

0.

New theory and experimental means of measurement for building new study about the gravity anomaly lows

1. **State registration** - №0108U000623.

2. **Head**

Prof. Honored Worker of Science and Technology of Ukraine Bezvesilnaya E.N. Instrument Faculty, Department of Instrumentation

3. **Results**

In the given work the investigation of potentialities and expediency of using integrating gyroscopic gravimeter as a gravimeter of airborne gravimetric system are performed with the aim of increasing the accuracy of measurements of gravitational acceleration values. The peculiarities of work of integrating gyro gravimeter are investigated with the help of computer in the static operation mode and the dynamic one under the condition of harmonic action of perturbations. The equation of airborne gravimetric system movement is specified in response to the setting point of the device and the vibrations of airplane during the flight. Analytical and quantitative characteristics of error components of gyro gravimeter are estimated. The ways of reducing the error value of gyro gravimeter are defined. The automatic system of signal reading and processing is developed. Experimental research of the integrating gyro gravimeter is carried out to confirm the reliability of the received theoretical positions.

Back