

Fiscal Year:	FY 2011	Task Last Updated:	FY 09/04/2012
PI Name:	Roma, Peter Ph.D.		
Project Title:	Field Test of a Simple, Rapid, and Objective Behavioral Assay of Group Cohesion in an Antarctic Space Analog Environment		
Division Name:	Human Research		
Program/Discipline:	NSBRI		
Program/Discipline--Element/Subdiscipline:	NSBRI--Neurobehavioral and Psychosocial Factors Team		
Joint Agency Name:	TechPort:	No	
Human Research Program Elements:	(1) BHP: Behavioral Health & Performance (archival in 2017)		
Human Research Program Risks:	(1) 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		
PI Email:	pete.roma@nasa.gov	Fax:	FY
PI Organization Type:	NASA CENTER	Phone:	
Organization Name:	KBR/NASA Johnson Space Center		
PI Address 1:	Behavioral Health & Performance Laboratory		
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PI Web Page:			
City:	Houston	State:	TX
Zip Code:	77058	Congressional District:	36
Comments:			
Project Type:	GROUND	Solicitation / Funding Source:	Directed Research
Start Date:	09/01/2011	End Date:	08/31/2013
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: NSBRI		
Contact Monitor:	Contact Phone:		
Contact Email:			
Flight Program:			
Flight Assignment:			
Key Personnel Changes/Previous PI:			
COI Name (Institution):			
Grant/Contract No.:	NCC 9-58-NBPF00008		
Performance Goal No.:			
Performance Goal Text:			
Task Description:	<p>The Johns Hopkins team has developed a simple, rapid, objective, and language-free assay of small-group behavioral dynamics. In cooperation with the European Space Agency (ESA), the team is testing this behavioral science technology during two consecutive 10-month winter-over periods at Concordia Station in Antarctica as an isolated, confined, and extreme (ICE) environment similar to what Astronaut crews will experience during long-duration exploratory missions. The primary aims/objectives for the project are to (1) assess operational acceptability and logistical feasibility of an objective group-level behavioral assay in an ICE environment, (2) validate the behavioral assay data against naturally occurring behaviors and subjective opinions relevant to group cohesion, and (3) inform next-generation software development based on user and operator feedback. This research can be used to enhance selection, composition, and objective monitoring of high-performance teams in extreme environments where group cohesion is</p>		

essential to mission success.	
Rationale for HRP Directed Research:	
Research Impact/Earth Benefits:	
Task Progress:	New project for FY2011. [Ed. note 9/4/2012: added to Task Book when became aware of the task]
Bibliography Type:	Description: (Last Updated: 07/05/2023)