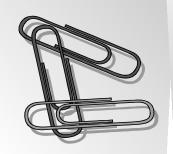


# AERIAL PHOTOGRAPHY FIELD OFFICE

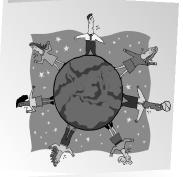
# APFO

# FY 2004 ANNUAL REPORT











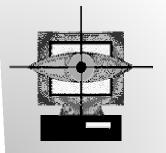








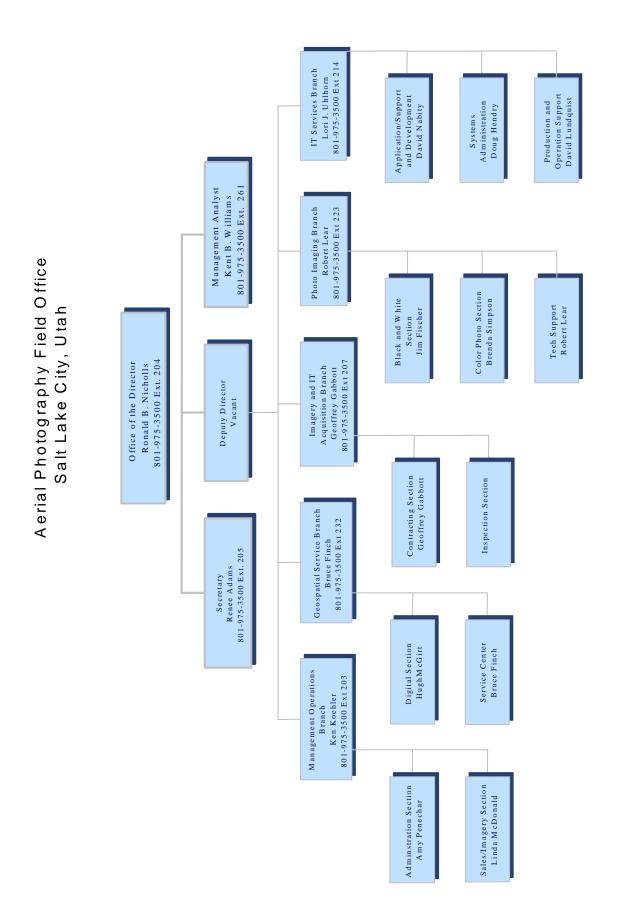






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#### **OFFICE OF THE DIRECTOR**

Ronald B. Nicholls, Director ronald.nicholls@apfo.usda.gov

The Aerial Photography Field Office (APFO) Strategic Plan of 2004 committed to providing Digital and Conventional Aerial Imagery. As the official distribution point for FSA compressed county ortho mosaics and the National



Agriculture Imagery Program (NAIP), hundreds of local, state and federal agency customers have contributed to and utilized our NAIP imagery, while APFO continues to provide conventional Image Photography to meet customer requirements.

APFO implemented the USDA Geospatial Data Gateway, a web based ordering system allowing users to download NAIP and CLU data stored at APFO's Geospatial Data Warehouse (GDW). The Gateway is expected to greatly facilitate the delivery of NAIP and CLU to producers and the general public reducing the burden on staff in Service Centers and at APFO who would otherwise meet customer requirements manually. The implementation is a joint effort between APFO, NRCS Information Technology Center in Fort Collins, CO, and the NRCS National Cartographic and Geospatial Center in Fort Worth, TX.

During FY 04, APFO formed the Rapid Deployment of New Products (RDNP) Team to develop procedures for the delivery of the Common Land Unit (CLU) and NAIP imagery. With the assistance of the ArcGIS training and APFO IT Section, processes have been created for coverage, producing, and quality checks. Current RDNP production includes;

- 3,853 1 meter Color/Color Infrared Quarter Quads
- 3,522 2 meter Color/Color Infrared Quarter Quads
- 159 Compressed County Mosaics
- 717 1 meter NRCS Color Quarter Quads for Contracting
- Total Dollar Value \$58,290.00

The RDNP Team has made recommendations for consideration in the redesigning of the APFO website ordering process. CLU current workload is being prepared for delivery. The RDNP Team attended the 2004 ESRI Conference, manning the FSA booth, networking with current and potential users.

Defending the United States in the war against terror in Qatar and Iraq, APFO Cartographic Technician Matthew McElreath has definitely had a busy FY04, The employees of APFO join his wife, anxiously awaiting his return.

In appreciation for Matt and his fellow comrades, APFO sent 4th of July greetings consisting of over 700 lbs of snacks and Holiday goodies. Arriving shortly after a helicopter had crashed sending the pilot to the hospital in Germany for recovery, many said the surprise arrival of packages couldn't have happened at a better time as moral was low.



APFO Director Ronald B. Nicholls with Matthew



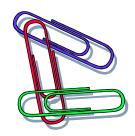


"Matt"

# Management Operations Branch ADMINISTRATION PERSONNEL

**SALES** 

Kenneth W. Koehler, Branch Chief kenneth.koehler@apfo.usda.gov



To insure the Aerial Photography Field Office operates in an efficient, cost effective manner by providing resources necessary for the production of aerial imagery products.

#### **Procurement**

The Management Operations Branch Administrative Section provided maximum, practicable opportunities in acquisitions to small business, small disadvantaged business, and woman owned small business concerns.



Procurement for much of APFO supplies and materials, training, and services (with the exception of flying contracts and IT) have been through the use of the USDA Government-Wide Commercial Purchase Card.

#### **General Administrative Accomplishments**

- Implementation of STAR Web for Time and Attendance
- Installation of new shipping system allowing a much improved and streamlined process, better cost recovery and customer tracking and notification
- Completion of the IT Contingency and Disaster Recovery Plan
- Participated in the Presidents Management initiatives as it pertains to work load / work management and Performance Based Results

#### **Human Resources**

Working closely with Kansas City Administrative Office (KCAO), APFO's Human Resources provided a comprehensive program of personnel services to the APFO employees.

#### Statistics for FY FY04 include;

- Personnel Actions Processed 17
- Training Requests 84
- QSI's 15
- Performance Awards 3
- Promotions 4
- Resignations 1
- Staff 78
- Retirements 2
- Spot Awards 30





#### FY 04 EEO / CR Accomplishments

#### **Hispanic Heritage Month**

- 1. Salsa Contest
- 2. Awareness Banners

#### **Disability Awareness Month**

1. Awareness Banners

#### **Adopt A Scholl Activities**

- 1. Participation in School District Partner Salute
- 2. Support of Geospatial Information System (GIS) Day
- 3. Sixth Grade Class tour of APFO
- 4. Conducted School Supply Drives
- 5. Warm Clothing Drives
- 6. Month of a 1,000 Books Donation

#### Nineteenth Annual Utah Women's Conference

1. "Discovering the Diversity and Unity of Women"

#### **USDA Food Drive**

<u>Multiple Sclerosis Society -</u> Donation of gift items <u>Martin Luther King, Jr.</u> -Poster

#### **Women's History Month**

- 1. Video "Let the Women Vote"
- 2. Notable Women Trivia and Display
- 3. Awareness Banner

#### Native American Heritage Month - Awareness Banner

Take our Daughters and Sons to Work

<u>Federal Women's Conference</u> -Nashville, TN; 1 employee attending <u>Blood Drive</u>

#### Asian/Pacific Heritage Month

- 1. Rice Bowl Lunch
- 2. Awareness Banners

#### 4th of July for the Troops

1. Sent 711 lbs. Of Forth of July items to an Apache Helicopter Unit in Afghanistan in Support of the Presidents War on Terrorism.

# **Management Operations Branch SALES SECTION**

Linda McDonald, Supervisor linda.mcdonald@apfo.usda.gov



To serve each customer as their primary resource of technical information concerning USDA related aerial photography and digital imagery of the United States and its territories. To account and reconcile funds from all government agencies as well as private customers.

As part of the Management Operations Branch, the Sales Section is responsible for the receipt and processing of work orders and coverage requests for aerial photography and digital imagery products and services. Sales is the liaison for the Aerial Photography Field Office to other government agencies and the public. Sales maintains and monitors all fiscal activity dealing with the sale of aerial photography and digital imagery.

#### **Major Work Activities Performed**

Activity	Number of Activities
Work Orders Processed	6,896
APFO Internal Work Orders Processed	1,131
Coverage Requests	2,192
Walk-In Customers	684
Telephone Calls	12,392
Catalog Registers	1,490
Billings and Refunds	614
Written Correspondence	567
GIS Cataloging	11,765
TOTAL	37,731



#### **Special Accomplishments**

<u>APFO Product Review</u> - An aerial photography and digital imagery product review resulted in the APFO eliminating 35 different Aerial and Digital Imagery Product Codes. The remaining Digital Product Codes were categorized into

two product categories; Hard Copy (photo paper) and Soft Copy (digital imagery) Products. New Digital Imagery Product Codes were added for County Certified Common Land Units (CLU), Source Image Scans and Digital Hard Copy Paper Prints. The changes made by sales affected the Work Order Entry System (WOES), Time, and Inventory System.

NAIP 2003 Compressed County Mosaics (CCM) and Quarter Quads (QQ) - During FY 2004, Sales Section furnished quotes ranging from single county to full NAIP 2003 CCM and QQ coverage. Sales coordinated the receipt, coverage and work order release for several NAIP FY 2003 projects to include;

•	US Core of Engineers	3,621 Quarter Quads
•	USDA/FSA/Nebraska	1,460 Compressed County Mosaics
•	USDA/NRCS/Oklahoma	791 Compressed County Mosaics
•	USDA/RMA	1,076 Compressed County Mosaics
•	Public Orders	5,867 Quarter Quads
•	State of Nebraska	5,867 Quarter Quads

<u>County Certified Common Land Units (CLU)</u> - Mid August 2004, the *USDA/FSA Geospatial Data Distribution Policy and Associated Costs*, Notice CP-581, gives the APFO the authority to distribute County Certified CLU's.

<u>New IT Equipment</u>—The Sales Section MCD terminals were replaced with Gateway PC's, providing CD and DVD read/write capabilities. Sales converted office operating systems from Word Perfect Documents and Uniplex/Lotus Spreadsheets to Microsoft Word and Excel Spreadsheet applications.

<u>USDA/BLM Wyoming Interagency Agreement #KAI010013</u>—FY 2004 ends a three year APFO and BLM Interagency Agreement. Under this agreement, APFO provided Wyoming State BLM office 10"x10" Color Infrared (CIR) Image Scans of Wyoming. This agreement was modified to extend through FY04 to accommodate re-flights. Sales coordinated the orders, fiscal activity, and report reconciliation. Agreement Activity included;

Work Orders 146
 Monetary Value \$209,528
 Image Scans 16,907



# **APFO** Customer, Units, and Dollar Value

FY 2004 Customers of Photographic Aerial Imagery Products and Services

Agency	% of Requests	Units	% of Revenue	Dollar Value
Farm Service	10	19,383	8	71,468.60
Forest Service	58	109,706	36	312,128.00
NRCS	4	7,849	10	87,791.00
GS	1	1,495	2	18,979.00
Other Federal	12	22,675	14	126,915.50
State Agencies	6	10,351	8	75,321.50
Public	9	17,513	21	181,536.60
Totals	100%	188,972	100%	\$874,140.20

# FY 2004 Customers of Digital Aerial Imagery Products and Services

Agency	% of Requests	Units	% of Revenue	Dollar Value
Farm Service	45	73,224	76	4,758,420.50
Forest Service	4	7,043	1	79,687.00
NRCS	25	40,857	15	925,666.00
GS	4	7,007	2	86,444.00
Other Federal	6	9,554	2	141,885.00
State Agencies	6	9,166	1	80,507.00
Public	10	15,648	3	166,231.50
Totals	100%	162,499	100%	\$6,238,841.50



## Total Dollar Volume \$1,397,235.90

Includes all fiscal activity associated with the sale of aerial photographic and digital imagery

# **Sales Directly Billed**

Category	Billed Amount
Federal Customers	285,908.50
Non-Federal, Tax-Supported Customers	127,127.50
Total	\$413,036.00

### Collections

Category	Dollar Amount
Cash and Check Receipts	207,446.25
Credit Card Receipts	579,706.12
Total	\$787,152.37

# **Fiscal Year Statistical Comparison**

Fiscal Year 2004	37 Units Per Order	
Fiscal Year 2003	45 Units Per Order	
Fiscal Year 2002	46 Units Per Order	



# **Sales Activity Report**

Activity	Total Hours	% of Time
Annual Leave	1,186	8
Sick Leave	626	4
Other Leave	698	5
Section Administration	260	2
Supervision	1,579	11
Training	269	2
Processing Work Orders	1,749	12
Fiscal Operations	1,241	8
GIS Operations	306	2
Special Projects	104	1
Detailed Activity	470	3
Support Operations	6,196	42
Totals	14,684	100%

#### **Information Technology Branch**

Lori Uhlhorn, Branch Chief lori.uhlhorn@apfo.usda.gov



#### **Information Technology Accomplishments**

ITSB successfully met the challenges of FY04. While managing incoming data and assisting staff with the ingestion of 2000 counties of imagery (an increase of 1200 counties for FY04), the IT staff continued to work towards Web based delivery systems for both delivery and production purposes.

Other goals met in FY04:

#### **GDW**

- APFO purchased an upgrade to the existing SAN (Storage Area Network), allowing for additional storage capacity.
- With the completion of a disk array upgrade, GDW now has the ability to expand to over 70 TB of online data.
- GDW has loaded and replicated over 16 TB of MDOQ and NAIP imagery.
- Recent SAN and system enhancements are allowing GDW to better integrate with APFO systems including EarthWhere. This upgrade is increasing throughput and delivery capabilities.
- Expanded data management process to incorporate a raster data mart to support map services.
- Implemented ETL web services to support MDOQ theme population of the USDA TerraServer data mart at ITC.
- Began work on CLU replication procedures to enable ingestion of CLU into GDW

#### **IT Security**

- Certification and Accreditation completed for both APFO production systems and GDW.
- Disaster Recovery completed for APFO and GDW.
- Implementations of Patch Management system All systems within APFO are scanned monthly for security risks, hot-patches and fixes.
- APFO Computer Usage Policy established.
- APFO User Password Policy established.
- APFO Internet Usage Policy established.
- Off-Site Storage and Backup are now in place for both APFO production and GDW systems.

#### LAN

APFO has designed and received approval from ITWG Network OPS for installation of new cable infrastructure to support internal production requirements. The new infrastructure is expected to support as many as 450 connections. The contract has been released and completion is expected to be 31 Dec 04.



#### **Application Development/Implementation**

In the last year, ITSB has developed and/or implemented the following:

- GeoSpatial Data Gateway APFO started working with ITC (Fort Collins, CO) to implement the Geospatial Data Gateway for delivery purposes of CCM's to Services Centers and other USDA agencies upon request. Availability of this web based application in expected shortly.
- APFO released a contract to SANZ, Inc. for implementation of EarthWhere.
   This application is currently intended to enhance and increase APFO's internal production systems. Expected time to production is currently in January 2005.
- Customer Help Desk (for Internal use only) Since its implementation in May 2004, ITSB has processed more that 400 requests for assistance. Of that, 93% is in direct support of GIS production systems. The remaining 7% is in support of Windows based environments.
- Inspection applications These applications have been developed in house to accommodate the Q&A inspection process of both 1m and 2m imagery before it is released for USDA use or external sale.

#### **CCE Desktop**

APFO has completed implementation of CCE desktops. GIS Training laptops are maintained and shipped by APFO ITSB to various sites as requested.

#### **Employee Training**

Windows Server 2003 Administration Microsoft TechNet Seminars Management Training ESRI Arc 9 ESRI ArcGIS I and II ESRI ArcObject Development I and II

#### **Staff**

Three contractors remain on site from Computer Services Corporation (CSC) to assist APFO in development, implementation and management of the Geospatial Data Warehouse.

A total of eight federal employees continue to support, maintain, and develop the production systems of APFO as well as GDW requirements.

APFO has received approval to hire 2 more personnel in the area IT Database Management, positions that are critical to our success with NAIP.



#### **Imagery & Information Technology Acquisition Branch**

#### **CONTRACTING**

**Quality Assurance** 

W. Geoffrey Gabbott, Branch Chief geoffrey.gabbott@apfo.usda.gov



To provide quality procurement services which exceed customer expectations by promoting cooperative partnerships and excellence in customer service and products.

The Contracting Section is responsible for providing contracting services, IT supplies, and products in support of aerial imagery programs of USDA and other Federal Agencies. Primary functions include coordinating requests for new aerial photography and digital imagery, establishing partnerships, acquisition planning, solicitation preparation, proposal evaluation, source selection, and administering the subsequent contracts.

The Contracting Section is also responsible for the procurement of geospatial data for USDA Service centers and provides contract authority for Information Technology acquisitions, special requirement purchases, and other procurement support activities.

#### **Procurement Achievements**

- Total Contracts Awarded 135 (36 aerial, 2 geospatial data, and 97 IT contracts
- Total Contract Value \$37,555,465 (\$28,031,393 aerial imagery, \$8,321,187 geospatial data, and \$1,202,885 IT contracts.
- Administrative Charges Revenue \$347,454
- APFO Furnished Products approximately \$325,288
- Total Coverage Contracted 1,979,492 Square Miles
- Contract Administration 57 Aerial Projects administered (49 new, 8 carry over from FY 03).
- Contract Pricing Overall weighted average price for all aerial imagery contracts was \$16.46 per square mile (\$31.79 per linear mile).

#### **Program Achievements**

#### **Small Business Concern Programs**

As a result of the Contracting Section soliciting sources for program requirements under a 100% Set-aside for Small Business Concerns when and where applicable, Keystone Aerial Surveys, Inc., Aerial Contractor for APFO, was nominated and awarded the FSA Women Owned Small Business of the Year Award. This prestigious award was presented to the company owner, Mary Potter, in an awards ceremony held in Washington DC.

#### **Program Achievements -** Continued

The APFO Contracting Section awarded 60% of the overall total contract dollar amount to Small Business Concerns; Large Business Concerns received 40%.



#### **Contract Distribution by Program;**

<u>Program</u>	Small Business	<u>Large Business</u>
NAIP Contracts	39%	61%
Resource Contracts	80%	20%
NRI Contracts	87%	13%
CLU Contracts	100%	0%

#### **National Agriculture Imagery Program (NAIP)**

Contracting provided services to FSA and other contributing partners for one meter and two meter digital ortho imagery, covering 2,089 counties (1,808,016 square miles) in 35 states. The Contracting Section awarded contracts for a total value of \$20,057,879.06, approximately \$5.7 million coming from partnership agreements with state and federal agencies, \$14.3 million was funded by the Farm Service Agency. Imagery was acquired using both precision mapping film cameras and large format digital cameras.

#### **Resource Aerial Photography Contracts**

During FY 04, 46,476 linear miles of conventional aerial photography services (89,747 square miles) were contracted. Twenty-six resource aerial photography contracts for \$1,477,430.20 were awarded. Included in the contracts were 22 U.S. Forest Service (USFS) projects, 1 National Park Service (NPS) project, 2 Natural Resource Conservation Service (NRCS) projects, and 1 Bureau of Indian Affairs (BIA) project.

#### **Natural Resource Inventory Contracts - (NRI)**

NRCS was provided Contracting services for the NRI Program to acquire aerial photography for 71,110 Primary Sample Unit (PSU) Sites. This was the final year of a 3 year IDIQ Contract for FY 04, total value of \$5,603,898.00.

#### NRCS Alaska Ortho imagery Contracts

Two contracts (one is APFO's first satellite contract) for a total of \$892,185.00 were awarded for 4 areas in Alaska for one meter digital ortho imagery, 189 DOQQ's (10,619 square miles).

#### **Computer Equipment and Maintenance Contracts**

Ninety-Seven Purchase Orders for APFO IT Hardware, Software, and Maintenance Agreements were completed during FY04.



# **Contracting Section Activity Report**

Activity	Total Hours	% of Time
Annual Leave	887	6
Sick Leave	286	2
Other Leave	648	4
Section Administration	116	1
Supervision	82	1
Training	303	2
Contract Support	837	6
Coordination	380	3
Contract, QA	1,637	11
Contracting	9,761	64
Totals		100%

#### **Imagery & Information Technology Acquisition Branch**

#### INSPECTION SECTION

Supervisor position, vacant



Assuring customer needs are met through the application of Government Performance Results Act (GPRA) methods and procedures to inspect products received, produced and released from the Aerial Photography Field Office.

The Inspection Section is directly responsible for the quality assurance inspection, monitoring, and disseminating of imagery and geospatial data for the following programs; National Agriculture Imagery Program (NAIP), National Resource Inventory (NRI) Resource Aerial Photography, Common Land Unit (CLU) digitizing, and Mosaicked Digital Ortho photos (MDOQ). The Inspection Section also provides APFO web site update information including

status maps and data for the NAIP, NRI, Resources, CLU and MDOQ programs. The Inspection Section is also responsible for maintenance of the Service Center GIS priority listing (SCIT), and Catalog Listing.

#### **Inspection Section Achievements**

#### National Agriculture Imagery Program (NAIP)

The Inspection Section performed Flight Planning of 2,089 counties covering 1,808,016 square miles (135,549 DOQQ's), Provided inspection services for the Compressed County Mosaics (CCM) and inspection management services for all other NAIP deliverables. Inspection and acceptance of contracted deliverables is currently being performed.

#### Natural Resource Inventory (NRI) Program Imagery

The APFO Inspection Section inspected and accepted 71,110 aerial photography site imagery;

Primary Sample Site (PSU)	69,536 sites
Wetland Reserve PROGRAM (WRP)	823 sites
Conservation Effects Assessment Project (CEAP)	562 sites
Range Inventory Program (RIP)	189 sites

#### **Inspection Section Achievements**

#### **Resource Aerial Photography**

Another FY 04 achievement included the Inspection Section providing flight planning and contract monitoring services for 30 resource aerial photography projects covering 100,366 square miles (46,476 linear miles).



# Common Land Unit (CLU) Digitizing, Mosaicked Digital Ortho Quadrangles (MDOQ's)

The Inspection Section inspected and accepted 407 CLU counties produced from digitizing centers and 682 CLU counties and 27 MDOQ counties produced by contract vendors.

Other accomplishments include maintaining and improving the "Scitmaster" spreadsheet data, performed comprehensive review and corrections to data contained in the APFO Catalog Listing, and regular reviews and updates to all contract program webbased status maps and information.

# **Inspection Section Activity Report**



Activity	Total Hours	% of Time
Annual Leave	1,625	9
Sick Leave	610	4
Other Leave	1,155	7
Section Administration	312	2
Supervision	1,479	9
Training	970	6
Contract Support	185	1
Contract Management	1,731	10
Resource Inspection	1,447	8
NAIP Inspection	2,242	13
NRI PSU Inspection	1,024	6
MDOQ / CLU Inspection	3,972	22
Monitor / Order DOQQ	303	2
Training	970	6
Totals	18,025	100%

Geospatial Services Branch
Service Center Support Section
Digital Section

Bruce Finch bruce.finch@apfo.usda.gov



The Service Center Support Section provides technical support and assistance on digital imagery related issues to FSA Service Centers, State Offices, and Digitizing Centers. The Service Center Support Section also supports the APFO Geospatial Services Branch Digital Section in evaluation and testing of software applications and development of methodologies to improve efficiency in orthorectification and mosaicking.

#### **Strategic Planning**

During FY 04, the APFO Service Center Support Section contributed to Agency and Departmental initiatives to refine and improve GIS implementation in FSA offices. This included participation on inter-agency teams evaluating business practices, upgrades to software and hardware, and development of tools for GIS applications. Helpdesk support was provided to both government and private users of digital imagery. As GIS becomes fully deployed in Service Centers in FY 05, Helpdesk support is expected to increase significantly.

#### **Reports**

- Information about pentablet-style computers used in the MDCD study for possible software upgrades.
- Report on GIS related Adopt-a-School activities at Hillsdale Elementary School.
- Updated the camera specifications and recommendations report for distribution to state offices.
- Report on the cause and solutions of the slow opening CCM's from ASI.

#### Research

- Compression ratio of the photomap scans used in CLU digitizing.
- Options for small format digital cameras for the aerial compliance program.
- Evaluation of JPEG2000 to replace MrSID for the NAIP program. Also researched other compression options in consultation with NCGC.
- Options for reprojecting NAIP imagery from one UTM zone to another.
- Options for new pentablet type devices.

#### Presentations / Training Provided and Received

The Geospatial Services Branch made a NAIP presentation to the Utah Geologic Association, provided training to approximately 400 students on "Utah State GIS Day" during FY 04.

#### **Agency and Department Committee Assignments**

- Metadata
- Geodata Provisioning
- Mobile Data Collection Devices
- FGDC Cadastral Subcommittee
- Transportation Layer Review (TeleAtlas)
- CLU
- NAIP Planning
- Help Desk
- Security
- Data Warehouse

#### **Data Provided**

- NOAA imagery to Hawaii
- Imagery for USDA Security
- Flight planning software to Arizona FSA
- Digital indexes for 3 Florida counties
- Imagery for the World Ag Forum
- Imagery to RMA
- PLSS data for RMA
- Data Viewer software to NRCS

#### **Conferences Attended**

- ESRI Mobile GIS Seminar
- ESRI Users Conference
- Commodity Classic Convention
- Utah Geographic Information Council Conference



# Service Center Support Section Help Desk Support



	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Total
Phone	17	11	10	14	16	12	20	10	7	10	12	20	159
email	5	5	2	5	5	10	10	5	4	5	5	5	66
Totals	22	16	12	19	21	22	30	15	11	15	17	25	225

# **Service Center Support Section Activity Report**

Activity	Total Hours	% of Time
Annual Leave	350.25	8.5
Sick Leave	94	2.3
Other Leave	176.5	4.3
Section Administration	35.75	0.9
Supervision	1,710.5	41.7
Training / Travel	280	6.8
Product Development / Special Projects / Help Desk	1,452	35.4
Total	4,099	100%

Geospatial Services Branch Digital Section Hugh McGirt hugh.mcgirt@apfo.usda.gov



. . . Provide our customers with the highest quality geospatial products, with emphasis on process improvement and customer satisfaction

Digital Services Section is responsible for producing accurate and quality checked 7.5" tiled mosaics (in county format), from USGS DOQQ's. Imagery is made available in soft and hardcopy formats to meet the needs of GIS implementation in support of FSA Service Centers.

Cartographic features such as scales or legends accompany hardcopy digital products, thus enhancing usability. Responsibilities of the Digital Section include;

- County Index maps created with quarter quads overlays
- County, State, and National Status Maps containing geospatial information
- Maintain, in county format, archived 7.5" tiles

#### **Strategic Planning**

During FY04, Digital Services completed the fifth year as a section in the reorganized Geospatial Branch. Equipment, process improvements, and training were goals established and achieve to include;

- Equipment 1 8mm Tape Storage Cabinet
- Library Additions 2,309 8mm tapes added for a total of 7,107 8mm tapes
- Process Improvements File manipulation scripts written and improved
- Training ArcGIS Course 20 employees
- Training ArcGIS II Course 8 employees

#### **Production Accomplishments**

- County mosaics completed 513
- APFO generated ortho imagery from scanned NAPP 3
- Mosaic plots completed 513
- Square miles completed 505,782
- DOQQ's seamed 80,364



# **Digital Section Production Activity Defined**

Activity	<b>Total Hours</b>
Project Assistance	12
Documentation	766
Cartographic Work	10
System Management	2
File Management	3,025.35
Tiling	33.75
Image Dodging	890.95
Mosaicking DOQQ's	4,966.80
Inspecting Seam Lines	3,522.30
Image Processing	675
Project Preparation	8,226.45
Ordering DOQQ's	31.
CIR Resampling	10
CD Writing Black and White	1,254.30
CD Writing Color Infrared	1,338.45
Ortho Production	1,911.00
Application Programming	189.75
Special Digital Ortho Projects	1,217.70



# **Digital Section Activity Report**

Activity	Hours	% of Time
Annual Leave	3,066.75	7
Sick Leave	1,753.25	4
Other Leave	4,335.25	10
Section Administration	325.55	1
Supervision	1,740.75	4
Training	1,255.75	3
Detailed Activity	404.25	1
Production Activity	29,199.45	70
Total	42,108.00	100%

#### **Photo Imaging Branch**

Technical Support Staff
Black and White Photography
Color Photography
Robert Lear
robert.lear@apfo.usda.gov



The Photo Imaging Branch consists of APFO's Technical Support, Black and White Photographic, and Color Photography Sections. The Branch provides APFO with the ability to perform Digital Imaging Production, Photographic Production, NAIP / NAPP Film Inspection, Chemical Mixing and Environmental Monitoring, Electronic and Mechanical Maintenance and Maintaining APFO's Film and Media Library.

Additional responsibilities during FY 04 include inspection of the two meter tiles for NAIP. To support this new workload, modification of physical work space, installation of additional computers, development of a project management system and procedures, and employee training was accomplished within 120 days of accepting the new responsibility.

Replacement of an obsolete reversal color photographic process with a two step digital imaging process was accomplished during FY 04, Color or Color Infrared film is scanned at 25 microns with a final photography printed on a Direct Digital Printer.

Photo Imaging Branch employees were provided training on; ERDAS, ARCGIS 1 & 2, Aerial Imaging Class and the ESRI Conference.

During FY 04, the Photo Imaging Branch produced;

- 188,972 Photographic products / services
- Scanned 27,201 images
- Successfully loaded MDOQ's to the L700 library in 1,346 hours
- Provided 1,900 hours to NAIP digital inspection
- Provided 695 hours to NAIP film inspection

Compliance and support of Utah State Law regarding chemical dumping or heavy metal levels to the local sewer authority was provided for the facility through the Photo Imaging Branch.

#### Technical Support Staff



#### **Technical Support Section**

The Technical Support Staff's role was expanded from photographic support to include IT hardware and cabling support. Tech Support has been involved in the following activities during FY 04;

- Relocated (1) Color Photo Section Horizontal Enlarger
- Removed for property excess (1) Black and White and (1) Color Sections Horizontal Enlargers
- Relocated (1) Color Photo RA4 Paper Processor
- Established mechanical drawing for new IT space
- Made recommendations for new IT cabling throughout APFO.
- Researched and resolved static and power problems with Color Photo Section automated printer.
- Provided the IT staff with 890 hours of support during FY 04.
- Relocated the silver recovery system in the chemical mixing room during replacement of damaged concrete floor, providing technical advice to the contractor regarding floor drain modification.





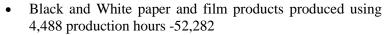
Working in unity with our customers in order to meet their expectations. Providing the highest quality black and white aerial photographic and digital products available.

The Black and White Photography Section is responsible for producing black and white aerial photographic products furnished to the USDA Farm Service and other Federal and non-federal customers.





## FY 04 Achievements in Black and White Photography Production



- Image Scans produced -27,201
- Image Scan CD's produced 1,452
- Image Scan DVD's produced 1,226
- Production hours used for Image Scans 3,027
- Photomap Scans and Plots produced 1,721
- L700 Cataloging MDOQ's 1,347
- Binding 24"x 24" paper prints 403
- Reprint Percentage .03%
- Total Work orders processed 5,115

#### **Training / Details**

- NAIP County Image Inspection 800 hours
- ArcView GIS I 3 days
- ERDAS Training 3 days
- Rapid Deployment of New Products Team 260 hours.





#### **Photo Imaging Branch**

**Color Section** 

Brenda Simpson, Supervisor brenda.simpson@apfo.usda.gov

To provide Quality in the form of Value, Service and Customer Conformance



The Color Section of the Photo/Imaging Branch is responsible for generating color products for various customers, including FSA, NRCS, Forest Service, other Federal and non federal agencies and the public.

The Color Section released 199,373 total products, photographic and digital imagery for FY 04.

#### **Color Section Achievements in Production**

•	Color Photography	130,530 Products -:	3,645 hours
•	CD Duplicating	59,904 Products -	1,101 hours
•	CD Writing	15,864	
•	FSA Photomap scans	1,721 Products -	44 hours
•	Laminating	6,871 Products -	29.5 hours
•	Trimming/Cutting	391 Products -	18 hours
•	Film Inspection		918 hours
•	Rolls Inspected	771 NAPP & NAI	P
•	35mm images scanned	3,951 images -	201 hours
•	1 and 2 Meter NAIP	images copied	21,032



#### **Accomplishments**

- Orders processed and released 5,698 orders using 15,978 rolls.
- External rework total 355 products, less than 1% of all photo products released by color.
- Products Inspected 13,530 photographic products.
- Waste for FY 04 waste 8%

Several photographic products were discontinued causing the shutdown of the P4 reversal process, when the existing photographic process was no longer available from any vendor. The Color Section researched and created a new digital to hard copy process allowing APFO customers to continue receiving color infrared prints from color infrared film to replace this product. All reversal products will be processed using a scanned image and making a digital paper print from these images.

#### **Color Section**

The Color Section developed three spreadsheets allowing the Sales Section of APFO to input the necessary information needed for an enlargement from a digital image, (i.e., scale of film, enlargement factor and scale requested by customer). This information is then used in



Adobe Photoshop to reproduce the digital image to a paper print, and setting up a grid system within Adobe Photoshop allowing easily reproduced left and right sectionals, quads and center on X images.

APFO's Color Section also expanded the film inspection area in preparation for the increased NAIP04 workload. A total of 654 rolls of NAIP03 film were inspected and released to the library, using 695 labor hours, 117 rolls of NAPP film were inspected using 244 hours. An additional light table was added for use in 2004 film inspection.

A new 2 meter tile inspection room has replaced a photo dark room where 192,099 QQ NAIP 04 were inspected.

#### **Training / Details**

150 hours of training was provided for the transition from Photographic P4 process to the Epsilon Digital Printer to Color Section employees.

Two section employees were detailed to the APFO Imagery & IT Acquisition Branch Inspection Section to provide 53

hours towards CLU inspection, 439 hours inspecting NAIP scanned images, and 287 hours were dedicated to Contract material inspection.

Extensive time was dedicated to training employees on the NAIP inspection, both film and 2 meter tile processes.

### **Color Section**





Activity	Total Hours	% of Time
Annual Leave	1,269.5	9
Sick Leave	5540	4
Other Leave	834	5
Section Administration	70	
Supervision	1,527	10
Training	554	4
Contact Prints	3,453	23
Photo Enlargements	933	6
Film Inspection	914	6
Digital Media	2,024	15
Support Activities Special Projects	2,786.4	18
Totals	14,909	100%