

IRRITABILITY

1. FEELING IRRITABLE	
2. GENERALLY ANNOYED WITH OTHERS	
3. PRETTY UNFRIENDLY/ TESTY	
4. IMPATIENT	
5. WOULD REALLY LIKE TO BE ALONE FOR A WHILE	
6. GETTING ANGRY	
7. DISAGREEABLE	
8. WISH I WEREN'T WITH THESE PEOPLE	
9. FEELING GROUCHY WITH PEOPLE	

FATIGUE/ LOW ENERGY

1. VERY TIRED	
2. REALLY FATIGUED	
3. BURNED OUT	
4. WORN OUT	
5. FEELING EXHAUSTED	
6. CAN'T GO ON MUCH LONGER	
7. NOT ENERGETIC	
8. TOO TIRED TO MOVE	
9. FEEL DRAINED	

POOR SLEEP

1. SLEEPY	
2. WISH I HAD SLEPT LONGER	
3. WISH I HAD SLEPT MORE SOUNDLY	
4. COULD FALL ASLEEP RIGHT HERE	
5. NODDING OFF	
6. EYES ARE CLOSING	
7. FORCING SELF TO KEEP EYES OPEN	
8. BOUNCING, TAPPING, SHAKING TO STAY AWAKE	
9. YAWNING	

WORK FRUSTRATION

1. PREFER TO NOT WORK NOW	
2. WISH I DIDN'T HAVE TO DO THINGS RIGHT NOW	
3. HOPE NOTHING ELSE NEEDS TO BE DONE	
4. TOO MUCH IS EXPECTED OF ME RIGHT NOW	
5. TIRED OF WORKING	
6. WORK FEELS LIKE DRUDGERY	
7. FEELS LIKE A GRIND	
8. WISH THE WORK WOULD END	
9. WOULD LIKE HELP WITH THE WORK	

PHYSICAL DISCOMFORT

1. MUSCLES HURT	
2. BODY STIFF	
3. CAN'T GET COMFORTABLE	
4. ARMS AND LEGS HURT	
5. WANT TO STRETCH	
6. SKIN STICKY/ DIRTY	
7. WHAT I'M WEARING IS UNCOMFORTABLE	
8. HEAD ACHES	
9. EYES TIRED	

CREWMEMBER

ACTIVITY & SLEEP LOG



PARTICIPANT NUMBER _____

Please complete Logbook entries and PVT test:

- 1. Before Trip (pre-trip)**
- 2. Upon arrival at Hotel (post-flight)**
- 3. Hotel (layover) Logbook, PVT optional**
- 4. Before pickup at Hotel (post-layover)**
- 5. Upon arrival at homebase (post-trip)**

Use appropriate code-letter or number below in each row of matrix.

Activity
 A = Awake
 R = Resting
 S = **Sleep (>15 min)**
 N = Nap (≤15 min)
 T = PVT Test Time

Rating
 1 = Well Rested
 2 = Moderately Rested
 3 = Slightly Rested
 4 = Not at all Rested

Fatigue
 1 - Feeling active and vital; alert; wide awake.
 2 - Functioning at a high level, but not at peak; able to concentrate.
 3 - Relaxed; awake; not at full alertness; responsive.
 4 - A little foggy; not at peak; let down
 5 - Fogginess; beginning to lose interest in remaining awake; slowed down.
 6 - Sleepiness; prefer to be lying down; fighting sleep; woozy.
 7 - Almost in reverie; sleep onset soon; lost struggle to remain awake_

EXAMPLE OF COMPLETED MATRIX

PILOT ENTRIES IN **BOLD**

Entry	Circle Log-Time Below																						
JFK	2100	2200	2300	0000	0100	0200	0300	0400	0500	0600	0700	0800											
GMT	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300											
BOM	0730	0830	0930	1030	1130	1230	1330	1430	1530	1630	1730	1830											
Activity	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S
Fatigue																							
Rating																							
JFK	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000											
GMT	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	0000	0100											
BOM	1930	2030	2130	2230	2330	0030	0130	0230	0330	0430	0530	0630											
Activity	A	A	A	A	A	A	A	A	A	T	A	A	A	A	R	R	A	A	A	A	S	S	
Fatigue																							
Rating																							

ARR (post-trip): Please rate "1= not at all" through "5 = very much" as each applies for about the last hour or so.

POOR CONCENTRATION

1. DIFFICULTY CONCENTRATING	
2. HARD TIME PAYING ATTENTION	
3. CAN'T STAY AT A TASK	
4. DISTRACTIBLE WHILE DOING THINGS	
5. HAVING TO RE-READ MATERIAL	
6. LOSING TRACK OF CONVERSATIONS	
7. HAVING TO PAY EXTRA ATTENTION TO UNDERSTAND	
8. DAYDREAMING	
9. NOT THINKING STRAIGHT/ EFFICIENTLY	

BOREDOM

1. NOTHING SEEMS INTERESTING	
2. NOT CARING ABOUT WHAT IS HAPPENING	
3. NONE OF THIS IS FUN ANYMORE	
4. NOT INTERESTED IN WHAT IS HAPPENING	
5. INDIFFERENT	
6. BORED WITH MISSION	
7. TIRED OF SAME OLD THING	
8. THINGS ARE TEDIOUS	
9. TIME IS PASSING TOO SLOWLY	

SLOWED REACTIONS

1. NOT MOVING VERY MUCH	
2. JUST LOOKING AROUND	
3. HAVING TO THINK BEFORE ACTING	
4. THINGS SEEM IN SLOW MOTION	
5. ARMS FEEL HEAVY	
6. REACTIONS ARE SLOWED	
7. MOVEMENTS SEEM DELAYED	
8. CAN'T KEEP UP WITH TASKS	
9. RESPONDING TAKES EFFORT	

ANXIETY

1. FEEL ANXIOUS	
2. FEEL TENSE IN MUSCLES	
3. FEEL NERVOUS	
4. WORRIED ABOUT THINGS	
5. MUSCLES ARE JITTERY	
6. TAPPING FINGERS OR FOOT	
7. STOMACH FEELS UPSET	
8. JUMPY	
9. VIGILANT	

DEPRESSION

1. FEEL DEPRESSED	
2. FEEL UNHAPPY	
3. FEEL SAD	
4. NOT ENJOYING THIS	
5. FEEL DISCOURAGED	
6. WISH I FELT HAPPIER	
7. WORRIED I MIGHT NEVER FEEL BETTER	
8. NO CONTROL OVER ANY OF THIS	
9. WHAT I DO DOESN'T MATTER	

ARR (post-trip)

Circle Log-Time

JFK	2100	2200	2300	0000	0100	0200	0300	0400	0500	0600	0700	0800
GMT	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300
BOM	0730	0830	0930	1030	1130	1230	1330	1430	1530	1630	1730	1830
Activity												
Fatigue												
Rating												
JFK	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000
GMT	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	0000	0100
BOM	1930	2030	2130	2230	2330	0030	0130	0230	0330	0430	0530	0630
Activity												
Fatigue												
Rating												

AWAKENINGS and REASON (EXAMPLE: 5 Min. @ 0430; turbulence)

1. _____ min. at _____
2. _____ min. at _____
3. _____ min. at _____

Sleep Rating (Please circle one number for each item)

Falling asleep	Not Difficult	1	2	3	4	5	Difficult
My sleep was	Not Deep	1	2	3	4	5	Deep
Arising was	Not Difficult	1	2	3	4	5	Difficult
I now feel	Not Rested	1	2	3	4	5	Rested

VISUAL ANALOG SCALE

very little-----very much

1. How alert do you feel?

2. How sad do you feel?

3. How tense do you feel?

4. How much of an effort is it to do anything?

5. How happy do you feel?

6. How weary do you feel?

7. How calm do you feel?

8. How sleepy do you feel?

Sleep & Alertness Strategies: _____

CAFFEINE & H2O INTAKE (coffee, tea, soda, water, other)

TYPE _____ AMT _____ TIMES _____

LOGBOOK ENTRY EXAMPLE (cont)

Visual Analog Scale

DRAW a line between the endpoints approximating your response to each question as seen in the example below.

VISUAL ANALOG SCALE

1. How alert do you feel?
very little _____|_____ very much
2. How sad do you feel?
very little ____|_____ very much
3. How tense do you feel?
very little _____|_____ very much
4. How much of an effort is it to do anything?
very little ____|_____ very much
5. How happy do you feel?
very little _____|_____ very much
6. How weary do you feel?
very little _____|_____ very much
7. How calm do you feel?
very little _____|_____ very much
8. How sleepy do you feel?
very little _____|_____ very much

Pre-trip: In bed time?				Circle Log-Time									
JFK	2100	2200	2300	0000	0100	0200	0300	0400	0500	0600	0700	0800	
GMT	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	
BOM	0730	0830	0930	1030	1130	1230	1330	1430	1530	1630	1730	1830	
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GMT	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	0000	0100	
BOM	1930	2030	2130	2230	2330	0030	0130	0230	0330	0430	0530	0630	
Activity													
Fatigue													
Rating													

Notes/Comments during return flight (e.g., ate something during layover that didn't set well, swapped rest times, or whatever...)

AWAKENINGS and REASON (EXAMPLE: 5 Min. @ 0430; turbulence)

1. _____ min. at _____
2. _____ min. at _____
3. _____ min. at _____

Sleep Rating (Please circle one number for each item)

Falling asleep	Not Difficult	1	2	3	4	5	Difficult
My sleep was	Not Deep	1	2	3	4	5	Deep
Arising was	Not Difficult	1	2	3	4	5	Difficult
I now feel	Not Rested	1	2	3	4	5	Rested

VISUAL ANALOG SCALE

very little-----very much

1. How alert do you feel?

2. How sad do you feel?

3. How tense do you feel?

4. How much of an effort is it to do anything?

5. How happy do you feel?

6. How weary do you feel?

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Sleep & Alertness Strategies: _____

CAFFEINE & H2O INTAKE (coffee, tea, soda, water, other)

TYPE _____ AMT _____ TIME _____

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1. FEELING IRRITABLE	
2. GENERALLY ANNOYED WITH OTHERS	
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4. IMPATIENT	
5. WOULD REALLY LIKE TO BE ALONE FOR A WHILE	
6. GETTING ANGRY	
7. DISAGREEABLE	
8. WISH I WEREN'T WITH THESE PEOPLE	
9. FEELING GROUCHY WITH PEOPLE	

FATIGUE/ LOW ENERGY

1. VERY TIRED	
2. REALLY FATIGUED	
3. BURNED OUT	
4. WORN OUT	
5. FEELING EXHAUSTED	
6. CAN'T GO ON MUCH LONGER	
7. NOT ENERGETIC	
8. TOO TIRED TO MOVE	
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POOR SLEEP

1. SLEEPY	
2. WISH I HAD SLEPT LONGER	
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WORK FRUSTRATION

1. PREFER TO NOT WORK NOW	
2. WISH I DIDN'T HAVE TO DO THINGS RIGHT NOW	
3. HOPE NOTHING ELSE NEEDS TO BE DONE	
4. TOO MUCH IS EXPECTED OF ME RIGHT NOW	
5. TIRED OF WORKING	
6. WORK FEELS LIKE DRUDGERY	
7. FEELS LIKE A GRIND	
8. WISH THE WORK WOULD END	
9. WOULD LIKE HELP WITH THE WORK	

PHYSICAL DISCOMFORT

1. MUSCLES HURT	
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4. ARMS AND LEGS HURT	
5. WANT TO STRETCH	
6. SKIN STICKY/ DIRTY	
7. WHAT I'M WEARING IS UNCOMFORTABLE	
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Pre-trip: Please rate "1= not at all" through "5 = very much" as each applies for about the last hour or so.

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BOREDOM

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SLOWED REACTIONS

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6. SKIN STICKY/ DIRTY	
7. WHAT I'M WEARING IS UNCOMFORTABLE	
8. HEAD ACHES	

Before Pick-up at HOTEL (post layover): Please rate "1= not at all" through "5 = very much" as each applies for about the last hour or so.

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2. HARD TIME PAYING ATTENTION	
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7. WORRIED I MIGHT NEVER FEEL BETTER	
8. NO CONTROL OVER ANY OF THIS	

9. WHAT I DO DOESN'T MATTER

Before Pick-up at HOTEL (post-layover)													Circle Log-Time	
JFK	2100	2200	2300	0000	0100	0200	0300	0400	0500	0600	0700	0800		
GMT	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300		
BOM	0730	0830	0930	1030	1130	1230	1330	1430	1530	1630	1730	1830		
Activity														
Fatigue														
Rating														
JFK	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000		
GMT	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	0000	0100		
BOM	1930	2030	2130	2230	2330	0030	0130	0230	0330	0430	0530	0630		
Activity														
Fatigue														
Rating														

AWAKENINGS and REASON (EXAMPLE: 5 Min. @ 0430; turbulence)

- _____ min. at _____
- _____ min. at _____
- _____ min. at _____

Sleep Rating (Please circle one number for each item)

Falling asleep	Not Difficult	1	2	3	4	5	Difficult
My sleep was	Not Deep	1	2	3	4	5	Deep
Arising was	Not Difficult	1	2	3	4	5	Difficult
I now feel	Not Rested	1	2	3	4	5	Rested

VISUAL ANALOG SCALE

very little-----very much

- How alert do you feel?

- How sad do you feel?

- How tense do you feel?

- How much of an effort is it to do anything?

- How happy do you feel?

- How weary do you feel?

- How calm do you feel?

- How sleepy do you feel?

Sleep & Alertness Strategies: _____

CAFFEINE & H2O INTAKE (coffee, tea, soda, water, other)

TYPE _____ **AMT** _____ **TIME** _____

Notes/Comments during flight (e.g., excessive turbulence, cabin noise, something irritating happened, or whatever...)

ARR (post-flight) Circle Log-Time

JFK	2100	2200	2300	0000	0100	0200	0300	0400	0500	0600	0700	0800
GMT	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300
BOM	0730	0830	0930	1030	1130	1230	1330	1430	1530	1630	1730	1830
Activity												
Fatigue												
Rating												
JFK	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000
GMT	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	0000	0100
BOM	1930	2030	2130	2230	2330	0030	0130	0230	0330	0430	0530	0630
Activity												
Fatigue												
Rating												

AWAKENINGS and REASON (EXAMPLE: 5 Min. @ 0430; turbulence)

1. _____ min. at _____
2. _____ min. at _____
3. _____ min. at _____

Sleep Rating (Please circle one number for each item)

Falling asleep	Not Difficult	1	2	3	4	5	Difficult
My sleep was	Not Deep	1	2	3	4	5	Deep
Arising was	Not Difficult	1	2	3	4	5	Difficult
I now feel	Not Rested	1	2	3	4	5	Rested

VISUAL ANALOG SCALE

very little-----very much

1. How alert do you feel?

2. How sad do you feel?

3. How tense do you feel?

4. How much of an effort is it to do anything?

5. How happy do you feel?

6. How weary do you feel?

7. How calm do you feel?

8. How sleepy do you feel?

Sleep & Alertness Strategies: _____

CAFFEINE & H2O INTAKE (coffee, tea, soda, water, other)

TYPE _____ AMT _____ TIME _____

Layover Circle Log-Time

JFK	2100	2200	2300	0000	0100	0200	0300	0400	0500	0600	0700	0800
GMT	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300
BOM	0730	0830	0930	1030	1130	1230	1330	1430	1530	1630	1730	1830
Activity												
Fatigue												
Rating												
JFK	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000
GMT	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	0000	0100
BOM	1930	2030	2130	2230	2330	0030	0130	0230	0330	0430	0530	0630
Activity												
Fatigue												
Rating												

Sleep Rating (Please circle one number for each item)

Falling asleep	Not Difficult	1	2	3	4	5	Difficult
My sleep was	Not Deep	1	2	3	4	5	Deep
Arising was	Not Difficult	1	2	3	4	5	Difficult
I now feel	Not Rested	1	2	3	4	5	Rested

VISUAL ANALOG SCALE

very little-----very much

1. How alert do you feel?

2. How sad do you feel?

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4. How much of an effort is it to do anything?

5. How happy do you feel?

6. How weary do you feel?

7. How calm do you feel?

8. How sleepy do you feel?

Notes/Comments during layover