

EDITORIAL

First read the following press release on the cause of the failure of Space Imaging's IKONOS 1 which was launched on 27 April 1999.

DENVER, Colorado, April 29, 1999 - The Lockheed Martin Astronautics Anomaly Investigation Team has determined that, based on telemetry and flight data analysis, the Athena II's payload fairing did not separate properly. As a result of carrying the extra weight of the payload fairing, the rocket did not achieve sufficient velocity to place the IKONOS 1 satellite into Earth orbit. The aluminum-lithium payload fairing, with a separated weight of approximately 1,143 lbs (518 kg), is used to protect the satellite from aerodynamic friction during the early phases of flight and is designed to separate and fall away from the rocket after it has passed through the atmosphere. The Lockheed Martin Anomaly Investigation Team has determined that the Thiokol Castor 120® first and second stage solid rocket motors, the Pratt and Whitney Orbus® 21D third stage solid propulsion system and the Orbit Adjust Module propulsion system (which includes the equipment section structure, attitude control system provided by Primex Technologies, and avionics) have been ruled out as possible causes of the failure. Lockheed Martin is continuing its investigation to determine why the payload fairing did not separate.

In the EARSeL Newsletter of March 1998 (No 33) Wim Bakker gave an overview of the different causes for failures of recently launched satellite missions (EarlyBird, Landsat-6, Spot-3, ADEOS, etc); one more can be added to the list. Since mid-1997 (EarlyBird) the remote sensing community has been waiting for high resolution spaceborne data. Space Imaging has probably carried out a sound analysis of the chances of success in this business and already built IKONOS 2 which will be launched before the end of this year. Before new year's eve, also Quickbird 1 and Orbview 3 should be in orbit. Read more about rockets, space, outer space and life in general in this Newsletter's edition of 'Observations'.

With respect to aircraft remote sensing we have a contribution by Martin Flood who gives a review on laser scanning and introduces a web site dedicated to this subject. If you are interested in this subject you may also revisit the EARSeL Newsletter of December 1997 (No. 30) which was a special issue on laser scanning.

Furthermore, there is news from many of our Special Interest Groups - some of them have set up their own web site which can be contacted through www.earseel.org. EARSeL also welcomes 9 institutes/companies as new members and these are shortly introduced in 'news from our association'.

Once again I should like to mention that the December issue of the EARSeL Newsletter will be a special issue on 'Distance Learning for Remote Sensing'. For this purpose an inventory will be made of available material (Internet courses, CD-ROM's). We shall focus on material which is 'made in Europe' irrespective of the materials language. If you want to be included in this survey please let me know. I am also looking for contributions which deal with the user's (or student's) experience with Distance Learning in the field of RS.

The Editor.

NEWS FROM THE ASSOCIATION AND ITS MEMBERS

2.1 EARSeL Special Interest Groups

2.1.1 SIG - Coastal Zone Management

Ir. Henk Kloosterman of the Survey Department of Rijkswaterstaat in Delft is taking over the management of this SIG from his colleague Jeroen Huising, who has left to take up a post in Uganda. Mr. Kloosterman is a landscape ecologist, with vegetation as a specialisation. His main task is to carry out research on the applicability of remote sensing for nature and environmental management, with emphasis on coastal ecosystems and wetlands. All those interested in joining this group may contact him at:

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2.1.2 SIG - Developing Countries

The 1st Workshop of the EARSeL SIG created to facilitate the exchange of experiences and the results of research programmes carried out in developing countries, will be held from 13-15 September 2000, in the city of Gent, Belgium, organised by Prof. Rudi Goossens, who convenes this group. More information may be obtained from him at

Geography Department, University of Gent
281 (S8-A1)
B-9000 Gent - Belgium
Tel: 32-9-2644709
Fax: 32-9-2644985
Email: rudi.goossens@rug.ac.be

2.1.3 SIG - Geological applications

The management of this SIG on Geological Applications of Remote Sensing has recently been taken over by Dr. Freek van der Meer of ITC in The Netherlands. The SIG - GEO intends to organise workshops, tutorials and special conference sessions to disseminate geologic remote sensing knowledge. It aims at bringing together experts from the various remote sensing agencies (institutes, universities and commercial enterprises) in Europe to create a forum for international discussion. It is aimed to better prepare the geologic remote sensing community for new developments in technology and application-oriented research. During the 19th ISPRS Congress which will be held from 16-23 July 2000 in Amsterdam a joint ISPRS Technical Commission VII/WG7 and EARSeL SIG-GEO Workshop will be organised on Mining and its impact on the Environment:

Convenors: T. Woldai and F. van der Meer
Date: 15 July 2000, duration: 1 day
Location: Amsterdam, ISPRS code: WS5
Keywords: Mining, toxic waste, remote sensing and GIS, modelling, EIA, hazards, pollution.
To join the SIG and to receive more details, please contact :
Dr. Freek van der Meer
ITC, Division of Geological Survey
Hengelosestraat 99, P.O. Box 6,
7500 AA Enschede, The Netherlands
Tel: +31 53 487 4353
Fax: +31 53 487 4336
Email: vdmeer@itc.nl [Http://www.itc.nl/~siggeo/](http://www.itc.nl/~siggeo/)

2.1.4 SIG - Imaging Spectroscopy

The 2nd Imaging Spectroscopy Workshop is planned to take place at the ITC, Enschede, from 11-13 July 2000 immediately prior to the ISPRS Congress in Amsterdam. More details will be given shortly. A few copies of the Proceedings of the 1st Workshop held in Zurich in October 1998 are still available from the EARSeL Secretariat. This high quality volume has proved very popular. In following Dr Müller, Convenor EARSeL SIG Imaging Spectroscopy, gives you some more information related to HY-EUROPE 1999 campaign. ANNOUNCEMENT OF AN AIRBORNE IMAGING SPECTROMETER CAMPAIGN IN EUROPE IN 1999 (HY-EUROPE 1999)

Dear Colleagues,

Since the Call for Proposals DLR has already received a number of requests for HY-EUROPE 1999. In a number of e-mails more information on the campaign was asked for:

Q: Where are the DAISEX 1999 sites?

A: Near Albacete / southern Spain, a French testsite near Colmar will be flown after the joint HyMap / DAIS campaign in July.

Q: Will the two instruments cover the same area on the ground?

A: HyMap and DAIS have comparable IFOV and Swath width, so the flight lines will overlap to about 90%

Q: What is the rationale to put two imaging spectrometers on one aircraft?

A: HyMap has a wide coverage/high spectral resolution (16nm) in the reflective part of the electromagnetic spectrum while DAIS offers 7 additional thermal channels

Q: When are the DAISEX 1999 sites in Spain to be flown?

A: between 31.5. and 11.6.1999

Q: Will the instruments be available in other periods than 20.5. - 11.6.1999?

A: For DAIS there are flight possibilities until autumn 1999, the HyMap will most likely leave Europe after 20 June 1999

Q: Will the HyMap be available in Europe in the years 2000+?

A: HyVista and DLR are currently investigating concepts for future airborne imaging spectrometer campaigns in Europe. ESA ESTEC has already promised logistic support.

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[Http://www.dlr.de/dais](http://www.dlr.de/dais)

2.1.5 SIG - Land Ice and Snow

After a very successful Workshop held in Freiburg, Germany, in April 1997, the Land Ice and Snow SIG is planning to hold a second meeting on 16/17 June 2000, immediately following the 20th EARSeL Symposium in Dresden, Germany. Topics to be covered include:

- snow of mountainous regions (new techniques, real-time processing, etc.),
- remote sensing of snow and land ice as a contribution to global change,
- glacier monitoring (interferometry, textural analysis, etc.),
- new sensors for snow and land ice monitoring.

The SIG is co-chaired by Dr. Stefan Wunderle, who is now based at the Department of Geography in Bern, Switzerland, and Dr. Thomas Nagler of the Institute for Meteorology and Geophysics of the University of Innsbruck, Austria. For more information and to join the group, please contact Dr. Stefan Wunderle at the

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2.1.6 SIG - Lidar Remote Sensing of Land and Sea

Much progress is being made in the domain of lidar remote sensing and the EARSeL SIG devoted to these techniques will hold its next event also in Dresden on 16/17 June 2000. Previous workshops have been held in Florence, Oldenburg and Tallinn, so once more we shall be encouraging East/West co-operation. Topics to be covered will include :

- remote sensing of marine and inland waters,
- remote sensing of phytoplankton and vegetation,
- underwater optics: measurement and modelling,
- remote sensing of pollutions and hazardous wastes,
- topographic mapping - new technologies.

The leader of this group is Dr. Rainer Reuter of the Department of Physics, University of Oldenburg. The SIG has installed an automated mailing list there which is intended as a platform for the exchange of information among people interested in the use of optical methods, in situ and remote sensing, in geo- and bio-sciences, oceanography, limnology, topographic mapping of the land surface, and other related disciplines. If you wish to log on to this mailing list, please send an email to: majordomo@marvin.physik.uni-oldenburg.de with the following command in the body (not in the subject) of your email message: `subscribe lidar ownname@owndomain.country` or `unsubscribe lidar ownname@owndomain.country` You can also use the WWW-form at:

[Http://www.physik.uni-oldenburg.de/cgi-bin/phys-majordomo.cgi](http://www.physik.uni-oldenburg.de/cgi-bin/phys-majordomo.cgi)

To send a message to all those currently registered on the list, just send mail to: lidar@www.physik.uni-oldenburg.de

2.2 New EARSeL members

We are happy to welcome the following eight institutes and companies to our members:

VITO - Centre for Remote Sensing and Atmospheric Processes Mol, Belgium. EARSeL representatives : Jan Van Rensbergen, Walter Debruyne and Marc Leysen. This Centre specialises in environmental monitoring and impact assessment (nature management, agriculture and land use) as well as the monitoring of atmospheric processes. Fax: +32 14 32 27 95. Email: vrensbej@vito.be

Institute for Coastal and Marine Management The Hague, The Netherlands. This Institute has rejoined EARSeL, represented by ir. J.M.M. Kokke. It specialises in nature management and hydrology, water quality, coastal zones and oceanography. Fax: +31 70 311 4600. Email: j.m.m.kokke@rikz.rws.minvenw.nl

Responsibility for the Remote Sensing Research Group in the Department of Geography of the University of Bern, Switzerland, has now been taken over by Dr. Stefan Wunderle, leader of the EARSeL SIG on Land Ice and Snow. Its former head, Dr. Michael Baumgartner has now opened his own company, which has become a new member of EARSeL:

MFB-Consulting

Im Eggen, CH-3254 Messen, Switzerland. The company specialises in surveying in all fields of applications of environmental monitoring, water quality, hydro-electricity, irrigation. It is the exclusive distributor in Switzerland for ERDAS products. It is participating in the EU Project: Hydrology of Alpine and northern latitude basins (HYDALP). Dr. Michael F. Baumgartner and Dr. Gabriela M. Affl. Fax: +41 31 765 6091. Email: contact@mfb-geo.ch

Nils Holgersson Centre Karlstad University, Dept. of Environmental Sciences, Sweden. This Centre, which hosted a recent annual meeting of the High Mountain Remote Sensing Cartography Working Group of the International Cartographic Association, specialises in topography and geomorphology, land ice and snow, nature management, hydrology, meteorology and atmospheric chemistry. Contact is Dr. Gerhard Bax. Tel: +46 54 7001516. Email: gerhard.bax@kau.se, and [Http: www.kau.se/](http://www.kau.se/)

Remote Sensing and Image Processing Unit. Dept. of Applied Physics, University of Athens. This Unit specialises in satellite climatology and meteorology, for example in the use of remote sensing for the definition and monitoring of plumes produced from industrial accidents and the definition of the spatial distribution of aerosols in urban areas and the study of heat islands in urban areas. The research team organises Workshops on remote sensing (Athens in December 1996, and in June 1997, Santorini in October 1997). The Unit has an attractive leaflet describing its research. To obtain more information, please contact the EARSeL representative Dr. C. Kartalis, Dept. of Applied Physics, University of Athens, Remote Sensing and Image Processing Research Team. Panepistimioupolis, Build. Phys. V, Athens 157 84, Greece. Tel: +30 1 7274 843. Fax: +30 1 7295281. Email: ckartali@atlas.uoa.gr

Groupe Photosynthèse et Télédétection LURE, Centre Universitaire Paris-Sud, Orsay, France. This group is led by Dr. Ismael Moy and Dr. Zoran Cerovic. Dr. Moya has contributed to at least two of our Lidar Remote Sensing Workshops. The group specialises in nature management and ecology, photosynthesis and vegetation. Contact is Dr. Zoran Cerovic. Fax: +33 1 6446 4148. Email: cerovic@lure.u-psud.fr

Centro Nacional de Informação Geografica (CNIG) Tagus Park, Oeiras, Portugal. This group has participated several times in our Forest Fires workshops, contributing several high quality papers. It specialises in nature management and ecology, land use, forestry and hydrology. It is represented by Dr. Mario Caetano. Fax +351 1 421 9856. Email: mario@cnig.pt

AGROLESPROJECT Ltd, Sofia, Bulgaria, has also applied for membership. It is represented by Mr. Teodossi Dimitrou. Fax: +359 2 986 2356. Email: agrolesproject@mobicom.com

EARSeL welcomes all these research groups and look forward to close and fruitful cooperation.

2.3 EARSeL/ISPRS at UNISPACE III

The European Association of Remote Sensing Laboratories (EARSeL) and the ISPRS are jointly organising a workshop on "Remote Sensing for the Detection, Monitoring and Mitigation of Natural Disasters" at the UNISPACE III conference in Vienna. The session is scheduled for 22 July 1999 at 14.30-17.30 hours in room B of the Vienna International Centre (VIC). The UNISPACE III Preliminary Programme and Registration Form are posted on the web site: <http://www.un.or.at/OOSA/unisp-3/>.

The papers foreseen in the EARSeL session are :

- Prof. (em.) P. Gudmandsen : An overview of the capabilities of space techniques
 - F. Cauneau (Ecole des Mines de Paris, France) : Remote Sensing Techniques for Oil Spill Monitoring
 - J. Béquignon (ESA/ESRIN) : Space technology and earthquake hazard management
 - R. Missotten (UNESCO) : Natural hazards of geological origin - erosion, land degradation, volcanoes
- ISPRS Session :
- Vernon Singhroy (European Space University) : Pollution Monitoring and Hazardous Waste
 - El Hadani (Morocco) : Remote Sensing Systems for Drought and Desertification Monitoring: Case Study of Morocco
 - Linsenbarth (IGIK, Warsaw, Poland) : Photogrammetry and Remote Sensing in Monitoring, Prediction and Prevention of Environmental Disasters
 - Helen Woods (NOAA, USA) : The Rôle of Weather Satellites.
- All those attending UNISPACE III will be most welcome.