MCEP and APEL – What does it mean?

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DA Civilian

Tri-Service Vision Conservation and Readiness Course

Course content updated: June 2015
OUTLINE

- Background / History of the Military Combat Eye Protection (MCEP)
- Background/History of the Authorized Protective Eyewear List (APEL)
- The APEL
- MCEP – does it help?
- MCEP/BPE Updates/Future
Goggles and other combat eyewear have been with soldiers as long as we have had Armies.

Before the mechanization of transport and armaments, speeds were slow and the main hazards were weapons, explosions and natural events.
During WWII, goggles were commonly issued to soldiers in combat roles where there were eye hazards. For example:

- Drivers of open vehicles
- Artillery and anti-aircraft gunners
- Tankers
- Air spray shields with gas masks
- Red Lenses for machine gunners
  - To assist in following the trajectory of machine gun tracer bullets.

Tank crewman, Fort Belvoir, VA, August 1941, wearing M-1938 Resistal tanker goggles.

Goggles, M-1944 with metal reinforced, cardboard box. Original M-1944 goggle sets were developed by Polaroid and delivered with three lenses (clear, dark polarizing, red) for dust, wind, and sun protection. "Goggle, M1944" is stamped into the one-piece rubber frame. The M-1944 pattern of goggles remained in use until the 1990s under several different names and part numbers (e.g. "Goggles, Sun/Wind/Dust" FSN 8465-161-4068 or NSN 8465-00-161-4068).
• In the 1970s eye injuries were recognized as a growing problem based on the experience in the Arab-Israeli wars of 1967 and 1973.

• Combat in Iraq in the 1990s found the US military facing desert conditions of heat and dust.

• Also, modern weapons had characteristics of blast, heat, and ballistic fragments that generated higher proportions of eye injuries.

• As a result, the Army researched and fielded spectacles and goggles, adopted in 1994 and issued in 1998
  – First fundamental redesign since WWII.
The Military Combat Eye Protection Background

- Initial products included:
  - SWDG – Sun, Wind, Dust Goggle
    - Circa WWII
    - Polycarbonate lens Type Classified in 1983 (replacing acetate lens)
    - Laser protective lenses Type Classified in 1990
  - BLPS – Ballistic Laser Protective System
    - Type Classified Limited Procurement Urgent in 1989
    - Type Classified Standard in 1995
  - SPECS – Special Protective Eyewear Cylindrical System
    - Type Classified Standard in 1995
    - Designed to provide ballistic, solar and laser protection to soldiers with normal vision.

- Program proved to be unsuccessful because the eye protection
  - Did not look good.
  - Did not feel good.
  - Combination of lenses and frame types were too complex with too many combinations.
Military Eye Protection System (MEPS)

• Developed at U.S. Army Soldier Systems Center in Natick, MA under an R&D program with fielding in 2002.
• Joint Army and Marine Corps Program for all ground combat and security personnel.
• Goggles or spectacles with interchangeable lenses.
  – Fit, comfort and logistical efficiency all improved.
The Military Combat Eye Protection Program

• Currently, MCEP is under the direction of the Project Manager Soldier Protective and Individual Equipment (PM SPIE) of the Program Executive Office (PEO) Soldier.

• PM SPIE is responsible for:
  – Creating/publishing the Authorize Protective Eyewear List (APEL)
  – Establishing/enforcing product requirements
  – Validating and recertifying all existing products
  – Testing all new product submissions
  – Establishing the Integrated Product Team (IPT)
Integrated Product Team (IPT)

- An Integrated Product Team (IPT) is a multidisciplinary group of people who are collectively responsible for delivering a defined product or process.
- Responsible for coming up with a Qualified Product List
  - A list of manufacturers who have had their products examined and tested and who have satisfied all applicable qualification requirements for that product.
  - The QPL for eyewear protection is the Approved Protective Eyewear List (APEL)
- Members of the IPT for APEL include:
  - Members of staff of Product Manager Soldier Protective Equipment
  - AIPH TSVCRP
  - Rep for the Marines
  - Service Optometry Consultants for Navy and Army
  - Representatives for DoD Optical Fabrication Advisory Board
Program Overview

The Military Combat Eye Protection (MCEP) program is an umbrella program geared toward:

- Protects eyes from external threats/hazards
  - Fragmentation
  - Electromagnetic Radiation
  - Wind/Sand/Dust
- Providing vision correction
  - Accommodate corrective lenses
  - Key role played by MEDCOM
- Encouraging use and feedback
  - Promote User awareness
  - Army and MEDCOM channels
  - Leverage soldiers feedback to improve designs
What is the APEL?

AUTHORIZED PROTECTIVE EYEWEAR LIST

- Listing of all COTS Products approved for military use
- New List released March 2015 by PEO Soldier (PM SPIE)
- Note that poster has the date listed at the bottom.

Program Executive Office Soldier
SFAE-SDR
5901 Putnam Road, Bldg. 328
Fort Belvoir, VA 22060-5422
phone: 703-704-2802
http://www.peosoldier.army.mil
As of 31 March 2015 Most current
• All products being provided to the US military under the APEL must bear the APEL logo
  – Only APEL approved eyewear using the materials/processes qualified through the Army APEL program are authorized to use the APEL logo
  – Only product sold for US military use (Government contract, AAFES, etc) may bear the “APEL” logo
  – Licensing agreement needed for eyewear sold to US military if not part of a US Government contract

• Products removed from the APEL must promptly remove the logo from the affected products
APEL Logo Cont

• “APEL” Logo shall be located on the left side of the frame
  
  – Letters may be embossed, debossed, pad printed, etc.
  – Letters must last for the life of the item (~ 6 months) and not be easily removed.

• APEL Logo implemented August 2011 so MCEP purchased prior to then do not have it
  
  – Awaiting washout of existing inventory without logo prior to enforcement on use of eyewear only with APEL
  – Memo dtd 18MAR15 states that “as of January 1, 2016 all eyewear not bearing the APEL logo will be considered unserviceable.”
Current APEL – as of 18MAR15

- 16 Spectacle Devices
  - 6 Options for Warfighters Requiring Rx (UPLC)
  - 10 Options for Warfighters Not Requiring Rx

- 15 Goggle Devices
  - 10 Options for Warfighters Requiring Rx (UPCL)
  - 6 Options for Warfighters Not Requiring Rx

- Only lenses available are clear, sun & laser (for some) and must be standard lenses (not “vented,” polarized, or transitions)
Current APEL Processes and Procedures

• Current APEL processes and procedures will remain in place while the APEL is being re-established

• Current products will remain on the APEL during the re-establishment process unless removed in accordance with current policy
  – New candidates are not currently being accepted
  – Engineering Change Proposals (ECPs) may still be submitted on current APEL items
How do products get on the APEL?

- APEL Approval is a three-step process
  - First must meet ballistic fragmentation, ANSI Z87.1 and other MCEP requirements
  - Undergo and pass user field testing
    - Must be convenient to carry
    - Must be durable during transport and individual use.
  - Receive approval from the APEL Eyewear Review Board

- So, can you get your favorite MCEP on the list?

  YES!!!
What are the MCEP requirements?

- For placement on the APEL, all MCEP/BPE must meet performance requirements that include:
  - ANSI Z87.1 compliance
  - Military Ballistic Fragmentation Standards
  - System Configuration
  - System Weight
  - System Interfaces
  - Environmental Factors
  - Optical Characteristics
  - Flammability
  - Durability
  - Chemical/Abrasion/Fog Resistance
Performance Specification Changes

• Key Changes with new release:
  – Implementation of UPLC
  – Implementation of ANSI Z87.1-2010
  – Introduction of sized EN head forms
  – Accommodation for drag when determining ballistic fragmentation velocity calculations
  – Camouflage face paint with DEET to be used for chemical resistance
    • Paint on test method removed.
  – Goggle carrying case color shall match the frame/sleeve color
  – UPLC nosepiece and goggle adapter shall come as part of the respective spectacle goggle kit
    • Nosepiece shall be placed on the spare lens (for eyewear with removable nosepieces)

• Additional changes may be made to the specification for clarification purposes only

All requirements of the specification will be enforced
MCEP Use Requirements

• AR 670-1, page 16, 3-10 a.(4)
  – “Soldiers are authorized to wear ballistic spectacle eye protection issued by the Army, including lens colors or logos that do not comply with paragraph 3–10a(3), above, in garrison or field environments unless otherwise directed by their chain of command. See the Army Combat Readiness Center for a list of currently approved protective eyewear”

• AR 385-10 Part Two
  – Discusses "functions that are appropriate to sustaining the Soldier during training, mobilization, and tactical and field operations in the garrison or during contingency and wartime conditions." It discusses the use of RM to identify and control hazards and includes identifying requirements for PPE such as MCEP. So, it appears to be at the local level of leadership.

  So, if you see a rash of eye injuries from Soldiers – consider holding leadership accountable!
APEL Spectacles – still available
Note new NSN numbers for most products.

ESS CROSSBOW
NSN: 4240-01-630-8327
UPLC COMPATIBLE

REVISION SAWFLY
NSN: 4240-01-527-4051 (Regular)
AVAILABLE IN THREE SIZES
UPLC COMPATIBLE

OAKLEY M FRAME 2.0
NSN: 4240-01-525-3095
NOT UPLC COMPATIBLE

SMITH OPTICS AEGIS
NSN: 4240-01-630-7992
UPLC COMPATIBLE

HONEYWELL (UVEX) GENESIS
NSN: 4240-01-552-4131
NOT UPLC COMPATIBLE

UVEX XC
NSN: 4240-01-516-5361
NOT UPLC COMPATIBLE

WILEY X PT-1
NSN: 4240-01-510-7853

WILEY X SG-1
NSN: 4240-01-504-0994

WILEY X TALON
NSN 4240-01-583-5158
UPLC COMPATIBLE

APEL Spectacles – still available
Note new NSN numbers for most products.
APEL Spectacles – New

**3M MAXIM**
NSN: 4240-01-630-8338
NOT RX OR UPLC COMPATIBLE

**OAKLEY M FRAME 3.0**
NSN: 4240-01-630-6064
NOT UPLC COMPATIBLE

**ESS CROSSHAIR**
NSN 4240-01-630-6352
UPLC COMPATIBLE

**ESS ROLLBAR**
NSN: 4240-01-630-8249
NOT RX OR UPLC COMPATIBLE

**OAKLEY RACING JACKET SPECTACLE**
NSN: 4240-01-630-6168
NOT RX OR UPLC COMPATIBLE

**REVISION EXOSHIIELD**
NSN: 4240-01-633-9521
NOT RX OR UPLC COMPATIBLE

**REVISION STINGERHAWK SPECTACLE**
NSN: 4240-01-630-6503
NOT UPLC COMPATIBLE

**WILEY X VALOR**
NSN: 4240-01-630-7802
NOT UPLC COMPATIBLE

**WILEY X VAPOR**
NSN: 4240-01-630-7493
UPLC COMPATIBLE
APEL Items being phased out

No new contracts will be awarded for these products; DSCP has limited supply of these products. The intent is to draw-down and discontinue use of these products.

**BALLISTIC LASER PROTECTIVE SPECTACLES (BLPS)**
NSN: 8465-010416-4636 (BPLS, Clear)
RX CAPABLE with M-40 Protective Mask Insert

**SPECIAL PROTECTIVE EYEWEAR CYLINDRICAL SYSTEM (SPECS)**
NSN: 8465-010416-4636
NOT RX CAPABLE

**SUN, WIND, AND DUST GOGGLE (SWDG)**
NSN: 8465-01-328-8268
WORN OVER EYEGLASSES

**ALSO BEING PHASED OUR ARE THE WILEY X SG-1 AND PT-1 SPECTACLES.**
ANY DATE STAMPED 03-2015 OR EARLIER CAN STILL BE USED WHILE AVAILABLE.
APEL GOGGLES
NOTE: All Goggles now only available in Tan.

WILEY X SPEAR
NSN: 4240-01-630-6712 Tan
UPLC COMPATIBLE

ESS PROFILE NVG
NSN: 4240-01-630-7259 Tan
UPLC COMPATIBLE

ESS LAND OPS
NSN: 4240-01-540-5580 Tan
WORN OVER GLASSES
NOT UPLC COMPATIBLE

REVISION DESERT LOCUST
NSN: 4240-01-592-9524 Tan
UPLC COMPATIBLE

SMITH OPTICS OUTSIDE THE WIRE
NSN: 4240-01-641-0158 Tan
UPLC COMPATIBLE

ARENA FLAKJAK
NSN: 4240-01-527-4076 Tan
NOT UPLC COMPATIBLE

NOTE: All Goggles now only available in Tan.
## APEL GOGGLES - NEW

<table>
<thead>
<tr>
<th>Model</th>
<th>NSN</th>
<th>Color</th>
<th>Compatibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>ESS INFLUX</td>
<td>4240-01-630-6343</td>
<td>Tan</td>
<td>UPLC COMPATIBLE</td>
</tr>
<tr>
<td>SMITH OPTICS BOOGIE</td>
<td>4240-01-640-9052</td>
<td>Tan</td>
<td>NOT UPLC COMPATIBLE</td>
</tr>
<tr>
<td>SMITH OPTICS LOPRO</td>
<td>4240-01-641-0162</td>
<td>Tan</td>
<td>NOT UPLC COMPATIBLE</td>
</tr>
<tr>
<td>WILEY X NERVE</td>
<td>4240-01-630-6743</td>
<td>Tan</td>
<td>NOT UPLC COMPATIBLE</td>
</tr>
<tr>
<td>OAKLEY 1.0</td>
<td>4240-01-630-6910</td>
<td>Tan</td>
<td>UPLC COMPATIBLE</td>
</tr>
<tr>
<td>OAKLEY 2.0</td>
<td>4240-01-630-5999</td>
<td>Tan</td>
<td>UPLC COMPATIBLE</td>
</tr>
<tr>
<td>HONEYWELL (UVEX) XMF</td>
<td>4240-01-630-8058</td>
<td>Tan</td>
<td>UPLC COMPATIBLE</td>
</tr>
<tr>
<td>REVISION BULLET ANT</td>
<td>4240-01-630-6281</td>
<td>Tan</td>
<td>UPLC COMPATIBLE</td>
</tr>
<tr>
<td>REVISION WOLFSPIDER</td>
<td>4240-01-630-6906</td>
<td>Tan</td>
<td>UPLC COMPATIBLE</td>
</tr>
</tbody>
</table>
Laser Protective Devices Available

No new contracts will be awarded for these products; DSCP has limited supply of these products. The intent is to draw-down and discontinue use of these products.

REVISION SAWFLY 2-LINE AND 3-LINE LASER PROTECTIVE SPECTACLE KIT
- Replaces BLPS and SPECS
MCN: 4240-01-C12-6545 (Regular)
4240-01-C12-6546 (Large)
UPLC CAPABLE

REVISION DESERT LOCUST 2-LINE AND 3-LINE LASER PROTECTIVE GOGGLE KIT – FOLIAGE GREEN
- Replaces SWDG
MCN: 4240-010F00-8555
UPLC CAPABLE
Have a version with a built in fan to reduce fogging.

SUN, WIND, AND DUST GOGGLE (SWDG)
NSN: 8465-01-328-8268
WORN OVER EYEGLASSES
Why are there so many APEL items?

• More Choice
  – Increase likelihood that they find a product that meets their needs in terms or style and wearability.
  – CDI or GDI Factor
    • If they like it, they will wear it
  – MCEP/BPE only works when it is worn!

• More Product
  – System failure could be overcome
    • Increases from other vendors can replace lost product

• More Competition
  – Vendors competition brings improved quality and cost
Marine Corps
Eye Protection System

• Marines utilize ESS products
  – Sole source supplier
  – Spectacle - ESS Crossbow
  – Goggle - ESS Profile NVG

• Issued to every Marine
  – Current ballistic spectacle kits include:
    • Clear and sun lenses
    • Two spectacles, one goggle
USAF Ballistic Protective Eyewear Program

• Currently covers only deploying Airmen
• USAF currently utilizes same products as the Army
  – AFPEL = APEL

Flight Protective Eyewear List (FPEL)

  – First Authorized Eye Protection for Aircrew
  – Approved by AF only.
Flight Protective Eyewear List

- ESS Suppressor
  Prescription Inserts Authorized

- Revision Sawfly
  Prescription Inserts Authorized

- Oakley SI M Frame 2.0
  Prescription Inserts Authorized

- Wiley-X Talon
  Prescription Inserts Authorized

- Revision Bullet Ant (goggles)
  Prescription Inserts Authorized

- Revision Exoshield (goggles)
  Authorized without Prescription Inserts
Navy Ballistic Protective Eyewear Program

- Medical personnel deploying with Marines are authorized APEL items
- Used on flight decks (Also by Australian Navy)
- Deploying Sailors may get MCEP
  - Area of Operations determines requirement
    - CENTCOM requires MCEP
  - Verified during the annual PHA according to SECNAV INSTRUCTION 6120.3
• Note that Gas Masks are not listed in the APEL.
• Most have not been ballistic tested and do not meet all of the requirements for the current APEL.
• The M50 Joint General Purpose Mask is the US Armed Forces current Field Protective mask.
  – Developed by Joint PEO for Chemical and Biological Defense.
  – Has been ballistic tested using outsert.
  – Rx insert is not UPLC.
PRESCRIPTION LENS CARRIERS (PLCs)

Warfighters who require prescription lenses for their MCEP will need to possess the appropriate Prescription Lens Carrier (PLC) for their Spectacle or Goggle. This can be obtained through a military Optometry Clinic.

Eventually all of the inserts above will be replaced by the Universal Prescription Lens Carrier (UPLC) currently manufactured by Revision. All manufacturers will need to modify their product to support this insert.

Revision Rx Carrier -- Iterative Design

http://www.youtube.com/watch?feature=player_embedded&v=Lhflty5DeBk
Universal Prescription Lens Carriers (UPLC)

• Categorized as Medical Item
• Possess Unique Challenges for APEL Vendors
• First eyewear where vendor mandated fabrication requirements

• Installation
  – Polycarbonate prescription lenses; non-lenticular
  – Prescription lens circumference shall be: 124.1mm ± .2
  – 44/40 Bevel
  – Hot Air Mount (optical pliers may be used to assist), mounted from the front to rear
    • Begin installing Rx lens from the front starting with upper nasal, followed by lower temporal, upper temporal and finishing with lower nasal corner
Polycarbonate Inserts

- ALL MCEP/BPE Insert are required to be made with Polycarbonate Inserts
- Increase protection by 20-34%
- Decrease Lens Thickness and Weight
- Adaptation Issues?
- Scratch Resistance?
What are the Ballistic Standards?

• Spectacle Systems
  – MIL-PRF-31013 and GL-PD 10-12
  – 5.8 Grain, .15 Cal. T-37 Projectile @ 650 ft/sec
  – One shot to critical optical area of lens; alternated between right & left side
  – 6 times the industrial impact standard

• Goggle Systems
  – MIL-G-43914/MIL-V-43511 and GL-PD 10-12
  – 17 Grain, .22 Cal. T-37 Projectile @ 560 ft/sec
  – Three shots: One shot to center of goggle, and one to left and right sides (in the critical optical area)
  – 5 times the industrial impact standard
So why can’t you use any ballistic tested products?

<table>
<thead>
<tr>
<th>Standard</th>
<th>Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANSI Z80.1</td>
<td>5/8 inch ball dropped from 50 inches</td>
</tr>
<tr>
<td>ANSI Z87.1 – non impact</td>
<td>1 inch ball dropped from 50 inches</td>
</tr>
<tr>
<td>ANSI Z87.1 – high impact</td>
<td>¼ inch ball projected at 150 ft/sec</td>
</tr>
<tr>
<td>APEL - Spectacle</td>
<td>5.8 Grain, .15 Cal. T-37 Projectile @ 650 ft/sec (3.8 mm at 196-201 m/s)</td>
</tr>
<tr>
<td>APEL - Goggle</td>
<td>17 Grain, .22 Cal. T-37 Projectile @ 560 ft/sec</td>
</tr>
<tr>
<td>European EN 166 - S</td>
<td>22 mm steel ball from 15 inches</td>
</tr>
<tr>
<td>European EN 166 - F</td>
<td>6 mm ball traveling at 45 m/sec</td>
</tr>
<tr>
<td>European EN 166 - B</td>
<td>6 mm ball at 120 m/sec</td>
</tr>
<tr>
<td>European EN 166 - A</td>
<td>6 mm ball at 190 m/sec</td>
</tr>
</tbody>
</table>

So, trust the requirements that products are tested to in order to get on the APEL. Use only items on the APEL.
Eye Protection S&T Efforts Cont

• **Variable Optical Transmission Lens for Integrated Eyewear Protection** – Kent Optronics, Hopewell Junction, NY/Eclipse Energy Systems, St. Petersburg, FL
  - Develop protective eyewear lenses that can rapidly adjust to varying light conditions while still meeting the MCEP requirements
  - Status: Complete; OCT 12
  - Results: Prototype samples showed inconsistent optics, susceptibility to environmental conditions and low transition range. Technology is not at an acceptable technology readiness level (TRL) for additional PM investment at this time

• **Colored Lens Study - US Army NSRDEC, Natick, MA**
  - Assess operational impact on use of colored lenses
  - Status: Complete; JUL 12
  - Results: Neutral colored lenses best for all operational environments. Commercial colored lenses varied in operational impact. Some colored lenses performed similar to neutral colored lenses while others degraded performance. Users wearing colored lenses were more detectable at shorter distances (50 meters or less) but not any more detectable at ranges greater than 100 meters.

• **Laser Eye Protection – US Army NSRDEC, Natick, MA**
  - Investigate new materials/solutions to mitigate the effects of lasers during day/night operations while minimizing transmission loss, effects on color perception and provide additional levels of protection
  - Status: Ongoing; Transition 2QFY16

• **Improved Impact Protection Material - US Army NSRDEC, Natick, MA**
  - Characterizes the impact resistance of transparent nylon material which has the potential for increased impact protection at lighter weight
  - Status: Ongoing
Eye Protection S&T Efforts Cont

• Anti-Fog Test Methodology Development - US Army NSRDEC, Natick, MA
  - Develop and implement laboratory method for evaluation of eyewears ability to prevent fogging
  - Status: Ongoing

• Blown Sand Abrasion Resistance Test Methodology Development – US Army NSRDEC, Natick, MA
  - Develop and implement laboratory method for evaluation of eyewears resistance to scratching when exposed to sand based environments.
  - Status: Ongoing
Requirements Development

• User Feedback
  – Surveys
  – Direct Contact

• Threat Assessments
  – National Ground Intelligence Center (NGIC)

• Injury Analysis
  – Joint Trauma Analysis and Prevention of Injury in Combat (JTAPIC)
  – Please send back devices with Wounded Warriors whenever possible so that we can examine them.
Are products ever removed?

- Yes
  - All products are routinely sampled for compliance
  - APEL Items which change the design or fabrication process require immediate retesting
  - Three spectacle and one goggle systems have been removed from the APEL to date
  - Items can be placed on suspension and need recertification to get back on the list
Is there a preferred product?

- No, there isn’t a preferred product
- All items meet the same APEL requirements
- No single product performs best on all tests
- Some items perform better on certain tests
  - Fogging, Scratch Resistance, etc.
- Users need to weigh pros/cons of each system with respect to the mission at hand.
How do Warfighters get MCEP/BPE?

- Issued at Individual Entry Training (IET)
- Soldier Protective Individual Equipment (SPIE) /Rapid Fielding Initiative (RFI)
- Supplied by command, unit or UDM
  - May be ordered through logistics using NSN
- Self Purchase
  - All items stocked at Military Clothing and Sales Stores and Post Exchanges
  - Ensure items are marked with APEL before purchase
- What about other sources?
SUBJ: ALARACT 209/2009 - UNAUTHORIZED PROCUREMENT OF BALLISTIC PROTECTION, BODY ARMOR AND OTHER SAFETY ITEMS

IT HAS BEEN REPORTED THAT SOLDIERS AND UNITS ARE PURCHASING INDIVIDUAL SOLDIER BALLISTIC PROTECTION ITEMS, BODY ARMOR, AND ADVANCED COMBAT HELMET (ACH) PADS THROUGH A VARIETY OF SOURCES.

2. THE PURPOSE OF THIS MESSAGE IS TO REITERATE THAT THE ONLY AUTHORIZED SUPPLY SOURCES FOR BALLISTIC PROTECTION ITEMS, BODY ARMOR, AND ARMY ISSUED SAFETY ITEMS ARE THE DEPARTMENT OF DEFENSE (DOD) SUPPLY SYSTEM AND APPROVED PRODUCT LIST ITEMS SOLD AT THE AAFES MILITARY CLOTHING SALES STORES (AMCSS). ORDERING THROUGH THE ARMY SUPPLY SYSTEM OR PURCHASING ITEMS THROUGH AMCSS IS THE ONLY WAY TO ENSURE THE PURCHASE OF SOLDIER PROTECTION AND SAFETY ITEMS THAT MEET ARMY TESTING REQUIREMENTS AND STANDARDS. FAILURE TO PROCURE SOLDIER BALLISTIC PROTECTION ITEMS THROUGH AUTHORIZED SOURCES PUTS OUR SOLDIERS AT RISK…

http://www.amazon.com/april-eye-protectionIndustrialScientific
Where do warfighter’s get their inserts?

- Inserts ordered via SRTS
  - Ensure that you are using the most current version
- Currently, must know brand/type of MCEP and whether it is old APEL or new APEL
  - Contact SPIE/RFI, UDM or purchasing unit
  - Remember, you will be able to order current inserts until inventories are depleted do feel free to ask.
- Optometry Clinics provide only authorized inserts
  - Some manufacturers have inserts that are NOT APEL Approved
Where do I find the APEL?

The APEL is published on the following websites:


Also through AKO, AF Portal or NKO


https://kx.afms.mil/optometry

https://nko.navy.mil/optometry
Where can deployed members get inserts?

- Government Eyewear System (G-Eyes)
- Allows deployed service members to reorder eyewear from their computer
- Requires a previous eyewaer order from a military clinic
- Can order 2 items per visit
- Orders fabricated and sent to the service member’s APO/FPO
- Spectacle frames may be substituted
- Service member may change type of by entering required type in comments section
Is MCEP Being Used?

2008/9 MCEP survey comparisons

• MCEP use by Soldiers:
  – Use of MCEP on convoys and missions outside the Forward Operating Base (FOB)
    • 2008 84% 2009 94%
  – OIF/OEF use of MCEP routinely anytime outdoors
    • 2008 54% 2009 58%
  – Use of MCEP at home
    • 2008 30% 2009 63%
  – * 6% Both years rarely or never used
Is MCEP/BPE Working??

http://bcove.me/da29b3ve
Future Efforts

• Soldier Protection System (SPS)
  – New PM SPE program of record
  – Improved ballistic fragmentation protection
    • Spectacles - 10% increase over current requirement (T) 15% (O)
    • Goggles - 5% increase over current requirement (T) 10% (O)
  – Variable Transmission Lens
    • Transition from 18%-68% (T) 18%-89% (O)
    • Transition in less than one (1) second
  – Be capable of interfacing with a maxillofacial protection and face shield
  – Other MCEP Specification requirements apply

Questions?

For more Information on MCEP and Current APEL
Michael.d.pattison.civ@mail.mil
DSN: 584-3735/ Com: 410-417-3735

For more on Flight Deck Danger click on the following link:
http://www.youtube.com/watch?v=dnCuvs-ACKQ

For more on carrier landings from a pilots perspective:
Part 1:
http://www.youtube.com/watch?v=4gGMI8d3vLs

Part 2:
http://www.youtube.com/watch?v=S0yj70QbBzg

From the PBS Documentary Series “Carrier”
http://www.pbs.org/weta/carrier/full_episodes.htm