

Fiscal Year:	FY 2012	Task Last Updated:	FY 05/24/2012
PI Name:	Hurst, Victor Ph.D.		
Project Title:	Assisted Medical Procedures (AMP)		
Division Name:	Human Research		
Program/Discipline:	HUMAN RESEARCH		
Program/Discipline--Element/Subdiscipline:	HUMAN RESEARCH--Operational and clinical research		
Joint Agency Name:	TechPort:	Yes	
Human Research Program Elements:	(1) ExMC :Exploration Medical Capabilities		
Human Research Program Risks:	(1) Medical Conditions :Risk of Adverse Health Outcomes and Decrements in Performance Due to Medical Conditions that occur in Mission, as well as Long Term Health Outcomes Due to Mission Exposures		
Space Biology Element:	None		
Space Biology Cross-Element Discipline:	None		
Space Biology Special Category:	None		
PI Email:	victor.hurst@nasa.gov	Fax:	FY
PI Organization Type:	NASA CENTER	Phone:	(281) 212-1460
Organization Name:	Wyle-Science, Technology, and Engineering/NASA Johnson Space Center		
PI Address 1:	1290 Hercules Avenue		
PI Address 2:			
PI Web Page:			
City:	Houston	State:	TX
Zip Code:	77058	Congressional District:	36
Comments:			
Project Type:	GROUND	Solicitation / Funding Source:	Directed Research
Start Date:	10/01/2008	End Date:	04/01/2014
No. of Post Docs:	0	No. of PhD Degrees:	0
No. of PhD Candidates:	0	No. of Master' Degrees:	0
No. of Master's Candidates:	0	No. of Bachelor's Degrees:	0
No. of Bachelor's Candidates:	0	Monitoring Center:	NASA JSC
Contact Monitor:	Watkins, Sharmila	Contact Phone:	281.483.0395
Contact Email:	sharmila.watkins@nasa.gov		
Flight Program:			
Flight Assignment:	<p>NOTE: Project name change to "Assisted Medical Procedures (AMP)" from "Advanced Integrated Clinical System-Guided Medical Procedure Systems," per JSC (Ed., 7/25/2012)</p> <p>NOTE: End date is now 4/1/2014 per HRP 3/14/12 Master Task List information (Ed., 4/9/2012)</p> <p>NOTE: question of period of performance per information from PI (Ed., 11/30/2011)</p>		
Key Personnel Changes/Previous PI:	Sharmila ("Sharmi") Watkins M.D. is still the NASA Tech Monitor for this project but her contact information has changed. Email: sharmila.watkins@nasa.gov Phone: 281.483.0395		
COI Name (Institution):	Wu, Jimmy (Wyle-Science, Technology and Engineering)		
Grant/Contract No.:	Directed Research		
Performance Goal No.:			
Performance Goal Text:			

Task Description:	<p>The Advanced Integrated Clinical Systems-Guided Medical Procedure System task was to provide the Constellation Program with a robust medical procedure system that fosters both astronaut wellness and mitigates medical issues during missions to the International Space Station (ISS), the Moon (Lunar Sorties and Lunar Outpost), and outreaching planets. With the cancellation of the Constellation Program, the work for the Advanced Integrated Clinical Systems-Guided Medical Procedure System ceased at the end of Fiscal Year 2010 and the project was closed.</p> <p>At the start of Fiscal Year 2012, the NASA Human Research Program (HRP) received funding to conduct the Exploration Medical System Demonstration (EMSD) project. The EMSD is an evaluation that will utilize the International Space Station (ISS) as a testbed to show that several medical technologies needed for an exploration class mission and medical informatics tools for managing evidence and decision making can be integrated into a single system and used by the on-orbit crew in an efficient and meaningful manner.</p> <p>The EMSD will be coordinated by the HRP Element called the Exploration Medical Capability (ExMC) Group and will consist of two phases: 1) A ground phase where all capabilities will be tested in a ground-based exercise in 2014 and 2) a space flight-phase where some of the capabilities from the ground-phase will be tested aboard the ISS in 2016. Included in both phases is an electronic ("paperless") medical procedure system called the Assisted Medical Procedures (AMP) that will help crew both select a medical procedure as well as guide them through the procedure. The system will be used for all medical encounters, especially during periods of exploration missions when contact with ground resources (e.g. flight surgeon) will either be minimal or absent (i.e. autonomous medical care).</p> <p>Development of the AMP will be accomplished by generating an operational concepts (OpsCon) document followed by the creation of requirements and corresponding drawings to produce the components of the system.</p>
Rationale for HRP Directed Research:	
Research Impact/Earth Benefits:	At the time of writing this report, it is believed that the development of the AMP will not have an impact on terrestrial medicine and research.
Task Progress:	<p>[Editor's note 5/24/2012: Task Book report compiled by PI on 3/2/2012 and submitted by Task Book editor on 5/24/2012.]</p> <p>A baseline version of the EMSD Operational Concept (OpsCon) document was completed on 21 November 2011. Using this document as a reference, the AMP OpsCon document was finalized on 13 February 2012. A requirements document for the AMP has since been drafted and is, at the time of writing this report, going through an internal review by ExMC Team members. Following this review, the document will undergo a formal review by the ExMC Advisory Group starting 6 March 2012.</p>
Bibliography Type:	Description: (Last Updated: 07/01/2015)