

FC01 : Uncontrolled drone in an unauthorized area (CAT)
DAL A required 1.10⁻⁸

Achieved failure rate : 8,017.10⁻⁹

Independance required

Erroneous thrust
DAL A required 5.10⁻⁹

Erroneous attitude/altitude control combined with loss of protection function
DAL A required 1,004.10⁻⁹

Erroneous position control combined with erroneous control mode selection ("stuck auto") – control system common mode
DAL A required 1.10⁻⁹

Erroneous or loss of position control in auto mode combined with incapacity to switch to manual mode or erroneous control in manual mode
DAL A required 9.10⁻¹²

Erroneous pilot consignes acquisition on remote control combined with erroneous manual override acquisition – remote control common mode
DAL A required 1.10⁻⁹

Erroneous manual mode selection combined with erroneous control in manual mode
DAL A required 4.10⁻¹²

Erroneous attitude/altitude control combined with incapacity to depower actuators due to Flight control system
DAL A required 1.10⁻⁹

Erroneous attitude/altitude control combined with incapacity to depower actuators due to propulsion system
DAL A required 4.10⁻¹²

Erroneous position control in auto mode
DAL B required 3.10⁻⁶

Incapacity to switch to manual mode OR erroneous control in manual mode
DAL B required 3.10⁻⁶

Erroneous pilot consignes acquisition
DAL B required 1.10⁻⁶

Erroneous manual mode selection
DAL B required 4.10⁻⁶

Incapacity to depower actuators due to propulsion system
DAL B required 4.10⁻⁶

Erroneous attitude/altitude control
DAL B required 1.10⁻⁶

Erroneous position control due to Flight control system
DAL B required 1.10⁻⁶

Erroneous flight plan computation
DAL B required 1.10⁻⁶

Erroneous pilot consignes acquisition
DAL B required 1.10⁻⁶

Erroneous control mode selection (« stuck_auto »)
DAL B required 1.10⁻⁶

Erroneous pilot consignes acquisition
DAL B required 1.10⁻⁶

Loss of manual override acquisition
DAL B required 1.10⁻⁶

Incapacity to depower actuator on propulsion unit 1
DAL B required 1.10⁻⁶

Incapacity to depower actuator on propulsion unit 2
DAL B required 1.10⁻⁶

Incapacity to depower actuator on propulsion unit 3
DAL B required 1.10⁻⁶

Incapacity to depower actuator on propulsion unit 4
DAL A required 1.10⁻⁶

Erroneous control mode selection (« stuck_man »)
DAL B required 1.10⁻⁶

Erroneous manual override acquisition
DAL B required 1.10⁻⁶

Erroneous pilot control mode acquisition
DAL B required 1.10⁻⁶

Erroneous or loss of drone follow-up data display
DAL B required 1.10⁻⁶

Erroneous thrust due to Propulsion system
DAL A required 2.10⁻⁹

Erroneous thrust due to Structure
DAL : N/A* 1.10⁻⁹

Erroneous desactivation of at most 3 engines due to Flight control system
DAL A required 1.10⁻⁹

Loss of power supply to at most 3 propulsion units
DAL A required 1.10⁻⁹

Erroneous or loss of propulsion on propulsion unit 1
DAL A required 5.10⁻¹⁰

Erroneous or loss of propulsion on propulsion unit 2
DAL A required 5.10⁻¹⁰

Erroneous or loss of propulsion on propulsion unit 3
DAL A required 5.10⁻¹⁰

Erroneous or loss of propulsion on propulsion unit 4
DAL A required 5.10⁻¹⁰

*DAL is not relevant for the Structure, which does not contain any software or complex electronic hardware items

Règle pour allocation des exigences vers le niveau système
- les événements feuilles contribuant directement à la FC deviennent des FC systèmes CAT avec un failure rate objective de 1.10⁻⁹
- les événements feuilles contribuant à la FC en combinaison avec un autre événements deviennent des FC systèmes HAZ

