



Presented to: USDA FSA APFO

*The Geospatial Experts*

# ***2005 NAIP Post Season Meeting Lessons Learned***

Jaymes Pardue, Senior Account Manager

Paul Currie, Project Manager

*December 06, 2005*

**VARGIS™**

An Infotech Enterprises Company

## **2005 Project Summary**

- 2005 Project summary
- Applying Lessons Learned in 2004
- 2005 Project Plan
- 2005 Results
- 2005 Lessons Learned
- Looking Forward to 2006
- Open Discussion and Questions

## 2005 Project Summary

- State of Pennsylvania (2 meter)
- State of Maryland (1 meter)
- 4,294 DOQQs or 91 CCMs
- 18,546 Linear Miles
- 8,588 Frames
- Natural Color
- Season: June 1 – August 15.
- Received 2 extensions
- Season Extended to: September 30, 2005.
- Film Capture Complete: September 24, 2005.

**“Translating our improved understanding of the NAIP program requirements into optimum results for 2005”**

**Three Focus Areas:**

Aerial Photography

QA/QC

Production

## Aerial Photography

- Dedicated flight manager
- Adequate aircraft allocations and full deployment
- Experienced flyers only
- Used aircraft with a greater capacity
- Flight resources stationed as close as possible to coverage areas
- Ensure flexibility in flight planning by providing each flying contractor with the same flight plan that is updated daily.

## QA/QC

- Implemented more QA/QC steps to catch potential problems early
- Made great strides in increasing our efficiency
- Allowing greater long term capacity
- Provided consistent product deliverables

## Production

- Investment in Technology
- Team Approach to produce more useful imagery
- Consolidated aerial processing and scanning procedures under one contractor to ensure consistent results
- Resulted in better overall color quality
- Manage expectations (subs and end customers)

## Flight Plan

- Aircraft Allocations and Deployment
  - Groupe Alta (GA)
    - 2 aircraft based in central PA
    - Allocated western  $\frac{3}{4}$  of PA and  $\frac{3}{4}$  of MD
  - Richard Crouse & Associates (RCA)
    - 1-2 aircraft based in MD
    - Allocated eastern  $\frac{1}{4}$  of PA and eastern  $\frac{1}{4}$  of MD
  - Airborne Sensing Corp (ASC)
    - 1 aircraft based in Toronto, Canada
    - Allocated western  $\frac{1}{8}$  of PA

## **Flight Plan (cont.)**

- Flight Management
  - Daily supervision by VARGIS PM
- Entire Film Processing by Groupe Alta
- All Scanning by Groupe Alta
- Film Review by VARGIS and Groupe Alta
- Titling by Groupe Alta
- QA of all materials by VARGIS

## Production Plan

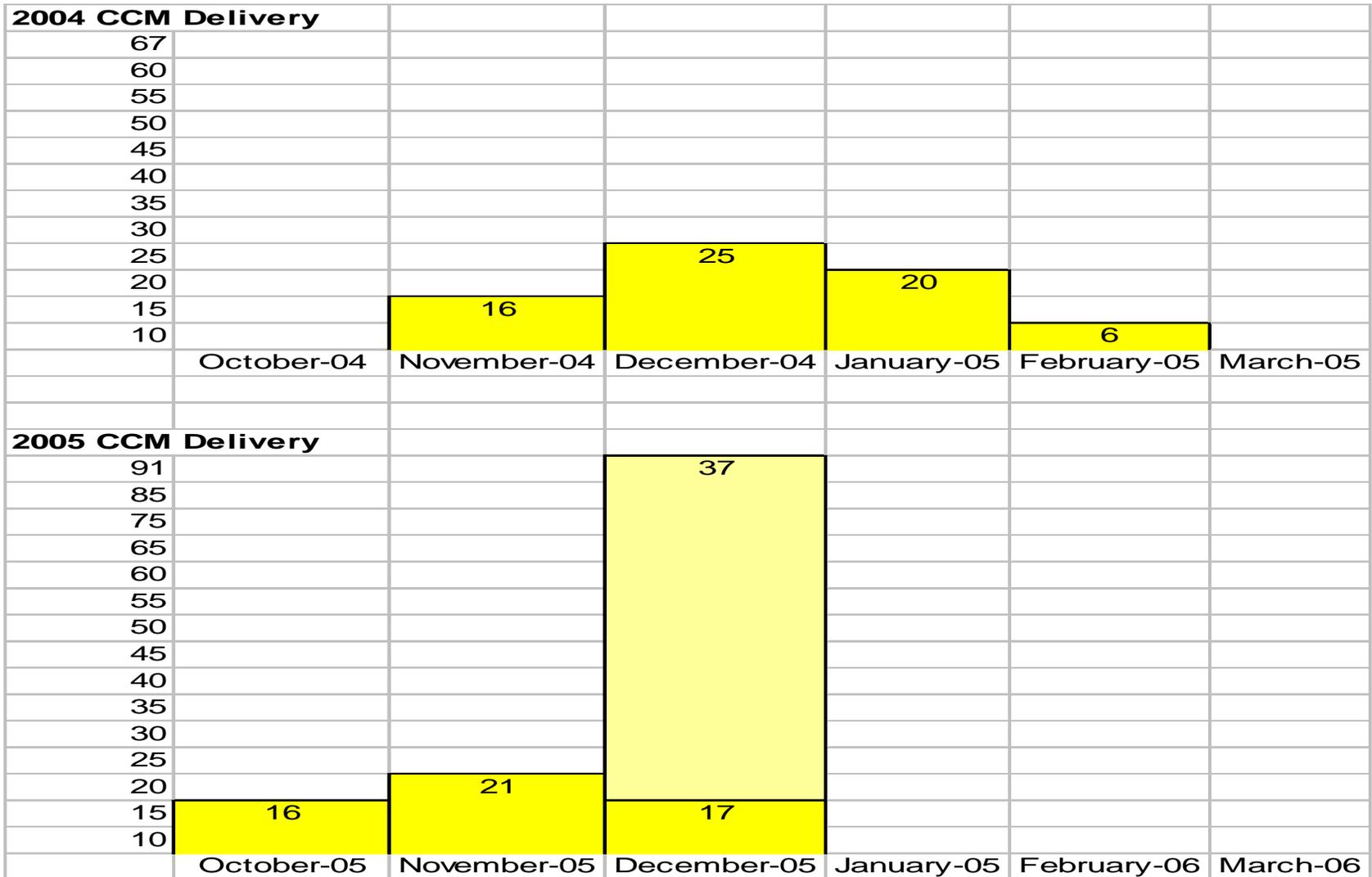
- Approved/Titled Film Sent To VARGIS Production Units For:
  - AT
  - Orthorectification
  - Color Balance
  - County Mosaics
  - Metadata
  - QA
- Final Deliverables Sent To USDA

## Improvement in all areas

- Aerial Photography
  - Collected more data in a shorter time frame
  - 92% collected within season
  - Took advantage of having contiguous states
  - Great reduction in small gaps in coverage
- QA/QC
  - Caught many problems early in the process
  - Very good acceptance rate (on products delivered)
- Production
  - Though behind we are on pace to complete delivery of all CCM's (91) in December
  - Currently at 68% complete (37% improvement over 04)



## 2005 Results



## Challenges and Causes

- Aerial Photography Delays:
  - Unable to capture photography within season due to poor weather in August
  - Unable to get access to Aberdeen Proving Ground
- QA/QC Delays:
  - New QA/QC procedures could have been communicated better to subs
- Production Delays:
  - More stringent internal QA/QC procedures
  - Initial rejection rate from subcontractors was very high
  - Departure of a key VARGIS production staff member

## Looking Forward to 2006

- Aerial Photography Collection
  - Performance greatly improved in 2005
  - Continue to maximize aircraft allocations early in season
  - Continue to rely on experienced firms with high capacity planes
- QA/QC
  - Initial results are very favorable
  - Continue to refine process based upon final results
  - Each production center will receive an updated QA/QC manual, project and risk management plan
- Production
  - Optimize production for rapid completion of county units
  - Continue to improve production tracking tools.

## Looking Forward to 2006

- Production
  - Optimize production for rapid completion of county units
  - Continue to improve production tracking tools.
  - Strive to improve efficiencies and economies throughout the process.

## Discussion Points - 2006 and Beyond

- Increased Resolutions – State of Virginia
  - 42,817 sq. miles of 2-foot, 1-foot and 6-inch
  - Collected in a 6-week season
  - Delivered in 1-year
  - Required 20 subs (survey, aerial collection, production)
  - Needed eight planes to complete
  - Demanded offshore labor resources
- MrSID compression vs. Jpeg 2000

Questions?

Thank You