

Fiscal Year:	FY 2012	Task Last Updated:	FY 09/22/2011
PI Name:	Tannenbaum, Scott Ph.D.		
Project Title:	Composing and Developing Resilient, Adaptive, and Self-Sustaining Teams for Long Duration Space Exploration		
Division Name:	Human Research		
Program/Discipline:	HUMAN RESEARCH		
Program/Discipline-- Element/Subdiscipline:			
Joint Agency Name:		TechPort:	No
Human Research Program Elements:	(1) BHP :Behavioral Health & Performance (archival in 2017)		
Human Research Program Risks:	(1) BMed :Risk of Adverse Cognitive or Behavioral Conditions and Psychiatric Disorders (2) Team :Risk of Performance and Behavioral Health Decrements Due to Inadequate Cooperation, Coordination, Communication, and Psychosocial Adaptation within a Team		
Space Biology Element:	None		
Space Biology Cross-Element Discipline:	None		
Space Biology Special Category:	None		
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City:	Albany	State:	NY
Zip Code:	12203-6006	Congressional District:	20
Comments:			
Project Type:	GROUND	Solicitation / Funding Source:	2010 Crew Health NNJ10ZSA003N
Start Date:	10/01/2011	End Date:	09/30/2014
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:	
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Flight Program:			
Flight Assignment:			
Key Personnel Changes/Previous PI:			
COI Name (Institution):	Alliger, George (The Group for Organizational Effectiveness, Inc.) Mathieu, John (University of Connecticut) Salas, Eduardo (University of Central Florida)		
Grant/Contract No.:	NNX11AR22G		
Performance Goal No.:			
Performance Goal Text:			

Task Description:	<p>Flight crews in Long Duration Space Exploration (LDSE) missions are isolated for prolonged periods with access to only limited, time-lagged communications with ground operations. This creates numerous team-related challenges. Under such conditions, a single crew member who is a "poor fit" can jeopardize mission effectiveness, and even a well-formed team must adapt during its time together to remain effective. The proposed research addresses how best to compose an LDSE team, as well as how to use subsequent team countermeasures to optimize team resilience, adaptability, and viability during a mission.</p> <p>The research program represents a synthesis of existing technologies and knowledge, and the advancement of new methods and applications, all grounded in the unique demands of LDSE. We consider team effectiveness as not only traditional task performance, but also, given the LDSE setting and mission, team sustainability and viability over time. Based on a synthesis of existing research, input from subject matter experts, and new empirical studies, we will recommend evidence-based guidelines for composing LDSE flight teams, identify diagnostic measures to guide preemptive actions, prototype a self-sustainment countermeasure to address psychosocial vulnerabilities, and develop specifications for an automated, diagnostic-driven, Team Autonomous Self-Development and Sustainment (TAS2) module.</p>
Rationale for HRP Directed Research:	
Research Impact/Earth Benefits:	
Task Progress:	New project for FY2012.
Bibliography Type:	Description: (Last Updated: 02/02/2024)