

Beaumont Fire-Rescue Services

STANDARD OPERATING GUIDELINES

204.02B – Wide Area Search & Rescue Operations

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Revised:

Replaces:

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I. Guiding Philosophy

When faced with a natural disaster or terrorist incident, our mission to protect both life and property is magnified and our resources are stretched to the limit. For these reasons, we strive to be as prepared as we possibly can, to maximize the efficient use of our resources, and to effectively and professionally adapt to circumstances as they arise, so that we provide the best possible service that we can to those in need.

II. Purpose

The purpose of this policy is to outline and describe wide area search operations as implemented by Beaumont Fire-Rescue Services.

III. Goals

The goals of this policy are to:

- A. Provide an overview of wide area search and rescue operations.
- B. Describe preparation measures to be initiated prior to search operations commencing.
- C. Communicate safety considerations to take into account relative to the type and scale of the disaster.
- D. Discuss the Command and SAR Branch structure and management.
- E. Define search strategies and skills.

IV. Definitions

- A. **EOC** – acronym for Emergency Operations Center
- B. **Hasty Search Units**– SAR Division Supervisor plus a minimum of two (2) additional persons, whose purpose is to perform a Type I Hasty Search for damage assessment purposes post-storm.
- C. **PAR** – acronym for Personnel Accountability Report; an acknowledgement that all team members are accounted for and safe.
- D. **SAR** – acronym for Search and Rescue.

- E. **SAR Division Supervisor** – individual responsible for SAR operations over a geographical section of the city corresponding to the existing Chief’s districts (51, 52, 53).
- F. **SAR Unit** – group of persons performing land-based SAR operations within the engine companies smaller defined geographical boundaries.
- G. **SAR Water Unit**– group of persons performing water-based SAR operations within defined geographical boundaries.
- H. **UCP**– acronym for Unified Command Post.
- I. **Type I Search** – “Hasty” reconnaissance of the area (City) after the event to assess areas of most damage.
- J. **Type II Search** – Rapid search of structures with heaviest damage.
- K. **Type III Search** – A search of all structures regardless of the level of damage to account for all remaining citizens that includes property conservation efforts.

V. Overview

- A. The main objective of a wide area search and rescue operation is to complete a primary search (Type II) of the heaviest damaged structures throughout the affected area (worst case—entire City) within no more than 48 hours of the disaster strike.
 - 1. Extreme levels of damage may extend this time frame, but every attempt should be made to keep the operation on as short a schedule as possible to provide the best chance for positive victim assistance.
 - 2. To accomplish this mission in an organized way City-wide (i.e. hurricanes), the City will be divided into areas that coincide with the existing engine company hydrant districts.
 - 3. For disasters that do not span the entire City (i.e. tornado touchdown), the Operations Section Chief, Planning Section Chief and SAR Branch Director will determine and communicate the Command structure, staffing requirements, search boundaries relative to the impact scale.
- B. SAR efforts post-strike will begin as soon as practical (to the extent that responders are able to safely function in the field) utilizing BFR staffing and resources.
 - 1. This policy assumes that assistance from SAR organizations from outside our department may not be readily available.
 - 2. Any assistance received from outside teams or sources will be coordinated and managed through the EOC/UCP and SAR Branch Director.
 - 3. Maps are included in this policy for reference and to help coordination efforts with outside agencies that may be called on to assist.
- C. After a primary search (Type II) of the affected area has been completed, a more thorough secondary search (Type III) may be initiated. This search may extend the focus beyond rescue to basic property conservation measures.

VI. Preparedness

- A. In preparation for any SAR response, special consideration should be made to the type of disaster anticipated.
 - 1. Hurricane
 - 2. Tornado
 - 3. Terrorist Action
 - 4. Flooding
 - 5. Earthquake
- B. If the event can be foreseen, this SOG will be reviewed by all SAR Branch/Division/Group/Unit members prior to the implementation of the response.
- C. All department-issued equipment that may be utilized during SAR Operations will be checked and placed in a safe but accessible area for use when SAR Operations commence. Equipment carried on Reserve apparatus should not be overlooked. This equipment includes, but is not limited to:
 - 1. Chainsaws
 - 2. Hotsticks
 - 3. Handlights
 - 4. Shoring equipment
 - 5. Forcible entry and hand tools
 - 6. Lifejackets
 - 7. Bolt cutters
 - 8. Electrical Gloves
- D. Close coordination between the SAR Branch Director, Division or Group Supervisors, Unit Leaders, the Planning Section, and the Logistics Section is necessary to acquire other needed resources, depending on the disaster profile.
 - 1. Examples include, but are not limited to:
 - a) Appropriate personal protective equipment
 - b) Appropriate forcible entry and/or shoring tools
 - c) Marking tape or labelling supplies
 - d) Communications equipment
 - e) Handheld GPS devices
 - f) Small boats or rubberized craft
 - g) Trucks, vans, “Mule” ATVs
 - h) Water and/or Gatorade for rehabilitation
 - i) Insect repellent
 - 2. If the Logistics Section can not immediately obtain a particular resource that may negatively affect the implementation of chosen strategy or tactics, any adjustments to the operational plan must be communicated through the chain of command to the SAR Branch Director and approved by the Operations Section Chief and Incident Commander.
- E. The Planning Section will insure that ample copies of this guideline, applicable forms, maps and other resources are distributed to each operating SAR Divisions and Unit Leaders.

VII. Safety Considerations

- A. All SAR Operations will follow the department’s approved Risk Management Plan and Tactical Priorities (***SOG 200.01***).

- B. Due to the added risks present to responders after a large scale disaster, SAR Operations should only be conducted during daylight hours.
 - 1. Night operations should only be considered if it is likely that immediate intervention will directly impact saving a life.
 - 2. Night operations should be implemented only after any special precautions have been addressed. Examples include, but are not limited to:
 - a) Appropriate lighting
 - b) Additional safety equipment
- C. The following hazards may be encountered during SAR operations:
 - 1. Numerous electrical hazards (*Note: All electrical equipment should be considered energized or as having the potential to become energized at any moment. Make every effort to avoid these electrical hazards.*)
 - a) Downed power lines
 - b) Transformers and electrical transmission equipment
 - c) Back-fed power lines/inappropriately installed generators
 - 2. Flooding or swift water
 - 3. Snakes, wild animals, and domesticated pets
 - 4. Criminal activity and/or looting
 - 5. Falling debris from trees or structures
 - 6. Hot or cold weather extremes
 - 7. Insects
 - 8. Contaminated run-off wastes
 - 9. Poor visibility
 - 10. Poor or limited communications

VIII. Command & SAR Branch Structure and Management

- A. For City-wide SAR operations, the Command and SAR Branch structure is shown in the SAR organizational chart in Appendix A.
 - 1. In a City-wide operation, actual task level search and rescue duties will be performed by twenty four 3-person SAR Units, each lead by a SAR Unit Leader (typically made up from current engine companies).
 - a) The SAR Units' search areas will normally correspond closely with each of the existing engine company's hydrant maintenance territories.
 - 2. The 3-person SAR Groups will report to a SAR Division Manager (typically selected from the current district chiefs).
 - a) SAR Division territories will correspond with each of the three District Chief's response territories.
 - b) SAR Unit Leaders will be directed by their assigned SAR Division Supervisor.
 - 3. The six SAR Division Supervisors will report to the SAR Branch Director.
 - 4. The SAR Branch Director will report to the Operations Section Chief, who in turn reports to the Incident Commander.
- B. SAR Communications Plan
 - 1. Members should realize a major disaster is the most dynamic and chaotic environment that we will experience as responders. Adjustments to the overall plan, including but not limited to last minute assignment changes, are inevitable. Members have a duty to be as prepared as possible, functioning efficiently within established systems and the chain of

command, so as to serve safely and effectively in the role(s) to which they are assigned.

- a) If there is **advanced warning** of the disaster (i.e. approaching hurricane), the SAR Branch Director and SAR Division Supervisors should be notified prior to the event for coordination and preparedness purposes if at all possible.
 - b) If there is **no advanced warning** prior to the disaster, then the SAR Branch Director and SAR Division Supervisors should be notified as soon as practical after the disaster strike has occurred. They should work cooperatively with the Operations Section Chief to develop the operational plan, including staffing and other resource needs for the period.
 - c) Once the operational plan for the period has been finalized, the Planning Section will ensure adequate copies of the plan, including maps noting the boundaries of search areas are distributed to all SAR Division and Group Supervisors and Unit Leaders.
2. **SAR Radio Communications Plan to be used as long as standard radio communications are operational post strike** (communication chart shown in Appendix B).
- a) Each SAR Division and Group will be assigned a separate portable radio channel (for SAR Divisions 51, 52, and 53).
 - b) Each channel will have an assigned communications member (typically a police dispatcher or technology services employee) designated to receive the incoming radio traffic.
 - c) Each SAR Unit will use an individual name designation for identification purposes created from the SAR Unit Leader's last name followed by their assigned search territory (ex. Captain Smith's team searching hydrant section 10-C would ID themselves as **SAR Unit Smith in 10C**).
 - d) Each SAR Unit will make reports on their assigned frequency and the communications personnel will enter the data into the city CAD system as an event (this process is described in detail under Strategies and Skills).
3. **Alternative communications plan (if radio communications are not available)**
- a) It's important to note that impaired radio communications will lengthen the SAR operational period considerably.
 - b) The first alternative would be to use cellular phones issued from the EOC for communications purposes.
 - c) If cell phones or cellular service is not available either, then communication would have to be maintained by keeping the SAR Division Supervisors moving between their respective SAR Units for face to face reports. A messenger would be to relay reports to the SAR Branch Director at the UCP/EOC or Fire-EMS Communications Division in the event of an emergency situation.
4. The SAR Branch Director, SAR Division Supervisors and SAR Unit Leaders must work purposefully within established systems to effectively communicate their work group's current and forecasted resource needs to the Operations, Logistics, and Planning Section Chiefs, so as to enable the

ability to efficiently plan for, obtain, and deliver needed resources in a timely manner.

IX. Search Strategies and Skills

A. Type I Search (*Hasty Reconnaissance Information*)

1. Once the strike phase of the event has passed, time is of the essence in beginning initial SAR operations. As soon as the EOC/UCP has determined and communicated that it is relatively safe for responders to begin SAR Operations, the SAR Branch Director will be cleared to initiate **Type I** search operations.
2. The purpose of the Type I - Hasty Search is to obtain information about the search area, **rapidly** assessing the extent and severity of damage.
 - a) Note hazards that would affect the safety of responders and the public.
 - b) Note hazards that will require specialized resources to mitigate.
 - c) This search is used as a basis for prioritizing areas needing more extensive search efforts versus those not requiring additional searches.
3. SAR Division Supervisors will be deployed (typically in the normal District Chiefs vehicles) as soon as feasible post-strike with a minimum of the following resources to conduct the Hasty Reconnaissance effort:
 - a) SAR Division Supervisor plus a minimum of two additional personnel
 - b) Standard equipment carried on a District Chief's vehicle
 - c) Debris removal equipment
 - i. Chainsaw
 - ii. Bolt cutters
 - iii. Large pry bar and halligan tool
 - iv. Tow chains
 - d) Electrical hazard identification equipment
 - i. Hotsticks
 - ii. Electrical gloves
 - iii. Electrical bolt cutters
 - e) Emergency medical bag
 - f) Division territory maps (See Appendix F)
 - g) Type I- Hasty Search Forms (See Appendix C)
4. Hasty Reconnaissance Process
 - a) Hasty Search Units should follow the main thoroughfares within their territory to assess the hazards and mitigation needs of the area.
 - b) If normal radio communications are operational then use the assigned tactical SAR Division channel to report the information directly to the EOC/UCP. Reports should briefly relay:
 - i. Complete blockages to main thoroughfares (debris or flooding)
 - ii. Major damage to critical city infrastructures (hospitals, fire stations, police stations, water towers, communications, etc.)
 - iii. Areas with heavy flooding
 - iv. Neighborhoods where multiple homes show significant damage
 - v. Heavily damaged homes or businesses where there could be a life safety issue
 - c) The SAR Branch Director and EOC staff will mark these locations called in on a large map to get a primary view of the impact scale of the event.

- d) This information observed will also be documented on the *Type I-Hasty Search form* and *territory maps*. These documents will be delivered to the SAR Branch Director upon completion of the Division survey.
- e) If no radio communication or cell phone communication is available then a second vehicle should accompany the Division Supervisor team to be used as a messenger to report any rescue situations found.
 - i. That vehicle would go directly to the closest location where they could communicate the situation to headquarters depending on the level of city wide communication interruption (the closest operating land phone line, nearest fire station with communications access to HQ, HQ directly, etc).
 - ii. Upon reporting the emergency, the vehicle would report back to the SAR Division Supervisor team.
- f) Hasty Search Units should avoid getting involved in actual rescue operations at this time unless their immediate intervention would directly impact saving a life.
 - i. In the event this situation occurs, the SAR Division Supervisor will contact the SAR Branch Director via radio to notify them that they are going to the Fire 1 channel to report an emergency incident.
 - ii. The SAR Division Supervisor should turn the radio to the channel Fire 1 and give a description of the problem along with a request for the appropriate resources to be dispatched to mitigate the incident.
 - iii. The SAR Branch Director should monitor the transmission to HQ so that they will be aware of the situation and notify the Operations Section Chief.
 - iv. The Operations Section Chief will insure the IC has been notified and make any adjustments to the personnel accordingly.
 - v. Once the requested emergency operation units have arrived and the rescue operation has been effectively transferred to them, the Hasty Search Unit (SAR Division Supervisor and crew) will continue the Hasty Search without delay.
- g) As soon as the Type I - Hasty Reconnaissance is completed, the SAR Division Supervisor will quickly organize and communicate the results to the SAR Branch Director and Operations Section Chief to determine, prioritize and plan for additional search requirements.
 - i. The SAR Division Supervisor will notify SAR Branch Director via radio (if possible) when the Type I search of his/her territory is complete.
 - ii. The SAR Division Manager teams should then report to the SAR Branch Director and the Operations Section Chief if possible to provide a face-to-face briefing related to the search results and to turn in the corresponding forms.
 - iii. The SAR Division Supervisor should be prepared to recommend and assist in the identification and prioritization of additional search operations that may be required within his/her area of service.

5. The SAR Branch Director and the Operations Sections Chief will then use this data and input from the SAR Division Supervisors to decide on the best deployment options for the SAR Units and the length for the first operational period.
 6. The SAR Division Supervisors will then return to their districts to brief and deploy the SAR Units according to the chosen plan.
- B. Type II Search (*Primary Life Safety Search*)
1. The purpose of the Type II - Primary Life Safety Search is to have SAR Units complete a thorough life safety search of all the heaviest damaged structures in the affected areas.
 2. Once the SAR Branch Director and the Operations Sections Chief have decided on the optimal deployment plan for the SAR Units, the groups will be given maps (Appendix G), Type II Search Forms (Appendix D), and instructions on their assignments from their SAR Division Supervisor.
 3. If staffing is at a maximum with all three shifts on duty, then the SAR Division Supervisors will select one crew per station to initially stay and handle typical emergency responses while the other two shifts are formed into three-man SAR Units to begin searching their assigned areas.
 - a) The crews initially assigned to stay for emergency response should correspond to the search area with the least damage.
 - b) The first SAR Unit to finish the Type II search of their area will then return to their normal station to take over the duties for emergency operations. The crew that they relieve will then form a new SAR Unit which will go out and begin SAR operations in their assigned search area.
 - c) When additional SAR Units complete their search areas, they will be strategically reassigned as directed by the SAR Branch Director to either assist with emergency responses or to help other teams that have larger search areas.
 4. If full staffing is not present at the beginning of the SAR Operation, then the SAR Branch Director and the Operations Sections Chief will organize and select the initial deployment of the SAR Units by priority:
 - a) Search areas with known or reported rescue situations
 - b) Search areas with the heaviest residential damage
 - c) Search areas with moderate but scattered structural damage
 5. The SAR Division Supervisors should brief all of the SAR personnel before deployment on the following topics:
 - a) Safety considerations (review of possible anticipated hazards)
 - b) Assigned search area
 - c) Communications protocols
 - i. Assigned operating channel (each SAR Division should have an assigned channel)
 - ii. Radio reporting procedures (both standard and emergency)
 - iii. Scheduled PARs for SAR Units out actively searching (typically, a PAR should be called in every hour)
 - iv. Backup plan for loss of communications
 - d) Designated length for the operational period

6. The SAR Units will each be assigned a vehicle for their operations. The assignment of these vehicles will be based on the conditions anticipated in the search areas and the overall availability of different types of vehicles.
 - a) Mule or Utility type ATV's
 - b) Department vehicles
 - c) Rented vans or pickups
 - d) Small boats for flooded areas (note that SAR Unit procedures for flooded areas require special considerations and are listed in the following "Section C" on this document)
7. Each SAR Unit should at least carry, but not be limited to, the following equipment:
 - a) Basic forcible entry tools
 - b) Flash lights
 - c) Portable radios and cell phones if available
 - d) Basic medical supplies
 - e) Insect repellent
 - f) Water or fluids appropriate for hydration requirements
 - g) Marking tape (bright colored) and labeling pens (Sharpie's)
 - h) Maps and search forms
8. Once the SAR Unit has been properly briefed, assigned a vehicle and checked their equipment, then they can begin operations in their assigned area.
9. The SAR Unit should proceed rapidly in a systematic fashion by going street to street in the assigned area looking for signs of people in distress or for structures with significant damage.
 - a) The SAR Unit should always stay together as a team and remain in either visual or voice contact with one another at all times.
 - b) The SAR Unit Leader is responsible for the safety and accountability of their assigned SAR Unit members.
 - c) The SAR Unit Leader will be responsible for transmitting a PAR to their SAR Division Supervisor typically every hour or at the predetermined time frames with the following information:
 - i. All group members visually accounted for and safe
 - ii. Current location
 - iii. Direction of travel
10. The Type II Search Form (Appendix D) will be used to document all significantly damaged structures in an area, any sites searched or unsafe to search, and record any need for a follow up visit to the location.
 - a) Document damage to the structure
 - i. Minor Damage is defined as a structure that has any of the following criteria: repair costs are likely to be 50% of the total value of the structure; is uninhabitable but can be repaired within 30 days.
 - ii. Major Damage is defined as a structure that has any of the following criteria: repair costs are likely to exceed 50% of the total value of the structure; is uninhabitable and requires extensive repairs taking longer than 30 days; substantial failures to structural elements (walls, floors, foundations, etc).

- iii. Destroyed is defined as having any of the following criteria: a total loss or damage that is so extensive that repairs are not economically feasible; structure is permanently uninhabitable; complete failure of structural components (collapse of walls or roof, etc).
 - b) Sites searched or unsafe to search
 - c) Any need for a secondary visit to the location
 - d) Any situation that would be pertinent to other agencies
11. The SAR Unit Leader is ultimately responsible for deciding when it is necessary and within our departments' accepted Risk Management practices (SOG 200.01) to enter a damaged structure to search for victims.
- a) The decision to enter a damaged structure requires a common sense approach by all SAR personnel, and the risk to the SAR Units' safety should be carefully weighed against the likelihood of finding a savable victim.
 - i. Be careful of startling anyone inside the structure. Make a loud, clear, verbal announcement of your identity and intention to enter the structure and listen for any response before proceeding.
 - ii. Watch and listen for any domesticated pets that might have been left at the structure before proceeding.
 - b) Careful consideration should be made when entering structures classified as having Minor or Major damage. The following criteria can be used to help make the judgment to enter these structures if it appears safe to do so:
 - i. Reports that residents might still be home
 - ii. Cars parked in the driveway or garage
 - iii. Trees or debris through the roof
 - iv. Water marks greater than 3 feet on the outside of the structure
 - v. Signs that the residents might be disabled or elderly (exterior handicapped ramps, fire department or EMS invalid stickers, etc.)
 - c) No structure meeting the definition of destroyed should be entered by SAR Unit members unless there is definitive proof of a savable victim.
 - i. Visually check these structures safely from the exterior as best you can.
 - ii. Briefly shout into the structure and knock loudly on the outside of the structure then remain quiet while you listen closely for any response.
 - d) After the house is checked, mark the front door or front window with the marking tape.
 - i. Make a single slash “\” mark if the structure was **not entered**.
 - ii. Make two slash marks to form an “X” if the structure was **entered and searched**.
 - iii. If a **deceased victim** is found then add lines “|” to each side and the bottom of the marking “|X|”.

- iv. On the marking tape, use the sharpie to write the date and your officer number. If bodies are found, write the number of deceased victims found on the bottom line of the marker.
 - v. Make sure you place the tape in a location that can be easily seen by future groups.
12. The SAR Unit Leader needs to make a brief radio report every time a Type II Search Form is filled out for a damaged structure (this allows the EOC staff to create an event for each location in the city CAD system in order to give them a real time overview of the damage patterns and the search teams progress). Unless there is an emergency situation, the report should be sent to the SAR Branch Director on the assigned radio channel for the division/group. The report should be very brief and only contain the following information:
- a) SAR Unit radio designation
 - b) Address of structure
 - c) Property type
 - i. Commercial structure (includes apartments)
 - ii. Primary residential structure (home)
 - iii. Secondary residential structure (garage, barn, etc.)
 - iv. Multi-family residence (duplex, etc)
 - v. Mobile home
 - d) Level of damage
 - i. Minor
 - ii. Major
 - iii. Destroyed

Example: *SAR Unit Johnson in 4C to SAR Branch, we are at 2850 French Rd. We have a primary residential structure with major damage.*

13. If a rescue situation is discovered or if an emergency incident needs to be reported, then the SAR Unit should use the following process:
- a) Transmit the pertinent information by radio
 - i. The SAR Unit should make an announcement on their assigned SAR Division channel informing the SAR Branch Director that they are switching to channel Fire 1 to report an emergency situation.
 - ii. The SAR Unit should turn the radio to the channel Fire 1 and give a description of the problem along with a request for the appropriate resources to be dispatched to mitigate the incident.
 - iii. The SAR Branch Director should monitor this Fire 1 transmission and notify the Operations Chief of the situation.
 - b) If it can be done safely, the SAR Unit should begin trying to resolve the emergency while HQ dispatches the requested help.
 - c) When the dispatched resources arrive, the SAR Unit should brief the relief crew on the situation and their actions already taken. Once the relief crew has control of the incident, the SAR Unit should then go back to the Type II search.
 - d) If for some reason, the SAR Unit is unable to resume the Type II search then the group's SAR Division Supervisor should notify the

- SAR Branch Director so that another group can be sent to cover the area.
- i. In this event, the SAR Division Supervisor should be briefed on the progress made and any streets already searched.
 - ii. The SAR Unit should also turn in their completed forms to their SAR Division Supervisor.
14. If a deceased victim is located, then the SAR Unit will use the same reporting process as listed above with the exception of noting that the incident involves a body recovery with no rescue involved. The SAR Branch Director will advise if the SAR Unit should remain on site or not until the appropriate agencies can respond.
15. When the SAR Unit finishes searching their entire area or they reach the end of the agreed upon operational period, they will need to report back to their SAR Division Supervisor.
- i. The SAR Division Supervisor should be briefed on their search results.
 - ii. The SAR Unit should turn in their completed forms at this time to their SAR Division Supervisor.
 - iii. The SAR Division Supervisor will turn these completed forms in to the SAR Branch Director and relay the verbal summary on the search.
 - iv. The SAR Branch Director will consult with the Operations Chief and the groups SAR Division Supervisor on where best to send the group next.
 - v. The SAR Division Supervisor will then direct the SAR Unit on their next assigned duties.
16. The SAR Divisional Supervisors are responsible for the safety and accountability of their assigned SAR Units.
- a) Due to the increased risks associated with working after a disaster, there are several instances that might require a MAYDAY situation.
 - i. Any report of a missing or seriously injured SAR Unit member should be declared as a MAYDAY situation.
 - ii. If a SAR Unit fails to transmit their scheduled PAR and cannot be reached immediately afterwards on the radio then a MAYDAY situation should be declared.
 - b) Any MAYDAY situation should be declared on the SAR Division radio channel announcing the affected SAR Unit identification.
 - c) The SAR Branch Director will acknowledge the MAYDAY call and consult with the Operations Section Chief on how to best resolve the situation.
 - i. The SAR Division Supervisor for the area should respond immediately to the MAYDAY area.
 - ii. If the affected SAR Unit's position is known then help from emergency response units or nearby search teams can be sent to the incident.
 - iii. If the affected SAR Unit is missing then the search should begin with the last reported location and direction of travel.

- iv. SAR Units operating near the MAYDAY area may broadcast their location and availability to respond to help but they should not automatically dispatch themselves to the area.
17. When the Type II Search Forms are all turned in, the SAR Branch Director and the Planning Section organize the completed forms in preparation for the Type III Search operation.
- a) All forms marked for a follow up property conservation visit should be copied and sorted into the next operational periods work list.
 - i. These copies will get delivered back to the appropriate SAR Units that will be making the various Type III search areas.
 - b) Any form marked with information pertinent to another agency (broken water mains, abandoned pets, signs of looting, etc.) should also be copied. That copy should be forwarded to the appropriate agency.
- C. Type II Search - SAR Water Group Operations (*Special Considerations for Flooded Areas*)
1. If there is minimum flooding from the event, then ideally the SAR needs for these areas would be handled by the departments Water Response Team members.
 - a) The Water Response Team members would respond under the above procedures with the designation as a SAR Water Group.
 - b) If enough team members are present then there could be 1-3 SAR Water Units searching different areas, all coordinated through the SAR Water Group Leader.
 2. In an event with widespread flooding, SAR Water Units would be put together from ordinary three person engine companies as with a typical SAR Unit.
 - a) Small aluminum or rubberized boats would be issued as search vehicles.
 - b) Search areas and the operational guidelines will be lined out by the SAR Branch Director before beginning operations.
 3. Safety considerations
 - a) All SAR Water Unit members must wear a lifejacket at all times while in the flooded areas.
 - b) Keep the boat out of moving water at all times.
 - c) Streamline your choice of equipment for the search, taking only essential items with you.
 - d) Keep equipment and personnel weight in the boat as evenly balanced as possible.
 - e) Try to avoid obstacles that could damage the boat or lead to the boat capsizing.
 - f) Extreme caution should be used in the decision to enter any flooded structure.
 4. Search form procedures
 - a) If only a few homes are flooded, then the SAR Water Unit would use the same SAR Type II search forms and reporting procedures as the land based SAR Units.

- b) If the flooding is widespread and affects numerous houses:
 - i. The SAR Water Unit will need to note the general area of flooding on their search maps but they will not need to fill out a search form for each house due to the extra time that would entail.
 - ii. In these widespread flood areas, the SAR search forms need to be filled out only for sites where entry is made, a victim (living or deceased) is found, or a rescue is made.
 - 5. Radio reporting procedures
 - a) PARs should be made hourly or at the designated times.
 - b) Radio reports to the SAR Branch Director on the assigned SAR Division/Group channel will be identical to the land based Type II search protocols and should be made:
 - i. Before going to Fire Channel 1 to report an emergency incident
 - ii. For any MAYDAY situation
 - iii. Any time a SAR search form is filled out for a site
 - c) Emergency situations and rescues other than a MAYDAY should be reported on Fire Channel 1 directly to the dispatch office (again, notify the SAR Division/Group Supervisor on the appropriate tactical radio channel before switching to Fire 1).
 - 6. Rescue considerations
 - a) Due to the likely possibility that SAR Water Units will be limited in number and have unique equipment capabilities, these Units will likely need to take a more active part in any rescue operation.
 - b) If possible, victims should be transported to areas where land based responders can meet them to take over victim care.
 - 7. When the operational period has ended or the search area is completed, search forms and reports for the SAR Water Units are processed the same as those for the land-based SAR Units.
- D. Type III Search (***Secondary Search Focusing on Property Conservation and Possibly a Door to Door Public Welfare Check***)
- 1. The goal of the Type III search is to continue the use of the assembled SAR Units to revisit the damaged homes in an effort to minimize property damage and for an area-wide welfare check if needed.
 - 2. From the Type II search forms, the SAR Branch Director and the Planning Section Chief will compile a list of addresses that need a follow up property conservation visit.
 - 3. A copy of these forms will be given to the assigned SAR Units so they can return to the location for the following concerns:
 - a) Pulling electrical meters to reduce electrical shock hazards and fire hazards when the power is restored.
 - i. The SAR Units should only pull electrical meters when there is damage to the breaker box or when damage inside the home would likely have compromised electrical wiring.
 - ii. Damage to the weather head does not require the meter to be pulled if it does not extend inside the home or meter box area.
 - iii. Place a strip of tape on pulled meters labeled with the address that they are taken from and the date. The meters should be

kept with the search team and then returned to the SAR Division Supervisors.

- iv. The SAR Division Supervisors will make arrangements with the SAR Branch Director to have the meters returned to Entergy.
 - b) Turn off water to structures that have water leaks or burst water lines.
 - c) Turn off the natural gas to structures that have leaks or burst gas lines.
 - d) For each location visited, the SAR Unit needs to complete the lower portion of the Type II Search Form listing the work done there and the date.
 - e) These forms are turned in to the SAR Division Supervisor and then routed back to the SAR Branch Director for review and filing.
4. If the disaster was so severe that essential City services (power, water, sewer, etc.) will be disrupted for an extended period of time, the Operations Section Chief may deem it necessary to use the Type III search groups to also make a door to door visit of every home in the affected area to check on the public's well being.
- a) They may not be able to make the determination for this type of operation until a complete evaluation of the damage to the city is known.
 - b) If this door by door operation is needed, the SAR Units should use the following procedure at each structure:
 - i. Identify themselves and their mission.
 - ii. Offer any accurate information available on the status of the City's services. Do not give out opinions, assumptions, or unverified information to the public.
 - iii. Ask if the residents have any life safety needs.
 - c) Each location where someone is home should be documented on the Type III Search Contact List (Appendix H). They should record the following information:
 - i. The contact persons name.
 - ii. How many people are in the structure.
 - iii. A contact phone number if available (cell phone or land line if available and operating).
 - iv. Any life safety needs at the residence.
 - d) Any emergency situations found will be reported as listed previously in the Type II search protocols.
 - e) The completed Type III Search Contact List will then be turned in to the SAR Division Supervisor and routed to the SAR Branch Director for review.

X. After-action Report and Policy Revision

- A. Once the entire SAR operation is finalized, the SAR Division Supervisors should meet with the SAR Units (as one large group or several medium sized groups if possible) and evaluate both the operation and this SOG.
 1. Discuss and document SAR operations' positive outcomes and what went right.

2. Discuss and document SAR operations' problems and what needs to be corrected.
 3. Evaluate the actual SOG policy for needed changes and clarifications in light of the comments. Forward these recommendations to the SAR Branch Director.
- B. The SAR Branch Director and the SAR Division Supervisors should look at the whole operation and prepare a detailed "after-action" report of the entire operation.
- C. The "after-action" report and a detailed list of all comments, both positive and negative should be forwarded to the Tactical Advisory Committee. The Tactical Advisory Committee should then meet with the SAR Branch Director to evaluate and amend the Wide Area SAR SOG as needed.