

- a. Using different Contractors for acquisition and ortho production adds program risk; primes and subs. Example of converting GPS/IMU to different format. Can cause finger pointing between Contractors, and requires knowledge of ortho production process before releasing the acquisition contract. The difference of defining a product for Remote Sensing (RS) applications versus to use in GIS. Transition to digital is difficult – if need for ortho, John suggests contract up front to one contractor. What are the pros/cons of getting ortho done as part of the contract? Melinda M.– we don't have money up front always to do both; have money for acquisition but not for ortho...final product is not always ortho in all cases. Conversation between Melinda M. and John M. about products and deliverables. Cannot just port film standards to digital, and we add risk to acquisition when there are multiple vendors, multi-products. A lot of details, camera types, product specifications, etc. Products vary from scans, GPS/IMU, to orthos, stereo, varied resolutions, bit-depth, or all of the above. Question is what is a “standard” product of the USFS regions? Is there a standard product? Or does each forest need something different to meeting their needs? Melinda M. – using stereo right now for hydro studies, construction, and pine beetle, etc., and can create 1 foot contours...also working in conjunction with USGS. Q – John M. – how does it work versus film? Melinda M. – it works very well, better than film. Kent W. – how do you actually use and distribute the data? Melinda M. – we work off of hard drives (HD) and distribution as we need to the other regions as needed. Use ArcMap and ERDAS Imagine to create block files and view stereo, etc.. Glenn B. – **It would be good to have brief on digital stereo, maybe next year? Melinda would be willing to share (soft action item)**... Glenn B. – have you done any classification? Melinda M. – not yet but we are planning to off the ortho. Jacque L – how do you use 35 TB of data? Melinda M. – swap a lot of drives. Glenn B. – important for Stephen Lowe to hear these stories, because he is going to be involved... John M. – yes, what is the requirement? From specs to delivery? Don E. – Can you describe the various cameras being used for resource? John M. – DMC, ADS40/80, Film, Ultracam, etc. discussion of no IMU deliverable with ADS scanning camera because the imagery products are “cut” from one big block. ADS can acquire the images 3 times in a single pass; forward, Nadir, and back looking...creating stereo from this. Discussed cookie cutting out the ADS images (big vs. small pieces which is large files versus many files). Cost reduction; with digital you may be able to work with lower sun angles, which means longer acquisition windows each day, lowers cost. Continuing conversation about file sizes. Kent W. – is USFS far enough along with digital resource to have enough experience to ID what you really want;

products and specs? USFS – what are our minimum specs for hardware/software etc.? Melinda M. – incompatibility with Citrix and stereo. Region 4 – RS steering committee looking at resource and NAIP, where do they connect or meet related to specs, or do they? We’ll discuss more when we go to regional reports. John M. - Is the data worth of the effort? USFS – yes, we are moving to digital. USFS – data center needs to be able to accommodate eventually. That is the direction USFS is going. The “GeoEDC should accommodate” is the message that the USFS is giving, and until they can, we’ll continue “working around”. John M. additional discussion about data volumes current and future. Glenn B. – ideal NAIP is ½-m 16-bit stereo. But as far as sizing out the issues, that’s what I would size out, just for this. Makes it look like what we are doing pretty small. We have a lot of unanswered arch questions, Citrix, stereo, ingest, processing, etc. A lot we could be doing, but need to look at the architecture long term. Don Evans – ERDAS and Apollo discussion. Serving imagery in stereo based on an AOI. John M. – What really is the requirement for resource for storage/archive? Kent W. – At very least a copy of data must be somewhere else, whether it’s backup or archive...what is the direction of USFS for local storage? Mark R. - Accommodate the data with local RAID, etc...so right now local is the answer. Maybe central locations should have the backup (e.g. APFO). Jim H. – sharing of data is difficult due to security measures (e.g. whole Disc Encryption (WDE)). We need to understand how to overcome. Jacque L – How do we get those that don’t work with data to understand some of the encryption or security measures are not necessary? Laura S. – Cannot necessarily rely on connectivity, and need to realize that local info is still important. Jim H. – Stephen L. needs to hear these issues, local versus central access, security, etc. Don Evans – is APFO planning to archive resource? Lori – We are planning on it, but someone needs to flip the bill, and discussions with NITC are on-going, but at very least we need to have a backup. Glenn B. – do we need to exercise the data on backup (e.g. the HD)? Bart M. – are there vendor requirements to archive the data for a certain amount of years? John M. – you can spec it, but it will cost dearly...we do not have hard specs, other than keep the data until we have inspected and accepted. John M. – The real question continues to be, what type of archive or storage does resource need? What is the requirement? Should we do a survey to ask these questions and centralize the answers. Kent – Define level of backup for resource. Survey. **ACTION ITEM APFO-GSB – define level of backup or archive for resource based on customer requirements (maybe expand scope to seek an understanding of digital acquisition requirements).** Change of topic: IDIQ for Fire? APFO can issue an

“open” contract for quick response to fire imagery; is there a requirement?  
Melinda M. – maybe not for fire specifically, but for other disasters – blow  
downs, hurricanes, etc. So for rapid response. John M. – so for rapid response?  
Yes or no? USFS – fire/GIS community upstairs are having meeting, may want to  
contact them. Sean triplet will host this...they may understand the  
requirements. Glenn B. - Some money for certain things. You have a mission  
and you have a need. We have an issue, when we think disaster we think FEMA,  
but they don't do very much...DHS is going out for disaster response, FEMA RFI.  
John M. - Good question for more discussion.