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| **Principles** | **Boeing 767** | **Airbus 320** |
| **1. Make displays legible (or audible)** | More clear and discernible: the pilot can effectively utilize the buttons and easily operate the airplane. | Less clear and discernible: the button arrangement is too crowded，pilot is not so easy to operate certain buttons among the board. |
| **2. Avoid absolute judgment limits** | No limitation for judgment of represented variable level | No limitation for judgment of represented variable level |
| **3. Similarity causes confusion: Use discriminable elements** | The button display is more obvious because of low ratio of the similar features of buttons | The button display is less less because of high ratio of similar features of buttons |
| **4 Top – down processing** | Great top – down processing because radar can be served as reliable signal detection | Great top – down processing because radar can be served as reliable signal detection |
| **5 Redundancy gain** | Eye observation and radar are redundant | Eye observation and radar are redundant |
| **6 Minimizing information**  **access cost** | Easy to access frequently used information : The operating lever is very close to the pilot and also some other important buttons | A little time cost to access information because the button arrangement is a little bit complex, pilot will figure out the frequently used buttons carefully |
| **7. Principle of multiple resources** | Having multiple resources  The signal can both be used for landing and taking off | Having multiple resources  The signal can both be used for landing and taking off |
| **8. Proximity compatibility principle** | The sources are compatible because for the buttons operating the plane taking off and landing, are really closed with each other | The sources are compatible  because for the buttons operating the plane taking off and landing, are really closed with each other |
| **9 Principle of consistency** | The button display design corresponds to the principle of consistency, the style and shape of left side and right side buttons are nearly the same | The button display design corresponds to the principle of consistency, the style and shape of left side and right side buttons are nearly the same |
| **10 Principle of predictive aiding** | The radar, temperature, and the atmosphere pressure are the applications of prediction | The radar, temperature, and the atmosphere pressure are the applications of prediction |
| **11 Replace memory with visual information: knowledge in the world** | The black box will record all the piloting information in it. | The black box will record all the piloting information in it. |
| **12 Principle of pictorial realism** | The environment pressure and temperature displays are in relation to realism | The environment pressure and temperature displays are in relation to realism |
| **13 Principle of the moving part** | The pilot will push the joystick  to elevate the airplane, and pull it to land. So it corresponds to the principle | The pilot will push the joystick  to elevate the airplane, and pull it to land. So it corresponds to the principle |

According to the comparison, Boeing 767 is better. The visualization of the button display on Boeing 767 is better. On airbus 320, the button display is too crowded, and the pilot will be more likely to make a wrong operation when encounter the emergency.