

**C H A R L O T T E S V I L L E  
A L B E M A R L E  
R E S C U E  
S Q U A D**

*staffed by professional volunteers...*



**2007 ANNUAL REPORT**

CHARLOTTESVILLE ALBEMARLE RESCUE SQUAD, INC.  
828 MCINTIRE ROAD  
CHARLOTTESVILLE, VA 22902

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# MISSION STATEMENT

## (1959)

The Articles of Incorporation of the Albemarle Rescue Squad dated January 14, 1958, set forth the following statement of purpose:

**To save life and administer first aid, to teach methods of safety and first aid to the general public and in the schools; to serve in time of flood, fire, hurricane and famine; to render assistance in case of accident, casualty and illness; to instruct its members in principles and applications of the life saving and first aid...**

The *Albemarle* Rescue Squad became the *Charlottesville - Albemarle* Rescue Squad soon after beginning operations in November of 1960. The Squad carries on the original mission by:

- Training and equipping members to respond to calls for assistance and provide basic and advanced life support care;
- Maintaining specialized rescue teams to provide vehicle extrication, water rescue, and technical rescue;
- Providing technical rescue training classes to local EMS agencies;
- Providing logistical support for the fire departments when needed.



The Charlottesville-Albemarle Rescue Squad strives to meet or exceed applicable standards of the Commission for the Accreditation of Ambulance Services (CAAS) or of the American Society for Testing and Materials (ASTM).

# AGENCY OVERVIEW

The Charlottesville-Albemarle Rescue Squad (CARS) provides rescue and emergency medical transport service to the City of Charlottesville, the University of Virginia and Albemarle County.

The Charlottesville-Albemarle Rescue Squad operates 24 hours a day, 365 days a year. CARS is a volunteer rescue squad with approximately 160 active members. We also have career firefighter/paramedics from Albemarle County Fire & Rescue that supplement our staffing on weekdays. The organization is headed operationally by L. Dayton Haugh, who has served as Chief for the past 12 years. Administratively, the department is run by President Larry Claytor. We are a member of the Virginia Association of Volunteer Rescue Squads assigned to District I. In 2007, we ran over 12,000 incidents and in 2006 *Firehouse Magazine* ranked us as the busiest volunteer rescue squad in the country.

The CARS fleet includes eight advanced life support ambulances (medic units), two advanced life support quick response cars (zone cars), two heavy rescue trucks (squads), a water rescue truck with two boats, a technical rescue truck, a collapse rescue trailer, two command cars, a mass causality incident truck and a special events bicycle response team with support trailer. All current apparatus is owned by the department and was purchased primarily with funds raised through donations from our community. Albemarle County has adopted an apparatus replacement plan and has reimbursed the cost of one ambulance in FY 2006.

CARS always has a supervisor on duty who is known as a Duty Officer. The Duty Officer is available to actively manage the operational and administrative issues of the agency while insuring that Emergency Medical Services are provided to the community in the most effective manner. Specially selected personnel take turns for 12 hour shifts to ensure that operating procedures and guidelines are being followed consistently. They manage the department's tactical resources on a minute-to-minute basis, and provide Incident Management System services at major incidents. These commanders, while on duty, maintain the rank of Deputy Chief and carry the delegated authority of the Chief. They are authorized to modify incident assignments, execute policy, conduct investigations, and initiate corrective actions.

The Charlottesville-Albemarle Rescue Squad has over 100 personnel trained in advanced life support and over 90 certified at the EMT-B level. ALS certification includes over 600 hours of classroom training and months of practical rotations in the hospital, along with a minimum of 40 hours of continuing education annually. ALS certified personnel can initiate complex medical and airway procedures for critically injured trauma and medical emergency patients. EMT-B providers receive 121 hours of schooling and are trained with basic intercessory procedures to react to most any emergency situation. All personnel must be precepted by experienced personnel before being released. These technicians are also able to assist patients with administering their own medications.

We are dispatched on emergency calls by the Emergency Communications Center (ECC). Assignment of apparatus to emergency calls is predetermined based on response time and distance. Most members carry department issued pagers which alert them to major emergency calls and assist in bringing in additional staffing during peak call loads.

# AGENCY LICENSURE

CARS is licensed by the Virginia Department of Health as an Emergency Ground Transport - Advanced Life Support (Intermediate/Paramedic) agency pursuant to the Rules and Regulations Governing Emergency Medical Services. Every two (2) years the agency license must be reissued, and, to be eligible for licensure, the agency must be inspected by the Field Representative of the Office of Emergency Medical Services. The agency is required to have available for inspection, among other things, its Standard Operating Procedures, training and personnel records, vehicle maintenance records, medical equipment and supplies, and vehicles.

## AGENCY MANAGEMENT

### Board of Directors

CARS is a volunteer, non-profit, Virginia non-stock corporation, which qualifies as a 501(c)(3) charitable corporation under the Internal Revenue Code. Control of the corporate business is vested in the Board of Directors. Current members of the Board include:

Larry Claytor – President	(07-09)
Pete Davidson – Vice President	(06-08)
Dayton Haugh, J.D. – Chief	(07-09)
Page Williams, J.D. – Squad Attorney	(06-08)
Wick Hunt, M.D. – Squad Physician	(07-09)
Ashley Blair – Active Squad Member	(07-09)
Laura Johnson – Active Squad Member	(07-09)
Benjamin Sojka – Active Squad Member	(07-09)
John Burruss – Active Squad Member	(06-08)
J.W. Albright – Active Squad Member	(06-08)
Sarah Lawson – Active Squad Member	(07-09)
Mike Bannister – Active Squad Member	(06-08)
Jay Levine – Active Squad Member	(06-08)
Michael Berg – Active Squad Member	(06-08)
Landon Harris – Retired Life Member	(06-08)
Ron Williams – Retired Life Member	(07-09)
Jim Carpenter - Non-Member Director	(06-08)
Richard Crampton, M.D. - Non-Member Director	(07-09)

### Corporate Officers

The Corporate Officers are responsible for matters pertaining to the Squad policies and operations as set forth in the Constitution and by-laws. The Corporate Officers transact business for the Squad.

President – Larry Claytor  
Vice-President – Pete Davidson  
Secretary – Michael Berg  
Treasurer – Jay Levine

## Line Officers

The Line Officers are responsible for day-to-day operations of the squad, including human resources and training, incident response and management, etc. The squad has a “flat” organizational structure, and refers to its chief operations officer as ‘Chief’. The following serve as Line Officers:

Chief – Dayton Haugh  
Assistant Chief Operations – Benjamin Sojka  
Deputy Chief Night Operations – Rob Walker  
Deputy Chief Day Operations – Sarah Lawson  
Monday Night Crew Captain – Zane Shuck  
Tuesday Night Crew Captain – William Spencer  
Wednesday Night Crew Captain – Noah Madden  
Thursday Night Crew Captain – Carrie Weber  
Friday Night Crew Captain – Mike Berg  
Rotation Crew Captain – Rob Walker  
Sunday Day Crew Captain – Alex Belgard  
Sunday Night Crew Captain – John Albright  
Monday Day Crew Captain – Anthony Judkins  
Tuesday Day Crew Captain – John Moore  
Wednesday Day Crew Captain – Jason Inofuentes  
Thursday Day Crew Captain – Sara Lawson  
Friday Day Crew Captain – Cynthia Garrett



One of the Line Officers (or other senior member) serves as the "Duty Officer", and is on call 24 hours a day for emergency management and administrative matters, complimenting the on-duty supervisor (crew captain).

## **Support Officers**

Support Officers are selected by the Chief and they are charged with the running of their respective sub-specialty group. Each position is for a minimum one-year term.

*Fleet Operations Officer* (Benjamin Sojka) - responsible for maintaining the fleet of vehicles, performing minor repairs, coordinating major repairs and maintaining service records. Most ambulances are covered by a fleet protection program through the manufacturer.

*Supply Officer* (J. W. Albright) – responsible for maintaining a sufficient stock of first-aid equipment and supplies for use on calls. Also maintains awareness of changes within industry and recommends substitution of supplies or additions to stock to the Investigation Committee to insure equipment and supplies are state-of-the-art and function to level of expectation.

*Deputy Chief of Special Operations* (John Burruss) – supervises the water rescue, vehicle rescue, special event medical management and technical rescue captains. Primarily responsible for supervision of all special operations teams captains.

*Water Rescue Captain* (Jim Miller, R.N.) – in charge of the water rescue team and supervises its functions. Primarily responsible for setting team goals, training and management of the budget.

*Technical Rescue Captain* (Jake Benner) – in charge of the technical rescue team and supervises its functions. Primarily responsible for setting team goals, training and management of the budget.

*Vehicle Rescue Captain* (Landon Harris) – in charge of the vehicle rescue team and supervises its functions. Primarily responsible for setting team goals, training and management of the budget.

*Special Event Captain* (Andrew Barros) – in charge of the special event team and supervises its functions. Primarily responsible for coordinating all stand-by events, works closely with SEMM, sets team goals, training and management of the budget.

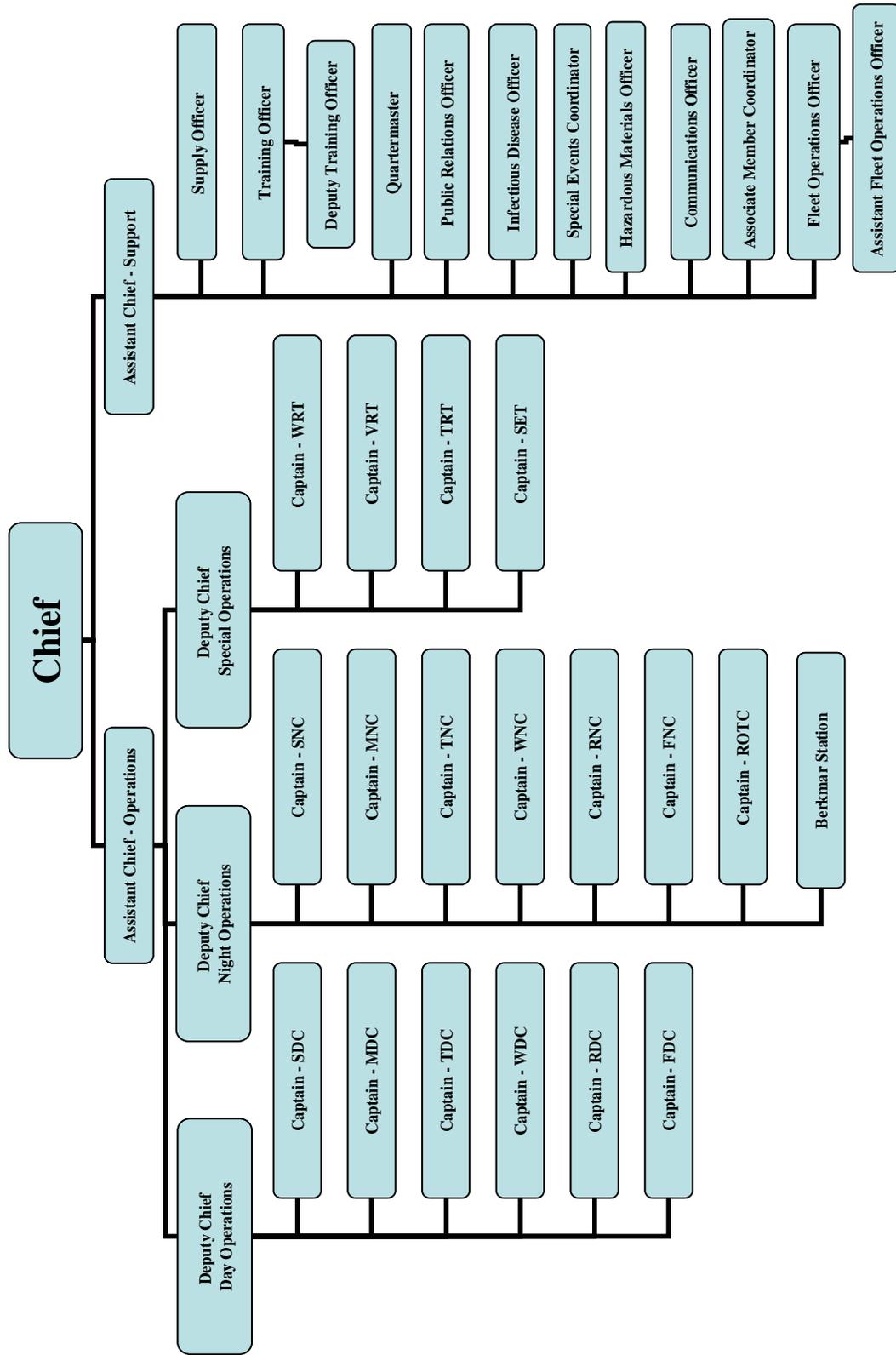
*Training Officer* (Anthony Judkins) - responsible for all the training, certification and re-certification of all active members. The Training Officer is also responsible for handling the preliminary investigation of all complaints against Squad members performing in an emergency. Reports of the findings are made to the Chief.

*Health & Safety Officer* (Tom Balmer) - is the communicable disease liaison officer who maintains oversight and provides information to prevent exposure to infectious disease and investigates all incidents of exposure to infectious disease.

*Uniforms* (Chris Meheta & Kirston Cooney) – responsible for the research, procurement and distribution of all uniforms, safety apparel and personal protective equipment.

*Associate Member Coordinator* (Farrell Long) – is responsible for coordinating associate member running schedules, maintaining records and advising the Manpower & Training Committee quarterly on number of hours each associate member has run.

*Communications Officers* (Alex Belgard & Andrew Barros) – responsible for the research, procurement and maintenance of all radio equipment including pagers, mobile radios and station alerting systems.



# AGENCY OPERATIONS

## RESPONSE TIMES

The “Response Time” is made up of the following elements:

- processing time at the 9-1-1 Center;
- time dispatched to unit responding;
- travel time to scene of the emergency for the first responder (may be a fire engine, ambulance or other vehicle);
- travel time to the scene of the emergency for advanced life support personnel (may be fire engine, ambulance or other vehicle);
- travel time for the transport unit (ambulance).

On all EMS calls, the National Fire Protection Association (NFPA) 1710 Standard\* establishes a turnout time of one minute and four minutes or less for the arrival of a unit with first responder or higher level capability at an emergency medical incident. This objective should occur 90% of the time.

The standard recommends an arrival of an ALS company within an eight-minute response time to 90% of incidents. This does not preclude the four-minute initial response.

No response time standard for the ambulance is suggested.

\*NFPA 1710 (Standard for the Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations, and Special Operations to the Public by Career Fire Departments)

(The NFPA 1720 standard for volunteer fire departments does not lay out specific time responses, licensure levels or staffing criteria for medical emergencies, but merely defines what an EMS system is and its various functions.)

The EMS Oversight Committee in their report *Emergency Medical System Delivery – Analysis of System Performance and Recommendation to Improve Service* set the following benchmarks for response times in the City:

- 5 minute response time goal for BLS first response resource on-scene, 90% of the time;
- 9 minute response time goal for ALS first response resource on-scene, 90% of the time;
- 13 minute response time goal for an ambulance on-scene, 90% of the time;

The following chart shows CARS response times in 2007:

## RESPONSE TIME REPORT\*

<b>CARS – City Calls</b>	<b>May 2007</b>	<b>June 2007</b>	<b>July 2007</b>	<b>August 2007</b>	<b>September 2007</b>	<b>October 2007</b>	<b>November 2007</b>	<b>December 2007</b>
Percent Within 9 Minutes of Dispatch	89%	88%	92%	91%	93%	93%	92%	94%
90% Response Time	9.13333 Min.	9.23333 Min.	8.4 Min.	8.45 Min.	8.47 Min.	8.53 Min.	8.69 Min.	8.44 Min.
Percent Within 10 Minutes of Dispatch	94%	93%	95%	96%	97%	96%	96%	97%
<b>CARS – County Calls</b>	<b>May 2007</b>	<b>June 2007</b>	<b>July 2007</b>	<b>August 2007</b>	<b>September 2007</b>	<b>October 2007</b>	<b>November 2007</b>	<b>December 2007</b>
Average Response Time (Dispatch to Arrival)	N/A	N/A	9.2	9.04	8.52	9.26	9.29	8.77
Median Response Time (Dispatch to Arrival)	N/A	N/A	8.23	8.13	7.72	8.48	7.95	7.87
No. Calls to Hollymead First Due Area	N/A	N/A	18	22	17	23	20	10
No. Calls to Western Albemarle RS First Due Area	N/A	N/A	3	4	5	3	1	3
No. Calls to Scottsville RS First Due Area	N/A	N/A	3	3	2	2	0	2

\*Accurate data is available from mid-April 2007 on.

## SUMMARY OF RESPONSE

<b>TYPE</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>
Abdominal Pain	352	355	404	437
Allergic Reaction	113	142	162	112
Animal Bite	19	14	23	11
Assault/Rape	214	282	263	255
Back Pain	126	165	149	150
Breathing Problems	1,128	1,152	1,148	1,099
Burns	17	20	15	16
CO Poisoning	13	14	12	20
Cardiac Arrest	143	142	154	135
Chest Pain	1,135	1,338	1,274	1,145
Choking	53	62	49	47
Convulsions (seizures)	476	469	477	479
Diabetic	275	284	310	260
Drowning (near)	5	13	7	10
Electrical Injury	2	5	2	0
Eye Problems	17	22	9	25
Falls	1,158	1,200	1,225	1,244
Headache	0	0	0	0
Heat/Cold Exposure	25	41	32	25
Hemorrhage	243	281	291	288
Industrial/Farm Accident	4	27	4	10
Overdose	293	316	371	411
Pregnancy	99	82	88	100
Psychiatric	34	38	32	44
Sick Person	1,457	1,441	1,662	1,610
Stabbing/Gunshot Wound	48	48	54	51
Stroke	286	306	309	270
Traffic Accident Injuries	1,709	1,638	1,508	1,419
Injured Person	431	484	507	501
Unconscious Person	605	596	631	597
Unknown Problem	286	354	345	416
Agency Assist	382	422	377	221
Mutual Aid Assist	105	143	54	37
Aircraft Emergency	6	9	5	7
Lifeline Alarm	156	201	168	213
Public Service Call	221	232	215	202
Special Rescue Situations	25	34	32	16
<b>TOTAL</b>	<b>11,661</b>	<b>12,372</b>	<b>12,368</b>	<b>11,883</b>

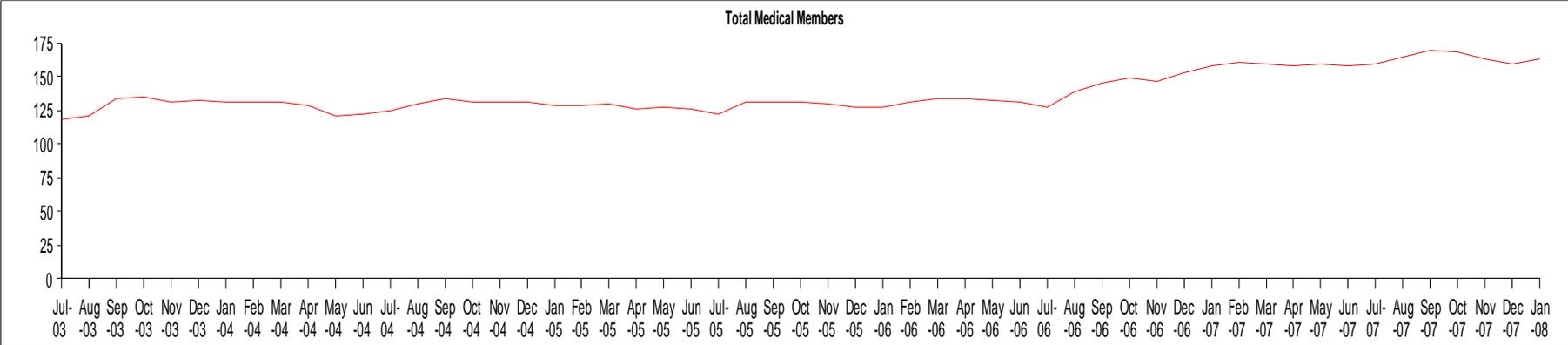
## APPARATUS RESPONSE

UNIT	#	2004	2005	2006	2007
Car	130	367	281	169	204
Car	131	478	443	185	385
Car	132	897	1,054	890	1,122
Squad	133	329	362	316	321
Squad	134	210	179	75	36
Squad	135	130	225	175	128
Water	136	11	26	24	15
Logistics	137	12	12	7	3
Support	138	41	39	43	24
Car	139	207	293	355	300
Medic	140	2,287	2,227	685	796
Medic	141	1,882	1,752	2,527	2,533
Medic	142	2,586	1,898	1,341	1,746
Medic	143	1,971	1,318	996	1,821
Medic	144	1,785	2,016	2,747	2,509
Medic	145	1,609	2,012	561	1,683
Medic	146	903	1,901	3,376	1,532
Medic	147		631	1,751	366
Car	148				22
Car	149				31
Duty 1		946	1,261	1,266	1,341
<b>SUB</b>		16,651	17,930	17,489	16,918
<b>BERKMAR</b>		795	885	600	260
<b>TOTAL</b>		17,446	18,815	18,089	17,178



# MEMBERSHIP TRENDS

This chart shows the increasing number of running members (those who respond to calls) from July 2003 to January 2007.



# AWARDS

Each June, at our annual awards banquet, we honor individuals who have stood out among the membership. While each of our members shows a high level of commitment, in 2007 the following individuals have gone past the norm of what is expected by meeting the criteria set out for each of the following awards...

- Squad Member of the Year – Benjamin Sojka
- Advanced Life Support Technician – Anthony Judkins
- Rookie of the Year – Ashley Blair
- Most Calls of the Year – Ashley Blair
- President’s Award – Laura Johnson
- Chief’s Award – John Burruss & Benjamin Sojka
- Joel M. Cochran Award – Jim Miller
- Nikki D. Kielar Memorial Leadership – JV Nable
- Community Partner Commendation – Colonial Auto Center Service Department

## **Awards Received from Outside Organizations:**

- Virginia Society of Sons of American Revolution EMS Award - L. Dayton Haugh
- TJEMS Council Award for EMS Administrator of the Year - Benjamin Sojka
- University of Virginia Class of 2007 Community Service Award - Nikola Juris
- Albemarle County Community Service Award - Larry Claytor
- Daily Progress newspaper’s Distinguished Dozen Award – Jim Carpenter



Squad members compete in competitions of skill. The Technical Rescue Team was the state Rescue Champions for 1994-95 & 2004-2005; the Water Rescue Team was the state Dive Rescue Champions for 1995-96, 1997-1998, 1998-1999, 1999-2000, 2000-2001; and the Advanced Life Support Team has been state ALS Champions on five occasions - 1986-87, 1988-89, 1995-96, 1997-1998 and 2004-2005.

# TRAINING

## Heavy and Technical Rescue Training Classes Taught In-House

(#) indicates number of students

Confined Space Rescue (operations)	19
Hazardous Materials (awareness)	9
Heavy Truck Rescue (technician)	46
Rescue Systems I	28
Rope Rescue (operations)	21
Swift Water Rescue (awareness)	25
Trench rescue (operations)	23
Vehicle Rescue (operations)	20
VEHEXT	56

Total Number of Students Taught (both CARS members and outside agencies) 247

Total Number of HTR Classes Taken by CARS Members (in-house & outside) 70

## Water Rescue Team Training

ERDI-1	1
ERDI-2	1
ERDI-Swift Water Awareness	3
ERDI Operations	1
ERDI-Ice Rescue	3
ERDI-Dry Suit	3
ERDI Full Face Masks	2
Deep Diver	1
Underwater Navigation	1
Night Diver	1
Search And Recovery	1
Wreck Diver	1
Basic Cave Diver	1
Cavern Diver	1
Master Diver	1
Rescue Diver	1
Solo Diver	1
Nitrox Diver	1
Basic Ice Diving	5
Rescue 3 SRT-1	1

ERDI= Emergency Response Diving International

## Management Classes (Taught In-House)

Supervisor Survival 21

**EMT-B Classes** (5 classes taught in-house) 99

**EMT-E Classes** 6

**EMT-I Classes** 6

**EMT-P Class** 5

<b>OEMS Symposium</b>	9
<b>Firefighter I</b>	2
<b>Swift Water Rescue Technician</b>	1



## **YEARLY CLASSES**

CARS teaches several classes each year that attracts students from around the country and gives our personnel valuable teaching experience.

**Supervisor Survival** – taught the 2<sup>nd</sup> weekend of February, covers current management issues.

**VEHEXT** – now in its 17<sup>th</sup> year, VEHEXT is a state-of-the-art vehicle extrication operations class that is taught the 2<sup>nd</sup> weekend of March each year.

**“Super” EMT (SEMT)** – taught each summer, SEMT was designed for UVA students who are in Charlottesville for the summer and who plan on joining CARS. In addition to the standard EMT curriculum, SEMT includes eight other HTR classes.

**Heavy Truck Rescue (HTR)** – one of the very few such classes taught nationwide, HTR has quickly grown to become the premiere such class in the country. The HTR curriculum has been adopted by the Virginia Department of Fire Programs and is taught as part of their heavy & tactical rescue training program.

# OPERATING COSTS

The following information was provided from the MATRIX Fire Service Consolidation Study.

## OPERATING COST PER CALL – 2006

- CARS \$39.00 (with capital costs, about \$55.00) FY06/CY06 Incidents
- Albemarle County \$849.00
- City of Charlottesville \$1,193.00

## OPERATING COST PER CAPITA – 2006

- CARS - \$6.70
- Albemarle County - \$75.00 (\$82.00 including cost of city-county fire contract)
- City of Charlottesville - \$194.00 (\$179.00 including cost of city-county fire contract)



## **WHERE DOES THE MONEY COME FROM?**

CARS conducts an annual fund drive that typically raises 1/3 to 1/2 of the annual budget. Funding from Albemarle County makes up about 20% of the budget. The rest of the cost of budgeted operations comes from other donations (and sometimes grants) during the year, including a donation from the University of Virginia.

## **WHERE DOES THE MONEY GO?**

Money donated to CARS is used to meet the current and future needs of the squad. CARS FY07-08 budget is approximately \$715,000.00. First aid supplies, oxygen, uniforms, fuel, vehicle maintenance, training, utilities and building maintenance are but some examples of budgeted items.

CARS is also faced with a number of major capital expenditures in the near future, including:

1. Replacement of 3 of 8 ambulances (approximately \$150,000.00 each) \$450,000.00
2. Replacement of one heavy rescue squad truck (Squad 133) \$600,000.00+
3. Renovation, repair and mechanical system upgrade to McIntire Rd. station – Several years ago a system evaluation discovered that the building and mechanical systems were in need of about \$300,000.00 in repair, replacement and upgrade. Major building renovation (dorms and bathroom facilities) are also needed to support the increased membership and use. A temporary building to house some vehicles now kept outside is needed at an approximate cost of \$160,000.00. However, the squad has not made these investments because there is a chance that the Meadowcreek Parkway will cause a loss of all or part of the building and that the money expended will be wasted. CARS awaits a definitive roadway design before it will commit to spending these funds. Complete replacement of the McIntire Building would cost in excess of \$5,500,000.00 now based on cost estimates for a combined CARS/Seminole Trail VFD building (see next paragraph), and the cost will continue to rise as time goes by.
4. Expansion of Berkmar Drive station – Several years ago an architect prepared an expansion concept that would double the number of beds and add one large truck bay to the existing building. The anticipated cost then was \$1,200,000.00. At the same time, Seminole Trail Volunteer Fire Department was in dire need of expansion and upgrades to its building located on the adjoining lot. CARS and Seminole Trail approached Albemarle County (which owns the property both building occupy) and the county authorized an architect to explore the feasibility of demolishing both existing stations and the construction of a new building to be jointly used by CARS and Seminole Trail on the combined lots. The cost of such a building was estimated to be in excess of \$5,500,000.00 in early 2007 dollars. The cost will certainly be more now and in the future based on the cost of construction materials. This project is ongoing.

# ACCOMPLISHMENTS

## TECHNOLOGY

Member Alex Belgard wrote an entirely new PPCR recording program that is OEMS compliant and eliminated many problems from the old program.

Member Brian MacMillian re-wired the entire McIntire building with new coax cable for much improved cable TV reception.

Member Ty Hoeffler upgraded the Status Board computer program to now show real-time unit status and incident information. Status Board allows dispatchers at the communication center to instantly see changes in on-duty staffing which results in much improved unit response.

The internal phone system at McIntire was replaced with a state-of-the-art IP phone system. This phone system greatly improves voice mail capability by sending an e-mail with the phone message to the affected party as well as adding many new features and ease of use.

Member Alex Belgard worked to have a 37" HDTV donated from Crutchfield Corporation that was installed in the TV room at McIntire.

A GPS receiver was added to Squad 133 and Car 130.

A mobile data terminal (MDT) was added to Car 139 for testing purposes. CARS has the only MDT in the fire/rescue system that is tied directly to the ECC dispatchers. Once the MDT system has passed system acceptance tests, other MDT's will be added to ambulances to greatly improve efficiency and response time.

## SAFETY

We purchased 146 Blauer florescent green safety coats for personnel. These coats, which greatly improve day/night visibility, are a huge improvement over the old dark blue coats we had been buying.

The Road Safety vehicle computer system was added to all light vehicles. Road Safety constantly records over 20 vehicle functions such as seat belt use, speed and cornering stresses and alerts us when set parameters have been exceeded.

A contract was signed with local vendor ABC Extinguishers which calls for yearly inspection and maintenance of all building and vehicle fire extinguishers. Over 17 fire extinguishers were found to be deficient and were repaired while 7 new extinguishers were installed in McIntire and Berkmar stations.

Member John Burruss developed a PowerPoint presentation on Interstate Incident Operations. This class will be taught to all personnel on a yearly basis.

Emergency light bars were added to the top-rear of the trailers to enhance visibility on emergency scenes.

A rear-facing CCTV camera/monitor was added to the pick-up to improve trailer hook-up time and safety.

## **PATIENT CARE**

Member Anthony Judkins wrote a quality assurance / quality improvement operational guideline that was implemented. This guideline will assure we give the best possible pre-hospital care.

The following state-of-the-art medical equipment was added and members were given training to keep us current with best practices in pre-hospital patient care.

- King Airway
- EZ-IO (intraosseous) drill
- Glucometers
- difficult airway mannequin
- CO monitor (only 2 are carried in Central Virginia)

The medical perception program was evaluated, rewritten and brought to current standards.

## **ADMINISTRATION & OPERATIONS**

A committee was established that reviewed and updated the Corporation's By-Laws.

A new computer was purchased and installed in the President's office.

The Operations Manual was reviewed, updated and printed for all supervisory personnel.

Member call run totals are now posted on a monthly basis.

Daily response times e-mailed out to supervisory personnel. (A response time goal of 8 minutes, 59 seconds to calls within the city limits was established.)

One trailer was re-striped and converted to a gator all-terrain support vehicle. This enables us to carry the gator quickly to off-road incidents.

The Special Event Trailer, Car 132, Support 138 and Ambulance 145 were re-striped in-house which resulted in a considerable cost savings.

One ambulance (140) was replaced.

National Incident Management Systems (NIMS) training became mandatory for all line-personnel.

## **SPECIAL OPERATIONS**

A pair of state-of-the-art night vision goggles were added to the water rescue team's (WRT) cache of equipment. By adding this capability, the CARS WRT now has all the required equipment by FEMA for water rescue team capabilities. As part of the new technology, a training program was developed and implemented for all water rescue team personnel.

All CARS WRT floatation devices (PFD's) were refurbished and brought to current safety standards.

A Petro-Gen portable exothermic cutting torch was purchased to replace the outmoded oxygen-acetylene cutting torch carried on Squad 135. The Petro-Gen uses low-grade gasoline which is considered more stable and safer than acetylene.

Heavy rescue apparatus provided for ACFR live fire training exercises.

Converted one trailer to house the SEMM gator and bicycle team equipment.

Continued to provide logistical & personnel support to the Virginia Department of Fire Program's Rescue Challenge. This event, held each year, is designed to challenge Virginia technical rescue team's technical and organizational skills, Rescue Challenge was also meant to encourage networking between the states highly trained technical rescuers. Teams complete two scenarios a day for each of the events four days, for a total of eight scenarios. High angle rope rescue, confined space rescue, trench rescue, vehicle/heavy machinery rescue and light & heavy structural collapse rescue are the basis for each Rescue Challenge scenario.

## **STANDBY EVENTS**

In addition to running emergency 9-1-1 calls, CARS also provides personnel, equipment and management expertise at the following yearly events held around the Charlottesville area:

- UVA home Football Games - 6
- UVA home Basketball Games – 19
- VHSL State Championship games - 2
- Albemarle County Fair
- Charlottesville 10-Miler
- Charlottesville Marathon
- Charlottesville Women's 4-Miler
- Foxfield (both Spring & Fall)
- UVA Commencement
- Fridays After Five – every other event throughout the summer
- UVA Graduation
- WARS Installation

Standby events are “mass casualty” incidents with 2 weeks notice. For example, during the Spring Foxfield Race, CARS assisted UVA Special Event Medical Management personnel with over 80 patients, 12 that required transport to local hospitals.

In a comparison of proper incident management practices, CARS and UVA SEMM worked the first two UVA home football games with in-house staffing. Due to high heat conditions, both games each had over 120 patients, with 12 requiring transport to local hospitals for heat-related injuries. At the NC State versus Nebraska football game (same date, similar size stadium and spectators and identical weather conditions) EMS resources were quickly overwhelmed with the same number of patients and staff had to activate a county-wide MCI plan to bring in additional resources.

## **MISCELLANEOUS**

The CARS volleyball team won the 2007 Charlottesville Co-Rec Spring season Championship and was tournament runner-ups.

Web site hits for information topped 300,601. The site has been in continuous operation since 1996.

We added 37 new members.

Charlottesville High School junior Maria Szakos chose CARS as her agency of choice for the City of Charlottesville Summer Internship Program. Maria donated much of her free time as the designated person in charge of cleaning out and reorganizing the attic into a workable and convenient space for storage and for the new uniform office. Maria also helped out with other organizing tasks and paperwork tasks throughout the building. While her internship ended at the close of the summer, Maria still comes around to help at the building when she can.

Taught 99 EMT students; many will join either CARS or other local fire/rescue stations.

Received State licensure to operate a remote pharmacy at the McIntire station. This will enable crews to re-stock ALS supplies in-house greatly reducing out-of-service time spent at the hospital pharmacy.

Berkmar residents added new floors, added chair rails, fixed lights, refurbished the baths and kitchen and painted the station themselves.

Michael Schmidt, a foreign exchange student from the University of Applied Sciences in Cologne, Germany, chose CARS as the agency at which to carry out his 'student practical semester job'- an agency residency experience required by his curriculum. While in residency, Michael worked to develop the skeleton of a plan which can be executed by CARS personnel in the event of a school shooting or similar mass casualty incident. Michael worked closely with CARS for five months researching and writing his MCI plan, and running with crews on a regular basis. During his stay in Charlottesville, Michael was provided housing by Deputy Chief John Burruss, followed by Member Charlie Smith. The exchange program is overseen by the Center for International Career Development and his experience will prepare him for his final exams in the Bachelor of Rescue-Engineering degree program.

# MATRIX REGIONAL FIRE & RESCUE CONSOLIDATION STUDY

The County and City jointly retained the Matrix Consulting Group to conduct the consolidation assessment during the fall of 2006. The purpose of the assessment was to evaluate opportunities for regional cooperation that might include a partial or complete consolidation of the fire and rescue services in both jurisdictions. The agencies studied include the Albemarle County Fire and Rescue Department and its volunteer components (ACFRO), the Charlottesville Fire Department (CFD) and the volunteer Charlottesville Ambulance Squad (CARS) that serves the City and the County. The study addresses the following questions:

**Is a multi-jurisdictional approach feasible and appropriate in all areas or just for certain functions?**

**What issues or obstacles could affect the development of a more cooperative approach?**

Furthermore, the Matrix study focused on the key objectives of:

- Improving efficiency
- Improving effectiveness
- Reducing duplication
- Increasing standardization
- Enhancing the coordination of services

## EMS DELIVERY - ANALYSIS OF EMS SYSTEM PERFORMANCE & RECOMMENDATIONS TO IMPROVE SERVICE

A committee was formed in 2007 made up of individuals picked by Charlottesville City Mayor David Brown to look at issues involving local EMS. A subcommittee was then formed to analyze the City's EMS performance relative to a recommended standard and develop opinions to address any deficiencies found. The sub-committee was composed of Chief Charles Werner (CFD), Chief Dayton Haugh (CARS) and Chief Dan Eggleston (ACFR). A report of their findings was published on October, 2007 which contained the following information:

- Recommended an EMS response time standard and key performance indicators;
- Comparison of the system's performance against the recommended standard to define gaps in service;
- Developed various recommendations to address gaps in service.

Data from both studies were used in the formation of this year end report. Both entire studies can be viewed on the CARS web site at [www.carsrescue.org](http://www.carsrescue.org) under *Download Central – Reports and Manuals*.

# MEMBERSHIP



Member of the Thomas Jefferson EMS Council, an extension of the Virginia Office of EMS.



Member of the Charlottesville Regional Chamber of Commerce



Member of the Virginia Association of Volunteer Rescue Squads



Member of the National Collegiate EMS Foundation





**Charlottesville-Albemarle Rescue Squad, Inc.**

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*The cost of printing this report was paid for by individual members of the rescue squad. No money donated by the public to CARS was used.*

*Pictures courtesy of Jason Nauman, Albemarle County Fire & Rescue*