



FIRE RESCUE

ALBEMARLE COUNTY

STANDARD ADMINISTRATIVE POLICY

Subject:	Fleet Size
Reference Number:	SAP-DEP-026
Effective Date:	28 September 2005
Last Revision Date:	25 April 2007

Signature of Approval:

J. Dan Eggleston, Chief

Purpose:

The purpose of this policy is to outline the established fleet size for fire, rescue, and EMS apparatus in Albemarle County.

Background:

This policy was adopted by the Fire Rescue Advisory Board at the 28 September 2005 meeting.

Scope:

This policy applies to the fleet of apparatus providing fire, rescue, and emergency medical services to Albemarle County.

Policy:

A. Engines

1. A total of sixteen (16) engines are needed to adequately cover the call load and square mileage of Albemarle County.
2. The NFPA recommends a reserve fleet to have about 25-33% the number of vehicles in the front-line fleet; four (4) reserve engines are needed to support the overall fleet.
3. Stations serving large rural areas (2, 3, 4, 5, 6, and 7) will each require at least two (2) engines (one of which may be considered a reserve for the system) in the station based on the following:
 - a. The large area covered by these stations
 - b. The time it will take for automatic aid companies to arrive
 - c. The probability of multiple calls for service in the County
 - d. The necessity to move-up or transfer companies to cover the urban areas during significant events.
 - e. A desired fire flow of 250 gpm for the first twenty (20) minutes after arrival of the first engine.
4. Urban area stations will require a single engine unless analysis of the call load for that engine/station approaches 2,000 annual responses (i.e., Seminole Trail requires two engines).

B. Tankers

1. Staff recognizes that our system falls short in supplying an adequate fire flow in the rural areas. Therefore, we will address this issue in three (3) ways:
 - a. Continue to outfit new engines with Compressed Air Foam Systems (CAFS). CAFS has proven to reduce water needs by at least 1/3.
 - b. Increase the number of tankers in our system. In most cases, two (2) tankers in each station is the not a solution. Therefore, tankers will be strategically located around the County to quickly respond to a working fire on the initial dispatch.
 - c. The dispatch protocol will call for more tankers on the initial response to a known working fire in the rural area.
2. Considering the above approach to rural water supply, a total of nine (9) tankers are needed to adequately cover Albemarle County.
3. Additionally, two (2) reserve tankers are needed to support the fleet. This conclusion is based on providing a fire flow of 250 gpm for the first twenty (20) minutes after arrival of the first engine.
4. Tanker 39, Tanker 49, and Tanker 57 (once replaced) will not be sold and will be housed at their respective stations until the Hollymead, Ivy, and Monticello stations are equipped with staffed tankers. [Once the tankers are placed at the new stations, the previously replaced tankers will be sold.]

C. Brush Trucks

1. A total of six (6) brush trucks are needed to adequately cover an average forest fire season in Albemarle County. Additionally, one (1) reserve brush truck is needed to support the fleet.
2. The Department of Forestry has a brush truck that is located in Albemarle County and services the region.
3. A contingency plan shall be developed to address the inevitable "above average" fire season in Albemarle County. One or more of the following options shall be utilized:
 - a. State or Federal resources are brought to Albemarle County to assist; or
 - b. One slide-in unit will be purchased and placed on existing utility or other four-wheel drive vehicle as necessary. The four-wheel drive vehicles are part of the existing fire rescue fleet (station utility vehicles, etc.).

D. Truck/Aerial

1. A total of five (5) trucks/aerials are needed to adequately cover the call load, commercial and residential development, and overall fire risk in Albemarle County.
2. With regard to aerial service, the following must be considered when determining fleet size:
 - a. Cooperative efforts with the City of Charlottesville to provide adequate aerial service in both the City and urban ring
 - b. Cooperative efforts to share an aerial as a reserve with the City of Charlottesville.
 - c. Justification for aerial service for Station 11 considering the opportunities listed above.
 - d. Justification may exist to place an aerial in the Scottsville area to cover the risks associated with the town. Further work is required to better understand the apparatus needs and possible cost sharing partnership with the Town of Scottsville.

E. Heavy Squads

1. A total of four (4) heavy rescue squads are needed to adequately cover the City of Charlottesville and Albemarle County.
2. These units are strategically located to provide the quickest response time possible to the urban areas, most heavily traveled major roads, and the Charlottesville-Albemarle Airport.
3. Rescue engines will support the vehicle extrication capabilities of these heavy squads.

F. Rescue Engines

1. A total of six (6) rescue engines are needed to cover extrication needs in the area in support of the heavy squads.
2. Generally, a rescue engine shall be located where the response will be quicker than that of the heavy squad.

G. Ambulances

1. The adequate number of ambulances for the system is based on a number of factors and additional analysis will need to be conducted.
2. For the FY 2006-07 CIP, two (2) ambulances are scheduled for replacement; a Type I ambulance for CARS and a Type II ambulance for SVRS.
3. Scottsville has a total of four (4) ambulances; analysis will determine if this is the appropriate number of ambulances for that station. In the meantime, the ambulance replacement for SVRS will be put on hold.

H. Hazardous Materials Response

1. The City and County have agreed to support a regional Hazardous Materials Team.
2. Resources for hazardous materials and spill response shall consist of the following:
 - a. Primary or Technical Haz-Mat Response Apparatus located at CFD Fire Headquarters.
 - b. Secondary or Support Haz-Mat and Spill Response Apparatus located at Earlysville.
 - c. Spill Response Trailers located at CFD Fire Headquarters and Scottsville Fire.

I. Air Utility or Salvage Unit

1. One (1) air utility is required to support operations in the City and County.
2. The present apparatus at CFD Fire Headquarters will serve that need.

J. Command and/or EMS Response Vehicles

1. A command vehicle and/or EMS response vehicle will be located at each fire and EMS station.
2. This is a new initiative, and as such will be required to go through the normal budget process for final approval.

K. Other Specialty or Utility Apparatus

1. Other specialty squads or apparatus, zone cars, trucks, support vehicles, or other apparatus shall be addressed on a case-by-case basis.
2. Generally, such vehicles would be supported by utilizing other replaced vehicles (i.e., replaced police department cars, replaced brush trucks, etc.) and will not be a part of the defined fleet.
3. The County will support the utilization of these vehicles by covering the insurance for at least one support/staff vehicle and one utility for each station.

	Engine	Reserve Engine	Rescue Engine	Tanker	Reserve Tanker	Brush Truck	Reserve Brush Truck	Command/EMS Response	Ambulance	Squad	Truck/Aerial	Total
East Rivanna 2	1	0	1	1	1	1	0	1	0	0	0	6
North Garden 3	1	0	1	1	0	1	0	1	0	0	0	5
Earlysville 4	1	1	0	1	0	1	0	1	0	0	0	5
Crozet 5	2	1	0	1	0	1	1	1	0	0	1	8
Stony Point 6	0	1	1	1	0	1	0	1	0	0	0	5
Scottsville 7	2	0	0	1	1	1	0	1	0	0	0	6
Seminole Trail 8	1	1	1	0	0	0	0	1	0	1	1	6
Monticello 11	0	0	1	1	0	0	0	1	1	0	1	5
Hollymead 12	1	0	0	1	0	0	0	1	1	0	1	5
Pantops 13	1	0	0	0	0	0	0	1	1	0	1	4
East Ivy 14	1	0	0	1	0	0	0	1	1	0	0	4
CARS R1	0	0	0	0	0	0	0	1	8	1	0	10
WARS R5	0	0	0	0	0	0	0	1	3	1	0	5
SVRS R7	0	0	0	0	0	0	0	1	3	1	0	5
Total:	11	4	5	9	2	6	1	14	18	4	5	79

	Station 2	Station 3	Station 4	Station 5	Station 6	Station 7	Station 8	Station 11	Rescue 1	Rescue 5	Rescue 7	Station 12	Station 13	Station 14
Established Fleet -Apparatus automatically replaced with new apparatus based on approved replacement criteria -Entire operating & support costs borne by county	Engine 24 (RSQ) Engine 21 Car 20 Brush 23 Tanker 27 Tanker 26 Attack 22	Engine 32 Engine 34 (RSQ) Car 30 Brush 36 Tanker 39	Engine 41 Engine 45* Car 42 Brush 43 Tanker 49 Support 47	Engine 56* Engine 58 Engine 54 Brush 53 Brush 55* Car 50 Tanker 57 +Truck/Aerial	Engine 61* Engine 62 (RSQ) Tanker 69 Brush 64 Car 61	Engine 72 Engine 73 Tanker 77 Tanker 79** Brush 75 Command/EMS	Engine 82* Engine 84 Engine 85 (RSQ) Tower 18 Car 80 +Squad	Engine 111 (RSQ) Truck 115 Car 111 +Tanker +Ambulance	Squad 133 (50%) Squad 134 Ambulance 140 Ambulance 142 Ambulance 144 Ambulance 146 Car 139	Ambulance 501 Ambulance 503 Ambulance 504 Squad 505 Car 507 Car 506	Ambulance 706 Ambulance 703 Ambulance 708 Car 708 Squad 709	+Engine +Tanker +Car +Ambulance +Truck/Aerial	+Engine +Car +Ambulance +Truck/Aerial	+Engine +Tanker +Car +Ambulance
Support Fleet -Replaced with retired ACFR/ACPD station vehicle -Insurance, fuel, maintenance, & support costs borne by county	Car 22	Utility 35 Utility 38	Car 40	Car 51 Utility 59	Car 60 Utility 65	Car 70 Utility 76	Car 89 Utility 86	Car 110	Car 132	Car 508 Car 508	Car 700 Utility 709			
Additional Fleet Apparatus -Apparatus purchased/replaced by individual station or by special budget request -Insurance, fuel, maintenance, & support costs borne by county	Attack 22 Engine 22 Car 21 Old Brush 23** Old Tanker 27**	Brush 31 Old Tanker 39**	Brush 46 Old Engine 41** Old Tanker 49**	Old Tanker 57**	Brush 63	Haz-Mat Trailer +Command/EMS	Car 81 Salvage 87 +Car	Car 112 Rehab 10	Car 130 Car 131 Squad 135 Water Rescue 136 Logistics 137 Car 148 Car 149 Collapse Trailer Events Trailers (2) Boats (3) Gators (1 +1) Support 138 Ambulance 141 Ambulance 143 Ambulance 145 Ambulance 147	Gator 5 Trailer	Water Rescue 704 Ambulance 707***			

(RSQ) - A standard pumper outfitted with a full complement of extrication tools for areas where a heavy squad response may be delayed.

* Reserve - A piece available for transfer to another station when the first line apparatus is out of service or a piece available for transfer as a fill-in when apparatus is committed to an incident for a significant period of time. The transfer will be effective for thirty (30) days, and beyond thirty (30) days, the transfer will be reevaluated by the chief officers affected.

** Temporary - Apparatus to temporarily remain at the station until placement of apparatus is ready for response at one of the planned stations (12, 13, or 14).

+ - Apparatus planned for addition in the next five (5) years.

*** Apparatus to temporarily remain at station until placement of apparatus is ready for response at Station 11 at which time it becomes reserve.