
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 October 2009

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 October 9, 2009, AerCap Holdings N.V. released a summary of its completed transactions during the third quarter of 2009.

This form 6-K is incorporated by reference into the Company's form F-3 registration statement file no. 333-155194 and related prospectus, as such registration statement and prospectus may be amended from time to time, and is incorporated by reference into the Company's form S-8 registration statement file no. 333-154416, as such registration statement may be amended from time to time.

Exhibits

99.1 AerCap Holdings N.V. Press Release

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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 Third Quarter 2009 Transactions**

Amsterdam, The Netherlands; October 9, 2009 - AerCap Holdings N.V. ("AerCap," "the Company") (NYSE: AER) today announced the completion of the following transactions during the third quarter 2009:

- Signed new lease agreements for six aircraft and executed letters of intent for five new aircraft leases,
- Delivered eight aircraft and 14 engines under lease agreements,
- Purchased six aircraft and three engines,
- Sold three aircraft and three engines, and executed letters of intent for the sale of five aircraft,
- Disassembled 12 aircraft and 16 engines.

Transaction Overview

	Third Quarter 2009			Year To Date 2009		
	Owned	Managed	Total	Owned	Managed	Total
Lease Agreements						
<i>Aircraft (Contracts)</i>	6	NA	6	15	2	17
<i>Aircraft (Letters of Intent)</i>	2	3	5	15	2	17
Deliveries						
<i>Aircraft</i>	7	1	8	24	6	30
<i>Engines</i>	14	NA	14	41	NA	41
Purchases						
<i>Aircraft (Closed)</i>	6	NA	6	27	NA	27
<i>Engines (Closed)</i>	3	NA	3	14	NA	14
<i>Aircraft (Contract Signed, to be Delivered)</i>	NA	NA	NA	3	NA	3
<i>Engines (Contract Signed, to be Delivered)</i>	NA	NA	NA	1	NA	1
<i>Aircraft (Letters of Intent)</i>	11	NA	11	17	NA	17
<i>Engines (Letters of Intent)</i>	2	NA	2	2	NA	2
Sales						
<i>Aircraft (Closed)</i>	1	2	3	4	3	7
<i>Engines (Closed)</i>	3	NA	3	13	NA	13
<i>Aircraft (Contract Signed, to be Delivered)</i>	NA	NA	NA	NA	1	1
<i>Aircraft (Letters of Intent)</i>	3	2	5	3	2	5

In addition, AerCap announced in the third quarter 2009 that the Boards of Directors of AerCap Holdings N.V. and Genesis Lease Limited had approved a definitive agreement under which AerCap and Genesis will merge in an all share-for-share transaction. The transaction is expected to close in the fourth quarter of 2009.

AerCap's CEO Klaus Heinemann commented: "The third quarter 2009, while remaining very challenging for the global aviation environment as a whole, showed increasing signs of improvement in Asia and Latin America, and with most of the low cost carrier sector. This improvement is resulting in more positive demand for our marketing activities for 2010 and 2011. Both manufacturers and export credit guarantee agencies are showing remarkable skill in managing the tight funding situation for new aircraft deliveries, thus protecting the solvency of their significant clients."

Klaus Heinemann added: "AerCap continued with its measured portfolio growth during the third quarter by taking delivery of six aircraft, all term funded and placed on profitable leases. The coming winter will remain challenging for the entire aviation industry. Still, there are currently no indications that the situation will deteriorate beyond last winter's challenges, which were managed well by AerCap and most of our competitors."

Lease Activities: Contracts Signed for Six Aircraft and Fourteen Engines**New Lease Agreements**

AerCap signed six new lease agreements for aircraft in the third quarter 2009:

- Four new Airbus A320s for Frontier Airlines (U.S.A.),
- Two new Airbus A319s for Adria Airways (Slovenia).

The average term of the six lease agreements for new aircraft signed during the third quarter was 144.0 months. During the third quarter, AerCap also executed letters of intent (signed and deposit paid by lessee) for five used aircraft leases with an average lease term of 54.4 months.

AerCap also entered into 14 engine lease agreements in the third quarter and delivered the engines to the lessees in the same period. Eleven of the leased engines were CFM-56, two were CF6 engines, and one was a PW4000 engine.

Deliveries

AerCap completed eight aircraft deliveries in the third quarter under previously contracted lease agreements:

- Two new Airbus A330s for Aeroflot—Russian Airlines (Russia),
- One new Airbus A320 for TAP (Portugal),
- One new Boeing B737-800 for GOL (Brazil),
- Two Airbus A320s for Strategic Airlines (France),
- One Boeing B737-800 for Garuda Indonesia (Indonesia),
- One Airbus A320 for TAME (Ecuador).

Purchase Activities: Six Aircraft Acquired in the Third Quarter

During the third quarter, AerCap executed an LOI to purchase a 13-aircraft portfolio from GECAS. Two Airbus A320 aircraft from this portfolio were acquired in the third quarter.

In addition, during the third quarter 2009, AerCap acquired one new Airbus A320 and two new Airbus A330s under existing commitments with Airbus, and one new Next Generation Boeing B737-800.

AerCap expanded its engine pool with the acquisition of three CFM56 engines in the third quarter.

Sales Activities: Three Aircraft Sold in the Third Quarter 2009

During the third quarter, AerCap closed sales transactions for one Airbus A320-200 from its owned portfolio, and one Boeing B737-300 and one McDonnell Douglas MD83 from its managed portfolio.

In addition, AerCap executed letters of intent for the sale of three new Airbus A330-300s from its forward order with Airbus and two older Boeing B737-300 from its managed portfolio.

AerCap also sold three CFM56 engines from its owned engine pool.

Disassembly: Twelve Aircraft and Sixteen Engines Disassembled

In the third quarter, AerCap's subsidiary AeroTurbine disassembled nine aircraft and six engines from its own inventory, and three aircraft and ten engines for third parties.

Portfolio Summary

As of September 30, 2009, AerCap's portfolio consisted of 304 aircraft and 82 engines that were either owned, on order, under contract or letter of intent, or managed.

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

About AerCap

AerCap is an integrated global aviation company with a leading market position in aircraft and engine leasing, trading and parts sales. AerCap also provides aircraft management services and performs aircraft maintenance, repair and overhaul services and aircraft disassemblies through its certified repair stations. AerCap is headquartered in The Netherlands and has offices in Ireland, the United States, Singapore, China 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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