Diagram

Description automatically generatedTask C: Internal and External Scan

User: “Computer, please begin voice interaction sequence with response

setting medium.”

Computer: “Hello Commander Dotsey, please begin.”

Dotsey: “Initiate Internal Scan”

Computer: “Please enter necessary parameters”

Dotsey: Type parameters into console

Dotsey: Confirm parameters

Computer: Initiate Scans

Computer: Compile Internal Scan report

Computer: Update Console

Computer: “The internal scan found three Ferengi life forms in cargo bay 2. The Bridge has been alerted and security teams are responding.”

Dotsey: “That is all.”

|  |  |  |
| --- | --- | --- |
| Keystroke Level Model: Internal Scan of Ship | | |
| Operator | Description | Duration (sec) |
| M | User Command - Voice Authorization, Response Setting | 1.35a |
| R(t) | Computer Response – Greeting, Authorization | t |
| M | User Command – Request Internal Scan | 1.35a |
| R(t) | Computer Response – Request Scanning Parameters | t |
| M | User Preparation – Consider Parameters | 1.75a |
| K | User Keystroke – Input Parameters | 1.20a |
| K | Button Press – Confirm Parameters | 0.12a |
| R(t) | Computer Action - Initiate Scans | t2 |
| R(t) | Computer Action – Compile Internal Scan Report | t2 |
| R(t) | Computer Response – Alert User of Scan Completion and Findings | t |
| M | User Command – end task | 0.75a |
| a: Skill Level **3**, t: Computer Processor **2.74 sec** | |  |

The computer response time when beginning scans and time necessary to update the console was included in the modified KLM.

|  |  |  |
| --- | --- | --- |
| Modified Keystroke Level Model: Internal Scan of Ship | | |
| Operator | Description | Duration (sec) |
| M | User Command - Voice Authorization, Response Setting | 1.35a |
| R(t) | Computer Response – Greeting, Authorization | t |
| M | User Command – Request Internal Scan | 1.35a |
| R(t) | Computer Response – Request Scanning Parameters | t |
| M | User Preparation – Consider Parameters | 1.75a |
| K | User Keystroke – Input Parameters | 1.20a |
| K | Button Press – Confirm Parameters | 0.12a |
| R(t) | Computer Action - Initiate Scans | t2 |
| R(t) | Computer Response – Beginning Scans | t |
| R(t) | Computer Action – Compile Internal Scan Report | t2 |
| R(t) | Computer Action – Update Console | t2 |
| R(t) | Computer Response – Alert User of Scan Completion and Findings | t |
| M | User Command – end task | 0.75a |
| a: Skill Level **3**, t: Computer Processor **2.74 sec** | |  |