



TEAM members on the go

■ **Can we all just get along?** Ken Voss, MAI, SRA, CAE, rspoke at the 2012 ABA/IPT Advanced Property Tax Seminar in New Orleans March 22–23, 2012. Ken presented a short narrative on “Functional Obsolescence” and Arbitration/Mediation/Alternate Dispute Resolutions. ABA is the American Bar Association and IPT is the Institute for Professionals in Taxation. Ken’s paper can be found TEAM’s website http://www.teamconsulting.cc/images/FUNCTIONAL_OBSCOLESCENCE.pdf.

Ken is putting his knowledge and experience to work, as of January 1 he became a county hearing officer in Georgia, hearing appeals of \$1,000,000 or more.

■ **Not your typical GIS assignment.**

Keith Cunningham, PhD, has been working with several native villages in Alaska to develop three-dimensional cadastres. This joint-research with the University of Alaska uses their unmanned aerial systems to collect the photo surveys used to locate lot lines and building footprints. This work will be presented at the 2012 IAAO conference in Kansas City. His pragmatic tools are FAA licensed unmanned aerial systems, do-it-yourself orthos, and volumetric change detection.

Dr. Cunningham is also busy with the U.S. Air Force developing a new forecasting model for volcanic eruptions, which impacts the taxation of commerce and aviation.

Lexur Uses VDV to Help Stark County, Ohio

Lexur Appraisal Services has just completed data verification of appraisal data for 56,000 of Stark County, Ohio’s, 200,000 properties. Utilizing Lexur’s Virtual Data Verification (VDV) application, Lexur was able to verify the required property data, over the Internet, in less than 90 days.

Stark County was in the middle of a state-mandated six-year reappraisal project and found itself behind schedule. The county looked for a way to complete data collection/verification on property in a short timeframe to meet the Ohio State Tax Department requirements. Reviewing the county’s needs, Lexur determined that Stark County had all the tools needed to implement the VDV process: street level images, ortho photography, oblique aerial photography, and CAMA data including sketches. Lexur and its business partner, Digital Data Technologies, Inc. (DDTI) were able to import all the necessary information into the VDV application thus giving Lexur appraisers, working remotely, all of the necessary information to meet the county’s requirements.

With the completion of the Stark project, Lexur has now verified

property characteristics on over 1.1 million properties since 2008, with another 110,000 already scheduled for 2012. In 2006 Lexur principals worked with other industry experts and formulated a process to verify property data without physically visiting the property by utilizing technology. This led Lexur to the State Tax Department in Ohio, where the process was presented for approval. Ohio requires two visits to each property as part of the cyclical appraisal process. The Tax Department approved of the process and the rest is history.

Lexur was the first in Ohio to use the desktop approach in 2008 and has pioneered the efforts for the last four years. Our experienced staff, excellent business partners, and the need to do things better at lower cost have contributed to the growth of the VDV efforts.

Data verification services utilizing VDV is now available for jurisdictions throughout the U.S. For more information, contact Lexur at 1-888-430-4495.

Lexur is a TEAM Consulting, LLC, business partner. Find out more about Lexur on their website at <http://www.lexurappraisal.com/>. ♦

■ **Dr. Henry and his retirement.**

Henry Riley, PhD, has been busy with this year’s winter projects: doing a golf course appraisal, teaching several courses, and completing an article for the April 2012 *Fair &*

Equitable: “On the Trail: A Guide to USPAP for Assessors” and the sidebar “How USPAP Got Its Start.” Check it out when you get your hard copy or read the Fair & Equitable Digital Edition online at www.iaao.org. ♦

Appraisal of Oil and Gas Mineral Interest for Ad Valorem Tax Purposes

By Stephen Campbell, Vice President of Thos. Y. Pickett & Co

Oil and gas mineral interests are appraised using a “discounted cash flow” calculation where future profits (cash flows) are projected and then “discounted” to a present value. The sum of the present values of future cash flows is the fair market value of the mineral interest in question. This discounted cash flow methodology is uncontroversial and commonly used to evaluate oil and gas reserves for a wide variety of reasons other than property tax assessments.

The following table presents a highly simplified example of this analysis.

Forecast Year	Price (\$/bbl)	Production (bbls)	Revenue (\$)	Operating Expenses (\$)	Future Cash Flow (\$)	P.V. Factor at 15%	P.V. of Cash Flow (\$)
Year 1	93.00	1,825	169,725	36,000	133,725	0.933	124,699
Year 2	94.00	1,460	137,240	36,000	101,240	0.811	82,093
Year 3	95.00	1,168	110,960	36,000	74,960	0.705	52,855
Year 4	95.50	934	89,235	36,000	53,235	0.613	32,640
Year 5	96.00	748	71,762	36,000	35,762	0.533	19,067
Year 6	96.50	598	57,709	36,000	21,709	0.464	10,065
Year 7	97.00	478	46,406	36,000	10,406	0.403	4,195
Year 8	97.50	383	37,316	36,000	1,316	0.351	461
Sum of Present Value of Cash Flows = Appraised Value -->							<u>\$326,075</u>

In a discounted cash flow analysis, it is necessary to forecast oil and gas prices for many years into the future in order to appraise a property on a given date. Common sources for price forecasts include New York Mercantile Exchange (NYMEX) contracts, the Energy Information Administration Annual Energy Outlook, and the Society of Petroleum Evaluation Engineer (SPEE) Survey of Price Projections and Escalations.

The forecasted price for each year is multiplied by the forecasted production in order to forecast revenue. Future oil and gas production rates can be estimated by

“decline curve analysis,” an analysis which relates the past performance of oil and gas wells to future performance. In its most basic form, a decline curve analysis is simply a plot of production rate versus time on a semi-log scale. When the logarithm of the producing rate is plotted versus linear time, a straight line trend in production often results with the extrapolated trend representing expected future production.

Lease operating expenses are deducted from the forecasted revenue to determine the future cash flow. Lease operating expenses are those expenses which are

direct, recurring, and sufficient to maintain production as forecasted. Lease operating expenses are most commonly determined from analysis of historical operating expenses for the subject lease or from the analysis of similar and surrounding leases.

Finally, future cash flows are discounted to present values using

prevailing discount rates. Discount rates are typically established by the analysis of oil and gas property sales, market survey reviews, or by weighted average cost capital studies.

Although the application of decline curve and discounted cash flow analyses requires some expertise, the widespread availability of production data (usually for very nominal costs) coupled with appropriate computer programs makes the appraisal of oil and gas producing properties feasible and cost efficient for many taxing jurisdictions. ❖

Thos. Y. Pickett & Co., Inc. appraises mineral producing properties, oil refineries, chemical complexes, railroads, pipelines, and manufacturing facilities for ad valorem taxation purposes. Established in 1926, Thos. Y. Pickett & Co. has a qualified staff of registered professional engineers and registered professional appraisers. Thos. Y. Pickett & Co. is a TEAM Consulting, LLC, business partner.

Stephen Campbell, vice president of Thos. Y. Pickett & Co., manages of the Minerals Department in Dallas. Mr. Campbell has extensive domestic and international energy industry appraisal experience, including the appraisal of over \$8 billion of producing mineral interests annually for ad valorem tax purposes. He has a Master's in business administration from the University of North Texas and a Bachelor of Science degree in Mechanical Engineering from Baylor University. **Questions or comments:** Write to StephenC@typco.com or call 972-387-4944.



Rick Norejko, CMS

Rick Norejko
dressed as
a colonial
surveyor

After earning degrees in civil engineering and business administration, Rick had the good fortune to enter the cadastral mapping field in the early '70s, when various state mapping programs were just starting. He worked on projects in New York, Alabama, Tennessee, Pennsylvania, and Missouri before becoming the first Land Records Director for Buncombe County, N.C.

After guiding the county in

building the second computer mapping system in the state, he turned his attention to IAAO and the national cadastral scene. His accomplishments within this international organization include the CMS designation, executive board member, GIS/CAMA conference chairman, Member of the Year, three-time Mapping/GIS section chairman, course author, case study grading chairman, and renowned lecturer and presenter.

Rick's historical mapping presentations are very popular with state mapping conferences. "I believe it is important that mappers, appraisers and assessors understand how the fabric of America's cadastre was built and who, and what, played an instrumental role in designing it."

"I believe it is important that mappers, appraisers and assessors understand how the fabric of America's cadastre was built..."

When he's not dressed as a colonial surveyor, Rick can be found with a camera in his hand. He is also a professional photographer, spending weekends from March until November covering women's fast-pitch softball tournaments throughout the southeastern United States. Occasionally, he breaks away for the solitude of landscape photography. In fact, one of his pieces is on display at IAAO headquarters in Kansas City, Mo. You can view more of Rick's work on his website at <http://www.richardnorejko.com/-/richardnorejko/default.asp>.

He resides in one of most scenic areas of the country, Asheville, North Carolina, with his wife, children and three grandchildren, who affectionately call him "GDad." See Rick's article, "Land Ownership in Colonial America," on page 4.

2012 Exhibitor and Sponsorship Opportunities

INTERNATIONAL ASSOCIATION OF ASSESSING OFFICERS

78TH ANNUAL INTERNATIONAL CONFERENCE ON ASSESSMENT ADMINISTRATION

SEPTEMBER 9-12, 2012 • KANSAS CITY CONVENTION CENTER • KANSAS CITY, MISSOURI



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Exhibitors Contact: Lauren Harlan, Meetings Coordinator, harlan@iaao.org • 816/701-8109 • Fax 816/701-8149 • www.iaao.org

Sponsors Contact: Leann Ritter, Marketing Manager, ritter@iaao.org • 816/701-8161 • Fax 816/701-8149 • www.iaao.org

Land Ownership in Colonial America: A Narrative

By Rick Norejko, CMS

Richard Edward Stuart gazed at the alpenglow in the western sky and pondered how many more days it would take to finish the survey; three, maybe four? The November air was cold and damp. From the look of the sky they could expect rain or even snow flurries before they finished the survey.

It had been an unusually cold and wet growing season, therefore a smaller than expected harvest. Richard desperately needed the 15 shillings he would get for surveying this 100-acre Headright Grant for Marion Emerson Johnson. Next spring he would use part of the money to buy extra seed. He believed he could clear another half acre before it was time to plant his field. That additional half acre of crops would help if they had another unpredictable growing season. He might even get another offer or two to survey a patent before spring. "Boy I sure could use another 20 to 30 shillings," he thought to himself.

He turned back to the crackling fire to hear the laughter of Johnson, George Xavier Dontell, and Johan Thimgan. The evening meal of rabbit, turkey and corn meal biscuits was getting close to being ready. He watched as Johnson, acting silly, flipped some biscuits in a pan. Marion E. Johnson was 27 years old, three years younger than himself. Unlike Stuart, Johnson had indentured himself to come to the Carolina colony with the dream of owning his own land. His convictions were so strong that they carried him through seven years of working six days a week from sun up to sun down working the tobacco fields. It was grueling, back-breaking work. He did this without proper clothing, tools or even food.

Marion's indenture was to Kenneth Albernathy Voss III, a wealthy

tobacco plantation owner. Voss was known throughout the colony as a vicious taskmaster. Eight out of ten indentured servants to Voss never survived to receive their Headright Grant. No wonder Johnson wanted his patent of land to be four days up the Neuse River from New Bern. He wanted to be as far away from Voss as possible.

Johnson had chosen an area along the Neuse River tributary Little River, two days' journey from the nearest farmstead owned by Fredrick Lincoln Crapo. The fact that Johnson's claim was so far from Crapo's patent gave Stuart pause. Johnson had selected an area that Stuart thought was only for the brave or very foolish. He did have to admit that the land was everything Johnson said it would be. He recalled the day Marion came to him asking him to survey and map his patent.

"Richard, it's a tract so fertile a bean grows like a tree and grass tickles your belly when you walk. And game! Deer by the thousands and even some elk, ducks and geese so plentiful they make night out of day when they pass over with squirrels thick as lice on hen and turkeys all over. I have never seen such waters for fish; nose to tail in every creek."

But this was red land. While claimed by The English Crown, it was a region inhabited for decades by the Tuscarora Indian tribe. Most of the tribe had already relocated to join the Iroquois in the New York colony. Their population reduced by one-half due to smallpox epidemics and conflicts with other tribes, they realized they were no match for the land-possessing Europeans, so they left en masse to become the sixth tribe in the Iroquois Nation. However, rumors had spread throughout the colony of a small, violent group

of remaining Indians that were terrorizing any intruders into their territory. Two years had passed since the last known incident with a fur trader named Harper Bennett. Old man Bennett was beaten and scalped by this band of Tuscarora. He had somehow managed to escape alive and made it back to New Bern to recover and tell his tale of adventure.

George Dontell, like Stuart, was a full-time farmer apprenticing with the desire to be appointed as a colonial crown surveyor so that he could make a few extra shillings during the "off" season. Now 24 years old, he had arrived in New Bern with his father and mother 12 years ago. Married to Mary Etheridge at the age of 19, he now had three children to raise. He was an excellent marksman, and there was a constant contest with Marion Johnson to see who could shoot the evening meal first.

The final member of the survey party was Johan Thimgan. He was the third son of Walker Thimgan, the wealthy English shipping merchant. Picked on by locals at Daniel's tavern for his silver spoon upbringing, Thimgan wanted to prove his mettle. Stuart needed an ax man and extra hand, so he agreed to Thimgan's request to join them.

Stuart was grateful that much of Johnson's Headright was already cleared. Generations of natives had encamped here growing corn, squash, beans, even some tobacco. *Lest not Kenneth Voss find out about this or he too would be trying to claim a patent along the Little River as well,* Stuart thought. He had such a hatred for the man that he didn't even want to think about what Johnson would say or do if that ever happened.

The overcast sky was quickly turning black, and Stuart could feel

the night air turning colder. Johnson had sectioned the turkey so it would cook faster and was turning the spit over the fire when Stuart suddenly stared out into the darkness at a slight noise and saw ten yards away half a dozen Indians in a semi-circle, two of them with guns already raised to fire. Stuart blurted out a sharp warning, but it was lost in the crash of one of the guns, and Johan Thimgan, his back to the intruders, stiffened unnaturally and screamed as he clawed for his back. "Meet at the big rock!" Stuart shouted at the same time diving toward the darkness on his side of the fire, stumbling for a moment as he lost his left boot and then dashed on into the woods.

The "big rock" was the beginning point Marion wanted to use as a corner of his grant. It was huge, unmovable and highly recognizable, a perfect natural feature if he ever had to defend his claim. Johan had no chance. He turned with one hand raised and the other covering the hole in his lower back where the ball

had entered. He looked puzzled and took one faltering step toward the attackers, his mouth working to say something, then crumpled to the ground.

This much Stuart saw in a swift glance over his shoulder, and then he was out of sight running as hard as he had ever run before stumbling again as briar branches lashed at his body and sharp rocks and sticks gouged his bare left foot. Not until he had run for more than a mile did he stop and try to halt his ragged gasping to listen for pursuit. For ten minutes he stood motionless against a tree trunk and then, satisfied that the Tuscarora's were not immediately following him, he slipped away in the direction of the big rock. The point of beginning of what now looked liked an uninhabitable, dangerous patent.

Stuart tried to reason that there was enough fully cooked food and plunder at the camp to keep the invaders there for awhile. He knew they would smash his compass, confiscate his mule, food and his Gunter

half chain. His surveyor notes of the past three days would be burned in the campfire.

After walking a little further in the darkness and rain, totally exhausted by his escape, he crawled under a rock outcrop to hide until daylight. He was thankful that the rain would obliterate his trail. Unfortunately, the rain was now forming an icy film on his buckskin coat. He wondered if Johnson and Dontello had made it safely away, and his mind filled briefly with the grisly picture of Johan Thimgan. It was then for the first time that the full enormity of his predicament crashed down upon him, and he trembled with a fear never before experienced. ❖



TO BE CONTINUED at the free IAAO webinar, "The History of Mapping," June 20, 2012. See webinar schedule at <http://www.iaao.org/sitePages.cfm?Page=427>

Upcoming TEAM Workshops

Several classes using TEAM workshop materials are on tap for 2012. Those open to enrollment (at this writing) appear below with the contact info.

May 30 – 31	Storm Lake, IA	John Lawson, jlawson@co.clay.ia.us
Classes:	Valuation of Self Storage Properties	
	Valuation of Low End & Difficult Residential Properties	
Aug. 28 – 30	Topeka, KS	Cindy Brenner, kcaa@sbcglobal.net
Classes:	Valuation of Self Storage Properties	
	Valuation of Low End & Difficult Residential Properties	
	Preparation & Presenting a Valuation Appeal	
Sept. 24 – 26	Peoria, IL	Erica Larkin, planner@ipaonline.com
Classes:	Valuation of Green Buildings	
	Valuation of Low End & Difficult Residential Properties	
	Valuation of Lodging Properties	

See all of the TEAM workshops at <http://www.teamconsulting.cc/workshops/workshopoverview.html>. Not finding what you want? Contact Rick Stuart, CAE, about developing a workshop to meet your needs. rstuart17@cox.net

2012 Conference Calendar

June 10 – 13, 2012

North Central Regional Association of Assessing Officers (NCRAAO)
Kansas City, MO

June 17 – 20, 2012

Kansas County Appraiser's Association, Manhattan, KS

Sept. 9 – 12, 2012

International Association of Assessing Officers, Kansas City, MO

Aug. 25 – 28, 2013

International Association of Assessing Officers, Grand Rapids, MI

If you have a conference that you would like listed in the newsletter, please email the details to Rick Stuart, CAE at rstuart17@cox.net.

TEAM's AAS Case Study Review

Congratulations to John Ulibarri, AAS, RES on obtaining both of the designations at the same time!

John is the assessor for Weber County, Utah, and used TEAM's AAS Case Study Review material to prepare for the exam.

The workshop provides a review of materials and an understanding of the composition of a case study to help prepare for the AAS Case Study Exam. It emphasizes the most prevalent items to study for, although it cannot be all-inclusive of what may actually be on the exam. Topics discussed are: USPAP, rates and levies, effective tax rates, economic principles, property definitions, ownerships and rights, three approaches to value, attributes in an effective tax system, role of the assessor, ratio studies, and tax policy. Included are multiple problems associated with the assessment and valuation processes, and the workshop concludes

I had received many inquiries from AAS candidates asking if I had any material that could help them in their pursuit of an AAS. Until this course was available my answer was always no. Now I can definitively tell them that there is a great course available to assist them. I plan to regularly offer this course and would recommend the same to other states or chapters with serious AAS candidates.

—Ken Joyner, RES, AAS

I successfully completed the AAS Case Study Exam this year after completing the Team Consulting LLC review course. I found the review course to be extremely valuable. The possible subject matter for the AAS exam is so broad that it was difficult to focus my preparation. The review course helped me to determine the areas where I needed to concentrate as well as giving me a great refresher course. The interaction with other candidates during and after the course was also very valuable to my success. I highly recommend that anyone who is planning to take the Case Study Exam, take the Case Study Review course first.

—J Brent Weisner, AAS

with a four-hour case study exam followed by a review of the answers.

This is not an IAAO workshop but one developed by TEAM Consulting, LLC. It has become a very popular item for those seeking their AAS designation. To set-up the workshop, contact Rick Stuart at rstuart17@

cox.net or by calling 785.259.1379 or you can use a local instructor to present the workshop.

You can also order the complete workshop as a self-study guide by going to: http://www.teamconsulting.cc/images/AAS_Order_Form_2010.pdf ❖

TEAM Workshops Highly Rated

TEAM workshops continue to rate high with the students. A review of some of the recent workshops is shown below. The first four were presented in Boise, Idaho, and the last one was in DuPont, Wash.

■ **Public Relations & Customer Service.** Overall rating: 4.8 on a scale of 5. Comments:

- *This will help me communicate better to taxpayers and the public.*
- *The entire workshop was well done*
- *Good ideas on different ways to communicate with the public*
- *Excellent class—one of the best I have attended—can use ideas at my office*

■ **The Valuation of Unique Properties.** Overall rating was 4.6 on a scale of 5. Comments:

- Instructor encouraged class participation and really took the time

to discuss unique problems some counties had run into

- *Awesome class, really enjoyed it.*
- *"Real world" subject*
- *Good information*

■ **Valuation of Historic Properties.**

Overall rating: 4.7 on a scale of 5.

Comments:

- *Very applicable—very good class*
- *Great examples*
- *Good information on historical homes*

■ **Valuation of Low-End & Difficult Residential Properties.**

Overall rating: 4.5 on a scale of 5. Comments:

- *Very timely to economic situation*
- *Very interesting and did pertain to my job*
- *Practical use of examples*
- *Lots of group interaction*

■ **Collection, Interpretation &**

Modeling Building of Income & Expense Data.

The 41 workshop evaluations broke down as: 4 Good, 12 Very Good and 25 Excellent.

Comments:

- *Great content*
- *Perfect as is—this is the best class that I have attended for a long time.*
- *This course should be taught as soon after IAAO 102 as possible.*
- *Very practical course, one of the best*
- *Good information to use on the job*
- *It was outstanding. I am so glad to have taken this class. I really appreciated the practical application.*

Contact Rick Stuart at rstuart17@cox.net or 785.259.1379 to set up these or other TEAM workshops. Most workshops are available for others to instruct or for purchase by going to <http://www.teamconsulting.cc/workshops/selfstudyworkshops.html>.



What is TEAM Consulting All About?

TEAM Consulting is a network of experienced “problem solvers” who can offer cost-effective and practical solutions to both large and small assessment jurisdictions. The core of **TEAM Consulting** is our vision, mission and values. These items are the key elements that guide **TEAM** in creating innovative solutions and partnerships that have the potential to change assessment administration and property valuation today and in the future.

Our Vision

TEAM's vision is two-fold. First, our vision for the future of assessment administration and property valuation is to help build systems that are technologically efficient, cost-effective and valuable to the publics who depend on them for information. Secondly, our vision for **TEAM** is to become a recognized leader who can make a difference in assessment administration and property valuation by creating a link to all parties involved in this process. Third, **TEAM** is a strong advocate of education and will create or assist in the creation of specialty designed educational workshops and courses.

Our Mission

“To enable the emergence of a new technology and innovative concepts and ideas to improve the performance of assessment administration and property valuation processes for the benefit of our customers and taxpayers who we all work for.”

Our Values

TEAM's values are central to who we are as individuals and as a team. Following are our primary values:

Respect – appreciating and valuing diverse perspectives; building relationships based on trust; and relating to others as individuals, without regard to role, authority, skill, experience or compensation.

Creativity – comes from thinking progressively and being open to the new concepts and ideas that have the potential to work better in the future and bring us closer to our mission.

Performance – takes many forms, but at its essence, this value reflects our desire for achievement, quality, professionalism and success.

Growth – comes out of education, learning from the examples of others and reflecting on our experiences in order to gain insights into how we can improve.

Purpose – knowing why we are doing something, which results in being more effective in our work. When we have purpose for our individual efforts that connects to the purpose of our group and corporate efforts, we have consistency of purpose as an organization.

Service – focusing on others rather than purely on us. Service drives our mission to create something that is of value to others.

Ethics – we subscribe to a code of ethics and the highest standards of our profession.

Check us out at www.teamconsulting.cc