UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 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 January 2024

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 ⊠

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.

Commission File Number 001-33159

Form 40-F □

Other Events

On January 17, 2024, we experienced a cybersecurity incident related to ransomware. We promptly took steps to investigate with the support of third-party cybersecurity experts and notified law enforcement. We have full control of all of our IT systems and to date, we have suffered no financial loss related to this incident. Our investigation into this incident, including the extent to which data may have been exfiltrated or otherwise impacted, remains ongoing.

The information contained in this Form 6-K is incorporated by reference into the Company's Form F-3 Registration Statement, File No. 333-260359 and Form S-8 Registration Statements, 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.

Forward-Looking Statements

This Current Report on Form 6-K contains certain "forward-looking statements" that involve risks and uncertainties. In some cases, forward-looking statements can be identified by the use of forward-looking terminology such as "may," "might," "should," "expect," "plan," "intend," "will," "aim," "estimate," "anticipate," "believe," "predict," "potential" or "continue" or the negatives thereof or variations thereon or similar terminology. All statements other than statements of historical fact included in this communication are forward-looking statements and are based on various underlying assumptions and expectations and are subject to known and unknown risks, uncertainties and assumptions, and may include projections of our future financial performance based on our growth strategies and anticipated trends in our business. These statements are only predictions based on our current expectations and projections about future events. There are important factors, including the impacts of, and associated responses to the Ukraine Conflict, that could cause our actual results, level of activity, performance or achievements to differ materially from the results, level of activity, performance or achievements to differ materially from the results, level of activity, performance or achievements to differ materially from the result, level of, and other impacts and developments resulting from, the cybersecurity incident. As a result, we cannot assure you that the forward-looking statements in this communication will prove to be accurate or correct. In light of these risks, uncertainties and assumptions, the future performance or events described in the forward-looking statements in this communication might not occur. Accordingly, you should not rely upon forward-looking statements as a prediction of actual results and we do not assume any responsibility for the accuracy or completeness of any of these forward-looking statements. Except as required by applicable law, we do not undertake any obligation to, and will not, update

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

Dated: January 22, 2024