Protective Equipment

Maxillofacial Protection for the Mitigation of Facial Injuries and Blast Wave Propagation

Researchers at the University of Nebraska at Lincoln, sponsored by the US Army PM SPE, have demonstrated that the addition of a maxillofacial system, consisting of a mandible and visor, to a combat helmet increases ballistic and blunt impact protection and also mitigates blast waves. These results enabled the provision of 100 maxillofacial systems for Contiguous US (CONUS) training and potential Outside the CONUS utilization. Unit feedback was considered to refine the system and influence requirements for the next generation of head protection: the Integrated Head Protection System (IHPS), a subsystem of the SPS. Development of the IHPS also has provided technology that is potentially backwards compatible with the currently fielded ACH. Future work by PM SPE includes exploring the operability of maxillofacial protection upgrade kits for the ACH.