FORM 6 - - K SECURITIES AND EXCHANGE COMMISSION

Washington, DC 20549

Report of Foreign Private Issuer Pursuant to Rule 13a - 16 or 15d - 16 under the Securities Exchange Act of 1934

For the month of July 2010

Commission File Number 001-33159

AERCAP HOLDINGS N.V.

(Translation of Registrant's Name into English)

Stationsplein 965, 1117 CE Schiphol Airport, The Netherlands, +31-20-655-9655

(Address of Principal Executive Office)

Indicate by check mark whether the registrant files or will file annual reports under cover of Form 20-F or Form 40-F.

Form 20-F

Form 40-F

Indicate by check mark if the registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule 101(b)(1):

Note: Regulation S-T Rule 101(b)(1) only permits the submission in paper of a Form 6-K if submitted solely to provide an attached annual report to security holders.

Indicate by check mark if the registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule 101(b)(7)):

Indicate by check mark whether the registrant by furnishing the information contained in this form is also thereby furnishing the information to the Commission pursuant to Rule 12g3-2(b) under the Securities Act of 1934.

Yes 🛛

No 🗵

If "Yes" is marked, indicated below the file number assigned to the registrant in connection with Rule 12g3-2(b): 82 – N/A

Other Events

On July 12, 2010, AerCap Holdings N.V. released a summary of its completed transactions during the second quarter of 2010.

Exhibits

99.1 AerCap Holdings N.V. Press Release

2

SIGNATURE

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

AERCAP HOLDINGS N.V.

By: /s/ Klaus Heinemann

Name: Klaus Heinemann Title: Authorized Signatory

EXHIBIT INDEX

99.1

AerCap Holdings N.V. Press Release.



PRESS RELEASE

FOR IMMEDIATE RELEASE

AerCap Holdings N.V. Announces Second Quarter 2010 Transactions

Amsterdam, The Netherlands; July 12, 2010 - AerCap Holdings N.V. ("AerCap," "the Company", NYSE: AER) today announced the completion of the following transactions during the second quarter 2010:

- · Signed new lease agreements for five aircraft,
- Delivered 18 aircraft and 11 engines under lease agreements,
- · Purchased 19 aircraft and two engines, signed contracts for the purchase of another nine aircraft for delivery later this year,
- · Sold five aircraft and five engines, signed contracts for the sale of another four aircraft, and
- · Disassembled nine aircraft and eight engines.

	Second Quarter 2010			Year to Date 2010		
Transaction Overview	Owned	Managed	Total	Owned	Managed	Total
Lease Agreements						
Aircraft (Contracts)	5	NA	5	9	NA	9
Aircraft (Letters of Intent)	1	NA	1	1	NA	1
Deliveries						
Aircraft	17	1	18	29	1	30
Engines	11	NA	11	23	NA	23
Purchases						
Aircraft (Closed)	19	NA	19	39	NA	39
Engines (Closed)	2	NA	2	7	NA	7
Aircraft (Contract Signed, to be	9	NA	9	9	NA	9
Delivered)						
Engines (Letters of Intent)	7	NA	7	7	NA	7
Sales						
Aircraft (Closed)	5	NA	5	10	NA	10
Engines (Closed)	5	NA	5	8	NA	8
Aircraft (Contract Signed, to be Delivered)	4	NA	4	8	NA	8

AerCap's CEO Klaus Heinemann commented: "The second quarter of 2010 was characterized by a material discrepancy between the highly volatile and mostly negative financial markets on the one hand and the solid financial and operational progress made by most of our airline clients on the other hand. AerCap took advantage of this market

1

situation by signing purchase contracts for another nine new aircraft. For some of these aircraft purchases, AerCap worked with existing and newly established joint venture partners in order to maintain our conservative liquidity position while significantly growing our lease portfolio."

Lease Activities: Contracts Signed for Five Aircraft and Eleven Engines --- Eighteen Aircraft Delivered

New Lease Agreements

AerCap signed five new lease agreements for aircraft in the second quarter 2010:

- · Three new Airbus A320s for Wizz Air (Hungary),
- · One Airbus A300 for MNG Airlines (Turkey), and
- One Boeing B737 for Air Company Yakutia (Russia).

The average term of lease agreements for new aircraft signed during the first half of 2010 was 138 months. The average term of lease

agreements for used aircraft signed during the first half of 2010 was 65 months (including letters of intent).

AerCap entered into 11 engine lease agreements in the second quarter and delivered the engines to the lessees in the same period. Seven of the leased engines were CFM-56 engines, three were CF6 engines and one was a Pratt & Whitney engine.

Deliveries

AerCap completed 18 aircraft deliveries in the second quarter under contracted lease agreements:

- Two new Airbus A319s for Adria Airways (Slovenia),
- Two new Airbus A320s for Spirit Airlines (USA),
- Two new Airbus A320s for Frontier (USA),
- One new Airbus A320 for Air Arabia (United Arab Emirates),
- One new Airbus A320 for Air France (France),
- · One new Airbus A320 for Kuwait National Airways (Kuwait),
- One new Airbus A320 for Wizz Air (Hungary),
- Two new Airbus A321s for Vietnam Airlines (Vietnam),
- · One new Airbus A330 for Aeroflot-Russian Airlines (Russia),
- Two new Boeing B737s for VRG/GOL (Brazil),
- · One Airbus A320 for Strategic Airlines (Australia),
- One Boeing B737 for Air North (USA), and
- One Boeing B737 Air Company Yakutia (Russia).

Purchase Activities: Purchases Closed for Nineteen Aircraft — Contracts Signed for Another Nine Aircraft Purchases

During the second quarter, AerCap acquired two new Airbus A319s, seven new Airbus A320s, two new Airbus A321s and three new Airbus A330s under existing commitments with Airbus. In addition, AerCap acquired two new Boeing B737s, one new Airbus A320 and two used Airbus A319s.

In addition to the completed purchase transactions, AerCap executed one agreement for the purchase of two Airbus A320s and a second agreement for the purchase of seven Airbus A320s.

2

Three of the Airbus A320 aircraft mentioned above (one aircraft delivered, two still to be delivered) were purchased by a joint venture between AerCap and Deucalion Aviation Funds, which are advised by DVB Bank.

AerCap also expanded its engine pool with the acquisition of two CFM-56 engines and signed a letter of intent for the acquisition of seven JT8D engines.

Sales Activities: Five Aircraft Sold

During the second quarter, AerCap closed sales transactions for two new Airbus A320s, two new Airbus A330s, and one Boeing B767 from its owned portfolio.

In addition to the completed sale transactions, AerCap executed an agreement for the sale of four Airbus A320s from its owned portfolio.

AerCap also sold five CFM-56 engines from its owned engine pool.

Disassembly: Nine Aircraft and Eight Engines Disassembled

In the second quarter, AerCap's subsidiary AeroTurbine disassembled two aircraft from its own inventory, and seven aircraft and eight engines for third parties.

<u>Debt Facilities: \$380 Million of New Debt Facilities and a \$151 Million Refinancing Through a Note Issuance Were Closed in the</u> <u>Second Quarter of 2010</u>

AerCap signed agreements for \$380 million of new debt facilities in the second quarter and a total of \$730 million in the year to date. In addition, a \$151 million refinancing through the issuance of notes guaranteed by the United Kingdom's Export Credit Agency was completed during the second quarter.

Portfolio Summary

As of June 30, 2010, AerCap's portfolio consisted of 329 aircraft and 90 engines that were either owned, on order, under contract or letter of intent, or managed. This includes aircraft that AerCap added through the acquisition of Genesis Lease in March 2010. These aircraft are still managed by GECAS and the respective transactions are included in the activity report.

The information in this press release also includes transactions completed by AeroTurbine, AerCap's subsidiary which focuses on engine leasing and trading, airframe and engine disassembly, part sales and MRO services.

About AerCap

AerCap is the world's leading independent aircraft leasing company. AerCap also provides engine leasing, aircraft management services, aircraft maintenance, repair and overhaul services and aircraft disassemblies. AerCap is headquartered in The Netherlands and has offices in Ireland, the United States, China, Singapore and the United Kingdom.

This press release may contain forward-looking statements that involve risks and uncertainties. In most cases, you can identify forward-looking statements by terminology such as "may", "should", "expects", "plans", "anticipates", "believes", "estimates", "predicts", "potential" or "continue" or the negative of such terms or similar terminology. Such forward-looking statements are not guarantees of future performance and involve significant assumptions, risks and uncertainties, and actual results may differ materially from those in the forward-looking statements.

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3