

F.Y.:	Cost Center:	Object Code:	Amount:	Vendor #:	P.O.#
2010-2011	216 126				

STATE OF MINNESOTA
MINNESOTA STATE COLLEGES AND UNIVERSITIES
DAKOTA COUNTY TECHNICAL COLLEGE
CUSTOMIZED TRAINING INCOME CONTRACT
JOINT POWERS AGREEMENT

Dakota County Technical College (hereafter College/University) by virtue of its delegated authority from the Board of Trustees of the Minnesota State Colleges and Universities) and **City of Saint Paul Fire Department, 1683 Energy Park Drive, St Paul, MN 55108** (hereafter "Purchaser") agree as follows:

I. DUTIES OF THE COLLEGE/UNIVERSITY. The College/University agrees to provide the following:

Title of Instruction/Activity/Service: **Emergency Response Driving** *See Attachment A*

Date(s) of Instruction/Activity/Service: **May 2, 2011 – 8am to 3pm**

Instructor/Trainer/Consultant: **DCTC Staff**

Location: **Classroom/Range @ DCTC, Rosemount MN**

Other Provisions: **Not Applicable**

II. DUTIES OF THE PURCHASER The Purchaser agrees to provide: **Not Applicable**

III. SITE OF INSTRUCTION/ACTIVITY/SERVICE. Dakota County Technical College shall make all of the arrangements, including any payment, for the location to be used for the Instruction/Activity/Service.

IV. CONSIDERATION AND TERMS OF PAYMENT.

A. Cost: **\$150 per operator**

Other Fees: **Not Applicable**

Notwithstanding the thirty (30) day notice period established in paragraph VII, in the event that the Purchaser desires to cancel or reschedule the Instruction/Activity/Service due to low enrollment, Purchaser shall give at least 4 days notice in writing to the College/University's authorized agent to cancel or reschedule. If the Instruction/Activity/Service is canceled as provided herein, the College/University shall be entitled to payment calculated according to paragraph VII. If the Instruction/Activity/Service is rescheduled as provided herein, payment shall be according to this paragraph IV.

- B. Terms of Payment. The College/University will send an invoice for the Instruction/Activity/Service performed. The Purchaser will pay within 30 days of receiving the invoice. Please send payment to:

Dakota County Technical College
Attn: Marsha Johnson
1300 145th Street East
Rosemount, MN 55068-2999

V. AUTHORIZED AGENTS FOR THE PURPOSES OF THIS CONTRACT.

- A. Purchaser's authorized agent: **Tom McDonough, Training Chief**
- B. College/University's authorized agent: Sharon LaComb, Vice President or Gary Hebert, Dean of Customized Training.

VI. TERM OF CONTRACT.

- A. Effective Date: **May 2, 2011**
- B. End Date: **May 2, 2011** or until all obligations set forth in this contract have been satisfactorily fulfilled, whichever occurs first.

- VII. CANCELLATION. This contract may be canceled by the Purchaser or the College/University at any time, with or without cause, upon thirty (30) days written notice to the other party. In the event of such a cancellation, the College/University shall be entitled to payment, determined on a pro rata basis, for work or Instruction/Activity/Service satisfactorily performed.

- VIII. ASSIGNMENT. Neither the Purchaser nor the College/University shall assign or transfer any rights or obligations under this contract without the prior written approval of the other party.

- IX. LIABILITY. Purchaser and the College/University agree that each party shall be responsible for its acts and omissions, and the consequences thereof. Purchaser's liabilities will be as provided in the Municipal Tort Claims Act, Minn. Stat. ch. 466, and the College/University's liabilities will be governed by the provisions of the Minnesota Tort Claims Act, Minn. Stat. section 3.736. This clause shall not be construed to bar any legal remedies a party may have for the other party's failure to fulfill its obligations under this contract.

- X. AMERICANS WITH DISABILITIES ACT (ADA) COMPLIANCE. The Purchaser agrees that in fulfilling the duties of this contract, the Purchaser is responsible for complying with the applicable provisions of the Americans with Disabilities Act, 42 U.S.C. Section 12101, et seq. and regulations promulgated pursuant to it. The College/University IS NOT responsible for issues or challenges related to compliance with the ADA beyond its own routine use of facilities, services, or other areas covered by the ADA.

- XI. AMENDMENTS. Any amendments to this contract shall be in writing and shall be executed by the same parties who executed the original contract or their successors in office.

- XII. DATA PRACTICES. Purchaser agrees to comply with the Minnesota Data Practices Act as it applies to all data in its possession generated as a result of this contract with College/University in accordance with the terms of this contract. College/University agrees to comply with the Minnesota Government Data Practices Act as it applies to all data generated under the terms of this contract within its possession.

- XIII. RIGHTS IN ORIGINAL MATERIALS. The Dakota County Technical College shall own all rights, including all intellectual property rights, in all original materials, including any curriculum materials, inventions, reports, studies, designs, drawings, specifications, notes, documents, software and documentation, computer based training modules, electronically or magnetically recorded materials, and other work in whatever form,

developed by the College/University and its employees individually or jointly with others or any subcontractor in the performance of its obligations under this contract. This provision shall not apply to the following materials: **Not Applicable**

XIV. JURISDICTION AND VENUE. This contract, and amendments and supplements thereto, shall be governed by the laws of the State of Minnesota. Venue for all legal proceedings arising out of this contract, or breach thereof, shall be in the state or federal court with competent jurisdiction in Ramsey County, Minnesota.

XV. OTHER PROVISIONS. (Attach additional page(s) if necessary): **Not Applicable**

IN WITNESS WHEREOF, the parties have caused this contract to be duly executed intending to be bound thereby.

APPROVED:

1. **PURCHASER:**
PURCHASER certifies that the appropriate person(s) have executed the contract on behalf of PURCHASER as required by applicable articles, by-laws, resolutions, or ordinances.

2. **MINNESOTA STATE COLLEGES AND UNIVERSITIES**

Dakota County Technical College

By (authorized signature)
Title
Date

By (authorized College/university signature)
Title
Date

By (authorized signature)
Title
Date

By (authorized College/University signature) <i>Jim Unger</i>
Title Director, Public Safety, Customized Training
Date March 2, 2011

MnSCU003

ATTACHMENT A

DAKOTA COUNTY TECHNICAL COLLEGE

CUSTOMIZED

Transportation Center of Excellence

**FIRE APPARATUS OPERATOR TRAINING
STUDENT MANUAL**

Emergency Response Driving Course

1300 145th Street East (County Road 42), Rosemount, MN 55068-2999
(651) 423-8482 or (651) 423-8224

Minnesota State Colleges and Universities
An Equal Opportunity Educator/Employer

Accredited by the
Commission on Institutions of Higher Education
North Central Association of Colleges and Schools

EMERGENCY RESPONSE DRIVING FOR FIRE APPARATUS OPERATIONS

DESCRIPTION

This six-hour course of instruction was developed to teach students proper emergency response techniques. Students are instructed to develop visual techniques necessary for emergency response apparatus operation, utilize proper braking and steering techniques, select appropriate lane positioning of apparatus for maximum visibility, control intersections, and maintain control of fire apparatus throughout a series of driving exercises on the decision driving range. Emergency response driving within apparatus limitations, state/local/NFPA and departmental regulations is stressed as is the priority placed on crew safety and the safety of the general public.

TERMINAL PERFORMANCE OBJECTIVE

Given a fire apparatus equipped with appropriate safety devices and in safe operating condition, the student will safely operate the apparatus through a series of practical exercises under prevailing weather conditions, meeting the principles and techniques delineated during the course of instruction.

INTERIM PERFORMANCE OBJECTIVES

1. Demonstrate knowledge of key state statutes and NFPA standards regarding apparatus operation.
2. Demonstrate proper braking methods and techniques for emergency response driving.
3. Demonstrate proper steering techniques required for emergency response driving.
4. Demonstrate proper acceleration techniques to maintain smoothness during emergency response driving.
5. Demonstrate the ability to drive within driver and apparatus limitations during emergency response driving.

INTRODUCTION

This course is devoted to the development of proper driving attitudes and provides the participant with the correct principles and techniques used in emergency response driving. Emergency response driving is basic apparatus operation with a number of additional variables which include: urgency of the call, higher than normal speeds, weather conditions, condition of the apparatus, driver fitness, and most certainly, interaction with other drivers, pedestrians and victims, all of whom react differently under increased heightened driver skills, good judgment and a keen awareness while operating apparatus.

The techniques presented in this course are based on scientific principles and the law of physics. When you apply proper driving techniques, you are a better representative of your department and enhance the image of all fire apparatus operators. Participants in our course are encouraged to think positively and keep an open mind. Please feel free to ask questions.

STOPS AND EMERGENCY RESPONSE

Minnesota Statute 169.03, Subdivision 2: Stops.

The driver of any authorized emergency vehicle, when responding to an emergency call, upon approaching a red or stop signal or any stop sign, shall slow down as necessary for safety, but may proceed cautiously past such red or stop sign or signal after sounding siren and displaying red lights.

Municipal laws; usually follow state law.

Department SOP: if you have it here, check it. If not, check when you get back to your department.

Rosemount SOP 11-13 #2. Unless all lanes can be accounted for by the driver during an emergency response, fire department vehicles shall come to a negative right-of-way situation. Rule of thumb: "If you can't see, stop".

LEGAL ASPECTS/DRIVER RESPONSIBILITIES

NFPA 1500 ON STOPS

NFPA 1500-1992 4-2.7. During emergency response, drivers of fire department vehicles shall bring the vehicle to a complete stop for any of the following:

1. When directed by a law enforcement officer
2. Red traffic lights
3. Stop signs
4. Negative right-of-way intersections
5. Blind intersections
6. When the driver cannot account for all lanes of traffic in an intersection
7. When other intersection hazards are present
8. When encountering a stopped school bus with flashing warning lights

NFPA 1500-1992 4-2.7. Drivers shall proceed through intersections only when the driver can account for all lanes of traffic in the intersection.

NFPA 1500-1992 4-2.8. During emergency response or non-emergency travel, drivers of fire department vehicles shall come to a complete stop at all unguarded railroad grade crossings.

Drivers shall assure that it is safe to proceed before crossing the tracks. Drivers shall use caution when approaching and crossing any guarded grade railroad crossing.

RIGHT-OF-WAY

Minnesota Statute 169.20, Subdivision 5: Emergency Vehicle.

Upon the immediate approach of an authorized emergency vehicle equipped with appropriate lights and siren under normal atmospheric conditions, the driver of each vehicle shall yield the right-of-way and shall immediately pull as close as possible to the right-hand edge or curb of the roadway clear of any intersection, and shall stop until the emergency vehicle has passed.

This Subdivision shall not relieve the driver of the emergency vehicle from the duty to drive with due regard for the safety of persons using the roadways.

MORE STATE STATUTES

Minnesota Statute 169.03, Subdivision 3. One-Way Roadways.

The driver of an emergency call may enter against the run of traffic on a one-way street, or highway to facilitate traveling to the area where an emergency has been reported.

Minnesota Statute 169.03, Subdivision 4. Parking at Emergency Scene.

An authorized emergency vehicle, when at the scene of an emergency, may park or stand, notwithstanding any law or ordinance to the contrary.

Minnesota Statute 169.03, Subdivision 5. Course of Duty.

No driver of any emergency vehicle shall assume any special privilege under this chapter except when such vehicle is operated in response to any emergency call.

EMERGENCY RUN SHUTDOWN

DEPARTMENTAL SOP

Procedure

When responding to an emergency call for which you are using the emergency vehicle's lights and siren and you fail to clear the intersection of vehicles, the following procedure should be followed. If you cannot continue through, shut down all emergency lights and sirens. Wait for the intersection to clear and as you can move the apparatus, turn your emergency lights and siren back on and proceed to the emergency.

If you force a vehicle into the oncoming traffic in the intersection and there is an accident, we become liable.

When approaching an intersection, slow down; use emergency lights and siren to clear traffic. Do not cross median or center island.

Discussion

That is the end of legal aspects/driver responsibilities and as you can see, we as apparatus operators, are granted some leeway with state laws as long as we operate with “due regard” for the safety of others and we also found out that the NFPA guidelines regarding stop signs and stop lights are stricter and should be the ones we follow as they can be used against you in a court of law if you don’t follow them.

DRIVER RESPONSIBILITIES

SAFETY TIPS

A few of the most common causes of apparatus accidents during emergency response:

1. Excess speed. Apparatus traveling too fast for conditions at the time of accident (i.e. road, weather, and traffic). Drive according to conditions at time of response.
2. Emergency vehicles following each other too closely (rear-end collisions). Stay back a safe distance.
3. Colliding with other emergency vehicles at intersections (i.e. with other apparatus, ambulances, and police cruisers). Communicate.
4. Emergency vehicles passing other emergency vehicles responding to same incident. Communicate.
5. Excess speed – trying to beat another company to the scene (a truck throwback to some traditional habits). Note: excess speed for any reason is unwise – a metro area department had an accident this past year where a truck took an exit ramp too fast and put it through a fence.
6. One-way street (especially long one-way streets). Particular warning should be given about proceeding against traffic on expressways before traffic is stopped or diverted. Use caution.
7. Causing other vehicles to have an accident (i.e. blasting air horn when directly behind a civilian vehicle). Note: We probably all know of a driver who is a bit too aggressive on emergency runs.
8. The last is not least. In fact, it is by far the most common: emergency vehicle colliding with any other vehicle at street intersection. In most cases, the emergency vehicle is proceeding through a red light or stop sign. For a variety of reasons, the other vehicle does not see or hear warning devices.

GOOD DRIVING PRACTICES

- Speed is less important than safe arrival
- Keep apparatus under control at all times
- Slow down at intersections – be prepared to stop – expect the worst possible situation

- Take nothing for granted
- Drive defensively – be aware of what is happening and what is likely to happen
- Expect some motorists to neither hear nor see apparatus warning devices

SUMMARY OF SAFE DRIVING

1. Safely drives apparatus
2. Legally responsible
3. Maintain good health
4. Maintain mental awareness
5. Maintain valid license
6. Maintain proficiency
 - A. Review
 - B. Refresher training
 - C. Update equipment
 - D. Update procedures
7. Personal condition (at time of alarm)
 - A. No alcohol
 - B. No drugs
 - C. No medication that affects driving

SAFETY CHECK (PRIOR TO RESPONSE)

1. Safety circle walk
 - A. Check items on floor
 - B. Check items under vehicle
 - C. Remove shorelines
 - D. Mirrors
 - E. Seat position
 - F. Seat belts
 - G. Braking system
 - H. Firefighter readiness
2. Maintain composure
 - A. At time of alarm
 - B. During response
 - C. Know location
 - D. Know route (normal and alternate route)
3. Warning devices
 - A. Visual (flashers, strobes, etc.)
 - B. Audible (siren, air horn)
 - C. How and when to use (change from wall to high-low before intersections)

4. On return from alarm
 - A. Obey all traffic laws
 - B. Refuel apparatus
 - C. Safety check of apparatus
 - D. Report any damage

VEHICLE DYNAMICS

Video "It's In Your Hands" (22 minutes)

Acceleration

Smooth is quick.

Rough movement caused by stomping on the accelerator or popping the clutch is hard on equipment and actually costs time rather than save time.

Standard transmission: Let clutch out smoothly – don't pop clutch.

Automatic Transmission

Press accelerator down evenly for smooth acceleration – don't stomp on accelerator.

Remember smooth is quick.

Braking

1. Perception and reaction: Identify need to stop.
2. Action: Step on brake.
3. Traction: Brakes slowing down wheels and tires on pavement

40 MPH Test

- A. Brakes locked up, dangerous and less effective. 124 gives up control of apparatus.
- B. Pump brakes; better at 110.
- C. Threshold braking; best way 100.

Steering

A 20 degree change in steering applies 30% of braking power.

More steer = less brake More brake = less steer

Use 3 and 9 o'clock hand position, keeping left-hand on left side of wheel and right-hand on right side of wheel shuffle steer.

Get braking done before you enter a turn.

Start turn from as wide a position as possible.

Better to steer around obstacle vs. stopping to avoid collision in many cases.

FINAL THOUGHTS

We are only asking for permission to have right-of-way when in emergency response mode with lights and siren activated.

Stay focused on the task at hand, look ahead for upcoming traffic problems and escape routes, check mirrors and gauges too.

Drive offensively as well – occupy extreme left part of lane to make truck appear at its largest to drivers in their mirrors so they can readily identify your apparatus.

Use extreme caution lanes of traffic.

Practical Exercises

Safety rules must be followed:

1. Seat belts used
2. No horseplay on range
3. Maximum speed on course is 35 MPH

Exercises to be completed:

1. Evasive maneuver (lane change)
2. Controlled braking
3. Alley dock
4. Serpentine (forward and reverse)
5. Zigzag (Phoenix FD)
6. Defensive drive area – backing