

# RADIOWAVES

## A Sudoku Puzzle for your Entertainment

*If you can pass the test and get a Ham license, you can solve a Sudoku!*

2				6		3	9	7
9		5		2			6	
	4							
			3					2
		7	2	4	5	6		
8					7			
							7	
	2			7		4		1
7	8	1		3				9

**Directions:**

The objective is to fill a 9x9 grid with digits so that each column, each row, and each of the nine 3x3 sub-grids that compose the grid (also called "boxes", "blocks", "regions", or "sub-squares") contains all of the digits from 1 to 9. Try it - Its fun!

Merry Christmas and Happy Holidays!



This is the space where we'd normally have some inspiring communication from the club leadership or pithy commentary by the newsletter editors. In December, however, we're all too busy chasing Black Friday deals for Ham radio gear, electronic instruments, parts or fancy, overpriced flying accessories (ahem) to be bothered with "The Details". Be assured that **Radiowaves** we'll return to "normal" next month.

Enjoy Your Holidays!

- Editors



MARCI ANNOUNCEMENTS

**Welcome New Hams!**

We have two new Hams from the testing at last month's MARCI Foxhunt. Our congratulations go out to **Tony McCrea** of Palmetto and **Brice Tilton** of Terra Ceia. Look for them at the meetings and introduce yourself.

**Time To Renew Your MARCI Annual Membership**

Its time again to renew your annual MARCI membership. Individual memberships are \$25 and family memberships are \$30. Either see Jerry at one of the meetings or mail your dues to the club address. Further details are on [www.manatee-arc.org](http://www.manatee-arc.org).

**What exactly is "Emissivity"?**

At the MARCI Foxhunt last month, one of the members asked for an explanation of the term "emissivity" that was used in the SDR article in last month's **Radiowaves**. "Emissivity" is the ratio of the brightness of a hot object (heat simply being infrared light) to its temperature. It is a function of an objects material and surface finish. "Emissivity" varies between 0 and 1. Most matte, dark objects and finishes have an emissivity of 0.95. Shiny objects glow relatively less as they are heated and have lower

emissivities. Highly polished silver has an emissivity of about 0.02.

Handheld IR thermometers must make some assumptions about the emissivity of the surface they are pointed at to estimate its temperature. Most assume, with some justification, that their targets will have an emissivity somewhere near 0.95. The better models of handheld IR ("non-contact") thermometers allow the user to adjust this factor, possibly even providing a thermocouple to make the necessary measurements. This helps increase their accuracy of their "non-contact" temperature measurements on difficult surfaces.

- Greg Blanchard, AI4ZR

**Articles Wanted for "Radiowaves"**

The editors of your new MARCI Newsletter, **Radiowaves**, are soliciting for original articles on the technical, operational and practical aspects of amateur radio. Here's your chance to see your experiences with some aspect of amateur radio in print. Although we are primarily interested in full-page articles, we will consider short topics, equipment reviews, and first-hand news articles. Writing is fun! Contact the editors (listed at the lower right) for more information.

CLASSIFIED ADS

**HP 64-bit Computer for Sale**

AMD Pnemon 9450e Quad-Core processor running at 1.8 GHz, 4 GB High speed memory, 2 X 500 GB serial ATA hard drives, 2 DVD drives, 19- inch Screen. All in new condition. Asking \$325.00. Contact Jerry, AE4XW for more information at [jerry.ae4xw@gmail.com](mailto:jerry.ae4xw@gmail.com).

**MARCI Information**

**MARCI Information Net**

Every Sunday at 7pm

**MARCI "Rag Chew" Net**

Every Thursday at 7pm

**MARCI Repeater**

146.820 - (100 CPS Tone)

**MARCI Website**

[www.manatee-arc.org](http://www.manatee-arc.org)

**MARCI Regular Meetings**

First Tuesday of the month at 7pm in the Red Cross Bldg. (2905 59th St. W., Bradenton, FL)

No Meetings in August

**MARCI Newsletter**



JONELLE NABERGALL

Jonelle (KI4WSN) serves as the official MARCI Board representative. Jonelle's e-mail is: [jnaberga@tampabay.rr.com](mailto:jnaberga@tampabay.rr.com).



GREG BLANCHARD

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GEOFF HAINES

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