45-2 Fall 2018

HOOSIER SURVEYOR

Quarterly publication of the Indiana Society of Professional Land Surveyors, Inc.

FEATURED ARTICLE

An effective drone program involves dozens of components, and we regularly test the options available for each. The three specific technology components we get the most questions about are drone airframes, sensors, and georeferencing options.

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Office: 317-636-4682
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FROM THE EDITOR

Deadlines for copy for various planned issues of the Hoosier Surveyor are as follows:

- Winter - February 1
- Spring - May 1
- Summer - September 1
- Fall - November 1

The Hoosier Surveyor is published quarterly by the Indiana Society of Professional Land Surveyors to inform land surveyors and related professions, government officials, educational institutions, libraries, contractors, suppliers and associated businesses and industries about land surveying affairs.

Articles and columns appearing in this publication do not necessarily reflect the viewpoints of ISPLS or the Hoosier Surveyor staff, but are published as a service to its members, the general public and for the betterment of the surveying profession. No responsibility is assumed for errors, misquotes or deletions as to its contents.

Mike Davis, Editor
4310 Broadway Street
Indianapolis, IN 46205
Phone: (317) 283-4630
Email: mijdavis@iupui.edu

CONTACT

9100 Purdue Road, Suite 200
Indianapolis, IN 46268

Phone: (317) 454-8309

Email: editor@ispls.org

LEGAL SURVEYS

By Bryan F. Catlin, PS, ISPLS Past President

The goal of this column is to provide brief summaries of recent Indiana Court of Appeals and Supreme Court cases involving topics related to surveying practice, certainly not to provide legal advice. Information is gathered from the courts website at www.in.gov/judiciary. Comments or suggestions for future columns are welcome by email to: Bryan.Catlin@indy.gov.

This was apparently a slow quarter for surveying-related cases. But the Lake Michigan boundary case decided in the Indiana Supreme Court earlier this year (No. 46S03-1706-PL-423, February 14, 2018) may still be alive. Attorneys for Bobbie and Don Gunderson, who previously owned a lakefront home in the LaPorte County town of Long Beach, have filed a petition for a writ of certiorari with the US Supreme Court. Time will tell if this case is one of the approximately 1% of petitions taken up by the court each year. You can follow the case here. One bit of trivia to remember is that Chief Justice John Roberts grew up in Long Beach.

As in this month's cases, the court's website includes many "Memorandum Decisions" which are not published in West's Northeastern Reporter and, in general, are not to be used as precedent or cited before any court. However, they still show a court's reasoning and may be of interest. This column looks at some such decisions related to surveying.

Robert J. Fiedler and Dianne C. Fiedler v. LaGrange County Regional Utility District, Indiana Court of Appeals Case No. 44A03-1712-MI-2951, July 3, 2018 MEMORANDUM DECISION

This case has already been before the Court of Appeals. My prior summary follows in italics:

Robert J. Fiedler and Dianne C. Fiedler v. LaGrange County Regional Utility District, Indiana Court of Appeals Case No. 44A03-1512-MI-2316, May 25, 2016 - MEMORANDUM DECISION - not regarded as precedent

This case from the LaGrange Circuit Court involves the Fiedlers who owned a lot on Shipshewana Lake. The utility district entered into an agreement to provide sewer services around the lake with funding from the United States Department of Agriculture which brought with it a requirement to follow the Uniform Relocation Assistance and Real Property Acquisition Act (URA). The district notified affected owners that the district would install a grinder pump and other equipment on each lot at no cost to the homeowner in exchange for a voluntary easement to install and maintain the equipment. The Fiedlers declined to provide a voluntary easement. The utility stated that it would not install the equipment, that the Fiedlers would have to do so at their own cost, and that the Fiedlers were required to disconnect from their private septic tank by a certain date. The Utility District filed a complaint on August 22, 2013 seeking to force the Fiedlers to discontinue use of their private septic system, to connect to the district's sewer line and to pay costs and attorney fees from the litigation. After several motions, and the Fiedlers eventually getting counsel, the court entered partial summary judgment for the utility district, requiring the Fiedlers to connect to the sewer system and reserving calculations of damages for later. Other actions were taking place as well but eventually the judgment was appealed and affirmed by the Court of Appeals.

The Fiedlers opted to purchase and install a grinder pump on their own, thereby avoiding the need for an easement. At a final hearing, the only remaining issues were proposed penalties against the Fiedlers and attorney fees. The trial court ordered that no penalties would be assessed against the Fiedlers, but that they shall pay $64,511.63 in attorney fees to the utility district.

The Fiedlers appealed, raising the following issues for review: 1. Whether the trial court abused its discretion when it denied their three motions to amend their answer. 2. Whether the trial court abused its discretion when it precluded them from raising constitutional claims at the final hearing. 3. Whether the trial court erred when it ordered them to connect their home to a sewer line without also ordering the Utility District to compensate them for an easement on their property. 4. Whether the trial court abused its discretion when it awarded the Utility District attorney's fees.

The Appeals Court noted that there was not abuse of the trial court's discretion when it denied the motions to amend their answer because either no evidence was included to support the claims or the issue presented was a matter of law, not of fact, and was therefore not newly discovered as the law was always publicly available. On the constitutional claims issue, the Fiedlers had not challenged any part of the trial court ruling on constitutional grounds or offered evidence of such at trial. Therefore, this issue was waived on appeal. On the easement issue, there was no evidence that the court ordered the Fiedlers to grant an easement without compensation, and furthermore, the Fiedlers opted to purchase and install their own grinder pump rather than negotiating an easement. Based on these facts, this issue was waived on appeal. As far as the attorney's fees, the Appeals Court rejected the Fiedlers' arguments and let the fees stand. The judgment of the trial court was affirmed.

Paul D. Boas and Doris E. Boas v. Hayden Methodist Church, Jon Stoner, Erin Stoner, and River Valley Financial Bank, Indiana Court of Appeals Case No. 18A-PL-608, August 22, 2018 MEMORANDUM DECISION

Here is another case where Fraley v. Minger comes into play. Since 1983, the Boases have owned a parcel in Jennings County with a row of trees and fence between their property and the church property that they treated as their property line. In 2008, the church had a survey performed to aid in subdividing an approximately one acre parcel that was sold to the Stoners. This survey and a subsequent survey revealed a discrepancy between the assumed and described property lines, creating a triangular disputed area. The Boases' garage had been partially in the disputed area since 1983. The Boases also had a shed in the disputed area. Over the years the Boases had replaced the fencing and rebuilt their garage in the same locations each had been in. The Boases had always maintained the disputed area and believed they had been paying taxes on it.

On November 3, 2014, the Boases filed a complaint which eventually included claims of quiet title and adverse possession. After a bench trial before a special judge in the Jennings Superior Court, the court issued an order awarding the Boases the portion of the disputed area claimed by the church, but not the portion claimed by the Stoners.

On appeal, the Boases challenged the portion of the order related to the Stoners. The court found that the Boases had continuously established the elements of adverse possession for the entire disputed area since 1983. In other words, by satisfying the elements of control, intent, notice and duration, title had vested with the Boases no later than 1993, well before the church subdivided and sold a portion of its property to the Stoners in 2008. Therefore, any subsequent objection to the Boases' use of the Disputed Area by either the Stoners or the church was insufficient to undermine the Boases' ownership of the disputed area.

The trial court was found to have erred by concluding that the Boases failed to prove their claim of adverse possession about the portion of the disputed area claimed by the Stoners. On remand, the trial court was instructed to enter judgment in favor of the Boases. The judgment of the trial court was affirmed in part, reversed in part, and remanded with instruction.

Of special interest to surveyors is the portion of Fraley quoted in this decision:

"Once title vests in a party at the conclusion of the ten-year possessory period, the title may not be lost, abandoned, or forfeited, even where the party pays rent to the titleholder, agrees to a survey to attempt to find the true boundary line, expresses satisfaction with a survey whose results are inconsistent with the property adversely possessed by him, or states that he does not claim the land and offers to buy it." Fraley, 829 N.E.2d at 487 (internal citations omitted).

Bryan F. Catlin, PS has been registered as a Land Surveyor in Indiana since 1991. He holds B.S. Land Surveying Engineering and M.S. Engineering (Geodesy) degrees from Purdue University.

Free Resource: Land Surveying Career Brochure

ISPLS has produced an educational brochure that raises awareness to the profession and encourages students to join the field. Help us spread the word by requesting print copies or sharing the digital version of the brochure in your office, at events and seminars and with any student who may be interested in joining the field.

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WHICH DRONE AIRFRAME IS RIGHT FOR YOUR SURVEY BUSINESS?

By Logan Campbell and Daniel Katz, Aerotas

Our goal at Aerotas is to provide the best drone solutions for land surveyors. To achieve this goal, we spend a lot of time staying up to date on the latest developments in survey drone technology. We are not attached to any specific providers of drone-related technology, instead staying independent so that when better tools are available, we can provide them to customers. To determine which technology we provide to our customers, we focus on cost-benefit analysis: what delivers the most benefit to the average surveyor for the lowest cost.

An effective drone program involves dozens of components, and we regularly test the options available for each. The three specific technology components we get the most questions about are drone airframes, sensors, and georeferencing options.

This article is the second in a three-part series covering those three technologies. The articles summarize our current analysis of the options for each of these components based on our continual R&D and our work implementing drone programs for hundreds of surveyors nationwide.

It is important to understand that the drone is only one part of a successful drone program. Even the best drone will not deliver the survey or business results needed unless it is paired with the right field Standard Operating Procedures and data processing and linework workflow.

Types of Drone Airframes for Surveyors

There are four main types of survey drone airframes: small multi-rotors, large multi-rotors, fixed-wings, and VTOL (vertical take-off and landing) fixed-wings. Multi-rotors fly like helicopters: they take off and land vertically and can hover in place and make sharp right-angle turns. Fixed-wings fly more like airplanes, taking off and landing at a slope, needing to fly faster to stay aloft, and making large swooping turns. VTOL fixed-wings are a hybrid, taking off and landing like a helicopter by flying like an airplane. All four are capable of being used as part of a drone survey program with the right SOPs and processing workflow, though they differ in their real-world accuracy capabilities.

	Small multi-rotor	Large multi-rotor	Fixed-wing	VTOL fixed-wing
Common size	1.5 feet in diameter	3 feet in diameter	3 feet wing-span	3 feet wing-span
Common weight	2-10 pounds	10-30 pounds	2-10 pounds	5-15 pounds
Common cost: airframe, likely sensor, necessary accessories	$4,000	$20,000	$40,000	$20,000
Real-world accuracy expectations	0.1’ vertical 0.8’ horizontal	0.1’ vertical 0.8’ horizontal	Sufficient for 1’ contours	Sufficient for 1’ contours

Small Multi-Rotor Airframes

Small multi-rotors weigh less than 5 pounds and are less than 1.5 feet in diameter. They usually have a built-in camera and are often sold as “pro-sumer” – high-end consumer or entry-level professional grade.

The biggest benefit of small multi-rotor drones is their simplicity. They are designed to be easy to learn to use, but, more importantly, they are easy for staff to use on every project with minimal extra work. Small multi-rotors are also usually the most reliable airframes. The scale of their manufacture and their light weight makes them the safest option. Manufacturers have been able to identify and resolve flaws that more boutique manufacturers often struggle with. Small multi-rotors are also inexpensive due to their production scale. Using a low-cost drone means it’s less of a burden on the business, causing less pressure to maximize how much the drone is used, and making it easier to scale up the benefit of drones to potentially even put a drone in every truck.

The primary drawback of small multi-rotors is a lack of flexibility. They are usually built as closed systems, and not designed to swap out sensors or other components. Small multi-rotors are best considered as a specific tool that’s optimized for a specific job, rather than a “Swiss Army Knife.”

For most surveyors doing topographic or planimetric survey work, a small multi-rotor is going to be the right airframe choice. Particularly for surveyors starting their drone program, or for larger companies looking to scale the benefits of drones to several teams, their low cost, ease of use, and reliability make them an excellent choice.

Large Multi-Rotor Airframes

Large multi-rotors usually weigh more than 10 pounds and are 3 feet in diameter. They require some setup or assembly in the field due to their large size and therefore generally require more expertise to use effectively.

The main benefit of large multi-rotors is their customizability. Most large multi-rotors are designed to be open platforms, meaning they can be mounted with a wide variety of customized sensors, payloads, or add-ons. For firms focused on projects like measuring vegetation health, bridge inspection, or other highly specialized needs, these airframes can be helpful.

The main drawback of large multi-rotors is their complexity. Because they are manufactured in lower volumes and require a lot of customization, there are a lot of small things that can derail a project; anything from a loose wire to a bad camera shutter connection can prevent the collection of the right data the first time.

Large multi-rotors can be very beneficial for special-use cases. For survey teams that are very experienced with the nuances of drone technology and frequently require using specialized sensors for unique project types, they are often the best choice.

Fixed-Wing Airframes

Fixed-wing drones usually have about a 3-foot wingspan and are typically light due to being constructed out of foam.

The major benefit of fixed-wing airframes is their range. They are inherently much more efficient fliers than multi-rotors, and so can fly longer before requiring a battery change. For projects larger than 100 acres, this benefit can be substantial, as using a multi-rotor would often require many battery swaps.

Unfortunately, this benefit is usually negated by law. Today it is legally required that a drone pilot actively watches the drone the entire time it’s flying. In most situations, operators will not be able to maintain line of sight for anything beyond 100 acres, meaning they can’t take advantage of the range benefit of fixed-wing airframes.

Fixed-wings are also prone to shorter lifespans than multi-rotors due to how they land, coming in at a slope and belly-sliding. This, combined with their light weight, means they are prone to easily catching on a patch of grass or rock and tumbling, putting sensors and onboard equipment at risk of damage.

Fixed-wing airframes also collect lower-accuracy data. Unlike multi-rotors, fixed-wing airframes must maintain a minimum speed to stay aloft. This means they must fly high to minimize motion blur and be able to take photos at sufficient overlap. Additionally, whereas most multi-rotors carry their sensor on a gimbal, which allows the camera to remain pointed straight down even as the drone turns or fights the wind, fixed-wings usually cannot carry a gimbal, causing a higher frequency of unusable data due to blur or off-centered photos. Finally, fixed-wing airframes are quite expensive, usually twice the price of large multi-rotors with the sensor and support gear required.

For firms that regularly do very large survey projects of hundreds of acres or more and only need accuracy sufficient for one-foot contours, a fixed-wing aircraft may be the right choice. Working to get special waivers from the Federal Aviation Administration or using visual observers to effectively extend range of sight can help mitigate the line-of-sight limitations.

VTOL Fixed-Wing

Hybrid vertical take-off and landing fixed-wing drones can take off and land like a helicopter, then be transitioned to fixed-wing style flight. This gives them some of the best of both airframe styles.

The primary benefits of VTOL fixed-wings are the fact that they have nearly the range capabilities of fixed-wings with the take-off and landing ease of multi-rotors. This means they do not suffer as many of the wear-and-tear challenges of standard fixed-wing airframes, while still being able to fly long ranges between battery changes.

VTOL fixed-wings face many of the same data accuracy challenges as fixed-wings, since after takeoff they fly the same as a fixed-wing and need to maintain a high minimum speed and altitude. Their real-world range is also limited by the same line-of-sight laws.

The larger drawback of VTOL fixed-wings today is the maturity of the technology. As the newest of the four airframe types, they are still in early phases of development and thus tend to require a great deal of know-how to operate and pose reliability challenges.

For surveyors who are highly proficient with drone technology, including maintenance and repair, want to be an active part of developing new technology, and regularly do very large projects, a VTOL fixed-wing can be a great asset.

	Small multi-rotor	Large multi-rotor	Fixed-wing	VTOL fixed-wing
Benefits	• Easy to use • Reliable • Inexpensive	• Customizable	• Much larger range	• Easy takeoff and landing • Larger range
Drawbacks	• Inflexible – can't swap payloads	• Complex to use • Tech problems likely • Expensive	• Range negated by line-of-sight law • Shorten lifespan • Lower accuracy • Expensive	• Range negated by line-of-sight law • Tech problems likely • Lower accuracy • Expensive
Best for	• New to drones • Most standard survey objects	• Experienced with drones • Unique projects that require special sensors	• Frequent very large projects	• Very experienced with drones • Frequent very large projects

Choosing the right tool for the job

There is no one right answer for every company. For teams that are just starting out, a small multi-rotor is always our recommendation. Even for experienced firms, the small multi-rotor is likely to be their best workhorse, as its simplicity and reliability make it easy to use on every project by every team. For firms that are very proficient with drone operations and have needs for specialized sensors, a large multi-rotor is a good investment to be used as a specialized tool. For experienced firms that do a lot of very large projects, a VTOL or standard fixed-wing aircraft is a good choice.

Logan Campbell and Daniel Katz are co-founders of Aerotas, where they enable land surveyors to use drones to get survey linework and contours with industry-best accuracy. Learn more at www.aerotas.com.

Indiana Society of Professional Land Surveyors

HOOSIER SURVEYOR

PHOTO & VIDEO CONTEST

Snap, Share, Win! The Indiana Society of Professional Land Surveyors (ISPLS) is pleased to announce the Spring 2019 Hoosier Surveyor Photo and Video Contest. All members of ISPLS are encouraged to participate for a chance to win up to $100!

The Hoosier Surveyor Photo and Video Contest was created to showcase and applaud the critical work land surveyors are doing in the community, raise awareness to the industry, and encourage students to join the profession.

The theme for this issue's contest is **innovative and cutting-edge technology**. To enter, simply share a photo and/or video on Twitter or Facebook that creatively captures the work you're doing in the field in a fun, unique way. There is no limit on how many photos or videos you can enter and this contest is open to all land surveying professionals and businesses, so **snap** and **share** for your chance to **win!**

Deadline to submit entries: March 1, 2019

HOW TO ENTER

- Must follow ISPLS on **Twitter** and/or **Facebook**
- For photo entries, use hashtag **#ISPLSPhotoContest**
- For video entries, use hashtag **#ISPLSVideoContest**
- All submissions must meet the theme and criteria outlined above
- Video entries must be between 30 seconds to 2 minutes in length
- All entries will be judged by the ISPLS Board of Directors
- Entries must be submitted by **March 1, 2019 at 11:59 pm EDT** to be considered
- By submitting your photo(s) and/or video(s) in this contest, you are granting ISPLS permission to use and republish the content provided.

Contact
Kayla Jenkins, Senior Communications Coordinator, ISPLS, kjenkins@ispls.org
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PRIZES

There will be one (1) winner for the photo contest and one (1) winner for the video contest.

- The winner of the photo contest will receive one (1) $50 Visa gift card
- The winner of the video contest will receive one (1) $50 Visa gift card
- The winner(s) will be featured in the upcoming issue of the Hoosier Surveyor and mentioned on social media
- The winner(s) will receive their own blog post on our website

#ISPLSPhotoContest

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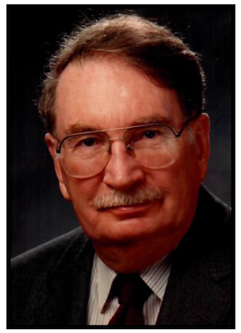
COMPLETED CAREERS

Kenneth Stewart Curtis



Kenneth Stewart Curtis, 93, of West Lafayette, died October 14 at Arnett Hospital, Lafayette, surrounded by his loving family. He was born October 10, 1925, in Lafayette to the late Paul Byron and Mary Isabel (Stewart) Curtis. He was a lifelong resident of West Lafayette, graduating from West Lafayette High School in 1943 and Purdue University, receiving his Bachelor of Science degree in 1946 and his Master of Science degree in 1949, in Civil Engineering.

Ken was a member of the Purdue Christian Foundation, where he met and fell in love with Mary Lou Dunbar. Ken and Mary Lou were married on June 22, 1947, at First Christian Church in Lafayette and recently celebrated 71 years of marriage.

He was Professor Emeritus of Civil Engineering at Purdue University, retiring in 1992. He also was Head of the Surveying and Mapping Department and was instrumental in establishing the Land Survey Engineering Degree. He was a Reamer, in Iron Key, a member of Chi Epsilon and Lambda Sigma, as well as a member of the John Purdue Club.

Ken was involved in numerous professional surveying and mapping organizations. He was the executive director of the Indiana Society of Professional Land Surveyors and editor of their newsletter, the Hoosier Surveyor. He was appointed by the Governor to the State Licensing Board for Surveyors from 1991-2003 and was the Executive Secretary of the American Congress on Surveying and Mapping and active in the American Society of Civil Engineers.

He received many teaching and professional awards, including the 1975 Earl J. Fennel Award, and in 1986 the Munson Best Teacher Award in Civil Engineering. He also was the author of numerous manuals on survey practices and was honored to be involved with the US Coast and Geodetic survey in the Bering Sea in 1951 and 1955, mapping the Bering Strait and coast as part of the civil service.

Upon his retirement, he was named a Sagamore of the Wabash for his service to Purdue and the State of Indiana. Ken was a Past President (1964-1965) and 61-year member of the Lions Club International and a member of the Indiana Historical Society and the National Association of Railroad Passengers. In his retirement, he shared his love of Purdue as an original volunteer at the Purdue Visitor Center. He was active in the Wabash Area Lifetime Learning Association and supported a variety of Purdue sports, the Lafayette Symphony, and Civic Theater.

Ken loved to travel with Mary Lou to Elderhostels, especially in the Blue Ridge Mountains of Virginia and the Carolinas. Over the years he enjoyed taking his family on numerous camping trips around the United States visiting many of the National Parks, and annual family gatherings in Pentwater, Michigan. He was a student of Historical Cartography and an avid map collector.

Along with his wife, Mary Lou, he is survived by three children, Terry (Steve) Farrer of Royal Center, Dr. Charles (Cheryl) Curtis of Zionsville, and Steve (Kelly) Curtis of Battle Ground; nine grandchildren, Brad, Drew, and John Farrer, Lauren Kossack, Paul, Austin, and Alex Curtis, Jill Kelleher, and Jamie Linenberg; 10 great-grandchildren; and a sister, Alice (Bruce) Simpson of Gainsville, Florida.

He was preceded in death by his parents, Paul and Mary Curtis, and his in-laws, H.O. and Kelta Dunbar.

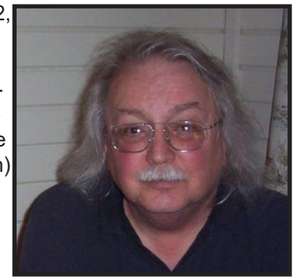
Memorial contributions in Ken's name may be given to First Christian Church in Lafayette and Lions Club International. He also had a passion for cancer research, so contributions can be made to the Purdue Cancer Research Foundation as well.

Visitation was held October 19 at Soller-Baker Funeral Home, West Lafayette Chapel, and a funeral service was held October 20 at First Christian Church, officiated by Pastor Phillip Hayes and Pastor Greg Eberhard.

Obituary originally published on Legacy.com

COMPLETED CAREERS

Gordon Lee Richardson



Gordon Lee Richardson, 72, of Anderson, passed away on October 18, 2018, at Community Hospital Anderson. He was born in Anderson on May 11, 1946, to the late Gail and Pearl (Weston) Richardson.

Gordon retired as a Registered Land Surveyor with American Structurepoint, having been in the profession for 36 years. He was a member of the Indiana Society of Professional Land Surveyors and enjoyed computers, math and reading, and he was always interested in learning new things.

"He was active on several committees during his membership with ISPLS," said fellow member Ed Sweetland. "He was one of the original committee members of the LS/SIT Review Committee back in 2003 and had a passion for solving math problems that related to surveying. He also liked computers and purchased one of the first Radio Shack TRS-80 computers back in the early 1980s so that he could learn programming and use it to solve math-related surveying problems."

Gordon is survived by his wife, Karen (Robertson) Richardson of Anderson; sons, John David (Dana) Richardson, Mark Aaron Richardson, both of Anderson; grandchildren, Paige Richardson, Hannah Richardson, Zachary Finn, Caleb Richardson; godson, Ryan Tirre; and several brothers- and sisters-in-law and several nieces and nephews.

He was preceded in death by a brother, Jimmie Richardson; step-father, Red Dahl; and nephew, Nathan Richardson.

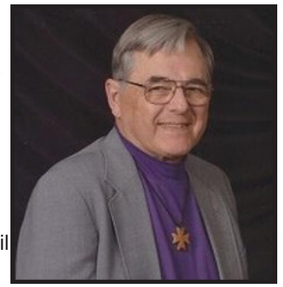
Services were held October 25 at Brown-Butz-Diedring Funeral Service and Crematory. Burial was at East Maplewood Cemetery in Anderson.

Memorial contributions may be made to the American Diabetes Association.

(Obituary originally published by Brown-Butz-Diedring Funeral Service and Crematory)

"He was activity on several committees during his membership with ISPLS. He was one of the original committee members of the LS/SIT Review Committee back in 2003. He had a passion for solving math problems that related to surveying. He also liked computers. He purchased one of the first TRS 80 (Radio Shack) computers back in the early 1980s so that he could learn programming and use it to solve math-related surveying problems."

Wayne Alan Sheets



Wayne A. Sheets, 76, passed away at St. Vincent's Hospital on Election Day, November 6, after a four-month battle with lung cancer. His last regret was not being well enough to vote.

Wayne was born in Lafayette, where he attended school until his senior year in high school when his family moved to Indianapolis. Even though he graduated from Broad Ripple High School he always considered Lafayette Jefferson his home school. He enjoyed attending the Lafayette Jeff Class of 1960 monthly luncheon gatherings and catching up on Purdue sports. Although he followed the Purdue teams, he never would watch a game for fear they would lose.

Growing up, he enjoyed going to both the Brown and Sheets family farms in Clinton County. He and his sister Harriet spent many weekends with their cousins exploring the nooks and crannies of the barns, chicken houses, and corn fields. Wayne was a Boy Scout and kept his uniform and badge sash — and, of course, the infamous Boy Scout canteen.

Wayne attended IUPUI and Purdue University Forestry School prior to being drafted into the Army. He served his two years in Germany, driving trucks between missile bases during the Cold War of the 1960s. Upon discharge from the Army in 1967, he began working for the Indiana Department of Natural Resources where he worked the majority of his career in the Division of Engineering. He became a registered land surveyor in 1986 after taking courses at IUPUI and doing a lot of independent study in the basement of Wayne and Ginny's first house. He retired in May 2009 and remained a member of the Indiana Society of Professional Land Surveyors.

Wayne met Virginia "Ginny" Erhart at the Department of Natural Resources. Ginny also worked her entire career for IDNR, retiring in 2008. Wayne and Ginny were married on June 29, 1974, in the courtyard of North United Methodist Church, Indianapolis. Being state government employees, they chose the wedding date to correspond with the end of the state's fiscal year. Wayne's two cousins, Bill Sheets and Dick Sheets, were also married the same summer, which led to many great stories about how the three Sheets boys got captured.

IN MEMORIAM

Wayne thoroughly enjoyed the brotherhood of his Masonic fraternal organizations. He was Worshipful Master of Broad Ripple Lodge No. 643. He was the presiding head of all three York Rite bodies. He was part of the Raper No. 1 Commandery Drill Team that won six consecutive Triennial Drill Competitions. Wayne served for many years as Prelate for Raper Commandery and frequently was asked to do the Prelate's part in the degree work for other commanderies. He served as Deputy Inspector General for the Indiana Grand Commandery and was Prelate Emeritus. He was past Governor for the Banks of the Wabash College and past Sovereign Master for the St. Bernard de Clairvaux Council No. 256 Allied Masonic Degrees.

He was a member of the Indianapolis Valley of the Scottish Rite (50-year), Murat Shrine (50-year), Sahara Grotto, Royal Order of Scotland, Yeoman of York, and probably a few others he kept secret from Ginny so she wouldn't complain about his attendance at so many meetings. For his dedication to Masonry, Wayne was honored with receiving the Knights Templar Cross of Honor from the Grand Encampment of Knights Templar, DeMolay Legion of Honor, and the Order of the Purple Cross. He was an honorary member of the Order of High Priesthood of South Dakota.

Wayne did have other interests. He maintained the cemetery for White Lick Presbyterian Church. He and Ginny had season tickets to the Indianapolis Symphony Pops concerts, and he played racquetball (a few years back), played some golf but enjoyed watching it more on TV, attended the Indy 500 for many years, and loved NASCAR and Formula 1. Although seemingly a quiet individual, he had a quick wit and dry sense of humor. A Facebook tribute from Mike Sponsler, previous director of the Division of Reclamation, IDNR, provides a fitting description of Wayne: "He was a kind man. You couldn't have asked for a better husband and friend. He will be missed by all who knew him."

Wayne is survived by his wife of 44 years, Ginny; his sister Harriet Sheets, sister-in-law Barb Barlow, uncle Max Sheets, 105-year-old aunt Dorothy Robinson, cousins, nieces, nephews, great- and great-great nieces and nephews; and four rescue cats who comforted Wayne with extra warmth and purrs.

In lieu of flowers, donations may be made to Scottish Rite Masonic Children's Learning Centers, White Lick Presbyterian Church or your favorite charity, or plant in tree in Wayne's memory.
Visitation, followed by a Masonic service, was November 12 at Matthews Mortuary, Brownsburg. Service of Celebration was November 13 at White Lick Presbyterian Church, followed by lunch and graveside services at Hopewell Cemetery, north of Frankfort.

(Obituary originally published by Matthews Mortuary)

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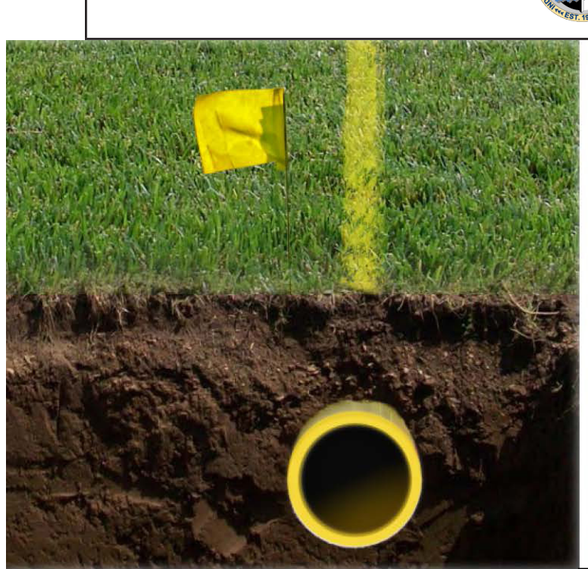

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