

DIGITAL HAPPENINGS #20

(March 2014)

By W0NAC ("Matt")

I'm happy to report that the new antenna mount seems to be working very well. I had a machinist enlarge the trailer hitch mounting hole and other parts to 1 ¼" and a local ham friend produced a new spool shaped insulator (photo below) using his 3-D printing machine (these new 3-D printers can do miraculous things!). I have temporarily assembled the mount (photo below) and on the air reports have been good.



A little later I will be re-assembling the mount using a special epoxy potting compound (excellent insulating qualities) which I hope will prevent road salt, etc. from corroding the metal parts.

Having learned my lesson the hard way, I have also installed a Comet trunk lip mount to use with assorted "Ham Sticks" for backup purposes. Brief A/B comparison tests show that the 20M Ham Stick puts out almost as strong a signal as my primary antenna.

Incidentally, N0KV put me on to some excellent quick-disconnect hardware made by Breedlove Mounts Inc. You can locate them using this link: https://breedlovemounts.com/Home_Page.php . They make a ton of other mounting stuff which is all first class! I am using their quick disconnects for several assorted Ham Sticks and will be using one on the main mast for my primary antenna.

You can see what is pretty close to my final setup in the photo below:



Even though both antennas seem to work well when they are both mounted at the same time, they do show substantial coupling effects. For this reason the Ham Sticks will probably remain in the trunk for emergency use only.

How To Find And Work Other Digital Mobiles:

As promised last month, I will try to finish answering the question: “**How in the @!X*#! do I find and work other digital county hunters?**”.

The last two tools I will discuss this month are RSID (Reed Solomon Identification) and Video mode display. Both of these are well supported by Fldigi software so I will discuss them as implemented in Fldigi. I’m sure that other digital software programs also support these tools, but time and space limits me to just Fldigi. As an aside, I am continually being more impressed with Fldigi! This program somehow achieves the lofty goal of having a rich set of features and settings, but at the same time being simple to use if you just use the default settings. I highly recommend it to all (and it’s free!). You can download the latest version (3.21.80) here: <http://www.w1hki.com/download.html>

Reed Solomon ID:

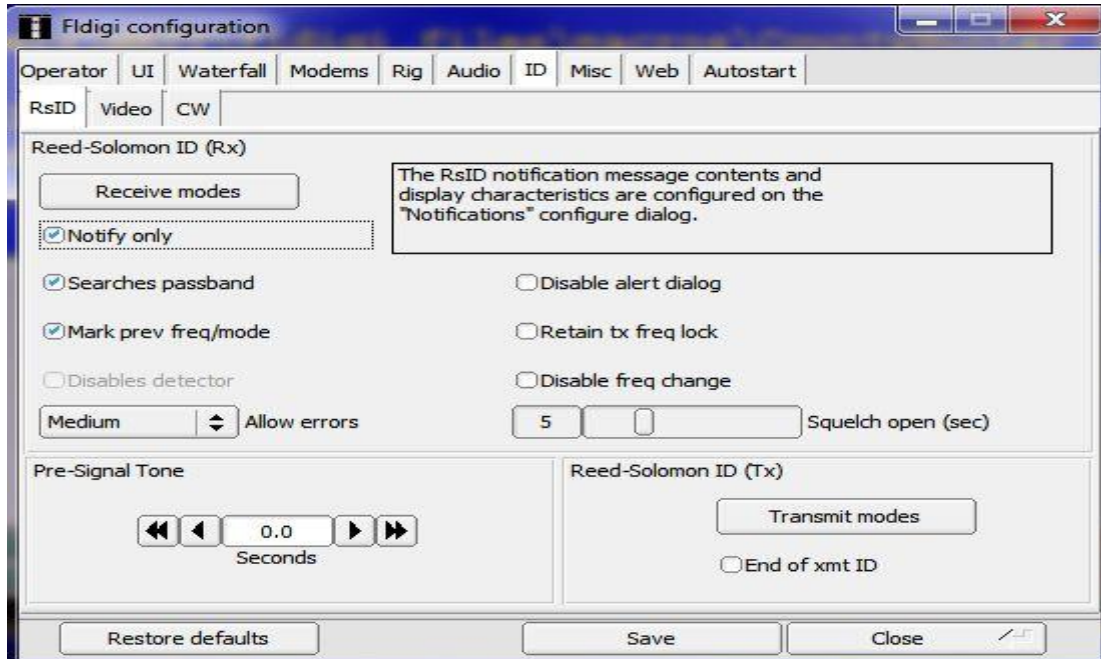
This is a special transmission (usually added at the beginning) which has a unique code for each mode/sub-mode that you are using. It was designed by Patrick Lindecker, F6CTE, for the modem program MultiPsk. It has been adapted to Fldigi and other modem programs. Fldigi has a separate RSID decoder that operates in parallel with all other modem decoders.

RSID reception and the transmission of RSID codes are toggled ON and OFF by clicking on buttons in the upper right of the Fldigi screen (see photo).



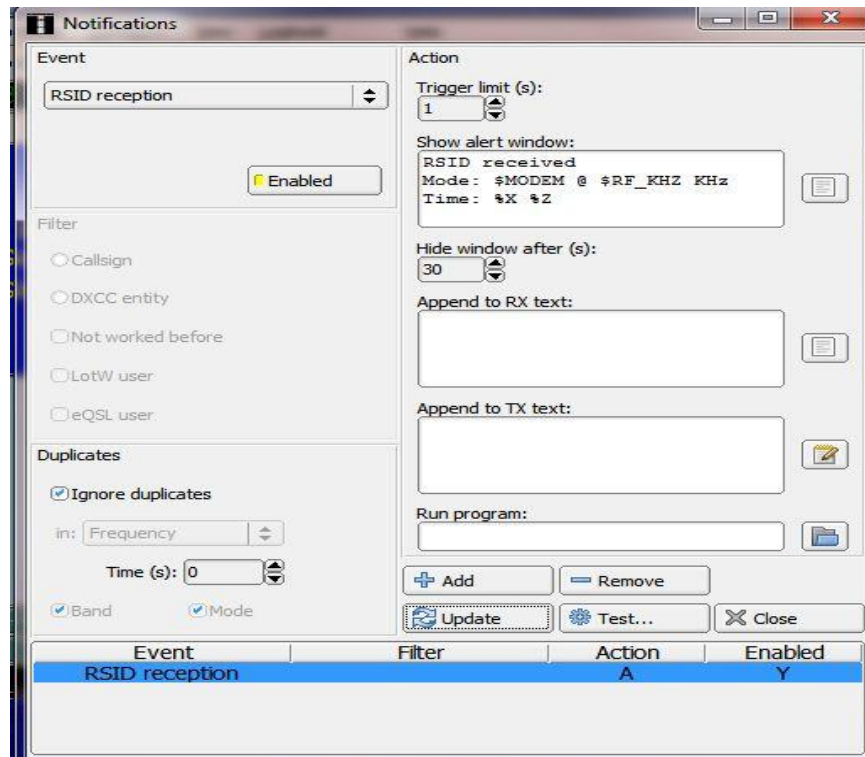
Note that in this picture, both RSID reception and RSID transmission are turned ON as indicated by the small green indicator light in each button.

There are many options available for both receiving and transmitting RSID signals. These are selected in the Configure/ID/RsID menu:

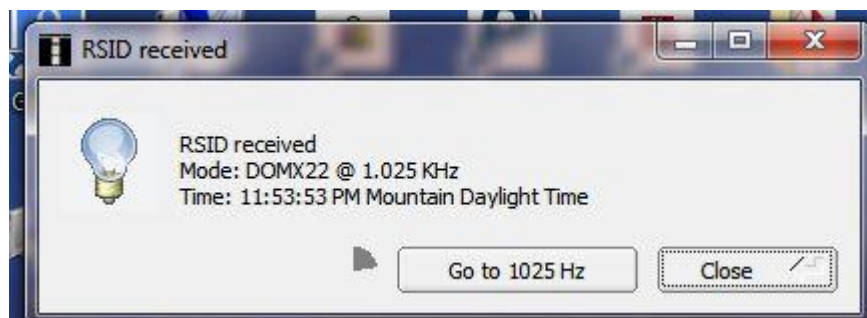


You will need to read the Fldigi manual (Heaven forbid!) to fully understand what each of these settings do, but if you just match the settings shown above things will probably work OK.

The other menu with settings for RSID is under Configure/Notification as follows:



Again, reading the Fldigi manual is recommended, but if you simply make your setup screen look exactly like this one, RSID should work OK. To be sure, click on the “Test” button and you should see a pop-up notification message similar to this:



A message (or several messages) like this is the end result of monitoring a frequency range where other people’s signals are appearing on your waterfall (If they are transmitting an RSID code). Note that the message shows the mode/sub-mode they are using and their offset frequency on your waterfall. If you click on the “Go to 1025 Hz” button, Fldigi will automatically change your frequency to match theirs and ALSO change your mode/sub-mode to match their mode/sub-mode!

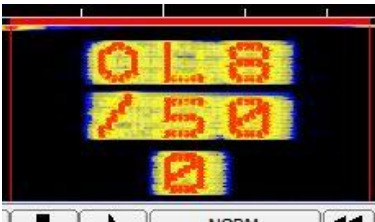
My initial opinion is that RSID has limited value for county hunters (mobiles) running counties using digital modes or for fixed station county hunters trying to work the mobiles. I believe this is true because the mobile’s call, mode, and frequency are probably already known, particularly if they have been “spotted”. Also, nothing is free in this world. So it is with RSID. It takes additional time at the beginning of a transmission to transmit the RSID code before any of your message text is sent. It may be short, but when you are trying to be as fast and efficient as possible, every extra second is very noticeable. Also, right now, most county hunters won’t be set up to receive your RSID code so all they will notice is a funny set of tones at the beginning of your transmissions.

If you are just “trolling” for casual contacts hoping to log new counties or new modes, it looks like RSID could quickly solve the mystery of what mode/sub-mode they are using plus switch you over to their frequency and mode almost instantly. This could be a real boon! The only drawback is that not every digital signal you see will be sending an RSID code. It’s still a bit new for many people.

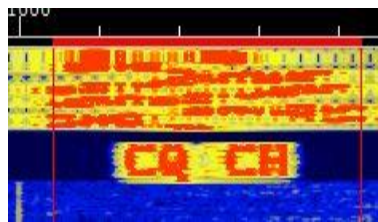
VIDEO ID & VIDEO TEXT:

Unlike RSID which just pops up a message, Video ID/Text actually displays brief mode IDs or other short text messages (or both!) at the beginning of your trace on the other person’s waterfall. Here are some examples:

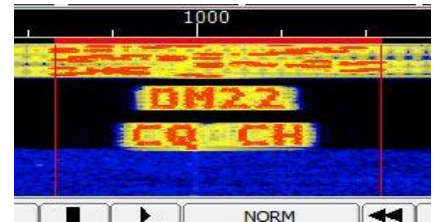
Video ID Only



Video Text Only

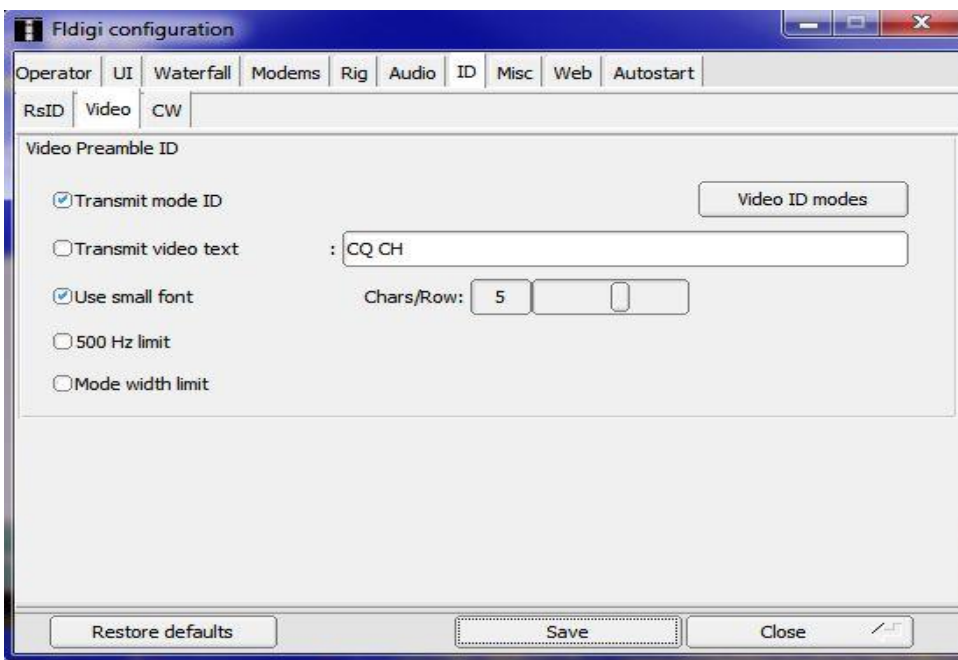


Both Video Text & ID



To save space, mode/sub-mode IDs are all abbreviated. In the first example above, the abbreviation is for “OLIVIA 8/500”. In the third, the ID is for “DOMINOEX 22”. In the second example the brief text message “CQ CH” is all that is displayed before the actual digital transmission (my call 3 times) is sent using DOMINOEX 22. In the third example both the text message “CQ CH” and the mode ID “DM22” are displayed before the actual digital transmission is sent. Pretty neat, huh?

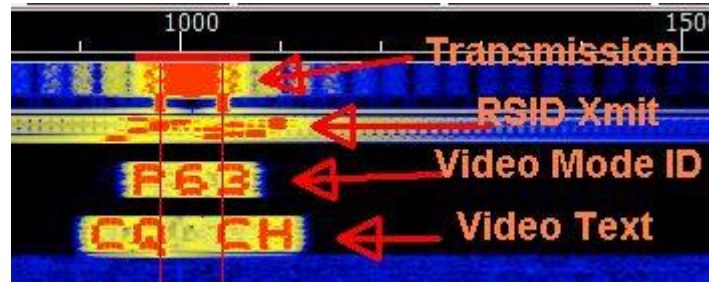
Fldigi gives you complete control over video ID/Text in the Configure/ID/Video menu:



As with the other menus, you will need to read the manual to understand all of the various features, but if all you wish to do is send video Mode ID, the settings in the menu above should work.

SUMMING IT ALL UP:

RSID and Video ID/Video Text have been around for a long time, but have not yet been used much by county hunters. That is unfortunate because they can be very useful tools. Just as an example, I have come up with a scheme where a mobile (putting out digital counties) might use these tools in their initial CQ call and in their CQ call every time they change modes. Their signal (assuming they begin by using PSK-63) would look like this:



The video text would assure other folks that this is a county hunter calling CQ. The next line (Video Mode ID) would tell people that the mobile is using PSK-63. The next line is the mobile's RSID which would pop up the notification box for watchers telling them again the mode plus the offset. If the watcher wishes, they can click on the "Go To xxxx" button and instantly be on the correct mode and tuned to the mobile's frequency ready to work them. The CQ-CH macro would control things so that the only time the IDs, etc. are transmitted would be when the mobile calls CQ. To insure that other macros will NOT transmit RSID or any Video ID/Text, you must have these features configured, but turned OFF in the Configure/ID/RSID and Configure/ID/Video menus.

If you would like to have the complete macro file containing this feature, you can get it at:

<https://dl.dropboxusercontent.com/u/26171574/Fldigi%20Macros/CountyHunter%20Mobile%20RSID%20Video.zip>

If you would like a complete set of macro files (Zipped) that I use then go here:

<https://dl.dropboxusercontent.com/u/26171574/Fldigi%20Macros/Fldigi%20Macros%2003-28-2014.zip>

You should place these macros (and any others you may be using) in the following folder:

"C:\Users\Your name\call)\fldigi.files\macros"

THE FUTURE:

I challenge other people in the digital county hunter community (fixed or mobile) to experiment with these new tools. There are bound to be better ways to use RSID and Video ID/Text to make digital county hunting more efficient and fun. I will be happy to look at and share any ideas you may have in future Digital Happenings articles.

March Activities:

Digital activities during March stayed at a high level! Digital county hunter mobiles spotted on W6RK in March and a very rough count of each's total counties/modes are:

W0NAC 4
 K5YAA 6
 KW1DX 12
 NA8W 33
 W5QP 6
 WQ7A 3
 NA8W/WD8BAH 12

The updated Table 3 is given below:

Table 3 - Active Digital County Hunters Award Status

#	CALL	NAME	STATUS* (M,F,I)	USA - DIGITAL COUNTIES (of 3077)	(1 MODE)	(2 MODES)	FIVE MODE COUNTIES (3 MODES)	(4 MODES)	(5 MODES)	TOTAL	% 5-Mode Completed	LAST UPDATED
1	AA8R	Randy	F	1206	3077	3077	1320	381	31	7886	51.3%	3/18/2014
2	AC0B	Cliff	F	205	-	-	-	-	-	0	0.0%	12/10/2012
3	AD1C	Jim	F	-	-	-	-	-	-	0	0.0%	
4	K0DEQ	Bill	F	-	-	-	-	-	-	0	0.0%	
5	K0FG	Fred	F	169	3077	3006	169	11	0	6263	40.7%	1/17/2014
6	K0PVW	Rob	F	-	-	-	-	-	-	0	0.0%	
7	K0WJ	Lou	F	-	-	-	-	-	-	0	0.0%	
8	K4PBX	Jim	F	151	2889	133	19	9	8	3058	19.9%	2/26/2014
9	K5GE	Gene	F	26	1893	575	8	0	0	2476	16.1%	5/26/2013
10	K5SF	Dick	F	-	-	-	-	-	-	0	0.0%	
11	K5WAF	Bill	F	599	3044	?	?	?	?	3044	19.8%	5/2/2013
12	K7REL	Tom	F	-	-	-	-	-	-	0	0.0%	
13	K8QWY	Ed	F	-	-	-	-	-	-	0	0.0%	
14	K8ZZ	Ed	F	-	-	-	-	-	-	0	0.0%	
15	KA4RRU	Mike	M/F	975	3077	2939	944	49	1	7010	45.6%	1/10/2014
16	KA8IQP	Pamela	M/F	22	202	64	53	28	4	351	2.3%	9/12/2013
17	KC3X	Hollis	F	-	-	-	-	-	-	0	0.0%	
18	KC6AWX	Bob	F	450	3077	1592	264	59	14	5006	32.5%	5/7/2013
19	KC7YE	Jack	F	-	-	-	-	-	-	0	0.0%	
20	KD5YUK	Billv	F	-	-	-	-	-	-	0	0.0%	
21	KD7KST	Bill	M/F	1792	-	-	-	-	-	0	0.0%	9/30/2012
22	KF7PKL	Davis	F	379	879	211	48	15	1	1154	7.5%	10/9/2013
23	KG5RJ	Greg	F	693	3050	2107	635	258	96	6146	39.9%	3/23/2014
24	KM1C	Bill	F	-	-	-	-	-	-	0	0.0%	
25	KU4YM	Dave	F	30	2782	29	10	2	1	2824	18.4%	9/6/2013
26	KM6HB	Mark	F	714	3077	2936	694	87	1	6795	44.2%	2/3/2013
27	KW1DX	Dave	M/F	24	3077	924	26	19	14	4060	26.4%	3/6/2014
28	N0KV	Barry	M/F	500	3077	3029	2289	355	69	8819	57.3%	1/7/2014
29	N0LXI	Sharon	M/F	1369	3077	2267	1216	490	250	7300	47.4%	3/28/2014
30	N1API	Al	F	549	3077	2098	468	251	144	6038	39.2%	3/24/2014
31	N4JT	Jim	F	736	3077	3064	743	235	150	7269	47.2%	10/21/2013
32	N5MLP	Ron	M/F	391	3077	409	54	37	9	3586	23.3%	5/19/2013
33	N6PDB	Dennis	M/F	849	3077	2884	931	580	441	7913	51.4%	3/28/2014
34	N8CIJ	Dick	F	676	3077	3014	668	303	229	7291	47.4%	9/5/2013
35	N8HAM	Jim	F	0	3077	0	0	0	0	3077	20.0%	4/2/2013
36	N9WNN	Steve	F	0	2180	0	0	0	0	2180	14.2%	2/24/2013
37	NA8W	Darl	F/M	579	3022	852	381	212	99	4566	29.7%	9/12/2013
38	NF0N	Mike	F	785	3077	3077	915	108	50	7227	47.0%	12/31/2012
39	NN9K	Pete	F	816	3077	859	78	1	0	4015	26.1%	3/23/2012
40	NT2A	Gene	F	-	-	-	-	-	-	0	0.0%	
41	NU4C	Paul	F	-	-	-	-	-	-	0	0.0%	
42	NW6S	Jim	F	722	3077	3077	743	59	35	6991	45.4%	9/7/2013
43	NX4W	Lloyd	M/F	1135	3077	1274	436	290	97	5174	33.6%	7/27/2013
44	W0NAC	Matt	M/F	1835	3077	2846	2005	1113	464	9505	61.8%	3/28/2014
45	W3DLM	Don	F	359	3077	2390	298	101	55	5921	38.5%	10/12/2013
46	W3ZUH	Dick	F	5	3077	2048	11	2	0	5138	33.4%	12/4/2013
47	W4IH1	Gary	F	-	-	-	-	-	-	0	0.0%	
48	W4SIG	Kerrv	F	-	-	-	-	-	-	0	0.0%	
49	W4YDY	Dave	F	909	3077	3077	1062	379	195	7790	50.6%	3/1/2014
50	W5QP	Rick	M/F	260	3077	2677	290	142	109	6295	40.9%	3/23/2014
51	W6RK	Risto	F	-	-	-	-	-	-	0	0.0%	
52	W6RLL	Joe	F	-	-	-	-	-	-	0	0.0%	
53	W7FEN	Larry	F	25	3077	2975	32	1	0	6085	39.6%	10/3/2013
54	W7IN	Larry	F	-	-	-	-	-	-	0	0.0%	
55	W7QQ	Bill	M/F	-	-	-	-	-	-	0	0.0%	
56	W9IR	Rich	F	90	3077	1674	44	0	0	4795	31.2%	10/31/2012
57	W9SUQ	Larry	F	-	-	-	-	-	-	0	0.0%	
58	WA4EEZ	Leslie	F	1086	3077	1742	699	234	31	5783	37.6%	1/6/2014
59	WA4UNS	Doug	F	-	-	-	-	-	-	0	0.0%	
60	WA6OCV	Susan	M/F	328	3077	328	320	130	10	3865	25.1%	3/28/2013
61	WA7ETH	Ed	F	173	1919	389	30	3	0	2341	15.2%	3/25/2014
62	WA7JHQ	Sterling	F	-	-	-	-	-	-	0	0.0%	
63	WB0M	Jeff	F	-	-	-	-	-	-	0	0.0%	
64	WB2ABD	Paul	F	-	-	-	-	-	-	0	0.0%	
65	WD4OIN	Jack	F	995	3077	3070	1005	422	189	7763	50.5%	3/15/2014
66	WQ7A	Terry	F	201	3077	3028	206	132	112	6555	42.6%	8/24/2013
67	WY4D	Ben	F	281	3077	303	36	15	9	3440	22.4%	2/11/2014

Please note that WD4OIN has also joined the small group of those who have completed 50% or more of the 5 – Mode Award. Congratulations Jack!

How To Get Your 5 – Mode Statistics Updated:

Several past Digital Happenings articles have given detailed instructions on a new and easy way to update your digital statistics for Table 3 by using a small program called “Digital Report Utility”. This new program will create a report for you showing your progress for both the **USA – Digital** and the **5 – Mode Awards** and email it to W0NAC. Instead of repeating these instructions every month I have included them in a Microsoft Word document that you can download by clicking on the following link: <https://dl.dropboxusercontent.com/u/26171574/Happenings/5%20Mode%20Update.doc>

Other possible topics for future months include (in no particular order):

“Compatibility Issues When Making RTTY Contacts”

“How To Log Your Digital Contacts In Logger”

“Macros – Revisited”

“New Digital Awards?”

“Digital Software Installation – Revisited”

“Award Difficulty Index”

I hate to keep harping at you all, but I really need (and welcome) your suggestions on topics for future articles! Or, if you have a story or tip that you wish to contribute, I will certainly try to include it. Short stories describing your experiences/joys/frustrations/etc. in getting started in digital ops would be especially welcome. Summaries of any digital trips you make (or have made in the past) would also be good. I look forward to hearing from you. Don't be shy!

Please email me with your comments/suggestions at w0nac@comcast.net and don't forget to send your updated status for the **USA – Digital** and **5 - Mode Awards** so I can update the Active Digital County Hunters Award Status list again next month.

73's and we hope to see you on our waterfall again real soon!

Matt – W0NAC