

ISO 15964:2025-04 (E)

Detection and avoidance systems for uncrewed aircraft systems

Contents		Page
Foreword.....		iv
Introduction.....		v
1	Scope	1
2	Normative references	1
3	Terms and definitions	1
4	General requirements for DAA system	2
4.1	General.....	2
4.2	General function.....	2
4.3	System architecture.....	3
4.4	Effective stage.....	3
4.5	Airspace requirement.....	3
4.6	Type and size of detection and avoidance.....	3
4.7	Human intervention.....	4
5	General principles on the range of sensors	4
6	Short-range DAA systems	4
6.1	System architectures on DAA system.....	4
6.2	Safety performance of DAA system.....	5
6.2.1	Avoidance manoeuvre.....	5
6.2.2	Detection.....	5
6.2.3	Safe separation distance.....	6
6.2.4	Landing scenario.....	6
6.2.5	Fail safe.....	6
6.2.6	Fault diagnosis and management.....	6
6.2.7	Power-on self-test and contingency management.....	6
6.2.8	System initialization monitoring and management.....	7
6.2.9	Pre-flight condition diagnosis and management.....	7
6.2.10	In-flight monitoring and management.....	7
7	Mid-range or long-range DAA systems	7
7.1	System architectures on DAA system.....	7
7.2	State machine of DAA system.....	8
7.2.1	General.....	8
7.2.2	Radar.....	8
7.2.3	Optical sensor.....	9
7.2.4	Processing unit.....	10
7.3	Functions of DAA system.....	10
7.4	Quality of DAA system.....	11
8	Mix of short-range, mid-range and long-range sensors	12
8.1	System architectures on DAA system.....	12
8.2	State machine of DAA system.....	12
8.2.1	General.....	12
8.2.2	Optical sensor.....	13
8.2.3	Processing unit.....	13
8.3	Functions of DAA system.....	14
8.4	Quality of DAA system.....	14
Bibliography.....		16