# The Ways to Buy Transport Airplanes Performed by Airliners 

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#### Abstract

: Target of article is process of overview aircraft transactions. In first part of article we deal about theoretical principles of each form of acquired aircraft. In second part of article is our target using a graphs and tables elucidate count of each types of aircraft, which is divided according to each categories based on division by forms of acquisition.


Keywords:
Aircraft, Purchase, Finance lease, Operating lease, A.C.M.I. lease, Acquisition

## INTRODUCTION

Aircraft are basic manufacturing means of airline operator and aircraft fleet, its size, composition and structure are one of the most obvious display of its strategy. Airline operators want in daily competitive struggle receive on their page a lot of customers. In this struggle is very valuable fact, when operator has at least one advantage, based on he can expel competitive operators from served market. The one of advantage can be the aircraft fleet of airline operator, when it is in required quality, it is right selected ways of acquisition and its composition. This problem concerning of aircraft fleet will be our target clarify in this article. In
article we describe ways, principles and procedures of aircraft acquisition for airline operators.

## 1. WAYS OF ACQUIRED CIVIL AIRCRAFT

Airline operator has two ways of acquired aircraft for her operation on markets. One of the opportunity is acquired of aircraft to her aircraft fleet. It does not it mean he is owner of aircraft. Second opportunity is aircraft acquired by lease from other airline operator, who have aircraft under operational control. Ways of acquired civil aircraft to aircraft fleet are four:

- Aircraft in directly owned by the operator
- Aircraft acquired by finance lease
- Aircraft acquired by operating lease
- Aircraft acquired by ,,wet lease" (A.C.M.I.) [1][3]


### 1.1 Aircraft in directly owned by the operator

The easiest for airline is, when aircraft is in her ownership. Aircraft can be owned by the airline, when this airline buy a aircraft or pay off a finance lease. There is opportunity acquired of aircraft by credit, but in this situation is aircraft property, which serves as a guarantee of credit and then airline can not to have his own ideas. Main is value of aircraft is combination actual value of the aircraft, which is according to its age and access wear and value airworthiness of the aircraft, which is keeps being grateful right program of maintenance according to all prescriptions in all time of operation. The influence incorrect activities can raise risks associated with aircraft degradation. This aircraft serves as a guarantee of credit and this fact brought this, acquired by credit was substitute by finance lease.

### 1.2 Aircraft acquired by finance lease

When we acquired aircraft by finance lease, it is form of credit, where subject of guarantee is this aircraft. Based on these facts establish leasing companies, who can to provide for airline operators resources in form finance lease, when they acquired aircraft, but different is airline operators own aircraft during repayment period. Leasing company oversees during repayment period on activities of
operator, she wants eliminate a risks connected with depreciation of aircraft. Aircraft will be property of operator, when he pay up aircraft after repayment period. It is usually 10-20 years.

### 1.3 Aircraft acquired by operating lease

Operating lease, called dry lease too, is based on some principles of finance lease, but it is easier, because when agreed rental time will end, aircraft is property of leasing company. She takes over aircraft according to agreed conditions to her control. Target is rent a aircraft other airline company in future. The important things agreed for operating lease are:

- Conditions of take over aircraft for lessee
- Conditions of return aircraft for renter
- Finance reserves for maintenance

Operating lease pay up operators in monthly instalments. Time period for operating lease is for new aircraft 5-10 years and older aircraft 3-5 years. Very specific form of operating lease is sale and lease back. The main principle is, airline operator, who is owners of aircraft, sale his aircraft for leasing company and immediately rent this aircraft from leasing company. There are agreed conditions and repayment period during operating lease. When operating lease will end, aircraft must be return for leasing company, who was owners of aircraft, when they closed the contract about sale and lease back. [7][8]

### 1.4 Aircraft acquired by wet lease (A.C.M.I.)

A.C.M.I. is concept from English words Aircraft / Crew / Maintenance / Insurance and it is lease of aircraft with educated crew, secure maintenance and agreed an insurance. Insurance is for third side too. Sometimes it called wet lease.

### 1.5 Principles and procedures of civil aircraft acquisition

From the point of view of the importance of decision making about composition and size of aircraft fleet and time advance, with which it must do a decision for smooth implementation, we know these categories:

- New type of aircraft
- Increase the count of aircraft, which he has in operation
- Acquisition new type of aircraft from manufacture
- Acquisition made aircraft


## 2. AIRCRAFT TRANSACTIONS

In this subchapter is our target give for the reader overview of second hand aircraft transactions.

Analyse of present situation in third chapter was by the year 2016, but we have not information about transactions in year 2016 and then we use data from year 2015 .

Subject of analyse are narrowbodies, widebodies, regional jet and turboprop aircraft, which are divided to three categories by type of acquisition.

These categories are acquired aircraft by purchase event, operating lease and A.C.M.I. lease. In category purchase event we think purchase and finance lease.


Fig. 1 Overview of aircraft transaction in years 2011-2015
Source: [2]

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Information shows a total of 3340 second-hand aircraft transactions during 2015 in the narrowbody, widebody, regional jet and turboprop markets. The 2015 transaction information includes 1998 purchases, as well as 940 operating leases and 412 A.C.M.I. lease events. Graph shows the number of transactions in year 2011-2015, it is in line with the last five years where data shows commercial aircraft transactions exceeded the 3000 mark on an annual basis. The most aircraft were acquired in this years by purchase event and on the other hand the less aircraft was acquired by A.C.M.I. lease. In comparison we can show, the count of transactions in year 2015 was the less than in year 2014 [2].

### 2.1 Acquired aircraft by purchase event

There were 1988 purchase events in 2015, the highest volume in five years and a 5\% increase on the previous year. It was recorded 1038 acquisitions in the narrowbody market alone.


Fig. 2 Division of aircraft acquired by purchase event according to categories in year 2015
Source: [2]

Airbus A320 family aircraft account for 429 units, or $41 \%$ of the narrowbody purchases, while the Boeing 737 Classic and NG families totalled 419. There were 335 acquisitions of widebody aircraft last year, split between Airbus and Boeing models. Airbus aircraft activity is led by purchases of A330 and A340 aircraft there were 58 of both - together with 18 A330s, five A310s and pair of A380s.


Fig. 3 Division of aircraft acquired by purchase event according to types in year 2015
Source: [2]
Boeing figures cover 91 Boeing 767s, as well as 41777 s , 37.Regional jet and turboprop acquisitions totalled 370 and 245 respectively.

The Embraer ERJ family stands out with 151 purchases, followed by Bombardier Dash 8 and CRJ aircraft with respective transactions of 113 and 101 units.

Delta Air Lines is the leading operator for purchase events in 2015 with a total of 54 transactions - including 36 aircraft already in their fleet. The aircraft purchased for the US mainline carrier include 19 Boeing MD-80 and MD-90 family aircraft, 13 757s eight A320s, seven 767s, five 747s and a pair 717s. [2][4][5][6]

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„Teória a prax v bezpečnosti a v krízovom riadení v doprave"

### 2.2 Acquired aircraft by operating lease

In 2015 was recorded $15 \%$ less lease events on the previous year and the lowest number of leasing transactions in five years with 940.

A total of 522 narrowbody and 147 widebody lease events were tracked during the year, while in the regional sector, 186 regional jet and 85 turboprop transactions took place.

Table 1 Overview types of aircraft acquired by purchase event according to categories in year 2015.

| Narrowbodies | $\mathbf{1 0 3 8}$ | Boeing 747 | 37 |
| :--- | :---: | :--- | :---: |
| Airbus A318 | 1 | Boeing 767 | 91 |
| Airbus A319 | 68 | Boeing 777 | 41 |
| Airbus A320 | 308 | Boeing 787 | 12 |
| Airbus A321 | 52 | MD-11 | 13 |
| Boeing 717 | 21 | Regional jet | $\mathbf{3 7 0}$ |
| Boeing 727 | 7 | BAE Systems 146 | 9 |
| Boeing737 Classic | 181 | Bae Systems RJ70/85/100 | 33 |
| Boeing 737NG | 238 | Bombardier CRJ | 101 |
| Boeing 757 | 86 | Embraer E-Jet | 57 |
| Boeing 787 | 1 | Embraer ERJ | 151 |
| MD-80 a MD-90 | 75 | Fokker 70/100 | 19 |
| Widebodies | $\mathbf{3 3 5}$ | Turboprop | $\mathbf{2 4 5}$ |
| Airbus A300 | 18 | ATR 42 | 16 |
| Airbus A310 | 5 | ATR 72 | 60 |
| Airbus A330 | 58 | Bombardier Dash 8 | 113 |
| Airbus A340 | 58 | Fokker 50 | 9 |
| Airbus A380 | 2 | Saab 340/2000 | 47 |

A combined figure of 275 Boeing narrowbodies were leased during the year, while there were 187 lease transactions for A320 family in 2015.

Almost half the widebody lease events - 68 aircraft out of 147 covered Boeing 767s.

The Embraer ERJ family aircraft accounts for $47 \%$ of the regional jets leased. The most favourite type of turboprop aircraft, which was acquired by this form, was Bombardier Dash 8 with 31 lease aircraft.

The second type was ATR $72-28$ pieces.


Fig. 4 Division of aircraft acquired by operating lease according to categories in year 2015
Source: [2]


Fig. 5 Division of aircraft acquired by operating lease according to types in year 2015
Source: [2]

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Table 2 Overview types of aircraft acquired by operating lease according to categories in year 2015

| Narrowbodies | $\mathbf{5 2 2}$ | Boeing 777 | 4 |
| :--- | :--- | :--- | :--- |
| Airbus A319 | 46 | MD-11 | 5 |
| Airbus A320 | 117 | Regional jet | $\mathbf{1 8 6}$ |
| Airbus A321 | 24 | BAE Systems 146 | 2 |
| Boeing 717 | 37 | BAE Systems RJ70/85/100 | 3 |
| Boeing 727 | 3 | Bombardier CRJ | 61 |
| Boeing 737 Classic | 85 | Embraer E-Jet | 32 |
| Boeing 737NG | 190 | Embraer ERJ | 87 |
| Boeing 757 | 10 | Fokker 70/100 | 1 |
| MD-80 a MD-90 | 10 | Turboprop | $\mathbf{2 4 5}$ |
| Widebodies | $\mathbf{1 4 7}$ | ATR 42 | 8 |
| Airbus A300 | 2 | ATR 72 | 28 |
| Airbus A330 | 33 | BAE Systems ATP | 1 |
| Airbus A340 | 14 | Bombardier Dash 8 | 31 |
| Boeing 747 | 21 | Fokker 50 | 4 |
| Boeing 767 | 68 | Saab 340/200 | 13 |
|  |  |  |  |

Source: [2]

### 2.3 Acquired aircraft by A.C.M.I. lease

It was recorded 412 A.C.M.I. lease events during 2015, down $13 \%$ on the 475 in 2015. The majority of the activity centred around narrowbody aircraft, which accounted for just over half the commercial market during the year. Around half of these A.C.M.I. lease transactions were for A320 family aircraft, while Boeing narrowbodies totalled $43 \%$ of transactions in the sector.

There were 94 A.C.M.I lease events in the widebody sector recorded in 2015. The largest share of these - $29 \%$ - covered A330 aircraft. A.C.M.I. lease transactions for regional jet and turboprop aircraft totalled 54 for each market group. It was recorded 17 wet-lease events for Saudia with a selection of A320 family aircraft, A330, 747 and 767 aircraft. There were a further dozen wet-lease events at another Saudi Arabian operator, Flynas[2].


Fig. 6 Division of aircraft acquired by A.C.M.I. lease according to categories in year 2015
Source: [2]


Fig. 7 Division of aircraft acquired by A.C.M.I. lease according to types in year 2015
Source: [2]

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Table 3 Overview types of aircraft acquired by A.C.M.I. lease according to categories in year 2015.

| Narrowbodies | $\mathbf{2 1 0}$ | Boeing 787 | 2 |
| :--- | :--- | :--- | :--- |
| Airbus A319 | 6 | MD-11 | 5 |
| Airbus A320 | 84 | Regional jet | $\mathbf{5 4}$ |
| Airbus A321 | 15 | BAE Systems 146 | 1 |
| Boeing 737 Classic | 41 | BAE Systems RJ70/85/100 | 4 |
| Boeing 737NG | 49 | Bombardier CRJ | 11 |
| Boeing 757 | 7 | Embraer E-Jet | 17 |
| MD-80 a MD-90 | 8 | Embraer ERJ | 16 |
| Widebodies | $\mathbf{9 4}$ | Fokker 70/100 | 5 |
| Airbus A300 | 1 | Turboprop | $\mathbf{5 4}$ |
| Airbus A310 | 4 | ATR 42 | 7 |
| Airbus A330 | 27 | ATR 72 | 21 |
| Airbus A340 | 3 | BAE Systems ATP | 7 |
| Boeing 747 | 19 | Bombardier Dash 8 | 7 |
| Boeing 767 | 24 | Fokker 50 | 10 |
| Boeing 777 | 9 | Saab 340/2000 | 2 |

Source: [2]

## CONCLUSION

Target of article was clarify, how airline operator can receive aircraft to own aircraft fleet. This ways are aircraft in directly owned by the operator, aircraft acquired by finance lease, operating lease or A.C.M.I. lease. Operators can acquisition new type of aircraft or increase the count of aircraft, which he has in operation or acquisition new type of aircraft from manufacture or acquisition made aircraft. The all of this ways are depend from strategy, but mainly from financial situation of operator.

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