

THE IMAGING & GEOSPATIAL INFORMATION SOCIETY
EASTERN GREAT LAKES REGION



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Inside this issue:

Fall Meeting in Dundee, MI	1
ASPRS Certification Program	2
Fall Meeting photos	3
John O. Behrens Institute for Land Information Memorial	3
Open Positions	4
New Members	5

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EGLR holds fall meeting in Dundee, MI

The Eastern Great Lakes Region held its fall meeting at Splash Universe in Dundee, MI. The focus of the meeting was Aerial Imagery Acquisition & Applications. Sessions included Innovative Data Sources & Distribution Methods for Aerial Imagery, Mapping the US Border, Regional Imagery Acquisition Projects, State of Michigan Orthoimagery Acquisition Proposal, Use of Remote Sensor Images in Court, and a Review of Oblique Camera Systems. Continuing Education Units were available from Ferris State University. Sponsors for the meeting included Air-Land Surveys, Aero-Metric, Inc., Aerocon, and Photo Science Geospatial Solutions. Fifty two dollars was raised for the scholarship fund through a 50/50 raffle.

Along with the EGLR membership, attendees were invited from IMAGIN (Improving Michigan's Access to Geographi Information), MiCAMP (Michigan Counties Association of Mapping Professionals), and MSPS (Michigan Society of Professional Surveyors).



Attendees absorb information at technical portion of meeting

(Continued on page 3)

Visit our website for archived issues of the newsletter, and other information about the Eastern Great Lakes Region.
<http://www.glc.org/asprs-eglr>

ASPRS CERTIFICATION PROGRAM

By Robert C. Burtch

In the first article, four sample questions were presented to test your knowledge in the geospatial sciences. As a quick reminder, these questions are not a part of the exam bank of questions. These are questions that I developed based on my belief of topics that might be found in questions within the test bank.

The answer to the first question is (d) principal point of photogrammetry. This point is defined as the intersection of the line from the perspective center to the focal plane, for that ray which is perpendicular to the focal plane before that light ray passed through the lens. It is a theoretical point and is approximated by other principal point definitions. For the second question on predicting values at a location within a site is (b) interpolation. Predicting values outside of the site is called extrapolation. Spectral differentiation, to topic of question 3, deals with answer (a) how many colors can be represented on the image. Finally, the answer to the last question dealing with a height above the geoid is (d) orthometric height. If anyone has any questions about these answers, please feel free to contact me and I can explain it there.

There is a lot of apprehension and angst at the thought of taking an exam and the Certification exams are no exception. Part of this stems from the make-up of the exam. In the following table, you can see the breakdown in the percentage of topics covered on the photogrammetry certification exam. The exams for Certified Mapping Scientist in GIS and in Remote Sensing have the same topics, but the percentage varies.

AREA	PERCENTAGE
Mathematics and Science	13 – 15
Engineering Surveying	6 – 7
Physics	9 – 11
Imaging	12 – 15
Photogrammetry	25 – 27
GIS	12 – 15
Ethics and general knowledge	15

The Imaging area pertains to remote sensing. For the GIS and remote sensing exams, the percentage in the GIS and Imaging categories would be around 25% respectively and other areas decreased in weight.

I am continually asked about the make-up of the exam with emphasis on the topics which represent areas that the applicant does not practice in. If one sits for a remote sensing exam why do they need to understand surveying? While the concern is valid, the rationale for a comprehensive exam far outweighs the disadvantages. Again, I am not speaking for the Certification Committee here, but am expressing my views on the subject. The reasons for a broad-based exam focus are:

- The boundaries outlining a discipline within the geospatial sciences are eroding and what constitutes photogrammetry and remote sensing, as just one example, is gray at best. Many of us use the global positioning system (GPS) and this could easily be argued to be a surveying tool.
- Firms are increasingly asked to provide products that in the past were considered the domain of another discipline. As an example, GIS organizations/companies routinely create digital orthophotography as a foundation for GIS creation. In fact, the process of orthophoto creation is becoming a ubiquitous operation.
- Licensure/certification exams in allied professions also measure the breadth of knowledge that an applicant has in their field. A Professional Engineer, as an example, becomes licensed as an engineer, not as a civil engineer, mechanical engineer, electrical engineer, etc. They must have a broad knowledge of engineering even though they will never practice in areas outside their specialization without further training. That is equally appropriate for the geospatial sciences.
- Just because an individual firm/organization does not have specific capability does not mean that the topic is not important to the profession. As an example, I do not think many would disagree that laser scanning (lidar) is an important geospatial data

(Continued on page 5)

Co-Hosted Conference Great Success!



The morning session was standing room only



Cabelas provided a diverse menu for lunch, including delicacies such as Wild Boar, Bison, and Ostrich



**Business
Networking
Technical
Presentations
EGLR had it all!**



BAE Systems has openings for:

Photogrammetric/Mapping Technician II Req. No: 508505 (Pittsburgh, PA)

2-5 years geospatial analyst or production exp preferably in the military or intelligence communities. US Citizenship required. Positions are subject to government security investigation and must meet eligibility requirements for access to classified information. Working level knowledge of advanced computer graphics applications. Must be able/willing to work 2nd shift. Technical/trade school major or AS in CADD, Cartography, Land Surveying, or Civil Engineering Technology. BA in Geography, GIS, Cartography or Environmental/Earth Sciences is preferred.

Photogrammetric Technician Trainees Req. No: 508437 (Pittsburgh, PA)

Technical/trade school major or AS in CADD, Cartography, Land Surveying, or Civil Engineering Technology, or equivalent related work exp. US Citizenship required. Position is subject to US government security investigation and must meet eligibility requirements for access to classified information. Working level knowledge of advanced computer graphics applications. Must be able/willing to work 2nd shift.

For more information or to apply visit <http://careers.na.baesystems.com> or contact Danielle Vileno at (703) 668-4129 or fax resume to: (703) 668-4387.

BAE Systems is an equal opportunity employer.

Woolpert, Inc. has the following opening:

Geospatial Analyst

Dayton, OH

Woolpert, Inc. is a national, geospatial services industry leader with 24 offices across the US. Due to our exceptional growth, we are searching for entry-level and experienced Geospatial Analysts (GA). The GA will collect, edit and process digital data from various sources to produce a variety of National Geospatial-Intelligence Agency (NGA) products that meet internal and external customer requirements. Position requires accurate, efficient collection of feature and elevation data from stereo imagery using ArcGIS and ERDAS Stereo Analyst. Other duties involve data attribution and manipulation of vector data using ArcGIS, ArcSDE and PLTS. Experienced analysts will also perform peer reviews and/or final quality assessment. May require working on second shift depending on staff and project requirements. Requirements: BS/BA degree in GIS, Cartography, Geography or Remote Sensing. A minimum of 2 years' experience in lieu of a degree will be considered. Good stereoscopic vision. Solid working knowledge of ArcGIS. Computer competency in Windows environment. Strong communication skills. Candidate must be a U.S. Citizen and able to obtain and maintain a DoD Secret level clearance.

Experienced Position Qualifications: Experience with production of NGA vector or raster geospatial datasets (Feature Data, Topographic Line Maps, City Graphics, Image City Maps, etc.). Previous photogrammetric collection and cartographic editing experience a plus. Experience using ImageStation, GeoMedia, SOCET, DAT/EM, or SoftPlotter a plus.

Woolpert offers employees a competitive compensation package as well as industry leading benefits. Woolpert provides employees with challenging work assignments, opportunities for advancement and the technical and/or managerial training necessary to help you maintain your professional edge.

For immediate consideration, please email your resume to eric.simmons@woolpert.com -Or- mail resume to:

Woolpert, Inc.
Human Resources
Attn: Eric Simmons
4454 Idea Center Boulevard
Dayton, Ohio 45430-1500
AA/EOE

(Continued from page 2)

collection tool. Is it photogrammetry? Remote sensing? GIS? Shouldn't everyone have a basic understanding of this technology, even if they do not work with it directly?

Finally, while the exam is geared to measuring the breadth of the geospatial sciences, the depth is measured in the discipline. By that I mean that the more challenging questions in remote sensing, as an example, would be found in the remote sensing exam. The GIS and photogrammetry exams would contain remote sensing questions that are more of a general nature.

Before leaving again, here are 4 additional questions for your consideration.

1. The distance between any wave and the next succeeding one is
 - a) amplitude.
 - b) frequency.
 - c) velocity.
 - d) wavelength.
2. An omega adjustment
 - a) rotates the model about the x-axis
 - b) rotates the model about the y-axis
 - c) rotates the model about the z-axis
 - d) translates the model up and down
3. Due to _____, dark objects appear brighter than they would otherwise be and bright objects appear darker, thereby decreasing contrast recorded by a sensor.
 - a) absorption
 - b) refraction
 - c) scattering
 - d) transmission
4. The measurement scale that identifies meaningful differences between numbers, but without a real origin, is called
 - a) fractal scale
 - b) interval scale
 - c) nominal scale
 - d) ordinal scale

Answers to these questions, plus any other question you may have on the exam and exam process, will be presented in the next issue of the newsletter.

Get involved!

Are you looking for a way to become more active in ASPRS?

The Eastern Great Lakes Region has an opening for Newsletter Editor. If you are interested in this fun role within the region, contact one of the Board Members