

# ARM E-Journal™



OFFICIAL PUBLICATION

ASA Appraisal Review &  
Management Discipline

## FEATURED ARTICLES

***The Copyright of Reports***

— *page 20*

***Red Flags in Valuation  
Reports***

— *page 24*

***Review: Shannon Pratt's  
The Lawyer's Business  
Valuation Handbook***

— *page 28*

***Forensics in Post-loss  
Jewelry Valuation***

— *page 34*

**Around the World with  
ARM: Preparing for the  
Global Valuation Review  
Symposium, World Tour  
2024-25: The Need for  
Global Education**

— *page 12*

## Welcome and Thank You

We all want to welcome Ms. Terri Lastovka, ASA, ARM, as our new ARM Discipline Chair. Terri brings tons of experience and enthusiasm to the committee as she has served in various capacities for many years, contributed articles, developed and taught seminars and courses, and continues to organize and contribute to the International Conference.

We thank past Chair, Matt Kaufman, ASA, ARM, for his years of service and look forward to his continued support and involvement. Thanks Matt!

## Membership Update

A major milestone has occurred for the Appraisal Review and Management discipline: we have reached 100 members! This has been a long time in the making and is considered to be a great and wonderful achievement for the ARM discipline. This

would not have happened without the remarkable efforts of many selfless members who advanced ideas, pushed the significance of the review and management process, developed and taught seminars and courses. We thank you all.

## Inside this Issue



Rob Schlegel, FASA, and Penny Lutocka, ASA, provide a great overview of the subject matter and topics discussed in the recent third edition of Shannon Pratt's *The Lawyer's Business Valuation Handbook*.



With over 40 chapters covering a wide range of legal cases, premises of value, terminology, methods and procedures, this text is a great

resource for attorneys who work with BV experts.

Richard Conti, ASA, ARM, (one of our E-Journal editors) discusses why copywriting reports may be of importance to you.

Alina Niculita, ASA, Director of Valuation at Morones Analytics, provides a useful article on "Red Flags in Valuation Reports".

Gary Smith, ASA, describes the fascinating process of post-loss jewelry valuation in "Forensics in Jewelry Valuation." If an item was stolen or lost to a fire, how does the appraiser value the non-existent item for an insurance (or other) claim/use?

The editors would like to thank all our contributing authors and those who continue to work, including many volunteers behind the scenes to make our E-Journal possible. Included in this group Bonny Rogers, Katherine Reyes and Sarah Sebastian at ASA HQ, Jo Crescent, Carol Busch, Rick Conti, and Liz Krage of Krage Design, thank you.

### **Your Article Here: Getting Published!**

Getting published in the ARM E-journal is good for your professional reputation. It not only showcases your expertise but also promotes your name and company before thousands of appraisers, allied professionals and referral sources. Get involved in building our discipline by submitting articles to the ARM E-journal.

For more information on submitting an article to the ARM E-journal, contact Charlie or Rick: [cdixon@cdvsinc.com](mailto:cdixon@cdvsinc.com) / [rick@contiestates.com](mailto:rick@contiestates.com)

*Charles Dixon*

*Charles Dixon, ASA, ARM*  
*ARM E-Journal™ Co-Editor*

*Richard Conti*

*Richard Conti, ASA, ARM*  
*ARM E-Journal™ Co-Editor*

**Subcommittee Co-Chair  
and ARM E-Journal™  
Co-Editor / Reviewer**  
Charles Dixon, ASA, ARM

**Subcommittee Co-Chair  
and ARM E-Journal™  
Co-Editor / Reviewer**  
Richard Conti, ASA, ARM

**Subcommittee Immediate  
Past Chair / Reviewer**  
Matthew Kaufman, ASA, ARM

**Production Manager**  
Carol Busch, ASA, ARM

**Developmental Editor**  
Jo Crescent, ASA, ARM

**Subcommittee / Reviewer**  
Terri Lastovka, ASA, ARM

**Reviewer**  
Barry Shea, ASA, ARM, IFA

**Reviewer**  
Raymond Rath, FASA, ARM,  
CEIV, IA

**Produced By:**  
ASA  
2121 Cooperative Way  
Suite 210  
Herndon, VA 20171  
(800) 272-8258  
[asainfo@appraisers.org](mailto:asainfo@appraisers.org)

© 2025, ASA

### FEATURED ARTICLES



**[Around the World with ARM: Preparing for the Global Valuation Review Symposium, World Tour 2024-25: The Need for Global Education](#)**

*Melanie Modica, ASA, ARM, ISA AM  
Faisal Hoodbhoy, ASA, ARM, CBV, CPA,  
FCA(UK), CF CA,*



**[The Copyright of Reports](#)**

*Richard J. Conti, ASA, ARM*



**[Red Flags in Valuation Reports](#)**

*Alina Niculita, ASA*



**[Review: Shannon Pratt's \*The Lawyer's Business Valuation Handbook\*](#)**

*Rob Schlegel, FASA  
Penny Lutocka, ASA*



**[Forensics in Post-loss Jewelry Valuation](#)**

*Gary L. Smith, ASA*

---

### COLUMNS

**05** [ARM Chair Notes](#)      **08** [ARM Education](#)  
**07** [ARM Governor Notes](#)    **10** [Member Welcome](#)



## Letter from ARM Chair



The ARM Discipline Committee has been working hard to provide top level education for you. Not only do we have our exceptional four POV courses, but we also offer the AR209 workshop

for those who would like a one-day refresher. We had an excellent turnout for AR201 recently. The participants gave very positive reviews. The Litigation Support course AR202 is currently in progress. For those interested in Managing Multifaceted Assignments, mark your calendar for February 2025. And to round out our POV courses, AR204 will be offered in April 2025.

This past summer, led by Melanie Modica and Fez Hoodbhoy, we conducted a two series International Invitational discussing how valuation review is looked at across the globe. This was just a precursor to the upcoming ASA Global Valuation Review Symposium World Tour that will take place in February, March, and May 2025.

And more on the international level, two new courses are currently being developed to incorporate IVS into our POV courses. VR201 and VR204 will be the gateway to your new valuation review and management credential for those that focus on IVS rather than USPAP.

I was thrilled to see so many of you at the recent International Conference in Portland. ARM hosts the Multi-Discipline track with speakers and topics that nearly everyone can appreciate – from AI to Cyber Security, litigation, ADR, IRS, and practice management. A little birdie told me that the IRS panel will be joining us again in San Juan.

The ARM Discipline Committee meets every odd numbered month to collaborate on our current endeavors. These meetings are 1.5 hours via Zoom and you are welcome to listen in. If you would like to join in, contact Sarah E. Sebastian, CAE at ASA headquarters, [ssebastian@appraisers.org](mailto:ssebastian@appraisers.org), for a meeting invitation.

There are so many exciting things in the works that you just might want to hop on board and work with us. If your schedule doesn't accommodate, feel free to reach out to me or any of the Discipline Committee members. We would love to hear from you!

*Terri Lastovka*

*Terri Lastovka, CPA, JD, ASA, ARM  
ARM Discipline Chair*

# Meet Your ARM Committee

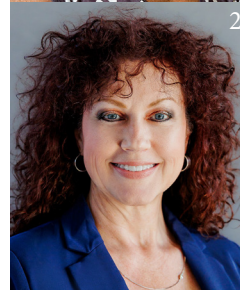
**1. Terri Lastovka, ASA, ARM**

Chair  
ARM Publication Reviewer



**2. Melanie Modica, ASA, ARM**

Vice Chair  
ARM Marketing Subcommittee Chair  
ARM Board of Examiners Reviewer  
ARM Publication Reviewer  
2020 ASA Woman Appraiser of the Year



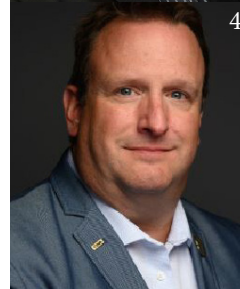
**3. Richard Conti, ASA, ARM**

Secretary/Treasurer  
ARM E-Journal™ Co-Editor



**4. Matthew Kaufman, ASA, ARM**

Past Chair



**5. Barry Shea, ASA, ARM, IFA**

Member At-Large  
Deputy Chair, IES Coalition  
ARM Publication Reviewer



**6. Charles Dixon, ASA, ARM**

Member At-Large  
ARM E-Journal™ Co-Editor



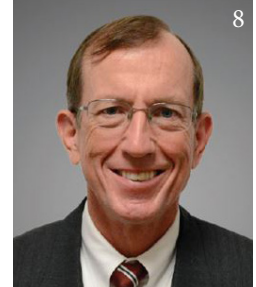
**7. Faisel Hoodbhoy, ASA, ARM**

Member At-Large



**8. Raymond Rath, FASA, CEIV, IA, ARM**

Member At-Large  
ARM Publication Reviewer



**9. Gregory Patterson, MJ, ASA, ARM**

ARM Education Subcommittee Chair



## SWOT Analyses by Discipline Working Groups to Inform ASA Strategic Planning Process



Best wishes for a grand holiday season.

I hope everyone had a productive and enjoyable time at the ASA International Conference in Portland

September 15-17, 2024.

As you may know the Board of Governors has selected our new CEO, Guillermo (Guille) Ortiz De Zarate. You can learn more about him on his [LinkedIn page](https://www.linkedin.com/in/guillermooz/). <https://www.linkedin.com/in/guillermooz/>

Guille will start in February of 2025. In the meantime, [Carla Glass, FASA](#), has kindly agreed to act as our interim CEO. Carla's impressive management background and familiarity with ASA and the appraisal profession will ensure that we stay on the right track. <https://www.linkedin.com/in/carla-glass-667b39113/>

In other news, over the last year a working group of the board has focused on analyzing the Strengths, Weaknesses, Opportunities, and Threats (SWOT) of each discipline.

Each discipline committee has reviewed their respective SWOT analysis and identified the top three priorities. The final SWOTs from the disciplines have been combined into a final report to the Board of Governors and will inform the ASA Strategic Planning process that will begin after G starts.

We appreciate your ongoing support and engagement as we navigate through these matters. This process and the whole of ASA rests upon the engagement of the membership.

If you have questions or comments regarding the Board of Governors and how its actions influence the ARM discipline and appraisal review profession, please email [jack@norcalvaluation.com](mailto:jack@norcalvaluation.com).

*Jack Young*

*Jack Young, ASA, ARM  
Board of Governors Representative, Appraisal  
Review & Management*

## From the Education Chair



This past summer, I had the honor of becoming the new Education Chair of the ARM Committee. When I called it an “honor,” those in my inner circle thought I was off my rocker (or a bit further than normal). How can taking on more video calls, planning sessions, emails, phone calls, and even a bit more stress be considered a blessing? It all comes down to where I started in this profession, where I am today, and the value that ASA’s education programs provided on my journey.

My career as an appraiser began by accident. In 1999, I applied for a ‘research analyst’ position posted in the newspaper, joining the appraisal staff of Yale Kramer and Terry Allen. Later generations of appraisers may not realize there was a time when BV was considered the unruly child of the ASA when compared to the more established and mature disciplines.

Yale and Terry were at the forefront of establishing ASA’s BV discipline as a leader among all the credentialing organizations. Among his many accomplishments, Yale served as a Regional Governor, Chairman of the BV Standards Committee, and

on the Appraisal Standards Board of the Appraisal Foundation (*side note: I still have a first edition of “Valuing a Business” signed by Dr. Shannon Pratt thanking Yale for his many contributions to the book*). Meanwhile, Terry served as a member on the BV Committee as Education Chair, collaborating on the design of many BV core classes and helping teach an entire generation of appraisers.

With a pre-law background and no formal training in finance or accounting, I was fortunate to find myself learning under two professionals who helped shape the BV discipline. It was truly the right place at the right time.

From the start, I wanted to learn more and expressed a desire to further my finance education. However, both Yale and Terry encouraged me to take the ASA BV core and advanced courses, believing that it would be a much more valuable education than anything I could learn in traditional business school. They. Were. Right. ASA’s education helped advance my craft and gave me the foundation to fully appreciate and build on what I was learning from sharp colleagues. For that, I’ll be forever grateful to them and to ASA.

*Continued on next page >*



In many ways, ARM today is where BV was 25 years ago. So, when I say I am honored to serve the members of ASA as the ARM Education Chair, I mean it. In my opinion, education is the cornerstone of ASA; without it, we are just another alphabet soup. I believe ARM has a bright future, and I hope to contribute in some small way to its growth and education opportunities.

If you made it this far, please consider the following:

Email me if you have any ideas for webinar presentations, particularly those that would be of interest to clients/referral sources for ARM practitioners.

If you have any good Yale or Terry experiences or stories, please email me as well. It does us well to preserve the past.

*Gregory Patterson*

Gregory Patterson, MJ, ASA, ARM  
HDH Advisors, LLC

mobile: 515.669.8178

office: 515.453.1603

email: [Gpatterson@HDHAdvisorsLLC.com](mailto:Gpatterson@HDHAdvisorsLLC.com)

[www.HDHAdvisorsLLC.com](http://www.HDHAdvisorsLLC.com)



## Welcome Our Latest ASA ARM Member



### **Maria Tarrence, ASA, ARM, ISA AM**

Maria founded New York City based firm Capital Art Group, following a career in the fine art appraisal, auction, and advisory business and years of teaching university art history classes. Capital Art Group specializes in valuation of fine art and personal property, appraisal review, and litigation support. Maria's area of expertise is Modern, Post-War, and Contemporary fine art.

Maria holds two professional designations with the American Society of Appraisers (Accredited Senior Appraiser and Appraisal Review and Management). She is an accredited member of the International Society of Appraisers and a candidate member of the Appraisers Association of America. A lifelong learner, Maria is pursuing a Graduate Gemologist degree to achieve her Gems and Jewelry appraiser designation.

An active member of ASA since 2016, she served as a two-term President of the New York City Chapter (2022-24), and a three-term Treasurer (2019-2022).

On a personal note, Maria is living the American Dream. As the recipient of a full academic scholarship for undergraduate and graduate studies in art history, she immigrated to New York from Europe 23 years ago. Today, Maria is a loving wife, proud mother, and a successful business owner who spends her free time running half marathons across the globe.

Connect with Maria today!

[maria@CapitalArtGroup.com](mailto:maria@CapitalArtGroup.com)  
[www.CapitalArtGroup.com](http://www.CapitalArtGroup.com)  
[linkedin.com/in/capitalartgroup](https://linkedin.com/in/capitalartgroup)



# When Value Matters

When it comes to valuing an asset, there is no room for error. Value matters, and so does the appraiser hired to make the value determination. An ASA's experience and education are the factors that can make all the difference. ASA understands the seriousness of the profession and has never wavered from our commitment of requiring excellence.

Education, integrity, credibility and experience all factor into the Accredited Senior Appraiser (ASA) designation. You can rest assured that the ASA designation after the name of an appraiser means they have been held to the highest standard in the profession.

*Hire the preeminent valuation professionals today!  
For more information visit [www.FindAnAppraiser.org](http://www.FindAnAppraiser.org)  
or call (800) ASA-VALU.*







# Around the World with ARM: Preparing for the Global Valuation Review Symposium, World Tour 2024-25: The Need for Global Education

By Melanie Modica, ASA, ARM, ISA AM  
Principal, Modica Fine Arts LLC  
and

Faisal Hoodbhoy, ASA, ARM, CBV, CPA, FCA(UK), CF CA,  
Managing Director at Rosehood Global Financial Inc.

**Abstract:** As standardized global practices in professional fields become more significant, consistency and professionalism are key to writing credible valuation review reports. Appraisal professionals involved in appraisal review will benefit from adhering to globally accepted standards that ensure uniformity, cohesion, consistency, and clarity in valuation review services. This article discusses how ASA's ARM is supporting appraisal professionals in meeting this challenge. With virtual passports packed for destinations across the globe, the Appraisal Review & Management Discipline continues to reach valuation professionals worldwide. The authors of this article, Mr. Hoodbhoy and Ms. Modica, are the co-creators of these global programs and initiatives for expanding Valuation Review & Management worldwide and are the developers of the upcoming Principles of Valuation courses written according to the IVS standard of care.



## The Need, the Outreach, the Solution

In an increasingly interconnected world, standardized global practices in professional fields are more significant now than ever. This is especially true in valuation reviews, where consistency and professionalism are

key to writing credible valuation review reports. As markets expand across borders, professionals involved in these higher calling services benefit from adhering to internationally accepted standards that ensure uniformity, cohesion, consistency, and clarity in valuation review services.

Education and continual learning are vital in maintaining these standards empowering professionals to stay current with evolving best practices. Membership in a recognized professional organization, such as ASA, further enhances this commitment to excellence. ASA supports and prepares members for success with access to valuable and applicable resources. Equally important are the networking opportunities for this community of professionals who are dedicated to upholding the highest ethical

and technical standards in valuation review services. These collective efforts not only strengthen individual expertise but also elevate the integrity and confidence that are key for building public trust of the global valuation profession.

## ASA Takes Valuation Review Around the Globe

Originally, ASA offered Appraisal Review & Management educational opportunities primarily tailored for appraisal review professionals who write reports that adhere exclusively to the Uniform Standards of Professional Appraisal Practice (USPAP).

Now, ASA has expanded its educational offerings to include valuation review education for professionals worldwide. This initiative provides an alternative for understanding how to structure valuation review reports in compliance with the International Valuation Standards (IVS).<sup>1</sup> By consistently applying the recognized IVS standard of care, both current and aspiring valuation review professionals can enhance the credibility of the valuation profession. This commitment to support and compliance ensures valuation review work products meet the highest ethical and technical standards. ASA's ARM Committee continues to lead and address these evolving needs.

---

<sup>1</sup> The IVS 2025 edition is published and currently available for use; it will be fully in effect on January 31, 2025.



*“The upcoming Global Valuation Review Symposium World Tour 2024–25 will provide introductory, intermediate, and advanced education on valuation review requirements according to IVS understanding and compliance.”*



## The Need for Global Education

ASA understands this calling to educate valuation review professionals outside of the United States. Like all education development, other parts of the world need education delivered according to the standard of care for the profession and the geographical locale. Until this year, valuation reviewers outside the U.S. have been required to comply with IVS in valuation review report writing without adequate methodological support and generally accepted developmental framework for report writing foundations.

In 2019, the AR204 Appraisal Review & Management (ARM) *Application & Report Writing* course began including awareness of IVS for valuation review into its dialogue education platform. Dialogue education is the manner and structure that delivers educational learning through communication and discussion of content. It is through this discussion structure that real learning is achieved, as it engages participants in the information and methodology.

As many appraisers know, the specialty ARM designation is available to any Accredited Senior Appraisers upon successful completion of AR201 *Overview & Development*, AR204 *Application & Report Writing*, and a peer-reviewed report approval. The ARM Committee's efforts to include IVS content in AR204 resulted in two IVS-compliant reports submitted for an ARM designation with ASA.

The first candidate submitted a valuation review report that complied with both USPAP and IVS—a 'hybrid' report that was very much a product of the world in which the applicant worked. This candidate

routinely completed assignments for clients in multiple countries and the hybrid valuation review report was a typical assignment. The report was approved. The second candidate submitted a valuation review report that complied solely with IVS, which was the first of its kind to be submitted to ASA. This report was also approved, setting the stage for more IVS compliant reports to follow.

This was exciting, innovative, and an awakening for ASA and the ARM Committee as the system was unprepared for IVS compliant reports. Since then, the AR204 course has continued to be taught according to the needs of each class's participants and IVS has been addressed when appropriate. Most ARM appraisal review reports submitted for accreditation continue to be written by professionals who write USPAP compliant reports.

### ***Oh, the Times, They Are A-changin'!***

ASA currently offers members and prospective members an opportunity to learn methodology for producing successful valuation review report writing through proper development and application—all in compliance with IVS through new versions of the 201 and 204 courses focusing on IVS compliance.

## The Outreach of Global Education

In 2023, ASA embarked on developing a separate, mirrored, track of *Principles of Valuation* (POV) courses to globally expand the Appraisal Review & Management program. Equipped with an outline of objectives for this new professional education audience, members of the ARM Committee created a pathway for ASA to provide valuation review education to the IVS-centric professionals.

These IVS-based POV courses will be released in 2025 as Valuation Review & Management courses VR201 and VR204.

## **Invitational Events**

In 2024, the ARM Committee hosted two virtual global invitational events for professionals who work in countries within the realm of International Valuation Standards (IVS) compliance for valuation and valuation review services. The invitational events introduced IVS 2025 to a select global audience in the framework of valuation review development and reporting, along with some review methodology.

Professionals interested in learning more general information about valuation review were invited to participate as Ambassadors representing their professions and their countries. These IVS valuers and valuation reviewers were not familiar with ASA's appraisal review methodology and report writing skills and so both events introduced educational information and ASA course opportunities.

## **Topics and Presentations**

In small interactive groups, participants discussed IVS valuation review content, a BV valuation review case study, an MTS valuation review case study, and a brief introduction of ASA methodology.

IVS Standards, presented by Alexander Aronsohn, FRICS, IVS Council Director of Technical Standards, England

MTS Valuation Review Case Study, presented by Ruka Jesinawu, ASA, ARM, TAQEEM, Saudi Arabia

ASA Valuation Review Information, presented by Faisal Hoodbhoy, ASA, ARM, CBV, CPA, FCA(UK), CF CA, Canada

VRM Structure for Reporting Issues in a Valuation Review Assignment, presented by Melanie Modica, ASA, ARM, ISA AM, United States

Mr. Hoodbhoy and Ms. Modica are the co-creators of these global programs and initiatives for expanding Valuation Review & Management worldwide and are the developers of the upcoming Principles of Valuation courses written according to the IVS standard of care.

## **Invitational One**

The first invitational event, on June 6, 2024, included 31 registered Ambassadors from various countries including Bahrain, Emirates of Dubai, Saudi Arabia, Canada, Mexico, Brazil, Hong Kong, Nigeria, Rwanda, Zimbabwe, and South Africa. Participants were provided with complimentary attendance and continuing education hours in exchange for their participation during the round table discussions.

Discussions were conducted as breakout sessions with an ARM member facilitating each conversation according to provided topics. The facilitators discerned the various levels of valuation review experiences, services, interests, and applications of the Ambassadors, and Ambassadors shared an overwhelming interest in learning more about valuation review education opportunities, as well as the much-needed methodology. Moreover, the participants were interested in understanding how the content could be applied to their valuation practices.

## Invitational Two

The second invitational event featured the same presentations for a different side of the world on July 31, 2024, and for many, on August 1, 2024. This event consisted of 33 registered Ambassadors in locations such as Australia, Brazil, Canada, Beijing, Hong Kong, Singapore, Japan, Kazakhstan, New Zealand, Nigeria, Saudi Arabia, Madrid, United Kingdom, Mumbai, Calcutta, and Ahmedabad (India).

Comments from Ambassadors attending both events included varying degrees of IVS understanding and compliance, with overall less familiarity of the IVS standards and requirements that are specific to valuation reviewing. Participants shared an interest in learning ASA valuation review methodology as education opportunities elsewhere are next to nonexistent. The MTS valuation review case study was a timely presentation and trendy discussion topic, as Ambassadors were intrigued with the report structure, considerations, and formality. The Valuation Review & Management reporting structure for communicating issues in a valuation review assignment was also well received, along with the cautions for, and remedies of, defamation against authors of works under review.

## The Solution: Global Valuation Review Symposium, World Tour

The upcoming *Global Valuation Review Symposium World Tour 2024–25* will provide introductory, intermediate, and advanced education on valuation review requirements according to IVS understanding and compliance. Three valuation review educational events are scheduled:

- Wednesday, February 26, 2025 - Introductory Program
- Wednesday, March 26, 2025 - Intermediate Program
- Thursday, May 22, 2025 - Advanced Program

Each of the three days will provide 4 hours of valuation review information with BV, PEI/MTS, and RP case study presentations and IVS compliance requirements and will spotlight some ASA VRM report writing methodology. These events are designed to introduce ASA valuation review education opportunities to prospective members and to unveil the new ASA Valuation Review & Management (VRM) courses.



The inevitable introduction of IVS into ARM courses, which began in 2019, has developed into formal courses, with ASA ready to provide proper resources to global valuation reviewers and prepare these professionals with the skills and knowledge needed to begin offering valuation review services to external clients, or internal quality control personnel.

Attendees of the World Tour events will be encouraged to complete the VR201 Valuation Review & Management Overview & Development course and the VR204 Valuation Review & Management Application & Report Writing course once those POV courses are offered in 2025.

Get your virtual passports ready—It's going to be a fabulous trip!

Visit ASA's website for more information and to register.

### About the Authors

Melanie Modica, ASA, ARM, ISA AM, Principal at Modica Fine Art LLC, Houston, Texas, is Vice Chair of the ASA ARM Committee and served as Secretary-Treasurer of the ARM Discipline Committee, Member-at-large, and Chair of the ARM Marketing Subcommittee. She was the inaugural editor of the ARM Journal and is the co-creator and developer of the ARM *Global Valuation Review Symposium, World Tour*, and the *Invitational One* and *Invitational Two* global events. Melanie is also active in the International Education Committee and currently serves as Chapter President, including President for 2013-14, and Secretary for two terms for the Houston Chapter. She was the 2020 ASA Appraiser of the Year.

Email [melanie@modicafineart.com](mailto:melanie@modicafineart.com)

Faisal Hoodbhoy, ASA, ARM, CBV, CPA, FCA(UK), CF CA, is currently a Managing Director at Rosehood Global Financial Inc, in Toronto, Canada. With 30+ years of professional experience in North America, Middle East, and the UK, including significant deals at NASDAQ Dubai, Fez has worked for Global Big 4 Firms (including Andersen, EY and was the regional partner, Deloitte in Middle East) and a variety of financial institutions. He is an active supporter of International Financial Reporting Standards (IFRS) and International Valuation Standards (IVS) in the Gulf and is the co-creator and developer of the ARM *Global Valuation Review Symposium, World Tour*, and the *Invitational One* and *Invitational Two* global events.

Email [faisal@rosehood.com](mailto:faisal@rosehood.com)



# Your Gateway to Appraisal Review Jobs and Career Resources

The demand for appraisal review professionals continues to grow. Especially those with experience and that are educated, credentialed and maintain membership in professional organizations like ASA. Whether you're a review appraiser searching for career opportunities or a user of appraisal services looking to hire one, ASA's Job Bank provides the comprehensive resources job seekers and employers need. All available securely and confidently online, and backed by the global profession's leading organization—ASA.

*Sign up today!*

*For more information visit [www.appraisers.org/JobBank](http://www.appraisers.org/JobBank), or contact [asainfo@appraisers.org](mailto:asainfo@appraisers.org) or (800) 272-8258.*



# The Copyright of Reports

By Richard J. Conti, ASA, ARM



**Abstract:** Appraisal and Valuation Reports can be protected by the authors even though we all follow a Standard. Some of us have unique ways to reach a valuation conclusion and it is in these instances copyright should be considered. While the U.S. Copyright Office issues over 500,000 copyrights per year, the author could find no history of litigation on copyright infringement of reports.



So far this year, I have reviewed about 20 reports, and none bore a copyright notice. However, the lack of a notice does not mean the reports were not protected.

I have been writing appraisal/valuation reports for 33 years and last month, for the first time in my valuation career, registered one of my reports with the United States Copyright Office (USCO) and received a Certificate of Registration Number TXu 2-443-127.

The first thing I discovered was that there were a lot of web sites offering registration options, but were not the USCO, welcome to 2024. The USCO site<sup>1</sup> is very clear and easy to navigate. Registering your work begins in a registration portal where you can register one report as a Standard Application or up to 10 at the same time. Our reports are considered Literary Works which are "...a work that explains, describes, or narrates a particular subject, theme or idea through the use of narrative, descriptive or explanatory text,...intended to be read." And there is a Statutory Definition.<sup>2</sup> Surprisingly, Appraisal, Appraisal Review or Valuation Reports are not works that are commonly registered, but Articles such as this, are.

The Standard Application for a Literary Work such as the ones we produce, is

<sup>1</sup> [www.copyright.gov](http://www.copyright.gov)

<sup>2</sup> 17 U.S.C. § 101

reviewed by the USCO and can be rejected. Based on the reports I have read over the past 33 years; I do not think you need to worry about getting rejected. The Standard Application just asks you to do three things: 1) complete the application form, 2) pay the \$45 fee and 3) upload the report. Simple, and you can register works you wrote that were published outside of the United States. Use of the copyright notice (the symbol © with the word "copyright", the year of first publication and the name of the copyright owner) has been optional since after March 1, 1989, and you do not need permission from or registration with the Copyright Office to use it. Given this fact, and the fact that the report writer is the owner with the intended user buying a license to use the report, and the fact that there are legal benefits for including the notice on your reports, my conclusion is we are missing the boat<sup>3</sup>.

Foreign works created outside the US may have protection affected by whether or not a country has entered into a copyright treaty with the United States<sup>4</sup>. A foreign valuation report can obtain a US copyright. Oddly, foreign copyright owners need not register their U.S. copyrights before filing suit.

The Standard Application requires the applicant to name the copyright claimants, the author(s) of the work being registered

<sup>3</sup> Oxford Language Club: "The opportunity to seize something beneficial but failing to do so due to a delay or inaction."

<sup>4</sup> Copyright Restoration Under the URAA (Circular 38B)

## The Copyright of Reports

as an individual name or organization name (not both) Note that Artificial Intelligence (AI) is neither. The application is specific that the author(s) to be a claimant, must own all rights under the U.S. copyright law. Artificial Intelligence does not own any rights. “If the report contains an appreciable amount of (i) previously published material(ii)material owned by another party, (iii) material that is on the public domain, or (iv) material generated by artificial intelligence, briefly identify that material in the “Material Excluded” section of the Standard Application.” Thus, AI is not copyrighted material, if it is in the report, it must be excluded. There is also an exception. If the AI-generated material standing on its own would be sufficient to satisfy the *Feist*<sup>5</sup> copyrightability standard as if it had been created by a human author then a brief statement disclosing that material should be included in the application registration. Here the door is open to generative artificial intelligence which may one day meet the Feist standard. It is best to register the original copy before AI editing to protect the work.

Although many Appraiser/Valuers work alone as independent contractors, others are in firms producing reports, sometimes as a team. This brings us to an issue of a work made for hire. The term “work made for hire” is (1) a work prepared by an employee within the scope of his or her employment; or (2) a work specially ordered or commissioned for use as a contribution to a collective work<sup>6</sup>...(or) if the parties expressly agree in a written instrument signed by them that the work shall be

<sup>5</sup> *Feist Publications, Inc v. Rural Tel. Serv. Co.*, 499 U.S. 340 (1991) The standard for deciding whether a work can gain copyright protection is its originality rather than the creator’s effort.

<sup>6</sup> Copyright Law of the United States and Related Laws Contained in Title 17 of the United States Code, Page 7

considered a work made for hire. Legally, in either of these situations the person creating the report, the author, is not considered to be the individual who created the report. The employer is considered both the author and the copyright owner of the report<sup>7</sup>. The protection in a work for hire is 95 years from the date of publication or 120 years from the date of creation, whichever expires first<sup>8</sup>.

An Appraiser/Valuer who has their own business outside of their employment and produces a report outside of regular business hours or authorized worktime is not producing a work made for hire and can register the report in their name. The same is true for Management of the creation of a report with several independent contractors, everyone gets listed after the symbol and date.


The benefits to having reports copyrighted are based on ownership. You own the copyright for the term of your life plus 70 years. That alone should be sufficient for any appraiser or valuer, if not, they can be extended<sup>9</sup>. If someone substantially copies a report without permission, they can be sued for between \$200 - \$150,000 and additionally pay all attorney and court fees. Depending on the case and damages it gets a lot more complicated. In one of the more famous copyright infringement cases involving literary works, Art Buchwald vs Paramount Studios<sup>10</sup>, Mr. Buckwald had an unfinished work which was not unlike an appraisal or valuation report in the eyes of the USCO, he claimed the studio stole his ideas from an abandoned project and turned them into a film screenplay. The Judge ruled in Buchwald’s favor, awarding

<sup>7</sup> Circular 30, see chapter 500, section 506 or chapter 600, section 614 of the *Compendium of U.S. Copyright Office Practice*.

<sup>8</sup> *Duration of Copyright Circular 15A*

<sup>9</sup> USCO Circular 15A Duration of Copyright

<sup>10</sup> California Superior Court, 90 L.A. Daily J. App. Rep. 14482 (1990)



him \$900,000 in damages. Actual damages in an infringement suit of an Appraisal/ Valuation report are likely to be nominal and difficult to prove. The author would need to claim significant statutory damages. Some of us are highly specialized, valuing esoteric material, with novel approaches and unique reports in accord with the Standards and may own the thought process.

At this writing we are halfway through 2024 with no substantial litigation in literary work infringements or copyright litigation (there are many regarding images). However, the war between creators and copyright owners against AI developers is heating up. Newspaper publishers under the ownership of hedge fund Alden Global Capital in California, Colorado, Illinois, Florida, Minnesota and New York said that Microsoft and OpenAI used millions of their articles without payment or permission to develop artificial intelligence models for ChatGPT and other products. This action in April came four months after The New York Times sued OpenAI for the same reason<sup>11</sup>.

<sup>11</sup> CNBC, AI Impact, April 30, 2024 Jordan Novet reporting

In conclusion, if you are of the opinion that a report you wrote is unique and creative then a copyright may be in order. Most reports contain previously published material and public domain material which is unclaimable and cannot be registered under copyright. If the report contains appreciable material vs. De Minimis material of AI generated material the test is whether the AI-generated material standing on its own would meet the copyright standard. If someone infringes on your copyright and you sue them, it will take a while for you to be awarded a little money. However, the fact that you copyrighted your report indicates to the reader a pride of authorship.

#### About the Author

[Richard J. Conti, ASA, ARM](#), owner and principal appraiser at Conti Appraisal Service, is an accredited personal property appraiser and Chief Assessor at City of Taunton, MA. An ASA since 2004 and a Past President of the Boston Chapter ASA, he currently serves as Chair of the ASA International Marketing Committee and the ARM Discipline Board and is a Co-Editor of the ARM E-journal.



# Red Flags in Valuation Reports

By Alina Niculita, ASA  
Director of Valuation, Morones Analytics



**Abstract:** This article—adapted from the classic text *Valuing a Business*<sup>1</sup>—presents some simple tools to spot red flags and to assess the overall reasonableness of a valuation report. Based on these tips, the attorney can decide to hire an objective appraiser to perform a professional appraisal review.

---

<sup>1</sup> Pratt, Shannon, and the ASA Educational Foundation, *Valuing a Business: The Analysis and Appraisal of Closely Held Companies*, 6th ed. (McGraw-Hill Education, 2022). Co-authored and edited by Alina Niculita, Director of Valuation at Morones Analytics, and Roger Grabowski, FASA, Kroll Managing Director in Valuation Advisory Services.





## Basic Considerations

The task of reviewing a valuation report can be a daunting one, especially for someone without valuation training. Family law attorneys are often presented with valuation reports for their clients or for the opposing side and are faced with the question of whether the valuation is “good.” Short of becoming an appraiser overnight, what is a busy attorney to do to decide whether a valuation report passes a basic “smell test”?

### Professional Standards and Credentials

A first step in evaluating a valuation report is to see if the author has any credentials in business valuation and if the report complies with valuation standards. Currently, there are three professional associations in the U.S. that issue valuation standards and offer professional designations in business valuation:

- American Society of Appraisers (ASA)
- American Society of Certified Public Accountants (AICPA)
- National Society of Certified Valuation Analysts (NACVA)

In addition to the above, the Appraisal Foundation issues the Uniform Standards

of Professional Appraisal Practice (USPAP) that include standards for all appraisal disciplines. While having a business valuation credential and following business valuation standards is not a guarantee of reasonable valuation work, it does establish minimum requirements for work quality. In addition, to maintain their designation, appraisers must comply with continuing education requirements.

### Clear Assignment Definition

The valuation report should be clear on what its assignment is, meaning that the valuation report includes the following information: the property to be valued, the ownership characteristics of the property to be valued, the valuation date, the purpose of valuation, and the standard of value. An example of a valuation assignment is: “The fair market value of 100 shares of common stock in ABC, Inc. as of December 21, 2023, on a minority non-marketable basis for purposes of marital dissolution.”

It would be very irregular if the valuation report did not include such information, as the valuation methodology and the value are driven by these parameters. If the report does include the assignment definition, the attorney can ask the following four questions:

1. Was the correct property valued?
2. Was the correct valuation date used?
3. Was the correct standard of value used?
4. Were the discounts applied appropriate?

## **A Comprehensive Report**

An appraisal report commonly includes several sections that culminate with an opinion of value. It is relatively easy to judge whether something included in the report is reasonable—but valuation reports can also contain errors of omission that are more difficult to detect. An example of an omission is to exclude a certain valuation procedure or method because of a lack of data. Attorneys should be alert to valuation reports that state that a certain valuation procedure was not performed, or a valuation method was not applied, and investigate the underlying reason for the omission. Typical sections of a valuation report can be found in the [Valuation Quick Checklist](#) linked here and provided at the end of this article.

## **Converging Indications of Value**

There are three valuation approaches—the income, market, and asset approaches—and each comprises two or more methods. As a result, a typical valuation report includes two or more indications of value. While the indications of value are typically different amounts, they are also typically not significantly different from each other. Obtaining indications of value for the same property that are far apart from each other may indicate errors in the valuation. Errors may include assumptions errors, methodology errors, or math errors. If a report includes two or more indications of value that are significantly different from each other and they are averaged to get to the conclusion of value without any further explanation or support, that may be a red flag.

## **Reasonable Financial Projections**

A central concept in business valuation is that value today equals future expected cash flows discounted back to the present. In practice, the future expected cash flows come in the form of financial projections. When using financial projections, appraisers are faced with the question of whether they are reasonable for valuation purposes. Some characteristics of reasonable projections include:

- They present the most likely picture of the business in the future based on all available information as of the valuation date.
- They appear credible in the light of the historical performance of the business, its industry, and the overall economy.
- They are not too optimistic or too pessimistic.
- They do not include upward or downward bias based on the wishes or needs of a party.

If the projections used in the valuation report appear unreasonable compared to the company's past performance, the performance of its industry, or appear biased, this issue may need further investigation.

## **Sources of Information**

The valuation of a business is based on information that is known or knowable as of the effective valuation date. Appraisers sometimes use professional judgment to decide whether to use older information than they would prefer or information after the valuation date. Although in some situations that may be appropriate, the use of old and potentially outdated information or information that would not be known or knowable as of the valuation date is a source of inquiry.

## Report Bias

Credible valuation reports contain objective analysis grounded in reasonable methodology and credible data sources. Sometimes valuation reports contain unsupported inputs that tend to favor extreme valuations—for instance, unsupported high (low) valuation multiples and low (high) discount rates that result in high (low) valuations. When all or most of the key inputs and adjustments in a valuation report are such that they result in an extremely low or high valuation, that may be a red flag that needs a closer look.

## Valuation Report Quick Checklist

1. Identification of the property
2. Effective valuation date
3. Definition of value
4. Purpose of appraisal
5. Actual or assumed ownership characteristics

- a. Marketability
- b. Degree of control
6. Basic company information
7. Economic and industry outlook
8. Sources of information
9. Financial statement analysis
10. Valuation methodology
  - a. Income approach
  - b. Market approach
  - c. Asset approach
11. Valuation synthesis and conclusion
12. Appraiser's qualifications
13. Contingent and limiting conditions

### About the Author

[Alina Niculita, ASA, CFA, ARM-BV, MBA](#), Director of Valuation at Morones Analytics, is an industry expert, previously with Shannon Pratt Valuations. Alina is an author, coauthor, and contributing author of articles, book chapters, and books on business valuation theory and methods, including several with Dr. Shannon Pratt. She has spoken on business valuation topics to various audiences and Alina teaches Continuing Legal Education (CLE) classes on business valuation. Email: [alina@moronesanalytics.com](mailto:alina@moronesanalytics.com)



# Review: Shannon Pratt's *The Lawyer's Business Valuation Handbook*

By Rob Schlegel, FASA,  
Principal with Houlihan Valuation Advisors  
and  
Penny Lutocka, ASA,  
Principal with Houlihan Valuation Advisors

**Abstract:** The third edition of *The Lawyer's Business Valuation Handbook*,<sup>1</sup> released August 2024, is an updated version of a classic text. This review discusses how this new edition can help to educate our attorney clients about the possible pitfalls of not understanding the role of business valuation in litigation.

---

<sup>1</sup> Pratt, Shannon, and the ASA Educational Foundation, *The Lawyer's Business Valuation Handbook: Understanding Financial Statements, Appraisal Reports, and Expert Testimony*, 2d ed., American Bar Association (Chicago, Illinois 2010)





## Helping Attorneys Understand BV

How many times have BV experts involved in a litigation case had to watch as attorneys who do not understand business valuation fumble with discovery and waste their time and ours at great expense to the clients?



As a business appraiser or a review appraiser, we typically depend upon Pratt's *Valuing a Business*<sup>2</sup> and other technical references for our analytical work. To many lawyers and judges, however, this expert work is somewhat dull, or at least mystifying. Previous editions of *The Lawyer's Business Valuation Handbook* have addressed this black hole in legal minds, and this new edition is an excellent up-to-date read. We suggest you recommend it to your lawyers & judges for their reference shelves.

Roger Grabowski and Alina Niculita edit this edition, which includes chapters by Roger, Alina, Jay Fishman, Ken Pia, Bruce Johnson, and a host of other ASA experts and attorneys. This update to the previous

---

<sup>2</sup> The most current is Pratt, Shannon, and the ASA Educational Foundation, *Valuing a Business: The Analysis and Appraisal of Closely Held Companies*, 6th ed. (McGraw Hill, 2022).

editions contains not only basic tenants of business valuation (BV), but also relevant new post-2010 information on cases and how BV is practiced.

## Definitional Components

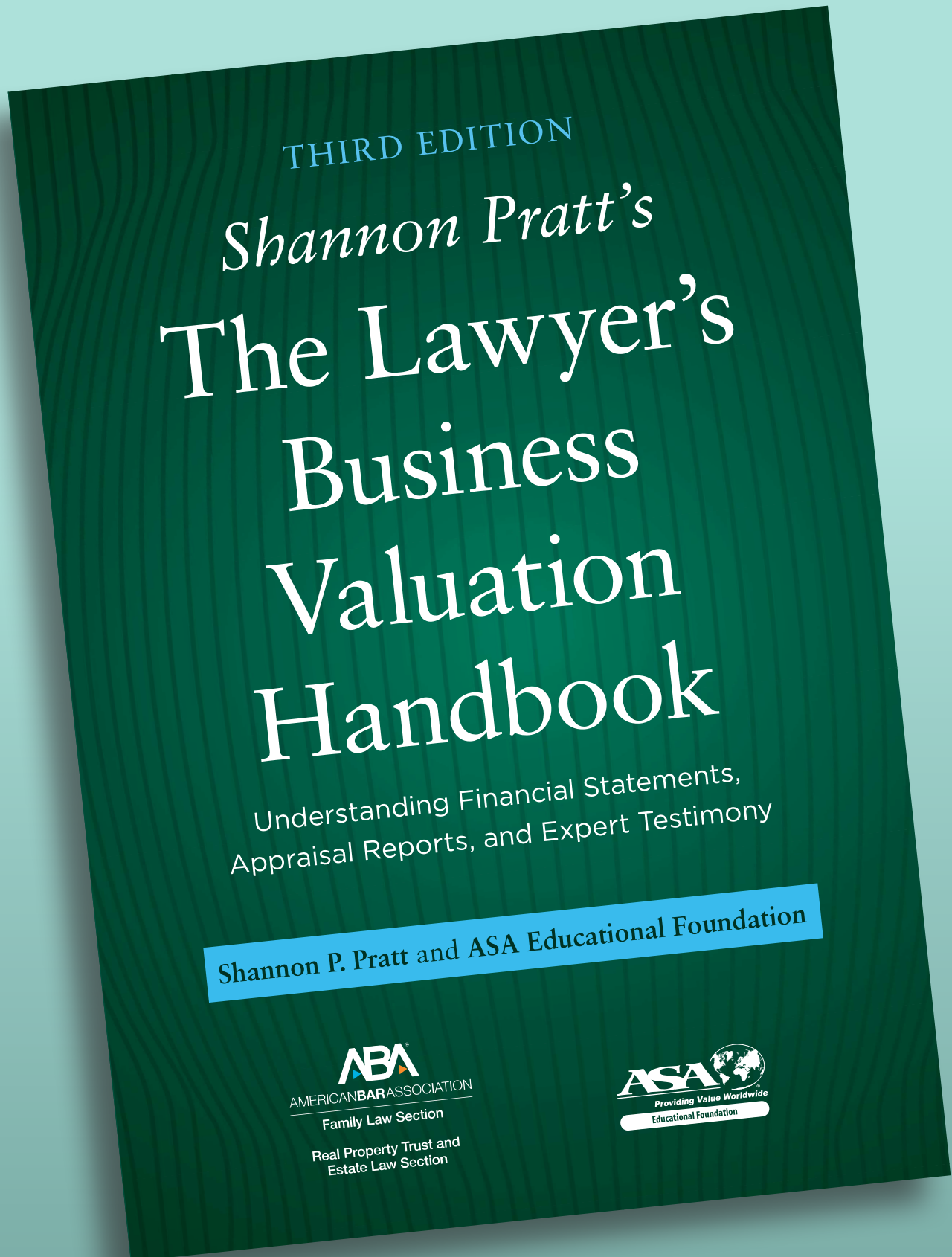
Too often, the intricacies of BV in legal areas of divorce, estate administration, gifts of equity, bankruptcy, and financial planning are not well understood. The definitional components include 40 chapters covering a wide spectrum of legal cases. Beginning chapters address relevant standards and premises of value, financial terminology, BV methods and procedures, the importance of understanding the Subject Company, economics and industry analysis, Market-Income and Asset approaches, and specific topics such as developing a discount rate, the excess earnings methods, derivation of discounts and premiums, and reconciliation.

## Subject Matter Issues

On the subject matter issues in later chapters, topics include discussion of the variations of BV procedures for marital dissolutions (including personal vs entity goodwill), shareholder and partnership disputes, ESOPs, and several Federal tax matters (e.g., estates, gifts, worthless stock deductions, transfer pricing, and so on.).

## Company Types & Legal Duties

The third edition also contains chapters on specific type of companies and legal duties,



such as valuing small service businesses, real property holding companies, intellectual property assets, buy-sell agreements, lost profits damages, alternative dispute resolution, and solvency and fairness opinions. Interestingly, the Reviewing a Business Valuation Report chapter is a concise 10 pages.

## **Technique Materials**

Perhaps the most useful technique materials for attorneys, many written by attorneys with substantial references to legal cases, are in some of the latter chapters.

### *Valuation Reports*

Chapter 33, Business Appraisal Reports, and Chapter 34, Checklist for Reviewing a Business Valuation Report, convey to the attorney what should be, and conversely, what should not be, in BV reports and BV review report. The checklist in Chapter 34 is important for Review Appraisers and attorneys.

### *Expert Evidence*

Chapter 35, Admissibility and the Impact of Expert Business Valuation Evidence, discusses a variety of issues, including:

- What are the factors in the “Gatekeeper” Rule seen in the *Daubert v. Merrill Dow Pharmaceuticals*, *General Electric Co. v. Joiner*, and *Kumho Tire Co. v. Carmichael* cases?
- What are the advantages and disadvantages of a CPA, financial analyst, or an academic of performing as a Business Appraiser?
- How does the attorney deal with the superficial analysis in a “down and dirty” appraisal (or calculation)?

- In litigation, how does the attorney examine a BV expert in deposition and trial? How does a judge typically view admissible expert evidence and the weight given to it?

### *Discovery*

Chapter 36, Discovery and the Business Valuation Expert, discusses the scope of what documents are typically requested and also how Federal Rule 14 and other limitations might affect the timing and sanctions for failure to comply. Other important discussions, including some specific, insightful examples of the scope of discovery, are:

- What discovery rules pertain to experts?
- Are interrogatories to the opposing party and expert to supplement the written report useful?
- How does the attorney involve the Business Valuation Expert in Discovery and depositions of the opposing expert?

Chapter 37, Business Valuation Standards and Credentials, explains the distinguishing aspect of the various BV credentials and discusses the question of material differences between USAP, AICPA regulations, and IRS Revenue Rulings.

Chapter 40, Examining a Business Valuation Expert in Deposition and in Trials, provides, in checklist form, examples of questions concerning qualification, sources of information, methods of analysis, financial statement adjustments, and reconciliation. Other questions addressed in Chapter 40 are

- How does the attorney examine background of the expert for qualification?
- What questions should be asked concerning each valuation method,



and the reconciliation of the value indications?

- What are the common errors that attorneys should avoid?

### Questions to Ask

Adding to the book's usefulness is the "Questions to Ask" section included in many chapters, the extensive case citations for the attorney's research to their current cases, and exhibits in each chapter that include diagrams, definitions, Revenue Rulings, examples of methods, and differences between Lost Profits cases and Lost Business Value cases, to name a few. These exhibits are invaluable to attorneys... and will help the attorney-reader understand what we do and how to dig underneath the layer of the expert opinion.

### Noncompetition Challenges

Perhaps the only hesitation may be the material in Chapter 14 on Employment and Noncompetition Agreements given the current challenges to noncompetition agreements by Federal Trade Commission (with a rule scheduled to become effective September 4, 2024). Yet, the implementation of this FTC ban on most non-compete agreements is currently being challenged in

litigation. So, as in most BV situations, it depends.

### Useful to Attorneys and BV Experts

Our recommendation: Tell the lawyers who hire you about the book and strongly suggest that they buy it. This book is also a good reference source for our shelves as well. We need to hone our understanding of how lawyers think (or perhaps, should think).

#### About the Authors

Rob Schlegel, FASA, MCBA, is a Principal with Houlihan Valuation Advisors in Indianapolis. He is a Past International President of the American Society of Appraisers, and a frequent author and teacher for many of the professional societies.

Penny Lutocka, ASA, CPA/ABV, ARM, CFE, a Principal with Houlihan Valuation Advisors and owner of Lutocka & Associates, performs business valuations and has testified as an expert in Indiana courts. Penny regularly writes on topics ranging from framework of business valuation standards, identity theft, warning signs of fraud, and tax and financial planning; and presents on topics such as fraud prevention and strategic planning. In addition to her ASA membership, she is a member of the professional organizations American Institute of Certified Public Accountants, Association of Certified Fraud Examiners, Indiana Chapter of Certified Fraud Examiners, and the Indiana CPA Society.



# Better Manage Client's Risk Through Appraisal Review

Nobody understands the value and risks of your client's assets better than ASA. Which is why more appraisers, assessors, CPAs, bankers, attorneys, departments of governments or other users of appraisal services are turning to ASA for appraisal review support. ASA offers three pathways to mastering this critical differentiator. From a comprehensive credentialing or specialty designation program for practitioners to a certificate of completion program for allied professionals, ASA offers the advanced ARM training, credentialing and membership opportunities you need now!

*Get started today!*

*For more information visit [www.appraisers.org/ARM](http://www.appraisers.org/ARM),  
or contact [asainfo@appraisers.org](mailto:asainfo@appraisers.org) or (800) 272-8258.*



# Forensics in Post-loss Jewelry Valuation

By Gary L. Smith, ASA  
Forensic Gemologist,  
Pennsylvania Gemological Laboratory



**Abstract:** In post-loss jewelry appraisals, it can be difficult to value the non-existent item. Often the appraiser is given only a photograph of the item taken at the time of purchase or of the individual wearing it. In such cases, the scientific use of Aspect Ratio can be invaluable in substantiating a loss claim. This article provides guidance and examples of how to correctly use calculations of the aspect ratio (or width to height ratio) in post-loss appraisals of jewelry.





## Appraising Jewelry

Historically we use one or more of three methods to establish a value for jewelry items:

1. Cost approach
2. Sales comparison approach
3. Income approach

Cost approach basically is a summation of the factors involved in the creation of a replica or similar acceptable item of jewelry.

Sales comparison approach basically compares the sales of similar items of jewelry in relevant markets.

Income approach basically is the present value of an item based on what income it will produce if replicated, licensed, or leased.

These approaches to value can be found with their methodology in the ASA course GJ203: Appraising Gems and Jewelry for Advanced Assignments: Development and Report Writing.

Most of the appraisals done on a daily basis consist of valuation for insurance purposes, estates, matrimonial dissolution, IRS, collateral, post-loss, and so on.

In almost all these valuations—except for post-loss—we have the physical item to

examine, test, and validate through sales receipts and various other documents. In a post-loss appraisal, however, the item is missing. Whether lost, stolen, or some other factor, the item is no longer available for analysis.

### Appraising Missing Items

Valuing something that no longer exists is dependent on what verifiable documentation is available: sales receipts, prior appraisals, photographs, and so on.

The quest for modern jewelry comparables, especially items that were sold by larger retail chains, can often be found by searching completed sales at auction and secondhand dealers sites.

If we can't find useful comps for the sales comparison approach and must resort to utilizing the cost approach, the difficulty may be collecting sufficient data and/or having the expertise to accurately calculate a replication cost and value the missing item.

What if you just have photographs and verifiable verbal descriptions?

### *Using Photographs*

Many of the cases our laboratory encounters are dependent on photographs and verifiable verbal descriptions. We've discovered several caveats that are useful to substantiating a valid scientific conclusion using photographs:

- Photographs must be of sufficient quality to allow microscopic enlargement.
- You must always have a known, verifiable measurement to use the aspect ratio method.
- All your measurement devices must be periodically checked for accuracy, preferably by a state agency.
- Any photographs you take should be in a RAW format, to prove they were not manipulated.
- Aspect Ratio (length divided by width) doesn't change if enlarged or shrunk in size.

### *Case Example: Strand of Pearls*

Client had a significant loss of jewelry, including a strand of pearls.

We had an excellent photograph of her wearing the pearls, but no sales receipt or prior appraisal to verify their size or quality.

To use the aspect ratio, we chose a dime, at 17.91mm in diameter, to give us a known dimension.

We had the client lie down, place a dime just below the hollow of her throat and take a photo at one-to-one ratio. We then had her repeat the placement of the dime, but now smile and take a photograph from the top of her head down to include the dime.

### **Calculations**

In the first photograph, the dime measures 13.0mm—a 27.42% photographic reduction from actual size. We multiplied the 13mm measurement by 137.8% to get actual size.

In the second photograph, her upper right central tooth measures 2.9mm. Multiplied by 137.8%, this equals 4.0mm—the tooth's actual width.

In the Exhibit photograph of her wearing the pearls, she is smiling with a clear image of her front teeth. In this photograph, her upper right central tooth measures 1.75mm.

We calculated an aspect ratio from the actual size of the tooth ( $4.0\text{mm} - 1.75 = 2.28:1$ ), proved it ( $1.75 \times 2.28 = 3.99\text{mm}$  tooth width) and used that aspect ratio to calculate the actual pearl diameter.

The central pearl in the Exhibit photograph measures 2.85mm. Aspect ratio calculations ( $2.8575 \times 2.28 = 6.498\text{mm}$ ) prove that she is wearing a strand of 6.5mm round pearls.

### *Case Example: Diamond Ring*

Client purchased a Princess cut diamond ring: Size 3.15ct., Color H, Clarity SI2.

The diamond came with a Diamond Quality Document (DQD) from the American Gem Society Laboratories, stating the diamond measurements: 7.98 x 7.97 x 5.77mm.

Client wore the ring for several years; a new insurance carrier required an updated appraisal for coverage.

The appraiser came back with the report that the diamond wasn't a 3.15 carat natural, but a 2.09 carat laboratory grown diamond. The client returned to the jeweler where she had purchased the diamond with a copy of the appraisal for an explanation. She was told they couldn't do anything about the issue, since she could have switched the diamond.

We were sent the ring to examine to see if we could ascertain if the stone had been switched, and if so by what type of tool. Under 120X microscopic examination of the prongs, there were no discernable tool marks. One prong shows a marked

deformation where the diamond setter slipped with a rotary bur and cut through the edge of the prong when setting the diamond.

We also found the inscription for the certification number from the International Gemological Institute (IGI) and obtained a copy with the following information: Cut - Princess, Weight 2.09ct., Size: 6.99 x 6.86 x 4.83mm. Color - G, Clarity - VS2, Lab Grown.

### Calculations

Compute the aspect ratios from the (DQD) and from the IGI revealed a substantial difference in the alleged size of the diamond: 0.999 to 0.981.

<b>DQD</b>	3.15ct	0.98 x 7.97 x 5.77mm	$7.98 - 7.97 = 0.999$ ratio
<b>IGI</b>	2.09ct.	6.99 x 6.86 x 4.83mm	$6.99 - 6.86 = 0.981$ ratio

Fortunately, when the client purchased the ring they photographed it, so we obtained the meta data from that initial picture. We compared that to a current photograph of the ring.

The aspect ratio of the original photo: 0.981, the ring now: 0.981 a perfect match.

## Aspect Ratio

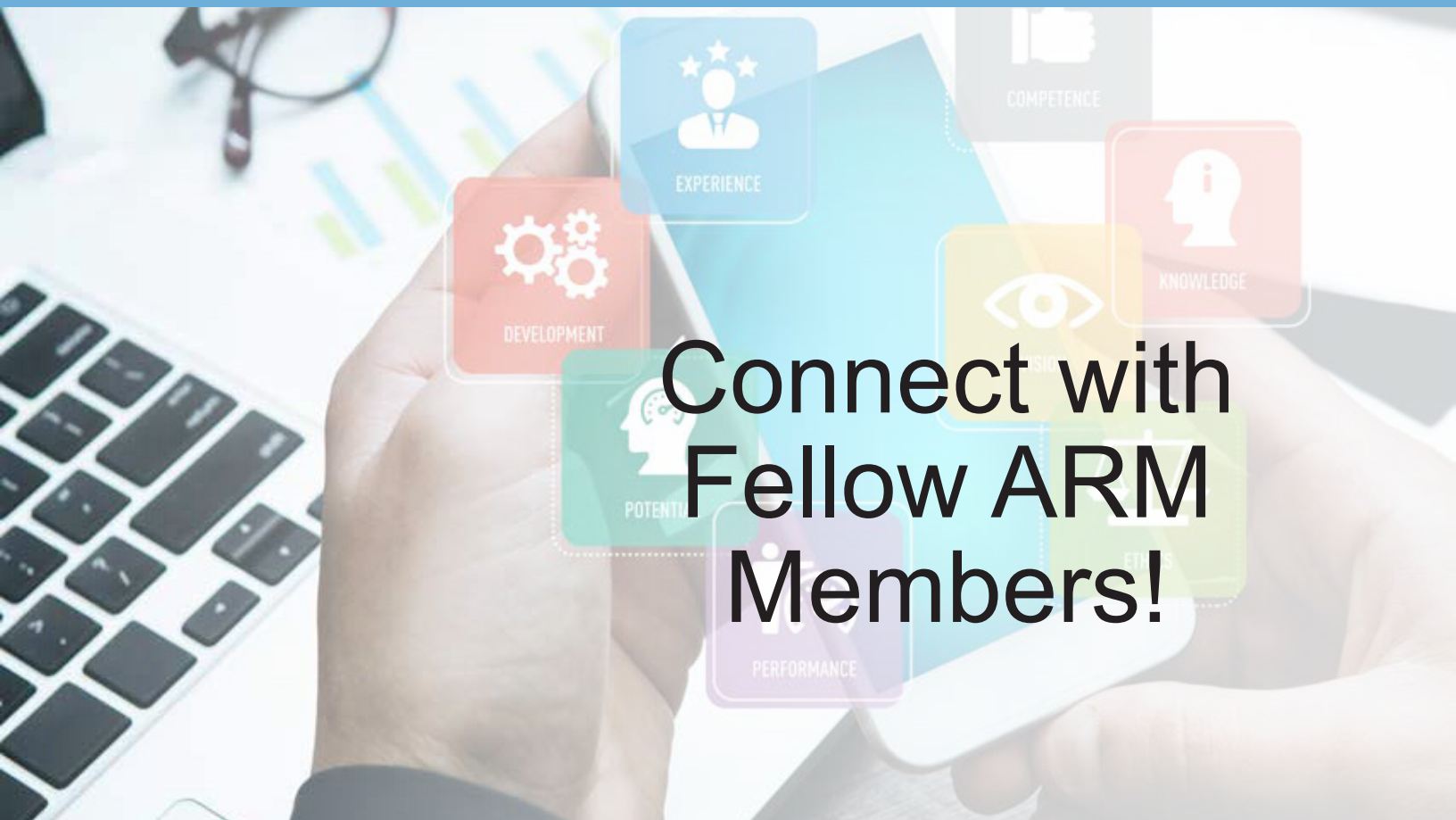
These two cases are a brief snapshot of the hundreds of forensic reports and cases we have done using aspect ratio, and are a summation of over a hundred pages of testing, CAD renderings, measurements and so on for each item.

In case after case, we have been able to use scientific measurements and aspect ratio in jewelry appraisals and we encourage other jewelry appraisers to investigate and use these methods when appropriate and necessary.

### About the Author

Gary L. Smith, ASA, GIA-GG, AGS-CGA, AGA-ASG, Master Gemologist Appraiser® and Forensic Gemologist®/Forensic Jeweler® at [Pennsylvania Gemological Laboratory](#), is a past president of ASA International. In addition to his many degrees and designations—including Graduate Gemologist with the Gemological Institute of America, Certified Gemologist Appraiser with the American Gem Society, and Accredited Senior Gemologist with the Accredited Gemological Association—Gary has over 50 years of experience as an internationally recognized teacher, and lecturer, and appraiser of gems and jewelry for private clientele, banks, insurance companies, legal firms, and the State of Pennsylvania Treasury Department. Email [pagemlab@comcast.net](mailto:pagemlab@comcast.net)





# Connect with Fellow ARM Members!

Put one of ASA's most valuable benefits to work for you. The ASAConnect Appraisal Review & Management Members Group is the perfect place to post technical questions, solicit professional guidance, network, engage fellow experts by swapping experiences and more. Simply opt in, compose and send your message to the group. Receive and comment on messages as desired. Being connected is the perfect way to grow your practice or career.

***Opt in to ASAConnect ARM Members Group today!  
For more information visit <https://connect.appraisers.org>,  
or contact [asainfo@appraisers.org](mailto:asainfo@appraisers.org) or (800) 272-8258.***