

Safety Vest Compliance Program



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Regional Safety Task Force Meeting
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The following Powerpoint slides are excerpted from my University of Extrication “Safe Parking” highway safety program.

This segment of the 8-hour program addresses the issue of proper PPE for responders working in or near moving traffic.

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National Unified Goal...
'Responder Safety'

Personnel Visibility

Responder Safety



NATIONAL UNIFIED GOAL (NUG) FOR TRAFFIC INCIDENT MANAGEMENT

The opportunity to enhance the safety of incident scenes is a key motivator for law enforcement, fire, emergency medical services (EMS), and towing and recovery to participate with transportation responders in traffic incident management programs.

While secondary incidents involving emergency responders can take many forms, they often occur when emergency responders are struck by passing vehicles while they are working at a traffic incident scene. For example, a law enforcement officer may be struck while assisting a stranded motorist or while directing traffic; a firefighter may be hit by a motorist while advancing a hose line across a roadway toward a vehicle fire; or a paramedic may be struck by a car while attending to an incident victim.

Public safety professions are high-risk, and have a safety culture with a low tolerance for any preventable deaths or injuries. As roadways grow more congested, and driver behavior deteriorates, concern mounts for responder safety at traffic incidents. Transportation agencies and private sector responders are equally concerned for the safety of their traffic incident responders.

The concerns are borne out by National Institute for Occupational Safety and Health (NIOSH) data showing an upward trend in numbers of workers of all types killed as a result of being struck by vehicles. In 2005, NIOSH reported 390 workers killed in struck-by incidents, up from 270 in 2004, and up from an annual average of 365 over the 2000-2004 time period. In 2005, struck-by incidents accounted for 7 percent of the total number of fatal occupational injuries. (Figure 1)

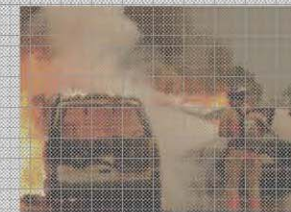
	2000-2004 AVERAGE	2004 NUMBER	2005 NUMBER
Worker Struck by Vehicles (All Occupations)	365	270	390 (7 percent)

Figure 1. Struck-by incidents accounted for 7 percent of fatal occupational injuries in 2005.¹

Fire Services

As dangerous as firefighting is, transportation-related incidents claim about 20 percent of the roughly 105 firefighter on-duty deaths each year, and struck-by deaths account for a growing proportion. In June 2001, NIOSH reported that the number of firefighters struck and killed by motor vehicles had increased by 89 percent in the previous five years. Seventeen firefighters had been struck and killed between 1995 and 1999, compared to 9 between 1990 and 1994. The report, *Traffic Hazards to Fire Fighters While Working Along Roadways*,² states:

"... Motorists accustomed to a clear, unobstructed roadway may not recognize and avoid closed lanes or emergency workers on or near the roadway. In some cases, conditions can reduce a motorist's ability to see and avoid firefighters and apparatus. Some examples include weather, time of day, scene lighting (i.e., area lighting and optical warning devices), traffic speed and volume, and road configuration (i.e., hills, curves and other obstructions that limit visibility). These hazards are not limited to the fire service alone. Other emergency service providers such as



23 CFR Part 634 (Nov 2008)

67792 Federal Register / Vol. 71, No. 226 / Friday, November 24, 2006 / Rules and Regulations

g.4. Glass or glass lined (including vitrified or enameled coatings);

g.5. Tantalum or tantalum alloys;

g.6. Titanium or titanium alloys;

g.7. Zirconium or zirconium alloys; or

g.8. Niobium (columbium) or niobium alloys.

h. Multi-walled piping incorporating a leak detection port, in which all surfaces that come in direct contact with the chemical(s) being processed or contained are made from any of the following materials:

h.1. Alloys with more than 25% nickel and 20% chromium by weight;

h.2. Fluoropolymers;

h.3. Glass (including vitrified or enameled coatings or glass lining);

h.4. Graphite or carbon-graphite;

h.5. Nickel or alloys with more than 40% nickel by weight;

h.6. Tantalum or tantalum alloys;

h.7. Titanium or titanium alloys;

h.8. Zirconium or zirconium alloys; or

h.9. Niobium (columbium) or niobium alloys.

i. Multiple-seal and seal-less pumps with manufacturer's specified maximum flow-rate greater than 0.6 m³/hour, or vacuum pumps with manufacturer's specified maximum flow-rate greater than 5 m³/hour (under standard temperature (273 K (0 °C)) and pressure (101.3 kPa) conditions), and casings (pump bodies), preformed casing liners, impellers, rotors or jet pump nozzles designed for such pumps, in which all surfaces that come into direct contact with the chemical(s) being processed are made from any of the of the following materials:

i.1. Alloys with more than 25% nickel and 20% chromium by weight;

Dated: November 16, 2006.

Christopher A. Padilla,

Assistant Secretary for Export Administration.

[FR Doc. E6-19825 Filed 11-22-06; 8:45 am]

BILLING CODE 3510-33-P

DEPARTMENT OF TRANSPORTATION

Federal Highway Administration

23 CFR Part 634

[FHWA Docket No. FHWA-2005-23200]

RIN 2125-AF11

Worker Visibility

AGENCY: Federal Highway Administration (FHWA), DOT.

ACTION: Final rule.

SUMMARY: Pursuant to Section 1402 of the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU), this final rule establishes a policy for the use of high-visibility safety apparel. The FHWA establishes a new Part in title 23, Code of Federal Regulations (CFR) that requires the use of high-visibility safety apparel and provides guidance on its application. This rulemaking applies only to workers who are working within the rights-of-way of Federal-aid highways. The FHWA is taking this

comments received may be viewed online through the Document Management System (DMS) at <http://dms.dot.gov>. The DMS is available 24 hours each day, 365 days each year. Electronic submission and retrieval help and guidelines are available under the help section of the Web site.

An electronic copy of this document may also be downloaded from the Office of the Federal Register's home page at: <http://www.archives.gov> and the Government Printing Office's Web page at: <http://www.access.gpo.gov/nara>.

Background

On April 24, 2006, at 71 FR 20925, the FHWA published a NPRM proposing to establish a policy for the use of high-visibility safety apparel for workers who are working within the Federal-aid highway rights-of-way. This NPRM proposed regulations implementing the requirements of Section 1402 of the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) (Pub. L. 109-59; August 10, 2005), which directed the Secretary of Transportation to, within one year, issue regulations to decrease the likelihood of worker injury and maintain the free flow of vehicular traffic by requiring workers whose duties place them on or in close proximity to a Federal-aid highway to wear high-visibility safety apparel. The comment period for the NPRM closed

23 CFR Part 634

All workers within the right-of-way of a Federal-aid highway who are exposed either to traffic (vehicles using the highway for purposes of travel) or to construction equipment within the work area shall wear high-visibility safety apparel.

23 CFR Part 634.3

Worker means people on foot whose duties place them within the right-of-way of a Federal-aid highway, such as highway construction and maintenance forces, survey crews, utility crews, responders to incidents within the highway right-of-way, and law enforcement personnel when directing traffic, investigating crashes, and handling lane closures, obstructed roadways, and disasters within the right-of-way of a Federal-aid highway.

23 CFR Part 634.2

Typical European crash scene



Typical U.S. crash scene







As of November 24, 2008... this is against the law!



Vests must also be 'high-visibility' Class II

Highway Safety Vests

Class I

Class II

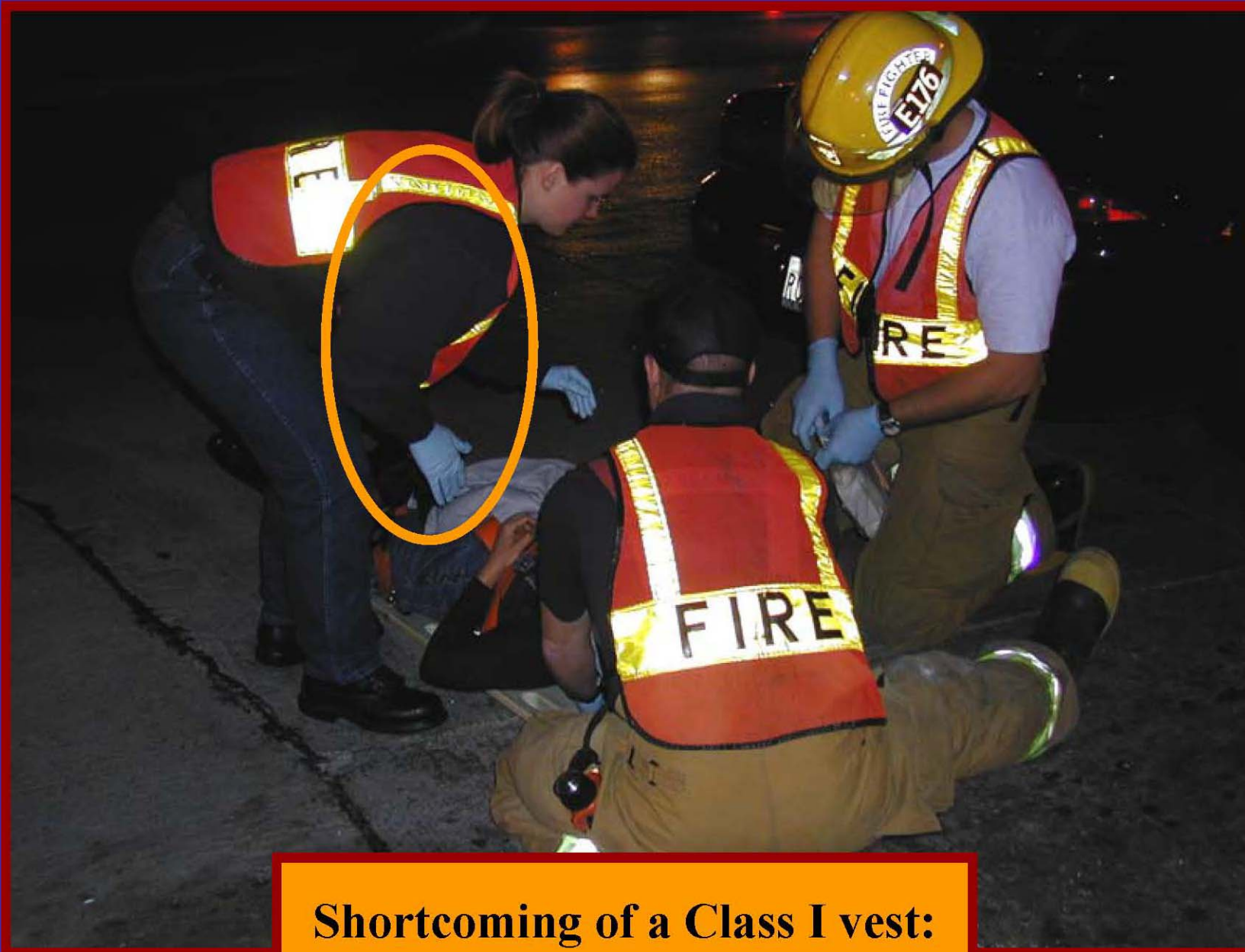
Class III

ANSI 107 Standard

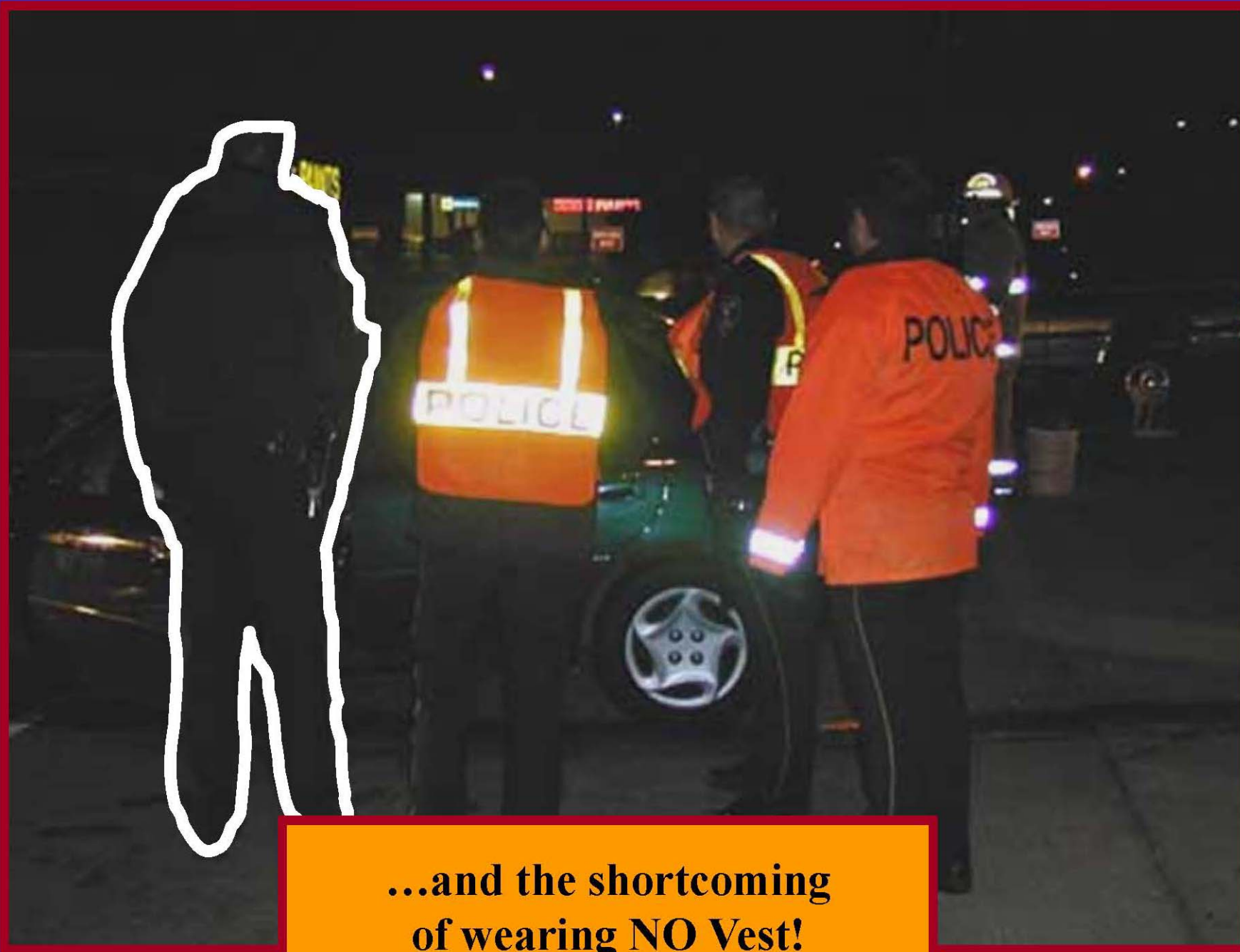




**“Class 1” vest in use
by airport baggage handler**



**Shortcoming of a Class I vest:
No side coverage**



**...and the shortcoming
of wearing NO Vest!**



**ANSI 107 Class II vest:
High-visibility green body with red trim, or...**



**ANSI 107 Class II vests with
High-visibility red/orange body with green trim**



Need a Vest Policy...?

"If your feet are on the street... Your vest is on your chest!"



**ANSI has a second vest standard;
the ANSI 207 “Public Safety Vest”**

ANSI 107 High-Visibility Vest



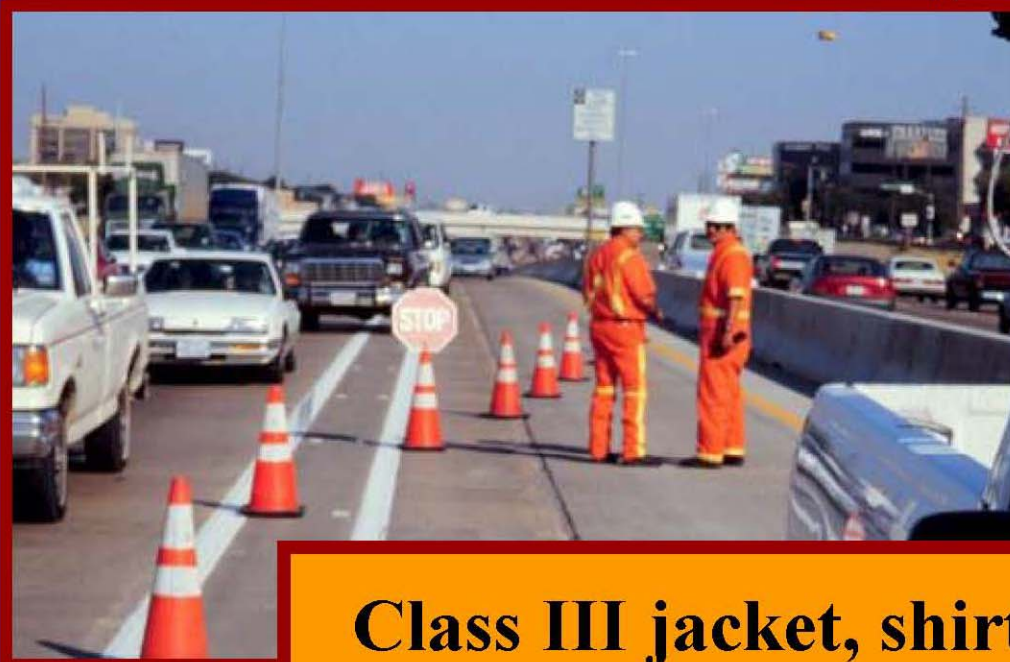
ANSI 207 High-Visibility Vest



Note shorter length
to allow access to
items on belt



**A “Class III” garment
has sleeves**



**Class III jacket, shirt, &
pants ensemble**

Tow-truck driver struck and killed in Manteo, VA

The Virginian-Pilot © March 27, 2004

- ✓ Tow-truck driver who tried to clean the debris from the roadway after a highway accident was struck by two vehicles and killed Thursday.
- ✓ Just finished hooking damaged car to wrecker
- ✓ Stepped into roadway with push broom







Vests can be donned over turnout coats and taken off if responding to a such calls.



McKinney (TX) FD Vest Specifications

Product Requested;

ANSI-107 Highway Safety Vests for Emergency Responders that meet the following specifications;

- Class 2, Level 2 ANSI Red mesh with contrasting silver/lime-yellow material and silver reflective stripes using 3M Scotchlite reflective;
- One Pen & Paper utility pocket on left chest integrated into vest design with contrasting color microphone tabs on each lapel area.
- Tear-away Velcro feature at both shoulders, both sides, & front chest,
- One size fits all design, L to 3XL. (special order; Size 4XL - 5XL at additional cost)
- 1- American flag patch on left chest
- The word " FIRE" printed on right vertical stripe in all upper case letters
- "McKINNEY FIRE" printed on silver reflective patch on back of vest in all upper case letters except for the letter 'c'. All text in black ink.

<http://vests.ironhorsesafety.com>

With Special Thanks to Chief Instructor Ron Moore
CVVFA Emergency Responder Safety Institute



On the Highway We've Got Your Back