

*K. Starostina, teacher,
V. Pakhomov, senior lecturer
L. Ship, senior lecturer,
D. Nesmianova,
(National Aviation University, Ukraine)*

Aeronavigation: trends and prospects for the development of the article

The article deals with the problem of air navigation and prospects and trends of the world civil aviation. The actual problems of globalization of international transport are stated.

Air navigation – the science of methods of driving aircraft on the specified course and height and with the observance of a specific flight time.

The techniques used to navigate the air depend on whether the pilot flies according to visual flight rules (PVP) or instrument flying rules (RFP). In the second case, the pilot will navigate using only aeronautical instrumentation and radio navigation equipment such as radio beacons, or follow the radar control instructions issued by the air traffic control system. In the case of a PVP, it will be to a large extent to navigate using the methods of "coordinate calculation" in conjunction with visual observations (pilotage), with reference to the corresponding maps. This can be complemented by radio navigation means.

Main types of air navigation:

- flight over landmarks;
- compass air navigation;
- radio navigation;
- astro navigation.

The tasks of aero navigation include the location, the laying of the course, the regulation of the flight direction from one place to another the most efficient and safest route within a set time. The leading civil aviation organizations in the International Civil Aviation Organization (ICAO) and the International Air Transportation Association (IATA), foreign and domestic scientists, Kostromina O., Kulayev Y., Zagorulko V. are constantly studying the prospects and trends of the development of world civil aviation. Polyans'ka N.E. and other.

The development of the global air transport market is under the influence of dynamically changing market conditions. The urgent problems are globalization of international transportation within the limits of global and strategic alliances of air carriers, tough competition, constant increase of direct operating costs, especially due to the constant rise in prices on the world fuel and lubricant market, and so on. Under these conditions, it is necessary to conduct continuous monitoring of trends in the development of world aviation markets in order to increase the economic efficiency of air transportation.

In the period from 1960-2006, the total economic activity in the world measured by gross domestic product (GDP) grew on average annually by 3.6% in

real terms. The average annual growth rate for decades of 1960-1970, 1970-1980, 1980-1990, 1990-2000 was 4.8%, 3.6%, 2.4% and 1.0%, respectively. The growth of air transport was significantly higher, than economic growth, but was closely linked to the latter. The volume of regular passenger airline traffic (domestic and international), calculated in passenger-kilometers (MIC), increased by an average of 8.5% annually during the 1960-2000 period. During the decades of 1960-1970's, 1970 -1980's, 1980-1990, 1990-2000, the volume of traffic grew by an average of 13.4%, 9.0%, 5.7% and 4.5% annually, respectively.

The role of air transport, as a catalyst for overall economic and social development, is driven by the speed and flexibility brought about by air transport in the overall transport system, facilitating expansion, the market system for many types of products, and the exchange of ideas among states with professional experience and skill. Due to the growing role of air transport in the economic development of countries and regions, it is important to take due account of the economic and social benefits that an efficient air transport system can offer and to properly assess future air transport needs, along with adequate financial and human resources that must be foreseen. Currency and financial and credit instability have a serious impact on the development of international air transport.

Today, the objective reality is the existence of air transport groups of countries within a single system of world air transport. Economic conditions for the development of air transport in each of the groups of countries differ significantly from each other. At the national level, a number of countries, including Ukraine, have begun the process of reviewing their air transport policy in the light of the global trend towards liberalization. Some of these concepts are aimed at the liberalization of air connections, in whole or in part, unilaterally without requirements, instead of comparable rights from partners under bilateral agreements. Others are aimed at liberalizing domestic air transport markets and also allowing more carriers to operate on international routes. Airlines increasingly use computer-based measures to increase productivity and optimize revenue, including the use of automated systems for managing profit margins, marketing, sales and communications.

First, the creation of perfect pay-as-you-run systems linked to the use of computers has allowed airlines to regulate the ratio of passengers with high fares and special fares on each flight in order to maximize revenue and provide effective seats. The specific income control system has allowed long-established, high-cost airlines, in some cases, to selectively compete with low-cost airlines, discounters airlines, which often rely on low tariffs to enter the market.

Secondly, product sales are currently carried out through the KSB.

Changes in the structure of the air transport industry traditionally stem from the need to meet the growing demand for air transport services in increasingly competitive markets and in a more globalized economic environment.

Conclusions.

From the above facts, one can conclude that there is a need for continuous monitoring of trends and aspects of the development of world aviation transport by

the Ukrainian air transport market participants and scientists in order to develop strategies for the development of international aviation transport.

References

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