



LIGHTWEIGHT IMPROVED TRANSPARENT ARMOR FOR INDIVIDUAL WARFIGHTERS | WarSTAR

OBJECTIVES

- Develop improved transparent armor systems for the individual Soldier.

APPROACHES

- Evaluation and optimization of new and existing materials (Near term), and
- Applying new advanced technologies (Long term).

POTENTIAL BENEFITS OF THIS TECHNOLOGY

- Reduced weight and bulk with equal or better ballistic performance

TECHNICAL RISK FACTORS

- Enhancement of ballistic performance of transparent armor materials.
- Incorporation of advanced technologies without harming the optical properties.
- Proper abrasion and weather resistant coating without harming the ballistic properties.

CANDIDATE MATERIAL – ENGINEERED POLYAMIDE

- High performance material that can be applied in all transparent armors for Soldier Force Protection.
- This material exhibits superior ballistic protection over currently fielded Polycarbonate (PC).
- Scratch resistant and anti-fog coating materials for this material were developed and applied successfully.
- Ballistic protection of fragment protective face shields and goggles fabricated with this material are 30-40% better than currently fielded PC.



POINT OF CONTACT:

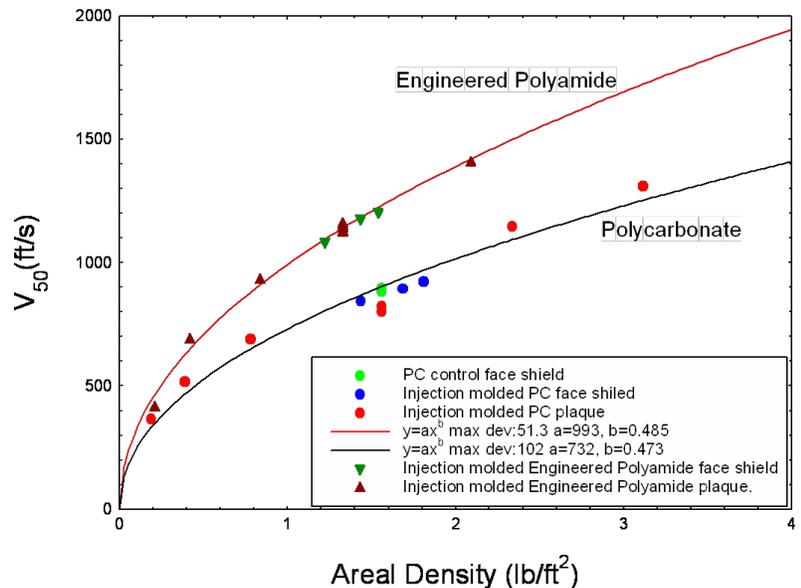
WarSTAR Liaison

COMM: (508) 233-4577,

DSN: 256-4577

E-MAIL:

nati-amrd-nsc-ss@conus.army.mil



UNCLASSIFIED

REV 11-24-08 | OPSEC 08-565