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The *IAG Newsletter* is under the editorial responsibility of the *Communication and Outreach Branch* (COB) of the IAG.

It is an open forum and contributors are welcome to send material (preferably in electronic form) to the IAG COB (newsletter@iag-aig.org). These contributions should complement information sent by IAG officials or by IAG symposia organizers (reports and announcements). The *IAG Newsletter* is published monthly. It is available in different formats from the IAG new internet site: <http://www.iag-aig.org>

Each *IAG Newsletter* includes several of the following topics:

- I. news from the Bureau Members
- II. general information
- III. reports of IAG symposia
- IV. reports by commissions, special commissions or study groups
- V. symposia announcements
- VI. book reviews
- VII. fast bibliography

Books for review are the responsibility of:

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General Announcements

IAG young authors award 2003



The winner of the IAG Young Author Award 2003 is Michael Kern. Michael Kern was born in Leer (Germany) in 1974. He holds a Dipl.-Ing. degree in geodesy (1999) from the University of Karlsruhe. He joined the Department of Geomatics Engineering at the University of Calgary in 1999 and worked under the supervision of Dr. K.-P. Schwarz. His activities included studies on downward continuation of airborne gravity data and the combination of satellite, airborne and terrestrial gravity data. In 2003 he graduated with a Ph.D. in Geomatics Engineering and was employed as a post-doctoral fellow at the Department of Geomatics Engineering at the University of Calgary. In 2003 he continued to work as a post-doctoral fellow at the Department of Theoretical Geodesy (headed by Dr. Sünkel), Graz University of Technology. Currently, he is an external European Space Agency fellow under the supervision of Dr. R. Haagmans and is actively involved in research related to the calibration and validation of the satellite mission GOCE.

The Geodesist's Handbook 2004

The Geodesist's Handbook – 2004 has recently been published as Issue: Volume 77, Numbers 10-11 of Journal of Geodesy. It is available from Springer Verlag and also a prepublication version is on the web at the address <http://www.gfy.ku.dk/~iag/HB2004/newsum.html>.

Earth Observation Summit II Successfully Held

The Earth Observation Summit II was held on Sunday, April 25th, 2004 at Hotel Okura in Tokyo, Japan. For more information please visit <http://www.ics-inc.co.jp/eos2e/>.

Meeting Announcements

IAG Sponsored Meetings

EUREF - 2004, The EUREF 2004 Symposium of the IAG Subcommittee for Europe

2-5 June 2004, Bratislava, Slovakia

visit <http://web.gku.sk/euref2004/> for more information.

15th International Symposium on Earth Tides

2-6 August 2004, Ottawa, Canada

The website has been updated with "Call for Session Proposals," "Registration," "Accommodation" and "Travel" information. visit <http://www.yorku.ca/ets/ets.html> for more information.

Gravity, Geoid and Space Missions – GGSM2004

30 August –3 September 2004, Porto, Portugal

IAG International Symposium

visit <http://www.fc.up.pt/ggsm2004/> for more information.

IGeS Geoid School

6-10 September, 2004, Sofia, Bulgaria

The next International School on "The Determination and Use of the Geoid" will be at Sofia, Bulgaria. The preliminary program is available at http://www.iag-aig.org/index.php?tpl=text&id_c=23&id_t=197.

12th General Assembly of the WEGENER project

21-23 September 2004, Tangier, Morocco

For details, please visit the *new webpage* at: <http://perso.menara.ma/~tmourabit/>.

The 2004 International Symposium on GPS/GNSS (GNSS 2004)

6-8 December 2004, Sydney, Australia

Internet: www.gnss2004.org.

IAG Related Meetings

CGU, AGU, SEG and EEGS 2004 Joint Assembly

17-21 May 2004 Montreal, Canada

THE 2004 JOINT ASSEMBLY, a partnership between CGU, AGU, SEG and EEGS, is being held in Montreal, Canada. Visit <http://www.agu.org/meetings/sm04/index.shtml> for more information.

14th Workshop on Laser Ranging

07-11 June 2004, San Fernando, Cadiz, Spain

The 14th International Workshop on Laser Ranging and International Laser Ranging Service General Assembly will be held at San Fernando (Cadiz, Spain) between June 07-11 2004. The Workshop is organized by "Real Instituto y Observatorio de la Armada" (ROA) and International Laser Ranging Service" (ILRS). For more information please visit the workshop web site at <http://www.roa.es/14workshop-laser>.

CCCT '04 Conference

14-17 August 2004, Austin, Texas, USA

2nd. International Conference on Computing, Communication and Control Technologies: CCCT '04. For details, please visit: <http://www.iiisci.org/ccct2004/WebSite/Default.asp> .

Map Asia 2004 Conference

26 – 29 August 2004, Beijing, China

Visit <http://www.mapasia.org> for more information.

Laser Scanner Conference

3 - 6 October 2004, Freiburg im Breisgau, Germany

International Conference "Laser-Scanners for Forest and Landscape Assessment - Instruments, Processing Methods and Applications". For details, visit: <http://www.natscan.de/conference/>.

3rd conference on Geodesy, GIS and Real Estate

13. – 14 October 2004, Herľany, Slovakia

Detailed information you can find at: http://www.fberg.tuke.sk/fakulta/konf_herľany/html/indexen.htm

19th CODATA International Conference

7-10 November 2004, Berlin, Germany

CODATA - Committee on Data for Science and Technology of the International Council of Science – ICSU
Title: “The Information Society: New Horizons for Science”. Visit <http://www.CODATA.org/04conf> for more information.

IAG Sister Societies' General Assemblies

FIG Working Week and General Assembly

22-27 May Athens, Greece

The next FIG General Assembly will be held in conjunction to the FIG Working Week in Athens. For details, please visit <http://www.fig2004.gr>.

1st FIG International Symposium on Engineering Surveys for Construction Works and Structural Engineering

28 June –1 July 2004, Nottingham, United Kingdom

This Symposium is organized by FIG Commission 6 and includes a workshop “Measurements and Analysis of Cyclic deformations and Structural Vibrations”. More information available at:
<http://www.fig.net/figtree/nottingham>.

XXth Congress of the ISPRS

12-23 July 2004, Istanbul, Turkey

The XXth Congress of the International Society for Photogrammetry and Remote Sensing will be held in Istanbul, Turkey. Visit <http://www.isprs2004-istanbul.com> for more information.

ICC2005 Conference

9-16 July 2005, A Coruña, Spain

The XXII International Cartographic Conference (ICC) is the most important event in the International Cartographic Association (ICA) calendar. Please visit <http://www.icc2005.org> for details.

Obituary

Buford K. Meade (1909-2004)



Buford K. Meade, whose geodetic career spanned almost seventy years, died March 4, 2004 at the age of 94. "B. K." (as he was always called, even by his family) was the last survivor of the distinguished group of scientists at the U. S. Coast and Geodetic Survey (C&GS) that dominated the American geodetic scene for a major part of the twentieth century. His unbroken service at C&GS (and its successor, the National Geodetic Survey (NGS)) from 1930 up to the end of 1974 began under the mentorship of William Bowie and Walter Lambert, continued with his close colleagues Charles Whitten and Donald Rice, and concluded as the Chief of the NGS Control Networks Division. Following his retirement from government service he remained active as a consultant. His last publication, on optimum methods for calculating geodetic inverses, appeared in 1996 when he was 86.

Following his graduation from Emory and Henry College in 1930, he was fortunate in the midst of the Great Depression to obtain a professional starting position with C&GS as a mathematician in the Geodesy Division. Charles Whitten had joined the same office just a few weeks before under similar circumstances. The careers of Meade and Whitten paralleled each other for more than 30 years, and their collaboration on many projects, especially on crustal motion studies, proved fruitful for them, C&GS, and the geophysical community.

Meade made impressive contributions in four areas: triangulation and trilateration adjustments with special emphasis on the U. S. transcontinental traverse; crustal motion in North America, particularly in California; the definitive resurvey of the north-south portion of the Mason-Dixon line; and the utilization of personal electronic calculators for geodetic computations.

Meade's particular talent was applying his mathematical skills to take advantage of new technologies for obtaining geodetic results of ever higher accuracy. For example, in his beginning years at C&GS he devised an improved method for reducing normal equations in a survey adjustment when utilizing the newly available mechanical calculators. Similarly, as advanced measuring methods like Shoran, electronic distance measurement (EDM) equipment, and Doppler became operational, he was primarily responsible for incorporating these more precise techniques into the U. S. first order networks.

By the early 1950's Meade was already recognized as a master in geodetic network adjustment. Around that time C&GS was given the charge of readjusting the Western European network. For his role in this task Meade was awarded the Department of Commerce Medal for Meritorious Service in 1953. Probably his most lasting accomplishment in this field was his leadership and vision in carrying out the U. S. Transcontinental Traverse (TCT) surveys through the 1960's and 70's. This effort, employing EDM, greatly strengthened the

existing triangulation network and was invaluable for the forthcoming readjustment of the North American Datum (NAD 83). These TCT measurements started by Meade nearly 40 years before the realization of NAD 83 provided a critical scale factor for the readjustment. Over certain distances in 1986, when NAD 83 was finally completed, the TCT scale measurements still proved to be equal or better in accuracy than those from the Global Positioning System - a remarkable achievement.

A natural consequence of the analysis of precise distance measurements was information on crustal motion. Meade devoted much effort on this topic, and obtained conclusive results along the San Andreas fault and other locations in California and the Western States. In the NOAA publication (July 1973) "Reports on Geodetic Measurements of Crustal Movement, 1906-71" that he edited, 13 of the 65 included papers are by him. He served as head of an International Association of Geodesy (IAG) Commission and Working Group on Crustal Movement in North America for many years. He was a co-editor (with Whitten and R. Green) of the special issue of Tectonophysics (Vol. 52, 1979) "Recent Crustal Movements, 1977", comprehensively covering the state of the art as of that date.

The work of Meade for which he is best remembered is the exhaustive "Report on surveys of Delaware-Maryland boundaries: in cooperation with the states of Delaware and Maryland" published by NOAA in 1982, dealing with the north-south portion of the Mason-Dixon Line. This was truly a labor of love, the subject occupying his attention for more than 40 years. Because of the disrepair into which the monuments of the 18th century survey had fallen, the two states agreed to fund a new survey and assigned the task to C&GS. Field surveys and new monumentation were carried out in the early 1960's, and Meade conducted the adjustment. Among interesting results achieved were that a foot as used by 18th century surveyors was about one part in 400 longer than today. Mason and Dixon had obtained as a byproduct of their survey the length of a degree of latitude in that area. In an unpublished manuscript written when he was 85 Meade ascertained that Mason and Dixon were in error by about one part in 800, but that if a particular set of their measurements is discarded the error drops to one part in 50,000.

Following his retirement from government service at the still vigorous age of 64, Meade joined John E. Chance & Associates, a global surveying firm, as a consultant and continued his involvement in geodetic survey adjustments. In this connection he became immersed in the utilization of pocket electronic computers for handling a variety of geodetic calculations. His calculator of choice was the HP 41CV, and he published several papers in the journal, *Surveying and Mapping*, of great practical value to surveyors in the field.

As one of the most outstanding geodesists in C&GS and NGS, Meade was a prominent member of the national and international geodetic community. Within the IAG he served on and chaired several committees engaged in crustal movement studies, and was awarded the Mescherikov Memorial Medal by the IAG Commission on Recent Crustal Movements in 1987. He was elected a Fellow of the American Geophysical Union in 1972 in recognition of his contributions to the field of geodesy. The American Congress of Surveying and Mapping made him a Life Member in 1980 and presented him a citation for outstanding service in 1986. He was also active in the Society of American Military Engineers, and the Washington Academy of Sciences. He served as a member of the National Academy of Sciences (NAS) Panel on Geodesy and Cartography in the 1970's and on the NAS Committee on Geodesy in the 1980's.

A typical characteristic of Meade was his modesty. It was not his habit to take the lead in discussions or vociferously press his point of view. But his opinions, whenever voiced by him, though soft in demeanor were firm in substance. Moreover, they were respected by his peers who acknowledged him as the authority in the field of geodetic surveying. His entire career was a worthy finale to the classic tradition of the Coast and Geodetic Survey. His professional contemporaries have all departed, but he is survived by his wife of 51 years, Ruth, a daughter, Ellen, her husband, Robert Kahn, and two grandchildren, Gabriel and Raphael Kahn.

BERNARD H. CHOVITZ