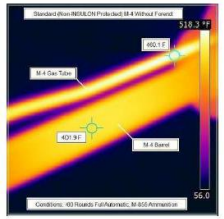
QUAD CHART
IR Signature Suppression Barrier

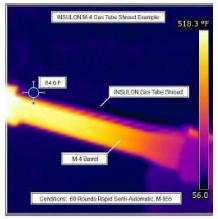
ARIS Inc.
POC: Kunigal Shivakumar
Tel +1 336-392-5582
Email: arisinc@arisinc-us.com

Problem: Gun IR Signature



- Successful Gun
- Vulnerable to enemy fire
- Inexpensive IR camera Technology
- No innovation in IR suppression









Eco-Core Thermal Barrier

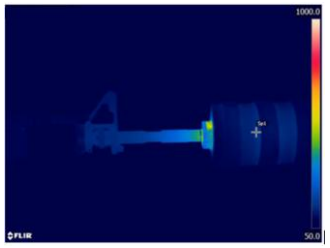
Built & Tested @ Aberdeen, MD

- No IR signature and contact burn
- Weight ≤ 0.5 lb
- Firing Rate 30 RPM
- Firing time 7 mts -> 13 mts

Limitations:

- Higher firing rate
- Longer firing duration
- Temperature: ≤ 600 F





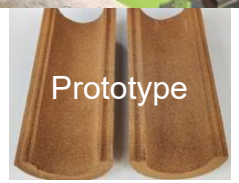
Proposed ALEC² Material Technology

Aris Lightweight Eco Ceramic Composite (ALEC²)

Attributes TRL/MRL: 4 (PCT)

- Porous Ceramic
- Lightweight = ½ Water density
- Temperature 2,000 F
- No IR Signature
- Structural
- Nonconductive, Low CTE & Thermally Stable
- *Offers convection heat flow within the material*





ALEC² Technology Potential

Technology Status

	Current	ALEC²
IR Signature:	YES	NO
Firing rate	: 30 RPM	Higher
Firing time	: 7 mts	Higher
Contact burn	: YES	NO

Other Applications

- Noise attenuation:
  - Aircraft Engine (TRL 5)
  - Highway
- Fire & Sound:
  - Maritime vessels
  - Buildings