

**Informatika i sistemy upravleniya. – 2019. – No. 4(62). – P. 35-44.**

**Selvesyuk N.I.** (nis@gosniias.ru), **Eremin A.I.**, **Lebedev G.N.**

State Research Institute of Aviation Systems

**ASSESSMENT OF THE LANDING DANGER COEFFICIENT DURING A GLIDESLOPE DESCENT WITH DUE ACCOUNT FOR PILOTING ERRORS AND SIDE WIND COMPONENT**

The article presents and solves the problem of continuous monitoring of the aircraft landing safety in the lateral control channel after the start of a glideslope descent with the side wind impact and piloting error. A computer simulation has shown that the proposed landing danger function simulates the increase of the pilot's anxiety and its decrease after the elimination of the emergency situations that affect the safety of landing at the landing point.

**Keywords:** optimal control, dynamic programming method, predictive risk function, side wind, emergency signals.

**DOI: 10.22250/isu.2019.62.35-44**

*For citation:*

**Selvesyuk N.I., Eremin A.I., Lebedev G.N.** ASSESSMENT OF THE LANDING DANGER COEFFICIENT DURING A GLIDESLOPE DESCENT WITH DUE ACCOUNT FOR PILOTING ERRORS AND SIDE WIND COMPONENT // *Informatika i sistemy upravleniya.* – 2019. – No. 4(62). – P. 35-44.