Fiscal Year:	FY 2010	**Task Last Updated:**	FY 10/20/2009
PI Name:	Gore, Brian Ph.D.		
Project Title:	Workload Tools and Guidelines		
Division Name:	Human Research		
Program/Discipline:	HUMAN RESEARCH		
Program/Discipline--Element/Subdiscipline:	HUMAN RESEARCH--Space Human Factors Engineering		
Joint Agency Name:		**TechPort:**	No
Human Research Program Elements:	(1) **SHFH**:Space Human Factors & Habitability (archival in 2017)		
Human Research Program Risks:	(1) **HSIA**:Risk of Adverse Outcomes Due to Inadequate Human Systems Integration Architecture		
Space Biology Element:	None		
Space Biology Cross-Element Discipline:	None		
Space Biology Special Category:	None		
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PI Organization Type:	NASA CENTER	**Phone:**	650.604.2542
Organization Name:	NASA Ames Research Center		
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PI Address 2:	Bldg. 262, Rm 226		
PI Web Page:			
City:	Moffett Field	**State:**	CA
Zip Code:	94035-0001	**Congressional District:**	18
Comments:			
Project Type:	GROUND	**Solicitation / Funding Source:**	Directed Research
Start Date:	10/01/2009	**End Date:**	09/30/2011
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:	Woolford, Barbara	**Contact Phone:**	218-483-3701
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Flight Program:			
Flight Assignment:			
Key Personnel Changes/Previous PI:	NOTE: Brian Gore became PI effective 10/01/2009, replacing Stephen Casner.		
COI Name (Institution):			
Grant/Contract No.:			
Performance Goal No.:			
Performance Goal Text:			
Task Description:	This directed research project (DRP) will survey the available literature on: (1) workload measurement techniques; and (2) the effects of workload on operator performance. The first set of findings will be used to provide practitioners with a collection of simple-to-use workload measurement techniques along with characterizations of the kinds of tasks each technique has been shown reliably address. This will allow design practitioners to select and use the most appropriate techniques for the task(s) at hand. The second set of findings will provide practitioners with the guidance they need to design for appropriate kinds and amounts of workload across all tasks for which the operator is responsible. This guidance will help practitioners design systems and procedures that ensure appropriate levels of engagement across all tasks, and avoid designs and procedures that result in operator boredom, complacency, loss of awareness, undue levels of stress, or skill atrophy that can result from workload that distracts operators from the tasks they perform and monitor, workload levels that are too low, too high, or too consistent or predictable. Lastly, an empirical study will be conducted to evaluate the usefulness of the workload measurement and management guidance that we produce.		

Rationale for HRP Directed Research:	
Research Impact/Earth Benefits:	
Task Progress:	New Principal Investigator is Brian Gore as of October 1, 2009, who was CoInvestigator when Casner was PI. See Casner for previous progress reports.
Bibliography Type:	Description: (Last Updated: 03/08/2018)