

MT HELP DESK

SPECIFIC FREQUENCY AND EQUIPMENT QUESTIONS

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Q. I saw the question in the October MT Help Desk you answered about this Stanag 4285 protocol. What is it and where can I monitor some of these comms? (Anonymous via email)

A. STANAG is the NATO abbreviation for Standardization Agreement, which sets up processes, procedures, terms, and conditions for common military or technical procedures or equipment between the member countries of the alliance. Each NATO state ratifies a STANAG and implements it within its own military. The purpose is to provide a common set of operational and administrative procedures and logistics, so one member nation's military may use the stores and support of another member's military. STANAGs are published in English and French, the two official languages of NATO, by the NATO Standardization Agency in Brussels.

A general description of the STANAG 4285 NATO standard can be found on the SkySweeper website at: www.skysweeper.com/stanag_4285_decoder.htm. That description includes the following:

"STANAG 4285 is the NATO standard for HF communication. It consists of several sub modes (75-3600 bps) and two different interleaving options (short and long). The receiver should be in USB mode and provide flat frequency response from 600-Hz to 3000-Hz. The center frequency is set to 1800-Hz and cannot be changed."

A friend of *Monitoring Times*, Mr. Eddy Waters from Collinswood, South Australia, passes along the following Stanag 4285 protocol frequencies he has monitored recently (frequencies are in kHz and mode is USB):

NATO					
4041.5	4055.2	4112.6	4152.0	4169.0	4225.5
4228.0	4236.2	4237.2	4244.6	4253.2	4255.0
4263.2	4278.2	4280.6	4299.2	4305.2	4306.0
4307.2	4310.2	4317.2	4345.0	4346.0	4347.5
4372.0	4376.2	4401.8	4509.7	4532.7	4572.5
4576.2	4588.6	4590.0	4603.2	4643.0	4680.1
4686.0	4687.2	4781.7	4808.2	4810.2	4901.0
5048.0	5085.2	5101.0	5102.2	5148.2	5235.7
5246.2	5266.6	5278.0	5278.2	5278.6	5279.7
5282.0	5309.7	5332.0	5336.5	5348.2	5361.7
5362.2	5379.0	5427.7	5700.0	5732.7	5784.7
5786.5	5789.7	5848.2	6227.6	6249.2	6251.0
6253.2	6258.2	6259.2	6286.7	6335.2	6343.2
6360.6	6382.2	6388.7	6393.2	6398.7	6403.2
6405.2	6408.5	6408.7	6419.2	6423.2	6424.0
6428.2	6429.2	6442.2	6443.2	6465.0	6472.2
6490.5	6492.7	6493.2	6500.7	6711.2	6765.0
6780.7	6781.2	6787.7	6793.2	6794.5	6805.2
6842.6	6843.2	6881.0	6889.6	6892.0	6893.2
6903.2	6903.2	6968.0	7405.2	7406.2	7420.7
7467.2	7467.7	7601.2	7723.0	7776.7	7800.0
7843.2	7853.2	7982.0	8005.0	8008.2	8022.2
8027.2	8049.7	8073.7	8082.0	8098.2	8106.7
8108.5	8109.7	8138.0	8138.2	8156.2	8170.2
8170.5	8172.0	8178.2	8248.0	8271.2	8300.2
8340.0	8355.0	8456.2	8463.2	8468.2	8470.0
8474.2	8488.2	8508.0	8511.0	8524.2	8540.2
8541.0	8542.0	8552.6	8573.6	8612.2	8612.2

8618.2	8632.6	8661.0	8672.2	8695.2	8697.4
8698.2	8708.2	8793.6	9005.0	9028.6	9052.7
9095.0	9098.6	9100.5	9132.0	9270.0	9910.7
9956.2	10012.0	10111.5	10170.2	10186.1	
10233.2	10264.2	10274.2	10352.2	10352.2	
10353.2	10371.2	10408.2	10439.6	10449.7	
10478.0	10499.7	10522.0	10555.5	10559.2	
10561.0	10568.2	10568.7	10568.7	10569.2	
10599.0	10658.2	10669.2	10740.0	10741.7	
10742.0	10751.6	10758.2	10778.2	10807.2	
10807.7	10836.7	10948.2	10948.7	10967.2	
11000.0	11006.2	11015.0	11016.7	11021.2	
11042.7	11072.7	11105.2	11200.0	11228.0	
11405.5	11414.0	11455.2	11457.0	11538.2	
11540.0	12144.6	12154.2	12193.0	12203.2	
12221.0	12275.0	12305.7	12368.2	12386.0	
12396.0	12406.0	12416.2	12568.0	12570.0	
12661.2	12685.2	12691.2	12692.0	12704.5	
12715.2	12724.0	12749.2	12771.0	12784.2	
12804.2	12829.2	12847.2	12860.5	12873.6	
12883.6	12883.7	12913.0	12915.0	12930.7	
12932.2	12958.0	12958.2	12982.0	13057.6	
13072.2	13091.5	13410.0	13410.7	13411.6	
13413.7	13415.5	13445.0	13495.0	13588.2	
13917.2	13919.0	14320.0	14371.5	14376.2	
14385.2	14388.2	14442.2	14616.0	14638.2	
14723.7	14749.2	14870.0	14901.0	15000.0	
15851.0	16000.0	16028.2	16030.0	16158.2	
16205.0	16225.0	16250.0	16270.2	16333.2	
16356.7	16456.5	16574.2	16589.2	16611.6	
16656.0	16748.2	16790.0	16905.0	16916.2	
16921.8	16924.2	16925.0	16931.0	17060.6	
17082.2	17097.6	17106.6	17125.7	17130.0	
17135.6	17179.6	17192.6	17197.5	17200.2	
17202.2	17218.7	17219.0	17237.7	17378.2	
17799.2	17930.2	18045.0	18259.2	18366.0	
18367.5	18375.2	18493.5	18507.2	18532.7	
18538.0	18555.0	18598.4	18853.2	18855.0	
19714.2	19729.2	19730.2	19737.7	19800.0	
19830.2	19898.2	20000.0	20010.2	20151.0	
20160.2	20192.0	20290.0	20975.2	22178.5	
22188.2	22413.0	22544.6	26130.2		

Here are a few more from my personal monitoring notes:

CANFORCE	
CFH	8632.6
French Navy	
6WW	12855.1
FUE	6348.0
FUF	4810.2 8479.5 13031.2 16961.5
FUG	4288.6
FUJ	4271.0 8646.0 12664.5 16957.8 22461.3
FUM	8625.0 12666.5
FUO	6384.7 8451.0 12664.5
FUV	8568.0 13042.5 22447.2
FUX	4332.0 8473.5 12689.0
Dutch Navy	
4278.2	
German Navy	
DHJ59	6777.2 8333.5 12178.0
Italian Navy	
IDR/IGJ	2350.5 2804.2 3583.2 4031.0 4115.6 4225.2 4474.0 6316.2 6318.0 6323.2 6331.7 6433.7 8149.2 10605.7
Spanish Navy	
	8463.2 12930.7
US Navy	
	8326.6

Q. It seems that 5.680 and 7.257 were active a couple of nights ago. This was the first time I ever caught any activity on these

freqs. I believe they are Coast Guard frequencies. (Al via the Utility Listening Newsgroup)

A. I presume you mean 7527 kHz above, because 7257 kHz is a 40 meter ham frequency. The frequency 5680 kHz is, in fact, a US Coast Guard air to ground frequency, but 7527 kHz is part of the Immigration and Customs Enforcement (ICE) COTHEN (Customs over the Horizon Network) system. They carry traffic from a lot of agencies involved in the war on drugs. Since the Coast Guard was rolled into the Department of Homeland Security as well as ICE, they now share the COTHEN net as equal partners and we see a lot more activity on COTHEN by the Coast Guard.

Following is some information I recently posted on my *MT Milcom* blogspot (<http://mt-milcom.blogspot.com/>):

U.S. Immigration and Customs Enforcement (ICE)

The COTHEN (Customs Over the Horizon Enforcement Net) HF radio system has replaced the older JTF designated systems and those frequencies/designators have been discontinued.

5732.0	Scan 1
7527.0	Scan 2
8912.0	Scan 3
10242.0	Scan 4
11494.0	Scan 5
13907.0	Scan 6
15867.0	Scan 7
18594.0	Scan 8
20890.0	Scan 9
23214.0	Scan 10
25350.0	Scan 11

Q. Is there any way for me to build a simple to moderately difficult kit that will up convert my VHF frequencies to UHF milband? Or, is it more efficient/cost effective to splurge on a UHF capable scanner, as I don't have a whole lot to spend? My feeling is the latter; however, I would like to hear your input. (Jacob via email)

A. Given the large amount of older non-trunk scanners in the marketplace that cover the 225-400 MHz UHF milair band, I would definitely say a dedicated scanner is the way to go. Besides, I haven't seen many kits floating around to convert VHF to UHF. The last piece of equipment I saw along those lines was a Grove VHF-UHF Converter that used stack frequency technology, but that has been long gone from the radio hobby marketplace. I recommend any of the many scanners that cover the milair band now.