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 April 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)): \Box

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 April 9, 2009, AerCap Holdings N.V. released a summary of completed transactions during the first 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

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EXHIBIT INDEX

99.1 AerCap Holdings N.V. Press Release.

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PRESS RELEASE

FOR IMMEDIATE RELEASE

AerCap Holdings N.V. Announces First Quarter 2009 Transactions

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

- · Signed new lease agreements for two aircraft,
- · Delivered 13 aircraft and eight engines under lease agreements,
- · Purchased ten aircraft and four engines,
- · Sold one aircraft and four engines,
- · Disassembled four aircraft and five engines.

Transaction Overview	First Quarter 2009		
	Owned	Managed	Total
Lease Agreements			
Aircraft (Contracts)	2	NA	2
Aircraft (LOI's)	6	NA	6
Deliveries			
Aircraft	10	3	13
Engines	8	NA	8
Purchases			
Aircraft (Closed)	10	NA	10
Engines (Closed)	4	NA	4
Engines (Contract Signed, to be Delivered)	1	NA	1
Aircraft (Contract Signed, to be Delivered)	4	NA	4
Sales			
Aircraft (Closed)	0	1	1
Engines (Closed)	4	NA	4
Aircraft (LOI's)	2	2	4
Engines (LOI's)	NA	NA	NA

AerCap's CEO Klaus Heinemann commented: "Though the first quarter of 2009 has seen one of the worst economic environments for the aviation industry, most airlines have shown a remarkable resilience to these conditions. In the first quarter, AerCap delivered 13 aircraft and eight engines, all as scheduled, and did not repossess any aircraft. All but one of our aircraft repossessed in 2008 — five from the second quarter, three from the third quarter and one from the last quarter - are now generating revenues again with new

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airline clients. We expect the aircraft recovered in the fourth quarter to begin generating revenues in June. During the first quarter 2009, AerCap also continued to successfully access the credit markets by contracting new debt facilities amounting to \$930 million."

Klaus Heinemann added: "Towards the end of the first quarter, we noticed a significant renewal of airline interest in contracting new capacity for 2010 and beyond. This trend has continued to date."

Lease Activities: Contracts Signed for Two Aircraft and Eight Engines

New Lease Agreements

AerCap signed two new lease agreements for aircraft in the first quarter 2009:

- · One Airbus A320 for XL Airways (France),
- · One Boeing B737-800 for PT Garuda Indonesia (Indonesia).

The average term of the two lease agreements for used aircraft signed during the first quarter was 51.5 months. AerCap also executed letters of intent (signed and deposit paid by lessee) for three new and three used aircraft leases with an average lease term of 104 months

for new aircraft and 40 months for used aircraft.

AerCap entered into eight engine lease agreements in the first quarter and delivered the engines to the lessees in the same period. All eight leased engines were CFM-56.

Deliveries

AerCap completed 13 aircraft deliveries in the first quarter under previously contracted lease agreements:

- Two new Airbus A319s for Royal Jordanian Airlines (Jordan),
- Two new Airbus A320s for Aeroflot-Russian Airlines (Russia),
- One new Airbus A320 for Air France (France),
- One new Airbus A320 for TAP (Portugal),
- One new Airbus A320 for Aegean Airlines (Greece),
- · One new Airbus A320 for Spring Airlines (China),
- One Airbus A320 for XL Airways (France),
- Two Boeing B737-500s for Aeroflot-Nord (Russia),
- · One Boeing B767 for Aeromexico (Mexico),
- One Boeing B767 for North American Airlines (USA).

Purchase Activities: Ten Aircraft Acquired

During the first quarter, AerCap acquired eight new Airbus A320s under existing commitments with Airbus. In addition, AerCap acquired two older Boeing B767 for further resale by its subsidiary AeroTurbine.

AerCap expanded its engine pool with the acquisition of three CFM-56 engines and one PW4060 engine in the first quarter.

Sales Activities: One Aircraft Sold

AerCap closed one aircraft sales transaction for a McDonnell Douglas MD82 from its managed portfolio and four engine sales transactions for CFM-56 engines from its owned engine pool in the first quarter 2009. In April 2009, AerCap also sold two Airbus A321s from its owned portfolio.

Portfolio Summary

As of March 31, 2009, AerCap's portfolio consisted of 295 aircraft and 75 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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