

**Final qualifying work topic:** «Information security measures against TEMPEST leakage (by the case of Military registration and enlistment office department in Zheleznovodsk, Mineralnye Vody and MV district of Stavropol region)».

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**Contracting authority:** Military registration and enlistment office department in Zheleznovodsk, Mineralnye Vody and MV district of Stavropol region

**Research topic relevance:** Military enlistment offices store and process large quantities of state-grade significance data. In this regard, selection and use of protective measures in certain rooms is of critical importance. Deployed means of protection are designed to provide efficient protection of confidential data.

**Purpose of the work:** Final qualifying work purpose is of organizing and implementing security measures against TEMPEST in Military registration and enlistment office to provide highest of secret, personal and other confidential data.

**Tasks:**

1. Military enlistment office analysis, characterization of its departments.
2. Software and technical aspects analysis.
3. Examination of information protection systems and means for their further improvement.
4. Selection of methodics and ways to increase TEMPEST security.
5. Providing practical solutions to said methods implementation.

**The theoretical** significance of this scientific study lies in the fact that laws and regulatory documents in the field of information security were analyzed, special literature was studied and the market for means of protection against leakage through the TEMPEST channel was studied, existing measures and means of protection in the military enlistment office were studied.

**The practical** significance of the results lies in the development and description of the project for the practical application of the selected means of protection against information leakage through the TEMPEST channel.

**Study results.** As a result of the implementation of the final qualifying work, the structure of Military registration and enlistment department of Mineralnye Vody and the Mineralovodsky district was studied, as well as the features of the structure and functioning of the institution's information security system, its hardware and software, engineering, organizational and legal equipment.

All the presented source data were processed, a schematic of the protected facility and a spatial protection model were compiled. We also selected specific tools and systems for protecting information from leakage through the TEMPEST channel. Instructions are given on the practical use of protective means.

**Recommendations:**

1. Use of «Sonata R3.1» (СОНАТА P3.1) to achieve spatial noise.
2. Use of «Sonata RS-3» (СОНАТА PC-3) for linear noise.
3. Fire alarm and telephone lines need to be disconnected during the works.
4. Install of «FP-11» 16 amps (ФП-11 16А) on the lighting grid.
5. Install of dielectric couplings in the heating system lines.
6. All free PC external and peripheral connectors need to be covered with «Gamma-EZ-17» (Гамма-ЭЗ-17) covers.