MQ-8B Fire Scout Launch/Recovery

The MQ-8B Fire Scout is a vertical takeoff and landing UAS. Takeoff and landing at the Trent Lott International Airport will be from the Northrop Grumman Production Facility's helipad. Takeoffs and landings with the MQ-8B are fully autonomous from the air vehicle operator's (AVO) issuance of the launch command through forward flight. Upon receiving the launch command, the Fire Scout climbs vertically to 30 feet and then transitions to forward flight along a pre-planned takeoff route.

During landing, the Fire Scout UAS follows a pre-planned approach route until the aircraft is in a hover 30 feet over the touch-down-point (TDP). There, the UAS awaits the "okay to land" command from the AVO. Once this land command is issued, the aircraft slowly descends until touchdown. Sensors on the skids are used to send a signal to the mission computer that the aircraft has landed. The engine automatically throttles back to idle for a two-minute engine cool down and then shuts itself off.

The Fire Scout system has a manual override capability during both launch and recovery modes. During launch, the AVO can command a launch abort any time up to the 30 feet point on takeoff and the UAS will descend back to the helipad. After forward flight, the AVO can manually command the aircraft to a hover and then issue a "land now" command or send the aircraft into the pattern to return and from there into a normal landing. During recovery, the AVO can command a "wave-off" which will cause the UAS to climb to pattern altitude and then onto a pre-planned wave-off route back into the airport pattern and from there to a normal recovery route.