

The 144 MHz EME NewsLetter

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KA6U Activating Squares in the Western USA

Due to COVID-19 the EME DXCC DXpedition activities have more or less come to a halt. But luckily major parts of the USA are *terra incognita* when speaking of rare grid squares. Peter KA6U has already brought a fair number of squares on the air this year. During his most recent tours he travelled visited six squares in Northern California, Oregon and Idaho in August: CN91, CN81, CN90, CN92, DN03 and DN04. Another two were added in September: CN70 and CN71.



KA6U location in CN91AD. Peter not only worked EME but also MS/Tropo on 2 m and 6 m.

It all started on August 15th when Peter's fully packed car arrived at CN91AD where he put together his station. During the setup process at night the crossbeam of the H-frame broke dumping half the

array on the ground. The crossbeam had a center aluminum tube supporting two non-conductive fiberglass tubes. The right two antennas were damaged. So Peter removed the mess and set up a two-way power-divider. Therefore during the first moon pass KA6U operated with only two antennas. The first QSO was completed at 0954 UTC on August 15th with RX1AS. After moonset the antennas were repaired and the h-frame was rebuilt so that Peter was QRV with the four yagis the next moon pass. The crossbeam was rebuilt with 8' steel tube and the broken antenna elements were replaced. Peter thanks Goran from Antennas-amplifiers.com for providing spare elements. So he only had to cut the spares to length and replace the broken elements.



There was a large alkaline lake in moonrise direction in CN90PQ: Peter copied signals even 5 mins before moonrise.

High winds forced him to take the antennas down earlier than planned but a considerable total of 64 QSOs was made though. Then he travelled to CN81XD for the next moon pass. Again high winds made working unpleasant but it was successful though. The following day August 18th UTC Peter went on to CN90. Here the wild fires forced him to look for an alternate location. Most roads he could find in western CN90 were closed due to fire danger. Eventually he was successful finding a place in CN90PQ.

After 50 complete QSOs from CN90 he then continued to CN92. Peter found out that station teardown and setup took longer than planned: He had budgeted 2 ½ hours tear down and pack, then a 2 hour drive to CN92WF. Once arriving at the general location he planned on an hour to pick a final site, followed by 2 ½ hour setup time. So he needs a total of 8 hours from when he stopped operations until setup at the next location. Not much time left for recovering since it is always a single man activity, no assistance.



In CN92 there was a hill which delayed seeing the moon for some minutes.

When arriving in CN92VF KA6U noticed the original planned location turned out to be a cattle pasture. So he had to look for an alternative which he found some 8 km west. This location had a hill in the direction of moonrise which resulted in waiting about one hour until he saw moon. He completed with 45 stations, then broke everything down and continued to DN03 and DN04. That area was a really remote one – without cellphone coverage. Peter reports having driven 300 km through Eastern Oregon without ever having a cellphone net. Even gas stations were available only every 200 km or so. The land is used as an open range for cattle and there are no fences along the road. This meant no fun driving those roads at night. So the activities from DN03 and DN04 were really amateur radio style without internet chat etc.

After concluding the DN04 activity Peter had to decide not to go to CN93. It would have been too dangerous: There were strong forest fires throughout Oregon including not far from CN93. These fires had resulted in thick smoke and bad air quality, particularly in the mountains. At times the smoke was so thick he could stare at the sun with no problem. Hence, on August 21st he decided in favour of health and safety and travelled back home. But still he was not yet tired from going to the field: The following trip led him to CN71 and CN70 right at the Pacific Ocean. The two grid squares only have little land, the rest is a water field.



The KA6U operating site in DN03. The trees added for some extra attenuation and the hill slope required some minimum elevation.

Peter always operated in the passenger side of his car. The 2 m amplifier sat on the drivers side with the air conditioning vents blasting 13°C air. With the air conditioning the amp generally can run at full power without overheating. Since the days were really warm he wanted to be in the car with the air conditioner. However, once the outside temp reaches about 30° C the amp overheat protection triggered and operations had to be terminated. Sitting in the car idling with the air conditioner on burns about 3,5 litres of gas per hour. Peter carried 15 gallons of extra gas with him.

He always slept in a tent since the car was reserved for the ham gear. While day temperatures reached 35°C max, the nights were rather chilly at lows of 7°C. One should not forget that all locations were between 1400 and 2000 m ASL. Peter was self-catering all the time. He had taken everything he needed for the week with him and the only thing he bought while traveling was gas.

After returning home he started preparing his next activity from CN70 and CN71 on September 16th and 17th. These QTHs were in park areas very close to the beach. From CN70UQ he managed 46 and from CN71WA 33 QSOs. The latter was no easy thing: He needed a minimum elevation auf 15° and to make things worse fog made it very hard to track moon visually. But at the end patience paid off.

Peter is very happy with his PA144-CROSS-20-6AP antennas (<https://www.antennas-amplifiers.com/2-meter-cross-yagi-contest-eme-antenna>). Those two trips were the first ones where he had both polarities H and V pol and it made a big difference. The antennas weigh about 9 kg each and can be handled easily.

He writes he had a couple of logging problems so maybe he missed 2 or 3 QSOs. Peter asks those who think they also have a QSO but do not find their callsign on www.grz.com/db/ka6u to please email him at petervanh143@gmail.com with the contact information. *(Addendum by DF2ZC: This email address also works with paypal in case somebody wants to support Peter's activities)*



The operating location in CN70 with the Ocean in the background. (all photos KA6U)

All QSOs are uploaded to LoTW. And for the upcoming ARRL EME Contest Peter will be on the roads again, activating four much wanted squares. Please see following page for more information.

Upcoming DXpeditions

For more information on current and upcoming DXpeditions please have a look at www.mmmmonvhf.de from where most of the information here was gathered unless noted otherwise.

KA6U Activating More Squares in Nevada

Peter, KA6U, plans to be QRV from two wanted squares during the ARRL EME Contest this year. The first day he will work from DN00, the second day from DN01. Further plans are to activate DN10 on October 12th and DN11 on October 13th. His operating plans are to run on 144.122 MHz 2nd 2 m EME from MR onwards. Peter will use a 4 X 10 HV array (antenna amplifiers) and a powerful sspa. Latest news are on <https://www.qrz.com/db/KA6U>

Time Table

10/11 October	ARRL EME Contest (0000 – 2400 UTC)
2 November	November Issue of the 144 MHz EME Newsletter ready for download

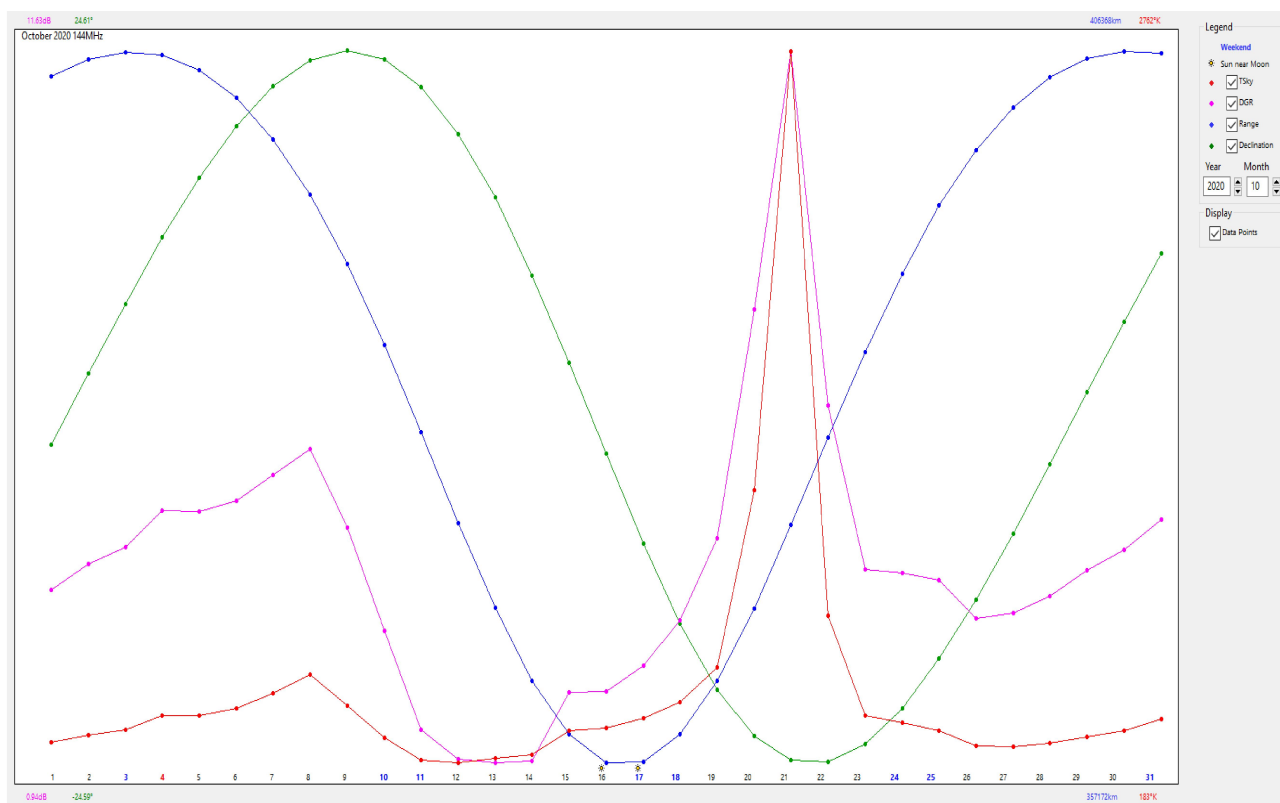
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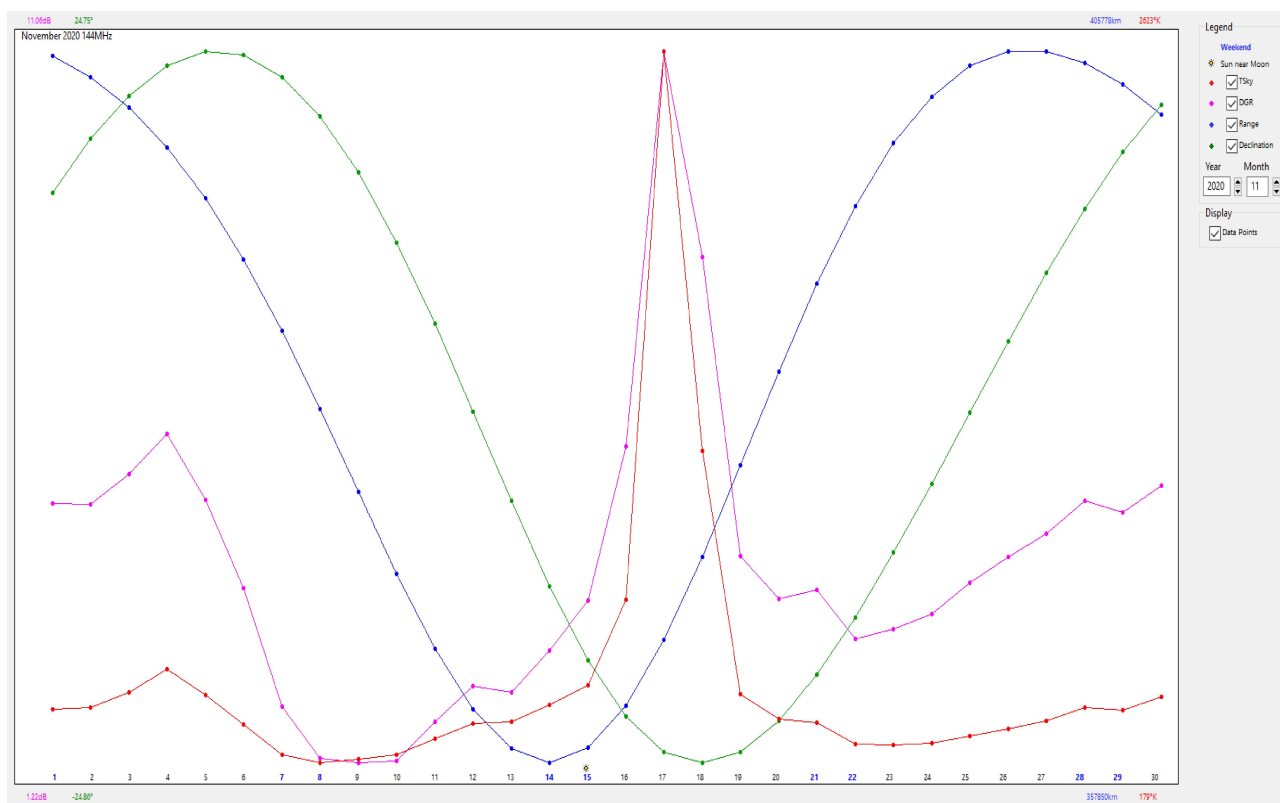
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Moon Conditions



Moon Graph October 2020



Moon Graph November 2020

(Courtesy of David GM4JJJ (sk) www.gm4jjj.co.uk/MoonSked/moonsked.htm)