



Sticky Notes

GECO Newsletter
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www.neighborhoodlink.com/GECO

Email: gecoradio@gmail.com

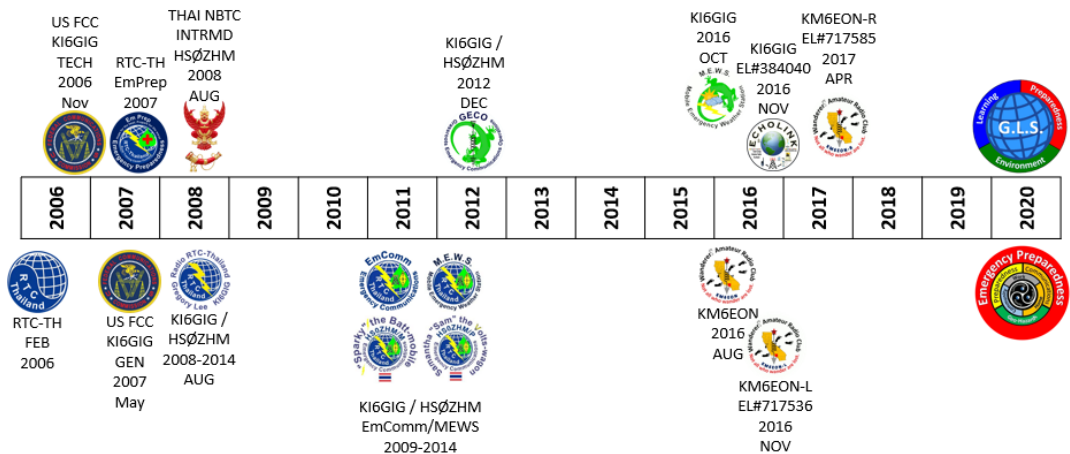
Ready to Serve and Sustain Our Community



GECO Continues to Evolve

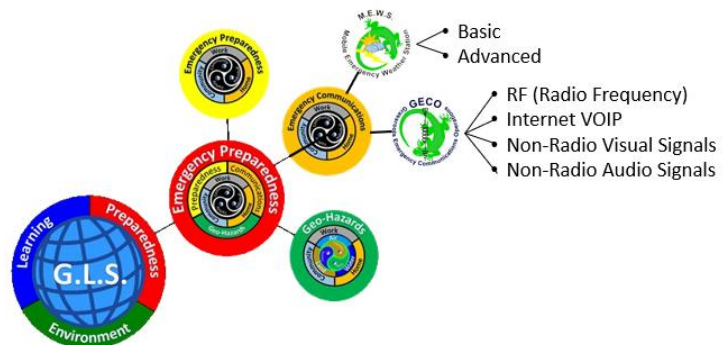
Many of you know I got a late start in HAM radio. Mark NYLA urged me to get my Tech License when he heard of my plans to retire in the 2006-2007 school year. He'd been after me to do this for several years. I had too many other expensive hobbies and activities at the time. But with retirement on the horizon, I figured "why not?" I got my Tech license and the KI6GIG call 2006 Nov 11. I went to Thailand for a Winter break project. I got an urgent email from Mark. "They will change the question pool in June for the General license. I am starting a study group for the General license. You should join us because once the question pool changes, I won't be able to help you prep for it." So, in Spring 2007 (~May), with having barely touched a radio, I studied for and got my General license.

The timeline on the right shows the evolution of my HAM activities relative to the Rural Training Center-Thailand. All prior EmPrep and EmComm activities have now culminated in a new Emergency



Preparedness program under the GLS banner.

The new organizational structure is shown at the right. GLS has three divisions: Environment, Learning and Preparedness. The Emergency Preparedness Division has three subsections: Geo-Hazards, EmPrep, and EmComm. The EmComm section has two units: MEWS (Mobile Emergency Weather Station; Basic and Advanced programs), and GECO (Grassroots Emergency Communications Operations). GECO consists of RF (radio frequency) operations on VHF/UHF; Internet VOIP (EchoLink, CQ-100); Non-Radio visual signals, and Non-Radio Audio Signals.



In This Issue

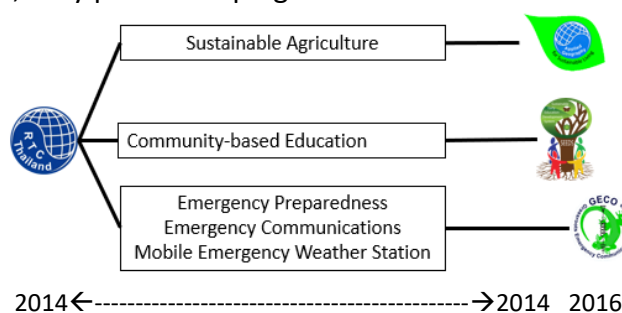
In This Issue			
<i>GECO Continues to Evolve</i>	1	<i>MEWS / GROW Lessons to be Merged Under GLS</i>	4-5
<i>GECO Part of a New Global Initiative</i>	2-3	<i>N7YLA Starts the HOSS Net</i>	5

GECO Part of a New Global Initiative

Many of you know GECO began as a second iteration of the Rural Training Center-Thailand emergency communications program (RTC-TH EmComm) and the Mobile Emergency Weather Station project (MEWS). When RTC-TH operations abruptly terminated in Aug 2014, several RTC-TH programs and projects were left hanging. The education programs and responsibility for the website archives were adopted by Sustainable Early Education Development System (S.E.E.D.S., a CA educational non-profit co-founded with Natalie Zartarian, 2014). With the help of Susan Eisenhower (Neighborhoodlink.com), Greg was able to keep the URLs for the RTC-TH websites by re-branding them Applied Geography for Sustainable Living (2014). Retaining the old URL was necessary to make all the past materials on those websites accessible. It was the best way to avoid “broken links” for people with older RTC-TH documents or papers with links to RTC-TH documents. Applied Geography expanded the sustainable agriculture theme to a more general level, Sustainable Living. The idea was the broader umbrella included the past sustainable agriculture activity. But without the demonstration farm, it could not be a primary program. In 2016, GECO was set up as a separate entity. It took over the website archival responsibility for the RTC-TH EmPrep, EmComm programs, and MEWS project.

The past six years, it has been a struggle. More effort was put into launching S.E.E.D.S. than Applied Geography. The transition from rural Thai farm to urban Los Angeles apartment blunted the sustainable activities. It was an uncomfortable fit at best. The GECO activities were a smoother transition (as evidenced by the web activities). And, life goes on with new twists, turns, ups and downs and unexpected challenges. Without going into details, those personal life changes took time and funds away from the S.E.E.D.S. start-up. After six years, they pulled the plug.

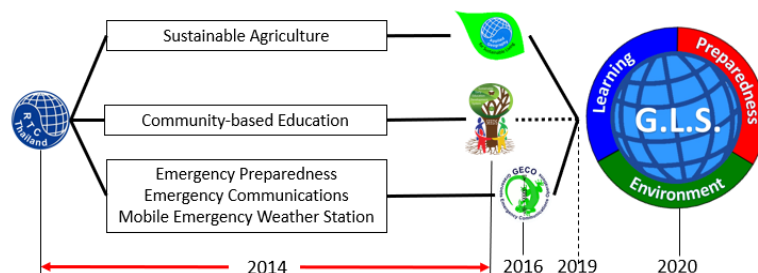
The struggle to recover from the demise of the RTC-TH was (and still is) a tough one. The RTC-TH end meant the near total loss of Greg’s lifetime possessions. The most immediate loss was all original documents and photos of the sustainable agriculture work in Thailand. Among the other items lost were all equipment (cameras, radios, computers, weather instruments, field survey



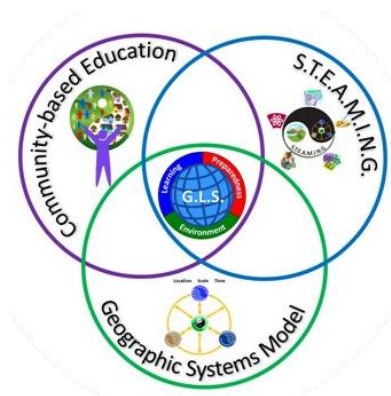
equipment, and training equipment in soils testing, field mapping, and weather observing. The RTC-TH library included a few thousand items (books, booklets, pamphlets, papers, albums; possibly the largest single English language library in Nan Province, Thailand). In the library were Greg’s 22 years of lessons and photo files in geography and English. Other photo files included all travels from 1964 to 2014 through 46 of the 50 states and more than 25 countries.

Stressful? Yes, but it is hard to turn away from a lifetime of work and seek a new path when so much remains to be done. The New Year 2020 was a time to pause and reflect. The current pandemic with self-quarantine regulations was an opportunity to sit, chill, and re-think the post-RTC-TH effort.

In the last month, after reading two UN reports, a new course was set. Greg established GSM Enterprises LLC to be



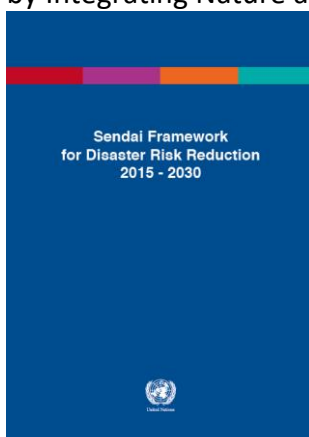
the new umbrella organization for the former RTC-TH programs. Some of Greg's loyal followers urged him to operate the GSM programs under the logo GLS (for Greg Lee Says). They see the awesome nature, value, and wisdom of his insights and practical methods. The Venn diagram show the three core concepts underlying all RTC-TH, SEEDS, and GECO lessons.



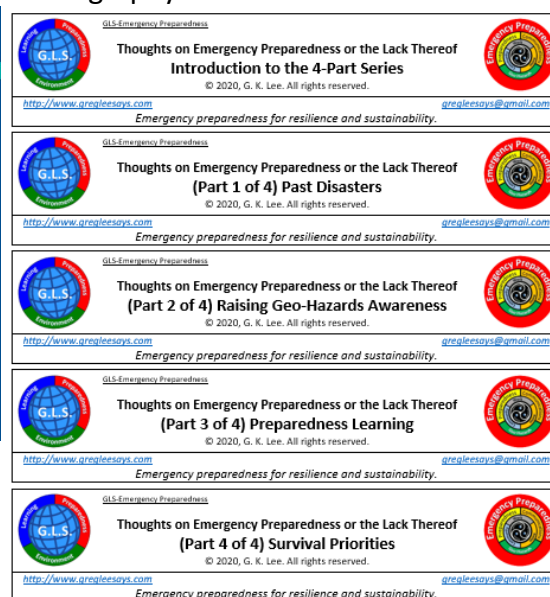
Community-based Education (C-bE) methods are designed for outdoor, hands-on training. It takes a no cost / low cost, no tech / low tech approach. C-bE was adapted and used in traditional public elementary school classrooms in rural Thailand. There was no added burden to the school budget.

The Geographic Systems Model (GSM) integrated Science, Technology, Engineering, and Mathematics (STEM). Lessons involved building equipment using off-the-shelf and recycled parts. Students were excited and engaged with the integrated learning that boosted English daily speaking skills. [Note: STEM evolved to STEAM by adding the "Arts" (e.g. language arts, graphic arts, and performing arts). After returning from Thailand, Greg created STEAMING based on his experiences in Thailand. STEAMING puts an enhances STEAM by Integrating Nature and Geography.

From 2020 onward, the new GLS Emergency Preparedness program



lessons support the [UN Sendai Framework](#) for Disaster Risk Reduction. Specifically, Priority #1 (Understanding disaster risk) and indirectly support Priority 3 (Investing in disaster reduction for resilience). The UN work is administrative and organizational at the international and national levels. GLS works at the grassroots level. The strategy is to forge contacts with local community leaders and teachers using local HAMs. 🌱



MEWS / GROW Lessons to be Merged Under GLS

Three weather observation programs emerged under the Rural Training Center-Thailand (RTC-TH). The first set of lessons were part of the Rural Environmental Education Enhancement Pilot Program (REEEP) to support the NASA-CERES S'COOL program. Those lessons were then modified and expanded to create the Mobile Emergency Weather Station program to support the RTC-TH Emergency Communications program. Disasters often destroy or damage existing weather stations. HAMs trained to make systematic weather observations could help improve flight safety for relief air operations. Getting Real On-Farm weather lessons adapted the previous weather lessons to address small rural family farm soil and water resource management.



All previous weather observation lesson sets will be re-compiled as the GLS Weather Observation Manual. This will bring them in alignment with the three divisions of the GLS (Sustainable Environmental Practices, Optimized Individual Learning, and Emergency Preparedness). The weather observation methodologies are universal. The applications are slightly different.

- Sustainable Environmental Practices: applications for soil and water resource management (e.g. rainwater harvesting, dealing with soil erosion, flood control)
- Optimize Individual Learning: focus is on learning practical applied science, engineering, mathematics using examples from weather observing.
- Emergency Preparedness: focus on weather observations to facilitating disaster relief, including aviation weather to improve flight safety for relief operations.

The format will continue the Basic and Advanced lesson dichotomy. Basic level lessons emphasize the no cost / low cost, no tech / low tech approach. This makes the lessons easy to implement in less developed and impoverished communities. We want the lessons used in elementary schools. They help integrate theory and practice to enable a competency-based education system. Advanced lessons use higher level equipment and more complex calculations. 🌱

N7YLA Starts the HOSS Net

When Mark N7YLA was ready to retire (~2005) he had an idea to start a radio net for HAMs over seventy years old. Brainstorming produced the HOSS Net (HAMs Over Seventy Society). A few years after retiring, Mark move to Washington State. He passed the GERC baton to Jim KG6TQT. It wasn't until 2012 when Mark began to get his HAM gear unpacked and dusted off. Then, in March 2020, he stirred up the coals and contacted Jim N7OIP and Greg KI6GIG to pull out his notes on the HOSS Net idea.

He decided to use NetQSO CQ-100 VOIP for the net. The idea was to use CQ-100 at the annual Washington State Science and Engineering Fair. The big appeal was being able to project the CQ-100 display of the Transceiver on a big screen to attract attention.

The HOSS Net is scheduled every Sunday at 1400 Hrs. Pacific time (2200 UTC) on QSONet CQ-100, 14.210 MHz. Sunday was chosen because former CQ-100 software subscribers are granted free access on Sundays. Those new to the CQ-100 program can try it free for 30 days. Contrary to the implied age range of the name, all HAMs are welcome to join the Net. It seems a substantial "age discount" is given for early enrollment.

The HOSS Net got off to a strong start. The first net was held on Apr 05, 2020 with about 10 HAMs joining. Last week the roster had grown to more than 24. Check-ins are from the US, Canada, UK, Oman, and Nepal. FFI: Mark N7YLA@arrl.net. 🌱

