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 January 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): \Box

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 January 13, 2009, AerCap Holdings N.V. released a summary of completed transactions during the fourth quarter of 2008.

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 and supplemented 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

EXHIBIT INDEX

99.1 AerCap Holdings N.V. Press Release.

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PRESS RELEASE

FOR IMMEDIATE RELEASE

AerCap Holdings N.V. Announces Fourth Quarter 2008 Transactions

Amsterdam, The Netherlands; January 13, 2009 - AerCap Holdings N.V. ("AerCap," "the Company", NYSE: AER) today announced the completion of the following transactions during the fourth quarter 2008:

- · Signed new lease agreements for 14 aircraft,
- · Delivered 12 aircraft and nine engines under lease agreements,
- · Purchased 11 aircraft and six engines,
- · Sold three aircraft and five engines,
- · Disassembled two aircraft and seven engines.

Transaction Overview	Fourth Quarter 2008			Full Year 2008		
	Owned	Managed	Total	Owned	Managed	Total
Lease Agreements						
Aircraft (Contracts)	10	4	14	79	12	91
Aircraft (LOI's)	1	NA	1	1	NA	1
Deliveries						
Aircraft	10	2	12	32	4	36
Engines	9	NA	9	43	NA	43
Purchases						
Aircraft (Closed)	11*	NA	11*	58	NA	58
Engines (Closed)	4	NA	4	25	NA	25
Engines (Contract Signed, to						
be Delivered)	2	NA	2	2	NA	2
Aircraft (Contract Signed, to						
be Delivered)	0	NA	0	4	NA	4
Sales						
Aircraft (Closed)	2	1	3	26	5	31
Engines (Closed)	5	NA	5	9	NA	9
Aircraft (LOI's)	NA	NA	NA	2	1	3
Engines (LOI's)	NA	NA	NA	NA	NA	NA

* incl. four older aircraft for disassembly

AerCap's CEO Klaus Heinemann commented: "Notwithstanding the increasingly negative impact of the global credit crisis on most airlines worldwide during the fourth quarter of 2008, AerCap's solid business franchise continued to sign new lease contracts and deliver

aircraft as planned throughout this period. In addition, we have added significantly to our capital base with the completion of the \$1.4 billion funding facility for our A330 forward order."

Lease Activities: Contracts Signed for 14 Aircraft and Nine Engines

New Lease Agreements

AerCap signed 14 new lease agreements for aircraft in the fourth quarter 2008:

- Three new Airbus A330 for Air China (China),
- Three new Airbus A330 for Sichuan Airlines (China),
- Three new Airbus A320 for Air One (Italy),

- · Three Boeing B737-400 for P.T. Metro Batavia (Indonesia),
- One Boeing B767-300 for North American Airlines (USA),
- · One Boeing B767-300 for Aeromexico (Mexico).

The average term of the nine lease agreements for new aircraft signed during the fourth quarter was 144 months. The average term of the five lease agreements for used aircraft was 61 months. During the fourth quarter, AerCap also executed a letter of intent (signed and deposit paid by lessee) for one used aircraft lease with a lease term of 72 months.

AerCap also entered into nine engine lease agreements in the fourth quarter and delivered the engines to the lessees in the same period. Seven leased engines were CFM-56 and two were CF6-80 engines.

Deliveries

AerCap completed 12 aircraft deliveries in the fourth quarter under previously contracted lease agreements:

- · Three new Airbus A320 for Air One (Italy),
- · Two new Airbus A320 for Aeroflot-Russian Airlines (Russia),
- · Two new Airbus A330 for Aeroflot-Russian Airlines (Russia),
- · One Boeing B737 for Aeroflot-Don (Russia),
- One Boeing B737 for P.T. Metro Batavia (Indonesia),
- · One Boeing B737 for Ukraine International Airlines (Ukraine),
- One Airbus A319 for Turk Hava Yollari/THY Turkish Airlines (Turkey),
- · One McDonnell Douglas MD-11F for Centurion Air Cargo, Inc. (USA).

Purchase Activities: Eleven Aircraft Acquired in the Fourth Quarter

During the fourth quarter, AerCap acquired five new Airbus A320s and two new A330s under existing commitments with Airbus. In addition, AerCap acquired four older Airbus A320s for disassembly by its subsidiary AeroTurbine.

AerCap also bought out a joint venture partner's share in two Airbus A330-300 aircraft and became the sole owner of these aircraft. These aircraft were re-financed at a significantly higher advance rate, generating additional cash.

AerCap expanded its engine pool with the acquisition of three CFM-56 engines, two PW4170 engines and one CF6-80 engine in the fourth quarter.

In addition to the completed purchase activities above, AerCap signed letters of intent to purchase two B767-200 aircraft.

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Sales Activities: Three Aircraft Sold in the Fourth Quarter 2008

AerCap closed three aircraft sales transactions in the fourth quarter 2008, two of which were from its owned portfolio and one from its managed portfolio:

- · One new Airbus A330 (owned),
- · One new Airbus A320 (owned),
- · One McDonnell Douglas MD83 (managed).

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

In addition to the completed sales activities above, AerCap has signed agreements for the sale of two Boeing B757-200 from its owned portfolio.

Portfolio Summary

As of December 31, 2008, AerCap's portfolio consisted of 304 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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