MICH-A-CON ARC SKYWARN NET PROCEDURE

October 19, 2004

Given the serious nature of our task, we insist that proper radio procedures are followed. This helps us collect the information needed by the NWS and relay it to them in a timely fashion.

It is not advisable to dispatch observers to follow a storm or to gain a vantage point. Due to the local terrain, the observer may become trapped in a rapidly developing storm with no escape route. It is best to have a large contingent of observers, spread over a wide area and close to shelter than it is to have a few observers putting themselves at risk to follow a storm. With this in mind, Storm Spotters must consider their safety, the safety of their family and the safety of their property before deciding to go mobile. The responsibility for doing so rests entirely with the Storm Spotter himself.

Repeater

The Net will operate on the club's 146.85 MHz repeater.

Net Control Operator

The primary NCO is Dennis Beurjey, KD8AIT, and alternate is (insert name and callsign). However, if the NCO or alternate hasn't convened the Net within a few minutes after the weather alert, any available member should assume the position, using the Mich-A-Con ARC Skywarn NCO Script as a guide. The member may relinquish the duties of NCO to the Primary or Alternate if they subsequently join the net.

Check-Ins

During severe weather, check-ins to the Net are not necessary. If you have something to report, simply follow the procedure below. If we need information from a specific location, we will announce this on the air. Many times spotters can sit through an entire net lasting hours, and never give a report. That's OK. Sometimes the best report you can give is no report at all.

However, when/if conditions permit, the NCO may ask for check-ins. Storm Spotters should then check in, giving only their callsign and location.

Reporting Procedures

All submitted reports will meet the criteria specified under "Reporting Criteria". Only when Net Control asks for information that differs from the listed parameters should you deviate. Stations with information to report will request recognition from the Net Control Operator (NCO) by stating your call sign and location. (Example: K8DDB, Loretto) Calling stations will usually be recognized in order. Try to avoid transmitting at the same time another station is. Remember, what they are reporting may be as important, or even more so than your report. The Net frequency can be quite hectic during a severe weather episode.

Brevity and Clarity

Please try to make reports as brief and concise as possible. We all like to rag chew at times, but during a weather net, air time is gold! A proper report sequence should go like this:

Spotter: K8DDB, Loretto

NCO: DDB, GO AHEAD

Spotter: K8DDB, reporting ½ inch hail, in Loretto.

NCO: K8DDB, ROGER. Thanks.

Elapsed time - about 12 seconds. If we need more detail, we'll ask.

Have a Heart!

The Net Control Operator's position is hectic. In addition to the Net, we may be monitoring weather conditions on TV, radio or the internet. Add someone talking to us in person or on the phone. If we ask you to repeat your traffic, understand that we want to make sure we get it right. Also, give us a few seconds to answer when you call.

Training Nets

Training nets are conducted on the fourth Tuesday of the month at 6:00 PM Central Time prior to the club's Tuesday Night Net. Training nets are much less formal than activations. Check-ins are taken first. Then any announcements are read. After that a short training topic is covered. Just before the net closes there is an opportunity for questions and answers and discussion.

Reporting Criteria

Each local Skywarn section uses slightly different reporting criteria. These reporting points are tailored to the specific needs of the local National Weather Service office.

The NWS in Marquette requests that area spotters use these criteria during severe weather nets:

- Tornado or Funnel Cloud
- Wall Cloud: rotating, non-rotating
- Hail: Any size
- Wind Damage: Trees and branches broken (give diameter), structural damage, etc.
- Heavy Rain: 1" or more per hour
- Heavy Snow: 1" or more per hour, accumulations of 2" or more
- Flooding: Water over roadways, streams/rivers rising to 1 ft. of bank full, over bank full, flood damage

Measured winds, hail, and rainfall are much preferred to estimations. Estimating accurately can be difficult during severe weather.

We ask that reports be confined to these criteria. Other reports tie up the net frequency and really do not provide necessary information. Please do not report anything you have not seen personally. If it is on the Internet, TV, or radar, the National Weather Service already knows about it. Reports such as "It's getting cloudy here" or "There is a lot of lightning" are not valid reports.

Occasionally, we will ask for reports that differ from the above criteria. When this occurs, it is OK to report

what we request. Such special information requests are usually from the NWS to coordinate with their radar or other information they may have.

Note: In the absence of a Skywarn Net, the above conditions should be reported directly to NWS in Marquette: **1-800-828-8002**

Give the following information:

- Who: Name/Spotter ID
- What: Is happening
- Where: Event is occurring
- When: Did event start/end - include time zone
- Movement of the event (observe storm as a whole, not the movement of small cloud elements)

Estimations

Measured reports are much more desirable than estimated reports. They are generally much more accurate. Sometimes it's hard to estimate properly under severe weather conditions. Over-estimating is as bad, or worse than under-estimating storm criteria.

If you must estimate, here are some handy guidelines:

Hail Size
Pea Size 1/4"
Dime Size 1/2"
Penny Size 3/4"
Quarter Size 1"
Golf Ball Size 1-3/4"
Baseball Size 2-3/4"

Rainfall Intensity
Light Less than 0.2"/Hr.
Moderate 0.2" to 1.0"/Hr.
Heavy 1.1" to 2.2"/Hr.
Very heavy 2.3" to 4.5"/Hr.
Intense 4.6" to 7.1"/Hr.
Extreme More than 7.1"/Hr.

Wind Speed (Miles Per Hour)
0 Smoke rises vertically
1-3 Smoke drifts but wind vanes do not move
4-7 Wind felt on face, leaves rustle
8-12 Small twigs in motion
13-18 Dust raised, loose paper raised, small branches move
19-24 Small leafy trees move, crested wavelets form on water
25-31 Large branches in motion, whistling in wires
32-38 Whole trees in motion
39-54 Twigs break off trees; wind impedes walking
55-72 Damage to chimneys, pushes over shallow rooted trees
72-112 Peels surface off roofs, windows broken, trailer homes overturned
113& up - Roofs torn off houses, trailers destroyed, large trees snapped and uprooted

Situational Awareness (AKA Be Alert!)

When it comes to severe weather, situational awareness is the best way to insure your safety. It's hard to turn on a radio or television without being exposed to weather information. It's readily available on the Internet. Most severe weather events are discussed hours, or in some cases, days in advance. Why is it then, that so many people say they were taken by surprise when severe weather occurs? The fact is that many people want someone to point a finger at them and say "It's time for YOU to seek shelter". Until then, they won't do it. The fact is, forecasting severe weather is not an exact science. The NWS is now better than ever at forecasting severe weather, but it is not perfect. Therefore, a large part of your safety is YOUR RESPONSIBILITY.

If you see or hear a weather forecast in the morning that says severe weather is possible later in the day, that is your cue to be on heightened alert. The definition of a severe weather watch is that "conditions exist that are favorable for" whatever the watch is for; tornadoes, severe thunderstorms, etc. That means be ready for it. It doesn't mean "We'll issue a warning before you really have to worry". Sometimes time doesn't permit. So when a watch is issued, be ready for immediate action. Keep a TV tuned to a local station. Better yet, stay near a weather radio. Most of all, use common sense. If the sky turns threatening, take shelter. Don't wait for someone to tell you to.

Weather Radio Frequencies

City	MHz	Transmitter Power
Escanaba	162.500	1000 Watts
Marquette	162.550	300 Watts
Sister Bay	162.425	500 Watts
Wausau	162.475	1000 Watts
Wausaukee	162.400	1000 Watts

Weather Radar

The weather radar information available on the internet may be as much as ½ hour old by the time it is displayed. If a severe storm is moving at 40 miles per hour, the radar information that you are watching may be significantly different than actual conditions at a particular point of interest. Don’t let this information lull you into a false sense of security!

Constructive Comments

Please forward constructive comments to Mike, K8DDB – mikebray@chartermi.net