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 2008

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 15, 2008, AerCap Holdings N.V. announced a strategic shift of the engine maintenance business at its AeroTurbine subsidiary.

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 Announces Strategic Shift in Engine Maintenance Business at its AeroTurbine Subsidiary

Amsterdam and Miami; October 15, 2008 – After completing a strategic review of its Engine Maintenance & Overhaul business unit segment, AeroTurbine, Inc. today announced that it is reducing operations of its engine performance restoration line. AeroTurbine will maintain current field service, accessories/line replaceable units (LRU) and light engine maintenance capabilities in support of its engine leasing business.

Currently, AeroTurbine performs full engine overhauls in support of its own CFM56-2/-3 engine lease portfolio. "We concluded that the investment and effort required to make AeroTurbine's engine maintenance platform commercially viable in the third party market would not provide the necessary return on our capital. Instead, required major engine repairs will be outsourced to world-wide maintenance providers where we can better leverage the existing business relationships of the AerCap Group," said Michael King, AeroTurbine President and Chief Executive Officer.

As a consequence, AeroTurbine will be reducing its workforce at the Miami, Florida location by approximately 50 positions. Michael King added: "This undertaking will provide an immediate financial benefit to AeroTurbine while allowing us to focus our resources on business development and customer service. I believe this provides us with a strong foundation to better optimize our core competencies while helping to provide strong momentum for growth."

About AerCap and AeroTurbine

AerCap is an integrated global aviation company with a leading market position in aircraft and engine leasing, trading and parts sales. AeroTurbine is a subsidiary of AerCap focusing on engine leasing and trading, airframe and engine disassembly, part sales and MRO services.

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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