

MISSISSIPPI SURVEYOR

MARCH 2016



**PUBLISHED BY:
MISSISSIPPI ASSOCIATION OF PROFESSIONAL SURVEYORS**

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Of PROFESSIONAL SURVEYORS, INC**

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“LIKE”

Mississippi Association of Professional Surveyors



Email Change?

Don't Miss out on the next newsletter. Let Us Know

There are two ways to let us know

- 1) Email to : maps4debra@bellsouth.net
- 2) drop us a note to the above address

PRESIDENT'S MESSAGE

I would like to take this opportunity to congratulate Gene Stenum on being chosen "Surveyor of the Year". I have known Gene for many years and have always found him to be generous, helpful, and professional, an excellent role model for we "younger" surveyors.

We had another great turnout at the Fall Convention in Vicksburg with many positive comments on the two day format. The negative comments mostly concerned the room acoustics and the power point type handouts, both issues to be addressed at future meetings. The board relies heavily on your comments at these conferences and welcome any, positive or negative, that will help us to improve the service to the members.

The board is also asking for feedback concerning our website, mississippisurveyor.com. The board is considering changes, including added a section for lost or stolen equipment.

I would like to thank Debra Byrd and her "staff" for her continued hard work on MAPS behalf and her excellent job in managing the many activities for the association.

Finally, the only way to improve our society is through the member's participation, please feel free to contribute any ideas or criticisms that could aid in that mission.

2016 SURVEYOR OF THE YEAR



Gene Stenum was awarded the 2016 Surveyor of the Year by Jason Pepper at the membership meeting .



U.S. Department
of Transportation
**Federal Aviation
Administration**

100 West Cross Street, Suite C
Jackson, Mississippi 39208-2307
(601)664-9814 Fax: (601)664-9910

MAPS Members:

This letter was sent to the Board of Licensure. The Board asked if we would get it out to surveyors to inform you of this.

Dear:

The purpose of this letter is to provide you with information about the laws and regulations regarding Unmanned Aircraft System (UAS) operations conducted within the National Airspace System (NAS). The NAS is “the common network of U.S. airspace; air navigation facilities, equipment and services, airports or landing areas Included are system components shared jointly with the military.”¹ The FAA’s safety mandate under 49 U.S.C. § 40103 requires it to regulate aircraft operations conducted in the NAS, which include UAS operations, to protect persons and property on the ground and to prevent collisions between aircraft and other aircraft or objects.

A UAS is an Aircraft

A UAS is an “aircraft” as defined in the FAA’s authorizing statutes and is therefore subject to regulation by the FAA. 49 U.S.C. § 40102(a)(6) defines an “aircraft” as “any contrivance invented, used, or designed to navigate or fly in the air.” The FAA’s regulations (14 CFR part 1, § 1.1) similarly define an “aircraft” as “a device that is used or intended to be used for flight in the air.” Because an unmanned aircraft is a contrivance/device that is invented, used, and designed to fly in the air, it meets the definition of “aircraft”. The FAA has promulgated regulations that apply to the operation of all aircraft, whether manned or unmanned, and irrespective of the altitude at which the aircraft is operating. For example, 14 CFR part 91, § 91.13 prohibits any person from operating an aircraft in a careless or reckless manner so as to endanger the life or property of another.

An important distinction for UAS operators to be aware of is whether the UAS is being operated for hobby or recreational purposes or for some other purpose. This distinction is important because there are specific requirements in the FAA Modernization and Reform Act of 2012, Public Law 112-95 (the Act), that pertain to “Model Aircraft” operations, which are conducted solely for hobby or recreational purposes. While flying model aircraft for hobby or recreational purposes does not require FAA approval, all model aircraft operators must operate safely and in accordance with the law. The FAA provides guidance and information to individual UAS operators about how they can operate safely under current regulations and laws. Guidance may be found at http://www.faa.gov/uas/publications/model_aircraft_operators/.

Model Aircraft Operations

Section 336(c) of the law defines “Model Aircraft” as “. . . an unmanned aircraft that is –

(1) capable of sustained flight in the atmosphere;

¹ See FAA Pilot/Controller Glossary (Apr. 3, 2014), available at http://www.faa.gov/air_traffic/publications/media/pcg_4-03-14.pdf

- (2) flown within visual line of sight of the person operating the aircraft; and
- (3) flown for hobby or recreational purposes.

Each element of this definition must be met for a UAS to be considered a Model Aircraft under the Act. Under Section 336(a) of the Act the FAA is restricted from conducting further rulemaking specific to Model Aircraft as defined in section 336(c) so long as the Model Aircraft operations are conducted in accordance with the requirement of section 336(a). Section 336(a) requires that—

- (1) the aircraft is flown strictly for hobby or recreational use;
- (2) the aircraft is operated in accordance with a community based set of safety guidelines and within the programming of a nationwide community-based organization;
- (3) the aircraft is limited to not more than 55 pounds unless otherwise certified through a design, construction, inspection, flight test, and operational safety program administered by a community-based organization;
- (4) the aircraft is operated in a manner that does not interfere with and gives way to any manned aircraft; and
- (5) when flown within 5 miles of an airport, the operator of the aircraft provides the airport operator and the airport air traffic control tower (when an air traffic facility is located at the airport) with prior notice of the operation (model aircraft operators flying from a permanent location within 5 miles of an airport should establish a mutually-agreed upon operating procedure with the airport operator and the airport air traffic control tower (when an air traffic facility is located at the airport)).

Section 336(b) of the law, however, makes clear that the FAA has the authority under its existing regulations to pursue legal enforcement action against persons operating Model Aircraft in accordance with section 336(a) and 336(c) when the operations endanger the safety of the NAS. Nothing in section 336 otherwise alters or restricts the FAA's statutory authority to pursue enforcement action against any UAS operator, even those whose operations are conducted in accordance with sections 336(a) and (c) that endanger the safety of the NAS. So, for example, a Model Aircraft operation conducted in accordance with section 336(a) and (c) may be subject to an enforcement action for violation of § 91.13 if the operation is conducted in a careless or reckless manner so as to endanger the life or property of another.

UAS Operations that are not Model Aircraft Operations

Operations of UASs that are not Model Aircraft operations as defined in section 336(c) of the law and conducted in accordance with section 336(a) of the law, may only be operated with specific authorization from the FAA. The FAA currently authorizes UAS operations that are not for hobby or recreational purposes through one of three avenues: (1) public aircraft operations; (2) civil aircraft certification; or (3) exemptions under 14 CFR part 11 that relies on section 333 (Special Rules for Certain Unmanned Aircraft Systems) of the Act for relief from the airworthiness certificate requirement. In all three cases, Certificates of Waiver or Authorization (COA) are also required. In accordance with § 91.903 the FAA grants COAs to applicants waiving compliance with certain regulatory requirements listed in § 91.905. The applicants must be able to show that they are able to safely conduct operations in the national airspace system. The COA contains specific safety risk mitigation(s) with which the applicant must comply in order to conduct operations. The FAA also issues COAs on an emergency basis when: 1) a situation exists in which there is distress or urgency and there is an extreme possibility of a loss of life; 2) the proponent has determined that manned flight operations cannot be conducted efficiently; and 3) the proposed UAS is operating under a current approved COA for a different purpose or location.

1. Public Aircraft Operations + COA. In accordance with 49 U.S.C. §§ 40102 and 40125, a public entity performing a governmental function may operate UAS in the NAS. Further information about public aircraft operations is available in Advisory Circular (AC) 00-1.1A, Public Aircraft Operations (Feb. 12, 2014). Public aircraft operators must also obtain a COA prior to operations.

2. Airworthiness Certification + COA. For civil operators, you can apply for a special airworthiness certificate under 14 CFR part 21. Refer to the current edition of FAA Order 8130.34, Airworthiness Certification of Unmanned Aircraft Systems and Optionally Piloted Aircraft. The full civil type certification process allows for production and commercial operation of UAS and is a lengthy process typically undertaken by aircraft manufacturers. UAS operators who have obtained an airworthiness certificate for their UAS must also obtain a COA before conducting UAS operations.

3. Section 333 Exemptions + COA. In accordance with part 11, §§ 11.15 and 11.61-11.103 and the FAA's authority in 49 U.S.C. § 44701(f), the FAA may grant exemptions from regulatory requirements. The exemption process allows for the submission of a petition to the FAA outlining why the granting of an exemption would be in the public interest, the need for the exemption, and the reasons why granting the petition would not adversely affect safety or would provide a level of safety equal to the rules from which the exemption is sought. The FAA is currently reviewing petitions by, and granting exemptions to, civil UAS operators that want to operate for other than hobby or recreational purposes. Under section 333 of the Act, operators in appropriate circumstances can be exempted from airworthiness certification requirements. UAS operators who have obtained an exemption must also obtain a COA before conducting UAS operations.

Finally, UAS operators must understand that all UAS operations that are not operated as Model Aircraft under section 336 of the Act are subject to current and future FAA regulation. At a minimum, any such flights are currently required under the FAA's regulations to be operated with a certificated aircraft, with a certificated pilot, and with specific FAA authorization.

For All UAS Operators

More information regarding UAS operations is available at the FAA Unmanned Aircraft Program Office's Web site: <http://www.faa.gov/about/initiatives/uas/>.

If you require additional information please contact me at {contact information}

In conclusion, we hope the information provided to you in this letter will assist you in conducting safe UAS operations in compliance with the FAA's regulations.

Sincerely,

Aviation Safety Inspector

Executive Director Message

Debra Byrd

The Annual convention went really well for trying the two day convention. It seems most people like the two day convention, so that is what will continue to do. We have already set the dates for next year's convention, February 2-3, 2017, so mark your calendar.

The board is working on the summer seminar, July 22-23, 2016 at the Henry Hunter Center in Starkville, MS. We will be having a Golf scramble July 21, 2016. We will be doing things a little different for the golf this year. You will make on your registration if you are playing golf but will not pay until you get to the golf scramble. This way if there is not enough to play, I do not have to try to refund money to people.

I am working on a 2016 Directory; I hope to have it ready by May. Also mark your calendar for the Ethics and Standards workshop; it will be December 3, 2016 at the Holiday Inn by Bass Pro in Pearl, MS.

The Mississippi Association of Professional Surveyors has a Facebook page. I hope this will be another way to get information out to the membership. Please LIKE us on Facebook.

If you have any information that you would like to see in the next issue, please contact me.

The contact information for MAPS.

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601-757-7691

Email:

maps4debra@bellouth.net

MAPS CALENDAR

March 8, 2016: State Capital 8-11
MAPS board meeting 12-3 At Bass Pro

July 22 & 23, 2016: 2016 Summer Seminar
Hunter Henry Center, Starkville, MS

December 3, 2016: Ethics and Standards workshop
Holiday Inn, Pearl, Mississippi

February 2-3, 2017: 2017 MAPS Annual Convention
Vicksburg Convention Center, Vicksburg, MS

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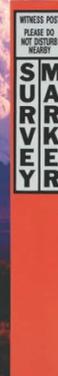
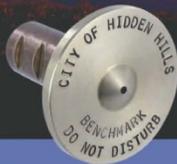
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MAPS Convnetion



Common Research Mistakes Surveyors Make (Road Records)

by
Knud E. Hermansen†
P.L.S., P.E., Ph.D., Esq.

In previous articles I have explained two of the five common mistakes made by surveyors in researching the records. In the first article I discussed mistakes made in determining senior title. In the second article I explained the deficiency existing when a forward search is omitted. The third of five common mistakes often made by surveyors when researching the records is the failure to research the road records.

Surveyors often omit searching for road records even though their property is bounded by a public road. Even if a search of road records is conducted, a surveyor will often fail to find the appropriate road records.

Road records are particularly difficult records to research for three reasons: 1) First, road records are not always found where other property records are recorded. Road records are often found in municipal offices, department of transportation offices, court records, county commissioner records, and even state archives or other historical archives. The location of road records often depend on the manner the roads were created (e.g., dedication, condemnation), the type of road (e.g., municipal, county, state) and age of the road. 2) The second difficulty arises because there is seldom an index to help locate the appropriate road record among the plethora of government documents that exist. 3) The third difficulty is the trouble in identifying a particular road from the ancient description often used when describing roads found in the records. In other words, when a road record is discovered and read, the reader often finds it difficult if not impossible to identify what road is described and where the road exists on the face of the earth using the ancient description. Consider how difficult it would be to locate the following road if knowledge of the area has been lost with the passage time.

Beginning 2 rods from Samuel Widman's pasture fence at the turnpike road, thence through Ezekiel King's land, N20°E 25 rods to a stake; thence N36°E, 120 rods to a stake; thence N48°E 90 rods to Jacob Denton's sawmill lane... To be opened at four rods. 12 June 1834.

Researching road records is not so much a matter of following a particular procedure as employing dogged determination and fortitude.

The failure to search for and locate the appropriate road record often results in the surveyor failing to properly fix the width of the road and thereby causing the client or other landowners to mistakenly build in the public right of way.

Describing typical weaknesses in the surveyor's record search will not necessarily convince surveyors to undertake the tedious and time consuming research necessary to overcome the limitations that were explained.

Knowledge of the deficiencies should allow the surveyor to inform the client that these deficiencies in the research exist at the completion of services. Should the client want to compensate the surveyor for the time to perform a thorough search, these limitations can be overcome.

† Knud is a professor in the surveying engineering technology program at the University of Maine. He offers consulting services in the area of boundary litigation, title, easements, land development, and alternate dispute resolution.



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Common Research Mistakes Surveyors Make (Easements)

by

Knud E. Hermansen†

P.L.S., P.E., Ph.D., Esq.

In previous articles I have explained three of the five common mistakes made by surveyors in researching the records. In the first article I discussed mistakes made in determining senior title often required when assessing the boundaries involving an overlap. In the second article I explained the deficiency that may exist when a forward search is omitted. In the third of five common mistakes I explained the necessity for researching the road records. In this article, I will explain the fourth deficiency – researching and identifying easements.

The failure to identify and locate easement records is a major source of liability for surveyors. There are numerous reasons for research difficulties associated with easements. Because some easements are public easements they suffer from the same difficulties associated with locating road records.

Other problems arise by the legal nature of the easement itself. An easement appurtenant to property that was created in, for example, 1823 by recorded grant need not be mentioned in any property records thereafter yet will still effectively burden property and benefit another property (appurtenant property).

The law presumes that an appurtenant easement is a part of the appurtenant property and passes with the conveyance of the appurtenant property even though the easement is not mentioned in subsequent records for the appurtenant property. For example, it is not unreasonable for a surveyor to stop the search of property records long before reaching the ancient property records where the deed for the easement was recorded - especially if all the boundaries to the property being surveyed were created subsequent in time to when the easement was created.

Another problem is that easements often arise from records that are not deeds. The sale of a lot by reference to a subdivision plan may give the lot owner an appurtenant easement in every road or other benefit shown on the plan (such as a park). Also, the call for a private road as a boundary, owned by the grantor at the time of the conveyance, may give an easement to the grantee in the grantor's private road. Unless the surveyor is aware of the law regarding implied easements, the surveyor may fail to research, locate, and mention the implied easement.

Finally, many easements that are evidenced by a deed are so poorly described that it is virtually impossible to locate or fix the width of the easement. These easements are often categorized as "blanket easements."

I hereby convey to William Surry an easement to install and maintain a water pipe across my property.

Where the surveyor has stopped research prior to a grant from the government, the surveyor would be wise to inform the client of a caveat regarding the presence of easements that may not have been discovered and shown on the surveyor's plat.

† Knud is a professor in the surveying engineering technology program at the University of Maine. He offers consulting services in the area of boundary litigation, title, easements, land development, and alternate dispute resolution.



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MAPS 2016 Summer Seminar Agenda

Thursday, July 21, 2016

1:00 PM Tee off for Golf Scramble at
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You will pay when you get there.
We have a set Tee Time

Seminar Location

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100 Hunter Henry Blvd,
Miss State, MS 39762

Lodging:

Hilton Garden

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Starkville, MS 39759
662-615-9664

Please tell them that you are with the
“**Mississippi Association
Professional Surveyors**” in order to
get the convention rate.

***Reservations must be made by July
7, 2016 in order to get this rate.***

Holiday Inn

1110 B Hwy 12
Starkville, MS 39759
662-324-0076

Please tell them that you are with the
“**MPS**” in order to get the convention
rate.

***Reservations must be made by July
1, 2016 in order to get this rate.***

Friday, July 22, 2016

7:00 AM REGISTRATION

7:30 AM **GPS**
Robert Martin (PDH: 2.0)

9:30 AM Break/View Exhibits

10:00 AM **GPS**
Robert Martin (PDH: 2.0)

12:00 PM Lunch/View Exhibits

1:00 PM **GPS Present & Future**
Adam Arrington (PDH: 2.0)

3:00 PM Break/View Exhibits

3:30 PM **UAV mapping Systems**
Adam Arrington (PDH 2.0)

5:30 PM ADJOURN

Saturday, July 23, 2016

7:00 AM REGISTRATION

7:30 AM **Ethics**
Chad Ainsworth (PDH:1.0)

8:30 AM **How to access MDOT
asbuilt information**
Chad Ainsworth (PDH:1.0)

9:30 AM Break

10:00 AM **Open Forum**
Joe Byrd (PDH:1.0)

11:00 AM **Standards of Practice for
Surveying in the State of Mississippi**
Tim Brewer (PDH 1.0)

12:00 ADJOURN

MAPS 2016 SUMMER SEMINAR REGISTRATION FORM

July 21-23, 2016, Hunter Henry Center, Starkville, MS

MAPS Member Seminar Registration Fees:			* Full Package Includes: Registration to Friday and Saturday Seminar, Lunch on Friday
Member – Full Seminar Package*	\$160.00	\$ _____	
Friday only	\$100.00	\$ _____	
Saturday only	\$100.00	\$ _____	
Student Member – Full Package	\$40.00	\$ _____	Please Mail this form in with payment. Checks only, or pay by PayPal online. You will not be pre-registered for the seminar until payment has been received. You will receive an email when we have received your registration.
<i>Non-Member Seminar Registration Fees:</i>			
Non-Member -Full Seminar Package*	\$260.00	\$ _____	
Friday only	\$150.00	\$ _____	
Saturday only	\$150.00	\$ _____	
OPTIONAL ACTIVITIES: (fees for members and non-members)			
Thursday, July 21- Golf Scramble will pay the day of Yes _____			
Late Registration <u>after July 1, 2016</u>	add \$50.00	\$ _____	
Total Fees Paid: _____			
NO REFUNDS AFTER: July 1, 2016			

Seating is Limited. Pre-Register early. Registration at the door will be on space available.

Name For Badge : _____

Address:: _____

PLS #: _____ Phone:: _____

Email:: _____

Please return this form along with your payment to :

Mississippi Association of Professional Surveyors

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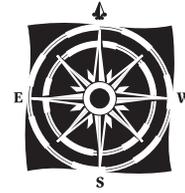
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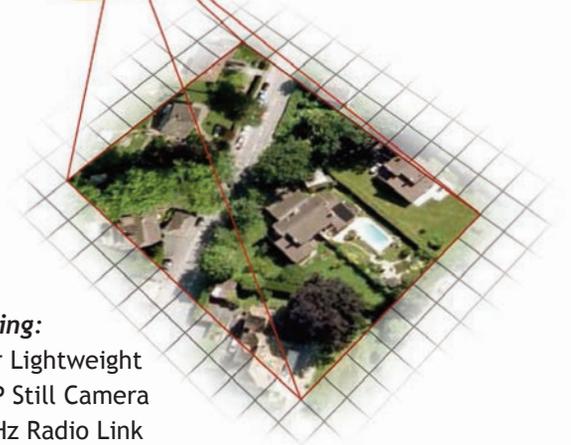


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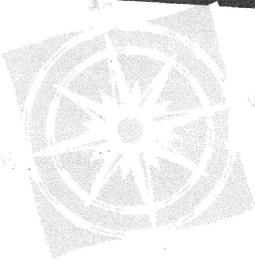


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