

AERCAP HOLDINGS N.V.

NOTICE OF THE ANNUAL GENERAL MEETING OF SHAREHOLDERS

Notice is hereby given of the annual general meeting of shareholders of AerCap Holdings N.V. (the "Company") to be held on 19 May 2009 at 4.00 p.m. (Amsterdam time) at the offices of the Company at AerCap House, Stationsplein 965, 1117 CE Amsterdam Schiphol Airport, The Netherlands.

Copies of the agenda for the meeting, stating the subjects to be considered - including the amendment to the Company's articles of association - and the other meeting documents can be obtained free of charge by shareholders and others entitled to attend the meeting and their representatives as of today until the close of the meeting at the offices of the Company and at American Stock Transfer & Trust Company, 6201 15th Avenue, Brooklyn, New York 11219, U.S.A. (attention shareholder services) and are also available free of charge during the meeting. Copies of these documents will also be made available on the Company's website (www.aercap.com).

The Board of Directors has determined that only shareholders who were shareholders on 20 April 2009, close of business (the "registration date") and who are registered in one of the Company's shareholders' registers on that date, or have a valid proxy from such a shareholder, may attend and vote at the annual general meeting of shareholders.

Investors who beneficially hold shares in the Company through the Depositary Trust Company wishing to exercise their meeting rights by submitting a proxy must return the proxy contained in the proxy materials in accordance with the instructions set forth therein no later than 5:00 p.m. (New York time) on 14 May 2009. Investors who beneficially hold shares in the Company through the Depositary Trust Company wishing to exercise their meeting rights in person must (i) notify the Company by submitting their name and number of beneficial shares through the Company's e-mail address at shareholdersmeeting@aercap.com no later than 5:00 p.m. (New York time) on 14 May 2009 and (ii) provide the Company with appropriate evidence of ownership

of and authority to vote the shares no later than 14 May 2009.

Investors who are registered in the Company's shareholders' registers wishing to exercise their meeting rights, in person or by proxy, must (i) notify the Company by submitting their name and number of registered shares through the Company's e-mail address at shareholdersmeeting@aercap.com by no later than 5:00 p.m. (Amsterdam time) on 14 May 2009 and, as the case may be, use (ii) the proxy form that can be obtained from the Company. The proxy forms need to be received by the Company no later than 5:00 p.m. (Amsterdam time) on 14 May 2009.

For further information please see www.aercap.com.

The Board of Directors

7 April 2009