Check this box if no longer subject to Section 16. Form 4 or Form 5 obligations may continue. See Instruction 1(b).

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

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP OF SECURITIES

OMB APPROVAL OMB Number: 3235-0287 Estimated average burden 0.5 hours per response...

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

Time of Ty	pe reesponse	3)														
Name and Address of Reporting Person * INGERSOLL W BRETT				2. Issuer Name and Ticker or Trading Symbol AerCap Holdings N.V. [AER]								5. Relationship of Reporting Person(s) to Issuer (Check all applicable)  X Director 10% Owner				
(Last) (First) (Middle) AERCAP HOUSE, STATIONSPLEIN 965				3. Date of Earliest Transaction (Month/Day/Year) 12/31/2010								Officer (give title below) Other (specify below)				
(Street) SCHIPHOL, P7 1117CE				4. If Amendment, Date Original Filed(Month/Day/Year)							_X_	6. Individual or Joint/Group Filing(Check Applicable Line) _X_Form filed by One Reporting PersonForm filed by More than One Reporting Person				
(City) (State) (Zip)				Table I - Non-Derivative Securities Acqui						Acquired	ired, Disposed of, or Beneficially Owned					
1.Title of S (Instr. 3)			Date (Month/Day/Year)	2A. Deemed Execution Date, any (Month/Day/Yea		ite, if		. 8)	(A) c	curities Acquar Disposed of 3, 4 and 5)  (A) or unt (D)	of (D) Ow Tra	(D) Owned Follow Transaction(s) (Instr. 3 and 4)		ed (	Ownership Form:	Beneficial Ownership
Reminder: Report on a separate line for each class of securities beneficially owned directly or indirectly.    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 Acquired, Disposed of, or Beneficially Owned   Contained in this form are not required to respond unless the form displays a currently valid OMB control number.																
Security (Instr. 3)	Conversion	3. Transaction Date (Month/Day/Year)	3A. Deemed Execution Date, if	4. Transac Code	nsaction of Expirate Month		6. Date Ex Expiration	Date Exercisable and 7. Tir expiration Date Amo Month/Day/Year) Under Secu		7. Title ar Amount of Underlyin Securities (Instr. 3 a	of ng	Derivative Security (Instr. 5)	9. Number of Derivative Securities Beneficially Owned Following Reported Transaction(s) (Instr. 4)	Ownership Form of Derivative Security: Direct (D) or Indirect		
				Code	v	(A)	(D)	Date Exercisabl		Expiration Date	Title	Amount or Number of Shares				
Ordinary Share Options	\$ 14.12	12/31/2010		J <u>(1)</u>		1,774		01/01/20	14 1	2/31/2020	Ordinary Shares	1,774	\$ 0	1,774	D	

# **Reporting Owners**

Describer Comment Name / Address	Relationships					
Reporting Owner Name / Address	Director	10% Owner	Officer	Other		
INGERSOLL W BRETT AERCAP HOUSE STATIONSPLEIN 965 SCHIPHOL, P7 1117CE	X					

# **Signatures**

/s/ W. Brett Ingersoll	01/25/2011			
**Signature of Reporting Person	Date			

# **Explanation of Responses:**

- \* If the form is filed by more than one reporting person, see Instruction 4(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) Grant of Options. This Form is filed voluntarily. As a foreign private issuer, AerCap is exempted from Section 16 of the Exchange Act by Rule 3a12-3.

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.