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An European initiative on Digital Camera Certification ?!

Michael Cramer

michael.cramer@ifp.uni-stuttgart.de

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European DAC Certification

Situation in digital airborne imaging

- Large diversity of digital airborne cameras in use, almost continuous advent of new systems
- Different concepts and sensor formats, only very few of them originally designed as large-format metric ones, provided by „well-established“ photogrammetric system suppliers
- Traditionally camera certification also guarantees that camera is able to fulfill accuracy specs, but existing lab calibration set up no longer sufficient for digital sensors
- Digital sensors need customized software chains, software is one inherent component in data generation and processing

Situation in digital airborne imaging
Problems arising

- How to guarantee, that specific camera design is able to fulfill the specific needs?
- How to contract such systems?
- Which system is appropriate / necessary / sufficient for my specific application ?
- Certification of the whole data procurement process – rather than calibration of the individual sensor components (mostly optical part) – is necessary but not available

Already ongoing activities

- From EuroSDR point of view
  - **Network on digital camera calibration** established
  - Successful running EuroSDR **project** based on evaluation of empirical sensor data
- Some activities in **defining standards** on national (like DIN in Germany) or international frame (ISO)
- Some **national approaches for DAC certification** in development, mainly dominated by USGS in the US

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Intergraph Receives Certification from United States Geological Survey

Intergraph Z/I Imaging DMC is First-Ever Certified

HUNTSVILLE, Ala., May 2, 2006 – Intergraph Corporation <NASDAQ: INGR> today announced at the 2006 American Society for Photogrammetry and Remote Sensing Conference that it has received the Type Certification from the United States Geological Survey (USGS), the sole science agency serving the U.S. Department of the Interior, for the Intergraph Z/I Imaging® DMC® (Digital Mapping Camera).

Intergraph is the first organization to receive the USGS certification on a large format sensor – assuring DMC customers that their high-quality digital mapping camera is certified by an unbiased, multi-disciplinary science organization.

"The Z/I Imaging DMC has established a reputation for versatility, quality and reliability among customers worldwide, so it is particularly gratifying to receive the first-ever certification for a large format sensor from such a prestigious organization," said Gadi BenMark, general manager, Intergraph Transportation & Photogrammetry.

To earn the USGS Type Certification, Intergraph's DMC underwent extensive reviews, which included submitting a detailed description of the camera system including hardware, software, factory calibration procedures, quality control processes and procedures, system documentation, user documentation and manufacturer best use recommendations. In addition, USGS inspected all applicable manufacturing and testing areas to certify that these processes were followed.

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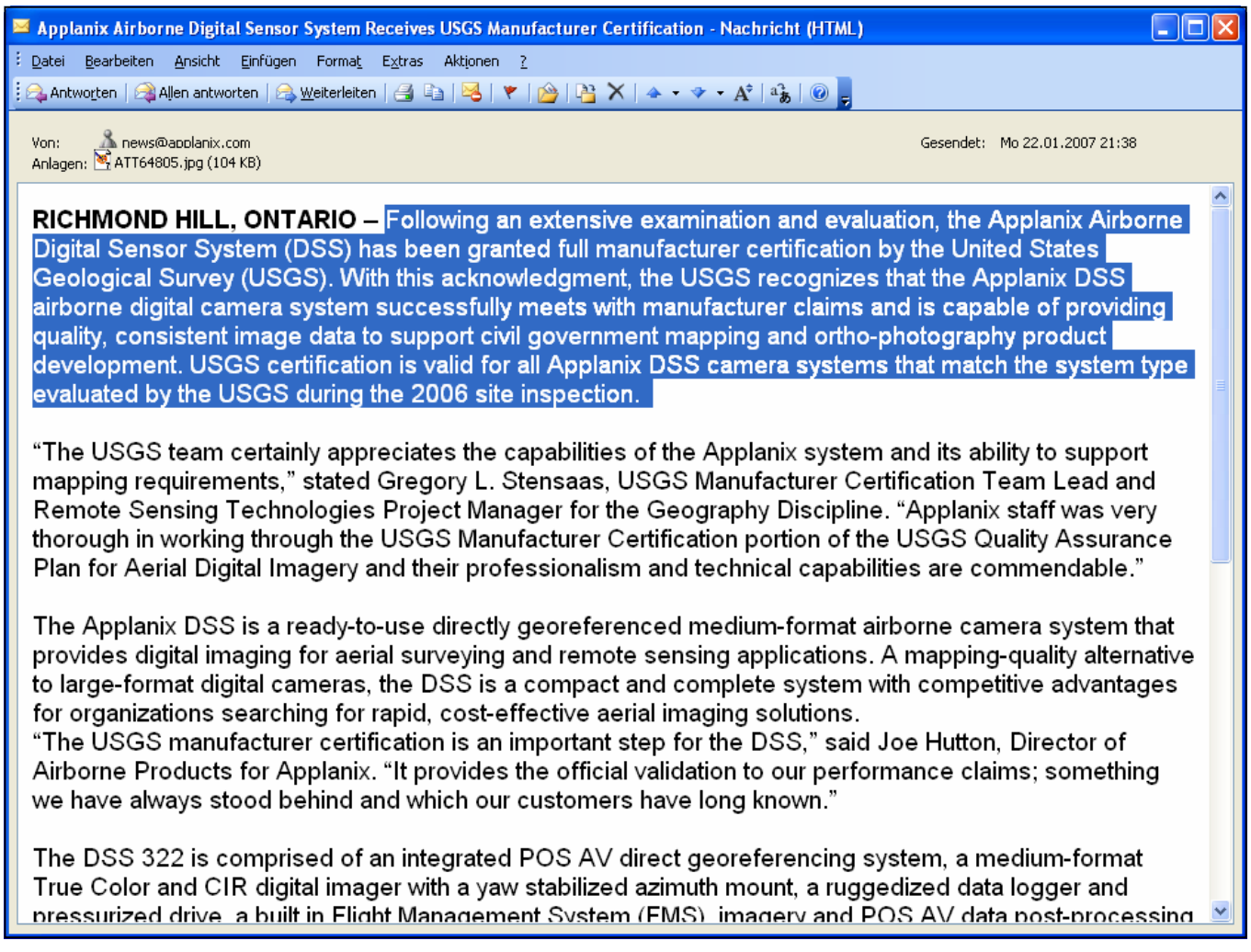

Applanix Airborne Digital Sensor System Receives USGS Manufacturer Certification - Nachricht (HTML)

Datei Bearbeiten Ansicht Einfügen Format Extras Aktionen ?

Antworten | Allen antworten | Weiterleiten

Von: news@applanix.com
Anlagen: ATT64805.jpg (104 KB)

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RICHMOND HILL, ONTARIO – Following an extensive examination and evaluation, the Applanix Airborne Digital Sensor System (DSS) has been granted full manufacturer certification by the United States Geological Survey (USGS). With this acknowledgment, the USGS recognizes that the Applanix DSS airborne digital camera system successfully meets with manufacturer claims and is capable of providing quality, consistent image data to support civil government mapping and ortho-photography product development. USGS certification is valid for all Applanix DSS camera systems that match the system type evaluated by the USGS during the 2006 site inspection.

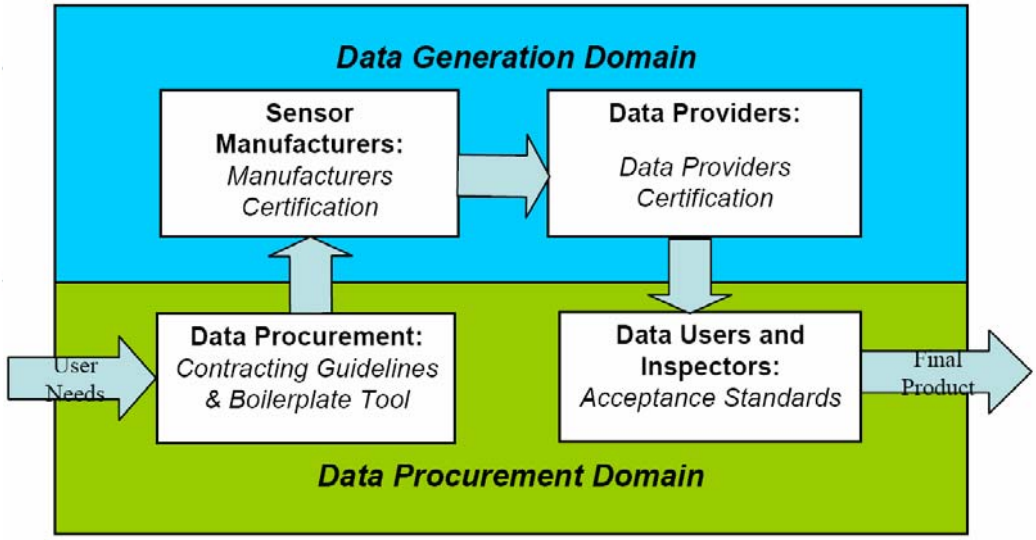
"The USGS team certainly appreciates the capabilities of the Applanix system and its ability to support mapping requirements," stated Gregory L. Stensaas, USGS Manufacturer Certification Team Lead and Remote Sensing Technologies Project Manager for the Geography Discipline. "Applanix staff was very thorough in working through the USGS Manufacturer Certification portion of the USGS Quality Assurance Plan for Aerial Digital Imagery and their professionalism and technical capabilities are commendable."

The Applanix DSS is a ready-to-use directly georeferenced medium-format airborne camera system that provides digital imaging for aerial surveying and remote sensing applications. A mapping-quality alternative to large-format digital cameras, the DSS is a compact and complete system with competitive advantages for organizations searching for rapid, cost-effective aerial imaging solutions.
"The USGS manufacturer certification is an important step for the DSS," said Joe Hutton, Director of Airborne Products for Applanix. "It provides the official validation to our performance claims; something we have always stood behind and which our customers have long known."

The DSS 322 is comprised of an integrated POS AV direct georeferencing system, a medium-format True Color and CIR digital imager with a yaw stabilized azimuth mount, a ruggedized data logger and pressurized drive, a built in Flight Management System (FMS), imagery and POS AV data post-processing

USGS Plan for Quality Assurance

- Four major parts covering two major processes:



USGS

Benefits of Manufacturers Certification

- Communicates specifications
- Provides evidence of system performance
- Independent certification helps to promote sensor systems
- Type certification eliminates burden of calibration for each sensor sold in the United States (1 time *vs.* n times)
- Eliminates need for USGS to have custom-built calibration instrument for calibration purposes

USGS

Camera certification – ROI

- Certification allows assumptions of end **quality by users**
- Provides **easier contracting** process
- **Limits the amount of individual user's testing** for each contract
- USGS is advised to work for international coordination, **cross certification** is aspired, because vendors are of concern that other countries may also perform certification processes

An European DAC certification initiative ?!

- **What should Europe do ?**
- NMCA in EuroSDR already signalized to support an European DAC certification approach.
- details not yet fixed
  - Full or partially acceptance of the USGS way of DAC certification ?
  - New / alternative way of DAC certification ?
- What is **your opinion** from camera user's point of view ?

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