

AerCap Holdings N.V.
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The Netherlands

February 6, 2015

VIA EDGAR AND HAND DELIVERY

Mr. Terence O'Brien
Branch Chief
United States Securities and Exchange Commission
Division of Corporation Finance
100 F Street, N.E.
Washington, D.C. 20549

Re: AerCap Holdings N.V.
Form 20-F
Filed March 18, 2014
Form 6-K
Filed November 20, 2014
File No. 001-33159

Dear Mr. O'Brien:

On behalf of AerCap Holdings N.V. (the "Company"), and in response to the comment of the staff (the "Staff") of the Securities and Exchange Commission (the "Commission") to the Company's Form 20-F filed with the Commission on March 18, 2014 (the "Form 20-F") and the Company's Form 6-K filed with the Commission on November 20, 2014 (the "Form 6-K") contained in your letter dated January 26, 2015 (the "Comment Letter"), we submit this letter on behalf of the Company containing the Company's responses to the Comment Letter.

For your convenience, we have set out the text of the comment from the Comment Letter in bold, followed by the Company's response.

1. **We have read your response to comment 1 in our letter dated December 16, 2014. Recognizing the differences in the provisions of ASC 805 and 360, both sets of guidance still require the use of an appropriate fair value technique(s) and management's ability to make reasonable assumptions related to the valuation process. Therefore, please fully address in your next letter and disclose/quantify in future filings, as appropriate, the basis for each of the key purchase accounting assumptions that contributed significantly to the downward adjustments documented in the pro forma financial statements in your May 6, 2014, Form 6-K, e.g., contracted and market rental rates, renewal options, release of aircraft provisions, residual values and appropriate discount rate depending on the age and type of the aircraft. Also, disclose whether you have written-down further the fair value of ILFC's fleet since the acquisition date and if so by how much.**

Response: The Company respectfully advises the Staff that the fair value adjustments included a downward adjustment to ILFC's carrying value of the flight equipment, partially offset by the recognition of a maintenance rights and lease premium intangible. The key inputs and assumptions for the fair value measurement of flight equipment were contracted leases, extensions and new lease assumptions, residual values and appropriate discount rates.

The Company proposes to include the following disclosure in future filings with respect to the purchase accounting adjustment on the flight equipment:

As of May 14, 2014, the closing date of our acquisition of ILFC, ILFC's fleet had an average age of approximately nine years, an average remaining economic life of approximately 16 years and an average remaining lease term of approximately five years. ILFC's fleet was measured at fair value as part of our acquisition method of accounting in accordance with ASC 805 using the fair value concepts defined in ASC 820. Adjustments reflected the measurement of the flight equipment held for operating leases at fair value, using the income approach, and we evaluated the results of the income approach using appraiser data where appropriate and available.

Key inputs and assumptions underlying the income approach and the projected cash flows were contracted leases, extensions and new lease assumptions, residual values and appropriate discount rates:

- The contracted leases, whose rents were adjusted to current market rents as appropriate, accounted for approximately 50% of the flight equipment's fair value.
- For most aircraft, an extension of the existing lease or a new lease was assumed based on our knowledge of the lessee's fleet plans and expected market lease rents. The extensions or new leases accounted for approximately 15% of the flight equipment's fair value.
- Out-of-production, older aircraft that were at the end of their economic life were assumed to be sold for parts. The assumptions for sales of parts were based on market data and inputs from AeroTurbine, our subsidiary that specializes in sales of aircraft parts. Sales of parts accounted for approximately 5% of the flight equipment's fair value.
- For in-production, younger aircraft, residual values were assumed after the extension of the existing lease or new lease. The residual value assumption was based on inputs from third party appraisers. The residual values accounted for approximately 30% of the flight equipment's fair value.
- The discount rate assumptions are based on our knowledge of market returns and leverage, which vary depending on the type and age of the aircraft, and range between 6% and 10%. The average discount rate, weighted by the fair value of ILFC's fleet, was approximately 7%.

We respectfully advise the Staff that we are in the process of finalizing the purchase price allocation relating to the acquisition of ILFC. To date, we have not identified any further material write-downs with respect to the fair value of ILFC's fleet.

We hope that the foregoing has been responsive to the Staff's comment. If you have any questions or comments regarding the foregoing, please do not hesitate to contact Craig F. Arcella at (212) 474-1024 or by email at carcella@cravath.com. In addition, please feel free to contact me at +31 20 559 600 or by email at khelming@aercap.com.

The undersigned hereby acknowledges that: (i) the Company is responsible for the adequacy and accuracy of the disclosure in its filings on Form 20-F and Form 6-K; (ii) Staff comments or changes to disclosure in response to Staff comments do not foreclose the Commission from taking any action with respect to the Form 20-F or the Form 6-K; and (iii) the Company may not assert Staff comments as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

/s/ Keith Helming

Name: Keith Helming

Title: Chief Financial Officer