

Component	Functional Purpose	Failure Mode	Failure Effect	Failure Cause	Previous Situation				Assigned Action	Improved Situation			
					S	L	D	RPN		S	L	D	RPN
Battery	Provide current to all systems in the air	Battery Fire	Damage to property and risk to human life	Charging or storage error	10	2	3	60	Assign safety officer	10	1	2	20
Flight Boundaries	Limit flight to safe areas	Dangerous crash	Damage to property and risk to human life	Flight boundary violation	10	3	2	60	Assign safety pilot	10	2	1	20
				Unsafe flight boundaries	10	2	1	20	Assign safety pilot	10	1	1	10
Personal Safety Equipment	Inhibit personal injury	Foreign object in eye	Loss of sight	Foreign objects near props	10	4	3	120	Establish protocol to keep props clear	10	2	2	40
				Safety glasses not applied	10	7	3	210	Add safety glasses to field flight checklist	10	3	3	90
Propulsion System	Provides thrust to aircraft	Motors start while hands are near props	Abrasions and lacerations	Lack of communication	10	6	5	300	Establish protocol to yell "clear props" whenever starting motors	10	1	1	10
				Arm disarm switch failure	10	4	6	240	Require system to be powered off or props removed to work near motors	10	1	6	60
Takeoff & Landing Procedure	Facilitate beginning and end of mission	Aircraft impacts person or property	Damage to property and risk to human life	Unsafe aircraft flight path	10	3	3	90	Require all personnel to be behind aircraft flight path before takeoff and landing	10	1	3	30

S: Severity of failure effect
L: Likelihood of failure occurring
D: Detectability of cause before failure occurs
RPN: Risk Priority number (S*L*D)