

# LSAW

Land Surveyors' Association of Washington

## **FALL SEMINAR SERIES - NOVEMBER 2-3, 2018**

### **OPUS PROJECTS – 2022 NATRF DATUM – GNSS/3D SCANNING**

**Presented by North Puget Sound Chapter**

**When:** November 2-3, 2018

**Where:** Renton Technical College – 3000 NE 4th Street, Renton, WA 98056

**Registration:** Registration closes October 30th. **Pre-registration Required!**

**Friday, 8:00 AM - 4:00 PM and Saturday, 9:00 AM - 2:30 PM**

**OPUS Projects Training (12 Hours) \*\*LIMITED TO FIRST 24 PAID ATTENDEES\*\***

*Bill Stone, Southwest Region NGS Geodetic Advisor & Dan Determan, Northwest Region NGS Geodetic Advisor*

OPUS Projects gives users web-based access to simple management and processing tools for projects involving multiple sites and multiple occupations. The advantages of OPUS Projects are:

- Data uploading through OPUS.
- Customizable data processing via the PAGES software suite.
- Visualization and management aids.

**Friday, 8:00 AM - 4:00 PM**

**2022 NATRF Datum (7 Hours)**

*Dave Doyle, base9geodesy*

**Are you prepared for the national datum changes planned for 2022? Can you answer these six questions?**

1. What is the biggest problem with the North American Datum of 1983 (NAD 83)?
2. What organization is responsible for the development of the International Terrestrial Reference Frame (ITRF)?
3. Which geodetic measurement systems are used to compute ITRF solutions?
4. What is the approximate percentage of currently published 1st and 2nd-Order North American Vertical Datum of 1988 (NAVD 88) bench marks will NGS likely use in the definition of the new vertical reference frame?
5. What are the names of the new reference systems that NGS will adopt?
6. How large are the expected horizontal position and orthometric height changes expected to be across Washington?

**Saturday, 8:30 AM - 2:00 PM (Field User Session)**

**GNSS/RTK/WSRN (2.5 Hours)**

*Mel Philbrook, Frontier Precision*

How to get the most out of using your GNSS and the WSRN

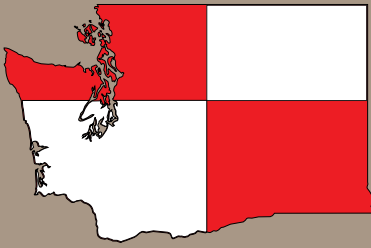
**Laser Scanning (2.5 Hours)**

*Jarret Price, Frontier Precision*



Discover multiple 3D data collection technologies and review some advanced software tools for extracting/creating useable deliverables from point clouds.





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### Special Thank You to Our Sponsor



Frontier Precision will provide a special presentation during the Friday luncheon.

#### UAS Tips & Best Practices

*Drew Johnston, UAS Sales and Service – Frontier Precision*

How to choose a UAS, Current FAA regulations, Mission Planning, Automated Flight Apps, Post Processing Software such as Pix4D, and examples of output data. Followed by Q&A

### HOTEL ACCOMMODATIONS AVAILABLE AT:

**Hampton Inn & Suites - 1300 Lake Washington Blvd. North - Renton, WA**

**Reservations:** 425-524-4440 - **Group Code:** LSA - **Cut-off Date:** October 12th - **Room Rate:** \$116

### REGISTRATION CLOSES OCTOBER 30th!

Online registration available at: [LSAW.org](http://LSAW.org)

Questions? Contact LSAW (888) 994-2845 ~ [info@lsaw.org](mailto:info@lsaw.org)

### REGISTRATION OPTIONS

- OPUS Projects (Fri. & Sat., 12 Hrs.) :  LSAW Members \$325  Non-Members \$500
- 2022 NATRF Datum (Fri., 7 Hrs.):  LSAW Members \$175  Non-Members \$250
- Field User Session (Sat., 5 Hours):  LSAW Members \$90  Non-Members \$150

#### REGISTRATION INFORMATION

#### PAYMENT INFORMATION

NAME \_\_\_\_\_

Total Enclosed \$ \_\_\_\_\_

COMPANY \_\_\_\_\_

Check (Checks payable to LSAW)  Visa  MasterCard

ADDRESS \_\_\_\_\_

Account # \_\_\_\_\_

CITY, STATE, ZIP \_\_\_\_\_

Exp. Date \_\_\_\_\_

CID # (3 digits on back)

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Billing Address (digits only) and Billing Zip Code \_\_\_\_\_

EMAIL \_\_\_\_\_

**Mail to: LSAW**  
526 South E Street  
Santa Rosa, CA 95404

**Fax to:** (707) 578-4406

**REGISTER ONLINE**  
**LSAW.org**