

SYSTEM OF REGISTRATION DATA AND QUALITY INCREASING OF CROP DUSTING DURING AVIATION CHEMICAL WORKS

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Abstract. Aviation chemical works need a system that will be able to indicate optimal way and save data about the crop dusting according with weather conditions and flight parameters. Chemical mark depends from many factors but most important of them are cross wind, airspeed and altitude. Airspeed and altitude can be defined by means of board instruments. Direction and speed of wind have to be calculated by using of data from GPS, airspeed device and 3D-axis magnetometer. All those data calculate in special controller according with model of dusting. The directional indicator of controller shows to the pilot optimal parallel tracks during crop dusting. GPS or DGPS allows attaching calculation data to map of fields and controller save data and then translating to owner of fields. This system allows spreading the droplets more regular and decreasing harm of chemical works.

Keywords. Chemical works, Crop Dusting