



PEAKS & NULLS



MORRIS RADIO CLUB

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SAY "HI" TO JUNO

NASA's Juno spacecraft is on a scientific mission to Jupiter. It is heading there to determine how much water is in Jupiter's atmosphere, measure the composition of the atmosphere, map the magnetic and gravity fields and explore the magnetosphere near the poles, especially the auroras. On August 7th the operations team successfully executed a trajectory control maneuver using the satellites control thrusters to refine the trajectory in preparation for the October 9th Earth flyby gravity assist maneuver. When this is completed Juno will receive the gravity assist it needs to reach Jupiter in 2016. During this flyby the Juno mission is giving Amateur Radio operators around the world a chance to say "HI" to Juno. Hams will be using a coordinated Morse code message and if enough hams participate, the "WAVES" radio and plasma wave experiment package will be able to detect the message. The message will be sent on 10 meters with the transmission frequency determined by the last letter of your call sign. This is because Juno will have a better chance of detecting signals from many operators if the transmissions are spread out across the spectrum. The Juno "WAVES" instrument is a broadband receiver and will be using a detector with a I MHz passband. 10 Meters was chosen because the University of Iowa instruments on the Galileo and Cassini Earth flybys showed significant ionospheric shielding at lower frequencies. In fact the worse the band conditions the more RF will radiate into space. The flyby will start on October 9th at about 18:01 UTC (2:01 PM EDT) and continue until about 20:41 UTC (4:41 EDT). The CW speed is slow. In fact as you can see in the diagram each dot is 30 seconds long.



The Say "HI" to Juno web page will tell you when to transmit and when to stop transmitting. The Say "HI" to Juno web page is at http://www.jpl.nasa.gov/hijuno/ and has all the information you need about saying "HI" to Juno. NASA's Juno web site (http://www.nasa.gov/mission_pages/juno/main/index.html) and the Mission Juno web site (http://missionjuno.swri.edu/) contain all the information about the mission.

A QSL card for contacting Juno will also be available.

A picture of Juno is on Page 3 and the transmission frequency list is on Page 4.

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UPCOMING MEETINGS

September 16, 2013 Regular business meeting

October 21, 2013 Regular business meeting

November 18, 2012 Regular business meeting

December 16, 2012 Holiday Get-Together

SELECTED UPCOMING CONTESTS

SARL 80m QSO Party 1700Z-2000Z, Oct 3

TARA PSK Rumble Contest 0000Z-2400Z, Oct 5

Oceania DX Contest, Phone 0800Z, Oct 5 to 0800Z, Oct 6

10-10 Int. 10-10 Day Sprint 0001Z-2359Z, Oct 10

Makrothen RTTY Contest 0000Z, Oct 12 to 1559Z, Oct 13

Oceania DX Contest, CW 0800Z, Oct 12 to 0800Z, Oct 13

North American Sprint, RTTY 0000Z-0400Z, Oct 13

10-10 Int. Fall Contest, CW 0001Z, Oct 19 to 2359Z, Oct 20

CQ Worldwide DX Contest, SSB 0000Z, Oct 26 to 2400Z, Oct 27



PREDICTED SUNSPOT NUMBER AND RADIO FLUX FOR OCTOBER 2013

SUNSPOT NUMBER
PREDICTED HIGH LOW

88.5

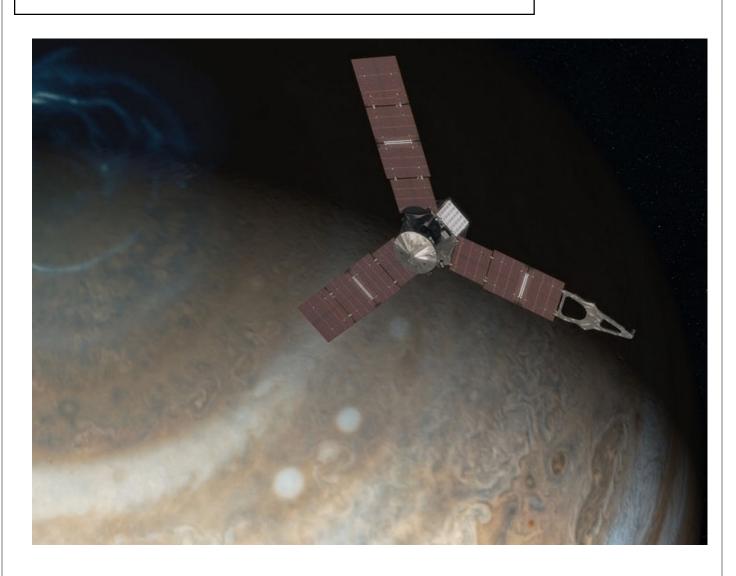
98.5 78.5

10.7 RADIO FLUX
PREDICTED HIGH LOW

139.9 148.9 130.9

AUGUST MEETING MINUTES

There was no August meeting. A Get-Together was held at Atlanta Bread in Morris Plains in place of the meeting.





MORRIS RADIO CLUB

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Last Letter of Your Call Sign	Frequency to Use (MHz)
Α	28.001
В	28.019
С	28.037
D	28.055
E	28.073
F	28.091
G	28.109
н	28.127
1	28.145
J	28.163
K	28.181
L	28.199
M	28.217
N	28.234
0	28.252
P	28.270
Q	28.288
R	28.306
S	28.324
Т	28.342
U	28.360
v	28.378
w	28.396
x	28.414
Y	28.432
Z	28.45

THE MORRIS RADIO CLUB IS AN ORGANIZATION OF AMATEUR RADIO OPERATORS WHICH HAS BEEN IN EXISTENCE FOR OVER SIXTY FIVE YEARS. AS A HOBBY, AMATEUR RADIO SERVES AS A PUBLIC RESOURCE FOR COMMUNICATIONS AS WELL AS AN EDUCATIONAL EXPERIENCE.

ALTHOUGH MANY WHO BECOME INTERESTED IN AMATEUR RADIO ARE INVOLVED IN AN ELECTRONICS RELATED FIELD, THE HOBBY APPEALS TO A WIDE VARIETY OF INDIVIDUALS.

THE MEMBERSHIP OF THE MORRIS RADIO CLUB IS A DIVERSE GROUP MADE UP OF MEDICAL, BUSINESS, EDUCATION, AND LAW ENFORCEMENT PROFESSIONALS, AMONG OTHERS, WHOSE COMMON INTERESTS ARE COMMUNICATION, EDUCATION, AND PUBLIC SERVICE.

HAMFEST CALENDAR

GSARA Hamfest

09/21/2013

Location: MOESC (formerly called MAECOM)

100 Tornillo Way Tinton Falls, NJ

Website: http://www.gardenstateara.org

Ocean Monmouth ARC Hamfest

09/28/2013

Location: Infoage Learning Center (Project Diana Site)

2300 Marconi Road

Wall, NI

Website: http://n2mo.org

BARA Fall Hamfest

10/12/2013

Location: Westwood Regional High School

701 Ridgewood Road

Township of Washington, NJ 07676

Website: http://bara.org