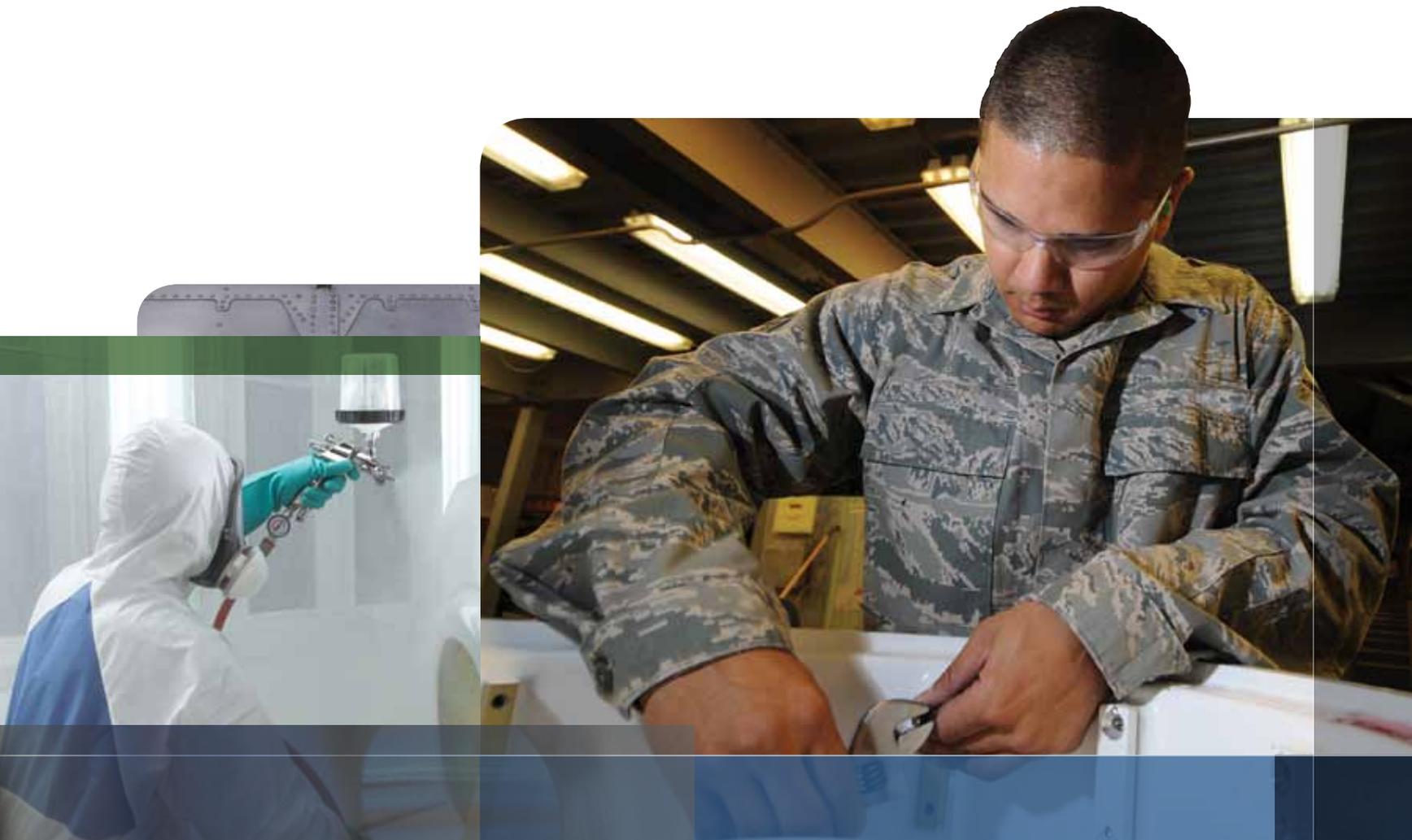


**3M Occupational Health and Environmental Safety Division**  
Health and Safety Solutions for Military Maintenance and Repair Operations



# Solutions Designed for Comfort and Reliability

# Protecting workers, while complying with regulations is a challenging mission.

## Challenge: Convincing workers to wear protective equipment is difficult

Preventable injuries and illnesses cost the Department of Defense (DoD) an estimated \$10 – \$21 billion annually,\* which includes civilian “lost day” rates, or days in which an employee missed work due to an injury. Personal protective equipment (PPE) is a key factor in improving safety and meeting Voluntary Protection Program (VPP) goals. Yet PPE is only effective when it is used correctly and worn consistently.

## Presenting: 3M Total Safety Solutions for Military MRO applications

A broad range of products designed for user protection and comfort... comprehensive tech support for solutions... regulatory and product-use questions... tools and services to help train workers on proper fit and wear.

3M Total Safety Solutions are designed for user comfort—helping workers to breathe easier, move more freely, tolerate heat better, and get the job done with less threat of injury. We deliver the high level

## Opportunity: Workers are more likely to wear PPE for long periods of time if it's comfortable

Quality products designed for comfort encourage proper usage and wear. Workers that are educated on PPE procedures and fit are more inclined to follow health and safety guidelines, making it easier to maintain OSHA compliance and achieve VPP goals while protecting against occupational hazards.

of quality the military needs and expects, along with support resources that make it easier to customize solutions, administer your health and safety program and maintain OSHA compliance.

**Utilizing comfortable PPE can help workers focus on improving process time and reducing total cost of ownership to achieve operational readiness.**

\*National Safety Council statistic

Cleaning



Metal Repair



Blasting



Painting



Assembly



In Military Maintenance & Repair Operations, jobs can take on huge proportions. The associated dangers and safety challenges are immense. With 3M you gain an innovative ally, providing open access to a full arsenal of compatible, high-performing PPE: a continuously evolving range of product solutions and problem-solving expertise.

## Respiratory Protection

### Respirator Fit Testing & Training Information

The Occupational Safety and Health Administration (OSHA) General Industry Standard for Respiratory Protection 29 CFR 1910.134 requires that a written respiratory protection program be established by an employer. This program typically includes medical evaluations and respirator fit testing annually.

3M facilitates convenient products and services to help you achieve regulatory compliance.

Our services are based on OSHA regulatory compliance requirements including customized online respirator medical evaluations to help optimize your compliance testing and tracking.

OSHA also requires training prior to use of respirators. 3M offers product selection tools, respiratory training tools and cartridge service life software to help meet your compliance needs.

### Powered & Supplied Air Training Tools

Gain a fuller understanding of how to use and care for your powered and supplied air respiratory protection equipment. This series includes training videos, posters and literature providing information on how to clean, assemble and maintain your system.

## Hearing Protection

### Hearing Conservation Seminars

3M offers free on-site employee educational seminars focused around hearing conservation. Topics include current regulations, equipment choices, employee training programs, and issues related to noise hazards and hearing protection.

### 3M™ Peltor™

### Communications Headsets

Get a firsthand look at the latest advancements in electronic headsets. Meet with a specialist from 3M's Peltor Communications group and learn how these headsets filter out noise while permitting the user to hear and be heard in extremely loud conditions. Get an on-site demonstration of communication options applicable to your needs, and try out the newest products including headsets with built-in programmable two-way radios, wireless

Bluetooth® headsets, lightweight headsets and headsets that can simultaneously work with both your VHF and UHF radios. For more information call 1-800-665-2942.

## Eye Protection

### 3M™ Total Eyewear Solutions

A comprehensive program focused on helping you keep workers protected and comfortable with a wide variety of prescription and non-prescription safety eyewear professionally fitted for your employees.

### On-Site Professional Optician Consultation and Fitting

For large facilities, 3M offers on-site fitting services by a qualified optician to provide personalized fitting for all 3M eyewear.

The process:

- Once you have identified the potential eye and face hazards at your site, 3M sales specialists will consult with your organization to help determine the appropriate 3M protective eyewear products for those hazards.
- 3M will provide a qualified optician to professionally fit 3M prescription and non-prescription eyewear that may be used to help maximize workers' safety and comfort.
- Employees have the opportunity to choose the style of eye protection they prefer from the range of options.

## Fall Protection

### Training & Support

Falls from height continue to be a leading cause of workplace fatalities and injuries globally. Employers are responsible for ensuring that all employees are properly trained, in accordance with the requirements of OSHA, in the safe use of the fall protection system and its components. 3M™ Fall Protection is proud to offer a wide range of training classes and tools to help promote safety on every worksite.

When you use 3M products, you gain access to a full range of leading-edge tools and resources to help you administer your safety program and maintain OSHA compliance. All are offered at no cost to you.

## Technical Service

### 3M Customer and Technical Service Resources

3M's Technical Service helpline is staffed with employees who understand occupational health and safety and can help answer your product-related questions. Many 3M Technical Service employees are Certified Industrial Hygienists (CIHs) or Certified Safety Professionals (CSPs) and are actively involved in professional safety organizations such as ASSE (American Society of Safety Engineers) and AIHA (American Industrial Hygiene Association).

### 3M Welding Hazard Seminars & Educational Information

These seminars will build your awareness of health and safety standards and employer responsibilities and can support your efforts to stay in compliance with OSHA regulations. Topics include regulations and standards, respiratory hazards and protection, engineering controls, benefits of auto-darkening filters, eye and face impacts, fall protection and productivity considerations; as well as arc radiation, noise and heat stress hazards. Visit [3m.com/weldingsafety](http://3m.com/weldingsafety) for a variety of welding safety tools and resources.

### Additional PPE Training Courses

3M Technical Service may also be able to offer larger audiences half or full day training on a variety of topics related to respiratory, hearing, eye and welding protective equipment applications and regulations. Contact your 3M Sales Representative for more information.

For more information about these training programs and others, visit [3M.com/PPESafety](http://3M.com/PPESafety) or call 1-800-243-4630



# 3M Safety Solutions for DoD Maintainers



## Respiratory Protection



**Respiratory Protection was the fourth most frequently cited OSHA standard violated in fiscal year 2011.<sup>1</sup>**

Sanding, grinding, welding and painting may expose DoD maintainers to a variety of potentially hazardous contaminants and airborne risks.

3M helps you find the right protection with a full line of disposable respirators, half and full facepiece reusable respirators, and powered & supplied air respirators that are comfortable, lightweight and designed for quality performance. For workers in hot, humid work environments, many 3M respirators are equipped with a proprietary 3M™ Cool Flow™ Valve, which allows exhaled air to more easily be expelled, helping keep workers

cooler and more comfortable during extended work assignments. Powered and supplied air respirators, such as the 3M™ Versaflo™ Respirator System features a broad selection of head top options including disposable hoods, face shields, hard hats and helmets designed to help improve user comfort. The vortex regulating valve with supplied air systems can help cool the ambient incoming air up to 50°F.

Support and services include:

- Cartridge and filter replacement programs
- Online medical evaluations
- Online training and maintenance videos
- Respiratory selection guide

Learn more at [3M.com/PPESafety](http://3M.com/PPESafety)

**Lightweight and designed for full-shift comfort and protection, the H-700 series of hard hats** is part of a full line of head and face protection products from 3M. The newest addition, the 3M™ H-700 Series Hard Hat with Uvicator™ Sensor is designed for outdoor use in places like shipyards and airfields where extended UV exposure can make hard hat shells brittle and compromise wearers' safety.

Damage from the sun's UV rays can be detected with the 3M™ H-700 Series Hard Hat with Uvicator™ Sensor. The sensor changes color from red to white as the hard hat is

exposed to UV light, alerting the wearer that it's time for a replacement.

- Ergonomically designed for lightweight, stability and balance
- Vented or unvented models
- Made in the U.S.A. with Globally Sourced Materials
- 4-point Ratchet or Pinlock suspension system with height adjustment
- Compliant in forward or reverse donning positions

Learn more at [3M.com/PPESafety](http://3M.com/PPESafety)

## Head & Face Protection



## Protective Coveralls



**MRO painting and assembly operations may expose workers to harmful contaminants.**

When the job requires protective apparel to safeguard at-risk workers, look to 3M for the solutions you need. Our 3M™ Protective Coveralls are built for worker safety and comfort, offering lightweight, breathable material technologies and design features that allow fewer entry points for contaminants and

enhance freedom of movement. From the 3M™ Protective Coverall 4540+ offering protection against certain light liquid splashes and dusts to the flame resistant properties of the 3M™ Protective Coverall 4530\*, 3M™ Protective Coveralls help protect against most hazardous particles and liquids.

Learn more at [3M.com/ProtectiveCoveralls](http://3M.com/ProtectiveCoveralls)

\*Coverall must be layered over primary FR garment and is not to be worn next to skin when true FR is required.

## Hearing Protection



**Permanent, noise-induced hearing loss is one of the most common occupational disabilities—and in most cases, it is 100 percent preventable.**

For maximum protection and productivity, noise exposure must be reduced to a safe level without hindering worker communication. 3M provides a broad range of comfortable, user-friendly solutions—from disposable ear plugs, Classic™, E-A-Rsoft™ Yellow Neon Blasts™ foam, to E-A-R™ Push-Ins™ and 3M™ Peltor™ earmuffs to high-tech electronic ORA TAC ear plugs and 3M™ Peltor™ two-way

radio headsets—to support your hearing conservation program.

Support and services include:

- 3M™ E-A-Rfit™ Validation System technology, providing objective, quantitative fit testing for hearing protectors. Learn more at E-A-Rfit.com.
- Onsite Hearing Conservation Seminars that help ensure your maintainers are getting proper fit and protection.

Learn more at [3M.com/Hearing](http://3M.com/Hearing)

**Every day, approximately 2,000 U.S. workers sustain a work-related eye injury that requires medical treatment.<sup>2</sup> Protecting maintainers from eye injury can be a challenge, because preventing harm requires every worker to consistently wear the appropriate eye protection.**

Injuries occur when workers aren't wearing eye protection or when they're wearing the wrong eye protection for the job. 3M™ Total Eyewear Solutions can help you in your efforts to reduce eye injuries by improving worker compliance and education. Recognizing that professionally fitted eyewear is likely to be more comfortable and used, it offers comprehensive services to

help equip workers with the right prescription and non-prescription protective eyewear for their job. Choose from a wide range of frame styles, lens tints, coatings, shades and other features such as Light Vision™ hands-free direct lighting, Smart Lens™ light reactive lens, and readers with molded-in magnifying diopters.

Support and services include:

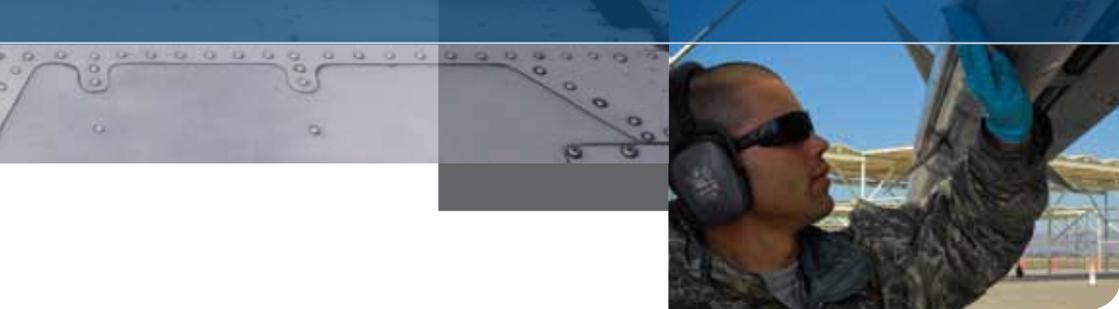
- On-site professional optician consultation and fitting
- Comprehensive online reporting
- Nationwide support network

Learn more at [3M.com/PPESafety](http://3M.com/PPESafety)

## Eye Protection



All 3M protective eyewear and goggles meet the High Impact Requirements of ANSI Z87.1-2003 or ANSI Z87.1-2012, depending on the model, and provide UV protection—polycarbonate lenses absorb 99.9% UV.



## Welding Products



**Dangerous light radiation, potentially hazardous fumes, heat stress: all are ongoing safety risks of MRO metal fabrication and repair.**

Worker injuries are preventable when proper protection is worn and used correctly. A global leader in welding PPE, 3M provides comfortable solutions for safeguarding maintainers from on-the-job hazards while increasing productivity—like the innovative 3M™ Speedglas™ Welding Helmet 9100-FX that gives workers effortless

transition from welding to grinding modes. Choose from a broad selection of PPE including the legendary 3M™ Speedglas™ Auto-Darkening Filters and Welding Helmets, Adflo™ Powered Air Purifying Respirator Systems and Fresh-Air Supplied Air Regulators.

Support and services include:

- Welding Hazard Seminars and Education

Learn more at [3M.com/WeldingSafety](http://3M.com/WeldingSafety)  
[Facebook.com/Speedglas](https://www.facebook.com/Speedglas)

**On average, 12 workers in the United States die each week due to falls while at work.<sup>3</sup>**

Ensuring the safety of maintainers who work at height is a priority for you—and for 3M. We help you protect your workers with fall arrest solutions you can trust. Your maintainers are often welding and 3M offers welding-specific fall protection equipment such as the Saturn Welding Harness and Saturn Energy Absorbing Lanyard that provide char resistance up to 700°F. Our full line of fall protection products including harnesses,

lanyards and anchors is backed with practical training to help ensure worker compliance and enhance your ability to reduce workplace injuries and avoid costly OSHA violations.

Support and services include:

- On-site product demonstration
- Training classes
- Online training videos

Learn more at [3M.com/FallProtection](http://3M.com/FallProtection)

## Fall Protection



<sup>1</sup>[osha.gov/dcsp/compliance\\_assistance/frequent\\_standards.html](http://osha.gov/dcsp/compliance_assistance/frequent_standards.html)

<sup>2</sup>[cdc.gov/niosh](http://cdc.gov/niosh) © 2012 National Institute for Occupational Safety and Health

<sup>3</sup>Source: [bls.gov/news.release/cfoi.nr0.htm](http://bls.gov/news.release/cfoi.nr0.htm)

Technical and online  
**support**  
to help you institute  
proper procedures and  
achieve VPP goals.

**Comfortable**  
PPE that help you work  
more efficiently and  
remain in compliance.

**Reliable** solutions that are  
easy to use.



### **Challenge: Finding the right resources to drive MRO health and safety**

Your responsibility to protect your workforce is a continual balancing act, requiring you to stay at the forefront of technology and on top of standards and regulations. It's an ongoing effort to maximize both the output of your workers and their protection, health and safety.

## service & support

### **Opportunity: Gain a partner that does more than supply PPE products**

Tap into a go-to resource that puts you at the leading edge of occupational health and safety, bringing you the most advanced products and regulatory expertise, and offering extensive technical service and support to help keep your workforce in compliance.

When you use 3M products, you get access to a full range of resources including on-site training and testing to help ensure a proper fit; correct usage and care; online and web-based tools; customized consultation; and more.



**Occupational Health  
and Environmental  
Safety Division**

3M Center  
Building 235-2W-70  
St. Paul, MN 55144-1000

**For more information on 3M Safety  
Solutions for Military Maintenance &  
Repair Operations, contact:**

**In U.S.**

Technical Assistance 1-800-243-4630  
Customer Care Center 1-800-328-1667  
3M.com/PPESafety or m.3M.com/PPESafety

**In Canada**

Technical Assistance 1-800-267-4414  
Customer Care 1-800-364-3577  
3M.ca/PPESafety

Photos courtesy of Defenseimagery.mil. Use of military imagery does not imply or constitute Department of Defense endorsement of this organization, its products or services.

The Bluetooth word mark is a registered trademark owned by Bluetooth SIG, Inc. Peltor is a trademark of 3M Svenska AB, used under license in Canada. 3M and all other trademarks used herein are trademarks of 3M Company, used under license in Canada. Please recycle. Printed in U.S.A.

© 3M 2012. All rights reserved.  
70-0716-2563-9