

# NATIONAL TRANSPORTATION SAFETY BOARD

Office of Aviation Safety Washington, D.C. 20594

September 1, 2016

Attachment 4 – Normal Checklist Instructions

# **OPERATIONAL FACTORS**

DCA15FA185



#### **Electronic Checklist Operation**

Operation with the electronic normal checklist is the same as the printed normal checklist except that, there is no need to read aloud or visually confirm items that are complete (green). For all checklists, the PM announces "\_\_\_\_ CHECKLIST COMPLETE," the PF visually confirms that the CHECKLIST COMPLETE indication is shown, and announces "CHECKLIST COMPLETE."

Closed loop (sensed) checklist items change from white to green when the action is taken. The PM is responsible to check off any open loop (not sensed) item and to verify that all closed loop items are green. See Chapter 10, Flight Instruments, Displays, for a complete description of the electronic checklist system.

A checklist should not be opened/started until the procedure is complete and all items can be checked off.

#### **Checklist Content**

The checklist has the minimum items needed to operate the airplane safely.

Normal checklists have items that meet any of the following criteria:

- items essential to safety of flight that are not monitored by an alerting system, or
- items essential to safety of flight that are monitored by an alerting system but if not done, would likely result in a catastrophic event if the alerting system fails, or
- · needed to meet regulatory requirements, or
- items needed to maintain fleet commonality between the 737, 747-400, 757, 767, 777, and 787, or
- items that enhance safety of flight and are not monitored by an alerting system (for example the autobrake), or
- during shutdown and secure, items that could result in injury to personnel or damage to equipment if not done

# **Checklist Construction**

When a checklist challenge does not end with "switch or lever", then the challenge refers to system status. For example, "Landing Gear...Down", refers to the status of the landing gear, not just the position of the lever.

When a checklist challenge ends with "switch or lever", then the challenge refers to the position of the switch or lever. For example, "FUEL CONTROL switches...CUTOFF" refers to the position of the switches.

Because normal checklists are done routinely, some checklist items are simplified to be more conversational such as "Autobrake...RTO" instead of "AUTOBRAKE selector...RTO".

# **Actual Value**

When a checklist response is noted as an underscore:

Autobrake.....

The actual system status or switch position should be stated. The underscore is used when the response is governed by environmental considerations such as anti-ice or multiple selections are valid such as minimums, brake selections or speeds.

# **Reference Checklists**

Non-critical checklists such as the ELECTRICAL POWER UP and SECURE procedures are provided in 'checklist' format on the Normal Checklist. These procedures should be actioned as 'reference steps'.