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## Integrated Resource Control of Complex Man-Machine Systems

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Investigate the nature of emergencies and disasters in complex human-machine systems. In order to assess and predict the complex emergency proposed to consider the resource system as a vector comprising human resources and computer resources. Prediction of accidents are encouraged to check with the logical security conditions applicable to heterogeneous system resources in the complex

*Key words:* accidents, security, disaster, remaining life, man-machine systems, the human factor.

### References

1. State Standard 27.002-89. Industrial product dependability. General concepts. Terms and definitions. Moscow, Standartinform, 1990, 24 p. (in Russian).
2. Novojilov G. V., Neymark M. S., Tsesarskiy L. G. *Bezopasnost' poleta samoleta. koncepcija i tehnologija* [Providing of the flight safety of an airplane. The concept and technique]. Moscow, MAI, 2007, 196 p. (in Russian).
3. Rezchikov A. F., Tverdohlebov V. A. *Prichinno-sledstvennyye modeli proizvodstvennyh sistem* [Cause-effect models of production systems]. Saratov, Nauchnaja kniga, 2008 (in Russian).
4. Klyuev V. V., Rezchikov A. F., Bogomolov A. S., Ukov D. A., Filimonyuk L. Yu. System approach to a problem of appraisal of man-machine systems' remaining life. *Control. Diagnostika*, 2011, no. 8, pp. 9–13 (in Russian).
5. Kluev V. V., Rezchikov A. F., Bogomolov A. S., Koshcheyeva E. M., Ukov D. A. Cause-conditional approach to resource management of furnace in cement production. *Control. Diagnostika*, 2012, no. 7, pp. 30–36 (in Russian).