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VEYRUM ROBOTICS STANDARD



VRS-AER-110

Aerial / UAS — Demonstration Protocol

The Aerial / UAS sector's witnessed steps for a Certified rating — lost link and positioning-degraded fallback in flight, geo-boundary and ceiling refusal with remote identification, flight termination on a rig, low-battery return and land, launch refusal at a weather limit, per-airframe logs and fleet firmware, local-data mode — run in the same session as the intrinsic protocol.

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Foreword. This Test Protocol is new in the VRS 2026 edition and is the Aerial / UAS sector’s extension of VRS-GEN-203, the intrinsic demonstration protocol. An aircraft’s regulatory standing — its class mark, its airworthiness basis, the operational authorisation its operator holds — is documentary and is scored from the pack; this Protocol does not re-examine it. What it witnesses is the behaviour that decides whether an aircraft comes back: what it does when the link dies or the positioning degrades in flight, whether it respects the boundary and ceiling it was given, whether its flight-termination system deploys, whether it returns and lands on its own when the battery runs low, whether it refuses to launch into weather it is not rated for, and whether the operator can see what every airframe in the fleet is running. Every flight step is flown inside a declared flight area under the operator’s authorisation, at a declared test altitude, over a marked clear area with no person beneath the aircraft; where a behaviour cannot be shown safely, the console’s arming state, self-test and trigger path are shown instead and the mark carries a note. The Protocol carries only what the intrinsic steps do not already witness. Steps run between Parts E and F of VRS-GEN-203, in the same session, on the same feed, into the same export. Standards carry no step identifiers; every step here names the VRS-AER-201 subclause that requires it. As a protocol it is versioned vX.Y.Z (VRS-GEN-004 §5.4). Requirements use “shall”.

1 Introduction

The Aerial / UAS anchor set is the regulators’ operational frameworks — the European open, specific and certified categories with their class marks, and the equivalent national rules elsewhere — together with the technical standards those frameworks lean on for remote identification, geo-awareness, flight termination and lithium-battery safety. Those frameworks already require, on paper, most of what this Protocol witnesses. The difference is that a purchaser, an insurer or a site owner rarely sees the lost-link return flown, the boundary refused, the parachute deployed or the low-battery landing performed by the aircraft on its own; the rating’s Certified tier exists so that someone independent has watched it happen and a reviewer can score it from the record.

Every flight in this Protocol is within a declared flight area under the operator’s own authorisation and at a declared test altitude; the Protocol never asks for a flight the operator is not permitted to make, and where a system cannot be exercised safely the console evidence stands in with a note. The data feed in this sector is the ground station itself, which already carries every field VRS-GEN-203 §4.4 requires.

2 1 Scope

This Protocol specifies the Aerial / UAS demonstration steps by which the criteria of VRS-AER-201 Clause 6 are demonstrated at the Certified tier, for every application class of VRS-AER-201 §7.3 (small UAS · heavy-lift / delivery · dock-based autonomous · VTOL fixed-wing). It applies to every Certified Aerial / UAS assessment, by every Certified route of VRS-GEN-003 §6.9.

It specifies: how this Protocol relates to VRS-GEN-203 (Clause 4); the envelope the manufacturer declares before the session (Clause 5); the steps (Clause 6); and a worked example (Clause 7). Annex A maps every VRS-AER-201 criterion to its intrinsic steps, its sector steps, or neither.

It does not: repeat any session requirement, step, marking rule or record rule of VRS-GEN-203, all of which apply unchanged; define any criterion, point, ceiling or ladder (VRS-AER-201); or define the Aerial / UAS information pack (VRS-GEN-013). Every flight step is flown within the declared flight area under the operator's own authorisation, at the declared test altitude, over a marked clear area with no person beneath the aircraft. Regulatory standing (class mark, airworthiness, authorisation) is documentary and is scored from the pack.

3 Normative references

- **VRS-GEN-203**, Demonstration Protocol — Intrinsic — session requirements (Clause 4), step rules (Clause 5), marks and scores (Clause 7), Session Record (Clause 8), all of which apply to this Protocol.
- **VRS-AER-201**, Aerial / UAS — AR Assessment Protocol — the criteria whose Certified rows this Protocol serves; application classes (§7.3).
- **VRS-AER-001**, Aerial / UAS Sector Standard — the declared envelope and class fields.
- ○ **VRS-GEN-101**, Safety — the intrinsic safety criteria the Aerial / UAS pool contributes to.
- ○ **VRS-GEN-102**, Reliability & Durability — the intrinsic endurance-sample and environmental steps that serve parts of VRS-AER-201 §6.5 and §6.6.
- ○ **VRS-GEN-105**, Cyber Posture — the intrinsic steps that witness parts of VRS-AER-201 §6.7 and §6.9.
- **VRS-GEN-003**, Governance Charter and Independence — Certified routes and route parity (§6.9).

4 Terms and definitions

Terms defined in VRS-GEN-001 and VRS-GEN-203 apply. In addition:

3.1 flight area — the declared horizontal area and altitude ceiling, within the operator's authorisation, inside which every flight step is flown.

3.2 test altitude — the declared altitude (m) at which in-flight steps are performed, high enough for the fail-safe to complete and low enough for the camera to follow.

3.3 clear area — the marked area beneath the flight path with no person in it during any airborne step.

3.4 ground station — the manufacturer's controller or fleet console whose screen-share is the data feed.

3.5 fail-safe — the declared behaviour on loss of command-and-control: return-to-home, land or loiter.

3.6 positioning-degraded fallback — the declared behaviour when satellite positioning is degraded or lost in flight.

3.7 flight termination — the declared system that ends powered flight on command (motor stop, parachute) and its trigger path.

3.8 remote identification — the broadcast of aircraft identity and position that a receiver on the ground can show.

3.9 local-data mode — the declared mode in which logs, video and telemetry are stored on the aircraft and ground station and not transmitted.

5 4 Relationship to the intrinsic protocol

4.1 This Protocol shall be run only as part of a session under VRS-GEN-203. Every requirement of VRS-GEN-203 Clause 4 applies to every step here without repetition or exception.

4.2 Position in the session. The steps of Clause 6 shall run after VRS-GEN-203 Part E and before VRS-GEN-203 Part F, so that one continuous recording and one export cover both protocols. The endurance sample opened in VRS-GEN-203 Part C continues to run through this Protocol.

4.3 Step identifiers. Steps shall carry identifiers of the form **AER-110.nn** ; they are Session Record step identifiers under the same rules as VRS-GEN-203 §5.1 and shall never be reused.

4.4 Required by. Every step shall name the VRS-AER-201 subclause(s) whose Certified row it serves. VRS-AER-201 carries no reference back to this Protocol.

4.5 Classes and declared subjects. Each step lists the application classes it applies to. A step whose class is not in the assessed envelope shall not be run. A step whose subject the manufacturer has not declared shall be marked *not declared* and has no effect on any score (VRS-GEN-203 §3.10). Parts 1, 2 and 4 shall be run for every Aerial / UAS assessment; the flight-termination step of Part 3 shall be run on a rig or from a safe height, or its console evidence shown with note.

4.6 Bound. The sum of step bounds for one class shall not exceed 120 min. Marks, failure, declined steps, continuation sessions and the Session Record follow VRS-GEN-203 Clauses 5, 7 and 8.

4.7 Criteria witnessed by intrinsic steps. Where a sector criterion's Certified row is already witnessed by intrinsic steps, Annex A names them and the criterion is scored from those marks together with any sector steps listed. VRS-AER-201 §6.1 (airworthiness, class mark and authorisation fit) is documentary and has no step; nothing witnessed under this Protocol is evidence of regulatory standing.

4.8 Flights. Every airborne step shall be flown within the declared flight area and altitude ceiling under the operator's own authorisation, at the declared test altitude, over the marked clear area; no person shall be beneath the aircraft or within the declared standoff during any airborne step (VRS-GEN-203 §4.8). The remote pilot may abort any step; an aborted step is marked *not run* and may be repeated once.

4.9 Where a behaviour cannot be shown safely. For flight termination and motor-out handling, where the manufacturer states that deployment or the test mode cannot be exercised safely at the site, the console's arming state, self-test and trigger path shall be shown and the step marked *achieved with note*; the reviewer reads the note against the criterion's ladder. No step shall be performed at a height or over an area that the operator's authorisation does not cover.

4.10 Admissibility of a mark. A step's mark shall be inadmissible, and the step shall be marked *not achieved*, where the dimension, mass, speed, force or condition it depends on was not shown on camera, or where the configuration demonstrated differs from the assessed one. The observer shall record the ground.

6 5 The declared envelope

5.1 Before the session the manufacturer shall have declared, in the information pack and per assessed application class: the flight area and ceiling (m) and the operator's authorisation reference; the test altitude (m); the command-and-control fail-safe and its completion time (s); the positioning-degraded fallback; the boundary standoff (m); the remote-identification content; the flight-termination or parachute system, trigger and deployment time (s), and whether it can be deployed at the site; the warnings; the over-people or operational-category limit; the low-battery threshold (%) and the return-and-land behaviour; whether propulsion redundancy is declared and its test mode; the wind (m/s), precipitation and temperature (°C) limits and the means of simulating them; the obstacle-sensing obscuration and low-light boundary (lux); the maintenance programme and pre-flight routine; the fleet-firmware mechanism; and the local-data mode and connected-mode destinations.

5.2 Every apparatus in Clause 6 shall be sized from those declarations and no other source (VRS-GEN-203 §4.7). A parameter not declared makes the steps that depend on it *not declared* (4.5); a manufacturer that declares a smaller envelope demonstrates a smaller envelope and is scored against it under VRS-AER-201.

5.3 The declared envelope shall match the one recorded for the rating (VRS-AER-001, VRS-GEN-009); a step demonstrated at a value other than the declared one shall be inadmissible (4.10).

7 6 The steps

Columns: **ID** — Session Record step identifier · **Step** — outcome to witness · **Classes** — application classes the step applies to (4.5) · **Witness** — means (VRS-GEN-203 §3.13) · **Apparatus** — manufacturer-supplied, at declared value · **Bound** — minutes · **Required by** — VRS-AER-201 subclause(s) served.

7.1 6.1 Part 1 — Lost link and fail-safe in flight

Extends the intrinsic lost-link step to the case that matters for an aircraft: airborne, at the test altitude, with the fail-safe completing and the aircraft landing in the marked zone.

ID	STEP	CLASSES	WITNESS	APPARATUS	BOUND	REQUIRED BY
AER-110.01	Command-and-control loss in flight. In a hover or cruise at the declared test altitude within the declared flight area, the command-and-control link is cut by the manufacturer's own means (controller powered off, link inhibited); the aircraft performs its declared behaviour (return-to-home, land, loiter) and the declared behaviour completes within the declared time; link state and the fail-safe are shown on the ground-station feed.	all	CAM+FEED	Means of cutting the link; landing zone marked	10 min	Required by VRS-AER-201 §6.2
AER-110.02	Positioning-degraded fallback in flight. With satellite positioning degraded by the manufacturer's own means (declared test mode, antenna shield) at the test altitude, the aircraft enters its declared fallback (attitude hold, vision-hold, controlled descent, land) and the positioning-quality state is shown; the aircraft remains within the declared area.	all	CAM+FEED	Manufacturer's means of degrading positioning	8 min	Required by VRS-AER-201 §6.2; §6.3

7.2 6.2 Part 2 — Airspace containment

A boundary and a ceiling the aircraft will not cross, and a broadcast a receiver on the ground can see.

ID	STEP	CLASSES	WITNESS	APPARATUS	BOUND	REQUIRED BY
AER-110.03	Geo-boundary and altitude-ceiling refusal. A flight area and altitude ceiling are configured; the aircraft is commanded toward the boundary at three points and above the ceiling; it stops, holds or turns at the declared standoff each time; the feed shows the boundary state; a manual command to cross is refused or produces the declared behaviour.	all	CAM+FEED+APP	Boundary and ceiling marked on the ground-station map; ground marks at two boundary points	10 min	Required by VRS-AER-201 §6.3
AER-110.04	Remote identification broadcast. The manufacturer's or an independent receiver held by the demonstrator shows the aircraft's remote-identification broadcast on camera (identifier, position, altitude, operator location as declared) while the aircraft is airborne; the values match the ground-station feed.	all	CAM+FEED+APP	Remote-identification receiver	5 min	Required by VRS-AER-201 §6.3

7.3 6.3 Part 3 — Ground-risk mitigation

The flight-termination system is shown deploying on a rig or from a safe height; where it cannot be, the console evidence stands in with a note (4.9).

ID	STEP	CLASSES	WITNESS	APPARATUS	BOUND	REQUIRED BY
AER-110.05	Flight termination or parachute on a rig. On a test rig or from a declared safe height over a marked clear area, the declared flight-termination or parachute system is triggered by the declared command; it deploys within the declared time; the aircraft's motors stop as declared; the deployment is shown on camera. Where deployment cannot be shown safely, the system's arming state, self-test and trigger path are shown on the console and the step is marked with note.	all	CAM+FEED+APP	Test rig or marked clear area; the declared trigger	10 min	Required by VRS-AER-201 §6.4
AER-110.06	Warnings and over-people class limits. The declared audible and visual warnings activate on arming, take-off and fault; the ground station shows the configured over-people or operational-category limit and refuses a flight plan or mode that exceeds it.	all	CAM+FEED	—	6 min	Required by VRS-AER-201 §6.4

7.4 6.4 Part 4 — Propulsion and battery in flight

The aircraft warns and comes home on its own when the battery runs low; redundancy is exercised only where the manufacturer declares it and can do so safely.

ID	STEP	CLASSES	WITNESS	APPARATUS	BOUND	REQUIRED BY
AER-110.07	Low-battery return and land. Starting from a declared reduced charge, the aircraft flies its representative pattern until the declared low-battery threshold is reached; it warns and then performs the declared return and land without operator command; battery state and thresholds are shown on the feed; the landing point is within the marked zone.	all	CAM+FEED+APP	Landing zone marked	12 min	Required by VRS-AER-201 §6.5
AER-110.08	Motor-out or redundancy handling. Where the manufacturer declares propulsion redundancy and can demonstrate it safely (declared test mode that stops one motor at the test altitude over the clear area), the aircraft maintains controlled flight	all	CAM+FEED	Manufacturer's declared test mode	8 min	Required by VRS-AER-201 §6.5 – Run where redundancy is declared

ID	STEP	CLASSES	WITNESS	APPARATUS	BOUND	REQUIRED BY
	or a controlled descent as declared and lands within the marked zone; otherwise the redundancy self-test and health indicators are shown on the console and the step is marked with note.					

7.5 6.5 Part 5 – Weather-envelope discipline

The ground station refuses to launch into weather the aircraft is not rated for; degraded sensing in flight produces the declared behaviour.

ID	STEP	CLASSES	WITNESS	APPARATUS	BOUND	REQUIRED BY
AER-110.09	Launch refusal and warning at a simulated limit. The declared wind, precipitation or temperature limit is simulated by the manufacturer's means (declared test input or the ground station's weather source set to a value beyond the limit); the ground station warns and refuses take-off; with the value inside the limit, take-off is permitted; where the real condition is present at the site, it is shown on the manufacturer's meter and the aircraft's behaviour at the limit is witnessed.	all	CAM+FEED	Manufacturer's test input or the manufacturer's anemometer	8 min	Required by VRS-AER-201 §6.6
AER-110.10	Degraded-sensing behaviour in flight. With the declared obstacle-sensing or vision sensors partly obscured by the manufacturer's means, or at the declared low-light boundary,	all	CAM+FEED+APP	Obscurant; the declared lighting condition; the manufacturer's light meter	6 min	Required by VRS-AER-201 §6.6

ID	STEP	CLASSES	WITNESS	APPARATUS	BOUND	REQUIRED BY
	the aircraft enters its declared behaviour (refuse take-off, hold, slow, disable obstacle avoidance with warning); the sensing-quality state is shown.					

7.6 6.6 Part 6 — Maintenance and fleet firmware

Extends the intrinsic update steps with the fleet view: every airframe’s firmware, this airframe’s log and next maintenance action.

ID	STEP	CLASSES	WITNESS	APPARATUS	BOUND	REQUIRED BY
AER-110.11	Per-airframe log and maintenance interval. The ground station or fleet console shows this airframe's flight log, cycle count and the next maintenance action due under the published programme; a declared pre-flight calibration or commissioning routine is performed per the manual and completes.	all	FEED	—	6 min	Required by VRS-AER-201 §6.7
AER-110.12	Fleet firmware management. The fleet console shows the firmware version of each airframe and controller in the fleet, applies a signed update to this airframe through the declared mechanism with verification shown, and refuses an unsigned package where one can be staged; the update is recorded against the airframe.	all	FEED	Update package(s)	8 min	Required by VRS-AER-201 §6.7; §6.9

7.7 6.7 Part 7 — Command-link and data security

Extends the intrinsic telemetry-disclosure step with the mode in which nothing leaves the aircraft.

ID	STEP	CLASSES	WITNESS	APPARATUS	BOUND	REQUIRED BY
AER-110.13	Local-data mode and account controls. The aircraft and ground station are placed in the declared local-data mode; the console shows that flight logs, video and telemetry are stored locally and not transmitted; the account controls (login, role, cloud-sync toggle) are shown; the console shows what is transmitted in the connected mode and to where, matching the disclosure.	all	FEED	—	8 min	Required by VRS-AER-201 §6.9

6.8 Timing budget. All 13 steps sum to 105 min. Per class, with every applicable step declared: small UAS 105 min · heavy-lift / delivery 105 min · dock-based autonomous 105 min · VTOL fixed-wing 105 min. Every class is within the 120 min bound of 4.6.

8 7 Worked example (informative)

An operator-manufacturer of a hypothetical dock-based inspection multirotor (class: dock-based autonomous) declares: a 200 × 200 m flight area with a 60 m ceiling under its operational authorisation, a 30 m test altitude; return-to-home and land within 90 s on link loss; vision-hold then land on positioning loss; a 10 m boundary standoff; remote identification broadcasting serial, position, altitude and take-off point; a parachute that cannot be deployed at the site (arming and self-test shown instead); strobes and a tone on arming and take-off; a 20 % low-battery return; no propulsion redundancy; a 10 m/s wind limit simulated through the dock's weather input; a 12 lux low-light boundary; a per-airframe log with a 50-cycle propeller inspection; fleet firmware through the dock console; and a local-data mode on the dock.

After VRS-GEN-203 Part E the sector steps run from 12:40 over the marked clear area. AER-110.01: controller powered off in a hover at 30 m, aircraft returns and lands in the zone in 64 s (achieved). AER-110.02: positioning test mode at 30 m, vision-hold then controlled land, quality state amber then red on the feed (achieved). AER-110.03: three boundary points and the ceiling, holds at 9–11 m standoff; manual push refused (achieved). AER-110.04: handheld receiver shows serial, position and altitude matching the dock feed (achieved). AER-110.05: parachute cannot be deployed at the site; arming state, self-test pass and trigger path shown on the console (achieved with note). AER-110.06: strobes and tone on arming and take-off; a flight plan over the marked crowd zone refused by category (achieved). AER-110.07: from 28 %, pattern flown to the 20 % threshold, warning at 22 %, autonomous return and land in the zone (achieved). AER-110.08: not declared. AER-110.09: dock weather input set to 12 m/s, take-off refused with a wind warning; set to 6 m/s, permitted (achieved). AER-110.10: downward sensors half-covered, take-off refused; at 9 lux on the meter, obstacle avoidance disabled with a warning as declared

(achieved). AER-110.11: log shows 1 212 cycles and the propeller inspection due at 1 250; compass calibration completes (achieved). AER-110.12: fleet view of three airframes; signed update applied to this one with verification; unsigned package refused; logged (achieved). AER-110.13: local-data mode, logs and video on the dock only, sync toggle off; connected mode shows the declared cloud destination (achieved). Sector time 96 min; VRS-GEN-203 Part F follows.

The reviewer scores VRS-AER-201 §6.2 from AER-110.01 and AER-110.02 with GEN-203.15; §6.3 from AER-110.02 to AER-110.04 with GEN-203.13; §6.4 from AER-110.05 (reading the note) and AER-110.06; §6.5 from AER-110.07 with GEN-203.07, GEN-203.18 and GEN-203.40; §6.6 from AER-110.09 and AER-110.10 with GEN-203.14 and GEN-203.39; §6.7 from AER-110.11 and AER-110.12 with GEN-203.33; §6.9 from AER-110.12 and AER-110.13 with the intrinsic cyber steps; §6.1 and §6.8 from the pack. No number in this example is a requirement; every apparatus value came from the manufacturer's own declaration.

9 Annex A (normative) — Criterion coverage

Every criterion of VRS-AER-201 Clause 6 appears once with the intrinsic steps (VRS-GEN-203) and the sector steps (this Protocol) that witness it, or the statement that it has none.

CRITERION	SUBCLAUSE	WITNESSED BY
AER-1 Airworthiness / class-mark / operational-authorisation fit	VRS-AER-201 §6.1	no step — documentary criterion
AER-2 Lost-link and fail-safe behaviour	VRS-AER-201 §6.2	intrinsic GEN-203.15; sector AER-110.01, AER-110.02
AER-3 Airspace containment	VRS-AER-201 §6.3	intrinsic GEN-203.13; sector AER-110.02, AER-110.03, AER-110.04
AER-4 Ground-risk mitigation	VRS-AER-201 §6.4	intrinsic GEN-203.13; sector AER-110.05, AER-110.06
AER-5 Propulsion and battery in-flight integrity	VRS-AER-201 §6.5	intrinsic GEN-203.07, GEN-203.18, GEN-203.40; sector AER-110.07, AER-110.08
AER-6 Weather-envelope discipline	VRS-AER-201 §6.6	intrinsic GEN-203.14, GEN-203.39; sector AER-110.09, AER-110.10
AER-7 Maintenance, inspection and fleet-firmware discipline	VRS-AER-201 §6.7	intrinsic GEN-203.33; sector AER-110.11, AER-110.12
AER-8 Occurrence and incident record	VRS-AER-201 §6.8	no step — scored at the Certified tier from the Verified evidence
AER-9 C2-link and data security	VRS-AER-201 §6.9	intrinsic GEN-203.32, GEN-203.33, GEN-203.37; sector AER-110.12, AER-110.13

10 Bibliography

- Commission Delegated Regulation (EU) 2019/945 and Commission Implementing Regulation (EU) 2019/947, *Unmanned aircraft systems – class marks and rules of operation*.
- ASTM F3411-22a, *Standard Specification for Remote ID and Tracking*.
- ASTM F3322-18, *Standard Specification for Small Unmanned Aircraft System (sUAS) Parachutes*.
- ASTM F3002-14a(2020), *Standard Specification for Design of the Command and Control System for Small Unmanned Aircraft Systems (sUAS)*.
- ASTM F3298-19, *Standard Specification for Design, Construction, and Verification of Lightweight Unmanned Aircraft Systems (UAS)*.
- ASTM F3178-16, *Standard Practice for Operational Risk Assessment of Small Unmanned Aircraft Systems (sUAS)*.
- ISO 21384-3:2023, *Unmanned aircraft systems – Part 3: Operational procedures*.
- ISO 21895:2020, *Categorization and classification of civil unmanned aircraft systems*.
- IEC 62133-2:2017, *Secondary cells and batteries containing alkaline or other non-acid electrolytes – Safety requirements for portable sealed secondary lithium cells*.
- EUROCAE ED-282 / RTCA DO-377A (2021), *Minimum Aviation System Performance Standards for C2 Link Systems Supporting Operations of Unmanned Aircraft Systems*.

11 Change history

DATE	VERSION	STATUS	CHANGE	AUTHORITY
2026-09-16	1.0.0 (draft)	Draft	Created for the VRS 2026 edition (rewrite Batch D; sector demonstration protocol). 13 steps in 7 Parts extending VRS-GEN-203 for the Aerial / UAS criteria of VRS-AER-201: command-and-control loss and positioning-degraded fallback in flight, geo-boundary and ceiling refusal, remote-identification broadcast, flight termination on a rig or console evidence with note, warnings and category limits, low-battery return and land, motor-out where declared, launch refusal at a simulated weather limit, degraded sensing in flight, per-airframe log and fleet firmware, local-data mode. Every flight within the declared area under the operator's authorisation; regulatory standing documentary. Annex A covers all 9 criteria.	Rewrite instructions §6 (VRS-XXX-110); sector traceability matrix (AER derived demonstration steps); CEO ruling 2026-09-15 that standards carry no catalogue identifiers

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