U.S. SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM F-3

REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933

AERCAP HOLDINGS N.V.

(Exact name of registrant as specified in its charter)

Netherlands

(State or other jurisdiction of incorporation or organization)

Not Applicable (I.R.S. Employer Identification No.)

Stationsplein 965 1117 CE Schiphol Airport The Netherlands +31 20 655 9655

(Address, including zip code, and telephone number, including area code, of registrant's principal executive offices)

Puglisi & Associates 850 Library Avenue, Suite 204 Newark, Delaware 19711 Tel. (302) 738-6680

(Name, address, including zip code, and telephone number, including area code, of agent for service)

Copies to:

Douglas A. Tanner Paul E. Denaro Milbank, Tweed, Hadley & McCloy LLP One Chase Manhattan Plaza New York, NY 10005 (212) 530-5000 Erwin den Dikken Chief Legal Officer Stationsplein 965 1117 CE Schiphol Airport The Netherlands +31 20 655 9655

Approximate date of commencement of proposed sale to the public: From time to time after this registration statement becomes effective.

If the only securities being registered on this Form are being offered pursuant to dividend or reinvestment plans, please check the following box. \Box

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, check the following box.

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. \Box

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. \Box

If this Form is a registration statement pursuant to General Instruction I.C. or a post-effective amendment thereto that shall become effective upon filing with the Commission pursuant to Rule 462(e) under the Securities Act, check the following box.

If this Form is a post-effective amendment to a registration statement filed pursuant to General Instruction I.C. filed to register additional securities or additional classes of securities pursuant to Rule 413(b) under the Securities Act, check the following box. \Box

CALCULATION OF REGISTRATION FEE

		Proposed Maximum	Proposed Maximum			
	Amount to be	Offering Price per	Agg	gregate Offering	Amount	of Registration
Title of Each Class of Securities to be Registered	Registered(1)	Share		Price		Fee
Ordinary Shares par value €0.01	745,965	\$ 11.54(2)	\$	8,608,436.10(2)	\$	986.53

number of ordinary shares of the Registrant as may be offered or issued to prevent dilution resulting from ordinary share splits, ordinary share dividends or similar transactions.

(2) Estimated solely for the purpose of determining the registration fee pursuant to Rule 457(c) of the Securities Act, based on the average of the reported high and low prices of the ordinary shares on the New York Stock Exchange on [November 1], 2011.

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PROSPECTUS



Ordinary Shares

This prospectus relates to the resale, from time to time, of up to 745,965 of our ordinary shares, par value $\notin 0.01$ per share, by the selling shareholders. The selling shareholders are certain members of our senior management and board of directors, who received or will receive their shares from one of our shareholders. This prospectus is part of a registration statement that replaces our previous registration statement filed on November 7, 2008.

We will not receive any proceeds from sales of the ordinary shares offered by the selling shareholders pursuant to this prospectus. We will pay all expenses of registering the ordinary shares. The selling shareholders identified in this prospectus, or their pledgees, donees, transferees or other successors-in-interest, may, from time to time, sell, transfer or otherwise dispose of any or all of their ordinary shares or interests in ordinary shares on any stock exchange, market or trading facility on which the ordinary shares are traded or in private transactions. These dispositions may be at fixed prices, at the prevailing market price at the time of sale, at prices related to the prevailing market price, at varying prices determined at the time of sale, or at negotiated prices.

The selling shareholders and any agents or broker-dealers that participate with the selling shareholders in the distribution of the ordinary shares may be considered "underwriters" within the meaning of the Securities Act of 1933, as amended (the "Securities Act"), and, in that event, any commissions received by them and any profit on the resale of the shares may be considered underwriting commissions or discounts under the Securities Act.

Our ordinary shares are listed on the New York Stock Exchange, or "NYSE" under the symbol "AER." On November 1, 2011, the closing sale price of our ordinary shares on the NYSE was \$11.54 per share. You are urged to obtain the current market quotations for our ordinary shares.

Investing in our ordinary shares involves risk. See "Risk Factors" beginning on page 1 of this prospectus.

Neither the Securities and Exchange Commission nor any state securities commission or other regulatory body has approved or disapproved of these securities or passed upon the accuracy or adequacy of this prospectus. Any representation to the contrary is a criminal offense.

The date of this prospectus is November 2, 2011.

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ABOUT THIS PROSPECTUS

This prospectus is part of a registration statement that we filed with the U.S. Securities and Exchange Commission ("SEC") utilizing a shelf registration process. Under this shelf process, the selling shareholders may offer up to a total of 745,965 ordinary shares, from time to time, in one or more offerings, in any manner described under the section in this prospectus entitled "Plan of Distribution."

ABOUT AERCAP

AerCap is the world's leading independent aircraft leasing company and has one of the youngest fleets in the industry. AerCap has approximately \$10 billion of assets on its balance sheet and over 350 aircraft with a focus on modern and fuel-efficient narrowbodies and widebodies. AerCap is a New York Stock Exchange-listed company (AER) headquartered in The Netherlands with offices in Ireland, the United States, China, Singapore, the United Arab Emirates, and the United Kingdom. www.aercap.com

RISK FACTORS

Investing in our ordinary shares involves risk. Those risks are specified in the section captioned "Risk Factors" in Item 3 of our Annual Report on Form 20-F for the year ended December 31, 2010, filed with the SEC on March 23, 2011 as amended by our Form 20-F/A filed with the SEC on April 20, 2011 (our "Annual Report"). You should carefully consider those risks together with the other information in this prospectus and incorporated by reference herein before deciding to invest in our ordinary shares. If any of those risks actually occur, our business, financial condition and results of operations could be materially and adversely affected. In that case, the trading price of our ordinary shares could decline, and you may lose all or part of your investment.

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus and the documents incorporated by reference include forward looking statements, principally under the captions "Prospectus Summary", "Aircraft, Engine and Aviation Parts Industry", "Risk Factors", "Management's Discussion and Analysis of Financial Condition and Results of Operations" and "Business" in our Annual Report and under "Management's Discussion and Analysis of Financial Condition and Results of Operations" in our quarterly reports furnished on Form 6-K. We have based these forward looking statements largely on our current beliefs, and projections about future events and financial trends affecting our business. Many important factors, in addition to those discussed in this prospectus and the documents incorporated by reference, could cause our actual results to differ substantially from those anticipated in our forward looking statements, including, among other things:

- · the availability of capital to us and to our customers and changes in interest rates,
- the ability of our lessees and potential lessees to make operating lease payments to us,
- our ability to successfully negotiate aircraft and engine purchases, sales and leases, to collect outstanding amounts due and to repossess aircraft and engines under defaulted leases, and to control costs and expenses,
- · decreases in the overall demand for commercial aircraft and engine leasing and aircraft management services,
- the economic condition of the global airline and cargo industry,
- · competitive pressures within the industry,
- the negotiation of aircraft management services contracts,
- regulatory changes affecting commercial aircraft operators, aircraft maintenance, engine standards, accounting standards and taxes, and
- the risks set forth in "Risk Factors."

The words "believe", "may", "will", "aim", "estimate", "continue", "anticipate", "intend", "expect" and similar words are intended to identify forward looking statements. Forward looking statements include information concerning our possible or assumed future results of operations, business strategies, financing plans, competitive position, industry environment, potential growth opportunities, the effects of future regulation and the effects of

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competition. Forward looking statements speak only as of the date they were made and we undertake no obligation to update publicly or to revise any forward looking statements after we distribute this prospectus because of new information, future events or other factors. In light of the risks and uncertainties described above, the forward looking events and circumstances described in this prospectus might not occur and are not guarantees of future performance.

USE OF PROCEEDS

We will not receive any proceeds from the sale of the ordinary shares by the selling shareholders.

SELLING SHAREHOLDERS

The selling shareholders are certain members of our senior management and board of directors, who received or will receive their shares from one of our shareholders. This prospectus is part of a registration statement that replaces our previous registration statement filed on November 7, 2008.

The table below shows all ordinary shares delivered or to be delivered to certain members of our senior management and board of directors by one of our shareholders that may be offered pursuant to this prospectus. These ordinary shares include 745,965 ordinary shares issuable upon the exercise of options, all of which were vested as of the date of this Prospectus. To our knowledge, none of the selling shareholders is a holder of 10% or more of our ordinary shares or a broker-dealer. The information provided in the table below with respect to each selling shareholder has been obtained from the selling shareholders. Because the selling shareholders may sell all, some or none of the ordinary shares beneficially owned by them, we cannot estimate either the number or the percentage of ordinary shares that will be beneficially owned by the selling shareholders following this offering. See the section captioned "Plan of Distribution." However, the table assumes that all ordinary shares being offered under this prospectus are ultimately sold. The ordinary shares covered by this prospectus include ordinary shares offered by any pledgee, donee, transferee or other successor-in-interest of the selling shareholders, provided that this prospectus will be amended or supplemented if required by applicable law.

We are registering the ordinary shares in order to permit the selling shareholders to offer the ordinary shares for resale from time to time. The table below sets forth the total number of ordinary shares that the selling shareholders may sell under this registration statement, as adjusted for any ordinary share split, ordinary share dividend or similar transaction.

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	Ordinary Shares	Fully Diluted Ownership Percentage(1)
Directors:		
Ronald J. Bolger	27,734	*
James N. Chapman	55,300	*
Marius J. L. Jonkhart	27,734	*
Aengus Kelly(2)	122,015	*
Senior Management:		
Wouter M. (Erwin) den Dikken	61,005	*
Keith A. Helming	452,177	*
Total	745,965	* %

* Indicates less than 1%.

(1) Percentage amount assumes the exercise by such persons of all options to acquire shares exercisable within 60 days and no exercise of options by any other person.

(2) Mr. Kelly is both a member of our Board of Directors and our Chief Executive Officer.

The addresses of each selling shareholder is c/o AerCap Holdings N.V., Stationsplein 965, 1117 CE Schipol Airport, The Netherlands.

PLAN OF DISTRIBUTION

The selling shareholders, which as used herein includes donees, pledgees, transferees or other successors-in-interest selling ordinary shares or interests in ordinary shares received after the date of this prospectus from a selling shareholder as a gift, pledge, partnership distribution or other transfer, may, from time to time, sell, transfer or otherwise dispose of any or all of their ordinary shares or interests in ordinary shares on any stock exchange, market or trading facility on which the ordinary shares are traded or in private transactions. These dispositions may be at fixed prices, at prevailing market prices at the time of sale, at prices related to the prevailing market price, at varying prices determined at the time of sale, or at negotiated prices.

The selling shareholders may use any one or more of the following methods when disposing of ordinary shares or interests therein:

ordinary brokerage transactions and transactions in which the broker-dealer solicits purchasers;

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- block trades in which the broker-dealer will attempt to sell the ordinary shares as agent, but may position and resell a portion of the block as principal to facilitate the transaction;
- · purchases by a broker-dealer as principal and resale by the broker-dealer for its account;
- an exchange distribution in accordance with the rules of the applicable exchange;
- · privately negotiated transactions;
- through the writing or settlement of options or other hedging transactions, whether through an options exchange or otherwise;
- broker-dealers may agree with the selling shareholders to sell a specified number of such ordinary shares at a stipulated price per share; and
- · a combination of any such methods of sale.

The selling shareholders may, from time to time, pledge or grant a security interest in some or all of the ordinary shares owned by them and, if they default in the performance of their secured obligations, the pledgees or secured parties may offer and sell the ordinary shares, from time to time, under this prospectus, or under an amendment to this prospectus under Rule 424(b)(3) or other applicable provision of the Securities Act amending the list of selling shareholders to include the pledgee, transferee or other successors in interest as selling shareholders under this prospectus. The selling shareholders also may transfer the ordinary shares in other circumstances, in which case the transferees, pledgees or other successors in interest will be the selling beneficial owners for purposes of this prospectus.

In connection with the sale of our ordinary shares or interests therein, the selling shareholders may loan or pledge the ordinary shares to broker-dealers that in turn may sell these securities. The selling shareholders may also enter into option or other transactions with broker-dealers or other financial institutions or the creation of one or more derivative securities which require the delivery to such broker-dealer or other financial institution of ordinary shares offered by this prospectus, which ordinary shares such broker-dealer or other financial institution of the transaction (as supplemented or amended to reflect such transaction).

The aggregate proceeds to the selling shareholders from the sale of the ordinary shares offered by them will be the purchase price of the ordinary shares less discounts or commissions, if any. Each of the selling shareholders reserves the right to accept and, together with their agents from time to time, to reject, in whole or in part, any proposed purchase of ordinary shares to be made directly or through agents. We will not receive any of the proceeds from this offering.

The selling shareholders also may resell all or a portion of the ordinary shares in open market transactions in reliance upon Rule 144 under the Securities Act of 1933, provided that they meet the criteria and conform to the requirements of that rule.

The selling shareholders and any underwriters, broker-dealers or agents that participate in the sale of the ordinary shares or interests therein may be "underwriters" within the meaning of Section 2(11) of the Securities Act. Any discounts, commissions, concessions or profit they earn on any resale of the ordinary shares may be underwriting discounts and commissions under the Securities Act. Selling shareholders who are "underwriters" within the meaning of Section 2(11) of the Securities Act will be subject to the prospectus delivery requirements of the Securities Act.

To the extent required, the ordinary shares to be sold, the names of the selling shareholders, the respective purchase prices and public offering prices, the names of any agents, dealer or underwriter, any applicable commissions or discounts with respect to a particular offer will be set forth in an accompanying prospectus supplement or, if appropriate, a post-effective amendment to the registration statement that includes this prospectus.

In order to comply with the securities laws of some states, if applicable, the ordinary shares may be sold in these jurisdictions only through registered or licensed brokers or dealers. In addition, in some states the ordinary

shares may not be sold unless they have been registered or qualified for sale or an exemption from registration or qualification requirements is available and is complied with.

We have advised the selling shareholders that the anti-manipulation rules of Regulation M under the Exchange Act may apply to sales of ordinary shares in the market and to the activities of the selling shareholders and their affiliates. In addition, to the extent applicable, we will make copies of this prospectus (as it may be supplemented or amended from time to time) available to the selling shareholders for the purpose of satisfying the prospectus delivery requirements of the Securities Act. The selling shareholders may indemnify any broker-dealer that participates in transactions involving the sale of the ordinary shares against certain liabilities, including liabilities arising under the Securities Act.

INTEREST OF NAMED EXPERTS AND COUNSEL

None.

MATERIAL CHANGES

Except as otherwise described our Annual Report on Form 20-F for the fiscal year ended December 31, 2010 and in our Reports on Form 6-K furnished under the Exchange Act and incorporated by reference herein, no reportable material changes have occurred since December 31, 2010.

ENFORCEABILITY OF CIVIL LIABILITIES

We are a Netherlands public limited liability company ("*naamloze vennootschap*"). Most of our directors and executive officers live outside of the United States. Most of the assets of our directors and most of our assets are located outside of the United States. As a result, it may not be possible to serve process on us or on such persons in the United States or to enforce judgments obtained in U.S. courts against them or us based on the civil liability provisions of the securities laws of the United States. Under our articles of association (i) certain disputes between, among others, our shareholders and us and or our directors must be exclusively submitted to Netherlands courts, and (ii) the legal relationships between, among others, those persons are governed by the laws of The Netherlands. There is doubt as to whether Netherlands courts will enforce claims for punitive damage. An award rendered by a foreign court is recognized and enforceable in The Netherlands only under a treaty to that effect between the state of the foreign court and The Netherlands. In the absence of a treaty providing for the recognition and enforcement of judgments of U.S. courts, Netherlands courts will not recognize and enforce judgments of U.S. courts based upon these civil liability provisions.

We have appointed Puglisi & Associates as our agent solely to receive service of process in any action against us in any U.S. federal court or the courts of the State of New York arising out of this offering.

WHERE YOU CAN FIND MORE INFORMATION

We have filed a registration statement on Form F-3, including the exhibits and schedules thereto, with the SEC under the Securities Act, and the rules and regulations thereunder, for the registration of the ordinary shares that are being offered by this prospectus. This prospectus does not include all of the information contained in the registration statement. You should refer to the registration statement and its exhibits for additional information. Whenever we make reference in this prospectus to any of our contracts, agreements or other documents, the references are not necessarily complete and you should refer to the exhibits attached to the registration statement for copies of the actual contract, agreements or other documents.

We are subject to the information reporting requirements of the Exchange Act, applicable to foreign private issuers. As a "foreign private issuer," we are exempt from the rules under the Exchange Act prescribing certain disclosure and procedural requirements for proxy solicitations, and our officers, directors and principal shareholders are exempt from the reporting and "short-swing" profit recovery provisions contained in Section 16 of the Exchange Act, with respect to their purchases and sales of shares. We file with the SEC an Annual Report on Form 20-F containing financial statements audited by an independent registered public accounting firm. We also furnish Reports on Form 6-K containing unaudited interim financial information for the first three quarters of each fiscal year.

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You may read and copy any document we file with or furnish to the SEC at the SEC's Public Reference Room at 100 F. Street, N.E., Washington, D.C. 20549. You may also obtain copies of the documents at prescribed rates by writing to the Public Reference Section of the SEC at 100 F. Street, N.E., Washington, DC 20549. Please call the SEC at 1-800-SEC-0330 to obtain information on the operation of the Public Reference Room. In addition, the SEC maintains an Internet site that contains reports, proxy and information statements, and other information regarding issuers that file electronically with the SEC. You can review our SEC filings, including the registration statement by accessing the SEC's Internet website at www.sec.gov. We will provide each person, including any beneficial owner, to whom a prospectus is delivered, a copy of any or all of the information that has been incorporated by reference into this prospectus but not delivered with this prospectus upon written or oral request at no cost to the requester. Requests should be directed to: AerCap Holdings N.V., Stationsplein 965, 1117 CE Schipol Airport, The Netherlands, or telephoning us at +31 20 655 9655. Our website is located at

INCORPORATION OF CERTAIN DOCUMENTS BY REFERENCE

The following documents filed with the SEC by us are incorporated herein by reference:

- our Annual Report on Form 20-F for the fiscal year ended December 31, 2010, filed with the SEC on March 23, 2011 as amended by our Form 20-F/A filed with the SEC on April 20, 2011;
- our Reports on Form 6-K furnished with the SEC on April 18, 2011, May 6, 2011, May 19, 2011, May 31, 2011, June 10, 2011, July 1, 2011, July 15, 2011, August 3, 2011, August 5, 2011, September 2, 2011, September 19, 2011, October 11, 2011, October 13, 2011 and our Report on Form 6-K/A furnished July 18, 2011; and
- the description of our ordinary shares, par value €0.01 per share set forth under "Description of Ordinary Shares" in our Registration Statement on Form F-1 (File No. 333—138381), as amended, which was originally filed with the Commission on November 16, 2006.

All documents subsequently filed by us with the Commission pursuant to Sections 13(a), 13(c), 14 and 15(d) of the Exchange Act, prior to the filing of a post-effective amendment to this Registration Statement which indicates that all securities offered have been sold or which deregisters all securities then remaining unsold, shall be deemed to be incorporated by reference in this Registration Statement, a report (or portion thereof) furnished on Form 6-K shall not be incorporated by reference herein shall be deemed to be modified or superseded for purposes of this Registration Statement to the extent that a statement contained herein or in any subsequently filed document to the extent that a statement contained herein. Any statement so modified or superseded shall not be deemed to be incorporated by reference herein shall be deemed to be modified or superseded shall not be deemed to be incorporated by reference herein statement. Any statement so modified or superseded shall not be deemed to be incorporated by reference herein statement. Any statement so modified or superseded shall not be deemed to be incorporated by reference herein statement. Any statement so modified or superseded shall not be deemed to be incorporated by reference herein statement. Copies of these documents are not required to be filed with this Registration Statement.

EXPENSES

We anticipate that our total expenses with respect to the registration statement of which this prospectus is a part and the offering to be made hereby will aggregate approximately \$33,987, of which \$986.53 is attributable to the SEC registration fee, approximately \$20,000 is attributable to legal fees and approximately \$13,000 is attributable to accounting fees. None of these expenses will be paid by the selling shareholders.

SEC POSITION ON INDEMNIFICATION FOR SECURITIES ACT LIABILITIES

Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers or persons controlling the registrant pursuant to the foregoing provisions, the registrant has been informed that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Act and is therefore unenforceable.

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PROSPECTUS

November 2, 2011

INFORMATION NOT REQUIRED IN PROSPECTUS

Item 8. Indemnification of Directors and Officers.

We have a directors and officers liability insurance policy which insures directors and officers against the cost of defense, settlement or payment of claims and judgments under some circumstances.

Although Netherlands law does not contain any provisions with respect to the indemnification of officers and directors, the concept of indemnification of directors of a company for liabilities arising from their actions as members of the executive or supervisory boards is, in principle, accepted in The Netherlands. AerCap's Articles of Association provide for indemnification of directors and officers by the company to the fullest extent permitted by Netherlands law against liabilities, expenses and amounts paid in settlement relating to claims, actions, suits or proceedings to which a director becomes a party as a result of his or her position.

The indemnification provided above is not exclusive of any rights to which any of our directors or officers may be entitled. The general effect of the forgoing provisions may be to reduce the circumstances in which a director or officer may be required to bear the economic burdens of the forgoing liabilities and expenses.

Item 9. Exhibits and Financial Statement Schedules.

(a) The following exhibits are filed herewith:

Exhibit Number	Exhibit Description		
4.1	Form of Share Certificate (incorporated herein by reference to Exhibit 4.1 of the Company's Registration Statement on Form F-1 (No. 333-138381), as amended, originally filed with the Commission on November 16, 2006).		
5.1	Opinion of NautaDutilh N.V.		
23.1	Consent of PricewaterhouseCoopers Accountants N.V.		
23.2	Consent of NautaDutilh N.V. (included in Exhibit 5.1).		
24.1	Power of Attorney (included in signature page to this Registration Statement).		
Item 10. U	Jndertakings.		

The undersigned registrant hereby undertakes:

(1) To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:

- (i) To include any prospectus required by Section 10(a)(3) of the Securities Act of 1933;
- (ii) To reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the registration statement. Notwithstanding the foregoing, any increase or decrease in volume of securities

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offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than a 20 percent change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement; and

(iii) To include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such information in the registration statement;

provided, *however*, that paragraphs (i), (ii) and (iii) above do not apply if the information required to be included in a posteffective amendment by those paragraphs is contained in periodic reports filed or furnished to the Securities and Exchange Commission by the registrant pursuant to Section 13 or Section 15(d) of the Exchange Act of 1934 that are incorporated by reference in this registration statement or is contained in a form of prospectus filed pursuant to Rule 424(b) that is part of this Registration Statement.

(2) That, for the purpose of determining any liability under the Securities Act of 1933, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof;

(3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering;

(4) To file a post-effective amendment to the registration statement to include any financial statements required by Item 8.A of Form 20-F at the start of any delayed offering or throughout a continuous offering. Financial statements and information otherwise required by Section 10(a)(3) of the Securities Act need not be furnished, *provided* that the registrant includes in the prospectus, by means of a post-effective amendment, financial statements required pursuant to this paragraph and other information necessary to ensure that all other information in the prospectus is at least as current as the date of those financial statements. Notwithstanding the foregoing, a post-effective amendment need not be filed to include financial statements and information required by Section 10(a)(3) of the Act or Rule 3-19 of Regulation S-K if such financial statements and information are contained in periodic reports filed with or furnished to the Commission by the registrant pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 that are incorporated by reference in this Registration Statement; and

- (5) That, for the purpose of determining liability under the Securities Act of 1933 to any purchaser,
- (i) Each prospectus filed by the registrant pursuant to Rule 424(b)(3) shall be deemed to be part of the Registration Statement as of the date the filed prospectus was deemed part of and included in the Registration Statement; and
- (ii) Each prospectus required to be filed pursuant to Rule 424(b)(2), (b)(5), or (b)(7) as part of a registration statement in reliance on Rule 430B relating to an offering made pursuant to Rule 415(a)(l)(i), (vii), or (x) for the purpose of providing the information required by section 10(a) of the Securities Act of 1933 shall be deemed to be part of and included in the registration statement as of the earlier of the date such form of prospectus is first used after effectiveness or the date of the first contract of sale of securities in the offering described in the prospectus. As provided in Rule 430B, for liability purposes of the issuer and any person that is at that date an underwriter, such date shall be deemed to be a new effective date of the registration statement relating to the securities in the registration statement to which that prospectus relates, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof. Provided, however, that no statement made in a registration statement or prospectus that is part of the registration statement will, as to a purchaser with a time of contract of sale prior to such effective date, supersede or modify any statement that was made in the registration statement or prospectus that was part of the registration statement or made in any such document immediately prior to such effective date;

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(6) The undersigned registrant hereby undertakes that, for purposes of determining any liability under the Securities Act of 1933, each filing of the registrant's annual report pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934 (and, where applicable, each filing of an employee benefit plan's annual report pursuant to Section 15(d) of the Securities Exchange Act of 1934) that is incorporated by reference in the registration statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

(7) Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers or controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the SEC such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

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SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form F-3 and has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Amsterdam, the Netherlands, on this November 2, 2011.

AERCAP HOLDINGS N.V.

By: /s/ Aengus Kelly Aengus Kelly Chief Executive Officer (Principal Executive Officer)

POWER OF ATTORNEY

We, the undersigned officers and directors of AerCap Holdings N.V., hereby severally constitute and appoint James N. Chapman and Aengus Kelly and both of them, our true and lawful attorneys-in-fact, with full power of substitution, for them, together or individually, in any and all capacities, to sign for us and in our names, the Registration Statement on Form F-3 filed with the Securities and Exchange Commission, and any and all amendments to said Registration Statement (including post-effective amendments), and to file or cause to be filed the same, with all exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys, and each of them full power and authority to do and perform each and every act and thing requisite and necessary to be done in connection therewith, as fully to all intents and purposes as each of them might or could do in person, and hereby ratifying and confirming all that said attorneys, or their substitute, shall do or cause to be done by virtue of this Power of Attorney.

Pursuant to the requirements of the Securities Act of 1933 this Registration Statement has been signed by the following persons in the capacities and on the dates indicated.

Signature	Title	Date
/s/ Pieter Korteweg Pieter Korteweg	Chairman of the Board of Directors	November 2, 2011
/s/ Aengus Kelly Aengus Kelly	Director and Chief Executive Officer	November 2, 2011
/s/ Salem Rashed Abdulla Ali Al Noaimi Salem Rashed Abdulla Ali Al Noaimi	Non-Executive Director	November 2, 2011
/s/ James N. Chapman James N. Chapman	Non-Executive Director	November 2, 2011
/s/ Paul T. Dacier Paul T. Dacier	Non-Executive Director	November 2, 2011
/s/ Michael Gradon Michael Gradon	Non-Executive Director	November 2, 2011
/s/ Marius J.L. Jonkhart Marius J.L. Jonkhart	Non-Executive Director	November 2, 2011
/s/ Keith A. Helming Keith A. Helming	Chief Financial Officer	November 2, 2011
/s/ Najim Chellioui Najim Chellioui	Chief Accounting Officer	November 2, 2011
/s/ Homaid Abdulla Al Shemmari Homaid Abdulla Al Shemmari	Non-Executive Director	November 2, 2011
/s/ Gerald P. Strong Gerald P. Strong	Non-Executive Director	November 2, 2011
/s/ Robert G. Warden Robert G. Warden	Non-Executive Director	November 2, 2011
/s/ Donald Puglisi Donald Puglisi	Authorized Representative in the United States	November 2, 2011

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Exhibits Index

Exhibit Number	Exhibit Description
4.1	Form of Share Certificate (incorporated herein by reference to Exhibit 4.1 of the Company's Registration Statement on Form F-1 (No. 333-138381), as amended, originally filed with the Commission on November 16, 2006).

5.1 Opinion of NautaDutilh N.V.

- 23.1 Consent of PricewaterhouseCoopers Accountants N.V.
- 23.2 Consent of NautaDutilh N.V. (included in Exhibit 5.1).
- 24.1 Power of Attorney (included in signature page to this Registration Statement).

Postbus 7113 1007 JC Amsterdam Strawinskylaan 1999 1077 XV Amsterdam T +31 20 717 10 00 F +31 20 717 11 11

Ladies and Gentlemen,

SEC Exhibit 5 opinion letter re Form F-3 Registration Statement

This opinion letter is rendered to you in order to be filed as an exhibit to the registration statement on Form F-3 to be filed by you with the U.S. Securities and Exchange Commission on or about 2 November 2011 (as amended, the "**Registration Statement**").

Amsterdam, 2 November 2011

AerCap Holdings N.V.

Stationsplein 965 AerCap House 1117 CE Schiphol The Netherlands

We have acted as legal counsel to AerCap Holdings N.V., a public company with limited liability (*naamloze vennootschap*), organized under the laws of the Netherlands ("AerCap") in connection with the registration of up to 745,965 of AerCap's ordinary shares in registered form with a nominal value of EUR 0.01, currently registered in the shareholders register of the Company in the name of Fern S.a.r.l. which may - after having being acquired from Fern S.a.r.l. - be sold from time to time by shareholders of the Company (the "**Selling Stockholders**") named under the caption "Selling Shareholders" in the Registration Statement, all as described in the Registration Statement (the "**Ordinary Shares**").

This opinion letter is addressed to you. It may be relied upon only in connection with the Registration Statement. This opinion letter is strictly limited to the matters stated in it and may not be read as extending by implication to any matters not specifically referred to in it. Nothing in this opinion letter should be taken as expressing an opinion in respect of any representation or warranty or

NautaDutilh N.V. has its seat at Rotterdam, The Netherlands and is registered in the Commercial Register in Rotterdam under number 24338323. All services and other work are carried out under a contract for professional services ("overeenkomst van opdracht") with NautaDutilh N.V., subject to the general conditions of NautaDutilh N.V. These general conditions include, among other provisions, a limitation of liability clause and have been filed with the Rotterdam Court of First Instance. They can be consulted at www.nautadutilh.com and will be provided free of charge upon request.

ABN AMRO Bank 46.69.93.293; Fortis Bank 64.21.43.218; Postbank 50296; Account Name: Stichting Beheer Derdengelden Advocatuur NautaDutilh.

other information contained in any document.

In rendering the opinions expressed in this opinion letter, we have exclusively reviewed and we have relied upon the following documents: (i) a photocopy of the deed of incorporation of AerCap, dated 10 July 2006; (ii) a photocopy of its current articles of association as lastly amended on 23 May 2011, (iii) the minutes of shareholders meetings of AerCap held on 10 November 2006, 11 May 2007, 9 May 2008, 19 May 2009, 27 May 2010 and 18 May 2011; (iv) resolutions of the board of AerCap passed on 18 October 2011; (the minutes and resolutions mentioned in (ii) and (iv) respectively are collectively referred to as the "Resolutions") (v) a copy of the shareholders register of AerCap; (vi) a private deed of issue of ordinary shares in AerCap dated 10 November 2006; (vii) an online extract dated the date hereof from the Commercial Register relating to AerCap that (X) AerCap has not (i) been dissolved (*ontbonden*), (ii) ceased to exist pursuant to a merger (*fusie*) or a division (*splitsing*), (iii) had its assets placed under administration (*onder bewind gesteld*), (iv) been declared bankrupt (*failliet verklaard*) or granted a suspension of payments (*surseance van betaling verleend*), or (v) been made subject to any other insolvency proceedings under any applicable law or otherwise be limited in its rights to dispose of its assets and (Y) the Resolutions are in full force and effect, correctly reflect the resolutions stated in them and the factual statements made in the Resolutions are complete and correct.

This opinion letter sets out our opinion on certain matters of the laws with general applicability of the Netherlands as they stand at today's date and as they are presently interpreted under published authoritative case law of the Dutch courts and the opinions expressed in this opinion letter are limited in all respects to and are to be construed and interpreted in accordance with, Dutch law. We do not express any opinion on public international law or on the rules promulgated under or by any treaty or treaty organisation, except insofar as these rules are directly applicable in the Netherlands, nor do we express any opinion on Dutch or European competition law or tax laws. No undertaking is assumed on our part to revise, update or amend this opinion letter in connection with or to notify or inform you of, any developments and/or changes of Dutch law subsequent to today's date.

This opinion letter may only be relied upon on the condition that you accept that the legal relationship between yourselves and NautaDutilh N.V. is governed by Dutch law and our general conditions and that any issues of interpretation or liability arising out of or in connection with this opinion letter are submitted to the exclusive jurisdiction of the competent courts at Amsterdam, the Netherlands.

In this opinion letter, legal concepts are expressed in English terms. The Dutch legal concepts concerned may not be identical in meaning to the concepts described by the English terms as they exist under the law of other jurisdictions. In the event of a conflict or inconsistency, the relevant expression shall be deemed to refer only to the Netherlands legal concepts described by the English terms.

For the purposes of this opinion letter, we have assumed that all documents reviewed by us as originals are complete and authentic and the signatures on these documents are the genuine signatures of the persons purporting to have signed the same, all documents reviewed by us as drafts of documents or as fax, photo or electronic copies of originals are in conformity with the executed originals and these originals are complete and authentic and the signatures on them are the genuine signatures of the persons purporting to have signed the same and these same and the statements contained in the Certificate are true and correct on the date of this opinion letter.

Based upon and subject to the foregoing and subject to the qualifications set forth in this opinion letter, we are of the opinion that:

- 1. AerCap has been duly incorporated and is validly existing as a public company with limited liability (*naamloze vennootschap*) under Dutch law.
- 2. The Ordinary Shares have been validly issued, fully paid and are non-assessable.

The opinions expressed above are subject to the following qualifications:

- A. The term "non-assessable" as used herein means that the holder of a share will not by reason of being merely such a holder, be subject to assessment or calls by AerCap or its creditors for further payment on such share.
- B. Registration in, or deregistration from a shareholders register is not a constitutive requirement under the laws of the Netherlands for (a) the authorisation, creation, issue, transfer, cancellation or redemption of shares in the capital of a company or (b) the creation of any lien, claim or other encumbrance, including without limitation a right of pledge or a right of usufruct with respect to shares; consequently, there is no way of verifying conclusively whether the information contained in a shareholders register is accurate.

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We consent to the filing of this opinion as an Exhibit to the Registration Statement hereby and further consent to the reference to our firm in the Registration Statement.

Yours faithfully,

NautaDutilh N.V.

Consent of independent registered public accounting firm:

We hereby consent to the incorporation by reference in this Registration Statement on Form F-3 of our report dated March 23, 2011 relating to the financial statements and the effectiveness of internal control over financial reporting, which appears in AerCap Holdings N.V.'s Annual Report on Form 20-F for the year ended December 31, 2010.

/s/ P.C. Dams RA

PricewaterhouseCoopers Accountants N.V. Amsterdam, the Netherlands November 2, 2011