



The Analyst

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David Herendeen 1946-2013



David L. Herendeen, founder and president of the Institute for Analytical Philately, Inc., died suddenly on January 4, 2013 in Las Vegas. David was a stamp collector since childhood, and specialized in worldwide postage due stamps and postal history for more than 35 years. His exhibits of British Empire and French community postage dues won many national Gold medals, Grand awards, and two international Gold medals. He was active in organized philately and held many positions including president of the France and Colonies Philatelic Society (2004-2007), first vice president and board member of the American Philatelic Congress (1997-2010), vice president (2003-2006) and board member of the American

Association of Philatelic Exhibitors (2000-2010). He was a nationally accredited judge and chief judge, serving in these capacities for more than 15 years. He was also an active writer and published major research articles in many publications including the *London Philatelist*, *The Collectors Club Philatelist*, and *The Congress Books*. He was also an editor of the *France and Colonies Philatelist* (2007-present) and previously edited the *British Caribbean Philatelic Journal* (1997-99). His book *The Parcel Post Stamps of the Ivory Coast* received a gold medal at Stampshow 2001.

Herendeen retired as a senior executive of an engineering and software consulting company after a 35-year career performing and managing significant government-related R&D activities. He held a degree in mathematics and computer science from the University of California, Los Angeles and took numerous graduate and career development courses at the State University of New York, UCLA and California Institute of Technology.

David's interest and experience in engineering and mathematics expressed themselves in his philatelic studies, and ultimately led to his suggesting the idea for IAP to a small group of like-minded colleagues. His belief that analytical methods held wide interest among philatelists was quickly validated when more than 100 people joined the new organization within a year of its launch. We are committed to continuing his work.

David was a man of conviction, honor and principles. He was passionate about knowledge and was inquisitive about much of what makes our life as stamp collectors worth living.

While opinionated about many things, David never let his own feelings interfere with his objectivity and as such was a delight to talk and work with. He never missed an opportunity to help others learn, and openly shared the results of his research through his personal network and his writing. He will sorely missed by all who knew him well and shared his laughter and his joy of philatelic pursuits.

May he rest in peace.

IAP Management Team Reorganized



John Barwis

Following the loss of President David Herendeen, your Board of Directors met in Louisville, Kentucky on January 18 to plan continuation of IAP's work, and to secure all data and financial assets. That transition has been completed.

Senior Fellow Dr. John Barwis, previously Vice President, is now President. He worked closely with David from the days when IAP was conceived, and is confident that pursuit of our mission will carry on seamlessly.

Our new Vice President is Senior Fellow Mark Schwartz. Having trained and worked as a chemist and in corporate marketing, Mark brings us an unique blend of technical and business experience.



Mark Schwartz

Ken Nilsestuen, a Certified Public Accountant, remains as Treasurer, and provides IAP with decades of experience in finance and accounting.

We are pleased that Dwayne Littauer will stay on as our Corporate Counsel. Dwayne is also Vice President of the U.S. Philatelic Classics Society, where he has been an officer for more than 20 years.

Director and Senior Fellow Jim Allen has 30 years experience in the chemical industry, and is an expert on ink composition and color.

Dr. Harry Brittain joins the Board as Director and Senior Fellow. He is the Institute Director of the Center for Pharmaceutical Physics, a research and consulting institute. Harry is an expert

on the use of forensic technology to understand the inks and papers used in postage stamp manufacturing.

IAP is fortunate to have access to the skills and experience of our two technical advisors.

Director Emeritus and Senior Fellow Dr. Robert Hisey, is a Registered Professional Engineer with more than 60 years of experience in paper technology.

Tom Lera holds the Research Chair at the Smithsonian Institution's National Postal Museum, with expertise in the use of a wide range of analytical equipment.

Résumés of all Management Team members can be found on our website: www_analyticalphilately.org



Ken Nilsestuen



Harry Brittain



Jim Allen



Dwayne Littauer

Q: Is the Board Financially Compensated? A: Nay

A few members have asked if the Board is paid. No, none of the Board receives payment for their service, nor any reimbursement for travel, lodging or other personal expenses. We are an all

-volunteer group.

Further, no one on the Board may use IAP funds for their own research projects, as we see this as a conflict of interest. We exist to encourage, to fund, and to

advise analytical research by others.

We do reimburse Directors for the costs of IAP business, such as printing this newsletter, postage, etc. We strive for low overhead!

2012 Symposium Snapshots

Ink Surprise

With the assistance of Tom Lera at the NPM, XRF was used by Jim Allen to demonstrate conclusively that while iron pigments were initially used in the U.S. 1851 stamps, they were discontinued after six months. After that period, major pigment and coloration

changes took place with neither iron pigments nor vermilion playing a role, as had been believed for 80 years.

Additionally, since the November 2012 IAP Symposium, XRD and FT-IR were used to confirm that, indeed, red lead—never previously mentioned as a component

of these inks—was the primary pigment for the 3c stamps of the 1851-1861 decade. Implications for collecting these stamps and the colors of the perforated stamps are already yielding some surprises which will be communicated in subsequent talks and papers.



Proliferation of Papers

Dr. John Barwis used wet chemical methods, statistics, microscopy, and bending resistance to better understand the paper characteristics of 1870-80s U.S. Bank Note issue stamps. The re-

sults show that many generally held assumptions about paper types of the period—their thickness, their sizing components and their stiffness—were contradicted or more factually developed.

The impact on print quality of these characteristics was demonstrated, thus clarifying a long-standing complex and very subjective area of American philately.



Pigment Experiments Illuminated

XRD, XRF, and FT-IR were all used by Tom Lera and Jennifer Giaccai to investigate variation in the inks and pigments used in Chile's first issues, 1853-

1862. Results illustrate that ink chemistry varied considerably between different printings, rather than being merely "batch" variations. Data show that pigment

experimentation was regularly performed, either to achieve specific color objectives or to address challenges such as the long-known "bluing" problem.



Confederate Printing Mystery Solved

Dr. Harry Brittain used XRD and FT-IR to identify pigments in the 1862 5c blue Confederate issues (Scott CSA-6 and CSA-7). This complex group of stamps printed with different inks by different companies on

different papers has always been a challenge for collectors and students of the issue. Careful application of these two technologies allowed the unequivocal differentiation of all pigment and paper types in use

among the production companies and paper suppliers. The paper types for each stamp, for the first time, were able to be conclusively identified based on the sizing and filling agents used in them.



The above papers will appear in the NPM's symposium volume, to be published in August.

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**Have a philatelic puzzle?
Apply for an IAP research grant!
We can help with equipment availability & analyses.**



Why Join IAP?

The major benefit of being an IAP member is the opportunity to give back to the hobby we love so well. Our funds will be used to create a legacy of scientific innovation in philately!

Membership benefits include:

- ◆ helping IAP to coordinate research activities through collaborative relationships with other philatelic organizations so that the overall hobby gets the most "bang for its buck"
- ◆ opportunities to work with some of the greatest philatelic minds and with state-of-the-art scientific equipment
- ◆ a newsletter that not only presents IAP news, but also news about current philatelic research activities and interests around the U.S. and world
- ◆ an annual meeting in conjunction with the APS Stampshow, or another major national exhibition, to maximize attendance and convenience for our members.
- ◆ a pipeline into IAP to suggest funding research efforts that are important to you



IAP Meeting at Australia 2013, Melbourne

At Australia 2013 John Barwis will give a presentation called "*If you have research ideas... We have money.*" The meeting is open to all philatelists as well as members of our organization. This event is scheduled for 2:15-4:00 on 11 May.

In addition to a brief review of what IAP does and the status of our research activities, there

will be ample opportunity for everyone to ask questions.

A second presentation will be given titled "*Use of Forensic Technology to Solve Philatelic Mysteries.*" This talk will summarize some of the research results presented at the First International Symposium on Analytical Methods in Philately, held at the Na-

tional Postal Museum in Washington DC in November 2012.

These two meetings should prove interesting to anyone interested in scientific philatelic research. Should you have questions about either of these talks, please contact John directly at JBarwis @AnalyticalPhilately.org