

**LITHUANIAN ARMY
AIR FORCE AIR BASE**

TECHNICAL SPECIFICATION FOR NAVIGATION EQUIPMENT FLIGHT TESTS

1. Purpose of the purchase object

Periodic flight tests (hereinafter referred to as tests) of navigation equipment (hereinafter referred to as NAVSYS) at the Air Force Base (hereinafter referred to as the Customer).

2. Mandatory requirements:

2.1. All NAVSYS type tests shall be performed in accordance with:

2.1.1. AERODROMES, Annex 14, Volume I, "Design and Operation of Aerodromes," of the Convention on International Civil Aviation (hereinafter referred to as ICAO).

2.1.2. AVIATION TELECOMMUNICATIONS, Annex 10 to the ICAO Convention;

2.1.3. Manual on Testing of Radio Navigation Aids, Doc. 8071, Volume 1, 4th edition-2000;

2.1.4. NATO RADAR, RADIONAVIGATION, AND APPROACH LANDING AIDS OPERATING PROCEDURES – AetP-1(E1) STANAG 3374.

In all cases, the latest versions of these documents, including the latest amendments and supplements, shall apply.

2.2. During NAVSYS testing, the following devices and their parameters must be checked, as required by the documents specified in section 2.1 of this specification:

2.2.1. EYSA RWY14L:

2.2.1.1. ILS GP 14L;

2.2.1.2. ILS LLZ 14L;

2.2.1.3. ILS DME 14L

2.2.1.4. PAPI 14L;

2.2.1.5. Approach lighting system, ALS;

2.2.1.6. Runway lights system (High intensity runway lights, hereinafter referred to as RWY LGT).

2.2.2. EYSA RWY32R:

2.2.2.1. ILS GP 32R;

2.2.2.2. ILS LLZ 32R;

2.2.2.3. ILS DME 32R;

2.2.2.4. PAPI 32R;

2.2.2.5. ALS;

2.2.2.6. RWY LGT;

2.2.3. EYSA RWY 14R:

2.2.3.1. PAPI 14R;

2.2.3.2. ALS;

2.2.3.3. RWY LGT.

2.2.4. EYSA RWY 32L:

2.2.4.1. PAPI 32L;

2.2.4.2. ALS;

2.2.4.3. RWY LGT.

2.2.5. EYSA DVOR;

2.2.6. EYSA DME;

2.2.7. EYSA TACAN.

2.3. NAVSYS GP 14L, LLZ 14L, GP 32R, LLZ 32R test must be performed with or without a Monitors Alarm Limits Check, as specified in the notification sent by the Customer to the Supplier;

2.4. All NAVSYS ILS 14L and ILS 32R equipment shall be tested for compliance with ILS CAT I requirements. In addition, for verification of the specified ILS class (Class I/T/3), the average deviation of the ILS LLZ 14L and ILS LLZ 32R modulation depth difference (hereinafter referred to as DDM) shall be verified in accordance with CAT II requirements up to point T.

2.5. The company conducting NAVSYS tests (hereinafter referred to as the Supplier) must be registered in a European Union or NATO country.

2.6. The supplier must have an operating license issued by the responsible supervisory organization of the European Union or NATO, which must be submitted to the Lithuanian Armed Forces for validation. The supplier may conduct tests only after the license has been validated by the Lithuanian Armed Forces.

2.7. The Supplier must have all the necessary equipment and means to perform NAVSYS tests, including tests in the presence of GNSS signal interference.

2.8. The supplier must have an aviation radio band voice communication device for communication with the customer's technical staff during testing.

2.9. The following must be used to ensure coordination:

2.9.1. e-mail, available 24 hours a day, seven days a week;

2.9.2. telephone communication, available on working days from 8:00 a.m. to 5:00 p.m. Lithuanian time.

2.10. The Customer shall inform the Supplier of the need for NAVSYS testing by sending a notification specifying:

2.10.1. the preliminary date of the need for testing;

2.10.2. the equipment to be tested;

2.10.3. the type of equipment testing;

2.10.4. other important information related to the equipment being tested or the tests.

2.11. The specific date for conducting NAVSYS flight tests shall be determined by mutual agreement, but shall be no later than 20 days from the date specified in the Customer's request.

2.12. Prior to the test date, the Supplier shall:

2.12.1. Complete all necessary procedures for arrival (flight) at EYSA as specified in the Aeronautical Information Publication (hereinafter referred to as AIP);

2.12.2. coordinate with Šiauliai International Airport regarding ground handling and refueling requirements. The Supplier shall pay Šiauliai International Airport for these services;

2.12.3. prepare and submit NAVSYS test flight schedules to the Customer.

2.13. On the day of the tests, before the start of the tests, the Supplier must familiarize the Customer with the work performance procedures and the work performance process, and discuss other details important for performing the tests. The Supplier shall take into account the comments made by the Customer and adjust the course of the tests accordingly.

2.14. The Supplier shall independently submit the aircraft flight plans required for the tests in accordance with the applicable procedures.

2.15. NAVSYS tests must be carried out in a coordinated manner. If circumstances arise that are important to the Customer, the tests or tests of specific equipment must be suspended by mutual agreement of both parties and resumed at a mutually agreed time.

2.16. If, during NAVSYS testing, a specific device is found to be non-compliant with the parameters and in need of adjustment, the Supplier shall perform additional testing of the required parameters of that device after the Customer has adjusted the parameters.

2.17. Immediately after flight testing, the Supplier shall:

2.17.1. provide the Customer with provisional flight inspection certificates for the tested equipment, which shall include:

2.17.1.1. Supplier's details;

- 2.17.1.2. details of the tested device;
- 2.17.1.3. test date;
- 2.17.1.4. test identification number (FIS Number);
- 2.17.1.5. registration number of the aircraft used for testing;
- 2.17.1.6. type of aircraft used for testing;
- 2.17.1.7. conclusion on the suitability of the tested device for use;
- 2.17.1.8. other important remarks.
- 2.17.2. Review the results of the equipment tests with the Customer, present conclusions and recommendations regarding their use.
- 2.17.3. Sign and submit the initial equipment test certificates to the Customer.
- 2.18. No later than 14 days after the test, the Supplier shall submit to the Customer the final approved flight test certificates for the equipment, in accordance with the recommended template specified in the documents referred to in point 2.1 of these technical specifications, which shall include:
 - 2.18.1. the measured parameters of the tested equipment, as required by the documents specified in section 2.1 of these technical specifications;
 - 2.18.2. Permissible signal deviation limits for tested equipment;
 - 2.18.3. Measurement graphs of measured signals with the permissible deviation limit indicated;
 - 2.18.4. measurement graphs of the average deviation of ILS LLZ 14L and ILS LLZ 32R DDM with the permissible deviation limit for CAT II indicated;
 - 2.18.5. conclusion on the suitability for use of the tested equipment;
 - 2.18.6. other important remarks.

3. Warranty requirements:

The supplier is liable for the accuracy of the NAVSYS tests and the results presented, the recording of the measurements of each tested device in accordance with approved procedures, including all relevant parameters necessary for the assessment of the NAVSYS performance characteristics.

If it is determined that the service does not meet the requirements of this technical specification, the Supplier shall, at its own expense, provide a service of appropriate quality within a period not exceeding 1 month from the date of submission of the claim or cover all costs incurred by the purchaser in connection with the provision of the service of unsuitable quality.

4. Additional information:

None.
