PLACE AND ROLE OF FORWARDING BY AIR TRANSPORT

Ján Ferenc - Erik Ščecina

This article contains a presentation of air freight its place in the global freight transportation. In this article we will analyze different types of freight and logistics companies, and will give some advice to optimalize transportation of goods. K e y w o r d s. aviation, material, transportation

1 INTRODUCTION

The history of the development of human society is closely associated with the exchange of goods, and thus the development of freight transport. Transportation has become a daily necessity of man kind and is an essential condition for international trade. Currently the smallest part of freight transport is air. In the last year it was about 1% of the whole freight transport of the SR.

2 CHARACTERISTICS OF CARRIERS AND SERVICES

For transportation of the products we can choose any mode of transportation, which can be road, rail, aviation, shipping and pipelines. It is possible to use different intermodal combinations: rail – road, road – shipping, road – rail or air – ship.

2.1 Air transport

Air transport sector is historically the youngest but in this short period of time saw the incredible technological advances. The issues that were still in the early 20 century aristocrats considered eccentric entertainment , is today the most dynamically expanding sector of business.

2.2 Naval transport

Naval transport is accompanied by businesses since the down of history and it is understandable that the earliest effort of unification of international concern precisely this mode transport. Despite the fact that in our conditions is shipping, given the negative geographical dispositions, on the outskirts of interest remain globally dominant mode of transport and in the expansion of the foreign trade through it launches at least a certain part of the service also for domestic businesses. Reasons why shipping regresses and maintains the distinction is more, but the principal attraction for customers is relatively low cost to transport relatively large amounts of material.

2.3 Road transport

Road haulers carry more than 75% of agricultural products (fresh or frozen meat, dairy, bakery, confectionery, beverages and tobacco products). Road

transport offers fast reliable service with a low probability of damage or loss during transport.

2.4 Multimodal (combined) transport

It can be concluded that combined transport is currently on the rise and it is peculiar that so far there is no uniformly accepted and applicable international regulation of its regulation. In1980 the UN adopted the Convention on International Multimodal Transport of Goods, which ultimately achieved significant success. What exactly is a contract of multimodal carriage of goods? This is a contract where the carrier undertakes to the sender in a single contract to carry out the service which will be partially carried by sea, internal waterways, road, rail, air, pipeline or any other type of means of transport. This is usually transported goods placed in a special vehicle. internationally standardized returnable containers (containers).

2.5 The Act defined forms of transport

Carriers can be divided into the four basic forms, which defines the law: public, contractors, special and private carriers.

Public carriers - offering their services to any shipper who needs to transport products, for public information and tariffs between fixed locations. To legally operate your business must be authorized by the regulatory authority. Common carriers are required to offer their services to the general public on a nondiscriminatory principle, this means that they must provide a service to any carrier who the products are able to transport their vehicles.

Contract carriers - carriers are hired who do not provide services the public, but provides services to a limited number of carriers on the basis of specific contractual agreements. The contract between the shipper and the carrier providing that the carrier provides carrier specific services a specific price. In most cases, the contract prices lower than those of public carriers.

Special carriers - carriers are hired, engaged in the transport of specific products exempted from certain regulatory provisions (unprocessed agricultural products agricultural needs, livestock, fish, poultry, seeds, plants, etc.). Rates for special services are generally lower than those in public or contracted transport.

Private carriers - generally they are not carriers providing public transport services. Private transport means that the company provides transportation primarily for their own products. The company must be owned or to rent vehicles and operate your business. From a legal perspective is the most important factor that distinguishes private hire transport service to conditions, the transport operation must be identical to the core business of the company.

3 COMPARISN OF ADVANTAGES AND DISADVANTAGES OF EACH TYPE OF FREIGHT TRANDPORTATION

Well organized freight transport also contributes to sustainable and energy efficient operation and strengthen cohesion by business across the EU, including the peripheral regions, will allow better access and draw more benefits from the internal market.

3.1 Road transport

Compared to rail, sea and air transport road is important for short distance transport. Road transport is important in terms of flexibility and operability.

Benefits: built dense network of roads, the possibility of home delivery, high flexibility saving time, transportation of special items, high versatility.

Disadvantages: production of large amounts of air pollutants, a limited amount of freight for one car, the impact of bad weather limited loading capacity, reduced transport of oversized and dangerous goods.

3.2 Rail transport

Among the fundamental modes, it is the principal contributor to the technological revolution of transportation.

Benefits: transport of high tonnage freight, independence of road and traffic density, the possibility of transport of dangerous goods, low failure rate.

Disadvantages: locked on the rail tracks, limited manoeuvrability, tying the timetables, little flexibility.

3.3 Air transport

It is suitable for transporting goods over long distances in relatively short time. The actual time required to overcome the distance between two points is only a fraction of the time it takes to load and unload the aircraft.

Benefits: high speed, the shortest time to overcome the tracks compared to the other modes of transport, relatively accurate departures and arrivals, ease of packaging.

Disadvantages: high cost of transportation, long time to inspect goods at airports and lengthy customs clearance, limiting the amount and type of transported goods.

3.4 Naval transport

The main application is for the transportation of bulk substrates that are not time consuming, but are dependant on transport costs. Using containers for water transport increases the loading space and can be very effective.

Benefits: possibility of transport of large quantities of goods, low transport cost, the possibility of using special boats.

Disadvantages: the inland transport depending on rivers, water quantity and its direction, dependence on naval ports, the impact of bad weather, low speed transport goods.

4 PROPOSAL OF IMPROVEMENT OF AIR FREIGHT TRANSPORT IN SLOVAKIA

The fastest mode of transport is air transport. This applies particularly in international relations, international trade and tourism. Air freight is in our economic conditions of small importance.

4.1 Enlargement of the airport

Each state is required to ensure the development of ground infrastructure, detect remove bottlenecks that limit the capacity of the airport. To solve that problem in a systemic approach is necessary. It is necessary to assess the capacity of each device runway, the taxiways and apron configurations of internal service roads parking, cargo terminal. Airport development planning is complicated by big differences in their high tech equipment and technology-intensive equipment that is necessary to ensure the clearance of aircraft, passengers, cargo and operation of the whole airport. For the smooth operation of the airport, it is impossible to judge individual objects (such as runway, taxiway, apron and building) alone.

4.2 Enlargement of the RWY

The main factor of the airport is the runway (RWY). The RWY is grater the larger the aircraft can take off or land on it thus it can take more goods away per flight.

4.3 Construction of larger warehouses

We would advise to increase the storage warehouses or storage of materials due to customs and postponing the time when the same shall not transfer to other types of transportation means such as for trucks. The recommended that we would be in a good position because of the Kosice airport being close to the factory to create a larger park combined warehouses. This would cover not only air but also by road freight. These stores would be devoted primarily-clearance of cargo, but should be available warehouse space for current cargo storage.

4.4 Reduction of customs control

In this section we would propose the employment and training more workers to speed up customs and streamlining the flow of materials It influences the time volume and quality of success and performance of the customs service workers occupying a substantial portion of air freight. Such procedures would have recommended to several airports in the Slovak Republic at least in Košice and Bratislava.

5 CONCLUSION

We must be aware of the fact that the growth performance of freight transport has become a mirror of problems related to this growth. A fundamental problem in the context of this is that services are unevenly divided between the types of freight transport and air freight is not used that much. Therefore we proposed to streamline air freight with a few of our advices.

BIBLIOGRAPHY

- [1] DHL logistics (Slovakia), spol, s.r.o.
- [2] R-cargo Slovakia s.r.o.
- [3] ŠPED-TRANS LEVICE a.s.

AUTHORS' ADDRESSES

Ferenc Ján, Ing. PhD Department of Aerodynamics and Simulations Faculty of Aeronautics Technical University Košice Rampová 7, 041 21 Košice e-mail: jan.ferenc@tuke.sk

Ščecina Erik, Bc. Faculty of Aeronautics Technical University Košice Rampová 7, 041 21 Košice e-mail: erik.scecina@student.tuke.sk