

# HAWAII LAND SURVEYORS ASSOCIATION

*Lae J Lae A newsletter from the Hawaii Land Surveyors Association, an affiliate of the National Society of Professional Surveyors and a member organization of the American Congress on Surveying and Mapping*

March-April  
2018  
Volume 31, Issue 2

E-mail: [hlsa-hawaii@outlook.com](mailto:hlsa-hawaii@outlook.com)

Website: [www.hlsahawaii.org](http://www.hlsahawaii.org)



## PRESIDENT'S MESSAGE

### The Force

I enjoy Star Wars, but by no means am I an expert. I feel much of the land surveyors with the knowledge, experience and wisdom (like the founding members of the Association) are like Jedi Masters with values deeply rooted in them through their training and upbringing from the generations of surveyors in the past. They hold the knowledge of practice and procedures with the understanding of how and why it all works. They have taken the time to train and educate and relay these values to the surveying community, sort of like the "Force". I don't want to call them "old" as I am not a young person by any stretch of the imagination, but I do try to remain young at heart as I use this quote taken out of the series but, hopefully, not out of context, "...there is a disturbance in the Force...". We are at a time where technology has reached the masses and the expertise of certain disciplines may sometimes be viewed as not required. Technology is great, but it should be used with some understanding of how and why it works.

The young surveyors who are in training are the new Jedi Knights who will need to carry on the values of knowledge and understanding. It is important to educate others outside of the surveying community of what we do and why, but in order to do this, we must further build the foundation to strengthen our position as professionals. Our surveying community may be considered small in comparison to other disciplines in the AEC field, but we do have an important role in supporting them in addition to providing services to homeowners, realtors, developers, etc.

There is a lot of experience out there. Whether they are members of the Association or not, they do possess the above-mentioned traits and, I believe, are willing to teach. Seek them out and ask questions. While a complete solution may not be provided, they can provide answers that can point you in the right direction. There is always something to teach and always something to learn.

On another note, our State has recently experienced natural events that have affected many local residents. NSPS has set up a foundation for disaster relief. Whether in need of assistance or would like to donate, please visit this site for information: <http://www.nsp.us.com/?page=DisasterRelief>

Thank you,  
Karl Nishio  
President, HLSA

LAEL  
Point to Point

## Summary of the NSPS SRPING BUSINESS MEETING

Feb. 20-23, 2018

Las Vegas, Nevada

The following is a summary of my notes taken at the NSPS Spring Business Meeting.

### **NSPS Member Dues Increase:**

I proudly counted Hawaii among the states that supported NSPS in this request for a modest raise (\$5-10) in annual membership dues. Currently there are 48 states that are 100% members in NSPS. However, four of those states in attendance at the conference had not yet gotten approval from their membership. Consequently the motion to increase the dues was withdrawn for this meeting. If approved at the next meeting, the raise would likely go into effect starting in January of 2019. As the Executive Committee the NSPS explained, more is being done with less, and this situation will get worse in the future if nothing is done. Because the budget for NSPS is derived mainly from dues, it was suggested that other sources of revenue be sought to augment the existing NSPS budget. It was agreed by all that the goal is for NSPS to be financially sound in the future, and that States need to push for 100% association membership for surveyors within their own states in order to grow the profession.

### **FIG: International Federation of Surveyors**

FIG represents the interests of surveyors worldwide. John Hohol serves as the NSPS liaison to FIG. He has been actively pursuing a bid for Florida to host the 2022 FIG Congress, with NSPS being a key sponsor. . FIG represents over 120 countries and holds a world congress every 4 years and sponsors a FIG Work week in a member country every year. Trimble, Leica, and Ricoh are partnering to support promotional activities on a global level for *Global Surveyors Day, March 21, 2018*. John Hohol also requested that NSPS sponsor a professional membership with the Pan American Association of Surveyors and Topographic Professionals to support and network with other associations in the Americas. The 2018 FIG conference will be held in Turkey this May and it is open to all surveyors. Please check out their website [www.fig.net](http://www.fig.net)

### **2018 National Surveyors Week**

National Surveyors week is celebrated annually during the third week in March. This year NSW was March 18-24, 2018. The NSPS website has plenty of ideas on how to commemorate and spread the word about our profession. If anyone would like to help to work on a task force to build this event for March, 2019, please contact the board!

## Lobby Day

NSPS seeks to influence national legislation in order to strengthen the Survey industry. This year the official “Lobby Day on Capitol Hill” will be on April 11, 2018. Three (3) survey-related legislative bills are being chosen to present to the State representatives in an effort to garner both legislative sponsors and support. This year HLSA will investigate the feasibility of having our own Lobby Day in Hawaii when our senators and congressional representatives are back here at their home offices. We will discuss the same legislation as the official Capitol Hill Lobby Day efforts.

## Remember the ill-fated LightSquared debacle???? In steps Ligado Networks, LLC

### Background

In 2001 a politically connected private satellite communications company named LightSquared proposed a wholesale nationwide wireless broadband network. The network would have combined existing satellite communications services with a ground based 4G-LTE network that transmitted on the same radio band as its satellites. The stated goal was to make the internet and digital communications accessible to the entire country via a commercially viable network. Unfortunately, the signal that LightSquared network proposed for this network would have operated very close to the L-1 bandwidth used by GPS receivers. The terrestrial signals would have been much stronger than the relatively weak satellite signal used by GPS receivers. Independent tests confirmed that the terrestrial LightSquared transmission would have crippled existing GPS receiver signals within a wide radius of transmissions. At the time, the geospatial community, including NSPS, strongly lobbied against the LightSquared proposal and had the support of the major GPS manufacturing companies, such as Trimble, Garmin and John Deere, as well as the Departments of Defense and Transportation. Many legislative hearings were held regarding the potentially devastating effects of bandwidth interference with GPS technologies. As of 2013, the FCC, not usually in the position of policing bandwidth, was forced to deny LightSquared permission to build its terrestrial network. In 2014 LightSquared went bankrupt.

### Currently:

After restructuring, in 2016 the entity known as “LightSquared” was resurrected as “Ligado”. Ligado is currently issuing the same request to the FCC; to allow an integrated satellite and terrestrial based network, though now to build out a 5G-LTE and Internet of Things (IoT) communications network. The major stakeholders in Ligado Networks are the same as they were for LightSquared as is the proposed bandwidth. To better politically position this request to the FCC, undisclosed deals were made with the major commercial stakeholders, including Trimble, John Deere, and other manufacturers, who are now currently supporting the Ligado efforts. Ligado is proposing different technological and deployment solutions to mitigate GPS interference.

The GPS community, including the U.S. Department of Transportation (DOT) and the Department of Defense has used independent tests to show that the Ligado transmitters, even with proposed modifications to aspects of the deployment plan, still effectively become jammers for **existing**

GPS receivers. The US Position, Navigation and Timing Advisory Board (PNTAB) is strongly opposed to the current Ligado proposal, saying that it will devastate the GPS dependent industries in their current form.

As of this writing the US House has passed a resolution prohibiting deployment of the Ligado Network plan, or any similar plan, until GPS interference is mitigated. The Senate version does not have the necessary language to ensure protection to existing GPS technologies.

NSPS will continue to band with other stakeholders to oppose Ligado's deployment plans until revisions are shown to be compatible with the **existing** GPS uses.

References: <http://gpsworld.com/a-grave-threat-to-gps-and-gnss/>;  
<https://www.gps.gov/spectrum/lightsquared/#>  
[https://en.wikipedia.org/w/index.php?title=Ligado\\_Networks&oldid=818318864](https://en.wikipedia.org/w/index.php?title=Ligado_Networks&oldid=818318864)

For more information on this and other issues being followed by the NSPS Government Affairs Committee see the following link.

[http://c.ymcdn.com/sites/www.nsp.us.com/resource/resmgr/2018\\_Spring\\_Committee\\_Reports/Feb\\_2018\\_NSPS\\_JGAC\\_Government.pdf](http://c.ymcdn.com/sites/www.nsp.us.com/resource/resmgr/2018_Spring_Committee_Reports/Feb_2018_NSPS_JGAC_Government.pdf)

## **Student Competition**

The theme for the NSPS 2018 student competition was "*Surveying Service*". Twelve teams from college survey programs around the country came to Las Vegas and were asked this question: "What would you do if you had an opportunity to be part of a team traveling to a developing country to provide surveying and mapping in support of an engineering design or construction project such as a community well, small bridge, new school or roadway/utility corridor?"

There competition was broken down into two divisions, one for four year baccalaureate programs and one for associate degree programs. The challenge was the same for both divisions. The teams consisted of five surveying students; each team was given a compass, tape, tripod, level and a level rod, as well as lathes, ribbon, nails and hubs. They were allowed one day to plan and execute a stakeout of a square  $\frac{1}{4}$  acre tract of land and topo the area with the given tools, a day to analyze and map the data and prepare their reports. The final day was spent with the judges. Judging was based on the final plat, the analysis and the subsequent presentations. Presentations included summaries of the processes they used, challenges faced, and analysis of their errors.

The plots of land were undeveloped areas of desert with varying terrain owned by the BLM and secured for competition use by Paul Burns of the Nevada Association of Land Surveyors. I was truly impressed with the presentations I attended, and with the cohesion these teams showed. They were put into a unique field situation; it was cold, there were 25 mph winds, and they only had a *compass and tape* to execute the stakeout based on a given center stake. A level and level rod were the only tools they had to complete the topo. Most of the teams were unfamiliar with desert terrain and none had ever worked with only the basic principles of surveying as a basis for executing their assignment. They have been taught with high tech equipment, as have the majority of us. It was inspiring to see how

these students worked through the challenges they were given and it was a great example of problem solving based on sound surveying fundamentals.

Many thanks were given to all the judges that made a huge time commitment over the course of the competition and to the corporate sponsors and donations that went to supporting the teams. The students had an unforgettable educational experience. The First Place awards, in both divisions, have been named after Mike and Anne Besch of Ohio, in recognition of their longstanding promotion of the event.



2 year degree program first place went to: Northeast Wisconsin Technical College (Green Bay)



4 year degree program first place to Oregon Institute of Technology (Klamath Falls);

Interested in seeing more snippets from in the field? Video interviews with the teams at their posters, and videos showing each team's oral presentation, are being processed and soon will be available on the [NSPS YouTube Channel](#).

## **NSPS Foundation**

The NSPS Foundation is a non-profit foundation set up within NSPS set up expressly for supporting Educational and Charitable efforts.

The foundation report emphasized that requests continue for disaster relief from Texas, Florida, Puerto Rico and US Virgin Islands. The foundation has distributed over \$100,000 in grants to over 40 applicants. (HLSA donated all proceeds from attendees at the 2017 annual dinner to the NSPS Disaster Relief Fund)

In addition to the Disaster relief fund, the NSPS Foundation actively manages the following funds for the benefit of surveyors and surveying.

- Scholarships are awarded annually and managed by the foundation. [2018 NSPS Scholarship Announcement](#). Other educational support is listed on the NSPS website.
- The Bonnie S. Atwell Fund benefits surveyors in financial need due to injury and illness [NSPS Bonnie S. Atwell Memorial Fund](#)
- The Final Point Project supplies monuments to be set in tribute to surveyors around the country. A new addition to this is the Beginning Point project; it mirrors the Final Point but with the monument memorializing the date of birth of a deceased surveyor. This is run with the support of Bernsten International. For more information: [NSPS Final Point Project](#)

## **YOUNG SURVEYORS NETWORK (YSN)**

The Young Surveyors network remains an active contingent of NSPS. There will be a meet-up at the 2018 ESRI User Conference in San Diego, and there is a call out to young surveyors to attend. The daylong session will be focused on bridging the gap between survey and GIS.

There will also be a national gathering of the FIG North American Young Surveyors in Washington D.C. from October 16-18 in conjunction with the NSPS fall conference and the Maryland Society of Surveyors annual conference.

A new video is being planned with crowd sourced clips, with the focus on "What Surveying Means to Me."

The 2018 YSN Student Resume Competition was won by Katie Singleton, a senior at Oregon Institute of Technology. She received an all-expenses paid trip to the NSPS spring meeting.

For more information about YSN, including an application form through NSPS, see the following line.  
[NSPS Young Surveyors Network](#) (To be a part of HLSA Young Surveyors please contact Alike Garo  
[agaro@hlsahawaii.org](mailto:agaro@hlsahawaii.org)

The next NSPS meeting is Oct. 17-20, 2018, College Park, Maryland

### **FOR THE RECORD**

During the NSPS Conference in Vegas the HLSA NSPS Director won absolutely no money to bring back to Hawaii! I do appreciate all the support from the Hawaii Land Surveyors Association. If you have any questions on these, or any other NSPS programs, including NSPS Insurance or CST certification, please get in touch. As they say at the NSPS meetings, "It's a great day to be a surveyor."

Respectfully, Joanne Williamson

(808)436-6725-c

Hlsa-hawaii@outlook.com