing; Automated Drafting/Plotting.

OTHER SERVICES

Statistical Modeling; Consultant Services; Interactive Computer Graphics

NAME: HEIMBUCH-STANTURF, INC.

HEIMBUCH-STANTURF, INC.

ADDRESS(ES) & CONTACT(S)

119 King Road West
Ithaca, NY 14850
(607) 277-4608
John Stanturf

PRODUCTS AND SERVICES PROVIDED

IMAGE PRODUCTS

(s)B&W, Color, Color Infrared, Color Composite, Negative Transparencies, Positive Transparencies, Contact Prints, Enlarged Prints.

ENHANCED AND CORRECTED IMAGERY

(s) Multitemporal Composites

PHOTOGRAMMETRIC PRODUCTS

INTERPRETED, THEMATIC PRODUCTS

(c)Color Thematic Maps, Land Use Maps, Vegetation/Forestry Maps, Area Tabulations, Geocoded Data Bases, Thematic Map Overlays, Soils Maps.

PROJECT PLANNING AND SUPPORT SERVICES

Problem Definition; Feasibility Analysis; Selection of Existing Imagery; Data Base Preparation; Sensor Selection/Evaluation; Sampling Strategy Design; Ancillary Data Collection; Ground Truth Survey; Data Management; (s)Ground Control Survey, Map Digitizing, Air Support Operations, Gray Level Digitizing.

AERIAL SURVEY

(s)Low Altitude Photography, High Altitude Photography, Multispectral Scanner.

IMAGE PROCESSING, INTERPRETATION AND ANALYSIS

Manual Image Interpretation; Analysis of Data Derived from Remotely Sensed Products; (s)Digital Image Processing, Batch Digital Image/Analysis/Classification, Interactive Digital Image/Analysis/Classification, Photographic Laboratory Processing.

PHOTOGRAMMETRIC ENGINEERING

REPRODUCTION

(s)Drafting & Scribing, Cartographic Reproduction, Printing.

OTHER SERVICE

Remote Sensing Research; Remote Sensing Training; Statistical Modeling; Consultant Services; Computer Services; Software Design/Development.

YEARS IN BUSINESS: 1

SMALL BUSINESS CONTRACTOR? Yes

PROJECTS COMPLETED: 2

MINORITY-OWNED BUSINESS? No

REGION SERVED: U.S., Int'l.

TOTAL APPLICABLE EMPLOYEES: 2

TYPES OF REMOTE SENSING TECHNOLOGIES:

Low Altitude Aerial Photo; Med Altitude Aerial Photo; High Altitude Aerial Photo; Aerial Multispectral Scanner; Landsat MSS; Manual Image Interpretations.

PERSONNEL & SKILLS REPRESENTED:

Professional(1); Technical (1); Computer Programmers (1); Soil Scientists (1); Photointerpreters (2).

STATEMENT OF CAPABILITIES:

Heimbuch-Stanturf, Inc. specializes in quantitative methods for natural resources management. We are oriented toward computer-assisted analysis and interpretation of remotely sensed data, especially for applications to management problems in forestry, fisheries, and land use planning. We maintain a small permanent staff and draw on students and faculty at Cornell University as needed. Staff members have academic backgrounds in forestry, fishery management, soil science, and statistics, as well as remote sensing.

NAME: HENDERSON AERIAL SURVEYS, INC.

HENDERSON AERIAL SURVEYS, INC.

ADDRESS(ES) & CONTACT(S)

5125 West Broad Street
Columbus, Ohio 43228
(614) 878-3925
Norman L. Henderson/Larry A. Mumford

YEARS IN BUSINESS: 20

SMALL BUSINESS CONTRACTOR? Yes

PROJECTS COMPLETED: 2,500

MINORITY-OWNED BUSINESS? _____

REGION SERVED: III, IV, V, VII

TOTAL APPLICABLE EMPLOYEES: _____

TYPES OF REMOTE SENSING TECHNOLOGIES:

Low Altitude Aerial Photo; Med Altitude Aerial Photo

PERSONNEL & SKILLS REPRESENTED:

Management (2); Professional (2); Technical (8); Engineers(civil, environ.) (1);
Photogrammatists (3); Photolab Technicians (2); Pilots (1); Photogrammetric Equip.
Oper. (3)

STATEMENT OF CAPABILITIES:

Aerial Photography - Wild RC-8 Camera, Twin-engine Aircraft, B&W, Color & False
Color.
Photo Lab - Complete B&W Services including Copy Camera.
Stereo Instrumentation - Wild A-8 & A-10 with direct readout to Data General Nova
2/10 Computer.
Aerotriangulation - Fully analytical Kern Comparator point transfer instrument with
Data General Computer and program by John F. Kenefick. Specialty is large scale
topo maps for Engineers, 1:240 to 1:600

FACILITIES AND SPECIAL EQUIPMENT

AIRCRAFT

Piper Aztec (1)

CAMERAS, SCANNERS, AND REMOTE SENSORS

Wild RC-8 (1)

FIELD SURVEY EQUIPMENT

Wild T-2 (1)
Ranger EDM (1)

PHOTOGRAPHIC PROCESSING EQUIPMENT

DuPont ERF (1)
Kodak Versamat (1)

PHOTOGRAMMETRIC PROCESSING EQUIPMENT

ACTI Engineering Copy Camera (1)

IMAGE INTERPRETATION, VIEWING AND MAPPING (NON-DIGITAL)

Kelsh (1)

IMAGE INTERPRETATION, VIEWING AND MAPPING (DIGITAL)

Wild A-8 (1)
Wild A-10 (1)

DIGITIZING, PLOTTING AND GRAPHICS

OTHER COMPUTER PROCESSING

OTHER

Kern Comparator (CPMI) Point Transfer Instrument (1)
Data General Computer (1)

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HENDERSON AERIAL SURVEYS, INC.

PRODUCTS AND SERVICES PROVIDED

IMAGE PRODUCTS

B&W, Color, Color Infrared, Color Composite Neg. Transp., Pos. Transp; B&W Contact Prints, Enlarged Prints; (s)Color, Color Infrared, Color Composite Contact Prints, Enlarged Prints; Photo Mosaics; Photo Atlas Sheets; Analog Magnetic Tape; Halftone Image Prints; Digital Magnetic Tape.
ENHANCED AND CORRECTED IMAGERY

PHOTOGRAMMETRIC PRODUCTS

Topographic Maps; Engineering Cross Sections; Stockpile Measurements; Earthwork Measurements; Digital Data Bases; Planimetric Maps; Photo-Contour Maps; Plan and Profile Sheets; Volumetric Calculations; Distance & Angle Measurements; (s) Orthophotos

INTERPRETED, THEMATIC PRODUCTS

Acreage Tabulations; (c) Utility Maps.

PROJECT PLANNING AND SUPPORT SERVICES

Ground Control Survey; Map Digitizing.

AERIAL SURVEY

Low Altitude Photography; High Altitude Photography

IMAGE PROCESSING, INTERPRETATION AND ANALYSIS

Photographic Laboratory Processing

PHOTOGRAMMETRIC ENGINEERING

Aerotriangulation; Planimetric Mapping; Stereo Digitizing; Cross-Sectioning; Stereocompilation; Topographic Mapping-Small Scale; Topographic Mapping-Large Scale; Volumetric Calculation; (s)Orthophotomapping.

REPRODUCTION

Drafting & Scribing; Cartographic Reproduction; Printing (s)Automated Drafting/Plotting.

OTHER SERVICES

Computer Services.

NAME: HUNTING SURVEYS & CONSULTANTS

ADDRESS(ES) & CONTACT(S)

790 Madison Avenue
New York, NY 10021
(212) 988-9600
R. H. Brower

Borehamwood, England
Herts, England

YEARS IN BUSINESS: 30

PROJECTS COMPLETED: 500 (est.)

REGION SERVED: Int'l.

SMALL BUSINESS CONTRACTOR? _____

MINORITY-OWNED BUSINESS? _____

TOTAL APPLICABLE EMPLOYEES: *

TYPES OF REMOTE SENSING TECHNOLOGIES:

Low Altitude Aerial Photo; Med Altitude Aerial Photo; High Altitude Aerial Photo; Aerial Multispectral Scanner; Aerial Thermal Infrared Scanner; Radar; Geophysical Survey; Landsat MSS; Landsat RBV; Seasat; HCMM; Skylab; Digital Image Interpretations; Manual Image Interpretations.

PERSONNEL & SKILLS REPRESENTED:

Cartographers, Computer Equip. Operators, Computer Programmers, Draftsmen, Field Surveyors, Image Processing Equip Oper., Soil Scientists, Photogrammatists, Photogrammetric Equip Oper., Photointerpreters, Photolab Technicians, Pilots.

STATEMENT OF CAPABILITIES:

Remote sensing techniques have been applied by Huntings to the study of Earth resources for 30 years. Developments in aerial photography, satellite sensors, image processing, fracture analysis, airborne geophysics and side-look-radar interpretation have been made parts of projects in over 150 countries. Interactive interpretation of digital imagery is applied to studies of all natural resources; land use, water resources, minerals, petroleum.

*Staff total 700. Approximately half involved periodically.

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FACILITIES AND SPECIAL EQUIPMENT

AIRCRAFT

Dove, Navahoe, DC-3 (2 owned; 20 lease arrangements)

CAMERAS, SCANNERS, AND OTHER REMOTE SENSORS

All types conventional aerial cameras (2-RC10)

Gamma Ray Spectrometers (5)

Airborne Magnetometers (high sensitivity to normal) (5)

FIELD SURVEY EQUIPMENT

Full range of the most modern field equipment, including tellurometers, distomat, etc., for staff of over 100 surveyors.

PHOTOGRAPHIC PROCESSING EQUIPMENT

Full photo laboratories.

PHOTOGRAMMETRIC PROCESSING EQUIPMENT

Digital mapping system connected to Wild A8 Stereoplotters through computer to Flatbed plotter.

IMAGE INTERPRETATION, VIEWING AND MAPPING (NON-DIGITAL)

²I²S Density Slicer, IDP 300P (Plessey) equipment. Television Viewers.

IMAGE INTERPRETATION, VIEWING AND MAPPING (DIGITAL)

International Imaging System facilities fully operational. Technical maintenance in-house.

DIGITIZING, PLOTTING AND GRAPHICS

Ferranti graphic digitizer.

OTHER COMPUTER PROCESSING

(2) HP-1000 units in-house, plus PDP used for photogrammetric processing equipment.

OTHER

PRODUCTS AND SERVICES PROVIDED

IMAGE PRODUCTS

(c) B&W, Color, Color Infrared, Color Composites Neg. Transp., Pos. Transp., Cont. Prints, Enlarged Prints; (c) Photo Mosaics, Photo Atlas Sheets, Analog Magnetic Tape, Thermograms, Digital Mosaics, Halftone Image Prints, Digital Magnetic Tape.

ENHANCED AND CORRECTED IMAGERY

(c) Multitemporal Composites, Contrast Enhanced, Geometric Correction, Density Slice, Change Detection, Multisensor Composites, Radiometric Correction, Image Resampling Photo and Digital Imagery.

PHOTOGRAMMETRIC PRODUCTS

(c) Topographic Maps, Engineering Cross Sections, Stockpile Measurements, Earthwork Measurements, Digital Terrain Models, Digital Data Bases, Planimetric Maps, Photo-Contour Maps, Plan and Profile Sheets, Volumetric Calculations, Distance & Angle Measurements.

INTERPRETED, THEMATIC PRODUCTS

(c) Land Use Maps, Vegetation/Forestry Maps, Acreage Tabulations, Geocoded Data Bases, Thematic Map Overlays, Geologic Maps, Transportation Maps, Soils Maps, Digital Magnetic Tapes.

PROJECT PLANNING AND SUPPORT SERVICES

Selection of Existing Imagery; Ground Control Survey; Map Digitizing; Data Base Preparation; Sensor Selection/Evaluation; Sampling Strategy Design; Ground Truth Survey.

AERIAL SURVEY

Low Altitude Photography; Thermal Infrared; Radar; Radar Interpretation; Geophysical; High Altitude Photography; Multispectral Scanner.

IMAGE PROCESSING, INTERPRETATION AND ANALYSIS

Digital Image Processing; Batch Digital Image/Analysis/Classification; Interactive Digital Image/Analysis/Classification; Photographic Laboratory Processing; Manual Image Interpretation.

PHOTOGRAMMETRIC ENGINEERING

Aerotriangulation; Planimetric Mapping; Stereo Digitizing; Cross-Sectioning; Stereocompilation; Topographic Mapping-Small Scale; Topographic Mapping-Large Scale; Volumetric Calculation.

REPRODUCTION

Drafting & Scribing; Cartographic Reproduction; Automated Drafting/Plotting; Printing.

OTHER SERVICES

Remote Sensing Research; Remote Sensing Training; Consultant Services.

INTERNATIONAL MAPPING UNLIMITED

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NAME: INTERNATIONAL MAPPING UNLIMITED

ADDRESS(ES) & CONTACT(S)

4343 39th Street, N.W.
Washington, D.C. 20016
(202) 244-4032

YEARS IN BUSINESS: 17

SMALL BUSINESS CONTRACTOR? Yes

PROJECTS COMPLETED: 60

MINORITY-OWNED BUSINESS? _____

REGION SERVED: Int'l.

TOTAL APPLICABLE EMPLOYEES: 2

TYPES OF REMOTE SENSING TECHNOLOGIES:

Low Altitude Aerial Photo; Med Altitude Aerial Photo; Landsat MSS;
Digital Image Interpretations

PERSONNEL & SKILLS REPRESENTED:

Management (1); Professional (1)
Geographers (1)

STATEMENT OF CAPABILITIES:

Develop Special map subject methodologies, execute that methodology, compile map, construct printing components, construct country Landsat mosaics from computer generated edge-enhanced color transparencies with infrastructure and subject annotations.

PRODUCTS AND SERVICES PROVIDED

IMAGE PRODUCTS

(s) B&W, Color, Color Infrared, and Color Composite Positive Transparencies, Contact Prints and Enlarged Prints; Halftone Image Prints; Digital Magnetic Tape
(c) Photo Mosaics; Digital Mosaics

ENHANCED AND CORRECTED IMAGERY

Multitemporal Composites; Contrast Enhanced; Geometric Correction; Density Slice; Change Detection

PHOTOGRAMMETRIC PRODUCTS

(c) Planimetric Maps

INTERPRETED, THEMATIC PRODUCTS

(c) Color Thematic Maps; Land Use Maps; Vegetation/Forestry Maps; Acreage Tabulations; Geocoded Data Bases; Thematic Map Overlays; Geologic Maps; Transportation Maps; Soils Maps; Tax Maps

PROJECT PLANNING AND SUPPORT SERVICES

Problem Definition; Feasibility Analysis; Selection of Existing Imagery; Ground Control Survey; Data Base Preparation; Ground Truth Survey; Data Management; (c) Map Digitizing; Air Support Operations

AERIAL SURVEY

Multispectral Scanner; (c) Low Altitude Photography; Thermal Infrared; Radar; Geophysical; High Altitude Photography

IMAGE PROCESSING, INTERPRETATION AND ANALYSIS

Batch Digital Image/Analysis/Classification; Interactive Digital Image/Analysis/Classification; Manual Image Interpretation; (c) Digital Image Processing; Photographic Laboratory Processing

PHOTOGRAMMETRIC ENGINEERING

Planimetric Mapping; (c) Cross-Sectioning; Stereocompilation

REPRODUCTION

Drafting & Scribing; Cartographic Reproduction; (c) Printing

OTHER SERVICES

Remote Sensing Research; Statistical Modeling; Consultant Services; (c) Interactive Computer Graphics; Hardware Design/Development; Software Design/Development

NAME: INTERPRETATION SYSTEMS INCORPORATED

INTERPRETATION SYSTEMS INCORPORATED

ADDRESS(ES) & CONTACT(S)

6322 College Blvd.
Overland Park, Kansas 66211
(913) 642-8700
D.G. Koger or J.D. Lent

(LogEtronics Inc.)
7001 Loisdale Road
Springfield, Virginia 22150
(703) 971-1400

YEARS IN BUSINESS: 11

SMALL BUSINESS CONTRACTOR? Yes

PROJECTS COMPLETED: 250

MINORITY-OWNED BUSINESS? No

REGION SERVED: U.S. & Int'l.

TOTAL APPLICABLE EMPLOYEES: 5

TYPES OF REMOTE SENSING TECHNOLOGIES:

Low Altitude Aerial Photo; Med Altitude Aerial Photo; High Altitude Aerial Photo; Aerial Multispectral Scanner; Aerial Thermal Infrared Scanner; Radar; Geophysical Survey; Landsat MSS; Landsat RBV; Seasat; HCMM; Skylab; Weather Satellite; Digital Image Interpretations; Manual Image Interpretations

PERSONNEL & SKILLS REPRESENTED:

Management (2); Professional (1); Technical (2)

Computer Equip Oper. (1); Computer Programmers (2); Electrical Engineers (2); Image Processing Equip. Oper. (1); Social Scientists (1); Photointerpreters

STATEMENT OF CAPABILITIES:

Manufactures analog and digital systems for image analysis applications. Digital systems permit high-speed processing, image manipulation, and enhancements. A patented hardware technique allows color image composites consistent with human visual perception, providing added advantages over traditional red-green-blue additive color techniques. EARTHVIEW, designed specifically for LANDSAT feature classifications, affords a full range of image statistics, enhancements, and hardcopy storage of results. It accommodates various inputs and outputs: floppy disks, hard disks, magnetic tapes, and color firm hardcopy. Standard video input digitizing and pseudo 3-dimensional display are options. Heavy emphasis is placed on system's ease of use. Personnel with no computer experience can operate the system after only a week's training.

FACILITIES AND SPECIAL EQUIPMENT

AIRCRAFT

CAMERAS, SCANNERS, AND OTHER REMOTE SENSORS

TV Cameras; Vidicon

FIELD SURVEY EQUIPMENT

PHOTOGRAPHIC PROCESSING EQUIPMENT

PHOTOGRAMMETRIC PROCESSING EQUIPMENT

IMAGE INTERPRETATION, VIEWING AND MAPPING (NON-DIGITAL)

System 130 for in-house demonstration (1)

IMAGE INTERPRETATION, VIEWING AND MAPPING (DIGITAL)

VIEWS, EARTHVIEW for in-house demonstration (2)

DIGITIZING, PLOTTING AND GRAPHICS

Capabilities offered as options to digital system technology. (1)

OTHER COMPUTER PROCESSING

Array Processor capabilities (1)

OTHER

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INTERPRETATION SYSTEMS INCORPORATED

INTERPRETATION SYSTEMS INCORPORATED

PRODUCTS AND SERVICES PROVIDED

REMOTE SENSING EQUIPMENT/SYSTEMS PROVIDED

IMAGE PRODUCTS

B&W, Color, Color Infrared, and Color Composite Negative Transparencies, Positive Transparencies, Contact Prints and Enlarged Prints; Digital Magnetic Tape

ENHANCED AND CORRECTED IMAGERY

Photo & Digital; Multitemporal Composites; Contrast Enhanced; Density Slice; Change Detection; Multisensor Composites; (c) Photo & Digital Geometric Correction; Image Resampling; Radiometric Correction; Pseudo Stereo

PHOTOGRAMMETRIC PRODUCTS

INTERPRETED, THEMATIC PRODUCTS

Color Thematic Maps; Thematic Map Overlays; Digital Magnetic Tapes; (c) Color Thematic Maps; Thematic Map Overlays

PROJECT PLANNING AND SUPPORT SERVICES

AERIAL SURVEY

(c) High Altitude Photography; Multispectral Scanner

IMAGE PROCESSING, INTERPRETATION AND ANALYSIS

Digital Image Processing; Interactive Digital Image/Analysis/Classification

PHOTOGRAMMETRIC ENGINEERING

REPRODUCTION

OTHER SERVICES

Remote Sensing Training; Turnkey Systems Sales/Leasing/Service; (c) Consultant Services

REMOTE SENSOR SYSTEMS

VIEWING EQUIPMENT

Sell & Lease Density Slicers

PHOTOGRAMMETRIC EQUIPMENT

DIGITAL IMAGE PROCESSING EQUIPMENT

Sell Film Output Recorders; Sell & Lease B&W Image Displays; Image Digitizers; Color Image Displays

SOFTWARE

INTEGRATED SYSTEMS

Sell & Lease Image Enhancement; Multispectral Classification

OTHER EQUIPMENT

Sell & Lease Interactive Graphics Systems

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NAME: ITEK OPTICAL SYSTEMS

ADDRESS(ES) & CONTACT(S)

10 Maguire Road
Lexington, Massachusetts 02154
(617) 276-2502
Ron Ondrejka

645 Almanor Avenue
Sunnyvale, California 94086
(408) 732-2710
Steve Herman

1700 North Moore Street, Suite 1910
Arlington, Virginia 22209
(703) 533-2030
Lloyd Rall

YEARS IN BUSINESS: 23

SMALL BUSINESS CONTRACTOR?

PROJECTS COMPLETED:

MINORITY-OWNED BUSINESS?

REGION SERVED:

TOTAL APPLICABLE EMPLOYEES: 34

TYPES OF REMOTE SENSING TECHNOLOGIES:

Low Altitude Aerial Photo; Med Altitude Aerial Photo; High Altitude Aerial Photo;
Aerial Multispectral Scanner; Aerial Thermal Infrared Scanner; Radar; Laser Scanner;
Geophysical Survey; Landsat MSS; Landsat RBV; Skylab; Digital Image Interpretations

PERSONNEL & SKILLS REPRESENTED:

Management (4); Professional (10); Technical (20)

Computer Equip. Oper.; Computer Programmers; Photogrammatists; Photointerpreters;
Photolab Technicians

STATEMENT OF CAPABILITIES:

Itek means Information Technology. The principal business of Itek's Optical Systems Division is the collection, processing, and display of information associated with images. Itek is a world leader in the technologies of advanced optics, photography, and electro-optics. The Optical Systems Division applies these technologies to customer needs in the fields of military reconnaissance and surveillance, mapping and remote sensing, scientific exploration, and industrial measurement

PRODUCTS AND SERVICES PROVIDED

IMAGE PRODUCTS

ENHANCED AND CORRECTED IMAGERY

PHOTOGRAMMETRIC PRODUCTS

INTERPRETED, THEMATIC PRODUCTS

PROJECT PLANNING AND SUPPORT SERVICES

Problem Definition; Feasibility Analysis; Selection of Existing Imagery; Data Base Preparation; Sensor Selection/Evaluation; Data Management

AERIAL SURVEY

IMAGE PROCESSING, INTERPRETATION AND ANALYSIS

Digital Image Processing; Interactive Digital Image/Analysis/Classification; Manual Image Interpretation

PHOTOGRAMMETRIC ENGINEERING

REPRODUCTION

OTHER SERVICES

Remote Sensing Research; Remote Sensing Training; Consultant Services; Interactive Computer Graphics; Computer Services; Turnkey Systems Sales/Leasing/Service; Hardware Design/Development; Software Design/Development; Equipment Sales/Leasing/Service; Software Sales/Leasing

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ITEK OPTICAL SYSTEMS

REMOTE SENSING EQUIPMENT/SYSTEMS PROVIDED

REMOTE SENSOR SYSTEMS

Sell Reconnaissance Cameras; Panoramic Cameras; Metric Cameras; Multispectral Cameras; Multispectral Scanners

VIEWING EQUIPMENT

Sell Color Additive Viewers

PHOTOGRAMMETRIC EQUIPMENT

DIGITAL IMAGE PROCESSING EQUIPMENT

Sell Image Digitizers; Film Output Recorders

SOFTWARE

Sell Geometric Correction; Radiometric Correction; Image Enhancement

INTEGRATED SYSTEMS

Sell Geometric Correction; Radiometric Correction; Image Enhancement

OTHER EQUIPMENT

Sell X-Y Coordinate Digitizer; Interactive Graphics Systems; Geographic Information Systems; Sensor Evaluation; Sensor Test/Checkout; Lease Geographic Information Systems

NAME: JAX STATE GEO-CARTOGRAPHIC SERVICES

ADDRESS(ES) & CONTACT(S)

Dept. of Geography; Jacksonville State University
Jacksonville, Alabama 36265
(205) 435-9820 Ext. 301
Dr. Thomas F. Baucom

YEARS IN BUSINESS: 1

PROJECTS COMPLETED: 1

REGION SERVED: IV

SMALL BUSINESS CONTRACTOR? _____

MINORITY-OWNED BUSINESS? _____

TOTAL APPLICABLE EMPLOYEES: 6

TYPES OF REMOTE SENSING TECHNOLOGIES:

Low Altitude Aerial Photo; Med Altitude Aerial Photo; High Altitude Aerial Photo; Landsat MSS; Landsat RBV; Skylab

PERSONNEL & SKILLS REPRESENTED:

Professional (2); Technical (2); Other (2)

Cartographers (1); Draftsmen (2); Photointerpreters (2); Physical Scientists (1)

STATEMENT OF CAPABILITIES:

Services include photo interpretation of existing or requested imagery involving urban/rural land cover and land use inventory and analysis, and the inking or scribing of reproducible general purpose and thematic maps. Emphasis in general purpose mapping is upon planimetry; however, low level topographic mapping is available at a reasonable cost.

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FACILITIES AND SPECIAL EQUIPMENT

AIRCRAFT

CAMERAS, SCANNERS, AND OTHER REMOTE SENSORS

FIELD SURVEY EQUIPMENT

PHOTOGRAPHIC PROCESSING EQUIPMENT

PHOTOGRAMMETRIC PROCESSING EQUIPMENT

IMAGE INTERPRETATION, VIEWING AND MAPPING (NON-DIGITAL)

Stereo Zoom Transfer Scope (1) Multiplex Stereoplotter (1)
Map-o-Graph (1)
Mirrow Stereoscopes (6)

IMAGE INTERPRETATION, VIEWING AND MAPPING (DIGITAL)

DIGITIZING, PLOTTING AND GRAPHICS

OTHER COMPUTER PROCESSING

OT

PRODUCTS AND SERVICES PROVIDED

IMAGE PRODUCTS

(s) B&W, Color, Color Infrared & Color Composite Negative Transparencies, Positive Transparencies, Contact Prints, and Enlarged Prints; (c) Photo Mosaics; (s) Halftone Image Prints

ENHANCED AND CORRECTED IMAGERY

PHOTOGRAMMETRIC PRODUCTS

(c) Topographic Maps; Planimetric Maps; Photo-Contour Maps; Plan and Profile Sheets; (s) Engineering Cross Sections; Distance & Angle Measurements

INTERPRETED, THEMATIC PRODUCTS

(c) Color Thematic Maps; Land Use Maps; Vegetation/Forestry Maps; Utility Maps; Acreage Tabulations; Geocoded Data Bases; Thematic Map Overlays; Transportation Maps; Soils Maps; Tax Maps

PROJECT PLANNING AND SUPPORT SERVICES

Problem Definition; Feasibility Analysis; Selection of Existing Imagery; Data Base Preparation; Sensor Selection/Evaluation; Sampling Strategy Design; Ancillary Data Collection; Ground Truth Survey; Data Management; (c) Ground Control Survey; Air Support Operations

AERIAL SURVEY

(c) Low Altitude Photography; Multispectral Scanner

IMAGE PROCESSING, INTERPRETATION AND ANALYSIS

Manual Image Interpretation; (c) Photographic Laboratory Processing

PHOTOGRAMMETRIC ENGINEERING

Planimetric Mapping; Stereocompilation; Topographic Mapping-Small Scale; (c) Aero-triangulation; Cross-Sectioning; Topographic Mapping-Large Scale; Volumetric Calculation

REPRODUCTION

Drafting & Scribing; (c) Cartographic Reproduction; Printing

OTHER SERVICES

Remote Sensing Research; Remote Sensing Training; Statistical Modeling; Consultant Services; Computer Services

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NAME: R.M. KEDDAL & ASSOCIATES, INC.

R.M. KEDDAL & ASSOCIATES, INC.

ADDRESS(ES) & CONTACT(S)

1900 Sleepy Hollow Road
Library, Pennsylvania 15129
(412) 835-1115
Robert M. Keddal

FACILITIES AND SPECIAL EQUIPMENT

AIRCRAFT

Cessna 310 (1)

CAMERAS, SCANNERS, AND OTHER REMOTE SENSORS

Ziess RMK - 15/23 (1)
Pleogon Lens A4

FIELD SURVEY EQUIPMENT

Wild T2 and T1 (5)
E.D.M. Equipment (4)
Levels (5)

PHOTOGRAPHIC PROCESSING EQUIPMENT

Kodak starter processor (1)

PHOTOGRAMMETRIC PROCESSING EQUIPMENT

Ziess KG 30 Contact Printer (1)
Ziess TG 24 Aerial Film Dryer (1)
Ziess FE 120 Aerial Film Rewind Processor (1)

IMAGE INTERPRETATION, VIEWING AND MAPPING (NON-DIGITAL)

IMAGE INTERPRETATION, VIEWING AND MAPPING (DIGITAL)

DIGITIZING, PLOTTING AND GRAPHICS

Kelsh 3 Projector PPV Stereo Instrument (1)
Dell Foster X-4-2 Digitizer (1)
Jena Topocart 1900 x 1200 precision coordinated (1)

OTHER COMPUTER PROCESSING

OTHER

YEARS IN BUSINESS: _____

SMALL BUSINESS CONTRACTOR? _____

PROJECTS COMPLETED: _____

MINORITY-OWNED BUSINESS? _____

REGION SERVED: II, III, IV, V

TOTAL APPLICABLE EMPLOYEES: 20

TYPES OF REMOTE SENSING TECHNOLOGIES:

PERSONNEL & SKILLS REPRESENTED:

Management (2); Professional (4); Technical (12); Other (2)

Cartographers (3); Computer Programmers (1); Civil, Environ. Engineers (2);
Field Surveyors (6); Soil Scientists (1); Photogrammatists (2); Photogrammetric
Equip. Oper. (1); Photointerpreters (1); Photolab Technicians (2); Pilots (1)

STATEMENT OF CAPABILITIES:

R.M. Keddal and Associates, Inc. has 14 years of experience in mapping and mapping
survey control. Typical projects, flood plain, highways, deep and surface mining.
Residential and commercial developments.

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R.M. KEDDAL & ASSOCIATES, INC.

PRODUCTS AND SERVICES PROVIDED

IMAGE PRODUCTS

(c) B&W, Color, and Color Infrared Contact Prints and Enlarged Prints; (c)&(s) B&W, Color, and Color Infrared Negative Transparencies and Positive Transparencies

ENHANCED AND CORRECTED IMAGERY

PHOTOGRAMMETRIC PRODUCTS

(c) Topographic Maps; Engineering Cross Sections; Stockpile Measurements; Earthwork Measurements; Planimetric Maps; Plan and Profile Sheets; Volumetric Calculations; (c)&(s) Orthophotos; Photo-Contour Maps

INTERPRETED, THEMATIC PRODUCTS

(c) Tax Maps

PROJECT PLANNING AND SUPPORT SERVICES

Air Support Operations; Ground Control Survey

AERIAL SURVEY

Low Altitude Photography; High Altitude Photography

IMAGE PROCESSING, INTERPRETATION AND ANALYSIS

Photographic Laboratory Processing

PHOTOGRAMMETRIC ENGINEERING

Planimetric Mapping; Stereo Digitizing; Cross-Sectioning; Stereocompilation; Topographic Mapping-Small Scale; Topographic Mapping-Large Scale; Volumetric Calculation; (c) Aerotriangulation; Orthophotomapping

REPRODUCTION

Drafting & Scribing; Cartographic Reproduction; Printing

OTHER SERVICES

NAME: KERN INSTRUMENTS, INC.

ADDRESS(ES) & CONTACT(S)

Geneva Road
Brewster, New York 10509
(914) 279-5095
Jon Hescoock

Kern & Co Ltd. (Parent Co.)
50001 AARAU, Switzerland

YEARS IN BUSINESS: 150

PROJECTS COMPLETED: _____

REGION SERVED: U.S. & Int'l.

TYPES OF REMOTE SENSING TECHNOLOGIES:

Manufacturer

SMALL BUSINESS CONTRACTOR? _____

MINORITY-OWNED BUSINESS? _____

TOTAL APPLICABLE EMPLOYEES: 21

PERSONNEL & SKILLS REPRESENTED:

Management (3); Professional (4); Technical (4); Other (10)

Field Surveyors (2); Photogrammatists (5)

STATEMENT OF CAPABILITIES:

Manufacturer of Photogrammetric & Geodetic Instruments in U.S.A. Sales & Service.

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KERN INSTRUMENTS, INC.

KERN INSTRUMENTS, INC.

PRODUCTS AND SERVICES PROVIDED

FACILITIES AND SPECIAL EQUIPMENT

IMAGE PRODUCTS

AIRCRAFT

ENHANCED AND CORRECTED IMAGERY

CAMERAS, SCANNERS, AND OTHER REMOTE SENSORS

PHOTOGRAMMETRIC PRODUCTS

FIELD SURVEY EQUIPMENT

INTERPRETED, THEMATIC PRODUCTS

PHOTOGRAPHIC PROCESSING EQUIPMENT

PROJECT PLANNING AND SUPPORT SERVICES

PHOTOGRAMMETRIC PROCESSING EQUIPMENT

Manufacturer & Supplier PG2, DC2B, MK2, PMG2, CPM1, DSRI

AERIAL SURVEY

IMAGE INTERPRETATION, VIEWING AND MAPPING (NON-DIGITAL)

IMAGE PROCESSING, INTERPRETATION AND ANALYSIS

IMAGE INTERPRETATION, VIEWING AND MAPPING (DIGITAL)

PHOTOGRAMMETRIC ENGINEERING

DIGITIZING, PLOTTING AND GRAPHICS

Manufacturer & Supplier AT, GP-1

REPRODUCTION

OTHER COMPUTER PROCESSING

OTHER SERVICES

OTHER

Turnkey Systems Sales/Leasing/Service; Equipment Sales/Leasing/Service; Software Sales/Leasing

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KERN INSTRUMENTS, INC.

REMOTE SENSING EQUIPMENT/SYSTEMS PROVIDED

REMOTE SENSOR SYSTEMS

VIEWING EQUIPMENT

PHOTOGRAMMETRIC EQUIPMENT

Sell & Lease Stereo Plotters; Point Transfer Devices; Orthoprojectors; Monocomparators; Geodetic

DIGITAL IMAGE PROCESSING EQUIPMENT

SOFTWARE

INTEGRATED SYSTEMS

OTHER EQUIPMENT

Sell & Lease Plotters

NAME: KEUFFEL & ESSER COMPANY

ADDRESS(ES) & CONTACT(S)

20 Whippany Road
Morristown, New Jersey 07960
(201) 285-5281
D. Michael

309 Era Drive
Northbrook, Illinois 60062
(312) 564-0880
P. Sandoz

1327 South Olive Street
Los Angeles, California 90015
(213) 747-7601
A. Cicoletti

Also in: Anchorage, Alaska
Fleurus, Belgium

YEARS IN BUSINESS: _____

PROJECTS COMPLETED: _____

REGION SERVED: _____

TYPES OF REMOTE SENSING TECHNOLOGIES:

SMALL BUSINESS CONTRACTOR? _____

MINORITY-OWNED BUSINESS? _____

TOTAL APPLICABLE EMPLOYEES: _____

PERSONNEL & SKILLS REPRESENTED:

STATEMENT OF CAPABILITIES:

Through its DA'S Group, K&E offers a system of sophisticated photogrammetric instrumentation manufactured by the K&E Kargl plant in San Antonio, Texas. Instruments are available for all phases of photogrammetric engineering; from enlargers to multi-component systems incorporating the latest developments in digital electronics, which can be integrated to fulfill individual customer's requirements. Newest K&E addition is the DSC-3/80 Analytical Stereocompiler. Applications include precise observation and recovery of three dimensional object coordinates from stereo photographs, acquisition of structured digital terrain models, topographic manuscript preparation, semi-automatic profiling and cross sectioning of predetermined areas or corridors, and aero-triangulation and photo-analysis and interpretation.

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KEUFFEL & ESSER COMPANY

REMOTE SENSING EQUIPMENT/SYSTEMS PROVIDED

REMOTE SENSOR SYSTEMS

VIEWING EQUIPMENT

PHOTOGRAMMETRIC EQUIPMENT

Sell Stereo Plotters and Monocomparators

DIGITAL IMAGE PROCESSING EQUIPMENT

SOFTWARE

INTEGRATED SYSTEMS

OTHER EQUIPMENT

Sell X-Y Coordinate Digitizer; Interactive Graphics Systems; Measurement Equipment; Plotters; Field Equipment

NAME: L. ROBERT KIMBALL AND ASSOCIATES

ADDRESS(ES) & CONTACT(S)

615 West Highland Avenue
Ebensburg, Pennsylvania 15931
(814) 472-7700
James L. Morgan

202 Rosemont Drive
Coraopolis, Pennsylvania 15931
(412) 331-6868
Paul McDermott

3160 Fifth Avenue North
St. Petersburg, Florida 33713
(813) 895-5716
Jack C. Hamilton

Additional Locations:

Huntington, West Virginia
Abington, Pennsylvania
Charlotte, North Carolina

YEARS IN BUSINESS: 27

PROJECTS COMPLETED: 2,000

REGION SERVED: U.S. & Int'l.

SMALL BUSINESS CONTRACTOR? No

MINORITY-OWNED BUSINESS? No

TOTAL APPLICABLE EMPLOYEES: 102

TYPES OF REMOTE SENSING TECHNOLOGIES:

Low Altitude Aerial Photo; Med Altitude Aerial Photo; High Altitude Aerial Photo;
Aerial Multispectral Scanner; Aerial Thermal Infrared Scanner

PERSONNEL & SKILLS REPRESENTED:

Management (5); Professional (39); Technical (27); Other (31)

Cartographers; Computer Equip. Oper.; Computer Programmers; Draftsmen; Engineers (civil, environ.); Engineers (electrical); Field Surveyors; Soil Scientists; Photogrammatists; Photogrammetric Equip. Oper.; Photointerpreters; Photolab Technicians; Physical Scientists; Pilots; Planners; Geographers

STATEMENT OF CAPABILITIES:

The firm of L. Robert Kimball & Associates was founded in 1953 to provide consulting services to governmental, industrial and private clients. Our offices, strategically located throughout the United States, employ over 450 professional technical personnel including architects, civil, sanitary, structural and mechanical engineers; site and urban planners; surveyors, geologists, geographers, economists, photogrammatists, foresters, chemists, appraisers, computer programmers, systems analysts; draftsmen; pilots, specifications writers and engineering technicians. These skilled personnel have the latest in aerial photographic and photogrammetric equipment, electronic digitizers, plotters and calculators; soils and chemistry labs; laser and electronic surveying equipment, engr., mass storage and high speed electronic data processing systems in daily operation.

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FACILITIES AND SPECIAL EQUIPMENT

AIRCRAFT

Cessna 206 (a)
Aero Commander 560/A dual engine aircraft

CAMERAS, SCANNERS, AND OTHER REMOTE SENSORS

Wild RC8 Aerial Camera 6" Focal length
Zeiss RMK-A 15/23 Aerial Camera 6" Focal length

FIELD SURVEY EQUIPMENT

Model 3800A Hewlett-Packard Distance Meters (6); Ranger Laser EDM Unit (1); Micro-Ranger EDM Unit (1); AGA Model 6B Geodimeters (4); 2 Sets Cubic Corp. Electrotapes; 1 Set MRA-3 Tellurometers; All Terrain Vehicles (2); One-Second Reading Theodolites (15); Levels Transportation (15)

PHOTOGRAPHIC PROCESSING EQUIPMENT

Durst Enlarger (1); Borrowdale 42" Process Camera (1); LogEtronic Contact Printers (1); f' Vacuum Frames (2); Pako Automatic 48-1 Processor (1); DuPont 42" Engineering Processor (1); Oscar Fisher Aerial Film Processor (1); 1250W Offset Press 11"x17" (1); 126 Zenith Offset Press 18"x24" (1); 510 Computer System (1); 9200 Xerox (1); Color Separation Facilities

PHOTOGRAMMETRIC PROCESSING EQUIPMENT

Santoni Steresimplex Model III (1); Santoni Model IIC's (5); S.F.O.M. Orthophotoscopes (3); Zeiss Jena Topocart with Orthophot (2)

IMAGE INTERPRETATION, VIEWING AND MAPPING (NON-DIGITAL)

Space Optic Monocomparator (1); Wild PUG Point Transfer Devices (2)

IMAGE INTERPRETATION, VIEWING AND MAPPING (DIGITAL)

Digital Planimeter & Volume Computer (Dell Foster) RSS-4DP/4VC (1); Dell Foster Coordinatograph Table interfaced to RSS-400 Quantizer System (1); Xynetis Flat Bed Plotter interfaced to the IBM 1130 Computer and Computervision Drafting System (1); RSS-4-MGT Dell Foster Metrographic Terminal (1); IBM Systems 3 Model 15D Computer System (1); Computervision Corp. Interactive Design & Drafting System (1)

DIGITIZING, PLOTTING AND GRAPHICS

IBM 1130 Computer System - 16K (1); Dell Foster RSS-400 Graphic Quantizer System (1)

OTHER COMPUTER PROCESSING

Property Plotting; Inverse Digitized Values; Co-Go (Coordinate Geometry); Revised Schut Strip & Block Adjustment for Analytical Aerial Triangulation on IBM 1130 16K Computer; Profile Plot; Highway Cross Section Plots; Stockpile Inventory; Traverse Adjustment; Manuscript Grid and Control Plot; Graphic Applications (Interactive System)

PRODUCTS AND SERVICES PROVIDED

IMAGE PRODUCTS

B & W Contact Prints; Photo Mosaics; Photo Atlas Sheets; Analog Magnetic Tape; Half-tone Image Prints; (c) B & W Positive & Negative Transparencies; B & W Enlarged Prints; Color, Color Infrared, & Color Composite Positive Transparencies & Enlarged Prints; (s) Color, Color Infrared, & Color Composite Negative Transparencies & Contact Prints

ENHANCED AND CORRECTED IMAGERYPHOTOGRAMMETRIC PRODUCTS

Orthophotos; Topographic Maps; Engineering Cross Sections; Stockpile Measurements; Earthwork Measurements; Digital Terrain Models; Digital Data Bases; Planimetric Maps; Photo-Contour Maps; Plan & Profile Sheets; Volumetric Calculations; Distance & Angle Measurements

INTERPRETED, THEMATIC PRODUCTS

Land Use Maps; Vegetation/Forestry Maps; Contour Weather Maps; Utility Maps; Acreage Tabulations; Geocoded Data Bases; Thematic Map Overlays; Geologic Maps; Transportation Maps; Transportation Maps; Soils Maps; Tax Maps; Digital Magnetic Maps

PROJECT PLANNING AND SUPPORT SERVICES

Problem Definition; Feasibility Analysis; Ground Control Survey; Map Digitizing; Data Base Preparation; Air Support Operations; Ground Truth Survey; Data Management

AERIAL SURVEY

Low Altitude Photography; Thermal Infrared; High Altitude Photography

IMAGE PROCESSING, INTERPRETATION AND ANALYSIS

Photographic Laboratory Processing; Manual Image Interpretation

PHOTOGRAMMETRIC ENGINEERING

Aerotriangulation; Orthophotomapping; Planimetric Mapping; Stereo Digitizing; Cross-Sectioning; Stereocompilation; Topographic Mapping-Small Scale; Topographic Mapping-Large Scale; Volumetric Calculation; Close Range

REPRODUCTION

Drafting & Scribing; Cartographic Reproduction; Automated Drafting/Plotting; Printing

OTHER SERVICES

Consultant Services; Interactive Computer Services; Computer Services; Software Sales/Leasing/Service

KOOGLE & POULS ENGINEERING, INC.

FACILITIES AND SPECIAL EQUIPMENT

AIRCRAFT

Cessna U-206 Turbo/Charged for High Altitude (1)

CAMERAS, SCANNERS, AND OTHER REMOTE SENSORS

Aerial Camera Zeiss RMK-A 15/23 (6 inch) (1)
Terrestrial Camera Kelsh K-470 (1)

FIELD SURVEY EQUIPMENT

DME Equipment: Geodimeter Models 12, 76, 68L & 8 (5)
Kern DKM-3 Theodolite (1)
Kern DKM 2AE Theodolites (5)

PHOTOGRAPHIC PROCESSING EQUIPMENT

K&E HE-12 Horizontal Automatic Rectifying Enlarger (1)
LogEtronic Printer (1) Automatic Proto Print Processor (1)
Precision Copy Camera 48" x 72"

PHOTOGRAMMETRIC PROCESSING EQUIPMENT

MacBeth Light Densitometers (2)
Monick Color Comparatize Analyzen (1)

IMAGE INTERPRETATION, VIEWING AND MAPPING (NON-DIGITAL)

Kelsh MOD 5030 (1) Kern Close Range Terrestrial Stereo Plotter (1)
K&E Belfort AMS-M2 (1)
Kern PMG-2 Point Marking & Transfer (1)

IMAGE INTERPRETATION, VIEWING AND MAPPING (DIGITAL)

Kern PG-2/AT-DC2B (1)
Kern PG-2/AT (1)
Kern MI-2 Monocomparator (1)

DIGITIZING, PLOTTING AND GRAPHICS

Coordinatographs with Digitizing Systems (1)
K-E Plotting Table and Digitizer (1)
Zata Plotter (1)

OTHER COMPUTER PROCESSING

PDP 11/34 90 Mega Byte Disk 128K (1)

OTHER

A fleet of Field Vehicles (FWD) (7)
3 Crts, two dec writers, high speed printer, punched card reader, card punch (Univac)
two-way FM band communication radios, field use, specific computer programs for
analytical triangulation, survey adjustments, volumetric, intergraphics.

NAME: KOOGLE & POULS ENGINEERING, INC.

ADDRESS(ES) & CONTACT(S)

8338-A Comanche, N.E.
Albuquerque, New Mexico 87110
(505) 294-5051
Herbert G. Koogle, Basil G. Pouls

YEARS IN BUSINESS: 15

SMALL BUSINESS CONTRACTOR? Yes

PROJECTS COMPLETED: Thousands

MINORITY-OWNED BUSINESS? _____

REGION SERVED: I, II, III, IV, V, VII, X

TOTAL APPLICABLE EMPLOYEES: 33

TYPES OF REMOTE SENSING TECHNOLOGIES:

Low Altitude Aerial Photo; Med Altitude Aerial Photo; High Altitude Aerial Photo

PERSONNEL & SKILLS REPRESENTED:

Management (3); Professional (4); Technical (23); Other (3)

Cartographers; Computer Equip. Oper.; Computer Programmers; Draftsmen; Civil, environ.
Engineers; Field Surveyors; Image Processing Equip. Oper.; Photogrammatists; Photogram-
metric Equip. Oper.; Photointerpreters; Photolab Technicians; Pilots

STATEMENT OF CAPABILITIES:

Consultants in Photogrammetric and associated civil engineering and land surveying,
route location studies and engineering surveys for cross country utility transmission
lines, pipelines and highway, right-of-way surveys. Topographic mapping and automated
terrain data acquisition systems. Analytical triangulation. Hydrology. Computer
processing. Geodetic surveys. Design of special instrumentation systems for
engineering and scientific application. Archaeological mapping, (including historic,
scientific and architectural), computer plotting, volumetrics, and aerial photography.

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PRODUCTS AND SERVICES PROVIDED

IMAGE PRODUCTS

BSW Negative Transparencies, Positive Transparencies, and Contact Prints; (s) Color and Color Infrared Negative Transparencies, Positive Transparencies, Contact Prints and Enlarged Prints. (c) Photo Mosaics; Photo Atlas Sheets; Halftone Image Prints; Digital Magnetic Tape
ENHANCED AND CORRECTED IMAGERY

PHOTOGRAMMETRIC PRODUCTS

(c) Topographic Maps; Engineering Cross Sections; Stockpile Measurements; Earthwork Measurements; Digital Terrain Models; Digital Data Bases; Planimetric Maps; Photo-Contour Maps; Plan and Profile Sheets; Volumetric Calculations; Distance & Angle Measurements; (s) Orthophotos

INTERPRETED, THEMATIC PRODUCTS

(c) Land Use Maps; Vegetation/Forestry Maps; Utility Maps; Acreage Tabulations; Geocoded Data Bases; Thematic Map Overlays; Tax Maps; Digital Magnetic Tapes

PROJECT PLANNING AND SUPPORT SERVICES

Ground Control Survey; Map Digitizing; Ground Truth Survey

AERIAL SURVEY

Low Altitude Photography; High Altitude Photography

IMAGE PROCESSING, INTERPRETATION AND ANALYSIS

Digital Image Processing; Photographic Laboratory Processing; Manual Image Interpretation

PHOTOGRAMMETRIC ENGINEERING

Aerotriangulation; Planimetric Mapping; Stereo Digitizing; Cross-Sectioning; Stereocompilation; Topographic Mapping-Small Scale; Topographic Mapping-Large Scale; Volumetric Calculation; (c) Orthophotomapping

REPRODUCTION

Drafting & Scribing; Cartographic Reproduction; Automated Drafting/Plotting

OTHER SERVICES

Consultant Services; Interactive Computer Graphics; Computer Services

NAME: R.A. KREIG & ASSOCIATES, INC.

ADDRESS(ES) & CONTACT(S)

Suite K, 1709 S. Bragaw
Anchorage, Alaska 99504
(907) 276-2025
Ray Kreig

YEARS IN BUSINESS: 10

PROJECTS COMPLETED: 100

REGION SERVED: X

TYPES OF REMOTE SENSING TECHNOLOGIES:

Low Altitude Aerial Photo; Med Altitude Aerial Photo; High Altitude Aerial Photo; Landsat MSS; Manual Image Interpretations

PERSONNEL & SKILLS REPRESENTED:

Management (1); Professional (2); Technical (1); Other (1)
Draftsmen; Soil Scientists; Photointerpreters; Geologist

STATEMENT OF CAPABILITIES:

Image analysis and natural resource evaluation. Terrain analysis for engineering and land capability. Engineering geology, permafrost studies, arctic engineering, land status and right of way. Pipeline geotechnical studies.

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SMALL BUSINESS CONTRACTOR? Yes

MINORITY-OWNED BUSINESS?

TOTAL APPLICABLE EMPLOYEES: 5

R. A. KREIG & ASSOCIATES, INC.

PRODUCTS AND SERVICES PROVIDED

IMAGE PRODUCTS

ENHANCED AND CORRECTED IMAGERY

PHOTOGRAMMETRIC PRODUCTS

INTERPRETED, THEMATIC PRODUCTS

(c) Land Use Maps; Vegetation/Forestry Maps; Thematic Map Overlays; Geologic Maps; Soils Maps; Tax Maps; Land Ownership Maps; Terrain Analysis Maps; Permafrost Maps

PROJECT PLANNING AND SUPPORT SERVICES

Problem Definition; Feasibility Analysis; Selection of Existing Imagery; Sensor Selection/Evaluation; Sampling Strategy Design; Ancillary Data Collection; Ground Truth Survey; Data Management; (c) Map Digitizing; Data Base Preparation; Air Support Operations

AERIAL SURVEY

IMAGE PROCESSING, INTERPRETATION AND ANALYSIS

Manual Image Interpretation

PHOTOGRAMMETRIC ENGINEERING

REPRODUCTION

Drafting & Scribing; (c) Cartographic Reproduction; Automated Drafting/Plotting; Printing

OTHER SERVICES

Remote Sensing Research; Remote Sensing Training; Consultant Services; (c) Statistical Modeling; Interactive Co-computer Graphics; Computer Services

NAME: LOUISIANA STATE UNIVERSITY, REMOTE SENSING AND IMAGE PROCESSING

ADDRESS(ES) & CONTACT(S)

College of Engineering
Remote Sensing and Image Processing
Division of Engineering Research
Louisiana State University
Baton Rouge, Louisiana 70803
(504) 388-8417
Charles Harlow

YEARS IN BUSINESS: 9

PROJECTS COMPLETED: over 50

REGION SERVED: U.S. & Int'l.

TYPES OF REMOTE SENSING TECHNOLOGIES:

Low Altitude Aerial Photo; Med Altitude Aerial Photo; High Altitude Aerial Photo; Aerial Multispectral Scanner; Aerial Thermal Infrared Scanner; Radar; Landsat MSS; Landsat RBV; HCMM; Weather Satellite; Digital Image Interpretation; Manual Image Interpretations

PERSONNEL & SKILLS REPRESENTED:

Management (3); Professional (10); Technical (3); Other (15)

Cartographers; Computer Equip. Oper.; Computer Programmers; Draftsmen; Engineers (civil, environ., electrical); Image Processing Equip. Oper.; Photogrammatists; Photogrammetric Equip. Oper.; Photointerpreters; Physical Scientists; Pilots; Geographers

STATEMENT OF CAPABILITIES:

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LOUISIANA STATE UNIVERSITY,
REMOTE SENSING AND IMAGE PROCESSING

FACILITIES AND SPECIAL EQUIPMENT

AIRCRAFT

Owned by State (Beechcraft) (1)

CAMERAS, SCANNERS, AND OTHER REMOTE SENSORS

MS Scanner (1)

FIELD SURVEY EQUIPMENT

PHOTOGRAPHIC PROCESSING EQUIPMENT

PHOTOGRAMMETRIC PROCESSING EQUIPMENT

IMAGE INTERPRETATION, VIEWING AND MAPPING (NON-DIGITAL)

IMAGE INTERPRETATION, VIEWING AND MAPPING (DIGITAL)

Photo I. Lab. (1)

DIGITIZING, PLOTTING AND GRAPHICS

Talos Digitizer (1)
Electrostatic & Hardcopy Plotters (1)

OTHER COMPUTER PROCESSING

Interdata 8/32 System (1)

OTHER

LOUISIANA STATE UNIVERSITY,
REMOTE SENSING AND IMAGE PROCESSING

PRODUCTS AND SERVICES PROVIDED

IMAGE PRODUCTS

(c) Thermograms; Digital Mosaics; Digital Magnetic Tape

ENHANCED AND CORRECTED IMAGERY

(c) Digital Multitemporal Composites; Contrast Enhanced; Geometric Correction; Change Detection; Multisensor Composites; Image Resampling

PHOTOGRAMMETRIC PRODUCTS

(c) Orthophotos; Topographic Maps; Engineering Cross Sections; Digital Terrain Models; Digital Data Bases

INTERPRETED, THEMATIC PRODUCTS

(c) Color Thematic Maps; Land Use Maps; Vegetation/Forestry Maps; Utility Maps; Acreage Tabulations; Geocoded Data Bases; Thematic Map Overlays; Transportation Maps; Soils Maps

PROJECT PLANNING AND SUPPORT SERVICES

Problem Definition; Feasibility Analysis; Selection of Existing Imagery; Ground Control Survey; Map Digitizing; Data Base Preparation; Sensor Selection/Evaluation; Sampling Strategy Design; Ancillary Data Collection; Ground Truth Survey; Gray Level Digitizing; Data Mangement; (s) Air Support Operations

AERIAL SURVEY

Multispectral Scanner; (s) Low Altitude Photography; Thermal Infrared; Radar

IMAGE PROCESSING, INTERPRETATION AND ANALYSIS

Digital Image Processing; Batch Digital Image/Analysis/Classification; Interactive Digital Image/Analysis/Classification; Photographic Laboratory Processing; Manual Image Interpretation

PHOTOGRAMMETRIC ENGINEERING

Aerotriangulation; Orthophotomapping; Planimetric Mapping; Stereo Digitizing; Cross-Sectioning; Stereocompilation

REPRODUCTION

Drafting & Scribing

OTHER SERVICES

Remote Sensing Research; Remote Sensing Training; Statistical Modeling; Consultant Services; Interactive Computer Graphics

NAME: M & S COMPUTING, INC.

ADDRESS(ES) & CONTACT(S)

P.O. Box 5183
Huntsville, AL 35805
(205) 772-3411
Ludie G. Richard

1485 Chain Bridge Road, Suite 200/201
McLean, VA 22101
(703)790-9750

17629 El Camino Road, Suite 122
Houston, TX 77058
(713) 486-5620

El Toro, CA Englewood, CO
San Antonio, TX
Ridgewood, NJ
Schaumburg, IL.
Dallas, TX
Charlotte, NC

YEARS IN BUSINESS: 11

SMALL BUSINESS CONTRACTOR? No

PROJECTS COMPLETED: _____

MINORITY-OWNED BUSINESS? No

REGION SERVED: US, Int'l

TOTAL APPLICABLE EMPLOYEES: 10

TYPES OF REMOTE SENSING TECHNOLOGIES:

Radar, Landsat MSS, Landsat RBV, Digital Image Interpretations

PERSONNEL & SKILLS REPRESENTED:

The M & S imagery effort is managed by a small staff (approximately 10) that can call on our staff of over 200 programmers and specialists.

STATEMENT OF CAPABILITIES:

With over 200 major installations worldwide, M&S Computing, Inc., is a leader in providing turn-key systems to support CAD/CAM and mapping applications for both government and industry. In the mapping area, these systems allow complete interactive control of integrated graphic and non-graphic data bases with total map analysis and generation services (precision project/deproject, grid-to-vector conversion, multiple map integration, complete analysis and data base services. etc.).

M&S now offers an imagery analysis capability to integrate with and compliment the current vector graphics system. This will make available to the imagery analyst the full capability of the interactive graphics system and provide data handling and analysis for multispectral and other imagery sources from raw data through final product.

M & S COMPUTING, INC.

FACILITIES AND SPECIAL EQUIPMENT

AIRCRAFT

CAMERAS, SCANNERS, AND OTHER REMOTE SENSORS

FIELD SURVEY EQUIPMENT

PHOTOGRAPHIC PROCESSING EQUIPMENT

PHOTOGRAMMETRIC PROCESSING EQUIPMENT

IMAGE INTERPRETATION, VIEWING AND MAPPING (NON-DIGITAL)

IMAGE INTERPRETATION, VIEWING AND MAPPING (DIGITAL)

Extensive inhouse equipment

DIGITIZING, PLOTTING AND GRAPHICS

Extensive inhouse equipment

OTHER COMPUTER PROCESSING

Extensive inhouse equipment

OTHER

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PRODUCTS AND SERVICES PROVIDED

REMOTE SENSING EQUIPMENT/SYSTEMS PROVIDED

IMAGE PRODUCTS

REMOTE SENSOR SYSTEMS

ENHANCED AND CORRECTED IMAGERY

Various products

VIEWING EQUIPMENT

PHOTOGRAMMETRIC PRODUCTS

Various products

PHOTOGRAMMETRIC EQUIPMENT

INTERPRETED, THEMATIC PRODUCTS

Various products

DIGITAL IMAGE PROCESSING EQUIPMENT

Sell and Lease B & W Image Displays, Color Image Displays

PROJECT PLANNING AND SUPPORT SERVICES

Problem Definition, Feasibility Analysis, Selection of Existing Imagery, Ground Control Survey, Map Digitizing, Data Base Preparation, Air Support Operations, Sensor Selection/Evaluation, Sampling Strategy Design, Ancillary Data Collection, Ground Truth Survey, Gray Level Digitizing, Data Management

SOFTWARE

Sell and Lease Geometric Correction, Radiometric Correct, Image Enhancement, Multispectral Classification

AERIAL SURVEY

INTEGRATED SYSTEMS

IMAGE PROCESSING, INTERPRETATION AND ANALYSIS

Digital Image Processing, Batch Digital Image/Analysis/Classification, Interactive Digital Image/Analysis/Classification

OTHER EQUIPMENT

Sell and Lease Interactive Graphics

PHOTOGRAMMETRIC ENGINEERING

REPRODUCTION

OTHER SERVICES

Remote Sensing Research, Interactive Computer Graphics

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NAME: CHAS. T. MAIN, INC.

CHAS. T. MAIN, INC.

ADDRESS(ES) & CONTACT(S)

P.O. Box 240236
Charlotte, N.C. 28224
(704) 554-1100
David W. Johnson

1800 S. W. First Avenue
Portland, Oregon 97201
(503) 221-6200
Preben B. Sorenson

Prudential Center
Boston, Massachusetts 02199
(617) 262-3200
Maurice E. Foley

Additional locations: Denver, Colorado
New York City, New York

YEARS IN BUSINESS: 7

SMALL BUSINESS CONTRACTOR? No

PROJECTS COMPLETED: 120

MINORITY-OWNED BUSINESS? No

REGION SERVED: U.S. & Int'l.

TOTAL APPLICABLE EMPLOYEES: 80

TYPES OF REMOTE SENSING TECHNOLOGIES:

Low Altitude Aerial Photo; Med Altitude Aerial Photo; High Altitude Aerial Photo;
Geophysical Survey; Landsat MSS; Landsat RBV; Skylab; Digital Image Interpretations;
Manual Image Interpretations

PERSONNEL & SKILLS REPRESENTED:

Management (3); Professional (26); Technical (51)

Cartographers (2); Computer Equip. Oper. (12); Computer Programmers (6); Draftsmen (12);
Engineers (civil, environ.) (10); Field Surveyors (4); Soil Scientists (2); Social
Scientists (2); Photogrammatists (2); Photogrammetric Equip. Oper. (6); Photo-
interpreters (10); Photolab Technicians (2); Physical Scientists (6); Planners (3);
Geographers (1)

STATEMENT OF CAPABILITIES:

Provides engineering services in the major fields of power systems, transmission
and distribution systems, environmental assessment, monitoring, planning and
controls, thermal and hydropower generation, industrial facilities design, and
multi-purpose land-use and water resource management.

Photogrammetric capabilities include: ground surveys, aerial photography and remote
sensing, analytical aerotriangulation, conventional and digital stereocompilation;
digital data extraction, orthophotography and a photographic laboratory.

Digital data bases are recorded directly from a stereo instrument to MAIN's CYARS
interactive graphics system.

MAIN's graphic information systems capabilities include the CYARS interactive
graphics systems, developed by MAIN, computer-aided design drafting, digital
mapping and record conversion services.

FACILITIES AND SPECIAL EQUIPMENT

PHOTOGRAPHIC PROCESSING EQUIPMENT

Brown Admiral 30" Copy Camera (1); Omega D-5 Enlarger (1); Douthitt 60" X 80"
Vacuum Frame (1); DuPont ERF 42" Automatic Processor (1); DuPont Crovex II Processor(1);
Log Etronic Mark IV Printer (1); Bronw Punch Registration System (1); Kargl
Rectifying Enlarger (1);

PHOTOGRAMMETRIC PROCESSING EQUIPMENT

Zeiss Planicart Stereoplotter (1); Wild Aviomap Stereoplotter (1); Kelsh K-5
Stereoplotter w/4 projectors (1); Kelsh K320 Orthoscan (1); Kelsh 5030
Stereoplotter w/2 projectors (1); Data Technology Automatic Drafting Plotters (2);
Dell Foster 3 Axis Digitizers with Digital Planimeters (2); Space Optic
Monocomparator (1); IBM 029 Cardpunch Units (3); Aristo Coordinatograph (1);
Wild PUG4 Point Transfer Device (1); Drafting/Scriber Light Tables (4);
Prime 300 Computer with 64K Memory (1), Talos Backlit 36" x 48" Digitizing
Data Tablet (1); Tektronix 19" Display CRT with Keyboard (1); Threshold
Technology Voice Data Entry Terminal (1); Versatec 36: Electrostatic Plotter (1);

DIGITIZING, PLOTTING AND GRAPHICS

Prime 300 Computers w/64k of Memory (6); Prime 200 Computers with 64k of
Memory (1); Talos 36" x 48" Backlit Tablet (3); Summagraphics 36" x 48"
Tablets (3); Tektronix 19" Electrostatic Plotter (1); Calcomp 960-36"
Plotter (1); Shugard Diskette Drives (14);

OTHER COMPUTER PROCESSING

IBM 370/148VM Computer System; Cour Phase Data IV-70 Remote Batch Entry Terminal;
Calcomp 136 Plotter; Calcomp 960 Plotter;

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CHAS. T. MAIN, INC.

NAME: MARS, INC.

PRODUCTS AND SERVICES PROVIDED

IMAGE PRODUCTS

B&W Positive Transparencies, Contact Prints, and Enlarged Prints; (c) B&W Negative Transparencies; Photo Mosaics; Photo Atlas Sheets; Analog Magnetic Tape; Digital Mosaics; Halftone Image Prints; Digital Magnetic Tape; (s) Color, Color Infrared, and Color Composite Negative Transparencies, Positive Transparencies, Contact Prints, and Enlarged Prints.
ENHANCED AND CORRECTED IMAGERY

ADDRESS(ES) & CONTACT(S)

3644 East McDowell Road
Phoenix, Arizona 85008
(602) 267-8008
Messrs. Lightcap, Gelnett, Gardner
Foreign Location: Calgary, Canada

PHOTOGRAMMETRIC PRODUCTS

(c) Orthophotos; Topographic Maps; Engineering Cross Sections; Stockpile Measurements; Earthwork Measurements; Digital Terrain Models; Digital Data Bases; Planimetric Maps; Photo-Contour Maps; Plan and Profile Sheets; Volumetric Calculations; Distance & Angle Measurements

INTERPRETED, THEMATIC PRODUCTS

(c) Color Thematic Maps; Land Use Maps; Vegetation/Forestry Maps; Utility Maps; Acreage Tabulations; Geocoded Data Bases; Thematic Map Overlays; Geologic Maps; Transportation Maps; Soils Maps; Tax Maps; Digital Magnetic Tapes

PROJECT PLANNING AND SUPPORT SERVICES

Problem Definition; Feasibility Analysis; Selection of Existing Imagery; Ground Control Survey; Map Digitizing; Data Base Preparation; Sensor Selection/Evaluation; Sampling Strategy Design; Ancillary Data Collection; Ground Truth Survey; Data Management; (s) Ground Control Survey; Air Support Operations; Sensor Selection/Evaluation

AERIAL SURVEY

(s) Low Altitude Photography; Thermal Infrared; Radar; Geophysical; High Altitude Photography; Multispectral Scanner

IMAGE PROCESSING, INTERPRETATION AND ANALYSIS

Photographic Laboratory Processing; Manual Image Interpretation; (s) Digital Image Processing; Batch Digital Image/Analysis/Classification; Interactive Digital Image/Analysis/Classification

PHOTOGRAMMETRIC ENGINEERING

Aerotriangulation; Orthophotomapping; Planimetric Mapping; Stereo Digitizing; Cross-Sectioning; Stereocompilation; Topographic Mapping-Small Scale; Topographic Mapping-Large Scale; Volumetric Calculation

REPRODUCTION

Drafting & Scribing; Automated Drafting/Plotting; (c) Cartographic Reproduction; Printing

OTHER SERVICES

Remote Sensing Research; Remote Sensing Training; Statistical Modeling; Consultant Services; Interactive Computer Graphics; Computer Services; Software Design/Development

YEARS IN BUSINESS: 6

PROJECTS COMPLETED: 64

REGION SERVED: U.S. & Int'l.

TYPES OF REMOTE SENSING TECHNOLOGIES:

Low Altitude Aerial Photo; Med Altitude Aerial Photo; Aerial Thermal Infrared Scanner; Radar; Geophysical Survey; Landsat MSS; Landsat RBV; Seasat; Skylab; Manual Image Interpretations

PERSONNEL & SKILLS REPRESENTED:

Management (2); Professional (6); Technical (1); Other (1)
Engineers (civil, environ.) (2); Photogrammatists (1); Photointerpreters/Geologists (3); Photolab Technicians (1); Pilots (2)

STATEMENT OF CAPABILITIES:

MARS (formerly MotorolaMARS) is a full service remote sensing company with in-house capability to fly, process and interpret image products. It owns its own aircraft and multi-sensor systems and operates world-wide. MARS performs customized services primarily for natural resources exploration and exploitation, such as hydrocarbons, mineral deposits, geothermal, groundwater, hydrology, forestry, agriculture, sea ice dynamics, siting major engineering structures, land use and mapping remote regions. Sidelooking airborne radar is the primary sensor system. In-house staff of geologists and interpretation specialists are internationally recognized experts.

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MARS, INC.

MARS, INC.

PRODUCTS AND SERVICES PROVIDED

FACILITIES AND SPECIAL EQUIPMENT

IMAGE PRODUCTS

B&W, Color, and Color Infrared Negative Transparencies, Positive Transparencies, Contact Prints, and Enlarged Prints; Radar Strip Imagery; Radar Mosaics; (c) Photo Mosaics; Photo Atlas Sheets; Halftone Image Prints; Digital Magnetic Tape

ENHANCED AND CORRECTED IMAGERY

Photo Pseudo Stereo; (c) Photo Multitemporal Composites; Contrast Enhanced; Geometric Correction; Change Detection; Radiometric Correction; Image Resampling

PHOTOGRAMMETRIC PRODUCTS

(c) Digital Terrain Models; Digital Data Bases; (s) Orthophotos; Topographic Maps; Planimetric Maps; Photo-Contour Maps; Distance & Angle Measurements

INTERPRETED, THEMATIC PRODUCTS

(c) Color Thematic Maps; Land Use Maps; Vegetation/Forestry Maps; Utility Maps; Acreage Tabulations; Geocoded Data Bases; Thematic Map Overlays; Geologic Maps; Transportation Maps; Soils Maps; Tax Maps

PROJECT PLANNING AND SUPPORT SERVICES

Problem Definition; Feasibility Analysis; Selection of Existing Imagery; Air Support Operations; Sensor Selection/Evaluation; Ancillary Data Collection; Ground Truth Survey; Data Management; (s) Ground Control Survey; Map Digitizing; Data Base Preparation; Gray Level Digitizing

AERIAL SURVEY

Low Altitude Photography; Thermal Infrared; Radar; Geophysical; Multiband Photography

IMAGE PROCESSING, INTERPRETATION AND ANALYSIS

Photographic Laboratory Processing; Manual Image Interpretation; (s) Digital Image Processing; Batch Digital Image/Analysis/Classification; Interactive Digital Image/Analysis/Classification

PHOTOGRAMMETRIC ENGINEERING

(s) Planimetric Mapping; Topographic Mapping-Small Scale; Topographic Mapping-Large Scale

REPRODUCTION

Printing; (s) Drafting & Scribing; Cartographic Reproduction; Automated Drafting/Plotting

OTHER SERVICES

Remote Sensing Research; Remote Sensing Training; Statistical Modeling; Consultant Services; (s) Interactive Computer Graphics; Computer Services

AIRCRAFT

Gulfstream G-159 (36,000 lb. twin-engine turbo-prop.) (1)

CAMERAS, SCANNERS, AND OTHER REMOTE SENSORS (6)

2 each Wild RC-8 metric cameras; 1 I²S multiband camera; 1 35 mm strip camera; 1 Daedalus IR Scanner; 1 Airborne magnetometer

FIELD SURVEY EQUIPMENT

PHOTOGRAPHIC PROCESSING EQUIPMENT

Standard photo-lab

PHOTOGRAMMETRIC PROCESSING EQUIPMENT

IMAGE INTERPRETATION, VIEWING AND MAPPING (NON-DIGITAL)

Richards variable-intensity night tables (5);
Single and dual binocular mirror stereoscopes (3);
Diffraction gratings; color density screens, etc.

IMAGE INTERPRETATION, VIEWING AND MAPPING (DIGITAL)

DIGITIZING, PLOTTING AND GRAPHICS

OTHER COMPUTER PROCESSING

OTHER

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NAME: MARTEL LABORATORIES, INC.ADDRESS(ES) & CONTACT(S)

1025 Cromwell Bridge Road
 Baltimore, Maryland 21204
 (301) 825-7790
 James D. Russell

P.O. Box 22141
 Savannah, Georgia 31402
 (912) 352-5012
 W. E. Savage

4501 126th Avenue North
 Clearwater, Florida 33516
 (813) 576-0100
 J. Gary Reed

Other locations: Fayetteville, North
 Carolina

PRODUCTS AND SERVICES PROVIDEDIMAGE PRODUCTS

(c) Half-tone Image Prints;
 (c) B&W Positive Transparencies, Contact Prints, and Enlarged Prints; (s) B&W Negative Transparencies; Color, Color Infrared, and Color Composite Negative Transparencies, Positive Transparencies, Contact Prints, and Enlarged Prints; Photo Mosaics
ENHANCED AND CORRECTED IMAGERY

YEARS IN BUSINESS: 6SMALL BUSINESS CONTRACTOR? YesPROJECTS COMPLETED: 12MINORITY-OWNED BUSINESS? YesREGION SERVED: U.S. & Int'l.TOTAL APPLICABLE EMPLOYEES: 81PHOTOGRAMMETRIC PRODUCTS

(c) Orthophotos; Topographic Maps; Engineering Cross Sections; Stockpile Measurements; Earthwork Measurements; Digital Terrain Models; Planimetric Maps; Photo-Contour Maps; Plan and Profile Sheets; Volumetric Calculations; Distance & Angle Measurements

INTERPRETED, THEMATIC PRODUCTS

(c) Land Use Maps; Vegetation/Forestry Maps; Utility Maps; Acreage Tabulation; Tax Maps

TYPES OF REMOTE SENSING TECHNOLOGIES:

Low Altitude Aerial Photo; Med Altitude Aerial Photo; High Altitude Aerial Photo; Aerial Multispectral Scanner; Aerial Thermal Infrared Scanner; Geophysical Survey; Landsat MSS; Seasat; Digital Image Interpretations; Manual Image Interpretations

PROJECT PLANNING AND SUPPORT SERVICES

(s) Ground Control Survey; Map Digitizing

PERSONNEL & SKILLS REPRESENTED:

Management (5); Professional (12); Technical (24); Other (40)

Cartographers; Draftsmen; Engineers (civil, environ.); Image Processing Equip. Oper.; Photogrammetists; Photointerpreters; Photolab Technicians; Physical Scientists; Pilots; Planners; Geographers

AERIAL SURVEY

(s) Low Altitude Photography

IMAGE PROCESSING, INTERPRETATION AND ANALYSISSTATEMENT OF CAPABILITIES:

Martel offers a full service cartographic laboratory completely staffed and equipped to produce maps and charts of all kinds. Martel's professional cartographers undertake all aspects of mapmaking from initial compilation through camera ready copy. Professional staff includes environmental analysts, photogrammetists, cartographers, pilots, geologists, photographers, geographers, foresters, soils scientists, planners, and systems analysts. Technical support staff is assigned within each discipline. Total staff numbers some 110 persons.

PHOTOGRAMMETRIC ENGINEERING

Orthophotomapping; Planimetric Mapping; Cross-Sectioning; Stereocompilation; Topographic Mapping-Small Scale; Topographic Mapping-Large Scale; Volumetric Calculation; (s) Aerotriangulation; Stereo Digitizing

REPRODUCTION

Drafting & Scribing; Cartographic Reproduction; (s) Automated Drafting/Plotting

OTHER SERVICES

Consultant Services; Software Design/Development

MARTINEZ ORTHO-MAPPING CORPORATION

NAME: MARTINEZ ORTHO-MAPPING CORPORATION

FACILITIES AND SPECIAL EQUIPMENT

AIRCRAFT

CAMERAS, SCANNERS, AND OTHER REMOTE SENSORS

Modified 6' Kargle mapping camera (1)

FIELD SURVEY EQUIPMENT

PHOTOGRAPHIC PROCESSING EQUIPMENT

Large vacuum frames (2); Dupont ERF processor (1); Durst 184 enlarger (1); MK III Log-E printer (1); Tobias Densitometer model TBS (1); Logetronic Contact Printer (1); Nu Arc Pulsed Xenon High Intensity Light (1); Diazo Dart Blue-line Printer (1)

IMAGE INTERPRETATION, VIEWING AND MAPPING (NON-DIGITAL)

Complete Scribing/Drafting Stations (3)

IMAGE INTERPRETATION, VIEWING AND MAPPING (DIGITAL)

Jena Stereometrograph F with 900 mm x 1200 mm Precision Coordinatograph (1); Jena Topocart B with 900 mm x 1200 mm Precision Coordinatograph (1); Jena Topocart C with 900 mm x 1200 mm Precision Coordinatograph (1); Kelsh KPP3 (1); Kelsh K-320 Orthoscan (1)

DIGITIZING, PLOTTING AND GRAPHICS

OTHER COMPUTER PROCESSING

OTHER

ADDRESS(ES) & CONTACT(S)

240 E. Fillmore Avenue
St. Paul, Minnesota 55107
(612) 291-1127
Anthony Martinez

240 Chester Street
St. Paul, Minnesota 55107
(612) 293-0695
William R. Block

YEARS IN BUSINESS: 5 1/2

PROJECTS COMPLETED: 570

REGION SERVED: U.S.

TYPES OF REMOTE SENSING TECHNOLOGIES:

Low Altitude Aerial Photo; Med Altitude Aerial Photo; High Altitude Aerial Photo;

PERSONNEL & SKILLS REPRESENTED:

Management (2); Professional (1); Technical (17); Other (1)
Cartographers (5); Computer Programmers; Engineers (civil, environ.); Photogrammatists(1);
Photogrammetric Equip. Oper. (7); Photointerpreters (1); Photolab Technicians (1);
Planners (1)

STATEMENT OF CAPABILITIES:

Company established, October 1974, and present capabilities include Aerial Photography, Surveying, Analytical Triangulation; Stereocompilation on first and second order plotters, Orthophotography, Ink Drafting & Scribing and Computer Software Development. Our Photo lab services consist of enlargements, various contact vacuum frame products and Log-E dodged contact prints and diapositives. In November, 1979 an Engineering Division was established, offering engineering services in the disciplines of Civil, Sanitary and Electrical Engineering.

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SMALL BUSINESS CONTRACTOR? Yes

MINORITY-OWNED BUSINESS? Yes

TOTAL APPLICABLE EMPLOYEES: 21

PRODUCTS AND SERVICES PROVIDED

FACILITIES AND SPECIAL EQUIPMENT

IMAGE PRODUCTS

(c) Photo Mosaics; Photo Atlas Sheets; B&W Negative Transparencies, Positive Transparencies, and Contact Prints; (s) B&W Enlarged Prints; Color, Color Infrared, and Color Composite Negative Transparencies, Color Transparencies, Contact Prints, and Enlarged Prints; Analog Magnetic Tape; Thermograms; Digital Mosaics; Halftone Image Prints; Digital Magnetic **ENHANCED AND CORRECTED IMAGERY** Tape

(c) Photo and Digital Multisensor Composites; Radiometric Correction; Image Resampling; Pseudo Stereo; Photo Multitemporal Composites; Contrast Enhanced; Geometric Correction; Density Slice; Change Detection; (s) Digital Multitemporal Composites; Contrast Enhanced; Geometric Correction; Density Slice; Change Detection
PHOTOGRAMMETRIC PRODUCTS

(c) Orthophotos; Topographic Maps; Engineering Cross Sections; Stockpile Measurements; Earthwork Measurements; Digital Terrain Models; Digital Data Bases; Planimetric Maps; Photo-Contour Maps; Plan and Profile Sheets; Volumetric Calculations; Distance & Angle Measurements

INTERPRETED, THEMATIC PRODUCTS

(c) Color Thematic Maps; Land Use Maps; Vegetation/Forestry Maps; Utility Maps; Acreage Tabulations; Thematic Map Overlays; Geologic Maps; Transportation Maps; Soils Maps; Tax Maps; (s) Contour Weather Maps; Digital Magnetic Tapes

PROJECT PLANNING AND SUPPORT SERVICES

Problem Definition; Feasibility Analysis; Selection of Existing Imagery; Ground Control Survey; Data Base Preparation; Sensor Selection/Evaluation; Sampling Strategy Design; Ancillary Data Collection; Ground Truth Survey; Data Management; (s) Map Digitizing; Air Support Operations; Gray Level Digitizing

AERIAL SURVEY

(s) Low Altitude Photography; Thermal Infrared; Radar; Geophysical; High Altitude Photography; Multispectral Scanner

IMAGE PROCESSING, INTERPRETATION AND ANALYSIS

Photographic Laboratory Processing; Manual Image Interpretation; (s) Digital Image Processing; Batch Digital Image/Analysis/Classification

PHOTOGRAMMETRIC ENGINEERING

Aerotriangulation; Orthophotomapping; Planimetric Mapping; Stereo Digitizing; Cross-Sectioning; Stereocompilation; Topographic Mapping-Small Scale; Topographic Mapping-Large Scale; Volumetric Calculation

REPRODUCTION

Drafting & Scribing; Cartographic Reproduction; Automated Drafting/Plotting; Printing

OTHER SERVICES

Remote Sensing Research; Remote Sensing Training; Statistical Modeling; Consultant Services; (s) Interactive Computer Graphics; Computer Services; Turnkey Systems Sales/Leasing/Service; Software Design/Development; Software Sales/Leasing

AIRCRAFT

CAMERAS, SCANNERS, AND OTHER REMOTE SENSORS

FIELD SURVEY EQUIPMENT (2)

Specific type not indicated.

PHOTOGRAPHIC PROCESSING EQUIPMENT (8)

Specific type not indicated.

PHOTOGRAMMETRIC PROCESSING EQUIPMENT (8)

Specific type not indicated.

IMAGE INTERPRETATION, VIEWING AND MAPPING (NON-DIGITAL) (1)

Specific type not indicated.

IMAGE INTERPRETATION, VIEWING AND MAPPING (DIGITAL)

DIGITIZING, PLOTTING AND GRAPHICS

OTHER COMPUTER PROCESSING

OTHER

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NAME: MATRA TECHNOLOGY, INC.

ADDRESS(ES) & CONTACT(S)

120C Albright Way
 Los Gatos, California 95030
 (408) 866-6606
 R.C. Jensen

P.O. Box 1211
 Point Pleasant Beach, New Jersey 08742
 (201) 295-1882
 Karl Kleinn

YEARS IN BUSINESS: 12

SMALL BUSINESS CONTRACTOR? Yes

PROJECTS COMPLETED: 10

MINORITY-OWNED BUSINESS: _____

REGION SERVED: U.S.

TOTAL APPLICABLE EMPLOYEES: 14

TYPES OF REMOTE SENSING TECHNOLOGIES:

Low Altitude Aerial Photo; Med Altitude Aerial Photo; High Altitude Aerial Photo;
 Aerial Thermal Infrared Scanner; Landsat MSS

PERSONNEL & SKILLS REPRESENTED:

Management (1); Professional (4); Technical (4); Other (5)

Computer Equip. Oper.; Computer Programmers; Draftsmen; Engineers (electrical);
 Image Processing Equip. Oper.; Photogrammatists; Photogrammetric Equip. Oper.

STATEMENT OF CAPABILITIES:

Manufacturer analytical stereo plotting instruments which combine remote sensing
 data with aerial mapping information.

FACILITIES AND SPECIAL EQUIPMENT

AIRCRAFT

CAMERAS, SCANNERS, AND OTHER REMOTE SENSORS (2)

Specific types not indicated.

FIELD SURVEY EQUIPMENT

PHOTOGRAPHIC PROCESSING EQUIPMENT (1)

Specific type not indicated.

PHOTOGRAMMETRIC PROCESSING EQUIPMENT (1)

Specific type not indicated.

IMAGE INTERPRETATION, VIEWING AND MAPPING (NON-DIGITAL) (1)

Specific type not indicated.

IMAGE INTERPRETATION, VIEWING AND MAPPING (DIGITAL) (1)

Specific type not indicated.

DIGITIZING, PLOTTING AND GRAPHICS (1)

Specific type not indicated.

OTHER COMPUTER PROCESSING

OTHER

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PRODUCTS AND SERVICES PROVIDEDIMAGE PRODUCTS

Digital Magnetic Tape

ENHANCED AND CORRECTED IMAGERY

Digital Multisensor Composites; Radiometric Correction; Image Resampling; Pseudo Stereo; Contrast Enhanced; Geometric Correction; Density Slice; Change Detection

PHOTOGRAMMETRIC PRODUCTS

Topographic Maps; Engineering Cross Sections; Stockpile Measurements; Earthwork Measurements; Digital Terrain Models; Digital Data Bases; Planimetric Maps; Photo-Contour Maps; Plan and Profile Sheets; Volumetric Calculations; Distance & Angle Measurements

INTERPRETED, THEMATIC PRODUCTS

Land Use Maps; Vegetation/Forestry Maps; Contour Weather Maps; Utility Maps; Thematic Map Overlays; Geologic Maps; Transportation Maps; Soils Maps; Tax Maps; Digital Magnetic Tapes

PROJECT PLANNING AND SUPPORT SERVICES

Problem Definition; Feasibility Analysis; Selection of Existing Imagery; Map Digitizing; Data Base Preparation; Sensor Selection/Evaluation; Data Management

AERIAL SURVEYIMAGE PROCESSING, INTERPRETATION AND ANALYSIS

Interactive Digital Image/Analysis/Classification

PHOTOGRAMMETRIC ENGINEERING

Aerotriangulation; Planimetric Mapping; Stereo Digitizing; Cross-Sectioning; Stereocompilation; Topographic Mapping-Small Scale; Topographic Mapping-Large Scale; Volumetric Calculation

REPRODUCTIONOTHER SERVICES

Turnkey Systems Sales/Leasing/Service; Hardware Design/Development; Software Design/Development; Equipment Sales/Leasing/Service

REMOTE SENSING EQUIPMENT/SYSTEMS PROVIDEDREMOTE SENSOR SYSTEMS

Sell and Lease Handheld Aerial Cameras; Terrestrial Cameras

VIEWING EQUIPMENT

Sell and Lease Stereoscopes

PHOTOGRAMMETRIC EQUIPMENT

Sell and Lease Stereo Plotters; Point Transfer Devices; Monocomparators

DIGITAL IMAGE PROCESSING EQUIPMENT

Sell and Lease Image Digitizers

SOFTWAREINTEGRATED SYSTEMSOTHER EQUIPMENT

Sell and Lease X-Y Coordinate Digitizer; Interactive Graphics Systems; Plotters

NAME: MEAD TECHNOLOGY LABORATORIES

MEAD TECHNOLOGY LABORATORIES

ADDRESS(ES) & CONTACT(S)

3481 Dayton-Xenia Road
Dayton, Ohio 45432
(513) 426-3111
R.R. Zimmerman

YEARS IN BUSINESS: 20

SMALL BUSINESS CONTRACTOR? No

PROJECTS COMPLETED: Many

MINORITY-OWNED BUSINESS? No

REGION SERVED: U.S. & Int'l.

TOTAL APPLICABLE EMPLOYEES: 91

TYPES OF REMOTE SENSING TECHNOLOGIES:

Low Altitude Aerial Photo; Med Altitude Aerial Photo; Aerial Thermal Infrared Scanner; Radar; Laser Scanner; Digital Image Interpretations; Manual Image Interpretations; Software program exploitation of digital and analog imagery data

PERSONNEL & SKILLS REPRESENTED:

Management (13); Professional (40); Technical (19); Other (19)

Computer Equip. Oper.; Computer Programmers; Draftsmen; Engineers (civil, environ., electrical); Field Surveyors; Image Processing Equipment Oper.; Photointerpreters; Photolab Technicians; Physical Scientists; Pilots; Planners; Geographers

STATEMENT OF CAPABILITIES:

Mead Technology Laboratories (MTL) has been recognized for nearly 30 years as an organization highly proficient in sensor analysis, test, and evaluation efforts on virtually all classes of reconnaissance equipments for airborne, ground and laboratory applications. Particularly noteworthy is MTL work in: (1) image processing, manipulation; analysis, and recording; (2) Aerial photographic and infrared mapping; (3) development of computer software programs to more quickly and effectively exploit imagery data; and (4) collecting, processing, analyzing, and evaluating air quality sensor data. Past high quality MTL performance for state, regional, and local government agencies is widely recognized. MTL personnel have gained extensive experience in both actual operational programs and controlled laboratory environments.

FACILITIES AND SPECIAL EQUIPMENT

AIRCRAFT

Fairchild-Hill Porter Turbo-prop (PC-6) (1)

CAMERAS, SCANNERS, AND OTHER REMOTE SENSORS

K-45 Cameras; KC-IB Cameras; KS-67 Cameras AAD-5 IR Scanners

FIELD SURVEY EQUIPMENT

HP-3810 Distance measurement equipment (1); Magnavox satellite positioning equipment - MX - 1102 (1); Engineering transits

PHOTOGRAPHIC PROCESSING EQUIPMENT

Sensitometer, Mead STAR (1); Sensitometric spray processor, mod SP 6707 (1); Processor, continuous roll, EK Versamat 11CM (1); Printer, continuous roll EK Niagara (1); Tempering unit for tray processing, Mead Technology Laboratories TU-3 (1); Processor, heated platen, 3M (1); Processor, ammonia fumes, Scott Graphics (1); Densitometer, transmission, Macbeth TD528 (1); Densitometer, transmission and reflection, Macbeth TR524 (1); Printer, microimage, David Mann (3); Printer, U-V, Miller Holzwarth 1119 (1); Enlarger, Simmon Omega D2 (1); Enlarger, Durst L184 (1); assorted contact and projection printers, timers, laboratory glassware, calculators and miscellaneous photographic tools; Vacuum printer, UV, 33 X 43, Ascor 1601-49 (1); Laminator, Cromalin, Dupont (1); Toning Console, Cromalin, Dupont (1);

IMAGE INTERPRETATION, VIEWING AND MAPPING (NON-DIGITAL)

Photomicrography stand, 4" x 5", Wild (1); Microscope, Unitron mod TM 25-1000 (1); Microscope, Zeiss WL (1); Microscope, reflection, Wild MS-72643 (1); Light table, Richards CFL 940MC (1); Light table, Richards CFL 940ELT (1); Light table Aristo DA-10 (1)

DIGITIZING, PLOTTING AND GRAPHICS

Microdensitometer, Mann-Data Microanalyzer mod I (1); Microdensitometer, Mann-Data Microanalyzer mod II (1); Comparator, x-y position, David Mann (1)

OTHER

Calculator, Hewlett-Packard 9810 (1); Computer, IBM 370-55 (1); Computer, DEC PDP 11/34 (1); Melting point apparatus, Thermolyne mod MP 12615 (1); Balance, Mettler H30 (1); Balance, Mettler P163 (1); Balance, beam, O'Haus 700 (1); Surface tensiometer, Fisher (1); Conductivity bridge, YSI mod 31 (1); Polarograph, Sargent mod FS (1); Plantinizer, YSI mod 3139 (1); Centrifuge, International Equipment, mod CL (1); pH meter, Orion mod 811 (1); pH meter, Orion mod 701 (1); Automatic titrator-potentiograph, Metrohm E436 (1); Incubator, Precision Scientific mod 805 (1); Test chamber, Precision Scientific, mod 1236 (1); Test chamber, Blue H, mod POM-5880-3MSP (1); Test chamber, Statham mod SD-6-1-2 (1); Test chamber, BMA mod TH-8 (1); Test chamber, P-Q mod 20-270 (1); Flex tester, belbo mod 5000 (1); Viscosimeter, Brookfield mod LVF (1);

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HEAD TECHNOLOGY LABORATORIES

FACILITIES AND SPECIAL EQUIPMENT

OTHER (cont.)

Spectrophotometer, atomic absorption, Beckman (1); Spectrophotometer, UV & visible, Beckman Acta C III (1); Spectrophotometer, UV, visible, near IR, Diano/Hardy (1); Spectrophotometer, UV, visible, near IR, Beckman DEZ (1); Spectrophotometer, infrared, Beckman IR-20A (1); Spectrophotometer, Baush & Lomb Spectronic 20 (1); Gas chromatograph, Hewlett-Packard 5700A, with pyrolysis unit (1); Microtoms, American Optical mod 821 (1); Machine Shop Mills, Lathes, Welders, Sheet Metal, and Drillpresses; Tribar Resolution Target (1); 5/6/10 - Step Grey Scale Targets; 6 and 12 Targets; Ground Meteorological Equipment (1); Radiosonde* (1); 100-channel contact temperature measuring device* (1); Dual Channel (3-5, 8-14) Radiometers; Dual Channel (3-5, 8-14) Imaging Radiometers**; Ground-to-ground & Ground-to-air Radio Communications; Cameras for Ground Documentation

* Mounted in self-contained mobile data collection van.
 ** Mounted on 50-ft boom truck.

OTHER COMPUTER PROCESSING

DEC 11/10, 11/20, & 11/34 (1 each)

PRODUCTS AND SERVICES PROVIDED

IMAGE PRODUCTS

(c) BW, Color, Color Infrared, and Color Composite Negative Transparencies, Positive Transparencies, Contact Prints, and Enlarged Prints; Photo Mosaics; Digital Mosaics; Half-tone Image Prints; Digital Magnetic Tape; Thermograms; (s) Photo Atlas Sheets

ENHANCED AND CORRECTED IMAGERY

(c) Photo & Digital: Multitemporal Composites; Contrast Enhanced; Geometric Correction; Density Slice; Change Detection; Multisensor Composites; Radiometric Correction; Image Resampling; Digital Pseudo Stereo

PHOTOGRAMMETRIC PRODUCTS

(s) Orthophotos; Topographic Maps; Engineering Cross Section; Stockpile Measurements; Earthwork Measurements; Digital Terrain Models; Digital Data Bases; Planimetric Maps; Photo-Contour Maps; Plan and Profile Sheets; Volumetric Calculations; Distance & Angle Measurements

INTERPRETED, THEMATIC PRODUCTS

(c) Color Thematic Maps; Land Use Maps; Vegetation/Forestry Maps; Thematic Map Overlays; Digital Magnetic Tapes

PROJECT PLANNING AND SUPPORT SERVICES

Problem Definition; Feasibility Analysis; Selection of Existing Imagery; Ground Control Survey; Data Base Preparation; Air Support Operations; Sensor Selection/Validation; Sampling Strategy Design; Ancillary Data Collection; Ground Truth Survey; Gray Level Digitizing; Data Management; (s) Ground Control Survey

AERIAL SURVEY

Low Altitude Photography; Thermal Infrared; High Altitude Photography; Magnetometer; TV

IMAGE PROCESSING, INTERPRETATION AND ANALYSIS

Digital Image Processing; Batch Digital Image/Analysis/Classification; Interactive Digital Image/Analysis/Classification; Photographic Laboratory Processing; Manual Image Interpretation

PHOTOGRAMMETRIC ENGINEERING

(s) Aerotriangulation; Orthophotomapping; Planimetric Mapping; Stereo Digitizing; Cross-Sectioning; Stereocompilation; Topographic Mapping--Small Scale

REPRODUCTION

Drafting & Scribing; Printing

OTHER SERVICES

Remote Sensing Research; Remote Sensing Training; Statistical Modeling; Consultant Services; Interactive Computer Graphics; Computer Services; Turnkey Systems Sales/Leasing/Service; Hardware Design/Development; Software Design/Development; Equipment Sales/Leasing/Service; Software Sales/Leasing

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MEAD TECHNOLOGY LABORATORIES

REMOTE SENSING EQUIPMENT/SYSTEMS PROVIDED

REMOTE SENSOR SYSTEMS

VIEWING EQUIPMENT

PHOTOGRAMMETRIC EQUIPMENT

DIGITAL IMAGE PROCESSING EQUIPMENT

Sell B&W Image Displays; Image Digitizers; Film Output Recorders; Color Image Displays

SOFTWARE

Sell Geometric Correction; Radiometric Correction; Image Enhancement; Multispectral Classification;

INTEGRATED SYSTEMS

Sell Geometric Correction; Radiometric Correction; Image Enhancement; Multispectral Classification

OTHER EQUIPMENT

Sell X-Y Coordinate Digitizer; Measurement Equipment; Photo Processing Equip.; Field Equipment; Sensitometers; Spectrosensitometers

NAME: METREX MANAGEMENT CORPORATION

ADDRESS(ES) & CONTACT(S)

131 N. San Gabriel Blvd.
Pasadena, California 91107
(213) 449-8162
A.H. Trinkle

YEARS IN BUSINESS: 14

PROJECTS COMPLETED: 2,000

REGION SERVED: U.S. & Int'l.

TYPES OF REMOTE SENSING TECHNOLOGIES:

Low Altitude Aerial Photo; Med Altitude Aerial Photo; High Altitude Aerial Photo; Digital Image Interpretations; Manual Image Interpretations

PERSONNEL & SKILLS REPRESENTED:

Management (5); Professional (4); Technical (7); Other (5)

Cartographers; Computer Equip. Operators; Computer Programmers; Draftsmen; Engineers (civil, environ.); Field Surveyors; Image Processing Equip. Oper.; Soil Scientists; Photogrammetists; Photogrammetric Equip. Oper.; Photointerpreters; Photolab Technicians; Physical Scientists; Geographers

STATEMENT OF CAPABILITIES:

Aerial photography, surveying, mapping, applied photogrammetry, cadastral mapping, thematic mapping, analytical bridging, digital mapping, photographic interpretation, geographic data base mapping, polygon extraction, color plots, land use surveys, radius maps, demographic mapping

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FACILITIES AND SPECIAL EQUIPMENT

AIRCRAFTCAMERAS, SCANNERS, AND OTHER REMOTE SENSORSFIELD SURVEY EQUIPMENTPHOTOGRAPHIC PROCESSING EQUIPMENTPHOTOGRAMMETRIC PROCESSING EQUIPMENTIMAGE INTERPRETATION, VIEWING AND MAPPING (NON-DIGITAL)IMAGE INTERPRETATION, VIEWING AND MAPPING (DIGITAL)DIGITIZING, PLOTTING AND GRAPHICS

701 Interactive Console (1)
875 Interactive Console (1)
Drum Plotter Cal Comp 936 (1)

OTHER COMPUTER PROCESSINGOTHER

Flatbed Plotter Xynetics (1)
Offline Computer LEC MAC 16 (1)

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PRODUCTS AND SERVICES PROVIDED

IMAGE PRODUCTS

B&W Neg. & Pos. Transparencies, Contact and Enlarged Prints; Photo Mosaics; Photo Atlas Sheets; (c) B&W Neg. & Pos. Transparencies, Contact and Enlarged Prints; Photo Mosaics; Photo Atlas Sheets, Analog Magnetic Tape; Thermograms; Digital Mosaics; Halftone Image Prints; Digital Magnetic Tape; (s) Color, Color Infrared, Color Composite Neg. & Pos. ENHANCED AND CORRECTED IMAGERY Transparencies, Contact and Enlarged Prints.

(c) Photo Pseudo Stereo; (s) Digital: Change Detection; Pseudo Stereo

PHOTOGRAMMETRIC PRODUCTS

(c) Topographic Maps; Engineering Cross Sections; Stockpile Measurements; Earthwork Measurements; Digital Terrain Models; Digital Data Bases; Planimetric Maps; Photo-Contour Maps; Plan and Profile Sheets; Volumetric Calculations; Distance & Angle Measurements; (s) Orthophotos

INTERPRETED, THEMATIC PRODUCTS

(c) Color Thematic Maps; Land Use Maps; Vegetation/Forestry Maps; Contour Weather Maps; Utility Maps; Acreage Tabulations; Geocoded Data Bases; Thematic Map Overlays; Geologic Maps; Transportation Maps; Soils Maps; Tax Maps; Digital Magnetic Tapes

PROJECT PLANNING AND SUPPORT SERVICES

Problem Definition; Feasibility Analysis; Selection of Existing Imagery; Ground Control Survey; Map Digitizing; Data Base Preparation; Ancillary Data Collection; Ground Truth Survey; Gray Level Digitizing; Data Management; (s) Air Support Operations; Sensor Selection/Evaluation; Sampling Strategy Design

AERIAL SURVEY

(s) Low Altitude Photography; Thermal Infrared; Radar; Geophysical; High Altitude Photography; Multispectral Scanner

IMAGE PROCESSING, INTERPRETATION AND ANALYSIS

Digital Image Processing; Batch Digital Image/Analysis/Classification; Interactive Digital Image/Analysis/Classification; Photographic Laboratory Processing; Manual Image Interpretation

PHOTOGRAMMETRIC ENGINEERING

Aerotriangulation; Planimetric Mapping; Stereo Digitizing; Cross-Sectioning; Stereo-compilation; Topographic Mapping-Small Scale; Topographic Mapping-Large Scale; Volumetric Calculation; (s) Orthophotomapping

REPRODUCTION

Drafting & Scribing; Cartographic Reproduction; Automated Drafting/Plotting; Printing

OTHER SERVICES

Statistical Modeling; Consultant Services; Interactive Computer Graphics; Computer Services; Software Design/Development; (s) Remote Sensing Research

METREX MANAGEMENT CORPORATION

REMOTE SENSING EQUIPMENT/SYSTEMS PROVIDED

REMOTE SENSOR SYSTEMS

VIEWING EQUIPMENT

PHOTOGRAMMETRIC EQUIPMENT

DIGITAL IMAGE PROCESSING EQUIPMENT

SOFTWARE

INTEGRATED SYSTEMS

OTHER EQUIPMENT

Sell & Lease Geographic Information Systems

NAME: METRICS, INC.

ADDRESS(ES) & CONTACT(S)

290 Interstate North, Suite 116
Atlanta, Georgia 30339
(404) 955-1975
G. William Spann

YEARS IN BUSINESS: 7

PROJECTS COMPLETED: 50

REGION SERVED: U.S.

TYPES OF REMOTE SENSING TECHNOLOGIES:

Low Altitude Aerial Photo; Med Altitude Aerial Photo; High Altitude Aerial Photo;
Aerial Multispectral Scanner; Aerial Thermal Infrared Scanner; Landsat MSS;
Landsat RBV; Skylab; Digital Image Interpretations; Manual Image Interpretations

PERSONNEL & SKILLS REPRESENTED:

Computer programmers; Photointerpreters; Pilots

STATEMENT OF CAPABILITIES:

METRIC, INC. provides a wide range of consulting services designed to assure the cost effective utilization of remote sensing data. METRICS' personnel have education and experience in remote sensing, physics, mathematics, computer programming, and economics. METRICS has provided management and technical assistance to local, regional, state, and federal government agencies, as well as to planning agencies and private industry, in planning, organizing, and conducting remote sensing projects.

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PRODUCTS AND SERVICES PROVIDED

IMAGE PRODUCTS

ENHANCED AND CORRECTED IMAGERY

PHOTOGRAMMETRIC PRODUCTS

INTERPRETED, THEMATIC PRODUCTS

PROJECT PLANNING AND SUPPORT SERVICES

Problem Definition; Feasibility Analysis; Selection of Existing Imagery; Sampling Strategy Design; Ancillary Data Collection; Ground Truth Survey; Data Management

AERIAL SURVEY

Low Altitude Photography

IMAGE PROCESSING, INTERPRETATION AND ANALYSIS

Manual Image Interpretation; (s) Digital Image Processing; Batch Digital Image/Analysis/Classification; Interactive Digital Image/Analysis/Classification; Photographic Laboratory Processing; Manual Image Interpretation

PHOTOGRAMMETRIC ENGINEERING

REPRODUCTION

OTHER SERVICES

Remote Sensing Research; Remote Sensing Training; Statistical Modeling; Consultant Services; Turnkey Systems Sales/Leasing/Service; Hardware Design/Development; Software Design/Development; Software Sales/Leasing

REMOTE SENSING EQUIPMENT/SYSTEMS PROVIDED

REMOTE SENSOR SYSTEMS

VIEWING EQUIPMENT

PHOTOGRAMMETRIC EQUIPMENT

DIGITAL IMAGE PROCESSING EQUIPMENT

SOFTWARE

Sell Geometric Correction; Radiometric Correction; Image Enhancement; Multispectral Classification

INTEGRATED SYSTEMS

Sell Geometric Correction; Radiometric Correction; Image Enhancement; Multispectral Classification

OTHER EQUIPMENT

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NAME: MISSISSIPPI STATE UNIVERSITY

MISSISSIPPI STATE UNIVERSITY

ADDRESS(ES) & CONTACT(S)

P.O. Box FD
Mississippi State, Mississippi 39762
(601) 325-2946
W. Frank Miller

FACILITIES AND SPECIAL EQUIPMENT

AIRCRAFT

CAMERAS, SCANNERS, AND OTHER REMOTE SENSORS

FIELD SURVEY EQUIPMENT

PHOTOGRAPHIC PROCESSING EQUIPMENT

PHOTOGRAMMETRIC PROCESSING EQUIPMENT

IMAGE INTERPRETATION, VIEWING AND MAPPING (NON-DIGITAL)

B&L Zoom 240, Richards Light Tables (2)
ZTS (1)
Mirror Stereoscopes and Vert. Sketchmasters (6)

IMAGE INTERPRETATION, VIEWING AND MAPPING (DIGITAL)

Univac 1100/80 (1)
Data General Eclipse Minicomputer with graphics and image pricing peripherals (1)

DIGITIZING, PLOTTING AND GRAPHICS

Numonics Graphic Calculators; TI Silent 700 (1)
Color CRT, Printer-Plotter (1)

OTHER COMPUTER PROCESSING

Entire System used for GIS

OTHER

YEARS IN BUSINESS: 8

SMALL BUSINESS CONTRACTOR? _____

PROJECTS COMPLETED: 14

MINORITY-OWNED BUSINESS? _____

REGION SERVED: IV & VI

TOTAL APPLICABLE EMPLOYEES: 12

TYPES OF REMOTE SENSING TECHNOLOGIES:

Low Altitude Aerial Photo; Med Altitude Aerial Photo; High Altitude Aerial Photo;
Landsat MSS; Digital Image Interpretations; Manual Image Interpretations; Data Base
Development

PERSONNEL & SKILLS REPRESENTED:

Management (1); Professional (7); Technical (2); Other (2)
Computer Programmers; Engineers (civil, environ.); Soil Scientists; Photogrammatists;
Photointerpreters; Geographers; Foresters; Wildlife Biologists

STATEMENT OF CAPABILITIES:

Provide demonstration projects and remote sensing support for units of local,
state and federal agencies, also private industry and individuals. Both manual
and digital analysis expertise in archeology, forestry, wildlife, land use planning,
resource management, wetlands, environmental impact assessments.

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MISSISSIPPI STATE UNIVERSITY

PRODUCTS AND SERVICES PROVIDED

IMAGE PRODUCTS

Photo Mosaics

ENHANCED AND CORRECTED IMAGERY

(c) Digital Geometric Correction; Density Slice; Change Detection; Multitemporal Composites

PHOTOGRAMMETRIC PRODUCTS

(c) Digital Terrain Models; Digital Data Bases; Planimetric Maps

INTERPRETED, THEMATIC PRODUCTS

(c) Land Use Maps; Vegetation/Forestry Maps; Utility Maps; Acreage Tabulation; Geocoded Data Bases; Thematic Map Overlays; Geologic Maps; Transportation Maps; Soils Maps; Tax Maps

PROJECT PLANNING AND SUPPORT SERVICES

Problem Definition; Feasibility Analysis; Selection of Existing Imagery; Ground Control Survey; Map Digitizing; Data Base Preparation; Sensor Selection/Evaluation; Sampling Strategy Design; Ancillary Data Collection; Ground Truth Survey; Gray Level Digitizing; Data Management; (s) Air Support Operations

AERIAL SURVEY

(s) Low Altitude photography

IMAGE PROCESSING, INTERPRETATION AND ANALYSIS

Digital Image Processing; Batch Digital Image/Analysis/Classification; Interactive Digital Image/Analysis/Classification; Manual Image Interpretation; (s) Photographic Laboratory Processing

PHOTOGRAMMETRIC ENGINEERING

Planimetric Mapping

REPRODUCTION

Drafting & Scribing; (s) Cartographic Reproduction; Printing

OTHER SERVICES

Remote Sensing Research; Remote Sensing Training; Consultant Services; Interactive Computer Graphics; Computer Services; Software Design/Development

NAME: NATIONAL PARK SERVICES, REMOTE SENSING DIVISION,
UNIVERSITY OF NEW MEXICO

ADDRESS(ES) & CONTACT(S)

P.O. Box 26176
Albuquerque, New Mexico 87125
(505) 277-4165
Dr. Thomas R. Lyons

YEARS IN BUSINESS: 10

PROJECTS COMPLETED: 25

REGION SERVED: _____

TYPES OF REMOTE SENSING TECHNOLOGIES:

Low Altitude Aerial Photo; Med Altitude Aerial Photo; High Altitude Aerial Photo; Aerial Multispectral Scanner; Aerial Thermal Infrared Scanner; Geophysical Survey; Landsat MSS; Landsat RBV; Skylab; Digital Image Interpretations; Manual Image Interpretations; Analog electronic image enhancement

PERSONNEL & SKILLS REPRESENTED:

Management (1); Professional (2); Technical (3); Other (2)

Computer Programmers; Social Scientists; Photointerpreters; Physical Scientists

STATEMENT OF CAPABILITIES:

Research into the application of remote sensing techniques for the purposes of cultural resource management in National Park Service areas. Consultation can be undertaken for State, local, and Federal Government agencies on a cooperative basis.

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NATIONAL PARK SERVICE, REMOTE SENSING DIVISION,
UNIVERSITY OF NEW MEXICO

NATIONAL PARK SERVICE, REMOTE SENSING DIVISION,
UNIVERSITY OF NEW MEXICO

FACILITIES AND SPECIAL EQUIPMENT

PRODUCTS AND SERVICES PROVIDED

AIRCRAFT

IMAGE PRODUCTS

CAMERAS, SCANNERS, AND OTHER REMOTE SENSORS

ENHANCED AND CORRECTED IMAGERY

FIELD SURVEY EQUIPMENT

PHOTOGRAMMETRIC PRODUCTS

Consultation of suggested specifications and techniques

PHOTOGRAPHIC PROCESSING EQUIPMENT

INTERPRETED, THEMATIC PRODUCTS

Identification of cultural anomalies

PHOTOGRAMMETRIC PROCESSING EQUIPMENT

PROJECT PLANNING AND SUPPORT SERVICES

Problem Definition; Feasibility Analysis; Selection of Existing Imagery; Sensor Selection/Evaluation; Sampling Strategy Design

IMAGE INTERPRETATION, VIEWING AND MAPPING (NON-DIGITAL)

Mirror stereoscopes/zoom microscopic stereoscopes 3/2
I^S Digicol and Mini-Addcol (1 ea)
Light tables (2)

AERIAL SURVEY

IMAGE INTERPRETATION, VIEWING AND MAPPING (DIGITAL)

IMAGE PROCESSING, INTERPRETATION AND ANALYSIS

DIGITIZING, PLOTTING AND GRAPHICS

Numonics 1224 Planimetric Digitizer (1)
Tektronix 4051 Graphics Terminal (1)

PHOTOGRAMMETRIC ENGINEERING

OTHER COMPUTER PROCESSING

REPRODUCTION

OTHER

OTHER SERVICES

Remote Sensing Research; Remote Sensing Training; Consultant Services

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NAME: NORTHERN AERIAL SURVEY

ADDRESS(ES) & CONTACT(S)

3025 Airport Road
 Hasting, Michigan 49058
 (616) 945-3216
 Charles F. Murphy

YEARS IN BUSINESS: 6SMALL BUSINESS CONTRACTOR? YesPROJECTS COMPLETED: 400MINORITY-OWNED BUSINESS? REGION SERVED: VTOTAL APPLICABLE EMPLOYEES: 4TYPES OF REMOTE SENSING TECHNOLOGIES:

Low Altitude Aerial Photo; Med Altitude Aerial Photo; Manual Image Interpretations

PERSONNEL & SKILLS REPRESENTED:

Management (1); Professional (1); Technical (2)
 Computer Programmers (1); Photogrammatists (1); Photolab Technicians

STATEMENT OF CAPABILITIES:

Northern Aerial Survey provides a full range of services associated with Photogrammetry. We have a Santoni Model IIC Stereo Plotter (First Order Plotter) which is monitored at all times by computer and digitized on all axes; and a staff experienced in all types of mapping, topographic, volumetric, cross sections, flood insurance, triangulation and tax base mapping. Also, we have a complete photo lab equipped for computer rectified enlargements to 48" x 42" and contact prints to 48" x 72". Our drafting department is well experienced and able to produce the finest scribed final sheets with title block.

FACILITIES AND SPECIAL EQUIPMENT

AIRCRAFTCAMERAS, SCANNERS, AND OTHER REMOTE SENSORSFIELD SURVEY EQUIPMENTPHOTOGRAPHIC PROCESSING EQUIPMENT

Kodak Supermatic Star Processor Model 342A (1)

PHOTOGAMMETRIC PROCESSING EQUIPMENT

Digitized Santoni Model IIC Stereo Plotter (1)

IMAGE INTERPRETATION, VIEWING AND MAPPING (NON-DIGITAL)

Santoni Stereoscope (1)

IMAGE INTERPRETATION, VIEWING AND MAPPING (DIGITAL)DIGITIZING, PLOTTING AND GRAPHICSOTHER COMPUTER PROCESSINGOTHER

48" x 48" Rectifying Enlarger (1)

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NORTHERN AERIAL SURVEY

PRODUCTS AND SERVICES PROVIDED

IMAGE PRODUCTS

B&W Negative Transparencies, Positive Transparencies, and Contact Prints; (c) B&W Enlarged Prints; Photo Mosaics; Photo Atlas Sheets; Halftone Image Prints; (s) Color, Color Infrared Negative Transparencies, Positive Transparencies, and Contact Prints

ENHANCED AND CORRECTED IMAGERY

PHOTOGRAMMETRIC PRODUCTS

(c) Topographic Maps; Engineering Cross Sections; Stockpile Measurements; Digital Terrain Models; Digital Data Bases; Planimetric Maps; Photo-Contour Maps; Plan and Profile Sheets; Volumetric Calculations; Distance & Angle Measurements

INTERPRETED, THEMATIC PRODUCTS

(c) Land Use Maps; Vegetation/Forestry Maps; Utility Maps; Transportation Maps; Tax Maps

PROJECT PLANNING AND SUPPORT SERVICES

(s) Ground Control Survey; Map Digitizing

AERIAL SURVEY

(s) Low Altitude Photography; Thermal Infrared

IMAGE PROCESSING, INTERPRETATION AND ANALYSIS

Photographic Laboratory Processing; Manual Image Interpretation

PHOTOGRAMMETRIC ENGINEERING

Planimetric Mapping; Stereo Digitizing; Cross-Sectioning; Stereocompilation; Topographic Mapping-Small Scale; Topographic Mapping-Large Scale; Volumetric Calculation

REPRODUCTION

Drafting & Scribing; Cartographic Reproduction; Printing

OTHER SERVICES

Hardware Design/Development

NAME: NORTH PACIFIC AERIAL SURVEYS, INC.

ADDRESS(ES) & CONTACT(S)

4241 "B" Street
Anchorage, Alaska 99503
(907) 274-3548
Anthony B. Follett

8989 S.E. McLoughlin Blvd.
Portland, Oregon 97222
(503) 652-1520
Al Handley

YEARS IN BUSINESS: 8

PROJECTS COMPLETED: over 500

REGION SERVED: X

TYPES OF REMOTE SENSING TECHNOLOGIES:

Low Altitude Aerial Photo; Med Altitude Aerial Photo; High Altitude Aerial Photo

PERSONNEL & SKILLS REPRESENTED:

Management(2); Professional (3); Technical (4)

Cartographers (4); Draftsmen (4); Engineers (civil, environ.) (1); Image Processing Equip. Oper.; Photogrammatists (2); Photogrammetric Equip. Oper. (6); Photolab Technicians (4); Pilots (3)

STATEMENT OF CAPABILITIES:

North Pacific is a full-service photogrammetric firm serving the Western U.S. and Alaska. The company specializes in aerial photography, related photo lab products, numerical photogrammetric, topographic mapping, digitizing, cartographic drafting, and professional consulting.

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FACILITIES AND SPECIAL EQUIPMENTAIRCRAFT

Cessna 320D Skyknight (3)
Cessna 206 (1)

CAMERAS, SCANNERS, AND OTHER REMOTE SENSORS

Zeiss RMK-A 15/23 (2)
Zeiss RMK-A 21/23 (1)

FIELD SURVEY EQUIPMENT

HP 3800 (2)
HP 3805 (1)

PHOTOGRAPHIC PROCESSING EQUIPMENT

LogE SP 10-70 CP 18-S (2)
Kodak 242 Processor (1)
Acti Process Copy Camera (1)

PHOTOGRAMMETRIC PROCESSING EQUIPMENT

Kern P-2-AT-DC2 & DC2B Plotters (2)
Kesh Plotters (6)
Kern Monocomparator & Point Transfer Device (2)

IMAGE INTERPRETATION, VIEWING AND MAPPING (NON-DIGITAL)IMAGE INTERPRETATION, VIEWING AND MAPPING (DIGITAL)DIGITIZING, PLOTTING AND GRAPHICS

Kern PG2-AT-DC2 & DC2B Plotters (2)

OTHER COMPUTER PROCESSINGOTHERPRODUCTS AND SERVICES PROVIDEDIMAGE PRODUCTS

(c) B&W Negative Transparencies, Positive Transparencies, Contact Prints, and Enlarged Prints; Photo Mosaics; Photo Atlas Sheets; Halftone Image Prints; Digital Magnetic Tape; (s) Color, Color Infrared, and Color Composite Negative Transparencies, Positive Transparencies, Contact Prints, and Enlarged Prints
ENHANCED AND CORRECTED IMAGERY

PHOTOGRAMMETRIC PRODUCTS

(c) Topographic Maps; Engineering Cross Sections; Stockpile Measurements; Earthwork Measurements; Digital Terrain Models; Digital Data Bases; Planimetric Maps; Photo-Contour Maps; Plan and Profile Sheets; Volumetric Calculations; (s) Orthophotos; Distance & Angle Measurements

INTERPRETED, THEMATIC PRODUCTS

(c) Digital Magnetic Tapes

PROJECT PLANNING AND SUPPORT SERVICES

Selection of Existing Imagery; Air Support Operations; Sensor Selection/Evaluation; (c) Problem Definition; Feasibility Analysis; Ground Control Survey; Map Digitizing; Data Base Preparation; Ground Truth Survey; Data Management

AERIAL SURVEY

Low Altitude Photography; (s) High Altitude Photography

IMAGE PROCESSING, INTERPRETATION AND ANALYSIS

Photographic Laboratory Processing; (s) Manual Image Interpretation

PHOTOGRAMMETRIC ENGINEERING

Aerotriangulation; Planimetric Mapping; Stereo Digitizing; Cross-Sectioning; Stereo-compilation; Topographic Mapping-Small Scale; Topographic Mapping-Large Scale; Volumetric Calculation

REPRODUCTION

Drafting & Scribing; Cartographic Reproduction; Automated Drafting/Plotting; Printing

OTHER SERVICES

Consultant Services

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NAME: OKLAHOMA STATE UNIVERSITY CENTER FOR APPLICATIONS OF REMOTE SENSING

OKLAHOMA STATE UNIVERSITY

ADDRESS(ES) & CONTACT(S)

Engineering South 403
Stillwater, Oklahoma 74078
(405) 624-5178
Dr. Stephen J. Walsh, Director

FACILITIES AND SPECIAL EQUIPMENT

AIRCRAFT

CAMERAS, SCANNERS, AND OTHER REMOTE SENSORS

YEARS IN BUSINESS: 1 _____

SMALL BUSINESS CONTRACTOR? Yes _____

PROJECTS COMPLETED: 5 _____

MINORITY-OWNED BUSINESS? _____

REGION SERVED: U.S. & Int'l.

TOTAL APPLICABLE EMPLOYEES: 16 _____

FIELD SURVEY EQUIPMENT

Olympus OM-1-35mm (2)
Miscellaneous equipment

PHOTOGRAPHIC PROCESSING EQUIPMENT

Plate maker (1)
Ozaloid Processor (1)
Kale Projector (1)

PHOTOGRAMMETRIC PROCESSING EQUIPMENT

TYPES OF REMOTE SENSING TECHNOLOGIES:

Low Altitude Aerial Photo; Med Altitude Aerial Photo; High Altitude Aerial Photo;
Aerial Multispectral Scanner; Aerial Thermal Infrared Scanner; Radar; Landsat MSS;
Landsat RBV; Skylab; Weather Satellite; Digital Image Interpretations; Manual Image
Interpretations

PERSONNEL & SKILLS REPRESENTED:

Management (3); Professional (7); Technical (4); Other (2)

Cartographers; Computer Equip. Oper.; Computer Programmers; Draftsmen; Engineers
(electrical); Image Processing Equip. Oper.; Social Scientists; Photogrammatists;
Photointerpreters; Physical Scientists; Planners; Geographers

STATEMENT OF CAPABILITIES:

Remote Sensing Research and applications in resource management and environmental
analysis. Landsat digital and analog analysis and interpretation through a
dedicated computer hardware and software system. Aerial photographic interpretation
of large to small scale color infrared, natural color, and black and white
photography. Analysis of thermal and SLAR data. Workshops offered featuring
extensive hands-on experience and supporting lecture.

IMAGE INTERPRETATION, VIEWING AND MAPPING (NON-DIGITAL)

Zoom Transfer Scope (1)
Mirror Stereoscope (2)
Light table (2)

IMAGE INTERPRETATION, VIEWING AND MAPPING (DIGITAL)

Perkin-Elmer 8/32 mini-computer (1)	300 Lpm Line Printer (1)
300 mega-byte disc (1)	Operator Terminals (4)
1600 BPL Tape Drive (2)	Comtal Color Video Image Processing System(1)
	Electrostatic Printer/Plotter (1)
	Raster Processor (1)

DIGITIZING, PLOTTING AND GRAPHICS
Graphic Digitizer (Altek) (1)

OTHER COMPUTER PROCESSING

OTHER

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OKLAHOMA STATE UNIVERSITY

NAME: OMI CORPORATION OF AMERICA

PRODUCTS AND SERVICES PROVIDED

IMAGE PRODUCTS

Color Composite Negative Transparencies, Positive Transparencies, & Contact Prints; Analog Magnetic Tape; Halftone Image Prints; Digital Magnetic Tape; (s) Photo Mosaics; Photo Atlas Sheets; Thermograms; Digital Mosaics; B & W, Color, & Color Infrared Negative Transparencies, Positive Transparencies, Contact Prints, & Enlarged Prints; Color Composite Enlarged Prints

ENHANCED AND CORRECTED IMAGERY

(c) Photo & Digital: Multitemporal Composites; Contrast Enhanced; Geometric Correction; Density Slice; Change Detection; Multisensor Composites; Radiometric Correction; Image Resampling; Pseudo Stereo

PHOTOGRAMMETRIC PRODUCTS

Topographic Maps; (c) Engineering Cross Sections; Stockpile Measurements; Earthwork Measurements; Digital Terrain Models; Digital Data Bases; Planimetric Maps; Plan and Profile Sheets; Volumetric Calculations; Distance & Angle Measurements (s) Orthophotos; Photo-Contour Maps

INTERPRETED, THEMATIC PRODUCTS

Digital Magnetic Tapes; (c) Color Thematic Maps; Land Use Maps; Vegetation/Forestry Maps; Contour Weather Maps; Utility Maps; Acreage Tabulations; Geocoded Data Bases; Thematic Map Overlays; Geologic Maps; Transportation Maps; Soils Maps; Tax Maps

PROJECT PLANNING AND SUPPORT SERVICES

Problem Definition; Feasibility Analysis; Selection of Existing Imagery; Ground Control Survey; Map Digitizing; Data Base Preparation; Sensor Selection/Evaluation; Sampling Strategy Design; Ancillary Data Collection; Ground Truth Survey; Gray Level Digitizing; Data Management; (s) Air Support Operations

AERIAL SURVEY

High Altitude Photography; (s) Low Altitude Photography; Thermal Infrared; Radar; Geophysical; Multispectral Scanner

IMAGE PROCESSING, INTERPRETATION AND ANALYSIS

Digital Image Processing; Batch Digital Image/Analysis/Classification; Interactive Digital Image/Analysis/Classification; Manual Image Interpretation; (s) Photographic Laboratory Processing

PHOTOGRAMMETRIC ENGINEERING

Aerotriangulation; Orthophotomapping; Planimetric Mapping; Stereo Digitizing; Cross-Sectioning; Stereocompilation; Topographic Mapping-Small Scale; Topographic Mapping-Large Scale; Volumetric Calculation

REPRODUCTION

Drafting & Scribing; Cartographic Reproduction; Automated Drafting/Plotting; Printing

OTHER SERVICES

Remote Sensing Research; Remote Sensing Training; Statistical Modeling; Consultant Services; Interactive Computer Graphics; Computer Services; Hardware Design/Development; Software Design/Development; (s) Turnkey Systems Sales/Leasing/Service; Equipment Sales/Leasing/Service; Software Sales/Leasing

ADDRESS(ES) & CONTACT(S)

1319 Powhatan Street
Alexandria, Virginia 22314
(703) 549-9191
Jack Friedman

YEARS IN BUSINESS: 25

PROJECTS COMPLETED: _____

REGION SERVED: Intl.

TYPES OF REMOTE SENSING TECHNOLOGIES:

SMALL BUSINESS CONTRACTOR? Yes

MINORITY-OWNED BUSINESS? _____

TOTAL APPLICABLE EMPLOYEES: _____

PERSONNEL & SKILLS REPRESENTED:

STATEMENT OF CAPABILITIES:

Manufacturer of photogrammetric instruments and systems and remote sensing image transfer device (stereofacet plotter).

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OMI CORP. OF AMERICA

REMOTE SENSING EQUIPMENT/SYSTEMS PROVIDED

REMOTE SENSOR SYSTEMS

VIEWING EQUIPMENT

Sell & Lease Transfer Scopes

PHOTOGRAMMETRIC EQUIPMENT

Sell Stereo Plotters; Monocomparators; Stereocomparators

DIGITAL IMAGE PROCESSING EQUIPMENT

SOFTWARE

INTEGRATED SYSTEMS

OTHER EQUIPMENT

NAME: OPTRONICS INTERNATIONAL, INC.

ADDRESS(ES) & CONTACT(S)

7 Stuart Road
Chelmsford, MA 01824
(617) 256-4511
Mr. James Deigan, Manager, Remote Sensing Systems.

Frankfurt, Fed. Repub. Germany

880 South Saratoga Ave., Apt. G-207
San Jose, CA 95129
(408) 296-3717
Mr. Glenn Copleman

YEARS IN BUSINESS: 8

SMALL BUSINESS CONTRACTOR? Yes

PROJECTS COMPLETED: N/A

MINORITY-OWNED BUSINESS? No

REGION SERVED: U.S. Int'l.

TOTAL APPLICABLE EMPLOYEES: 11

TYPES OF REMOTE SENSING TECHNOLOGIES:

Low Altitude Aerial Photo; Med Altitude Aerial Photo; High Altitude Aerial Photo; Aerial Multispectral Scanner; Aerial Thermal Infrared Scanner; Radar; Laser Scanner; Geophysical Survey; Landsat MSS; Landsat RBV; Seasat; HCMM; Skylab; Weather Satellite; Digital Image Interpretations; Manual Image Interpretations; Map Scan.

PERSONNEL & SKILLS REPRESENTED:

Professional (1); Technical (3); Other (7); Computer Equip Operators (1); Computer Programmers (1); Engineers(electrical)(1); Photogrammatists(1); Photolab Technicians(1); Other(6). (90-120 total employees.)

STATEMENT OF CAPABILITIES:

Optronics, in its 11 years of existence, has grown to become the world leader in the manufacture and sales of color and black-and-white digital image scanning and film recording systems. Over 400 computer controlled high precision systems have been installed throughout the world. Specifications include: 80 line per mm map spatial resolution; 8-bit spectral resolution over a variety of optical density ranges; input from film, non-transparent media, and magnetic tape; output to color or black-and-white film or magnetic tape; formats 10 x 10" (standard) or larger; and systems available on-line or in stand-alone configurations. Sales and service worldwide.

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FACILITIES AND SPECIAL EQUIPMENT

AIRCRAFT

CAMERAS, SCANNERS, AND OTHER REMOTE SENSORS

FIELD SURVEY EQUIPMENT

PHOTOGRAPHIC PROCESSING EQUIPMENT

Colenta Color Processor (1)
Log E Black & White Film Processor (1)

PHOTOGRAMMETRIC PROCESSING EQUIPMENT

IMAGE INTERPRETATION, VIEWING AND MAPPING (NON-DIGITAL)

IMAGE INTERPRETATION, VIEWING AND MAPPING (DIGITAL)

Optronics Colormation System (2)
Optronics Laser Photowrite System (1)

DIGITIZING, PLOTTING AND GRAPHICS

OTHER COMPUTER PROCESSING

OTHER

PRODUCTS AND SERVICES PROVIDED

IMAGE PRODUCTS

(c)B&W, Color, Color Composite Positive Transparencies; (c) B&W Contact Prints; (c) B&W, Color, Color Infrared, Color Composite Enlarged Prints; (c)Digital Magnetic Tape.

ENHANCED AND CORRECTED IMAGERY

(c) Contrast Enhanced, Density Slice, Multisensor Composites Digital Imagery.

PHOTOGRAMMETRIC PRODUCTS

INTERPRETED, THEMATIC PRODUCTS

PROJECT PLANNING AND SUPPORT SERVICES

AERIAL SURVEY

IMAGE PROCESSING, INTERPRETATION AND ANALYSIS

PHOTOGRAMMETRIC ENGINEERING

REPRODUCTION

OTHER SERVICES

Remote Sensing Training; Turnkey Systems Sales/Leasing/Service; Hardware Design/Development; Equipment Sales/Leasing/Service; Software Sales/Leasing.

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OPTRONICS INTERNATIONAL, INC.

REMOTE SENSING EQUIPMENT/SYSTEMS PROVIDED

REMOTE SENSOR SYSTEMS

VIEWING EQUIPMENT

Sell Density Slicers.

PHOTOGRAMMETRIC EQUIPMENT

Sell Orthoprojectors.

DIGITAL IMAGE PROCESSING EQUIPMENT

Sell and Lease Image Digitizers, Film Output Recorders.

SOFTWARE

Sell Image Enhancement

INTEGRATED SYSTEMS

Sell Image Enhancement

OTHER EQUIPMENT

NAME: OWEN AYRES & ASSOCIATES, INC.

ADDRESS(ES) & CONTACT(S)

2132 Pankratz Street
Madison, Wisconsin 53704
(608) 249-0471
L.R. Evans

1300 West Clairmont Avenue
Eau Claire, Wisconsin 54701
(715) 834-3161
Pat Quinn

209 Stoneridge Drive, Suite 104
Columbia, South Carolina 29210
(803) 252-8885
Donald G. Baker

Other Locations: Dallas, Texas
Brighton, Colorado
Midland, Michigan

YEARS IN BUSINESS: 31

PROJECTS COMPLETED: 3,500

REGION SERVED: U.S. & Int'l.

TYPES OF REMOTE SENSING TECHNOLOGIES:

Low Altitude Aerial Photo; Med Altitude Aerial Photo; High Altitude Aerial Photo;
Manual Image Interpretations

SMALL BUSINESS CONTRACTOR? Yes

MINORITY-OWNED BUSINESS?

TOTAL APPLICABLE EMPLOYEES: 65

PERSONNEL & SKILLS REPRESENTED:

Management (7); Professional (10); Technical (40); Other (8)
Cartographers (2); Computer Equip. Oper. (2); Computer Programmers (2); Draftsmen (10);
Engineers (civil, environ.)(8); Engineers (electrical (2); Field Surveyors (10);
Image Processing Equip. Oper. (1); Soil Scientists (3); Photogrammatists (9);
Photogrammetric Equip. Oper. (8); Photointerpreters (2); Photolab Technicians (2);
Physical Scientists (2); Planners (2)

STATEMENT OF CAPABILITIES:

Madison based photogrammetric engineering, surveying and mapping division, has over 30 years of experience of record in photogrammetry. The total firm has complete service capabilities in architecture, engineering, planning, photogrammetry, geotechnical services, project development, project management, construction, supervision, real property appraisal, environmental studies, value engineering, and community development planning.

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FACILITIES AND SPECIAL EQUIPMENT

AIRCRAFT

Cessna 180 (2)
Cessna 206 (1)
Cessna 310 (1)

CAMERAS, SCANNERS, AND OTHER REMOTE SENSORS

Zeiss RMK 15/23 - 6" (2)
Wild RC8 - 6" (1)
Wild Rc10 - 6" & 3 1/2" (1)

FIELD SURVEY EQUIPMENT

Wild T-2 Theodolites (4)
Wild N-2 automatic levels (4)
Laser Ranger & Hewlett Packard EDM equipment (4)

PHOTOGRAPHIC PROCESSING EQUIPMENT

40" copy camera (1)
Log-E-Tronic contact & strip printers (1)
DuPont 42" and Pako 24" automatic processors (1)

PHOTOGRAMMETRIC PROCESSING EQUIPMENT

Wild B85 stereo plotters (4)
Kern PG2 stereo plotters (1)
Kelsh stereo plotters (4)

IMAGE INTERPRETATION, VIEWING AND MAPPING (NON-DIGITAL)

Stereo plotting instruments (9)
Hand and mirror stereoscopes (4)

IMAGE INTERPRETATION, VIEWING AND MAPPING (DIGITAL)

Stereo plotting instruments (2)

DIGITIZING, PLOTTING AND GRAPHICS

H.Dell Foster Digital Quantizer interfaced with Stereo-plotter equipment (2)

OTHER COMPUTER PROCESSING

Hewlett Packard 3000 System (1)
General Automation 1830 System (1)

OTHER

S.F.O.M. orthophoscopes (2)
Calcomp flat bed plotter (1)
Terminal(2) time share service with United Computing; Boeing; McDonnell-Douglas;
Watstore-U.S.G.S.; USS Engineers & Consultants, Inc.; University of Wisconsin Academic
Computer Center, Univac System

PRODUCTS AND SERVICES PROVIDED

IMAGE PRODUCTS

(c) B&W and Color Composite Negative Transparencies, Positive Transparencies, Contact Prints, and Enlarged Prints; Photo Mosaics; Photo Atlas Sheets; Halftone Image Prints; (s) Color and Color Infrared Negative Transparencies, Positive Transparencies, Contact Prints and Enlarged Prints; Analog Magnetic Tape; Thermograms; Digital Mosaics; Digital ENHANCED AND CORRECTED IMAGERY Magnetic Tape
(s) Photo & Digital: Multitemporal Composites; Contrast Enhanced; Geometric Correction; Density Slice; Multisensor Composites; Radiometric Correction; Image Resampling; Pseudo Stereo; Photo Change Detection

PHOTOGRAMMETRIC PRODUCTS

(c) Orthophotos; Topographic Maps; Engineering Cross Sections; Stockpile Measurements; Earthwork Measurements; Planimetric Maps; Photo-Contour Maps; Plan and Profile Sheets; Volumetric Calculation; Distance & Angle Measurements; (s) Digital Terrain Models; Digital Data Bases

INTERPRETED, THEMATIC PRODUCTS

(c) Color Thematic Maps; Land Use Maps; Vegetation/Forestry Maps; Contour Weather Maps; Utility Maps; Acreage Tabulations; Geocoded Data Bases; Thematic Map Overlays; Geologic Maps; Transportation Maps; Soils Maps; Tax Maps; Digital Magnetic Tapes; Digital Card Decks

PROJECT PLANNING AND SUPPORT SERVICES

Problem Definition; Feasibility Analysis; Selection of Existing Imagery; Ground Control Survey; Map Digitizing; Data Base Preparation; Air Support Operations; Sensor Selection/Evaluation; Sampling Strategy Design/ Ancillary Data Collection; Ground Truth Survey; Data Management; (s) Gray Level Digitizing

AERIAL SURVEY

Low Altitude Photography; Thermal Infrared; High Altitude Photography; (s) Radar; Geophysical; Multispectral Scanner

IMAGE PROCESSING, INTERPRETATION AND ANALYSIS

Manual Image Interpretation; Photographic Laboratory Processing; (s) Digital Image Processing; Batch Digital Image/Analysis/Classification; Interactive Digital Image/Analysis/Classification;

PHOTOGRAMMETRIC ENGINEERING

Aerotriangulation; Orthophotomapping; Planimetric Mapping; Stereo Digitizing; Cross-Sectioning; Stereocompilation; Topographic Mapping-Small Scale; Topographic Mapping-Large Scale; Volumetric Calculation

REPRODUCTION

Drafting & Scribing; Cartographic Reproduction; Automated Drafting/Plotting; Printing

OTHER SERVICES

Statistical Modeling; Consultant Services; Computer Services; (s) Remote Sensing Research; Remote Sensing Training; Interactive Computer Graphics

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NAME: PAN AMERICAN SURVEYS, INC.

PAN AMERICAN SURVEYS, INC.

ADDRESS(ES) & CONTACT(S)

8755 S.W. 131 Street
Miami, Florida 33176
(305) 235-7051
Donald A. Walker

FACILITIES AND SPECIAL EQUIPMENT

AIRCRAFT

Piper Appache Twin Aircraft (1)

CAMERAS, SCANNERS, AND OTHER REMOTE SENSORS

Cameras 6", 8 $\frac{1}{2}$ ", 12" (8)

FIELD SURVEY EQUIPMENT

2nd Order Theodolite, Levels (2)
1st Order Distancers (2)

PHOTOGRAPHIC PROCESSING EQUIPMENT

Fully equipped Lab for Black & White Photography (1)
Floor area 3600 sq.ft., Developer, Printer, Enlarger, etc.

PHOTOGRAMMETRIC PROCESSING EQUIPMENT

Rectifier

IMAGE INTERPRETATION, VIEWING AND MAPPING (NON-DIGITAL)

1st Order Plotter (1)
2nd Order Plotter (1)

IMAGE INTERPRETATION, VIEWING AND MAPPING (DIGITAL)

DIGITIZING, PLOTTING AND GRAPHICS (1)

OTHER COMPUTER PROCESSING

OTHER

YEARS IN BUSINESS: 34

SMALL BUSINESS CONTRACTOR? Yes

PROJECTS COMPLETED: 1,500

MINORITY-OWNED BUSINESS? _____

REGION SERVED: IV, Int'l.

TOTAL APPLICABLE EMPLOYEES: 7

TYPES OF REMOTE SENSING TECHNOLOGIES:

Low Altitude Aerial Photo; Med Altitude Aerial Photo

PERSONNEL & SKILLS REPRESENTED:

Management (1); Professional (2); Technical (2); Other (2)

Draftsmen; Engineers (civil, environ.); Field Surveyors (2); Photogrammatists (1);
Photolab Technicians (1); Pilots (1)

STATEMENT OF CAPABILITIES:

This companies has over thirty years experience in Aerial Photography and Photogrammetry. Its activities include but are not limited to the following:
High and low level vertical Aerial Photography in Black and White, Color, Infrared, Color Infrared, complete lab processing of black and white and infrared photography. Photogrammetric and topographic maps, mosaics, rectified and unrectified enlargements and reproducibles, plan and profile sheets, volume and area abstraction from photographs for progress reports, stock piles etc. The company also provides ground control survey using the latest surveying instruments with experienced staff.

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PAN AMERICAN SURVEYS, INC.

PRODUCTS AND SERVICES PROVIDED

IMAGE PRODUCTS

B&W Contact and Enlarged Prints; (c) B&W Negative and Positive Transparencies; Photo Mosaics; Photo Atlas Sheets; Halftone Image Prints; (s) Color, Color Infrared, and Color Composite Negative Transparencies, Positive Transparencies, Contact Prints, and Enlarged Prints

ENHANCED AND CORRECTED IMAGERY

PHOTOGRAMMETRIC PRODUCTS

(c) Orthophotos; Topographic Maps; Engineering Cross Sections; Stockpile Measurements; Earthwork Measurements; Digital Terrain Models; Digital Data Bases; Photo-Contour Maps; Plan and Profile Sheets; Volumetric Calculations; Distance & Angle Measurements

INTERPRETED, THEMATIC PRODUCTS

PROJECT PLANNING AND SUPPORT SERVICES

Ground Control Survey

AERIAL SURVEY

Low Altitude Photography

IMAGE PROCESSING, INTERPRETATION AND ANALYSIS

Photographic Laboratory Processing; Manual Image Interpretation

PHOTOGRAMMETRIC ENGINEERING

Planimetric Mapping; Stereo Digitizing; Cross-Sectioning; Stereocompilation; Topographic Mapping-Large Scale; Volumetric Calculation; (s) Aerotriangulation; Orthophotomapping

REPRODUCTION

Printing; Drafting & Scribing

OTHER SERVICES

NAME: PHOTO SCIENCE, INC.

ADDRESS(ES) & CONTACT(S)

7840 Airpark Road
Gaithersburg, Maryland 20760
(301) 948-8550

Richard G. Crouse

PHOTO SCIENCE, INC. OF KY.
1630 N. Broadway
Lexington, Kentucky 40505
(606) 293-0502
Clayton Smith

YEARS IN BUSINESS: 25

PROJECTS COMPLETED: 4,500

REGION SERVED: U.S. & Int'l.

TYPES OF REMOTE SENSING TECHNOLOGIES:

Low Altitude Aerial Photo; Med Altitude Aerial Photo; Aerial Thermal Infrared Scanner; Landsat MSS; Landsat RBV; Seasat; Skylab; Weather Satellite; Digital Image Interpretations Manual Image Interpretations

PERSONNEL & SKILLS REPRESENTED:

Management (6); Professional (26); Technical (27); Other (2)

Cartographers (8); Draftsmen (8); Field Surveyors (4); Image Processing Equipment Operators (2); Photogrammatists (4); Photogrammetric Equipment Operators (10); Photointerpreters (4); Photolab Technicians (11); Pilots (3)

STATEMENT OF CAPABILITIES:

Acquisition of aerial, photography, image processing, data interpretation and mapping.

PHOTO SCIENCE, INC. OF S.C.
401 National Cemetery Road
Florence, South Carolina 29503
(803) 662-8405
D.C. Barbot

SMALL BUSINESS CONTRACTOR? Yes

MINORITY-OWNED BUSINESS? _____

TOTAL APPLICABLE EMPLOYEES: 60

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FACILITIES AND SPECIAL EQUIPMENT

AIRCRAFT

Beechcraft Queen Air 65/80 (dual camera capabilities) (1); Aztec (1); Cessna 320 (1)

CAMERAS, SCANNERS, AND OTHER REMOTE SENSORS

RCA Wild (2); RC5 Wild (1); Strip Camera 9" (1); Bendix LN 3 Thermal Mapper (1); Hulcher 70mm Aerial Camera w/1000' Mag. (1); Richardson Aerial Viewers; Multi-camera 70mm Sensor System (1)

FIELD SURVEY EQUIPMENT

Wild T-1 Theodolites (1); Wild T-2 Theodolites (1); Wild N-2 Levels (1); Zeiss TH-2 Theodolites (1); Zeiss N-12 Levels (Self Leveling) (1); Plane Table and Alidade (1); Geodimeters (Day/Night) (1); K&E Microranger (1) Level Rods, Range Poles, Tapes

PHOTOGRAPHIC PROCESSING EQUIPMENT

Hope Color Processor (2); Dupont ERF Cronaflex Processors (3); Dupont Crovex Processors (2); Precise Scale Camera Projector (1); Dupont Cromalin Color Proofing System (1); Pako-Pakoral Super G-48 Processor (1); Robertson Tri-Color Process Camera (1); Poloroid MP-4 Copy System (1); Durst G-184 Enlarger (2); Durst 138 Micro Spec Enlarger (1); Hulcher 70mm Processing System (1); Nikon 100' Open-Reel Processing System - 35mm, 70mm, 105mm; Zeiss 120 Aerial Film Processing System (1); LogEtronic Printers - Mark IV for Color and B/W; Morse Contact Printers; Vacuum Frames - Brown, 28"x48", 52"x68", 52"x74"

PHOTOGRAMMETRIC PROCESSING EQUIPMENT

Kelsh Stereo Mapping Plotters (7); K&E Multiple Projector (5) Stereo Plotter (2)

IMAGE INTERPRETATION, VIEWING AND MAPPING (NON-DIGITAL)

Panoscan; Stereo sketch

IMAGE INTERPRETATION, VIEWING AND MAPPING (DIGITAL)DIGITIZING, PLOTTING AND GRAPHICS

Kongsberg KS 5000 High speed automatic drafting table (1); Dell Foster Electronic Digitizer with X, Y, and Z capability (2)

OTHER

HAAS-STREIT Coordinatograph (1); Olivetti Underwood Computer (1); Computer Time Sharing - Tech-Mac, Honeywell (1)

PRODUCTS AND SERVICES PROVIDED

IMAGE PRODUCTS

(c) B&W, Color, Color Infrared, and Color Composite Negative Transparencies, Positive Transparencies, Contact Prints and Enlarged Prints; Photo Mosaics; Photo Atlas Sheets; Thermograms; Halftone Image Prints; (s) Analog Magnetic Tape; Digital Mosaics; Digital Magnetic Tape

ENHANCED AND CORRECTED IMAGERY

(c) Photo: Multitemporal Composites; Contrast Enhanced; Geometric Correction; Density Slice; Change Detection; Multisensor Composites; Pseudo Stereo; (s) Photo: Radiometric Correction

PHOTOGRAMMETRIC PRODUCTS

(c) Topographic Maps; Engineering Cross Sections; Stockpile Measurements; Earthwork Measurements; Planimetric Maps; Photo-Contour Maps; Plan and Profile Sheets; Volumetric Calculations; Distance & Angle Measurements (s) Orthophotos; Digital Data Bases; Photo-Contour Maps

INTERPRETED, THEMATIC PRODUCTS

(c) Color Thematic Maps; Land Use Maps; Vegetation/Forestry Maps; Utility Maps; Acreage Tabulation; Thematic Map Overlays; Transportation Maps; Slope Mapping; (s) Geocoded Data Bases; Geologic Maps; Digital Magnetic Tapes

PROJECT PLANNING AND SUPPORT SERVICES

Problem Definition; Feasibility Analysis; Selection of Existing Imagery; Ground Control Survey; Map Digitizing; Data Base Preparation; Air Support Operations; Sensor Selection/Evaluation; Ancillary Data Collection; Ground Truth Survey; Gray Level Digitizing; Data Management

AERIAL SURVEY

Low Altitude Photography; Thermal Infrared

IMAGE PROCESSING, INTERPRETATION AND ANALYSIS

Photographic Laboratory Processing; Manual Image Interpretation; (s) Digital Image Processing; Batch Digital Image/Analysis/Classification; Interactive Digital Image/Analysis/Classification

PHOTOGRAMMETRIC ENGINEERING

Planimetric Mapping; Stereo Digitizing; Cross-Sectioning; Stereocompilation; Topographic Mapping-Small Scale; Topographic Mapping-Large Scale; Volumetric Calculation; Danger Tree Mapping for Power Lines; (s) Aerotriangulation; Orthophotomapping

REPRODUCTION

Drafting & Scribing; Cartographic Reproduction; Automated Drafting/Plotting; (s) Printing

OTHER SERVICES

Remote Sensing Research; Remote Sensing Training; Consultant Services; (s) Statistical Modeling; Interactive Computer Graphics; Computer Services

NAME: PHOTOGRAPHIC INTREPRETATION CORPORATION

PHOTGRAPHIC INTERPRETATION CORP.

ADDRESS(ES) & CONTACT(S)

Box 868
Hanover, New Hampshire 03755
(603) 643-2268
V.H. Anderson or Roger B. Arend

FACILITIES AND SPECIAL EQUIPMENT

AIRCRAFT

CAMERAS, SCANNERS, AND OTHER REMOTE SENSORS

FIELD SURVEY EQUIPMENT

SOIL SAMPLER (1)
GEOLOGIC FIELD EQUIPMENT (1)

PHOTOGRAPHIC PROCESSING EQUIPMENT

PHOTOGRAMMETRIC PROCESSING EQUIPMENT

IMAGE INTERPRETATION, VIEWING AND MAPPING (NON-DIGITAL)

Stereoscopes (6)
Light Tables (3)
Monocular Enlargers (3)

IMAGE INTERPRETATION, VIEWING AND MAPPING (DIGITAL)

DIGITIZING, PLOTTING AND GRAPHICS

OTHER COMPUTER PROCESSING

OTHER

Diazo Reproduction

YEARS IN BUSINESS: 10

SMALL BUSINESS CONTRACTOR? Yes

PROJECTS COMPLETED: over 100

MINORITY-OWNED BUSINESS? _____

REGION SERVED: U.S. & Int'l.

TOTAL APPLICABLE EMPLOYEES: 9

TYPES OF REMOTE SENSING TECHNOLOGIES:

Low Altitude Photography; Med Altitude Photography; High Altitude Photography;
Aerial Thermal Infrared Scanner; Radar; Landsat MSS; Landsat RBV; Skylab;
Manual Image Interpretations

PERSONNEL & SKILLS REPRESENTED:

Professional (9)

Engineers (civil, environ.) (2); Physical Scientists (2); Planners (2); Geographers (1);
Biological Scientists (2)

STATEMENT OF CAPABILITIES:

The Photographic Interpretation Corporation, an interdisciplinary consulting firm, has extensive experience in the application of remote sensing techniques for the creation of environmental data bases. PIC's staff includes engineers, geologists, and ecologists and represents many years of experience in the research and application of imagery interpretation to environmental problem solving. Since 1970, PIC has successfully completed projects in twenty-seven states, Canada, Ghana, and Latin America. These projects have been performed for clients from federal, state and local governments and the private sector to develop solutions to problems such as streambank erosion, flood control, water quality, site selection, wildlife habitat, and wetland delineation.

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PHOTOGRAPHIC INTERPRETATION CORP.

PRODUCTS AND SERVICES PROVIDED

IMAGE PRODUCTS

(c) Photo Mosaics; (s) B&W Neg. Transparencies, Contact & Enlarged Prints; Color Neg. Transparencies; Color and Color Infrared Pos. Transparencies, Contact and Enlarged Prints

ENHANCED AND CORRECTED IMAGERY

(c) Photo: Multitemporal Composites; Change Detection; (s) Photo: Contrast Enhanced; Geometric Correction

PHOTOGRAMMETRIC PRODUCTS

(c) Engineering Cross Sections; Stockpile Measurements; Earthwork Measurements; Volumetric Calculations; (s) Topographic Maps; Planimetric Maps; Photo-Contour Maps

INTERPRETED, THEMATIC PRODUCTS

(c) Color Thematic Maps; Land Use Maps; Vegetation/Forestry Maps; Acreage Tabulations; Thematic Map Overlays; Geologic Maps; Transportation Maps; Soils Maps; Tax Maps

PROJECT PLANNING AND SUPPORT SERVICES

Problem Definition; Feasibility Analysis; Selection of Existing Imagery; Data Base Preparation; Air Support Operations; Sensor Selection/Evaluation; Sampling Strategy Design; Ancillary Data Collection; Ground Truth Survey; Data Management; (s) Ground Control Survey; Map Digitizing

AERIAL SURVEY

Low Altitude Photography

IMAGE PROCESSING, INTERPRETATION AND ANALYSIS

Manual Image Interpretation; (s) Photographic Laboratory Processing

PHOTOGRAMMETRIC ENGINEERING

(s) Aerotriangulation; Planimetric Mapping; Stereo Digitizing; Stereocompilation; Topographic Mapping-Small Scale; Topographic Mapping-Large Scale

REPRODUCTION

Printing; (s) Drafting & Scribing; Cartographic Reproduction; Automated Drafting/Plotting

OTHER SERVICES

Remote Sensing Research; Remote Sensing Training; Consultant Services;

NAME: PICKERING RESEARCH CORPORATION

ADDRESS(ES) & CONTACT(S)

1444 Wentworth Ave., (P.O. Box 986)
Pasadena, California 91102
(213) 795-7557
A. H. Pickering

YEARS IN BUSINESS: 4

PROJECTS COMPLETED: 2

REGION SERVED: U.S. & Int'l.

TYPES OF REMOTE SENSING TECHNOLOGIES:

Landsat MSS; Digital Image Interpretations

PERSONNEL & SKILLS REPRESENTED:

Management (3); Professional (5); Technical (2)

Cartographers; Computer Equipment Operators; Engineers (electrical); Image Processing Equipment Operators; Photolab Technicians; Pilots; Planners; Geographers

STATEMENT OF CAPABILITIES:

The Pickering Research Corporation has expertise in computer systems, software development and production of products for remote sensed imagery. It provides complete systems and/or software packages for data management and processing of imaged data. Processing includes error correction, enhancement; mosaicking, geological and land use classification, matching to map projections, statistical listing and analysis. It also furnishes data processing systems to meet customer specifications and products from remote imaged data to satisfy customer requirements.

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FACILITIES AND SPECIAL EQUIPMENT

PRODUCTS AND SERVICES PROVIDED

AIRCRAFTIMAGE PRODUCTSCAMERAS, SCANNERS, AND OTHER REMOTE SENSORS

(c) B&W, Color, Color Infrared, and Color Composite Negative Transparencies and Positive Transparencies; Analog Magnetic Tape; Digital Mosaics; Halftone Image Prints; Digital Magnetic Tape; (s) B&W, Color, Color Infrared, and Color Composite Contact Prints and Enlarged Prints

FIELD SURVEY EQUIPMENTENHANCED AND CORRECTED IMAGERY

(c) Photo & Digital: Multitemporal Composites; Contrast Enhanced; Geometric Correction; Density Slice; Change Detection; Multisensor Composites; Radiometric Correction; Image Resampling

PHOTOGRAPHIC PROCESSING EQUIPMENTPHOTOGRAMMETRIC PRODUCTS

(c) Digital Data Bases; Planimetric Maps

PHOTOGRAMMETRIC PROCESSING EQUIPMENTINTERPRETED, THEMATIC PRODUCTSIMAGE INTERPRETATION, VIEWING AND MAPPING (NON-DIGITAL)

Basic System IBM 3033 Computer (1)

PROJECT PLANNING AND SUPPORT SERVICES

Problem Definition; Feasibility Analysis; Selection of Existing Imagery; Ground Control Survey; Map Digitizing; Data Base Preparation; Sensor Selection/Evaluation; Sampling Strategy Design; Ancillary Data Collection; Gray Level Digitizing; Data Management; (s) Air Support Operations; Ground Truth Survey

IMAGE INTERPRETATION, VIEWING AND MAPPING (DIGITAL)

Basic System IBM 3033 Computer (1)

AERIAL SURVEYDIGITIZING, PLOTTING AND GRAPHICSIMAGE PROCESSING, INTERPRETATION AND ANALYSIS

Digital Image Processing; Batch Digital Image/Analysis/Classification; Interactive Digital Image/Analysis/Classification; (s) Photographic Laboratory Processing

OTHER COMPUTER PROCESSINGPHOTOGRAMMETRIC ENGINEERING

Aerotriangulation; Orthophotomapping; Planimetric Mapping; Cross-Sectioning; Topographic Mapping-Small Scale; Topographic Mapping-Large Scale

OTHERREPRODUCTION

(s) Drafting & Scribing; Cartographic Reproduction; Automated Drafting/Plotting; Printing

OTHER SERVICES

Remote Sensing Research; Remote Sensing Training; Statistical Modeling; Consultant Services; Interactive Computer Graphics; Turnkey Systems Sales/Leasing/Service; Software Design/Development; Equipment Sales/Leasing/Service; Software Sales/Leasing; (s) Hardware Design/Development

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PICKERING RESEARCH CORPORATION

REMOTE SENSING EQUIPMENT/SYSTEMS PROVIDED

REMOTE SENSOR SYSTEMS

VIEWING EQUIPMENT

PHOTOGRAMMETRIC EQUIPMENT

DIGITAL IMAG. PROCESSING EQUIPMENT

SOFTWARE

Sell & Lease: Geometric Correction; Radiometric Correction; Image Enhancement;
Multispectral Classification

INTEGRATED SYSTEMS

Sell & Lease: Geometric Correction; Radiometric Correction; Image Enhancement;
Multispectral Classification

OTHER EQUIPMENT

NAME: PRECISION PHOTO LABORATORIES

ADDRESS(ES) & CONTACT(S)

5758 N. Webster Street
Dayton, Ohio 45414
(513) 898-7450
Fred Tuzzi, Mel Kruser

4241 "B" Street, Suite 102
Anchorage, Alaska 99503
(907) 274-3596
Keith Nelson

YEARS IN BUSINESS: 13

PROJECTS COMPLETED: _____

REGION SERVED: U.S. & Int'l.

TYPES OF REMOTE SENSING TECHNOLOGIES:

Low Altitude Aerial Photo; Med Altitude Aerial Photo; High Altitude Aerial Photo

SMALL BUSINESS CONTRACTOR? Yes

MINORITY-OWNED BUSINESS? _____

TOTAL APPLICABLE EMPLOYEES: 43

PERSONNEL & SKILLS REPRESENTED:

Management (6); Professional (1); Technical (27); Other (9)

Photolab Technicians; Photo Scientist

STATEMENT OF CAPABILITIES:

Precision Photo Laboratories is a full service photographic laboratory offering complete color and black and white service to the aerial photographic industry. The laboratory is equipped with two Kodak RT Ektachrome processors and a Kodak Model 11 Versamat film processor. These, along with complete sensitometric and densitometric capabilities, provide processing services which are of the highest precision obtainable. Printing services include the ability to produce color enlargements up to 48" x 100" on Eastman Ektacolor Paper and up to 40" x 100" on Cibachrome reversal material. Three LogEtronic Mark III & Mark IV printers are used to produce color contact prints from color negative film. Also provided at Precision Color Laboratories are black and white and color film diapositives, color and black and white aerial film duplication in roll form or single frames, and a complete mounting and laminating service.

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FACILITIES AND SPECIAL EQUIPMENT

AIRCRAFTCAMERAS, SCANNERS, AND OTHER REMOTE SENSORSFIELD SURVEY EQUIPMENTPHOTOGRAPHIC PROCESSING EQUIPMENTPHOTOGRAMMETRIC PROCESSING EQUIPMENT

Color Aerial Film Processor (2)	10x10 enlargers (6)	4'x8' dry mount press (2)
B&W 35 mm Slide processor (1)	Log-E contact printers	5"x7" enlargers (2)
52" Cibachrome processors (3)	B&W Aerial Film processor (1)	
Cold Laminating Machine (2)	52" Cibachrome processor	
<u>IMAGE INTERPRETATION, VIEWING AND MAPPING (NON-DIGITAL)</u>	Log-E Robertson Copy Camera (1)	

IMAGE INTERPRETATION, VIEWING AND MAPPING (DIGITAL)DIGITIZING, PLOTTING AND GRAPHICSOTHER COMPUTER PROCESSINGOTHER

PRODUCTS AND SERVICES PROVIDED

IMAGE PRODUCTS

B&W, Color, and Color Infrared Negative Transparencies, Positive Transparencies, Contact Prints and Enlarged Prints; (c) Color Composite Negative Transparencies, Positive Transparencies, Contact Prints, and Enlarged Prints; Photo Mosaics
ENHANCED AND CORRECTED IMAGERY

PHOTOGRAMMETRIC PRODUCTSINTERPRETED, THEMATIC PRODUCTSPROJECT PLANNING AND SUPPORT SERVICES

Feasibility Analysis

AERIAL SURVEYIMAGE PROCESSING, INTERPRETATION AND ANALYSIS

Photographic Laboratory Processing

PHOTOGRAMMETRIC ENGINEERINGREPRODUCTION

Printing (Photographic)

OTHER SERVICES

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PRECISION PHOTO LABORATORIES

REMOTE SENSING EQUIPMENT/SYSTEMS PROVIDED

REMOTE SENSOR SYSTEMS

VIEWING EQUIPMENT

PHOTOGRAMMETRIC EQUIPMENT

DIGITAL IMAGE PROCESSING EQUIPMENT

SOFTWARE

INTEGRATED SYSTEMS

OTHER EQUIPMENT

Sell: Aerial Film; Photo Processing Equip.; Silver Recovery Systems

NAME: PURDUE, LABORATORY FOR APPLICATIONS OF REMOTE SENSING, (LARS)

ADDRESS(ES) & CONTACT(S)

1220 Potter Drive
West Lafayette, Indiana 47906
(317) 749-2052
David A. Landgrebe, Director

YEARS IN BUSINESS: 14

PROJECTS COMPLETED: over 100

REGION SERVED: U.S., Intl.

TYPES OF REMOTE SENSING TECHNOLOGIES:

Low Altitude Aerial Photo; Med Altitude Aerial Photo; High Altitude Aerial Photo; Aerial Multispectral Scanner; Aerial Thermal Infrared Scanner; Radar; Geophysical Survey; Landsat MSS; Landsat RBV; Skylab; Weather Satellite; Digital Image Interpretations; Manual Image Interpretations

PERSONNEL & SKILLS REPRESENTED:

Management (3); Professional (50); Technical (22); Other (58)

Computer Equip Oper.; Computer Programmers; Civil, environ., & electrical Engineers; Field Surveyors; Image Processing Equip. Oper.; Soil Scientists; Photogrammatists; Photogrammetric Equip. Oper.; Photointerpreters; Physical Scientists; Geographers;

STATEMENT OF CAPABILITIES:

Purdue University's Laboratory for Applications of Remote Sensing (LARS) is an interdisciplinary research organization established to develop techniques and applications for the timely analysis of earth resource information; utilizing data collected from field, aircraft and spacecraft sensor systems. The LARS team is drawn from the staffs of various departments primarily within the schools of agriculture, engineering and science. This team has been responsible for pioneering many of the developments in remote sensing technology. In the process, LARS has become one of the world's leading research and training centers in the areas of computer-assisted processing, analysis and interpretation of remotely sensed data and its applications.

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FACILITIES AND SPECIAL EQUIPMENT

AIRCRAFT (1)

Specific type not indicated.

CAMERAS, SCANNERS, AND OTHER REMOTE SENSORS (6)

Specific type not indicated.

FIELD SURVEY EQUIPMENT (4)

Specific type not indicated.

PHOTOGRAPHIC PROCESSING EQUIPMENT

PHOTOGRAMMETRIC PROCESSING EQUIPMENT (2)

Specific type not indicated.

IMAGE INTERPRETATION, VIEWING AND MAPPING (NON-DIGITAL) (1)

Specific type not indicated.

IMAGE INTERPRETATION, VIEWING AND MAPPING (DIGITAL) (3)

Specific type not indicated.

DIGITIZING, PLOTTING AND GRAPHICS (2)

Specific type not indicated.

OTHER COMPUTER PROCESSING (2)

Specific type not indicated.

OTHER

PRODUCTS AND SERVICES PROVIDED

IMAGE PRODUCTS

Half-tone Image Prints; Digital Magnetic Tapes;
B&W and Color Negative Transparencies, Positive Transparencies, Contact Prints and
Enlarged Prints; (c) Color Infrared and Color Composite Negative Transparencies,
Positive Transparencies, Contact Prints and Enlarged Prints; Photo Mosaics; Thermograms;
ENHANCED AND CORRECTED IMAGERY Photo Atlas Sheets; Digital Mosaics;

(c) Photo & Digital: Multitemporal Composites; Contrast Enhanced; Geometric Correction;
Density Slice; Change Detection; Multisensor Composites; Radiometric Correction; Image
Resampling

PHOTOGRAMMETRIC PRODUCTS

INTERPRETED, THEMATIC PRODUCTS

(c) Color Thematic Maps; Land Use Maps; Vegetation/Forestry Maps; Acreage Tabulations;
Geocoded Data Bases; Thematic Map Overlays; Geologic Maps; Soils Maps; Digital Magnetic
Tapes

PROJECT PLANNING AND SUPPORT SERVICES

Feasibility Analysis; Selection of Existing Imagery; Map Digitizing; Data Base
Preparation; Sensor Selection/Evaluation; Sampling Strategy Design; Ancillary Data
Collection; Ground Truth Survey; Gray Level Digitizing; Data Management; (s) Air
Support Operations

AERIAL SURVEY

Low Altitude Photography; (s) Thermal Infrared; Radar; Geophysical; High Altitude
Photography; Multispectral Scanner

IMAGE PROCESSING, INTERPRETATION AND ANALYSIS

Digital Image Processing; Batch Digital Image/Analysis/Classification; Interactive
Digital Image/Analysis/Classification; Manual Image Interpretation; (s) Photographic
Laboratory Processing

PHOTOGRAMMETRIC ENGINEERING

REPRODUCTION

OTHER SERVICES

Remote Sensing Research; Remote Sensing Training; Statistical Modeling; Consultant
Services; Interactive Computer Graphics; Computer Services; Software Design/Development;
Software Sales/Leasing

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C-3

NAME: RAMTEKADDRESS(ES) & CONTACT(S)

RAMTEK CORPORATION
7979 Old Georgetown Road, Suite 900
Bethesda, Maryland 20014
(301) 656-0350
TWX 710-824-0557
Ted Dyer

Pepper Pike, OH 44122
Burlington, MA 01803
East Brunswick, NJ 08816

Dayton, OH 45414
Maitland, FL 32751
Huntsville, AL 35805
Santa Clara, CA 95050
Santa Ana, CA 92704
Albuquerque, NM 87110
Plano, TX 75074
Arlington Heights, IL 60006
Federal Way, WA 98003

YEARS IN BUSINESS: 9SMALL BUSINESS CONTRACTOR? NoPROJECTS COMPLETED: over 50MINORITY-OWNED BUSINESS? NoREGION SERVED: U.S. & Int'l.TOTAL APPLICABLE EMPLOYEES: _____TYPES OF REMOTE SENSING TECHNOLOGIES:

Aerial Multispectral Scanner; Aerial Thermal Infrared Scanner; Radar; Landsat MSS;
Landsat RBV; Seasat; Skylab; Weather Satellite; Digital Image Interpretations

PERSONNEL & SKILLS REPRESENTED:

N/A

STATEMENT OF CAPABILITIES:

Design and manufacture of digital image processing systems for remote sensing applications. Features include ultra-high resolution gray scale and/or color display with pan and zoom hardware and video lookup tables for image enhancement and pseudocoloring.

REMOTE SENSING EQUIPMENT/SYSTEMS PROVIDEDREMOTE SENSOR SYSTEMSVIEWING EQUIPMENTPHOTOGRAMMETRIC EQUIPMENTDIGITAL IMAGE PROCESSING EQUIPMENT

Sell: B&W Image Displays; Color Image Displays

SOFTWAREINTEGRATED SYSTEMSOTHER EQUIPMENTORIGINAL PAGE IS
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NAME: RAPID COLOR, INC.

RAPID COLOR, INC.

ADDRESS(ES) & CONTACT(S)

1236 So. Central Ave.
Glendale, California 91204
(213) 240-6100
Mark Kramer

165 Second Street
San Francisco, California 94105
(415) 392-1776
Jeff Dooley

FACILITIES AND SPECIAL EQUIPMENT

16661 Milliken Ave.
Irvine, California 92714
(714) 979-5050
Barry Henshaw

YEARS IN BUSINESS: 11

PROJECTS COMPLETED: N/A

REGION SERVED: U.S.

TYPES OF REMOTE SENSING TECHNOLOGIES:

SMALL BUSINESS CONTRACTOR? No

MINORITY-OWNED BUSINESS? No

TOTAL APPLICABLE EMPLOYEES: _____

AIRCRAFT

CAMERAS, SCANNERS, AND OTHER REMOTE SENSORS

FIELD SURVEY EQUIPMENT

PHOTOGRAPHIC PROCESSING EQUIPMENT (2)

PHOTOGRAMMETRIC PROCESSING EQUIPMENT

IMAGE INTERPRETATION, VIEWING AND MAPPING (NON-DIGITAL)

IMAGE INTERPRETATION, VIEWING AND MAPPING (DIGITAL)

DIGITIZING, PLOTTING AND GRAPHICS

OTHER COMPUTER PROCESSING

OTHER

Log-E Printers (3)
Enlargers (3)
Large Print Mounting Equipment

PERSONNEL & SKILLS REPRESENTED:

Management (2); Technical (2)

Image Processing Equip. Oper.

STATEMENT OF CAPABILITIES:

Color film processing negative and positive 70mm through 9½" format. I.R. processing a specialty. LogE Printing as well as large print capabilities to 44x144" type "C" and cibachrome prints and transparencies. Eleven years experience in the production of the finest image.y obtainable.

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RAPID COLOR, INC.

PRODUCTS AND SERVICES PROVIDED

IMAGE PRODUCTS

B&W Contact Prints; Color, Color Infrared, and Color Composite Negative Transparencies, Positive Transparencies, Contact Prints, and Enlarged Prints; (c) Photo Mosaics; B&W Enlarged Prints; (s) B&W Negative Transparencies, and Positive Transparencies

ENHANCED AND CORRECTED IMAGERY

PHOTOGRAMMETRIC PRODUCTS

INTERPRETED, THEMATIC PRODUCTS

PROJECT PLANNING AND SUPPORT SERVICES

AERIAL SURVEY

IMAGE PROCESSING, INTERPRETATION AND ANALYSIS

PHOTOGRAMMETRIC ENGINEERING

REPRODUCTION

OTHER SERVICES

NAME: RCA GOVERNMENT SYSTEMS DIVISION

ADDRESS(ES) & CONTACT(S)

Rt. #38,
Cherry Hill, New Jersey 08358
(609) 338-4188
R.B. Stevens, Bldg. 206-1

Marne Highway
Moorestown, New Jersey 08057
(609) 755-2372
J.G. Durbin, Bldg. 127-201

Front & Cooper Sts.
Camden, New Jersey 08102
(609) 338-2105
F.H. Stelter, Bldg. 13-4

Additional Locations: Washington, D.C.
Dayton, Ohio
Los Angeles, Ca

YEARS IN BUSINESS: 15

PROJECTS COMPLETED: 50

REGION SERVED: U.S.

SMALL BUSINESS CONTRACTOR? _____

MINORITY-OWNED BUSINESS? _____

TOTAL APPLICABLE EMPLOYEES: 110

TYPES OF REMOTE SENSING TECHNOLOGIES:

Aerial Multispectral Scanner; Aerial Thermal Infrared Scanner; Radar; Laser Scanner; Weather Satellite; Digital Image Interpretations

PERSONNEL & SKILLS REPRESENTED:

Management (10); Professional (50); Technical (50)

Computer Equip. Oper.; Computer Programmers; Draftsmen; Engineers (electrical); Image Processing Equip. Oper.; Photointerpreters; Photolab Technicians; Physical Scientists

STATEMENT OF CAPABILITIES:

Design and manufacture products and systems and supply services for Aerospace and Defense.

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PRODUCTS AND SERVICES PROVIDED

REMOTE SENSING EQUIPMENT/SYSTEMS PROVIDED

IMAGE PRODUCTS

REMOTE SENSOR SYSTEMS

Sell: Radars Synthetic Aperture; Radars-Real Aperture; Multispectral Cameras

ENHANCED AND CORRECTED IMAGERY

VIEWING EQUIPMENT

PHOTOGRAMMETRIC PRODUCTS

PHOTOGRAMMETRIC EQUIPMENT

INTERPRETED, THEMATIC PRODUCTS

DIGITAL IMAGE PROCESSING EQUIPMENT

Sell: B&W Image Displays; Color Image Displays

PROJECT PLANNING AND SUPPORT SERVICES

SOFTWARE

Sell: Image Enhancement; Multispectral Classification

Problem Definition; Feasibility Analysis; Selection of Existing Imagery; Map Digitizing; Data Base Preparation; Sensor Selection/Evaluation; Sampling Strategy Design; Ancillary Data Collection; Gray Level Digitizing; Data Management;(s) Ground Control Survey

INTEGRATED SYSTEMS

Sell: Image Enhancement; Multispectral Classification

AERIAL SURVEY

OTHER EQUIPMENT

IMAGE PROCESSING, INTERPRETATION AND ANALYSIS

Digital Image Processing; Batch Digital Image/Analysis/Classification; Interactive Digital Image/Analysis/Classification

PHOTOGRAMMETRIC ENGINEERING

REPRODUCTION

OTHER SERVICES

Remote Sensing Research; Computer Services; Hardware Design/Development; Software Design/Development; Equipment Sales/Leasing/Service

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NAME: RESOURCE INFORMATION ASSOCIATES, INC.

RESOURCE INFORMATION ASSOCIATES, INC.

ADDRESS(ES) & CONTACT(S)

P.O. Box 95
Charlotte, Michigan 48813
(517) 543-5525
Stephen E. Tilmann

PRODUCTS AND SERVICES PROVIDED

IMAGE PRODUCTS

B&W, Color, and Color Infrared Negative Transparencies, Positive Transparencies, Contact Prints, and Enlarged Prints; (c) Color Composite Negative Transparencies, Positive Transparencies, Contact Prints, and Enlarged Prints; Photo Mosaics; Photo Atlas Sheets; Half-tone Image Prints
ENHANCED AND CORRECTED IMAGERY
(c) Photo & Digital: Multitemporal Composites; Contrast Enhanced; Geometric Correction; Density Slice; Change Detection; Multisensor Composites; Image Resampling

YEARS IN BUSINESS: 8

SMALL BUSINESS CONTRACTOR? Yes

PROJECTS COMPLETED: over 12

MINORITY-OWNED BUSINESS? No

REGION SERVED: U.S. & Int'l.

TOTAL APPLICABLE EMPLOYEES: 6

PHOTOGRAMMETRIC PRODUCTS

Digital Data Bases; (s) Orthophotos; Topographic Maps; Digital Terrain Models; Planimetric Maps; Photo-Contour Maps; Plan and Profile Sheets

TYPES OF REMOTE SENSING TECHNOLOGIES:

Low Altitude Aerial Photo; Med Altitude Aerial Photo; High Altitude Aerial Photo; Landsat MSS; Skylab; Manual Image Interpretations

INTERPRETED, THEMATIC PRODUCTS

Geocoded Data Bases; Thematic Map Overlays; Tax Maps; (c) Color Thematic Maps; Land Use Maps; Vegetation/Forestry Maps; Acreage Tabulations; Soils Maps

PERSONNEL & SKILLS REPRESENTED:

Management (2); Professional (2); Technical (2)

Computer Programmers; Photointerpreters; Pilots; Soil Scientists

PROJECT PLANNING AND SUPPORT SERVICES

Problem Definition; Feasibility Analysis; Selection of Existing Imagery; Map Digitizing; Data Base Preparation; Air Support Operations; Sensor Selection/Evaluation; Sampling Strategy Design; Ancillary Data Collection; Ground Truth Survey; Data Management; (s) Ground Control Survey; Gray Level Digitizing

AERIAL SURVEY

Low Altitude Photography; Thermal Infrared; Radar; Geophysical; (s) High Altitude Photography; Multispectral Scanner

IMAGE PROCESSING, INTERPRETATION AND ANALYSIS

Manual Image Interpretation; (s) Digital Image Processing; Batch Digital Image/Analysis/Classification; Interactive Digital Image/Analysis/Classification; Photographic Laboratory Processing

PHOTOGRAMMETRIC ENGINEERING

(s) Aerotriangulation; Orthophotomapping; Planimetric Mapping; Stereo Digitizing; Cross-Sectioning; Stereocompilation; Topographic Mapping-Small Scale; Topographic Mapping-Large Scale

REPRODUCTION

Drafting & Scribing; Cartographic Reproduction; Printing

OTHER SERVICES

Remote Sensing Research; Remote Sensing Training; Statistical Modeling; Consultant Services; Interactive Computer Graphics; Computer Services; Turnkey Systems Sales/Leasing/Service; Hardware Design/Development; Software Design/Development; Software Sales/Leasing; (s) Equipment Sales/Leasing/Service

STATEMENT OF CAPABILITIES:

Resource inventories; specializing in light aircraft aerial surveys; microcomputer geographic information systems; photo interpretation and mapping; forest management; and land assessment systems.

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FACILITIES AND SPECIAL EQUIPMENT

AIRCRAFT

172 Cessna - modified for aerial surveys (1)

CAMERAS, SCANNERS, AND OTHER REMOTE SENSORS

35mm Nikon & 70mm Hasselblad (1 ea)

FIELD SURVEY EQUIPMENT

PHOTOGRAPHIC PROCESSING EQUIPMENT

PHOTOGRAMMETRIC PROCESSING EQUIPMENT

IMAGE INTERPRETATION, VIEWING AND MAPPING (NON-DIGITAL)

IMAGE INTERPRETATION, VIEWING AND MAPPING (DIGITAL)
Various plotting tables & equip. (1)

DIGITIZING, PLOTTING AND GRAPHICS

OTHER COMPUTER PROCESSING
Microcomputer based machinery (1)

OTHER

REMOTE SENSING EQUIPMENT/SYSTEMS PROVIDED

REMOTE SENSOR SYSTEMS

VIEWING EQUIPMENT

PHOTOGRAMMETRIC EQUIPMENT

DIGITAL IMAGE PROCESSING EQUIPMENT

SOFTWARE

INTEGRATED SYSTEMS

OTHER EQUIPMENT

Sell & Lease: Aerial Film; Geographic Information Systems

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NAME: RESOURCES DEVELOPMENT ASSOCIATES

ADDRESS(ES) & CONTACT(S)

1101 N. San Antonio Road, Suite 301
Mountain View, California 94043
(415) 961-9477
Kenneth B. Craib

Foreign Locations: Colombo, Sri Lanka
Djibouti, Djibouti

Main Location: P.O. BOX 239
Los Altos, California 94022
(415) 961-7477
Kenneth B. Craib

YEARS IN BUSINESS: 9SMALL BUSINESS CONTRACTOR? YesPROJECTS COMPLETED: 26MINORITY-OWNED BUSINESS? REGION SERVED: U.S. & Int'l.TOTAL APPLICABLE EMPLOYEES: 35TYPES OF REMOTE SENSING TECHNOLOGIES:

Low Altitude Aerial Photo; Med Altitude Aerial Photo; High Altitude Aerial Photo;
Aerial Multispectral Scanner; Aerial Thermal Infrared Scanner; Radar; Landsat MSS;
Landsat RBV; Seasat; Skylab; Weather Satellite; Digital Image Interpretations;
Manual Image Interpretations

PERSONNEL & SKILLS REPRESENTED:

Management (2); Professional (17); Technical (14); Other (2)
Cartographers (3); Computer Equip. Oper. (2); Computer Programmers (2); Draftsmen (2);
Image Processing Equip. Oper. (2); Soil Scientists (3); Photogrammatists (1);
Photogrammetric Equip. Oper. (1); Photointerpreters (5); Photolab Technicians (1);
Physical Scientists (5); Pilots (1); Geographers (3)

STATEMENT OF CAPABILITIES:

Resources Development Associates (RDA), an international technical assistance and consulting organization, engages in a broad range of activities related to the application of advanced technology to regional development of natural resources. RDA specializes in all phases of natural resources development work including exploration, inventory and analysis. Data acquisition ranges from the classical ground survey to the state-of-the-art technology of remote sensing. RDA personnel have been responsible for major projects in the fields of remote sensing technology and applications of this technology to problems of water pollution, vegetation management, agronomy, soils, geology, forestry, range and urban planning. Recent emphasis has been placed on the economics of remote sensing.

FACILITIES AND SPECIAL EQUIPMENT

AIRCRAFTCAMERAS, SCANNERS, AND OTHER REMOTE SENSORS

35mm SLR (3)

FIELD SURVEY EQUIPMENT

Misc - mapping hardware

PHOTOGRAPHIC PROCESSING EQUIPMENT

Complete b/w and color darkroom (1)

PHOTOGRAMMETRIC PROCESSING EQUIPMENTIMAGE INTERPRETATION, VIEWING AND MAPPING (NON-DIGITAL)

Stereoscopes (4)
Density Slicer (1)

IMAGE INTERPRETATION, VIEWING AND MAPPING (DIGITAL)DIGITIZING, PLOTTING AND GRAPHICS

Digital Planimeter (1)

OTHER COMPUTER PROCESSING

Micro-computer (1)

OTHER

Light tables (2)

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RESOURCES DEVELOPMENT ASSOCIATES

NAME: THE RICHARDS CORP.

PRODUCTS AND SERVICES PROVIDED

IMAGE PRODUCTS

(c) Photo Monies; (a) B&W, Color, Color Infrared, Color Composite Negative Transparencies, Positive Transparencies, Contact Prints, and Enlarged Prints; Halftone Image Prints; Digital Magnetic Tape

ENHANCED AND CORRECTED IMAGERY

(c) Photo; Multitemporal Composites; Contrast Enhanced; Density Slice; Change Detection; Multisensor Composites; (a) Digital; Multitemporal Composites; Contrast Enhanced; Geometric Correction; Density Slice; Change Detection; Multisensor Composites; Photo & Digital Radiometric Correction; Image Resampling; Pseudo Stereo

INTERPRETED, THEMATIC PRODUCTS

(c) Color Thematic Maps; Land Use Maps; Utility Maps; Acreage Tabulations; Geocoded Data Bases; Thematic Map Overlays; Geologic Maps; Soils Maps; Tax Maps; (a) Digital Magnetic Tapes

PROJECT PLANNING AND SUPPORT SERVICES

Problem Definition; Feasibility Analysis; Selection of Existing Imagery; Data Base Preparation; Sensor Selection/Evaluation; Sampling Strategy Design; Ancillary Data Collection; Ground Truth Survey; Data Management; (a) Ground Control Survey; Air Support Operations; Gray Level Digitizing

AERIAL SURVEY

(a) Low Altitude photography; Thermal Infrared; Radar; High Altitude Photography; Multispectral Scanner

IMAGE PROCESSING, INTERPRETATION AND ANALYSIS

Interactive Digital Image/Analysis/Classification; Manual Image Interpretation; (a) Digital Image Processing; Batch Digital Image/Analysis/Classification; Photographic Laboratory Processing

PHOTOGRAMMETRIC ENGINEERING

REPRODUCTION

Drafting & Scribing; (a) Cartographic Reproduction; Automated Drafting/Plotting; Printing

OTHER SERVICES

Remote Sensing Research; Remote Sensing Training; Statistical Modeling; Consultant Services; Software Design/Development; (a) Interactive Computer Graphics

ADDRESS(ES) & CONTACT(S)

1545 Spring Hill Road
McLean, Virginia 22101
(703) 893-8400
Jack D. Brunton

YEARS IN BUSINESS: 22

PROJECTS COMPLETED: _____

REGION SERVED: _____

TYPES OF REMOTE SENSING TECHNOLOGIES:

PERSONNEL & SKILLS REPRESENTED:

STATEMENT OF CAPABILITIES:

R&D on equipment primarily used for optical viewing, display and handling of aerial photography.
Manufacture of same equipment.

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SMALL BUSINESS CONTRACTS: Yes

MINORITY-OWNED BUSINESS? No

TOTAL APPLICABLE EMPLOYEES: _____

PRODUCTS AND SERVICES PROVIDED

REMOTE SENSING EQUIPMENT/SYSTEMS PROVIDED

IMAGE PRODUCTS

REMOTE SENSOR SYSTEMS

ENHANCED AND CORRECTED IMAGERY

VIEWING EQUIPMENT

Sell: Stereoscopes; Lighttables

PHOTOGRAMMETRIC PRODUCTS

PHOTOGRAMMETRIC EQUIPMENT

INTERPRETED, THEMATIC PRODUCTS

DIGITAL IMAGE PROCESSING EQUIPMENT

PROJECT PLANNING AND SUPPORT SERVICES

SOFTWARE

AERIAL SURVEY

INTEGRATED SYSTEMS

IMAGE PROCESSING, INTERPRETATION AND ANALYSIS

OTHER EQUIPMENT

Sell: Measurement Equipment; Photo Processing Equipment

PHOTOGRAMMETRIC ENGINEERING

REPRODUCTION

OTHER SERVICES

Hardware Design/Development; Equipment Sales/Leasing/Service

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NAME: ROBINSON AERIAL SURVEYS, INC.

ROBINSON AERIAL SURVEYS, INC.

ADDRESS(ES) & CONTACT(S)

43 Sparta Avenue
Newton, New Jersey 07860
(201) 333-2511

FACILITIES AND SPECIAL EQUIPMENT

AIRCRAFT

CAMERAS, SCANNERS, AND OTHER REMOTE SENSORS

YEARS IN BUSINESS: 44

SMALL BUSINESS CONTRACTOR? Yes

PROJECTS COMPLETED: 5,000

MINORITY-OWNED BUSINESS? _____

REGION SERVED: U.S.

TOTAL APPLICABLE EMPLOYEES: 12

FIELD SURVEY EQUIPMENT

PHOTOGRAPHIC PROCESSING EQUIPMENT

Kodak Royal Print (1)

LogE Mark 4 (1)

Levy Copy Camera (1)

Zeiss Rectiprojectors (1)

PHOTOGAMMETRIC PROCESSING EQUIPMENT

TYPES OF REMOTE SENSING TECHNOLOGIES:

Low Altitude Aerial Photo; Med Altitude Aerial Photo; Manual Image Interpretations

IMAGE INTERPRETATION, VIEWING AND MAPPING (NON-DIGITAL)

PERSONNEL & SKILLS REPRESENTED:

Management (2); Professional (3); Technical (5); Other (2)

Draftsmen; Photogrammatists; Photogrammetric Equip. Oper.; Photolab Technicians

IMAGE INTERPRETATION, VIEWING AND MAPPING (DIGITAL)

STATEMENT OF CAPABILITIES:

Robinson Aerial Surveys, Inc. is a Photogrammetric Mapping firm having capabilities of in-house large scale topographic mapping geared to serve the engineering/surveying public, utilizing the latest of stereo plotting instrumentation. In addition we maintain and operate an in-house photo lab for reproduction needs of our clients.

DIGITIZING, PLOTTING AND GRAPHICS

Kern PG-2 with DC2B (1)

Kelsh (2)

H.Dell Foster (1)

Jena Stereometrograph (1)

OTHER COMPUTER PROCESSING

Haig-Strait Coordinatograph (1)

OTHER

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ROBINSON AERIAL SURVEYS, INC.

PRODUCTS AND SERVICES PROVIDED

IMAGE PRODUCTS

(c) B&W Neg. & Pos. Transparencies; Photo Mosaics; Halftone Image Prints; (s) Color, Color Infrared, Color Composite Neg. & Pos. Transparencies, Contact and Enlarged Prints

ENHANCED AND CORRECTED IMAGERY

PHOTOGRAMMETRIC PRODUCTS

(c) Topographic Maps; Engineering Cross Sections; Stockpile Measurements; Earthwork Measurements; Planimetric Maps; Photo-Contour Maps; Plan and Profile Sheets; (s) Orthophotos; Digital Terrain Models; Digital Data Bases; Volumetric Calculations; Distance & Angle Measurements

INTERPRETED, THEMATIC PRODUCTS

(c) Acreage Tabulations; (s) Land Use Maps; Vegetation/Forestry Maps; Utility Maps; Geologic Maps; Transportation Maps; Soils Maps; Tax Maps; Digital Magnetic Tapes

PROJECT PLANNING AND SUPPORT SERVICES

Problem Definition; Feasibility Analysis; Selection of Existing Imagery; Data Base Preparation; Sampling Strategy Design; (s) Ground Control Survey; Map Digitizing; Air Support Operations; Ground Truth Survey; Gray Level Digitizing; Data Management

AERIAL SURVEY

Low Altitude Photography; (s) Thermal Infrared; Radar; Geophysical; High Altitude Photography; Multispectral Scanner

IMAGE PROCESSING, INTERPRETATION AND ANALYSIS

Photographic Laboratory Processing; Manual Image Interpretation

PHOTOGRAMMETRIC ENGINEERING

Planimetric Mapping; Stereocompilation; Topographic Mapping-Small Scale; Topographic Mapping-Large Scale; (s) Aerotriangulation; Orthophotomapping; Stereo Digitizing; Cross-Sectioning; Volumetric Calculation

REPRODUCTION

Drafting & Scribing; Cartographic Reproduction; Automated Drafting/Plotting; Printing

OTHER SERVICES

Consultant Services; (s) Interactive Computer Graphics

NAME: SAN JOSE STATE UNIVERSITY, CARTERS LABORATORY, DEPARTMENT OF GEOGRAPHY

ADDRESS(ES) & CONTACT(S)

Washington Square
San Jose, California 95192
(408) 277-3463
Dr. Richard Elledsen

YEARS IN BUSINESS: 10

PROJECTS COMPLETED: 12

REGION SERVED: IX & Int'l.

TYPES OF REMOTE SENSING TECHNOLOGIES:

Low Altitude Aerial Photo; Med Altitude Aerial Photo; High Altitude Aerial Photo; Aerial Multispectral Scanner; Landsat MSS; Landsat RBV; Skylab

PERSONNEL & SKILLS REPRESENTED:

Management (1); Professional (5)

Cartographers; Draftsmen; Image Processing Equip. Oper.; Social Scientists; Photointerpreters; Physical Scientists; Geographers

STATEMENT OF CAPABILITIES:

We are engaged primarily in contract remote sensing, mapping, and analysis. Most of our work supports our primary education mission and emphasizes providing practical work experience for students under faculty direction. Contract work has been done for: U.S. Geological Survey, U.S. Navy, U.S. Army, U.S. Agency for International Development, State of California, NASA, NSF, and numerous local planning and resources agencies.

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SAN JOSE STATE UNIVERSITY, CARTERS LABORATORY
DEPARTMENT OF GEOGRAPHY

PRODUCTS AND SERVICES PROVIDED

IMAGE PRODUCTS

ENHANCED AND CORRECTED IMAGERY

PHOTOGRAMMETRIC PRODUCTS

INTERPRETED, THEMATIC PRODUCTS

(c) Color Thematic Maps; Land Use Maps; Vegetation/Forestry Maps; Acreage Tabulations;
Thematic Map Overlays; Urban Buildings; Urban Spatial Patterns

PROJECT PLANNING AND SUPPORT SERVICES

(s) Problem Definition; Selection of Existing Imagery; Map Digitizing; Data Base
Preparation; Sensor Selection/Evaluation

AERIAL SURVEY

IMAGE PROCESSING, INTERPRETATION AND ANALYSIS

(s) Digital Image Processing; Batch Digital Image/Analysis/Classification; Interactive
Digital Image/Analysis/Classification; Manual Image Interpretation

PHOTOGRAMMETRIC ENGINEERING

REPRODUCTION

(s) Drafting & Scribbling; Cartographic Reproduction

OTHER SERVICES

(s) Remote Sensing Research; Remote Sensing Training; Consultant Services

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NAME: SEISCOM DELTA, INC., DIGITAL IMAGES DIVISION

ADDRESS(ES) & CONTACT(S)

P.O. Box 36928
Houston, Texas 77036
(713) 789-6020
Brian T. Fine

YEARS IN BUSINESS: 4

SMALL BUSINESS CONTRACTOR? No

PROJECTS COMPLETED: 400

AUTHORITY-OWNED BUSINESS? No

REGION SERVED: U.S. & Int'l.

TOTAL APPLICABLE EMPLOYEES: 7

TYPES OF REMOTE SENSING TECHNOLOGIES:

Geophysical Survey; Landsat MSS; Landsat RBV; Digital Image Interpretations; Manual
Image Interpretations; Digital Laser Recording

PERSONNEL & SKILLS REPRESENTED:

Management (1); Professional (2); Technical (3)

Cartographers; Computer Equip. Oper.; Computer Programmers; Image Processing Equip Oper.;
Physical Scientists; Geographers

STATEMENT OF CAPABILITIES:

Provide digital image processing and large format laser recording of digital imagery.
Seiscom Delta provides services in image processing and cartographic preparation
of digital imagery (i.e., Landsat, digitized maps, aircraft scanner, etc.). Seiscom
Delta sells the large format (40" x 73") laser recorders.

FACILITIES AND SPECIAL EQUIPMENT

AIRCRAFTCAMERAS, SCANNERS, AND OTHER REMOTE SENSORSFIELD SURVEY EQUIPMENT

Seismic Collection (Marine and Land)

PHOTOGRAPHIC PROCESSING EQUIPMENTDuPont Cromalin (2), Agfa Film processors (1)
Seischrome II Laser Recorder (1)PHOTOGRAMMETRIC PROCESSING EQUIPMENTIMAGE INTERPRETATION, VIEWING AND MAPPING (NON-DIGITAL)IMAGE INTERPRETATION, VIEWING AND MAPPING (DIGITAL)

Seischrome II (1); Calcomp 42" pen plotter (1); Seischrome II VIS (1)

DIGITIZING, PLOTTING AND GRAPHICSOTHER COMPUTER PROCESSING

Megaseis (SEL 32/77 with AP120B) (2)

OTHER

Full suite of image enhancement software implemented on the SEL 32/77.

PRODUCTS AND SERVICES PROVIDED

IMAGE PRODUCTS

B & W Negative & Positive Transparencies & Contact Prints; Color Separations Negative & Positive Transparencies & Contact Prints; Color, Color Infrared & Color Composite Contact Prints; (c) B & W, Color, Color Infrared, Color Composite, Color Separation Enlarged Prints; Halftone Image Prints; Digital Magnetic Tape; (s) Color, Color Infrared & Color Composite Negative & Positive Transparencies; Photo Mosaics; Digital Mosaics

ENHANCED AND CORRECTED IMAGERY

Digital: Contrast Enhanced; Geometric Correction; Density Slice; Radiometric Correction; Image Resampling; (c) Multitemporal Composites; Multisensor Composites; (s) Change Detection

PHOTOGRAMMETRIC PRODUCTS

(c) Planimetric Maps; Photo-Contour Maps; (s) Digital Terrain Models; Digital Data Bases

INTERPRETED, THEMATIC PRODUCTS

(c) Color Thematic Maps; Land Use Maps; Vegetation/Forestry Maps; Utility Maps; Acreage Tabulations; Thematic Map Overlays; Geologic Maps; Transportation Maps; Soils Maps; Tax Maps; Digital Magnetic Tapes; (s) Geocoded Data Bases

PROJECT PLANNING AND SUPPORT SERVICES

Problem Definition; Feasibility Analysis; Selection of Existing Imagery; (s) Map Digitizing; Data Base Preparation; Sampling Strategy Design; Ancillary Data Collection; Gray Level Digitizing; Data Management

AERIAL SURVEY

(s) Radar; Geophysical

IMAGE PROCESSING, INTERPRETATION AND ANALYSIS

Digital Image Processing; Batch Digital Image/Analysis/Classification; Photographic Laboratory Processing; (s) Manual Image Interpretation; Interactive Digital Image/Analysis/Classification

PHOTOGRAMMETRIC ENGINEERINGREPRODUCTION

Drafting & Scribing; Cartographic Reproduction; Automated Drafting/Plotting; Printing

OTHER SERVICES

Remote Sensing Training; Consultant Services; Computer Services; Turnkey Systems Sales/Leasing/Service; Hardware Design/Development; Software Design/Development; Equipment Sales/Leasing/Service; Software Sales/Leasing (s) Statistical Modeling; Interactive Computer Graphics

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SEISCOM DELTA, INC.

REMOTE SENSING EQUIPMENT/SYSTEMS PROVIDED

REMOTE SENSOR SYSTEMS

VIEWING EQUIPMENT

PHOTOGRAMMETRIC EQUIPMENT

DIGITAL IMAGE PROCESSING EQUIPMENT

Sell & Lease B&W Image Displays; Film Output Recorders

SOFTWARE

Sell: Geometric Correction; Radiometric Correction; Image Enhancement

INTEGRATED SYSTEMS

Sell: Geometric Correction; Radiometric Correction; Image Enhancement

OTHER EQUIPMENT

Sell & Lease: Photo Processing Equip.; Plotters

NAME: JAMES W. SEWALL COMPANY

ADDRESS(ES) & CONTACT(S)

147 Center Street
Old Town, Maine 04468
(207) 827-4456
Stephen Ballew

YEARS IN BUSINESS: 35

PROJECTS COMPLETED: _____

REGION SERVED: U.S.

TYPES OF REMOTE SENSING TECHNOLOGIES:

Low Altitude Aerial Photo; Med. Altitude Aerial Photo; High Altitude Aerial Photo;
Landsat MSS; Digital Image Interpretations; Manual Image Interpretations

PERSONNEL & SKILLS REPRESENTED:

Management (5); Professional (8); Technical (30)

Cartographers (6); Computer Equip. Oper. (1); Computer Programmers (3); Draftsmen (6);
Field Surveyors (10); Photogrammatists (3); Photogrammetric Equip. Oper. (2);
Photointerpreters (5); Photolab Technicians (3); Pilots (4)

STATEMENT OF CAPABILITIES:

The Sewall Company is a multi-disciplined consulting firm specializing in aerial surveys, computer services, engineering, forestry, tax mapping, appraisal, photogrammetry and surveying. Much of our work revolves around the use of aerial photography for photogrammetric mapping, engineering design, tax mapping, and forestry and land use mapping. We specialize in a complete in-house service including the aerial survey and photo processing. More recently we have expanded our photogrammetric and forest mapping capabilities around the use of computer graphics and digitizing.

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FACILITIES AND SPECIAL EQUIPMENT

AIRCRAFT

Aztec C (PA23-250) Twin Engine (1)
 Cherokee-Six (PA32-260) six place (1)
 Cherokee Lance (PA32R-300) (1)

CAMERAS, SCANNERS, AND OTHER REMOTE SENSORS

Zeiss RMK-A 15/23 6" focal length (1)
 Zeiss RMK-A 21/23 8½" focal length (1)
 Zeiss RMK-A 15/23 6" focal length (f-4lens) (1)

FIELD SURVEY EQUIPMENT

Geodometers--Mode 8 Laser & Mode 76 Laser (2)
 Hewlett-Packard 3800 Distance Meters (3)
 Hewlett-Packard 3820A Electronic Total Station (1)

PHOTOGRAPHIC PROCESSING EQUIPMENT

Mark IV & CP 18 Log E Contact Prints (2)
 Aero 20 Logeflo film processor (1)
 10"x10" Simon Enlarger with 40"x40" projection board (1)

PHOTOGRAMMETRIC PROCESSING EQUIPMENT

Wild Pug 4
 Haag-Streit Coordinatorgraph (0.0015" accuracy) (1)

IMAGE INTERPRETATION, VIEWING AND MAPPING (NON-DIGITAL)

Model No. 5030 Kelsh Plotters (3)
 Bausch & Lomb Zoom Transferscope (1)

IMAGE INTERPRETATION, VIEWING AND MAPPING (DIGITAL)

Kern PG-2, Stereo Plotter with Data Tech AT table (1)
 and H.Del Foster 3 Axes Digitizer

DIGITIZING, PLOTTING AND GRAPHICS

Talos Digitizer (1)
 H.Del Foster digitizer (interfaced to PG-2) (1)
 Numonics Digitized Planimeter (1)

OTHER COMPUTER PROCESSING

Digital DEC Data System PDP 11/34 computer (1)

OTHER

Wild T-2 Theodolites (2)
 20"x24" Copy Camera (1)
 30"x40" Vacuum Printer & 48"x60" Vacuum Printer (2)
 Self levelling levels (3)

PRODUCTS AND SERVICES PROVIDED

IMAGE PRODUCTS

B&W Negative Transparencies, Color Transparencies, Contact Prints, and Enlarged Prints;
 (c) Color and Color Infrared Negative Transparencies, Color Transparencies, Contact
 Prints, and Enlarged Prints; Color Composite Negative Transparencies, Positive
ENHANCED AND CORRECTED IMAGERY Transparencies, Contact Prints and Enlarged Prints
 (s) Digital Multitemporal Composites; Contrast Enhanced; Geometric Correction; Density
 Slice; Change Detection; Radiometric Correction

PHOTOGRAMMETRIC PRODUCTS

(c) Topographic Maps; Engineering Cross Sections; Stockpile Measurements; Earthwork
 Measurements; Digital Terrain Models; Digital Data Bases; Planimetric Maps; Photo-
 Contour Maps; Plan and Profile Sheets; Volumetric Calculations; Distance & Angle
 Measurements (s) Orthophotos
INTERPRETED, THEMATIC PRODUCTS
 (c) Land Use Maps; Vegetation/Forestry Maps; Utility Maps; Acreage Tabulations;
 Geocoded Data Bases; Transportation Maps; Tax Maps; (s) Color Thematic Maps;
 Thematic Map Overlays; Soils Maps; Digital Magnetic Tapes

PROJECT PLANNING AND SUPPORT SERVICES

Problem Definition; Feasibility Analysis; Selection of Existing Imagery; Ground
 Control Survey; Map Digitizing; Data Base Preparation; Air Support Operations;
 Sensor Selection/Evaluation; Sampling Strategy Design; Ancillary Data Collection;
 Ground Truth Survey; Gray Level Digitizing; Data Management

AERIAL SURVEY

Low Altitude Photography; (s) Thermal Infrared; High Altitude Photography; Multi-
 spectral Scanner

IMAGE PROCESSING, INTERPRETATION AND ANALYSIS

Photographic Laboratory Processing; Manual Image Interpretation; (s) Digital Image
 Processing; Batch Digital Image/Analysis/Classification

PHOTOGRAMMETRIC ENGINEERING

Aerotriangulation; Orthophotomapping; Planimetric Mapping; Stereo Digitizing; Cross-
 Sectioning; Stereocompilation; Topographic Mapping-Small Scale; Topographic Mapping-
 Large Scale; Volumetric Calculation

REPRODUCTION

Drafting & Scribing; Cartographic Reproduction; Automated Drafting/Plotting; Printing

OTHER SERVICES

Remote Sensing Research; Statistical Modeling; Consultant Services; Interactive
 Computer Graphics; Computer Services; Software Design/Development; Software Sales/
 Leasing

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JAMES W. SEWALL COMPANY

REMOTE SENSING EQUIPMENT/SYSTEMS PROVIDED

REMOTE SENSOR SYSTEMS

VIEWING EQUIPMENT

PHOTOGRAMMETRIC EQUIPMENT

DIGITAL IMAGE PROCESSING EQUIPMENT

SOFTWARE

INTEGRATED SYSTEMS

OTHER EQUIPMENT

Lease 3820 Total Station and 2810 Total Station

NAME: THE SIDWELL COMPANY, INC.

ADDRESS(ES) & CONTACT(S)

28W240 North Ave.
West Chicago, Illinois 60185
(312) 231-0206
Robert W. Meiborg

YEARS IN BUSINESS: 52

SMALL BUSINESS CONTRACTOR? Yes

PROJECTS COMPLETED: unknown

MINORITY-OWNED BUSINESS?

REGION SERVED: IV, V, VI, VII, VIII

TOTAL APPLICABLE EMPLOYEES: 101

TYPES OF REMOTE SENSING TECHNOLOGIES:

Low Altitude Aerial Photo; Med Altitude Aerial Photo

PERSONNEL & SKILLS REPRESENTED:

Management (5); Professional (10); Technical (54); Other (32); Computer Equipment Operators (2); Computer Programmers (1); Draftsmen (40); Field Surveyors (2); Photogrammatists (4); Photogrammetric Equipment Operators (5); Photolab Technicians (6); Pilots (4)

STATEMENT OF CAPABILITIES:

Acquisition of aerial photography, image processing, data interpretation and mapping.

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FACILITIES AND SPECIAL EQUIPMENT

AIRCRAFT

Cessna UC-206 (1)
Cessna 180 (1)

CAMERAS, SCANNERS, AND OTHER REMOTE SENSORS

RMKA 8.5/23 (1)
RMKA 14/23 (2) RMK 30/23 (2)

FIELD SURVEY EQUIPMENT

EDM Equipment

PHOTOGRAPHIC PROCESSING EQUIPMENT

Versimat 11-C
DuPont EFR

PHOTOGRAMMETRIC PROCESSING EQUIPMENT

Kern KG-2 with attables (3)

IMAGE INTERPRETATION, VIEWING AND MAPPING (NON-DIGITAL)

IMAGE INTERPRETATION, VIEWING AND MAPPING (DIGITAL)

DIGITIZING, PLOTTING AND GRAPHICS

H.D. Foster Quantizer (1)
Altek AC-189 (1)

OTHER COMPUTER PROCESSING

Mini computer-Systems Marketing Consolidated. Ltd. (1)

OTHER

Rectifiers (3)

PRODUCTS AND SERVICES PROVIDED

IMAGE PRODUCTS

B & W Negative & Positive Transparencies & Contact & Enlarged Prints; Color & Color Infrared Negative & Positive Transparencies; Photo Mosaics; Photo Atlas Sheets; Halftone Image Prints; (c) Analog Magnetic Tape; Digital Magnetic Tape; Photo Mosaics; Photo Atlas Sheets; Halftone Image Prints; Color Composite Negative & Positive Transparencies; B & W Contact & Enlarged Prints; B & W, Color & Color Infrared Negative & Positive Transparencies; B & W Contact & Enlarged Prints; (s) Color, Color Infrared & Color Composite Contact & Enlarged Prints

PHOTOGRAMMETRIC PRODUCTS

(c) Orthophotos; Topographic Maps; Engineering Cross Sections; Stockpile Measurements; Earthwork Measurements; Digital Terrain Models; Digital Data Bases; Planimetric Maps; Photo-Contour Maps; Plan & Profile Sheets; Volumetric Calculations; Distance & Angle Measurements

INTERPRETED, THEMATIC PRODUCTS

(c) Tax Maps

PROJECT PLANNING AND SUPPORT SERVICES

Problem Definition; Feasibility Analysis; Selection of Existing Imagery; (s) Map Digitizing; Data Base Preparation; Sampling Strategy Design; Ancillary Data Collection; Gray Level Digitizing; Data Management

AERIAL SURVEY

Low Altitude Photography; (s) Thermal Infrared

IMAGE PROCESSING, INTERPRETATION AND ANALYSIS

Photographic Laboratory Processing; Manual Image Interpretation

PHOTOGRAMMETRIC ENGINEERING

Aerotriangulation; Orthophotomapping; Planimetric Mapping; Stereo Digitizing; Cross-Sectioning; Stereocompilation; Topographic Mapping-Small Scale; Topographic Mapping-Large Scale; Volumetric Calculation

REPRODUCTION

Drafting & Scribing; Cartographic Reproduction; Automated Drafting/Plotting

OTHER SERVICES

Consultant Services; Interactive Computer Graphics; Computer Services; Turnkey Systems Sales/Leasing/Service.

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NAME: DAVID C. SMITH & ASSOCIATES

DAVID C. SMITH & ASSOCIATES

ADDRESS(ES) & CONTACT(S)

1734 S.E. Tacoma
Portland, Oregon 97202
(503) 232-5285
David C. Smith

YEARS IN BUSINESS: 15

PROJECTS COMPLETED: 1,000

REGION SERVED: U.S.

SMALL BUSINESS CONTRACTOR? Yes

MINORITY-OWNED BUSINESS? No

TOTAL APPLICABLE EMPLOYEES: 7

TYPES OF REMOTE SENSING TECHNOLOGIES:

Low Altitude Aerial Photo; Med Altitude Aerial Photo; High Altitude Aerial Photo

PERSONNEL & SKILLS REPRESENTED:

Management (1); Professional (3); Technical (3)

Cartographers; Draftsmen; Field Surveyors; Photogrammatists; Photogrammetric Equip. Oper.; Photolab Technicians

STATEMENT OF CAPABILITIES:

Topographic, orthophoto mapping, aerotriangulation, digitizing and cross sections. Drafting and complete photo lab services. Local 6 round control for aerial surveys.

FACILITIES AND SPECIAL EQUIPMENT

AIRCRAFT

Subcontract

CAMERAS, SCANNERS, AND OTHER REMOTE SENSORS

Subcontract

FIELD SURVEY EQUIPMENT

MRA 101 Tellurometer (1); H.P. Distance Meters (2); Kern DKM-2 (1); Zeiss one-second theodolites (1); Kern DKM-1 ten second theodolite (1); Zeiss automatic levels and rods (5); 4-wheel drive vehicles (3)

PHOTOGRAPHIC PROCESSING EQUIPMENT

LogEtronic Printer (1)
Vacuum Frame 38x50" (1)
Acti 32x42 camera (1)

PHOTOGRAMMETRIC PROCESSING EQUIPMENT

OGM plotters (2)
Kern PG-2 plotters (2)
Orthophoto - SPOM (1)

IMAGE INTERPRETATION, VIEWING AND MAPPING (NON-DIGITAL)

IMAGE INTERPRETATION, VIEWING AND MAPPING (DIGITAL)

DIGITIZING, PLOTTING AND GRAPHICS

Kern DC-2 Graphics (1)
Kern DC-2B Graphic (1)
Kern AT Tables (2)

OTHER COMPUTER PROCESSING

OTHER

Office & lab 4,000 sq.ft.
complete supporting equipment for above main items
Olivetti computers (2); H.P. programmable calculator (1); HP 9810 programmable calculator with photogrammetric software package (1); Teletype with paper tape punch (1); IBM 026 card punch with paper tape reader (1)

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DAVID C. SMITH & ASSOCIATES

PRODUCTS AND SERVICES PROVIDED

IMAGE PRODUCTS

B&W Positive Transparencies, Contact Prints, and Enlarged Prints; (c) Photo Mosaics; Photo Atlas Sheets; Halftone Magnetic Tape; (s) Color, Color Infrared, and Color Composite Negative Transparencies, Positive Transparencies, Contact Prints and Enlarged Prints
ENHANCED AND CORRECTED IMAGERY

PHOTOGRAMMETRIC PRODUCTS

(c) Orthophotos; Topographic Maps; Engineering Cross Sections; Stockpile Measurements; Earthwork Measurements; Digital Terrain Models; Digital Data Bases; Planimetric Maps; Photo-Contour Maps; Plan and Profile Sheets; Volumetric Calculations; Distance & Angle Measurements

INTERPRETED, THEMATIC PRODUCTS

PROJECT PLANNING AND SUPPORT SERVICES

Problem Definition; Feasibility Analysis; Selection of Existing Imagery; Ground Control Survey; Map Digitizing; Data Base Preparation; Air Support Operations

AERIAL SURVEY

(c) Low Altitude Photography; Thermal Infrared; Radar; Geophysical; High Altitude Photography; Multispectral Scanner

IMAGE PROCESSING, INTERPRETATION AND ANALYSIS

Photographic Laboratory Processing

PHOTOGRAMMETRIC ENGINEERING

Aerotriangulation; Orthophotomapping; Planimetric Mapping; Stereo Digitizing; Cross-Sectioning; Stereocompilation; Topographic Mapping-Small Scale; Topographic Mapping-Large Scale; Volumetric Calculation

REPRODUCTION

Drafting & Scribing; Cartographic Reproduction; Automated Drafting/Plotting; Printing

OTHER SERVICES

Consultant services

NAME: C.S. SMYTH GEOLOGIST, INC.

ADDRESS(ES) & CONTACT(S)

14044 NE Eighth Street
Bellevue, WA 98007
(206) 746-0333
Steve Smyth

YEARS IN BUSINESS: 54

PROJECTS COMPLETED: 92

REGION SERVED: VIIJ, X

TYPES OF REMOTE SENSING TECHNOLOGIES:

Radar; Geophysical Survey; Landsat MSS; Landsat RBV; Seasat; HCMM; Skylab; Weather Satellite; Digital Image Interpretations.

PERSONNEL & SKILLS REPRESENTED:

Management (1); Professional (3); Technical (1); Other (2); Computer Programmers (1); Photolab Technicians (1); Physical Scientists (2).

STATEMENT OF CAPABILITIES:

Design, analysis, and development of computer programs for, and custom processing of earth satellite (LANDSAT, NOAA, GOES, NIMBUS, SEASAT, HCMM) digital image data; rectification and reformatting of digital image and terrain data; construction of digital terrain models; ore reserve estimation and raster graphics for mining simulations.

SMALL BUSINESS CONTRACTOR? Yes

MINORITY-OWNED BUSINESS?

TOTAL APPLICABLE EMPLOYEES: 7

FACILITIES AND SPECIAL EQUIPMENT

PRODUCTS AND SERVICES PROVIDED

AIRCRAFT

CAMERAS, SCANNERS, AND OTHER REMOTE SENSORS

FIELD SURVEY EQUIPMENT

PHOTOGRAPHIC PROCESSING EQUIPMENT

Color Darkroom (1).

PHOTOGRAMMETRIC PROCESSING EQUIPMENT

IMAGE INTERPRETATION, VIEWING AND MAPPING (NON-DIGITAL)

IMAGE INTERPRETATION, VIEWING AND MAPPING (DIGITAL)

Raster CRT Display (3)
Electrostatic Plotter (1)
Graphic Digitizer (1)

DIGITIZING, PLOTTING AND GRAPHICS

Digital Plotter (1)

OTHER COMPUTER PROCESSING

Digital Equipment Corp. PDP-11/34 Computer (1)
Proprietary Image Processing Software (1)

OTHER

Landsat Digital Image Library for W. Washington (120 tapes)
Digital Terrain Library for W. Washington (25 tapes).

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IMAGE PRODUCTS

B&W, Color, Color Infrared, Color Composite Negative Transparencies, Positive Transparencies, Enlarged Prints; B&W Contact Prints; Digital Mosaics; Halftone Image Prints; Digital Magnetic Tape; Resampled Digital Image Data.

ENHANCED AND CORRECTED IMAGERY

Digital: Multitemporal Composites; Contrast Enhanced; Geometric Correction; Density Slice; Change Detection; Multisensor Composites; Radiometric Correction; Image Resampling; Pseudo Stereo; Perspective Scene Synthesis; Image Annotation

PHOTOGRAMMETRIC PRODUCTS

Digital Terrain Models; Digital Data Bases; Volumetric Calculations; Point-to-point Visibility Maps; (c) Stockpile Measurements; Earthwork Measurements

INTERPRETED, THEMATIC PRODUCTS

Color Thematic Maps; Land Use Maps; Vegetation/Forestry Maps; Utility Maps; Geologic Maps; Soils Maps; Digital Magnetic Tapes; Visibility Maps; Digital Map Magnetic Tapes; (c) Acreage Tabulations, Geocoded Data Bases.

PROJECT PLANNING AND SUPPORT SERVICES

Problem Definition; Feasibility Analysis; Selection of Existing Imagery; Map Digitizing; Data Base Preparation; Sampling Strategy Design; Ancillary Data Collection; Data Management; (s) Ground Control Survey, Air Support Operations, Sensor Selection/Evaluation, Ground Truth Survey, Gray Level Digitizing.

AERIAL SURVEY

(s) Radar, Geophysical, Multispectral Scanner.

IMAGE PROCESSING, INTERPRETATION AND ANALYSIS

Digital Image Processing; Batch Digital Image/Analysis/Classification; Interactive Digital Image/Analysis/Classification; Photographic Laboratory Processing; (s) Manual Image Interpretation.

PHOTOGRAMMETRIC ENGINEERING

REPRODUCTION

Automated Drafting/Plotting; (s) Drafting & Scribing; Cartographic Reproduction; Printing

OTHER SERVICES

Remote Sensing Research; Remote Sensing Training; Statistical Modeling; Consultant Services; Interactive Computer Graphics; Computer Services; Turnkey Systems Sales/Leasing/Service; Software Design/Development; Equipment Sales/Leasing/Service; Software Sales/Leasing (s) Hardware Design/Development.

NAME: SOUTH DAKOTA STATE UNIVERSITY, REMOTE SENSING INSTITUTE

C.S. SMYTH GEOLOGIST, INC.

ADDRESS(ES) & CONTACT(S)

Wenona Hall
South Dakota State University
Brookings, South Dakota 57007
(605) 688-4184
Victor I. Myers

REMOTE SENSING EQUIPMENT/SYSTEMS PROVIDED

REMOTE SENSOR SYSTEMS

VIEWING EQUIPMENT

PHOTOGRAMMETRIC EQUIPMENT

DIGITAL IMAGE PROCESSING EQUIPMENT

SOFTWARE

Sell and Lease Geometric Correction, Radiometric Correc., Image Enhancement, Multi-spectral Classification.

INTEGRATED SYSTEMS

Sell Geometric Correction, Radiometric Correct., Image Enhancement, Multispectral Classification.

OTHER EQUIPMENT

Sell and Lease Geographic Information Systems; Sell Topographic Data Bases, Geological Data Bases.

YEARS IN BUSINESS: 11

SMALL BUSINESS CONTRACTOR? No

PROJECTS COMPLETED: 50

MINORITY-OWNED BUSINESS? No

REGION SERVED: U.S. & Int'l.

TOTAL APPLICABLE EMPLOYEES: 29

TYPES OF REMOTE SENSING TECHNOLOGIES:

Low Altitude Aerial Photo; Med Altitude Aerial Photo; High Altitude Aerial Photo; Aerial Multispectral Scanner; Aerial Thermal Infrared Scanner; Radar; Landsat MSS; Landsat RBV; HCM; Skylab; Weather Satellite; Digital Image Interpretations; Manual Image Interpretations

PERSONNEL & SKILLS REPRESENTED:

Management (3); Professional (21); Other (8)

Computer Equipment Operators (1); Computer Programmers (2); Draftsmen (1); Engineers (civil, environmental) (2); Engineers (electrical) (2); Soil Scientists (3); Photogrammatists (1); Photointerpreters (1); Photolab Technicians (2); Pilots (1); Geographers (1); Wildlife (1)

STATEMENT OF CAPABILITIES:

RSI was established in 1969 and is devoted to research, applications, education, training, and information dissemination in the field of remote sensing. Major emphasis is placed on agriculture, hydrology, and engineering. There are 21 full-time professional employees and additional consultants, part-time employees and student assistants. Support capability includes research and training facilities, aircraft data collection facilities, computer facilities, photographic laboratory, photo-interpretation capability, and graphic arts laboratory. The Institute has successfully participated in many domestic and foreign activities involving South Dakota State agencies, federal agencies, international organizations and foreign governments.

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FACILITIES AND SPECIAL EQUIPMENT

AIRCRAFT

Beechcraft 18 (1)

CAMERAS, SCANNERS, AND OTHER REMOTE SENSORS

Hasselblad 70mm (5)
 K-17 6" and 12" 9x9 (2)
 Thermal Scanner (also L-Band Microwave Radiometer (1ea))

FIELD SURVEY EQUIPMENT

Solameters
 Precision Radiation Thermometer
 Osco Radiometers also Exotech Tediometer

PHOTOGRAPHIC PROCESSING EQUIPMENT

Completely equipped Black and White and Color Photo Labs

PHOTOGRAMMETRIC PROCESSING EQUIPMENT

Complete photo lab for special processing of imagery for photo enhancement, generation of many special photo products

IMAGE INTERPRETATION, VIEWING AND MAPPING (NON-DIGITAL)

I²S (1)
 Zoom Transfer also Reflecting Projector (1 ea)

IMAGE INTERPRETATION, VIEWING AND MAPPING (DIGITAL)

Signal Analysis System (1)

DIGITIZING, PLOTTING AND GRAPHICS

Coordinate Digitizer (1)
 Calcomp Plotter (1)

OTHER COMPUTER PROCESSING

Areas Information System (1)

OTHER

Film Densitometers (3)

PRODUCTS AND SERVICES PROVIDED

IMAGE PRODUCTS

B&W and Color Negative Transparencies, Color Transparencies, Contact Prints and Enlarged Prints; Color Infrared and Color Composite Positive Transparencies, Contact Prints and Enlarged Prints; (c) Photo Mosaics; Analog Magnetic Tape; Thermograms; Halftone Image Prints; Digital Magnetic Tape; (s) Digital Mosaics
ENHANCED AND CORRECTED IMAGERY

(c) Photo: Multitemporal Composites; Contrast Enhanced; Density Slice; Change Detection; Multisensor Composites; Digital: Image Resampling; Change Detection; (s) Digital: Multitemporal Composites; Contrast Enhanced; Geometric Correction; Density Slice; Multisensor Composites

PHOTOGRAMMETRIC PRODUCTS

(c) Digital Data Bases

INTERPRETED, THEMATIC PRODUCTS

(c) Color Thematic Maps; Land Use Maps; Vegetation/Forestry Maps; Utility Maps; Acreage Tabulations; Geocoded Data Bases; Thematic Map Overlays; Geologic Maps; Transportation Maps; Soils Maps; Tax Maps; Digital Magnetic Tapes

PROJECT PLANNING AND SUPPORT SERVICES

Problem Definition; Selection of Existing Imagery; Ground Control Survey; Map Digitizing; Data Base Preparation; Sensor Selection/Evaluation; Sampling Strategy Design; Ancillary Data Collection; Ground Truth Survey; Gray Level Digitizing; Data Management

AERIAL SURVEY

Low Altitude Photography; Thermal Infrared; Radar; Geophysical

IMAGE PROCESSING, INTERPRETATION AND ANALYSIS

Digital Image Processing; Batch Digital Image/Analysis/Classification; Interactive Digital Image/Analysis/Classification; Photographic Laboratory Processing; Manual Image Interpretation

PHOTOGRAMMETRIC ENGINEERINGREPRODUCTION

Drafting & Scribing; Printing

OTHER SERVICES

Remote Sensing Research; Remote Sensing Training; Statistical Modeling; Consultant Services; Interactive Computer Graphics; Computer Services; Software Design/Development

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NAME: SPACE SYSTEMS

ADDRESS(ES) & CONTACT(S)

P.O. Box 1608
Fairbanks, Alaska 99701
(907) 479-2924
William R. Thener

YEARS IN BUSINESS: 2

PROJECTS COMPLETED: 3

REGION SERVED: X & Int'l.

TYPES OF REMOTE SENSING TECHNOLOGIES:

Low Altitude Aerial Photo; Med Altitude Aerial Photo; High Altitude Aerial Photo;
Radar; Landsat MSS; Landsat RBV; Seasat; Skylab(not available in Alaska); Digital
Image Interpretations; Manual Image Interpretations

PERSONNEL & SKILLS REPRESENTED:

Management (1); Professional (1); Technical (2)
Cartographers; Computer Programmers; Draftsmen; Field Surveyors; Social Scientists;
Photogrammatists; Photogrammetric Equip. Oper. Photointerpreters; Pilots; Planners

STATEMENT OF CAPABILITIES:

Value added interpretive services utilizing high altitude photography, satellite
imagery and radar; small format aerial photography and processing; economic
resource planning management and development

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SPACE SYSTEMS

PRODUCTS AND SERVICES PROVIDED

IMAGE PRODUCTS

(c) B&W and Color Infrared Positive Transparencies, Contact Prints; Photo Mosaics;
(s) B&W, Color Infrared Enlarged Prints

ENHANCED AND CORRECTED IMAGERY

(c) Photo: Multitemporal Composites; Density Slice; Change Detection; Multisensor
Composites

PHOTOGRAMMETRIC PRODUCTS

(c) Topographic Maps; Plan and Profile Sheets; Volumetric Calculations

INTERPRETED, THEMATIC PRODUCTS

(c) Color Thematic Maps; Land Use Maps; Vegetation/Forestry Maps; Utility Maps; Acreage
Tabulations; Geocoded Data Bases; Thematic Map Overlays; Geologic Maps; Transportation
Maps; Soils Maps; Wood Fuels/Energy Maps; Marine Plants/Energy Maps

PROJECT PLANNING AND SUPPORT SERVICES

Problem Definition; Feasibility Analysis; Selection of Existing Imagery; Data Base
Preparation; Air Support Operations; Sensor Selection/Evaluation; Sampling Strategy
Design; Ground Truth Survey; Data Management; (s) Ground Control Survey; Map Digitizing;
Ancillary Data Collection

AERIAL SURVEY

Low Altitude Photography; High Altitude Photography; Radar; Multispectral Scanner

IMAGE PROCESSING, INTERPRETATION AND ANALYSIS

Photographic Laboratory Processing; Manual Image Interpretation

PHOTOGRAMMETRIC ENGINEERING

Topographic Mapping--Small Scale; Topographic Mapping--Large Scale; Volumetric Calculation

REPRODUCTION

Drafting & Scribing; Cartographic Reproduction; Printing

OTHER SERVICES

Remote Sensing Research; Remote Sensing Training; Statistical Modeling; Consultant
Services; Turnkey Systems Sales/Leasing/Service; (s) Software Design/Development;
Equipment Sales/Leasing/Service; Software Sales/Leasing

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NAME: SPACE-TEK

ADDRESS(ES) & CONTACT(S)
1666 E. Cypress Avenue
Redding, California 96002
(916) 243-3024
Kent D. Rozelle, President

YEARS IN BUSINESS: 1 SMALL BUSINESS CONTRACTOR? Yes
PROJECTS COMPLETED: 1 MINORITY-OWNED BUSINESS? No
REGION SERVED: U.S. TOTAL APPLICABLE EMPLOYEES: 3

TYPES OF REMOTE SENSING TECHNOLOGIES:

Low Altitude Aerial Photo; Med Altitude Aerial Photo; High Altitude Aerial Photo;
Landsat MSS; Landsat RBV; Skylab; Manual Image Interpretation

PERSONNEL & SKILLS REPRESENTED:

Management (1); Professional (2)
Photointerpreters; Planners; Geographers

STATEMENT OF CAPABILITIES:

SPACE-TEK offers a broad range of services to both government and private sectors. We specialize in resource inventories and analysis for forestry and vegetation, land use and land cover, wetlands and water resources, agricultural studies, and geologic investigations. Our remote sensing services include interpretation of satellite, high flight, and low altitude aerial photography or imagery. We specialize in false color photointerpretation for vegetation in stress analysis. Other services include development site screening, thematic mapping, data collection and management, and environmental impact assessments.

SPACE SYSTEMS

FACILITIES AND SPECIAL EQUIPMENT

AIRCRAFT

Cessna 206 or 172 (1)

CAMERAS, SCANNERS, AND OTHER REMOTE SENSORS

Small format reconnaissance cameras (2)

FIELD SURVEY EQUIPMENT

Transit/chain crew equipment

PHOTOGRAPHIC PROCESSING EQUIPMENT

PHOTOGRAMMETRIC PROCESSING EQUIPMENT

IMAGE INTERPRETATION, VIEWING AND MAPPING (NON-DIGITAL)
Old delta stereoscope monocomparator (1)

IMAGE INTERPRETATION, VIEWING AND MAPPING (DIGITAL)

DIGITIZING, PLOTTING AND GRAPHICS

OTHER COMPUTER PROCESSING

OTHER

FACILITIES AND SPECIAL EQUIPMENTAIRCRAFTCAMERAS, SCANNERS, AND OTHER REMOTE SENSORSFIELD SURVEY EQUIPMENTPHOTOGRAPHIC PROCESSING EQUIPMENTPHOTOGRAMMETRIC PROCESSING EQUIPMENTIMAGE INTERPRETATION, VIEWING AND MAPPING (NON-DIGITAL)

Topcon mirror stereoscope 6X (2)
Light tables (2)

IMAGE INTERPRETATION, VIEWING AND MAPPING (DIGITAL)DIGITIZING, PLOTTING AND GRAPHICSOTHER COMPUTER PROCESSINGOTHERPRODUCTS AND SERVICES PROVIDEDIMAGE PRODUCTS

(s) B&W, Color, Color Infrared, & Color Composite Negative Transparencies, Positive Transparencies, Contact Prints & Enlarged Prints; Photo Mosaics; Photo Atlas Sheets; Digital Mosaics; Halftone Image Prints; Digital Magnetic Tape

ENHANCED AND CORRECTED IMAGERY

(s) Photo & Digital: Multitemporal Composites; Contrast Enhanced; Geometric Correction; Density Slice; Change Detection; Multisensor Composites; Radiometric Correction; Image Resampling; Pseudo Stereo

PHOTOGRAMMETRIC PRODUCTS

(s) Orthophotos; Topographic Maps; Engineering Cross Sections; Stockpile Measurements; Earthwork Measurements; Digital Terrain Models; Digital Data Bases; Planimetric Maps; Photo-Contour Maps; Plan and Profile Sheets; Volumetric Calculations; Distance & Angle Measurements

INTERPRETED, THEMATIC PRODUCTS

Color Thematic Maps; Land Use Maps; Vegetation/Forestry Maps; Contour Weather Maps; Utility Maps; Acreage Tabulations; Thematic Map Overlays; Geologic Maps; Transportation Maps; Soils Maps; Tax Maps; (s) Geocoded Data Bases; Digital Magnetic Tapes

PROJECT PLANNING AND SUPPORT SERVICES

Problem Definition; Feasibility Analysis; Selection of Existing Imagery; Data Base Preparation; Sensor Selection/Evaluation; Sampling Strategy Design; Ancillary Data Collection; Ground Truth Survey; Data Management; (s) Ground Control Survey; Map Digitizing; Air Support Operations; Gray Level Digitizing

AERIAL SURVEY

(s) Low Altitude Photography; Thermal Infrared; High Altitude Photography; Multispectral Scanner

IMAGE PROCESSING, INTERPRETATION AND ANALYSIS

Manual Image Interpretation; (s) Digital Image Processing; Batch Digital Image/Analysis/Classification; Interactive Digital Image/Analysis/Classification; Photographic Lab Processing

PHOTOGRAMMETRIC ENGINEERING

(s) Aerotriangulation; Orthophotomapping; Planimetric Mapping; Stereo Digitizing; Cross-Sectioning; Stereocompilation; Topographic Mapping-Small Scale; Topographic Mapping-Large Scale; Volumetric Calculation

REPRODUCTION

Drafting & Scribing; (s) Cartographic Reproduction; Drafting & Scribing; Automated Drafting/Plotting; Printing

OTHER SERVICES

Remote Sensing Research; Remote Sensing Training; Consultant Services; (s) Interactive Computer Graphics; Computer Services

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NAME: SPATIAL DATA SYSTEMS

SPATIAL DATA SYSTEMS

ADDRESS(ES) & CONTACT(S)

503 So. Fairview Ave., (P.O. Box 249)
Costa, California 93017
(805) 967-2328
M. Stanley Schlosser

YEARS IN BUSINESS: 11

PROJECTS COMPLETED: _____

REGION: 901

SMALL BUSINESS CONTRACTOR? _____

MINORITY-OWNED BUSINESS? _____

TOTAL APPLICABLE EMPLOYEES: _____

TYPES OF REMOTE SENSING TECHNOLOGIES:

Digital & Analog Image Processing

REMOTE SENSING EQUIPMENT/SYSTEMS PROVIDED

REMOTE SENSOR SYSTEMS

VIEWING EQUIPMENT

Sell: Density Slicers

PHOTOGRAMMETRIC EQUIPMENT

DIGITAL IMAGE PROCESSING EQUIPMENT

Sell: B&W Image Displays; Image Digitizers; Color Image Displays

SOFTWARE

INTEGRATED SYSTEMS

Sell: Image Enhancement; Multispectral Classification

OTHER EQUIPMENT

PERSONNEL & SKILLS REPRESENTED:

STATEMENT OF CAPABILITIES:

Analog System: Datscolor as color density slicer edge enhancer to measure density, area, enhance edges in film images; Digital Systems: Eyecom Multispectral image processing systems provide software and hardware to analyse film or computer compatible tapes to ratio, classify; density slice, measure areas, determine histograms, edge enhance and color code features.

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NAME: SPECTRAL DATA CORP.

SPECTRAL DATA CORP.

ADDRESS(ES) & CONTACT(S)

112 Parkway Drive South
Hauppauge, New York 11727
(516) 543-4441
Dr. Edward Yost

1500 Wilson Blvd., Suite 810
Arlington, Virginia 22209
(703) 243-0660
William Smith

YEARS IN BUSINESS: 11

SMALL BUSINESS CONTRACTOR? Yes

PROJECTS COMPLETED: over 50

MINORITY-OWNED BUSINESS? _____

REGION SERVED: I,II,III,IV,V, IX, &
Int'l.

TOTAL APPLICABLE EMPLOYEES: 19

TYPES OF REMOTE SENSING TECHNOLOGIES:

Low Altitude Aerial Photo; Med Altitude Aerial Photo; Landsat MSS; Landsat RBV; Skylab;
Digital Image Interpretations; Manual Image Interpretations

PERSONNEL & SKILLS REPRESENTED:

Management (2); Professional (10); Technical (3); Other (4)

Engineers (electrical); Image Processing Equip. Oper.(1); Photogrammatists (1);
Photointerpreters (2); Photolab Technicians (2); Physical Scientists (2);
Geographers (1)

STATEMENT OF CAPABILITIES:

Spectral Data incorporated in New York in 1969. Company personnel; principal investigations; Landsat & Skylab; Applications programs agriculture, forestry, range resources, interpretation techniques development, mineral resources. Principal contractor to USAID operating remote sensing applications and training centers in developing nations. Conducted Landsat mapping programs for USGS using Landsat Imagery; Manufacturers multispectral cameras, additive color viewers, photographic printers and spectroradiometers.

FACILITIES AND SPECIAL EQUIPMENT

AIRCRAFT

CAMERAS, SCANNERS, AND OTHER REMOTE SENSORS

Multispectral cameras (4)
9x9 K-17 (1)
70mm (4)

FIELD SURVEY EQUIPMENT

PHOTOGRAPHIC PROCESSING EQUIPMENT

Color Processing (1)
B&W Processing (1)
Auto M.S. Printing (1)

PHOTOGRAMMETRIC PROCESSING EQUIPMENT

IMAGE INTERPRETATION, VIEWING AND MAPPING (NON-DIGITAL)

Additive Colorviewers (2)

IMAGE INTERPRETATION, VIEWING AND MAPPING (DIGITAL)

Digital Image Analysis (1)

DIGITIZING, PLOTTING AND GRAPHICS

Digitizing (1)

OTHER COMPUTER PROCESSING

OTHER

Telespectroradiometer/digital (2)
Truck Field Laboratory (1)

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PRODUCTS AND SERVICES PROVIDED**IMAGE PRODUCTS**

B&W, Color, Color Infrared, and Color Composites Negative Transparencies, Positive Transparencies, Contact Prints, and Enlarged Prints; Halftone Image Prints; Thermograms; (s) Photo Mosaics; Photo Atlas Sheets

ENHANCED AND CORRECTED IMAGERY

Photo: Multitemporal Composites; Contrast Enhanced; Digital: Density Slice; (c) Photo: Multisensor Composites

PHOTOGRAMMETRIC PRODUCTS**INTERPRETED, THEMATIC PRODUCTS**

(c) Color Thematic Maps; Land Use Maps; Vegetation/Forestry Maps; Utility Maps; Acreage Tabulations; Thematic Map Overlays; Geologic Maps; Soils Maps

PROJECT PLANNING AND SUPPORT SERVICES

Problem Definition; Feasibility Analysis; Selection of Existing Imagery; Data Base Preparation; Sensor Selection/Evaluation; Sampling Strategy Design; Ancillary Data Collection; Ground Truth Survey; Gray Level Digitizing; Data Management; (s) Air Support Operations

AERIAL SURVEY

Low Altitude Photography; Multispectral Photography; (s) Thermal Infrared; Radar; Geophysical; High Altitude Photography; Multispectral Scanner

IMAGE PROCESSING, INTERPRETATION AND ANALYSIS

Photographic Laboratory Processing; Manual Image Interpretation; (s) Digital Image Processing; Batch Digital Image/Analysis; Classification; Interactive Digital Image/Analysis/Classification

PHOTOGRAMMETRIC ENGINEERING

(s) Aerotriangulation; Orthophotomapping; Planimetric Mapping; Stereo Digitizing; Cross-Sectioning; Stereocompilation; Topographic Mapping-Small Scale; Topographic Mapping-Large Scale; Volumetric Calculation

REPRODUCTION

(s) Drafting & Scribing; Cartographic Reproduction; Automated Drafting/Plotting; Printing

OTHER SERVICES

Remote Sensing Research; Remote Sensing Training; Statistical Modeling; Consultant Services; Turnkey Systems Sales/Leasing/Service; Hardware Design/Development; Equipment Sales/Leasing/Service; (s) Interactive Computer Graphics; Computer Services; Software Design; Development

REMOTE SENSING EQUIPMENT/SYSTEMS PROVIDED**REMOTE SENSOR SYSTEMS**

Sell & Lease: Reconnaissance Cameras; Multispectral Cameras; Handheld Aerial Cameras; Lease: Metric Cameras

VIEWING EQUIPMENT

Lease: Density Slicers; Sell & Lease: Monocular Magnifiers; Stereoscopes; Color Additive Viewers

PHOTOGRAMMETRIC EQUIPMENT**DIGITAL IMAGE PROCESSING EQUIPMENT****SOFTWARE****INTEGRATED SYSTEMS****OTHER EQUIPMENT**

Sell: Aerial Film; Sell & Lease: Spectrometers; Measurement Equipment; Photo Processing Equip.; Field Equipment

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NAME: STONEROCK AERIAL SURVEYS

ADDRESS(ES) & CONTACT(S)

7990 M-15
Clarkston, Michigan 48016
(313) 625-4890
Gary R. Stonerock

YEARS IN BUSINESS: 15

SMALL BUSINESS CONTRACTOR? Yes

PROJECTS COMPLETED: _____

MINORITY-OWNED BUSINESS? _____

REGION SERVED: U.S.

TOTAL APPLICABLE EMPLOYEES: 15

TYPES OF REMOTE SENSING TECHNOLOGIES:

Low Altitude Aerial Photo; Med Altitude Aerial Photo

PERSONNEL & SKILLS REPRESENTED:

Management (1); Professional (2); Technical (3); Other (9)
Computer Equip. Oper.; Draftsmen; Field Surveyors; Photogrammatists; Photogrammetric
Equip. Oper.; Photolab Technicians; Pilots

STATEMENT OF CAPABILITIES:

Offer aerial photogrammetric mapping, photography, and land surveying and construction
layout.

FACILITIES AND SPECIAL EQUIPMENT

AIRCRAFT

Twin 320-D Skyknight, Turbo (1)

CAMERAS, SCANNERS, AND OTHER REMOTE SENSORS

Wild RC-8, Certified (1)
T-12, Fairchild (1)
12" & 8 1/4" Cameras (1 ea.)

FIELD SURVEY EQUIPMENT

T-2 Theodolite's, Wild (2)
NIZ Levels, Zeiss (2)
EDM 3800 Hewlett Packard (1)

PHOTOGRAPHIC PROCESSING EQUIPMENT

Kodak Versimat (1)
Log-E Printer - Black & White (1)

PHOTOGAMMETRIC PROCESSING EQUIPMENT

Santonia Z-C Plotter (1)
Kelsh Stereo Plotter (2)
K&E (1)

IMAGE INTERPRETATION, VIEWING AND MAPPING (NON-DIGITAL)

IMAGE INTERPRETATION, VIEWING AND MAPPING (DIGITAL)

DIGITIZING, PLOTTING AND GRAPHICS

OTHER COMPUTER PROCESSING

Computer - Hewlett Packard (1)

OTHER

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STONEROCK AERIAL SURVEYS

PRODUCTS AND SERVICES PROVIDED

IMAGE PRODUCTS

(c) B&W and Color Negative Transparencies; Photo Mosaic; B&W Contact Prints; (s) B&W Pos. Transparencies and Enlarged Prints; Color Positive Transparencies, Contact Prints, and Enlarged Prints

ENHANCED AND CORRECTED IMAGERY

PHOTOGRAMMETRIC PRODUCTS

(c) Topographic Maps; Engineering Cross Sections; Stockpile Measurements; Earthwork Measurements; Planimetric Maps; Photo-Contour Maps; Plan and Profile Sheets; Volumetric Calculations; Distance & Angle Measurements; (s) Orthophotos; Digital Data Bases

INTERPRETED, THEMATIC PRODUCTS

PROJECT PLANNING AND SUPPORT SERVICES

Ground Control Survey; Map Digitizing; Air Support Operations; Ground Truth Survey

AERIAL SURVEY

Low Altitude Photography; High Altitude Photography

IMAGE PROCESSING, INTERPRETATION AND ANALYSIS

Photographic Laboratory Processing

PHOTOGRAMMETRIC ENGINEERING

Planimetric Mapping; Cross-Sectioning; Stereocompilation; Topographic Mapping-Small Scale; Topographic Mapping-Large Scale; Volumetric Calculation; (s) Aerotriangulation; Orthophotomapping; Stereo Digitizing

REPRODUCTION

(s) Drafting & Scribing; Cartographic Reproduction

OTHER SERVICES

Computer Services

NAME: SURDEX CORPORATION

ADDRESS(ES) & CONTACT(S)

520 Mercury Boulevard
Chesterfield, Missouri 63017
(314) 532-3427
Glen R. Buckland, Vice President

YEARS IN BUSINESS: 24

PROJECTS COMPLETED: _____

REGION SERVED: U.S.

TYPES OF REMOTE SENSING TECHNOLOGIES:

Low Altitude Aerial Photo; Med Altitude Aerial Photo; High Altitude Aerial Photo

PERSONNEL & SKILLS REPRESENTED:

Management (4); Professional (6); Technical (36)

Computer Equip. Oper. (2); Computer Programmers (1); Draftsmen (6); Field Surveyors (3); Photogrammatists (6); Photogrammetric Equip. Oper. (11); Photolab Technicians (5); Pilots (4); Planners (4); Photographers, Aerial (4)

STATEMENT OF CAPABILITIES:

Specializing in aerial photography, topographic mapping, analytical photogrammetry, volumetric inventories, electronic field surveys, resource surveys for engineers, public utilities, industrial clients, and government agencies.
Staff with a wide variety of background experience.

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FACILITIES AND SPECIAL EQUIPMENT

AIRCRAFT

Aero Commander 500 Turbo-Charged (1)
 Aero Commander 680 Super-Charged (1)
 Cessna 206 Turbo-Charged (1)

CAMERAS, SCANNERS, AND OTHER REMOTE SENSORS

Zeiss Aerial Camera (153mm FL) (2)
 Zeiss Aerial Camera (85mm FL) (1)

FIELD SURVEY EQUIPMENT

Ten second Theodolite (1)
 One second Theodolite (2)
 EDM measuring instrument (3)
 Automatic and semi-automatic level (4)
PHOTOGRAPHIC PROCESSING EQUIPMENT

Kodak Versimat (1)
 LogE Printer (2)
 Kargyl copy camera (1)
 K&E horizontal enlarger (1)

PHOTOGRAMMETRIC PROCESSING EQUIPMENT

Kelsh (4)
 Kern PG2 (1)
 Santoni ICC (1)
 Santoni G6 (1)

IMAGE INTERPRETATION, VIEWING AND MAPPING (NON-DIGITAL)

Altek Digitizer AC 100 (1)
 Kern Monocomparator (1)

IMAGE INTERPRETATION, VIEWING AND MAPPING (DIGITAL)

Dell Foster RSS 400 Quantizer (1)
 Wild Pug Transfer (1)
 Data Tech Auto Plotting Table (2)
 Altek Transducer Digitizing Table (1)
DIGITIZING, PLOTTING AND GRAPHICS
 Hewlett Packard 1000 Computer System (1)
 Altek Microprocessor (1)

OTHER COMPUTER PROCESSINGOTHER

PRODUCTS AND SERVICES PROVIDED

IMAGE PRODUCTS

(c) B&W, Color, Color Infrared, and Color Composite Negative Transparencies, Positive Transparencies, Contact Prints, and Enlarged Prints; Photo Mosaics; Photo Atlas Sheets; Analog Magnetic Tape; Halftone Image Prints; Digital Magnetic Tape

ENHANCED AND CORRECTED IMAGERYPHOTOGRAMMETRIC PRODUCTS

(c) Topographic Maps; Engineering Cross Sections; Stockpile Measurements; Earthwork Measurements; Digital Terrain Models; Digital Data Bases; Planimetric Maps; Photo-Contour Maps; Plan and Profile Sheets; Volumetric Calculations; Distance & Angle Measurements
 (s) Orthophotos

INTERPRETED, THEMATIC PRODUCTS

(c) Land Use Maps; Vegetation/Forestry Maps; Utility Maps; Acreage Tabulations; Transportation Maps; Tax Maps; Digital Magnetic Tapes

PROJECT PLANNING AND SUPPORT SERVICES

Selection of Existing Imagery; Ground Control Survey; Map Digitizing; Data Base Preparation; Air Support Operations

AERIAL SURVEY

Low Altitude Photography; High Altitude Photography

IMAGE PROCESSING, INTERPRETATION AND ANALYSIS

Batch Digital Image/Analysis/Classification; Photographic Laboratory Processing

PHOTOGRAMMETRIC ENGINEERING

Aerotriangulation; Planimetric Mapping; Stereo Digitizing; Cross-Sectioning; Stereo-compilation; Topographic Mapping-Small Scale; Topographic Mapping-Large Scale; Volumetric Calculation; (s) Orthophotomapping

REPRODUCTION

Drafting & Scribing; Cartographic Reproduction; Automated Drafting/Plotting; Printing

OTHER SERVICES

Interactive Computer Graphics; Computer Services

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NAME: SYSTEM PLANNING CORPORATION

SYSTEM PLANNING CORPORATION

ADDRESS(ES) & CONTACT(S)

1500 Wilson Blvd.
Arlington, Virginia 22209
(703) 841-2844 or 8863
Andy Schultheis, Vice President, System Engineering
Cliff McLain, Vice President, Product Development

Central Bank Bldg., 200 W. Court Sq., Suite 920
Huntsville, Alabama 35801
(205) 536-6671
Jack Farrington, Manager Huntsville Office

YEARS IN BUSINESS: 9

SMALL BUSINESS CONTRACTOR? Yes

PROJECTS COMPLETED: over 30

MINORITY-OWNED BUSINESS?

REGION SERVED: U.S. & Int'l.

TOTAL APPLICABLE EMPLOYEES: 55

TYPES OF REMOTE SENSING TECHNOLOGIES:

Low Altitude Aerial Photo; Med Altitude Aerial Photo; High Altitude Aerial Photo;
Aerial Multispectral Scanner; Aerial Thermal Infrared Scanner; Radar; Landsat MSS;
Seasat; Weather Satellite; Digital Image Interpretations; Laser Remote Sensing

PERSONNEL & SKILLS REPRESENTED:

Management (6); Professional (16); Technical (28); Other (5)
Draftsmen/Technicians (5); Engineers (civil, environ.) (8); Engineers (electrical) (15)
Social Scientists (5); Physical Scientists (11); Planners (5); Computer Analysts (6)

STATEMENT OF CAPABILITIES:

System Planning Corporation is active in the development of remote sensing systems (sensors and real-time data processing) through evaluation of customer needs, design and assembly of prototypes to meet these needs, and field testing of these prototypes to validate performance and carry out research. We emphasize our ability to develop unique system alternatives which incorporate the best capabilities from a variety of component manufacturers in short periods of time. Customers get field experience on minor alternatives using design breadboards, prior to committing to a separate competitive manufacturing phase for multiple buys. SPC also has procured and operated remote sensing facilities for customers.

FACILITIES AND SPECIAL EQUIPMENT

AIRCRAFT

Leased as needed

CAMERAS, SCANNERS, AND OTHER REMOTE SENSORS

25 channel VRIR Scanner (1)
5 frequency coherent radars (to be 7 channels) (1)
X band coherent radar (1)

FIELD SURVEY EQUIPMENT

FIR Field Instrumentation (1)

PHOTOGRAPHIC PROCESSING EQUIPMENT

PHOTOGRAMMETRIC PROCESSING EQUIPMENT

IMAGE INTERPRETATION, VIEWING AND MAPPING (NON-DIGITAL)

IMAGE INTERPRETATION, VIEWING AND MAPPING (DIGITAL)

DIGITIZING, PLOTTING AND GRAPHICS

RAMTEC Facility (1)

OTHER COMPUTER PROCESSING

OTHER

Instrumented support van (1)

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PRODUCTS AND SERVICES PROVIDED

IMAGE PRODUCTS

Thermograms

ENHANCED AND CORRECTED IMAGERY

PHOTOGRAMMETRIC PRODUCTS

INTERPRETED, THEMATIC PRODUCTS

PROJECT PLANNING AND SUPPORT SERVICES

Problem Definition; Feasibility Analysis; Selection of Existing Imagery; Ground Control Survey; Map Digitizing; Data Base Preparation; Air Support Operations; Sensor Selection/Evaluation; Sampling Strategy Design; Ancillary Data Collection; Ground Truth Survey; Gray Level Digitizing; Data Management

AERIAL SURVEY

Thermal Infrared; Radar; Multispectral Scanner; (s) Low Altitude Photography; High Altitude Photography

IMAGE PROCESSING, INTERPRETATION AND ANALYSIS

PHOTOGRAMMETRIC ENGINEERING

REPRODUCTION

OTHER SERVICES

Remote Sensing Research; Remote Sensing Training; Statistical Modeling; Consultant Services; Interactive Computer Graphics; Computer Services; Hardware Design/Development; Software Design/Development

REMOTE SENSING EQUIPMENT/SYSTEMS PROVIDED

REMOTE SENSOR SYSTEMS

Sell: Radars Synthetic Aperture; Radars-Real Aperture; Multispectral Scanners; Millimeter Wave Sensors; Remote Laser Sensing

VIEWING EQUIPMENT

PHOTOGRAMMETRIC EQUIPMENT

DIGITAL IMAGE PROCESSING EQUIPMENT

SOFTWARE

INTEGRATED SYSTEMS

OTHER EQUIPMENT

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NAME: SYSTEMHOUSE

SYSTEMHOUSE

ADDRESS(ES) & CONTACT(S)

99 Bank Street, 3rd Floor
Ottawa, Ontario K1P 6B9
(613) 236-9734
C.C. Nowell

#2-700 Princess Street
Alexandria, Virginia 22314
(703) 549-8488
W.R. Detwiler

YEARS IN BUSINESS: 6

SMALL BUSINESS CONTRACTOR? _____

PROJECTS COMPLETED: 25

MINORITY-OWNED BUSINESS? _____

REGION SERVED: U.S. & Int'l.

TOTAL APPLICABLE EMPLOYEES: 45

TYPES OF REMOTE SENSING TECHNOLOGIES:

Low Altitude Aerial Photo; Med Altitude Aerial Photo; High Altitude Aerial Photo;
Close Range Photogrammetry; Terrestrial Photography

PERSONNEL & SKILLS REPRESENTED:

Management (5); Professional (40)

Computer Programmers; Photogrammatists; Photogrammetric Equip. Oper.

STATEMENT OF CAPABILITIES:

Systemhouse is a major computer systems design and development company employing over 600 professionals. During the last five years the company has successfully installed turnkey automated cartographic systems for both government and private organizations in the United States, Australia, India and Canada. Systemhouse has also developed a very successful universal analytical stereoplottter called AUTO PLOT, that is now being used in many areas in the photogrammetric industry. Systemhouse is prepared to consider any form of turnkey photogrammetric or cartographic system that is required.

PRODUCTS AND SERVICES PROVIDED

IMAGE PRODUCTS

ENHANCED AND CORRECTED IMAGERY

PHOTOGRAMMETRIC PRODUCTS

Engineering Cross Sections; Stockpile Measurements; Earthwork Measurements; Digital Terrain Models; Digital Data Bases; Planimetric Maps; Photo-Contour Maps; Plan and Profile Sheets; Volumetric Calculations; Distance & Angle Measurements

INTERPRETED, THEMATIC PRODUCTS

PROJECT PLANNING AND SUPPORT SERVICES

Feasibility Analysis; Map Digitizing; Data Base Preparation

AERIAL SURVEY

IMAGE PROCESSING, INTERPRETATION AND ANALYSIS

PHOTOGRAMMETRIC ENGINEERING

Stereo Digitizing; Cross-Sectioning; Stereocompilation; Topographic Mapping-Small Scale; Topographic Mapping-Large Scale; Volumetric Calculation

REPRODUCTION

OTHER SERVICES

Consultant Services; Interactive Computer Graphics; Computer Services; Turnkey Systems Sales/Leasing/Service; Hardware Design/Development; Software Design/Development; Equipment Sales/Leasing/Service; Software Sales/Leasing

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SYSTEMHOUSE

REMOTE SENSING EQUIPMENT/SYSTEMS PROVIDED

REMOTE SENSOR SYSTEMS

VIEWING EQUIPMENT

PHOTOGRAMMETRIC EQUIPMENT

Sell & Lease: Stereo Plotters

DIGITAL IMAGE PROCESSING EQUIPMENT

SOFTWARE

Sell: Geometric Correction

INTEGRATED SYSTEMS

OTHER EQUIPMENT

Sell & Lease: Interactive Graphics Systems; Plotters; Geographic Information Systems

NAME: TECHNICOLOR GRAPHIC SERVICES, INC.

ADDRESS(ES) & CONTACT(S)

P.O. Box 1242
Sioux Falls, South Dakota 57101
(605) 594-6511
H.E. Lockwood

Building 50, Denver Federal Center
Denver, Colorado 80225
(303) 234-6730
Gregg Johnson

Mail Stop 242-4
Moffett Field, California 94035
(415) 965-2961

YEARS IN BUSINESS: 16

SMALL BUSINESS CONTRACTOR?

PROJECTS COMPLETED: 100

MINORITY-OWNED BUSINESS?

REGION SERVED: U.S. & Int'l.

TOTAL APPLICABLE EMPLOYEES: 345

TYPES OF REMOTE SENSING TECHNOLOGIES:

Low Altitude Aerial Photo; Med Altitude Aerial Photo; High Altitude Aerial Photo;
Aerial Multispectral Scanner; Aerial Thermal Infrared Scanner; Landsat MSS; Landsat RBV;
Skylab; Digital Image Interpretations; Manual Image Interpretations

PERSONNEL & SKILLS REPRESENTED:

Management (25); Professional (70); Technical (250)
Computer Equip. Oper.; Computer Programmers; Draftsmen; Engineers (civil, environ.);
Engineers (electrical); Image Processing Equip. Oper.; Soil Scientists; Social
Scientists; Photogrammatists; Photogrammetric Equip. Oper.; Photointerpreters; Photolab
Technicians; Physical Scientists; Planners; Geographers

STATEMENT OF CAPABILITIES:

Government support services contractor for NASA, U.S. Geological Survey, and Bureau
of Land Management. Provide data processing and analysis of electronic and photo-
graphic imagery from LANDSAT and aircraft image gathering platforms; also provide
image interpretation of images from remotely sensed data; produce high quality visual
imagery as well as image enhancement for scientific study.

FACILITIES AND SPECIAL EQUIPMENT***

AIRCRAFTCAMERAS, SCANNERS, AND OTHER REMOTE SENSORSFIELD SURVEY EQUIPMENTPHOTOGRAPHIC PROCESSING EQUIPMENT

Color (24)
B&W (24)

PHOTOGRAMMETRIC PROCESSING EQUIPMENTIMAGE INTERPRETATION, VIEWING AND MAPPING (NON-DIGITAL) (6)IMAGE INTERPRETATION, VIEWING AND MAPPING (DIGITAL) (9)DIGITIZING, PLOTTING AND GRAPHICS (7)OTHER COMPUTER PROCESSING (3)OTHER

***Note: All facilities and equipment are government owned.

PRODUCTS AND SERVICES PROVIDED ***

IMAGE PRODUCTS

B&W, Color, Color Infrared, and Color Composite Negative Transparencies, Positive Transparencies, Contact Prints, and Enlarged Prints; Photo Mosaics; Analog Magnetic Tape; Thermograms; Digital Mosaics; Halftone Image Prints; Digital Magnetic Tape

ENHANCED AND CORRECTED IMAGERY

Photo & Digital: Multitemporal Composites; Contrast Enhanced; Geometric Correction; Density Slice; Change Detection; Multisensor Composites; Radiometric Correction; Image Resampling; Pseudo Stereo

PHOTOGRAMMETRIC PRODUCTS

Orthophotos; Digital Terrain Models; Digital Data Bases

INTERPRETED, THEMATIC PRODUCTS

Color Thematic Maps; Land Use Maps; Vegetation/Forestry Maps; Acreage Tabulations; Geocoded Data Bases; Geologic Maps; Soils Maps; Digital Magnetic Tapes

PROJECT PLANNING AND SUPPORT SERVICES

Problem Definition; Feasibility Analysis; Selection of Existing Imagery; Ground Control Survey; Map Digitizing; Data Base Preparation; Sensor Selection/Evaluation; Sampling Strategy Design; Ancillary Data Collection; Ground Truth Survey; Gray Level Digitizing; Data Management; (s) Air Support Operations

AERIAL SURVEYIMAGE PROCESSING, INTERPRETATION AND ANALYSIS

Digital Image Processing; Batch Digital Image/Analysis/ Classification; Interactive Digital Image/Analysis/Classification; Photographic Laboratory Processing; Manual Image Interpretation

PHOTOGRAMMETRIC ENGINEERINGREPRODUCTION

Cartographic Reproduction; Automated Drafting/Plotting; Printing

OTHER SERVICES

Remote Sensing Research; Remote Sensing Training; Statistical Modeling; Consultant Services; Interactive Computer Graphics; Computer Services; Hardware Design/Development; Software Design/Development

***Products and services listed here are routinely provided as part of government contracts.

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NAME: TECHNOLOGY DEVELOPMENT CORPORATIONADDRESS(ES) & CONTACT(S)

P.O. Box 403
Tullahoma, Tennessee 37388
Dr. F. Shahrokhi

P.O. Box 22027
Nashville, Tennessee 37202
Dr. F. Shahrokhi

YEARS IN BUSINESS: 6SMALL BUSINESS CONTRACTOR? YesPROJECTS COMPLETED: 6MINORITY-OWNED BUSINESS?REGION SERVED: U.S. & Int'l.TOTAL APPLICABLE EMPLOYEES: 10TYPES OF REMOTE SENSING TECHNOLOGIES:

Low Altitude Aerial Photo; Med Altitude Aerial Photo; High Altitude Aerial Photo;
Landsat MSS; Landsat RBV; Skylab; Digital Image Interpretations; Manual Image
Interpretations

PERSONNEL & SKILLS REPRESENTED:

Management (1); Professional (5); Technical (3); Other (1)
Engineers (civil, environ.) (3); Engineers (electrical) (1); Image Processing Equip.
Oper. (1); Photolab Technicians (1); Physical Scientists (2); Pilots (1); Geographers (1)
Secretary (1)

STATEMENT OF CAPABILITIES:

Training seminars in remote sensing, environmental, and earth sciences. Design
of complete facilities. Consultation on start-up and continued operations. Data
analysis. Cooperative activities with Univ. of Tennessee Space Institute.

FACILITIES AND SPECIAL EQUIPMENT

AIRCRAFT

Single-engine (1)

CAMERAS, SCANNERS, AND OTHER REMOTE SENSORS

Multispectral Camera (1)
70mm Camera (1)

FIELD SURVEY EQUIPMENTPHOTOGRAPHIC PROCESSING EQUIPMENT

PHOTOGRAMMETRIC PROCESSING EQUIPMENT
Digital-to-photograph equipment (1)

IMAGE INTERPRETATION, VIEWING AND MAPPING (NON-DIGITAL)

Color Additive Projector (1)
Zoom Transfer Scopes (2)
Stereoscopes (6)

IMAGE INTERPRETATION, VIEWING AND MAPPING (DIGITAL)

Mini-computer & peripherals (1)

DIGITIZING, PLOTTING AND GRAPHICS

Photo-to-digital tape equipment (1)

OTHER COMPUTER PROCESSING

ISI Analog Analysis System (1)

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TECHNOLOGY DEVELOPMENT CORPORATION

PRODUCTS AND SERVICES PROVIDED

IMAGE PRODUCTS

(c) Digital Magnetic Tape; (s) Photo Mosaics

ENHANCED AND CORRECTED IMAGERY

(c) Photo: Density Slice; (s) Digital: Radiometric Correction; Image Resampling;
Photo&Digital Geometric Correction

PHOTOGRAMMETRIC PRODUCTS

(c) Planimetric Maps; (s) Topographic Maps;

INTERPRETED, THEMATIC PRODUCTS

(c) Color Thematic Maps; Land Use Maps; Vegetation/Forestry Maps; Acreage Tabulations;
Geocoded Data Bases; Thematic Map Overlays; Geologic Maps; Transportation Maps; Soils
Maps; Digital Magnetic Tapes

PROJECT PLANNING AND SUPPORT SERVICES

Problem Definition; Feasibility Analysis; Selection of Existing Imagery; Sensor
Selection/Evaluation; Sampling Strategy Design; Ancillary Data Collection; Ground Truth
Survey; Gray Level Digitizing; Data Management; (s) Map Digitizing; Air Support Operations

AERIAL SURVEY

Low Altitude Photography; (s) Thermal Infrared; Multispectral Scanner

IMAGE PROCESSING, INTERPRETATION AND ANALYSIS

Digital Image Processing; Interactive Digital Image/Analysis/Classification; Photographic
Laboratory Processing; Manual Image Interpretation

PHOTOGRAMMETRIC ENGINEERING

Planimetric Mapping; (s) Topographic Mapping-Small Scale; Topographic Mapping-Large Scale

REPRODUCTION

Drafting & Scribing; (s) Cartographic Reproduction; Printing

OTHER SERVICES

Remote Sensing Research; Remote Sensing Training; Statistical Modeling; Consultant
Services; Interactive Computer Graphics; Computer Services; Turnkey Systems Sales/
Leasing/Service; Software Design/Development; Equipment Sales/Leasing/Service; Software
Sales/Leasing

NAME: TELLUROMETER-USA

ADDRESS(ES) & CONTACT(S)

89 Marcus Blvd.
Hauppauge, New York 11787
(516) 231-7710
Roger N. Justice

YEARS IN BUSINESS: _____

PROJECTS COMPLETED: _____

REGION SERVED: Int'l.

TYPES OF REMOTE SENSING TECHNOLOGIES:

SMALL BUSINESS CONTRACTOR? No

MINORITY-OWNED BUSINESS? No

TOTAL APPLICABLE EMPLOYEES: _____

PERSONNEL & SKILLS REPRESENTED:

STATEMENT OF CAPABILITIES:

Manufacture and distribute electronic distance measuring equipment.

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TELLUROMETER-USA

REMOTE SENSING EQUIPMENT/SYSTEMS PROVIDED

REMOTE SENSOR SYSTEMS

VIEWING EQUIPMENT

PHOTO PANNETRIC EQUIPMENT

DIGITAL IMAGE PROCESSING EQUIPMENT

SOFTWARE

INTEGRATED SYSTEMS

OTHER EQUIPMENT

Sell & Lease: Measurement Equipment; EDM

NAME: TERRA COGNITA

ADDRESS(ES) & CONTACT(S)

P.O. BOX 59
Lake Elsinore, California 92330
(714) 674-6455
Gary M. Washburn

YEARS IN BUSINESS: 6

PROJECTS COMPLETED: 4

REGION SERVED: U.S., IX
Int'l.

TYPES OF REMOTE SENSING TECHNOLOGIES:

Low Altitude Aerial Photo; Med Altitude Aerial Photo; High Altitude Aerial Photo;
Aerial Multispectral Scanner; Aerial Thermal Infrared Scanner; Landsat MSS; Landsat RBV;
Skylab; Digital Image Interpretations; Manual Image Interpretations

SMALL BUSINESS CONTRACTOR? Yes

MINORITY-OWNED BUSINESS?

TOTAL APPLICABLE EMPLOYEES: 12

PERSONNEL & SKILLS REPRESENTED:

Management (3); Professional (5); Technical (3); Other (1)

Cartographers; Draftsmen; Field Surveyors; Image Processing Equip. Oper.; Soil
Scientists; Photointerpreters; Physical Scientists; Planners; Geographers

STATEMENT OF CAPABILITIES:

Terra Cognita works in the field of land use and land evaluation for regional planning
and now compiles land data banks for investors of real estate. Training courses
are provided to state, local and overseas requestors who desire to learn technical
aspects in manual remote sensing. Staff training from (ITC) International
Inst. for Aerial Surveying and Earth Science, Holland

FACILITIES AND SPECIAL EQUIPMENTPRODUCTS AND SERVICES PROVIDEDAIRCRAFTIMAGE PRODUCTS

(C) B&W Pos. Transparencies, Contact Prints, and Enlarged Prints; Color Pos. Transp. Contact Prints; Color Infrared Pos. Transparencies, Contact Prints; Color Composite Pos. Transparencies, Contact Prints; Photo Mosaics; Half-tone Image Prints; (s) Color Infrared Enlarged Prints; Color Composite Enlarged Prints

ENHANCED AND CORRECTED IMAGERY

Photo Change Detection; (C) Photo: Multitemporal Composites; Multisensor Composites; Image Resampling; Digital: Contrast Enhanced; Geometric Correction; Density Slice; Change Detection; (s) Photo: Contrast Enhanced; Density Slice; Digital Multitemporal Composites; Multisensor Composites; Radiometric Correction; Image Resampling

PHOTOGRAMMETRIC PRODUCTS

(s) Planimetric Maps

FIELD SURVEY EQUIPMENT

Soil test equip., field camera

PHOTOGRAPHIC PROCESSING EQUIPMENT

Copy camera, lab and lesser processing equip.

PHOTOGRAMMETRIC PROCESSING EQUIPMENTINTERPRETED, THEMATIC PRODUCTS

Land Use Maps; Vegetation/Forestry Maps; Utility Maps; Geocoded Data Bases; (C) Acreage Calculations; Thematic Map Overlays; Transportation Maps; Soils Maps; Tax Maps; Digital Magnetic Tapes; (s) Color Thematic Maps; Contour Weather Maps; Geologic Maps

PROJECT PLANNING AND SUPPORT SERVICES

Problem Definition; Feasibility Analysis; Selection Existing Imagery; Ground Control Survey; Map Digitizing; Data Base Preparation; Sensor Selection/Evaluation; Ancillary Data Collection; Ground Truth Survey; Gery Level Digitizing; Data Management; (s) Air Support Operations; Sampling Strategy Design

AERIAL SURVEY

Low Altitude Photography; (s) Thermal Infrared; Radar; Geophysical; Bath Altitude Photography; Multispectral Scanner

IMAGE PROCESSING, INTERPRETATION AND ANALYSIS

Batch Digital Image/Analysis/Classification; Interactive Digital Image/Analysis/Classification; Manual Image Interpretation; (s) Digital Image Processing; Photographic Laboratory Processing

PHOTOGRAMMETRIC ENGINEERINGREPRODUCTION

Drafting & Scribing; Cartographic Reproduction; Printing; (s) Automated Drafting/Plotting

OTHER SERVICES

Remote Sensing Research; Remote Sensing Training; Consultant Services; (s) Statistical Modeling; Interactive Computer Graphics; Computer Services; Equipment Sales/Lensing/Service

IMAGE INTERPRETATION, VIEWING AND MAPPING (NON-DIGITAL)

Kargle Projector, Topcon Stereoscopes; B&L Stereoscopes, 1² S Color Combiner, Light tables

IMAGE INTERPRETATION, VIEWING AND MAPPING (DIGITAL)

Tectronics Screen, PDP 11/25 computer system

DIGITIZING, PLOTTING AND GRAPHICS

Dell Foster Digitizer

OTHER COMPUTER PROCESSINGOTHER

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TERRA COGNITA

REMOTE SENSING EQUIPMENT/SYSTEMS PROVIDED

REMOTE SENSOR SYSTEMS

Lease: Handheld Aerial Cameras

VIEWING EQUIPMENT

Lease: Monocular Magnifiers; Stereoscopes

PHOTOGRAMMETRIC EQUIPMENT

DIGITAL IMAGE PROCESSING EQUIPMENT

SOFTWARE

INTEGRATED SYSTEMS

OTHER EQUIPMENT

Lease: Geographic Information Systems; Field Equipment

NAME: TOPOGRAPHIC SCIENCIES CORPORATION

ADDRESS(ES) & CONTACT(S)

One Tysons Corner Center Office Bldg.
Suite 208, McLean, Virginia 22102
(703) 827-9501
Juan Cornejo

YEARS IN BUSINESS: 2

SMALL BUSINESS CONTRACTOR? Yes

PROJECTS COMPLETED: 3

MINORITY-OWNED BUSINESS? Yes

REGION SERVED: U.S.

TOTAL APPLICABLE EMPLOYEES: 20

TYPES OF REMOTE SENSING TECHNOLOGIES:

Low Altitude Aerial Photo; Med Altitude Aerial Photo; High Altitude Aerial Photo;
Aerial Multispectral Scanner; Aerial Thermal Infrared Scanner; Landsat MSS;
Manual Image Interpretations; Landsat RBV

PERSONNEL & SKILLS REPRESENTED:

Management (1); Professional (15); Technical (4)

Cartographers (2); Draftsmen (4); Engineers (civil, environ.) (1); Soc. Scientist (1)
Photogrammatists (2); Photointerpretors (1); Physical Scientists (5); Planners (1);
Geographers (2)

STATEMENT OF CAPABILITIES:

Topographic Sciences Corporation provides mapping, photogrammetric, and photo interpretation services to the general business community and to governmental agencies. The services provided include map compilation and revision, color separation and editing. In the photo interpretation field, we provide manual interpretation of soils, woodlands, wetlands, archeological sites, and volumetric measurements of stockpiled materials.

FACILITIES AND SPECIAL EQUIPMENT

PRODUCTS AND SERVICES PROVIDED

AIRCRAFTCAMERAS, SCANNERS, AND OTHER REMOTE SENSORSFIELD SURVEY EQUIPMENT

Wild Heerbrug model T-2 one second theodolite (1)

PHOTOGRAPHIC PROCESSING EQUIPMENT

Brown Process Camera with Nikon f1.9 305mm (1)
Lens, blow-back capability, full instrument panel, internal rectifier and roll film adapter

PHOTOGRAMMETRIC PROCESSING EQUIPMENT

OGM EPIII stereo photogrammetric plotter (1)
OGM EPII stereo photogrammetric plotter (1)

IMAGE INTERPRETATION, VIEWING AND MAPPING (NON-DIGITAL)

Bausch & Lomb SIS95 Stereo Interpretation System (3)
4X Mirror Stereoscope (1)
Parallax Bar (1)

IMAGE INTERPRETATION, VIEWING AND MAPPING (DIGITAL)DIGITIZING, PLOTTING AND GRAPHICSOTHER COMPUTER PROCESSING

OTHER
Complete facility equipped for the compilation, drafting, and edit of topographic maps, special products, and manual aerial photo interpretation (1)

IMAGE PRODUCTS

(c) B&W Neg. Transparencies, Pos. Transparencies, Contact Prints, and Enlarged Prints; Photo Mosaics, Photo Atlas Sheets; Halftone Image Prints; Digital Magnetic Tape;
(s) Color, Color Infrared, and Color Composite Neg. Transparencies, Pos. Transparencies, Contact Prints, and Enlarged Prints

ENHANCED AND CORRECTED IMAGERY

(c) Photo Pseudo Stereo

PHOTOGRAMMETRIC PRODUCTS

(c) Topographic Maps; Engineering Cross Sections; Stockpile Measurements; Earthwork Measurements; Digital Data Bases; Planimetric Maps; Photo-Contour Maps; Plan and Profile Sheets; Volumetric Calculations; Distance & Angle Measurements

INTERPRETED, THEMATIC PRODUCTS

(c) Color Thematic Maps; Land Use Maps; Vegetation/Forestry Maps; Utility Maps; Acreage Tabulations; Geocoded Data Bases; Thematic Map Overlays; Transportation Maps; Soils Maps; Tax Maps; Tax Maps; Digital Magnetic Tapes; Wetland Inventories

PROJECT PLANNING AND SUPPORT SERVICES

Problem Definition; Feasibility Analysis; Selection of Existing Imagery; Ground Control Survey; Map Digitizing; Data Base Preparation; Sensor Selection/Evaluation; Sampling Strategy Design; Ancillary Data Collection; Ground Truth Survey; Data Management

AERIAL SURVEY

(s) Low Altitude Photography

IMAGE PROCESSING, INTERPRETATION AND ANALYSIS

Photographic Laboratory Processing; Manual Image Interpretation

PHOTOGRAMMETRIC ENGINEERING

Aerotriangulation; Planimetric Mapping; Stereo Digitizing; Cross-Sectioning; Stereo-Compilation; Topographic Mapping-Small Scale; Topographic Mapping-Large Scale; Volumetric Calculation

REPRODUCTION

Drafting & Scribing; (s) Cartographic Reproduction

OTHER SERVICES

Remote Sensing Research; Remote Sensing Training; Statistical Modeling; Software Design/Development; Consultant Services

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TREMBLY ASSOCIATES

NAME: TREMBLY ASSOCIATES

ADDRESS(ES) & CONTACT(S)

119 Quincy N.E.
Albuquerque, New Mexico 87108
(505) 266-8616
Rod Chambers

835 W. 22nd Street, Suite A
Tempe, Arizona 85282
(602) 967-2058
Dave Clarkson

2124 S. Birch Street
Denver, Colorado 80222
(303) 759-1195
Dave Dykehouse

Additional Locations:
Salt Lake City, Utah (801) 486-5292
Las Vegas, Nevada (702) 739-6816

YEARS IN BUSINESS: 12

PROJECTS COMPLETED: hundreds

REGION SERVED: _____

TYPES OF REMOTE SENSING TECHNOLOGIES:

SMALL BUSINESS CONTRACTOR? Yes

MINORITY-OWNED BUSINESS? No

TOTAL APPLICABLE EMPLOYEES: 4

PERSONNEL & SKILLS REPRESENTED:

Management (1); Professional (1); Technical (2)

STATEMENT OF CAPABILITIES:

Tremby Associates is an electronic manufacturers representative that sells electronic and electro-optic equipment to government agencies and private businesses--sales personnel have many years experience in thermal sensing, infrared surveys, and equipment and systems usage with expert back-up from engineers and sales personnel in those fields.

PRODUCTS AND SERVICES PROVIDED

IMAGE PRODUCTS

Single line Thermal Scanners; Non-contact Thermometers; (c) Thermograms

ENHANCED AND CORRECTED IMAGERY

PHOTOGRAMMETRIC PRODUCTS

INTERPRETED, THEMATIC PRODUCTS

PROJECT PLANNING AND SUPPORT SERVICES

Ground Truth Survey

AERIAL SURVEY

Thermal Infrared

IMAGE PROCESSING, INTERPRETATION AND ANALYSIS

PHOTOGRAMMETRIC ENGINEERING

REPRODUCTION

OTHER SERVICES

Remote Sensing Research; Turnkey Systems Sales/Leasing/Service; Hardware Design/Development; Software Design/Development; Equipment Sales/Leasing/Service; Software Sales/Leasing

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TREMBLY ASSOCIATES

REMOTE SENSING EQUIPMENT/SYSTEMS PROVIDED

REMOTE SENSOR SYSTEMS

Sell: Multispectral Cameras; Multispectral Scanners

VIEWING EQUIPMENT

PHOTOGRAMMETRIC EQUIPMENT

DIGITAL IMAGE PROCESSING EQUIPMENT

SOFTWARE

INTEGRATED SYSTEMS

Sell: Radiometric Correction

OTHER EQUIPMENT

Sell: Spectrometers; Measurement Equipment

NAME: TRW DEFENSE AND SPACE SYSTEMS GROUP

ADDRESS(ES) & CONTACT(S)

One Space Park
Redondo Beach, California 90278
(213) 535-4321
David M. McKinnon, Donald C. Brabston

YEARS IN BUSINESS: 20

PROJECTS COMPLETED: 28

REGION SERVED: U.S. & Int'l.

TYPES OF REMOTE SENSING TECHNOLOGIES:

Low Altitude Aerial Photo; Med Altitude Aerial Photo; High Altitude Aerial Photo;
Landsat MSS; Landsat RBV; Digital Image Interpretations Landsat MSS

PERSONNEL & SKILLS REPRESENTED:

Management (3); Professional (10); Technical (2); Other (1)

Computer Equip. Operators; Computer Programmers; Engineers (electrical); Physical Scientists

STATEMENT OF CAPABILITIES:

Remote sensing activities of TRW's Defense and Space System Group center on design/development of high volume, throughput, precision digital image processing systems; e.g., the TRW design and built USGS EROS Data Center Digital Image Processing System (EDIPS), or the TRW engineered Japanese Landsat Ground Station, or the analyses, software provided to GE for NASA's Landsat-D image processing system. TRW's activities are supported by sensor data services using the facility's interactive capability; this software/firmware is for sale/lease. TRW's subsidiary, ESL, provides data services and turnkey systems (IDIMS).

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TRW DEFENSE

FACILITIES AND SPECIAL EQUIPMENT

AIRCRAFT

CAMERAS, SCANNERS, AND OTHER REMOTE SENSORS

FIELD SURVEY EQUIPMENT

PHOTOGRAPHIC PROCESSING EQUIPMENT

Full-scale photographic laboratory for color or reproduction work

PHOTOGRAMMETRIC PROCESSING EQUIPMENT

IMAGE INTERPRETATION, VIEWING AND MAPPING (NON-DIGITAL)

254mm roll film light table

IMAGE INTERPRETATION, VIEWING AND MAPPING (DIGITAL)

DIGITIZING, PLOTTING AND GRAPHICS

Ring of 5 computer systems; (2) 512x512 color comtal displays; (1) 1-24x1024 comtal disp.
(1) Evans & Southerland picture system; (20) graphics display terminals; 636 MByres core
and disk data storage; (1) Optronics image reader/writer; (1) optronics photo writer;
(1) FPS AP 120-B Array Processor; (7) magnetic tape drives; (7) line printers; (2) Gould
OTHER COMPUTER PROCESSING Electrostatic Plotters; (1) 30x70" X,Y Digitizer; (7) line
printers; (8) Decwriter Terminals; D/A and A/D converters

OTHER

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TRW DEFENSE

PRODUCTS AND SERVICES PROVIDED

IMAGE PRODUCTS

(c) B&W and Color Neg. and Pos. Transparencies, Contact and Enlarged Prints; Color
Composite Enlarged Prints; Digital Mosaics; Halftone Image Prints; Digital Magnetic Tape

ENHANCED AND CORRECTED IMAGERY

(c) Digital: Multitemporal Composites; Contrast Enhanced; Geometric Correction; Density
Slice; Change Detection; Multisensor Composites; Radiometric Correction; Image Resampling;
Pseudo Stereo

PHOTOGRAMMETRIC PRODUCTS

(c) Digital Terrain Models; Digital Data Bases

INTERPRETED, THEMATIC PRODUCTS

(c) Color Thematic Maps; Digital Magnetic Tapes

PROJECT PLANNING AND SUPPORT SERVICES

Problem Definition; Feasibility Analysis; Selection of Existing Imagery; Sensor Selection/
Evaluation; Sampling Strategy Design; Gray Level Digitizing; Data Management;

AERIAL SURVEY

IMAGE PROCESSING, INTERPRETATION AND ANALYSIS

Digital Image Processing; Interactive Digital Image/Analysis/Classification; Photographic
Laboratory Processing

PHOTOGRAMMETRIC ENGINEERING

REPRODUCTION

OTHER SERVICES

Remote Sensing Research; Statistical Modeling; Consultant Services; Interactive Computer
Graphics; Computer Services; Turnkey Systems Sales/Leasing/Service; Hardware Design/
Development; Software Design/Development; Software Sales/Leasing

TRW DEFENSE

REMOTE SENSING EQUIPMENT/SYSTEMS PROVIDED

REMOTE SENSOR SYSTEMS

VIEWING EQUIPMENT

PHOTOGRAMMETRIC EQUIPMENT

DIGITAL IMAGE PROCESSING EQUIPMENT

SOFTWARE

Lease: Geometric Correction; Radiometric Correction; Sell & Lease: Image Enhancement; Multispectral Classification

INTEGRATED SYSTEMS

Sell: Geometric Correction; Radiometric Correction; Image Enhancement; Multispectral Classification

OTHER EQUIPMENT

NAME: UNIVERSITY OF ALASKA, NORTHERN REMOTE SENSING LABORATORY

ADDRESS(ES) & CONTACT(S)

Geophysical Institute
University of Alaska
Fairbanks, Alaska 99701
(907) 479-7363
John M. Miller

YEARS IN BUSINESS: 8

PROJECTS COMPLETED: over 50

REGION SERVED: X

SMALL BUSINESS CONTRACTOR? _____

MINORITY-OWNED BUSINESS? _____

TOTAL APPLICABLE EMPLOYEES: 20

TYPES OF REMOTE SENSING TECHNOLOGIES:

Low Altitude Aerial Photo; Med Altitude Aerial Photo; High Altitude Aerial Photo; Aerial Thermal Infrared Scanner; Radar; Landsat MSS; Landsat RBV; HCMM; Weather Satellite; Digital Image Interpretations; Manual Image Interpretations; Real-Time Landsat Data

PERSONNEL & SKILLS REPRESENTED:

Management (2); Professional (6); Technical (9); Other (3)

Computer Equip. Oper.; Computer Programmers; Draftsmen; Engineers (electrical); Image Processing Equip. Oper.; Photointerpreters; Photolab Technicians; Physical Scientists; Botanists; Geologists.

STATEMENT OF CAPABILITIES:

Applied remote sensing technology with special emphasis upon northern environments, including evaluation of land suitability, transportation corridors; assessment of timber, minerals, soils and rangeland; real-time surveillance of wildfires, floods, sea-ice and episodic events such as surging glaciers and volcanic activity; mapping of land cover, landforms, lineaments, bedrock, drainage and environmental hazards.

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UNIVERSITY OF ALASKA, NORTHERN REMOTE
SENSING LABORATORY

FACILITIES AND SPECIAL EQUIPMENT

AIRCRAFT

CAMERAS, SCANNERS, AND OTHER REMOTE SENSORS

Exotech 100 AX-M Radiometer (1)

FIELD SURVEY EQUIPMENT

PHOTOGRAPHIC PROCESSING EQUIPMENT

8x10 Color Enlarger (1); LogEtronics Mark IV Dodging Printer (1)

PHOTOGRAMMETRIC PROCESSING EQUIPMENT

IMAGE INTERPRETATION, VIEWING AND MAPPING (NON-DIGITAL)

VP-8 Image Analyzer (1); I²S Color Additive (1); Bausch & Lomb ZTS Zoom Transfer Scope (1)

IMAGE INTERPRETATION, VIEWING AND MAPPING (DIGITAL)

Digital Color Image Optical Recorder (1)

DIGITIZING, PLOTTING AND GRAPHICS

OTHER COMPUTER PROCESSING

DEC VAX 11/780 (1); 67MB Disk Drives (3); La-120 Console (1); LP-11-VA 300 LPM Printer (1); TEU-77A Magnetic Tape Drives (2); Printronics 300 Digital Line Printer (1); HIS 66/40 256K Word + Computer Graphics (1); Tek 4663 2-Pen Plotter (1); Tek 4662 Pen Plotter (1); Tek 4006 CRT Display (1); Tek 4010 CRT Display (1); Tek 4013 CRT Display (1); Tek 4051 CRT Display (1); Tek 4631 Hard Copy Unit (1); Calcomp 10" Drum Plotter (1); Calcomp 30" Drum Plotter (1); Tek 2647A Intelligent Graphics Memory (1); Tek 9872B 4-Pen Plotter (1); Tek 2631G Printer Plotter (1)

OTHER

Muirhead K-560 Facsimile Recorder (1); Nagra 4.2L Tape Recorder (1); Photo Library and Browse File (satellite and aircraft imagery of Alaska, including 30,000 accessions and 200 Landsat digital tapes)

UNIVERSITY OF ALASKA, NORTHERN REMOTE
SENSING LABORATORY

PRODUCTS AND SERVICES PROVIDED

IMAGE PRODUCTS

(c) B&W Negative Transparencies, Contact Prints, and Enlarged Prints; Color, Color Infr. and Color Composite Positive Transparencies, Contact Prints and Enlarged Prints; Photo Mosaics; (s) B&W Positive Transparencies; Color, Color Infrared, and Color Composite Negative Transparencies

ENHANCED AND CORRECTED IMAGERY

(c) Photo Multitemporal Composites; Change Detection; Photo & Digital: Contrast Enhanced; Densit Slice; Multisensor Composites; Digital: Multitemporal Composites; Geometric Correction; Change Detection; Radiometric Correction; Image Resampling; Pseudo Stereo

PHOTOGRAMMETRIC PRODUCTS

INTERPRETED, THEMATIC PRODUCTS

(c) Color Thematic Maps; Land Use Maps; Vegetation/Forestry Maps; Contour Weather Maps; Utility Maps; Acreage Tabulation; Thematic Map Overlays; Geologic Maps; Transportation Maps; Soils Maps; Tax Maps; (s) Geocoded Data Bases; Digital Magnetic Tapes

PROJECT PLANNING AND SUPPORT SERVICES

Problem Definition; Feasibility Analysis; Selection of Existing Imagery; Data Base Preparation; Sensor Selection/Evaluation; Sampling Strategy Design; Ancillary Data Collection; Ground Truth Survey; Gray Level Digitizing; Data Management; (s) Ground Control Survey; Map Digitizing; Air Support Operations;

AERIAL SURVEY

Low Altitude Photography; (s) Thermal Infrared; Radar; High Altitude Photography; Multispectral Scanner

IMAGE PROCESSING, INTERPRETATION AND ANALYSIS

Digital Image Processing; Batch Digital Image/Analysis/Classification; Interactive Digital Image/Analysis/Classification; Photographic Laboratory Processing; Manual Image Interpretation

PHOTOGRAMMETRIC ENGINEERING

REPRODUCTION

Drafting & Scribing

OTHER SERVICES

Remote Sensing Research; Remote Sensing Training; Consultant Services; Computer Services Software Design/Development (s) Interactive Computer Graphics

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NAME: UNIVERSITY OF ARIZONA

ADDRESS(ES) & CONTACT(S)

University of Arizona
Tucson, Arizona 85721
(602) 626-4242
F.N. Slater, Chmn, Committee on Remote Sensing

YEARS IN BUSINESS: over 15

PROJECTS COMPLETED: over 100

REGION SERVED: U.S. & Int'l.

SMALL BUSINESS CONTRACTOR? _____

MINORITY-OWNED BUSINESS? _____

TOTAL APPLICABLE EMPLOYEES: 100

TYPES OF REMOTE SENSING TECHNOLOGIES:

Low Altitude Aerial Photo; Med Altitude Aerial Photo; High Altitude Aerial Photo;
Aerial Multispectral Scanner; Aerial Thermal Infrared Scanner; Radar; Laser Scanner;
Geophysical Survey; Landsat MSS; Landsat RBV; Seasat; HCMM; Skylab; Weather Satellite;
Digital Image Interpretations; Manual Image Interpretations; Digital Classification;
Spectroradiometer; Spectrophotometer; Scanning microdensitometer

PERSONNEL & SKILLS REPRESENTED:

Professional (20); Technical (60); Other (20)

Cartographers; Computer Equip. Oper.; Computer Programmers; Draftsmen; Engineers
(civil, environ.); Engineers (electrical); Field Surveyors; Image Processing Equip.
Oper.; Soil Scientists; Photogrammatists; Photogrammetric Equip. Oper; Photointerpr;
Photolab Technicians; Physical Scientists; Planners; Geographers

STATEMENT OF CAPABILITIES:

The University of Arizona offers excellent facilities for support of remote sensing research. The Digital Image Analysis Laboratory contains a PDP 11/70 computer and a color interactive digital image video display. Comprehensive software is operational for image processing and classification. A CDC Cyber 175 and DEC PDP10 is available for batch and interactive processing; Several units on campus are particularly active in applications of remote sensing to state and local government agency problems. Examples include inventory and hazard mapping of Arizona surface mines, vegetation mapping of parks, rangeland resource assessment, and agricultural analysis.

FACILITIES AND SPECIAL EQUIPMENT

AIRCRAFT

CAMERAS, SCANNERS, AND OTHER REMOTE SENSORS (10)

FIELD SURVEY EQUIPMENT

extensive

PHOTOGRAPHIC PROCESSING EQUIPMENT

complete photo lab

PHOTOGRAMMETRIC PROCESSING EQUIPMENT

IMAGE INTERPRETATION, VIEWING AND MAPPING (NON-DIGITAL)

Stereoscopes (6)
Zoom transferscopes (1)

IMAGE INTERPRETATION, VIEWING AND MAPPING (DIGITAL)

Interactive System with color display(1)

DIGITIZING, PLOTTING AND GRAPHICS

Digitizers (3)

OTHER COMPUTER PROCESSING

Software

OTHER

film scanners (1)

UNIVERSITY OF ARIZONA

PRODUCTS AND SERVICES PROVIDED

IMAGE PRODUCTS

(c) Digital Mosaics; Halftone Image Prints; Digital Magnetic Tapes

ENHANCED AND CORRECTED IMAGERY

(c) Digital: Multitemporal Composites; Contrast Enhanced; Geometric Correction; Density Slice; Change Detection; Multisensor Composites; Radiometric Correction; Image Resampling; Pseudo Stereo

PHOTOGRAMMETRIC PRODUCTS

(c) Digital Data Bases

INTERPRETED, THEMATIC PRODUCTS

(c) Color Thematic Maps; Land Use Maps; Vegetation/Forestry Maps; Acreage Tabulations; Thematic Map Overlays; Geologic Maps; Transportation Maps; Soils Maps; Digital Magnetic Tapes

PROJECT PLANNING AND SUPPORT SERVICES

Problem Definition; Feasibility Analysis; Selection of Existing Imagery; Ground Control Survey; Map Digitizing; Data Base Preparation; Sensor Selection/Evaluation; Sampling Strategy Design; Ancillary Data Collection; Ground Truth Survey; Gray Level Digitizing; Data Management; (s) Air Support Operations

AERIAL SURVEY

(s) Low Altitude Photography; Thermal Infrared; Radar; Geophysical; High Altitude Photography; Multispectral Scanner

IMAGE PROCESSING, INTERPRETATION AND ANALYSIS

Digital Image Processing; Batch Digital Image/Analysis/Classification; Interactive Digital Image/Analysis/Classification; Photographic Laboratory Processing; Manual Image Interpretation; (s) Photographic Laboratory Processing

PHOTOGRAMMETRIC ENGINEERING

REPRODUCTION

Drafting & Scribing; Cartographic Reproduction; Automated Drafting/Plotting; Printing; (s) Automated Drafting/Plotting; Printing

OTHER SERVICES

Remote Sensing Research; Remote Sensing Training; Statistical Modeling; Consultant Services; Interactive Computer Graphics; Computer Services; Hardware Design; Development; Software Design/Development

NAME: UNIVERSITY OF DELAWARE, CENTER FOR REMOTE SENSING

ADDRESS(ES) & CONTACT(S)

University of Delaware
College of Marine Studies
Newark, DE 19711
(302) 730-2336
Dr. Vic Klemas

YEARS IN BUSINESS: 11

PROJECTS COMPLETED: 29

REGION SERVED: U.S. & Int'l.

TYPES OF REMOTE SENSING TECHNOLOGIES:

Low Altitude Aerial Photo; Med Altitude Aerial Photo; High Altitude Aerial Photo; Aerial Multispectral Scanner; Aerial Thermal Infrared Scanner; Laser Scanner; Landsat MSS; Seasat; Skylab; Digital Image Interpretations; Manual Image Interpretations

PERSONNEL & SKILLS REPRESENTED:

Management (2); Professional (6); Technical (5); Other (2)

Cartographers; Computer Programmers; Draftsmen; Engineers (civil, environ.); Field Surveyors; Image Processing Equip. Oper.; Photointerpreters; Photolab Technicians; Physical Scientists; Pilots; Geographers; Oceanographers

STATEMENT OF CAPABILITIES:

Remote sensing of coastal environment and marine resources

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PRODUCTS AND SERVICES PROVIDED

IMAGE PRODUCTS

B&W, Color, Color Infrared Neg. & Pos. Transparencies, Contact & Enlarged Prints;
Photo Mosaics; Photo Atlas Sheets

ENHANCED AND CORRECTED IMAGERY

Digital: Multitemporal Composites; Contrast Enhanced; Geometric Correction; Density Slice;
Change Detection; Multisensor Composites; Radiometric Correction

PHOTOGRAMMETRIC PRODUCTS

INTERPRETED, THEMATIC PRODUCTS

Color Thematic Maps; Land Use Maps; Vegetation/Forestry Maps; Utility Maps; Acreage
Tabulations; Thematic Map Overlays; Geologic Maps; Transportation Maps; Tax Maps

PROJECT PLANNING AND SUPPORT SERVICES

Problem Definition; Feasibility Analysis; Selection of Existing Imagery; Ground Control
Survey; Map Digitizing; Data Base Preparation; Air Support Operations; Sensor Selection/
Evaluation; Sampling Strategy Design; Ancillary Data Collection; Ground Truth Survey;
Gray Level Digitizing; Data Management

AERIAL SURVEY

Low Altitude Photography; Thermal Infrared; High Altitude Photography; Multispectral
Scanner

IMAGE PROCESSING, INTERPRETATION AND ANALYSIS

Digital Image Processing; Batch Digital Image/Analysis/Classification; Photographic
Laboratory Processing; Manual Image Interpretation

PHOTOGRAMMETRIC ENGINEERING

REPRODUCTION

Drafting & Scribing; Cartographic Reproduction; Automated Drafting/Plotting; Printing

OTHER SERVICES

Remote Sensing Research; Remote Sensing Training; Statistical Modeling; Consultant
Services; Interactive Computer Graphics; Computer Services; Software Design/Development

FACILITIES AND SPECIAL EQUIPMENT

AIRCRAFT(1) (SPECIFIC TYPES NOT INDICATED)

CAMERAS, SCANNERS, AND OTHER REMOTE SENSORS (4)

FIELD SURVEY EQUIPMENT (8)

PHOTOGRAPHIC PROCESSING EQUIPMENT (3)

PHOTOGRAMMETRIC PROCESSING EQUIPMENT

IMAGE INTERPRETATION, VIEWING AND MAPPING (NON-DIGITAL) (3)

IMAGE INTERPRETATION, VIEWING AND MAPPING (DIGITAL) (3)

DIGITIZING, PLOTTING AND GRAPHICS (1)

OTHER COMPUTER PROCESSING (2)

OTHER

ORIGINAL PAGE IS
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NAME: UNIVERSITY OF FLORIDA, REMOTE SENSING APPLICATIONS LABORATORY

UNIVERSITY OF FLORIDA,
REMOTE SENSING APPLICATIONS LABORATORY

ADDRESS(ES) & CONTACT(S)

Dept. of Civil Engineering
346 Weil Hall
University of Florida
Gainesville, Florida 32611
(904) 392-1436 or (904) 392-6590
Janet Degner or Byron Ruth

YEARS IN BUSINESS: 5

SMALL BUSINESS CONTRACTOR? No

PROJECTS COMPLETED: 8

MINORITY-OWNED BUSINESS? No

REGION SERVED: IV, Florida only

TOTAL APPLICABLE EMPLOYEES: 3

TYPES OF REMOTE SENSING TECHNOLOGIES:

Low Altitude Aerial Photo; Med Altitude Aerial Photo; High Altitude Aerial Photo;
Aerial Multispectral Scanner; Landsat MSS; Landsat RBV; Seasat

PERSONNEL & SKILLS REPRESENTED:

Professional (2); Technical (1)

Engineers (civil, environ.)

STATEMENT OF CAPABILITIES:

Remote Sensing Applications Laboratory's purpose is to assist and involve government agencies in solving geological or engineering problems and other physical and technical problems. Analysis includes Landsat imagery, aerial photography, and other scientific data. The laboratory is applications-oriented.

FACILITIES AND SPECIAL EQUIPMENT

AIRCRAFT

CESSNA 210 (1)

CAMERAS, SCANNERS, AND OTHER REMOTE SENSORS

FIELD SURVEY EQUIPMENT

available through U of Florida Survey Program

PHOTOGRAPHIC PROCESSING EQUIPMENT

Available through U of Florida

PHOTOGRAMMETRIC PROCESSING EQUIPMENT

IMAGE INTERPRETATION, VIEWING AND MAPPING (NON-DIGITAL)

Zoom Transfer scopes, stereoscopes, etc.
Stereo ZTS

IMAGE INTERPRETATION, VIEWING AND MAPPING (DIGITAL)

Available through Kennedy Space Center

DIGITIZING, PLOTTING AND GRAPHICS

Available through U of Florida

OTHER COMPUTER PROCESSING

University computer system

OTHER

University computer system

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UNIVERSITY OF FLORIDA,
REMOTE SENSING APPLICATIONS LABORATORY

PRODUCTS AND SERVICES PROVIDED

IMAGE PRODUCTS

ENHANCED AND CORRECTED IMAGERY

PHOTOGRAMMETRIC PRODUCTS

INTERPRETED, THEMATIC PRODUCTS

(c) Color Thematic Maps; Land Use Maps; Vegetation/Forestry Maps; Acreage Tabulations; Thematic Map Overlays; (s) Color Thematic Maps; Vegetation/Forestry Maps; Geologic Maps

PROJECT PLANNING AND SUPPORT SERVICES

Problem Definition; Feasibility Analysis; Map Digitizing; Data Base Preparation; Sampling Strategy Design; Ground Truth Survey; Gray Level Digitizing; (s) Feasibility Analysis; Map Digitizing; Data Base Preparation; Air Support Operations; Sampling Strategy Design; Ground Truth Survey; Gray Level Digitizing

AERIAL SURVEY

IMAGE PROCESSING, INTERPRETATION AND ANALYSIS

Digital Image Processing; Batch Digital Image/Analysis/Classification; Interactive Digital Image/Analysis/Classification; Manual Image Interpretation; (s) Digital Image Processing; Batch Digital Image/Analysis/Classification; Interactive Digital Image/Analysis/Classification; Photographic Laboratory Processing; Manual Image Interpretation

PHOTOGRAMMETRIC ENGINEERING

REPRODUCTION

Drafting & Scribing; (s) Cartographic Reproduction; Drafting & Scribing; Automated Drafting/Plotting; Printing

OTHER SERVICES

Remote Sensing Research; (s) Remote Sensing Research

NAME: UNIVERSITY OF KANSAS APPLIED REMOTE SENSING PROGRAM (KARS)

ADDRESS(ES) & CONTACT(S)

2291 Irving Hill Road
Lawrence, Kansas 66045
(913) 864-4775
Dr. Edward A. Martinko

YEARS IN BUSINESS: 8

PROJECTS COMPLETED: 41

REGION SERVED: US, Int'l

SMALL BUSINESS CONTRACTOR? _____

MINORITY-OWNED BUSINESS? _____

TOTAL APPLICABLE EMPLOYEES: 20

TYPES OF REMOTE SENSING TECHNOLOGIES:

Low Altitude Aerial Photo; Med Altitude Aerial Photo; High Altitude Aerial Photo; Aerial Thermal Infrared Scanner; Radar; Landsat MSS; Landsat RBV; Seasat; Skylab; Digital Image Interpretations; Manual Image Interpretations

PERSONNEL & SKILLS REPRESENTED:

Cartographers (3); Computer Equip Operators (1); Computer Programmers (1); Draftsmen (1); Engineers Mech. (1); Photointerpreters (4); Photolab Technicians (1); Geographers (4); Others: Biologists/Ecologists (4)

STATEMENT OF CAPABILITIES:

The KARS Program conducts applied remote sensing research and provides a complete range of services including remote sensing data analysis, field investigations, customized mapping, geo-coding, and statistical analysis.

Projects are designed to aid public agencies and other organizations in using remote sensing technology in decision-making, policy formulation, and in meeting other needs and responsibilities.

Major program areas include land use/land cover inventory and mapping, irrigated lands inventories, wildlife habitat evaluation, strip mined lands assessment, crop and rangeland evaluation, integrated natural resources inventories, geographic information system development and utilization, thematic mapping, and technology transfer/remote sensing education.

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UNIVERSITY OF KANSAS APPLIED REMOTE SENSING PROGRAM
(KARS)

FACILITIES AND SPECIAL EQUIPMENT

AIRCRAFT:

Cessna 180 Skywagon with factory installed camera bay (1)

CAMERAS, SCANNERS, AND OTHER REMOTE SENSORS:

500 EL/M 70mm-hasselblad Multispectral Camera Array (4)
Fairchild CA-8 9 inch Cartographic Camera (1)

PHOTOGRAPHIC PROCESSING EQUIPMENT:

Complete photo lab including: Agfa - Gevaert PHT Processor; Agfa - Gevaert Process Camera; Omega Enlarger; Polaroid MP-3 Copy Camera/Nikon 35mm Camera; Log Etronic Contact Printer; Paco Print Dryer; Nu-Arc 30" x 40" Flip-Top Plate Maker; Nu-Arc 20" x 24" Horizontal Camera; PHT Processor; IBM Composer

IMAGE INTERPRETATION/VIEWING/MAPPING (non-digital):

Bausch and Lomb Zoom Transfer Scope (1); Itek Color Additive Viewer (1); Variscan Rear Projection Viewer/Enlarger (1); Richards GFL-918 LW Light Tables (2); Richards GFL-940 MCE Light Table with Bausch and Lomb Zoom 240 Stereoscope (1); Richards GFL-940 MC Light Tables with Bausch and Lomb Zoom 240 Stereoscopes (2); Saltzman Projector (Reducer/Enlarger) (1); MacBeth Color Spot Densitometer (1); Interpretation Systems Incorporated (ISI) VP-8 Color Video Image Analyzer (1); Old Deft Scanning Stereoscope (1); Bausch and Lomb Multipower Roll Film Stereoscopes, scales, grids, parallax measurement, and other manual image interpretation equipment

IMAGE INTERPRETATION/VIEWING/MAPPING (digital):

Intertec SuperBrain Intelligent Terminal interfaced to University of Kansas Honeywell Level 66 Computer System (KU Shared Mass Storage System); KARS/ LANDSAT image enhancement and multispectral classification software; Interpretation Systems Incorporated (ISI) VDI Image Analyzer (image enhancements, digital image analysis);

DIGITIZING/PLOTTING/GRAPHICS:

Tektronix 4051 DeskTop Graphic Computer with plotter and digitizer; Tektronix 4052 DeskTop Graphic Computer with plotter and floppy disc unit; Hewlett-Packard 7221A Plotter Calcomp 1038 Plotter; ALTEK AC90SM Advanced Micro-Processor Digitizing System (1)

UNIVERSITY OF KANSAS APPLIED REMOTE SENSING PROGRAM
(KARS)

FACILITIES AND SPECIAL EQUIPMENT

OTHER COMPUTER PROCESSING:

Computer software (e.g., STMAP, SURFACE II, SPSS/BMDP) available through the University of Kansas

OTHER EQUIPMENT:

Complete graphic arts darkroom; Berkey Register Punch; Complete range of cartographic drafting and negative scribing equipment

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UNIVERSITY OF KANSAS APPLIED REMOTE SENSING PROGRAM
(KARS)

PRODUCTS AND SERVICES PROVIDED

IMAGE PRODUCTS

Black & White Negative Transparencies, Positive Transparencies, Contact Prints, Enlarged Prints;

ENHANCED AND CORRECTED IMAGERY

PHOTOGRAMMETRIC PRODUCTS

INTERPRETED, THEMATIC PRODUCTS

(c) Color Thematic Maps; Land Use Maps; Vegetation/Forestry Maps; Acreage Tabulations; Geocoded Data Bases; Thematic Map Overlays

PROJECT PLANNING AND SUPPORT SERVICES

Problem Definition; Feasibility Analysis; Selection of Existing Imagery; Map Digitizing Data Base Preparation; (s) Air Support Operations

AERIAL SURVEY

Low altitude photography multispectral in support of KARS Research

IMAGE PROCESSING, INTERPRETATION AND ANALYSIS

Digital Image Processing; Batch Digital Image/Analysis/Classification; Interactive Digital Image/Analysis/Classification; Manual Image Interpretation

PHOTOGRAMMETRIC ENGINEERING

Planimetric Mapping

REPRODUCTION

Drafting & Scribing; Cartographic Reproduction; Automated Drafting/Plotting; (s) Printing

OTHER SERVICES

Remote Sensing Research; Remote Sensing Training; Statistical Modeling; Consultant Services; Interactive Computer Graphics

NAME: UNIVERSITY OF NEW MEXICO, TECHNOLOGY APPLICATIONS CENTER

ADDRESS(ES) & CONTACT(S)

University of New Mexico
Albuquerque, New Mexico 87131
(505) 277-3622
Michael H. Inglis

YEARS IN BUSINESS: 10

PROJECTS COMPLETED: 65

REGION SERVED: U.S. & Int'l.

SMALL BUSINESS CONTRACTOR? No

MINORITY-OWNED BUSINESS? No

TOTAL APPLICABLE EMPLOYEES: 8

TYPES OF REMOTE SENSING TECHNOLOGIES:

Low Altitude Aerial Photo; Med Altitude Aerial Photo; High Altitude Aerial Photo; Aerial Multispectral Scanner; Aerial Thermal Infrared Scanner; Landsat MSS; Landsat RBV; Skylab; Digital Image Interpretations; Manual Image Interpretations

PERSONNEL & SKILLS REPRESENTED:

Management (2); Professional (3); Technical (3);

Cartographers (1); Computer Equip. Oper. (2); Computer Programmers (1); Image Processing Equip. Oper. (1); Photointerpreters (3)

STATEMENT OF CAPABILITIES:

The Technology Application Center Remote Sensing-Natural Resource Division's primary goal is to lend assistance to industry and government in a variety of ways through skilled application of remote sensing technology. We have experience in a number of natural resource areas including water resources, geology, vegetation/habitat mapping, computer processing of Landsat and scanner data, and digitizing. We also have vast experience in conducting remote sensing workshops on remote sensing fundamentals as well as in several of the natural science disciplines.

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FACILITIES AND SPECIAL EQUIPMENT

PRODUCTS AND SERVICES PROVIDED

AIRCRAFT

CAMERAS, SCANNERS, AND OTHER REMOTE SENSORS

FIELD SURVEY EQUIPMENT

Hand-held Thermal Sensors (2)

PHOTOGRAPHIC PROCESSING EQUIPMENT

PHOTOGRAMMETRIC PROCESSING EQUIPMENT

IMAGE INTERPRETATION, VIEWING AND MAPPING (NON-DIGITAL)

Zoom Transfer Scope (1)
Dietzgen Mirror Stereoscope (1)

IMAGE INTERPRETATION, VIEWING AND MAPPING (DIGITAL)

PDP 11/34 DEC (1)

DIGITIZING, PLOTTING AND GRAPHICS

Contrac CRT (1)
Summagraphics Digitizers 36"x48" (1)
Grinnell CRT Interface (1)

Printronic Impact Line Printer (1)

OTHER COMPUTER PROCESSING

Decwriter II (1)
VT-100 Terminal (2)

OTHER

ADM Terminal (1)
Minolta Microfiche Reader-Printer (1)
Texas Instrument Silent-700 Terminal (1)
Numonics Electronic Calculator and Area Planimeter (1)

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IMAGE PRODUCTS

B&W, Color, Color Infrared, and Color Composite Negative Transparencies, Color Transparencies, Contact Prints, and Enlarged Prints; Photo Mosaics, Photo Atlas Sheets; (c) Halftone Image Prints; Digital Magnetic Tape; (s) Analog Magnetic Tape; Thermograms; Digital Mosaics

ENHANCED AND CORRECTED IMAGERY

(c) Photo: Multitemporal Composites; Photo&Digital: Contrast Enhanced; Change Detection; Digital: Geometric Correction; Image Resampling; (s) Digital: Multitemporal Composites; Photo & Digital: Density Slice; Multisensor Composites; Radiometric Correction; Pseudo Stereo

PHOTOGRAMMETRIC PRODUCTS

(c) Digital Terrain Models; Digital Data Bases; Planimetric Maps; (s) Orthophotos; Topographic Maps; Engineering Cross Sections; Stockpile Measurements; Earthwork Measurements; Photo-Contour Maps; Plan and Profile Sheets; Volumetric Calculations; Distance & Angle Measurements

INTERPRETED, THEMATIC PRODUCTS

(c) Color Thematic Maps; Land Use Maps; Vegetation/Forestry Maps; Utility Maps; Acreage Tabulations; Geocoded Data Bases; Thematic Map Overlays; Digital Magnetic Tapes; (s) Contour Weather Maps; Geologic Maps; Transportation Maps; Soils Maps; Tax Maps

PROJECT PLANNING AND SUPPORT SERVICES

Problem Definition; Feasibility Analysis; Selection of Existing Imagery; Map Digitizing; Data Base Preparation; Sensor Selection/Evaluation; Sampling Strategy Design; Ancillary Data Collection; Ground Truth Survey; Data Management; (s) Ground Control Survey; Gray Level Digitizing; Air Support Operations

AERIAL SURVEY

(s) Low Altitude Photography; Thermal Infrared; Radar; Geophysical; High Altitude Photography; Multispectral Scanner

IMAGE PROCESSING, INTERPRETATION AND ANALYSIS

Digital Image Processing; Interactive Digital Image/Analysis/Classification; Manual Image Interpretation; (s) Photographic Laboratory Processing

PHOTOGRAMMETRIC ENGINEERING

(s) Aerotriangulation; Orthophotomapping; Planimetric Mapping; Stereo Digitizing; Cross-Sectioning; Stereocompilation; Topographic Mapping-Small Scale; Topographic Mapping-Large Scale; Volumetric Calculation

REPRODUCTION

Drafting & Scribing; Cartographic Reproduction; Printing; (s) Automated Drafting/Plotting;

OTHER SERVICES

Remote Sensing Research; Remote Sensing Training; Consultant Services; Interactive Computer Graphics; Computer Services; Software Design/Development; (s) Statistical Modeling

NAME: UNIVERSITY OF NEBRASKA, REMOTE SENSING APPLICATIONS LABORATORY

UNIVERSITY OF NEBRASKA, REMOTE SENSING
APPLICATIONS LABORATORY

ADDRESS(ES) & CONTACT(S)

University of Nebraska at Omaha
Omaha, Nebraska 68182
(402) 554-2725
Dr. Donald Rundquist
Mr. Scott Samson

YEARS IN BUSINESS: 6

SMALL BUSINESS CONTRACTOR? No

PROJECTS COMPLETED: 12

MINORITY-OWNED BUSINESS? No

REGION SERVED: U.S. & Int'l.

TOTAL APPLICABLE EMPLOYEES: 17

TYPES OF REMOTE SENSING TECHNOLOGIES:

Low Altitude Aerial Photo; Med Altitude Aerial Photo; High Altitude Aerial Photo;
Aerial Thermal Infrared Scanner; Landsat MSS; Landsat RBV; HCMM; Skylab; Digital
Image Interpretations; Manual Image Interpretations

PERSONNEL & SKILLS REPRESENTED:

Management (3); Professional (6); Technical (2); Other (6)
Cartographers; Computer Equip. Oper.; Computer Programmers; Engineers (electrical);
Soil Scientists; Social Scientists; Photointerpreters; Photolab Technicians; Physical
Scientists; Planners; Geographers

STATEMENT OF CAPABILITIES:

RSAL has expertise and capabilities appropriate for general image analysis, both
visual and digital. Our system experience lies in two principal areas; Landsat
digital analysis and interpretation of CIR imagery. Projects have included several
relating to Wetland research. Others have addressed land use classification, glacier
inventory, vegetative mapping, archaeology, urban analysis, and environmental
impacts; worldwide.

FACILITIES AND SPECIAL EQUIPMENT

AIRCRAFT

CAMERAS, SCANNERS, AND OTHER REMOTE SENSORS

FIELD SURVEY EQUIPMENT

PHOTOGRAPHIC PROCESSING EQUIPMENT

Vivitar VI Color Enlarger
Simmon-Omega Enlarger
Full Photo Lab facilities

PHOTOGAMMETRIC PROCESSING EQUIPMENT

IMAGE INTERPRETATION, VIEWING AND MAPPING (NON-DIGITAL)

3 B&L ZTZ (stereo, vertical & horizontal)
Reference Projector (1)
Stereo Interp. System (1)

IMAGE INTERPRETATION, VIEWING AND MAPPING (DIGITAL)

Calcomp Plotter (1)
Gould Electrostatic Plotter (1)
Compucolor II Microprocessor(1)

DIGITIZING, PLOTTING AND GRAPHICS

Numonics 1224 Digitizer/Planimeter (1)

OTHER COMPUTER PROCESSING

DEC Writer LA-36

OTHER

Spatial Data Density Slicer (1)
Joyce-Loebl Scanning Microdensitometer (1)
Macbeth Point Densitometer (1)

RCA CRTs (25)
IBM 370-158 (2)
CDC CYBER -172 (1)

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UNIVERSITY OF NEBRASKA, REMOTE SENSING APPLICATIONS
LABORATORY

PRODUCTS AND SERVICES PROVIDED

IMAGE PRODUCTS

(c) B&W and Color Positive Transparencies, Contact Prints, and Enlarged Prints;
Photo Mosaics; Digital Mosaics; Halftone Image Prints; Digital Magnetic Tapes

ENHANCED AND CORRECTED IMAGERY

(c) Digital: Contrast Enhanced; Geometric Correction; Radiometric Correction; Image
Resampling; Photo & Digital: Multitemporal Composites; Density Slice; Change Detection

PHOTOGRAMMETRIC PRODUCTS

INTERPRETED, THEMATIC PRODUCTS

(c) Color Thematic Maps; Land Use Maps; Vegetation/Forestry Maps; Acreage Tabulations;
Geocoded Data Bases; Thematic Map Overlays; Soils Maps; Digital Magnetic Tapes;
Wetland Mapping

PROJECT PLANNING AND SUPPORT SERVICES

Problem Definition; Feasibility Analysis; Selection of Existing Imagery; Ground Control
Survey; Map Digitizing; Data Base Preparation; Air Support Operations; Sensor Selection/
Evaluation; Sampling Strategy Design; Ancillary Data Collection; Ground Truth Survey;
Gray Level Digitizing; Data Management

AERIAL SURVEY

(s) Low Altitude Photography; Thermal Infrared; High Altitude Photography

IMAGE PROCESSING, INTERPRETATION AND ANALYSIS

Digital Image Processing; Batch Digital Image/Analysis/Classification; Interactive
Digital Image/Analysis/Classification; Photographic Laboratory Processing; Manual Image
Interpretation

PHOTOGRAMMETRIC ENGINEERING

REPRODUCTION

Drafting & Scribing; Cartographic Reproduction; Automated Drafting/Plotting; Printing

OTHER SERVICES

Remote Sensing Research; Remote Sensing Training; Statistical Modeling; Consultant
Services; Software Design/Development; Software Sales/Leasing

UNIVERSITY OF NEBRASKA, REMOTE SENSING
APPLICATIONS LABORATORY

REMOTE SENSING EQUIPMENT/SYSTEMS PROVIDED

REMOTE SENSOR SYSTEMS

VIEWING EQUIPMENT

PHOTOGRAMMETRIC EQUIPMENT

DIGITAL IMAGE PROCESSING EQUIPMENT

SOFTWARE

Sell: Image Enhancement; Multispectral Classification

INTEGRATED SYSTEMS

OTHER EQUIPMENT

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NAME: UNIVERSITY OF SOUTH CAROLINA COMPUTER GRAPHICS

UNIVERSITY OF SOUTH CAROLINA COMPUTER GRAPHICS

ADDRESS(ES) & CONTACT(S)

2712 Middleburg Dr., Suite 104
Columbia, South Carolina 29204
(803) 777-7236
Gerald R. Minick

FACILITIES AND SPECIAL EQUIPMENT

AIRCRAFT

Cessna 206 (1)

CAMERAS, SCANNERS, AND OTHER REMOTE SENSORS

Fairchild T-R (1)

FIELD SURVEY EQUIPMENT

PHOTOGRAPHIC PROCESSING EQUIPMENT

PHOTOGRAMMETRIC PROCESSING EQUIPMENT

IMAGE INTERPRETATION, VIEWING AND MAPPING (NON-DIGITAL)

Light tables (3)

IMAGE INTERPRETATION, VIEWING AND MAPPING (DIGITAL)

COMTAL Vision I/20 (1)
Data General Eclipse S/230 (1)

DIGITIZING, PLOTTING AND GRAPHICS

Bendix Digitizing Stations (2)
Kongsburg Flatbed Plotter (1)
Goud Electrostatic Plotter (2)

Textonix (2)
OTHER COMPUTER PROCESSING

AMDAC V6 Main Frame (1)

OTHER

YEARS IN BUSINESS: 3

SMALL BUSINESS CONTRACTOR?

PROJECTS COMPLETED: 28

MINORITY-OWNED BUSINESS?

REGION SERVED: III, IV

TOTAL APPLICABLE EMPLOYEES: 14

TYPES OF REMOTE SENSING TECHNOLOGIES:

Low Altitude Aerial Photo; Med Altitude Aerial Photo; High Altitude Aerial Photo;
Landsat MSS; Digital Image Interpretation; Manual Image Interpretation

PERSONNEL & SKILLS REPRESENTED:

Management (2); Professional (8); Technical (4)

Cartographers (4); Computer Equip. Oper. (2); Forester (1); Mathematician (1);
Physicist (3); Programmer (1); Secretary (1); Business Relations (1)

STATEMENT OF CAPABILITIES:

Management of The South Carolina Geographical Information System

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NAME: UNIVERSITY OF TENNESSEE SPACE INSTITUTE

UNIVERSITY OF SOUTH CAROLINA COMPUTER GRAPHICS

ADDRESS(ES) & CONTACT(S)

Tullahoma, Tennessee 37388
(615) 455-0631
Dr. F. Shahrokhi

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PRODUCTS AND SERVICES PROVIDED

IMAGE PRODUCTS

B&W, Color, Color Composite Neg. & Pos. Transparencies, Contact & Enlarged Prints; Halftone Image Prints; Digital Magnetic Tape; (c) Digital Mosaics

ENHANCED AND CORRECTED IMAGERY

Digital Multitemporal Composites; Photo & Digital: Contrast Enhanced; Geometric Correct; Density Slice; Radiometric Correction; Image Resampling; (c) Change Detection

PHOTOGRAMMETRIC PRODUCTS

Engineering Cross Sections; Stockpile Measurements; Earthwork Measurements; Digital Terrain Models; Digital Data Bases; Plan and Profile Sheets; Volumetric Calculations; Distance & Angle Measurements; (c) Modeling from multivariable digital data base

INTERPRETED, THEMATIC PRODUCTS

Color Thematic Maps; Land Use Maps; Vegetation/Forestry Maps; Contour Weather Maps; Util. Maps; Acreage Tabulations; Geocoded Data Bases; Thematic Map Overlays; Geologic Maps; Transportation Maps; Soils Maps; Tax Maps; Digital Magnetic Tapes

PROJECT PLANNING AND SUPPORT SERVICES

Problem Definition; Feasibility Analysis; Selection of Existing Imagery; Ground Control Survey; Map Digitizing; Data Base Preparation; Sensor Selection/Evaluation; Sampling Strategy Design; Ancillary Data Collection; Ground Truth Survey; Data Management; (s) Air Support System

AERIAL SURVEY

(s) Low Altitude Photography

IMAGE PROCESSING, INTERPRETATION AND ANALYSIS

Digital Image Processing; Batch Digital Image/Analysis/Classification; Photographic Laboratory Processing; Manual Image Interpretation

PHOTOGRAMMETRIC ENGINEERING

REPRODUCTION

Drafting & Scribing; Cartographic Reproduction; Automated Drafting/Plotting; (s) Printing

OTHER SERVICES

Remote Sensing Research; Remote Sensing Training; Statistical Modeling; Interactive Computer Graphics; Computer Services; Software Design/Development; Software Sales/Leasing

YEARS IN BUSINESS: 10

SMALL BUSINESS CONTRACTOR? _____

PROJECTS COMPLETED: 35

MINORITY-OWNED BUSINESS? _____

REGION SERVED: U.S. & Int'l.

TOTAL APPLICABLE EMPLOYEES: 6

TYPES OF REMOTE SENSING TECHNOLOGIES:

Low Altitude Aerial Photo; Med Altitude Aerial Photo; High Altitude Aerial Photo; Landsat MSS; Landsat RBV; Skylab; Digital Image Interpretations; Manual Image Interpretations; Analog Image Interpretations

PERSONNEL & SKILLS REPRESENTED:

Management (1); Professional (4); Technical (1)

Engineers (civil, environ.) (3); Photolab Technicians (1); Pilots (1); Geographers

STATEMENT OF CAPABILITIES:

Graduate academic program in physics, mathematics, or engineering with remote sensing emphasis. Special short courses. Annual Conference on Remote Sensing of Earth Resources; 8th volume of proceedings recently published. Laboratory equipped for photogrammetric, analog, and digital analysis of data; and for cartography. Aircraft equipped for multispectral photography.

FACILITIES AND SPECIAL EQUIPMENT

AIRCRAFT

Single-engine Otter (1)

CAMERAS, SCANNERS, AND OTHER REMOTE SENSORS

Multispectral Camera (1)
70mm camera (1)

FIELD SURVEY EQUIPMENTPHOTOGRAPHIC PROCESSING EQUIPMENT

Darkroom with equipment for black & white processing (1)

PHOTOGRAMMETRIC PROCESSING EQUIPMENT

Optronics photowrite (1)

IMAGE INTERPRETATION, VIEWING AND MAPPING (NON-DIGITAL)

Color Additive Projector (1)
Zoom Transfer Scopes (2)
Stereoscopes (4)

IMAGE INTERPRETATION, VIEWING AND MAPPING (DIGITAL)

Cal-Data I computer (1)

DIGITIZING, PLOTTING AND GRAPHICS

Optronics photoscan (1)
Versatech printer (1)

OTHER COMPUTER PROCESSING

ISI Analog Analysis System (1)

OTHER

Dicomed quick-look tape drive and display (1)

PRODUCTS AND SERVICES PROVIDED

IMAGE PRODUCTS

(c) Photo Mosaics; Maps; Digital Magnetic Tape

ENHANCED AND CORRECTED IMAGERY

Density Slice

PHOTOGRAMMETRIC PRODUCTS

(c) Planimetric Maps

INTERPRETED, THEMATIC PRODUCTS

(c) Color Thematic Maps; Land Use Maps; Vegetation/Forestry Maps; Acreage Tabulations; Thematic Map Overlays; Geologic Maps; Transportation Maps; Digital Magnetic Tapes

PROJECT PLANNING AND SUPPORT SERVICES

Problem Definition; Feasibility Analysis; Selection of Existing Imagery; Air Support Operations; Sensor Selection/Evaluation; Sampling Strategy Design; Ancillary Data Collection; Ground Truth Survey; Gray Level Digitizing; Data Management; (s) Air Support Operations

AERIAL SURVEY

Low Altitude Photography; (s) Thermal Infrared; Multispectral Scanner

IMAGE PROCESSING, INTERPRETATION AND ANALYSIS

Digital Image Processing; Interactive Digital Image/Analysis/Classification; Photographic Laboratory Processing; Manual Image Interpretation

PHOTOGRAMMETRIC ENGINEERINGREPRODUCTION

Drafting & Scribing; (s) Cartographic Reproduction; Printing

OTHER SERVICES

Remote Sensing Research; Remote Sensing Training; Statistical Modeling; Consultant Services; Interactive Computer Graphics; Software Design/Development

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NAME: UNIV. OF WASHINGTON, DEPT. OF CIVIL ENGINEERING

ADDRESS(ES) & CONTACT(S)

121 More Hall (FX-10)
Seattle, Washington, 98195
(206) 543-2684

YEARS IN BUSINESS: 20

PROJECTS COMPLETED: 20

REGION SERVED: U.S.

SMALL BUSINESS CONTRACTOR? _____

MINORITY-OWNED BUSINESS? _____

TOTAL APPLICABLE EMPLOYEES: 6

TYPES OF REMOTE SENSING TECHNOLOGIES:

Low Altitude Aerial Photo; Aerial Multispectral Scanner; Aerial Thermal Infr. Scanner;
Landsat MSS; Manual Image Interpretations; Terrestrial Systems

PERSONNEL & SKILLS REPRESENTED:

Professional (6);

Cartographers; Engineers (civil, environ.); Field Surveyors; Photogrammatists;
Photointerpreters; Planners

STATEMENT OF CAPABILITIES:

Consultants and researchers in photogrammetry and remote sensing with emphasis on multi-spectral and thermal imagery including analysis and interpretation and aerial and terrestrial photogrammetric mapping for non-routine projects with emphasis on deformation studies and including close range photogrammetric applications.

FACILITIES AND SPECIAL EQUIPMENT

AIRCRAFT

Available by subcontract

CAMERAS, SCANNERS, AND OTHER REMOTE SENSORS

KE6"; TAF; Hasselblads; I²S; HRB Singer Anlas 14 (9)

FIELD SURVEY EQUIPMENT

T-3/DRM-3 T-2/Th-2/DKM-2 T-1/DKMI (20)
HP 3810 A (1)
Levels (6)

PHOTOGRAPHIC PROCESSING EQUIPMENT

Available on campus

PHOTOGAMMETRIC PROCESSING EQUIPMENT

Balplex, Kelsh, Multiplex Systems (5)
APC (1)
Comparator Zeiss 1818 (1)

IMAGE INTERPRETATION, VIEWING AND MAPPING (NON-DIGITAL)

I²S(1)
Usual Delft Stereoscopes, etc. (6)

IMAGE INTERPRETATION, VIEWING AND MAPPING (DIGITAL)

APC

DIGITIZING, PLOTTING AND GRAPHICS

Available on campus

OTHER COMPUTER PROCESSING

Complete Computer & Library
Cartographic Systems in Geography
planning facilities in Urban Planning

OTHER

ORIGINAL PAGE IS
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PRODUCTS AND SERVICES PROVIDED

IMAGE PRODUCTS

(a) B&W, Color, Color Infrared, & Color Composite Neg. & Pos. Transparencies, Contact and Enlarged Prints; Photo Atlas Sheets; (c) Photo Mosaics; Thermograms

ENHANCED AND CORRECTED IMAGERY

PHOTOGRAMMETRIC PRODUCTS

(c) Topographic Maps; Engineering Cross Sections; Stockpile Measurements; Earthwork Measurements; Digital Terrain Models; Digital Data Bases; Planimetric Maps; Plan & Profile Sheets; Volumetric Calculations; Distance & Angle Measurements; (s) Orthophotos

INTERPRETED, THEMATIC PRODUCTS

(c) Land Use Maps; Vegetation/Forestry Maps; Utility Maps; Acreage Tabulations; Geocoded Data Bases; Thematic Map Overlays; Transportation Maps; Soils Maps

PROJECT PLANNING AND SUPPORT SERVICES

Problem Definition; Feasibility Analysis; Selection of Existing Imagery; Ground Control Survey; Map Digitizing; Data Base Preparation; Sensor Selection/Evaluation; Sampling Strategy Design; Ancillary Data Collection; Ground Truth Survey; Data Management; (s) Gray Level Digitizing

AERIAL SURVEY

(s) Low Altitude Photography; Thermal Infrared

IMAGE PROCESSING, INTERPRETATION AND ANALYSIS

Batch Digital Image/Analysis/Classification; Manual Image Interpretation; (s) Photographic Laboratory Processing

PHOTOGRAMMETRIC ENGINEERING

Aerotriangulation; Planimetric Mapping; Cross-Sectioning; Stereocompilation; Topographic Mapping-Small Scale; Topographic Mapping-Large Scale; Volumetric Calculation; (s) Orthophotomapping; Stereo Digitizing

REPRODUCTION

Drafting & Scribing; Cartographic Reproduction

OTHER SERVICES

Remote Sensing Research; Remote Sensing Training; Statistical Modeling; Consultant Services; Software Design/Development; (s) Interactive Computer Graphics; Computer Services;

REMOTE SENSING EQUIPMENT/SYSTEMS PROVIDED

REMOTE SENSOR SYSTEMS

Lease: Aerial TIR Scanners; Multispectral Cameras

VIEWING EQUIPMENT

Lease: Monocular Magnifiers; Transfer Scopes; Stereoscopes; Color Additive Viewers

PHOTOGRAMMETRIC EQUIPMENT

Lease: Stereo Plotters

DIGITAL IMAGE PROCESSING EQUIPMENT

SOFTWARE

INTEGRATED SYSTEMS

OTHER EQUIPMENT

Lease: Spectrometers; Measurement Equipment

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NAME: VIRGINIA INSTITUTE OF MARINE SCIENCE REMOTE SENSING CENTER

VA INSTITUTE OF MARINE SCIENCE

ADDRESS(ES) & CONTACT(S)

Gloucester Point, Virginia 23062
(804) 642-2111
Dr. John C. Monday, Jr. (ext. 254)

FACILITIES AND SPECIAL EQUIPMENT

AIRCRAFT

DeHavilland Beaver, nadir metric port. (1)

CAMERAS, SCANNERS, AND OTHER REMOTE SENSORS

Fairchild CA-8 9-inch (1)
Nikon 35 mm (1)
Hasselblad 70mm (2)

Barnes IRT infrared thermometer (1)

FIELD SURVEY EQUIPMENT

Transits (1)
Current meters (50)
Turbidimeters (3)

PHOTOGRAPHIC PROCESSING EQUIPMENT

Standard black and white processing equipment in Institute photo laboratory (1)

PHOTOGRAMMETRIC PROCESSING EQUIPMENT

Kelsh plotter (1)

IMAGE INTERPRETATION, VIEWING AND MAPPING (NON-DIGITAL)

Light tables (5)
Bausch & Lomb Zoom Transfer Scope ZT4-H (1)
Photo Viewer (1)

IMAGE INTERPRETATION, VIEWING AND MAPPING (DIGITAL)

IBM 370-158 computer (1)
Apple II 48 k RAM microcomputer, disk, color and B&W TV, micromodem (1)

DIGITIZING, PLOTTING AND GRAPHICS

Numonics electronic planimeter and graphics calculator (1)
Calcomp plotter (1)
Tektronix plotter (1)

OTHER COMPUTER PROCESSING

GIS under development by state government in Richmond as part of VARIS (Virginia Resource Information System)

OTHER

Full marine science, oceanographic capabilities

YEARS IN BUSINESS: 10

SMALL BUSINESS CONTRACTOR? _____

PROJECTS COMPLETED: 25

MINORITY-OWNED BUSINESS? _____

REGION SERVED: III

TOTAL APPLICABLE EMPLOYEES: 9

TYPES OF REMOTE SENSING TECHNOLOGIES:

Low Altitude Aerial Photo; Med Altitude Aerial Photo; High Altitude Aerial Photo;
Aerial Multispectral Scanner; Aerial Thermal Infrared Scanner; Radar; Landsat MSS;
Landsat RBV; Seasat; Skylab; Weather Satellite; Digital Image Interpretations;
Manual Image Interpretations; Coastal Circulation Photogrammetry

PERSONNEL & SKILLS REPRESENTED:

Management (1); Professional (3); Technical (4); Other (1)
Computer Programmers (1); Field Surveyors (1); Photointerpreters (3); Photolab
Technicians (1); Physical Scientists (1); Pilots (1); Geographers (1)

STATEMENT OF CAPABILITIES:

Landsat CCT digital data processing and image interpretation. Thermal infrared data processing and evaluation. Satellite radar data analysis. Aerial photography in 9-inch, 70-mm, and 35-mm format, to altitudes of 13,000 feet; films: color, color infrared, black and white, black and white infrared; photographic interpretation; photogrammetric plotting and resection for currents and shorelines. Surface data acquisition: vessels, all types of oceanographic and marine sampling equipment, laboratory analysis; wetlands and coastal land use evaluation. Applications: facility siting, land use mapping; shoreline analysis, wetlands and subaquatic vegetation mapping, algal blooms, turbidity dynamics, and coastal currents and circulation.

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VA INSTITUTE OF MARINE SCIENCE

PRODUCTS AND SERVICES PROVIDED

IMAGE PRODUCTS

B&W Neg. & Pos. Transparencies, Contact & Enlarged Prints; Photo Mosaics; Analog Magnetic Tape; Digital Mosaics; Halftone Image Prints; Digital Magnetic Tape; (s) Color, Color Infrared, and Color Composite Neg. & Pos. Transparencies, Contact and Enlarged Prints

ENHANCED AND CORRECTED IMAGERY

Digital: Geometric Correction; Density Slice; Multisensor Composites; Radiometric Correction; Photo & Digital: Multitemporal Composites; Contrast Enhanced

PHOTOGRAMMETRIC PRODUCTS

Planimetric Maps; Plan and Profile Sheets; Volumetric Calculations; Distance & Angle Measurements

INTERPRETED, THEMATIC PRODUCTS

Color Thematic Maps; Land Use Maps; Vegetation/Forestry Maps; Acreage Tabulations; Geocoded Data Bases; Thematic Map Overlays; Geologic Maps; Transportation Maps; Tax Maps; Digital Magnetic Tapes

PROJECT PLANNING AND SUPPORT SERVICES

Problem Definition; Feasibility Analysis; Selection of Existing Imagery; Ground Control Survey; Map Digitizing; Data Base Preparation; Air Support Operations; Sensor Selection/Evaluation; Sampling Strategy Design; Ancillary Data Collection; Ground Truth Survey; Aerial Level Digitizing; Data Management

AERIAL SURVEY

Low Altitude Photography; Thermal Infrared; Multispectral Scanner

IMAGE PROCESSING, INTERPRETATION AND ANALYSIS

Digital Image Processing; Batch Digital Image/Analysis/Classification; Photographic Laboratory Processing; Manual Image Interpretation; (s) Interactive Digital Image/Analysis/Classification

PHOTOGRAMMETRIC ENGINEERING

Planimetric Mapping; Topographic Mapping-Large Scale; Volumetric Calculation

REPRODUCTION

Drafting & Scribing; Cartographic Reproduction; Automated Drafting/Plotting; Printing

OTHER SERVICES

Remote Sensing Research; Remote Sensing Training; Statistical Modeling; Consultant Services; Interactive Computer Graphics; Computer Services

NAME: VERNON GRAPHICS, INC.

ADDRESS(ES) & CONTACT(S)

400 Executive Blvd.
Elmsford, New York 10523
(914) 592-4890
Herman Kahrs

9748 Varial Avenue
Chatsworth, California 91311
(213) 882-6311
William Reid

106 South Hoover Avenue
Tampa, Florida 33609
(813) 872-2783
Edward Livingston

Other Locations: Norristown, Pennsylvania
Louisville, Kentucky

YEARS IN BUSINESS: 33

PROJECTS COMPLETED: 552

REGION SERVED: U.S.

TYPES OF REMOTE SENSING TECHNOLOGIES:

Low Altitude Aerial Photo; Med Altitude Aerial Photo; High Altitude Aerial Photo; Manual Image Interpretations

PERSONNEL & SKILLS REPRESENTED:

Management (23); Professional (40); Technical (297)

Cartographers (11); Computer Equip. Oper. (53); Computer Programmers (14); Draftsmen (192); Photogrammatists (2); Photogrammetric Equip. Oper. (14); Photolab Technicians (28)

STATEMENT OF CAPABILITIES:

Vernon Graphics, Inc. is a service company with thirty three years of experience responding to the map and record system need of utilities and municipalities. The scope of the company's services in the photogrammetric, interactive graphics, and computerized data processing fields includes acquisition of aerial photography, direct digitization from stereo models, orthophotography, plotting, and data base creation and management. Individualized software systems are developed to meet the specific requirements of the clients' data collection, record conversion, and data base maintenance needs.

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FACILITIES AND SPECIAL EQUIPMENT

PRODUCTS AND SERVICES PROVIDED

AIRCRAFT

IMAGE PRODUCTS

(c) B&W Negative and Positive Transparencies, Contact and Enlarged Prints; Photo Mosaics; Photo Atlas Sheets; Halftone Image Prints; Digital Magnetic Tape

CAMERAS, SCANNERS, AND OTHER REMOTE SENSORS

ENHANCED AND CORRECTED IMAGERY

FIELD SURVEY EQUIPMENT

PHOTOGRAMMETRIC PRODUCTS

(c) Orthophotos; Topographic Maps; Digital Data Bases; Planimetric Maps; Photo-Contour Maps; Distance & Angle Measurements

PHOTOGRAPHIC PROCESSING EQUIPMENT

Brown "Admiral 31" overhead camera with projection back (1)
Zeiss Seg V Rectified with 39"x39" vacuum table (1)

INTERPRETED, THEMATIC PRODUCTS

(c) Land Use Maps; Vegetation/Forestry Maps; Utility Maps; Acreage Tabulations; Geocode Data Bases; Thematic Map Overlays; Tax Maps; Digital Magnetic Tapes

PHOTOGRAMMETRIC PROCESSING EQUIPMENT

PROJECT PLANNING AND SUPPORT SERVICES

Problem Definition; Feasibility Analysis; Selection of Existing Imagery; Map Digitizing Data Base Preparation; Sensor Selection/Evaluation; Sampling Strategy Design; Ancillary Data Collection; Data Management; (s) Ground Control Survey; Air Support Operations; Ground Truth Survey

IMAGE INTERPRETATION, VIEWING AND MAPPING (NON-DIGITAL)

AERIAL SURVEY

(s) Low Altitude Photography; High Altitude Photography

IMAGE INTERPRETATION, VIEWING AND MAPPING (DIGITAL)

Kern PG-2 Stereo Compiler with internal microprocessor support and Data Technology Plotter (1); Jena Topocart Stereo Compiler and orthophoto restitute with microprocessor interface to a host computer (1)

IMAGE PROCESSING, INTERPRETATION AND ANALYSIS

Photographic Laboratory Processing; Manual Image Interpretation

DIGITIZING, PLOTTING AND GRAPHICS

Table digitizing stations including Data Technology tables with microprocessor, Tektronix 401401 or GMA 102A storage tube graphic monitors and ADDS, Hazeltine or MFCS alpha/numeric screens (15); Camlomp 748 Flatbed plotter with 925 controller (1); Calcomp 1051 drum plotter with 906 controller (1)

PHOTOGRAMMETRIC ENGINEERING

Orthophotomapping; Planimetric Mapping; Stereo Digitizing; Stereocompilation; Topographic Mapping-Small Scale; Topographic Mapping-Large Scale; (s) Aerotriangulation

OTHER COMPUTER PROCESSING

Two station Calma system with an Eclipse S130 (1)
Eclipse S 250 Processors (2)

REPRODUCTION

Drafting & Scribing; Cartographic Reproduction; Automated Drafting/Plotting; Printing

OTHER

Nova 3/12 Processors (4)
Nova-2 Processors (2)
Data Entry alpha/numeric stations (25)
Disk storage devices (9)
Support peripherals (magnetic tape I/O and line printers) (8)

OTHER SERVICES

Consultant Services; Computer Services; Software Design/Development; Software Sales/Le

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NAME: W.A.C. CORP.

W.A.C. CORP.

ADDRESS(ES) & CONTACT(S)

520 Conger St.
Eugene, Oregon 97402
(503) 342-5169
Robert Nelson

FACILITIES AND SPECIAL EQUIPMENT

AIRCRAFT

Twin Engine Turbocharged (2)
Single Engine Turbocharged (3)

CAMERAS, SCANNERS, AND OTHER REMOTE SENSORS

6" Zeiss Cameras (4)
8 $\frac{1}{4}$ " Zeiss Cameras (2)
12" W.A.C. Cameras (3)

FIELD SURVEY EQUIPMENT

PHOTOGRAPHIC PROCESSING EQUIPMENT

1411 Color Film Processor (1)
11C B & W Film Processor (1)
42" Kreonite Color Paper Processor (1)
9"x9" Durst Enlargers (2)

PHOTOGRAMMETRIC PROCESSING EQUIPMENT

IMAGE INTERPRETATION, VIEWING AND MAPPING (NON-DIGITAL)

IMAGE INTERPRETATION, VIEWING AND MAPPING (DIGITAL)

DIGITIZING, PLOTTING AND GRAPHICS

OTHER COMPUTER PROCESSING

OTHER

YEARS IN BUSINESS: _____

SMALL BUSINESS CONTRACTOR? Yes

PROJECTS COMPLETED: _____

MINORITY-OWNED BUSINESS? _____

REGION SERVED: _____

TOTAL APPLICABLE EMPLOYEES: _____

TYPES OF REMOTE SENSING TECHNOLOGIES:

Low Altitude Aerial Photo; Med Altitude Aerial Photo; High Altitude Aerial Photo

PERSONNEL & SKILLS REPRESENTED:

Draftsmen (1); Photolab Technicians (15); Pilots (5)

STATEMENT OF CAPABILITIES:

We are in the aerial photography business. All of our 6" 8 $\frac{1}{4}$ " and 12" cameras are precision and have gone through the National Bureau of Standards. We have five mapping airplanes with altitude capabilities up to 30,000 ft. and equipped with 3 axis auto pilots. Our radius of operation is anywhere in the continental U.S. but mainly west of Denver. We have a full service lab in both black and white and color with copy cameras that will make negatives up to 42" x 52".

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W.A.C. CORP.

W.A.C. CORP.

REMOTE SENSING EQUIPMENT/SYSTEMS PROVIDED

REMOTE SENSOR SYSTEMS

Lease: Reconnaissance Cameras

VIEWING EQUIPMENT

PHOTOGRAMMETRIC EQUIPMENT

DIGITAL IMAGE PROCESSING EQUIPMENT

SOFTWARE

INTEGRATED SYSTEMS

OTHER EQUIPMENT

PRODUCTS AND SERVICES PROVIDED

IMAGE PRODUCTS

B&W, Color, Color Infrared Neg. & Pos. Transparencies, Contact & Enlarged Prints;
Photo Mosaics

ENHANCED AND CORRECTED IMAGERY

PHOTOGRAMMETRIC PRODUCTS

INTERPRETED, THEMATIC PRODUCTS

PROJECT PLANNING AND SUPPORT SERVICES

AERIAL SURVEY

Low Altitude Photography; High Altitude Photography

IMAGE PROCESSING, INTERPRETATION AND ANALYSIS

Photographic Laboratory Processing

PHOTOGRAMMETRIC ENGINEERING

REPRODUCTION

OTHER SERVICES

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NAME: WASHINGTON STATE DEPARTMENT OF NATURAL RESOURCESADDRESS(ES) & CONTACT(S)Resource Inventory Section QW-21
Olympia, Washington 98504
(206) 753-5338
Roger HardingPRODUCTS AND SERVICES PROVIDEDIMAGE PRODUCTS

Black & White, Color, Color Infrared Positive Transparencies, Contact Prints, Enlarged Prints;

ENHANCED AND CORRECTED IMAGERYPHOTOGRAMMETRIC PRODUCTSOrthophotos; Topographic Maps; Planimetric Maps
(c) Digital Data BasesINTERPRETED, THEMATIC PRODUCTS

Soils Maps

PROJECT PLANNING AND SUPPORT SERVICESAERIAL SURVEYIMAGE PROCESSING, INTERPRETATION AND ANALYSISPHOTOGRAMMETRIC ENGINEERINGREPRODUCTIONOTHER SERVICESYEARS IN BUSINESS: 25SMALL BUSINESS CONTRACTOR? _____PROJECTS COMPLETED: 1000MINORITY-OWNED BUSINESS? _____REGION SERVED: XTOTAL APPLICABLE EMPLOYEES: 46TYPES OF REMOTE SENSING TECHNOLOGIES:Low Altitude Aerial Photo; Med Altitude Aerial Photo; High Altitude Aerial Photo;
Aerial Thermal Infrared Scanner; Landsat MSS; Landsat RBV; Digital Image Interpretations; Manual Image InterpretationsPERSONNEL & SKILLS REPRESENTED:Cartographers (17); Computer Equip Operators (1); Computer Programers (1);
Image Processing Equip Oper. (1); Photogrammatists (1); Photogrammetric Equip
Oper. (7); Photointerpreters (1); Photolab Technicians (1); Other (Foresters) (16)STATEMENT OF CAPABILITIES:

The DNR provides aerial photography, orthophotographic maps, and planimetric maps of the state of Washington.

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WASHINGTON STATE DEPARTMENT OF NATURAL RESOURCES

FACILITIES AND SPECIAL EQUIPMENT

AIRCRAFT

CAMERAS, SCANNERS, AND OTHER REMOTE SENSORS

FIELD SURVEY EQUIPMENT

PHOTOGRAPHIC PROCESSING EQUIPMENT

PHOTOGRAMMETRIC PROCESSING EQUIPMENT

IMAGE INTERPRETATION, VIEWING AND MAPPING (NON-DIGITAL)

IMAGE INTERPRETATION, VIEWING AND MAPPING (DIGITAL)

DIGITIZING, PLOTTING AND GRAPHICS
Specific type not indicated (4)

OTHER COMPUTER PROCESSING

OTHER

NAME: WALKER & ASSOCIATES, INC.

ADDRESS(ES) & CONTACT(S)

6264 Stanley Ave So.
P.O. Box c-81430
Seattle, Washington 98108
(206) 763-9858
George F. Walker, President

YEARS IN BUSINESS: 27

PROJECTS COMPLETED: 5,000

REGION SERVED: VIII, IX, X

TYPES OF REMOTE SENSING TECHNOLOGIES:

Low Altitude Aerial Photo; Med Altitude Aerial Photo; High Altitude Aerial Photo

PERSONNEL & SKILLS REPRESENTED:

Management (3); Professional (4); Technical (15); Other (2)

Draftsmen; Field Surveyors; Image Processing Equip. Oper.; Photogrammatists;
Photogrammetric Equip. Oper.; Photointerpreters; Photolab Technicians; Pilots

STATEMENT OF CAPABILITIES:

Walker & Associates is a full service aerial survey firm that offers aerial photogrammetry and lab services, ground control surveying and photogrammetric mapping services.

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FACILITIES AND SPECIAL EQUIPMENT

RCRAFT

ssna 337 Skymaster (1)
ssna Turbo 180 (1)

MERAS, SCANNERS, AND OTHER REMOTE SENSORS

less RMKA 15/23 (1)
less RMKA 21/23 (1)
er View 12" (1)

FIELD SURVEY EQUIPMENT

1) K&E Transits; Zeiss Levels (2); Wild T-2 (1)
-Meter (1) & HP 3800 (1)

PHOTOGRAPHIC PROCESSING EQUIPMENT

AKO Film processor
astman 242
ogE Printer & Processor

PHOTOGRAMMETRIC PROCESSING EQUIPMENT

soni Model III D (2)
Plotter (1)
Orthoplotter (1)

IMAGE INTERPRETATION, VIEWING AND MAPPING (NON-DIGITAL)

IMAGE INTERPRETATION, VIEWING AND MAPPING (DIGITAL)

DIGITIZING, PLOTTING AND GRAPHICS

Autotrol (1)
ata Tech Flatbed (1)

OTHER COMPUTER PROCESSING

OTHER

Robertson process camera

PRODUCTS AND SERVICES PROVIDED

IMAGE PRODUCTS

B&W, Color, & Color Infrared Neg. & Pos. Transparencies, Contact and Enlarged Prints;
Photo Mosaics; Photo Atlas Sheets; Halftone Image Prints; Digital Magnetic Tape;
(c) Color Composite Neg. & Pos. Transparencies, Contact and Enlarged Prints

ENHANCED AND CORRECTED IMAGERY

PHOTOGRAMMETRIC PRODUCTS

Orthophotos; Topographic Maps; Engineering Cross Sections; Stockpile Measurements;
Earthwork Measurements; Digital Terrain Models; Digital Data Bases; Planimetric Maps;
Photo-Contour Maps; Plan and Profile Sheets; Volumetric Calculations; Distance & Angle
Measurements

INTERPRETED, THEMATIC PRODUCTS

Land Use Maps; Vegetation/Forestry Maps; Utility Maps; Acreage Tabulations; Geocoded Maps;
Soils Maps; Tax Maps; Digital Magnetic Tapes

PROJECT PLANNING AND SUPPORT SERVICES

Problem Definition; Feasibility Analysis; Selection of Existing Imagery; Ground Control
Survey; Map Digitizing; Data Base Preparation; Air Support Operations; Sensor Selection/
Evaluation; Ancillary Data Collection; Ground Truth Survey

AERIAL SURVEY

Low Altitude Photography; High Altitude Photography; (s) Thermal Infrared

IMAGE PROCESSING, INTERPRETATION AND ANALYSIS

Photographic Laboratory Processing; Manual Image Interpretation

PHOTOGRAMMETRIC ENGINEERING

Aerotriangulation; Orthophotomapping; Planimetric Mapping; Stereo Digitizing; Cross-
Sectioning; Stereocompilation; Topographic Mapping-Small Scale; Topographic Mapping-
Large Scale; Volumetric Calculation

REPRODUCTION

Drafting & Scribing; Cartographic Reproduction; Automated Drafting/Plotting

OTHER SERVICES

Consultant Services; Computer Services; Software Design/Development; Interactive Computer
Graphics

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NAME: WILSON & COMPANY, ENGINEERS & ARCHITECTS

WILSON & COMPANY

ADDRESS(ES) & CONTACT(S)

631 E. Crawford
Salina, Kansas 67401
(913) 827-0433
Craig Roberts, Partner

8047 Parallel Parkway
Kansas City, Kansas 66112
(913) 334-0447
David Youtsey

218 North Waco
Wichita, Kansas 67201
(316) 264-9175
Ron Chandler

Additional Locations: Albuquerque, NM
Hays, Kansas
Foreign: Riyadh, Saudi Arabia

YEARS IN BUSINESS: N/A

SMALL BUSINESS CONTRACTOR? _____

PROJECTS COMPLETED: _____

MINORITY-OWNED BUSINESS? _____

REGION SERVED: _____

TOTAL APPLICABLE EMPLOYEES: _____

TYPES OF REMOTE SENSING TECHNOLOGIES:

Low Altitude Aerial Photo; Med Altitude Aerial Photo; High Altitude Aerial Photo

PERSONNEL & SKILLS REPRESENTED:

STATEMENT OF CAPABILITIES:

Acquisition of aerial photography, image processing, data interpretation and mapping.

FACILITIES AND SPECIAL EQUIPMENT

AIRCRAFT

Twin-engine aircraft (Beech King Air) (1); Cessna TU206 aircraft, equipped for aerial photography at altitudes to 30,000 feet A.S.L. (1) (lease)

CAMERAS, SCANNERS, AND OTHER REMOTE SENSORS

Zeiss RMK A 15/23 Aerial Mapping Camera with 153mm (6") high performance Pleogon wide-angle lens for panchromatic (B&W), infrared and color photography (1); Zeiss RMK 8.5/23 Aerial Mapping Camera with 85mm (3-1/2") high performance S-Pleogon super wide-angle lens for panchromatic (B&W), infrared and color photography (lease) (1)

FIELD SURVEY EQUIPMENT

Electronic Distance Measuring Instruments (4 Tellurometer CA-1000, 2 - Geodimeter Model 76 and 1 - Wild DI-10) (8); Geodimeter Model 78 (1); Wild Theodolites (5 - Wild T-2 and 3 - Wild T-16) (8)

PHOTOGRAPHIC PROCESSING EQUIPMENT

Morse B-5-A Aerial Film Developing Unit (1); EL-10-A Aerial Flim Dryer (1); Mark II LogEtronic Automatic Printer (1); Copy Camera equipped with 19- and 30-inch Goerz Red Dot Artar lens, 96"x54" vacuum easel (1); Kargl Autofocus Rectifying Enlarger (1); Nuarc Model VFC 46 Contacting Frame (36"x46") (1) Pako Model 26 Print Dryer (1); Dupont Cronaflex Engineering Reproduction Processor (44" width) (1)

PHOTOGRAMMETRIC PROCESSING EQUIPMENT

Wild PUG4 Point Transfer Device (1); Kern MK2 Monocomparator, interfaced with H. Dell Foster Electronic Digitizer for Aerotriangulation (1)

OTHER COMPUTER PROCESSING

Digital Equipment Corporation PDP 11/40 Electronic Computer (48K core memory). Operational software includes J.F. Kenefick's RABATS Programs for Aerotriangulation

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WILSON & COMPANY

PRODUCTS AND SERVICES PROVIDED

IMAGE PRODUCTS

(c) B&W, Color, & Color Infrared Contact Prints and Enlarged Prints; Photo Mosaics; Half-tone Image Prints

ENHANCED AND CORRECTED IMAGERY

PHOTOGRAMMETRIC PRODUCTS

(c) Topographic Maps; Engineering Cross Sections; Stockpile Measurements; Earthwork Measurements; Digital Terrain Models; Digital Data Bases; Planimetric Maps; Photo-Contour Maps; Plan and Profile Sheets; Volumetric Calculations; Distance & Angle Measurements;
(s) Orthophotos

INTERPRETED, THEMATIC PRODUCTS

(c) Land Use Maps; Acreage Tabulations; Transportation Maps; Soils Maps; Tax Maps

PROJECT PLANNING AND SUPPORT SERVICES

(s) Problem Definition; Feasibility Analysis; Selection of Existing Imagery; Ground Control Survey; Map Digitizing; Data Base Preparation; Air Support Operations; Data Management

AERIAL SURVEY

(s) Low Altitude Photography; High Altitude Photography

IMAGE PROCESSING, INTERPRETATION AND ANALYSIS

(s) Photographic Laboratory Processing

PHOTOGRAMMETRIC ENGINEERING

Aerotriangulation; Planimetric Mapping; Stereo Digitizing; Cross-Sectioning; Stereocompilation; Topographic Mapping-Small Scale; Topographic Mapping-Large Scale; Volumetric Calculation (s) Orthophotomapping

REPRODUCTION

Drafting & Scribing; Cartographic Reproduction; Automated Drafting/Plotting; Printing

OTHER SERVICES

Statistical Modeling; Consultant Services; Interactive Computer Graphics; Computer Services

NAME: WISE-L CONSULTANTS, LTD.

ADDRESS(ES) & CONTACT(S)

2115 Aspen Ave., N.W.
Albuquerque, New Mexico 87104
(505) 243-2117
J.A. Weisel

YEARS IN BUSINESS: _____

PROJECTS COMPLETED: _____

REGION SERVED: VI, VIII

TYPES OF REMOTE SENSING TECHNOLOGIES:

Low Altitude Aerial Photo; Med Altitude Aerial Photo; High Altitude Aerial Photo; Manual Image Interpretations

PERSONNEL & SKILLS REPRESENTED:

Management (1)

Cartographers; Planners

STATEMENT OF CAPABILITIES:

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SMALL BUSINESS CONTRACTOR? Yes

MINORITY-OWNED BUSINESS? _____

TOTAL APPLICABLE EMPLOYEES: 10

WISE-L CONSULTANTS, LTD.

PRODUCTS AND SERVICES PROVIDED

IMAGE PRODUCTS

ENHANCED AND CORRECTED IMAGERY

PHOTOGRAMMETRIC PRODUCTS

INTERPRETED, THEMATIC PRODUCTS

PROJECT PLANNING AND SUPPORT SERVICES

Problem Definition; Feasibility Analysis; (s) Selection of Existing Imagery; Data Base Preparation; Ancillary Data Collection; Data Management

AERIAL SURVEY

IMAGE PROCESSING, INTERPRETATION AND ANALYSIS

PHOTOGRAMMETRIC ENGINEERING

REPRODUCTION

OTHER SERVICES

Consultant Services

NAME: WOODWARD-CLYD CONSULTANTS

ADDRESS(ES) & CONTACT(S)

1350 Baur Blvd.
St. Louis, Missouri 63132
(314) 997-5700
William Prosser

1425 Broad Street
Clifton, New Jersey 07012
(201) 471-2000
Ray Hinkle, Jim Smith

YEARS IN BUSINESS: 15

PROJECTS COMPLETED: 1,000

REGION SERVED: U.S. & Int'l.

TYPES OF REMOTE SENSING TECHNOLOGIES:

Low Altitude Aerial Photo; Med Altitude Aerial Photo; High Altitude Aerial Photo; Aerial Multispectral Scanner; Aerial Thermal Infrared Scanner; Radar; Geophysical Survey; Landsat MSS; Landsat RBV; Seasat; HCMM; Skylab; Digital Image Interpretations; Manual Image Interpretations; Analog Image Interpretations

PERSONNEL & SKILLS REPRESENTED:

Management (10); Professional (50); Technical (10)
Cartographers (10); Computer Equip. Operators (10); Computer Programmers (10); Draftsmen (30); Engineers (civil, environ.)(178); Engineers (electrical)(2); Image Processing Equip. Oper. (5); Soil Scientists (4); Social Scientists (1); Photogram. (5); Photogrammetric Equip. Oper. (5); Photointerpreters (50); Physical Scientists (370); Pilots (5); Planners (4); Geographers (3)

STATEMENT OF CAPABILITIES:

WCC is a national, multidisciplinary consulting firm employing 1000 persons, including over 600 professionals practicing in the fields of geotechnical engineering, geology, hydrology, environmental sciences and remote sensing. Our firm operates 22 offices located in major U.S. cities. Systematic use of remote sensing techniques is an everyday part of our practice. We maintain a state-of-the-art practice in remote sensing and have facilities specifically directed toward the use and interpretation of remote sensor imagery. These include image processing. Our broad experience background is applied practically in our remote sensing practice.

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FACILITIES AND SPECIAL EQUIPMENT

AIRCRAFTCAMERAS, SCANNERS, AND OTHER REMOTE SENSORSFIELD SURVEY EQUIPMENTPHOTOGRAPHIC PROCESSING EQUIPMENTPHOTOGRAMMETRIC PROCESSING EQUIPMENTIMAGE INTERPRETATION, VIEWING AND MAPPING (NON-DIGITAL)

ISI 130 System VP-8 Image Analyzer (1)
 Bausch & Lomb Zoom Stereoscope (1)
 Delft Stereoscope (1)

IMAGE INTERPRETATION, VIEWING AND MAPPING (DIGITAL)DIGITIZING, PLOTTING AND GRAPHICSOTHER COMPUTER PROCESSING

Computer Geographic Information System (1)
 Digital Computer System for Geotechnical engineering analyses (1)

OTHER

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PRODUCTS AND SERVICES PROVIDED

IMAGE PRODUCTS

(c) Analog Color Densitometry; (s) B&W, Color, Color Infrared, Color Composite Neg. & Pos. Transparencies, Contact Prints & Enlarged Prints; Photo Mosaics; Photo Atlas Sheets; Analog Magnetic Tape; Thermograms; Digital Mosaics; Halftone Image Prints; Digital Magnetic Tape
ENHANCED AND CORRECTED IMAGERY

(s) Photo & Digital: Multitemporal Composites; Contrast Enhanced; Geometric Correction; Density Slice; Change Detection; Multisensor Composites; Radiometric Correction; Image Resampling; Pseudo Stereo

PHOTOGRAMMETRIC PRODUCTS

(c) Engineering Cross Sections; Stockpile Measurements; Earthwork Measurements; Plan and Profile Sheets; Volumetric Calculations; (s) Orthophotos; Topographic Maps; Digital Terrain Models; Digital Data Bases; Planimetric Maps; Photo-Contour Maps

INTERPRETED, THEMATIC PRODUCTS

(c) Acreage Tabulations; Thematic Map Overlays; Geologic Maps; Soils Maps; (s) Color Thematic Maps; Land Use Maps; Vegetation/Forestry Maps; Contour Maps; Utility Maps; Transportation Maps

PROJECT PLANNING AND SUPPORT SERVICES

Problem Definition; Feasibility Analysis; Selection of Existing Imagery; Sensor Selection/Evaluation; Sampling Strategy Design; Ancillary Data Collection; Ground Truth Survey; Gray Level Digitizing; Data Management

AERIAL SURVEY

(s) Low Altitude Photography; Thermal Infrared; Radar; Geophysical; High Altitude Photography; Multispectral Scanner

IMAGE PROCESSING, INTERPRETATION AND ANALYSIS

Manual Image Interpretation; Analog Image Processing; (s) Digital Image Processing; Batch Digital Image/Analysis/Classification; Interactive Digital Image/Analysis/Classification; Photographic Laboratory Processing

PHOTOGRAMMETRIC ENGINEERING

(s) Aerotriangulation; Orthophotomapping; Planimetric Mapping; Stereo Digitizing; Cross-Sectioning; Stereocompilation; Topographic Mapping-Small Scale; Topographic Mapping-Large Scale; Volumetric Calculation

REPRODUCTION

(s) Drafting & Scribing; Cartographic Reproduction; Automated Drafting/Plotting; Printing

OTHER SERVICES

Remote Sensing Research; Remote Sensing Training; Statistical Modeling; Consultant Services; (s) Interactive Computer Graphics; Computer Services

NAME: WOOLPERT CONSULTANTS

WOOLPERT CONSULTANTS

ADDRESS(ES) & CONTACT(S)

2324 Stanley Avenue
Dayton, Ohio 45404
(513) 461-5660
Wallace E. Smith

650 Northland Road
Cincinnati, Ohio 45240
(513) 381-0984

602 Bel Air Blvd.
Mobile, Alabama 36606
(205) 478-4554
Don Summey

YEARS IN BUSINESS: 10

SMALL BUSINESS CONTRACTOR? yes

PROJECTS COMPLETED: 3500

MINORITY-OWNED BUSINESS? _____

REGION SERVED: US, I, II, III, IV, V,
VI, VII

TOTAL APPLICABLE EMPLOYEES: 23

TYPES OF REMOTE SENSING TECHNOLOGIES:

Low Altitude Aerial Photo; Med Altitude; High Altitude Aerial Photo;
Geophysical Survey, Digital Image Interpretations, Manual Image Interpretations

PERSONNEL & SKILLS REPRESENTED:

Management (2); Professional (21); Cartographers (1); Computer Equip Operators (2);
Computer Programmers (1); Draftsmen (6); Engineers (civil, environ.) (5); Field
Surveyors (45); Image Processing Equip. Oper. (4); Soil Scientists (3); Social
Scientists (2); Photogrammatists (3); Photogrammatic Equip Oper. (12); Photo-
interpreters (2); Photolab Technicians (6); Physical Scientists (1); Pilots (1);
Planners (6); Geographers (4);

STATEMENT OF CAPABILITIES:

Woolpert Consultants supplies the full range of photogrammetric services includ-
ing B&W, Color IR, B&W IR, aerial photography ground control, topographic
mapping, interactive digital data banks, computerized mapping and land use maps.
These capabilities are supported by Engineering, Environmental, & Planning
personnel from our other divisions.

FACILITIES AND SPECIAL EQUIPMENT

AIRCRAFT:

Cessna Stationair (1); Zeiss RMK 15/23 (6" lens) (1); Zeiss Film Magazines (2)

FIELD SURVEY EQUIPMENT:

AGA-12a Geodimeters (2); Hewlett-Packard H-3800 AEDM (2MR) (2); Hewlett-Packard
H-3808 AEDM (6MR) (2); Hewlett-Packard H-3820 Complete Survey Stations (2);
Lietz Levels (7); Wild NA #2 Levels (5); Zeiss Levels (4); Lietz Theodolite (1);
Wild T-2 (One Second) Theodolites (7); Burger Transit (1); K&E Paragon Transits
(18); Wild T-16 (Ten Second) Optical Transit (1); Raytheon Recording Depth
Finders (2); Detectron Metal Locators (4); M Scope TW Pipe Locator (1); K&E
Alidales & Plane Tables (3); Streeter Amvet MR101B (15 Minutes) Traffic Counters
(4); Monroe Compucorp 322 Scientist Electronic Calculators (5); Monroe Surveyor
354 Electronic Calculators (10); Texas Instrument Silent 700 ASR Electronic Data
(Teletype Timesharing Terminals) (6); 5 Watt Transceivers (6); 1 Watt Transceivers
(20);

PHOTOGRAPHIC PROCESSING EQUIPMENT:

Arkey (Model 150 Ferrottype) Dryer (1); Brown (Commodore) Copy Camera (1); Dupont
(Cronaflex) ERF Processor (1); Iconics (48" x 72") Vacuum Frame (1); K&E (Model
HE-12) Horizontal Enlargers (2); K&E (48" x 72") Vacuum Board (1); Kreonite (DM-
RP-1-42) Processor (1); Logetronic (Mark III) Printer (1); Logetronic (Mark IV)
Printer (1); Morse Contact Printer (1);

PHOTOGRAMMETRIC PROCESSING EQUIPMENT:

Santoni Simplex II-C Stereo Plotters (3); Santoni Simplex G-6 Stereo Plotter (1)
Santoni Ortho-Photo Scope (1); K&E 3-Projector Stereo Plotters (2); K&E 5-Pro-
jector Stereo Plotters (1);

DIGITIZING/PLOTTING/GRAPHICS:

Dell Foster Automatic Terrain Plotting Table (1); Data-Tech Automatic Terrain
Plotting Table (1); Dell Foster (3-axis) Digitizers (2);

OTHER COMPUTER PROCESSING:

Nova (K-32) Mini Computer (1);

OTHER EQUIPMENT OR FACILITIES:

Dell Foster Mono-Comparator (1); Wild PUG-4 Point Transfer Device (1);

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WOOLPERT CONSULTANTS

PRODUCTS AND SERVICES PROVIDED

IMAGE PRODUCTS

B & W, Color, Negative Transparencies, Positive Transparencies Contact Prints, Enlarged Prints; Color Infrared Contact Prints, Enlarged Prints; Photo Atlas Sheets; Halftime Image Prints; (c) Color Infrared Neg. & Pos. Trans.; Colorcomposite Neg. & Pos. Transp., Contact Prints, Enlarged Prints; Photo Mosaics; Analog Magnetic Tape; ENHANCED AND CORRECTED IMAGERY Digital Mosaics; Digital Mag. Tape;

Photo: Contrast Enhanced; Geometric Correction; Density Slice; Pseudo Stereo;
(c) Digital: Contrast Enhanced; Geometric Correction; Density Slice; Pseudo Stereo

PHOTOGRAMMETRIC PRODUCTS

(c) Orthophotos; Topographic Maps; Engineering Cross Sections; Stockpile Measurements; Earthwork Measurements; Digital Terrain Models; Digital Data Bases; Planimetric Maps; Photo-Contour Maps; Plan and Profile Sheets; Volumetric Calculations; Distance & Angle Measurements

INTERPRETED, THEMATIC PRODUCTS

(c) Color Thematic Maps; Land Use Maps; Vegetation/Forestry Maps; Contour Weather Maps; Utility Maps; Acreage Tabulations; Geocoded Data Bases; Thematic Map Overlays; Geological Maps; Transportation Maps; Soils Maps; Tax Maps; Digital Magnetic Tapes

PROJECT PLANNING AND SUPPORT SERVICES

Problem Definition; Feasibility Analysis; Selection of Existing Imagery; Ground Control Survey; Map Digitizing; Data Base Preparation; Air Support Operations; Sensor Selection/Evaluation Sampling Strategy Design; Ancillary Data Collection; Ground Truth Survey; Gray Level Digitizing; Data Management

AERIAL SURVEY

Low Altitude Photography; Geophysical; High Altitude Photography

IMAGE PROCESSING, INTERPRETATION AND ANALYSIS

Digital Image Processing; Batch Digital Image/Analysis/Classification; Interactive Digital Image/Analysis/Classification; Photographic Laboratory Processing; Manual Image Interpretation

PHOTOGRAMMETRIC ENGINEERING

Aerotriangulation; Orthophotomapping; Planimetric Mapping; Stereo Digitizing; Cross-Sectioning; Sterocompilation; Topographic Mapping-Small Scale; Topographic Mapping Large Scale; Volumetric Calculation

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Drafting & Scribing; Cartographic Reproduction; Automated Drafting/Plotting; Printing

OTHER SERVICES

Statistical Modeling; Consultant Services; Interactive Computer Graphics

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