

Agenda

Presented by David R. Doyle

Day One: Fundamentals of Geodetic Datums

Thursday, October 1, 2020 | 10:30 am - 3:15 pm CDT (including a 60-min. break)

Horizontal Datums

Geodetic surfaces – ellipsoid and geoid
Positioning elements of the National Spatial Reference System (NSRS)
Classical horizontal positioning – triangulation and traverse
U.S. national horizontal datums – NAD 27 and NAD 83

Development of Satellite Positioning Systems

Foundation of space-based positioning up to GPS/GNSS
GPS impact on integrity of NAD 83
Relationship of NAD 83 and WGS 84
Horizontal datum transformations – NADCON, Molodensky

Vertical Datums

Vertical datums definitions – geodetic and tidal
U.S. national vertical datums – NGVD 29 and NAVD 88
Issues with GPS/GNSS-derived heights
Vertical datum transformations – VERTCON

Day Two: New Geodetic Datums for the United States 2022

Friday, October 2, 2020 | 10:30 am - 2:45 pm CDT (including a 60-min. break)

Rationale for Replacing Current Geodetic Datums

Problems with NAD 83 and NAVD 88
Introduction to International Terrestrial Reference Frame
Adoption of ITRF14 into NSRS

National Geodetic Survey Plans for New National Datums

New geometric/geopotential datum definitions
Gravity for the Redefinition of the American Vertical Datum (GRAV-D)
Computing approximate horizontal and vertical positional differences
Importance of positional metadata

Can't Attend? Order the Webinar as a Self-Study Package!

Recordings of this webinar are available for purchase. See registration panel for more information and please refer to specific state licensing rules or certification requirements to determine if this learning method is eligible for continuing education credit.

Geodetic Datums:

Fundamentals and New Developments

Online - Thursday, October 1 and Friday, October 2, 2020



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Learning Objectives

You'll be able to:

Examine the foundational attributes that define horizontal and vertical geodetic datums.

Realize the accessibility of datums through passive and active control stations.

Review the positional reliability of geoid models and datum transformations.

Study the rationale for the decision by the National Geodetic Survey to replace existing horizontal and vertical datums.

Understand the approximate 3-dimensional positional changes to existing datums.



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Geodetic Datums: Fundamentals and New Developments

Live, Interactive Webinar Series

Thursday, October 1 and Friday, October 2, 2020



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Continuing Education Credits

Professional Engineers
7.0 PDHs in all states

Floodplain Managers
7.0 ASFPM CECS

Land Surveyors

7.0 PDHs,
(excluding Florida, Kansas,
New Jersey, Tennessee, Texas)



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Faculty

David R. Doyle *Base 9 Geodetic Consulting Services, in Silver Spring, MD*

Mr. Doyle has been involved in geodetic surveying since 1967. He joined the National Geodetic Survey in 1972 and functioned in numerous positions dealing with national adjustments, datum transformation and outreach to the surveying and geospatial community. Mr. Doyle held the position of Chief Geodetic Surveyor for 12 years prior to his retirement in 2013. He now owns Base 9 Geodetic Services which provides consultation to public and private agencies and companies as well as teaching seminars on the fundamentals of geodesy and the National Spatial Reference System. Mr. Doyle is a past president of the American Association for Geodetic Surveying, and is an active member of the DC, Maryland and Virginia professional surveyors’ associations. He has published more than 30 technical articles on geodesy and was honored as the recipient of the AAGS 2018 Joseph Dracup Lifetime Achievement award in addition to numerous other service awards from state and national surveying associations.

Webinar Information

Day One: Fundamentals of Geodetic Datums
Thursday, October 1, 2020
10:30 am - 3:15 pm CDT (including a 60-min. break)

Day Two: New Geodetic Datums for the United States 2022
Friday, October 2, 2020
10:30 am - 2:45 pm CDT (including a 60-min. break)
(please log into the webinar 15 - 30 minutes before start time)

Tuition
\$299 for individual registration
\$199 for three or more registrants from the same company at the same time.
Included with your registration: *PDF seminar manual.*

How to Register

- Visit us online at www.halfmoonseminars.org
- Mail-in or fax the attached form to 715-835-6066
- Call customer service at 715-835-5900

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Cancellations: Cancel at least 48 hours before the start of the webinar, and receive a full tuition refund, minus a \$39 service charge for each registrant. Cancellations within 48 hours will receive a credit toward another webinar or the self-study package. You may also authorize another person to take your place.

Additional Learning

Tracking the Railroads *Live, Interactive Webinar*
Wednesday, September 30, 2020 | 11:00 am – 4:00 pm CDT (incl. 30-min. break)

Agenda Highlights:

- What is a “railroad” by law? (and why does it matter?)
- Railroad records and regulation
- Examining the extent, type, location and time/duration of railroad rights

Continuing Education Credits:

- Professional Engineers: 4.0 PDHs Land Surveyors: 4.0 PDHs
- Certified Planners: 4 | CM

Presented by
Wendy Lathrop, PLS, CFM *President and Owner of Cadastral Consulting, LLC*

To register and to view more details please visit:
www.halfmoonseminars.org/webinars/
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Continuing Education Credit Information

This interactive webinar offers 7.0 PDHs/continuing education hours professional engineers licensed in all states and 7.0 PDHs to land surveyors in all states, except those in Florida, Kansas, New Jersey, Tennessee, and Texas.

HalfMoon Education is an approved continuing education sponsor for engineers in Florida (Provider No. 0004647), Indiana (License No. CE21700059), Maryland, New Jersey (Approval No. 24GP00000700), North Carolina (S-0130), and North Dakota.

HalfMoon Education is deemed an approved continuing education provider for engineers and land surveyors licensed in New York via its registration with the American Institute of Architects Continuing Education System (Regulations of the Commissioner §68.14(i)(2) and §69-1.5(i)(2)).

HalfMoon Education is an approved continuing education sponsor for land surveyors licensed in Indiana (License No. CE21700059), Maryland, North Carolina (S-0130), and North Dakota.

The Association of State Floodplain Managers has approved this course for 7.0 CECs for certified floodplain managers.

Course completion certificates will be awarded to participants who complete the webinar in its entirety, respond to all the verification prompts during the instruction, and earn a score of 80% on the quiz that follows the instruction (multiple attempts allowed).

Can’t Attend? Order the Webinar as a Self-Study Package!
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Registration

Geodetic Datums: Fundamentals and New Developments

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How to Register		Registrant Information
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Complete the entire form. Attach duplicates if necessary.		
		Registrant Information Name: _____ Company/Firm: _____ Address: _____ City: _____ State: _____ Zip: _____ Occupation: _____ Email: _____ Phone: _____ Additional Registrants: Name: _____ Occupation: _____ Email: _____ Phone: _____ Name: _____ Occupation: _____ Email: _____ Phone: _____ Email address is required for credit card receipt, program changes, and notification of upcoming seminars and products. Your email will not be sold or transferred. () I need special accommodations. Please contact me.

Tuition
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