
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 **May 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

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

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 May 21, 2010, AerCap Holdings N.V. announced that it has signed debt facility agreements totaling \$190 million with three banks from Europe and Asia.

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

Date: May 21, 2010

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EXHIBIT INDEX

99.1 AerCap Holdings N.V. Press Release.

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PRESS RELEASE

AerCap Signs Debt Facilities for Total of \$190 Million With Three Banks From Europe and Asia

Amsterdam, The Netherlands; May 21, 2010 — AerCap Holdings N.V. (“AerCap”, NYSE: AER) today announced that it has signed debt facility agreements totaling \$190 million. The facilities have terms ranging from eight to ten years and cover the financing of A319, A321 and A330 aircraft. The separate facilities were provided individually by Credit Agricole CIB, DBS Bank Singapore and Sumitomo Mitsui Banking Corporation (SMBC).

AerCap’s CFO, Keith Helming, said: “We are delighted to be expanding AerCap’s broad network in the financial community with DBS Bank from Singapore, a new business partner for us, and to build up on our already strong relationships with Credit Agricole CIB and SMBC.”

Including the new facilities, AerCap has now closed \$560 million of new debt in 2010 which brings the total amount of debt accessed by the company in the last two years to \$5.5 billion.

About AerCap Holdings N.V.

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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