

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 Thursday, May 31, 2012 at 9:30 a.m. (Amsterdam time) at the offices of the Company at AerCap House, Stationsplein 965, 1117 CE Schiphol, The Netherlands (the "**Meeting**").

The agenda for the Meeting, including proposals made by the Board of Directors, is as follows:

- 1. Opening.
- 2. Report of the Board of Directors on the 2011 financial year (for discussion).
- 3. Adoption of the annual accounts for the 2011 financial year (voting item).
- 4. Reservation and dividend policy (for discussion).
- 5. Release of liability of the directors (*leden raad van bestuur*) with respect to their management during the 2011 financial year (voting item).
- 6. Designation of Mr. Keith A. Helming as the designated person in article 16, paragraph 8 of the articles of association (voting item).
- 7. Appointment of PricewaterhouseCoopers Accountants N.V. as the registered accountants (voting item).
- 8. Reduction of capital through cancellation of the Company's ordinary shares acquired pursuant to the share repurchase program in 2011 (voting item).
- (a) Authorization of the Board of Directors to repurchase ordinary shares (voting item).

(b) Conditional authorization of the Board of Directors to repurchase additional ordinary shares (voting item).

- 10. Reduction of capital through cancellation of the Company's ordinary shares which may be acquired pursuant to the authorizations to repurchase shares (voting item).
- 11. Amendment to the articles of association and designation of each of the Company's directors and each lawyer at NautaDutilh N.V. to implement the amendment to the articles of association (voting item).
- 12. Questions.

13. Closing.

Copies of the agenda for the Meeting stating the topics to be considered, including the amendment to the Company's articles of association, and other meeting documents can be obtained free of charge by shareholders, others entitled to attend the Meeting and their respective representatives until the close of the Meeting at the offices of the Company and at Broadridge, the Company's transfer agent, at 51 Mercedes Way, Edgewood, NY, 11717, U.S.A. and are also available free of charge during the Meeting. Copies of these documents are also available on the Company's website (www.aercap.com).

The Board of Directors has determined that only shareholders who are shareholders as of May 3, 2012 at the 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 Meeting.

For the convenience of the Company's shareholders, the Company will mail this notice of the Meeting, the explanation to the agenda, the annual report for the 2011 financial year, the annual accounts for the 2011 financial year and the draft amendment to the Company's articles of association together with a proxy form (the "**Proxy Materials**") to shareholders who are registered in the Company's shareholders' registers and to beneficial holders of the Company's ordinary shares who hold their shares indirectly through the Depositary Trust Company (collectively, the "**Investors**") who owned their registered or beneficial shares (collectively, the "**Shares**") on March 26, 2012. This mailing will allow Investors' votes will not count unless they remain Investors on the registration date, May 3, 2012.

The Company will make a second distribution of the Proxy Materials on the Registration Date, May 3, 2012, to Investors who acquired their Shares after March 26, 2012 to ensure that all Investors who own the Company's Shares on May 3, 2012 have an opportunity to vote.

In both cases, Investors who receive the Proxy Materials should vote promptly after they receive the Proxy Materials in accordance with the voting instructions contained in the Proxy Materials to allow sufficient time for the proxies to be received and tabulated.

Investors 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 May 23, 2012. Investors wishing to exercise their meeting rights in person must (i) notify the Company by submitting by email their name and the number of beneficial shares or the number of registered shares they hold to the Company's e-mail address at shareholdersmeeting@aercap.com no later than 5:00 p.m. (New York time) on May 23, 2012 and (ii) provide the Company with appropriate evidence of ownership of and authority to vote in the case of any shares beneficially owned and the proxy forms in the case of any shares held directly no later than May 23, 2012.

Access to the Meeting by an Investor or proxy holder is permitted after verification of personal identification.

For further information please see www.aercap.com.

Requests for information can also be sent to: Shareholdersmeeting@aercap.com

The Board of Directors

April 3, 2012