

# Madison County EMA&HLS – Communications Division

## Stormnet Network Status:

- STANDBY** - Conditions favorable for the formation of severe weather.  
Participants monitor more closely.
- READY** - Severe thunderstorm/tornado watch issued for Madison County.  
Formal communications network established.  
Participants check in & prepare for assignment.
- ACTIVE** - Severe thunderstorm/tornado warning issued for Madison or adj. Co.  
Observers dispatched to observation points.

## Participant Readiness Status:

- A-1 - Immediately available for an assignment
- A-2 - Available in a short time (10 min.). Will recheck-in when available
- A-3 - Available from home only (Monitor/Observe/Provide link to another Co.)
- A-4 - In Route to assist at the EOC or logged into the Virtual EOC

## Observation Points utilized during Stormnet:

<u>DESIGNATION(S)</u>	<u>GENERAL LOCATION</u>	
A (Alpha) - 1000S/50W	1000S & 50W	(Church Lot)
B (Bravo) - Ingalls	575W & SR 67	(.6 Mi. South)
C (Charlie) - I69/SR13	I 69 & SR 13	(.5 Mi. North)
D (Delta) - Lapel	300S & 950W	(.4 Mi. South)
E (Echo) - Perkinsville	8th. St. & SR 13	(.2 Mi. West)
F (Foxtrot) - West Frankton	700N & 900W	(.25 mi. West)
G (Golf) - Southwest Elwood	700E (Tipton Co.) & SR 28	(.3 Mi. S.)
H (Hotel) - North Markleville	575S & 300E	(.25 Mi. East)
I (India) - Southwest Anderson	500S & 150W	(.15 Mi. East)
J (Juliet) - West Anderson	250S & 500W	(.25 Mi. West)
K (Kilo) - Northwest Anderson	300N & 500W	(.1 Mi. South)
L (Lima) - Linwood	600N & 100W	(EOC)
N (November) - Anderson Airport	SR 32 & 300 East	(In Tower)
O (Oscar) - Orestes	1100N & 400W	(.1 Mi. North)
P (Papa) - S. W. Summitville	1550N & 300W	
R (Romeo) - North Elwood	1600N & 900W	(SR 13)
S (Sierra) - N. W. Summitville	1850N & 300W	(.25 Mi. East)

## Frequencies Utilized:

Madison County Stormnet: 146.820 MHz. (Alternate 147.090 MHz./110.9)

Link to the National Weather Service: 146.970 MHz. or 442.650 MHz./77.0 (Designated contact only)

Madison County Public Safety Interoperability      SAFE-T Talk Group 48-MCEMA

# Spotter's Reference Guide

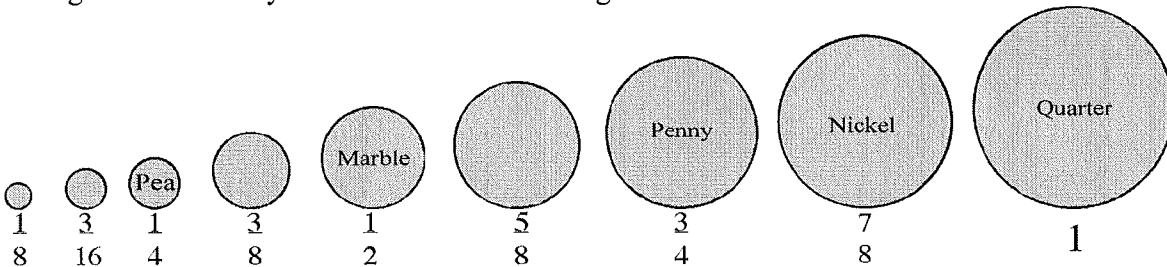
## Madison County EMA

- **For all reports, give location** (example: Delta)
- **Keep all messages short**, especially during emergency and priority situations
  1. Think about what you need to report and rehearse it in your mind before transmitting.
  2. In emergency and priority transmissions, give all the essential information: What, Where, and direction. Net Control will tell you what information is needed.
  3. When giving routine reports, limit the report to the relevant information. The *absence* of wind, rain, hail, etc. does not require comment.
  4. Respond to requests for specific, non-severe information such as temperature, wind *direction*, distant lightning, only as requested by the Net Control Station.
- Do not give your call with each transmission.

Feature	Emergency	Priority	Routine
Cloud Formations Thunderstorms (Report direction and distance)	Tornado Debris cloud Funnel cloud	Wall cloud Rotation in cloud	Cumulonimbus Roll cloud Shelf cloud Scud
Wind	Speed $\geq$ 55 MPH Debris in air Tree or structure damage	Speed $\geq$ 35 MPH Small limbs down Gust front	Speed < 35 MPH
Hail	Size $\geq$ 0.5"	Size < 0.5"	
Lightning (Report direction and distance)		Strokes $\geq$ 6/Min. from one cell	Strokes < 6/Min. from one cell
Rain		Visibility < 0.5 Mi.	Visibility > 0.5 Mi.

### Wind Speed Estimation Guide

- 25 — 31 MPH Large branches moving, whistling heard in overhead wires.
- 32 — 38 MPH Whole trees moving, inconvenience in walking against wind.
- 39 — 46 MPH Small branches (twigs) break, impedes walking.
- 47 — 54 MPH Slight structural damage, larger branches and weak limbs may break.
- 55 — 63 MPH Moderate structural and tree damage.
- 64 & Higher Heavy tree and structural damage.



Hail Size Reference Chart (Inches)

# Weather Information Sources

## Madison County Emergency Management Agency

### March, 2012

#### Radio:

NOAA Weather Radio, Indianapolis	162.550 MHz*
NOAA Weather Radio, Muncie	162.425 MHz*
*Weather radio programmed for Madison County alerts recommended	
Madison County StormNet Observers network	146.820 MHz
Madison County EMA Warning	453.825 MHz

#### Internet:

Links to radar and other information with automatic refresh  
<http://wx.andersonrepeaterclub.org:18008/radar/index.html>

Weather Bugs for ALL Madison County Reporting Weather Stations  
<http://wx.andersonrepeaterclub.org:18008/radar/WxBugs.html>

Weather Station at Linwood (600 N)  
<http://wx.andersonrepeaterclub.org:18008/>

Weather Station at Pendleton SR38/I69, Exit 19  
<http://www.weatherlink.com/user/pendleton/index.php?view=summary&headers=1>

National Weather Service Indianapolis Radar  
<http://radar.weather.gov/ridge/radar.php?rid=ind&product=N0R&overlay=01101111&loop=no>

National Weather Service Indianapolis Office  
<http://www.crh.noaa.gov/ind/>

National Weather Service all Indiana Warnings  
<http://www.crh.noaa.gov/ind/>

National Weather Service Indiana Tornado Warnings  
<http://www.weather.gov/view/validProds.php?prod=TOR&node=KIND>

National Weather Service Indiana Severe Thunderstorm Warnings  
<http://www.weather.gov/view/validProds.php?prod=SVR&node=KIND>

National Weather Service spot forecast  
<http://forecast.weather.gov>

# Participants in Madison County STORMNET Training - 2000-2011

Call	Name		Yrs	Call	Name	Yrs	Call	Name	Yrs
WD9AES	Bill	Gibson	4	<b>KC9HMX</b>	<b>Ray Haisley</b>	1	KB9RPY	Laura Fields	1
KC9AHQ	Sue	Dowden	3	KC9HQM	Janet Shetterly	1	N9RRN	Mike Phenis	2
<b>KC9AKJ</b>	<b>Don</b>	<b>Hughes</b>	10	KC9HZA	John Wendling	1	KB9RZZ	Bill Plummer	1
<b>WB9AL</b>	<b>Al</b>	<b>Wendling</b>	7	<b>W2IBC</b>	<b>Tony Fox</b>	2	<b>KB9SCC</b>	<b>Larry McCoy</b>	12
KC9AOI	Tim	Palmer	1	<b>KC9ICU</b>	<b>John Harris</b>	4	<b>KB9SIH</b>	<b>Steve McDuffee</b>	4
KC9AOJ	Bennie	Bilbrey	1	N9IKF	Brad Whatley	1	<b>KB9SNG</b>	<b>Terry Hunter</b>	7
<b>KC9AOM</b>	<b>Mike</b>	<b>Dewey</b>	8	K9IND	Bob Shelton	3	<b>KC9SQV</b>	<b>Randy Busby</b>	1
KC9AON	Tom	Dickerson	1	<b>KC9IOG</b>	<b>Mike Milliner</b>	1	<b>WA9STB</b>	<b>Dick Elmore</b>	11
KB9APP	Jim	Gerkin	3	<b>KC9IYF</b>	<b>Gene Vincent</b>	6	<b>N9SVM</b>	<b>Tony Misner</b>	11
N9AWP	Ed	Evitt	2	KC9IYG	David Gilliam	3	<b>KA9SYP</b>	<b>Tom Ecker</b>	10
WB9AZY	Richard	Bickel	1	KC9IYH	Jackson Riley	3	<b>K9TAH</b>	<b>Tim Horn</b>	3
<b>KC9BHJ</b>	<b>John</b>	<b>Kinley</b>	10	<b>KC9IYI</b>	<b>Jason Filburn</b>	5	<b>W9TCR</b>	<b>Tim Riley</b>	10
KC9BHW	Tim	Bannon	1	N9JBQ	Norm Sanders	1	N9TKU	Derrick Buck	1
KC9BHX	Brad	Scott	5	<b>WA9JCF</b>	<b>Miriam Jones</b>	6	<b>K9TZJ</b>	<b>Charlie Jones</b>	9
<b>KC9BHY</b>	<b>Mike</b>	<b>Burton</b>	6	KB9JFS	Vera Griffin	2	KB9TVA	Isaac Beeson	1
<b>KC9BHZ</b>	<b>Jerry</b>	<b>Parker</b>	5	<b>KC9JJC</b>	<b>Theresa Hardman</b>	1	KB9UCW	Robert Masen	2
<b>KC9BKZ</b>	<b>Paul</b>	<b>Hughes</b>	8	<b>N9JJK</b>	<b>Jorge Silva</b>	8	<b>N9UIV</b>	<b>Chris Hardman</b>	2
<b>W9BLF</b>	<b>Bryan</b>	<b>Frank</b>	5	<b>KB9JQM</b>	<b>Chris Burris</b>	4	WB9UOF	Bob Brobst	2
K9BUL	Norm	Bracken	2	<b>N6JSX</b>	<b>Dale Kubichek</b>	1	<b>WB9URL</b>	<b>Phil Miller</b>	8
<b>K9BUZ</b>	<b>Bret</b>	<b>Busby</b>	2	<b>WA9JWL</b>	<b>Frank Dick</b>	9	N9UYE	Tony Cox	2
KC9BYH	Mike	Burton	1	<b>KC9JWO</b>	<b>Alan Weber</b>	4	<b>KB9VE</b>	<b>Tim Galbraith</b>	6
N9CAR	Jim	Vandiver	1	<b>KA9KGL</b>	<b>Sharon Miller</b>	3	KB9VTE	Dave Dudley	1
WA9COP	Frank	Burrows	1	KA9KHF	Mike Lucas	2	<b>N9VUQ</b>	<b>Teresa Farmer</b>	9
KB9CQZ	Jeff	Banter	1	<b>KC9KHP</b>	<b>Joe Marshall</b>	4	<b>KV9W</b>	<b>Dale Bales</b>	2
N9CVT	Jim	Currier	1	<b>KC9LGP</b>	<b>Rick Rogers</b>	2	N9WCH	John Wilson	1
<b>WA9CWE</b>	<b>Steve</b>	<b>Riley</b>	12	<b>KB9LGV</b>	<b>Tom Harvey</b>	6	KB9WI	Gene Smith	2
N9CXV	B'Jay	Currier	1	<b>KC9LGY</b>	<b>Brian Loughman</b>	2	KB9WJ	Wanda Smith	2
N9DEZ	Greg	Casto	4	KA9LNT	Bill Dailey	2	<b>KA9WJD</b>	<b>Todd Harmeson</b>	10
KC9DJS	Mike	Sheets	2	N9LVB	Bill Debrot	1	KA9WJF	Jamey Burrows	4
<b>KC9DJU</b>	<b>Mike</b>	<b>Cook</b>	6	KC9LWK	Michael Corbin	1	N9WKM	Beth Mehling	1
<b>KC9DOH</b>	<b>Brent</b>	<b>Jensen</b>	2	K9MI	Mike Brown	3	<b>N9WKN</b>	<b>Tom Mehling</b>	5
<b>KD9DR</b>	<b>Carl</b>	<b>Maupin</b>	5	KB9MOX	Joe Bays	1	<b>N9WKO</b>	<b>Brad Mehling</b>	5
<b>N9DR</b>	<b>Doug</b>	<b>Rose</b>	7	W9MTU	Bob Shoemaker	1	N9WKQ	Chester House	1
<b>KB9DXO</b>	<b>Doug</b>	<b>Townsend</b>	5	<b>KC9NCR</b>	<b>Brian Boyer</b>	4	KB9WPG	Brian Shryock	1
KA9DUR	Don	Sanquetti	1	WB9NJE	Linda Bracken	2	<b>WA9WQS</b>	<b>Marvin Barker</b>	3
<b>W9EEL</b>	<b>Tom</b>	<b>Harbron</b>	12	K9NM	Norm McKain	2	<b>KE9XF</b>	<b>Dave Sargent</b>	9
KC9EJE	Manny	Diaz	4	<b>KC9NMO</b>	<b>Mike Miller</b>	1	N9XXR	Jon Johnson	5
<b>KC9EJG</b>	<b>Richard</b>	<b>Whitaker</b>	5	KG9NS	Matt Fields	7	N9XXT	Bill Griffin	4
<b>N9EOT</b>	<b>Brian</b>	<b>Jones</b>	6	<b>KB9NTG</b>	<b>Dave Bendt</b>	10	KB9YAM	Jon Plough	3
KC9EPE	Mark	Bickel	1	<b>KB9NTH</b>	<b>Kevin Etchison</b>	10	<b>N9YIW</b>	<b>Daryl Wicker</b>	1
N1ESB	Joe	Krupa	1	N9OMW	Harvey Riedel	1	N9YRA	Dick Allen	1
N9ETL	Jerry	Riley	2	KA9OVY	Phil Gillam	6	<b>KC8YUN</b>	<b>Jake Ash</b>	1
KB8F	Don	Burns	1	<b>KC9PDG</b>	<b>John Krieg</b>	1	<b>N9ZAF</b>	<b>Cautt Dowden</b>	11
KK9FLS	Frank	Shetterly	1	KB9PLZ	Jerald Bowyer	2	<b>WB9ZJR</b>	<b>Guido Politano</b>	9
<b>KJ9FLY</b>	<b>Jason</b>	<b>Cooper</b>	4	<b>KC9PPM</b>	<b>John Gegenheimer</b>	1	KB9ZLP	Seth Dowden	4
<b>K9FOI</b>	<b>Dick</b>	<b>Brown</b>	10	N9PVI	Duane Hoak	3	<b>KB9ZLR</b>	<b>Russell Simpson</b>	6
<b>KC9GBL</b>	<b>Tim</b>	<b>Young</b>	6	<b>KC9PWS</b>	<b>Cheryl Boyer</b>	2	<b>KB9ZLT</b>	<b>James Hawkins</b>	1
N8GJQ	Rob	Rice	1	<b>KB9QIY</b>	<b>David Leisure</b>	10	<b>KA4ZYI</b>	<b>Delbert Leisure</b>	5
<b>KC5GNC</b>	<b>Dan</b>	<b>Harvey</b>	5	K9QR	Doug Cloverdale	4			
KC9GQE	Rodney	Conner	2	KB9RAE	Linda Hobbs	1			
N9GVR	Ted	Blackburn	1	<b>KC9RGM</b>	<b>Mick Stutzer</b>	1			
KG9HG	Curtis	Granger	1	N9RHY	Bill Ward	1			
N9HJJ	Larry	Wisheart	7	N9RLN	Thomas Shryock	1			

Yrs = Number of years of training since 2000  
**BOLD** = Trained in last 3 years

March 15, 2011

Stormnet Attendance Summary.xls

## General procedures for participation in the Madison County StormNet Program

All licensed Amateur Radio Operators in Madison County are invited to actively participate in the program. More participants result in improved accuracy of local warnings.

Successful completion of one or more yearly training classes is required for assignment to an observation point. Regular training will improve the skills of the observer.

When in **STANDBY** Status monitor the network more closely to understand the potential for activation and the potential timing/severity of the situation.

- Make certain your batteries are charged and equipment properly programmed.
- Attach an improved temporary antenna to your vehicle if you typically utilize a handheld.

When in **READY** Status check into the formal net and LISTEN for updates of the situation.

- Check in with the Net Control station even if you cannot leave home (A-3).
- PROVIDE FOR THE SAFETY OF YOUR FAMILY.
- Prepare for assignment to an observation point if possible (A-1).
- Check your "ready bag" for necessary equipment, maps, paperwork, etc.
- Prepare your communications equipment for possible loss of primary power.
- Review your "field of view" and ability to provide visual reports from home.
- If possible volunteer to monitor SKYWARN Nets in adjacent Counties.
- Monitor for real-time updates from the Warning Division to the Network.

When in **ACTIVE** Status observers are dispatched to the designated Observation Points and radio traffic is limited to transmissions directly related to the situation in Madison County.

- Confirm that your radio transmitter power level is "high".
- If assigned to an Observation Point proceed at the best SAFE speed.
- Monitor closely for situational updates.
- Notify the Net Control when you have reached the assigned location.
- Provide observations when in-route only if requested by Net Control.
- Expect regular requests for weather/observation updates, especially if in the high activity area.
- Report WHAT IS, not what isn't happening.
- Utilize the TACTICAL designation for the observation point.

If participating from home:

- Monitor closely the net reports for your own safety.
- When reporting provide your General location (500S & 109; 53<sup>rd</sup> & Main; 1 mi. west of Frankton).
- Provide reports to the Net Control ONLY if you are in a high activity zone or if the Net is tracking a Squall line/front passing your area.
- Observe from your location and report large Hail, Funnel Clouds and Tornadoes.
- Do NOT report what ISN'T happening.

Recognize that the Net Control Station and the Warning Division members may be operating on three or more radios/frequencies and dealing with inputs that may not be heard on this Operational Network. Be patient and understanding of the task at hand. Warning Division members are also interfacing with the NWS and preparing/delivering warnings to our citizens.

Amateurs passing thru the area will want to provide observations and updates that may or may not be helpful to the "flow" of the local network. If the net control station is "short" with those reporters recognize that it's not that we don't want the added input, but it might not be pertinent to the immediate data need. Their lack of familiarity with the County can also result in non-essential reporting.

## Basic Communications Skills

There are many skills associated with successful communications that are essential to emergency communications situations. Most amateurs routinely use SOME of these critical skills but many are not a habit. Therefore, it is important to practice them all so they will be second nature in an emergency. These items are reviewed in more detail in the ARRL Emergency Communications Handbook, Chapters 5 and 6. The Communications Division of the MCEMA&HLS will utilize these procedures and recommendations.

**LISTENING** - Listening is at least half of communications. Discipline yourself to focus on your job and tune out distractions and other communications sources (scanners, etc.). This also means avoiding unnecessary transmissions and repeats of earlier inquiries.

**MICROPHONE TECHNIQUES** – Talk across, rather than into, the microphone. Speak in a normal, clear and calm voice and at a normal pace. Rushing your words can result in unintelligible speech. Push the transmit button and wait a second before talking to allow repeaters and tone decoders time to activate.

**BREVITY & CLARITY** – Each communication should include only the information necessary to get the message across. Make your transmissions sound crisp and professional. Be sure to say exactly what you mean and communicate one complete subject at a time.

**PLANE LANGUAGE** – Not everyone involved in emergency communications understands slang and technical jargon. All messages and communications in an emergency should be in plane language only. Avoid words and phrases that carry strong emotions as others not familiar with the situation may be listening.

**PHONETICS** – Certain words may not be immediately understood, especially if the signal is marginal. To reduce requests for repeats use the standard practice of “I spell” followed by spelling phonetically. Utilize the ITU Phonetic Alphabet as indicated below:

A – alfa (AL-fa)	N – november (no-VEM-ber)	One – (WUN)
B – bravo (BRAH-voh)	O – oscar (OSS-cah)	Two – (TOOO)
C – charlie (CHAR-lee)	P – papa (PAH-PAH)	Three – (THUH-ree)
D – delta (DELL-tah)	Q – quebec (kay-BECK)	Four – (FOH-wer)
E – echo (ECK-oh)	R – romeo (ROW-me-oh)	Five – (FY-ive)
F – foxtrot (FOKS-trot)	S – sierra (SEE-air-rah)	Six – (SICKS)
G – golf (GOLF)	T – tango (TANG-go)	Seven – (SEV-vin)
H – hotel (HOH-tell)	U – uniform (YOU-ni-form)	Eight – (ATE)
I – India (IN-dee-ah)	V – victor (VIK-tor)	Nine – (NINE-er)
J – Juliet (JU-lee-ett)	W – whiskey (WISS-key)	Zero – (ZEE-row)
K – kilo (KEY-loh)	X – x-ray (ECKS-ray)	
L – lima (LEE-mah)	Y – yankee (YANG-key)	
M – mike (MIKE)	Z – zulu (ZOO-loo)	

**PRO-WORDS** – Pro-words are procedural terms with specific meanings. They are used to save time and ensure understanding. Common words utilized in amateur communications are:

GO AHEAD – Proceed with your traffic

OVER – I have finished transmitting and I am waiting for and expect your reply

OUT – End of contact – I have finished and expect no reply

STAND BY – A temporary interruption of the contact

ROGER – Received and understood

AFFIRMATIVE – Yes,      NEGATIVE – No,      CORRECT – You are correct

**TACTICAL CALL SIGNS** – A tactical call sign identifies a location or purpose regardless of who is operating the station. It eliminates confusion and should be used for all emergency nets and public service activities. If not already established the NCS should assign the tactical call sign and it should have a meaning that makes sense for that site or function. Utilize only the tactical call sign assigned that location or assignment for all communications.

**STATION IDENTIFICATION** – Amateur stations are required to identify with their call each 10 minutes when transmitting. Tactical call signs should be used initially and during the exchange, and when the exchange is completed the operator station call sign can be used. This serves two important purposes: 1) It tells the NCS that you consider the exchange complete. 2) It fulfills all FCC identification requirements.

**COMPLETING A CALL** – The NCS must allow each station the opportunity to identify at the close of an exchange. This confirms that the exchange is complete. The NCS is expected to set the example of expected identification by utilizing the correct Tactical Call signs, Station ID, etc.

**HABITS TO AVOID** – In usual conversations and QSO's we develop habits that are not effective in emergency communications. Although accepted in everyday conversations, they should be avoided in emergency situations. Some of them are: "Thinking aloud on the air"; On-air arguments or criticism; Shouting into your microphone; Rambling commentaries; "Cute" phonetics"; Identifying every time you key or un-key the mic; Using 10-codes or Q-signals; Speaking without planning your message in advance; Talking just to pass the time.

**NET FORMATS** – Net operations provide an orderly means of conducting communications within a group of stations. An operator should monitor the frequency long enough to determine the type of net and procedures in use. An "emergency net" may be formal or informal. An **Informal Net is an open net (Status Standby)** that may or may not have an NCS, and stations may call other stations directly. Usually a NCS will exist and will step in when traffic volume increases to make it necessary. A **Formal Net is a directed net (Status Ready or Active)** in which a net control station organizes and controls all activity. The NCS handles the highest priority situations first followed by lower priorities. All communications should be directed to the NCS unless instructed otherwise.

**CHECKING INTO AN EMERGENCY NET** – You need to check in to a net: 1) When you are first available to participate in some manner; 2) When you have messages, questions or information to send. If the net is a Directed Net wait until the NCS asks for check-ins unless you have true emergency traffic to input into the network. Identify with your call, status of availability and location. Stand-by for acknowledgement for a minute as the NCS may be busy with other duties.

**BREAKING THE NET** – If the net is in progress and you have a time-value report give your call (or the Tactical Call Sign) and a one or two word explanation of your message ("ECHO, Tornado Sighting"). Await recognition by the NCS and then give your detailed but brief report.

**CHECKING OUT OF AN EMERGENCY NET** – Always let the NCS know that you are leaving the net even if it is only for a few minutes. It is especially important if you have a specific assignment. You should check out if: 1) The location of your station is closing down; 2) You need a break and no relief operator is available; 3) You have turned the location over to another operator; 4) You have no specific assignment but have earlier checked in as available and are no longer able to respond.



