

AerCap Holdings N.V.
AerCap House
Stationsplein 965
1117 CE Schiphol Airport Amsterdam
The Netherlands

Genesis Lease Limited
4450 Atlantic Avenue
Westpark, Shannon
Co. Clare, Ireland

February 3, 2010

VIA EDGAR

Pamela Long
Assistant Director
Division of Corporation Finance
U.S. Securities and Exchange Commission
100 F Street, NE
Washington, D.C. 20549-4631

**Re: AerCap Holdings N.V.
Registration Statement on Form F-4, as amended
Filed October 6, 2009, and amended on November 18, 2009, December 11, 2009,
January 4, 2010, January 26, 2010 and February 2, 2010
File No. 333-162365**

Dear Ms. Long:

Pursuant to Rule 461 under the Securities Act of 1933, as amended, AerCap Holdings N.V. (the "Company") respectfully requests that the Registration Statement No. 333-162365 on Form F-4 filed by the Company on October 6, 2009, as amended on November 18, 2009, December 11, 2009, January 4, 2010, January 26, 2010 and February 2, 2010, be declared effective as of 3:00 p.m. (Eastern time) on February 3, 2010, or as soon thereafter as practicable.

As requested by the staff of Division of Corporation Finance of the Commission, the Company acknowledges that:

- should the Securities and Exchange Commission (the "Commission") or the staff of the Commission ("the Staff"), acting pursuant to delegated authority, declare the filing effective, it does not foreclose the Commission from taking action with respect to the filing;
 - the action of the Commission or the Staff, acting pursuant to delegated authority, in declaring the filing effective, does not relieve the Company or Genesis Lease Limited ("Genesis") from its full responsibility for the adequacy and accuracy of the disclosure in the filing; and
 - the Company and Genesis may not assert Staff comments and the declaration of effectiveness as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.
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U.S. Securities and Exchange Commission
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If you have any questions, please do not hesitate to contact Robert S. Reder at (212) 530-5680 or Dean W. Sattler at (212) 530-5629, both of Milbank, Tweed, Hadley & McCloy LLP. In addition, please feel free to contact me at +31 206 559 600.

Sincerely,

/s/ KLAUS HEINEMANN

Klaus Heinemann
Chief Executive Officer
AerCap Holdings, N.V.

/s/ JOHN MCMAHON

John McMahon
Chairman, President and Chief Executive Officer
Genesis Lease Limited

Enclosures

cc: John McMahon—Genesis Lease Limited
Raymond O. Gietz—Weil, Gotshal & Manges LLP
Boris Dolgonos—Weil, Gotshal & Manges LLP
Robert S. Reder—Milbank, Tweed, Hadley & McCloy LLP
Drew S. Fine—Milbank, Tweed, Hadley & McCloy LLP
Dean W. Sattler—Milbank, Tweed, Hadley & McCloy LLP
