

US DEPARTMENT OF DEFENSE BLAST INJURY RESEARCH PROGRAM COORDINATING OFFICE

## **Protective Equipment**

## **Head Protection**

Product Manager Soldier Protective Equipment within the US Army Program Executive Office (PEO) Soldier has developed the Integrated Head Protection System (IHPS), a subsystem of the soldier protection system (SPS) for head protection, with an integrated maxillofacial protection subsystem comprised of a removable mandible and visor (Figures 1 to 3). The IHPS maxillofacial protection subsystem protects mounted Service Members, such as turret gunners, from common blast fragments. The IHPS also leverages the lessons learned from research completed in conjunction with the University of Nebraska at Lincoln to effectively mitigate blast overpressure (BOP) events under operationally relevant threat scenarios. The IHPS provides head protection, to include face, from blast wave and fragmentation from blast and ballistic threats and therefore will provide superior protection from a wider variety of explosive threats than any previously issued standard combat helmet. Milestone C authority approved the IHPS for low-rate production in the fourth quarter of FY16.



**FIGURE 1:** Modular Helmet- primarily worn by all dismounted Soldiers in a tactical environment. This configuration provides limited rifle protection. (Photo courtesy of Brandon Motte.)



FIGURE 2: Modular Helmet with attached maxillo-facial protection (mandible and face shield) worn by Soldiers who man machineguns (turrets) exposed to kinetic and fragmentation threats. The turret configuration may also include the Modular Ballistic Applique. (Photo courtesy of Brandon Motte.)



FIGURE 3: Modular Helmet with Modular Ballistic Applique. Worn by dismounted Service Members for short durations during assault to objective type scenarios. This configuration provides increased rifle protection over the modular helmet alone. (Photo courtesy of Brandon Motte.)

