Volunteer Emergency Communications Plan

for DeKalb County, Indiana

DeKalb County ARES Group

Amateur Radio Emergency Service

AMATEUR RADIO - COMMITTED TO SERVE

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Purpose

The purpose of this plan is to provide broad written guidelines with a minimum of information needed in an emergency and to define the roles and responsibilities of the licensed amateur radio operators volunteering for Emergency Communications service in DeKalb County. These procedures are set forth in accordance with the rules and regulations of the Federal Communications Commission Part 97.1 (a) of the Communications Act of 1934. Subpart (a) lists one of the fundamental principles of the amateur radio service as the "Recognition and enhancement of the value of the amateur service to the public as a voluntary noncommercial communication service, particularly with respect to providing emergency communications."

The Role of Amateur Radio

Volunteer public service communications have been a traditional responsibility of the Amateur Radio Service since 1913. Amateurs at the University of Michigan and Ohio State University, as well as individual amateurs in and around the region, stepped up to provide communications in an area isolated by a severe Midwest windstorm. In the early days, the functions of such disaster work were spontaneously organized to meet the needs and circumstances of the incident.

Today, Amateur Radio disaster work is highly organized and practiced. Communications support is implemented principally through the National Traffic System (NTS), the Amateur Radio Emergency Service (ARES), the Radio Amateur Civil Emergency Service (RACES), as well as independent nets and other amateur public service groups -- all recognized as part of the Amateur Radio Relay League (ARRL) public service efforts.

Internet and telephone service, as well as inexpensive Family Radio Service (FRS), General Mobile Radio Service (GMRS), Multi-Use Radio Service (MURS) and Citizens' Band (CB) radio service have the potential to parallel or supplant amateur radio and ham operators providing communications support for public service and emergency incidents. However, none are as organized or as practiced as amateur radio.

While Internet connectivity is becoming more common and easy to use. It still requires comparatively expensive equipment and reliable wired or wireless connections. Cellular and "plain old telephone service" in addition to voice, can provide Internet connectivity. Internet messages can be either one-to/from-many or one-to-one. Phones and cell messages are one-to-one. Wired connections are not always conveniently or consistently available in all areas. Wireless connectivity is typically dependent upon transmit power, antenna gain, proximity to receivers or relay stations, and frequency or band characteristics. Many event leaders and participants use cell phones when possible.

Radio transmissions are one-to/from-many. FRS, GMRS, MURS and CB radio service may be used by any citizen for personal or business purposes. All are designed for short range communications by limiting either the frequency or transmit power. CB no longer requires a Federal Communications Commission (FCC) license, uses High Frequency (HF) channels on the 11-meter “shortwave” band, but is limited to 4 watts of power. FRS does not require an FCC license, is limited to less than 1/2 watt (500 milliwatts) of power and a non-detachable antenna, and uses UHF frequencies. GMRS radios require an FCC license because they generally transmit at higher power levels (1 to 5 watts is typical) and may have detachable antenna. Some radios are certified for use in both FRS and GMRS on the basis that some channels are authorized to both services, or a user of the radio may communicate with stations in the other service.

Since May of 2003, Multi-Use Radio Service (MURS) has been FCC-authorized to use VHF channels on 151.820-154.600 MHz with up to 2 watts of power. MURS stations are prohibited from operating as a repeater station, as a signal booster and as store-and-forward packet operations. During a public service event, many participants use these services for personal communication.

The FCC not only permits but encourages licensed amateur radio operators to assist in emergencies and "provide essential communications in connection with the immediate safety of human life and the immediate protection of property when normal communications systems are not available." If landline phones, cell, or Internet connectivity is lost, radio transmissions can provide communications links.

While unlicensed radio is restricted, licensed amateurs have up to 1500 watts of "peak envelope power" (PEP) available for transmissions and may use both repeater stations and packet operations. Tactical communications in first-response circumstances typically use 2-meter frequencies in the VHF band, either on repeater-supported net frequencies or on simplex frequencies. However, more extensive emergency situations can involve any or all of the amateur frequencies from low band 160 meters through the HF and VHF frequencies to Ultra High 1300 MHz, and a variety of modes, including CW, packet, RTTY and television, as well as phone (voice). Public service activities provide operating and training opportunities for the amateur radio emergency service.

The NTS operates daily to handle local and remote written traffic, in a standard ARRL message format, over nets at four levels, connected through liaisons that assure systematic point-to-point flow, in the shortest possible time consistent with organizational objectives and mass handlings. ARES consists of licensed amateurs who have registered the availability of themselves and their equipment and are trained for emergency operations in the public interest under the operational leadership of local and district Emergency Coordinators (EC).

RACES consists of licensed amateurs registered and trained through local emergency management agencies to serve government civil preparedness entities at local, state and federal levels under the leadership of licensed amateur leadership, appointed by the government agencies as RACES officers.

Individual Amateur Radio operators participate as members of other public service support groups as well as volunteer as communicators in support of those functions. At the organizational level, formal relationships on the local and national level between Amateur Radio and other public service groups provide structures that facilitate volunteer emergency communications support for a wide variety of incidents and circumstances. Part 97 of the Federal Communication Commission's (FCC) Rules and Regulations states, as the first principle under "Basis and Purpose," the following: "Recognition and enhancement of the value of the amateur service to the public as a voluntary, non-commercial communication service, particularly with respect to providing emergency communications.

Membership Eligibility

The DeKalb County ARES Group consists of licensed amateurs who have voluntarily registered their capabilities and equipment for communications duty in the public service when disaster strikes. Every licensed amateur living or working in Allen County, regardless of membership in ARRL or any other local or national organization, is eligible for membership in the DeKalb County ARES Group. Members must meet the following qualifications:

1. Possess an active FCC Amateur Radio Service license of at least Technician class,
2. Be at least 18 years of age,
3. Have a sincere desire to serve the public, train in emergency communication, and maintain a level of preparedness to facilitate efficient response in the event of activation,
4. Have successfully completed FEMA courses IS-100 and IS-700 to activate during an incident (or drill) in support of a government agency,
5. Have successfully completed additional FEMA courses IS-200 and IS-800 to activate during an incident (or drill) in support of a government agency and gain access to the Emergency Operations Center (EOC)

Membership in the DeKalb County ARES Group is initiated by requesting an application from the ARES Emergency Coordinator (see Appendix for copy). Applicants must complete the form and submit it to the DeKalb County ARES EC for approval. All approved members will be issued an ARES ID badge with a two year expiration term (ARRL form FSD 224). The ARES ID badge will be required when working with public and non-government disaster relief agencies. Some agencies may require a separate badge and/or registration when in their facilities. Other agencies, such as the American Red Cross of Northeast Indiana, will accept the ARES ID badge in lieu of a Red Cross ID as the ARES volunteers will not be considered registered Red Cross volunteers subject to internally mandated background checks.

Professional Conduct

When we are serving the public, our appearance and actions, both on and off the air directly reflect upon each of us as individuals, the Amateur Radio Service, and the agency we are serving. The public and news media are listening to us, and in a disaster situation they will be listening even closer. DeKalb County ARES members will conduct themselves in a proper, professional, and ethical manner. Failure to adhere to reasonable standards of conduct and appearance is just cause for termination of membership at the discretion of the ARES EC.

Any licensed amateur radio operator who participates in disaster relief efforts agrees to perform their assigned tasks to the best of their ability within these guidelines:

1. Members will follow all FCC Amateur Radio Service regulations at all times.
2. Members will carry proper identification and credentials at all times.
3. Members will operate and conduct themselves in both behavior and appearance in a professional manner which brings the highest level of honor and respect to the agencies we serve.
4. During interaction with served agency command personnel, members will not repeat confidential information and will only transmit such information under the authority and discretion of the served agency official.
5. During operations, members will not initiate nor repeat rumor or speculation and will transmit only factual reports and messages they are authorized to relay.

Scope and Limitations

The DeKalb County ARES Group provides emergency communications for non-government disaster relief organizations and government agencies in times of emergencies or disasters. Operation is governed by this plan and coordinated with an overall county Emergency Management Plan. Our primary function is communications support; we are not there to make decisions for the agencies we serve. Amateur radio operators on duty are not expected to serve any other function, but may be requested to fill other non-hazardous routine assignments by the served agencies depending on the nature of the emergency. However, at no time should the alternative assignments interfere with or take priority over their primary role of communication support.

Personal Emergency Preparedness

ARES members will train and prepare for emergency incident deployment by maintaining a state of readiness for their family, home, property, and radio equipment. No member should respond to an incident assignment until his family and home are safe and secure with life sustaining essential provisions in quantities sufficient for the expected duration of the activation. The American Red Cross guidelines for 72 – hour kits are listed in the appendix.

Emergency Condition Alerts

The DeKalb County ARES Group will be notified of an emergency and advised of the status with the following condition alerts:

Condition 1: Standby [Mitigation]

A potential emergency exists and there is the possibility of a tornado, flooding, severe thunderstorm, or other natural or man-made emergency.

Receive notification by telephone tree plan and/or radio net.
Secure home and family
Monitor designated frequencies for information and liaison assignments.
Charge batteries and assemble radio and personal equipment for deployment
Have a full tank of gas in vehicle.
Be ready to respond.

Condition 2: Primary Mobilization [Preparedness]

Threat is imminent - shelters opening, evacuation begins.

Designated agency members report to agency centers/headquarters.
ARES members and volunteers respond to NCS.
Designated ARES members and volunteers report to liaison locations—
local shelters, area hospitals, law enforcement stations, etc
Remainder of ARES volunteers standby for relief at primary locations or assignment to secondary locations as they are opened.

Limited or local emergency - tornado, explosion, fire, plane crash, chemical spill, etc.

Designated ARES volunteers report to assignments as directed.

Condition 3: Full Emergency [Response]

Incident or serious emergency is in progress.

All ARES volunteers assigned are on standby status, depending on the severity and duration of the emergency.
Emergency traffic only; repeaters and simplex frequencies are closed to all but necessary emergency traffic.
The simplex frequencies will be assigned for tactical traffic as needed.

Condition 4: Aftermath [Recovery]

Assist as necessary with cleanup.
Assist government agencies as necessary to supplement their communications and/or substitute for inoperative equipment.
Assist with damage assessment.
Deliver messages to and from outside areas.

IMPORTANT: ARES Group members **do not** self-activate during an emergency incident. We serve at the discretion of emergency management and disaster relief agencies that decide when they want/need our support. Self-activation without prior notice from a served agency provides just cause for revoking an operator's membership in the ARES group.

Emergency Response Resources

In addition to the law enforcement, fire safety, hazardous material, and health services resources which respond to County Dispatch, DeKalb County benefits from the following government and volunteer emergency response resources:

Northeast Indiana Chapter of the American Red Cross

Chartered by Congress in 1905, the Red Cross provides relief to victims displaced by disaster, from the onset of disaster conditions to the recovery phase. Local ARES Emergency Coordinators work closely with their counterparts in the chapter offices, on missions with Red Cross personnel and providing communications for shelter managers.

Red Cross Disaster Services -- This congressionally-mandated service not only applies to major national tragedies but also to single-family incidents, generally fire, flood or tornadoes. Typically, Red Cross responds by purchasing food, new clothing and providing shelter for families to help meet immediate emergency needs.

American Red Cross

Together, we can save a life

Red Cross Armed Forces Emergency -- The congressional mandate of the Red Cross includes providing service to our armed forces, including emergency communication between soldiers and their families, emergency leave and referral services.

Amateur radio operators responding with the Red Cross may do so either as registered Red Cross volunteers or as non-registered Ham radio communicators for agency personnel.

IMO Skywarn -- Amateur Radio is almost synonymous with the Skywarn program, the "eyes and ears" of the National Weather Service during severe weather emergencies. Hams comprise the majority of Skywarn volunteers reporting "ground truth" to local NWS offices, supplementing their sophisticated weather monitoring equipment. Radio operators provide a vital communications link from the 37 counties in the Northern Indiana National Weather Service area-of-responsibility in cases of severe weather. It supports the NWS with communications, educational and technical resources, utilizing the services of trained professional volunteers through continuous improvement in the promotion and advancement of the Skywarn program, thereby lessening the burden of government and promoting the social welfare of the citizens of the State of Indiana. The Skywarn program is one of the finest examples of hams providing public service.

SKYWARN

NOAA Weather Radio --The National Weather Service operates more than 670 National Oceanographic and Atmospheric Administration (NOAA) Weather Radio transmission stations across the country. NOAA uses seven frequencies -- 162.400, 162.425, 162.450, 162.475, 162.500, 162.525, and 162.550 MHz to provide overlapping coverage across geographical areas

Citizens Corps – The ARRL is an affiliate under the four chartered Citizen Corps programs--Neighborhood Watch, Volunteers in Police Service, Community Emergency Response Teams (CERT) and Medical Reserve Corps. Citizen Corps is an initiative within the Department of Homeland Security to enhance public preparedness and safety. The relationship calls on DHS and ARRL to raise public awareness of Amateur Radio as a safety resource, to cooperate in providing training and accreditation for Amateur Radio emergency communications and to work together to promote the formation of local Citizen Corps councils and assist them with education, training and volunteer service opportunities that support first responders, disaster relief organizations and community safety efforts.

Civil Air Patrol -- The Indiana Wing of CAP is a civilian auxiliary of the US Air Force. CAP is made up of volunteers and among their missions is Emergency Services. These services include air and ground search and rescue operations, disaster relief operations due to tornadoes, floods, or earthquakes, environmental protection operations, State and Regional disaster airlift operations, organ and tissue transportation operations, aerial reconnaissance, transportation of emergency equipment and supplies, and transportation of State Officials and other non-CAP members.

Military Affiliate Radio System -- The MARS mission is to provide the Department of Defense sponsored emergency communications on a local, national, and international basis as an adjunct to normal communications. It also provides as an auxiliary communications for military, civil, and/or disaster officials during periods of emergency. MARS is to assist in effecting normal communications under emergency conditions. In central Indiana, there are representatives for Army, Air Force, and Navy / Marine Corps MARS.

Indiana Army National Guard – Deployment of the Indiana Army National Guard for general state or local emergency is under the authority of the Governor of the State of Indiana, usually at the request of local authorities. Should a large-scale emergency involve DeKalb County, it is possible, that units including the local battalion could be assigned to this area. If the President of the United States declares an emergency and with the approval of Congress calls reserve units to active duty, a Guard unit could leave the community for up to a year.

DeKalb County ARES Group is the operational umbrella comprised of ARES, under the direction of the ARRL-appointed Emergency Coordinator, and which provides DeKalb County with a seamless source of volunteer radio amateur communicators ranging from individual, independent operators, through cooperative exercises with non-governmental agencies, to local, state or federal government incidents and responses.

DeKalb County Amateur Radio Emergency Service [ARES] operates in accordance with national Memoranda of Understanding between the Amateur Radio Relay League and a number of served agencies. ARES usually cooperates with non-governmental agencies like the American Red Cross and the Salvation Army. Locally, ARES also cooperates with the DeKalb County Office of Homeland Security.

Amateur Radio Repeaters

(In and Contiguous to DeKalb County)

DeKalb County

W9OU **147.015** (+600 kHz) no CTCSS

W9QR **147.360** (+600 kHz) tone 141.3 Hz

Noble County

K9NDU **145.300** MHz (-600 kHz) tone 131.8

N9BCP **147.150** MHz (+600 kHz) no CTCSS

Whitley County

WC9AR **145.27** MHz (-600 kHz) tone 131.8 Hz

Allen County – Fort Wayne, IN

W9TE **146.940** MHz (-600 kHz) no CTCSS

146.760 MHz (-600 kHz) no CTCSS

146.910 MHz (-600kHz) no CTCSS

W9INX **146.880** MHz (-600 kHz) no CTCSS

W9FEZ **145.330** MHz (-600kHz) no CTCSS

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IRLP Node 8380

Emergency Preparation and Training

Amateur Radio

- ARES Field Resources Manual (http://www.arrl.org/FandES/field/aresman.pdf)
- ARRL Certification Training Level I (Introduction to Emergency Communications Course)
- Certification Training Level II (Intermediate Emergency Communications Course)
- Certification Training Level III (Advanced Emergency Communications Course)
- Operating Manual, "Emergency Communications," and "Traffic Handling Procedures" *Public Service Communications Manual* (http://www.arrl.org/FandES/field/pscm/index.html)

ARRL Field Day. The fourth full weekend in June each year is designated by the ARRL as Field Day. The object is to work as many stations as possible on any amateur band (excluding 60, 30, 17 and 12 meters and any repeaters) and to learn to operate in "less than optimal conditions." It is an opportunity to learn new operating modes and practice NTS message handling.

A premium is placed on developing skills to meet the challenges of emergency preparedness as well as to acquaint the general public with Amateur Radio. To that end, one of the stations may be a GOTA – Get On The Air – location for non-hams or amateurs trying new bands. Points are earned for publicity as well as hosting an elected or appointed government official.

Participants may make contacts using digital modes, CW, or phone. A premium is placed on operating with low power, off a generator, and/or using non-traditional methods of recharging or powering the radio gear. Additional credit is earned by making specific contacts.

DeKalb County ARES nets are held under auspices of the ARRL. ARES nets are widely used in Public Service events as *Informal Directed* nets for emergency practice and as *Formal Directed* nets in emergencies. The level of formality is set by the NCS.

DeKalb County ARES Training net is held every Saturday at 7:00 PM local time on the W9OU 2-meter repeater at 147.015 MHz (+) .

ARES conducts an Indiana Section ARES Emergency Net the 4th Sunday of every month at 8:00 AM local time on 3.910 MHz just prior to the session of the Indiana Traffic Net (ITN). The purpose of this monthly net is to disseminate timely information for all stations interested in emergency communications and provide a forum for discussion of emergency communications activities.

Federal Emergency Management Agency [FEMA]

IS-5 An Introduction to Hazardous Materials
IS-7 A Citizen's Guide to Disaster Assistance
IS-22 Are You Ready? An In-depth Guide to Citizen Preparedness
IS-100 Introduction to Incident Command System
IS-200 ICS For Single Resources and Initial Action Incidents
IS-317 Introduction to Community Emergency Response Teams
IS-700 National Incident Management Systems (NIMS), An Introduction IS-800 National Response Framework, An Introduction (http://training.fema.gov/IS/)

FEMA offers courses at the Emergency Management Institute and through the Independent Study Program. FEMA courses IS-100 and IS-700 are required for all RACES members. Additionally, FEMA courses IS-200 and IS-800 are required for eligibility for operation in the Office of Homeland Security EOC.

American Red Cross of Northeast Indiana

Health and Safety Classes

Disaster Services Training	Introduction to Disaster Assessment
Adult CPR Training	Basic First Aid Training
Infant and Child CPR	First Aid for Children

National Weather Service - Basic Weather Spotter Training offered annually and Advanced Weather Spotter Training offered bi-annually usually in February - March. Amateur Radio operators are encouraged to attend the Basic Weather Spotter Training only once every three years and the Advanced Weather Spotter Training bi-annually.

SET – Simulated Emergency Training

At any time between September 1 and November 30, ARES groups conduct a state and national simulated emergency response based upon a scenario which ideally involves Amateur Radio, public and private response agencies, and NTS. The state and national exercise is on a specified date.

Severe Weather Safety

Indiana continues to rank in the top ten nationally in tornado occurrences, tornado-related fatalities and tornado damage costs. Indiana also experiences significant severe thunderstorm damage. It is important to be familiar with severe weather terms and safety rules before the weather gets bad.

A WEATHER WATCH is issued when conditions are right for a tornado to develop. Keep alert to changing weather conditions and tune into a radio or television for developments. A WARNING is issued when a tornado has been sighted or is indicated by radar. Go immediately to a safe place.

Severe Weather Definitions

Tornado -- A violently rotating column of air, usually forming a pendent from a cumulonimbus cloud, where circulation reaches the ground. A tornado usually starts as a funnel cloud and may be accompanied by a loud roaring noise. Tornados can move at speeds up to 70 mph, with winds speeds greater than 200 mph and sizes over a mile in diameter.

Funnel Cloud -- A violently rotating column of air that does not reach the ground. If the funnel cloud reaches the ground, it becomes a tornado.

Severe Thunderstorms -- A thunderstorm accompanied by winds (sustained or gusts) of 58 mph (50 knots) or more and hail 3/4 inch in diameter or larger.

Flash Flood -- A flood which happens within a few hours after a heavy or excessive rainfall.

Tornado Safety

In Homes -- Get away from windows, doors and outside walls. Go to the basement. If you do not have a basement, take shelter in a first-floor bathroom or closet located near the center of the house. If possible, get under heavy furniture or cover your head with blankets or pillows.
In Schools -- Go to the lowest floor or basement. Go to small interior rooms or hallways. Stay away from windows. Avoid auditoriums and gymnasiums or structures with wide, free-span roofs, which often collapse if struck by tornado-force winds.
In Public Buildings -- Go immediately to a designated shelter area or to an interior hallway or small room on the lowest floor. Stay away from windows. Do not use elevators. Do not go to your parked car.
Outside -- Move away from the approaching tornado at right angles, if possible. If there is not time to move or find suitable shelter, leave your car and crouch down in a ditch or depression. Avoid large trees, metal poles and other electric conductors.
In Mobile Homes -- Mobile homes should be abandoned immediately. If there are no reinforced buildings or underground shelters nearby, take cover in a ditch or depression. Be sure to cover your head with your arms or hands.

Tornado Facts

- Tornadoes can occur at any time of the year.
- Tornadoes are most likely to occur between 3 PM and 9 PM, but can occur at all hours of the day and night.
- The average tornado moves from southwest to northeast, but tornadoes have been known to move in any direction.
- The average forward speed is 30 mph, but may vary from nearly stationary to 70 mph.
- Indiana averages 20 tornadoes and 4 tornado fatalities each year.
- Indiana's biggest outbreak of tornadoes was on June 2 and 3, 1990, with 37 tornadoes.
- The Super Outbreak of 21 tornadoes in Indiana on April 3, 1974, killed 48 Hoosiers.

Tornado Classifications

Weak Tornadoes (EF0, EF1): Eighty-eight (88) percent of all tornadoes are these weak tornadoes. They generally only last 1-10 minutes and their winds are slower than 110 mph.

Strong Tornadoes (EF2, EF3): Eleven (11) percent of all tornadoes last 20 minutes or longer and cause 30% of all tornado-related deaths. Their winds reach 111-165 mph.

Violent Tornadoes (EF4, EF5): Only 1% of all tornadoes are this violent. They cause 70% of all tornado-related deaths with winds greater than 165 mph and lasting over an hour.

Floods and Flash Floods Safety

Floods and flash floods are the number one cause of deaths associated with thunderstorms with an average of 110 fatalities nationwide each year. A water depth of two feet will cause most vehicles to float and only six inches of fast-moving water can knock you off your feet. If flooding occurs, get to higher ground and away from areas subject to flooding. Avoid areas already flooded and do not attempt to cross flowing streams. Never drive through flooded roadways as road beds may be washed out under flood waters. If your vehicle is suddenly caught in rising water, leave it immediately and seek higher ground. Be especially cautious at night when it is harder to recognize flood dangers.

Lightning Safety

Lightning kills 73 Americans on average and causes several hundred million dollars in property damage each year. To avoid danger, watch for signs of approaching storms. If you can hear thunder, seek shelter in a building or car immediately. Count the number of seconds between a flash of lightning and the next clap of thunder and divide that number by 5 to determine the distance in miles to the lightning. When lightning is present, get out of boats and away from water. Avoid using the telephone or other electrical appliances. If caught outside, find a low spot away from trees, fences, and poles. If you feel your skin tingle or your hair stands on end, squat low to the ground on the balls of your feet.

Hazardous Material Incidents

Hazardous materials [HAZMAT] refers to any substances or materials which if released in an uncontrolled manner (spilled) can be harmful to people, animals, crops, water systems or other elements of the environment. The list is long and includes explosives, gases. Flammable and combustible liquids, flammable solids or substances, poisonous and infectious substances, radioactive materials, and corrosives.

One of the major problems is to determine what chemicals are where and in what quantities. The US Department of Transportation [DOT] has established definitions of various classes of hazardous materials, established placarding and marking requirements for containers and packages, and adopted an international cargo commodity numbering system.

DOT requires that all freight containers, trucks and rail cars transporting these materials display placards identifying the hazard class or classes of the materials they are carrying. The placards are diamond-shaped, 10-inches on a side, color-coded and show an icon or graphic symbol depicting the hazard class. They are displayed on the ends and sides of transport vehicles. A four-digit number may be displayed on the placard or on an adjacent rectangular orange panel. Two of the more common include **1993** (chemicals, including road tar, cosmetics, diesel fuel and home heating oil) and **1203** (gasoline).

In addition to the placards, warning labels must be displayed on most packages containing hazardous materials -- smaller versions of the placards (4-inches on a side). In some cases, more than one label must be displayed, placed next to each other. In addition to labels for each of the DOT hazard classes, other labels with specific warning messages may be required. Individual containers also have to be accompanied by shipping papers which contain the proper shipping name, the four-digit ID number and other information about the hazards of the materials.

HAZMAT Guidelines

- Approach the scene cautiously – from uphill and downwind. If you have binoculars, use them
- Attempt to identify
  - the 4-digit number on the placard or orange panel
  - the 4-digit number (preceded by “UN/NA” on shipping paper or package
  - the “name” of the material on shipping paper, placard or package
- Call for help immediately and let the experts handle the situation. Do not attempt to take any action beyond your level of training. Know what you are capable of doing.

The Ready Kit

Basic Deployment Equipment

When responding to an emergency incident, or even a training exercise, there is a minimum set of equipment and personal gear that should taken along to get the job done:

- 2m HT (Multi-band HTs should have 70cm TxRx and wide-band receive capability)
- Appropriate portable/mobile gain antenna, connections and adapters
- Earphone and/or speaker mic
- Extra batteries and auxiliary power adapters
- Pencil (or pen) and paper (including logging sheets)
- An appropriate map of the locale
- Identification:
  Laminated wallet-size copy of the FCC amateur operator/station license and ARES photo ID card
- Appropriate clothing, sunscreen, insect repellant, camp stool or folding chair, food and water.

The majority of these items should be kept in a *Ready Kit*, stored to be picked up on the way out the door for deployment. Consider items from the following list for inclusion in the Ready-Kit, designed to allow field deployment for up to 72-hours.

Power – The 72-hour kit should have several sources of power with extra charged battery packs and an alkaline dry cell pack for HTs. Larger ampere batteries are required for mobile VHF/UHF radios. Gel cell or deep-cycle marine batteries are good sources of battery power, and must be kept charged and ready to go. Have alternate means available to charge batteries during the emergency. Smaller batteries can be charged from other larger batteries. Consider a solar charging device. Operators might have access to a power generator that can be in place of the normal electrical lines. Have more battery capacity than normally needed. Be able to connect radios to different power sources with appropriate adapters.

Antennas and Feedline – Operators should expect to need a gain antenna for each HT, as well as additional gain antenna that can be used on either an HT or a mobile rig. The extra antenna might be needed by another operator, or the first antenna might break. For VHF/UHF, a TV twin lead J-pole is an inexpensive and very compact antenna. Have several lengths of coax, totaling at least 50 feet and with barrel connectors to extend length.

Personal - Include staples: water, or a reliable water filtration and purification system, enough food for three days, eating utensils, a drinking cup and, if needed, a way to cook the food. Sunscreen (lotions, lip balm), insect repellant, and a folding stool or chair could be important for even the shortest call-out. Shelter is also important. An RV or pickup conversion is more comfortable than car seats or a tent, but resources and the disaster conditions may determine what is possible. Have several different plans for shelter. Light is psychologically important during an emergency. Have several light sources available. Consider battery-powered and/or propane/gasoline-fueled lanterns in addition to flashlights.

Deployment Checklists

Basic Deployment Equipment Checklist

Forms of identification
- ☐ ARES – RACES photo ID
- ☐ FCC station/operator license
- ☐ driver's license

Radio gear
- ☐ VHF
- ☐ mic
- ☐ headphones
- ☐ power supply (extra batteries)
- ☐ antennas w/ mounts
- ☐ fuses
- ☐ patch cords / adaptors
- ☐ SWR meters
- ☐ extra coax

Writing gear
- ☐ pen / pencil / eraser
- ☐ clipboard
- ☐ message forms
- ☐ logbook
- ☐ note paper
- ☐ ARRL message forms

Personal gear
- ☐ snacks / liquids
- ☐ throat lozenges
- ☐ personal prescriptions/meds
- ☐ sweater / jacket
- ☐ sunscreen / lip balm / lotion
- ☐ insecticide [DEET]

Extended (72-hour) Deployment Equipment Checklist

Toolbox
- ☐ screw drivers
- ☐ pliers
- ☐ socket wrenches
- ☐ electrical tape
- ☐ 12/120v soldering iron w/ solder
- ☐ volt/ohm meter

Other
- ☐ HF TxRx
- ☐ hatchet / ax / saw / pick
- ☐ gloves
- ☐ siphon
- ☐ jumper cables
- ☐ generator (spark plugs / oil)
- ☐ camp lantern w/ kerosene
- ☐ highway flares
- ☐ extra gasoline / oil
- ☐ 3/8” hemp rope

Personal gear
- ☐ foul weather gear
- ☐ 3-day supply drinking water
- ☐ cooler w/ 3-days food
- ☐ messkit w/ cleaning supplies
- ☐ first aid kit
- ☐ personal prescription / meds
- ☐ aspirin
- ☐ throat lozenges
- ☐ shelter / tent /sleeping bag
- ☐ toilet articles
- ☐ mechanical / battery alarm clock
- ☐ flashlight w/batteries / lantern
- ☐ candles / waterproof matches
- ☐ extra prescription glasses
- ☐ cash – assorted small bills for food/needs

WARNING: fueled lanterns and generators should only be used in well-ventilated areas. They should never be used indoors, in a vehicle, or in a tent.

Initial Action Checklist

The net control station and/or officials on the designated emergency net will provide additional instructions, including information on frequencies used or other resource and tactical nets.

- ☐ Check that family and property are safe and secure.
- ☐ Be prepared to operate. Check all equipment and connections.
- ☐ Be prepared to deploy to an assignment/location with Ready-Kit.
- ☐ Monitor assigned frequency and follow check-in instructions.
- ☐ Initiate personal log of dates and times of various assignments performed while activated.
- ☐ Enter assigned frequency(s) on log sheet. Log all traffic sent or received, and other significant events.
- ☐ Deploy to assignment/location.
- ☐ Obtain tactical call sign for location/assignment (if appropriate).
- ☐ Use a formal ARRL Message Form when a precise record is required.
- ☐ If appropriate, use tactical call sign, while observing FCC's ten-minute ID rule.
- ☐ Monitor your assigned frequency at all times. Request permission from NCS before changing frequency. Notify (and/or request permission from) NCS if you have to leave frequency or location.

National Incident Management System

The **National Incident Management System [NIMS]** is a consistent nationwide approach to work effectively and efficiently together to prepare for, respond to, and recover from domestic incidents, regardless of cause, size or complexity. Incident Command System [ICS] is component tool of NIMS which provides a coordinated system of command, communications, organization and accountability in managing emergency incidents. NIMS/ICS uses

1. Clear text and common terms. No "10" codes.
2. Unified command.
3. Flexibility
4. Concise span of control.

Integral to the NIMS/ICS model is *Unified Command* – there is one individual responsible for the overall operation, which, no matter the size of the emergency incident, will always include planning, logistics, operations, and finance functions. Amateur radio operators are expected to be communicators. Within an ICS incident, this function fits in the Logistics Section.

In the event of an emergency, during which any of the communications organizations may be of service to the community, any responsible official of the DeKalb County Office of Homeland Security, the Red Cross, NWS, or other agencies may request a number of amateur radio operators regardless of their affiliation with any group. In these cases, the DeKalb County ARES EC may assist in determining what modes of communications are best suited for the emergency.

All jurisdictions will be required to adopt ICS in order to be compliant with NIMS.

Amateur Radio Emergency Operations

DeKalb County ARES members and other amateur radio service volunteers, upon becoming aware that an emergency exists, shall monitor the following frequencies:

1. 147.015 MHz (+) repeater to receive instructions or assignments. This is the *primary net frequency* and is located in Auburn Indiana.
2. 147.360 MHz (-) repeater will be used if the above repeater becomes overloaded or inoperative, or as a subnet frequency. This repeater is located in Spencerville Indiana.
3. 146.520 MHz Simplex will be used as the primary simplex frequency if all repeaters are overloaded or inoperative.
4. 146.580 MHz Simplex will be used as the secondary simplex frequency if all repeaters are overloaded or inoperative, or may be used as a subnet frequency. The ARES EC will determine availability of other simplex frequencies for resource or tactical subnets during an incident.

Amateur Radio Traffic

Tactical traffic is the first response communication in an emergency situation. It may be instructions or inquiries: "Send ambulance," "Where are water supplies?" Though tactical traffic is generally unformatted and seldom written, on responses, all traffic should be logged to protect both the radio amateur and the cooperating agency.

Formal traffic is generally long-term communications, often cast in ARRL message format and handled on NTS nets.

Packet – mode is handy for detailed or lengthy messages. The operator may prepare the message ahead of time and edit off-line as text files.

Emergency | Priority | Break

Break -- The normal, polite request for an opportunity to interrupt an ongoing contact is the lowest priority of interruption. Break is also often recognized during an Open Net and may be granted during an Informal Directed Net. The NCS can break back with a higher priority should events warrant a change in net status. NCS or an operator on any contact will always STOP everything and answer the following interruption priority calls immediately.

Priority -- The second highest level of interruption, Priority, means the traffic concerns an immediate safety issue regarding human life or injury, or impending property damage.

Emergency -- The highest level of priority, Emergency, is reserved for only danger-of-death or serious-injury-if-message-is-not-heard-immediately messages

Activation of the Communication Plan

- DeKalb County **ARES** may activate a *Declared Formal Emergency Net* at the direction of the DeKalb County Office of Homeland Security, and *Formal* or *Informal Emergency* nets at the request of the Red Cross Director of Disaster Services and/or authorities of other agencies. ARES also operates *Informal* or *Formal Declared* weather nets based upon observed or potential local incidents.

- The ARES EC, the DeKalb County Skywarn Manager, or his designee may activate a *Formal Declared* Severe Weather or *Skywarn* Net under the direction of the NWS in North Webster. The trigger is an NWS severe weather *Watch* for DeKalb and/or surrounding counties in the path of the event. The Skywarn Manager or designee may initiate a "Standby" net prior to authorization of activation by the NWS. The NWS may notify the DeKalb County ARES EC or Skywarn Manager when severe weather threatens any of the 37 reportable counties and especially when threat exists in the 11 counties organized under Northern Indiana Skywarn Quad 2.

- A local emergency net can also be triggered by the Office of Homeland Security when a severe storm/tornado warning is issued by NWS or if tornado sirens are activated to indicate other emergency incidents. A steady *wail* from the DeKalb County tornado sirens means that a tornado has been sighted in DeKalb County or that NWS has issued a tornado *Warning*. A list of all DeKalb County tornado siren locations is provided in the Appendix

- In the event of an emergency incident, the Office of Homeland Security will contact the ARES EC or an assistant. ARES may activate a telephone tree to alert members and will begin a declared net on the primary frequency, W9OU (1467.015 MHz), to secure additional ARES support and other amateur radio volunteers.

- The **Red Cross** activates upon receiving a call from Chapter Management. A Telephone Tree Plan is used to activate the membership at large. A Red Cross disaster radio subnet NCS or liaison stations may be assigned by ARES NCS to provide emergency radio communications between the disaster scene, normally at or near the triage location, and the Red Cross Chapter HQ. Red Cross is involved with sheltering, first-aid, patient tracking, other patient related health and safety activities, and damage assessment.

Principles of Disaster Communication

1. Monitor primary or assigned frequency. Stay on assigned frequency.

2. Keep the interference level down. All stations should remain silent until called or unless there is necessary traffic to pass.

3. Avoid spreading rumors. Report first-hand knowledge. Relay-transmissions should be officially authenticated, authorized and repeated word for word.

4. Authenticate all messages. Messages of an official nature should be written and signed. When handling traffic for a served agency, use the form they designate for official traffic. Form ICS-213 is preferred by agencies operating under Incident Command System protocol. When handling traffic through the NTS, the ARRL Radiogram Message Form is the accepted form and may be used in situations where the served agency does not designate another form (see appendix). Amateur operators should avoid initiating disaster or emergency traffic. ARES does the communicating; the agency officials supply the content of the communications.

5. Strive for efficiency. Instead of trying to operate a station full time at the expense of health and efficiency, volunteer for a shift at one of the better-located, better-equipped stations, manned by relief shifts of the best-qualified operators. This reduces interference and assures well-operated stations.

6. Use the selected mode and band. The merits of a particular band or mode in a communications emergency have been evaluated impartially by the authorities and the EC with a view to the appropriate use of bands, modes, equipment and purposes.

7. Be courteous of and cooperative with other communications groups responsible for emergency communications support. The primary objective of emergency communications is to save lives and property.

8. Use all communications channels intelligently. Under FCC rules and regulations, in the absence of Amateur Radio Service frequencies, other official channels may be used to transmit an *Emergency* message, but *not* Priority, Routine or Welfare traffic.

9. Operators will not transmit the name of an injured, trapped or deceased subject, but may request that the NCS send the appropriate authorities and assistance to the location using *Emergency* or *Priority* traffic protocols. Operators will not transmit the name of a minor lost or separated from responsible adults, but will be prepared to respond to NCS with description and or identifying information established ahead of time. Should this not suffice, request formal authorization from the official in charge for transmission of the name.

10. Don't broadcast. Amateur Radio Service transmissions are not intended to keep the public informed. Emergency Communications are intended to support authorities handling an incident.

Repeater Operation

Power -- PL tones will normally be off during emergency incidents. Use minimum power to avoid keying near-by, same-frequency repeaters and causing unnecessary interference. Low power also conserves batteries.

Pause -- To allow NCS, liaisons, or operators with *Emergency* or *Priority* traffic, immediate access, operators with *Routine*/*Welfare* traffic should pause after a station finishes a transmission -- count to 2 or 3 before transmitting.

Listen -- Listen much, transmit little.

Think -- Think before transmitting. Stick to facts, control emotions. Write out what is to be transmitted before sending the message. Be succinct -- as short and concise as possible.

Articulate -- Don't slur. Speak close to the mic, but talk across it, not into it. Keep voice down. Talk slowly, calmly.

Amateur Radio Nets

A **Declared Net** begins with a statement that a net is being started for a particular purpose. There is an identified Net Control Station [**NCS**], perhaps identified backup and/or logging stations, and in some instances, liaison(s) between NCS, served agencies and other amateur radio stations.

Open Net -- A net is declared. Normal use of repeater or frequency continues. Any licensed amateur radio operator can start a net to get assistance with a situation. Usually, such nets involve personal circumstances such as automobile assistance, making travel arrangements, or other non-commercial activity. Sometimes such nets may be a precursor to a *Directed Net* as operators begin to organize and discuss possible incidents, such as weather emergencies.

Directed Net -- NCS declares the net and actively controls the frequency. Normal usage of the frequency or repeater is stopped. Specific topic, conditions, and/or instructions for check-in are given.

Informal Directed Net -- Public service nets and practice nets.

Formal Directed Net -- Activation of specific nets for a specific purpose or emergency.

Emergency nets are reserved for *danger-of-death or serious-injury* situations -- an accident or other crisis where people and/or property are in distress. Emergencies are nearly always recognized and declared by agencies or authorities outside of the Amateur Radio Service, such as the NWS, the local Emergency Manager [**EM**], and/or the local Red Cross. Amateur radio operators and amateur radio NCS do not have independent authority to declare an emergency.

Sub-nets – NCS may establish independent sub-nets with or without their own frequencies and NCS's reporting to the main net.

NCS will regularly announce the authority for, and status (*Open, Informal, Formal*) of the net, during the operation.

Principles of Net Operation

1. DeKalb County ARES Net Control may operate from a location other than that of the DeKalb County Emergency Operations Center (EOC). A liaison may be located at the EOC to pass information to/from the net.

2. Once a net is declared, NCS will begin to build an Asset List to match the requirements of the incident. ARES members and other amateur radio volunteers should follow the procedures outlined in instructions from NCS which will depend upon the circumstances of the emergency and may vary throughout the course of the event. For example, NCS may request check-ins by calling for those stations who have been notified by telephone, from only those stations with specific traffic to pass, from stations which are or can be mobile or portable, or from stations with other equipment, modes or operating capabilities, from operators in specific or certain locations in the area, or from all Amateur Radio Service volunteers who are standing by.

3. The size of an emergency net will guide and be guided by the National Incident Management System [NIMS/ICS] plan, but it could change very quickly. In a major event that is likely to grow, NCS may request and keep a large Asset List of standby operators who may never be required to activate or give a report.

   As each operator checks in, NCS may request
   - Call sign
   - Name
   - Location
   - Equipment [type of radio(s), antenna(s), power supply, and transportation]
   - Initial Status [mobile, stationary]
   - Estimate of the length of availability.

   NCS may then ask for a “standby” to organize the available personnel resources to meet the logistics of the event. A local net responding to a large-scale incident may require more functions than can be managed by a single NCS. As the situation develops, NCS may establish a subnet structure to handle some of the traffic. This is a principle of the NIMS/ICS.

   Available operators may then be assigned to function
   - as Backup NCS
   - as Logging or Liaison stations
   - as Resource NCS to direct specific tasks created by the complexity of the incident
   - as an operator or spotter.

   Resource NCS, Logging and Liaison stations, and other stations may also be assigned locations. Operators/Spotters may be assigned duties on a Resource or other subnet and frequency for which they will be given instructions.

4. Mobile and portable units may be dispatched, within the limits of personnel and equipment, as needed to schools, shelters, hospitals, fire stations, or other locations necessary to support emergency communications. ARES operators may be assigned to vehicles operated by EMA, Red Cross, or other cooperating agencies or groups. Mobile and portable units may be contacted by NCS while in route, but will always report in upon arrival at the assigned locations.

5. Operators will monitor assigned frequency and notify the NCS if it is necessary to leave or if relief is needed. Transmissions will be made as instructed or at the request of the NCS -- or for *Emergency* (life and death) or *Priority* (property damage, threat to human life), or other traffic initiated by the official in charge at that location. All formal traffic shall be handled and formatted in accordance with the individual organizations' operating procedures. This could be in either plain English text or on the standard ARRL Message Form and using numbered Radiogram messages.

6. Information concerning the nature of an emergency event and the extent of ARES involvement will be transmitted to all volunteers as it becomes available and updated when possible. However, ARES will avoid transmitting identifying addresses of the most severe damage, license or other identification numbers of vehicles, possible reported causes, names of an injured, trapped or deceased subjects, and names of a minors lost or separated from responsible adults – except as outlined and agreed upon by the authorities or agencies in the NIMS/ICS for the event.

7. Federal regulations provide that licensed amateurs shall exert direct control over all transmissions on amateur frequencies. This does allow for "third party traffic" where the amateur operator retains control of the transmission and has advised against the use of foul language or the conduct of commercial business. Relays often become incorrectly "translated" by the relay operator, especially if there is a high percentage of special agency terminology or technical terms.

Communications with/by Other Agencies

Amateur Radio operators may be assigned as Liaison Stations to other groups or agencies. Such liaisons may be assigned to physically locate with those groups. Those groups or agencies may have radio service on bands other than those of the Amateur Radio Service. Under FCC rules and regulations, liaison operators will use ***only*** assigned amateur frequencies to relay traffic and information.

Liaison Assignments

Amateur Radio operators may be assigned as Liaison Stations at locations identified by ARES, DHS, the Red Cross, and/or other participating agencies. These may be, but not limited to, the following:

Staging Areas

- City - County Highway Garages
- City - County Annex Building
- School Corporation buildings being used as shelters or aid stations
- Church buildings being used as shelters or aid stations

Hospitals and Medical Centers

- DeKalb Health - 1316 E. 7th St. Auburn, IN
- Betz Nursing Home - 116 Betz Rd. Auburn, IN
- Miller's Merry Manor - 1367 S. Randolph St. Garrett, IN
- Laurels of DeKalb - 520 W. Liberty St. Butler, IN

Law Enforcement Headquarters

- DeKalb County Sheriff's Dept - 215 E. 8th St. Auburn, IN
- Auburn Police Department - 210 S. Cedar St. Auburn, IN
- Garrett Police Department - 200 N. Cowen St. Garrett, IN
- Butler Police Department - 120 W. Main St. Butler, IN
- Waterloo Town Marshall - 300 N. Wayne St. Waterloo, IN
- Ashley Police Department - 500 S. Gonser St. Ashley, IN

Fire Stations

- Auburn FD Station 1 - 4553 CR 35 Auburn, IN
- Auburn FD Station 2 - 902 S. Grandstaff Dr. Auburn, IN
- Garrett FD - 200 N. Cowen St. Garrett, IN
- Butler FD - 700 W. Main St. Butler, IN
- Waterloo FD - 305 Sheridan St. Waterloo, IN
- Jackson Township FD - 3390 CR 60 Auburn, IN
- Corunna FD - 1111 US 6 Corunna, IN
- Ashley FD - 101 S. Union St. Ashley, IN
- Concord Township FD - 300 Hart St. St. Joe, IN
- Spencerville FD - 5647 Mill St. Spencervile, IN
- Laotto FD - 11595 SR 205 Laotto, IN

Monitoring Assignments

Operators may be assigned to monitor one or more of the NOAA Weather Radio frequencies depending upon the direction of the weather threat:

Unless the event disrupts other normal broadcast and/or data resources, some operators may be assigned to monitor area television channels, cable news and weather services, and Internet resources:

Unless specifically directed by NCS, the Amateur Radio operator shall not report information from these sources with the same urgency as direct observations by local operators. Such assignments are supplemental to direct observation.

Communicating with the Media

When involved with an emergency situation, all attempts for interviews from the media should be referred to the designated spokesperson of the convening authority. It is good practice to follow this protocol during practice nets and public service events as well, referring questions to the organizers or directors of the event.

ARES operators will not make any comment to a member of the media regarding information about injuries, deaths, addresses of the most severe damage, license numbers of vehicles, rail car numbers, and possible reported causes which might lead them to a "trail-of-responsibility/blame. "*I can't answer that question,"* is always a good response.

Amateur radio operators will not transmit the name of an injured, trapped or deceased subject, but may request that the NCS send the appropriate authorities and assistance to the location using *Emergency* or *Priority* traffic protocols. Operators will not transmit the name of a minor lost or separated from responsible adults, but will be prepared to respond to NCS with description and or identifying information established ahead of time.

In either an emergency or a practice event, operators *may* discuss the role of the communications volunteers and amateur radio in the overall, but not the specific, situation. As a volunteer for a served agency, the amateur radio operator *does not* have any authority to speak on its behalf. Care must be taken to assure that even "off the record" conversations with the media do not leak disparaging remarks or details about the operation status.

Shelter Operations

Amateur Radio operators provide backup for overloaded Red Cross communications systems, staffing Red Cross Shelters, various Red Cross units, and the Salvation Army and others involved in the aftermath of tragedy. In times of disaster, the nation's ham radio operators are often the first to volunteer their communications expertise. Today, there are nearly 700,000 Amateur Radio operators in the United States and more than 2.5 million worldwide

Shelters are a temporary place of protection where disaster victims can find assistance and supplies. Shelters may operate during an incident response phase, such as stranded motorists during a snow storm, or after an incident during the recovery phase, such as individuals and families displaced by a tornado.

In shelters, children may need to be entertained, but adults are worried about what happens next. Repeaters and auto patches allow welfare communication to inform, advise and reassure friends, families and relatives. Hams at shelters provide communication support and backup, handle outgoing health-and-welfare traffic, and reassure shelter residents that they are not totally out of touch with the outside world. Hams working in the shelters should maintain a high profile.

Health and Welfare

In the event of a natural or man-made disaster, radio amateur volunteers will work with community organizations to relay vital information in a structured and accurate manner. They are skilled at composing and relaying messages by voice and through computer based Amateur Radio communications modes. Amateur Radio volunteers will join local ARES nets and will support emergency activities ranging from equipment logistics, victim location and identification, emergency shelter, food and water information, medical equipment and material distribution, and, sometimes, life-and-death communication.

Emergency messages within the disaster area often have life-death urgency. Much of the local traffic will be on VHF/UHF. Emergency, Priority and Welfare traffic flowing outside the disaster area may be best handled on HF using the NTS. Incoming Health and Welfare traffic should be handled only after all Emergency and Priority traffic is cleared because it can easily overload an already busy system.

Damage Assessment

Damage caused by natural disasters can be sudden and extensive. Responsible officials in and near the event may need communications assistance. Such reports and data are used to initiate and coordinate disaster relief and recovery.

Red Cross damage assessment teams survey an area to calculate initial impact estimates. The office of Homeland Security may request surveys to ascertain the amount of outside assistance needed in an area. Using a ride-along ham provides instantaneous contact with the Chapter HQ or EOC

Conclusion

Amateur radio operators should become familiar with the *ARRL Operating Manual*, especially the *Desktop Reference* and the chapters on "Emergency Communications" and "Traffic Handling Procedures," and the *ARES Field Resources Manual*, from which much of the operational information for this Plan is derived.

The purpose of this plan is to provide broad written guidelines with a minimum of information needed in an emergency and to define the roles and responsibilities of the licensed amateur radio operators volunteering for Emergency Communications service in DeKalb County.

With the privilege of holding an FCC issued Amateur Radio license, comes the obligation for public service. DeKalb County ARES and the many amateur radio operators licensed in this area are proud to offer radio communications support to the community in the hope that such assistance is rarely needed.

Definitions

ARES	Amateur Radio Emergency Service
ARRL	Amateur Radio Relay League
CAP	Civil Air Patrol
CW	Continuous wave – Morse code
EC	(ARES) Emergency Coordinator
DHS	Department of Homeland Security
EMA	Emergency Management FEMA=Federal
EMC	Agency / Center
EOC	Emergency Operations Center
FCC	Federal Communications Commission
HAZMAT	Hazardous Materials
HF	High Frequency (1.8 - 30 MHz)
ICS	Incident Command System, component of National Incident Management System [NIMS]
MARS	Military Affiliate Radio System
Modes	Various amateur radio methods of operation: CW, phone, packet, digital, FSTV. SSTV, etc.
NCS	Net Control Station
Net	A frequency controlled by an NCS for station-to-station traffic
NIMS	National Incident Management System
Phone	Voice mode on the Amateur Radio Service
RACES	Radio Amateur Civil Emergency Service
Repeater	A radio which receives signals on one frequency and transmits on a second. Usually has better antenna and location and better power than personal stations.
SATERN	Salvation Army Team Emergency Radio Network
UHF	Ultra High Frequency (420-450 MHz)
VHF	Very High Frequency (144-148 MHz)

DeKalb County ARES Application Form

(Please Print Legibly)

Name:	
Call Sign:	
Mailing Address:	
City, State, ZIP code:	
e-mail address(es):	
Home phone number:	
Work phone number:	
Cell phone number:	
License Class:	

Check bands and modes that you can operate:

MODE	HF	6 meters	2 meters	222 MHz	440 MHz	Others
SSB						
CW						
FM						
DATA						
PACKET						
Other modes (specify below)						
Mobile Operation						

Can your home station be operated without commercial power? Yes [ ] No [ ]

FEMA Course(s) Completed: IS-100 [ ] IS-200 [ ] IS-700 [ ] IS-800 [ ]

ARECC Course(s) Completed: Level 1 [ ] Level 2 [ ] Level 3 [ ]

Other Applicable Training: _____

_____

_____

_____

Signature_____ Date _____

The American Radio Relay League
RADIOGRAM
Via Amateur Radio

Number Precedence HX Station of Origin Check Place of Origin Time Filed Date

To:

This Radio Message was received at:
Amateur Station _____
Date_____ Phone _____
Name _____
Street Address _____
City, State, Zip_____

Telephone Number:

_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

Signature

REC'D From Date Time SENT To Date Time

A licensed Amateur Radio Operator, whose address is shown above, handled this message free of charge. As such messages are handled solely for the pleasure of operating, a "Ham" Operator can accept no compensation. A return message may be filed with the "Ham" delivering this message to you. Further information on Amateur Radio may be obtained from ARRL Headquarters, 225, Main Street, Newington, CT 06111.

The American Radio Relay League, Inc. is the National Membership Society of licensed radio amateurs and the publisher of *QST* Magazine. One of its functions is promotion of public service communication among Amateur Operators. To that end, The League has organized the National Traffic System for daily nationwide message handling.

In accordance with FCC regulations, the contents of messages handled by amateur radio are not divulged to any unauthorized persons. These communications are furnished without any form of compensation. This form is more efficient than many "relays" which may be incorrectly "translated" by the operators, especially if there is a high percentage of special agency terminology or technical terms.

ARRL FSD-3 contains Relief *Emergency Recommended Procedures* which allow for the use of "numbered" Radiograms. FCC rules and regulations allow for these ARRL numbered shortcuts as they are not intended to obscure the contents of the message, but rather to further reduce the possibility of ambiguity or error. These "numbers" refer to the following shortcuts in **Group One for Possible Relief Emergency** traffic – not to the "message number" box on the Radiogram:

ARRL Message Format Instructions for NTS Traffic Handling

The letters ARL are inserted in the preamble in the **check** count and in the **text** before spelled out numbers or numbers in numeral form which represent text from **Group One**. Example:

> NR 20 E K9RFZ ARL 9 FORT WAYNE IN. MAY 15 AA ALLEN COUNTY EMA W PATRIOT DRAA PHONE 439-8300 BT ARL EIGHT 2 ARL THIRTEEN ARL SIXTEEN RBB SHELTER BT JOHN AR.

In plain text, this message reads: *Message number 20, Precedence Emergency, From K9RFZL, Check is 9 words, location Fort Wayne, IN, May 15, for Allen County EMA at W Patriot Dr., telephone 349-2546. Text: need 2 additional mobile or portable units at this location, a medical emergency exists here, property damage very severe in this area RBB Shelter, Signed, John.*

Group One—For Possible Relief Emergency Use

ONE	Everyone safe here. Please don't worry.
TWO.	Coming home as soon as possible.
THREE.	Am in _____ hospital. Receiving excellent care and recovering fine.
FOUR	Only slight property damage here. Do not be concerned about disaster reports.
FIVE	Am moving to new location. Send no further mail or communication. Will inform you of new address when relocated.
SIX	Will contact you as soon as possible.
SEVEN.	Please reply by Amateur Radio through the amateur delivering this message.
EIGHT	Need additional ____ mobile or portable equipment for immediate emergency use.
NINE.	Additional _____ radio operators needed to assist with emergency at this location.
TEN	Please contact _____. Advise to standby and provide further emergency information, instructions or assistance.
ELEVEN	Establish Amateur Radio emergency communications with _____ on _____ MHz.
TWELVE	Anxious to hear from you. No word in some time. Please contact me as soon as possible.
THIRTEEN	Medical emergency situation exits here.
FOURTEEN	Situation here becoming critical. Losses and damage from ____ increasing.
FIFTEEN	Please advise your condition and what help is needed.
SIXTEEN	Property damage very severe in this area.
SEVENTEEN	REACT communications services also available. Establish REACT communication with _____ on channel _____.
EIGHTEEN	Please contact me as soon as possible at _____.
NINETEEN	Request health and welfare report on _____ . (State name, address and telephone number.)
TWENTY	Temporarily stranded. Will need some assistance. Please contact me at _____.
TWENTY ONE	Search and Rescue assistance is needed by local authorities here. Advise availability.
TWENTY TWO	Need accurate information on the extent and type of conditions now existing at your location. Please furnish this information and reply without delay.
TWENTY THREE	Report at once the accessibility and best way to reach your location.
TWENTY FOUR	Evacuation of residents from this area urgently needed. Advise plans for help.
TWENTY FIVE	Furnish as soon as possible the weather conditions at your location.
TWENTY SIX	Help and care for evacuation of sick and injured from this location needed at once.

Emergency/priority messages originating from official sources must carry the signature of the originating official.

ARRL Radiogram Message Form Contents

Date of origin.

Address. The address should be complete and include a telephone number if known. The text should be short and to the point, and the signature should contain not only the name of the person sending the message but his title or connection also, if any.

Number. This is the number of the message. Select a start point for "1.**"**

Precedence.

Emergency—Any message having *life and death* urgency to any person or group of persons. This includes official messages of welfare agencies during emergencies requesting supplies, materials, or instructions vital to relief of stricken populace in emergency areas. These are handled *before* Priority, Welfare, or Routine traffic. Rarely used during non-emergency periods.

Priority—Important messages having a specific time limit: official messages not covered in the Emergency category, press dispatches and other emergency-related traffic not of the utmost urgency, personal or official notification of death or injury in a disaster. These are handled *after* Emergency traffic but *before* Welfare or Routine traffic.

Welfare—A message that is either;

an inquiry as to the health of an individual in the disaster area or

an advisory or reply from the disaster area that indicates all is well should carry this precedence. These messages are handled *after* Emergency and Priority traffic, but *before* Routine.

Routine—Most traffic in normal times will bear this designation. In disaster situations, traffic labeled Routine should be handled last, or not at all when circuits are busy with Emergency, Priority, or Welfare traffic.

Handling Instructions. Optional. This section is *not regularly used in Emergency Communications*, but once inserted is mandatory with all relaying stations. The following definitions apply:

HXA--(Followed by number) Collect landline delivery authorized by addressee within...miles. (If no number, authorization is unlimited.)

HXB--(Followed by number) Cancel message if not delivered within...hours of filing time; service originating station.

HXC—Report date and time of delivery (TOD) to originating station.

HXD—Report to originating station the identity of station from which received, plus date and time. Report identity of station to which relayed, plus date and time, or if delivered report date, time and method of delivery.

HXE—Delivering station get reply from addressee, originate message back.

HXF--(Followed by number.) Hold delivery until...(date).

HXG—Delivery by mail or landline toll call not required. If toll or other expense involved, cancel message and service originating station.

Station of Origin. The first amateur handler. (see **Place of Origin**)

Check. The number of words/groups in text only.

Place of Origin. City or town where message is sent. Not necessarily location of Station of Origin.

Time Filed. The time message is filed. Optional with originating station.

Address. Complete address including ZIP code of person who will receive this message.

Telephone Number. Complete number including area code of person who will receive the message.

Text. Limit message to 25 words or less, if possible. Note that "X", when used in the text as punctuation, counts as a word for **Check**..

Signature. The name of the person sending the message. It does not count as a word.

RCV'D (Received). During an emergency, an official who receives the message should sign in the box. Otherwise, the amateur who receives the message signs. Message forms may vary, so if this area is not on the form, sign on the back of the form.

Sent. During an emergency, an official who sends the message should sign in the box. Otherwise, the amateur who sends the message signs. Message forms may vary, so if this area is not on the form, sign on the back of the form.

ICS-213 General Message Form

GENERAL MESSAGE		
TO:	POSITION:	
FROM:	POSITION:	
SUBJECT:	DATE:	TIME:
MESSAGE:		
SIGNATURE:	POSITION:	
REPLY:		
DATE:	TIME:	SIGNATURE/ POSITION:

American Red Cross 72 – Hour Preparedness Recommendations

Prepare for Disasters Before They Strike: Build A Disaster Supplies Kit

There are six basics you should stock for your home in the case of an emergency:

water, food, first aid supplies, clothing and bedding, tools and emergency supplies, and special items for medical conditions.

Keep the items that you would most likely need during an evacuation in an easy to carry container. Below is a comprehensive list of what should be included in your kit – recommended items are marked with an asterisk (*).

Possible containers include a large, covered trash container, a camping backpack or a duffle bag.

Water

- Store water in plastic containers such as soft drink bottles. Avoid using containers that will decompose or break, such as milk cartons or glass bottles. A normally active person needs to drink at least two quarts of water each day. Hot environments and intense physical activity can double that amount. Children, nursing mothers, and ill people will need more.
- Store one gallon of water per person per day.
- Keep at least a three-day supply of water per person (two quarts for drinking, two quarts for each person in your household for food preparation/sanitation).*

Food

Store at least a three-day supply of non-perishable food. Select foods that require no refrigeration, preparation or cooking, and little or no water. If you must heat food, pack a can of sterno. Select food items that are compact and lightweight.

Include a selection of the following foods in your Disaster Supplies Kit:

- Ready-to-eat canned meats, fruits, and vegetables
- Canned juices
- Staples (salt, sugar, pepper, spices, etc.)
- High energy foods
- Vitamins
- Food for infants
- Comfort/stress foods

Non-Prescription Drugs

- Aspirin or non-aspirin pain reliever
- Anti-diarrhea medication
- Antacid (for stomach upset)
- Syrup of Ipecac (use to induce vomiting if advised by the Poison Control Center)
- Activated charcoal (use if advised by the Poison Control Center)

First Aid Kit
Assemble a first aid kit for your home and one for each car.

- (20) Adhesive bandages, various sizes.
- (1) 5" x 9" sterile dressing.
- (1) conforming roller gauze bandage.
- (2) triangular bandages.
- (2) 3 x 3 sterile gauze pads.
- (2) 4 x 4 sterile gauze pads.
- (1) roll 3" cohesive bandage.
- (2) germicidal hand wipes or waterless alcohol-based hand sanitizer.
- (6) antiseptic wipes.
- (2) pair large medical grade non-latex gloves.
- Adhesive tape, 2" width.
- Anti-bacterial ointment.
- Cold pack.
- Scissors (small, personal).
- Tweezers.
- CPR breathing barrier, such as a face shield.

Tools and Supplies

- Mess kits, or paper cups, plates, and plastic utensils*
- Emergency preparedness manual*
- Battery-operated radio and extra batteries*
- Flashlight and extra batteries*
- Cash or traveler's checks, change*
- Non-electric can opener, utility knife*
- Fire extinguisher: small canister ABC type
- Tube tent
- Pliers
- Tape
- Compass
- Matches in a waterproof container
- Aluminum foil
- Plastic storage containers
- Signal flare
- Paper, pencil
- Needles, thread
- Medicine dropper
- Shut-off wrench, to turn off household gas and water
- Whistle
- Plastic sheeting
- Map of the area (for locating shelters)

Sanitation

- Toilet paper, towelettes*
- Soap, liquid detergent*
- Feminine supplies*
- Personal hygiene items*
- Plastic garbage bags, ties (for personal sanitation uses)
- Plastic bucket with tight lid
- Disinfectant
- Household chlorine bleach

Clothing and Bedding

*Include at least one complete change of clothing and footwear per person.

- Sturdy shoes or work boots*
- Rain gear*
- Blankets or sleeping bags*
- Hat and gloves
- Thermal underwear
- Sunglasses

Special Items

- Remember family members with special requirements, such as infants and elderly or disabled persons

For Baby*

- Formula
- Diapers
- Bottles
- Powdered milk
- Medications

For Adults*

- Heart and high blood pressure medication
- Insulin
- Prescription drugs
- Denture needs
- Contact lenses and supplies
- Extra eye glasses

Important Family Documents

- Keep these records in a waterproof, portable container:
    - Will, insurance policies, contracts deeds, stocks and bonds
    - Passports, social security cards, immunization records
    - Bank account numbers
    - Credit card account numbers and companies
- Inventory of valuable household goods, important telephone numbers
- Family records (birth, marriage, death certificates)

ARES Asset List

ARES ASSET LIST	1. Incident Name	2. Date/Time Net Declared:	3. Change in Net Status:	4. Change in Net Status:	5. Date/Time Net Closed:

5. Basic Amateur Radio Operator Utilization							
Callsign	Name	Equipment	Initial Status / Location	Function	Assignment/Location	Tactical Call	Remarks
6. Prepared by Amateur Radio Service Volunteer Unit:							**Page of**