



ARES COMMUNICATOR

Information for Scott County Amateurs



February, 2012

Accurate, Reliable Emergency Communications

Volume 12, Number 2

The Minnesota QSO Party

Saturday Feb 4th 8AM – 6PM

The time has come! The first weekend in February bring the Minnesota QSO Party to the airwaves. This one time of the year when everyone is looking to make contact with a Minnesota station.

The contest runs from 8:00AM to 6:00PM (CST) on Saturday, February 4th. You will find activity on the usual five HF bands plus 6M and above. You will find 80M, 40M, and 20M good pretty much all day long. Check the chart for specific frequencies.

Don't hesitate to put out a call of "CQ MN QSO Party".

There are stations out there looking for a Minnesota contact. The information exchange for the contest consists of your first name and your three character county designator, i.e. "Sylvester, SCO". ARES members should include the identifier 'ARES' in their exchange. For example Scott ARES members would identify their county as 'Scott ARES' or phonetically as Sierra Charlie Alpha Romeo Echo Sierra.

A certificate will be awarded to the highest scoring ARES station in the QSO Party. Go get 'em!

Be sure to visit the MN Wireless Assn. website for more information on the 2011 MN QSO Party. You will find links to logging software and rover maps and schedules. You will find information here: www.w0aa.org/ The MN QSO Party County Activity Map on the website is color-



MN QSO Party *cont'd on page 2*

The ARES COMMUNICATOR is published for the benefit of Amateur Radio Operators in Scott County and other interested individuals.
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Reader submissions encouraged!

SKYWARN Training

It is SKYWARN training time! Metro SKYWARN requests that all severe weather spotters complete the training class every two years.

Using a training program jointly developed by the National Weather Service and Metro Skywarn, volunteers train about 600 Radio Amateurs every two years. The training program runs from March to May every year.

The NWS brings its weather knowledge and access to exciting and instructive video footage and slides. The local ARES/RACES organizations bring their expertise in emergency communications. The result is a four hour video and slide presentation.

Net operations rely upon a high degree of independence from spotters. Spotters are trained about basic storm structure and the sequence of events of an approaching severe storm, to place themselves safely near severe weather and how to report into the net. Special emphasis is placed



SKYWARN *cont'd on page 2*

ARES Activities

Weekly Net Monday 7 PM 146.535 mhz (s)

Breakfast Saturday, February 11th

Digital Monday, February 13th

ARES Nets

MN ARES Phone Net		
	6:00PM Sunday	Freq: 3.568 mhz
ARRL MN Phone Net		
	12:00p, 4:30p CST Daily	Freq: 3.568 mhz
ARRL MN CW Net		
	6:30p, 9:50p CST Daily	Freq: 3.568 mhz

NETS WITH OUR NEIGHBORS

North Dakota:	Daily 3.937 mhz	6:30pm
South Dakota:	Daily 3.870 mhz	6:00pm
Wisconsin:	Daily 3.985 mhz	5:30pm
Iowa:	Daily 3.970 mhz	12:30/5:30pm

MN QSO Party - cont'd from page 1

coded to show expected county activations and clicking on a county shows call signs "signed up" to activate it. The web site will also track the rovers in real-time via APRS as the contest progresses.

This is a fun operating event with opportunities for everyone to participate. You can operate voice, sideband and FM, or digital, CW, PSK, RTTY, etc. Let's put Minnesota on the air on Feb 4th.

Band	Freq.	CST	GMT
10 SSB	28.450	2:00 PM	2000
15 SSB	21.350	1:00 PM	1900
20 SSB	14.270	All Day!	All Day!
40 SSB	7.250	All Day!	All Day!
80 SSB	3.850	All Day!	All Day!
160 SSB	1.870	5:30 PM	2330

NOTE: Times are recommendations based on propagation estimates and past year's activity. Tune around and take advantage of what propagation is available.

BREAK - OVER

"The largest room in the world is the room for improvement."

Harvey McKay

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SKYWARN cont'd from col. 1

on training the spotter how to differentiate severe weather from weather easily confused with severe weather with a specially prepared video and slide presentation. Many useful weather terms are learned to facilitate communication on the net.

Spotters are expected to monitor severe weather potential and activate themselves as needed and available and place themselves at useful locations. Reports are requested from anyone seeing severe weather. Updates from the NWS about current conditions are repeated or updated every ten minutes. Occasionally, the NWS will request information from a specific location or regarding specific conditions.

If this is your year for training, check the classes listed below. These training locations are located in the southern and western metro however there are more classes being held at various locations through the Twin City area. You can find the complete training schedule at the Metro SKYWARN website: <http://www.metrokywarn.org/cgi-bin/classes.pl>

Saturday, March 3rd, from 9:00 A.M. to 1:00 P.M.

Sponsor: Twin Cities Repeater Club

Location: Open Circle Church

Address: 2400 Highland Drive

City, State: Burnsville, Minnesota

Wednesday, March 21st, from 6:00 P.M. to 10:00 P.M.

Location: Carver County Government Center

Address: 600 East 4th Street

City, State: Chaska, Minnesota

Saturday, April 7th, from 8:00 A.M. to 12:00 P.M.

Sponsor: Bloomington Emergency Communications

Location: Bloomington Fire Station #1

Address: 10 West 95th Street

City, State: Bloomington, Minnesota

Saturday, May 5th, from 9:00 A.M. to 1:00 P.M.

Location: Hennepin County Emergency Management

Address: 1600 Prairie Drive

City, State: Medina, Minnesota

Saturday, May 19th, from 9:00 A.M. to 1:00 P.M.

Sponsor: Twin Cities Repeater Club

Location: Open Circle Church

Address: 2400 Highland Drive

City, State: Burnsville, Minnesota

What can go wrong?

Part Two

By Lt. Dan Blackston, Chula Vista Police Department

The following is part two of a list of seventy things to expect is not offered as a prediction of doom. Although most of the items are negative, this is a realistic list of problem areas that we can expect to face in a disaster. Recognizing that problems will appear and giving some thought to them prior to a disaster are steps towards overcoming them. Some of the areas require specific actions; some will diminish with time; some are inherent in disaster operations and must simply be accepted. Although not every one of the 70 listed items will occur in every emergency, the majority of them will appear in most situations. You are encouraged to scan the list, determine which items are or may become your responsibility, and determine how those items could best be handled or the problem reduced.

1. Law enforcement and the media will clash; all media representatives should be referred to the Public Information Officer.
2. Very few citizens will utilize evacuation/mass care centers; they will prefer to stay with friends and relatives, or to camp out in their own yards.
3. Structural engineers will be needed to evaluate standing buildings for use as evacuation centers, command posts, information centers, first aid stations.
4. The identification of workers and volunteers will be a problem; it will be difficult to determine who is working where and on what.
5. There will be rumors; people will be listening to their radios and must be given accurate information.
6. There will not be enough handie-talkies; batteries will soon go dead.
7. Many fire hydrants will be inaccessible (covered or destroyed by rubble) or inoperable.
8. Generators will run out of fuel; jerry cans of fuel must be obtained early to maintain generator powered lighting and communications.
9. Critical facilities will have to be self-sufficient; gas, lights, water and sewage may be out for days.
10. Emergency responders will require rest and must be relieved. Local personnel may be of value as guides for mutual aid responders, or as supervisors for volunteer crews.
11. Equipment will be lost, damaged or stolen, and may never be accounted for.
12. Someone will get the bill; record-keeping and accounting procedures will be important.
13. Traditional non-emergency personnel will want to go home at 5 o'clock; all public employees must be made to realize that they are a part of the emergency response team.
14. People will die and there is nothing that can be done about it. Non-public safety personnel will not understand why everyone cannot be saved. Priorities must be set to save the most lives possible.
15. Dead bodies should not be an initial concern. Rescuing the living should be the first priority.
16. If phones are working, the number of requests for service will be overwhelming. People will have to fend for themselves; it will be difficult for dispatchers to ignore these pleas for help.
17. Some field units will disappear; you will not be able to reach them and will not know where they are or what they are doing.
18. Security will have to be posted at hospitals, clinics, and first-aid stations to control hysterical citizens demanding immediate attention.
19. Representatives from public agencies throughout the United States and many foreign countries will want to come and observe the operations or offer assistance. They will be a significant problem.
20. Department heads (EOC) staff may not have a working knowledge of their assigned areas of responsibility, and will play it by ear.
21. Some citizens and media representatives will question your decisions because they will not recognize that the safety of field responders is paramount.
22. There are no critically injured in a disaster; only those who are dead or alive.
23. Handicapped and disabled persons will probably die unless personal family and friends can care for them and maintain their life-support systems.
24. Management will not be familiar with field response procedures, and may attempt to change standard operating procedures.
25. Emergency responders (public safety and medical alike) will not be adequately trained to respond efficiently.
26. There will be initial chaos; supplies, materials and equipment needed will not be readily available.
27. There will be a general lack of necessary information; coordinators will want to wait for damage/casualty assessment information to establish priorities.
28. Emergency equipment will not be able to reach some locations because of traffic jams. Tow trucks will be at a premium. Parked or abandoned vehicles will block streets, and emergency responders will be the worst offenders.

USS Minnesota SSN783



WASHINGTON The official logo of the Virginia-class attack submarine Pre-Commissioning Unit (PCU) Minnesota (SSN 783). The logo was designed by Jakob Bartels, a Minnesota high school student, as part of a U.S. Navy League-sponsored contest and was selected from over 100 submissions from area high school and college students by the Minnesota's crew.

Take a Dip in the General Pool

Time to test your knowledge of the information covered by the General Class license exam. Each month we'll take a look at a selection from the question pool. Here is this month's sample:

1. What language must you use when identifying your station if you are using a language other than English in making a contact using phone emission?
 - A. The language being used for the contact
 - B. Any language if the US has a third party agreement with that country
 - C. English
 - D. Any language of a country that is a member of the ITU
2. Which sideband is most commonly used for voice communications on frequencies of 14 MHz or higher?
 - A. Upper sideband
 - B. Lower sideband
 - C. Vestigial sideband
 - D. Double sideband

(Check next month's issue of the ARES Communicator for the answer.)

What Can Go Wrong? - cont'd from page 3

29. Even though there will not be enough people to initially deal with emergencies, many available personnel will never be identified and never used. After the initial shock, there will be too many volunteers.
30. General information will be offered in response to specific questions because field units cannot verify the requested information.
31. Individual public safety officers will be asked to do the work of squads or companies; they will have to recruit volunteers on the spot to provide assistance to their efforts.
32. The message flow to, from, and within the EOC and Field Command Post will break down and become inefficient and unmanageable.
33. There will be an over critical desire to verify all incoming information. If it is received from a field unit, it should be considered as verified.
34. Some EOC and Command Post personnel will become overloaded; some will not be able to cope with the volume of activity and information they have to deal with, and some will not be able to cope with the noise and distractions.
35. Things will get better some time after they have become considerably worse.



January General Pool Answer

1. Which of the following is a requirement for a non-licensed person to communicate with a foreign Amateur Radio station from a US amateur station at which a licensed control operator is present?
 - B. The foreign amateur station must be in a country with which the United States has a third party agreement
2. What portion of the 10 meter band is available for repeater use?
 - D. The portion above 29.5 MHz

Test Your NIMS Knowledge

This month we will review some of the points from the course ICS-200b: ICS for Single Resources and Initial Action Incidents. Check your recall of the course material with these questions.

1. Who generally facilitates the Operational Period Briefing?
 - A. Public Information Officer
 - B. Operations Section Chief
 - C. Logistics Section Chief
 - D. Planning Section Chief
2. Select the TRUE statement:
 - A. ICS organizational structure should include only the functions and positions needed to achieve the incident objectives
 - B. ICS positions may be combined in order to save on staffing or achieve a higher level of efficiency
 - C. ICS encourages the use of unique position titles in order to better meet the specific incident needs
 - D. ICS recognizes that an Incident Commander may not be necessary if an Operations Section Chief is assigned

Check next month's ARES Communicator for the solution



January NIMS Knowledge Solution

1. ICS Form 201:
 - C. Contains status information for briefing the incoming Incident Commander or team, or other resources
2. Which General Staff position conducts tactical operations, develops the tactical objectives and organization, and directs all tactical resources?
 - C. Operations Section Chief

BREAK - OVER

W1AW LIVE! Webcast

On Sunday, February 12th at 5 p.m. Eastern time, ARRL and Al Petrunti of The New Day Group will webcast a *LIVE* tour of W1AW – the ARRL flagship station. Amateurs around the country (and the world) will be able to watch it at <http://www.awecast.tv/channels/arrl/>.

“Hams around the world know of W1AW and thousands have made contacts with this impressive station, but most never get to see it,” said Allen Pitts, W1AGP, who is producing the event. “Thanks to Al Petrunti’s group, we hope that folks enjoy seeing what’s at the other end of the signals.”

You will be there as Petrunti, KA1TCH, local weatherman Geoff Fox, K1GF, and others are given a tour by Station Manager Joe Carcia, NJ1Q. As in all live broadcasts, you never know just what might happen. We invite you to join us. Petrunti, KA1TCH, also created the video about HR-607 for ARRL.

You can learn more about W1AW at www.arrl.org/w1aw and about the New Day Group at www.NewDayHD.com.

BREAK - OVER



PACIFIC OCEAN (Feb. 1, 2012) MV-22 Osprey assigned to Marine Medium Tiltrotor Squadron (HMM) 166 land aboard the amphibious assault ship USS Peleliu (LHA 5) during flight deck qualifications. This is the first time an Osprey has landed aboard a Tarawa-class amphibious assault ship.

LED Prices are Falling

Seven years ago Mike Brakey was spending an average of \$170 per month on power and far more during some months. Today Brakey's home uses about 500 kilowatt-hours per month and his monthly bill is often below \$40. One reason is the LED light bulb, the "light-emitting diode" that General Electric researchers invented 50 years ago, which is now the focus of intense competition among all of the major lighting manufacturers.

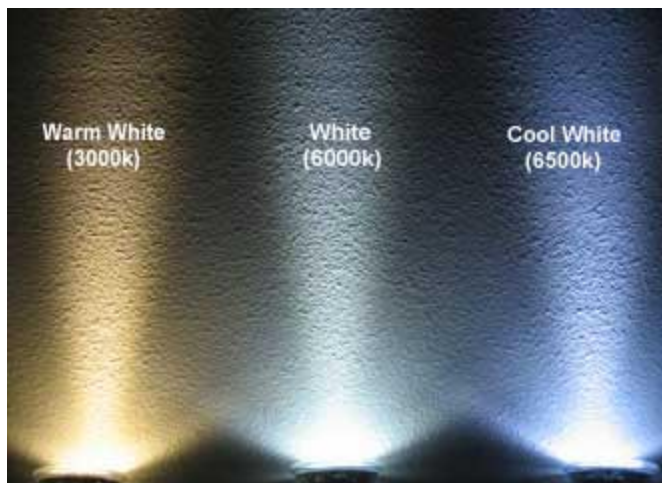
"There are two races going on," said Todd Manegold, the LED product manager for Philips Electric. "One is the race to equivalency. It's about delivering light bulbs that replicate or imitate what people are used to. Once you reach equivalency, the game is how to make it more affordable. We think we have gotten it more affordable."

Industry experts say that within a decade LEDs will eclipse conventional lighting such as halogen and compact fluorescent bulbs – and not because of any new government regulations, but rather because it will just make sense economically. The switch is already under way for commercial customers, especially in new construction, where newly designed fixtures incorporated LEDs.

But there are an estimated 2.6 billion light bulb sockets in American homes, making them the big prize for the industry. But LED bulbs are still far more expensive than any other light you can buy, more expensive than old fashioned bulbs, than halogens and CFL bulbs.

Old-fashioned light bulbs put out 10 to 15 lumens per watt – or about 800 lumens for a 60-watt bulb. A CFL gives off 40 to 60 lumens per watt. "The technology is now at point, where LEDs can produce 100 to 150 lumens per watt. They are now the most efficient white light source." For most consumers, the price at which it will make sense to buy an LED that will last 20 years is somewhere between \$10 and \$20, Griffiths said.

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007 Cufflinks!

Life as a secret agent means you need to have access to the internet when you need it, as well as have the ability to carry around important files in locations where your adversaries won't think to look. These secret agent-worthy Wi-Fi cufflinks let you wear your mobile hotspot on one wrist, and carry around 2GB of important files on the other.

The Wi-Fi cufflink essentially acts like a miniature router. The end pops out, and when plugged into the USB port on your web-connected computer creates a hotspot that can be used by other devices like laptops, smartphones, and tablets.

While most places these days seem to have Wi-Fi available, the wearable tech could be perfect for situations like sharing the wired-only internet connection in your office with a visiting friend or colleague. The cufflink creates an easy quick connection using just your PC, and can be disconnected as soon as it is no longer needed.

While you're using one of the cufflinks to share your internet connection, the other can be used to share files between two computers. The USB cufflink has a built-in 2GB flash drive that can be used to transfer files, or tote around any super-secret data that you don't want to leave your side.

The Wi-Fi and USB cufflinks are available now from Brookstone for US\$250, for the Spy who has everything!

BREAK - OVER



cont'd from col. 1

The other efficient lighting option is the compact fluorescent lamp, CFL. The curly CFL contains small amounts of mercury which might be a concern for some people. CFLs are now offered in a wide array of styles based on "color temperature." Color temperature, which is measured in degrees Kelvin (K), describes the color of the light a bulb produces. In general, the higher the Kelvin temperature, the more blue the color. The intricacies of Kelvin ratings are complex, but to select bulbs you really just need to check out the Chart below. It offers basic definitions of different bulb ratings.

BREAK - OVER

Cyber Defense Initiative

Feds unveil cyber defense initiative

Federal agencies will work closely with the electric power industry under a White House initiative intended to enhance security of the grid from cyber attacks. The effort, led by the Department of Energy, in partnership with the Department of Homeland Security, was unveiled Jan. 5. It is a response to “increasingly sophisticated and dynamic” cyber threats, federal officials said. According to officials, the Electric Sector Cybersecurity Risk Management Maturity Project will build on existing public and private sector cyber efforts “to create a more comprehensive and consistent approach to protecting the nation’s energy delivery system.”

Establishing such an approach will give utilities and grid operators “another important tool” to improve their ability to respond to cyber risks, said Energy Secretary Steven Chu. Officials said the initiative will focus on development of a “maturity model”—a widely used tool that relies on best practices to identify an organization’s strengths and weaknesses. In this case, the model will allow utilities and grid operators to measure their current capabilities and analyze shortcomings in cyber defenses. Such models are used by other sectors to improve performance, efficiency and quality. “It is important to understand the sector’s strengths and remaining gaps across the grid to inform investment planning and research and development, and enhance our public-private partnership efforts,” said Howard Schmidt, White House cyber security coordinator.

Federal officials kicked off the new effort by meeting recently with leaders from across the electric sector. Over the next several months, these officials will host a series of workshops with the industry to draft a sector-wide maturity model. The model will be available for use this summer, they indicated. “While this effort is voluntary for the electric sector, DOE and DHS are treating it with a great deal of urgency,” said Laura Marshall Schepis, NRECA government relations deputy director and counsel, who is taking part in the discussions. “NRECA’s up-front participation is aimed at assisting the agency staff in focusing the effort,” Schepis noted. “We’re also seeking to identify participation channels for co-op subject matter experts that will benefit both the newly launched process and overall cyber security efforts across the co-op program.”

BREAK - OVER

Bad Phone Habits

A blog posed the question, “Do you have a ‘pet peeve’ or operating gripe?” and asked for reader responses. Here are the most common practices. Check your operating habits and try to improve your operating skills.

Avoid Wordiness and Redundundundundancy. (This one is far too common.)

Whoever started this inane and obnoxious style of operating should get 40 lashes with a Cat-o’-RG8-tails! Avoid frequent and inappropriate use of terms such as “here” and “there,” and “at this time.” Example: “The current weather report for here at this location is _____ at this time. What is the current weather there at your location at this time?” (NOTE: This is a voice-only phenomena and would never be sent on CW.)

Avoid excessive use of terms of endearment. “Real good ol’ buddy,” or “you’re comin’ in here like gang busters.” This gets old very quickly with most seasoned and skilled operators. Leave that lingo and jargon for the CBers and lids.

Always travel in a group. The person who uses ‘we’ whenever describing an activity although the individual usually travels alone. For example, “We went up the tower to check the dipole feed point.” How large a group was involved in the meeting on the tower? How about the zinger, “We took the Extra upgrade test last Wednesday and passed.” Hmm, I don’t think you can bring a tutor along to share the test!

Avoid “butting in” and/or interjecting unnecessary comments.

Comments such as “73 ol’ buddy have a nice day” (unidentified of course), after the NCS has acknowledged a station, or after a station has ended his/her transmission, is a bad habit and only slows down a net and causes confusion. (What if everyone did it?) If you wish to make a contact, say “contact” or your call sign (or hail sign if in Morse) and wait until recognized by net control. (The term “break” should be reserved for emergency traffic only.)

Another common “gripe” is: People who checking into a net by “proxies.”

Example: “Check me into the net tonight. I’m going bowling!” You are either participating and available in a net...or you are NOT. It is acceptable (if you must) to have another operator say: “Elmer, W1— said to tell everyone hello and that he’s sorry he can’t be on the net tonight. He will be on next week.”

LoTW and CQ

ARRL's Logbook of The World Support for CQ's Awards

(Hicksville, NY and Newington, CT - Jan. 24, 2012) – CQ Communications, Inc. (CQ) and ARRL – the national association for Amateur Radio, have signed an agreement to begin providing support for CQ-sponsored operating awards by the ARRL's Logbook of the World (LoTW) electronic confirmation system. The agreement was announced jointly today by ARRL Chief Operating Officer Harold Kramer, WJ1B, and CQ Communications President Richard Ross, K2MGA.

CQ's awards will be the first non-ARRL awards supported by LoTW and will be phased in, beginning with the CQ WPX award. Additional CQ awards will follow. The ARRL's LoTW system, an interactive database recording contacts between radio amateurs was created in 2003 and has been adopted by 47,500 radio "hams" worldwide. It already has records of 400 million contacts and grows weekly. The target date for beginning LoTW support for WPX is April 1, 2012. Amateurs will be able to use LoTW logs to generate lists of confirmed contacts to be submitted for WPX credit. Standard LoTW credit fees and CQ award fees will apply.

ARRL Chief Executive Officer David Sumner, K1ZZ, observed that this step gives radio amateurs throughout the world an inexpensive and convenient means of gaining credits toward CQ's popular operating awards. "LoTW has significantly increased interest and participation in the ARRL's DXCC, Worked All States and VUCC awards programs. We anticipate a similarly positive response to the addition of the CQ WPX award. Amateurs will be able to spend more time operating and less time chasing QSL cards."

CQ President Richard Ross, K2MGA, said he is very pleased to be able to move forward with Logbook support for CQ awards. "We have had excellent results with electronic confirmations for several years," he said, "and I am glad that we are now able to begin expanding that convenience to those participants in our award programs who use Logbook of the World. We look forward to a smooth launch for WPX, and to the expansion of LoTW support to include the rest of our award programs as well."

To learn more go to < www.arrl.org/logbook-of-the-world>.

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Bad Habits - cont'd from page 7

Another common example of poor operating is the **failure to identify** at the end of transmission (when a station/operator is done and/or is not expected to return to the net within ten minutes.)

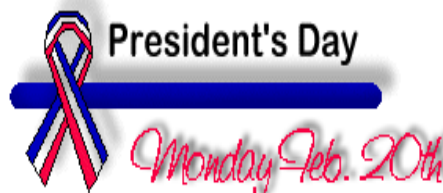
If we all use the proword "OVER"... and there will be a lot less guesswork and "doubling". (On CW, Morse operators always (well almost always) send the prosign: "K" or "KN")

Establish two-way contact before you start yakking. ALWAYS make sure that the calling station doesn't have some urgent message before you launch into a long spiel.

If someone says "I have EMERGENCY traffic." (9 out of 10 times these are NOT an actual emergency). Ask "state the emergency?" Example: Reporting a stranded motorist is not an emergency...unless of course the motorist is well along in labor!

All these examples of poor operating on 'phone would be avoided if operators would first ask yourself: "Would I send all that I am saying if I were on CW?"

BREAK - OVER



ARES Breakfast
Saturday, February 11th
7:30AM
Perkins Restaurant
Savage, MN

NECOS Schedule February 2012

6 Feb N0PI Dan
13 Feb W0NFE Bob
20 Feb KB0FH Bob
27 Feb KC0YHH Tony
5 Mar N0PI Dan
12 Mar W0NFE Bob