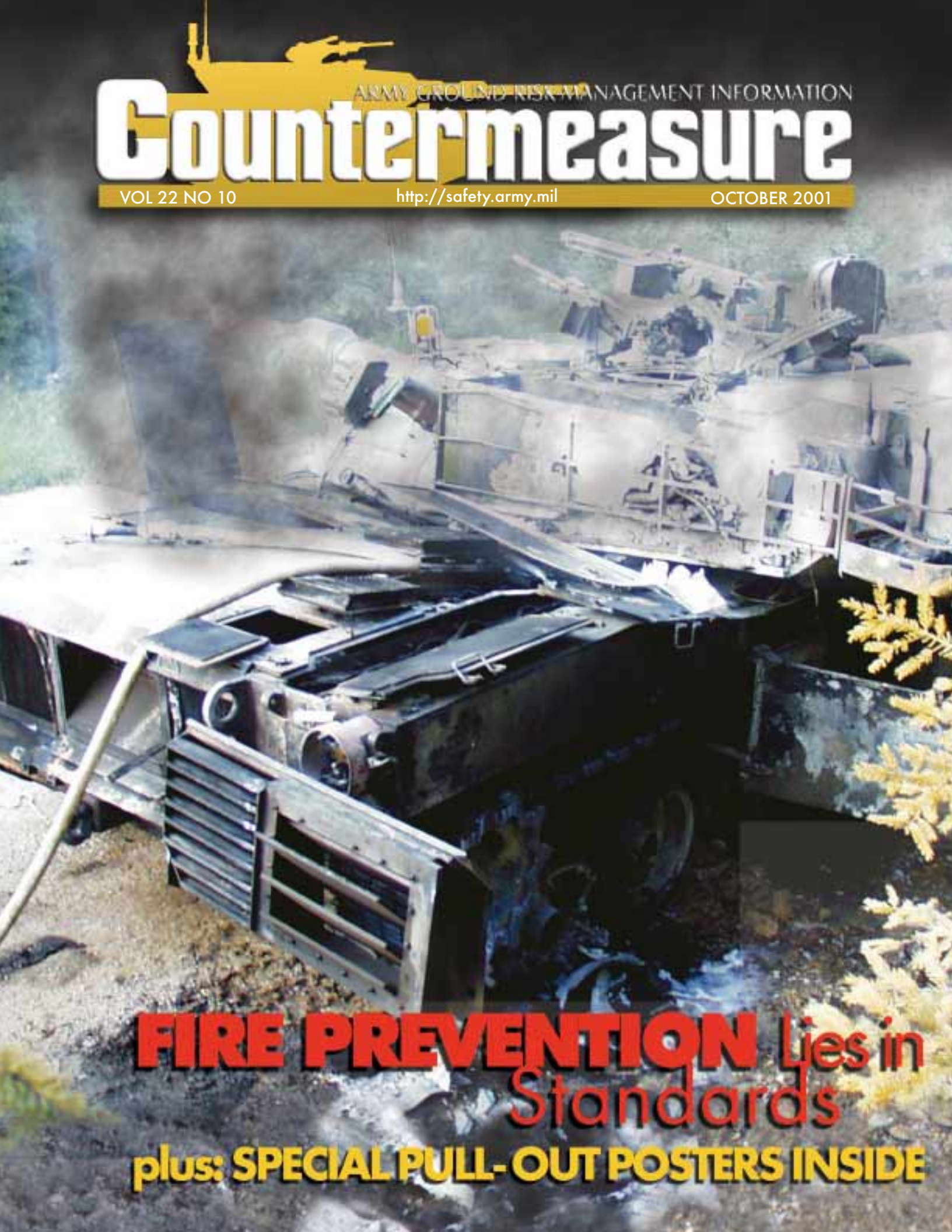
ARMY GROUND RISK MANAGEMENT INFORMATION
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FIRE PREVENTION Lies in Standards
plus: SPECIAL PULL-OUT POSTERS INSIDE

Countermeasure
ARMY GROUND RISK-MANAGEMENT INFORMATION

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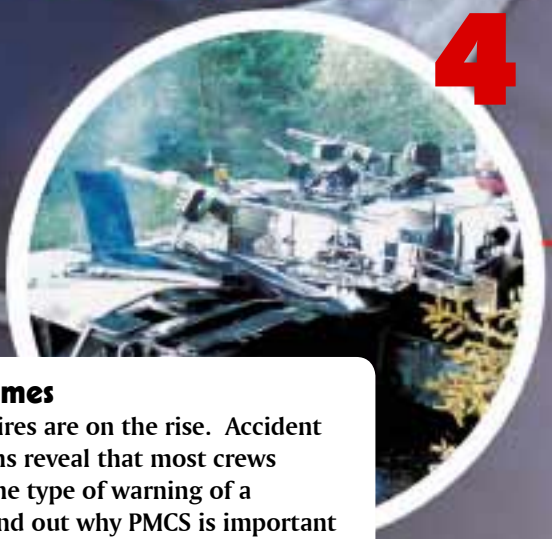

M1s In Flames
M1A1 tank fires are on the rise. Accident investigations reveal that most crews received some type of warning of a problem. Find out why PMCS is important and why leaders should enforce standards.

Investigators' Forum
The squad leader had a reputation with the chain of command as "squared away." The company commander trusted him to do the tough jobs without a lot of supervision. After reading this article, I'm sure you'll agree that even "squared away" leaders can make fatal mistakes.

Where's the Fire?
When was the last time you checked the fire suppression system on your BFV? With good PMCS, it will work when you need it.

Features

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Fire Prevention Lies in Standards

Another fiscal year has begun, and if our past is any indication of our future, accidents will still be a major threat to soldiers in FY02. The Army has downsized even as our missions have grown; consequently, every accident has become more expensive, not only in terms of manpower and money, but also in terms of readiness.

A prime example of how these accidents cost money and hurt readiness can be found in the Armor community. Within the last 46 months, 14 M1 tanks have experienced reportable fires. Fortunately, no injuries were reported associated with these tank fires. Nevertheless, most of these fires could have been avoided. Maintaining situational awareness and performing proper preventive maintenance checks and services (PMCS) would have stopped many of these fires before they started, or at least before they became critical.

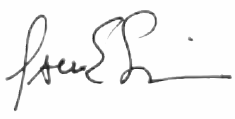
How do these fires happen? It often starts with soldiers just "trying to get the job done." Soldiers know that commanders want all their tanks in the fight. No one likes to have a tank sitting in the unit maintenance collection point (UMCP), while mechanics try to track down a leak in the engine. Determined to complete the mission, many crews fail to report leaks or give commanders the proper information to make informed decisions. As a result, many crews operate tanks with potentially hazardous leaks.

For instance, the driver of an M1A1 was traveling approximately 15 mph when the transmission oil temperature high light on the driver's instrument panel illuminated. The driver alerted the tank commander (TC) of the warning light. The TC made the decision to disregard the warning light, contrary to the guidance in the operator's manual, and directed the driver to continue with the operation. As a result of this action, a fire developed in the engine compartment. The fire became greater than the on-board fire suppression system could extinguish, and the tank was extensively damaged.

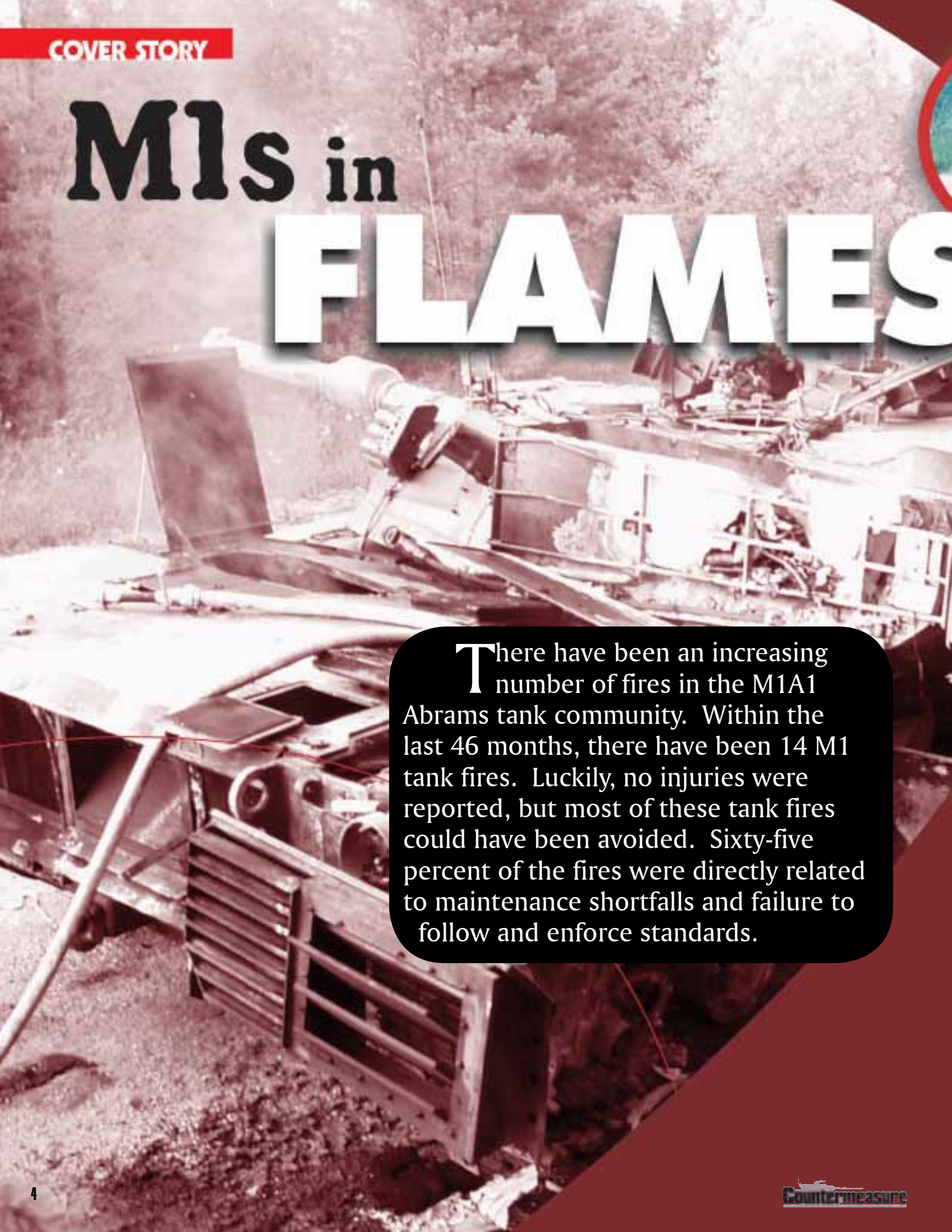
Proper, by-the-book, daily PMCS is the best prevention for fires of this type. Identifying and correcting leaks would prevent almost all tank fires. Another critical point of prevention is during quarterly annual services. You cannot properly perform a quarterly service without pulling the pack. Tank crews must ensure that they clean all debris from the bottom of the hull. A buildup of dirt can keep leaking oils from seeping out of the hull and increase the potential for an engine fire.

We know the fix. It's in the standards. The Army standard is to train and maintain to the published standards in the technical manuals (TMs). The same standards must be enforced on every task, whether it is performed individually or as part of a larger operation. Maintenance is a continuous process, and to be effective, units must integrate maintenance into all phases of an operation. This requires leaders to enforce maintenance standards, and at times make the difficult decision to deadline vehicles, temporarily taking America's most lethal combat vehicle out of the fight. Failure to do so not only destroys tanks, it can also kill soldiers.

— BG James E. Simmons



M1s in FLAMES



There have been an increasing number of fires in the M1A1 Abrams tank community. Within the last 46 months, there have been 14 M1 tank fires. Luckily, no injuries were reported, but most of these tank fires could have been avoided. Sixty-five percent of the fires were directly related to maintenance shortfalls and failure to follow and enforce standards.

The Armor community understands that the M1A1 has a turbine engine that puts out significant heat, but many may not know just how hot that engine really gets. The Abrams AGT 1500 engine will reach temperatures of 1200 to 1350 degrees Fahrenheit. Combine that with 30W oil, turbo-shaft oil, and fire-resistant hydraulic fluid (FRH), all with flashpoints around 450 degrees Fahrenheit, and it becomes obvious how a tank engine can catch on fire. Add 504.4 gallons of JP8 and one starts to wonder why there aren't more fires.

According to TM 9-2350-264-10-1, any class III leak renders the vehicle "NOT FULLY MISSION CAPABLE." The rationale should be obvious, but it still seems to elude some leaders and soldiers. Class III leak(s) in the engine compartment can damage equipment, start a fire, and result in injury, costly repairs, or death.

Accident investigations reveal that most crews received some type of warning of a problem. Warnings included a transmission or engine oil temp high light, finding the engine or transmission oil unusually low, or seeing smoke come from the engine compartment while running or after shutdown. Even a small amount of smoke can indicate a leak of some kind.

One of the most critical points of prevention is during semi-annual services. Units must adhere to their preventive maintenance checks and services (PMCS) inspections and their non-mission capable criteria. During maintenance, leaders must take the extra time to ensure that all steps are performed properly and no fire hazard exists.

Tank crews must clean all the sludge and gunk from the bottom of the hull. A buildup of dirt can keep leaking oils from seeping out of the hull and increase the potential for an engine fire.

While the power pack is out, the crew and the maintenance team must ensure they inspect the fire shields that protect the fuel cells from the tremendous heat produced by the engine. Any bent, broken, or otherwise defective fire shield must be replaced before the power pack is set back into the hull of the tank.

A close inspection of the transmission oil crossover hose, the transmission oil cooler grill door seals, and the main hydraulic pump and lines is time well spent in fire prevention. Look closely for fuel leaks, and if identified, immediately contact unit level maintenance. Never operate the tank until maintenance identifies and repairs the leak.

In addition, there is a Ground Precautionary Message (GPM-01-020) in reference to the hydraulic case drain quick disconnect. This GPM outlines the hazards of abnormally high pressures and temperature in the main hydraulic pump when someone fails to properly connect the quick disconnect. If the quick disconnect is not properly fitted and the hydraulic pump leaks, there is a high probability of an engine fire.

The GPM further directs replacement of the quick disconnects during the next semi-annual service, or when the power pack is pulled for non-scheduled maintenance. Be a proactive tanker and ask your maintenance team if this has occurred on your tank.

When operating in severely dusty or sandy terrain, the buildup of debris increases in the hull compartment and should be cleaned out as soon as possible. If a power pack is removed in a field environment, the crew should be disciplined enough to take the time to remove debris and any excess fluids before returning the power pack to the engine compartment.

Don't let your M1 series tank become the next victim of fire! Listen when your tank tells you that something is wrong, and take the time when performing maintenance to identify all leaks and get them fixed. Your Abrams tank is the finest main battle tank in the world—let's keep it that way!

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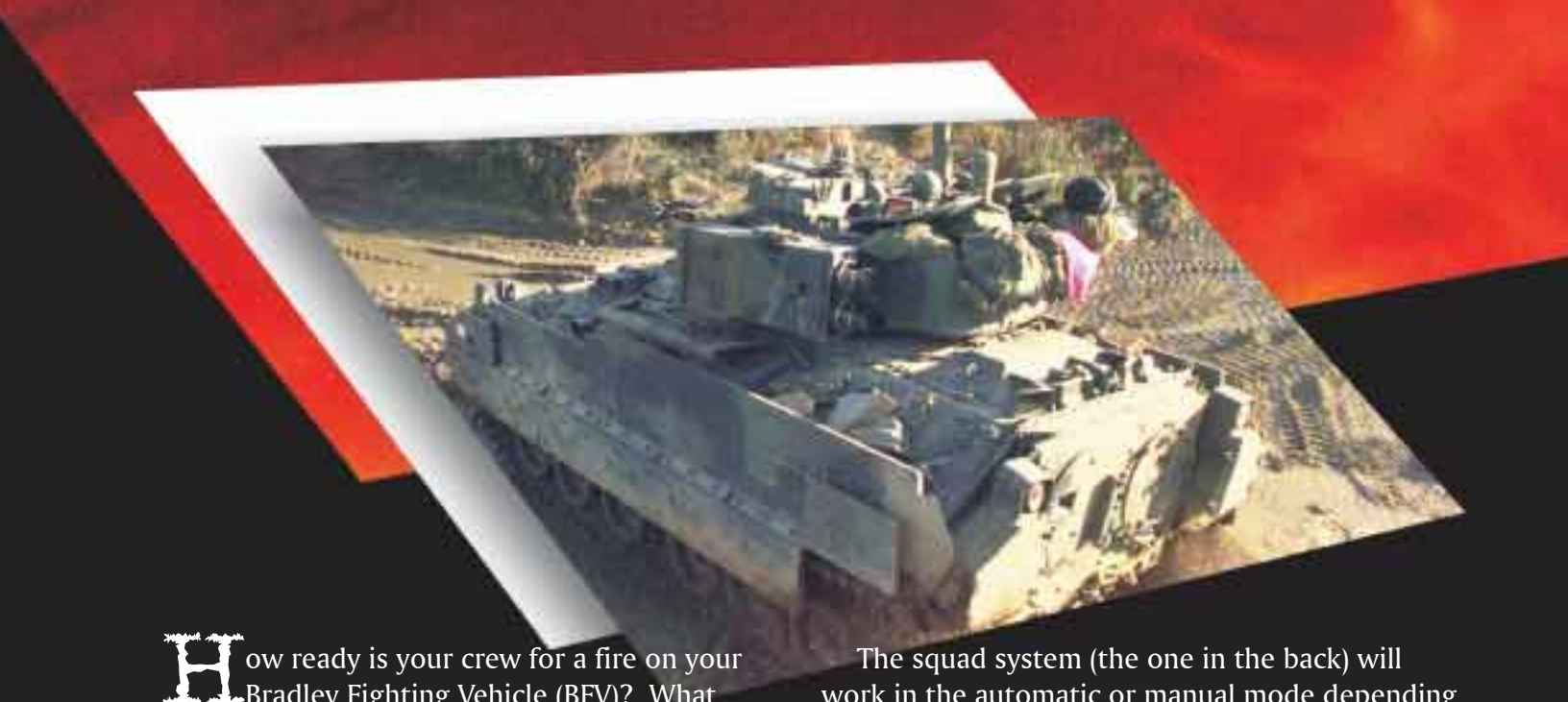

Where's the FIRE?

How ready is your crew for a fire on your Bradley Fighting Vehicle (BFV)? What actions must the driver take? The Bradley commander? What about the guys in the back? C'mon, that's all commonsense stuff; we did all of that fire evacuation stuff in new equipment training 3 years ago. Unfortunately, common sense is not so common. If we fail to rehearse these basic drills, we are leaving the safety of our personnel and equipment to chance. So let's take a few minutes and review some of the basics.

First, let's discuss how the BFV fire suppression system works. The BFV has two separate fire suppression systems: one system for the squad compartment, and a separate system for the engine compartment. Each system has separate fire bottles. The fire bottles for the crew compartment are next to the turret, and the one for the engine compartment is underneath the instrument panel. It is important to remember that the two systems are totally independent; if one of the systems activates, it will not activate the other system.

The squad system (the one in the back) will work in the automatic or manual mode depending on how the switch is set. In the automatic mode, once the sensors in the vehicle detect a fire, the system activates and discharges the Halon from the two rear fire bottles into the squad compartment. You can manually activate the system by pulling the fire extinguisher handle in the right rear by the ramp or the exterior handle at right rear of the BFV. Don't panic, the horror stories about Halon sucking the oxygen from your lungs are just not true; you have plenty of time to get out. A good load plan and rehearsals of Crew Drill 3 are located in FM 7-7J, and are an important part of the evacuation process. (This crew drill can be used or modified for any of the turreted BFV variants.)

The engine fire suppression system is not automatic, the crew must manually activate the system. After shutting down the engine, the driver needs to reach under the instrument panel and turn the knob to the left. Pulling the exterior handle by the driver's hatch will activate the engine

system as well. Keep in mind that the exterior fire extinguisher handles operate only one system—right rear for the crew compartment and left front for the engine compartment.

When was the last time you checked the fire suppression system? How about that bottle under the instrument panel? We all know it's a pain to check, but with good preventive maintenance checks and services (PMCS), it will work when we need it. Make sure you check the cables that run from the handles on the outside to the valves on the bottles. These cables deteriorate, lose support, and develop kinks after time. If the cables look bad, write it up and have the mechanics check them.

Okay, so now we know what to do if we have a fire, but how can we keep a fire from starting in the first place? First, there is a Ground Precautionary Message (GPM 00-016) that addresses a problem with cracked fuel fittings on the engine. The GPM directs your mechanics to replace the brass fittings with steel fittings the next time they pull the pack. Do yourself a favor and make sure the mechanics replace the fuel fittings on your BFV.

Don't panic, the horror stories about Halon sucking the oxygen from your lungs are just not true; you have plenty of time to get out.

Secondly, there is a problem with the power cable for the driver's night viewer getting pinched in the driver's hatch. Once the cable gets pinched, it can short out and cause a fire in the vehicle. There is a new cable and routing to fix this problem. Check out the "Bradley Bits" article regarding the fix for the 1W300 cable on the PM Bradley web site http://www.pmbradley.org/.

Lastly, do your best to keep the hull clean. If possible, pull the pack in a place where you can washout the hull. (I know, easier said than done, but a rag will help.) If you have a large amount of POL in the bilge, it can quickly become a fire hazard.

Don't let your BFV become another fire statistic in the Safety Center database. Follow your -10 PMCS, and take a minute to educate yourself on the fire suppression system. If you know what to do, your training will overcome fear, saving your life and preserving a critical piece of equipment.

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Nomex and Polypro Don't Mix

Mixing the Nomex™ and the combat vehicle crewman (CVC) uniform with synthetic underwear, such as the issue-type polypropylene, is an invitation for pain! Nomex™ will withstand temperatures up to 700 degrees Fahrenheit, whereas synthetic materials can melt at about 300 degrees Fahrenheit. It is possible for Nomex™ to transfer enough heat to melt the polypro against your skin! Doesn't sound like a very comfortable way to survive a vehicle fire to me.

Okay, if I can't wear my polypro, what can I do? Combat vehicles are just like a refrigerator in the winter! First, your only choice is to wear the aramid or 100 percent cotton underwear. The table on the right contains national stock numbers for both types. Tell your supply folks to use an advice code of 2b. This code will ensure that you don't get a substitute made of synthetic materials.

Secondly, there are some "CVC look-alike" gloves available at clothing sales and other stores. These gloves are black in color; however, based on a recent test, they are not fire-resistant. Check your NSNs to make sure you have the proper glove.

Lastly, keep your CVC uniform clean. Oil, grease, or household starch will cause the fabric to burn. Cleaning the CVC uniform to remove these contaminates will restore its fire-retardant properties.

Don't be the soldier who survives a vehicle fire only to find yourself with melted polypro stuck to your skin, and third degree burns on your hands because of gloves that were not made from Nomex™. Worn properly, the CVC uniform will protect you from burns, should the unexpected happen in your combat vehicle.

Drawers, 100% cotton, cold weather
8415-01-051-1175 X-Small
8415-00-782-3226 Small
8415-00-782-3227 Medium
8415-00-782-3228 Large
8415-00-782-3229 X-Large

Undershirt, 100% cotton, cold weather
8415-01-051-1174 X-Small
8415-00-270-2012 Small
8415-00-270-2013 Medium
8415-00-270-2014 Large
8415-00-270-2015 X-Large

Undershirt, Flyers, Man, Aramid
8415-01-043-8375 X-Small
8415-00-485-6547 Small
8415-00-485-6548 Medium
8415-00-485-6680 Large
8415-00-485-6681 X-Large

Drawers, Flyers, Aramid
8415-01-043-4036 X-Small
8415-00-467-4075 Small
8415-00-467-4076 Medium
8415-00-467-4078 Large
8415-00-467-4100 X-Large

Gloves, Combat Vehicle Crewman
8415-01-074-9428 Size 5
8415-01-074-9429 Size 6
8415-01-074-9430 Size 7
8415-01-074-9431 Size 8
8415-01-074-9432 Size 9
8415-01-074-9433 Size 10
8415-01-074-9434 Size 11

POCs: MSG Michael H. Barksdale, Mechanized Infantry System Manager, Ground Systems and Accident Investigation Division, DSN 558-2959 (334-255-2959), barksdam@safetycenter.army.mil and Mr. Larry Hasty, Directorate of Force Development, Fort Knox, KY, DSN 464-3662

If Your Vehicle Catches Fire

I was making good time this past weekend traveling from New Orleans, when suddenly, traffic slowed down to a snail's pace. I thought to myself that there must be a wreck ahead. When I finally reached the accident site, flames were shooting out from beneath the hood of a vehicle that was now on the right shoulder of the road. The driver of the burning car was standing on the shoulder, not far from his vehicle. I yelled to him that he needed to get away from the car, that the car's gas tank might explode. It seemed strange that the other drivers were not aware of the dangers of a car fire either; some were stopping, and others were rubbernecking to see the burning car. In my rearview mirror, I saw a fire truck and ambulance arrive. I eagerly left the scene.

According to the U.S. Fire Administration, 600 people are killed in car fires each year and 3,800 people are injured—1,200 of those are firefighters.

Fires in motor vehicles can produce toxic gases. Automobiles, trucks, and other motor vehicles are made of many synthetic materials that emit harmful, if not deadly, gases when they burn. A main by-product of fires is carbon monoxide—an odorless, colorless, and tasteless gas that kills when present in high concentration.

A vehicle fire can generate heat upwards of 1500 degrees Fahrenheit. Keep in mind that water boils at 212 degrees Fahrenheit, and that most foods are cooked at temperatures less than 500 degrees Fahrenheit. Flames from burning vehicles can often shoot out distances of 10 feet or more.

Parts of the vehicle can rupture because of heat, shooting debris great distances. Bumpers and hatchback-door struts, two-piece tire rims, magnesium rims, drive shafts, grease seals, axles, and engine parts can all become lethal projectiles.

Although a relatively rare happening, gas tanks of motor vehicles can burst and spray flammable fuel, causing a serious hazard. In more catastrophic instances, gas tanks have been known to explode. Hazardous materials, such as battery acid, can injure without even burning.

Vehicle fires are so dangerous that firefighters wear full protective fire-resistant equipment and self-contained breathing apparatus. Firefighters also have the ability to quickly put out vehicle fires with large amounts of water or other extinguishing agents. You don't have these advantages, so use risk management when deciding to fight a motor vehicle fire.

Here are some tips to help you should your vehicle catch fire:

- Signal your intentions and move to the shoulder or breakdown lane.
- Stop immediately and shut off the engine.
- Get yourself and your passengers out of the vehicle. Remain at least 50 feet away from the vehicle. Keep others away as well.
- Do not try to go back into a burning vehicle to retrieve belongings.
- Warn oncoming traffic. Ensure you are located in a safe position away from fire and traffic hazards.
- Call 911 or notify the fire department and report the location and type of fire.

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Gunner Killed When M1114 HMM

A unit recently lost a soldier in a rollover accident. The soldier was the gunner in an M1114 Up-armored HMMWV and was exposed through the turret of the vehicle. Riding exposed already bares certain increased risks. In this accident, three significant factors become apparent when analyzing this tragic event: minimal leadership involvement, no risk management planning, and no rollover drills conducted. These three factors overlap in many ways producing this fatal accident.

Background

The unit deployed after an intense train-up that included training at home station, followed by training at one of the national training centers. This train-up also included transitioning from normal corps operations with three vehicles to division operations with two. The training did not, however, include the M1114 Up-armored HMMWV. The unit got that experience in a one-day training event.

The unit arrived in-country and conducted a relief in place, which included "right seat/left seat" rides in the Up-armored M1114. They were then on their own to conduct route security and detainee escort duty. The route they were operating on was the route they had been over numerous times in the last couple of weeks.

The gunner for the squad leader's vehicle had an unexpected medical emergency and was redeployed back to home station days prior to the accident. The team leader's gunner was moved to the squad leader's vehicle. There were now five soldiers assigned to the two vehicles.

What happened?

The night prior to the accident, the squad leader went to sleep at 2200. He had established a wake-up at 0300. The next mission had a departure time of 0530. The remainder of the squad was enjoying personal time playing cards and getting in precious phone calls to loved ones back home. The team leader finally went to sleep at 2400. Another squad member was the last one to go to sleep minutes later.

The squad leader had a reputation with the chain of command as "squared away." The company commander trusted him to do the tough jobs without a lot of supervision.

During this deployment, the company commander decided to run this operation much like they would have in a garrison environment. This meant the squad leader would receive his mission from the operations sergeant and conduct his back briefs through the operations center. The platoon chain of command was "not needed" for this type operation. The company commander required only the squad leader to conduct risk assessments of the operation and turn them in prior to departure. Besides, this was basically the same mission conducted at home station.

At 0500 on the morning of the accident, the squad leader awoke and realized he had overslept. He quickly woke up the squad. The operations NCO called the squad room asking where the squad leader was for his mission brief. The squad leader replied that he would be right there, as they were running a little late.

The team leader took the other three squad members to the motor pool to ready the vehicles. At 0515, the squad leader arrived at the TOC and departed at 0525 to link up with the squad. The squad departed the camp at 0534. There were no other leaders involved in this morning's mission.

The squad immediately went to eat breakfast at a nearby location, since their early departure preceded the dining facility opening. Once there, they ate and collected their thoughts. The driver of the team leader's vehicle told him he was too tired to drive, so the team leader took over from there.

Mission: Conduct Route Security (Mounted)

Hazards

- Continuous operations.
- No rollover drills conducted.
- No risk management planning or implementation.
- Real-world mission using unfamiliar equipment.

Controls

- Conduct rollover drills IAW ARTEP 19-100-10-DRILL.
- Conduct risk management IAW FM 100-14.
- Leaders incorporate/supervise rest plans.

WV Rolls

Once the squad had eaten, they departed on the mission. As the squad moved along its route, nothing seemed out of the ordinary. That is, until they entered a small village where the road dropped off on the right side and was supported by a 12-foot retaining wall.

The squad leader's gunner was alerted by a loud bang and turned to see the team leader's vehicle skidding along the top of the retaining wall and the gunner flailing inside the turret. Then, he saw the vehicle go over the edge and overturn out of sight. He alerted the squad leader of what had just happened and they returned to the site. They immediately called for a medical evacuation aircraft and began lifesaving measures. It would be too late for the gunner.

Now, let's go back and review the three factors identified earlier.

• **Leadership.** The company leaders trusted this squad, which evolved into no leader involvement in mission preparation and execution. The platoon leadership was not present or engaged in the squad's actions. The squad leader trusted his team leader and squad to get the necessary rest for the next day's mission. None of the leaders identified any risks associated with this mission. Leaders must be involved in their unit's actions, especially in the planning and preparation phases.

• **Risk management**. The chain of command did not do risk management. This mission was like the mission they did at home. Besides, the squad leader was "squared away." The squad leader did a risk assessment prior to departing on his mission. He identified leader rest as very adequate; however, no leaders reviewed the completed risk assessment.

The chain of command must identify and manage risks for all missions. Considering all the factors involved in this mission, the appropriate-level of authority should have made the decision on this mission. Had the chain of command done this, they may have identified the risks associated with not having all mission-essential personnel for a real-world mission, and taken the appropriate actions to mitigate these risks. If you combine leader involvement with risk management, the leaders should have awoken the squad on time to prepare for the mission and supervised their preparation.

•**Rollover drills.** Rollover drills were never conducted. They were known, but not conducted. Drills enable us to react in situations or environments that occur quickly and sometimes without warning, thus preventing us from issuing orders and commands. It is imperative that leaders and soldiers take every opportunity to minimize the risks associated with our already risky business. Drills are one way to do that. Rollover drills may have saved a life on this day.

POC: Ground Systems and Accident Investigation Division, DSN 558-3562 (334-255-3562)

RESULT - 1 FATALITY

Number One Killer of Children

This is the first of two articles that addresses child passenger safety restraint systems and the establishment of an installation Child Passenger Safety Training Program.

Every day, children sustain serious injuries and die in traffic accidents. Many of these tragedies could be avoided with the correct use of child safety seats and seatbelts. Sergeant Smith and her 5-year old daughter found out just how important it is to use seatbelts and child safety seats—

On the morning of 24 August, Sergeant Smith was driving her daughter to the child development center when they were involved in a serious accident. A driver in a pickup truck tried to pass her vehicle, but saw oncoming traffic and suddenly cut back into the right lane. The driver never slowed down and rammed Sergeant Smith's car in the rear. Sergeant Smith was wearing her seatbelt and suffered only minor injuries from the rear-end impact. Her daughter was startled and crying, but unharmed in her booster seat in the back. Paramedics examined the child and did not find a mark on her.

Many are not so fortunate. According to the National Highway Traffic Safety Administration (NHTSA):

- Between 1990 and 1999, over 90,000 children under the age of 20 died in motor vehicle crashes.
- Over 16,500 of those children were under the age of 10, meaning that 33 children under the age of 10 died every week in motor vehicle crashes.
- During that same time, over 57,500 teens between 16 and 20 died in traffic crashes—about 110 each week.
- In total, over eight million children were injured.

Although 96 percent of parents who do buckle up their children think they are doing it correctly. However, car seat checkups continually show that 4 out of 5 unintentionally make mistakes that could result in their child being injured or killed in a crash. Many are not aware that there are four important steps to keep kids safe in motor vehicles. Skipping even one step can put kids at serious risk of injury or death in an accident.

Four steps to keep kids safe:

1. Use rear-facing child seats for children up to at least 20 pounds and 1 year of age.

2. Use forward-facing child seats for children 20-40 pounds (1-4 years old).

3. Use belt-positioning booster seats for children 40-80 pounds or under 4'9" tall.

4. Use seatbelts for older children large enough for the belt to fit correctly: at least 80 pounds and 4'9" tall.

The child passenger safety seat problem includes: nonuse, misuse, and incompatibility.

Nonuse and misuse

Despite the advancements in technology and education, many children are placed in vehicles unrestrained. When children outgrow their convertible safety seats at around age 4 and/or 40 pounds, many parents stop using child safety seats and move kids directly into seatbelts.

According to a recent NHTSA study, approximately 80 percent of all child safety seats are installed incorrectly or misused. Although most parents do make an attempt to fasten the seatbelt around the child, the correct installation of safety seats can be difficult.

Incompatibility

Compatibility problems often occur due to the variety of seatbelt configurations, vehicle seat designs, and child safety seat designs. Always read both the vehicle owner's manual and the car seat instructions carefully when deciding which car seat to use and how to properly install it. Check your car manual to determine if you need a locking clip or other equipment to properly secure the child's safety seat.

Children need special protection

Properly installed child safety seats work to allow the child's body to stop as the vehicle is slowing. This reduces the force on the child's body, and prevents contact with hard surfaces, other occupants, the road, or other vehicles.

Highway deaths are the number one killer of children and young adults in our nation. To prevent these losses, Army installations and organizations can implement a Child Passenger Safety Training Program into their Privately Owned Vehicle (POV) Accident Prevention Program. This topic will be discussed in detail next month.

Highlights include-

- Setting up a Child Passenger Safety Training Program for your installation.
- How to become a certified child passenger safety technician.
- Children and airbags don't mix.

REMEMBER ALWAYS BUCKLE UP. EVERY TRIP. EVERY TIME.

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ARMY SAFETY – The Past Meets the Present

Army Safety doesn't always leave when an installation shuts down. Fort McClellan, Alabama, officially "closed the gate" in September 1999 under the Base Realignment and Closure Act (BRAC). Since 1917, the fort has successfully supported military training and was home to the U.S. Army Military Police and Chemical Schools. Past training activity included use of various weapon systems from World War I through the Gulf Conflict, along with chemical and radiological operations.

Changing from an active installation to a BRAC site is challenging. This mission is the responsibility of the U.S. Army Transition Force (TF) Fort McClellan. A primary task is ensuring the installation's land is free of unexploded ordnance (UXO) or environmental contamination. This has to be done before the Army can transfer property for reuse. The TF relies on the risk management processes outlined in FM 100-14 to assess known or expected hazards. Installation range and land areas are being evaluated for initial and residual risks.

The BRAC process has the TF interacting with multiple agencies. Examples include Headquarters, Department of the Army (HQDA); Training and Doctrine Command (TRADOC); National Guard Bureau (NGB); Corps of Engineers (Mobile and Huntsville Districts); Department of Justice (DOJ); U.S. Fish and Wildlife Service (USFWS); Environmental Protection Agency (EPA); U.S. Army Technical Center for Explosive Safety (USATCES); U.S. Army Technical Escort Unit (TEU); Department of Defense Explosives Safety Board (DDESB); State of Alabama (Departments of Transportation and Environmental); Alabama National Guard (ALARNG); local county Sheriffs' Department; and local reuse groups.

The cleanup process is complex. Daily work activity at Fort McClellan includes the detection, removal, and destruction of UXO from firing and historical range areas, investigating chemical and radiological training sites, the construction of a state highway bypass through portions of the fort's property, timber removal along forested right-of-ways, and environmental sampling and analyses of water and soils.

The presence of UXO on BRAC installations has two distinct safety issues. First, is the concern of safely performing environmental investigations in the presence of UXO; the second problem is the Army's liability from the residual UXO. The TF continues to make risk decisions to protect the public, BRAC contractors, and other agencies working at Fort McClellan. Hazardous areas have been closed to public access, including the shut down of all hunting activity throughout the installation's 40,000-acre land area. Previously open installation roadways have also been selectively closed. Additional control measures include:

- Providing UXO safety briefs to all contractors, the public, and community agencies.
- Coordinating security patrolling with MP, DOD, and local police departments.
- Installing metal gates with locks to control access along roadways leading into cleanup sites.
- Maintaining liaison with community media through radio, TV, and newspaper updates.
- Weekly meetings with contractors and state agencies to resolve cleanup issues.
- Linking the TF and contractors using a wireless telephone system.
- Installing and upgrading signage to mark UXO, environmental, and logging areas.
- Ensuring utility (gas, water, electric, etc.) companies coordinate all intrusive work with the TF.

We are an Army in transformation. As more base closings occur, the integration of Army safety and risk management can provide reasonable controls to support mission accomplishment. Communicating the risk management process to the lowest organizational level is very important. If effectively done, there is a buy-in by participants with an understanding that maintaining a safe and healthy work environment is not just an idea—it is top priority. This is equally applicable to active-duty units or closed-down installations!

POC: Mike Moore, Transition Force Fort McClellan, ATTN: ATZN-SS-S (Safety), Bldg 215, 291 Jimmy Parks Boulevard, Fort McClellan, AL 36205-5000, (256) 848-5433, mike.moore@mcclellan.army.mil

A Message to Installation Commanders and S

The safety and occupational health profession (Career Program-12) is at a critical point in its existence. Due to changing regulations and technology, many facilities are challenged just to maintain the standard on a daily basis. Leadership is in need of competent safety professionals with a comprehensive plan to support Army readiness, while staying in compliance with safety and occupational health statutes. Thus, CP-12 formulated a training program to equip safety professionals.

The CP-12 vision is to meet the Army's force protection requirements, enhance mission accomplishment, and comply with statutory requirements by acquiring, training, developing, referring, and sustaining highly-qualified Army safety and occupational health professionals. This vision is being realized by the career program's wide-ranged training plan.

The CP-12 training program is tailored for safety and occupational health interns, but is also designed to meet the requirements of safety professionals and military members who need safety training. The course schedule is posted below and on page 15, as well as on the Safety Center website under the CP-12 hyperlink. Also on the website is a course catalog that contains course descriptions of all classes offered.

To enroll, both civilians and military members should call DSN 558-3943 or commercial (334) 255-3943, or e-mail Ms. Jenell Fuller (fullerj@safetycenter.army.mil) to request a slot in a desired course. An original Department of Defense (DD) Form 1556 must be brought to class to obtain required signatures. Successful completion of all course requirements will entitle students to request college credit for most individual classes through the American Council on Education.

A partnership between Texas A&M-Commerce, Texas Engineering Extension Service, the OSHA Education Center, and the Army Safety Center provides an even greater opportunity for safety and occupational health interns and safety professionals. By combining Army professional development courses and academic courses from the Texas A&M University System, interns are afforded the chance to earn a master's degree during their internship. A Master of Science in Industrial Technology Engineering and Safety Management can be earned through this unprecedented program of education and instruction in the area of safety management.

Career Program-12 provides safety professionals with combined intellectual knowledge and understanding of safety issues, advanced working skills, and credentials leading to rewarding professional opportunities in the Army. For further information, visit the Safety Center website or call Dr. Brenda Miller, Chief, Training and Education Division, and CP-12 Manager at DSN 558-3553 (334-255-3553).

POC: Krystal Hancock, USASC CP-12 Intern, DSN 558-1220 (334-255-1220)

PHASE I
Safety and Occupational Health Course Schedule

Course	Date
Orientation*	Jan 3
How the Army Runs	Jan 3-4
Theory & Application of Accident Prevention	Jan 7-8
Human Factors	Jan 8
Risk Management	Jan 9-11
Industrial Application of Regulatory Initiatives	Jan 14-17
Problem Solving	Jan 18
Holiday	Jan 21
Advanced Machinery Safeguarding	Jan 22-25
Electrical Hazard Control	Jan 28-30
CAPSTONE I - Ft. Benning, GA*	Jan 31-Feb 1
Fire Safety in Building Design	Feb 4-6
Environmental Law	Feb 7-8
Quantitative Methods in Safety Management	Feb 11-13
System Safety	Feb 14-15
Holiday	Feb 18
Contemporary & Army Ergonomics	Feb 19-22
Writing Techniques	Feb 25

afety Officers

Legal Aspects of Safety	Feb 26-Mar 1
Safety Program Leadership & Management	Mar 4-6
Briefing Techniques	Mar 7
MACOM Briefings*	Mar 8
Hazardous Material Control & Response Methods	Mar 11-15
Recognition, Evaluation, & Control of the Occ. Enviro.	Mar 18-22
Motor Vehicle and Transportation Safety	Mar 25-28
Research Methods	Mar 28-29
Accident Investigation and Analysis Techniques	Apr 1-5
Hazard Recognition in Built Environments	Apr 8-12
Training Techniques	Apr 15-16
Health Physics & Radiological Health	Apr 17-18
Research Project	Apr 19
CAPSTONE II - Ft. Polk, LA*	Apr 21-24
Operational Safety	Apr 25-26
Range Safety	Apr 29-May 1
Career Development	May 2
INTERN GRADUATION [Phase I]	May 3
* CP12 interns only	

PHASE II	
Aviation Safety	May 13-17
Tactical Safety	May 20-31
Hospital Safety	Jun 3-5
Modern Safety Issues	Jun 6-7
Army Safety Program	Jun 10-12
Resource Management	Jun 13-14
Explosives Safety Management	Jun 17-21
Occupational Health Safety Technologist Cert Workshop	Jun 24-26
INTERN GRADUATION [Phase II]	Jun 27

PROFESSIONAL DEVELOPMENT COURSES	
Accident Reporting Workshop	Jun 10-12 & Sep 9-11
Range Safety	Aug 19-23
Risk Management [Train-the-trainer]	Aug 27-29 & Oct 3-4
Problem Solving Strategies for Safety Professionals	Sep 11-12
Theory and Application of Accident Prevention	Sep 12-13
OSHA 501/600	Sep 16-20
Behavior Based Safety	Sep 17-19
Resource Management	Oct 1-2
Associate Safety Professional Certification Workshop	Oct 16-18
Certified Safety Professional Certification Workshop	Oct 22-24
Army Safety Program Management	Oct 22-24
Contractor Safety	Oct 28-Nov 1
Accident Investigation & Analysis	Nov 4-8
Chemical Safety Management	Nov 13-15
Advanced Accident Investigation & Analysis	Nov 18-22
Advanced Safety Management	Dec 10-12
Modern Safety Issues - "What's New?"	Date TBD
FYI: 2002 NATIONAL SAFETY CONFERENCE [San Diego]	Oct 4-11


We will emerge from this attack stronger—with greater resolve to prevail against the forces of hatred and darkness.
— CSA Eric K. Shinseki
U.S. ARMY SAFETY CENTER