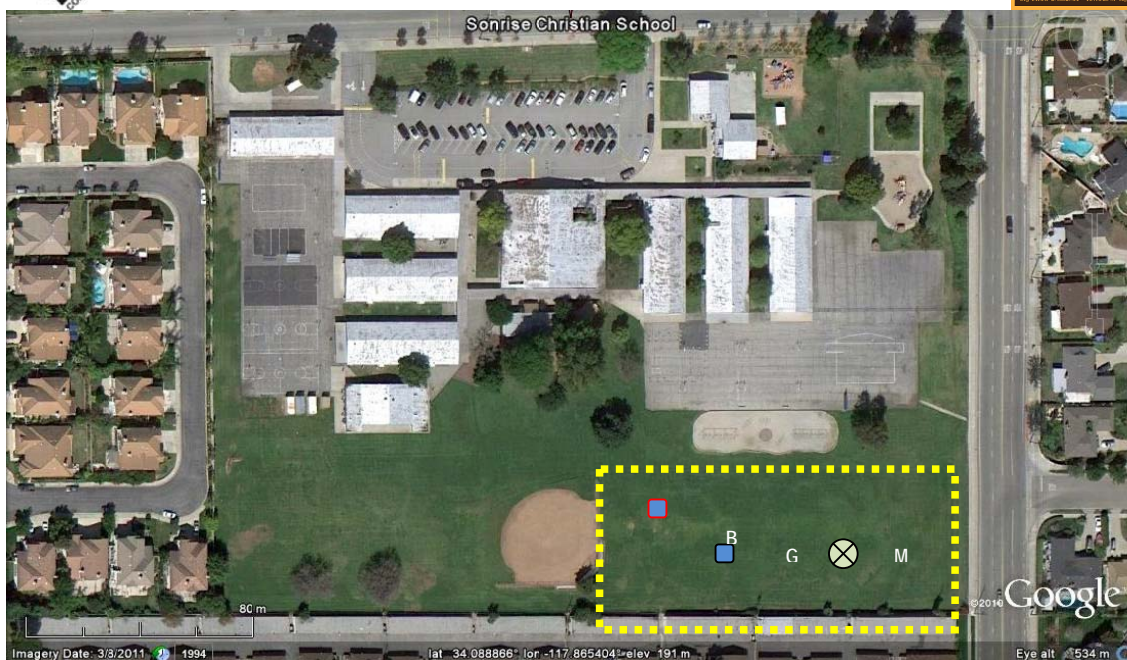




GERC JOTA 2011 Photo Summary

Glendora Emergency Response Communications
Jamboree On The Air 2011

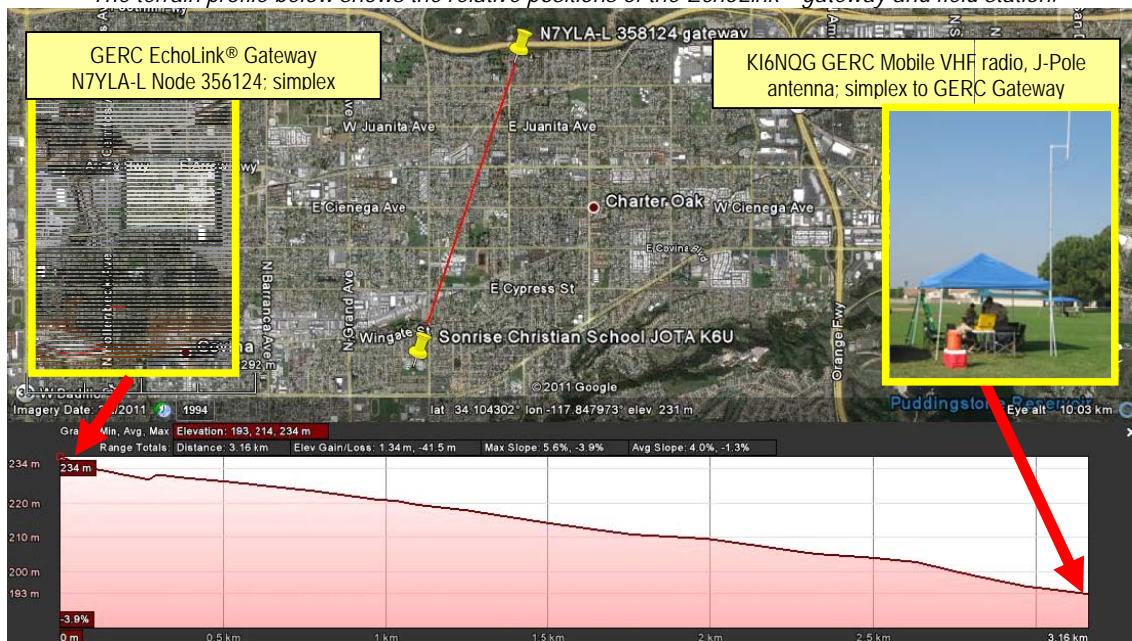


General site for the GERC JOTA 2011 Station at Sonrise Christian School

Registration VHF Station B VHF Antenna G G5RV HF Dipole Antenna Parachute Shade Structure HF Station M = Moxon HF Antenna

The general layout of the GERC JOTA 2011 is shown in the top photo (positions of the K6U event facilities in the box with yellow dashed lines are relative).

The terrain profile below shows the relative positions of the EchoLink® gateway and field station.



This shows the geographic relationship of the GERC base station to the mobile VHF radio at the JOTA 2011 site. Both radios are on the same simplex frequency. Each radio is at the extreme edges of the terrain profile (pink graph above). The line of sight distance is ~3.23 km / ~2 miles. The base station is at 233 m (above mean sea level); the JOTA site is at ~193m (AMSL). The terrain profile shows there is a clear line of sight (LOS) between the antennas of both stations.



GERC hams setting up their HF station for JOTA



The GERC VHF station was west of the HF station



THE GERC JOTA registration tent



A Radio Merit Badge class was held here.

The GERC JOTA site was the playground of the Sunrise Christian School (1220 E. Ruddock St., Covina, CA (~34.088247 N, 117.864619 W, Elev. ~193m AMSL). The GERC JOTA HF station had two ICOM 718 multiband radios located under the parachute shade structure (in the left photo), a Moxon HF antenna (being set up the GERC hams on the left), and a G5RV dipole antenna (tall mast on the right).

Dennis (K16NQG) ran the VHF station that had the 2m VHF EchoLink® simplex radio link (with a dual band J-pole antenna mounted at the top of a portable push up mast). The EchoLink® gateway was Mark's N7YLA-L node 358124 located ~2 miles at ~18° True azimuth from this station. Another VHF radio (using a magnetic car mounted antenna) was tuned to a local repeater. Power was from a 12 VDC battery.

Dave (KK6VR) greeted GERC JOTA 2011 visitors at the Registration Tent. Scouts signing in got an individual log sheet on which to record all radio contacts they made using a variety of equipment: VHF radios, EchoLink®, and HF radios. GERC's open door policy makes it easy for any of the general public to learn more about amateur radio and emergency preparedness.

Jim (KG6TQT) and Frank (KG6TQV) also conducted a Boy Scout Radio Merit badge class. One of the basic requirements is to make a radio contact. GERC's JOTA 2011 event gave scouts a



The Radio Merit badge could be a stepping stone to the world of amateur radio.

chance to get their Radio Merit Badge, make their first radio contact, and to be introduced to amateur radio. JOTA allows GERC to educate the public about amateur radio as well as practice operating their radios in the field.

GERC JOTA 2011 Helping Hams

The success of any GERC community service activity depends on the active participation of GERC hams and their families. Many times the public sees the GERC ham on-site. But behind the scenes are the family members of the GERC hams. Through their direct and indirect support, they are also part of the GERC team. GERC hams are only able to turn out for events after meeting their commitments at home to their families. So to the family members of the GERC hams, whose names and photos are not here, please accept our warm gratitude for your support.



Jim (KG6TQT)



Frank (KG6TQV)



Mark (N7YLA)



Dennis (KI6NQG)



Richard (KG6TRD)



Tom (KI6YCC)



Donny (KF6HZX)



Rich (KG6MXP)



Scott (W7JYA)



Dave (KK6VR)



Carolyn (KF6RFJ)

Special Thanks to Marilyn and Jim Dowdle for providing lunch!

JOTA Photographers
Frank Bigelow KG6TQV,
Jim Dowdle KG6TQT,
Donny Hayden KF6HZX,
Mark Hayden N7YLA

2011 JOTA Participating Amateur Radio Operators

Richard Anderson KG6TRD, Frank Bigelow KG6TQV, Scott Boland W7JYA, Bruce Bolton KJ6QCM, George Cooper KC9TIJ, Jim Dowdle KG6TQT, Jose Garza AB6RM, Carolyn Hayden KG6RFJ, Donny Hayden KF6HZX, Mark Hayden N7YLA, Tom Higham KI6YCC, Rich Koch KG6MXP, Greg Lee HSOZHM, Jens Puzik DL1BJR, Dennis Swink KI6NQG, Dave Truax KK6VR.

Thanks to the Set Up and Take Down Crew

Richard Anderson KG6TRD, Frank Bigelow KG6TQV, Scott Boland, W7JYA, Jim Dowdle KG6TQT, Carolyn Hayden KF6RFJ, Donny Hayden KF6HZX, Mark Hayden N7YLA, Tom Higham KI6YCC, Dennis Swink KI6NQG, Dave Truax KK6VR.



GERC EchoLink® Friends



A fundamental part of ham radio is international friendship. This manifested itself in GERC's ability to enlist the help of hams outside California to support K6U for JOTA 2011. Prior arrangements were made with EchoLink® stations outside CA to collaborate with the



*George (KC9TIJ)
Node 553653
Indiana, USA*



*Jens (DL1BJR)
(via DOØEHB-R)
Germany*



*Greg (HSØZHM)
Node 520300
Thailand*

GERC JOTA K6U station to assure scouts could make their radio contact to fulfill the merit badge requirement and earn their "First Contact" certificates. These were personal contacts made by Mark (N7YLA) via EchoLink®.

George, KC9TIJ

Indiana, USA

Lat.: 40.52 N

Lon.: 85.64 W

UTC: -5

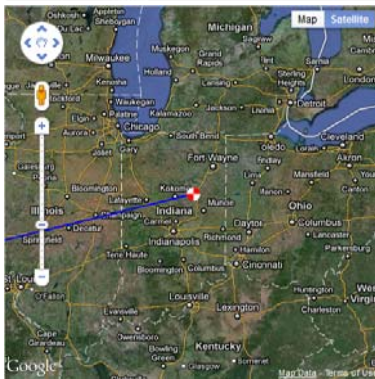
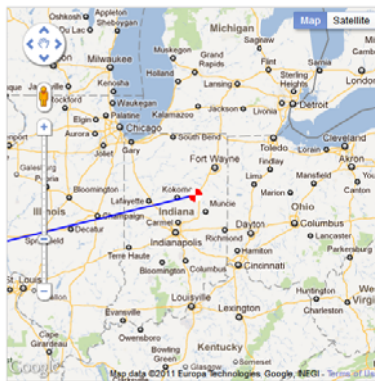
Dist (km): 2,968.6

Dist (mi): 1,844.6

Grid: EN7Øem

ITU: 8

CQ: 4



Jens, DL1BJR

Bremen, Germany

Lat.: 53.22 N

Lon.: 8.79 E

UTC: +2

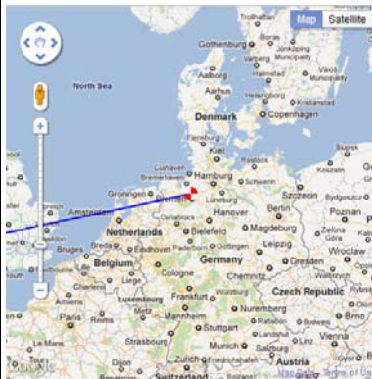
Dist (km): 9,050.7

Dist (mi): 5,623.8

Grid: JO43jf

ITU: 28

CQ: 14



Greg, HSØZHM

Nan Prov., Thailand

Lat.: 19.12 N

Lon.: 100.81 E

UTC: +7

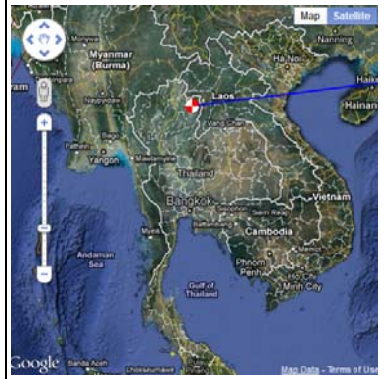
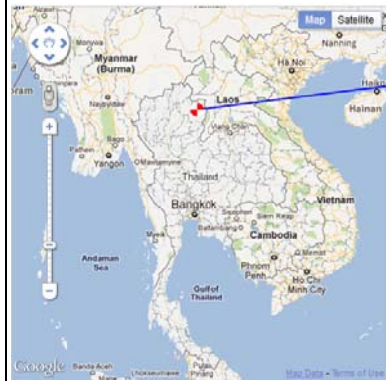
Dist (km): 12,780.4

Dist (mi): 7,941.4

Grid: OKØ9jc

ITU: 49

CQ: 26



Set Up

The GERC team arrived on site to begin set up at 0730 hrs. The plan called for 3 separate tents: HF station, VHF station, and registration. Shade is a vital element of operating in sunny southern California, and Saturday was no exception.



Richard (KG6TRD), Mark (N7YLA), Tom (KI6YCC) and Donny (KF6HZX) setting up the home made Moxon HF antenna. This would be connected to an ICOM 718 and operated on the 20m band.



Richard (KG6TRD) is helping with the Moxon antenna (outside of the picture to the right). The American flag waves over the parachute shade structure and marks the HF station where Jim (KG6TQT) works with visiting scouts. The G5RV dipole antenna mast is visible in the background. The blue tent in the background is the VHF station where the EchoLink® and local repeater contacts would be carried out.





The multiband G5RV dipole antenna mast.

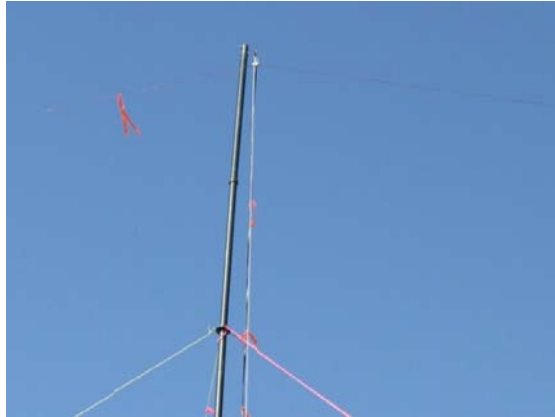


The homemade Moxon 20m band HF antenna.



Scott (W7JYA) helps with the set up.

a disaster strikes, you have run out of time to prepare. Group activities like this means having other hams around to help you when you get rusty.



The HF antennas for the GERC JOTA 2011 effort consisted of a multiband G5RV dipole antenna mounted on a surplus military mast with guy lines. The photo on the left shows the mast for the G5RV. The top photo shows some detail of the mast head with the balun for the G5RV and feedline. A homemade Moxon HF antenna for 20 m was also deployed. It was mounted on a 5m push up aluminum flag pole mast. Both antennas were connected to separate ICOM 718 multiband radios. Power supply for the radios were 12 VDC batteries.

Field events such as JOTA gives GERC hams practice is deploying their radio equipment away from their homes. Operating outdoors and away from 110 VAC power is a common scenario for emergency communications. You need to be well organized to do this. Missing a critical connector could mean no communications at all. When you see the number of radios, cables, connectors, antennas, headsets, batteries, etc. involved, you can better appreciate the organization needed to hold this event.

The old saying of "practice makes perfect" holds true for emergency communications (EmComm). Frequent deployment and repetition keeps hams familiar with their equipment and procedures. As with any volunteer organization, those who are most active can develop higher proficiency. When a



The Flag tops off the shade canopy.



A billowing canopy in the morning breeze.



An ICOM 718 multiband radios brought by an individual GERC ham for use at JOTA.



Tom (KI6YCC) with a battery powered ICOM 718 multiband HF radio.



Mark (N7YLA) shows the K6U HF station is open.

GERC got permission from ARRL (American Radio Relay League) to use the special event callsign K6U for this event. GERC has used this call sign for other events before. It is a short call sign, making it easy to use and quick to recognize. Apparently GERC has had such good luck getting K6U that Mark had a permanent sign made for it. Watch for this sign at future GERC events.

GERC HF Operators



(l to r): Tom (KI6YCC), Mark (N7YLA), Jim (KG6TQT) Richard (KG6TRD)

GERC hams donate their time, skills, knowledge, and equipment to JOTA 2011. Jim (KG6TQT) organized the event. Mark (N7YLA), founder of GERC, provided much of the equipment (e.g. tents, chairs, antennas, cables, etc.). Richard (KG6TRD) and Tom (KI6YCC) often turn out to lend a hand doing what is necessary to get the job done.

HF operations depend on atmospheric conditions making it difficult to guarantee contacts can be made.





Tom (K16YCC), Mark (N7YLA)



Jim (KG6TQT) Richard (KG6TRD)

Community service events are another way GERC hams confirm their equipment is ready for an emergency. Outdoor field activities such as JOTA is an opportunity to get out and away from commercial line power. These hams must be able to power their radios using other power sources. For the JOTA event, the radios were all powered by 12 VDC wet cell batteries.

Every set up is unique. This further tests the ability of GERC hams to adapt to varying and changeable field conditions. GERC hams have a wide variety of equipment and not everyone uses the same equipment. It takes effective interpersonal communications to quickly set up equipment and get on the air quickly.

GERC JOTA 2011 Registration Tent

There were two types of activities at the GERC JOTA 2011: a chance to make radio contacts and a Boy Scout Radio Merit Badge class (which requires the scout to make a radio contact). Visitors to GERC JOTA 2011 sign the activity log. Scouts wishing to log radio contacts would get an individual log form. Those taking the Radio Merit



THE GERC JOTA registration tent

Badge could complete the course by making their first radio contact.

Jim (KG6TQT) and Frank (KG6TQV) conduct numerous Radio Merit badge classes throughout the year. The effective collaboration of GERC with JOTA creates a "one stop" shopping opportunity for local scouts to earn their radio merit badge. For GERC, JOTA 2011 helps fulfill a number of organizational goals: community service,



with the terrain and urban landscape features. Weather conditions can also affect radio transmissions. This means there is no end to the assessment process.



The GERC JOTA 2011 HF Station



Shade is a premium commodity when operating in sunny southern California. The GERC 36-foot cargo parachute shade structure is eye-catching and is great for attracting attention to GERC events.



"Cool" California GERC hams at the HF station.



Jim (KG6TQT) conducts a Radio Merit badge class



Jim (KG6TQT) getting scouts on the air to try to make some HF contacts.

Moxon antenna; the other was connected to a G5RV wire dipole antenna. Tom (KI6YCC), Mark (N7YLA), Jim (KG6TQT), Richard (KG6TRD) formed the HF operator team.

Jim (KG6TQT) and Frank (KG6TQV) conducted a Radio Merit badge class during the JOTA 2011 event. On the same day as the class, scouts can make a radio contact required to complete their first radio contact with 2 HF units operating at different frequencies, and 2 VHF units operating in different modes.



Frank (KG6TQV) during the Radio Merit Badge class



Jim (KG6TQT) and Richard (KG6TRD) ready and willing to explain HF radio to visitors.



The GERC JOTA 2011 VHF/UHF Station



The GERC field EchoLink® radio link station was set up in the VHF tent. It would operate simplex to access the N7YLA-L EchoLink® gateway about 2 miles away using a dual / band Yaesu FT 8800 VHF radio with a dual / band J-pole vertical antenna.

An ICOM 2200H using a magnetic mounted mobile antenna was tuned to 147.09 MHz for the Catalina Repeater.

The intent was to give scouts a chance to use 2m radios for global EchoLink® contacts as well a local repeater traffic.



Yaesu FT 8800; simplex to GERC EchoLink Gateway



ICOM 2200H set for Catalina Repeater 147.09 MHz



Tom (KI6YCC) helping Dennis (KI6NQG) set up the VHF station



Dennis (KI6NQG) logs scout at the VHF station and a chance to use EchoLink®



Dennis had his hands very full coordinating the EchoLink® ccontacts. It seems the EchoLink demonstration was a big highlight of the GERC JOTA 2011. Scouts were eager to contact Indiana, Germany, and Thailand. EchoLink® was a definite crowd pleaser for this GERC activity..

GERC JOTA 2011 Photo Summary



JOTA is primarily an international scouting activity. For GERC it began as a community service activity to support scouts in the local area. But these young scouts were dependent on their parents to get them to the JOTA site.

GERC JOTA 2011 Photo Summary



Mark (N7YLA) had the foresight to set up dual headphones on the radios allow parents to listen in as their scout made a radio contact. It was an eye-opening experience to see how well EchoLink® can work thousands of miles away. For many the added personal connection with the radio experience heightened the excitement and novelty of JOTA 2011. This simple enhancement undoubtedly helped create some lasting impressions of amateur radio on these participants.



The GERC outreach effort didn't stop there. In an effort to be inclusive, GERC also allowed younger siblings of the scouts to participate.



GERC strives to introduce ham radio to everyone. So younger siblings also get a chance on the air.

Dennis (K16NQG) used magnets to put up a world map so the scouts could locate the various stations contacted. Ham radio is a great way to expand your horizons. Besides the obvious connections to math and science, ham radio also embraces geography and cultural diversity. As George (KC9TIJ) said to the scouts, ham radio lets you contact people all over and gives you a window to the world that you might not have otherwise. He also urged the scouts to value their education and to seek opportunities to further it.



Dennis (K16NQG) used magnets to secure the map.

Jens (DL1BJR) enjoyed participating in JOTA. He said scouting was not so popular in Germany. He decided to help out because of what he called "the ham spirit" adding that if only 1 scout went on to get an amateur license, it would make the effort worthwhile.

The GERC hams were very pleased with JOTA 2011. They especially appreciated the effort of their EchoLink® friends from afar. The scouts and parents expressed amazement at their EchoLink® experiences. It seems the message and spirit of ham radio's international friendship and cooperation came through loud and clear. 🌐

GERC Net for JOTA 2011 Scouts Catch-ups



Mark (N7YLA; left end) and Jim (KG6TQT; right end) with scouts completing their Radio Merit Badge required radio contact prior to the GERC Net 25 Oct 2011.



Screen shot of the CQ100 virtual HF radio (www.qsonet.com/programs.html). Thereafter it requires a \$39 annual subscription.

CQ100 is operating VoIP, but gives you a feeling for real HF operations. It is a low cost alternative introduction to HF operating without the cost and complexity of buying an HF rig and setting up a full blown station and antenna. For beginners, it's a great introduction to HF operating. 🌐

GERC JOTA 2011 Feedback to HSØZHM



you.

I had a world map from the Yeasu booth at HamCon by my station. It was fun to see the scouts and sometimes their parents trying to find Thailand. Us Vietnam aged people knew exactly where it was. I am sure you would agree that the world

Four scouts, Peter, John, Paul and Karson were unable to attend JOTA due to prior commitments. So Jim (KG6TQT) and Mark (N7YLA) arranged a make up session for them prior to the GERC Net on 25 Oct 2011 (PDT) conducted at the N7YLA-L EchoLink® gateway station.

George (KC9TIJ) and Greg (HSØZHM) logged into the GERC EchoLink® gateway before the Net to facilitate the required QSOs so these scouts could complete their Merit Badges.

The scouts listened to the conduct of the GERC Net, which included local area GERC members calling in via local simplex to Mark's (N7YLA) EchoLink-L gateway station's VHF radio. David (KGJOH) was on the road and signed in via EchoLink® from Scottsdale, AZ.

Following the GERC Net, Mark unveiled a special surprise demonstration of CQ100 (a virtual HF radion computer program). CQ100 is provided by VE3EFC. With a valid amateur license, you can download the program free

- E-mail excerpts from Dennis (K16NQG): "What can I say, you are amazing. You pulled an all-nighter and made it look easy. I really enjoyed listening to your contacts with the boys. You should have seen their faces light up when they heard where you were half way around the world. You have the ability to engage all ages. I was worried about some of the really young ones but even they seemed to make a connection with

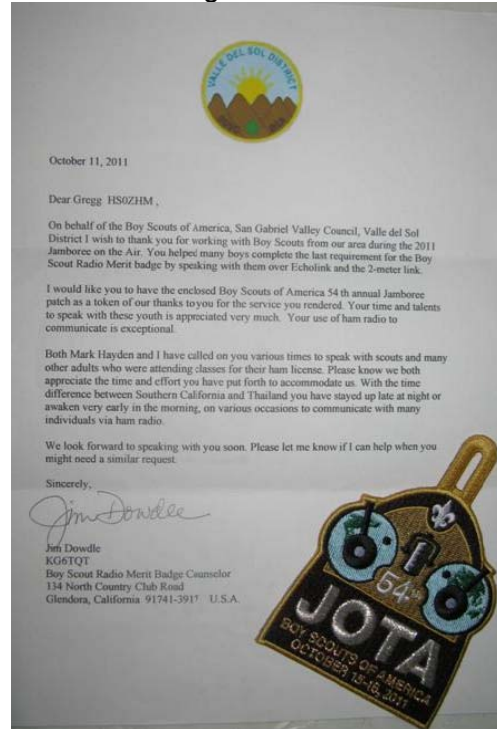


needs more geography teachers. They were all impressed by how far away it was. Most of the adults had heard about the flooding and made some comments when the rain on your end started coming through as a kind of thundering echo sound.”

- Excerpts from Jim's (KG6TQT) letter:
On behalf of the Boy Scouts of America, San Gabriel Valley Council, Valle del Sol District, I wish to thank you for working with Boy Scouts from our area during the 2011 Jamboree on the Air. You helped many boys complete the last requirement for the Boy Scouts Radio Merit badge by speaking with them over EchoLink and the 2-meter link.

“...Both Mark Hayden and I have called upon you various times to speak with scouts and many other adults who were attending classes for their ham license. Please know we both appreciate the time and effort you put forth to accommodate us.”

[**Note:** Jim (KG6TQT) was the GERC JOTA 2011 organizer and one of the Boy Scout Radio Merit Badge course instructors.]



- Excerpts from Mark's (N7YLA) E-mail:
Thank you for your great service to the Boy Scouts at the JOTA last weekend. In every respect you made our event extremely successful! The parents were especially awed by our very long distance communications, even after we explained how Echolink works! We had 24 scouts participate during the event arriving a few at a time during the day which worked out very well. The weather was great and not too hot with a gentle breeze. We were on the air for seven hours and wanted to stay longer! Next year we hope to camp out on the field overnight on Friday.
[**Note:** Mark (N7YLA) is the GERC founder and an Elmer to many GERC hams.]

Similar messages of positive feedback and appreciation were sent to EchoLink® participants George (KC9TIJ) and Jens (DL1BRJ) as well as to all participating hams.

GERC JOTA 2011 Photo Summary

GERC JOTA 2011 Contact Summary

Event→	JOTA 2011					GERC Net	
Date→	15-16 Oct					25-26 Oct	
Contact→	DL1BJR JENS	KC9TIJ George	HSØZHM Greg	NI6IW USS Midway	KG6MXP Rich	KC9TIJ George	HSØZHM Greg
Mode→	EchoLink® via N7YLA-L			147.090 MHz Catalina Repeater	145.180 MHz	EchoLink® via N7YLA-L	
Adam	X	X	X				
Alaric			X				
Alvin	X	X	X				
Alvin Neo	X		X				
Andrew	X	X	X	X			
Andy		X					
Carlos (sibling)	X						
Carson						X	X
Chase			X				
Christian			X				
Daniel	X						
Eric	X		X				
Hank	X						
Hunter	X	X	X		X		
James		X					
John						X	X
Keala	X		X				
Lorenzo		X		X			
Mike		X					
Neil	X	X	X				
Patrick	X		X				
Paul						X	X
Peter						X	X
Ryan	X		X				
Sebastian	X		X				
Shon		X					
Welsley	X	X	X				
Zack	X	X	X				

