

No. ....

9/24

JSC ROUTING SLIP			ASTRONAUT OFF-ICE				Due Date
Circulate	Coordination	File	Read	Necessary Action	Note and Return	See Mr. Signature	Comply
✓		y 9-29			HARTSFIELD		SEDDON
					HAUCK		SHAW
					HAWLEY		SHRIVER
					HENIZE		SMITH
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					HOFFMAN		SPRINGER
				✓	KERWIN		STEWART
					LEESTMA		SULLIVAN
					LENOIR		THAGARD
					LYND	✓	THORNTON
					LOUNGE		TRULY
					LOUSMA		VAN HOFTEN
					LUCID		WALKER
					MATTINGLY	✓	WEITZ
					McBRIDE		WILLIAMS
					McCANDLESS		
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							BOUDREAU
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					MUSGRAVE		ELLIS
					NAGEL		EUBANK
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					NICOLLIER		GRIFFITH
					OCKELS		MARKS
					O'CONNOR		MARTIN
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					PARKER		SALINAS
					PETERSON		SMITH
					RESNIK		SYMMS
					RICHARDS		VAN GILDER
					RIDE		
					ROSS		
					SCOBEE		READ BOARD-INFO.

Remarks:

Can we find out what this is about?  
 Exactly what do we want from  
 the OFT crews? What investigation  
 commenced 1 Sept 1980?

FILE

DISCARD

From

Phone

Date



## MEMORANDUM

Lyndon B. Johnson Space Center

NASA

REFER  
TO: SA

DATE SEP 16 1980

INITIATOR  
SA/LFDietlein:ec:9/16/80:6291

ENCL

TO: CA/Director of Flight Operations

CC  
AC/H. E. Clements  
CB/J. P. Kerwin  
W. E. Thornton  
SD/S. L. Pool  
C. F. Sawin

FROM: SA/Director of Space and Life Sciences

SIGNATURE

R. O. Piland

*R. O. Piland*

SUBJ: Cooperative Investigations of Shuttle Crew Operational Exercise Requirements

We recently initiated studies designed to evaluate exercise devices and protocols for their application in the mature STS operations era. Dr. William Thornton has been a major contributor in this general area during past flight programs. His efforts culminated in the development and flight evaluation of a prototype treadmill. He also conducted extensive musculoskeletal evaluations on crewpersons preflight and postflight. It is requested that Dr. Thornton be permitted to participate as an investigator in our program and, specifically, that he be acknowledged as a co-investigator with Dr. Eugene Coleman, University of Houston/Clear Lake City.

Dr. Thornton's expertise in exercise hardware development and evaluation techniques, together with his realistic approach in determining practical inflight regimens, will add a critical perspective to our investigations. These investigations commenced September 1, 1980, and are planned to continue for approximately 3 years.

*What investigations commenced?*

Current activities in the Crew Health Maintenance RTOP include plans for a workshop on flight exercise requirements. The workshop is tentatively planned to be held in Bethesda, Maryland, at the National Institute of Health during Spring 1981.

Dr. Thornton and Dr. Joe Kerwin are cordially invited to participate in this NASA sponsored workshop. It is requested that they be allowed to brief the consultants on practical aspects of flight exercise in order that the subsequent recommendations from the experts can, in fact, be realistically applied. Specific details of the workshop will be forwarded to Dr. Thornton and Dr. Kerwin by Dr. Charles Sawin of the Medical Sciences Division. He serves as manager for the Crew Health Maintenance RTOP.

It is hoped that establishment of a cooperative effort between flight crews and operational medical researchers will yield a relevant exercise program for the operational STS era. Your consideration of this request is appreciated.

CA/FLIGHT OPS

SEP 17 1980

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*ACTION  
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C. HUNT*