Final Van	EV 2012	Task Last Undeted	EV 00/11/2012
PISCAL LEAF:	FI 2015	Task Last Opuateu:	F1 09/11/2013
ri Name:	Binsted, Kim Ph.D.	mulation of Team Function and Darf	ormanaa on Long Duration Evaluration
Project Title:	Missions		Simance on Long Duration Exploration
Division Name:	Human Research		
Program/Discipline:	HUMAN RESEARCH		
Program/Discipline Element/Subdiscipline:	HUMAN RESEARCHBehavior and perform	mance	
Joint Agency Name:		TechPort:	No
Human Research Program Elements:	(1) HFBP:Human Factors & Behavioral Perfe	ormance (IRP Rev H)	
Human Research Program Risks:	(1) <b>Team</b> :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:	Honolulu	State:	HI
Zip Code:	96822-2217	<b>Congressional District:</b>	1
Comments:			
Project Type:	Ground	Solicitation / Funding Source:	2012 Crew Health NNJ12ZSA002N
Start Date:	08/01/2013	End Date:	07/31/2016
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	<b>Contact Phone:</b>	
Contact Email:	lauren.b.leveton@nasa5.gov		
Flight Program:			
Flight Assignment:			
Key Personnel Changes/Previous PI:			
COI Name (Institution):	Doumas, Alex (University of Hawaii) Hunter, Jean (Cornell University)		
Grant/Contract No.:	NNX13AM78G		
Performance Goal No.:			
Performance Goal Text:			

Task Description:	Loa side of the saddle area on the Big Island of Hawaii at approximately 8200 feet above sea level. HI-SERAS is unique, in addition to its setting in a distinctive analog environment, as: - we select the crew to meet our research needs (in serendipitous analogs, such as Antarctic stations, crew selection criteria are not controlled by researchers); - the conditions (habitat, mission, communications, etc.) are explicitly designed to be similar to those of a planetary exploration mission; - the site is accessible year round, allowing longer duration isolated and confined environment studies than at other locations; - the Mars-like environment offers the potential for analog tasks, such as geological field work by human explorers and/or robots. The ability to select crew members to meet research needs and isolate them in a managed simulation performing under specific mission profiles makes HI-SEAS ideal for detailed studies in space-flight crew dynamics, behaviors, roles and performance, especially for long-duration missions. To take advantage of this capability, the research in this proposal addresses the Integrated Research Plan (IRP) Gap Team1: "We need to understand the key threats, indicators, and life cycle of the team for autonomous, long duration and/or distance exploration missions." In particular, we will conduct a ground-based investigation to measure and track the factors expected to have significant impacts on team function and performance, and assess that impact, over three high-autonomy missions of differing durations (four, eight, and twelve months). During crew selection for each mission we will measure participants' cognitive capacities, communication skills, preferred communication strategies, interpersonal strategies, coping strategies, mission and crew role specific knowledge, and planning and collaborative problem solving ability. During the missions we will monitor crew communication, communication strategies, crew coping strategies, crew work load and job sharing, and conflict resolution an
Rationale for HRP Directed Research:	
<b>Research Impact/Earth Benefits:</b>	
Task Progress:	New project for FY2013.
Bibliography Type:	Description: (Last Updated: 05/20/2025)