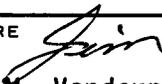


**MEMORANDUM**

Lyndon B. Johnson Space Center



REFER TO: SB	DATE OCT 2 1984	INITIATOR SB/JLHomick:pm:10-1-84:2381	ENCL 1
TO: Distribution		CC	
FROM: SB/Director, Space Biomedical Research Institute		SIGNATURE  James M. Vanderploeg, M.D.	
SUBJ: Questionnaire for DSO 0401			

Part of the preflight requirement for DSO 0401 "Validation of Predictors and Countermeasures for Space Motion Sickness" is the completion of a standard motion experience questionnaire. In the past this questionnaire was sent to the individual crewmember one to two weeks prior to the first rotating chair test in the Neurophysiology Laboratory with the request that it be returned by mail or hand carried to the first test.

As a result of a recent transfer of astronaut scheduling responsibilities within the Neurophysiology Laboratory we inadvertently failed to send you the questionnaire. We would like a completed questionnaire for our data file on you.

Therefore, please fill out the enclosed questionnaire and return it to SB/Neurophysiology Laboratory at your convenience. We greatly appreciate your cooperation in the implementation of DSO 0401.

## Distribution:

CB/W. Thornton  
B. McCandless  
R. Stewart  
R. McNair  
J. McBride  
J. Buchli  
E. Onizuka

MOTION EXPERIENCE QUESTIONNAIRE  
(Revision C, Dec. 1979)

NAME: \_\_\_\_\_ DATE: \_\_\_\_\_ S.S.NO.: \_\_\_\_\_  
DATE OF BIRTH: \_\_\_\_\_ MALE  FEMALE  HANDEDNESS: R  L   
HEIGHT: \_\_\_\_\_ WEIGHT: \_\_\_\_\_ OCCUPATION: \_\_\_\_\_

(PLEASE READ ALL ITEMS CAREFULLY)  
(All YES and NO questions to be answered by code; 1 for YES, 0 for NO)

PART I

1. Have you completed a motion experience questionnaire before? CODE ANSWER: \_\_\_\_\_  
If yes, when and for what purpose? \_\_\_\_\_  
\_\_\_\_\_
2. Have you ever participated as a test subject in any type of physiological or behavioral research? CODE ANSWER: \_\_\_\_\_  
If yes, briefly describe what, where and when. \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
3. a. Do you wear corrective lenses? CODE ANSWER: \_\_\_\_\_  
b. Do you have an eye muscle defect? CODE ANSWER: \_\_\_\_\_
4. Do you have a hearing defect? CODE ANSWER: \_\_\_\_\_  

	Right Ear	Left Ear	Both	None	
CODE:	<u>R</u>	<u>L</u>	<u>B</u>	<u>0</u>	

If yes, describe. \_\_\_\_\_
5. Have you ever been treated with streptomycin for a prolonged period of time? CODE ANSWER: \_\_\_\_\_  
If yes, when \_\_\_\_\_
6. Experience with high g force: (Only include exposures longer than 10 seconds)  
a. Number of times exposed to 2-4g:  

	None	1-5	5-10	10-20	20-30	Over 30	
CODE:	<u>0</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	CODE ANSWER: _____

7. Approximate number of hours in single engine aircraft as a crewmember (pilot, co-pilot, navigator) or passenger?

HOURS:	None	10	10-50	50-200	200-1000	1000	
CODE:	<u>0</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	CODE ANSWER: _____
							CREW: _____
							PASSENGER: _____

8. Approximate number of hours in multi-engine aircraft as a crewmember (pilot, co-pilot, navigator) or passenger?

HOURS:	None	10	10-50	50-200	200-1000	1000	
CODE:	<u>0</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	CODE ANSWER: _____
							CREW: _____
							PASSENGER: _____

PART II  
(PLEASE READ BEFORE CONTINUING)

Motion sickness susceptibility is revealed by a wide variety of subjective symptoms and objective signs resulting from various types of motion and may be experienced over a wide range of severity. Common symptoms are stomach discomfort, lack of appetite, nausea, dizziness and drowsiness; common signs are pallor, sweating, increased salivation and vomiting. Most persons recall accurately severe symptoms, but mild symptoms, even when experienced, may not have been attributed to motion. In identifying your motion sickness susceptibility, you should relate the acute onset of symptoms to the onset of motion.

9. In people who occasionally experience motion sickness, symptoms may be largely confined to one of two categories. In one, symptoms start in and are confined to the head (dizziness, vertigo, sleepiness). In the other, symptoms originate largely in the stomach (nausea, vomiting). Which is typical of the motion sickness you have experienced?

	Head	Stomach	Both	
CODE:	<u>1</u>	<u>2</u>	<u>3</u>	CODE ANSWER: _____

10. From your flying experience, how would you judge your susceptibility to airsickness?

	No flying experience	Not at All	Minimal	Slight	
CODE:	Leave Blank	<u>0</u>	<u>1</u>	<u>2</u>	
	Moderate	Very	Extreme		
	<u>3</u>	<u>4</u>	<u>5</u>		CODE ANSWER: _____

11. When you have experienced airsickness under what condition(s) did symptoms usually occur? (Specify one or more)

CODE:	<u>1</u> In single engine aircraft	<u>2</u> In multi engine aircraft	
	<u>3</u> As a crewmember	<u>4</u> As a passenger	CODE ANSWER: _____

12. How susceptible are you to car sickness?

Not at all    Minimally    Slightly    Moderately    Very    Extremely  
CODE:    0            1            2            3            4            5  
CODE ANSWER: \_\_\_\_\_

13. How susceptible are you to seasickness?

Not at all    Minimally    Slightly    Moderately    Very    Extremely  
CODE:    0            1            2            3            4            5  
CODE ANSWER: \_\_\_\_\_

14. How would you grade your overall susceptibility to motion sickness?

Not at all    Minimal    Slight    Moderate    Very    Extreme  
CODE:    0            1            2            3            4            5  
CODE ANSWER: \_\_\_\_\_  
ADULT LIFE: \_\_\_\_\_  
YOUTH: \_\_\_\_\_

15. In situations where you experienced nausea due to motion:

CODE: 0 Was never nauseated  
1 Could never vomit  
2 Rarely vomited  
3 Frequently vomited  
4 Vomited easily  
CODE ANSWER: \_\_\_\_\_

16. How many experiences with vertigo or disorientation (apparent movement or change in position relative to your surrounding environment-eyes open or closed) have you had during the past three years?

None            1-5            5-10            Over 10  
CODE:    0            1            2            3            CODE ANSWER: \_\_\_\_\_

Briefly explain circumstances \_\_\_\_\_

\_\_\_\_\_

### PART III

(PLEASE READ CAREFULLY BEFORE COMPLETING  
TABLE ON FOLLOWING PAGE)

To assist you in properly completing the table on the next page, the following example is provided. The example is given for one type of motion exposure; you should treat all others accordingly as they apply to you.

#### EXPOSURE:

Suppose during your youth and adult life you had approximately 40 exposures to carnival devices. You should enter code 3 in the space provided.

#### SYMPTOMS:

Suppose that as a result of one or more of these exposures you experienced mild nausea, severe stomach awareness, mild cold sweating and moderate general discomfort. You should enter code numbers 2, 4, 2, and 3 respectively in the appropriate symptom spaces opposite "Carnival Devices". All other symptom spaces in that row would remain blank.

Indicate by the proper code taken from the appropriate table below and for each type of motion listed:

1) the number of exposures and 2) the intensity of the symptoms experienced.

Exposure	Code:	POSSIBLE SYMPTOMS										SCORING LEAVE BLANK		
		INTENSITY: NONE Very Mild Mild Moderate Severe Very Severe												
		CODE: Blank 1 2 3 4 5												
		Nausea (Code 1-4)	Vomited or Retches (Code 5)	Stomach Awareness or Discom- fort	Increased Salivation	Giddiness Dizziness or Vertigo	Drowsiness	Cold Sweating	Increased Warmth (not from Exercise)	Headache	Pallor	General Discomfort		
Swing or other gym- nastic equipment														
Carnival Devices														S
Airplane Turbulence														S
Airplane Aerobatics														S
Airplane - Zero-g Maneuvers														S
Ships/Boats a. Calm Conditions to light swells														S
	b. Moderate Swells to Storm Conditions													S
High Speed Elevators														S