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15. SUBJECT TERMS Armor						
16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT	18. NUMBER OF PAGES	19a. NAME OF RESPONSIBLE PERSON	
a. REPORT	b. ABSTRACT	c. THIS PAGE			Diana-Lynn Herbst	
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INSTRUCTIONS FOR COMPLETING SF 298

1. REPORT DATE. Full publication date, including day, month, if available. Must cite at least the year and be Year 2000 compliant, e.g. 30-06-1998; xx-06-1998; xx-xx-1998.

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Final Technical Status Report

DOTC 10-01-INIT-084

“Development of Prototype Reactive Armor Tile”

Reporting Period: through 15 June 2013

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Submitted: 15 June 2013



1. Comments on Technical/Cost/Schedule Performance

Technical: All milestones were completed.

2. Initiative Quad Chart

Development of Prototype Reactive Armor Tile	
Goals & Objectives	Initiative Information
Produce prototype Reactive, Active, and Passive Armor Products using precision green manufacturing technologies to enhance the operational effectiveness and reduce the cost and weight of the vehicle add-on armor package.	Initiative Lead: CLogic LLC Period of Performance: 24 months Funding: \$1,884,912.00
Milestones & Technical Achievements	Implementation & Payoff
Work on this initiative has been fully completed	Schedule: June 15, 2013 Status: 100% complete
	Technology will provide prototype lightweight reactive armor systems using hybrid armor materials for vehicles that resist increasingly lethal threats, including simultaneous attacks from different weapons. Technologies include lightweight composites, ceramics, metal-ceramic compounds, nanomaterials, and more advanced reactive and active protection systems.
Current Status: Technical = Green Schedule = Green Cost = Green	

3. Supplemental Information

In order to improve the usefulness of the quad charts and provide DOTC with sufficient initiative information, the Quarterly Report must be supplemented with data described below.



3.1 Technical Achievements

Prototype hardware was produced and provided to the Government for testing.

Milestone Status:

Milestone No.	Deliverable Description	Due Date	Percent complete
1	Quarterly Technical and Business Status Reports	3/20/2011	100%
2	Fabricate Prototype Wave Shapers	4/15/2011	100%
3	Identify candidate materials	4/15/2011	100%
4	Prepare armor tiles Prototype 1	5/30/2011	100%
5	Quarterly Technical and Business Status Reports	6/20/2011	100%
6	Prepare armor tiles Prototype 2	7/30/2011	100%
7	Design and prototype multi-functional armor in various sizes and shapes 1	7/30/2011	100%
8	Analysis, modeling, and simulation 1	7/30/2011	100%
9	Pro-E and 3D C and Models of prototype designs 1	8/30/2011	100%
10	Quarterly Technical and Business Status Reports	9/20/2011	100%
11	Prepare armor tiles Prototype 3	9/30/2011	100%
12	Design and prototype multi-functional armor in various sizes and shapes 2	9/30/2011	100%
13	Fabricate prototypes and armor mock-ups 1	9/30/2011	100%
14	Pro-E and 3D C and Models of prototype designs 2	10/30/2011	100%
15	Analysis, modeling, and simulation 2	10/30/2011	100%
16	Prepare armor tiles Prototype 4	11/30/2011	100%
17	Fabricate prototype multifunctional, lightweight layered material tiles that perform two or more primary functions 1	11/30/2011	100%
18	Quarterly Technical and Business Status Reports	12/20/2011	100%
19	Pro-E and 3D C and Models of prototype designs 3	12/20/2011	100%
20	Design and prototype multi-functional armor in various sizes and shapes 3	12/30/2011	100%
21	Design and prototype multi-functional armor in various sizes and shapes 14	1/30/2012	100%
22	Fabricate prototypes and armor mock-ups 2	1/30/2012	100%



23	Prepare armor tiles Prototype 5	2/28/2012	100%
24	Annual Technical and Quarterly Business Status Reports	3/20/2012	100%
25	Design and prototype multi-functional armor in various sizes and shapes 4	3/30/2012	100%
26	Fabricate prototype multifunctional, lightweight layered material tiles that perform two or more primary functions 2	3/30/2012	100%
27	Pro-E and 3D C and Models of prototype designs 4	4/30/2012	100%
28	Prepare armor tiles Prototype 6	4/30/2012	100%
29	Design and prototype multi-functional armor in various sizes and shapes 5	4/30/2012	100%
30	Design and prototype multi-functional armor in various sizes and shapes 6	5/30/2012	100%
31	Pro-E and 3D C and Models of prototype designs 5	5/30/2012	100%
32	Quarterly Technical and Business Status Reports	6/20/2012	100%
33	Pro-E and 3D C and Models of prototype designs 6	6/30/2012	100%
34	Design and prototype multi-functional armor in various sizes and shapes 7	6/30/2012	100%
35	Prepare armor tiles Prototype 7	6/30/2012	100%
36	Pro-E and 3D C and Models of prototype designs 7	7/30/2012	100%
37	Design and prototype multi-functional armor in various sizes and shapes 8	7/30/2012	100%
38	Analysis, modeling, and simulation 3	7/30/2012	100%
39	Design and prototype multi-functional armor in various sizes and shapes 9	8/30/2012	100%
40	Quarterly Technical and Business Status Reports	9/20/2012	100%
41	Pro-E and 3D C and Models of prototype designs 8	9/30/2012	100%
42	Prepare armor tiles Prototype 8	9/30/2012	100%
43	Design and prototype multi-functional armor in various sizes and shapes 10	9/30/2012	100%
44	Analysis, modeling, and simulation 4	9/30/2012	100%
45	Fabricate prototypes and armor mock-ups 3	9/30/2012	100%
46	Design and prototype multi-functional armor in various sizes and shapes 11	10/30/2012	100%
47	Analysis, modeling, and simulation 5	10/30/2012	100%
48	Prepare armor tiles Prototype 9	11/30/2012	100%
49	Design and prototype multi-functional armor in various sizes and shapes 12	11/30/2012	100%
50	Quarterly Technical and Business Status Reports	12/20/2012	100%
51	Design and prototype multi-functional armor in various sizes and shapes 13	12/30/2012	100%



52	Pro-E and 3D C and Models of prototype designs 10	1/30/2013	100%
53	Design and prototype multi-functional armor in various sizes and shapes 15	2/28/2013	100%
54	Pro-E and 3D C and Models of prototype designs 9	3/15/2013	100%
55	Prepare armor tiles Prototype 10	3/15/2013	100%
56	Design and prototype multi-functional armor in various sizes and shapes 16	3/15/2013	100%
57	Characterize the properties	3/15/2013	100%
58	Fabricate prototype multifunctional, lightweight layered material tiles that perform two or more primary functions 3	3/15/2013	100%
59	Analysis, modeling, and simulation 6	3/15/2013	100%
60	Fabricate prototypes and armor mock-ups 4	3/15/2013	100%
61	Producibility Study	3/15/2013	100%
62	Prototype Design Assessment	3/15/2013	100%
63	Critical characteristics identification	3/15/2013	100%
64	Fabricate prototype packaging	3/15/2013	100%
65	POP testing	3/15/2013	100%
66	Manufacturability Report	3/15/2013	100%
67	Technology Transfer Plan	3/15/2013	100%
68	Final Technical and Business Status Reports	3/15/2013	100%

Technical Readiness Level Status: 5

3.2 Problems Encountered and Action Taken

- None

3.3 Technology Transfer

- None

3.4 Plans for Next Quarter: Initiatives is complete

