

GNSS RF Interference Review Worksheet

For integrated platforms: document the installation boundary, nearby RF and electrical conditions, receiver observations, controlled evidence and RFQ inputs.

How to use	Scope boundary
Complete the fields that are available, identify unknowns explicitly, and retain document revisions with any observation record. Use a common time basis where platform and receiver events are compared.	This worksheet supports engineering preparation. It does not replace platform-level RF testing, electromagnetic compatibility work, regulatory assessment, certification, product confirmation or acceptance by the responsible engineering authority.

1. Project and platform identification

Input / observation	Record, source, revision or note
Project / platform name	
Integrator / owner	
Configuration or drawing revision	
Review date and participants	

2. Mission and operating environment

Input / observation	Record, source, revision or note
Platform role and GNSS-dependent function	
Operating area, exposure and environmental constraints	

Input / observation	Record, source, revision or note
Operational consequence of stale, invalid or unavailable GNSS data	

3. GNSS constellations and frequency bands

Input / observation	Record, source, revision or note
Constellations, signals and bands required	
Receiver signal modes and firmware / configuration identifier	
Known spectrum or service constraints to review	

4. Receiver and antenna interfaces

Input / observation	Record, source, revision or note
Receiver model and available status / timing / position outputs	
Interface type, messages, update timing and controller inputs	
Antenna model and relevant published documentation reference	

5. Antenna count, location, spacing and ground-plane inputs

Input / observation	Record, source, revision or note
Antenna count and mounting zone	

Input / observation	Record, source, revision or note
Separation from co-located antennas and electronics	
Ground-plane, enclosure, radome or structural inputs	

6. Cable type, length, loss, connectors and active gain

Input / observation	Record, source, revision or note
Cable type, routed length and known loss information	
Connector and inline-component record	
Active gain / power-feed information where applicable	

7. On-platform RF emitters

Input / observation	Record, source, revision or note
Radios, antennas, amplifiers and wireless links	
Frequency range, location and simultaneous-operation cases	
Equipment document and configuration reference	

8. Adjacent-band and harmonic review

Input / observation	Record, source, revision or note
Nearby emissions, harmonics, spurious outputs or converter activity to investigate	
Potential coupling paths and installation boundary	
What is observed versus what remains an unproven hypothesis	

9. Transmit power, duty cycle and operating states

Input / observation	Record, source, revision or note
Transmit power / operating state when documented	
Duty cycle, scheduling and mode transitions	
Time reference used to correlate platform and receiver evidence	

10. Baseline receiver observations

Input / observation	Record, source, revision or note
Normal receiver status and metrics exposed by the system	
Platform mode and controller response during baseline	
Configuration, timestamps and any installation assumptions	

11. Emitter-on test matrix

Input / observation	Record, source, revision or note
Controlled condition, operating state and permitted test method	
Receiver and controller observations to record	
Result classification: observed / inconclusive / follow-up required	

12. Recovery and reacquisition observations

Input / observation	Record, source, revision or note
Condition ending or changing	
Receiver recovery / reacquisition information exposed	
Controller handling, alarm, timeout, source selection or fallback response	

13. Installation change log

Input / observation	Record, source, revision or note
Antenna, cable, connector, power, firmware or configuration change	
Date / revision and reason	
Evidence affected or no longer comparable	

14. Acceptance evidence checklist

Input / observation	Record, source, revision or note
Published product documentation reference	
Installation record and interface / controller evidence	
Review method, evidence owner and decision required	

15. Open technical questions

Input / observation	Record, source, revision or note
Question requiring engineering confirmation	
Information still needed	
Owner and target decision date	

16. RFQ preparation inputs

Input / observation	Record, source, revision or note
Platform and operating context	
Receiver, antenna, RF path and co-located equipment	
Interfaces, installation constraints and evidence requested	