



THE
OUGHTRED
SOCIETY

Newsletter

August 1, 2014

News from the Oughtred Society's President - Bob Decesaris



Now that we have two exciting and well-attended Oughtred Society meetings under our belt for the year, it is time to look towards the second half of the year, and to important preparations that the Society needs to undertake to begin preparations for the next **International Meeting, IM2015**, scheduled for Fall 2015 for the US West Coast. This meeting will follow **IM2014**, to be held Sept 5th and 6th, 2014, in Delft, The Netherlands, and will provide our international visitors a significant contrast from the US last hosting of IM2011 in Cambridge, MA. At our last board meeting, we discussed and are closing on pushing out the East Coast Meeting 2014 and Winter Meeting 2015 in order to combine them with IM2015 to make this one of the biggest events ever. This will also allow us to focus on this important meeting and utilize the experienced leaders from these other meetings towards insuring a most successful IM2015 event.

The Oughtred Society is currently seeking volunteers to assist with planning and preparation for IM2015, including for the positions of:

IM2015 Proceedings Chairperson to solicit papers and presentations

IM2015 Local Site Chairperson for hotel, dining, tours, and other necessary arrangements.

In addition, the **Oughtred Society Publications Committee (OSPC)** is seeking **additional assistance for the variety of Committee activities**, including the coordination and preparation of printed and electronic publications that are in progress at OSPC related to IM 2015 papers, slide rules, calculators, and collections. Specific needs are for coordinating, monitoring, tracking, and reporting the status of various projects.

Please contact Bob De Cesaris (robert.g.de.cesaris@intel.com) or Clark McCoy (oughtredsociety@comcast.net) if you are interested and willing to assist with any of our IM2015 events and activities. Thank you!

Reported by Bob DeCesaris

News from the Dutch Kring



International Meeting IM2014 – about 1 month from now!!!

The Dutch KRING is now registering participants for the international conference IM2014 in Delft, September 5-6. For the latest information and for the registration form, please visit www.rekenlinialen.org

We hope you will send in your registration form soon, because we need to know the approximate number of participants for reservations at the locations we are going to use. The program of papers to be presented is now complete, and covers a very interesting and wide-ranging set of subjects.

In our previous international meetings we have introduced the concept of presenting special calculating instruments, the so-called “One-Off’s”. We still have space for an extra 10 or so One-Off’s, to be described in the Proceedings and to be demonstrated at the meeting.

For more information and for the registration form, please visit: www.rekeninialen.org

Report from Otto van Poelje

News on Logarithms from the German RST.....



1) Since 2012 Stephan Weiss and Klaus Kuehn are offering once per quarter lectures on “Calculating like in the olden days” (Rechnen wie damals) in Gröbenzell (Germany). The 9th meeting was performed (June 30, 2014) as a role play “Napier 400 Memorial” which was attended by a record audience of 60 people even from Switzerland and Austria. Among those participants we have gratefully welcomed some honoric scientists for the history of mathematics (Faustmann, Fischer, Folkerts, Schöbi-Fink, Staudacher and Waldvogel).

First we have acquainted the audience with some important historical developments of the 16th century and with “Sir John” in person who told us about his life and his inventions and writings. Finally we gave an outlook on the relevance of logarithms in the presence. The audience did acknowledge our 1-hour performance as well as the accompanying exhibition on logarithmic calculating aids/devices by very gracious and positive feedback. See: (http://www.rechnerlexikon.de/artikel/K%FCChn/_Weiss_Rechnen_wie_damals_2012).

2) News on ARISTO slide rules: Exhibition ‘ $2 \times 2 = 3.99$ ’ in Wörgl, Austria

Some slide rule collectors might be aware that ARISTO-slide rules were not only made in Hamburg (-Altona) but also in Wörgl, Austria. This former Austrian ARISTO subsidiary has been refounded as a management buy out as GEOTEC, and is still producing plenty of office and school supplies, like plastic rulers, triangles, etc. (<http://www.aristo.at/go/home>).

Some weeks ago GEOTEC organized an exhibition on the history of ARISTO slide rule production in Austria. The opening ceremony on May 30, 2014 was very well attended as you can see via this link: <http://www.vero-online.info/page.php?id=3130>. Some of the fotos in the gallery might be of interest to the slide rule collecting community.

Report from Klaus Kühn

News from the UKSRC.....



The UKSRC have just sent to the printers this year's "bumper" 150 page edition of its annual Gazette which, in part, celebrates Napier's Quadricentenary of the publication of his discovery, or is it better to describe it as "invention," of logarithms in 1614. As well as 5 Napier based articles, and he was a fascinating man of many parts as the Gazette articles illustrate, we have our usual melange of slide rule and matematical instrument collecting articles from 13 different authors, including another new one as we have managed in every one of our past editions.

This is a record we are very proud of. The Gazette is available via Rod Lovett or Peter Hopp as well as at the forthcoming IM in Holland.

Report from Peter Hopp

Past Oughtred Society Journals Are Available on DVD



All past issues of the Journal of the Oughtred Society are now available in digital format on a DVD. The new DVD archive contains all Journal issues published since vol. 0, no. 0 in 1991. The DVD also includes three special publications: *The Slide Rule*, a reprint of the booklet published by Edwin Thacher; *Slide Rules in K&E Catalogs*, by Bruce Babcock; and *A Slide Rule Bibliography*, by Peter M. Hopp. Individual journals are presented as PDF files at high resolution. Price (including postage) for all OS members: \$95. Yearly updates for OS members will also be available for \$10. To order a DVD go to the OS website and click on the **Journal page** and pay for the disk via PayPal.

Information from the OS web site as edited by your OS Newsletter editor

New Oughtred Society Members in July are

Mark Huffstutter, Seattle, WA

John H Runnels, Baton Rouge, LA

Mark Lehrer, Riverside, CA

Jim Parker, United Kingdom

Welcome to the Oughtred Society!

Joining the OS is easy & rewarding. Just visit the [Oughtred Society](#) website and select Membership in the main menu.

Clark McCoy, Membership Secretary, reporting

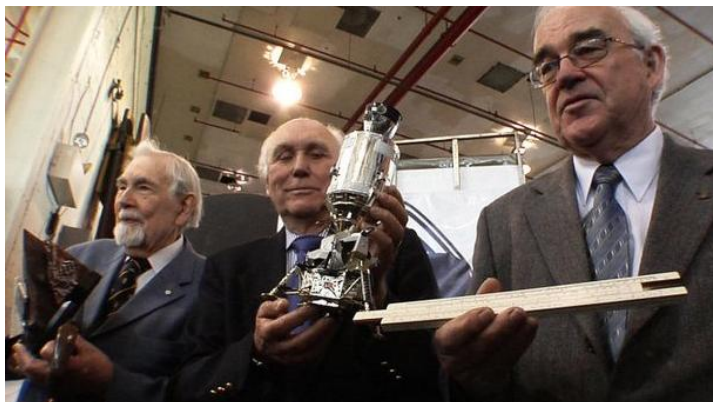
Upcoming articles in the Fall 2014 (Vol 23.1) Journal

- *The Deaths of the Slide Rule* by Robert James
- *My Slide Rules* by William J. Wayne
- *The Peruvian-German Slide Rule Connection: The ARISTO Nr.10065 System Gruter* by Richard Smith Hughes
- *Design Considerations for the Analon Slide Rule* by Cliff Frolich
- *Charles Hoare His Book and His Slide Rules* by Tom Wyman
- *Pencil Slide Rules: Part 1 "An Overview"* by Rodger Shepherd
- *A Brief Summary of Combined Slide Rules: Part 1* by Panagiotis Venetsianos
- *Golding's Horse Power Computer* by Stephan Weiss
- *Aspect Ratios of Pictures* by Otto van Poelje
- *Collectanea de Logarithmis* by Klaus Kühn

David Sweetman, Managing Editor, reporting

Famous Slide Rule Personalities

From the Toronto Star, April 13, 2010: "U of T Engineers Recognized for Apollo 13 Rescue"



"Forty years after an accident that threatened the lives of the Apollo 13 space crew, a team of U of T engineers was recognized Tuesday morning for the little-known role they played in averting a tragedy. Phil Sullivan, Rod Tennyson, Irvine Glass, Barry French and Ben Etkin were honored during a ceremony at the Canadian Air and Space Museum

at Downsvieview Park for helping the astronauts safely return to Earth. [see Etkin, French & Sullivan shown receiving the award]

On April 13, 1970, an oxygen tank exploded as the spaceship was four-fifths of the way to the moon. The crew was forced to scrap the moon mission and focus solely on getting back to Earth alive. The plan involved the crew members moving from the service module, which was hemorrhaging oxygen, into the cramped, frigid lunar lander while they rationed their dwindling oxygen and electricity. Using the lunar module as a lifeboat, they swung around the moon and aimed for Earth.

The professors from the University of Toronto's Institute for Aerospace Studies were called upon by Grumman, a major contractor on the lunar program, to make crucial air pressure calculations needed for the strategy. With very little data and no computers to rely on, the engineers were able to make the calculation and report it back to NASA."



Few have remembered that a tragedy was averted that fateful day, in large part by a team of engineers at the University of Toronto, with nothing more than their slide rules and powerful brains and knowledge of the operation of the space vehicle. It took, perhaps 6 hours, for this group of engineers to make the calculations of the critical pressure required to jettison the lunar module without damaging the space vehicle in which 3 astronauts were riding. The pressure required had to be precisely calculated. "Too high, and it might damage the hatch and the astronauts will burn up because they won't be sealed in the spacecraft. Too low, and the lunar module would not get separated enough from the command module."

This all may be surprising to those not remembering or knowing the power of a slide rule for making engineering and scientific calculations. But until 1972, the primary personal calculating tool in the US space program was the slide rule. The space program had at its disposal large mainframe computers to make the calculations necessary to launch and guide the space vehicles. But, astronauts in all of the Apollo missions carried slide rules for making routine calculations before and during the missions. And there were many special purpose slide rules made specifically for the space program, including the *Aristo 80123 Martin Space Slide Rule* that provided for the calculation of the velocity, time of travel, etc. required to reach various planets. This slide rule was made by Aristo especially for the Martin Marietta Space Systems Division, prime contractor for NASA, in 1962. . . . Another "space" slide rule was the *Space Vehicle Pocket Designer for Three Stage Rockets*. It was also made for The Martin Company. These and many other slide rules were partially responsible for flying man to the moon.

A photograph of an astronaut on the moon surface. The astronaut is standing next to a large American flag on a pole. In the background, the lunar lander is visible on the moon's surface. The scene is brightly lit, likely by the sun.

THIS WAS DONE WITH A SLIDE RULE.

Your eighth grader has more computing power in his cell phone and still can't pass math because he won't do more than fifteen minutes of homework.

Where do you think HE'LL be going?

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Notable Slide Rule Sales on eBay in July



Slide rule sales for winning bids of \$100 or more on eBay dipped a bit in July. Two European slide rules topped the list: 1) a Faber Castell 2/84N Mathema Slide Rule, MIB, ; sold for \$1,325 and 2) a Swiss National 16 m cylindrical slide rule sold for \$1050. Other sales of particular note were a K&E Cox Patent 4076 duplex slide rule, with 2 slides, and a metal framed cursor that sold for \$688, a K&E 4105 Webb cylindrical stadia slide rule that sold for only \$106, and a rare K&E N4135 Horsepower Calculator Slide Rule that sold for just \$191. Twelve special purpose and nine 20 inch (25 cm) slide rules led the sales.

US Slide Rules (26 slide rules sold for \$100 or more in July for a total of 5342)



- K&E Cox Patent, 4076 Duplex Slide Rule, 2 slides, metal framed cursor - \$688
- Kueffel and Esser 4061-T, pocket slide rule with column cursors - \$344
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- Eugene Dietzgen 48" Slide Rule Classroom Demonstration w/case - \$332
- Pickett 6-T STATICAL QUALITY CONTROL SLIDE RULE - NIB - \$288
- Pickett 1082-ES Rafter Framing Slide Rule -NIB - \$248
- Kueffel and Esser 4160 CHEMISTRY SLIDE RULE - \$238
- PICKETT CIRCULAR SLIDE RULE MODEL 110ES - \$230
- K&E 68 1200 Log Log Duplex Decitrig 20" slide rule, case, box - \$216
- K&E N4081-5 Log Log Duplex Decitrig 20" slide rule with case - \$215
- K & E 68 1210 Log Duplex Decitrig Slide Rule MIB - \$212
- Kueffel and Esser 4083-5 VECTOR slide rule - \$202
- K+E Deci-Lon 10 slide rule #68 1100 w/ case, manuals - \$195
- K&E 4080-5 LogLog Duplex Trig. & 4081-3 Decitrig slide rules - \$196
- K&E 4081-5 Log Log Duplex Decitrig 20" slide rule - \$195
- K&E N4135 HORSEPOWER CALCULATOR SLIDE RULE - \$191
- K&E 4081-5 - \$153
- PICKETT MODEL N-16-ES ELECTRONIC" SLIDE RULE W/ CASE - \$152
- K+E Deci-Lon 68 1100 Slide Rule in box w/Leather Case & Book - \$150
- Pickett N909-ES Slide Rule - Simplex Trig Rule with Metric Conversion - \$149
- Kueffel and Esser 4093-5 log log duplex vector slide rule - \$145
- K&E Log Duplex Trig Slide Rule Case 20" 681200 -\$122
- Kueffel and Esser 4041 slide rule with a decimal keeping cursor - \$115
- PICKETT 600 T SLIDE RULE new old stock -\$112
- Gilson 10.5 inch SQUARE "ATLAS" circular slide rule - \$112
- K+E 4105 Webb cylinder stadia slide rule (fair condition) - \$106

European Slide Rules (20 slide rules sold for \$100 or more, for a total of \$5920)

- Faber Castell 2/84N Mathema Slide Rule, MIB, - \$1,325
- National Billeter Modell No.16 Cylindrical Slide Rule 1910 - \$1,050
- Fuller Calculator, Model 1, 1961 Bakelite model - \$695
- Fuller Calculator, Model 1 (no date given) - \$375
- Faber Castell TR3 Slide Rule / Calculator - \$350
- Aristo 100101 Slide Rule - IBM Manpower Utilization Efficiency - \$220
- Fowler JUBILEE MAGNUM- Extra Long Scale circular slide rule - \$202

Dennert & Pape DR 3 Dreieckrechner Luftwaffe Kreis-Rechenschieber - \$181
 Tavenier Gravett Manheim slide rule c1875-1895 with chisel cursor - \$179
 FOWLER'S MAGNUM LONG SCALE CALCULATOR - \$170
 Aristo Studio 01068, 50 cm Riesen Rechenschieber - \$166
 Fowler's "Universal" Calculator Slide Rule in Leather Case - \$141
 Early OTIS KING Pocket Calculator Slide Rule White on Black Scales - \$140
 ARISTO 869 STUDIO LOG POCKET SLIDE RULE - \$138
 Faber-Castell TR1 Slide Rule/Digital Calculator - \$125
 D & P - Plath DR 2 Dreieckrechner Luftwaffe Kreis-Rechenscheibe - \$122
 Faber Castell Slide Ruler Novo Duplex No. 2/83 N New Leather Pouch - \$120
 Faber Castell Circular Calculator Nr. 8/10 Slide Rule - \$112
 Faber Castell slide rule 67/54Rb DARMSTADT w. addiator - \$109

Asian Slide Rules (4 slide rules sold for \$100 or more, for a total of \$1288)

Hemmi No. 154 Electrical Engineer 20" duplex slide rule, 2 cursors - \$449
 Hemmi No. 154 Electrical Engineer 20" duplex slide rule with cardboard case -\$431
 HEMMI No. 70 Improved Rietz, 50cm - \$222
 Hemmi #269 Civil Engineering slide rule - \$186

Ed Chamberlain, your Newsletter editor, reporting

On The Lighter Side



From K&E Instruction Book

Ed Chamberlain, your Newsletter editor, reporting

..... Send Contributions to: edwin_chamberlain@valley.net