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Gulf Coast Outing at Grand Isle, Louisiana EL49xf

Al Ward W5LUA

October 8, 2016

Where is Grand Isle?

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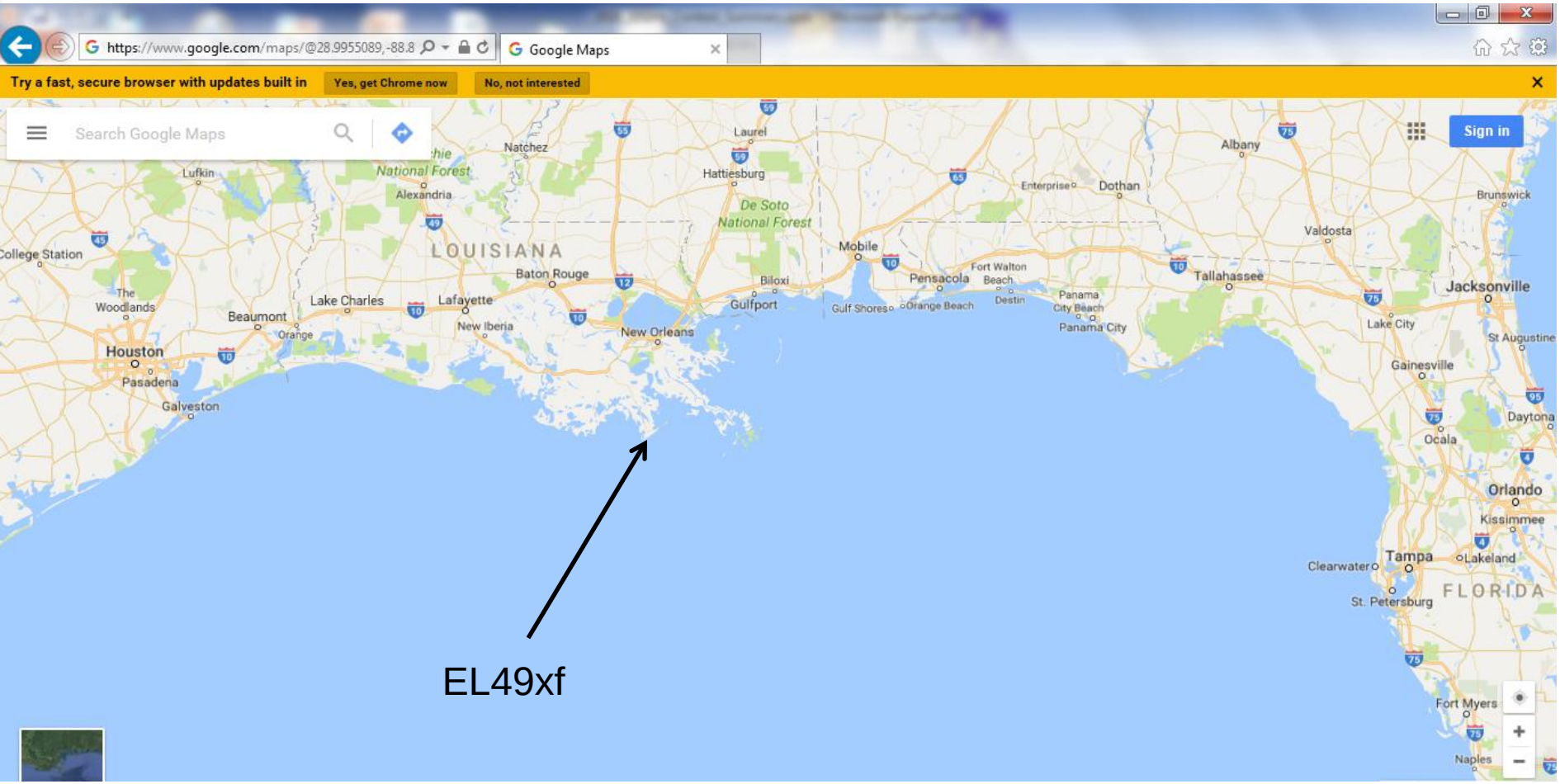

How to get there?

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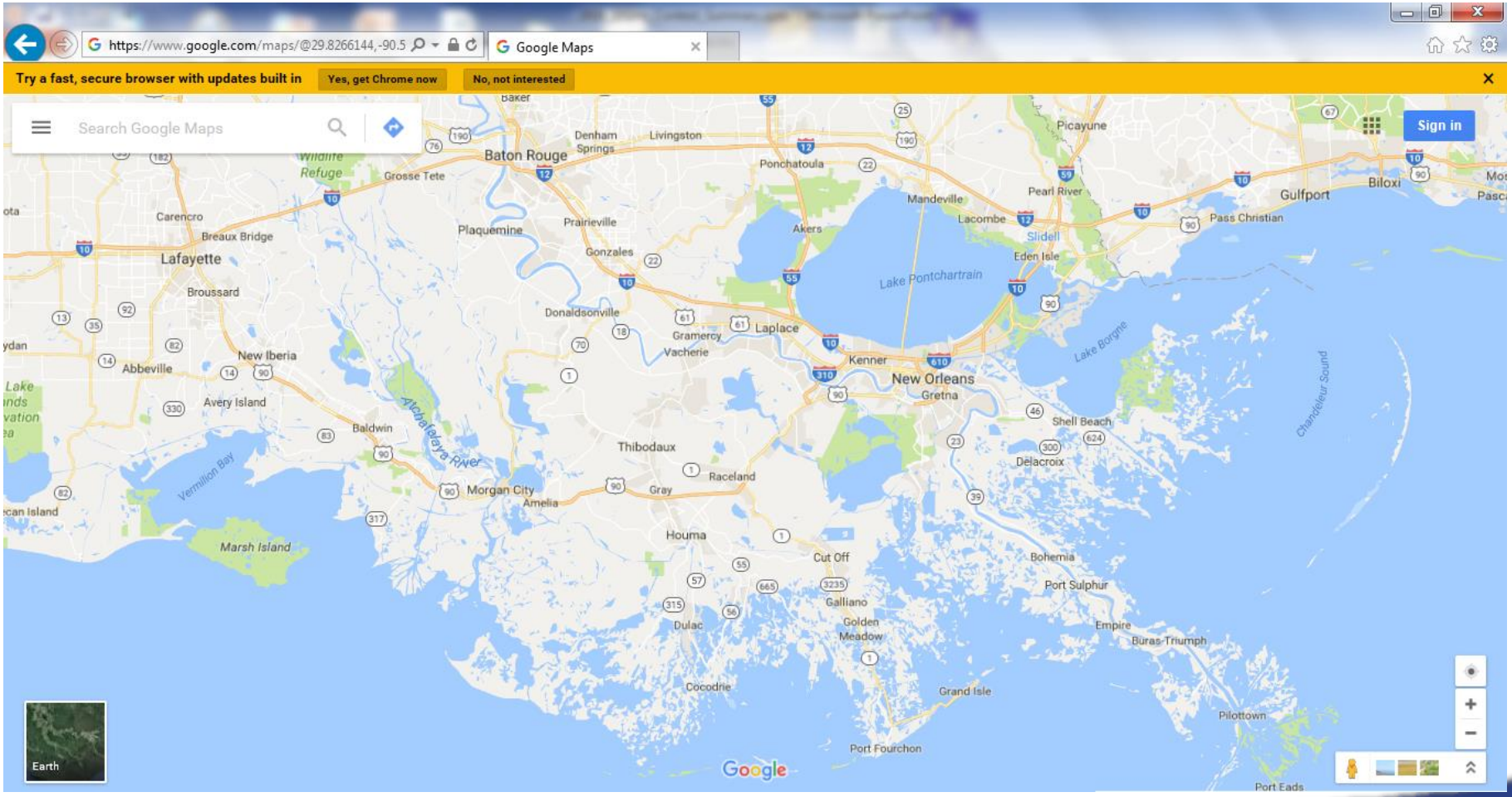

Grand Isle

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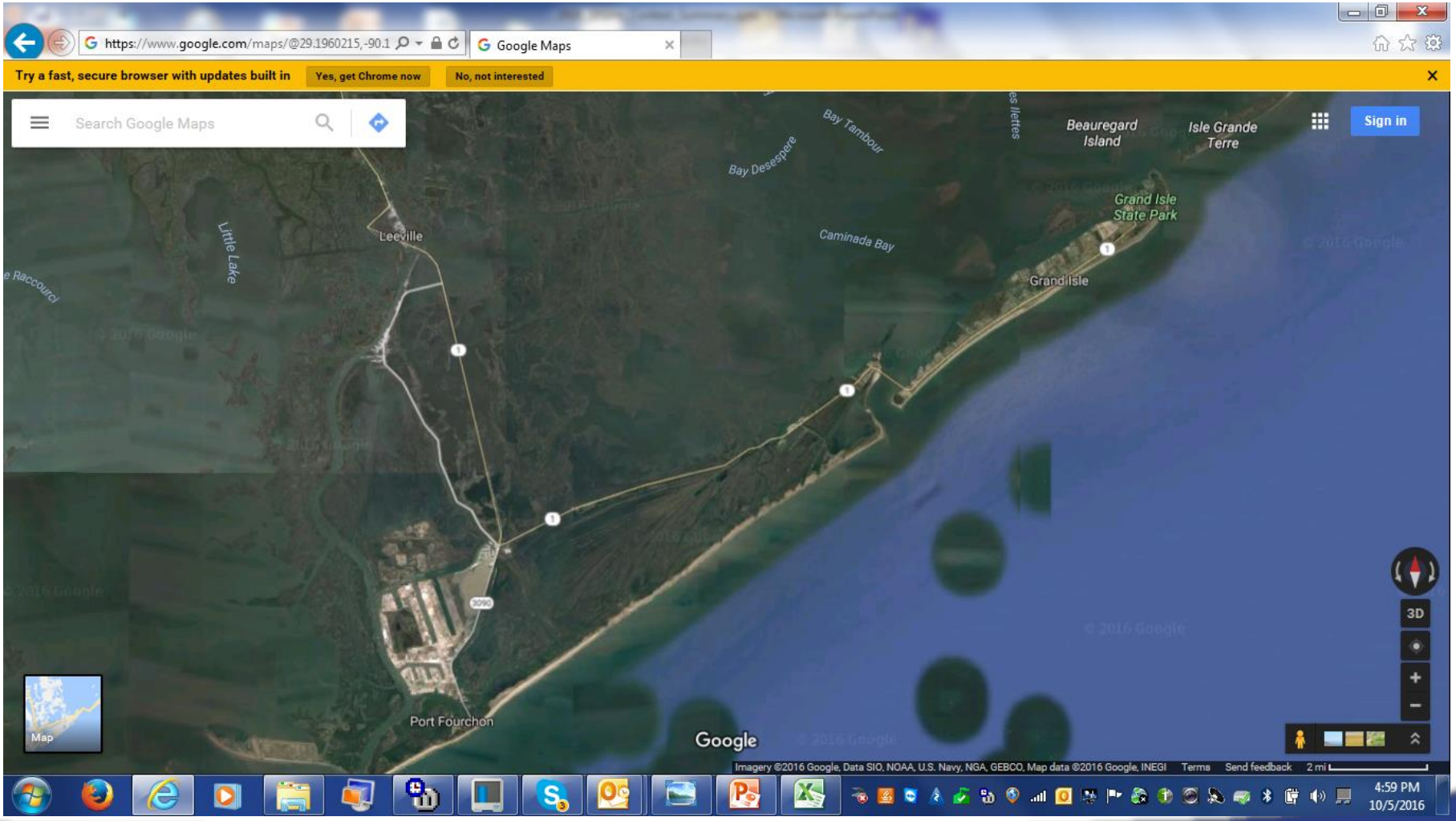

EL49xf

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W5LUA/R Equipment

- KX-3 and PX-3 operating at 28 MHz
- DEMI 10 GHz xvtr with A-32 PLL controlled by an ISOTEMP 10 MHz TCXO
- W1GHZ 2m to 10m Miniverter
- 50 watt GaN device delivering about 25 watts at 13.8VDC
- 2 ft Dish fed with short piece of Andrews ½ inch Superflex – about a dB of loss

2 Ft Dish on 10 GHz

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Armstrong rotor and calibration

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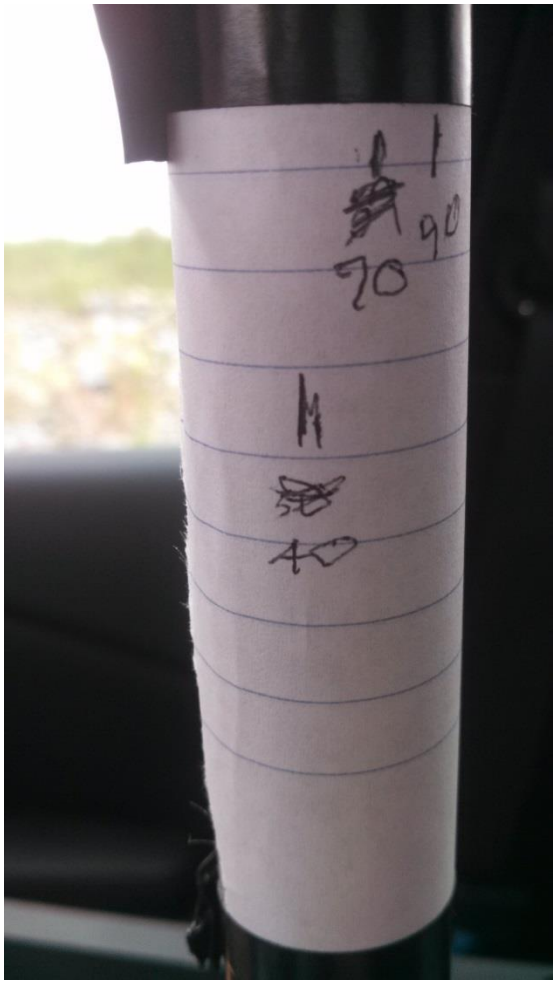

Operating and Eating Position

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Saturday's Weather to the West

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Weather Radar on Saturday

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Working WA5YWC & WA8RJF at 424 km with horn in vehicle

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I could still hear Bob with the window up via rainscatter in the pouring rain!

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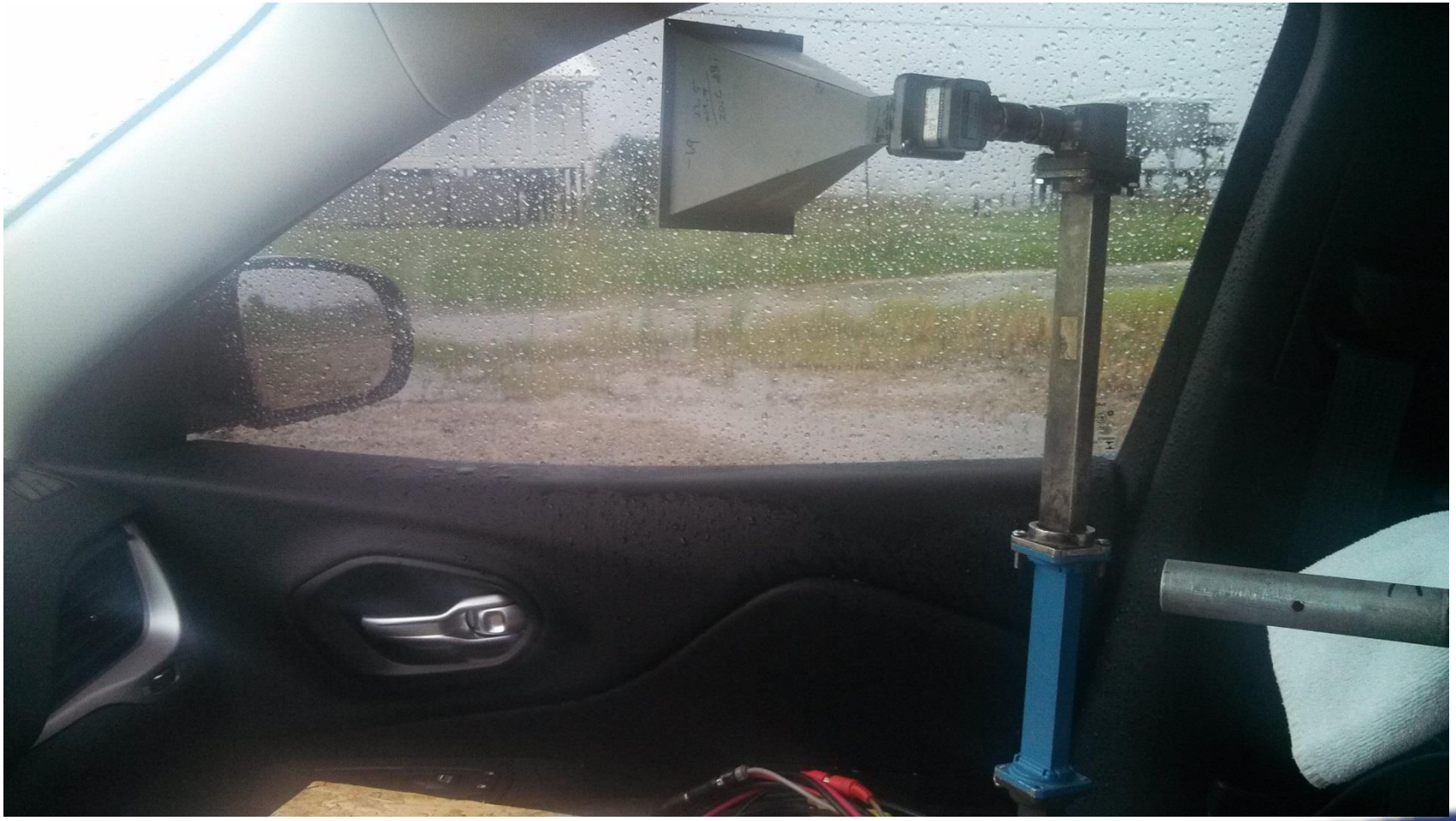

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Saturday Results in EL49xf

9/17/2016	7:00 AM	Time on					
	7:14 AM	WA5YWC	EL49xf	EL29oh	10	462	100
	7:40 AM	WA8RJF	EL49xf	EL29ql	10	446	100
	7:57 AM	AA2LY	EL49xf	EL79hw	10	459	100
	9:16 AM	WA5YWC	EL49xf	EL29tn	10	422	
	9:50 AM	WA8RJF	EL49xf	EL29tn	10	422	
	10:31 AM	WA5YWC	EL49xf	EL29ts	10	424	
	10:42 AM	WA8RJF	EL49xf	EL29ts	10	424	
	11:35 AM	WA5YWC	EL49xf	EL29xu	10	394	
	12:17 AM	WA8RJF	EL49xf	EL29xu	10	394	
	12:40 AM	WA5YWC	EL49xf	EL39bs	10	377	
	1:09 PM	WA5YWC	EL49xf	EL39fs	10	345	
	1:14 PM	WA8RJF	EL49xf	EL39bs	10	377	
	1:58 PM	WA8RJF	EL49xf	EL39er	10	352	
	2:39 PM	WA5YWC	EL49xf	EL39ls	10	297	
	2:50 PM	WA8RJF	EL49xf	EL39gs	10	337	
	3:43 PM	WA8RJF	EL49xf	EL39it	10	322	
	4:20 PM	WA5YWC	EL49xf	EL39vu	10	221	
	4:38 PM	WA8RJF	EL49xf	EL39kt	10	306	
	5:32 PM	WA8RJF	EL49xf	EM30la	10	303	
	6:00 PM	Time off					

Weather Radar on Sunday

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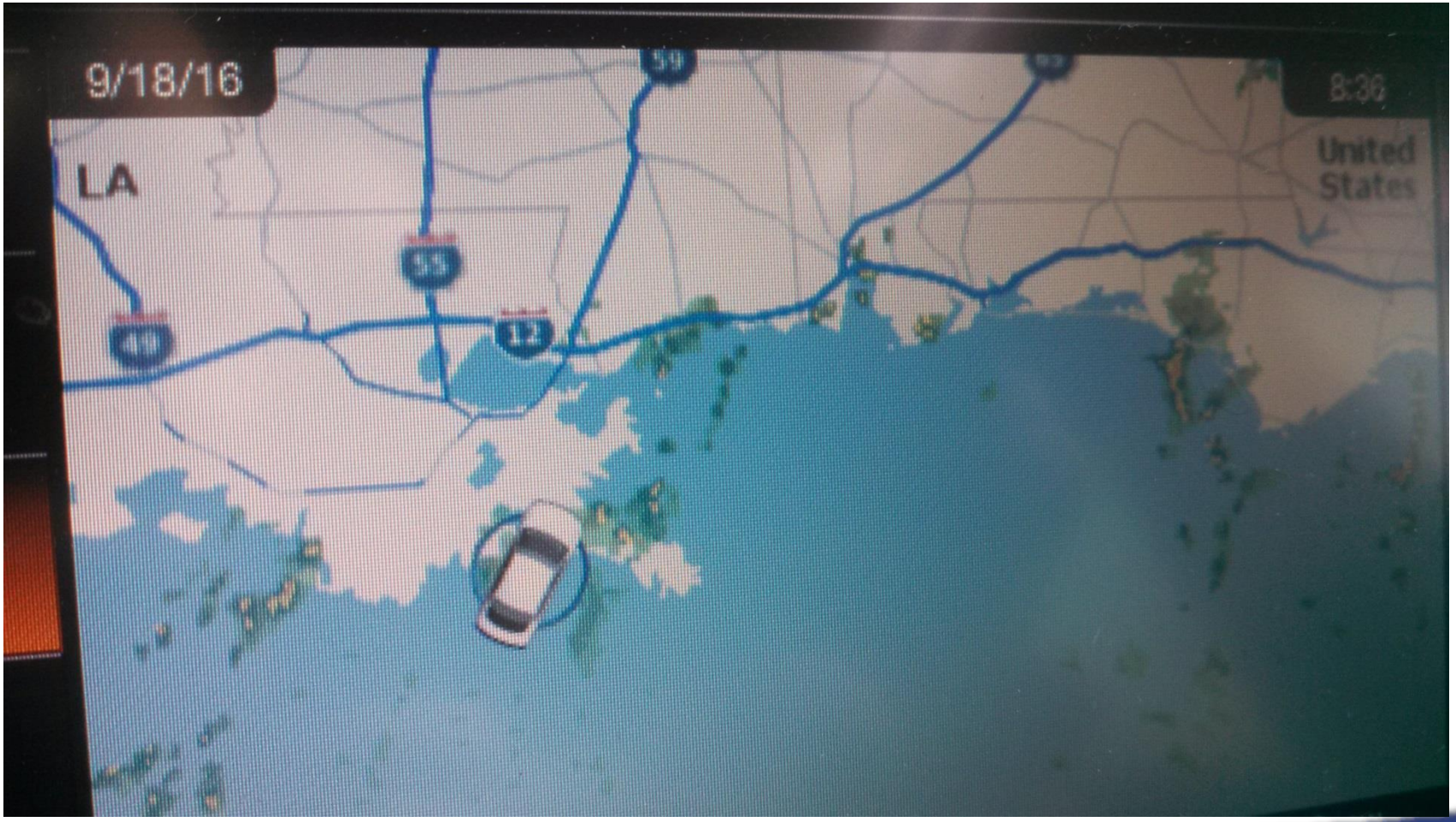

Sunday Results in EL49xf

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9/18/2016	7:00 AM	Time on					
	7:24 AM	WA5YWC	EL49xf	EM50ki	10	153	
	7:58 AM	WA8RJF	EL49xf	EM50gf	10	124	
	9:08 AM	WA8RJF	EL49xf	EM50jh	10	145	
	9:49 AM	WA5YWC	EL49xf	EM50mj	10	166	
	10:16 AM	N2CYM	EL49xf	EL79gw	10	451	100
	11:00 AM	WA8RJF	EL49xf	EM50mj	10	166	
	11:18 AM	WA5YWC	EL49xf	EM50ri	10	191	
	3:25 PM	WA8RJF	EL49xf	EM60fg	10	268	
	3:40 PM	WA5YWC	EL49xf	EM60fg	10	268	
	5:19 PM	N2CYM	EL49xf	EM60oj	10	340	
	6:00 PM	Time off					

My Jeep Cherokee

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- Moon roof worked well for rotating dish except when it started to rain – next year I will install a TR-44 rotator.
- Installed a 1000 watt 12v to 110V inverter which provided power for my lap top and cell phone
- Idled the vehicle from 7AM to 7PM both days – gas consumption 6 gallons per day
- Total trip mileage 1295 miles at an average of 22.8 mpg – not bad!

August Results from EM13qc

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Date	Time	Worked	Sent	Received	Band	DX (km)	QSO points	
8/20/2016	6:00 AM	Time on			GHz			
	6:06 AM	K5LLL	EM13qc	EM10kf	10	322	100	
	7:31 AM	AA5C	EM13qc	EM13se	10	18	100	
	8:05 AM	N5WCO	EM13qc	EM12mo	10	64	100	
	11:49 AM	K5TR	EM13qc	EM00uf	10	356	100	
	12:56 PM	K5TRA	EM13qc	EM10bf	10	340	100	
	1:05 PM	WA5TKU	EM13qc	EM13jg	10	57	100	
	2:21 PM	N5BRG	EM13qc	EM13il	10	75	100	
	3:05 PM	AA5AM	EM13qc	EM13sg	10	24	100	
	3:13 PM	WA5TKU	EM13qc	EM13jj	10	63		
	4:15 PM	WA5TKU	EM13qc	EM13hi	10	75		
	7:53 PM	K5ZSJ	EM13qc	EM13ne	10	25	100	
	8:00 PM	Time off						
8/21/2016	6:30 AM	Time on						
	6:54 AM	WA5VJB	EM13qc	Em12lq	10	60	100	
	11:02 AM	N5BRG	EM13qc	EM13mj	10	45		
	11:30 AM	Time off						
Aug Total						1524	1000	2524

Contest Results

- August weekend in EM13qc
  worked K5LLL, AA5C, N5WCO, K5TR, K5TRA, WA5TKU, N5BRG, AA5AM, K5ZSJ, and WA5VJB for a total of 10 unique calls, 13 QSOs, 1524 km distance for a total score of 2524 points
  worked WA5TKU 3 times and N5BRG twice
- September weekend in EL49xf
  worked WA5YWC, WA8RJF, AA2LY, and N2YCM for a total of 4 unique calls, 29 QSOs, 9356 km distance for a total score of 9756 points
  worked WA5YWC 12 times, WA8RJF 14 times, AA2LY once and N2YCM 2 times
  best DX was to Bob and Tony at 462 km (287 miles) in EL29oh – our first QSOs when they were in the Galveston area
  Most contacts were done via rain scatter!
- Combined score of 12280 points – my best ever!
- Worked 5 states from EL49fx – TX, LA, MS, AL and Fl

AA5AM 10 GHz System

18 inch offset fed dish
400 mW Qualcom PA
Double balanced mixer with no RF amplifier on receive

AA5AM Results

W5LUA - 24km
AA5C - 9km
N5WCO - 86km Best DX
WA5VJB - 85km and a close 2nd.

Score: 204kM + 400 QSO pts = 604

Mounting 10 GHz XVTR to arm of dish at AA5AM

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Mounting modified Ku band feed to offset fed dish at AA5AM

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Next Year

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- Consider Liaison on 432, smaller antennas, easier to pack in vehicle and potentially better propagation than 2m.
- RMG uses a 900 MHz repeater and also 440 FM
- Downside of migrating off of 144.260 MHz – Must publicize to make all aware locally and nationally
- What else?

How about operating 10 GHz from home in the comfort of your shack?

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- Measured losses on cables at 10368 MHz
  63 ft of ½ Heliax = 7 dB
  110 ft of 7/8 LDF = ~ 8 dB
  80 ft of 1 5/8 LDF = 6.8 dB
- Compare to 80 ft of EW-90 measured at 3 dB
- I use EW53 6 GHz waveguide at 10368 MHz where loss measured 1.5 dB
- AA5C has used ¾ inch copper pipe with transitions to coax at both ends with measured loss of about 1 dB for 50 ft. Greg mentions that any imperfections in retaining circularity in pipe can cause a polarization rotation which can increase loss.

Send your score to the ARRL

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8.2. Electronic entries must include the required information from the ARRL summary sheet (available online) completely filled out and a log file indicating band, date, time, call sign, the exchange information plus distance of contacts in km. The Cabrillo format is not required for the 10 GHz and Up Contest.

8.3. Logs must be submitted no later than 0000 UTC Tuesday, October 18, 2016.) Paper logs may be mailed to ARRL Contest Branch, 225 Main St, Newington, CT 06111. Electronic logs should be emailed to 10GHZ@arrl.org Incomplete or late logs may be classified as “check log.”