

СУЧАСНІ АВІАЦІЙНІ ТЕХНОЛОГІЇ

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*National Aviation University, Kyiv***SOCIAL ASPECTS OF THE UNMANNED AERIAL VEHICLES AND AIRSHIPS APPLICATION IN THE CITIES OF UKRAINE**

Modern interaction of transport and economic sectors leads to the emergence of new areas of applications of vehicles and the introduction of new ones. These modes of transport are unmanned aerial vehicles (UAV) and airships. Appropriate characteristics of these modes allow their widespread use in different social spheres of the country (road monitoring, watching over the meetings, implementation of advertising on these transport modes and so on).

For comparative characteristics of UAVs and airships we will take into account the following models: "Sky Patrol," "Zhaivir" - UAV, BSD-3 and AI-11 "Aist" airships.

Aircraft performances

Aircraft specification	M-10 "Sky Patrol"	M-6 "Zhaivir"	BS D-3	AI- 11 "Aist"
Wingspan, m / Diameter, m	6,0	1,6	1,9	16
Payload weight, kg	70	7	2	52
Take-off weight, kg	200	12	50	160
Maximum velocity, km/h	250	150	50	115
Engine power, kVt	2×17	1×1,7	1×0, 85	1×48
Maximum altitude, m	3000	1000	32,3	134
Time to prepare for flight, h	0,5	1	1	1,5

The main disadvantage of airship in comparison with UAV is its low speed – not more than 150 km/h. UAV modes of transport are more maneuvers and smaller that is the result of better quality of video observation. At the same time airships could be used in the implementation of the strategy of advertising.

Road monitoring, watching over the meetings safety can be performed with UAV and airships with the help of camera Pentax Optio A40 and ZALA 421-08. Also, it is interesting to take into account the implementation of advertising on this transport modes. Thus, extensive experience in operation of airships in this area have a company Goodyear (USA), Budweiser (USA). According to these firms, the use of airships for advertising is a high return, besides the use of airships to maintain a high image of the companies. In Ukraine there is a company "Autostand" which offers the services of implementation of advertisement on the airships. Advertising on the airship is by far the most effective during public events, short-term promotions or exhibitions.

Such social aspects should be implemented in Ukrainian cities such as Kyiv, Lviv, Donetsk and Kharkiv (Euro-2012). These cities involves well-developed transport infrastructure and financial responsibilities for further development.

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