Fiscal Year:	FY 2014	**Task Last Updated:**	FY 09/24/2013
PI Name:	Rose, Raphael Ph.D.		
Project Title:	Self-Guided Multimedia Stress Management and Resilience Training		
Division Name:	Human Research		
Program/Discipline:	HUMAN RESEARCH		
Program/Discipline--Element/Subdiscipline:	HUMAN RESEARCH--Behavior and performance		
Joint Agency Name:		**TechPort:**	Yes
Human Research Program Elements:	(1) **HFBP**:Human Factors & Behavioral Performance (IRP Rev H)		
Human Research Program Risks:	(1) **BMed**:Risk of Adverse Cognitive or Behavioral Conditions and Psychiatric Disorders		
Space Biology Element:	None		
Space Biology Cross-Element Discipline:	None		
Space Biology Special Category:	None		
PI Email:	rose@psych.ucla.edu	**Fax:**	FY 310-825-9048
PI Organization Type:	UNIVERSITY	**Phone:**	310-825-9048
Organization Name:	University of California, Los Angeles		
PI Address 1:	Department of Psychology		
PI Address 2:	Box 951563, 1285 Franz Hall		
PI Web Page:			
City:	Los Angeles	**State:**	CA
Zip Code:	90095-1563	**Congressional District:**	33
Comments:			
Project Type:	GROUND	**Solicitation / Funding Source:**	Directed Research
Start Date:	12/11/2013	**End Date:**	12/10/2016
No. of Post Docs:		**No. of PhD Degrees:**	
No. of PhD Candidates:		**No. of Master' Degrees:**	
No. of Master's Candidates:		**No. of Bachelor's Degrees:**	
No. of Bachelor's Candidates:		**Monitoring Center:**	NASA JSC
Contact Monitor:	Leveton, Lauren	**Contact Phone:**	
Contact Email:	lauren.b.leveton@nasa5.gov		
Flight Program:			
Flight Assignment:	NOTE: Period of performance changed to 12/11/2013-12/10/2016 per NSSC information (previously noted as 9/18/2013-10/31/2015 per HRP information)--Ed., 9/9/14		
Key Personnel Changes/Previous PI:			
COI Name (Institution):	Craske, Michelle Ph.D. (University of California, Los Angeles) Smith, Scott Ph.D. (NASA-Johnson Space Center Nutrition Biochemistry Lab)		
Grant/Contract No.:	NNX14AC47G		
Performance Goal No.:			
Performance Goal Text:			

Task Description:	Stress and anxiety-related problems are some of the most common and costly behavioral health problems in society. For those working in operational environments (i.e., astronauts, flight controllers, military), stress and anxiety-related problems before, during, or after missions can seriously compromise efficiency, safety, and performance. To address behavioral health issues like stress, it is important to maximize the privacy, validity, and acceptability of the countermeasures used. Technology-based behavioral health programs (e.g., computer or web-based programs) are effective for treating behavioral health problems. These programs increase availability of evidence-based interventions to individuals who are not able or willing to receive such in-person treatments. Our prior research validated the autonomous multimedia resilience training program we created (i.e., SMART-OP). Results from a randomized controlled trial with a stressed but otherwise healthy sample (N=66) indicated that SMART-OP decreased perceived stress, improved perceived control over stress, and was rated as significantly more useful than an attention control group that received marketed videos and published material on stress management. SMART-OP was also rated as “excellent” in terms of user-friendliness, had low dropout, and high homework adherence. We propose to evaluate the effectiveness, usefulness, and usability of SMART-OP with a sample of flight controller trainees at Johnson Space Center by comparing it to an attention control group. Additionally, we will examine the effects of self-guided stress management and resilience training on biomarkers for stress (i.e., cortisol, a-amylase), heart rate, and cognitive and behavioral performance. Based on several meetings with the SFRM Working Group, we learned that trainees are not progressing through the training flow satisfactorily and that they identified stress as a potential contributor to poor trainee performance. Since SMART-OP significantly reduced perceived stress, increased perceived control over stressors, and was rated as highly useful, SMART-OP could provide helpful stress management training for flight controllers. Also, since SMART-OP is evidence-based, confidential, and self-directed, it may be more acceptable to flight controller trainees than other programs.
Rationale for HRP Directed Research:	This research is directed because it contains highly constrained research.
Research Impact/Earth Benefits:	
Task Progress:	New project for FY2013.
Bibliography Type:	Description: (Last Updated: 02/11/2021)