



# NewsLetter

**Welcome** to the second 5 Boroughs NewsLetter! So what did you think of the first one? It's a bit difficult to tell as I'm not certain anybody downloaded it.

As ever we need your input if the NewsLetter is going to succeed. Send me your articles, ideas, circuit diagrams, beer tokens, competitions, wives and anything else you can think of.

Well, the website idea has progressed. We are now in possession of the domain 'nyc-ares.org'. If you have any ideas for the NewsLetter or the website then please drop me an email to [g7litt@g7litt.com](mailto:g7litt@g7litt.com). I can accept any PC based file format and all graphics formats. So get your pen going and lets see if we can make a go of it!

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## **WEATHER HAZARDS AWARENESS WEEK**

This year, Governor Pataki proclaimed the week of March 19th (-25th) as WEATHER HAZARDS AWARENESS WEEK in the Empire State.

The NYSEMO mailed "information packets" to you (our local County Emergency Managers) and to members of the New York State Broadcasters Association (Station Managers) during the week of February 14th and 21st. Likewise, the New York State Education Department mailed "information packets" to Superintendents of public and private schools.

These packets were sent to educate and prepare our local communities for severe weather. As you know, the NWS will issue a TEST Severe Thunderstorm Warning around 10:07 am on Tuesday, March 1st and a TEST Tornado Warning around 1:47 pm on Thursday, March 23rd. Your info packets contain "Drill Response Forms" for schools, the broadcast media, and for you. People have been instructed to return the completed forms to you for an initial assessment. For schools, I'm asking that you reach out to your local BOCES Health and Safety Coordinators to ensure that they're on-board with this drill. These coordinators should be able to make your jobs easier by collecting responses from schools that participate through BOCES.

If you need additional info, please send me an e-mail ([gary.conte@noaa.gov](mailto:gary.conte@noaa.gov)) or simply call me at 631-924-0593 XT.223.

As always, thanks for your assistance and cooperation. Gary Conte, NWSFO Upton, NY



## Independent Study Course List

**To view a course description, download course materials, enroll in courses, or take the final exam, select the course you are interested in from the list below.**

The course materials are provided in Adobe Acrobat Portable Document Format files. These files are not zipped.

Once you download the files you want into the desired directory, open the Acrobat Reader program and then open the files you want to view or print.

Download directions are also available with each course.

It is recommended that the user download the course material files and view them off-line at their convenience, saving time and money for Internet connect charges.

[IS-1 Emergency Program Manager: An Orientation to the Position](#)

[IS-2 Emergency Preparedness, USA](#)

[IS-3 Radiological Emergency Management](#)

[IS-5 Hazardous Materials: A Citizen's Orientation](#)

[IS-7 A Citizen's Guide to Disaster Assistance](#)

[IS-8 Building for the Earthquakes of Tomorrow: Complying with Executive Order 12699](#)

[IS-10 Animals in Disaster - Module A Awareness and Preparedness](#)

[IS-11 Animals in Disaster - Module B Community Planning](#)

[IS-120, An Orientation to Community Disaster Exercises](#)

[IS-195 Basic Incident Command System](#)

[IS-275 The EOC's Role in Community Preparedness, Response and Recovery Activities](#)

[IS-279 Engineering Principles and Practices for Retrofitting Flood-Prone Residential Structures](#)

[IS-288 The Role of Voluntary Agencies in Emergency Management](#)

[IS-301 Radiological Emergency Response](#)

[IS-324 Community Hurricane Preparedness](#)

[IS-346 An Orientation to Hazardous Materials for Medical Personnel](#)

[IS-393 Introduction to Mitigation](#)

[IS-394 Mitigation for Homeowners](#)

[IS-513 The Professional in Emergency Management](#)

[SS-534: Emergency Response to Terrorism](#) (presented by the National Fire Academy-12 hours)

## *Float Charging Batteries*

I have developed a modification to the very popular Astron RS and RM series of linear supplies that has been successful in float charging gel type batteries, both in our emergency comm van and at several repeater sites. I have not worked (yet) with liquid filled batteries except for some very poor experience with deep cycle marine batteries. Along the way, I have probably learned more than I ever wanted to know about gel type batteries.

First, get good quality batteries designed for float service. I use batteries designed for solar power systems. Sealed batteries eliminate all of the gassing and spillage safety problems. Their construction is quite different than starting batteries with their emphasis on high starting current, fractional discharge and low cost. Deep cycle marine batteries are a bit better but their quality varies widely, both by brand and even among batteries from the same manufacturer and production lot. Paralleling mismatched batteries results in either boil off and overcharge damage on the low voltage units or undercharge on the high voltage ones.

One problem with damaged batteries is that the damage is hard to detect unless their capacity is checked. They can look great until crunch time comes and then quit after delivering only 10 to 20 percent of their rated capacity. Batteries are usually specified at a 20 hour discharge rate to an end point of 10.5V for a 12V battery. I usually test to 11V end point because a lot of gear quits there. This should give 90 percent of rated storage. Capacity drops when the battery is cold but recovers when it warms up again.

Second, the charging voltage needs to be temperature compensated unless the batteries are in an air conditioned space. The manufacturer of the batteries I use provides temperature curves and has stated that the float life of the batteries will be cut in half by deviations of only 50 millivolts (!) from the target value. The ideal value varies a lot, from 13.3V at 110 deg. F to 14.45V at 0 deg. F for example. The proper voltage is only 13.8V at 68 deg. F.

Finally, the power supply must be current limited to a value that doesn't exceed either the maximum charging rate for the batteries or the maximum CONTINUOUS rating of the supply. Remember that the nameplate rating assumes excellent ventilation so the rating must be reduced further in many real installations.

Most batteries can be safely charged at up to an 8 hour rate, that is, 50 amps for a 400AH capacity. This rate on a 50AH gel battery would be destructive. The nice part of a floating battery is that the supply only has to make up the average power drawn so a 20A or even a 12A unit would be plenty. The "pile up peaks" are from the battery.

Most of my work has been with the Astron RS series of linear power supplies. These are rugged, high quality units that share nearly the same control PC board for ratings from 7A to 50A. Temperature compensation requires only the addition of one fixed resistor and one thermistor. The thermistor is on a cord and is taped to the battery case.

These supplies have a fold back current limiter which protects them against shorts but it is non-adjustable and set too high for charge limiting. I have added an outboard limit circuit which gives an accurate constant current limit in the 9 to 14V range for charging but leaves the original circuit active for fault conditions.

These supplies already have good protection against being back fed by the battery when the input power is off. They also have an SCR over voltage "crowbar" circuit to protect the load in case the regulator fails. An output fuse must be added to disconnect the supply from the battery if this circuit ever triggers. Diode isolation wastes a lot of power and can, with radios that need at least 11.0V to operate, make almost half of

your battery capacity useless.

These techniques do work. We have a solar powered repeater on an offshore island that gets quite a bit of use. The batteries get cycled every day and yet, after over 7 years with no maintenance (no one has even visited the site), they still have most of their original capacity. The original marine batteries failed in less than two years. An article and possibly a kit are in the works.

Bruce Gordon N6OLT  
Santa Barbara, CA

## *KNOW YOUR STUFF!*

### *Monday Night ARES Net Schedule*

Below is the REVISED schedule for the year 2000. Since there have been some changes to the various boro rosters, it required the change. I would like to welcome back Andy Borrok (N2TZX) after his illness. All are reminded that it is the sole responsibility of the scheduled NCS and alternate to keep each other posted as to their availability and replacement. This means that if you are unable to fulfill your scheduled assignment, YOU are responsible to find a replacement. If this involves swapping for another night with the scheduled NCS/ALT, then by all means do so (and fulfill your end of the bargain)! This schedule is being forwarded to N2VLT for hard copy printing and to OEM for advanced notice of who is expected for that night. I would like to see either the NCS or alternate at the OEM office. Any other operator intending on showing up at OEM must notify and obtain the OK of myself, as per OEM officials until further notice. There are changes going on at OEM that dictate caution. The Director of OEM (Jerry Hauer) is due to leave soon and his replacement has not been officially named yet. Until the program is thoroughly explained and accepted by the new leadership, we have to tread softly.

If there are any questions with this policy or the schedule, please feel free to contact me via email or phone.

#### **NCS Schedule for 2000**

1/3 N2NOV/W2JER	5/8 KE2UN/KC2AYG	9/11 KE2UN/KC2AYG
1/10 KE2UN/KC2AYG	5/15 N2VLT/N2ZRC	9/18 N2VLT/N2ZRC
1/17 N2VLT/N2ZRC	5/22 N2ZRC/KB2PSM	9/25 N2FWR/KE2UN
1/24 N2SHQ/KB2OQX	5/29 N2FWR/KE2UN	10/2 KB2PSM/N2CKK
1/31 N2FWR/KE2UN	6/5 KB2PSM/N2CKK	10/9 W2JER/KB2KWI
2/7 KB2PSM/N2CKK	6/12 W2JER/KB2KWI	10/16 N2SHQ/KB2OQX
2/14 W2JER/KB2KWI	6/19 N2TZX/N2VLT	10/23 N2TZX/N2VLT
2/21 N2TZX/N2VLT	6/26 N2SHQ/KB2OQX	10/30 N2NOV/W2JER
2/28 N2SHP/KB2PSM	7/3 N2NOV/W2JER	11/6 KE2UN/KC2AYG
3/6 N2NOV/W2JER	7/10 KE2UN/KC2AYG	11/13 N2VLT/N2ZRC
3/13 KE2UN/KC2AYG	7/17 N2VLT/N2ZRC	11/20 KB2KWI/KB2PSM
3/20 N2VLT/N2ZRC	7/24 N2SHQ/KB2OQX	11/27 N2FWR/KE2UN
3/27 N2FWR/KE2UN	7/31 N2FWR/KE2UN	12/4 KB2PSM/N2CKK
4/3 KB2PSM/N2CKK	8/7 KB2PSM/N2CKK	12/11 W2JER/KB2KWI
4/10 W2JER/KB2KWI	8/14 W2JER/KB2KWI	12/18 N2SHP/N2VLT
4/17 N2SHQ/KB2OQX	8/21 N2ZRC/N2VLT	12/25 N2SHQ/KB2OQX
4/24 N2ZRC/N2VLT	8/28 N2SHP/KB2PSM	
5/1 N2NOV/W2JER	9/4 N2NOV/W2JER	

## *NYC RACES NCS SKED 2000*

1/3 N2NOV/W2JER	7/3 N9SAT/N2TZX
2/7 KB2PSM/N2CKK (same as ARES, so switch w/each other)	8/7 N2FWR/KE2UN
3/6 N2TZX/N3IMU	9/4 N3IMU/N2SHP
4/3 N2SHP/KB2PSM	10/2 N2VLT/N2CKK
5/1 KC2AYG/N2NOV	11/6 KE2UN/N9SAT
6/5 N2NDU/N2VLT	12/4 KB2IQX/N2ZRC

## *Red Cross March/April Training Schedule*

The following schedule is the courses that are suggested to take as an ARES member. The best way to be able to work in an emergency with the Red Cross or any other agency is to know what they need and how they operate. It is too late to learn when there is an emergency.

### **Introduction to Disaster**

March 7 2000	6 to 9 PM	Queens chapter
March 25	9 AM to 12 PM	Manhattan Red Cross HQ
March 27	2 to 5 PM	Manhattan Red Cross HQ
March 30	6 to 9 PM	Manhattan Red Cross HQ
April 04	6 to 9 PM	Manhattan Red Cross HQ
April 17	2 to 5 PM	Brooklyn Chapter
April 24	2 to 5 PM	Manhattan Red Cross HQ

### **Mass Care**

March 16	6 to 9 PM	Manhattan Red Cross HQ
April 18	6 to 9 PM	Manhattan Red Cross HQ

### **Shelter Operations**

March 14	6 to 9 PM	Queens Chapter
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### **Damage Assessment**

April 13	6 to 9 PM	Manhattan Red Cross HQ
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To register for above courses call (212) 875 2165

FOR THOSE WHO HAVE JUST JOINED RED CROSS AS A VOLUNTEER YOU ARE REQUIRED TO TAKE VOLUNTEER ORIENTATION. For this class only call (212) 875 2067

### MANHATTAN SCHEDULE

March 07	930 to 1230 PM
March 18	930 to 1230 PM
March 30	630 to 930 PM
April 13	630 to 930 PM

April 18  
April 29

930 to 1230 PM  
930 to 1230 PM

The courses are listed in the order they can be taken. You must take Intro to Disaster first then take Mass Care and so on. These are the recommended courses that Red Cross would like ARES members to have. You only need to be an ARES member to take the courses. You do not have to belong to the Red Cross. These courses are FREE.

John Kiernan KE2UN  
EC/RO ARES./RACES MANHATTAN/BRONX STATION MANAGER FOR WC2OEM

## Section Meetings

Manhattan/Bronx meet on the 3<sup>rd</sup> Thursday of the month at Red Cross 150 Amsterdam Avenue (66<sup>th</sup> Street)

March 16 Thursday 8 PM at Red Cross 150 Amsterdam Avenue (66 street) Mark Phillips G7LTT will be giving a talk and demo on satellite communications. Bronx has had a good showing at the meetings Manhattan has been a little short at the meetings. Also do not forget that we will have an ARES Manhattan/Bronx NET on 444.050 PL 114.8 at 8 PM Tuesday. All are welcome to check in and also to come to the meeting.

Staten Island meet on the 4<sup>th</sup> Friday of the month at St Vincents Hospital on the North Shore.

## NYC ARES TAC FREQS

TAC Channel	Output Frequency	Shift	PL Tone	Location
TAC 01	147.270	+	127.3	Manhattan
TAC 02	147.000	-	136.5	Manhattan
TAC 03	444.200	+	136.5	Queens
TAC 04	145.230	-	114.8	Brooklyn
TAC 05	145.270	-	88.5	Queens
TAC 06	448.625	-	136.5	Queens
TAC 07	443.300	+	88.5	Bronx
TAC 08	147.240	+	94.8	Bronx
TAC 09	447.925	-	114.8	Brooklyn
TAC 10	444.050	+	114.8	Manhattan
TAC 11	146.730	-	88.5	Brooklyn
TAC 12	445.825	-	156.7	Staten Isl

## NEW YORK CITY-LONG ISLAND (NLI) SECTION NEW YORK CITY DISTRICT PERSONELL

Position	Name	Call Sign	Section	Email
SEC	Tom Carubba	KA2D	NYC-LI	<a href="mailto:ka2d@qsl.net">ka2d@qsl.net</a>
DEC	Charles Hargrove	N2NOV	NYC-Citywide	<a href="mailto:n2nov@lsa.net">n2nov@lsa.net</a>

EC-Ops EC	Jerrold Loewenthal John Kiernan	W2JER KE2UN	NYC-Citywide Bronx (act.) see Manhattan	<a href="mailto:jloewe@worldnet.att.net">jloewe@worldnet.att.net</a>
EC EC EC EC	Rob Robinson John Kiernan Andy Borrok Charles Hargrove	KB2PSM KE2UN N2TZX N2NOV	Brooklyn Manhattan Queens Staten Island	<a href="mailto:rob@excelonline.com">rob@excelonline.com</a> <a href="mailto:102414.646@compuserve.com">102414.646@compuserve.com</a> <a href="mailto:n2tzx@webspan.net">n2tzx@webspan.net</a> <a href="mailto:n2nov@lsa.net">n2nov@lsa.net</a>
AEC. AEC AEC	John LaSala Bill Hindin Alan Dove	N2FWR W2BH N3IMU	Port. Auth Manhattan Manhattan	<a href="mailto:fm1483@aol.com">fm1483@aol.com</a> <a href="mailto:bildin@ix.netcom.com">bildin@ix.netcom.com</a> <a href="mailto:alanwdove@earthlink.net">alanwdove@earthlink.net</a>
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