THE PROPAGATOR

NOVEMBER 2006

NEXT MEETING NOVEMBER 1

The next regular meeting of the GSARA will be held on **Wednesday, November 1** at **8:00 PM** at the MARS building in Fort Monmouth. Come early to enjoy the refreshments. We look forward to seeing YOU at the meeting!

FORT MONMOUTH PASSES

Please check the expiration date on your Fort Monmouth badges. Within two or three weeks before they expire, notify Larry, KB2RIS or Frank, W2XYZ. You then must check with visitor control on Oceanport Ave. to retire your old badges and get a new placard. Your old badges CANNOT be renewed.

MOBILE RIGS FOR SALE

1. Yaesu FT-100 D Mobile/Portable/Base HF plus 6 meter transceiver. The 2 meter 440 side does not work due to a burned out final (expensive) but the HF and 6 meters works great. 500 Hz CW filter, mike, power cable, book, and original box. Will include an MFJ 95B manual mobile tuner with book and box also. 5 to 100 watts. $420.

2. Yaesu FT-1500M 2 meter mobile transceiver with mike, mounting bracket, cable, book and box. $95.

3. Hustler heavy duty ball mount with spring, all hardware, and will include MFJ capacitance matcher and coax. $40

4. New ARRL Book BASIC RADIO $22

Package on ALL above plus 10, 20, 30 and 80 meter Ham Sticks thrown in - $550 FIRM

Marty WN2DX   wn2dx@arrl.net

ARRL ON-LINE AUCTION OPEN

Bidding in the ARRL On-Line Auction <http://arrl.auctionanything.com/> begins Monday, October 23, at 10 AM EDT (1400 UTC). Thanks to the generosity of many donors, there's a diverse list of items. Prospective bidders may browse through the auction inventory, which includes HF and VHF transceivers, ARRL Lab-tested and reviewed equipment, exotic vacations, antennas, Amateur Radio jewelry, robot kits, rare books, vintage gear and more! Auction proceeds will benefit a wide range of ARRL education programs. These encompass activities designed to license newcomers, strengthen Amateur Radio's emergency service training, offer continuing technical and operating education through distance learning courses and create varied instructional and educational materials. Register to bid now or anytime during the auction, which concludes Friday, November 3. Even if you're registered at the ARRL Web site, you must create a new user profile to register for the ARRL On-Line Auction. Click on "New Users Register Here" on the auction home page to create your profile. Software for the ARRL On-Line Auction is provided courtesy of auctionanything.com.

From *The ARRL Letter*, No. 42, October 20, 2006

The date for purchasing Tickets for the 2006 Hudson Division Awards Dinner has been extended to Monday, November 6th

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GSARA HOMEPAGE

http://home.comcast.net/~gsara_w2gsa

GSARA CALENDAR

http://home.comcast.net/~gsara_w2gsa/calendr.htm

PROPAGATOR AVAILABLE BY E-MAIL

Would you like to help the finances of GSARA and at the same time get your issue of *The Propagator* a few days earlier? You can get every issue e-mailed to your computer every month by simply giving your e-mail address to Bruce McLeod, K2QXW and request *The Propagator* electronically. Bruce's e-mail address is <brucemcleod@comcast.net>

BADGES AND PATCHES

All new GSARA members get a name badge. However, you may order additional ones by getting a Badge Order Form from our Secretary, **Bob Buus, W2OD**, filling it out and turning it in to Bob with your $5.00 payment.

We also now have patches available at all meetings and they cost $3.

OUTGOING QSL CARDS

If any GSARA members wish to combine their QSL cards that are going through the outgoing ARRL Bureau, please bring them to the next GSARA meeting along with the label from a recent QST Magazine (you must be an ARRL member to participate in this program). We then send them as a group at no charge to GSARA members.   It couldn't be much easier than that to QSL. You are registered at the W2 incoming bureau, aren't you?

PROPAGATOR NOW ON THE WEB

The *Propagator* is available as a PDF file at:

http://home.comcast.net/~gsara_w2gsa/prop.pdf

It is installed on the web about two weeks after the direct mailing to members.

EDITOR'S NOTES

The big news this month is the release of the FCC "omnibus" Amateur Radio Report and Order (see pp. 5 and 6). This greatly expands the phone bands for all classes of licenses at the expense of a corresponding reduction of the CW bands. Although there are some problems with the proposal (the 80 meter RTTY sub band got lost, among other things), I'm sure that the final implementation will fix these things and still leave the phone operators quite happy. I don't think the CW operators are going to be too happy but fortunately, that mode is so efficient of bandwidth that a lot of stations can still fit in the CW bands without as much QRM as found in the phone bands. It will be interesting to see how it works out.

I also wrote a little article about wiring computers into a LAN (see p. 8). If any of you would like to play with this, I'll be glad to lend you the crimping tool and tester as well as let you use some of my cable and connectors at a nominal charge. I know many of you are using (or thinking of using) wireless routers but a hard wired network is cheaper and more secure.

I would like to remind you that the ARRL on-line auction is underway (see p. 1) and there are a number of interesting items being auctioned. If there is good participation, I suspect that we will see more of these. Although it is not e-bay, it will be interesting to see how this turns out.

Remember if you change your e-mail address, please be sure to inform Bruce McLeod, K2QXW.

As always, I appreciate feedback or material for *The Propagator*. The deadline for the December issue is November 15.

73 de Bob, w2od@arrl.net

ROSTER CHANGE

Please change the e-mail address of **Pat Brannick, N2BZD** to n2bzd@arrl.net

HUDSON DIVISION HOME PAGE

http://www.hudson.arrl.org

MINUTES OF OCTOBER 4 MEETING

By Bob Buus, W2OD, Secretary

The meeting was called to order at Fort Monmouth by President Jeff Harshman, N2LXM, at 8:03 PM. After the Pledge to the Flag, all members present introduced themselves. There were 22 members present. Jeff, N2LXM mentioned that the multi-band dipole at the MARS station needs to be raised some Saturday and asked members to be ready to help when necessary.

Treasurer's Report

Treasurer Frank Wroblewski, W2XYZ made a report for September. A motion was made by Nena, N2WAY and seconded by Peg Struening to accept the report. The report was unanimously accepted.

Secretary's Report

A motion was made by Peg Struening and seconded by Nena, N2WAY to accept the minutes of the September meeting as published in the October Propagator. The motion passed unanimously. There was no correspondence received.

Old Business

Nominating Committee head Ray, W2NXG presented the following slate of candidates for office for 2007. All were current officers for 2006. They are:

> President – Jeff Harshman, N2LXM
> Vice President – Tom Cosgrove, N2VFK
> Treasurer – Frank Wroblewski, W2XYZ
> Secretary – Bob Buus, W2OD
> Chief Engineer – Marty Szumera, WN2DX

Jeff, N2LXM asked for any additional nominations from the floor and there were none. The election will take place at the November 1 meeting after again asking for nominations from the floor.

It was suggested that we have a talk about MARS (Military Affiliate Radio System) on one of our upcoming meetings. Jeff, N2LXM agreed to make the arrangements.

Our 1000 foot loop antenna for Field Day was modeled by Jeff, N2LXM who showed the plots at the meeting. The antenna is practically omni directional with both high and low angle lobes which confirmed its great performance for both distance and near-in.

Larry, KB2RIS reported on the status of the antennas at the MARS station. The pole for the VHF antenna is rotted and is coming down and will not be replaced. The 10-meter pole is also rotted but will be replaced. The 20 meter beam rotator needs repair but that might be expensive. Larry also reported that there was a 100% property book inspection successfully completed.

Public Service

Tom, N2VFK reminded us of the last two Public Service events for 2006. The Juvenile Diabetes walk is Sunday morning, October 8 in Avon. The CROP walk is Sunday afternoon, October 15 in the Red Bank area. Four or 5 operators are still needed.

Announcements

OMARC will hold their tailgate fest on Saturday, October 7. Buyers are free.

DVRA will hold a Hamfest on Sunday, October 8.

Russ Fraser from the Civil Air Patrol came in late. He said that the CAP is looking for someone to give them communications lectures.

The MFJ CW QRP rig is still available to the first young amateur who masters the Morse code.

Jeff, N2LXM became a grandfather for the second time. Congratulations!

Program

Bob, W2OD showed a little circuit he built that allowed him to troubleshoot Ethernet LAN cables with RJ-45 connectors on each end. He had made up a cable by crimping RJ-45 connectors on each end of a length of 8-conductor CAT5 cable. When it tested open on one pair, he wanted to determine which end to cut off and put on a new connector. This was done by measuring the capacitance across each pair. At one end, each of the four pairs had about the same amount of capacitance. At the other end, the bad pair showed very low capacitance so this was the bad end. It was then a simple matter to cut off the bad connector and carefully crimp a new one in its place. Since connecting the capacitance meter leads to the small pins on the RJ-45 connector is difficult, the measurement was facilitated by building a little circuit with an RJ-45 receptacle wired to a 2-pole, 4-position switch which then went to the capacitance meter. He also

added a couple of BNC connectors to the switch so that the same method could be used to find the bad end of an open coaxial cable.

Closing

A drawing was held for the main door prize which was won by Howard Suffill, W2HTS.

There being no further business, a motion was made by Nena, N2WAY and seconded by Peg Struening to close the meeting. The meeting was closed at 9:05 PM.

Bob, W2OD showing his cable tester with a capacitance meter (top) connected to the homebrew switch which in turn has a piece of RJ-45 Ethernet cable under test dropping down out of the picture. Photo by Ray, W2NXG.

ANTENNAS, TOWER FOR SALE

40-foot Crank Down Tilt Over EZ Way Tower, self supporting

HAM II Rotator

TA-33 Jr, 3 element beam, 10-15-20 Meters

$375 for all 3 above items

3 Element Full Size Telrex Beam, 10-15-20 Meters - $75

3 Element reduced size beam, 10-15-20 Meters - $65

5BTV, Hustler Vertical Antenna - $50

Bernie, W2QFQ (moving from Eatontown)
732-542-2664
w2qfq@juno.com

AREA AMATEUR EXAM SESSIONS

Amateur radio exam sessions that are given in the central New Jersey area are as follows but please contact the responsible person to be sure that the time and date are accurate.

Wall Township, Camp Evans Area on Marconi Road: Exams are held on the second Wednesday of the even numbered months (Dec. 13, 2006) at 6:30 PM. The contact person is Larry Wilkins, KB2RIS at 732-922-6720 or e-mail to kb2ris@verizon.net.

Middletown, Croyden Hall on Leonardo Road: Exams are on the second Tuesday of every month at 7 PM. The contact person is Mario Sellitti, N2PVP 732-787-7184 or e-mail to n2pvp@n2pvp.com.

Toms River, Riverview Park Recreation Building: Exams are held on the third Thursday of every month at 7:30 PM. The contact person is Ed Genoino, WA2NDA at 609-971-2792 or e-mail to wa2nda@aol.com.

Toms River, Holiday City South Clubhouse, Meeting Room #1, Mule Road at the corner of Santiago Drive on the second Saturday of the odd numbered months (November 11, 2006) at 10:00 AM. Pre-registration is required (no walk ins). The contact person is Bill Haldane, AC2F, 732-240-7064 or ac2f@earthlink.net.

In all cases, the fee is $14 and you should bring the original and a copy of any amateur license presently held and original and one copy of any credit (CSCE) forms you have. Also bring 2 forms of ID with one being a picture ID.

NEW DXCC APPROVALS

The ARRL DXCC Desk has approved these operations for DXCC credit: TT8LN (Chad), February 12-June 5, 2006. 9Q1D (Democratic Republic of the Congo), current operation beginning September 22, 2006. This accreditation also includes 9Q1TB and 9Q1EK.

A reminder: The DXCC Desk now is accepting submissions for Swain's Island (KH8). For more information, visit the DXCC Web page <http://www.arrl.org/awards/dxcc>. "DXCC Frequently Asked Questions" can answer most questions about the DXCC program.

From *The ARRL Letter*, Nos. 40 & 41, Oct. 6 & 13, 2006

FCC RELEASES "OMNIBUS" R & O

Ending a protracted waiting period, the FCC's Report and Order (R&O) in the so-called "omnibus" Amateur Radio proceeding, WT Docket 04-140, was adopted October 4 and released October 10. In it, the FCC adopted nearly all of the changes it had put forth in its 2004 Notice of Proposed Rulemaking (NPRM) in the proceeding. The R&O the FCC released this week does NOT include action on the Commission's proposal to eliminate the Morse code requirement. A Report and Order in that proceeding, WT Docket 05-235, is pending. ARRL President Joel Harrison, W5ZN, expressed the League's gratitude to the FCC for acting this week in the wide-ranging proceeding.

"On behalf of the ARRL and the Commission's licensees in the Amateur Radio Service I want to express appreciation for your release yesterday of the Report and Order in WT Docket 04-140 (FCC 06-149) amending Part 97 of the Commission's Rules," Harrison wrote October 11. "The Commission's action in clearing this pending proceeding will assist the Amateur Radio Service in meeting its objectives, particularly with regard to providing emergency and public service communications."

The new rules are expected to become effective later this year. Among the highlights in the October 10 Report and Order, the FCC:

* "refarmed" the current Novice/Tech Plus bands to expand certain phone subbands;

* agreed to allow Novice and Tech Plus licensees to operate CW in the General class CW subbands on 80, 40, 15 and 10 meters.

* implemented rules to discourage multiple vanity call sign filings on the same day from the same applicant;

* permitted auxiliary stations to transmit on portions of the 2 meter band;

* permitted amateur licensees to designate a specific Amateur Radio club to receive their call sign in memoriam;

* eliminated certain restrictions governing the manufacture, marketing and sale of external RF power amplifiers intended for Amateur Radio use;

* clarified that "amateur stations may, at all times and on all frequencies authorized to the control operator, make transmissions necessary to meet essential communication needs and to facilitate relief actions";

* deleted the requirement to publicly announce Amateur Radio examination locations and times, and

* deleted the frequency bands and segments specified for Radio Amateur Civil Emergency Service (RACES) stations.

In response to an ARRL Petition for Rule Making, the Commission agreed to "refarm" the HF segments currently authorized to Novice and Technician Plus licensees. The reallocation will expand the phone subbands for General, Advanced and Amateur Extra licensees, although not all commenters agreed with the idea.

"We are persuaded, however, by ARRL's contention that increasing the amount of spectrum for voice communications will reduce interference among stations using voice communications," the FCC said in its R&O, "thereby benefiting all licensees." The FCC said authorizing more phone spectrum would "more closely reflect licensees' operating preferences" and mean more efficient spectrum use.

On 75 meters, the FCC went well beyond the modest expansion the ARRL had proposed and the FCC had tentatively adopted in its 2004 NPRM. Generals will be able to operate on phone from 3800 to 4000 kHz, Advanced class licensees from 3700 to 4000, and Amateur Extras from 3600 to 4000 kHz – greatly reducing the amount of 80-meter spectrum available for RTTY and data (the only segment where automatically controlled digital stations may operate on 80 meters is 3620 to 3635 kHz).

The FCC said the amateur community wanted as much phone spectrum as possible. "Indeed, a number of commenters argue that the NPRM proposal to increase the amount of spectrum permitted for voice communications would still not meet the demand for voice communication spectrum in the HF bands, particularly in the 80 meter band," the FCC said.

On 40 meters, Advanced and Extra Class licensees will be able to operate phone from 7125 to 7300 kHz, and Generals from 7175 to 7300 kHz. On 15 meters, General class operators may operate phone from 21,275 to 21,450 kHz.

The FCC affirmed its intention to permit Novice and Tech Plus (or Technician with Element 1 credit) licensees to operate CW in the current General exclusive-CW allocations on 80, 40 and 15 meters and CW/data on 10 meters, where the FCC provided an additional 100 kHz for Novice/Tech Plus licensees. Novice/Tech Plus licensees still may run no more than 200 W PEP, but the Commission has done away with Novice band power limitations for higher-class licensees.

The FCC revised its vanity call sign rules to discourage the filing of multiple applications for the same call sign on the same day, and many commenters supported this concept. As implemented in §97.19(d)(1), if the FCC receives more than one application requesting a vanity call sign from a single applicant on the same receipt day, it will process only the first application entered into the Universal Licensing System. "Subsequent vanity call sign applications from that applicant with the same receipt date will not be accepted," the rule concludes.

"We are persuaded that we should adopt rule amendments to discourage multiple vanity call sign applications," the FCC said in the R&O, "and we believe that a one-application-per-day-per-applicant rule, as requested by ARRL and others, will eliminate multiple applications requesting the same assignable call sign on the same day." The FCC concedes that its one-application-per-day rule "will not prevent an individual from requesting multiple vanity call signs per se," because an applicant may request up to 25 call signs at a time.

When the FCC receives multiple valid applications from several individuals requesting the same vanity call sign as a first choice on the same day, it uses a lottery system to decide which application to process first.

The R&O also affirms changes to Part 2 and Part 97 rules the FCC had proposed regarding the manufacture, marketing and sale of external RF power amplifiers. Current FCC rules prohibit commercial manufacturers from marketing RF power amplifiers capable of transmitting on the 12 and 10 meter bands. The rules were put in place as a way to prevent use of such amplifiers by CBers.

"We agree with ARRL that the requirements imposed on Amateur Radio operators by the current rule are unnecessary because, under the present rules, 'the equipment, once authorized, can be modified to transmit on all amateur service frequency allocations,' and that revising the rule 'will enhance use of the 12 and 10 meter amateur bands,'" the FCC said.

To prevent the use of Amateur Radio amplifiers by CBers, the FCC says manufacturers of Amateur Radio amplifiers must design their products to avoid operation between 26 MHz and 28 MHz. They also must certify that amplifiers are not easily modifiable to operate between 26 MHz and 28 MHz prior to a grant of equipment certification.

The various rule changes become effective 30 days after their publication in the Federal Register <http://www.gpoaccess.gov/fr/index.html>.

A copy of the R&O is on the FCC Web site <http://hraunfoss.fcc.gov/edocs_public/attachmatch/FCC-06-149A1.pdf>.

ARRL has posted a list of Frequently Asked Questions (FAQs) regarding the R&O <http://www.arrl.org/announce/regulatory/wt04-140/faq.html>.

A downloadable chart shows the band changes <http://www.arrl.org/announce/regulatory/wt04-140/Hambands3_color.pdf>.

From *The ARRL Letter*, No. 41, October 13, 2006

WRTC 2010 TO BE IN RUSSIA

The World Radiosport Team Championship Sanctioning Committee (WRTC-SC) has announced the next WRTC will be held in Russia for the first time in 2010. The Soyuz Radiolyubitelei Rossii (SRR) -- the Union of Radio Amateurs of Russia -- will be the primary sponsor, and SRR President Roman Thomas, RZ3AA, is the host committee chairman. The event will be held in the vicinity of Moscow in conjunction with the IARU HF World Championship in July 2010. The committee plans to publish qualification rules and procedures and establish a WRTC 2010 Web site as soon as possible. The WRTC-SC expressed its gratitude to the Russian team for its hard work in preparing the proposal and undertaking initial planning for the event.--Contester's Rate Sheet <http://www.arrl.org/contests/rate-sheet/>

From *The ARRL Letter*, No. 40, October 6, 2006

FCC "OMNIBUS" REPORT ERRORS

The FCC's recent Report and Order (R&O) in WT Docket 04-140 seems to offer something for just about every sector of the Amateur Radio community, but it's not without shortcomings. Most appear to be unintended consequences stemming from the FCC's arguably too-generous allocation of 75 meter phone spectrum to Amateur Extra class licensees. The FCC indicated it was only doing what the ham radio community said it wanted.

"Indeed, a number of commenters argue that the NPRM (Notice of Proposed Rule Making) proposal to increase the amount of spectrum permitted for voice communications would still not meet the demand for voice communication in the HF bands, particularly in the 80 meter band," the FCC said in the R&O, released October 10. Several radio amateurs filing comments justified extending the phone allocation further into the CW band, the FCC continued, citing their arguments that the CW band is "grossly underused and represents a huge waste in spectrum."

Once the new rules go into effect, the 75 meter phone band will span 3800 to 4000 kHz for Generals, 3700 to 4000 kHz for Advanced class licensees (ARRL had requested 3750 to 4000 kHz), and 3600 to 4000 kHz for Amateur Extras (ARRL had requested 3725 to 4000 kHz). Far more modest phone expansions were the rule for 40 and 15 meters, the other affected bands.

But the ample 75 meter Amateur Extra class phone allocation not only effectively reduces the amount of 80-meter spectrum available for CW, RTTY and data, it actually eliminates Advanced and General class access on any mode to certain segments where they now have privileges. Sensitive to fallout from the "incentive licensing" debacle of the late 1960s, the FCC has indicated it wouldn't let that kind of thing happen again.

In the run-up to the April 2000 license restructuring, the FCC assured that any pending changes would not take away any incumbent licensee's privileges, and it carefully avoided doing so in its restructuring R&O. In applauding the ARRL's "refarming" proposal in this docket's NPRM, the FCC pointed out that "as proposed, no licensees would lose any spectrum privileges." Nonetheless that's just what happened:

Generals lose 150 kHz of CW/data spectrum on 80 meters but gain 50 kHz of phone spectrum on 75. They also lose 25 kHz of CW/data spectrum on 40 meters but gain 50 kHz of phone privileges on that band. Factoring in another 25 kHz of phone spectrum on 15 meters that's an overall gain of 125 kHz of phone spectrum offset by an overall loss of 175 kHz of CW/data spectrum -- or a net loss of 50 kHz in spectrum privileges.

Advanced licensees also lose 150 kHz of CW/data spectrum on 80 meters but gain 75 kHz of phone spectrum on 75. They also lose 25 kHz of CW/data spectrum on 40 meters but gain 25 kHz of phone spectrum there. That's an overall loss of 175 kHz of CW/data spectrum offset by an overall gain of 100 kHz of phone spectrum (25 kHz less than Generals). The net loss in Advanced privileges works out to 75 kHz (25 kHz greater than Generals).

The new rules are "nothing but net" for Novice and Tech Plus (Technician with Element 1 credit) licensees. These licensees take home a whopping 250 kHz of additional CW spectrum (CW/data on 10 meters).

The R&O contains several apparent mistakes, too. For example, in §97.301(d) the 80 meter row should read 3.525-3.600 MHz for all three ITU regions. In §97.305(c), the frequencies in the first line for 40 meters should read 7.000-7.100 MHz. The FCC will fix these errors when the "official" R&O text appears in the Federal Register later this fall.

Other corrections may prove more troublesome. Creating a humongous 75 meter phone band for Extras effectively, but apparently inadvertently, deleted the only 80 meter segment where automatically controlled digital stations may operate -- 3620 to 3635 kHz. The new rules no longer permit RTTY and data there, however.

In addition, the FCC accommodated the inclusion of images in data transmissions by defining a range of image emission types as "data" and limiting them to 500 Hz bandwidth in the RTTY/data subbands. Unfortunately, it did so in a way that also limits J2D emissions -- data sent by modulating an SSB transmitter -- to 500 Hz bandwidth.

From *The ARRL Letter*, No. 42, October 20, 2006

LINKING COMPUTERS – A TUTORIAL

By Bob Buus, W2OD

If you've bought a computer in the past few years, you've probably noticed a modular Ethernet jack on the back similar to the telephone RJ-11 jack but larger. The Ethernet jack is type RJ-45 and supports 8 conductors. Two computers equipped with such jacks can be interconnected by the proper wire with RJ-45 plugs. This forms a Local Area Network (LAN) and is supported by Windows XP. Actually, two different speeds are commonly supported. The slower 10 Mb/s 10base-T and the 100 Mb/s 100base –TX. The former uses only two pairs (4 conductors) of the cable while the latter uses all four pairs (8 conductors). It is best to wire all four pairs so you are good for either standard.

The LAN cable consists of 4 unshielded twisted pairs in a cable identified with a category rating. Use category 5, 5e or 6 cables for operation at both 10 and 100 Mb/s. The cable can have either solid or stranded conductors. Stranded is more expensive but can be flexed more than solid. Performance is about the same with either type. However, the crimp-on RJ-45 connector is slightly different for the two types of wire so be sure that you use the right type connector for your cable.

The signals appearing on the RJ-45 jack on the computer are as follows:

RJ-45 Pin No.	Signal Name
1	TX_D1+
2	TX_D1-
3	RX_D2+
4	BI_D3+
5	BI_D3-
6	RX_D2-
7	BI_D4+
8	BI_D4-

For 10base-T, only the TX and RX pairs are used. Note that the receive (RX) pair is not on adjacent terminals of the RJ-45 jack. Also note that if we used a straight through cable (connecting the same numbered pins together) to connect two computers, we would be connecting transmit to transmit and receive to receive. That won't work.

Instead, for connecting two computers, we must use a crossed cable with the following assignments:

A end Pin	Wire Color	B end Pin
1	White/orange	3
2	Orange	6
3	White/green	1
4	Blue	7
5	White/blue	8
6	Green	2
7	White/brown	4
8	brown	5

By the way, the RJ-45 pins numbers go sequentially from left to right when you look into the jack with the conductor wires on top (locking notch on the bottom) or look into the rear of the plug with the conductors on the top side (locking tab on the bottom).

This crossed cable only works if you are connecting only two computers together. If you have more computers that you would like to add to the network, you must do so through a Hub, Switch, or Router. In those cases, connection of each computer to the Hub/Switch/Router is by a straight cable wired as follows:

A end Pin	Wire Color	B end Pin
1	White/orange	1
2	Orange	2
3	White/green	3
4	Blue	4
5	White/blue	5
6	Green	6
7	White/brown	7
8	brown	8

I have purchased a kit with a box of Cat 5 cable, a package of RJ-45 crimp-on plugs, a crimping tool, and a tester. If anyone would like to try creating a LAN for your computers, I will be glad to lend out this kit and charge you only for the materials that you use (cable and connectors).

NOTES ON CALENDAR (see reverse side)

Large call letters denote birthdays e.g., **KG2NV** November 8. All times in EST.

November 1 – **GSARA Monthly Meeting** at the MARS Building at Fort Monmouth at 8:00 PM.

November 2 – **Holiday City ARC meeting** at 7 PM at Holiday City South Clubhouse in Toms River.

November 3 and every Friday – **Lunch at Blue Swan Diner**, Rt. 35 South, Ocean Township at noon.

Nov. 4-5 – **ARRL November Sweepstakes**, CW from 4 PM Saturday to 10 PM Sunday. See Oct. QST, p. 103 or www.arrl.org/contests

November 4 – **Radio Club of America QSO Party**, Phone from noon to midnight. See Nov. QST, p. 104 or www.radioclubofamerica.org

November 6 – **Monmouth County ARES Net** meets on 147.045 +600 at 7:30 PM.

November 7 – **Middletown Pancake House Luncheon** at noon in back room to left. All are invited.

November 7 – **Old Barney ARC Meeting**, 7:30 PM at Ocean Acres Community Center in Manahawkin, NJ. See http://www.obarc.org

November 7 and every following Tuesday – **QCWA News Net** on 147.045 PL=67 at 9:00 PM.

November 8 – **W1AW Qualifying Run** at 9 AM (35-10 WPM). See November QST, pp. 102, 103 and 104.

November 9 – **Jersey Shore Amateur Radio Society (JSARS)** meeting in Riverview Park Recreation Building, Rt. 527 and Riverwood Drive in Toms River at 7:30 PM.

November 11 – **OMARC Meeting**, 9:00 AM at the Diana Site on Marconi Road, Wall, NJ. Note the change in meeting place.

November 11 – **Holiday City VE Test Session** at 10 AM in Toms River. Pre-register with Bill Haldane, AC2F, 732-240-7064 or ac2f@earthlink.net. No walk-ins.

Nov. 11-12 – **CQ Western Electric**, all modes from 2 PM Saturday to midnight Sunday. See Nov. QST, p. 104 or www.cqwe.cboh.org

November 13 – **Monmouth County RACES** on 147.045 +600 at 7:30 PM. RACES members only.

November 14 – **Amateur Radio Luncheon** at Perkins in Colts Neck Inn at noon. All amateurs invited.

November 14 – **VE Test Session** at Croydon Hall, Leonardo section of Middletown at 7:00 PM. For more information, contact Mario Sellitti, N2PVP at 732-787-7184 or n2pvp@n2pvp.com

November 16 – **JSARS VE Test Session** at 7:30 PM Riverview Park Recreation Bldg., Rt. 527 and Riverwood Drive in Toms River. Contact Ed Genoino, WA2NDA at 609-971-2792 or wa2nda@comcast.net.

Nov. 18-19 – **ARRL November Sweepstakes**, Phone from 4 PM Saturday to 10 PM Sunday. See Oct. QST, p. 103 or www.arrl.org/contests

November 20 – **Monmouth County ARES Net** meets on 147.045 +600 at 7:30 PM.

November 21 – **Middletown Amateur Radio Club meeting** at 8 PM in Croyden Hall off Leonardville Road.

Nov. 24-26 – **CQ WW DX Contest**, CW from 7 PM Friday to 7 PM Sunday. See Oct. QST, p. 102 or www.cqww.com

November 25 – **Neptune ARC Meeting** at American Legion Post #346. 31 Gully Road in Neptune at 9 AM.

November 27 – **Buttonwood Manor Lunch** at noon. Raritan Bay Amateurs. All are welcome.

November 27 – **JCDXA meeting** at 7:30 PM (6:30 for dining) at the Cobblestone Diner on Rt. 35 in Eatontown.

November 27 – **Monmouth County RACES** on 147.045 +600 at 7:30 PM. RACES members only to participate.

November 28 – **W1AW Qualifying Run** at 7 PM (10-35 WPM). See November QST, pp. 102, 103 and 104.

NOVEMBER 2006

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
			1 **GSARA Mtg.**	**2** **Hol. City Mtg.**	**3** **Blue Swan**	**4** **RCA QSO Pty** **CW SS**
5 **CW SS**	**6** **ARES/RACES 7:30**	**7** **Pancake House** **Old Barney ARC** **QCWA News 9 PM**	**8** **KG2NV** **CW Qual. Run**	**9** **JSARS Mtg.**	**10** **K2SAU** **Blue Swan**	**OMARC Mtg. 11** **Hol. City VE** **CQ WE**
12 **W2NXG** **CQ WE**	**13** **RACES Net 7:30**	**14** **Perkins Lunch** **Croyden VE 7 PM** **QCWA News 9 PM**	**15**	**16** **KB2USF** **JSARS VE**	**17** **Blue Swan**	**18** **Phone SS**
19 **Phone SS**	**20** **ARES/RACES 7:30**	**21** **WA2DND** **MARC Mtg** **QCWA News 9 PM**	**22**	**23** **Thanksgiving** **Holiday**	**24** **Blue Swan** **CQ WW DX CW**	**Neptune Mtg 25** **CQ WW DX CW**
26 **W2KQ** **CQ WW DX CW**	**27** **Buttonwod Mnr** **JCDXA Mtg.** **RACES Net 7:30**	**28** **CW Qual. Run** **QCWA News 9 PM**	**29**	**30**		

FIRST CLASS