



Horizon Air



HORIZONS
AN EARTHDATA COMPANY

NAIP POST-SEASON MEETING

December 6, 2005

ACQUISITION TEAM MEMBERS

<u>Contractor:</u>	<u># Planes</u>
Great Lakes Aerial – OH	1 – PA31 Navajo
Woolpert – OH	2 – Cessna 310 & 404
James W. Sewell – OH	1 – Aztec
Horizons, Inc. – OH	1 – Cessna 310
EarthData, Aviation – VA	1 – PA31 Navajo
Richard Crouse & Assoc. – VA	1 – PA31 Navajo
Tuck Mapping Solutions – VA	1 – PA31 Navajo
Horizons, Inc. – ND	2 – Conquest 441 (Digital Camera)

Total of 10 Aircraft

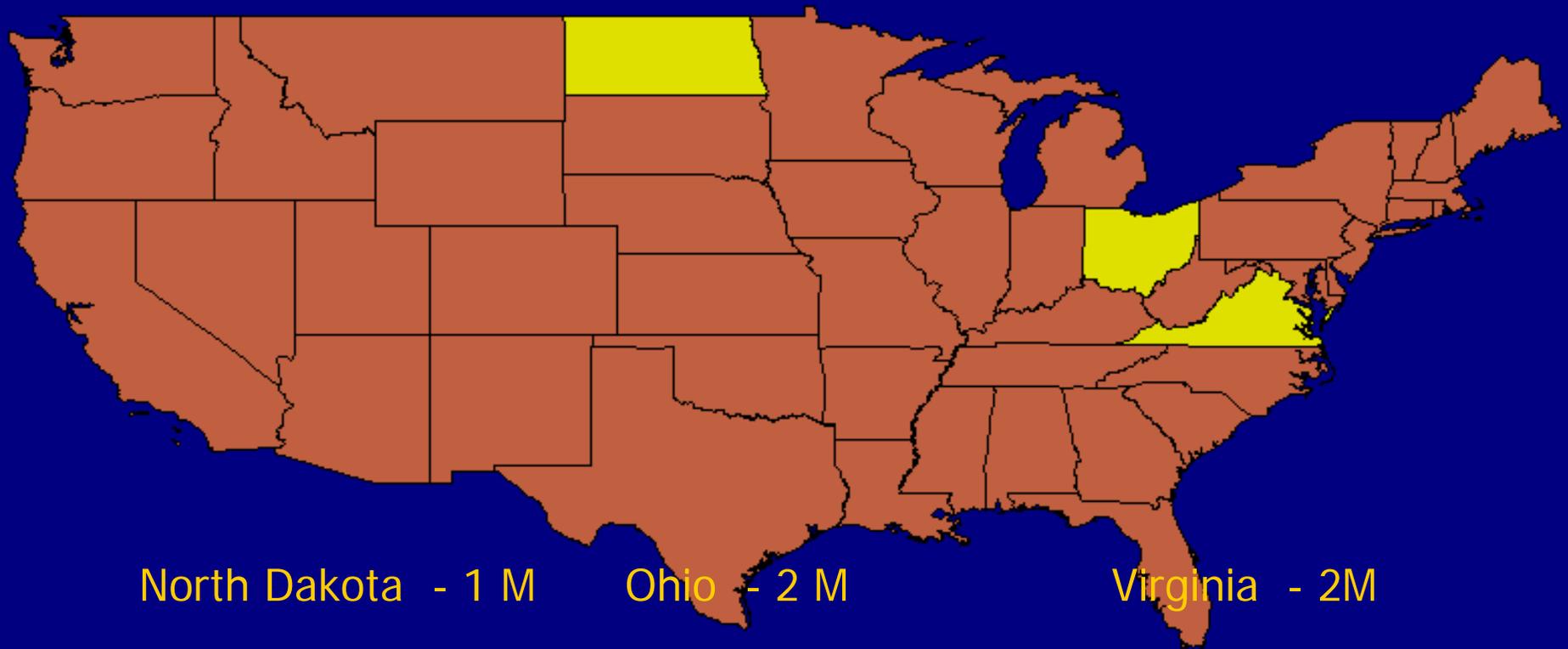
TEAM MEMBERS

Scanning

Woolpert, Inc.
James W. Sewell
Horizons, Inc.

Ortho Generation

Pixxures - OH
Woolpert, Inc. - VA
NW Geomatics - ND
Horizons, Inc - ND



North Dakota - 1 M
22,272 FLM
5,675 DOQQ
June 15 – August 15

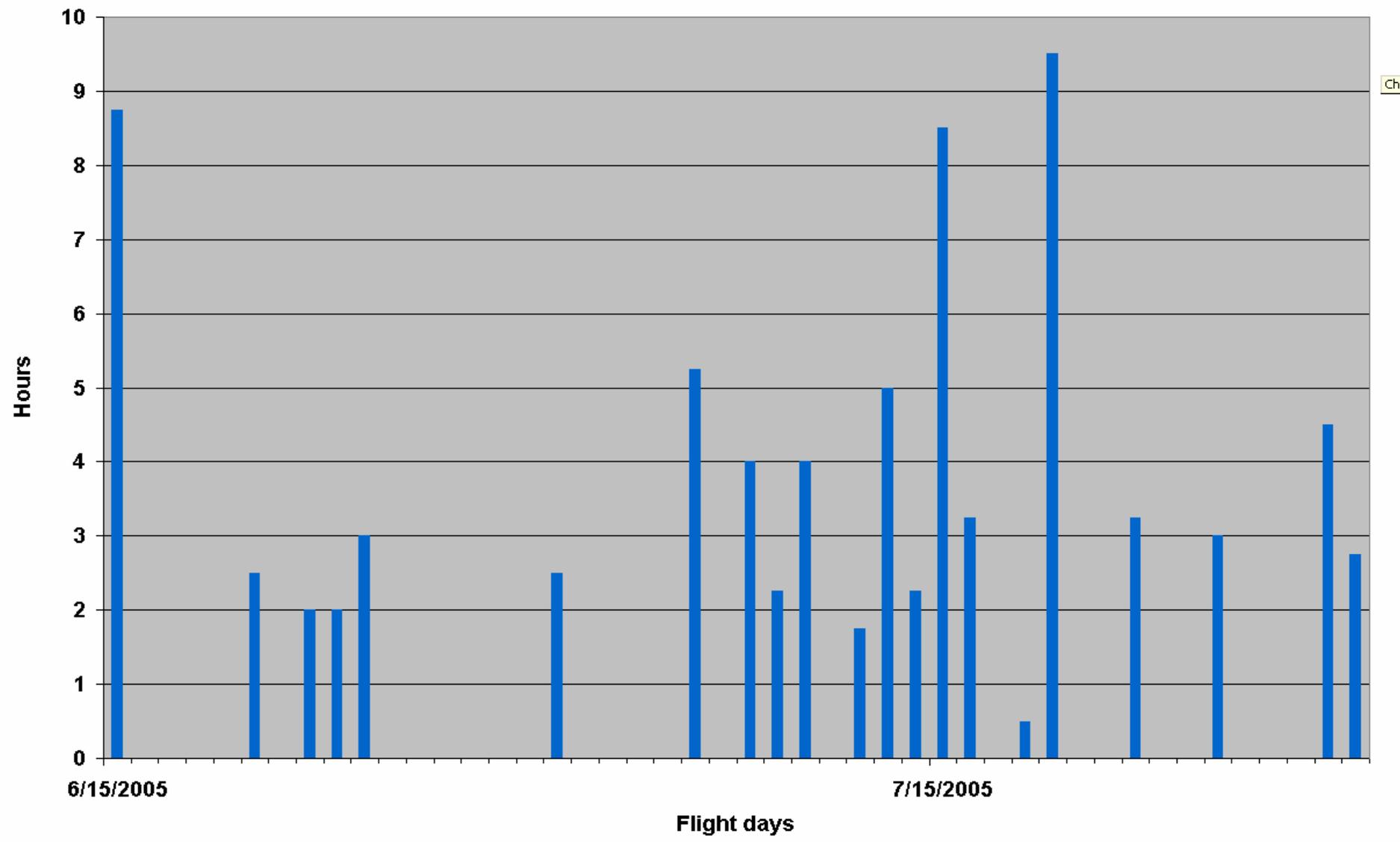
Ohio - 2 M
13,219 FLM
3,077 DOQQ
June 15 – August 15

Virginia - 2M
12,980 FLM
3,014 DOQQ
June 1 – August 15

ACQUISITION SUMMARY

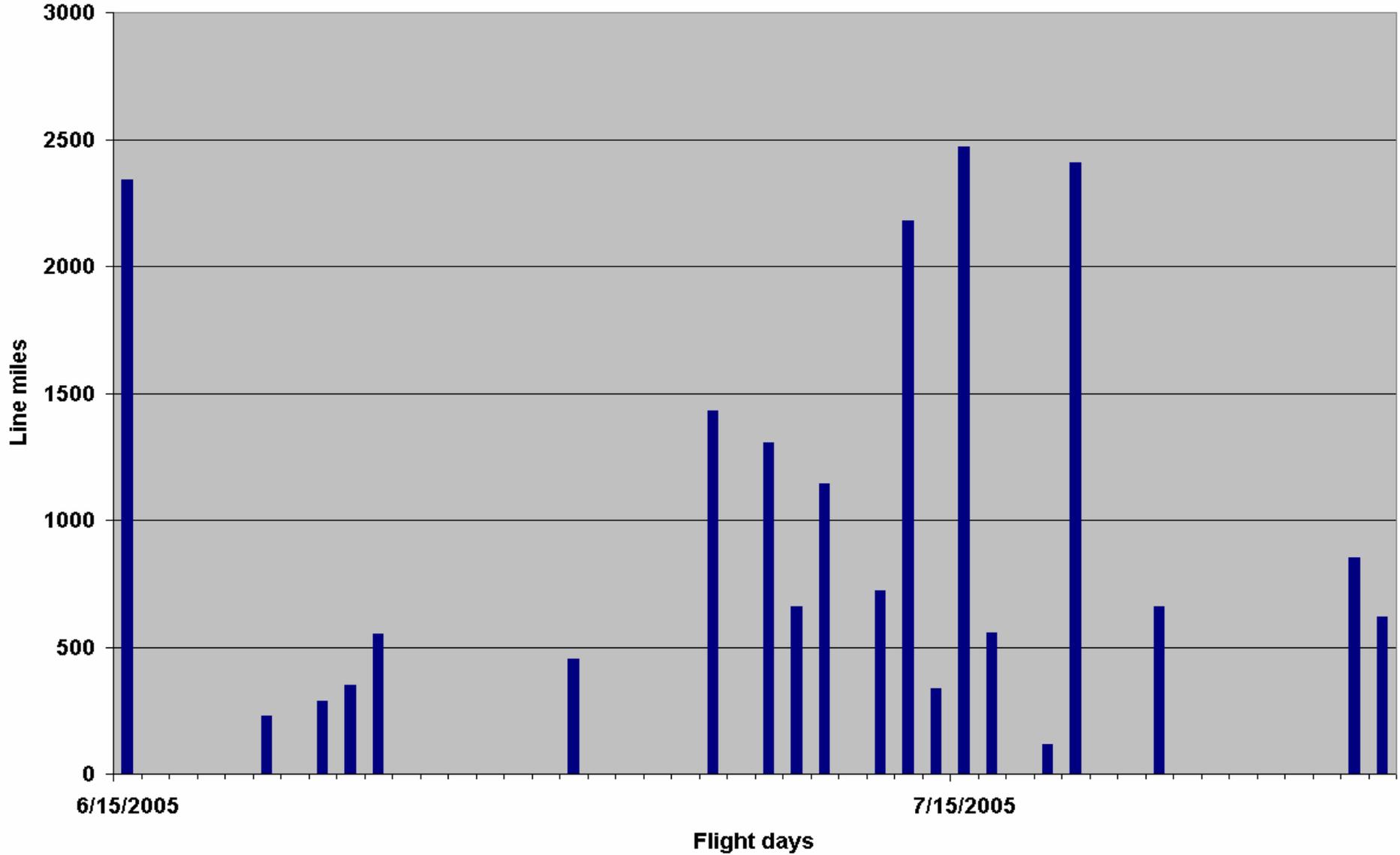
	ND	OH	VA
Planes in state:	2	5	3
Initial Window:	6/15 - 8/15	6/15 - 8/15	6/1 - 8/15
Date Completed:	7/30	8/25	9/23
Days Flown:	20/46	19/72	39/115
Total Hours:	78	89	89
Ave. Hrs/Flt Day:	3.87	4.69	2.28
Ave. FLM/Flt Day:	1113.6	695.7	332.8

North Dakota Flight Hours



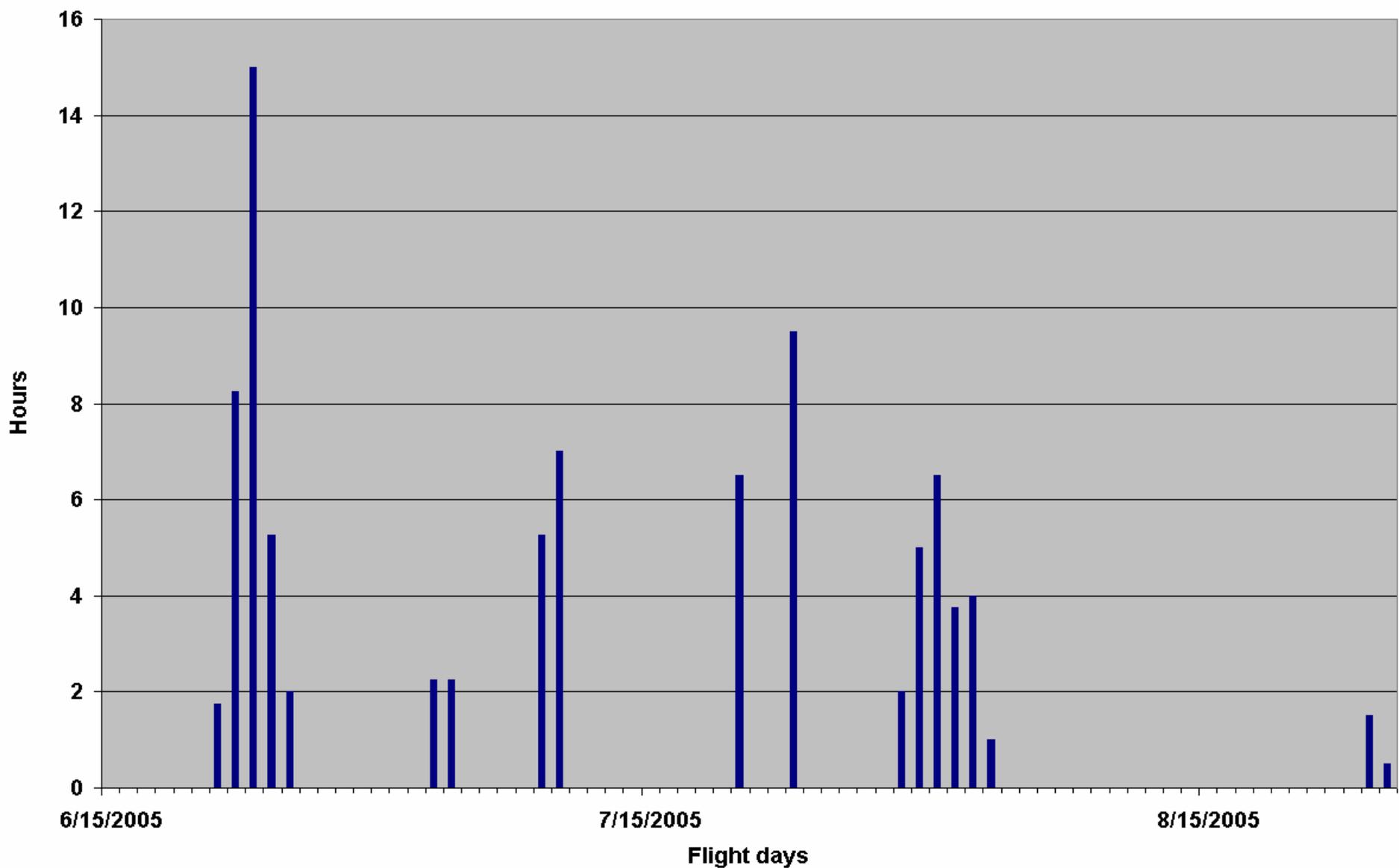
North Dakota line miles/Flight day

Chart Title



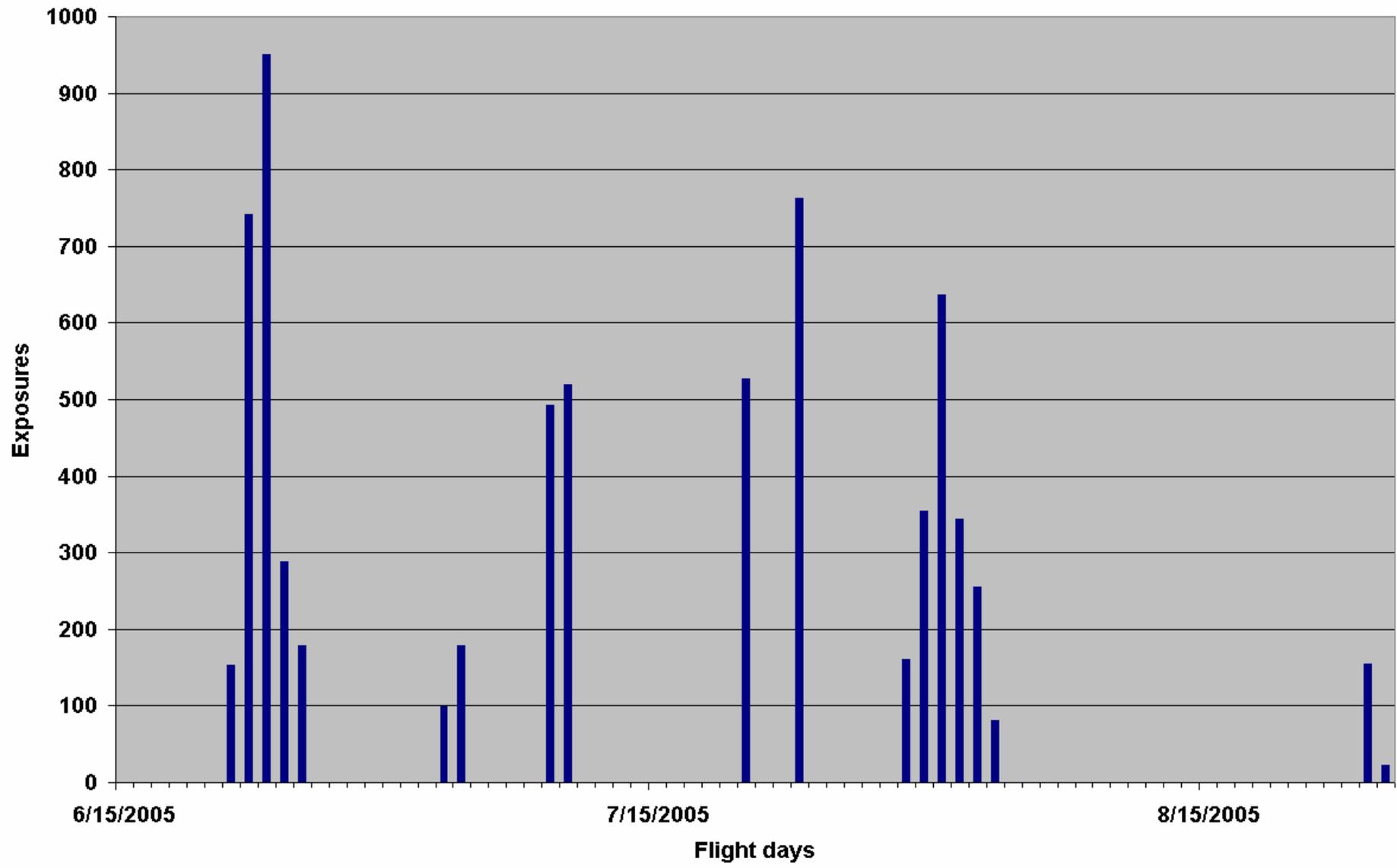
Ohio Flight Hours

Chart Area

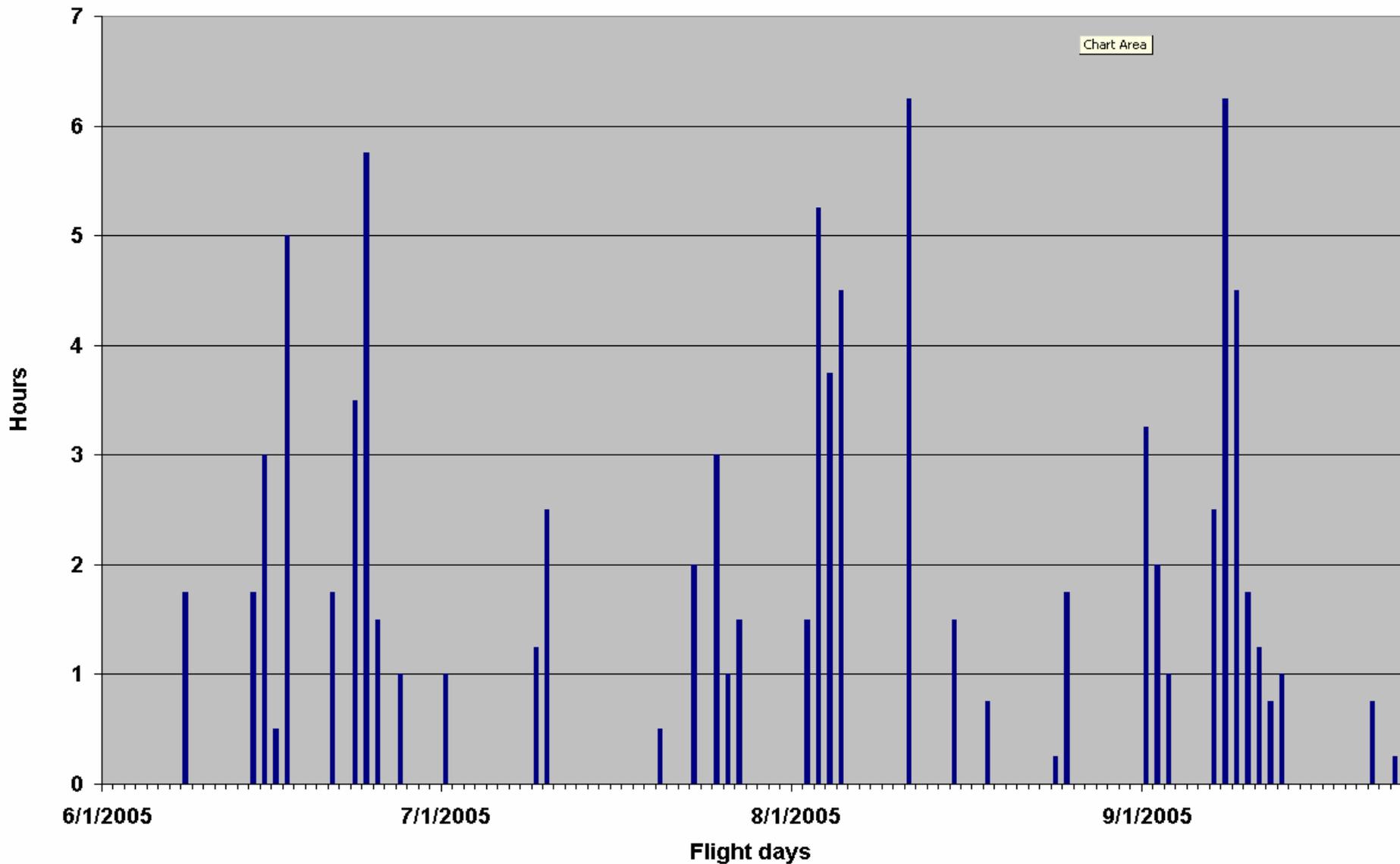


Ohio Exposures/Flight days

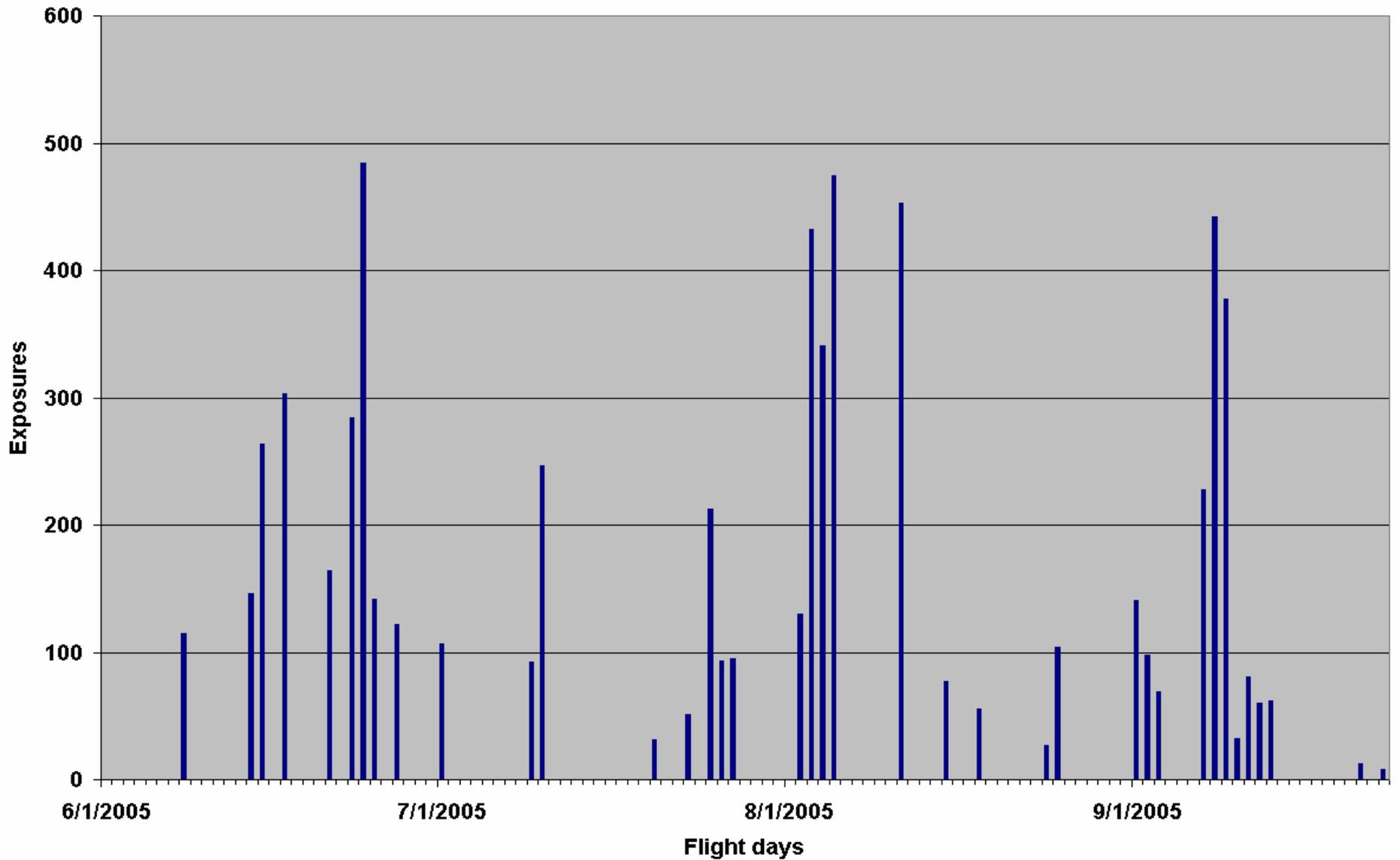
Chart Area



Virginia Flight Hours



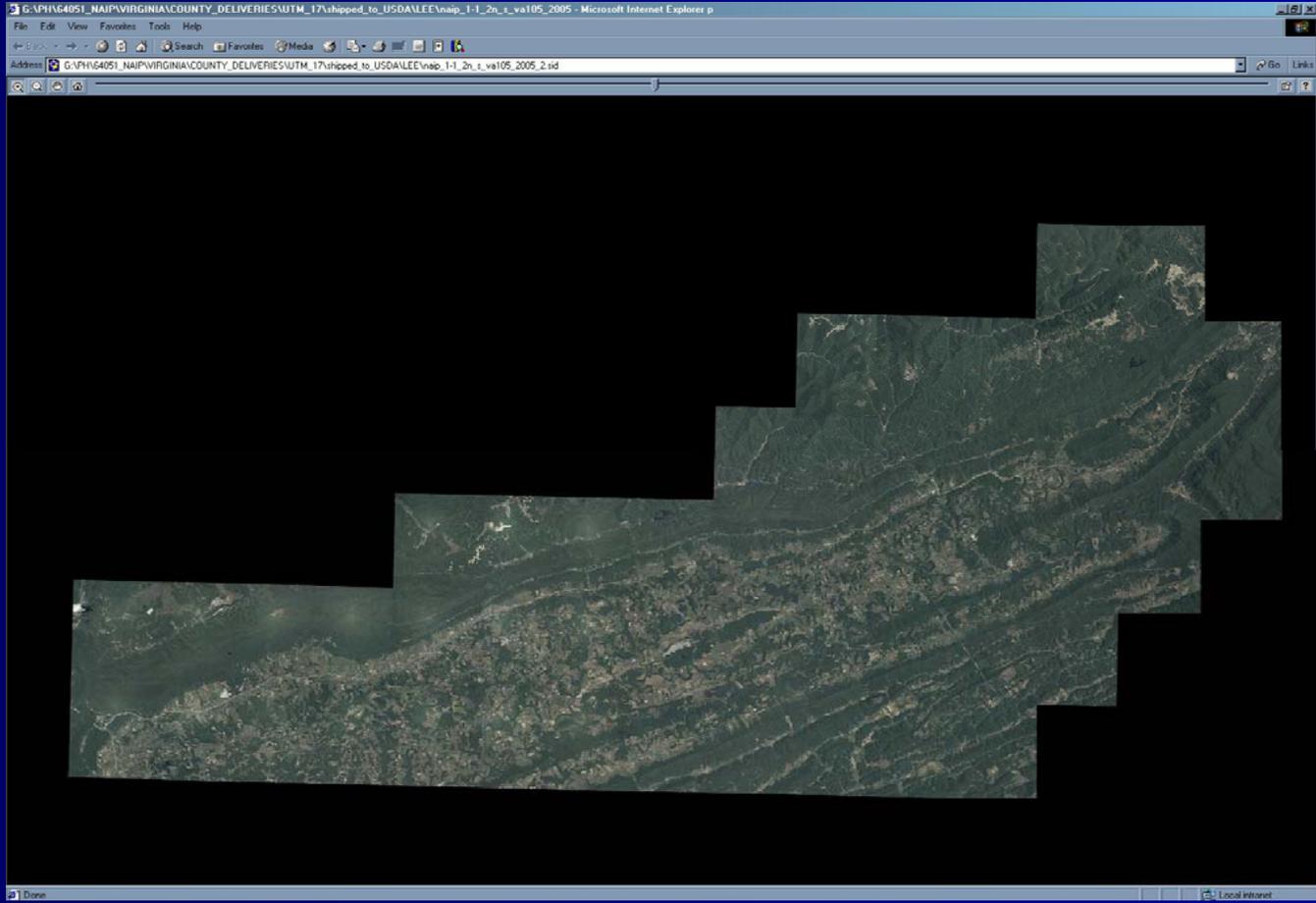
Virginia Exposures/Flight day



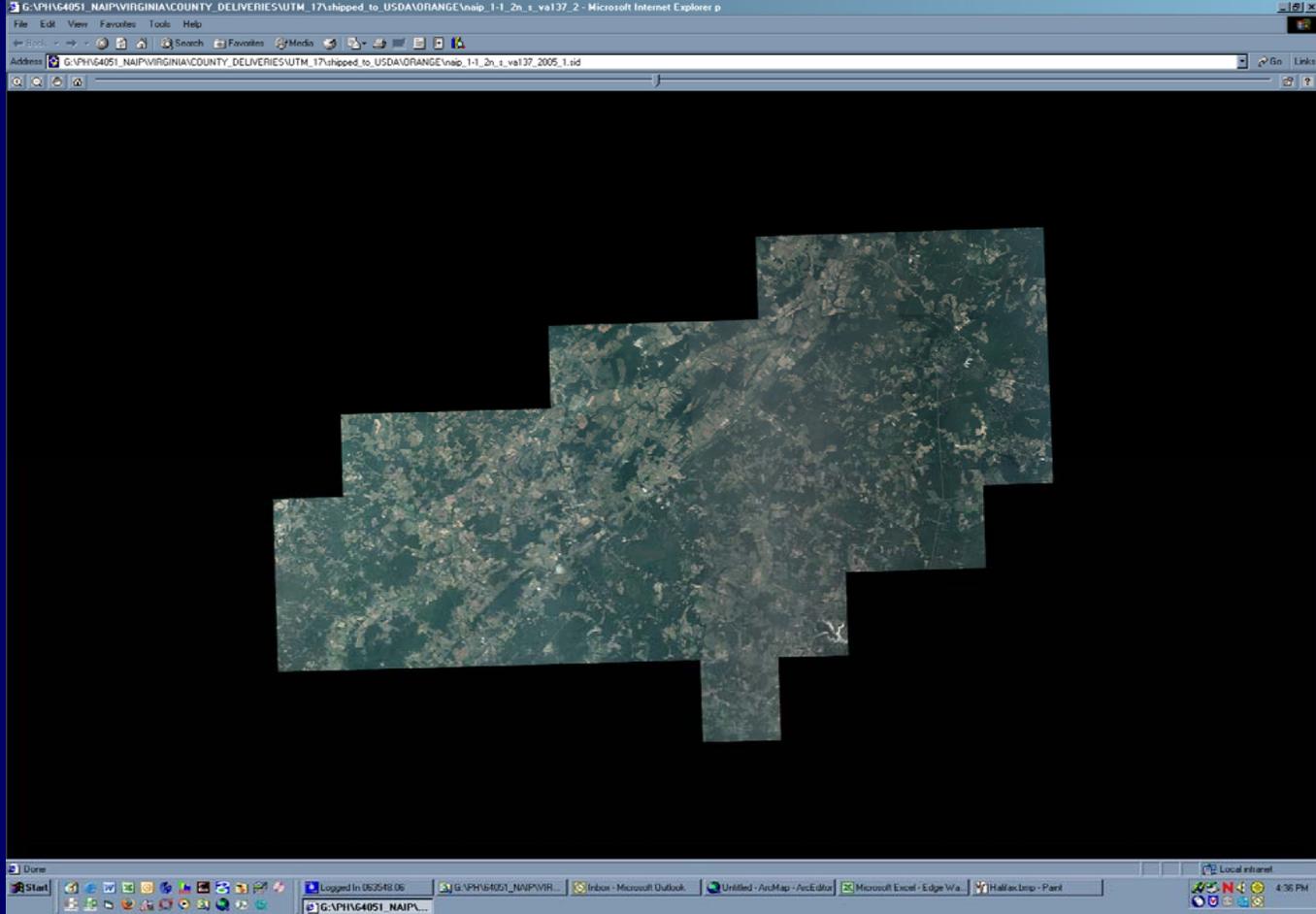
Color Balance Issues Within CCMs

- Multiple Dates of Aerial Photograph
- Multiple Cameras
- Local Weather Conditions – Haze and Clouds
- Time delay in acquisition between adjoining DOQQs
- Not as bad as the southern Gulf States...

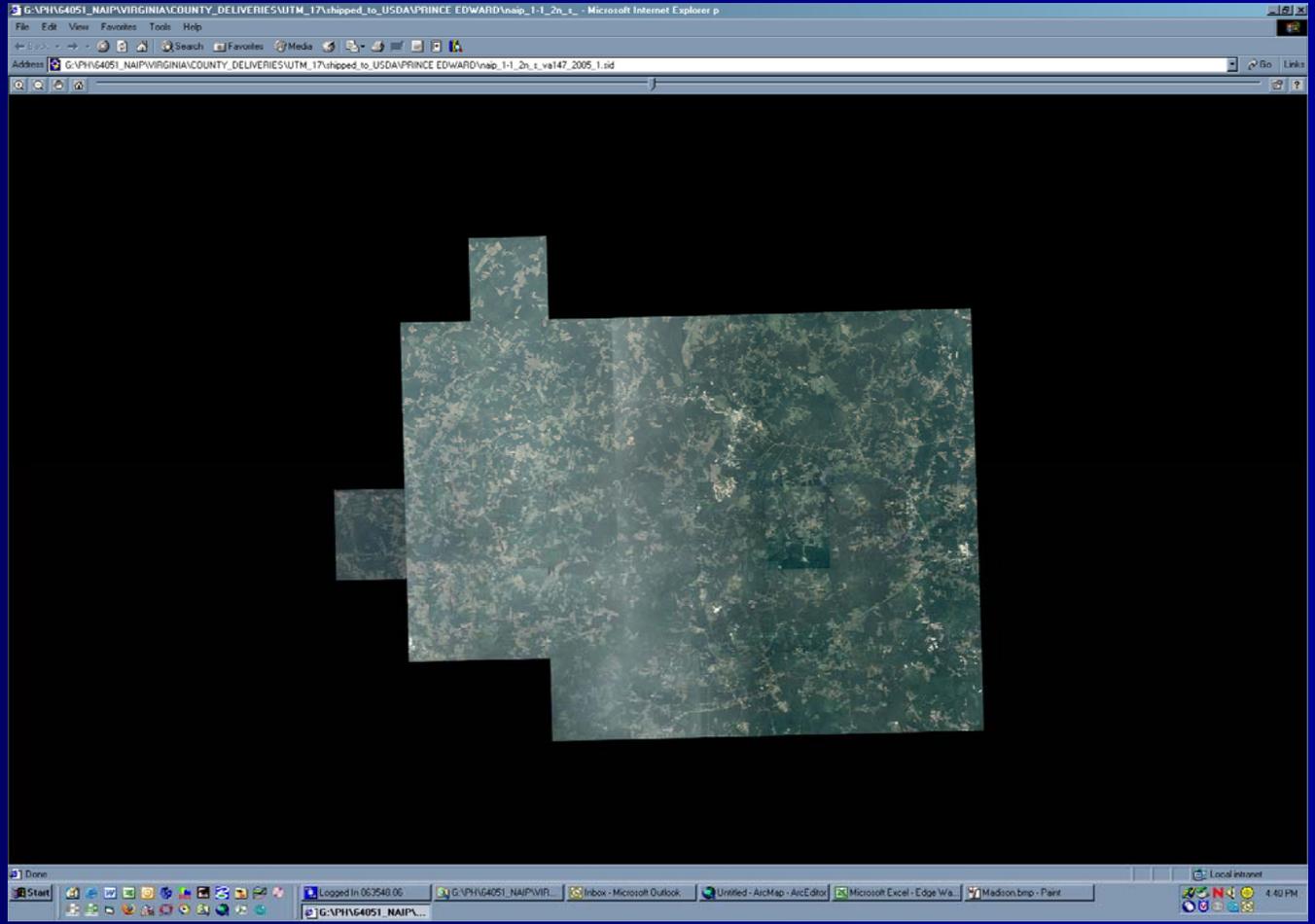
Lee County, VA



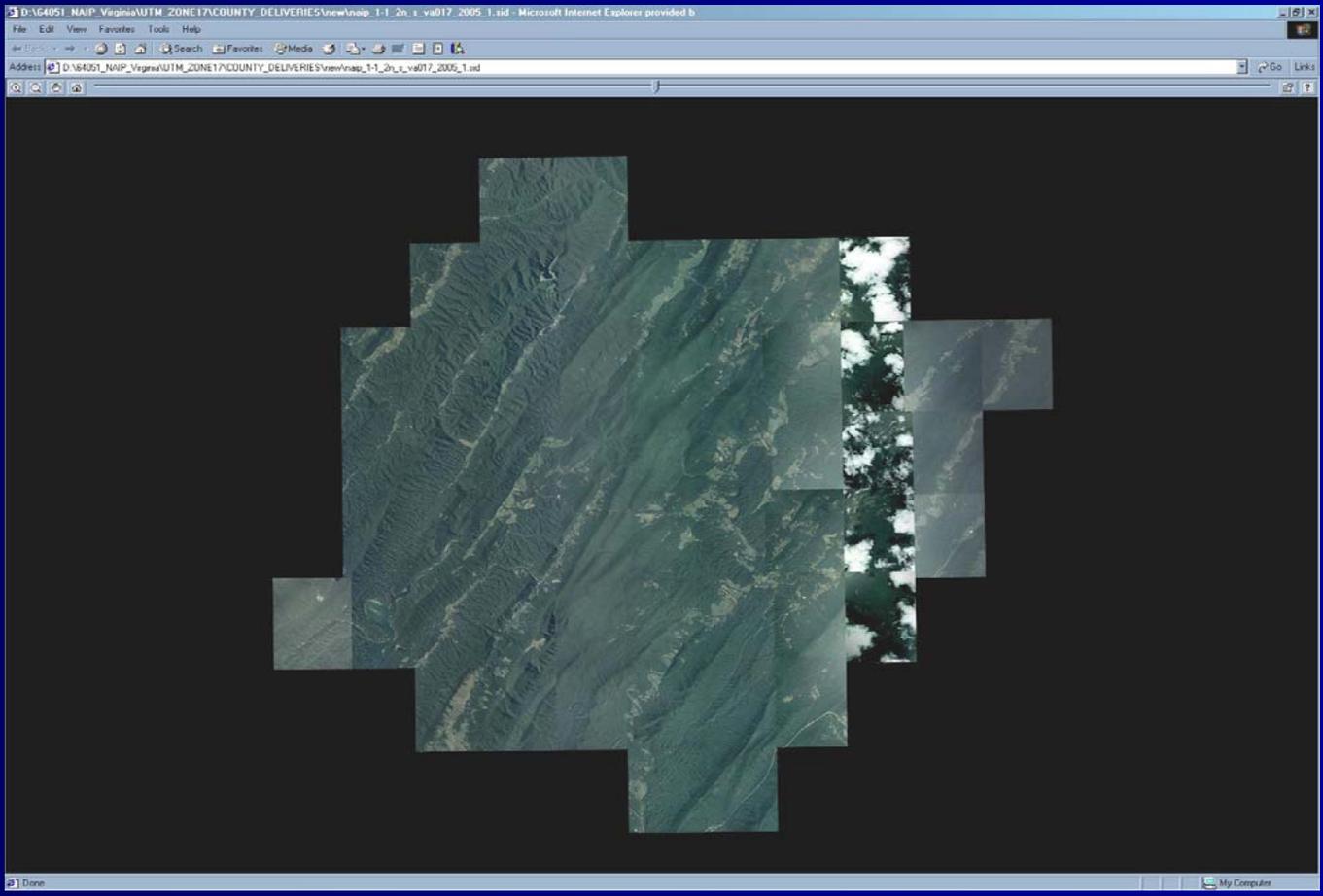
Orange County, VA



Prince Edward County, VA



Bath County, VA



Monitor Color Calibration



National Archives and Records Administration
Monitor Adjustment Target

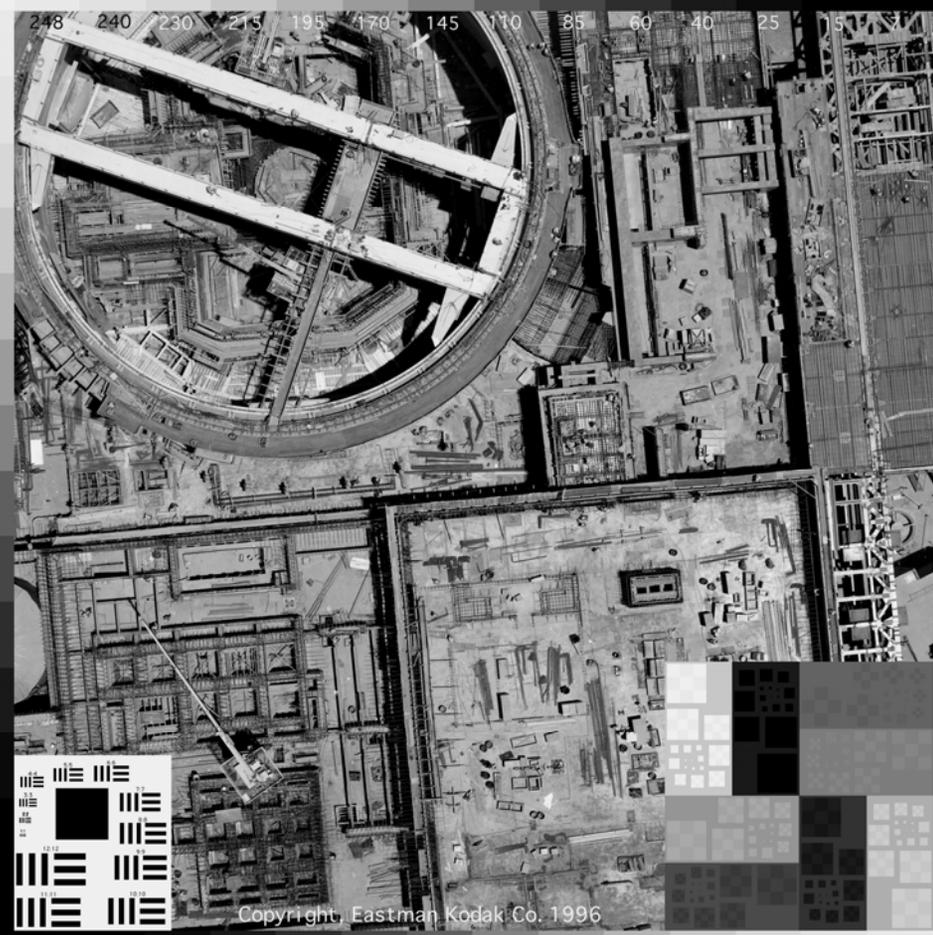
11 shades from white (R 255, G 255, B 255) to black (R 0, G 0, B 0).



7 shades: two white, three gray, and two black shades.
Each shade should be just distinguishable from the adjacent similar shade(s).

For best viewing results, set monitor controls to represent at least 256 colors. Then adjust the brightness and contrast of the monitor so that all of the shades in the two scales above are visible.

Kodak Monitor Calibration



LESSONS LEARNED

- Contract negotiations need to be completed as early as possible to allow for preparation and planning
- Readiness to take advantage of every minute of clear sky conditions
- Importance of reviewing photography immediately after processing
- Scanning of film prior to labeling to decrease the scratches and dirt

LESSONS LEARNED – Continued

- It is critical to label scan files properly since the film is labeled after scanning.
- In film states, timely feedback from the APFO after sample image scans are submitted. In digital states, feedback on digital image sample is needed, as well. Approval needs to be received concerning the color and radiometric quality of the initial samples within 3-5 days.
- Some end users did not have the necessary tools to view MG3 files.

Secondary Sales of Data

- Two inquiries were received concerning the VA data – no Purchase Order was received from either inquiry.
- No interest was expressed in the OH data
- Two inquiries were received concerning the ND data – one was a state agency that only wanted to pay minimal handling costs to repackage the data. When they learned of the cost, they decided they would wait until the data was released by the APFO. We are expecting to finalize the sale with the second interested party.
- We either have done a poor job of marketing the data or we are working in states where there is little interest in summer photography or in imagery as coarse as 1 meter resolution.

Successes

- 100% of ND, OH and VA were flown during the 2005 season (57 VA exposures contained more than the allowable 10% clouds).
- Delivery of both the CCM's and the DOQQ's of OH within the 33 of the Acquisition Window.
- Delivery of VA CCM's was within 37 days of last aerial photography mission. DOQQ have been delivered, as well.

Future NAIP Program Challenges

- Two of our acquisition sub-contractors are not willing to continue in the NAIP program going forward. Two reasons:
 - a) The need for total commitment to the project
 - b) The payment schedule
- 2) Developing a team of individuals in the SLC office that will have the expertise and the “authority” to approve the radiometric & color balance for all users.
- 3) The quality specifications may need to be changed for the 1 meter states since it seems like the contributing partners have higher expectations.

QUESTIONS/DISCUSSION ?

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