#### 3905 Century Club Shootout Report 2013 – Torrington, WY

I had such a great time in Torrington. Torrington's 2011 census indicated a population of 6,690 (the city limit signs need updating). I've been in towns of three to five times Torrington's population that didn't have as much going on. Did you visit the local Radio Shack? Coolest one I've ever been in. I had a shirt and a hat (a real Cowboy hat) embroidered while there and all the people I came into contact with were just as nice as they could be. I imagine all the rest of Wyoming is very similar and my next trip to visit my Daughter and her family in Spearfish, SD, even though it's a bit out of the way, will take me through Torrington.

This year's Shootout was held at possibly the best venue we've ever used for a Shootout. Last year, I sent a test signal from my mobile that was used as a benchmark to determine if Shootout conditions were changing during the event and participant scores were corrected using the benchmark data. This year, the same methodology was used, but unlike last year, the benchmark signals did not vary indicating a very stable environment. Therefore, no scoring adjustments were required. Not really hard to understand given the heat and lack of rainfall in Torrington, WY.

Thanks so much to Dave, WN1F for running the receive site and recording the scores. I couldn't have done it without him.

Special thanks to our Host John, WK7K for his hard work along with those assisting him. Thanks for volunteering to host the Eyeball in such a special place. Your wit and cowboy eloquence was appreciated by all and we won't soon forget the 2013 Eyeball. The huge, air-conditioned building was fantastic. All of the meals were wonderful and the Blue Grass group that serenaded us during the banquet Saturday night was an extra special touch.

And an extra special thanks, once again, to Ron, NI7J owner of Scorpion Antennas in Phoenix, AZ for his continued support of our Eyeball weekends through his generous contribution to our prize pool. This year, KK0Q won a Scorpion SA-680 mobile antenna and W2UJ and WT0A each won a Scorpion Cap Hat. Thanks very much, Ron for all you do for the 3905 Century Club.

The report format this year looks very similar to last years and I think you can look forward to subsequent years maintaining this same format. Thanks to all the participants this year – we had a lot of fun as usual.



Top Gun this year was Cal, **KCOCL** from Olathe, KS.

Cal designed the mount for his Scorpion SA-680 antenna and it includes a linear actuator which allows him to garage his vehicle at home. By pressing a button from his driver's position, the antenna lowers to a horizontal position. If you missed seeing this at the Eyeball, you missed something fairly rare in the world of mobiling. Cal also employed a Cap Hat using a DX Engineering Hot Rodz hub on a 4' mast and therein is your answer as to why he won – 48" between his main coil and a 4' diameter Cap Hat. Also note in the picture that his main coil is <u>well</u> above his roof line.

Congratulations, Cal.

Finish Order	Test Order	Call	Antenna	Whip/Cap Hat Configuration	Vehicle	Antenna Mounting Position	Raw Score in mV	Adjusted Score	dB Down from Top Gun
1	2	KCOCL	Scorpion SA680 http://www.scorpionantennas.com/	Scorpion Cap Hat on a 4' Mast	2008 Ford Escape	Home brew tubular mount at driver's side rear including linear actuator to lower antenna for garaging	23		0

# **BIG GUN and Tied for 2<sup>nd</sup> Place** Glen, WTOA



Glen, WT0A was back at it again this year. He came with basically the same antenna as last year, but made some very effective modifications to the undercarriage of his pickup truck. Remembering that the goal is to capacitively couple the pickup to ground, Glen bonded a large aluminum sheet to the underside of his pickup's frame and it improved his setup enough to garner a share of second place. Glen dubbed it his "Capacitance Boot." I shudder to think what he'll bring to the next Eyeball. if you Remember Glen, buy a decommissioned battleship, it must be capable of operating on our Interstate Highway system!!!



Finish Order	Test Order	Call	Antenna	Whip/Cap Hat Configuration	Vehicle	Antenna Mounting Position	Raw Score in mV	dB Down from Top Gun
3	3	WT0A	Hustler 75 Meter Standard Resonator at 90° http://www.new-tronics.com/main/	Hustler Resonator at 90° at top of mast at 13' 4"	2006 Chevy 1500 Pickup	Rear Bumper	16	-3.15

#### **BIG GUN and Tied for 2<sup>nd</sup> Place** Russ, W2UJ



El Presidente made a great showing this year with his Hustler antenna and home brewed mount and tall mast. His setup speaks for itself. Of course, it didn't hurt that the Crown Vic he owns was, in a previous life, a patrol car which was already bonded to the hilt. Way to go, Russ!

Finish Order	Test Order	Call	Antenna	Whip/Cap Hat Configuration		Antenna Mounting Position	Raw Score in mV	dB Down from Top Gun
2	7	W2UJ	Hustler 75 Meter Standard Resonator http://www.new-tronics.com/main/	None	2002 Crown Victoria	Rear Hitch Receiver	16	-3.15

# **BIG GUN and 4<sup>th</sup> Place** Jim, KB3PU



....and you all thought Jim was too busy being our club's webmaster to do anything in the Shootout. I guess he showed you! To be sure, Jim has provided our club with one of the premier websites for clubs like ours, but somehow he found the time to make a couple of minor changes over his entry from his 12<sup>th</sup> Place finish in Connecticut in 2011 and boosted his finish up eight places. You may think that a little corrosion on that screw connecting your coax to the antenna mount isn't worth worrying about, but it can make a difference – especially in a Shootout.

Finish Order	Test Order	Call	Antenna	Whip/Cap Hat Configuration	Vehicle	Antenna Mounting Position	Raw Score in mV	
4	10	KB3PU	Tarheel 200 http://www.tarheelantennas.com/	Standard 6' Whip	2004 Honda Accord	Rear Hitch Receiver	15	-3.71

# **5<sup>th</sup> Place** Elaine, N9QZF



Keith, she whipped you. At least you kept it in the family. It's good to see a husband and wife working together in Ham Radio for a common goal, but Keith must have worn himself out assisting Elaine, as his own entry will appear a bit further down in this report.

Finish Order	Test Order	Call	Antenna	Whip/Cap Hat Configuration	Vehicle	Antenna Mounting Position	Raw Score in mV	 dB Down from Top Gun
5	1	N9QZF	80 Meter Hamstick with a Hamstick Radial		2012 Chevy Impala	Home brew tubular mount rear bumper frame mounted	13	-4.96

## 6<sup>th</sup> Place RJ, NAOL

places this year.



RJ has more packed into his truck, in a most efficient manner, than I think I've ever seen. I didn't see the toilet or shower, but I didn't look into the back of his pickup. I'm not sure if he made any changes over his entry from last year, but he improved six

Finish Order	Test Order	Call	Antenna	Whip/Cap Hat Configuration	Vehicle	Antenna Mounting Position	Raw Score in mV	Adjusted Score	dB Down from Top Gun
6	6	NAOL	Tarheel 400A http://www.tarheelantennas.com/	6' Mast with a six- spoke Cap Hat at the top	2009 For Ranger	Home brew mount coming out the side of the hitch mount assembly at right rear	12		-5.65

## **7<sup>th</sup> Place** Keith, KS9WI

Keith tried a modification of Elaine's 5<sup>th</sup> Place entry and lost another .69 dB to Top Gun Cal. But that's what it's all about – trying things to see what happens.



Finish Order	Test Order	Call	Antenna	Whip/Cap Hat Configuration	Vehicle	Antenna Mounting Position	Raw Score in mV	dB Down from Top Gun
7	9	KS9WI	80 Meter Hamstick with a Hamstick Radial	None	2012 Chevy Impala	Home brew tubular mount rear bumper frame mounted	12	-5.65

## 8<sup>th</sup> Place Carl, W900



Carl, last year's Top Gun, decided to have some fun of a different type this year. He drove in with a monstrosity mounted on his car's roof which almost fell off as he approached the testing position. Oddlv enough, not one person objected to his entry, so testing commenced and Carl finished in eighth place. Carl brought much humor to this year's Shootout. Personally, I can't believe the thing even loaded up. It was a mess. That being said. This was the only antenna in the Shootout that didn't have to rely on a ground plane. Take a look at: http://www.standpipe.com/w2bri/loopbuilders1.htm and you'll see one that really works well.



Finish Order	Test Order	Call	Antenna	Whip/Cap Hat Configuration	Vehicle	Antenna Mounting Position	Raw Score in mV	 dB Down from Top Gun
8	13	W900	Gagtenna: ¼λ 75 Meter Loop http://www.whatabunchacrap.com	None	Did not notice due to the monstrosity on its roof	Mid Roof	12	-5.65





Phil's entry earned him a ninth place finish. I believe he would benefit from a larger diameter Cap Hat and a greater distance between his main coil and the Cap Hat. Although, his main coil appears to clear the roof, additional mast length would help a lot. Overall height should not be a concern, because the whip above the Cap Hat could be removed as it offers very little improvement when the Cap Hat is in place. Still, Phil was only an S-unit down from the winner.

Finish Order	Test Order	Call	Antenna	Whip/Cap Hat Configuration	Vehicle	Antenna Mounting Position	Raw Score in mV	Adjusted Score	dB Down from Top Gun
9	8	K9ZK	Tarheel 400A http://www.tarheelantennas.com/	2' Mast to a six- spoke Cap Hat with a 19 5' Mast on top	98 Ford Windstar	Rear Hitch Receiver	11		-6.41





Karl has been using this same setup for a few years now and it continues to work well for him. It's a simple and clean installation that anyone would be proud to call their own.

Finish Order	Test Order	Call	Antenna	Whip/Cap Hat Configuration	Vehicle	Antenna Mounting Position	Raw Score in mV	dB Down from Top Gun
10	4	KCOMS	80 Meter Valor Pro Am	None	2009 Honda Accord	Trunk Deck Lid	10	-7.23



Ray was the only entrant I couldn't find a picture of. His installation was definitely picture worthy as he had everything at his fingertips, within easy reach. He ended up just slightly worse than an S-unit behind Top Gun and I'm sure he doesn't miss many contacts, if any at all.

Finish Order	Test Order	Call	Antenna	Whip/Cap Hat Configuration	Vehicle	Antenna Mounting Position	Raw Score in mV	dB Down from Top Gun
11	12	WB0PYF	Hustler 75 Meter Standard Resonator http://www.new-tronics.com/main/	None	2012 Chrysler Town & Country	Left rear Hatch	10	-7.23

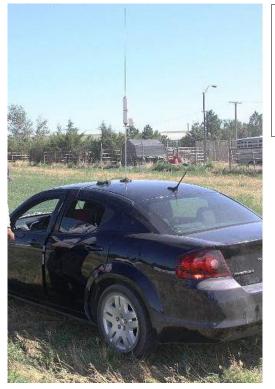
# 12<sup>th</sup> Place



By far, the most exciting part of the Shootout for me was seeing Jay drive his Big Rig to the Shootout line. There's just something about really big trucks that I like. Big Rigs are inherently problematic for Ham Radio operators. They already approach the max height rules, so getting an antenna ABOVE all that is a real challenge. Jay's installation tries to mitigate the issues as best as possible. Almost all of us have worked Jay in multiple states and he has done a great job of giving us those contacts despite being in motion most of the time. Jay runs an amplifier, so that more than makes up for the antenna mounting issues and we all certainly appreciate his efforts. Keep on truckin' Jay!!!

Finish Order	Test Order	Call	Antenna	Whip/Cap Hat Configuration	Vehicle	Antenna Mounting Position	Raw Score in mV	Adjusted Score	dB Down from Top Gun
12	11	W9JAY	GS-4 http://www.gs-mfg.com/index_003.html	4' Whip Only	2000 International Pro Star Big Rig	Passenger Side Mirror Mount	9		-8.15





Dwight flew up from Florida and rented a car, but that certainly didn't deter him from entering the Shootout. His Hustler resonator on a mag mount, in the middle of his roof worked well for him all weekend as he made quite a few contacts on the nets. He just bought a brand new truck, so watch out for him at next year's Shootout.

Finish Order	Test Order	Call	Antenna	Whip/Cap Hat Configuration	Vehicle	Antenna Mounting Position	in mV	 dB Down from Top Gun
13	5	WF4H	Hustler 75 Meter Standard Resonator http://www.new-tronics.com/main/	None	2013 Dodge Avenger Rental Car	Mid Roof on a Mag Mount	8	-9.17

## **Pop Gun and 14<sup>th</sup> Place Fred, WAOSIK**



Fred's four hour trip from his home in Colorado netted him 14<sup>th</sup> place in this year's Shootout. Do the rest of you remember one of your first times in a Shootout? Seems like there is always something to be improved upon, but the good thing is, it's usually just a couple of small things. After all, there were no less than five Hustler's in this year's Shootout and second place was, in fact, a Hustler. I didn't get a chance to really look at Fred's installation, but I'm sure that with a couple small changes, Fred would be in the running next time. Still, I'm sure Fred will tell you that he has made many a contact with his mobile. Thanks for being there this year, Fred.

Finish Order	Test Order	Call	Antenna	Whip/Cap Hat Configuration	Vehicle	Antenna Mounting Position	Raw Score in mV	 dB Down from Top Gun
14	14	WA0SIK	Hustler 75 Meter Standard Resonator http://www.new-tronics.com/main/	None	2008 Chevy Colorado	Behind Cab on Bed Rail	7	-10.33

#### **2013 Shootout Summary**

Finish Order	Test Order	Call	Antenna	Whip/Cap Hat Configuration	Vehicle	Antenna Mounting Position	Raw Score in mV	Adjusted Score	dB Down from Top Gun
1	2	KC0CL	Scorpion SA680 http://www.scorpionantennas.com/	Scorpion Cap Hat on a 4' Mast	2008 Ford Escape	Home brew tubular mount at driver's side rear including linear actuator to lower antenna for garaging	23		0
2	7	W2UJ	Hustler 75 Meter Standard Resonator http://www.new-tronics.com/main/	None	2002 Crown Victoria	Rear Hitch Receiver	16		-3.15
3	3	WT0A	Hustler 75 Meter Standard Resonator at 90° http://www.new-tronics.com/main/	Hustler Resonator at 90° at top of mast at 13' 4"	2006 Chevy 1500 Pickup	Rear Bumper	16		-3.15
4	10	KB3PU	Tarheel 200 http://www.tarheelantennas.com/	Standard 6' Whip	2004 Honda Accord	Rear Hitch Receiver	15		-3.71
5	1	N9QZF	80 Meter Hamstick with a Hamstick Radial		2012 Chevy Impala	Home brew tubular mount rear bumper frame mounted	13		-4.96
6	6	NAOL	Tarheel 400A http://www.tarheelantennas.com/	6' Mast with a six- spoke Cap Hat at the top	2009 For Ranger	Home brew mount coming out the side of the hitch mount assembly at right rear	12		-5.65
7	9	KS9WI	80 Meter Hamstick with a Hamstick Radial	None	2012 Chevy Impala	Home brew tubular mount rear bumper frame mounted	12		-5.65
8	13	W900	Gagtenna: ¼λ 75 Meter Loop http://www.whatabunchacrap.com	None	Did not notice due to the monstrosity on its roof	Mid Roof	12		-5.65
9	8	K9ZK	Tarheel 400A http://www.tarheelantennas.com/	2' Mast to a six- spoke Cap Hat with a 5' Mast on top	1998 Ford Windstar	Rear Hitch Receiver	11		-6.41
10	4	<b>KCOMS</b>	80 Meter Valor Pro Am	None	2009 Honda Accord	Trunk Deck Lid	10		-7.23
11	12	WB0PYF	Hustler 75 Meter Standard Resonator http://www.new-tronics.com/main/	None	2012 Chrysler Town & Country	Left rear Hatch	10		-7.23
12	11	W9JAY	GS-4 http://www.gs-mfg.com/index 003.html	4' Whip Only	2000 International Pro Star Big Rig	Passenger Side Mirror Mount	9		-8.15
13	5	WF4H	Hustler 75 Meter Standard Resonator http://www.new-tronics.com/main/	None	2013 Dodge Avenger Rental Car	Mid Roof on a Mag Mount	8		-9.17
14	14	WA0SIK	Hustler 75 Meter Standard Resonator http://www.new-tronics.com/main/	None	2008 Chevy Colorado	Behind Cab on Bed Rail	7		-10.33