

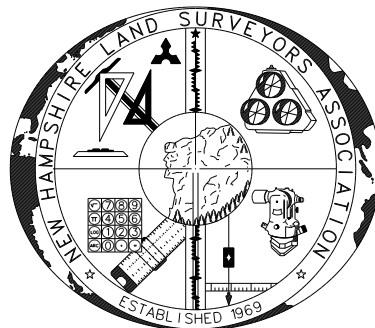
New Hampshire Land Surveyors Association  
P.O. Box 689  
Raymond, NH 03077

# History and Development of Topographic Surveying, Isolines and Contours

Thursday  
June 22, 2017  
Samuel E. Paul  
Community Center  
61 South Street  
Troy, NH 03465  
603-242-7722

Sponsored by the  
New Hampshire  
Land Surveyors Association

Continuing Education Units: 2.0



## Seminar Description

200 years ago mapmakers could only draw a picture that represented a hill, possibly shading them to show some sense of an elevation change. David Mann will take us on a “time travel” from these early times up to his firsthand methods from the 90’s. After a lunch break, Rick Ladd will whisk us ahead to modern times, showing how surfaces are prepared with CAD software. He will detail how to use the surface data available at GRANIT and Point Cloud information to create a state of the art plan.

## Speakers

**David A. Mann** resides in Keene, N.H. with his wife and best friend Toni. David is Editor of the VLSL publication, *The Cornerpost*. He was stricken with the “I want to know more” bug early in his surveying career, if not before, and has always been interested in the History of Land Surveying. He also suffers from the Civil War battlefield visitation bug and the “I can’t walk past a book sale syndrome.” He graduated from Bucks County Tech with a degree in Civil Technologies. He is a licensed land surveyor in Vermont and New Hampshire.

**Rick Ladd** is the owner of CADNET Services, LLP, a CAD and IT consulting firm located in Manchester NH. Rick Ladd has been a member of NHLSA in one capacity or another since 1988, and CADNET is currently a sustaining member.

## General Information

This seminar is limited to the first 100 NHLSA members. To ensure a seat, **please register early** by completing the attached registration form and mail it immediately.

**Price \$0.00**

**Deadline: Registration must be received by June 16<sup>th</sup>.**

For information about registration, contact the NHLSA office at 1-800-698-5447 (in state) or 603-895-4822 (out of state).

If you would like information on the seminar, contact Education Director, Bob Smith @ 603-242-3818.

Since this is a free seminar, we'd like to remind you to please prepare to bring your morning breakfast, break snacks, drinks, and bagged lunch.

Also, we'd like to thank David and Rick for donating their time and expertise with NHLSA members.

## Tentative Seminar Schedule

- 8:00-8:15 a.m. **Sign-In**
- 8:15-8:30 Introduction of Speakers
- 8:30-12:00 p.m. **Morning Session**
- I. Introduction
  - II. Exploring Ancient Civilizations and their Instruments

- III. Exploring the European Renaissance
- IV. Development of Mounds, Shading, and Hachures

10:00-10:15 **Morning Break**

- V. Introduction of Isolines and Contours
- VI. First Aerial Photographs
- VII. Development of Modern Contour Surveying Techniques
- VIII. My experience with Topographic Surveying from 1967 to 1990

12:00-1:00 Lunch Break (on your own)

1:00-4:00 **Afternoon Session**

- I. Surface creation in CAD software programs
  - a. Existing Surface model creation and contouring using CAD software
  - b. Edits of Surface models
  - c. Analysis tools of Surface models
  - d. Displays of Surface models

2:15-2:30 **Afternoon Break**

- II. Surface Tools for use with LiDAR, GIS, and Point Clouds
  - a. Using NH LiDAR data for surfaces and contouring
  - b. Surface data available at GRANIT and how to use it
  - c. Point Cloud information and creating surfaces from them

3:30-4:00 Wrap-up, Q&A & **Sign Out**

## History and Development of Topographic Surveying

June 22, 2017

| Sign up for:                           | Time      | Price         |
|--|-----------|---------------|
| <input type="checkbox"/> NHLSA members | 8:00-4:00 | <b>\$0.00</b> |

Company \_\_\_\_\_

Name \_\_\_\_\_


Address \_\_\_\_\_

E-mail address \_\_\_\_\_

Phone \_\_\_\_\_

Others attending \_\_\_\_\_

Return To:

|   |   |
|---|---|
|  | <b>New Hampshire Land Surveyors Association</b> |
| P.O. Box 689<br>Raymond, New Hampshire 03077-0689                                     |   |
| Phone: 603-895-4822<br>Fax: 603-386-6856<br>Email: info@nhlsa.org                     |   |