

**Report to the 29<sup>th</sup> General Assembly  
FIG Congress in Munich, October 2006**

**International Institution for the History of Surveying & Measurement**

**Report of Activities 2005-2006**

**1. Main event for the period**

**The Struve Geodetic Arc on the World Heritage List**

By far the most important event during the period under review was the positive vote by UNESCO on the acceptance of the Struve Geodetic Arc as a World Heritage Monument.

In 1994 a resolution to FIG in Melbourne tasked the group with pursuing the idea of getting the Struve Geodetic Arc as a World Heritage Monument. After some 10 years of effort and 1½ years waiting for the verdict it was a great relief to all concerned when on 15<sup>th</sup> July 2005 it was announced at the UNESCO meeting in Durban, South Africa, that the venture had been successful. In fact it is the first scientific cultural object to be so listed by UNESCO and the first monument to involve more than two countries.

Many people were involved in the project, not least representatives from the ten countries through which the Arc now goes. However special thanks must be extended to the National Land Survey of Finland under Jarmo Ratia which undertook the collection, collation and final publication of all the material required for the submission. In particular this was orchestrated by Pekka Tätilä.

Vitali Kaptjug (Russia) and Jim Smith (UK) were particularly active in the research and Jan de Graeve was able to accumulate and provide access to most of the original books on arc measurement since the 16<sup>th</sup> century.

The financing of the Struve Arc was partly sponsored by a grant of £5,000 by the RICS and by the sale of books and personal contributions of the Officers in parallel with the work by the 10 countries concerned.

In September 2005 during the Struve Conference in Helsinki a visit was arranged to the Struve station Puolakka for the inauguration of the Struve WHM points in Finland. This was attended by Jan de Graeve and Jim Smith representing the IIHSM. Similarly in June 2006 similar events were held in Alta and Hammerfest (N. Norway) and the same two representatives attended those celebrations as guests of the Statens Kartverk of Norway. Similar events were held in some of other countries around the same weekend and a further Struve Conference is arranged for August in Haparanda, Sweden. It has been particularly encouraging to see how enthusiastic the local communities have been and their intentions to make the most of their new WHMs with regard to tourism. A number of presentations and published papers relate to this achievement.

At the 2005 Struve conference in Helsinki a Struve committee was formed to oversee the future well being and development of the WHM and to pursue various other related initiatives including efforts to get the Old Tartu Observatory as a recognised Struve museum and to extend the Struve arc monument southwards to Crete, across the Mediterranean Sea and down the **30<sup>th</sup> Meridian Arc of East Africa** to near Port Elizabeth in South Africa. This latter exercise will require the cooperation and goodwill of some 20 countries which will prove a considerable challenge. Any readers of this who have good survey contacts in any of the following countries are asked to get in touch with Jim Smith or Jan de Graeve:- Poland, The old Austro-Hungarian Empire, Rumania, former Yugoslavia, FYROM, Greece, Turkey, Crete, Sudan, Congo, Burundi, Mozambique and Zimbabwe. Any material relating to the meridian arc through these countries would be much appreciated.

The steering group can now concentrate on the scientific aspects of future research and applications of the preserved points for future measures and perhaps applications in various geotechnical areas. This could open the project to future university students for research into historical documents. The preservation of filed notes and original documents is still to be pursued.

## **2. Working Week in Cairo**

A successful day of sessions was held and the FIF President was able to attend for part of the time. This was accompanied by an exhibition mounted by Greek colleagues.

The following day a visit was made to the site of a point on the northern end of Arc of the 30<sup>th</sup> meridian. There a plaque was unveiled by the Head of the Egyptian Survey Department. This plaque complements that unveiled in 2004 at the southern end of the arc at Buffelsfontein near Port Elizabeth.

## **3. Publications**

- a. A calendar for 2007 is in preparation and will hopefully be available during the FIG week.
- b. A catalogue of early surveying textbooks is in preparation. Many of the titles listed are expected to be in a display at the Deutsches Museum to coincide with the FIG meeting in Munich.
- c. The sale of reprints of books has helped to finance the Struve research in Russia, Moldova and Estonia. It is now hoped to raise more from this source for research on the 30<sup>th</sup> Arc in Africa.

Copies are still available of the two reprints produced by IIHSM:-

*Geodesia* of 1688 by John Love and

*The Compleat Surveyor* of 1657 by William Leybourn.

Each volume is \$50 plus postage and packing.

Interested purchasers should contact Walter Robillard, 1601 Berkeley Lane NE, Atlanta, GA 30329-2729, USA. Or by e-mail [robw@mindspring.com](mailto:robw@mindspring.com)

#### **4. On-going research**

- a. Research continues on the Arc of the 30<sup>th</sup> Meridian as mentioned above.
- b. Jan de Graeve continues to extend his library on the history of surveying and opening it for further research.
- c. The library of the late Bud Uzes (USA), consisting of some 1600 books on surveying, has recently joined another important collection in California. The Uzes collection of historical instruments is now in London still as a single collection.

#### **5. Coming events**

- a. ICA symposium Utrecht. August 2006. History of Colonial Cartography from 1750 to 1950. Jim Smith is presenting a paper *The Backbone of Colonial Mapping in Eastern Africa*. It is hoped to foster collaboration between this ICA Group and the IIHSM.
- b. Australia. 21<sup>st</sup> August 2006. Jan de Graeve is presenting papers at a one day symposium in Sydney on early cartography in Australia He will also attend a gathering in Darwin to honour the retirement of Bill Kitson. This will be in conjunction with a conference on the History of Cartography in Australia.
- c. FIG Munich, October 2006. A day of three sessions are planned to be held at the LVG (Bavarian Survey Department) where it is expected to have papers on Shaping the Earth; Meridian Measurements and Famous European Surveyors. The speakers are expected to come from Germany, Belgium, Switzerland, Australia and UK. In addition there is hoped to be a visit to a special exhibition in the Deutsches Museum.
- d. FIG Hong Kong 2007. If a local partner can be found then it is hoped to organise a symposium for History of Surveying in the Pacific Region.

#### **6. The future**

- a. The Officers would be interested to hear from any persons who would be willing to take an active part in the activities of IIHSM, particularly those with appropriate research interests or who would be willing to assist in any other way.
- b. If the General Assembly of FIG was to present a resolution for extending the Struve Geodetic Arc monument over the Mediterranean Sea and through the Arc of the 30<sup>th</sup> Meridian the IIHSM would be happy and proud to continue this work..
- c. The IIHSM looks for financial help for research into, and to achieve the preservation of, the existing points in Africa, both by moral support and any financial contribution that becomes possible.
- d. It would be appreciated if the corresponding members in Africa could call upon their colleagues in neighbouring countries, where those countries contain parts of the 30<sup>th</sup> Meridian Arc, and so help create a working party for that project.

#### **Jan de Graeve**

Director of the International Institution for the History of Surveying & Measurement

July 2006