



THE
OUGHTRED
SOCIETY

Newsletter

Oct. 1, 2014

News from the Oughtred Society's President - Bob De Cesaris



We are closing in on the dates and venue for our International Meeting 2015.....to be held in the Bay Area, California, during a weekend between September 15 and October 19, 2015. The meeting will be close to the Computer History Museum where a half day tour will be scheduled, as this will be one of our primary highlights and focal points for the meeting. Other local museums are being contacted for possible tours.

The Oughtred Society continues to seek volunteers to assist with planning and preparation for IM2015, especially for the position of IM2015 Proceedings Chairperson to solicit papers and presentations. Kate Matthews has graciously accepted the position of IM2015 Local Site Chairperson where she has begun working the meeting agenda and logistics for hotel, dining, tours, and other necessary arrangements.

In addition, the Oughtred Society Publications Committee (OSPC) continues to seeking additional assistance for a variety of Committee activities, including the coordination and preparation of printed and electronic publications in progress at OSPC related to IM 2015 papers, slide rules, calculators, and collections. Specific needs include 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 De Cesaris

Tatjana J. van Vark - Engineer/Scientist/Craftsman/Genius



Paul McConnell brought to your editor's attention the extraordinary work of the Dutch scientist/engineer; Tatjana J. van Vark. She is a genius at creating and crafting complex electrical/mechanical instruments for all sorts of purposes. Her craftsmanship is superb and artful, with the purposeful use of complex brass gears and other machined parts. She builds her instruments with her own hands, machining most parts in her machine shop. Most of her work is done and displayed in her own home, which looks inside more like a combination machine shop, electronics laboratory and museum. Otto van Poelje

knows Tatja as a special person who demonstrated some of her integrators and Fourier wave analyzers at IM2007. She has also built an improved version of the WWII Enigma cipher machine, and working models of historically significant telescopes and other instruments from barometers to polarimeters to an Antikythera Mechanism (analog computer) driven Hypothetical Planetarium.

Tatja is a genius at crafting instruments, but she is plain spoken in describing how they function, leaving to the observer to discover the beauty, function and purpose. A visit with Tatja is an experience not forgotten. One can see a demonstration of Tatjana J. van Vark's work and intellectual mastery at: <<http://www.tatjavanvark.nl/Youtube.html>>, and read her biography at: <<http://www.tatjavanvark.nl/index.html>>

Reported by Ed Chamberlain, Paul McConnell and Otto van Poelje

News from the Dutch Kring

Aftermath of the IM2014 Meeting in Delft

After the successful IM2014 Meeting on Historical Calculating Instruments in Delft, the Netherlands, 5 – 6 September 2014, we would like to draw your attention to the vast and widely varying information and knowledge that has been presented in the live sessions, and which is preserved in the IM2014 Proceedings and its companion CD.

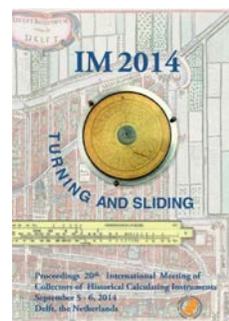
Below you will find how you can obtain copies from our remaining stock. First the summaries of the twelve papers that were presented at IM2014:

1. **ALRO Calculating Disc for Optical Ray Tracing** *Otto van Poelje* reports on a new-found ALRO desktop-sized disc from 1939.
2. **A “mystery” PTT Slide Rule from the Netherlands** *Jerry McCarthy* analyses and explains the scales of the NL PTT cable radio slide rule.
3. **Turning and sliding in the spinning and weaving factory with the LOGA discs.** *Nico Smalenburg* describes the use of LOGA calculating disks in the yarn spinning industry.
4. **Extreme Sliding – Base Jumping with the Radix 2/10 Binary/Decimal Slide Rule.** *Colin Tombeur* describes his design – and the production at his home – of a logarithmic slide rule based on the binary number system.
5. **Old Computing & New Generations - teaching slide rules and other historical calculating instruments at schools and fairs** by *Nicola Marras*
6. **The Ross Precision Computer – Types I & II A New Perspective** *Ed Chamberlain* describes two successive versions of these long spiral-scale discs.
7. **FUJI - Circling the World with Straight Slide Rules** *Jose Fernández* catalogued a large number of slide rules by *Fuji*.
8. **Maximator Valorect – A New but Unsuccessful Treatment of Logarithms with a Digital Adder** by *Stephan Weiss*
9. **Graphic Logarithmic Tables: – A Picture Should Be Worth A Million Numbers** *David Rance* shows how regular logarithmic tables can be represented as dual scales with log values and opposite anti-log values
10. **NuPuBest and EFluBest** *Andries de Man* describes different kinds of toolboxes to model forces and their deforming effects in structural analysis. *Meccano*-like beam and fixture construction
11. **How to Draw a Logarithmic Curve** *Stefan Drechsler & Barbara Haeberlin* give an overview of historical drawing instruments to produce special mathematical curves.
12. **Milling numbers – Discovering the Millionaire Calculator** *Dirk Rietveld* shares with the reader his experiences in discovering the *Millionaire* mechanical.

The Proceedings end with descriptions of 12 “One of a Kind” slide rules, including *Thornton* and *Casella* slide rules with “mystery” scales, a new *D&P* disc in brass with trig scales (never seen before), a metal disc (45 cm diameter, 6 kg) by *Gebrüder Fromme* for interest calculations, and more.

How to get copies of Proceedings and/or CD?

The printed Proceedings book of 185 pages in paperback includes the IM2014 CD, and can be ordered for 40 Euro each, excluding shipping.



Details of costs of the Proceedings + CD:

- 40- euro without shipping, payment in cash
- 45- euro shipping by letter post to the Netherlands, payment by bank transfer (IBAN/BIC)
- 50- euro shipping by letter post to EU (European Union), payment by IBAN/BIC
- 52 - euro shipping by letter post outside the EU, payment by PayPal

The IM2014 CD contains all the papers in the Proceedings plus the complete FUJI Catalogue, in a single PDF file with easy navigation by mouse clicks.

Details of costs of the CD only:

- 10 - euro without or with shipping anywhere worldwide, payment by IBAN or PayPal

Orders with full address information can be sent by email to ovpoelje@rekeninialen.org and by direct payments to bank account of HR O E VAN POELJE, BIC = INGBNL2A, IBAN = NL13 INGB 0000 1252 07. Payments from outside EU to the Paypal account of ovpoelje@rekeninialen.org

Report from Otto van Poelje

Review of IM2014 Meeting in Delft



Your editor attended IM2014 and was impressed by the fine organization and program. The meeting opened in the conference hotel in the afternoon of Friday, September 5th, with 4 papers and a swap/sales meet. Following the theme of the meeting - Turning and Sliding - the presentations covered special purpose disks made for "cable" radio and for

spinning and weaving of yarn. Most interesting to me was a paper by the Italian slide rule educator - Nicola Marras - describing his extensive experience in teaching the younger generation in Italy about slide rules and how to use them. It was most interesting to hear how he engages his students. One can only imagine how much fun it would be to be in one of his classes.

The hotel conference room was ringed with tables for the swap/sales meet. The tables were filled with slide rules for sale, some rare and seldom seen. One table featured Pickett slide rules, a personal collection going up for sale. At one end of the room, 12 "One-Offs" were displayed and described. They included mystery 20-in Thornton and Casella slide rules, homemade radiation dosage calculating disks, an early brass disk by D & P, a special made cylindrical slide rule in cardboard tubes having a scale length of about 10m, a uniquely constructed (Mechanical Engineer ?) pocket slide rule, a Loga disk for interest calculations, an Italian calculating rule involving the tracing of a line and a



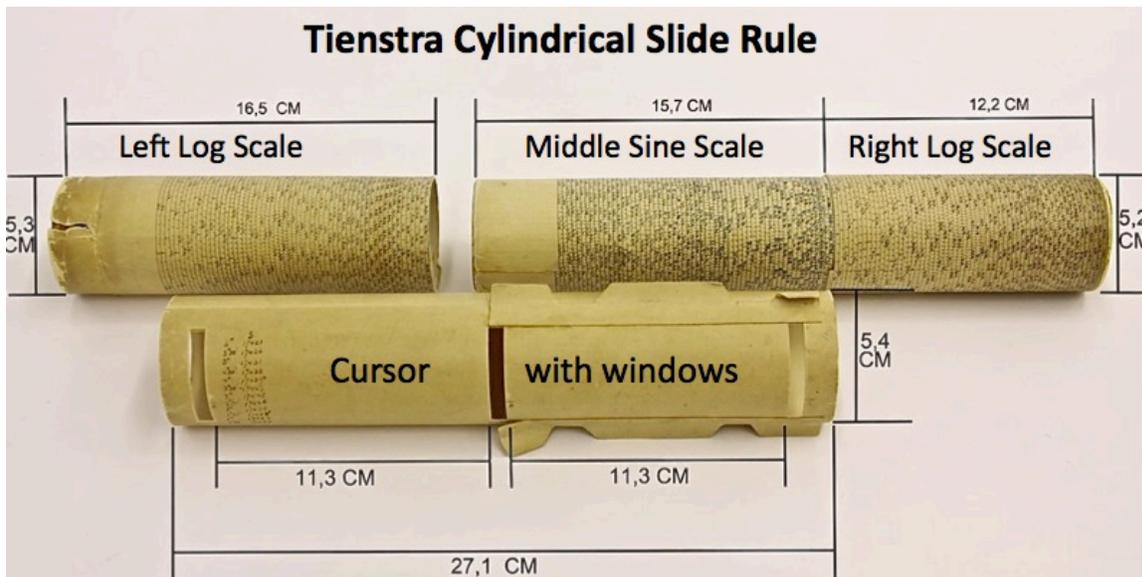
single log scale, an early (c1920) heavy (6kg) large dia (450mm) Austrian Gebruder Fromme disk for financial calculations, a "Virtual" Calculimetre, and a disk for determining the logarithms of numbers. Finally a plastic UTO No.1 slide rule was shown that was made to turn into a helical form in a turkey roaster. Otto van Poelje and Gerard van Gelswijck had fun making this slide rule fit IM2014's theme of - "Turning and Sliding." Unfortunately the slide on this slide rule no longer slides.

We finished the day with dinner and lots of conversations about slide rules and people who collect them.

The next morning we gathered at Delft's Science Center for the continuation of the technical program. The presentations covered a binary slide rule, the Millionaire Calculator (its works and how it works), drawing of log curves, modeling structural analysis, the world of Fuji slide rules, the Maximator Valoret (logarithms with a digital adder), and graphic log tables. I made a presentation of two variations of the Ross Precision Computer. In the afternoon I accepted the IM Challenge Drum for IM 2015. This trophy is passed on from one International Meeting to the next. I invited all to attend IM2015 which will be hosted by the Oughtred Society in California next year. After the formal sessions closed, we took the opportunity to visit the hands-on displays at the Science Center, and then retired to a cozy restaurant in Delft to one again to discuss slide rules and the people who collect them. Afterwards, a walk through old Delft back to our hotel finished a fine day.

Reported by Ed Chamberlain

One-Off Tienstra Cylindrical Slide Rule shown by Chris Hakkaart at IM2014



This appears to be a home made slide rule in the style of the Otis King Model L Calculator. The 2 end scales are 60 revolution log scales running from 1 to 10. The middle scale is a sine scale running from about 5 deg to 90 deg, also for 60 windings. The helical scale lengths are approximately 10m, making the scale lengths longer than that of a Thacher cylindrical slide rule (9.17m), and almost as long as that of the Fuller helical Calculator (12.7m).

The scales appear to be printed on card stock folded to form tubes. The middle sine scale tube is adhered to the inside of the right log scale tube so that the indices line up. The left log scale tube slides over the middle sine scale tube. It can also be rotated relative to the other 2 scales. A cursor sleeve with cutout windows slides over the assembled set of scale tubes, the cursor tube being operated much like the black cursor tube on an Otis King Calculator. This cylindrical slide rule is operated much like an Otis King. The results can be read to 5 digits at the low end of the scale and about 4.5 digits at the high end.

This slide rule is in the inventory of the Delft Technical University. Prof. Jacob Menno Tienstra developed it during WWII. Details are shown in the Proceedings of IM2014 - International Meeting of Historical Calculating Instruments, Sept. 5-6, 2014, Delft, The Netherlands. (see above review of IM2014 for details about purchasing copies of the proceedings)

Reported by Ed Chamberlain with details from Chris Hakkaart

Passing of Two Notable Oughtred Society Personalities

Ellen Wyman (1927 – 2014)

With great sadness the Oughtred Society notes the passing of Ellen Wyman, widow to President



Emeritus Tom Wyman, who died in March. A longtime resident and activist in Palo Alto, Ellen died on Sunday, September 14, at the age of 86, after years of frail health. A lifelong volunteer, Ellen participated in many local groups, including the League of Women Voters, the PTA, the Palo Alto Civic League and the Santa Clara County Grand Jury. As a strong opponent of urban growth in Palo Alto, she and Tom helped to found organizations that successfully lobbied to enact restrictions on new developments. Ellen and Tom were also both ardent supporters of the Palo Alto libraries. Along with Tom, Ellen helped to establish and run the book sales for the Friends of the Palo Alto Library; these remarkable sales generated a substantial amount of revenue for the Library. In 2005, both she and Tom were honored with an

Avenidas Lifetimes of Achievement award to acknowledge their lasting contributions to the Palo Alto community.

Ellen was born on November 25, 1927, and grew up in Danville, Illinois, where political engagement became a way of life for her from a very early age. She helped her mother hand out buttons on a street corner as part of a campaign to elect Wendell Wilkie, Franklin Delano Roosevelt's opponent in the 1940 presidential election. Ellen graduated from the University of Illinois and worked for a time as a marketing and opinion researcher. She met Tom, a Chevron oil executive who had grown up in Palo Alto, in Chicago, and the two married in 1955.

As a couple, Ellen and Tom did much to help create the warm and convivial feeling that has always permeated the Society's meetings, especially those held in Palo Alto over the years. The Wymans' particular pleasure was to host a dinner at their home following each of the Society's annual meetings. All who had the privilege to attend remember these events with great fondness, for in addition to offering a delicious meal, the Wymans created an atmosphere of cordial comfort where members could share not only hors d'oeuvres and drinks, but also free and easy conversations, banter and embellishment, triumphs, theories and more. Ellen and Tom were both passionately interested in the world of ideas, and both were skilled conversationalists who were always genuinely interested in the topics that arose. In this soft and friendly setting, conversations ranged far beyond the confines of slide rules and collecting, often touching on politics, technology, literature and more. Although Ellen's health issues in her later years necessarily began to limit her activities, she

remained gracious, indomitable and forthright until the end. Like Tom, she was a leading light in the lives of all the many people she touched and like him, she too will be sorely missed.

Ellen is survived by her daughter, Susan Sage Wyman of New Braunfels, Texas; her son, Tom (Susie) Wyman of Boulder, Colorado; and four grandchildren, Mackenzie, Casey, Samantha and Macey. A memorial service will be held on Oct. 12 from 2 to 5 p.m. at the Lucie Stern Community Center, 1305 Middlefield Road, Palo Alto. In lieu of flowers, memorial donations can be made to the Friends of the Palo Alto Library.

Bobby Charles Feazel (1943 - 2014)

We are very saddened to learn of the death of Bobby Feazel, a very active Oughtred Society member and collector in the 1990's. Bobby was a very good friend to those of us who were privileged to know him personally. He died Monday afternoon, Sept 15, in his home at Hemphill, TX, at the age of 70, of congestive heart failure. He was born in Richmond, California, to Charles Sheldon and Jettie Griggs Feazel. His career as a civil engineer with paper mills took him to Birmingham, Alabama where he acquired a very distinctive and charming southern accent.

During the 1990's, Bobby thrived within the OS as a very active member, collector, and researcher, and graciously shared his vast knowledge of specialty slide rules and of surveying instruments. He was a regular participant at our Annual West Coast Meetings and contributed numerous articles to the Journal, dealing primarily in the area of special purpose slide rules. His articles were characterized by impressive research and scholarship. His work in the area of one of America's first slide rules, Palmer's Computing Scale, focused much attention on this rule and motivated many collectors to perform additional research on detailing the various types and varieties. Some of his other articles focused on rules such as the K&E Pilot Balloon slide rule, K&E Fetal Age rule, and the Electrical Wireman's gauge. These informative and entertaining articles on these very rare and specialized items were all written with Bobby's special sense of humor.

Bobby is survived by his wife, Becky, of Hemphill, TX; his mother, Jettie Feazel of West Monroe, LA and a large extended family of children, grandchildren and great grandchildren, nieces and nephews. Memorial services were held on Saturday, September 20, 2014, in the chapel of Mulhearn Funeral Home, West Monroe, Louisiana.

Obituaries reported by Bob De Cesaris

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

One New Oughtred Society Member in September is

Enrique Velasco Diaz, Madrid, Spain
Welcome to the Oughtred Society!

Joining the OS is easy & rewarding. Just visit the [Oughtred Society](http://Oughtred Society website) 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 Anolon 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

Galileo Book at Auction



ASTRONOMY GALILEI, GALILEO. Systema cosmicum. 1632 + Tractatus de proportionum instrumento, 1612 at auction (Swann Auction Galleries)

This is a first edition (in Latin) of Galileo's 1632 arguments proving the validity of the Copernican heliocentric theory (planets revolve around a stationary sun). It is bound with a second edition of his 1612 treatise on the sector or proportional compass and its use as a calculating instrument. The sector was a predecessor-calculating rule to the slide rule, and 19th century sectors often have Gunter log scales engraved on them along with sector scales. The auction date is October 21st, and the estimated hammer price is **\$15,000 to \$20,000**. \$11,000 is the starting bid. See more details at:

http://www.invaluable.com/auction-lot/-1-c-2EA79A089B?utm_source=inv_kwalert&utm_medium=email&utm_campaign=keywordalertlive&utm_term=2

Reported by Ed Chamberlain

Notable Slide Rule Sales on eBay in September

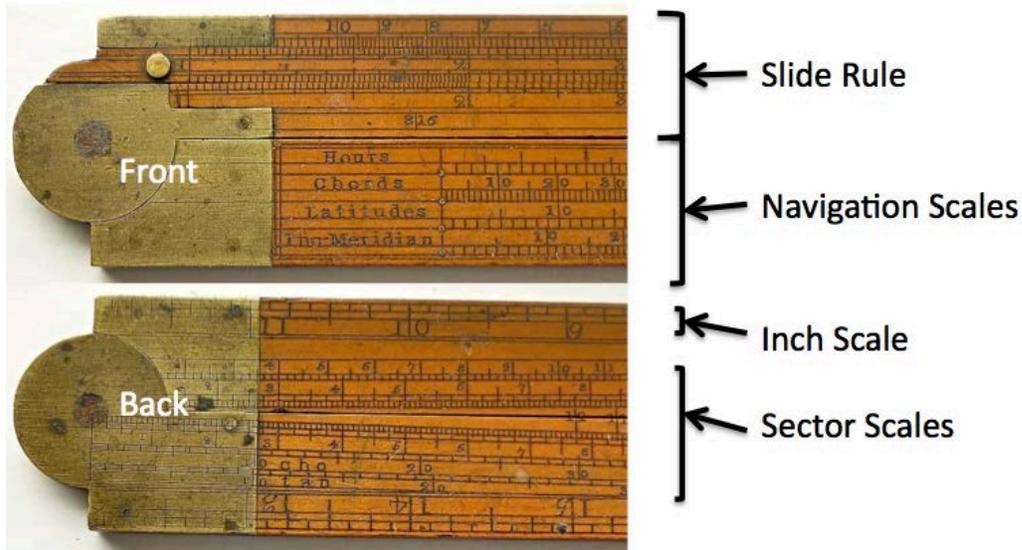
For sake of brevity this month, only eBay sales of greater than \$200 are shown

US Slide Rules (7 slide rules sold for \$200 or more in September)

Kueffel and Esser 4012 Thatcher cylindrical slide rule, serial #3318	\$587
Pickett Model N525-ES Statistical Slide Rule 1965 In Box	\$315
Kueffel and Esser 4083-5 20" Log vector slide rule 1947	\$315
Pickett model X-3 Executive slide rule	\$295
Kueffel and Esser 4020 Charpentier pocket circular slide rule	\$275
Pickett & Eckel No.14 US Military slide rule	\$222
Pickett Kellogg Hydraulic Slide Rule model 575	\$204

European Slide Rules (7 slide rules sold for \$200 or more)

British 2-fold boxwood navigation rule/sector/slide rule,	\$1314
Faber Castel 2/84 Mathema hyperbolic slide rule	\$462
Loga 15 meter cylindrical slide rule	\$449
Fuller's Calculator, Bakelite model, 1949	\$369
Faber Castell TR1 Slide Rule / Calculator	\$357
Dring & Fage four sided excise slide rule in boxwood	\$355
Courvoisier Regle/Cercle a Calcul (spiral circular slide rule) c.1944	\$345



British 2-fold navigation rule

British 2-fold boxwood navigation rule/sector/slide rule, sold on eBay for \$1314

Asian Slide Rules (2 slide rules sold for \$200 or more)

Hemmi #405 chemical slide rule (scarce model)	\$333
Hemmi electronic slide rule #266	\$220

Note: Most of the above slide rule descriptions are taken directly from eBay. There is some editing, but some errors may have slipped through.

Ed Chamberlain, your Newsletter editor, reporting

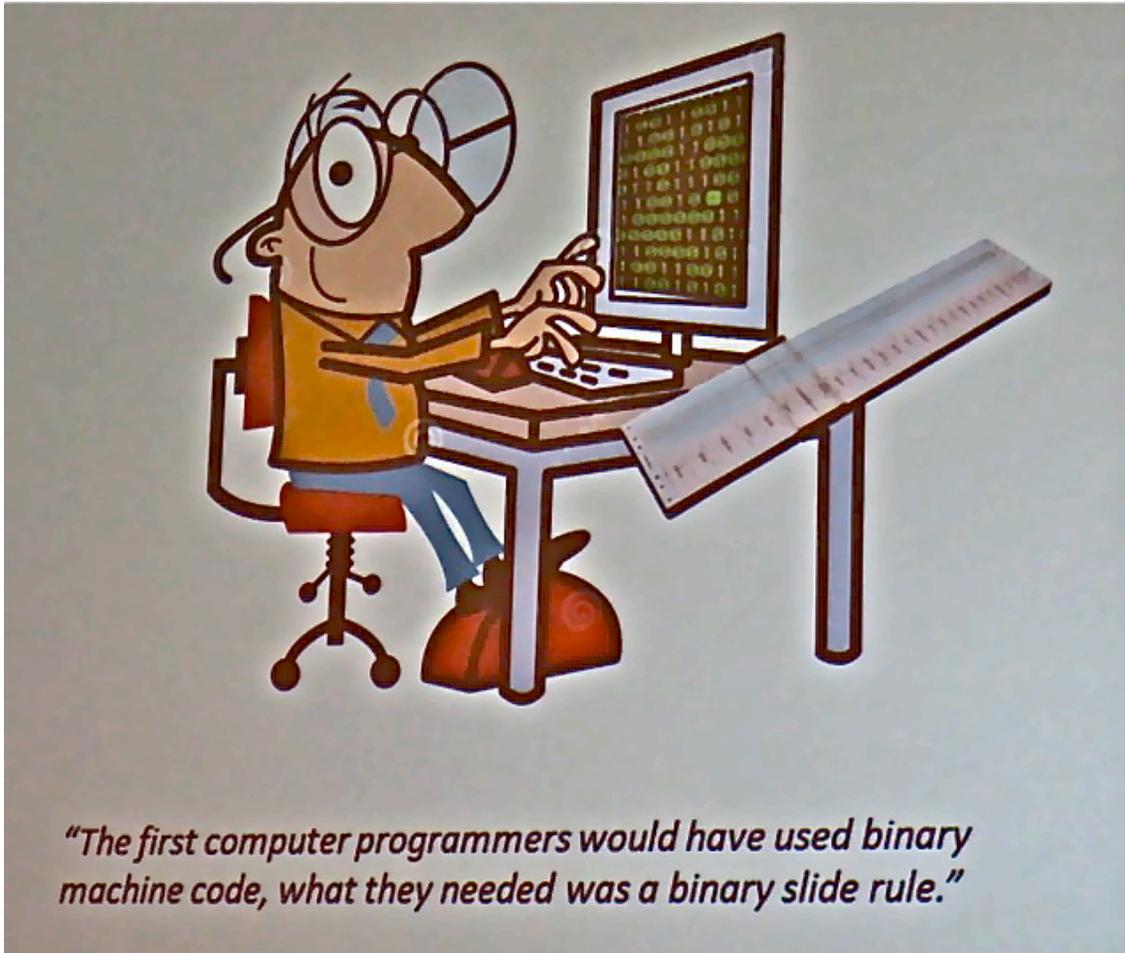
Does Anyone Know?



Does anyone know the company or person behind the trademark "Color Slide"? The trademark (date unknown) was for a linear 30cm/12" slide rule design for working with colours rather than scales. The spelling

of “color” suggests an American provenance. I would also be interested in hearing from anyone who has or had such a slide rule for colour in their collection – David Rance:
<<mailto:david.rance@xs4all.nl>>david.rance@xs4all.nl .

On The Lighter Side



“The first computer programmers would have used binary machine code, what they needed was a binary slide rule.”

Credit to Colin Tombeur, IM2014

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