

**Contractor's Progress Report  
(Technical and Financial)  
CDRL A001**

**For: Safe Surgery Trainer**

**Prime Contract: N00014-14-C-0066**

**For the Period Mar 1, 2014 to Mar 31, 2014**

**Submitted: 15 May 2015**

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# Report Documentation Page

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## Medical Modeling - Safe Surgery Trainer

This Monthly Progress Report is provided in accordance with the contract CDRL.

1) **Contract Period of Performance:** 12 March, 2014 to 30 September, 2015

2) **Cost (Estimated financials may differ from actual invoice)**

a) Total Amount Funded to date:	\$910,256.00
b) Estimated Reporting Period Expenditures	\$23,357.23
c) Estimated Cumulative Expenditure	\$654,365.52
d) Estimated Remaining Funds To Completion	\$255,890.48

3) **Progress and Accomplishments During Report Period**

- a) Program Management – Ongoing communication and project management with project team and sub-contractors. Ongoing outreach with medical centers (see below). Ongoing project management according to Alion’s CMMI Level 3 processes.
  - i) Continued coordinating of technology transfer, surgical visitation, and study participation.
  - ii) Ongoing interactions with medical representatives that were interested in or attended the SST StoryJam. StoryJam Participating organizations included: Portsmouth Naval Hospital, Langley AFB Hospital, Fort Eustis McDonald Healthcare, Eastern Virginia Medical School, Maryview Hospital, Mary Immaculate Hospital, and the Children’s Hospital of the King’s Daughters.
  - iii) Continued outreach to the VA, Navy, Army, Airforce, and civilian healthcare organizations to encourage participation and alignment.
- b) Prototype Development – Completed development of Iteration 2 including work on the missions, environmental art, and user interface. Continued refinement of scenarios, architecture, and foundational technology. Added fun-facts mini-game and a 4<sup>th</sup> scenario mission.
- c) Instructional Design and Healthcare Research – Minimal updates of scenario materials to ensure gameplay, scenarios, and conversations match the learning objectives. Continued reviewing the terminal and enabling Learning Objectives. Refined learning objectives based on December I/ITSEC study to include only elements related to: Facilitate Psychological Safety.
- d) Research Studies – Continued preparation for studies which is now scheduled to begin in the end of June. Refined measurement outlines for continued studies. Continued plans for IRB approval for May testing.

4) **Work in Progress / Plans for Next Month**

Unclassified

- a) Program Management - Continue identifying communication channels, managing contracts, and coordinating with team members and outside participants. Continue involving team members and stakeholders in design, testing, and development.
- b) Prototype Development – Minor revisions to the software in preparation for the June studies. This may include refinements to the game, flow, and mechanics as well as capturing statistics. Based on preliminary study work, may also include work toward a 5<sup>th</sup> mission. Begin Iteration Three.
- c) Instructional Design and Healthcare Research – Continue finalizing scenarios, conversations, and learning objectives.
- d) Research Studies – Support learning objective refinements with measurement outlines. Coordinate with Portsmouth Naval regarding IRB and June studies. Continue participation in discussions to ensure design, development, and research goals are in alignment (ex. psychological safety).

5) Milestones / Deliverables

Name/Description	Date (Target or Actual)	Notes/Status
Project Management Plan	<b>DONE:</b> May 28, 2014	<b>COMPLETE</b>
Reports	15 <sup>th</sup> of each month	This document
Presentation Materials	As appropriate	ONR Kickoff Brief
Software Requirements Document	<b>Target:</b> Nov 30, 2014	
Scenario Design Document	<b>Target:</b> Sept 30, 2014 & June 30, 2015	
Prototype - Executable	<b>Target:</b> December, 2014, May, 2015, and Aug, 2015	Iter 1 – <b>COMPLETE 12/1/14</b> Iter 2 – Target Apr 30, 2015 Iter 3 – Target July 31, 2015
Prototype - Source	<b>Target:</b> Sept 30, 2015	
Research Data	<b>Target:</b> Sept 30, 2015	
Final Report	<b>Target:</b> Sept 30, 2015	
Milestone – Initiation	<b>DONE:</b> May 31, 2014	<b>COMPLETE</b>
Milestone – Iteration 1	<b>DONE:</b> Dec 1, 2014	<b>COMPLETE</b>
Milestone – Iteration 2	<b>Target:</b> Apr 30, 2015	<b>COMPLETE</b>
Milestone – Iteration 3	<b>Target:</b> July 31, 2015	
Milestone – Conclusion	<b>Target:</b> Sept 30, 2015	
Milestone – ONR Kickoff	<b>DONE:</b> Apr 22, 2014	<b>COMPLETE</b>
Milestone – StoryJam	<b>DONE:</b> May 25, 2014	<b>COMPLETE</b>

6) Risks/Issues/Concerns/Problems

- a) Still need a transition agreement or memorandum with Portsmouth Naval Hospital. Working with new XO, Capt Smith. Will also begin work to brief/update the new CO, Capt Vai. (Note – see October report for more detailed analysis of previous risk)

**7) Travel Accomplished**

- a) I/ITSEC, Dec 1 – Dec 4, Orlando Florida. Included labor hours for onsite SST effort such as conducting the field study. No actual travel budget.
- b) IMSH, Jan 12-14, New Orleans, Louisiana. Includes labor hours for onsite SST demonstrations and meetings. No actual travel budget.

**8) Planned Travel**

- a) Travel to Norfolk by UCF research partners, likely in June.

**9) Related Activities**

- a) Submitted abstract for I/ITSEC 2015 tutorial, “We Need To Talk! Safer Surgery With Games.” Abstract was accepted, with presentation due June 12.
- b) Presented talk at the International Modelling and Simulation in Healthcare (IMSH) 2015 conference, New Orleans, Louisiana, Jan 10-14, 2015. “Safer Surgery with Games – The Moment of Truth”
- c) Presented at the Design of Learning Games Community Workshop, at I/ITSEC, Wednesday, Dec 3<sup>rd</sup>.
- d) Conducted Field Study from the Alion booth at I/ITSEC 2014 – only such study of the conference!
- e) Presented SST concepts in a brief at the M&S Southwest Modeling and Simulation Conference in Scottsdale, Arizona, Mar 12, 2014.