
**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION**
Washington, DC 20549

FORM 6-K

REPORT OF FOREIGN PRIVATE ISSUER PURSUANT TO RULE 13a-16 OR 15d-16 UNDER THE SECURITIES EXCHANGE ACT OF 1934

For the month of September 2023

Commission File Number 001-33159

AERCAP HOLDINGS N.V.

(Translation of Registrant's Name into English)

AerCap House, 65 St. Stephen's Green, Dublin D02 YX20, Ireland, +353 1 819 2010
(Address of Principal Executive Office)

Indicate by check mark whether the registrant files or will file annual reports under cover of Form 20-F or Form 40-F.

Form 20-F

Form 40-F

Indicate by check mark if the registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule 101(b)(1):

Note: Regulation S-T Rule 101(b)(1) only permits the submission in paper of a Form 6-K if submitted solely to provide an attached annual report to security holders.

Indicate by check mark if the registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule 101(b)(7):

Note: Regulation S-T Rule 101(b)(7) only permits the submission in paper of a Form 6-K if submitted to furnish a report or other document that the registrant foreign private issuer must furnish and make public under the laws of the jurisdiction in which the registrant is incorporated, domiciled or legally organized (the registrant's "home country"), or under the rules of the home country exchange on which the registrant's securities are traded, as long as the report or other document is not a press release, is not required to be and has not been distributed to the registrant's security holders, and, if discussing a material event, has already been the subject of a Form 6-K submission or other Commission filing on EDGAR.

Other Events

On September 7, 2023, the board of directors (the “Board”) of AerCap Holdings N.V. (“AerCap”) approved a share repurchase program authorizing total repurchases of up to \$650 million of AerCap ordinary shares through December 31, 2023 (the “September Repurchase Program”).

Previously, AerCap announced that in April 2023 the Board approved a share repurchase program authorizing total repurchases of up to \$500 million of AerCap ordinary shares through September 30, 2023 (the “April Share Repurchase Program”) and that in July 2023 the Board approved additional repurchases of up to \$500 million of AerCap ordinary shares through December 31, 2023 (the “July Share Repurchase Program”) and, together with the April Share Repurchase Program and the September Share Repurchase Program, the “Share Repurchase Programs”). As of September 7, 2023, AerCap had repurchased 6,014,716 ordinary shares under the April Share Repurchase Program for approximately \$357.2 million and no shares under the July Share Repurchase Program or September Repurchase Program. As a result, AerCap has an aggregate capacity of \$1.3 billion for share repurchases under its Share Repurchase Programs as of September 7, 2023.

Repurchases under the Share Repurchase Programs may be made through open market purchases or privately negotiated transactions in accordance with applicable U.S. federal securities laws. The timing of repurchases and the exact number of ordinary shares to be purchased will be determined by AerCap’s management, in its discretion, and will depend upon market conditions and other factors. The program will be funded using AerCap’s cash on hand and cash generated from operations. The program may be suspended or discontinued at any time.

The information contained in this Form 6-K is incorporated by reference into the Company’s Registration Statements on Form F-3, File Nos. 333-270326 and 333-260359, Registration Statements on Form S-8, File Nos. 333-194638, 333-194637, 333-180323, 333-165839 and 333-154416 and related Prospectuses, as such Registration Statements and Prospectuses may be amended from time to time.

SIGNATURE

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

AERCAP HOLDINGS N.V.

By: /s/ Aengus Kelly

Name: Aengus Kelly

Title: Authorized Signatory

Date: September 7, 2023