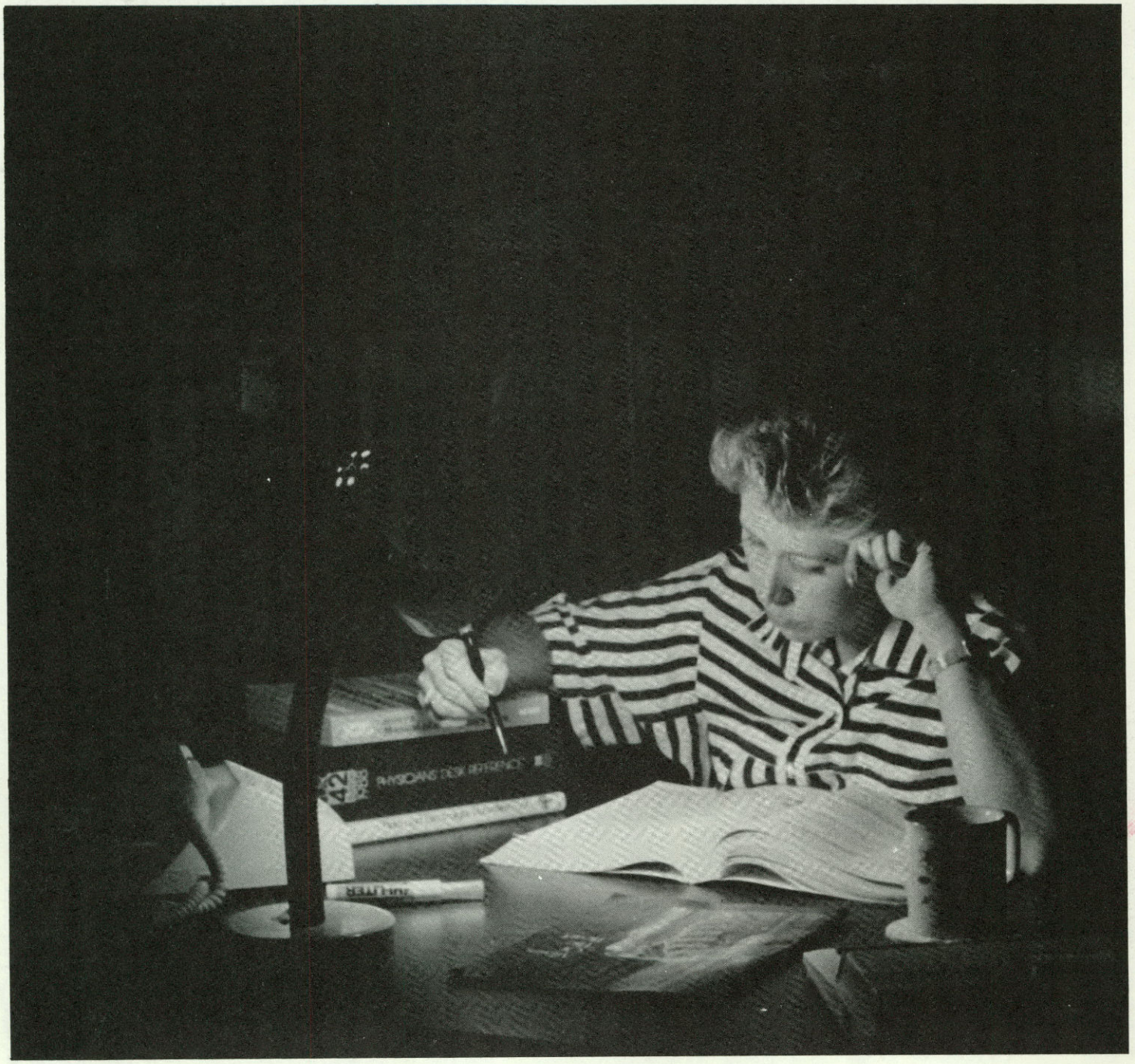
EMS MESSENGER

TEXAS DEPARTMENT OF HEALTH
BUREAU OF EMERGENCY MANAGEMENT

Volume 10 Issue 2
February 1989



About the Cover: Ballinger EMT Joni Gray took this photo of her partner EMT-SS Joni Parr. Called "Silent Dedication: Studies - The Best Way to the Top," the picture won a second place ribbon in the EMS Training category of the 1988 EMS Week Photo Contest.

Editorial Board

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From This Side

Protection — Personal or Governmental?

by Gene Weatherall

In 1987 7,994 motorcycle operators and passengers were injured in Texas; 286 of those people were killed. 66% of the riders injured were not wearing helmets; 81% of those killed were not wearing helmets. Texas follows California in the number of motorcycles it has registered, and like, California, Texas has no law requiring adults to wear motorcycle helmets.

As a State health official, as a one-time street paramedic, as a taxpayer, and as a Honda 750 rider, I strongly support motorcycle helmet laws with fines for non-compliance. Texas had a helmet law until 1977 when it was repealed for adults. There have been several attempts to reinstate the helmet law, with support from almost every law enforcement and medical group Texas has, but the lobby groups for unhelmeted riding in Texas are very persuasive.

Texans have a long history of supporting individual freedoms and of believing that "less government is better government." Many of those opposing helmet laws will choose to wear a helmet when they ride — they just don't want the Texas Legislature telling them they have to put on a helmet.

My problem with that line of reasoning is that riding a motorcycle isn't a right — it's not one of those 27 freedoms that is protected in the Texas Constitution's Bill of Rights. Riding a motorcycle is a privilege. And every privilege we have comes with responsibilities. It's the old "you don't get somethin' for nothin'."

When I take my Honda out on the highway, I don't have the right to drive in any lane I want, at any speed I want, or for that matter off the highway and through any farmer's field that I want. I have the responsibility of driving it according to Texas laws — or I get fined. Those rules protect me and they protect others out on the highway with me. So do helmet laws.

Look at the stats. Across the nation, deaths go down when helmets are worn. If deaths go down, surely catastrophic head injury requiring months of hospitalization, rehabilitation, and retraining goes down. And that means that less of my money will have to go to pay for uninsured, injured motorcyclists who require lifesaving emergency medical services, surgery, and hospitalization.

So put my name in the column that reads, "Yes, there should be motorcycle helmet laws with fines for non-compliance." Texans may complain about too much government intervention, but I look at it as an obligation government has to protect non-riders as well as riders.

Motorcycle Trauma Fact Sheet

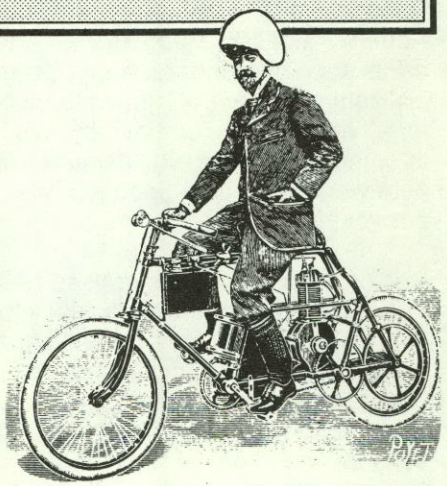
1. On a mileage basis, the death rate for motorcyclists is 16 times the rate for passenger car occupants.

2. Motorcyclists represent only 3% of the registered vehicles, but account for 10% of motor vehicle deaths.

3. In 1987, 81% of the 286 persons killed in motorcycle crashes were not wearing helmets. This information hints that possibly 232 persons might have survived, considering the safety effectiveness of helmets.

4. State law requires all motorcycle riders under the age of 18 to wear helmets; however, 64% of those under 18 who were killed did not have on helmets at the time of the crashes.

November 1988
Injury Control Program
Texas Department of Health



Local and Regional EMS News

Hubbard Hospital recently honored Hubbard's EMS volunteers with a reception at the hospital. The **Hubbard Emergency Ambulance Drivers Association** celebrated its 10th anniversary with Certificates of Appreciation signed by Texas Department of Health Commissioner **Dr. Robert Bernstein** and orange "gimme" caps from Hubbard Hospital Administrator **Milt Meadows**.

The active members of Hubbard Emergency Ambulance Drivers Association who were honored were: **Wil Geltmeier**, EMT and the group's Vice-President; Bobby Hance, First-Aid; **Milt Meadows**, EMT; **Warren McKinney**, EMT; **Phillis Olson**, ECA; **Gail Geltmeier**, EMT and Course Coordinator; **Roy Lee Jennings**, EMT and President of H.E.A.D.; **Robert Schulz**, First-Aid; **Edgar Humphries**, EMT; **Maurice Evans**, ECA and Treasurer; **Vern Odom**, First-Aid; **Jo Payne**, EMT; **Linda Chasteen**, EMT and Course Coordinator; **Diane Grice**, ECA; **Dorothy Wylie**, EMT; **Edward Fullerton**, EMT; **Terry Richard**, ECA; **Pat Schulz**, ECA; **Spring Taylor**, ECA; and **Eddie Taylor**, ECA.

Wil Geltmeier, **Diane Grice**, and **Roy Lee Jennings** were singled out for being ten-year members of the Association. **Eleanor Rutledge**, **Ed Fields**, and **David White**, who are no longer active members, were also recognized for their contributions in organizing Hubbard's EMS volunteers ten years ago and for providing patient care. President Jennings recalled that Fields and **Mary Thompson** were on the "very first ambulance run we ever made."

About fifty people attended the reception, including past and present volunteers, family members, hospital staff, and regional and central office Texas Department of Health representatives. Hospital Administrator **Milt Meadows** told the group that rural areas such as Hubbard "aren't big enough to specialize and survive. We have to be able to provide for all needs of our community. We have to be able to compete with the big hospitals and when we compete we have to do a good job. We're doing that with our volunteers."

Region 1's **Brett Marsh** praised EMS volunteers in Texas and in Hubbard particularly for being a vital part of the health care system in rural communities. "Volunteer EMS organizations are filling a vital need in rural communities," said Marsh. "We have seen hospitals close across the state, and when that happens the volunteer EMS is there to continue to provide emergency care."

The Bureau of Emergency Management's **Alana Mallard** cited Texas EMS Registry statistics that show that nearly 1/3 of the people working in EMS in Texas are volunteers - over 10,000 EMS certified volunteers work in 520 volunteer EMS groups. But she warned Hubbard that "there is an EMS volunteer crisis in Texas." Many volunteers are working a regular job, raising a family and volunteering for EMS. "Community support is essential for EMS volunteers," Mallard said. "There are many jobs in a volunteer EMS organization besides providing medical care. Community members can support EMS by doing public education, inservice training, equipment maintenance, and fundraising."

Hubbard is about 30 miles northeast of Waco, and has a population of about 1800. Hubbard Emergency Ambulance Drivers provide emergency medical services to Hubbard, Malone, Coolidge, Penelope and Mt. Calm.

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Several Public Health Regions have new staff members. **Vic Dwyer** and **Chris Nollette** have joined the PHR 4 EMS staff; **James Davis** is new to the PHR 1 staff; and **Noemi Sanchez** began with PHR 8 in September.

Vic Dwyer is a retired City of Houston police officer and volunteers as a paramedic with **Cypress Creek EMS**. **Chris Nollette** worked for Oklahoma City's **AmCare** for six years; he is also a paramedic. Both are assigned to the Houston office as EMS program specialists.

James Davis has joined the Austin office of PHR 1. James is a paramedic and he worked for **Temple Fire Department**. You have seen him go down the sides of buildings if you have been to TDH's last two state EMS conferences.

Noemi Sanchez transferred into the Harlingen EMS office of PHR 8 in September from Environmental Health where she had worked for 9 years. She saw the move as an opportunity to continue her education, and she certainly wasted no time doing just that. Noemi took her EMT certification exam on January 26.

*****

Alana Mallard

Organizer Pam Price labels donations for the Bureau's "adopted" group at Christmas.

The Bureau's **Pam Price** and **Tom Ardrey** led activities to "adopt" a senior nutrition program in Austin for the holidays. Pam's idea was to scale down our traditional "office feast" and to use those resources for a group of elderly people. She said her inspiration was the January **EMS Messenger**'s emphasis on the elderly and **PHR 6** and **Uvalde EMS**' Mother's Day activities for nursing home residents. About 25 Bureau employees donated food and gifts for the 6 women and 13 men in the Montopolis Recreation Center's Nutrition Program in southeast Austin. Enough Christmas presents were donated to give several to each person in the nutrition program.

Pam says that next year she wants us to participate in Meals on Wheels holiday dinners for the elderly.

*****

Tom Payne, State Radiological Maintenance Officer, represented the Bureau of Emergency Management and the RADEF Shop in Washington at the Federal Emergency Management Agency's annual awards ceremony. The RADEF Shop (actually called Radiological Instrument Maintenance and Calibration Program) was honored with an Excellence in Emergency Management Award. This was the only national award given to a RADEF shop facility and it was for "efforts and achievements in preparation of the National Emergency Radiological Instrument Support Package."

The Support Package is an inventory of over 4,000 radiological detection instruments located in Fort Worth which is for FEMA's use in case of a radiological disaster. RADEF shop members **David Ramsey**, **Bill Patrick**, and **Mike Rutherford**, along with shop administrator Tom Payne, repaired and calibrated these 4,000 instruments over the last three years in addition to the 40,000 Texas instruments they maintain.

Congratulations to Tom, David, Bill, and Mike on their Excellence Award!

A.S.M

Alana Mallard

Debby Hollan, Ginger Gober, Jeanne McGinley, and Linda Williams put together "goodie bags" before our trip to the recreation center.

Greg Patterson

RADEF Shop employees proudly show off an Excellence in Emergency Management Award from the Federal Emergency Management Agency. Seated left to right are Bill Patrick, David Ramsey, and Mike Rutherford. Standing left to right are Dave Fehrenkamp, who joined the RADEF Shop on December 1, 1988, and Tom Payne.

Everyday Heroes

Lubbock System Supports Professional EMS

Story and Photos by Tom Ardrey

We are becoming increasingly more aware that in EMS we have a number of people who can readily be classified as "Everyday Heroes." These are the men and women who have for years been quietly going about their daily, weekly, monthly and yearly lives, supporting EMS in their local communities through their job dedication and civic activities. This is not to take away from the outstanding men and women who have saved lives and gone way beyond the "call of duty" in rescuing people trapped in the inner recesses of the earth, people in burning buildings and people victimized in both ground and air crashes. However, all of these heroic activities would have never occurred if there had not been the educators who trained, dispatchers who called emergency care personnel and sent vehicles to the scene and the maintenance personnel who daily did their best to keep equipment in the best of condition and ready to be used. And not to be overlooked are the business administrators who keep the systems running. These people, too, are real heroes of EMS.

I recently had the opportunity to visit the Lubbock and South Plains EMS System. I was not aware of the sophistication which has occurred in the last few years in far West Texas. While there, I was shown the new Communication Center of which the personnel are justifiably proud. The new 9-1-1 system came on line January 27. In-coming calls are immediately displayed on the computer screen giving phone number, address, whether residence or business or if it is a phone operator-initiated call. There is, in addition, closed-circuit TV monitoring, which allows the dispatchers to view in-coming and departing helicopters on the helipad. The new Communications Center has a transmitter range of at least eighty miles and the capability of "patching" EMS through to fire service, police and helicopter is available. EMTs Patti Weatherford and Shirley Stewart were on duty. Talk about pride and enthusiasm, these two people "got it!"

And speaking of helicopters, Lubbock does have helicopters. Lubbock General and Methodist Hospitals have a French built SA 365N1 Dauphin and a Twin Star. The Dauphin is a beautiful craft capable of carrying two patients, three paramedics, a pilot and copilot. They believe this to be the only N1 in Texas being used for medical emergencies. It cruises smoothly at 195 mph. The day I was there I

Care-Link, Methodist and Lubbock General Hospitals. Standing left to right are Scott Boss, lead pilot; Syan Young, R.N./ Paramedic; Richard Bills, a recent patient; Bonnie Jackson, Associate Director; and Bob Pierson, Paramedic.

Texas Tech Health Science Center, Lubbock, one of the leading centers for EMS education in Texas.

met two of the professional helicopter pilots, Scott Boss who is lead pilot with Rocky Mountain Helicopter Service and Regional Manager Thomas Spriggs. These two guys are proud of "their Dauphin." The medical crew for CareLink that day for the helicopter service was Syan Young, an RN and EMT-Paramedic and Bob Pierson, EMT-Paramedic. The crew brought to mind the logo "EMS in Texas, Dedicated to Patient Care." Another Dauphin is in use in Lubbock as a medical helicopter and is operated by St. Mary's of the Plains Hospital.

At the Carelink crew office I met a real West Texan who knows firsthand about EMS in West Texas, Mr. Richard Bills from Earth, Texas. Earth is in Lamb County about 60 miles northwest of Lubbock and 65 miles southwest of Amarillo. On November 18, 1988, Mr. Bills was working with butane when the tank blew up and burned him severely on his hands, face and upper body. About 25% of his body was involved. On December 1 this ex-patient came in to say, "Thanks," to the CareLink crew who had flown to Dimmit and had him back into the Burn Center at Lubbock General Hospital in less than an hour from the time of the explosion. What does Richard Bills think of CareLink? "These people are great, I can't say enough about them." They are real heroes to Mr. Bills.

In addition to a fine EMS System, Lubbock and that part of West Texas has an individual who has been a real guiding force in the growth and success of Lubbock and the South Plains EMS. That individual is an educator, dispatcher, paramedic and all-around EMS support crew, who also has the responsibilities of wife and mother of three.

Currently, she is Associate Director of EMS Training at Texas Tech University. A native of Red Wing, Minnesota, Bonnie Jackson came to Texas and attended Abilene Christian University and graduated with a BS in Education. A few years later she earned a master's degree in Education at Texas Tech. While teaching at Lubbock Christian College, she was invited to attend one of Dr. Paul Huffington's early EMT courses there at LCC. From then on Bonnie was an "EMS person."

For 15 years Bonnie Jackson has taught, worked and lived EMS, constantly striving for increased course quality. Currently, Bonnie coordinates EMS instruction at Texas Tech University Health Services Center and for the 15 counties surrounding Lubbock. Currently the ACLS course at Tech is required for all second year medical students, and all Residents in the medical school are ACLS trained. There are a number of truly outstanding graduates of the nearly 2800 trained through the EMS courses held in the South Plains Region since 1974, not the least of which is Paramedic Terry Bavousett, the Public Health Region 2 EMS Program Manager. Included also are Dr. Jeff Young who is a paramedic instructor, second year resident in Family Practice and Associate Medical Director for South Plains EMS; Doak Enabnit, Operations Chief, Lubbock County EMS; Mark Brock, Director, Lubbock County EMS; and Michael Wainscott, M.D., former Deputy Medical Director, El Paso EMS.

In discussing changes in EMS instruction which have occurred in the last fifteen years, Bonnie listed several:

1. Improved pre-hospital care and training
2. Better instruction in stabilization of injuries
3. Differentiation between the need for rapid transport and stabilization at the scene according to patient need, brought about by improved patient assessment skills.
4. Increased awareness by the medical profession and the general public that EMS personnel provide quality prehospital medical care.

Bonnie Jackson, Associate Director of EMS Training at Texas Tech University in Lubbock - "for 15 years, an EMS person."

Methodist Hospital, Lubbock, one of the homes of Lubbock and South Plains EMS.

EMT Shirley Stewart in the Lubbock/South Plains Communications Center, Methodist Hospital, Lubbock.

5. The trend away from volunteerism as EMS providers and EMS instructors. This change has been difficult (and expensive) for many communities.

Changes that this EMS leader would like to see:

1. More full time EMS educators. On this subject Bonnie Jackson says, "It is as inappropriate to think that a good field Paramedic is automatically a good instructor, as it is to think that a good instructor is automatically a good field Paramedic. We do best those things which we do all the time."
2. "I'd really like to see EMS people, as a whole, demand quality education." If we are to continue to improve prehospital patient care in Texas, good professional training is a must.

Currently, Bonnie is researching the feasibility of establishing a baccalaureate degree program. It would include paramedic training, basic education courses, business administration, and management.

"There is a real need for a career ladder for EMS personnel. We need EMS administrators and EMS educators who are oriented to pre-hospital care and the problems presented in the field," Bonnie stated. In addition to the one paramedic course each year, the Health Science Center has a very active outreach program. Bonnie coordinates 10-12 ECA, EMT, and EMT-SS classes outside of Lubbock each year. There have been courses as far away as Matador, which is some 80 miles northeast of Lubbock, as well as in Denver City, approximately 80 miles southwest of Lubbock.

Why such an outreach program? Bonnie says, "Because that's where the people are who want the classes." TTUHSC provides lecturers and skills instructors, equipment and audio visuals, and assistance with test construction. "At this time we train about 200 people a year through our outreach program," said Bonnie.

We asked Bonnie Jackson if considering all the training going on at the Health Science Center, she had time to work in the field. Terry Bavousett said, "Let me answer that. Bonnie works most holidays, and at least twice a month as a paramedic where needed. Additionally, she frequently can be heard over the communications system, working as a dispatcher." Bonnie definitely likes to keep active in the field. "Besides," says Bonnie, "field personnel don't think of you as a textbook paramedic if they know you are willing to get your hands dirty on calls."

When asked how she managed family life, (she and her husband have one son, a college sophomore, another son who is a high school senior, and a daughter, a high school sophomore), Bonnie replied, "we just plan things like Christmas and Thanksgiving around our work schedule. My family knows that I'm not going to change, so they just accept having Thanksgiving and other family celebrations at a time we can work it in. You know, 7:00 or 8:00 in the evening really isn't a bad time for Thanksgiving or Christmas Dinner."

During our conversation with this EMS lady, I asked just what she would like to see occur statewide if money and staff were not a problem. When asked

(see Heroes page 17)

Fuel May Be Causing Ambulance Fires

by William F. Baker, Jr., EMT-B

During the last year there have been approximately six more ambulance fires across Texas. While in some cases the vehicles were totally destroyed approximately four of the six burned vehicles have been repaired and returned to service. To the best of our knowledge here at the Texas Department of Health no one has been seriously hurt in any of the fires. This does not diminish the seriousness of the fires but does reflect well on the ability of the personnel involved to respond to a serious emergency.

The six fires mentioned represent only a small fraction of the 21,502 vehicular fires reported to the State Fire Marshal during the last fiscal year. Of those fires, 3200 were on Ford vehicles, and 69 were on Ford vans manufactured between 1981 and 1987. The most common ignition factors in those fires for which a cause has been determined are listed as: 1) Short circuit, ground fault or other electrical failure (11 fires); 2) Part failure, leak or break (10 fires); 3) Backfire, ignition outside the combustion chamber except fires originating as a result of hot catalytic converters (9 fires). Fully one-third (23) of the fires reported are listed as "undetermined" while six fires are of "incendiary" or "suspicious" origin.

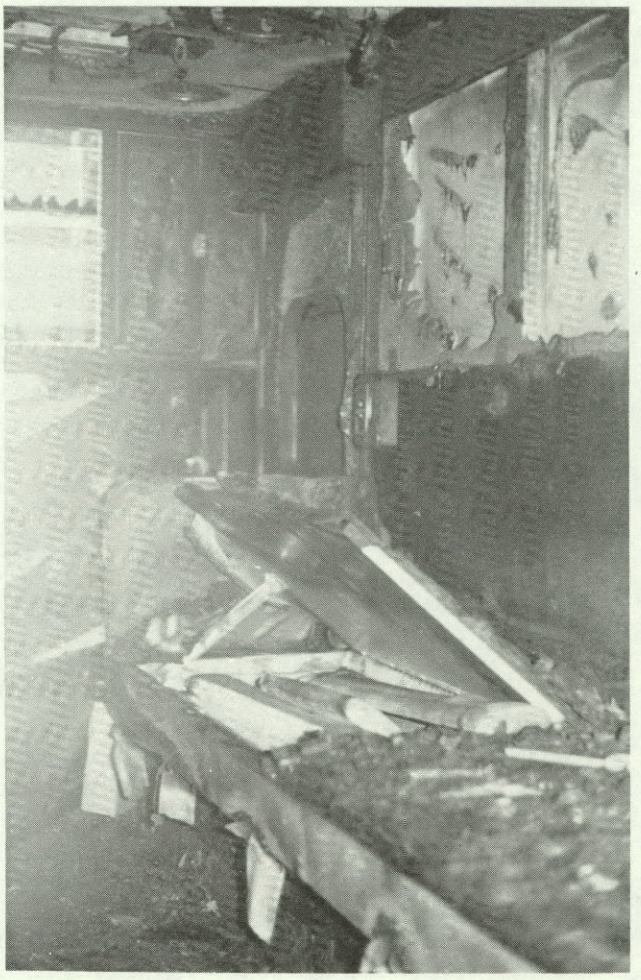
Although a single link between the fires has yet to be established the Ford Motor Company has initiated several recalls in an effort to reduce the potential for fires. The recalls have included redesigned fuel-filler systems, the addition of heat shields to catalytic converters, the installation of special heater hoses, and some electrical work to the alternators. While it is impossible to say how many fires may have been prevented by these measures, it is also obvious that the fires have not ceased.

In the past year, for example, one Cooke County EMS unit which had been retrofitted in compliance with all of the Ford recalls was totally destroyed in a fire. Another unit from Mount Enterprise received serious, but repairable damage in a similar incident. The Mount Enterprise unit was purchased used with little evidence that it had been retrofitted by the previous owners.

Discussions with representatives of the Environmental Protection Agency and the Texas Railroad Commission have revealed a growing amount of attention to the chemical content of the gasoline being used as fuel in all vehicles. Those compounds which relate directly to fuel volatility are coming under closest scrutiny. Volatility is a measure of the temperature at which the fuel will ignite and is expressed in terms of "Reid Vapor Pressure" or RVP.

During the winter the RVP level is increased to make vehicles start and run smoother in cooler weather. During the summer the RVP level is reduced to prevent the increased ambient temperatures from causing a pressure build-up within the tank which might allow vapors to escape into the environment. The RVP level is increased by diluting the gasoline with byproducts which would otherwise be burned off during the refining process. Therefore, the per-gallon cost of manufacturing gasoline decreases with each increase in the RVP level.

A Ford representative stated that the RVP level should vary between 9.5 for summer and 11.5 for winter. At least one refinery is distributing fuel to Texas markets with RVP levels as high as 13.5. That level may be too high for even the Panhandle, where our most severe winter weather can be found. The maximum attainable RVP level is measured at 14.0,



This retrofitted Cooke County unit was completely destroyed in a fire that began in the engine area.

and that level is used in those states along the Canada border where winter temperatures remain subzero for extended periods of time.

California is the only state which regulates the RVP level of motor fuel, and it is also the only state which has not reported any ambulance fires. The more heavily populated parts of California tend to have a climate which is much less extreme than Texas. However, there are sections of the state, such as the central valleys, which boast of hot summers and chilly winters. In such areas, the consistent use of fuel at the appropriate RVP level may make the difference in the lack of fires.

The RVP problem may appear more acute in ambulances than in other vehicles of similar design due to the service required of the unit in the day-to-day performance of its job. While on a call an ambulance may idle for as long as an hour, building up heat and pressure throughout the fuel system. Furthermore, the problem is exacerbated because the ambulance must idle at a relatively high speed in order to supply power to the various pieces of equipment on board. On a still, hot summer day there is simply no effective way to dissipate the build up of heat and pressure in the system. Any factor such as an improper RVP only increases the risk that a problem will develop.

The EPA is considering the future regulation of Reid Vapor Pressure, but that regulation is probably at least a year away. Until then there is very little that the consumer can do to be assured of a constant supply of proper fuel. Gasolines which come from a public source, such as a service station, would probably tend to be "safer" than fuels from a private tank, such as a County or City vehicle maintenance area. Since the RVP level is adjusted gradually from one end of the year to the other, those stations with the greatest turnover are most likely to distribute fuel in line with current seasonal needs. Fuel delivered to a smaller tank in February will have an RVP level for winter. If that same fuel is still being used in May, the RVP level will be too high. The bulk of this year's fires occurred during the early part of summer, late March through late June, perhaps for that very reason.

For those services with vehicles that are included within the parameters of the Ford recalls it is of paramount importance that each vehicle be brought into complete compliance with all of the changes mandated by the recalls. Several Ford dealers continue to complain that many firms have not brought their vehicles in for service. While it is inconvenient to lose the use of an important vehicle for a few days, a lawsuit for damages based on negligence for failure to comply with the recall will have more devastating effects on a firm's financial standing and its ability to keep the public trust. There are ways that we at the Texas Department of Health may be able to assist those firms who are having difficulties in working with their local dealers so please inform your regional personnel of any problems. If you have a vehicle which should have been recalled, but you have not received notice of the recalls, let us know immediately, and we shall contact Ford for you. Finally, if you have a fire, please tell us so that we may remain on top of the story.

One of the "solutions" to this problem has been to sell the problem units, and to purchase diesel units as replacements. If a unit is sold, even to an out-of-state purchaser, please tell us so that we may inform Ford directly in case there are additional recalls. Hugh Keepers, the Safety Director at the Texas Railroad Commission has become concerned with the increased use of diesel units, because they are not immune from fire problems. It must be remembered that a diesel engine requires significantly more oxygen for its operation than does its gasoline powered counterpart. Thus, when operating the unit near a spill of volatile fuel, steps must be taken to keep the unit at least 150 feet from the spill at all times, to prevent the engine from sucking in vapors, which will lead to an explosion.

Care in the use and maintenance of these vehicles will permit us to live with the problem. Those of us who work on the the affected vehicles must remain aware of the danger of fire, and report any observations which could lead to a fire. Finally, when a fire is spotted, evacuate the vehicle immediately. The consequences for you and your patient are too grave to do otherwise.

Did You Read. . . ?

. . . in the November 1988 **Emergency Services Newsletter** that bicycle helmets could prevent more than half of the 1,000 annual bicycle fatalities in the U.S., according to the American Academy of Pediatricians.

. . . in the same publication a summary of the article "The Medical and Social Impact of Nonaccidental Injury" by Dr. G. K. Luna says that of 2,451 trauma patients studied at a Level I trauma center, 17% were victims of intentional injury. The majority were severely injured, required a hospital stay of an average 6 days, and incurred hospital charges that averaged $13,000 per patient.

. . . in the September 1988 issue of the newsletter from U.S. Department of Transportation a new study that shows that drinking drivers and those who do not wear safety belts have similar profiles. Similarities in characteristics, attitudes, and behaviors include: received two or more traffic citations in the past five years; tendency to keep an eye out for police; drink away from home and prefer beer; drive

(see Read page 23)

FOCUS ON...Texas EMS Registry

40,000 and Still Growing

by Pamela Price

That 40,000 + refers to the EMS Registry of currently certified personnel. This includes 9,891 ECA's, 20,643 EMT's, 1,743 Special Skills, 5,442 Paramedics and 2,648 Law Enforcement personnel!

A volunteer registry has existed since the early 70's and has continued to grow to the passage of the original 4447o which laid the ground work for the 1983 EMS Act. The Registry program today is responsible for working with the public and regional EMS staff to permit ambulances and certify EMS personnel. These functions are currently mandated by Article 4447o, Vernons Texas Civil Statute which states that a person may not practice as emergency medical services personnel unless the person is certified in accordance with the EMS Act and the rules adopted under this Act. The EMS Act is a considerable step up from the original 1940 Law which listed a first aid kit with approximately 16 items and a traction splint as mandatory equipment on an ambulance. The ambulance attendants were merely required to have 8 hours red cross training.

The Registry provides standardized certification for approximately 12,000 EMS personnel yearly. Approximately 1,200 permits are issued annually to ambulances meeting the minimally mandated standards.

A recent comparison of our certification procedures and the licensing procedures for nurses, respiratory therapists and the medical examiners showed that nurses are licensed in 7 to 10 weeks. Respiratory therapists no longer have to take a special Texas exam and it takes 6 to 7 weeks to receive their certification once it is graded by a National organization. Medical examiners take from 6 weeks to one year. A paramedic can be certified within 2 to 3 weeks from their test date.

This efficient turn around time can consistently be attributed to the staff in the EMS Registry Program. The staff includes 2 analysts Susan Kollath who is responsible for Regions 1, 3, 6 and 8 and Calvin Blackman who is responsible for Regions 2, 4, 5 and 7. They are assigned specific regions to be responsible for in order to get a better working knowledge of the EMS needs of the regions and communities they serve. They constantly strive for a balance between excellence in patient care and the needs of the community. Staff members that are responsible for data entry and secretarial functions are Lovie Walker, and Debra Hack. Long-time Registry secretary Traci Miller transferred to another Health Department group last month.

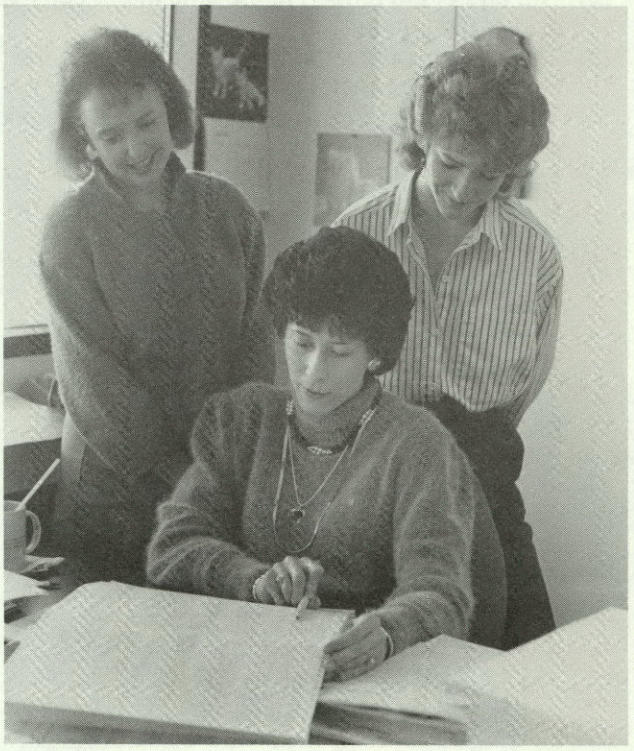
Lovie Walker came to the Registry in October 1984. Debra Hack has been the Bureau's telephone receptionist for a year and transferred into the Registry in December.

Susan Kollath joined the Registry with past experience from the Social Security Administration in Oklahoma, her home state. She has been employed with the EMS Registry for over five years. Calvin Blackman hails from the big city of Houston and came to the Texas Department of Health in March 1975 to work in the RADEF shop. Calvin became a part of the Registry team in October 1976.

I was born in Victoria, Texas, and began working in the EMS Registry October 1, 1979. My past job experience includes interpreting sysmic data from oil wells at Gulf Oil and teaching 1st grade in Houston.

I received EMT training from U.T. Austin. Susan took ECA training at Austin Community College and Calvin trained as an ECA in Jarrell, Texas.

The role of EMS personnel as a profession has grown considerably in the past few years. The Division of Emergency Medical Services has been taking a more rigid assessment of applications for certification since the summer of 1987 when rules were promulgated regarding certifying persons with



Alana Mallard

Susan Kollath, Pam Price, and Debra Hack (left to right) check printouts of licensed vehicles.

criminal backgrounds. These rules establish guidelines used to evaluate the eligibility of applicants to the EMS Registry who have prior felony or misdemeanor convictions that directly pertain to the duties and responsibilities of EMS personnel.

When evaluating a certification application the EMS Division must determine whether a crime directly relates to the occupation of EMS personnel by considering the following criteria from Article 6252-13C, V.T.C.S. which was enacted as section 4 of Senate Bill No. 247 by the Sixty-seventh Legislature:

Section 4 (b)

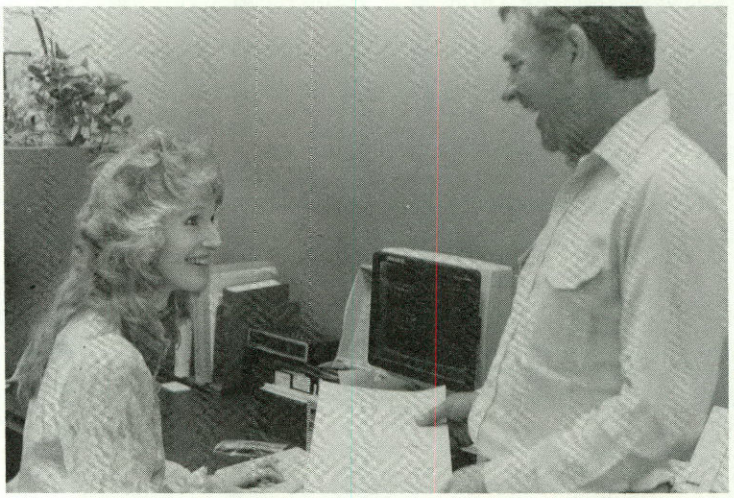
(1) The nature and seriousness of the crime;
(2) The relationship of the crime to the purposes for requiring a license to engage in the occupation;
(3) The extent to which a license might offer an opportunity to engage in further criminal activity of the same type as that in which the person previously has been involved; and
(4) The relationship of the crime to the ability, capacity, or fitness required to perform the duties and discharge the responsibilities of the licensed occupation.

Section 4 (c) In addition to the factors that may be considered under Subsection (b) of this section, the licensing authority, in determining the present fitness of a person who has been convicted of a crime, shall consider the following evidence:

(1) The extent and nature of the person's past criminal activity;
(2) The age of the person at the time of the commission of the crime;
(3) The amount of time that has elapsed since the person's last criminal activity;
(4) The conduct and work activity of the person prior to and following the criminal activity;
(5) Evidence of the person's rehabilitation or rehabilitation effort while incarcerated or following release;
(6) Other evidence of the person's present fitness, including letters of recommendation from: prosecution, law enforcement, and correctional officers who prosecuted, arrested, or had custodial responsibility for the person; the sheriff and chief of police in the community where the person resides; and any other persons in contact with the convicted person; and
(7) It shall be the responsibility of the applicant to the extent possible to secure and provide to the licensing authority the recommendations of the prosecution, law enforcement, and correctional authorities as required under this Act; the applicant shall also furnish proof in such form as may be required by the licensing authority that he or she has maintained a record of steady employment and has supported his or her dependents and has otherwise maintained a record of good conduct and has paid all outstanding court costs, supervision fees, fines, and restitution as may have been ordered in all criminal cases in which he or she has been convicted.

Title 25 Texas Administrative Code, Section 157.74 defines procedures for decertifying or suspending existing certificates and denying certification to persons with criminal backgrounds. The Bureau of Emergency Medical Services informs the individual by registered mail at their last known address, as shown in EMS Registry records as to the reason of the Bureau's proposed action. The individual may request a hearing for a decertification action within 15 days of the written notice. This request must be addressed to the Bureau of Emergency Management's Bureau Chief.

Hearing procedures are conducted according to the Administrative Procedure and Texas Register Act, Texas Civil Statutes, Article 6252-13a, and Section 1.21-1.32 of this title which relates to formal hearing procedures. If the individual does not request a hearing within 15 days of receiving the Bureau's proposed action, the opportunity for a hearing is waived, and the action proposed by the Bureau will proceed. If the Department decertifies, suspends or denies a certificate after due legal process, the Bureau Chief will give the particular person involved written notice of the decision by registered mail.



Alana Mallard

Tracy Miller and Calvin Blackman work on Registry applications.

Regional Statistics

1988 EMS Training Courses

Region	ECA	EMT	EMT-SS	Paramedic
1	54	50	3	2
2	17	43	11	4
3	31	38	10	11
4	110	83	20	34
5	68	69	11	18
6	14	21	7	3
7	32	50	11	8
8	19	25	6	4
Total Courses	345	379	79	84

TEXAS DEPARTMENT OF HEALTH OFFICES

Texas Department of Health
Bureau of Emergency Management
1100 West 49th Street
Austin, Texas 78756-3199
512/458-7550

Public Health Region I
EMS Offices
2408 S. 37th Street
Temple, Texas 76503
817/778-6744

1212 E. Anderson Lane, Suite D
Austin, Texas 78752
512/834-8673

Public Health Region 2
EMS Offices
4709 66th Street
Lubbock, Texas 79414
806/797-4331

P.O. Box 968 WTSU Station
Canyon, Texas 79016
806/655-7151

Public Health Region 3
EMS Offices
P.O. Box 10736
El Paso, Texas 79997
915/779-8012

619 W. Texas Avenue, Suite 300
Midland, Texas 79701
915/683-9492

Public Health Region 4
EMS Office
10500 Forum Place Dr. Suite 200
Houston, Texas 77036
713/995-1112

Public Health Region 5
EMS Offices
2561 Matlock Road
Arlington, Texas 76015
817/792-7211

1290 S. Willis Suite 100
Abilene, Texas 79605
915/695-7170

Public Health Region 6
EMS Offices
P.O. Box 630
Uvalde, Texas 78802
512/278-7173

1015 Jackson Keller Rd. Suite 222
San Antonio, Texas 78213-3748
512/342-3300

Public Health Region 7
EMS Offices
P.O. Box 2501
Tyler, Texas 75710-2501
214/595-3585

206 W. Pillar
Nacogdoches, Texas 75961
409/560-3058

Public Health Region 8
EMS Office
601 W. Sesame Drive
Harlingen, Texas 78550
512/423-0130

1233 Agnes Street
Corpus Christi, Texas 78401
512/888-7762

TEXEMS: A Statewide Database Management And File Transfer System

by Yves Renaud

Since December 1987, the Urban Systems Laboratory at the LBJ School of Public Affairs at The University of Texas at Austin has been working in collaboration with the Texas Department of Health's EMIS Program and the State Department of Highways and Public Transportation on the development of a statewide information system on EMS activities and highway safety.

The Texas Emergency Medical Services Management System is a software package that provides to its users a database and file transfer abilities. It has been developed in a very "user friendly" and "menu driven" way to allow every EMS provider in Texas who wishes to participate in the EMIS program to store its data, retrieve them and upload or download data files to and from other Texas EMS computers.

TEXEMS includes three modules: a database management module, the file preparation for data transmission module, and the file transfer module.

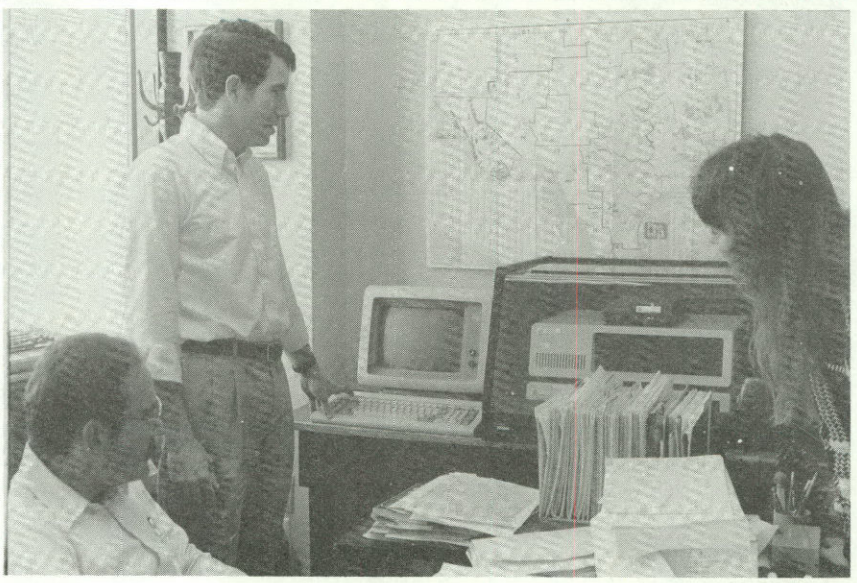
The database management module is divided into four parts: data creation, data modification, data retrieval and data deletion. Hence, once the user creates a data file, he has the ability to manipulate it. File preparation occurs just before a file transmission. The file preparation module transforms the not human readable file created by the first module into a readable flat file that can be used by other kinds of application software, like popular spreadsheet packages or database management systems. The last module takes care of three different file transfers: sending and receiving files with a fileserver, sending files to a receiver, and receiving files from a sender.

Since December the tests of the first version of TEXEMS have started. The Urban Systems lab has installed a fileserver in the EMIS office and data has been sent back and forth between the LBJ School of Public Affairs. Soon, four "guinea pigs" (the City of Austin EMS, North Hays County EMS, Williamson County EMS and Lubbock TDH EMS) will be able to collect data and transfer them to the Texas Department of Health.

To be able to use TEXEMS, you must have any kind of "true" IBM compatible computers (laptops, XTs, ATs, PS/2s...) running under the DOS system, some floppy disks or hard disks, and a "true" Hayes compatible modem. The standard data set that TEXEMS collects is the one used by the EMIS run form.

The next steps of the project are to develop a UNIX and a MacIntosh version of TEXEMS, to develop a customizable version of the system, and to develop the reporting part of TEXEMS. These developments will allow a wider range of users to access the system and to customize their version, giving users the ability to add data specific to their situation. The reporting part of TEXEMS will include different kinds of reports, from form print-outs to maps, at different levels from local to statewide.

If you need any further information, please contact Gene Willard or Richard Harris at the Texas Department of Health (512) 458-7550 or Professor David Eaton or Yves Renaud at the LBJ School of Public Affairs (512) 471-4962.



Alana Mallard

Gene Willard receives data from UT as Rick Harris and Mandy Holt look on.

Factors Affecting State Examination Scores

by Jim Zukowski, Ed.D.

A great deal of discussion has been generated over the difference in state EMS examination scores from one training program to another or from one region in the state to another region. Several factors can greatly affect the examination scores.

1. **Length of Course** — Scheduling of classes has an influence on the test results of students. For example, a 120-hour Basic EMT class covered in a 6-week period with 4 to 6-hour class sessions every other weekday provides a tremendous challenge for students to quickly absorb a phenomenal amount of information. If all of the students in this type of scenario are self-motivated and eager, examination scores accurately reflect whether or not they have achieved the stated criteria. If some of the students in this type of training situation require a longer period of time to absorb the information, they are hampered when it comes to the state examination.

2. **Instructional Personnel** — The role of the instructor in providing a quality learning experience cannot be overstated. Obviously, if the educational personnel have successfully completed a formalized instructor certification course, they are equipped with a repertoire of established tools and techniques that will improve the quality of instruction. Consequently, students have a better chance of learning the required skills and information in this kind of productive learning environment.

Furthermore, instructors who have had extensive experience in teaching and/or in the field have an overall edge over novice instructors with limited field experience and/or teaching. A finely tuned session on neonatal emergencies by an experienced instructor is preferred to a fumbled session by an instructor who is more or less reiterating information in one of the commercial texts.

Guest instructors can also have an effect on overall student performance when it comes to the state examination. It has been well documented that when guest instructors with expertise in a given area cover a topic having a clearly defined learning objective, performance is markedly improved. However, if a guest instructor strays away from an assigned area and conveys "war stories," student scores can suffer.

3. **Classroom Attendance** — There is no substitute for active class participation and discussion. Too many times it has been noted that volunteer EMT's have been called away from class to handle an emergency. In those instances reading the lectured topic in a text does not adequately replace the classroom presentation and discussion of the material in a formal setting. Consequently, the students who have only read the information are at a distinct disadvantage when it comes to the test and will probably score lower.

4. **Instructional Aids** — Since no two students learn the same way with the same physiological senses, the use of instructional aids enhances the learning on the part of all students. Because of a cost factor associated with audio-visual aids, EMS training programs operating on limited funds are, in a real sense, at a disadvantage. This is a recurring problem without a clear cut solution. But it bears noting that any commited instructor should provide some sort of alternate delivery method, whenever possible, because in the long run students will have a clearer understanding and perform better on the state examination.

5. **Other Factors** — Briefly, other considerations that will enhance the student's capability of performing better on the state examination include the following:

a. **Practice Multiple-Choice Exams** — Using the multiple-choice testing format throughout the duration of the class reduces a considerable amount of the test anxiety normally associated with taking a state certification exam.

b. **Training requirements** — Handing out a copy of the required knowledge objectives for the course allows the student to know up front what the course expectations are and provides the overall framework for training.

c. **Textbooks** — Do not let one textbook be your bible. A variety of sources will help to clarify and expand on a concept or issue rather than confuse.

d. **Pre-Selection Criteria** — Admission requirements into an EMS course can be structured to screen out potential candidates with little or no educational background and screen in students who have increased literacy skills and a higher degree of motivation.

This list can be expanded, but it is important to realize that the factors presented can certainly impact training which ultimately influences exam scores.

Ethical Teaching Behavior: Are You Fair?

by Doug Stevenson

Ethical teaching is built on three moral principles according to the American Academy of University Professors (1966). These principles include respect for the student as well as the patients; the right of the student for fair and just treatment in emergency medical service training courses; and benefice. In an educational setting, benefice means that the student is entitled to a competent and accurate education. Brown (1981) states that students as consumers expect "respect, fairness, and sensitivity from the teacher." Educational programs that do not follow these moral principles will discover that EMS consumers are finding other EMS programs to continue their education.

Education is a two-way communication process. If the student detects a condescending or disrespectful attitude in the teacher, communication avenues close and learning grinds to a halt. An ethical teacher needs to be open-minded while allowing the adult students to use their own experiences and opinions. The teacher should become sensitive to the student's needs by developing a constructive relationship with students. The EMS instructor should schedule frequent, confidential counseling sessions with the students and advise them on their progress.

The teacher is a moral/ethical role model for the student to emulate. The clinical teachers or preceptor must be aware that their actions will be mirrored in their students. An effort should be made to use proper technique in teaching skills with no shortcuts.

The preceptor is a role model for behaviors other than skills. The methods that the preceptor uses to obtain patient consent, to show respect for the patient's needs, and to protect the patient's privacy are all being monitored by the new EMS student in a clinical or field setting. The preceptor should observe the students performing skills but the "instant replay" and critique should be done away from the patient's bedside.

In clinical and field internships, students not only organize content and theory, but also learn about professional socialization. Students look to the field and clinical staff to learn time management, to evaluate the overall effectiveness of patient care and and to find methods of dealing with criticism from patients, staff or teachers. EMS students need ethical teachers that respect them as adult learners and show respect for the needs of the patients to keep the learning channels open.

The ethical teacher must be clear as to the written policies and procedures to be followed during the course. Students and instructors must be absolutely certain about how these written policies will be used in the course. The teacher has as much an obligation as the student to follow these initial written guidelines.

The teacher would be angry about a student using dishonest academic behavior. Unless this behavior is specifically described as being academically dishonest, the student may not be aware that it is considered cheating. Stern and Havlicek surveyed 104 university faculty and 314 students about behaviors that the teachers felt were dishonest scholastic behaviors. In 24 out of 36 behaviors the faculty and students disagreed on whether a behavior was dishonest scholastic behavior.

Most disagreement centered on copying a classmate's notes, someone else typing and correcting a paper when the grammar was to be graded, working in a group on an individual assignment, looking at old tests from a test file, and asking another student about answers from an exam. Combining all of the faculty and students, 82% said they had performed one or more of these behaviors.

Once the faculty and students understand the course operating procedures and policies, it should be easier for the ethical teacher to remain fair and impartial. However, Everidge reports that it is not always possible to operate without problems occurring. These problems can arise in evaluation and grading challenges, access to or misuse of student records, professional misconduct, or discrimination.

Once a protest arises, the teacher is obliged to follow the written policies, and the student has the right to due process in all academic procedures. The hearing should be more than an informal review. The student should have written notice, have the right to confront accusers or bring in witnesses and be allowed the right to counsel. Any decision of suspension, dismissal, or sanction should be delivered to the student. The student should have an avenue to appeal these decisions.

The ability of the ethical teacher to control the class

depends on the students and faculty following these policies and procedures. The educator's ultimate goal is to help the students meet the objectives of the EMS course. The teacher needs to make an effort at every administrative level to mediate these educational disputes.

The last moral principle is benefice or a competent, ethical education. This places the burden on the teacher to provide quality education. The teacher should be prepared to teach prior to class and be prepared to prevent injuries to students during their training. The teacher must cover all D.O.T. objectives included for state certification, not just the ones in the textbook.

The teacher has an obligation to make sure that any adjunct lecturers, skills instructors, or preceptors are capable and competent with evaluation tools based on the D.O.T. and the course objectives. The ethical teacher will follow guidelines, behave properly, and pay attention to classroom duties such as providing students feedback on examinations on a timely basis.

How can you evaluate ethical teaching behavior? Deciding which behaviors are ethical and which to put in the survey can be very difficult decisions. In general, most courses use teacher evaluation forms with a numerical rating scale along with areas for comments about an instructor's teaching abilities. Numerical ratings should be used for evaluating the global performance of the teacher's abilities, but written comments should be used to help the instructor subjectively evaluate the educational curriculum.

Educators have also found that these types of evaluations tend to be inflated depending on the length of time the teacher spent with the students. The longer the time, the better the ratings and comments across the board.

Observation has been used but its validity is questioned since an instructor may change the delivery if a supervisor is sitting in the back of the classroom. If evaluations occur several times in a course, the instructor might retaliate against the students for bad ratings or comments.

An ethical teacher should use subjective opinions of the students, institutional ratings, peer observation by other EMS educators, curriculum review by EMS providers, and results on examinations to form a general opinion as to the competence and accuracy of the course curriculum.

Ethical teaching includes having respect for students and patients, fairness, and presentation of accurate theory along with development of competent skills. If this process occurs, then quality in EMS education will follow. The EMS student and employer are the consumers of EMS education. These consumers develop their own criteria for quality EMS education far beyond those of legislated minimal state criteria. Programs that fail to meet these consumer standards of quality will decay and eventually disappear.

Ethical teaching requires daily examination and evaluation to make sure that students receive an ethical Emergency Medical Services education.

BIBLIOGRAPY

1. "Nursing Student's Perspectives of Unethical Teaching Behaviors", **Journal of Nursing Education**, E. Charlotte Theis, Vol. 27, No. 3, March 1988; PP 101-106.

2. **The Handbook**; Jefferson Community College, Louisville, Kentucky 1980.

3. "Clinical Experience", S. White, **Journal of Nursing Education**, Bol. 26, No. 4, April 1987, PP. 151-153.

4. "Putting Out the Fire Before It Starts: Due Process in the Classroom" Jim Everidge, Lecture, NAEMT National Educational Symposium, 1988 Reno, Nevada.

5. "Redundancy of Student Comments and Numerical Ratings in Evaluation" **Journal of Allied Health**, February 1985, PP. 141-147.

6. "Academic Misconduct: Results of Faculty and Undergraduate Student Surveys", Erica Stern; Larry Havlicek, **Journal of Allied Health**, May 1986, PP. 129-142.

(Heroes continued from page 8)

this question, Bonnie Jackson smiled and said, "I guess the first thing would be tuition support, organized in such a way that the students got a tuition refund from their volunteer service after they completed the course and proved their seriousness toward becoming trained EMS personnel." Secondly, for the Health Science Center, she would really like to have a training ambulance. This should be a fully-equipped Mobile Intensive Care Unit, where students learned through hands on simulated experiences, including lifting, moving, communications, starting IV's while moving and a good bit of having to function amid the noise and confusion of an ambulance run.

Statewide, her emphasis would be on top level training. EMS people of Texas want to be professionals and to be accepted as such, and professional classroom instruction will help them get one step closer to that goal.

Other issues in Texas: "I think it is very important for (registration and ambulance) fees to be for specific purposes. People will oppose higher fees unless they are told what the money will be used for."

(see Heroes page 18)

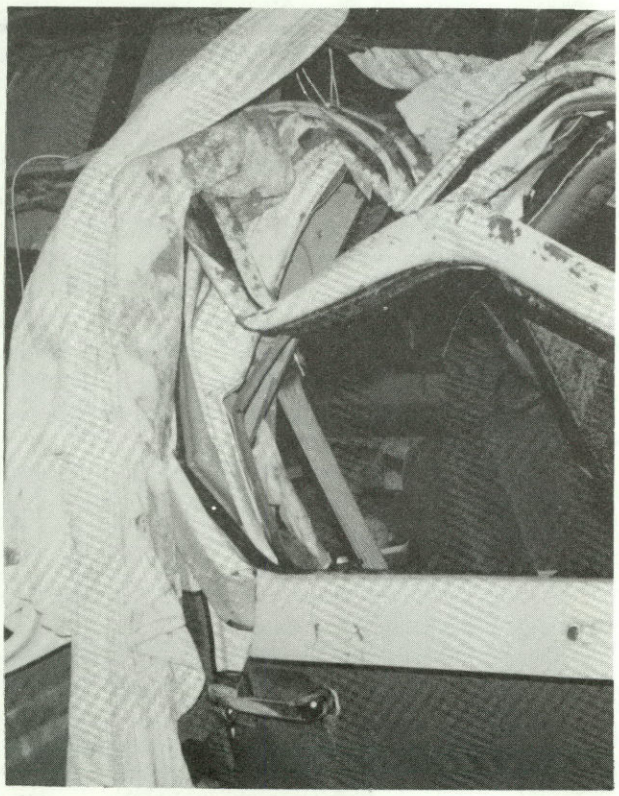
Rescuers Rescued

by Elliot Ralin

Kaufman County Ambulance Service is a hospital - based EMS service, operating out of Presbyterian Hospital of Kaufman. The hospital also sponsors an EMT training program with some of the ambulance personnel as instructors.

On November 19, 1988, Howard Mount, an EMT with Kaufman County Ambulance was driving a new type II vehicle, unit 963, along with his partner, EMT Joe Hatcher. The two were responding to a cardiac call out in the county. There were high winds and heavy rains that day. Because of the weather, the crew slowed their speed. But, as they were en route on this emergency call, the ambulance suddenly hydroplaned, slid off the road into a ditch, and rolled several times. Ironically, this was the same day that the EMT school was having their extrication class.

Mr. Mount suffered C-spine injuries and Mr. Hatcher complained of pain in the side and hip area. EMT Mount was able, however, to crawl from the vehicle and radio for help. Steve Strempke, Paramedic with Kaufman County Ambulance and EMT Course Coordinator was returning from the extrication class in a fire department rescue truck when he heard the call for help. Mr. Mount's coworkers quickly headed for the scene as they realized that the accident involved their own vehicle and crew members. Howard Mount commented, "I was never so glad to see their ugly faces," once his help arrived.



Kaufman County EMTs Howard Mount and Joe Hatcher are back on the job after their vehicle was involved in a rainy day crash.

The rescue actually involved a seven agency cooperative effort with the DPS, Sheriff's Office, Kaufman County Ambulance Service, Kemp Police Department, the Highway Department, Kaufman Fire Department, and East Texas EMS.

EMT Mount reportedly gave his own patient report when brought into the emergency room at Presbyterian Hospital of Kaufman. When interviewed in December, he was sporting a C-collar and had much comment about C-collars, padding backboards, and finally, on what it felt like to be the patient.

Happily, both crew members are recuperating well and back on the job, with much praise for their rescuers.

Letters From The Front

Texas' Loss/Pennsylvania's Gain

As of the first of the year, I will be moving to Tri-County Fire Department in Glen Mills, Pennsylvania.

My stay in Texas has been truly enjoyable and working as an EMT-SS most rewarding, but "Greener Pastures" beckon and I sadly must move on. Thank you for an informative and enjoyable publication which I hope to continue to receive for years to come.

Barry E. McClung EMT-SS
Northwest Rural EMS
Tomball, Texas

(Heroes continued from page 17)

As far as EMS is concerned nationally, Bonnie Jackson says, "we need to start supporting EMS systems, not just individual services." As far as training is concerned nationally Jackson says, "the knowledge objectives have increased the instructor load and student learning requirements, but the recommended hours haven't increased. It's impossible to adequately teach the knowledge objectives in the number of hours Texas requires as a minimum for any of its levels of certification."

Bonnie Jackson is one of the many people in Texas who have taken EMS in Texas from a simple sideline service to its current level of excellence. We want to recognize and encourage such people and say to them "Thanks for your dedication, your tenacity, your excellence." It is these people who put real meaning to the logo, "EMS in Texas, Dedicated to Patient Care."

PATIENCE

by Dennis Zerby

This article first appeared in the Pennsylvania Emergency Health Services Federation Newsletter ***EHSF Dispatch****. Some of the EMS terminology differs between Pennsylvania and Texas, but the emotions are the same.*

It was just another typical Saturday morning, or so I kept trying to convince myself. But this was not true. It was a very important day in my life. Today was the day I would be taking the Emergency Medical Technician (EMT) practical examination, a test that would determine whether I would be permitted to become certified as an EMT, a course that I had been taking for the last five months. All of us need to pass this test today. If any member of the class does not pass today, we will be dropped from the class.

If I do not pass today, I do not know what I will do. That is not totally true; I will take it over again. That is, if they permit me to do so. Once I am over today, then I can worry about the exam, but not until I pass this test today.

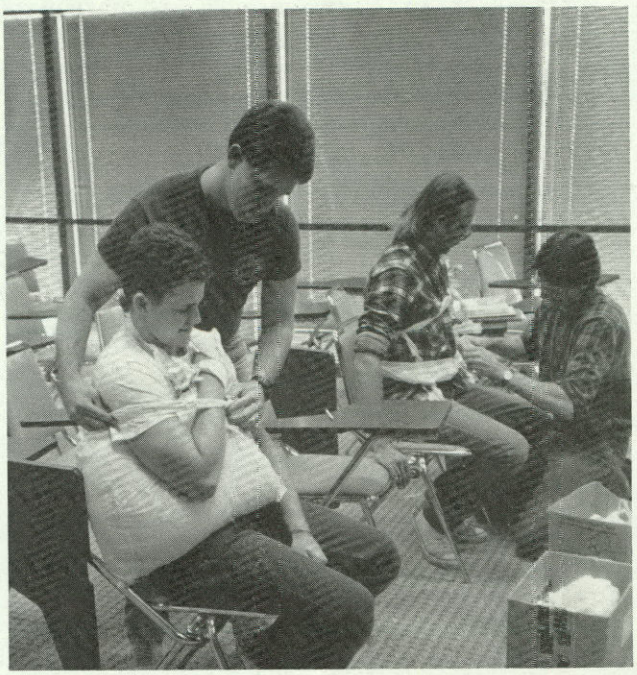
How well do I know the practical skills we will be tested on today? You know, the skills that my partner Dan and I have been practicing every chance we could for the last five months, things such as bandaging, stabilization, recognizing symptoms, taking care of a patient in cardiac arrest, etc.

Oh, how did I get myself into this predicament anyhow? Charlie, that's how. Charlie was one of those employees in the department where I worked. Three months previous, he had a heart attack while at the shore. Now he was returning to work and the plant nurse was concerned. The doctors told Charlie's wife they could have declared Charlie legally dead. Charlie was without a heart beat for over an hour and a half, except by artificial means. Because they persisted, Charlie is a live today.

The plant nurse recognized a need. There are twenty three personnel in our department, and no one was trained in Cardiopulmonary Resuscitation (CPR). The nurse wanted someone to be able to help Charlie, just in case he had a relapse while at work.

Sure, why not? Charlie's my friend. Why wouldn't I want to help him if he needed it. Within a few days, the nurse notified us of the pending class that two of my fellow department workers and I would be attending. The course would take eight hours, Gee, a whole day away from my job. That would be great, and I will be learning something to help a fellow human being.

That was the beginning, but I could not stop there. When the nurse asked for additional personnel to train as First Aid Attendants, I volunteered - again. This course would take four hours and after satisfactory completion, I would be certified as a Mult media First Aid Attendant. Someone who is capable of taking care of minor first aid problems that happen within the plant, things such as cuts, scratches, minor burns, etc., until the nurse could arrive at the plant.



Tom Ardrey

Students practice bandaging and splinting in preparation for their State skills exam.

But today is different. If I pass today, I will be permitted to take the EMT written examination. Upon satisfactory completion of the practical **and** written examinations, I would be certified by the Commonwealth of Pennsylvania as an Emergency Medical Technician, certified to assist on ambulances, accident scenes, medical emergencies, and at hospitals. This is where the very ill people need assistance. This is where I must be able to piece together the puzzle of someone's illness. (I must really know my stuff.) It will not be like at home where I take care of the kid's problems with a baby aspirin or a band-aid; it will be the real McCoy.

First things first; today I need to pass the practical examination. (Then I can worry about passing the written and the rest in the future.) Oh, why did I get myself into this? What about Dan, my partner? He is counting on me today. I hope I do not let him down, because I am nervous. I hope I do not do poorly today and pull him down also; he really wants this. No I should not pull him down; he is smart. He was a medic in the Navy; he even has experience doing such things as starting I.V.s.

Stop worrying. Get up, shave, shower, and get dressed. Maybe if I take a little time to study the skills from the Skill Workbook, I can relax a little and take my mind off the practical today. Relax, do not worry about having an EMT Evaluator looking over

your shoulder. Just like when you would make twice as many mistakes in typing class when the teacher would stand behind you, watching. Forget the rumors that they are monsters, just looking for the smallest mistakes so they can fail you. Relax. Dan and I know our skills down pat. After all, the two of us have practiced every possible chance we could on class nights. But, I know I am going to be extra nervous today. An awful lot is riding on this test. Five months of my time, my ability to learn, some money, and putting my family on the back burner. Five months, it seems like yesterday that the Course Coordinator was orientating the class.

What happened to the time? It is almost 8:00 a.m. already! Dan will be waiting for me. Maybe we can go over some more of the skills while I drive to the test site. Oh, I hope he is not nervous too. Maybe he can add some stability to this partnership and pull us both through.

We are here already. Gee, that did not take long. We hardly had any time to review before we arrived at the test site. Dan is just as nervous as I am. It feels like I need another shower. So much for deodorant!

Who are they? The Evaluators! But they do not look like monsters. They look like regular people. A couple of them look pretty tough, though. They have the EMT patch on their shoulders so they must have gone through all of this themselves. I hope they remember their humble beginnings and show us some mercy.

Orientation did not take too long, but we are only allowed one abort per station, and we must pass eight of the nine skills in order to retest. If we fail more than two skills, we fail for the day. Failing today means taking the course all over again. Only two skill failures, that is not very much! But we can do it, can't we Dan?

Where did all these people come from? There were only 22 in our class. Oh, a Refresher class form a different county, and us. Oh, this is going to take all day. I do not know if the uncertainty will get to me or not.

Oh no, back boards for our first station. This is going to be the pits! Probably the most difficult of the skills. Just our luck, the slightest movement of the patient's head or neck, and there goes the skill. Dennis, settle yourself. Listen to the Evaluator; listen to the scenario, maybe he will give us some clues to make this station less difficult. Take neck stabilization, that is the way Dan and you have always practiced. Do not let the patient's head slip out of your sweaty hands; hold it firm and steady. For a real patient, this is to prevent damage or any further damage to the cervical spine area. Movement could cause severing of the nerves in the spine, leaving the person with permanent loss of movement in the extremities.

That is one station down with only two more to go! It was not as difficult as I thought it was going to be. Once we got started we were really smooth, weren't we Dan? We acted as if we really knew what we were doing. Let's go, Dan, I am ready for the next station, whatever it may be.

Finally, we are done, all three stations. We did not do badly at them either. We had a couple of mix-ups at two stations, but they were just minor. We accomplished the skill, just slightly out of sequence from the way it was taught. There is no way the Evaluators could fail us for those little things is there? They were just small, trivial, minute, little mistakes? None were life threatening?

We have turned in our routing slips. All we need to do now is wait to compile the data sheets from all three stations and then we know if we passed today. I hope it does not take too long.

What is taking them so long? The suspense is killing me. Five minutes should have been long enough for them to get all the sheets together and to come out to notify us if we passed today. Where are they? Can't they see we are eager to know the results?

Hey, I like the idea; they call both partners up at the same time to give them the news. That's pretty cool. Oh, no! Carol and Sis are going back the hallway with the Test Team Leader! I wonder what that means? Do you think they failed? Dan! Dan! That's us. Put your cigarette down; they are calling us, come on.

"Dan and Dennis, I have good news and bad news - which would you like to hear first?" Heart failure! Four months of working, and for what? Our families were upset because we were never home, and for what? How could this man even know what we have gone through. "Oh, give us the bad news first."

"The bad news, you still have to take the written test. The good news, you have passed for today. Good luck with your written."

That happened several years ago. The irony of the whole thing is I still have not learned to say no. Four years ago I became an EMT Evaluator, and eventually, a test Team Leader. June of '87 I also became an EMT Instructor. Why? Well, this is one small thing I can do for my community, helping people in need. I do not have an abundance of money to donate, but God gave me this talent - it is called caring. As an EMT I have found a way to use my talent for the good of the community, for people who need comforting and/or help, - people in need.

By the way, every three years an EMT must be recertified to maintain certification in Pennsylvania. The EMT needs to perform the practical skills and take a written examination in order to retain this certification. Oh yes, I still get very nervous even now when it is my time to recertify.

Like we said, some of the facts and terminology are different, but the emotions are the same. Recertification is required every four years in Texas.

Continuing Education Tapes

The following CE tapes are available free from the Bureau of Emergency Management.

1. **The Carbusters!** Three separate videos - 2 hour modules each order separately.

   a. **The Principles of Extrication**
   b. **Techniques of Extrication**
   c. **Hand Tools and Pneumatics**
   d. **Patient Consideration**

2. **Emergency Medical Technician** - A Continuing Education Recertification Program Teaching Manual. These outlines for instructors follow the D.O.T. curriculum. Includes: 20 separate lessons, slides, pre and post tests for each lesson.

   Each of the following lessons is available separately. C.E. credit is given on an hour of credit per hour of instruction basis.

   (1) Roles, Responsibility and Legal Aspects
   (2) Anatomy, Physiology, and Patient Assessment
   (3) Airway Obstruction, Respiratory Arrest
   (4) Cardiac Arrest
   (5) Adjuncts to Airway Management
   (6) Bleeding, Shock and Pneumatic Counter-Pressure Devices
   (7) Soft Tissue Injuries
   (8) Fractures and Dislocations of the Upper Extremities
   (9) Fractures and Dislocations of the Lower Extremities
   (10) Injuries to the Head, Face, Eye, Neck and Spine
   (11) Injuries to the Chest, Abdomen and Genitalia
   (12) Medical Emergencies I
   (13) Medical Emergencies II
   (14) Emergency Childbirth
   (15) Environmental Emergencies
   (16) Psychological Emergencies
   (17) Lifting and Moving
   (18) Extrication
   (19) Ambulance Operations
   (20) IV Therapy

3. **Pediatric Assessment** - Dr. Rolf Habersang (#4105)
First in a series of workshops presented by Dr. Habersang, Associate Chairman, Department of Pediatrics, Assistant Dean for Academic and Student Affairs at Texas Tech's Regional Academic Center in Amarillo. Addresses differences in working with children and adults, and how to determine the pediatric patient's condition and appropriately begin treatment. Includes handouts; Student Outline, Audio-visual resource lists, Pediatric Trauma Scale, Pediatric Coma Scale, Pediatric Blood Pressure Charts, etc.

4. **Pediatric Medical and Respiratory Emergencies - Dr. Rolf Habersang** (#4106)

How EMS personnel assess and treat various Pediatric Emergencies such as respiratory distress/ failure, dehydration, illnesses, shock, and seizures. Includes handouts: Student Outline, IV Fluid Rates, APGAR Scoring Criteria, Pedi Schedule - Values, Equipment, Dosages, Resource Lists, etc.

5. **Pediatric Poison and Overdose** - Dr. Rolf Habersang (#4107)
Aspects of EMS assessment, treatment, and prevention of poisoning and overdose. Includes a Student Outline and also a question and answer period where Dr. Habersang answers questions from EMS personnel concerning information from all three modules.

6. **Autonomic Nervous System and Drugs** - Dr. Bass
Explains the functions of the Sympathetic and Parasympathetic Nervous Systems, and how specific drugs affect them. Primarily intended for advanced EMT's. A student outline is included; 2 hours of C.E. credit.

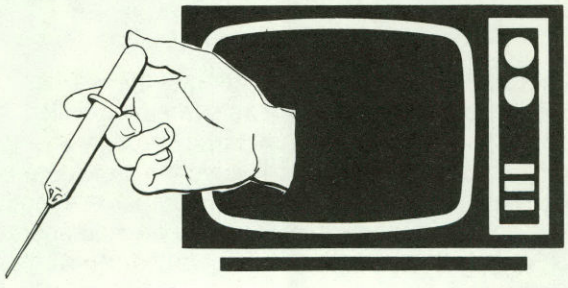
7. Pediatrics Emergency Medical Services Program: Dr. Linda Rice **"Airway Management"**

8. Pediatrics Emergency Medical Services Program: Dr. Eichelberger **"Pediatric Primary Trauma Assessment"**

9. **Emergency Medical Update**

Intended to supplement classroom instruction. Four topics are covered: Mass Casualty Incident: Edmonton Tornado, Patient Assessment, Aids/Hepatitis, and Legal Issues. Includes 20 Learning Objectives, and a quiz to be given at the end of the session. 1 hour of C.E. credit will be given for completing the entire program.

For more information on using Continuing Education tapes for credit contact your Public Health Region EMS office or the Bureau of Emergency Management in Austin at (512) 458-7550. Public Health Region telephone numbers and addresses are listed on page 13.



Beyond Facts and Figures Teaching With a Heart

by Virginia Hofmann Blackwell, R.N., B.S.N.

A little over six years ago I got involved in training pre-hospital workers, particularly Paramedics and Special Skills EMTs. I was a critical care nurse with virtually no teaching background, but I was interested in teaching and wanted to give it a try. As I worked to establish myself as a teacher, I looked around and saw other educators who, like me, were good clinicians, but when it came to teaching, were "flying by the seat of their pants." I want to share with other educators some of what I have discovered about teaching, and what works for me in the classroom.

This article will not be focused solely on theories and techniques of adult education. Instead, I hope to provide some insight, and stimulate you to examine your own thoughts, attitudes, and practices in educating prehospital care personnel.

Let's begin with some definitions of learning, teaching and motivation. Learning is a relatively permanent change in behavior that comes about as a result of a planned experience. Teaching is a planned experience which prompts a person to behave in a certain way.

Implied in both definitions are certain responsibilities which are assumed by the teacher and the learner. The teacher not only must have command of the subject being taught, but must plan and prepare for the experience. Preparation is essential, and it takes a concerted effort to prepare. It is an important part of teaching. The teacher should even prepare for lessons which have been taught numerous times before, so the material is updated and fresh.

The learner also must assume responsibility according to this definition. The learner's responsibility is to change behavior. Although we, as teachers, may have other expectations of our students, ultimately the student's behavior must change as evidence that learning has taken place. It is very important that the learning objectives be behavior oriented, because demonstration of the desired behavior is the only reliable measure of how much the student has learned.

Learning depends on motivation of the learner. Motivation can be defined as something which prompts a person to behave in a certain way. Motivation can come from within the individual, or from outside sources. Although a student's motivation can be strongly influenced by outside sources, ultimately the motivation must come from within the student.

In planning an educational experience, it is important for the teacher to recognize a number of principles which apply to adult learners. Recognition and application of these principals can increase your teaching effectiveness, and result in a more enjoyable and fruitful learning experience for the student. The scope of this article does not permit a in-depth look at adult learning principals; however, they can be summarized.

In general, adults want to be respected, and they shun threatening or humiliating situations. They also shun learning situations which do not offer practical solutions to today's problems or needs. They hate to have their time wasted. Adults are resistant to change. The motivation to change must come from the learner, and this motivation must be strong enough to overcome their natural resistance to change. The teacher can help the student overcome resistance to change by creating a climate which promotes learning.

What is a climate conducive to motivating the learner, and how can we, as instructors, create it? I believe that each teacher must start by identifying and understanding his or her own attitudes (about teaching, learning, the students involved, and the lesson content), and the student's attitudes. These attitudes inevitably impact on our performance as teachers.

It is essential that the teacher take the subject matter seriously, but not take the teacher too seriously. The teacher must be competent and confident, but must also recognize and admit personal fallibility. Recognition and acceptance of our own ability to make mistakes not only gives the students the ability to recognize, accept and admit their own fallibility, but gives them the freedom to risk and to make mistakes.

It is important that the teacher avoid conditions which promote the development of negative attitudes in the students. Nothing kills motivation faster than negativity. These conditions include:

1. psychological pain: fear, anxiety, frustration, humiliation, and embarrassment.
2. boredom
3. physical discomfort

The teacher demonstrates a positive attitude toward the students and the teaching experience by incorporating the following practices:

1. Recognize that student responses are attempts to learn. Whether the response is correct or incorrect, acknowledge it. Comments you make regarding student responses should be accepting rather than rejecting.

2. Reinforce or reward responses which approach the desired behavior. This can be done very simply: a smile, a nod of the head, a cheer, a cup of coffee, or maybe just some of your attention.

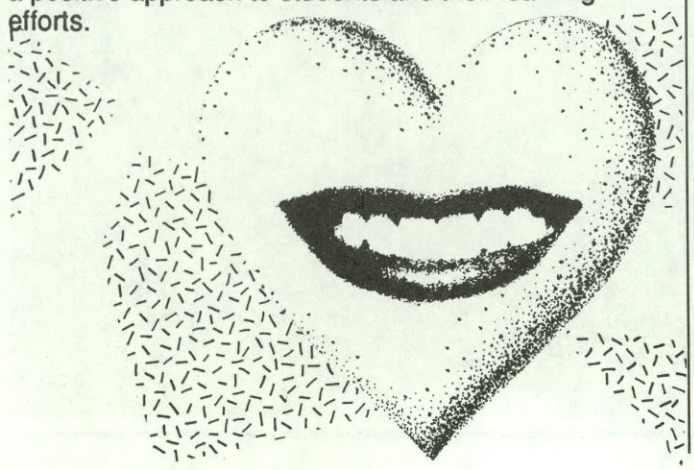
3. Provide a tangible token for successful completion of an especially difficult or time consuming piece of work. This can be in the form of a gold star, a simple certificate, or even a "happy face" drawn on the paper. Some students may make disparaging remarks toward these, but the same students brag when they earn a token. And I've never seen a student leave one behind.

4. Provide feedback specific to the student's behavior in a timely manner. The sooner you give feedback after the performance, the more positive impact your feedback will have. Be sure your comments are limited to the performance of the student, and whether or not that performance met the stated objectives. Do not belittle your students when giving feedback. Keep your comments positive. Showing disrespect for your students as people and making negative comments about the students leaves them thinking about how you treated them, not their performance.

5. Finally, treat students as persons worthy of your time and attention, not as numbers in a faceless crowd.

All humans, including students and teachers, are wanting creatures. We want positive self-esteem. We have a basic need to love and be loved. In a learning situation, we need a safe place to develop confidence and competence.

The ideas discussed in this article should not be interpreted to mean that the teacher need "baby" the students. Indeed, prehospital training demands high standards of performance. The teacher can have the best of both worlds when, in addition to demanding high levels of performance, he or she strives to take a positive approach to students and their learning efforts.



(Read continued from page 10)

over the posted speed limit; drive to cool down after an argument; and less likely to pay attention to warnings about drinking and driving.

. . . in **JAMA**, July 1988, where a 12-month study at a major trauma center reported that in 105 motorcycle accidents with hospitalized riders, 63.4% of the care costs were paid for by public funds. The total cost involved was $2.7 million. That averages out to $25,714.29 per patient. The 63.4% paid with public funds is $16,302.86 each.

. . . in Summer/Fall 1988 **Texas Emergency Medical Technician** journal, a survey of Texas street medics for least desirable and most desirable characteristics in a partner. A partner who knows it all, is rude to patients, or has poor driving habits is least desirable, while calmness during a crisis and good medical skills were the most desirable characteristics.

. . . American Heart Association's new public service ad that reads: You don't have to be an American to die of a heart attack. But it helps. You also don't have to overeat. Or consume excess amounts of cholesterol. Or ignore high blood pressure. Or smoke. But that's what a large segment of this country's population does. And that's one reason the United States has the highest incidence of heart attack in the world. At the American Heart Association, we're trying to help Americans change the way they live. And die.

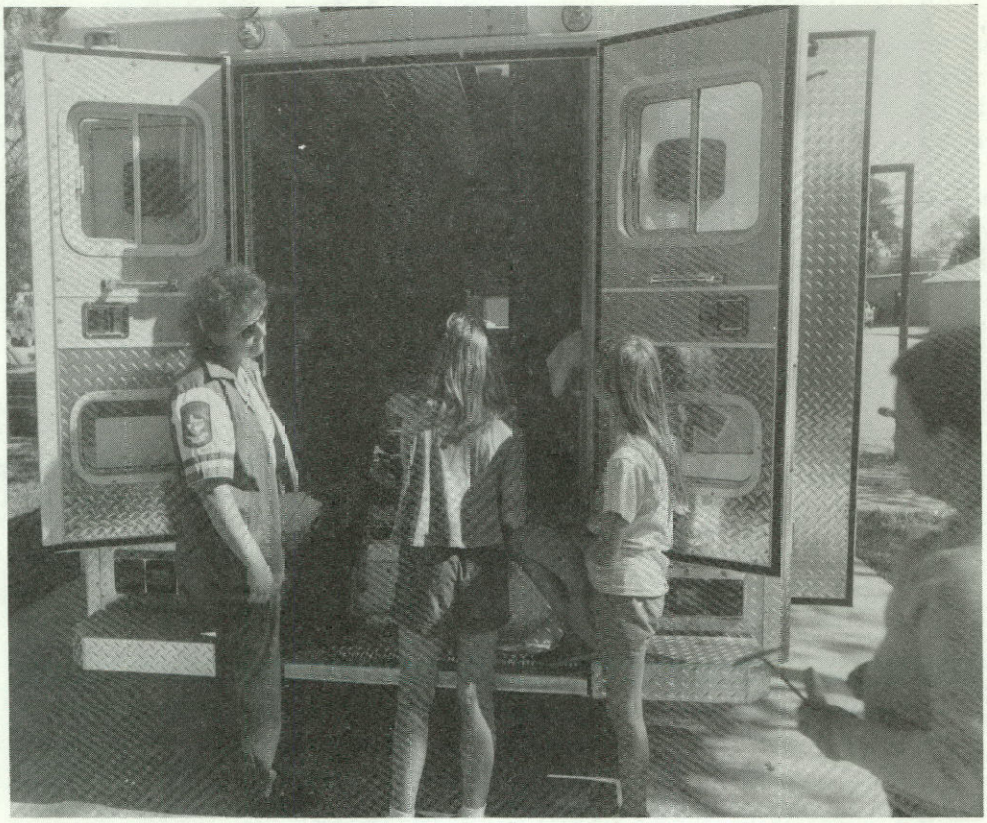
. . . in Carolyn Garcia's article on employee assistance programs in the November, 1988 **JEMS**, that 40-60% of all illnesses causing employees to miss work are stress-related.

. . . in November 15, 1988 **Traumagram** that seat belt use by automobile drivers has increased to a new high of 43.4%. This percentage is based on over 49,000 observations between February and May 1988 in 19 U.S. cities and compares to an 11% usage rate cited by National Highway and Traffic Safety Administration officials in 1982. Of the 19 cities in the study, Dallas had the highest usage rate - 71.4% - with Houston running a close second at 65.6%.

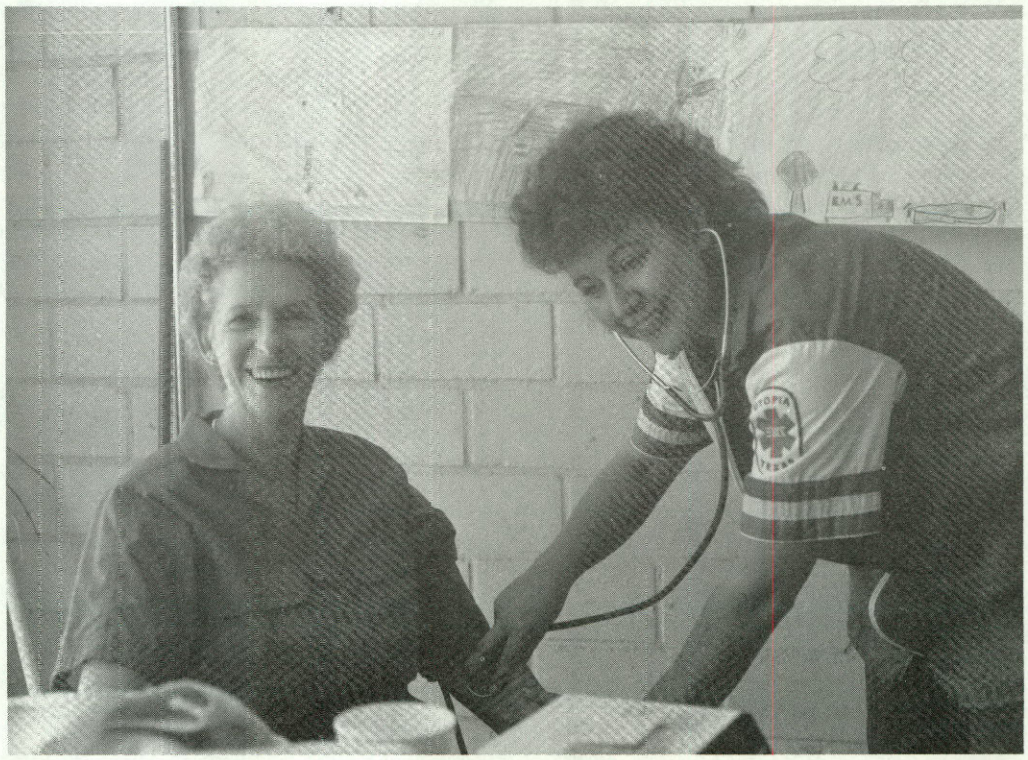
. . . in October, 1988 **HIV Prevention News** that there are 52 countries reporting more than 50 cases of AIDS, with 96,433 cases reported worldwide as of June I, 1988. World Health Organization estimates there may be as many as 200,000 actual cases, mostly unreported outside the industrialized nations, and up to 5 million with HIV infection worldwide.

ASM

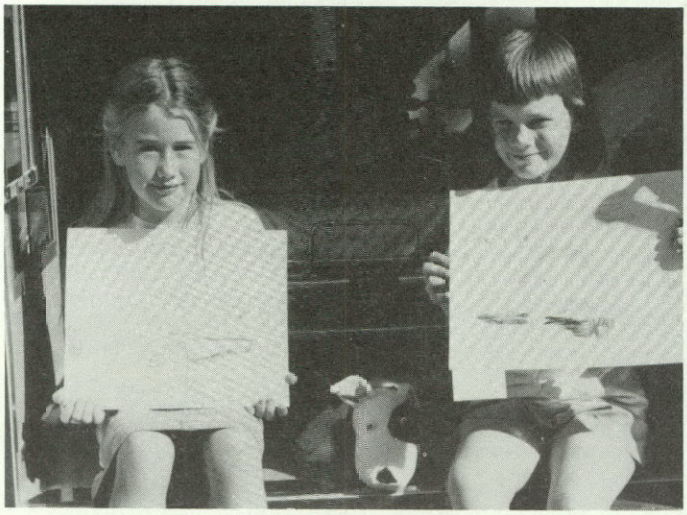
EMS "Standing By" at the Fall Fair in Utopia, Texas



Brenda Boyd, 14-year veteran of Utopia EMS, shows off some of the EMS equipment to curious fair-goers.



The blood pressure clinic was held in the EMS garage and the Fall Fair Barbeque Dinner was held in the training area. EMS posters drawn by students decorated the walls.



Two young winners of the EMS poster contest show off their artwork from the back of the ambulance.

The Utopia EMS emergency vehicle is highly visible outside the EMS station and right next door to the Fall

The Fall Fair is held every year to coincide with the opening of deer season, so that, besides community residents, hunters and their families can attend.

Photos: Alana Mallard

Annual Trauma Symposium To Be Held in Amarillo

The fifth annual "Tri-State Trauma Symposium" is scheduled for April 28-29, 1988 in Amarillo, Texas. The conference is being presented by Amarillo College, the Texas Department of Health, Amarillo Medical Services, Northwest Texas Hospital, and the Panhandle EMS System. Presentations will be provided in three tracks including programs for EMS and nursing personnel. Additionally, an Instructor/ Coordinator track has been added this year.

Several keynote speakers are slated to present topics at the conference including: Dr. Frank L. Mitchell, M.D., National Chairman of the American College of Surgeons Trauma Center Verification Committee; Mr. James O. Page, J.D., Publisher and Editor-in-Chief, Journal of Emergency Medical Services (JEMS); Dr. Michael Wainscott, M.D., former Associate Medical Director, El Paso EMS; Dr. Rolf Habersang, M.D., Outstanding Educator in Texas for 1988; Dr. Paul E. Pepe, M.D., President, National Emergency Medical Services Physicians; Ms. Jane Wynn, R. N., Program Director, Careflite-Dallas; Ms. Virginia Scott, R.N., Director, Emergency Ambulatory Care, Ben Taub General Hospital; Mr. Don Stamper, President Elect, Association of Air Medical Services (ASHBEAMS); Mr. David Wurtz, Deputy Director, City of Austin EMS; and several other specialists in emergency medical care.

The symposium will also include a Texas Department of Health EMS Coordinator Recertification program. This will involve attending a one-half day session on April 27, 1989 as well as the Instructor/ Coordinator track sessions during the conference. Individuals interested in pursuing EMS Coordinator recertification through this conference should contact Mr. Terry Bavousett, Program Administrator, Public Health Region 2, 300 Victory Drive, P.O. Box 968 WTSU Station, Canyon, Texas 79016 or phone 806/ 655-7151.

The fee for the conference is $55, which includes registration, conference materials, coffee breaks, two luncheons, and a "Meet the Faculty" wine and cheese reception scheduled for the evening of the April 28. The Texas Department of Health has awarded 14 CEU hours for the conference, and the National Registry of EMT's has awarded 10 CEU hours. For further information contact Larry Croy, Paramedic Coordinator, Amarillo College, P.O. Box 447, Amarillo, Texas 79178 or phone 806/354-6069.

POSITIONS AVAILABLE

EMT-SS/Paramedic: Texas Department of Corrections is hiring EMTs with Special Skills, Choice of location in Texas, excellent benefits, $1545/month. Requires Texas certification as EMT-SS/ Paramedic or TDC certification as EMT-Additional Skills. Prefer administrative or supervisory experience. Contact Hugh Robb, Medical Recruiter, Texas Department of Corrections, P.O. Box 99, Personnel Annex, Huntsville, Texas 77342 or call (409) 294-2755.

A note of immediate importance to RN's and LVN's. Discover our competitive salaries, improved benefits pack and innovate management style. 100% tuition reimbursements for critical care training. $2000. sign on bonus for critical care. Professional opportunities in: ICU, telemetry, PD, PDICU, Level 3 NICU, medical, surgical and more. Contact Rori Cantu RN, McAllen Medical Center, 301 W Expressway 83, McAllen, Texas 78503, call collect (512)632-4673 or 1-800-633-3658.

City of Marfa is updating its applicant pool for certified EMT's and Paramedics, advanced life support operations, excellent working conditions in beautiful West Texas. Send resume and salary requirements to: Darren Blankenship, Director, Marfa City/ County EMS, PO Box 787, Marfa, Tx 79843 or call (915)729-3151. Equal Opportunity Employer.

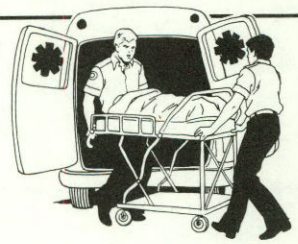
EMT Instructor: Teach basic EMT and ECA courses. Handle EMT-ECA recertification, CPR and First Aid training for local Industry. Requires minimum 5 years EMS experience and eligible Texas Paramedic certification. Degree preferred. Need strong communication skills, able to explain program to Industry. Contact Dr. Joe Hendrix, Kilgore College, Longview Center, 300 South High Street, Longview, Tx 75601.

Paramedics: To work offshore oil and gas platforms; State or National Registry; 3 years working experience; prefer ACLS background. Send resume to Medic Systems, P.O. Box 3184, Port Arthur, Tx 77642.

Paramedic Instructor Needed, the University of Texas Southwestern Medical Center has an opening for full time paramedic faculty. PA or RN registration required. Minimum salary $25,000. Send CV to Debra Cason, Department of Internal Medicine, 5323 Harry Hines, Dallas, Texas 75235-9030 or call (214)688-3131. The University of Texas Southwestern Medical Center is an equal opportunity employer.

EMT Coordinator Needed, Coordinate 5 EMT classes a year, supervise 3 full time and 6-7 part time instructors. Requirements include 2 years of clinical emergency care experience, 2 years of EMT/Paramedic teaching experience, Bachelor's degree in Health Education or related field and eligible for paramedic certification in Texas. For information call or send CV to Debra Cason, UT Southwestern Medical Center, 5323 Harry Hines Boulevard, Dallas, Texas 75235 or phone (214)688-3131.

EMT Instructor Needed, Plan and teach EMT classes, plan and teach some paramedic continuing education at local fire stations teach first aid and CPR to Police Academy. Requirements include 2 years of prehospital emergency experience, Bachelor's degree in Health Related Fields; eligible for certification as paramedic in Texas. For information call or send CV to Debra Cason, UT Southwestern Medical Center, 5323 Harry Hines Boulevard, Dallas, Texas 75235 or call (214)688-3131.



Editor's Notes

This issue of the **EMS Messenger** is an excellent example of why our magazine is consistently improving - its authors. The **Messenger** is not a narrow-focus, parochial, self-serving publication; it is a publication that has wide-angle view of Texas EMS and its issues and one that exists and improves for its readers. This wide-angle view is possible because of the variety of contributors to the **Messenger**. If you look down this list you will see Bureau of Emergency Management staff, Public Health Region staff, local EMS educators, an EMS-ex, a future policy maker, EMS managers, and first-line field medics.

CONTRIBUTING AUTHORS

Thomas J. Ardrey has worked with Bonnie Jackson, the subject of his new "Everyday Heroes" column, for many years during his EMS career with the Bureau.

Bill Baker, an EMT with the Bureau's Medical Standards on Motor Vehicle Operations Division, has been gathering and synthesizing information on Ford ambulance fires since 1986.

Virginia Blackwell, Associate Director of El Paso EMS and on staff of Texas Tech University-Regional Health Center, presented a workshop at the 1988 Texas EMS Conference on teaching the adult learner.

Pam Price is the justifiably proud Program Administrator of the Texas EMS Registry. Her article on the Registry program highlights the 40,000 registrants milestone just recently achieved.

Elliot Ralin is a paramedic on the staff of Public Health Region 5 EMS office and the editor of that region's **EMS Advisor**.

Yves Renaud is a graduate student with LBJ School of Public Affairs at The University of Texas, and works with the Bureau's EMIS Program on the TEXEMS project.

Doug Stevenson is the EMS Program Coordinator for Houston Community College. He is a founding member of the Texas Society of EMS Educators.

Bureau Chief Gene Weatherall supports motorcycle safety in this month's "From This Side."

Dennis Zerby is a Pennsylvania EMT and educator.

Jim Zukowski investigates EMS training course averages in this issue of the **EMS Messenger**.

In the next few months I will be in contact with individuals around the state about articles for the **Messenger**. If you have an idea or want to submit an article or photograph, don't wait for me to call you; my number is (512) 458-7330.

And thanks for the help.

Alana S. Mallard

Editor

TEMSAC Elects 1989 Officers

TDH's Gene Weatherall and Dr. Al Randall congratulate new TEMSAC officers Jay Johnson, Vice-Chair; Virginia Scott, Parliamentarian; and Dr. David Prentice, Chair.

Alana Mallard

Around the State

February 27-28, 1989, **Texas Firemen's Training School**. Brayton Firemen Training Field, Texas A & M University Campus, College Station. Tentative tuition $210. Sponsored by State Firemen's and Fire Marshals' Association of Texas. Contact Fire Protection Training Division (409)845-7641.

March 1-3, 1989, **Texas Firemen's Training School.** Brayton Firemen Training Field, Texas A & M University Campus, College Station. Tentative tuition $210. Sponsored by State Firemen's and Fire Marshals' Association of Texas. Contact Fire Protection Training Division (409)845-7641.

March 8-11, 1989, **7th Annual EMS Today Conference and Exposition.** Town and Country Hotel in San Diego, California. Contact Tami McConnell (619)481-5267.

March 31 - April 2, 1989, **Annual Texas Emergency Care Symposium,** Stouffer Hotel, Austin, sponsored by TAEMT, TAA, ACEP, and ENA.

April 14-16, 1989, **EMS Expo '89**, Georgia World Congress Center in Atlanta, Georgia. Sponsored by Emergency Medical Service Magazine (203)852-0500.

April 22, 1988, **Modern Challenge's Facing EMS**, Hilton Hotel in College Station. Sponsored by Texas A & M Emergency Care Team. For more information contact Kelli Bobbitt, Symposium Coordinator, Texas A & M University, A.P. Beutel Health Center, College Station, Texas 77841-1264 or call (409)845-4321.

April 26-28, 1989, **8th Annual Modern Concepts In Trauma Care Symposium.** Disneyland Hotel, Anaheim, California. Earn 17 continuing education credits. Sponsored by The Orange County Trauma Society. For further information call (714)937-5030.

April 28-29, 1989, **5th Annual "Tri-State Trauma Symposium."** Amarillo, Texas $55. per person. 14 CEU hours. For further information contact Larry Croy, Paramedic Coordinator, Amarillo College, P.O. Box 447, Amarillo, Texas 79178 or phone (806)354-6069.

April 29-30, 1989, **Basic Vertical Rescue**, Waco - $55 per person; fundamentals of rappelling and an intro to patient packaging and vertical lower for the Stokes basket; Contact Renee Michalski, McLennan Community College, (817)756-6551, ext 212.

May 5-7, 1989 and repeated May 19-21, 1989, **Swiftwater Rescue Technician I,** New Braunfels; for further information contact Fire Protection Training Division, Texas A&M, (409) 845-1152.

May 20-21, 1989, **Basic Vertical Rescue**, Waco - $55 per person; fundamentals of rappelling and an intro to patient packaging and vertical lowering for the Stokes basket; Contact Renee Michalski, McLennan Community College, (817)756-6551, ext 212.

June 15-17, 1989, **Advanced Vertical Rescue**, Waco - $100 per person. Ascending, haul systems, rough terrain/cliffs, rappelling, night exercises and rescue organization. Contact Renee Michalski at McLennan Community College (817)756-6551 est. 212.

July 8, 1989, **Vertical Rescue "Problems" Course**, Waco. Explores a single topic in depth, areas for consideration are tyroleans, minimal equipment systems and cave rescue field trips. Contact Renee Michalski at McLennan Community College (817)756-6551 ext. 212.

August 15-18, 1989, **Global Health Care Development.** Hyatt Regency Crystal City, Arlington, Virginia. Contact Tami McConnell (619)481-5267.

FOR SALE: 1983 Ford Type II Ambulance, asking $10,000. Contact Don Floyd, Sinton EMS (512)364-4332.

FOR SALE: Stretcher, Ferno Washington 1 man stretcher with pad and straps. About 10 years old. Excellent condition, $350. Carol Lou Treat (512)267-3432, Lago Vista EMS.

EQUIPMENT NEEDED: South Anderson County Volunteer Emergency Corp. is looking for the following items free or at a reasonable price:
1. Portable two-way radios
2. Bunker gear
3. Light bars
4. Voice pager

If you can help, please contact Randy McCoy, Elkhart, Tx (214)764-5566.

EMS

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