

## Amateur Radio Operator Readiness

*Planning a "GO-KIT" for communications and personal survival in emergencies or disaster.*

[The material in this presentation is a collection of information developed, taken, or plagiarized from a number of sources without specific credits. No slight is intended for this omission, only a general thank you to Ham Operators who have contributed to this effort!]

**CLICK MOUSE BUTTON TO ADVANCE SLIDES**


June 21, 2008 Rev. Ken Cohen KB9RH, prepared for the training of SD-REMCOM, MRC-SD, SDGARES & SD-RACES volunteers. Page1



## Personal Protection:

1. **Your personal safety & health should be your 1<sup>st</sup> consideration!**
2. **Gloves, Ear, and Eye Protection**
  - a. Heat, cold or chemicals
  - b. Noise control and message comprehension
  - c. Flying objects, dust and irritants
3. **Breathing Masks and Respirators**
  - a. Dusts, cinders, and chemicals
4. **Your personal medications availability can alter your readiness.**


June 21, 2008 Rev. Ken Cohen KB9RH, prepared for the training of SD-REMCOM, MRC-SD, SDGARES & SD-RACES volunteers. Page4



## "GO-KIT" Topics:

1. "GO-Kit" Principles
2. Personal Protection
3. Power considerations
4. Rigs & Antennas
5. Personal Comfort
6. The "GO-KIT" Itself
7. Logistics
8. "GO-KIT" Management
9. Pre-Deployment.....A few important words


June 21, 2008 Rev. Ken Cohen KB9RH, prepared for the training of SD-REMCOM, MRC-SD, SDGARES & SD-RACES volunteers. Page2



## Power Considerations:

1. **Never assume commercial power will be available, or will maintain during the entire event.**
2. **Never rely on only your vehicle battery to power your gear...You may need it to escape or for refuge!**
3. **Sealed Lead Acid's or Gell Cells**
  - a. Avoid deep discharge failure.
4. **Lead acid car-type batteries**
5. **Bring extra batteries & charger, or Alkaline batteries for your HT power.**
6. **Have an adequate power supply to run your gear and charge batteries just in case AC is available at your location.**
7. **Always consider your gear's power requirements, and use only sufficient power to communicate.**


June 21, 2008 Rev. Ken Cohen KB9RH, prepared for the training of SD-REMCOM, MRC-SD, SDGARES & SD-RACES volunteers. Page5



## "GO-KIT" Principles: *Plan ahead!*

1. **Ability to deploy yourself and equipment on short notice.**
2. **Plan for up to 72 hour deployment, or more depending on the severity of the event.**
3. **You must be able to be completely self-sufficient.**
4. **Essential gear must be assembled and ready to move to a designated area immediately when notified.**
5. **Do not become a burden to the emergency operation, by deploying unprepared.**

June 21, 2008 Rev. Ken Cohen KB9RH, prepared for the training of SD-REMCOM, MRC-SD, SDGARES & SD-RACES volunteers. Page3




## Rigs & Antennas:

- *Never depend solely on an HT*

1. **A 25 watt radio is the minimum essential for reliable operation under emergency conditions**
2. **The ideal emergency equipment will provide operation in VHF, UHF, and HF for maximum coverage, as privileges permit.**
  - a. **Other modes can be beneficial:**
    - 1] Digital message: Winlink, D-Chat, PSK, etc.
    - 2] Digital Voice: D-Star
3. **Must use some increased gain antennas, not a "rubber ducky".**
  - a. Telescoping Whip
  - b. Twin Lead or solid J-pole
  - c. Mag-Mount and/or Ground Plane type verticals
  - d. NVIS on HF.

June 21, 2008 Rev. Ken Cohen KB9RH, prepared for the training of SD-REMCOM, MRC-SD, SDGARES & SD-RACES volunteers. Page6



## Rigs & Antenna CAUTIONS:

- You must have sufficient coax cable to operate at a SAFE distance from your antenna's radiation.
- Beware of antenna placement near objects and bystanders.
- Locate any gas powered generator away from your station setup.
  - Carbon monoxide can be lethal, while virtually undetectable.
- Extra Patch cords and inter connectors are a *must!*


June 21, 2008 Rev. Ken Cohen KB9RH, prepared for the training of SD-REMCOM, MRC-SD, SDGARES & SD-RACES volunteers. Page7



## The "GO-KIT": (Cont.)

- **General "Full Service Kit"**
  1. For deployment beyond 48 hours of operation
  2. More capable communications Equipment
  3. Greater tools and supplies (technical and personal)
    - a. Electronics basic tool kit; wire, soldering, etc.
  4. Greater power reserve capabilities
    - a. Generator gasoline supplies and batteries.
- **Extended Deployment Kit**
  1. Greater need for self sufficiency
  2. More power, food and personal essentials


June 21, 2008 Rev. Ken Cohen KB9RH, prepared for the training of SD-REMCOM, MRC-SD, SDGARES & SD-RACES volunteers. Page10



## Personal Comfort:

1. Personal comforts help to keep you an effective operator!
2. Extra Clothing, personal & sanitation supplies.
  - a. Seasonal clothing protection (i.e., rain, sun, etc.)
3. Food, water and service supplies for at least 72 hours of deployment.
  - a. Bottled or jugs of water
  - b. Dehydrated or re-constitutable foods
4. Station illumination and adequate lighting for event logging.
5. Sleeping Bags and related items
6. Relaxation items: books, music, AM/FM portable or "crank" radio.

June 21, 2008 Rev. Ken Cohen KB9RH, prepared for the training of SD-REMCOM, MRC-SD, SDGARES & SD-RACES volunteers. Page8



## Checklists of Items:

- Everyone's needs will vary slightly, as will their Checklist.
- Develop your own checklist, or plagiarize our "handout example list", and keep copies of your "final" list in your Go-kits.
- The "handout Checklist" is for guidance only, and is meant to be modified, by you, to your needs.
- Small stuff is **CRUCIAL** "The devil is in the details" Just one bad or missing connector, cable or tool can incapacitate your operation


June 21, 2008 Rev. Ken Cohen KB9RH, prepared for the training of SD-REMCOM, MRC-SD, SDGARES & SD-RACES volunteers. Page11



## The "GO-KIT" Itself:

- Can be comprised of multiple kits tiered toward the operation
- "Basic Kit"
  1. Keep "trickle charged" and handy for ultra fast deployment;
  2. Basic communications equipment and supplies;
  3. Short term personal needs, for 24-48 hours.
  4. Basic kit should be backed up by general "full service kit" which is taken on deployment, but not necessarily used.

June 21, 2008 Rev. Ken Cohen KB9RH, prepared for the training of SD-REMCOM, MRC-SD, SDGARES & SD-RACES volunteers. Page9



## The Logistics "yellow brick road":

- **Use an Efficient Transport Container**
  - Backpack
  - Duffle bag
  - Banker's Box
  - Rubbermaid Container
  - Transportable roll along tool carts
  - Tool Boxes (Metal and Plastic)
  - Military Storage Containers: (wood boxes and ammo cans)
  - Five gallon plastic bucket

June 21, 2008 Rev. Ken Cohen KB9RH, prepared for the training of SD-REMCOM, MRC-SD, SDGARES & SD-RACES volunteers. Page12



## The Logistics “yellow brick road”: (Cont.)

1. Keep the basic kit nearby at all times, for rapid deployment.
2. Keep the 48+ hour “Full Service Kit” in a convenient spot to transport.
3. Arrange your response vehicle to best store the multi-tiered kits efficiently.
4. Have available and use a folding “Hand Truck” for faster loading and unloading.
  - a. Some types can be laid down on roller wheels as a cart. This can be very effective for bulk items.

June 21, 2008 Rev.

Ken Cohen KIBHRH, prepared for the training of SD-REMCOM, MRC-SD, SDGARES & SD-RACES volunteers.

Page13



## Managing the “GO-KIT”

- Use inventory checklists, and update periodically or after a deployment for additions or corrections.
- Check for expiration dates, on food and supplies, and rotate your inventory stock for freshness and useability.
- Keep batteries maintained and charged
  - “Float” battery chargers do a surprisingly good job of keeping rechargeable batteries at the ready.
- Test and use emergency equipment periodically to check reliability, and performance.
- Insure that the latest EMCOM frequencies are programmed into your radios for quick access.

June 21, 2008 Rev.

Ken Cohen KIBHRH, prepared for the training of SD-REMCOM, MRC-SD, SDGARES & SD-RACES volunteers.

Page14



## Critical Pre-Deployment Issues:

- Ensure that your family and loved ones are safe and secure before you deploy to the operation
- Ensure that your family and loved ones have adequate emergency supplies on hand for the duration
- Keep your spirits high, and those of your fellow volunteers, and remember that your are helping others!

June 21, 2008 Rev.

Ken Cohen KIBHRH, prepared for the training of SD-REMCOM, MRC-SD, SDGARES & SD-RACES volunteers.

Page15