## NAVIGATION SYSTEMS

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## STATISTICAL ANALYSIS OF WORLDWIDE AVIATION OCCURRENCES IN 2011

At present day a civil aviation is very impotent component of transportation system for many countries. Air travel is one of the safest forms of transportation, but accidents do happen with dramatic and terrifying results. The causes of aviation accidents vary greatly depending on specific circumstances and problems that may develop during the flight process.

From database Aviation Safety Network following that in 2011 there were 2210 aviation occurrences and 28 accidents with fatalities 1674 and 507 correspondingly. The total accidents and occurrences distribution during the year is shown in fig. 1.
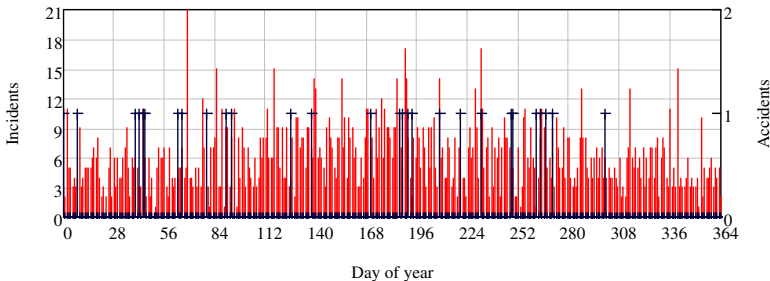


Fig.1. Time distribution of worldwide occurrences

As result of research, the values of probability density function and cumulative distribution functions were calculated. Graphical representation of these calculations in fig. 2 is shown.
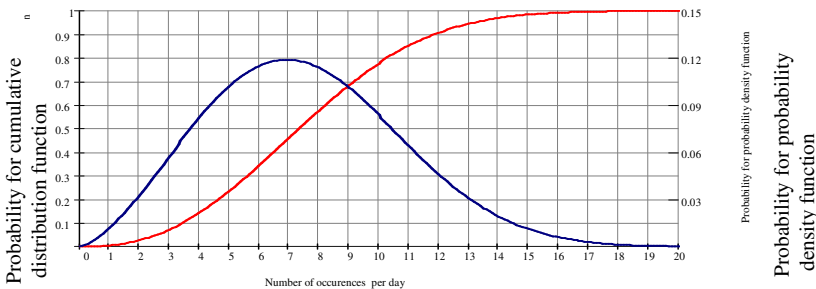


Fig.2. Characteristics for occurrence probability of aviation events

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