	Charles County Emergency Services	
	Subject: **Incident Management System, Building Layouts & Exposure Designations**	**SOG#** 04-05-2013
	Approved: County Fire Chief, Wally Danielson	**Approved:**
	Approved: County EMS Chief, Brent Huber	**Initiated:**
	Approved: Director of Emergency Services, Bill Stevens	**Revised:**

I. Purpose

a. These guidelines are established for the utilization of the Incident Management System, Building Sides, & Exposure Designations. The Incident Management System shall be utilized when three (3) or more units are assigned to an incident. Due to the infinite number of possible scenarios that may be encountered, these guidelines shall be used to assist with strategic and tactical decision making throughout the operation. Additionally, these guidelines will layout the radio communications between units and the Charles County 911 Communications Center.

II. Procedure's

a. <u>Initial Size Up & Establishing Command</u>

i. The first arriving unit shall provide the following information, which shall be communicated on the assigned TAC Channel.

- Announce correct address *(if different from dispatched address)*
- Announce number of floors
- Announce type of construction
- Announce occupancy type
- Announce conditions found *(Smoke, Fire, People Trapped etc…)*
    i. *Every attempt shall be made to execute at 360º size up*
- Establish/Pass Command *(if passed the next arriving Fire Unit shall establish command until relieved by a Higher Ranking Officer)*
    i. *If a command statement is not given Charles County Communications shall ask the first arriving unit if they are going to establish or pass command.*
- Identify Command by street name *(i.e."Main Street Command")*
- Announce location of the Incident Command Post (ICP)
- If the OIC must remain with their crew to ensure the safe & effective operation to complete outlined tasks, command shall be passed to next arriving unit.

- The first arriving unit officer shall maintain Command, even after "Passing Command" until the next arriving Officer or Chief Officer assumes Command.
- The "COMMAND" designation shall not change for the duration of the incident. Personnel shall use the incident street address or other specific building identifier for the Command Designation. The use of community, company/department name or number should be avoided. This will help avoid possible confusion should multiple incidents occur in a specific geographical area.

Radio Transmission Example:

Engine 11 arrives at a house fire:

Engine 11: "E-11 is on the scene, 1234 Main Street, with a 2 story, wood framed, single family dwelling, with nothing evident, E-11 is establishing the Main Street Command, the Command Post will be located at E-11."

Charles County Communications: "Attention units responding to Main Street, Engine 11 is on the scene with a 2 story, wood framed, single family dwelling with nothing evident, Engine 11has established the Main Street Command, Command the radio is yours; you may go direct to your units. After this transmission, Communications is to refrain from making unnecessary radio transmissions that may hinder the operations of the incident, i.e. Acknowledging units responding on the TAC Channel or units arriving on the scene. Furthermore, once Command has been established at an incident Communication shall not provide "courtesy returns" to ranking responding officers. Command officer shall refrain from making operational decisions or transmissions unless there is demonstrable safety concern to do so.

b. <u>Passing Command</u>

i. When the physical participation of the first arriving unit officer-in-charge is critical to the safe, effective operation of their crew, and will adversely affect their ability to establish Command then Command shall be "passed" to the next arriving unit.

ii. When Command has been "passed" the second arriving "*<u>Fire</u>*" unit shall establish Command of the incident upon arrival until properly relived by a higher ranking Officer. The only exception is if Command is established by a Chief Officer prior to the second unit arriving on the scene.

<u>Radio Transmission Example:</u>

<u>Engine 33 arrives at a house fire:</u>

Engine 33: "E-33 is on the scene, 1234 Bannister Circle, with a 2-story, wood frame, single family dwelling, with smoke showing from Division 2, Side Bravo, Quadrant B and report of people trapped, E-33 is passing command."

Charles County Communications: "Attention units responding to 1234 Bannister Circle, E-33 is on the scene with a 2 story, wood frame, single family dwelling with smoke showing from Division 2, Side Bravo, Quadrant B and Reported People Trapped, E-33 is passing the Command. Charles County to E-121are you ok? (Confirming that the second unit acknowledged the passing of Command)

c. <u>Assuming Command</u>

i. Upon arrival of the first Command Officer, transfer of Command from the first *non-Command Officer* Incident Commander may occur without a face-to-face exchange. Provided that all pertinent information is relayed to the assuming Command Officer.

Radio Transmission Example:

Chief 7-A assumes Command at a Building Fire from Engine 71:

Chief 7-A: "Chief 7-A is on the scene assuming the Indian Head Hwy Command, Command Post is located on Side Alpha, at Command Unit 7."

Charles County Communications: Attention units operating at 1234 Indian Head Hwy, Chief 7-A has assumed Command, the Command Post is located on Side Alpha at Command Unit 7

d. Command Post Location

i. Incident Commanders shall select a strategic location for the Command Post to direct all operations of the Incident.

ii. On major incidents, an Emergency Command Post/Bus shall be requested by the Incident Command and positioned appropriately on site, to be utilized as the Command Post.

e. Incident Command Worksheet(s)

i. Incident Command Worksheet(s) shall be prepared by Command as a tracking tool to provide the current status of the incident and the resources operating. The Incident Commander shall prepare all appropriate Incident Command Worksheet(s) for incidents which they respond.

f. Responsibilities of the Incident Command

i. Command shall be responsible for the overall management of the incident including:

- Ensure the Rapid Intervention Group is established and maintained until the incident is declared under control.
- Accountability of all personnel operating on the incident scene.
- Identify areas of function that need specific attention and organize appropriate divisions and/or groups. Appoint division and group supervisors to Command those assignments.
  - Units assigned to divisions/groups report directly to division/group supervisors.
  - Divisions/group supervisors shall be responsible for providing Command or section/branch leader with progress reports that contain:
    - Current Information about needs and accomplishments of the division or group.
    - Accountability of all personnel operating in the division or group.
    - Completion of specific tasks.
    - Any other pertinent informatio

- Provide 20 minute updates of the Incident to include:
  - Accountability of all personnel operating
  - Progress of Searches
  - Fire Situation (*advancing/doubtful/under control*)
  - Exposure Problems
  - Units being committed (*give estimated time if able*)
  - Request for additional resources (*Gas Co., Electric Co., Fire Marshal*)

g. Responsibilities of Communications

i. The following are expectations of the Charles County 911 Communications that will help ensure efficient operations at incidents:

- When Command has been established, Communications will repeat the Initial Size Up and announce that Command is established and advise the IC that the Channel is theirs. At this point Communications is to refrain from making any "unnecessary" radio transmissions that could hinder fire ground operations. I.E. acknowledging units responding on the TAC Channel, Acknowledging the arrival of units.

  Radio Transmission Example:

  Charles County: "Attention units on the scene and responding to 1234 Main Street, Chief 8 has established the Main Street Command. Command the radio is yours; go direct with your units."
- Communications will still be required to monitor the Channel and to ensure the Incident Commander does not miss any important Radio Transmissions. I.E. Priority Radio Messages, May-Days and Emergency Identifier Activations. These Emergencies shall be handled by SOGs' that are already in place.
- At the 5 Minute Challenge Mark, Communications will provide a Brief Summary of units responding to Ranking Chief Officer or Command (if established).

  Radio Transmission Example:

  Charles County to Chief 4-B at this time you have 4 Engines, 2 Trucks, 1 Squad, 1 Battalion Chief and 1 Ambulance responding….Total of 26 Personnel and Tower 824 is understaffed with 2 and no response from E836 we are alerting Engine Company 10. Chief 4-B would acknowledge this message and can also decide if he would like another Truck at this point to respond due to the Understaffed Unit.
- A complete unit breakdown staffing report will only be given to the Incident Commander when he/she request it. The unit break down shall be given as follows:
  - Engine(s)
  - Truck(s)
  - Squad(s)
  - Special Unit(s) *Ex. Special Ops, Special Units, Hazmat Units, Mass Casualty Units, Boats…..*
  - Chief/Staff Officer(s)
  - EMS Units
  - *Note: This may occur on another channel if the Incident Commander deems it necessary and there should be a pre-determined channel that will always be the same Tac 1??*
- After Command has been established, Communications will advise units on FEMAIN when they mark on the air responding that Command has been established on the TAC Channel. This will tell the units that they will not be acknowledged on the TAC Channel when they switch over.

h. Termination of Command

i. At the point the Incident Commander deems that the Incident can be Terminated or Down Scaled, he/she shall announce to all units that are on the scene and/or still responding a brief description of what has taken place and what units are going to remain on the scene. The Incident Commander will relay that the remaining units that are being placed in service are to go in service on FEMAIN, not the TAC Channel. The Incident Commander is to ensure that Communications is aware of the Units being held and Placed in Service.

Radio Transmission Example:

"Washington Avenue Command to the Units on the scene and responding to 1234 Washington Avenue, we had a small fire on the stove with no extension, Command is holding Engine 11 and Truck 3, the remaining units can return to service, return to service on FEMAIN. Command to Charles due you copy?"

i. Division, Group, and Building Layout Designations

i. Divisions shall be assigned based on the geographic location in which they are operating.

ii. For a working incident in a single-family dwelling there shall normally be assigned a Basement or Terrace Division, Division 1, Division 2, Roof Division, Attic Division, etc. These designations are made based on geographical locations the Incident Commander is having his/her units operating.

iii. When operating in a multi-story structure, it will usually be necessary to designate division locations by floor. This system of geographical designation uses the floor number, as shown above to designate divisions. Divisions shall be numbered in accordance with the convention already established within the building.

- For example:
  - Floors designated as Floor 1 ="Division 1;"
  - Parking level/P1 level = "Division P1;" or Mezzanine level 4/5 = "Mezzanine Division 4/5."

iv. Groups shall be assigned when specific tasks require dedicated attention. Group

Assignment's will likely crossover multiple geographic divisions.

v. Group supervisors shall be made on the needs of the specific incident. The designation of the group shall be made according to the function on the incident, i.e.: Fire Attack Group, Ventilation Group, Search Group, Recon Group, Extrication Group etc. Group Supervisors will be responsible for the accountability of all personnel operating under their direction. Because groups can be operating throughout the incident scene, group Supervisors will be responsible to advise Division Supervisors when they have personnel operating in their geographical area for accountability purposes.

Diagrams:

Figure 1: Building Sides

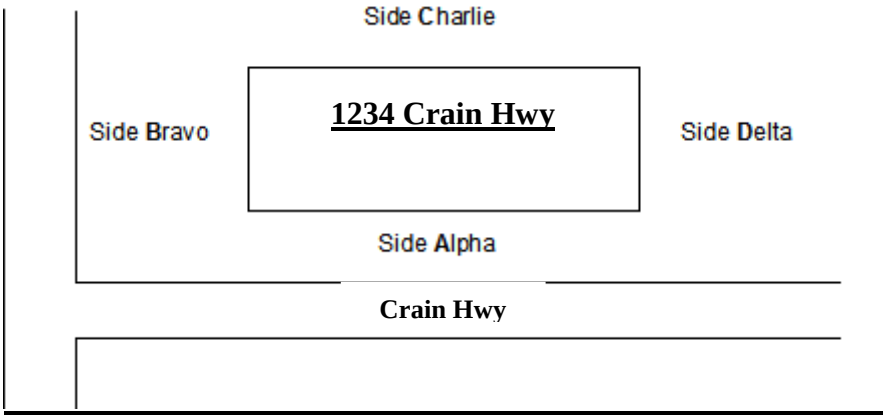

Figure 2: Interior Quadrants

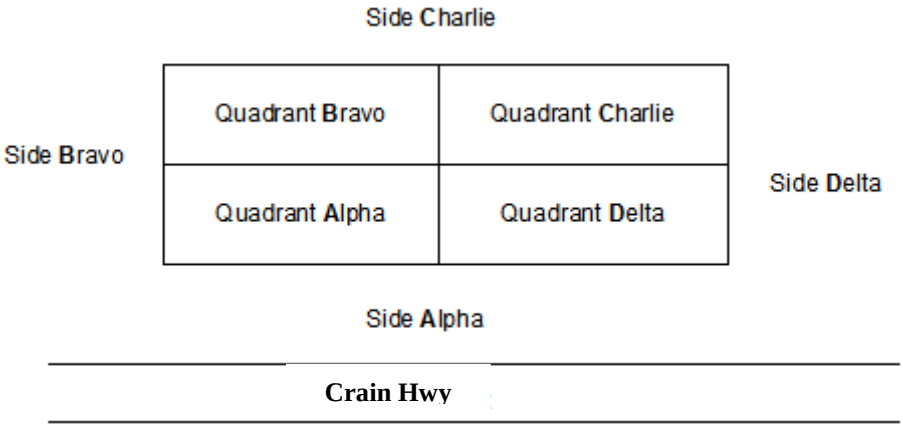

Figure 3: Interior Quadrants Unusually Shaped Buildings

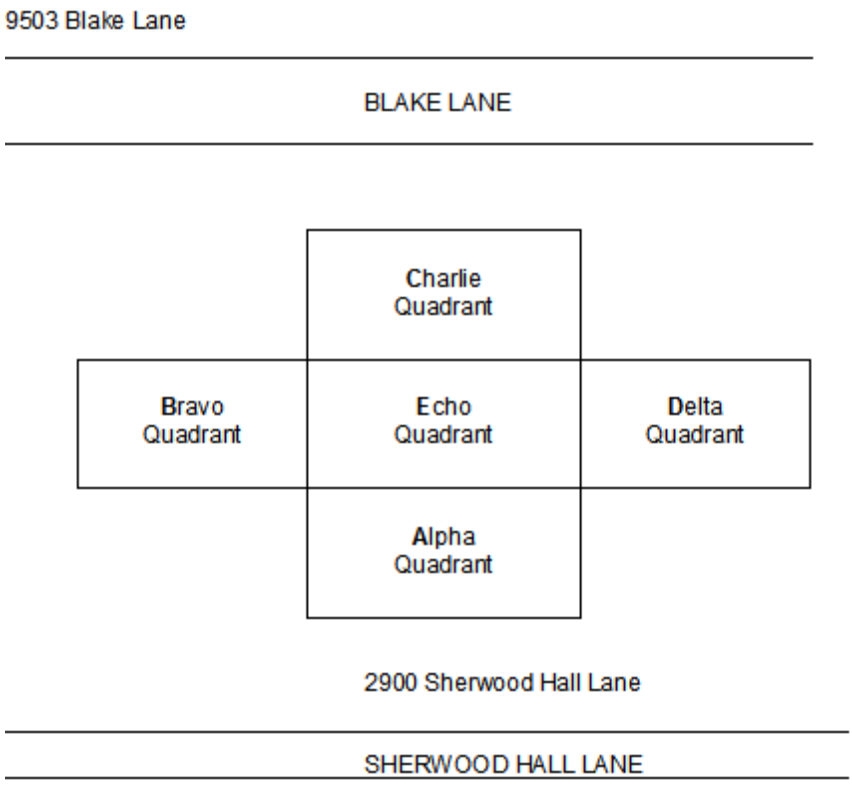

Figure 4: Multi-Story Division Designations

Roof: Roof Division	
5th Floor	**Division 5**
4th Floor	**Division 4**
3rd Floor	**Division 3**
2nd Floor	**Division 2**
1st Floor	**Division 1**
Basement	**Basement Division**
P1	**Division P1**

Figure 5: Exposure Designations

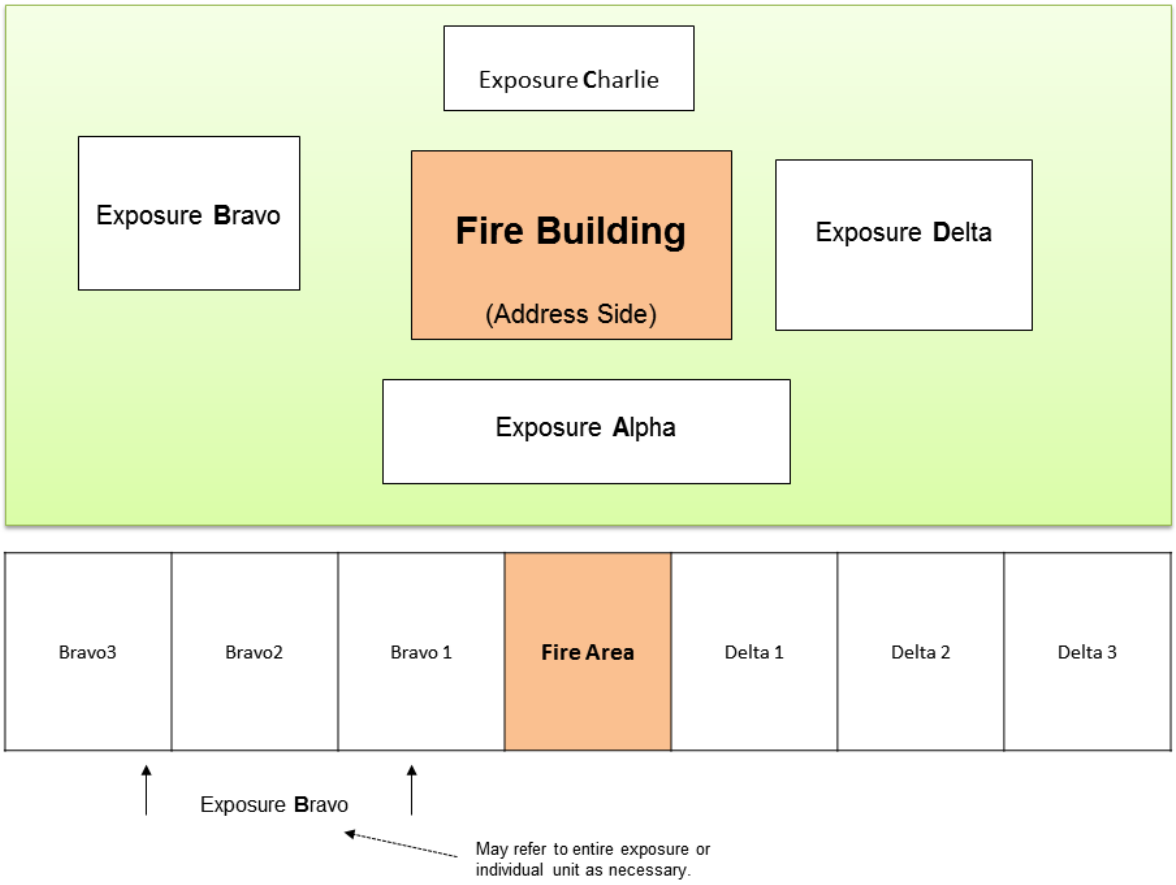

Figure 6: ICS Command Worksheet / Chart

CHARLES COUNTY INCIDENT COMMAND CHART

DATE: _____ DISPATCH TIME: _____ ARRIVAL TIME: _____ CONTROL TIME: _____

ADDRESS: OPS. CHANNEL: WATER SUPPLY CHANNEL:

ENGINE STAFFING		IC ASSIGNMENTS	UNIT
		COMMAND	
		OPERATIONS	
		PIO	
		SAFETY	
		ACCOUNTABILITY	
		CHARLIE DIVISION	
		MEDICAL BRANCH	
TANKER STAFFING		REHAB GROUP	
		ROOF DIVISION	
		DIVISION 5	
		DIVISION 4	
		DIVISION 3	
TRUCK STAFFING		DIVISION 2	
		DIVISION 1	
		BASEMENT DIVISION	
		RECON GROUP	
SQUAD STAFFING		SUPERVISOR:	
		UNITS:	
		NOTIFICATIONS	YES/NO
CHIEF STAFFING		SMECO	
		GAS COMPANY	
		TOWN OF LA PLATA	
		FIRE MARSHAL	
AMBO STAFFING		FORESTRY	
		HEALTH DEPT.	
		BLDG. INSPECTOR	
		RED CROSS	
		SHA/COUNTY ROADS	
		POLICE AGENCY	
EMS SUP STAFFING		LADIES AUXILIARY	
		HELICOPTER	

TACTICAL GROUPS
ATTACK GROUP
SUPERVISOR:
UNITS:
DIVISON: QUAD:
VENT GROUP
SUPERVISOR:
UNITS:
DIVISON: QUAD:
RESCUE GROUP
SUPERVISOR:
UNITS:
DIVISON: QUAD:
RIT GROUP
SUPERVISOR:
UNITS:
LOCATION:
EXPSOURE GROUP
SUPERVISOR:
UNITS:
LOCATION:
WATER SUPPLY GROUP
SUPERVISOR:
UNITS:
LOCATION:
STAGING GROUP
SUPERVISOR:
UNITS:
LOCATION:
EXTRICATION GROUP
SUPERVISOR:
UNITS:

INCIDENT OBJECTIVES	✓
PRIMARY WATER SUPPLY	
SECONDARY WATER SUPPLY	
LINE ON THE FIRE	
BACK-UP LINE DEPLOYED	
FLOOR ABOVE/BELOW CHECKED	
PRIMARY SEARCH	
SECONDARY SEARCH	
EXPOSURE CHECK	
CONTROL UTILITIES	

UTILITY CONTROL	BY UNIT #	✓
ELECTRIC		
GAS		
WATER/SPRINKLER		

OCCUPANTS DISPLACED			
# ADULTS:		# CHILDREN:	

AIR MONITORING FOR GAS LEAKS (ESTABLISH 330' HOT ZONE)

Entry Time: Exit Time:

	Initial	2nd meter	after FD Vents
Oxygen: Normal Ranges < 19% - 23.5% >			
CO: 35+ PPM don SCBA	@ENTRANCE:		
H2S: 10+ PPM don SCBA (rotten-egg odor)	TOP FLOOR:		
Natural Gas: 5-15% LEL Ignition (RISES)	1ST FLOOR:		
Propane: 2.5-9.1% LEL Ignition (SINKS)	BASEMENT:		

TASK FORCES
RIT: TRK/RS, ENG, AMB(1 ALS)
Water Supply: ENG, 2 TA
Brush: BU, ENG, BU, AMB + TA in Non-Hydrant
EMS: RS/TRK, 2 ENG, 4 AMB(1 ALS), MCU

TECHNICAL RESCUE			
ROPE		COLLAPSE	
HAZMAT		CONFINED SPACE	
DIVE TEAM		SWIFTWATER	

Rapid Intervention Taskforce/MAYDAY		
Unit(s): E TRK/SQD EMS		
Staging Location(s):		
Mayday Time:		
Location:		
Unit w/ Mayday:		
Name(s):		
Air Supply:		
Resources Needed:		
Consider 2nd Alarm when activating RIT		

ACCOUNTABILITY CHECKS (+ or -)		
20m:	80m:	140m:
40m:	100m:	160m:
60m:	120m:	180m:

CATASTROPHIC EVENT:		
MAYDAY:	OFF->DEF:	@END:

Confirm readings w/ 2nd meter

ADDITIONAL UNITS	
ENGINE	
TRUCK	
SQUAD	
TANKER	
CHIEFS	
BLS	
ALS	
OTHER	

Figure 7: Rural Water Supply Worksheet / Chart (Pg. 1 of 2)

CHARLES COUNTY—RURAL WATER SUPPLY ICS WORKSHEET

Water Supply Group Supervisor	**Water Supply Channel**	**Command Channel**

CHASCO Tanker Sizes in Gallons	
F-TA1	2800
P-TA2	2500
TA4	4000
F-TA5	3800
P-TA6	2000
TA7	3000
TA8	3500
F-TA10	3000
P-TA11	2500
F-TA12	2900

If it takes more than 3 minutes for an Engine to Establish DRAFT replace them immediately

Dump Site	*Fill Site 1*	*Fill Site 2*
Location:	Location:	Location:
Supervisor:	Supervisor:	Supervisor:
Dump Engine(s): Water Transfer Engine Needed? *YES* or *NO* # of Basins needed to meet the GPM flow? _____	Fill Engine(s): Tankers:	Fill Engine(s): Tankers:

TASK OR OBJECTIVE	DONE
Establish Dump Site Established with Engine(s) _____	
Establish 1st Fill Site Staff with 3rd Due Engine _____	
Establish 2nd Fill Site Established with Engine(s) _____	
Get Separate Water Supply Radio Channel	
Ensure Dump Site does not interfere with Fire Ground Operations	
Add 1 Tanker for Safety Margin	

Number of Tankers Needed for Shuttle Operations

Required GPMs	*Round Trip Mileage*		
	2 miles	4 miles	6 miles
1000	6	8	10
900	6	7	9
800	5	7	8
700	5	6	7
600	4	5	6
500	3	4	5
400	3	4	4
300	2	3	3
200	2	2	2

Distance = _____ miles	Time ***Departs*** Dump Site	Time ***Returns*** Dump Site	***Total*** Fill/Travel Time	# of Loads Dumped
Tanker # _____ (size _____)				
Tanker # _____ (size _____)				
Tanker # _____ (size _____)				
Tanker # _____ (size _____)				
Tanker # _____ (size _____)				
Tanker # _____ (size _____)				

Figure 8: Rural Water Supply Worksheet / Chart (Pg. 2 of 2)

CHARLES COUNTY—RURAL WATER SUPPLY ICS WORKSHEET

Continuous Flow Capabilities for 3000 gallon Tankers							
Hook-Up Time+ Fill Time+ Dump Time = (in Minutes)	Distance from water source to scene of incident in round trip mileage (to and from)						
	2 miles	4 miles	6 miles	8 miles	10 miles	12 miles	20 miles
2	496	317	233	185	153	130	82
3	426	287	217	174	145	125	80
4	373	262	202	164	139	120	78
5	331	241	189	156	132	115	76
6	299	223	178	148	127	111	74
7	271	208	168	141	122	107	72
8	249	194	159	135	117	103	70
9	230	182	151	129	113	100	69
10	214	172	144	124	108	97	67
11	199	163	137	119	105	94	66
12	187	154	131	114	101	91	64
13	176	147	126	110	98	88	63
14	166	140	121	106	95	86	62
15	157	134	116	103	92	83	60
16	150	128	112	99	89	81	59

Figure 9: Charles County Rapid / Mayday Intervention Worksheet / Chart

Initial Actions & Considerations

- ☐ 1. Confirm "MAYDAY" (*ID the problem*)
- ☐ 2. FIRE GROUND ANNOUNCEMENT →
- ☐ 3. LOCATION OF "MAYDAY"
- ☐ 4. UNIT WITH A "MAYDAY"
- ☐ 5. NAME OF MEMBER(S)
- ☐ 6. AIR STATUS OF MEMBERS
- ☐ 7. RESOURCES NEEDED FOR RESCUE
- ☐ 8. DEPLOY "RIT"- RESCUE ACTION PLAN
- ☐ 9. NOTIFY COMMUNICATIONS →
- ☐ 10. REQUEST ADDITIONAL RESOURCES
- ☐ 11. CONTINUE FIRE ATTACK
- ☐ 12. CONDUCT ACCOUNTABILITY CHECK
- ☐ 13. ASSIGN MAYDAY BRANCH DIRECTOR
- ☐ 14. ASSIGN RIT SAFETY OFFICER
- ☐ 15. LEVEL III ACCOUNTABILITY
- ☐ 16. STAGE & MAINTAIN ALS RESOURCES
- ☐ 17. CREATE A DEFENDABLE SPACE
- ☐ 18. DEVELOP ALTERNATE STRATEGIES
- ☐ 19. CONTROL UNASSIGNED RESOURCES
- ☐ 20. RISK ASSESSMENT
- ☐ 21. CONTROL RELEASE OF INFO.
- ☐ 22. NOTIFY ALL UNITS & COMM. WHEN THE MAYDAY HAS BEEN CLEARED
- ☐ 23. BE SURE RIT IS RE-ESTABLISHED

CHARLES COUNTY MAYDAY WORKSHEET

Mayday *Channel*	Mayday *Called*	Mayday *Cleared*

Command to all units on the fire ground, a **MAYDAY** has been declared. Stop all routine radio traffic & continue fire attack. The following units are assigned to the Mayday Branch (*assign units*). Prepare for an accountability check.

NAME	CO.	FLOOR/ QUAD	AIR SUPPLY	NOTES

Command to Charles County, a **MAYDAY** has been declared at (*address*), give (*LUNAR*)
Start the ***RIT Task Force*** & stage them at: _____
Also start the ***next alarm*** & stage them at: _____

NEXT ALARM: E _____ Chiefs _____
T _____ C _____
RS _____ EMS _____

MAYDAY Branch Director: RIT Safety Officer:

Mayday Group 1	Mayday Group 2	Mayday Group 3	Support Group	EMS Group
Supervisor:	*Supervisor:*	*Supervisor:*	*Supervisor:*	*Supervisor:*
In Time: Out Time:	In Time: Out Time:	In Time: Out Time:	In Time: Out Time:	

Notes/Sketch: