

# FORM 3

**UNITED STATES SECURITIES AND EXCHANGE  
COMMISSION  
Washington, D.C. 20549**

OMB APPROVAL	
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## INITIAL STATEMENT OF BENEFICIAL OWNERSHIP OF SECURITIES

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934  
or Section 30(h) of the Investment Company Act of 1940

(Print or Type Responses)

1. Name and Address of Reporting Person * Venuto Joseph  (Last) (First) (Middle) AERCAP HOUSE, STATIONSPLEIN 965  (Street) SCHIPHOL AIRPORT, P7 1117CE  (City) (State) (Zip)	2. Date of Event Requiring Statement (Month/Day/Year) 03/13/2012	3. Issuer Name <b>and</b> Ticker or Trading Symbol AerCap Holdings N.V. [AER]	
		4. Relationship of Reporting Person(s) to Issuer (Check all applicable) <input type="checkbox"/> Director <input type="checkbox"/> 10% Owner <input checked="" type="checkbox"/> Officer (give title below) <input type="checkbox"/> Other (specify below) Chief Technical Officer	5. If Amendment, Date Original Filed(Month/Day/Year)
6. Individual or Joint/Group Filing(Check Applicable Line) <input checked="" type="checkbox"/> Form filed by One Reporting Person <input type="checkbox"/> Form filed by More than One Reporting Person			

### Table I - Non-Derivative Securities Beneficially Owned

1. Title of Security (Instr. 4)	2. Amount of Securities Beneficially Owned (Instr. 4)	3. Ownership Form: Direct (D) or Indirect (I) (Instr. 5)	4. Nature of Indirect Beneficial Ownership (Instr. 5)
Ordinary Shares	2,500	D	

Reminder: Report on a separate line for each class of securities beneficially owned directly or indirectly.

SEC 1473 (7-02)

**Persons who respond to the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB control number.**

### Table II - Derivative Securities Beneficially Owned (e.g., puts, calls, warrants, options, convertible securities)

1. Title of Derivative Security (Instr. 4)	2. Date Exercisable and Expiration Date (Month/Day/Year)		3. Title and Amount of Securities Underlying Derivative Security (Instr. 4)		4. Conversion or Exercise Price of Derivative Security	5. Ownership Form of Derivative Security: Direct (D) or Indirect (I) (Instr. 5)	6. Nature of Indirect Beneficial Ownership (Instr. 5)
	Date Exercisable	Expiration Date	Title	Amount or Number of Shares			
Ordinary Share Options	12/31/2011 (2)	09/13/2017	Ordinary Shares (1)	75,000	\$ 24.63	D	

## Reporting Owners

Reporting Owner Name / Address	Relationships			
	Director	10% Owner	Officer	Other
Venuto Joseph AERCAP HOUSE STATIONSPLEIN 965 SCHIPHOL AIRPORT, P7 1117CE			Chief Technical Officer	

## Signatures

/s/ Joseph Venuto	03/15/2012
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Signature of Reporting  
Person

Date

## Explanation of Responses:

\* If the form is filed by more than one reporting person, *see* Instruction 5(b)(v).

\*\* Intentional misstatements or omissions of facts constitute Federal Criminal Violations. *See* 18 U.S.C. 1001 and 15 U.S.C. 78ff(a).

(1) This form is filed voluntarily. As a foreign private issuer, AerCap is exempted from Section 16 of the Exchange Act by Rule 3a12-3.

(2) The Ordinary Share Options were granted on September 13, 2007 and vested in tranches based on time- and performance-based criteria. They were all fully vested as of December 31, 2011.

Note: File three copies of this Form, one of which must be manually signed. If space is insufficient, *See* Instruction 6 for procedure.

Potential persons who are to respond to the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB number.