

THE 6 METER NET CHRONICLES

Larry Royster, KI4FYR

Julie Royster, KI4OTM

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**NOTE! WITH THIS ISSUE OF THE TEARA 6 METER NET
CHRONICLES WE WILL START A SERIES OF SHORT
DISCUSSIONS ON THE MAKE-UP OF THE UNIVERSE.**

PURPOSE

The purpose of this information source is to keep interested parties abreast of the amateur radio activities and other deemed pertinent ham related topics on the TEARA 6 meter chat/information net held each Thursday at 8:30 pm using the 53.03 six meter repeater (K4ITL, FM) located just south of Raleigh, NC at Lake Wheeler. The 53.03 repeater is owned by Danny Hampton, Jr. and we have been given permission by him to use it.

CONTRIBUTING

If you have any information that would be pertinent to the amateur radio participants of this net please send it to ki4fyr@bellsouth.net for inclusion in a future issue. Also send a note to this address if you, or a friend, wish to be included in the email distribution for issues of the 6 Meter Net Chronicles.

NET ACTIVITY SUMMARY

During the month of July, the TEARA 6 meter net handled 28 check-ins covering an area of approximately a 50 mile radius from Danny Hampton's 53.03 repeater. A table and map showing the activities to date are included as **Appendix A** of this document.

TEARA (Triangle East Amateur Radio Association)

The Triangle East Amateur Radio Association meets the fourth Tuesday of each month, at 7:00 pm, in the social hall of the Wendell United Methodist church. Individuals start arriving around 6:00 to 6:30 pm and bring their dinner and socialize until the meeting starts at 7:00 pm. TEARA has very good programs of interest to hams. Please give the club a visit and consider becoming a member. TEARA does not meet during the month of December.

TEARA CLUB 2006 FIELD DAY PICTURE



Robert Pierpoint, KG4BDX
Sits With His Rocket Collection During Field Day 2006
Along With Sam Johnson, NC4SJ.

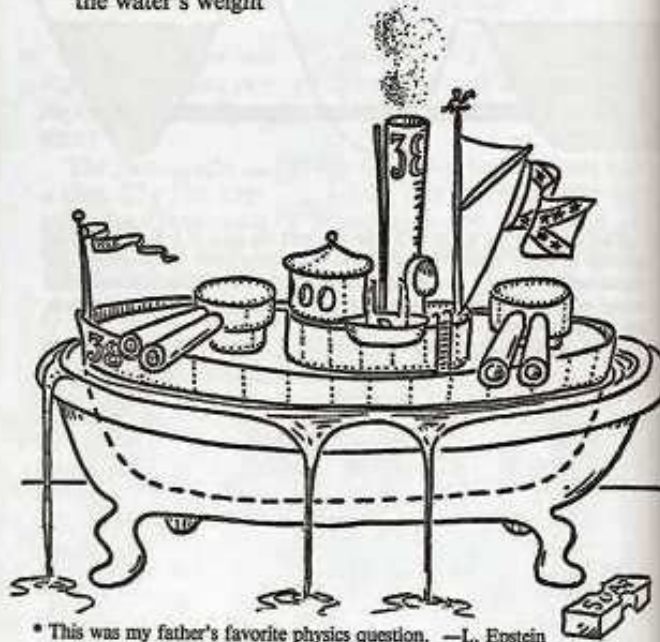
A HAM'S THINKING PROBLEM

BATTLESHIP FLOATING IN A BATHTUB

Can a battleship float in a bathtub?*

Of course, you have to imagine a very big bathtub or a very small battleship. In either case, there is just a bit of water all around and under the ship. Specifically, suppose the ship weighs 100 tons (a very small ship) and the water in the tub weighs 100 pounds. Will it float or touch bottom?

- a) It will float if there is enough water to go all around it
- b) It will touch bottom because the ship's weight exceeds the water's weight



* This was my father's favorite physics question. —L. Epstein

ASTRONOMY

PART A--FROM EARTH!

Larry Royster, KI4FYR
Julie Royster, KI4OTM

Beginnings

This is the first part of what I hope to be a series of articles related to **Astronomy Concepts, Things and Presently Known Scientific Facts**. In this first part we will start our journey from the standpoint of the surface of the earth. From the beginning humans observed the heavens and developed all kinds of concepts and ideas (usually odd and non-factual) about what they observed.

Consider our solar system as shown in Figure 1. If you think of an

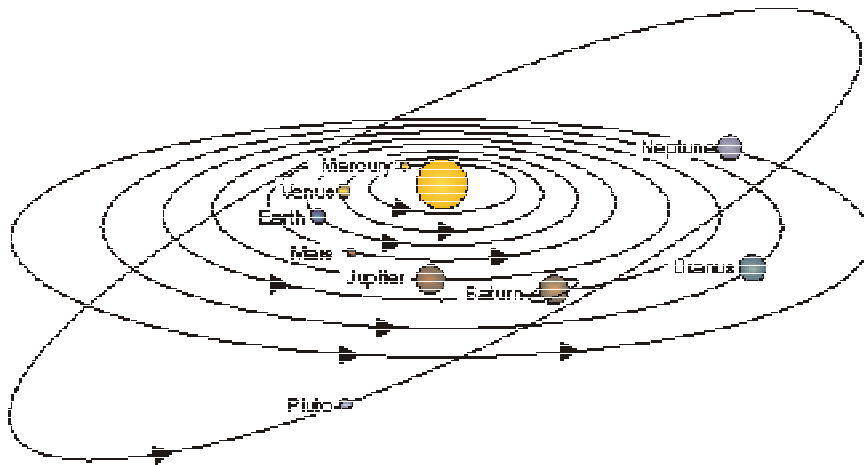


Figure 1.

early pre-historic human (and some much more recent), standing on the surface of the earth and looking up at the night sky, it is easy to imagine that early humans wondered about the goings-on of the heavenly lights, and their movements, that they observed in the sky. Since the sun seemed to come up in one direction and set in another and with the political power that the early churches had over the populations, it is easy to understand the early concept that the earth was the center of the universe which dominated everyday life.

However, in time problems with how the big lights, planets, etc., seemed to move over time created conflicts with these early interpretations that the earth was

the center of the universe, at least for some early scientists. Then over time, thanks to the efforts of many individuals (Copernicus, Kepler, Newton, etc.) it finally was comprehended that the Sun was the center of our solar system, not the earth. It has only been fairly recently that humans came to appreciate the fact that our sun is just one star in one of hundreds of billions of galaxies. Note that each galaxy contains some 100-400 billion suns of various sizes.

Indeed, we are not even a speck in the game of things, and human life on this planet is hard to relate to time as applied to the universe as a whole. In fact, as Einstein's equations demonstrate, and as it has now been proven experimentally, time is relative: it is not even a fixed parameter.

Constellations

A constellation is one of the 88 areas into which man has divided up the sky, from the surface of the earth. These groupings of stars, visible white dots, are called constellations and they have been given various names that have been modified, changed, etc. over time. Some of the well known constellations are Ursa Major (big dipper), Ursa Minor (small dipper), Orion (the hunter), Leo (the lion) and Scorpius (the scorpion).

Therefore as early man observed the heavens, he started to associate different clusters of other suns, stars, with various gods and earthly shapes. Two of the more well known constellations are shown in Figures 2 and 3, Ursa Major and Ursa Minor.

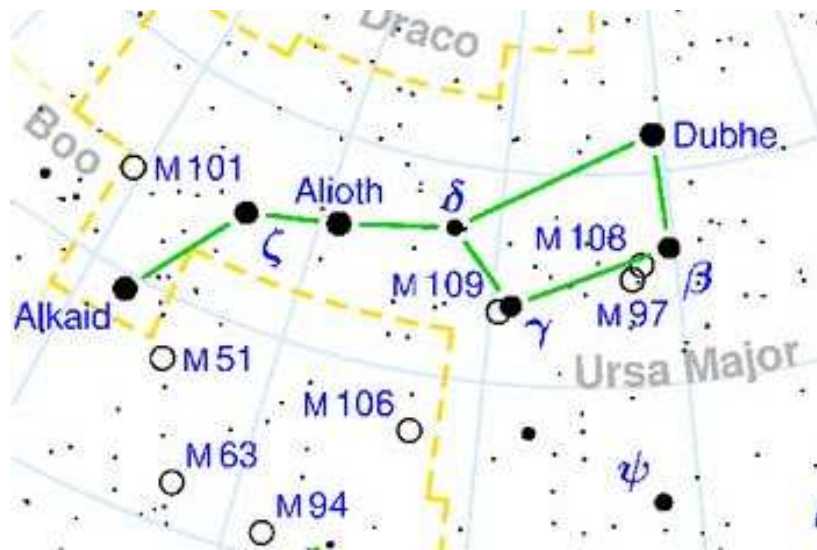


Figure 2.

Ursa minor is very important because the star at the end of the little dipper's handle is Polaris, the North Star. This Star has been used for millennia by humans as a guide (in that it seemed to remain stationary in space). This is because Polaris is located above the North Pole and, since the earth turns somewhat around this axis, the North Star seems to remain in the same location. However, in time its apparent position will change and it will no longer will be a good reference point (but not in our life time!!!).

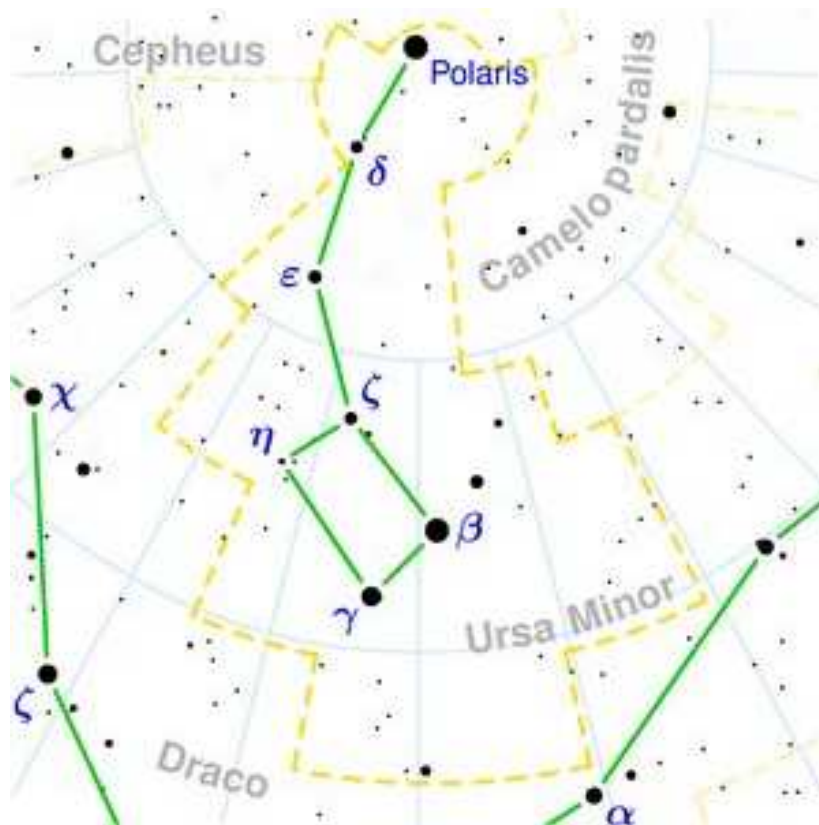


Figure 3.

Take A Look

If you happen to live in a place where the night sky is not filled with light from earth-based light sources, go outside and take a look at your visible sky. Better yet, if you own a good set of wide-angle binoculars, use them to take a scan of the sky. As your eyes adjust to the dark I think you will be amazed at what you can see in the sky. You might wish to use one of the various web sources to get a

fix on what you are looking at. You might wish to check out your local library and see if they carry a copy of the *Astronomy* magazine. It includes a pull-out of the visible sky from various locations on the surface of the earth. This source provides useful information about the contents of the sky as seen by the naked eye.

Modern Day Definitions

The IAU (International Astronomical Union) divides the sky up into 88 "official" constellations. Note that the stars in a constellation do not necessarily have any physical (astrophysical) relationship to each other. They just appear to be in the same general area to an observer on the surface of the earth. You might have surmised by now that the grouping of stars into various constellations is very arbitrary.

Closing Comments - Request

If you are into astronomy and would like to contribute a couple of short articles on any related subject to the TEARA 6 meter net Chronicles, please send your ideas to ki4fyr@bellsouth.net. If you have corrections to any of the contents of this or other articles, please also send them to the same address. Many, many.... thanks.

Reference Sources

The following are just a very few of the very useful sites on the web that have information related to the topics discussed in Part A.

- (1) The Night Sky - <http://nightskylive.net/> - This location has a camera that is pointed towards the night sky, etc. A great location to go for beginner or experienced astronomer types!
- (2) The Night Sky This Week - <http://www.nightskyinfo.com/> - gives a current picture of what one should see in the sky (northern hemisphere).
- (3) Space.com - <http://www.space.com/spacewatch/> - has various types of information about space related topics.
- (4) Definitions - Wikipedia - <http://en.wikipedia.org/wiki/Constellation> - If you go to this free internet encyclopedia site it will provide definitions and typically

very detailed explanations for most words, topics, etc. that you come up with. A great resource.

(5) Definitions - Wikipedia - Polaris - <http://en.wikipedia.org/wiki/Polaris> - information about Polaris.

(6) <http://eobglossary.gsfc.nasa.gov/Topics/atmosphere.html>. Detailed information about earth's atmosphere. Great NASA resource, just follow the go-to-clicks.

(7) Astronomy (magazine) Available in the Wake County Library System. You can check copies of this magazine out for a week at a time. However, there is not a fine for turning a copy back in late. Great resource about current Astronomy related topics. Has a pull-out of the night sky for each month.

Final Request

If you are interested in these topics and have comments or if you can suggest additional favorite websites, please send them to ki4fyr@bellsouth.net.

Be Warned

As we have stated several times before the reader is warned that we are not experts in this area, so errors in content may well occur. We only hope to give enough information to stimulate the reader to further study of the covered and related topics.

Up-Coming Parts

Part B - From The Milky Way

Part C - From The Universe

Part D - Components Of The Universe - Matter and Stars

Part E - Galaxies

Part F - Gravitational Lensing

Part G - Black Things

Part H - Some Minor Planets, Comets And Asteroids

APPENDIX A

TABLE FOR MONTHLY CHECK IN/OUT TO THE TEARA 6meter THURSDAY NIGHT INFORMATION/CHAT NET - YEAR 2006 MONTH: JULY

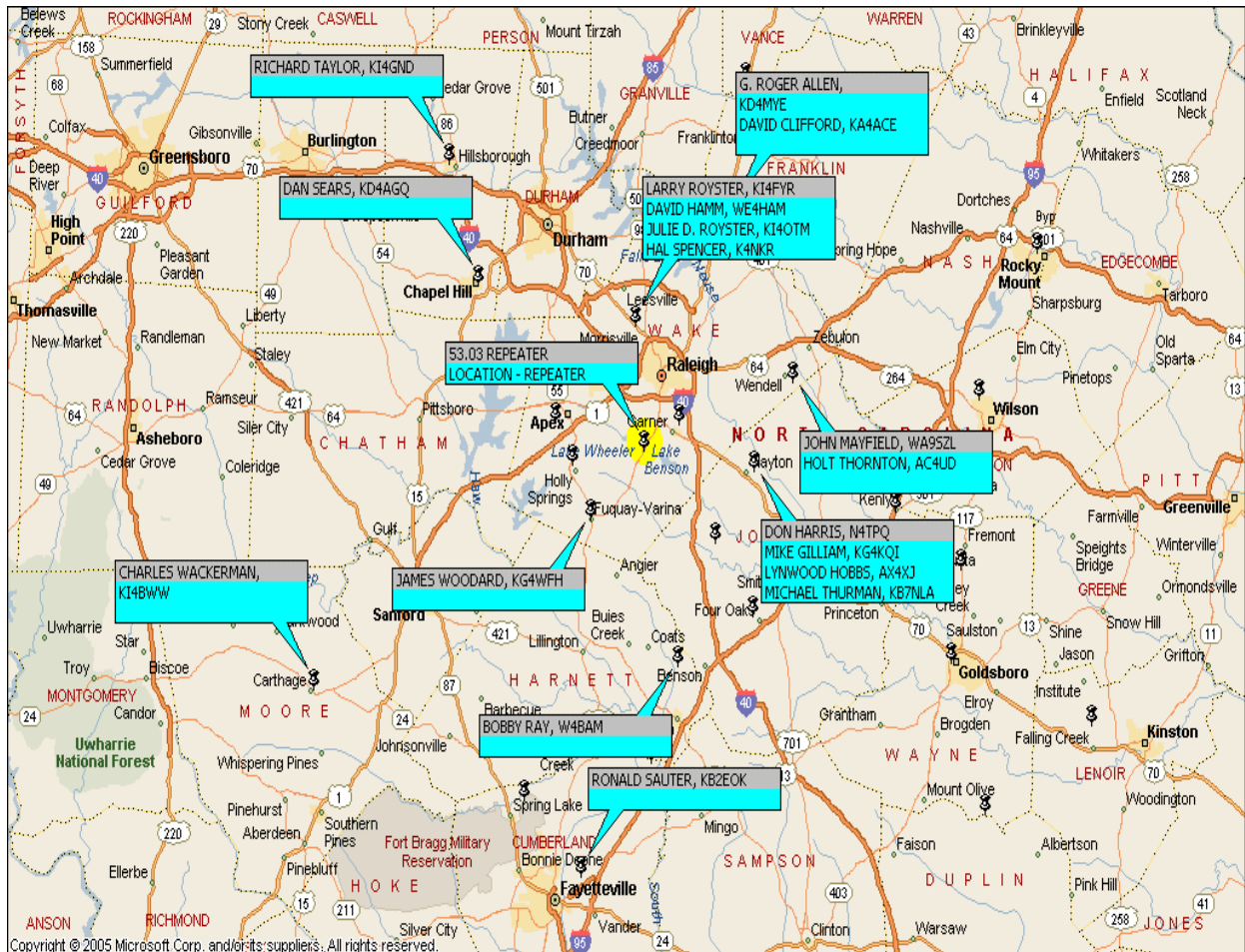
(*) Indicates Net Controller For The Session and (**) In and Out

SEQ	WK 1	WK 2	WK 3	WK 4	WK 5	CALL SIGN	NAME	LOCATION	COMMENTS
1						AC4UD	HOLT THORNTON	WENDELL	
2						AD4XE	FRANCIS DRAKE JR	GARNER	FRANK
3	X	X		X		AF4XJ	LYNWOOD HOBBS	CLAYTON	
4						AG4WE	FREDERICK BREIDT	RALEIGH	FRED
5						AI4FQ	BOBBY CARLYLE JR	DOVER	BOB
6						K4JDR	RONNIE CASEY	RALEIGH	RON
7						K4NGJ	BYRON KING	RALEIGH	
8		X	X	X		K4NKR	EARNEST SPENCER	RALEIGH	HAL
9						K4WDE	WALT EDMUNDSON	WAKE FOREST	
10						K4WIX	JACKIE WILLIAMS	WENDELL	
11						K9TJE	TERRY EDWARDS	ROCKY MOUNT	TED
12						KA0GMY	STEVEN MOWELS, SR	RALEIGH	
13						KA3SEI	ROB RUFF	APEX	
14						KA4ACE	CLIFFORD DAVIS	WAKE FOREST	CLIFF
15						KA9QJT	BRIAN YOUNG	RALEIGH	
16						KB2EOK	RONALD SAUTER	FAYETTEVILLE	RON
17						KB4PQJ	STEVE VON DOHLEN	RALEIGH	
18				X		KB7NLA	MICHAEL THURMAN	GARNER	MIKE
19						KC4PHJ	ALEX MACKLIN	HOLLY SPRINGS	
20	X			X		KD4AGQ	DAN SEARS	CHAPEL HILL	
21						KD4MYE	GLENN R ALLEN	WAKE FOREST	ROGER
22						KD4CHT	ALAN AYCOCK	PRINCETON	
23						KD4JWF	JOSE GUZMAN	GARNER	
24						KE4HXV	SAMUEL HAWKINS	TRENTON	SAM
25						KF4FJJ	JOHN BREEDLOVE	GOLDSBORO	
26						KF4VXJ	DAVID CRAWFORD	RALEIGH	
27						KG4HNB	BILLY SMITH	HILLSBOROUGH	
28				X		KG4KQI	MIKE GILLIAM	CLAYTON	
29						KG4QYK	JAMES P WILSON	CARTAGE	
30						KG4VDM	JACOB ALDERMAN III	WAKE FOREST	JAKE
31						KG4VXJ	RANDALL BARTLETT	FLINT HILL, VA	GERONE
32						KG4WVU	STUART SMITH	PINK HILL	
33						KG4WFH	JAMES WOODARD	FUQUA VARINA	KERBIE
34						KG4WFG	HARRY GATES	GOLDSBORO	
35						KG4UXR	DAVE SUTTON	DUNN	
36						KG4ZHK	JEROME EDGELEY	KENLY	
37	X	X		X**		KI4BWW	CHARLES WACKER.MAN	CARTHAGE	
38	X	X*	X	X		KI4FYR	LARRY ROYSTER	RALEIGH	
39	X	X	X*	X		KI4OTM	JULIE ROYSTER	RALEIGH	
40						KI4GND	RICHARD TAYLOR	HILLSBOROUGH	RICK
41						KI4IHX	PHILIPPE HOSTER	CARY	PHIL
42						KI4WZ	JAMES DRIVER JR	KENLY	
43						KJ4RB	DONALD SMITH	PINK HILL	DON
44						KM4DA	CADDELL 3, WILLIAM	WAKE FOREST	WILLIE

SEQ	WK 1	WK 2	WK 3	WK 4	WK 5	CALL SIGN	NAME	LOCATION	COMMENTS
45			X			N4TBL	TERRY LEWIS	CLAYTON	
46						N4TL	THOMAS LEWIS	RALEIGH	TOM
47						N4DIL	KENNETH HOLMES	RALEIGH	VADEN
48						N4PLC	PHILIP COCKRELL	WILSON	PHIL
49						N4TPQ	DON HARRIS	CLAYTON	
50	X		X	X		W4BAM	BOB RAY	BENSON	
51						W4FHC	FREDRICK CROSBY	GOLDSBORO	FRED
52						W4DNA	ROY DAVID	GOLDSBORO	
53				X**		W4JRZ	MICHAEL CALLAM	FOUR OAKS	MIKE
54						W4SIS	LEWIS THOMAS	RALEIGH	TOM
55						WA4PXV	DAN RENFRO	GRIFFINS CROSS R	
56						WA4IAJ	SCOTT MEDLEY		TIM?
57						WA9SZL	JOHN MAYFIELD	WENDELL	
58						WB4IUY	DAVID HOCKADAY	YOUNGSVILLE	
59						WB7OND	RICHARD LINDER	FAYETTEVILLE	DICK
60						WD4MB	MICHAEL BALDOCK	WILLOW SPRINGS	MIKE
61	X		X			WE4HAM	DAVID HAMM	RALEIGH	
62						WI4PER	CECIL PERKINS	PIKEVILLE	
63						WW4TLB	THOMAS BABB	HOLLY SPRINGS	TOMMY
XX						K4ITL -53.03	REPEATER-DANNY HAMPTON	LAKE WHEELER	RALEIGH
D	6	13	20	27					
TO	7	5	6	10		TT = 28			

SPECIAL NOTE

Note! Only those individuals who have checked into the 6 meter net during a previous three month period (April, May, June) are listed on the map below. In the future the map shown will be updated at the end of each new quarter period.



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