NASA-TLX Mental Workload Rating Scale

Please place an "X" along each scale at the point that best indicates your experience with the display configuration.

| Mental Demand: How much mental and perceptual activity was required (e.g., thinking, deciding, calculating, remembering, looking, searching, etc)? Was the mission easy or demanding, simple or complex, exacting or forgiving? | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|------|----------|-------|-------|-----|------|--------|------|-----|-----|------|-----|-----|------|------|------|-----|----------|-------|-----|-----|-------|-------|----|------|
| Low | | 1 | | | | | | | | | | | 1 | | | | | I | | | | | | | High |
| Physic contro restful | llin | g, ad | ctiva | ting, | | | | | | | | | | | | | | | | | | | | | ous, |
| Low | | 1 | | | | | | | | | | | 1 | | | | | <u> </u> | | | | | | | High |
| <u>Temp</u> missic | | | | | | | | | | | | | | | | | | | or pa | ace | at | whi | ich t | he | |
| Low | | <u> </u> | | _ | | | | | | | | | 1 | | _ | | | L | | | | | | | High |
| <u>Performance</u> : How successful do you think you were in accomplishing the goals of the mission? How satisfied were you with your performance in accomplishing these goals? | | | | | | | | | | | | | | | | | | | | | | | | | |
| Low | | <u> </u> | | | | | | | | | | | 1 | | | | | I | | | | | | | High |
| Effort perfor | - | | | did | you | have | e to v | work | (me | ent | ally | and | phy | sica | lly) | to a | acc | omj | olisl | n y | our | : lev | vel o | f | |
| Low | | <u> </u> | | | | | | | | | | | 1 | | | | | <u> </u> | | | | | | | High |
| Frustration: How discouraged, stressed, irritated, and annoyed versus gratified, relaxed, content, and complacent did you feel during your mission? | | | | | | | | | | | | | | | | | | | | | | | | | |
| Low | | 1 | | | | | | | | | | | 1 | | | | | <u> </u> | | | | | | | High |

Total Un-weighted Mental Workload Score¹: _____

- 1. To calculate an un-weighted score, average the raw data scores from the 6 factors.
- 2. To calculate a weighted score, add the number of times a factor was selected on the ranking page. Divide that number by 15. Multiply it by the factor score. Add all ranking*rating combination to get the total weighted score.

NASA-TLX Mental Workload Rankings

For each of the pairs listed below, circle the scale title that represents the more important contributor to workload in the display.

| Mental Demand | or | Physical Demand |
|-----------------|----|-----------------|
| Mental Demand | or | Temporal Demand |
| Mental Demand | or | Performance |
| Mental Demand | or | Effort |
| Mental Demand | or | Frustration |
| Physical Demand | or | Temporal Demand |
| Physical Demand | or | Performance |
| Physical Demand | or | Effort |
| Physical Demand | or | Frustration |
| Temporal Demand | or | Performance |
| Temporal Demand | or | Frustration |
| Temporal Demand | or | Effort |
| Performance | or | Frustration |
| Performance | or | Effort |
| Frustration | or | Effort |

Total Weighted Mental Workload Score²: _____

^{1.} To calculate an un-weighted score, average the raw data scores from the 6 factors.

^{2.} To calculate a weighted score, add the number of times a factor was selected on the ranking page. Divide that number by 15. Multiply it by the factor score. Add all ranking*rating combination to get the total weighted score.