

The accuracy of measurement work in forestry

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The accuracy of a measurement of the boundary lines (horizontal) and determination of the area of the terrain in harvest areas, especially felling largely determine the vector of development of forestry in the Russian Federation.

In this segment of forestry there are a lot of differences and contradictions, which provokes the creation of administrative barriers, hampering the efficiency of leasing relations, and, consequently, the emergence of significant amounts of unrecorded wood on the market of round timber and incorrect accounting of forest land intended for afforestation.

Currently, there are situations when the control over correctness of allocation and measurement of the boundary lines of the controlling authority shall refuse the submission of work, although they violated definition technology square, and not observed all prerequisites: 1) to use the equipment with the appropriate measurement accuracy for the conditions of work; 2) the account of magnetic declination; 3) the deviation of a magnetic needle; 4) to take into account the magnetic variation (old course); 5) the status of the upper atmosphere should be the same as the initial work; 6) according to the instructions of the instruments to their use must be checked.

Control not taking into account these conditions is the administrative barriers in the use of forests because it is not clearly regulated by the Federal government, according to st. 26.2 the administrative code of the Russian Federation.

To minimize errors that occur when establishing the boundaries of cutting area and determine their operational area it is necessary to standardize the technologies account for any variations and amendments tools and methods.

The most promising is the use of navigation devices and software tools. Even tourist navigation devices with the stated accuracy in 3–4 meters suitable for work, because this is the accuracy of geolocation, not the error of the measurements at a certain interval, which is installed in forestry. When removing already 3–4 place this instrument measurement error in a particular place strives to 1/4 radius of the global error of the Navigator.

Described the conditions necessary for the correct organization of works on implementation of limitations and measurements of the boundary lines (horizontal) should underpin the development of technologies for the implementation of these activities with the help of navigation equipment and software computing assets.

Key words: *measurement accuracy, measurements, rumb, azimuth, cartography, navigation.*