

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

FORM S-3
REGISTRATION STATEMENT
Under the Securities Act of 1933

Howmet Aerospace Inc.
(Exact name of Registrant as specified in its charter)

Delaware
(State or other jurisdiction of incorporation or organization)

25-0317820

(I.R.S. Employer Identification Number)

201 Isabella Street, Suite 200
Pittsburgh, Pennsylvania 15212-5872
(412)-553-1940

(Address, including zip code, and telephone number, including area code, of Registrant's principal executive offices)

Lola F. Lin, Esq.
Executive Vice President, Chief Legal and Compliance Officer and
Secretary

Howmet Aerospace Inc.
201 Isabella Street, Suite 200
Pittsburgh, Pennsylvania 15212-5872
(412)-553-1940

(Name, address, including zip code, and telephone number, including area code, of agent for service)

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Approximate date of commencement of proposed sale to the public:

From time to time, after the effective date of this Registration Statement.

If the only securities being registered on this Form are being offered pursuant to dividend or interest reinvestment plans, please check the following box.

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, other than securities offered only in connection with dividend or interest reinvestment plans, check the following box.

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, please check the following box and list the Securities Act of 1933 registration statement number of the earlier effective registration statement for the same offering.

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act of 1933, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this Form is a registration statement pursuant to General Instruction I.D. or a post-effective amendment thereto that shall become effective upon filing with the Commission pursuant to Rule 462(e) under the Securities Act of 1933, check the following box.

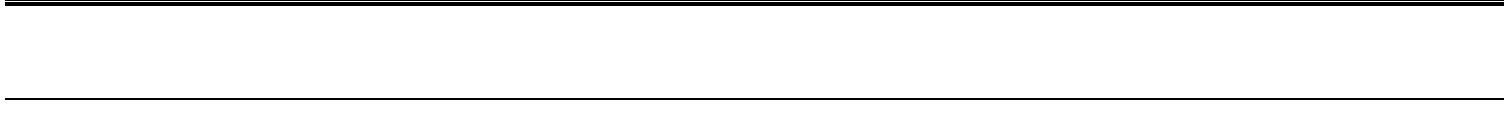
If this Form is a post-effective amendment to a registration statement filed pursuant to General Instruction I.D. filed to register additional securities or additional classes of securities pursuant to Rule 413(b) under the Securities Act of 1933, check the following box.

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company" and "emerging growth company" in Rule 12b-2 of the Exchange Act of 1934. (Check one):

Large Accelerated filer
Non-accelerated filer

Accelerated filer
Smaller reporting company
Emerging growth company

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 7(a)(2)(B) of Securities Act of 1933.





**HOWMET
AEROSPACE**

Howmet Aerospace Inc.

Senior Debt Securities

We may issue senior debt securities from time to time in one or more offerings. This prospectus describes the general terms of these securities and the general manner in which these securities will be offered. We will provide the specific terms of these securities in one or more supplements to this prospectus. The prospectus supplements will also describe the specific manner in which these securities will be offered and may also supplement, update or amend information contained in this document. You should read this prospectus and any applicable prospectus supplement before you invest.

We may offer these securities in amounts, at prices and on terms determined at the time of offering. The securities may be sold directly to you, through agents, or through underwriters and dealers. If agents, underwriters or dealers are used to sell the securities, we will name them and describe their compensation in a prospectus supplement.

Investing in these securities involves certain risks. See “[Risk Factors](#)” on page 3 of this prospectus and any risk factors included in or incorporated by reference into any applicable prospectus supplement and in the documents incorporated by reference in this prospectus for a discussion of the factors you should carefully consider before deciding to purchase these securities.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or passed upon the adequacy or accuracy of this prospectus. Any representation to the contrary is a criminal offense.

The date of this prospectus is May 23, 2023.

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We are responsible for the information contained and incorporated by reference in this prospectus, any applicable prospectus supplement and any applicable free writing prospectus prepared by us or on our behalf. We have not authorized anyone to give you any other information, and we take no responsibility for any other information that others may give you. We are not making an offer to sell these securities in any jurisdiction where the offer or sale is not permitted. You should not assume that the information contained or incorporated by reference in this prospectus or any applicable prospectus supplement is accurate as of any date other than the date of the document containing the information.

ABOUT THIS PROSPECTUS

This prospectus is part of a registration statement that we filed with the Securities and Exchange Commission, which we refer to as the SEC, utilizing a “shelf” registration process. Under this shelf registration process, we may from time to time sell the securities described in this prospectus in one or more offerings.

This prospectus provides you with a general description of the securities we may offer. Each time we sell securities, we will provide one or more prospectus supplements that will contain specific information about the terms of the offering. The prospectus supplement(s) may also add, update or change information, including information about us, contained in this prospectus. Therefore, before making your investment decision, you should carefully read both this prospectus and any applicable prospectus supplements together with the additional information described under the headings “Where You Can Find More Information” and “Incorporation by Reference.”

Unless the context otherwise indicates, references in this prospectus to “Howmet Aerospace,” “the Company,” “we,” “our” and “us” refer, collectively, to Howmet Aerospace Inc., a Delaware corporation, and its consolidated subsidiaries.

WHERE YOU CAN FIND MORE INFORMATION

We file annual, quarterly and current reports, proxy statements and other information with the SEC. Our SEC filings are available to the public over the Internet at the SEC’s website at <http://www.sec.gov>. Copies of certain information filed by us with the SEC are also available on our website at www.howmet.com. Information accessible on or through our website is not a part of this prospectus. Our website is included in this prospectus and any applicable prospectus supplement as an inactive textual reference only.

This prospectus is part of a registration statement we filed with the SEC. This prospectus omits some information contained in the registration statement in accordance with SEC rules and regulations. You should review the information and exhibits in the registration statement for further information about us and our consolidated subsidiaries and the securities we are offering. Statements in this prospectus concerning any document we filed as an exhibit to the registration statement or that we otherwise filed with the SEC are not intended to be comprehensive and are qualified by reference to these filings. You should review the complete document to evaluate these statements.

INCORPORATION BY REFERENCE

The SEC allows us to incorporate by reference much of the information we file with the SEC, which means that we can disclose important information to you by referring you to those publicly available documents. The information that we incorporate by reference in this prospectus is considered to be part of this prospectus. Because we are incorporating by reference future filings with the SEC, this prospectus is continually updated and those future filings may modify or supersede some of the information included or incorporated by reference in this prospectus. This means that you must look at all of the SEC filings that we incorporate by reference to determine if any of the statements in this prospectus or in any document previously incorporated by reference have been modified or superseded. This prospectus incorporates by reference the documents listed below and any future filings we make with the SEC under Sections 13(a), 13(c), 14 or 15(d) of the Securities Exchange Act of 1934, as amended, or the Exchange Act, until the offering of the securities under the registration statement is terminated or completed, except that we are not incorporating any information included in a Current Report on Form 8-K (including any exhibits) that has been or will be furnished (and not filed) with the SEC, unless the information is expressly incorporated herein:

- [Annual Report on Form 10-K for the fiscal year ended December 31, 2022](#);
- [Quarterly Report on Form 10-Q for the fiscal quarter ended March 31, 2023](#); and
- Current Reports on Form 8-K filed on [February 27, 2023](#), [March 23, 2023](#), [March 29, 2023](#), [April 3, 2023](#) and [May 22, 2023](#).

Copies of these filings are available to you without charge upon your written or oral request. You can obtain the documents incorporated by reference in this document through the SEC website at www.sec.gov, by going to our Investor Relations page on our corporate web site at www.howmet.com, or by requesting them from us at the following address: Howmet Aerospace Inc., 201 Isabella Street, Suite 200, Pittsburgh, Pennsylvania 15212-5872, Attention: Investor Relations, or by telephone at 1-412-553-1950. Information contained in or accessible through our website is not part of or incorporated by reference, and shall not be deemed incorporated by reference, into this prospectus or any applicable prospectus supplement. Our website is included in this prospectus and any applicable prospectus supplement as an inactive textual reference only.

FORWARD-LOOKING STATEMENTS

This prospectus and the information incorporated by reference in this prospectus contain statements that relate to future events and expectations and, as such, constitute forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. Forward-looking statements include those containing such words as “anticipates,” “believes,” “could,” “estimates,” “expects,” “forecasts,” “goal,” “guidance,” “intends,” “may,” “outlook,” “plans,” “projects,” “seeks,” “sees,” “should,” “targets,” “will,” “would,” or other words of similar meaning. All statements that reflect our expectations, assumptions or projections about the future, other than statements of historical fact, are forward-looking. Forward-looking statements are not guarantees of future performance and are subject to risks, uncertainties, and changes in circumstances that are difficult to predict. Although we believe that the expectations reflected in any forward-looking statements are based on reasonable assumptions, we can give no assurance that these expectations will be attained and it is possible that actual results may differ materially from those indicated by these forward-looking statements due to a variety of risks and uncertainties.

For a discussion of some of the specific factors, risks and uncertainties that may cause our actual results to differ materially from those projected in any forward-looking statements, see our Annual Report on Form 10-K, Quarterly Reports on Form 10-Q and any other documents incorporated by reference in this prospectus and in any applicable prospectus supplement. Any forward-looking statement speaks only as of the date on which it is made, and we assume no obligation to update or revise any such statement, whether as a result of new information, future events or otherwise, except as required by applicable law.

OUR BUSINESS

Howmet Aerospace is a leading global provider of advanced engineered solutions for the aerospace and transportation industries. The Company's primary businesses focus on jet engine components, aerospace fastening systems, and airframe structural components necessary for mission-critical performance and efficiency in aerospace and defense applications, as well as forged aluminum wheels for commercial transportation. Howmet Aerospace's technological capabilities support the innovation and growth of next-generation aerospace programs. Its differentiated technologies enable lighter, more fuel-efficient aircraft and commercial trucks to operate with a lower carbon footprint and support more sustainable air and ground transportation.

Howmet Aerospace is a Delaware corporation formerly known as Arconic Inc. and is the successor to Alcoa Inc., a Pennsylvania corporation that was formed in 1888 and was formerly known as Aluminum Company of America. Our principal executive offices are located at 201 Isabella Street, Suite 200, Pittsburgh, Pennsylvania 15212-5872 and our telephone number is (412) 553-1940. We maintain a website at www.howmet.com. Information contained in or accessible through our website is not part of or incorporated by reference into this prospectus or any applicable prospectus supplement. Our website is included in this prospectus and any applicable prospectus supplement as an inactive textual reference only, and shall not be deemed incorporated by reference.

RISK FACTORS

Investing in our securities involves risks. Before deciding to purchase any of our securities, you should carefully consider the discussion of risks and uncertainties under the heading "Risk Factors" contained in any applicable prospectus supplement and in the documents incorporated by reference in this prospectus. See the section entitled "Where You Can Find More Information" in this prospectus. The risk factors in the documents incorporated by reference in this prospectus or any applicable prospectus supplement are not necessarily presented in the order of probability of occurrence. The risks and uncertainties we discuss in the documents incorporated by reference in this prospectus or any applicable prospectus supplement are those we believe may materially affect our Company, at the respective times those disclosures were made. Additional risks and uncertainties not presently known to us or that we currently believe are immaterial also may materially and adversely affect our business, financial condition and results of operations.

USE OF PROCEEDS

Unless otherwise specified in an applicable prospectus supplement, we intend to use the proceeds from the sale of the securities offered by this prospectus for general corporate purposes, which may include but is not limited to working capital, capital expenditures, acquisitions, and repurchasing, redeeming and/or refinancing of debt, including outstanding commercial paper and other short-term indebtedness. Net proceeds may be temporarily invested prior to use. We may include a more detailed description of the use of proceeds of any specific offering of securities in the prospectus supplement relating to the offering.

DESCRIPTION OF SENIOR DEBT SECURITIES

The following description sets forth certain general terms and provisions of the senior debt securities that Howmet Aerospace may offer under this prospectus. The particular terms of any senior debt securities and the extent, if any, to which the following general provisions may apply to any series of senior debt securities will be described in one or more prospectus supplements relating to the issuance of those senior debt securities. For purposes of this description, references to “Howmet Aerospace,” “the Company,” “the issuer,” “we,” “our” and “us” refer only to Howmet Aerospace Inc. and do not include any of Howmet Aerospace’s current or future subsidiaries.

Senior debt securities may be issued, from time to time, in one or more series under the indenture dated as of September 30, 1993 (the “original indenture”) between Alcoa Inc. (formerly known as Aluminum Company of America), a Pennsylvania corporation, and The Bank of New York Mellon Trust Company, N.A. (formerly known as The Bank of New York Trust Company, N.A.), as trustee, as successor to J.P. Morgan Trust Company, National Association (formerly known as Chase Manhattan Trust Company, N.A., as successor to PNC Bank, National Association), as supplemented by the first supplemental indenture dated as of January 25, 2007 (the “first supplemental indenture”) between Alcoa Inc., a Pennsylvania corporation, and the trustee, the second supplemental indenture dated as of July 15, 2008 (the “second supplemental indenture”) between Alcoa Inc., a Pennsylvania corporation, and the trustee, the fourth supplemental indenture dated as of December 31, 2017 (the “fourth supplemental indenture”) among Arconic Inc. (formerly known as Alcoa Inc.), a Pennsylvania corporation, Arconic Inc. (which subsequently changed its name to Howmet Aerospace Inc.), a Delaware corporation, and the trustee and the fifth supplemental indenture dated as of April 16, 2020 (the “fifth supplemental indenture”) between Howmet Aerospace Inc., a Delaware corporation, and the trustee. The original indenture, the first supplemental indenture, the second supplemental indenture, the fourth supplemental indenture and the fifth supplemental indenture are incorporated by reference as exhibits to the registration statement of which this prospectus is a part. References in this prospectus to the trustee for our senior debt securities mean The Bank of New York Mellon Trust Company, N.A. The terms of the senior debt securities include those expressly set forth in the original indenture, as supplemented by the first supplemental indenture, the second supplemental indenture, the fourth supplemental indenture and the fifth supplemental indenture (the original indenture as so supplemented, the “senior indenture”), and those made part of the senior indenture by reference to the Trust Indenture Act of 1939, as amended (the “Trust Indenture Act”). You may obtain a copy of the senior indenture from us without charge by the means described under “Where You Can Find More Information.”

The following summary of certain provisions of the senior indenture and the senior debt securities that may be offered under this prospectus is not meant to be complete. For more information, you should refer to the full text of the senior indenture and the senior debt securities, including the definitions of terms used and not defined in this prospectus. Notwithstanding the provisions of the senior indenture described below, senior debt securities will not be issued in bearer form after March 18, 2012.

General

The senior indenture does not limit the aggregate principal amount of senior debt securities that Howmet Aerospace may issue, whether under the senior indenture or any existing indenture or other indenture that Howmet Aerospace may enter into in the future or otherwise. Unless otherwise specified in a prospectus supplement relating to an offering of senior debt securities, the senior debt securities offered under this prospectus:

- will be unsecured obligations of Howmet Aerospace;
- may be issued under the senior indenture from time to time in one or more series up to the aggregate amount from time to time authorized by Howmet Aerospace for each series; and
- will rank on a parity with all other unsecured and unsubordinated indebtedness of Howmet Aerospace.

A prospectus supplement will describe the following terms of any series of senior debt securities that Howmet Aerospace may offer:

- the specific designation, aggregate principal amount being offered and purchase price;
- any limit on the aggregate principal amount of such senior debt securities of the series that Howmet Aerospace may issue;
- whether the senior debt securities of the series are to be issuable as registered securities or bearer securities or both, whether any of the senior debt securities of the series are to be issuable initially in temporary global form and whether any of the senior debt securities of the series are to be issuable in permanent global form;
- the date(s) on which the principal is payable and any right to extend such date(s);
- the rate(s) at which the senior debt securities of the series being offered will bear interest or method of calculating any interest rate(s);

- the date(s) from which interest will accrue, or the manner of determination of interest payment dates;
- the regular record date for any interest payable on any senior debt securities of the series being offered which are registered securities on any interest payment date and the extent to which, or the manner in which, any interest payable on a temporary global senior debt security on an interest payment date will be paid if other than in the manner described under “Temporary Global Securities” below;
- the person to whom any interest on any registered security of the series will be payable if other than the person in whose name the registered security is registered at the close of business on the regular record date for the interest as described under “Payment and Paying Agents” below, and the manner in which any interest on any bearer security will be paid if other than in the manner described under “Payment and Paying Agents” below;
- any right to defer payments of interest by extending the interest payment periods and the duration of such extensions;
- any mandatory or optional sinking fund or analogous provisions;
- each office or agency where, subject to the terms of the senior indenture as described below under “Payment and Paying Agents,” the principal of and any premium and interest on the senior debt securities of the series will be payable, each office or agency where, subject to the terms of the senior indenture as described below under “Form, Exchange, Registration and Transfer,” the senior debt securities of the series may be presented for registration of transfer or exchange, and each office or agency where notices and demands to or upon the Company in respect of the senior debt securities of the series or the senior indenture may be served;
- the date(s) after which and the period(s) within which, the price(s) at which and the terms and conditions upon which the senior debt securities of the series may be redeemed, in whole or in part, at the option of Howmet Aerospace;
- any obligation of Howmet Aerospace to redeem or purchase the senior debt securities of the series at the option of the holder thereof and the date(s) after which and the period(s) within which, the price(s) at which and the terms and conditions upon which the senior debt securities of the series will be redeemed or purchased, in whole or in part, under such obligations;
- the denominations in which any senior debt securities of the series that are registered securities will be issuable, if other than denominations of \$1,000 and any integral multiple thereof, and the denomination or denominations in which any senior debt securities of the series that are bearer securities will be issuable, if other than the denomination of \$5,000;
- the currency, currencies or currency units of payment of principal of and any premium and interest on the senior debt securities of the series and the manner of determining the U.S. dollar equivalent for purposes of determining outstanding senior debt securities of the series;
- if the principal of or any premium or interest on any senior debt securities of the series is to be payable at the election of the Company or holder thereof in one or more currencies or currency units other than that or those in which the senior debt securities of the series are stated to be payable, the currency currencies or currency units in which payment of the principal of and any premium and interest on the senior debt securities of the series as to which such election is made shall be payable and the periods within which and the terms and conditions upon which such election is to be made;
- any index used to determine the amount of payments of principal of and any premium and interest on the senior debt securities of the series;
- the portion of the principal amount of the senior debt securities of the series, if other than the principal amount, payable upon acceleration of maturity;
- if other than the trustee, the person who will be the security registrar of the senior debt securities of the series;
- whether the senior debt securities of the series will be subject to defeasance or covenant defeasance as described below under “Defeasance and Covenant Defeasance”;

- any terms and conditions under which the senior debt securities of the series may be convertible into or exchangeable for common stock of Howmet Aerospace;
- whether the senior debt securities of the series will be issuable in whole or in part in the form of one or more book-entry securities and, in such case, the depository or depositories for such book-entry debt security or book-entry securities and any circumstances other than those set forth in the senior indenture in which any such book-entry security may be transferred to, and registered and exchanged for senior debt securities of the series registered in the name of, a person other than the depository for such book-entry security or a nominee thereof and in which any such transfer may be registered;
- whether the senior debt securities of the series are issuable as a global security, and in such case, the identity of the depository;
- any other terms of the senior debt securities of the series not inconsistent with the provisions of the senior indenture (Section 301);
- certain U.S. federal income tax consequences; and
- any special provisions for the payment of additional amounts with respect to the senior debt securities of the series.

Senior debt securities of a series may be issued at a substantial discount below their stated principal amount. Certain U.S. federal income tax considerations applicable to senior debt securities of any series issued at a discount and to senior debt securities of a series that are denominated in a currency other than U.S. dollars will be described in the applicable prospectus supplement.

Redemption

Pursuant to the terms of the senior indenture (as may be further amended and/or supplemented from time to time), any senior debt securities issued pursuant to such senior indenture may be redeemable before their stated maturity in accordance with the applicable terms set forth, if any, in the applicable prospectus supplement. In addition to any terms specified in such applicable prospectus supplement, the senior debt securities may be redeemable, as a whole or in part, at our option, at any time or from time to time, on at least 15 days, but not more than 60 days, prior notice to the holders of such senior debt securities. Any notice of redemption of the senior debt securities to be redeemed at the option of the Company may state that such redemption shall be conditional, in the Company's discretion, on one or more conditions precedent, and that such conditional notice of redemption may be rescinded by the Company if it determines that any or all such conditions will not be satisfied by the redemption date, and that in such event, such redemption notice shall be of no further force or effect and the Company shall not be required to redeem the senior debt securities on the redemption date or otherwise.

Form, Exchange, Registration and Transfer

Senior debt securities may be issued in registered form or bearer form or both, as specified in the terms of the series. Senior debt securities will not be issued in bearer form after March 18, 2012. Unless otherwise indicated in an applicable prospectus supplement, definitive bearer securities will have interest coupons attached. (Section 201) Senior debt securities of a series may also be issuable in temporary and permanent global form. (Sections 203 and 301) See "Permanent Global Securities" below.

In connection with its sale during the restricted period (as defined in U.S. Treasury Regulations Section 1.163-5(c)(2)(i)(D)(7)), no bearer security, including a senior debt security in permanent global form, may be mailed or otherwise delivered to any location in the United States or its possessions. No bearer security other than a temporary global bearer security may be delivered, nor may interest be paid on any bearer security unless the person entitled to receive the bearer security or interest furnishes written certification, in the form required by the senior indenture, to the effect that such person:

- is not a U.S. person;
- is a foreign branch of a U.S. financial institution purchasing for its own account or for resale, or is a U.S. person who acquired the senior debt security through such a financial institution and who holds the senior debt security through such financial institution on the date of certification. In either of such cases, such financial institution must provide a certificate to Howmet Aerospace or the distributor selling the senior debt security to it stating that it agrees to comply with the requirements of Section 165(j)(3)(A), (B) or (C) of the Internal Revenue Code of 1986, as amended, and the U.S. Treasury Regulations thereunder; or
- is a financial institution holding for purposes of resale during the restricted period (as defined in U.S. Treasury Regulations Section 1.163-5(c)(2)(i)(D)(7)).

A financial institution holding for purposes of resale during the restricted period, whether or not also satisfying the other two prongs of the above sentence, must certify that it has not acquired the senior debt security for purposes of resale directly or indirectly to a U.S. person or to a person within the United States or its possessions. In the case of a bearer security in permanent global form, such certification must be given in connection with notation of a beneficial owner's interest therein. (Section 303) See "Temporary Global Securities" below.

Senior debt securities may be presented for exchange as follows:

- Registered securities will be exchangeable for other registered securities of the same series.
- If senior debt securities have been issued as both registered securities and bearer securities, subject to certain conditions, holders may exchange bearer securities for registered securities of the same series of any authorized denominations and of a like aggregate principal amount and tenor.
- Bearer securities surrendered in exchange for registered securities between a regular record date or a special record date and the relevant date for payment of interest must be surrendered without the coupon relating to such date for payment of interest and interest will not be payable in respect of the registered security issued in exchange for such bearer security, but will be payable only to the holder of such coupon when due in accordance with the terms of the senior indenture.
- Bearer securities will not be issued in exchange for registered securities.
- Each bearer security other than a temporary global bearer security will bear a legend substantially to the following effect: "Any U.S. Person who holds this obligation will be subject to limitations under U.S. income tax laws, including the limitations provided in Sections 165(j) and 1287(a) of the Internal Revenue Code."

Registered securities may be presented for registration of transfer, with the form of transfer endorsed thereon duly executed, if so required by Howmet Aerospace or the trustee or any transfer agent, at the office of the security registrar or at the office of any transfer agent designated by Howmet Aerospace for that purpose with respect to any series of senior debt securities and referred to in the applicable prospectus supplement, without service charge and upon payment of any taxes and other governmental charges as described in the senior indenture. Any transfer or exchange will be effected once the security registrar or transfer agent, as the case may be, is satisfied with the documents of title and identity of the person making the request. (Section 305)

If a prospectus supplement refers to any transfer agents, in addition to the security registrar, initially designated by Howmet Aerospace with respect to any series of senior debt securities, Howmet Aerospace may at any time rescind the designation of any additional transfer agent or approve a change in the location through which any transfer agent acts. If senior debt securities of a series are issuable solely as registered securities, Howmet Aerospace will be required to maintain a transfer agent in each place of payment for the series. If senior debt securities of a series are issuable as bearer securities, Howmet Aerospace will be required to maintain, in addition to the security registrar, a transfer agent in a place of payment for the series located outside the United States. Howmet Aerospace may at any time designate additional transfer agents with respect to any series of senior debt securities. (Section 1002)

If debt securities of a series are redeemed in part, Howmet Aerospace will not be required to:

- (1) issue, register the transfer of or exchange senior debt securities of the series during a period beginning at the opening of business 15 days before any selection of senior debt securities of that series to be redeemed and ending at the close of business on:
 - if senior debt securities of the series are issuable only as registered securities, the day of mailing of the relevant notice of redemption, and
 - if senior debt securities of the series are issuable as bearer securities, the day of the first publication of the relevant notice of redemption or, if senior debt securities of the series are also issuable as registered securities and there is no publication, the mailing of the relevant notice of redemption; or
- (2) register the transfer of or exchange any registered security, or portion thereof, called for redemption, except the unredeemed portion of any registered security being redeemed in part; or
- (3) exchange any bearer security called for redemption, except to exchange such bearer security for a registered security of that series and like tenor which is immediately surrendered for redemption. (Section 305)

Payment and Paying Agents

Unless otherwise indicated in an applicable prospectus supplement, payment of principal of and any premium and interest on registered securities will be made at the office of the paying agent(s) designated by Howmet Aerospace from time to time. At the option of Howmet Aerospace payment of any interest may instead be made by check mailed to the address of the person entitled thereto as such address appears in the security register. Unless otherwise indicated in an applicable prospectus supplement, payment of any installment of interest on registered securities will be made to the person in whose name the registered security is registered at the close of business on the regular record date for that interest. (Section 307)

Unless otherwise indicated in an applicable prospectus supplement, payment of principal of and any premium and interest on bearer securities will be payable, subject to any applicable laws and regulations, at the offices of paying agents outside the United States as Howmet Aerospace may designate from time to time by check or by transfer, at the option of the holder, to an account maintained by the payee with a bank located outside the United States. Unless otherwise indicated in an applicable prospectus supplement, payment of interest on bearer securities on any interest payment date will be made only against surrender outside the United States, to the paying agent, of the coupon relating to that interest payment date. (Section 1001) No payment with respect to any bearer security will be made at any office or agency of Howmet Aerospace in the United States or by check mailed to any address in the United States or by transfer to an account maintained with a bank located in the United States. Notwithstanding the foregoing, payments of principal of and any premium and interest on bearer securities denominated and payable in U.S. dollars will be made at the office of Howmet Aerospace's paying agent in the Borough of Manhattan, the City of New York, if, but only if, payment of the full amount thereof in U.S. dollars at all offices or agencies outside the United States is illegal or effectively precluded by exchange controls or other similar restrictions. (Section 1002)

Unless otherwise indicated in an applicable prospectus supplement, the corporate trust office of the trustee in Pittsburgh, Pennsylvania will be designated as a paying agent for Howmet Aerospace for payments with respect to senior debt securities which are issuable solely as registered securities. Howmet Aerospace will maintain a paying agent outside of the United States for payments with respect to senior debt securities, subject to the limitations described above on bearer securities, which are issuable solely as bearer securities, or as both registered securities and bearer securities. Any paying agents outside the United States and any other paying agents in the United States initially designated by Howmet Aerospace for the senior debt securities will be named in an applicable prospectus supplement. Howmet Aerospace may at any time designate additional paying agents or rescind the designation of any paying agent or approve a change in the office through which any paying agent acts. If senior debt securities of a series are issuable solely as registered securities, Howmet Aerospace will be required to maintain a paying agent in each place of payment for the series. If senior debt securities of a series are issuable as bearer securities, Howmet Aerospace will be required to maintain:

- a paying agent in the Borough of Manhattan, the City of New York, for payments with respect to any registered securities of the series and for payments with respect to bearer securities of the series in the circumstances described above, but not otherwise; and
- a paying agent in a place of payment located outside the United States where senior debt securities of the series and any coupons appertaining thereto may be presented and surrendered for payment. If the senior debt securities of such series are listed on The Stock Exchange of the United Kingdom and the Republic of Ireland or the Luxembourg Stock Exchange or any other stock exchange located outside the United States and such stock exchange so requires, Howmet Aerospace will maintain a paying agent in London or Luxembourg or any other required city located outside the United States, as the case may be, for the senior debt securities of such series. (Section 1002)

All monies paid by Howmet Aerospace to a paying agent for the payment of principal of and any premium or interest on any senior debt security that remain unclaimed at the end of two years after such principal, premium or interest becomes due and payable will be repaid to Howmet Aerospace if Howmet Aerospace so requests. Thereafter, the holder of any such senior debt security or any coupon may look only to Howmet Aerospace for payment. (Section 1003)

Book-Entry Securities

The senior debt securities of a series may be issued in the form of one or more registered securities that will be registered in the name of a depository or its nominee and bear a legend as specified in the senior indenture. These senior debt securities will be known as book-entry securities. Unless otherwise indicated in the applicable prospectus supplement, a book-entry security may not be registered for transfer or exchange to any person other than the depository or its nominee unless:

- the depository notifies Howmet Aerospace that it is unwilling to continue as depository or ceases to be a clearing agency registered under the Exchange Act;
- Howmet Aerospace executes and delivers to the trustee a company order that the transfer or exchange of the book-entry security will be registrable; or
- there has occurred and is continuing an event of default, or an event that after notice or lapse of time, or both, would be an event of default, with respect to the series of senior debt securities evidenced by the book-entry security.

Upon the occurrence of any of the conditions specified above or other conditions as may be specified as contemplated by the senior indenture, the book-entry security may be exchanged for senior debt securities of the series registered in the names of, and the transfer of the book-entry security may be registered to, such persons, including persons other than the depository with respect to such series and its nominees, as the depository may direct.

The specific terms of the depository arrangement with respect to any portion of a series of registered book-entry securities to be represented by a book-entry security will be described in the applicable prospectus supplement. Howmet Aerospace expects that the following provisions will apply to depository arrangements.

Unless otherwise specified in the applicable prospectus supplement, senior debt securities of a series that are to be represented by a book-entry security to be deposited with or on behalf of a depository will be represented by a book-entry security registered in the name of the depository or its nominee. Upon the issuance of a book-entry security, and the deposit of the book-entry security with or on behalf of the depository, the depository will credit, on its book-entry registration and transfer system, the respective principal amounts of the senior debt securities of such series represented by the book-entry security to the accounts of institutions that have accounts with the depository or its nominee. The accounts to be credited will be designated by the underwriters or agents of the senior debt securities of the series or by Howmet Aerospace if the senior debt securities of the series are offered and sold directly by Howmet Aerospace. Ownership of beneficial interests in a book-entry security will be limited to the institutions that have accounts with the depository or persons that may hold interests through the institutions. Ownership of beneficial interests by the institutions in the book-entry security will be shown on, and the transfer of that ownership interest will be effected only through, records maintained by the depository or its nominee for the book-entry security. Ownership of beneficial interests in the book-entry security by persons that hold through the institutions will be shown on, and the transfer of that ownership interest within the institution will be effected only through, records maintained by that institution. The laws of some jurisdictions require that certain purchasers of securities take physical delivery of securities in certificated form. The foregoing limitations and such laws may impair the ability to transfer beneficial interests in book-entry securities.

So long as the depository for a book-entry security, or its nominee, is the registered owner of that book-entry security, the depository or nominee, as the case may be, will be considered the sole owner or holder of the senior debt securities represented by the book-entry security for all purposes under the senior indenture. Unless otherwise specified in the applicable prospectus supplement, owners of beneficial interests in a book-entry security:

- will not be entitled to have senior debt securities of the series registered in their names;
- will not receive or be entitled to receive physical delivery of senior debt securities of the series in certificated form; and
- will not be considered the holders of debt securities for any purposes under the senior indenture. (Sections 204 and 305)

Accordingly, each person owning a beneficial interest in a book-entry security must rely on the procedures of the depository and, if such person does not have an account with the depository, on the procedures of the institution through which such person owns its interest, to exercise any rights of a holder under the senior indenture. The senior indenture provides that the depository may grant proxies and otherwise authorize participants to give or take any request, demand, authorization, direction, notice, consent, waiver or other action that a holder is entitled to give or take under the senior indenture. (Section 104) Howmet Aerospace understands that under existing industry practices, if Howmet Aerospace requests any action of holders, or if an owner of a beneficial interest in such book-entry security desires to give any notice or take any action a holder is entitled to give or take under the senior indenture, the depository would authorize the participants to give such notice or take such action, and participants would authorize beneficial owners owning through such participants to give such notice or take such action or would otherwise act upon the instructions of beneficial owners owning through them.

Temporary Global Securities

If so specified in an applicable prospectus supplement, all or any portion of the senior debt securities of a series that are issuable as bearer securities may initially be represented by one or more temporary global senior debt securities, without interest coupons, to be deposited with a common depository in London for Euroclear Bank S.A./N.V. (“Euroclear”) and Clearstream Banking Luxembourg S.A. (“Clearstream”) for credit to the designated accounts. On and after the date determined as provided in any temporary global senior debt security and described in an applicable prospectus supplement, each temporary global senior debt security will be exchanged for an interest in a permanent global bearer security as specified in an applicable prospectus supplement, but, unless otherwise specified in an applicable prospectus supplement, only upon receipt of:

- written certification from Euroclear or Clearstream, as the case may be, in the form and to the effect required by the senior indenture (a “Depository Tax Certification”); and
- written certification to Euroclear or Clearstream from the person entitled to receive such senior debt securities of the series in the form and to the effect described above under “Form, Exchange, Registration and Transfer.”

No definitive bearer security, including a senior debt security in permanent global form that is either a bearer security or exchangeable for bearer securities, delivered in exchange for a portion of a temporary or permanent global senior debt security may be mailed or otherwise delivered to any location in the United States in connection with such exchange. (Section 304)

Unless otherwise specified in an applicable prospectus supplement, interest in respect of any portion of a temporary global senior debt security payable in respect of an interest payment date occurring before the issuance of securities in permanent global form will be paid to each of Euroclear and Clearstream with respect to the portion of the temporary global senior debt security held for its account following the receipt by Howmet Aerospace or its agent of a Depository Tax Certification. Each of Euroclear and Clearstream will undertake in such circumstances to credit such interest received by it in respect of a temporary global senior debt security to the respective accounts for which it holds such temporary global senior debt security only upon receipt in each case of certification in the form and to the effect described under "Form, Exchange, Registration and Transfer" with respect to the portion of such temporary global senior debt security on which such interest is to be so credited. Receipt of the certification described in the preceding sentence by Euroclear or Clearstream, as the case may be, will constitute irrevocable instructions to Euroclear or Clearstream to exchange such portion of the temporary global senior debt security with respect to which such certification was received for an interest in a permanent global senior debt security.

Permanent Global Securities

If any senior debt securities of a series are issuable in permanent global form, the applicable prospectus supplement will describe any circumstances under which beneficial owners of interests in any such permanent global senior debt security may exchange their interests for senior debt securities of the series and of like tenor and principal amount in any authorized form and denomination. No bearer security delivered in exchange for a portion of a permanent global senior debt security may be mailed or otherwise delivered to any location in the United States in connection with the exchange. (Section 305)

A person having a beneficial interest in a permanent global senior debt security will, except with respect to payment of principal of and any premium and interest on the permanent global senior debt security, be treated as a holder of the principal amount of outstanding senior debt securities represented by the permanent global senior debt security as is specified in a written statement of:

- the holder of the permanent global senior debt security, or
- in the case of a permanent global senior debt security in bearer form, the operator of Euroclear or Clearstream,

which is produced to the trustee by such person. (Section 203)

Principal of and any premium and interest on a permanent global senior debt security will be payable in the manner described in the applicable prospectus supplement.

Certain Limitations

The senior indenture contains the covenants and limitations summarized below. These covenants and limitations will be applicable, unless waived or amended with respect to a series of senior debt securities, so long as any of the senior debt securities are outstanding, unless stated otherwise in the prospectus supplement.

Liens. Howmet Aerospace covenants that it will not create, incur, assume or guarantee, and will not permit any Restricted Subsidiary (as defined below) to create, incur, assume or guarantee, any indebtedness for borrowed money secured by a mortgage, security interest, pledge, charge or similar encumbrance ("mortgages") upon any Principal Property (as defined below) of Howmet Aerospace or any Restricted Subsidiary or upon any shares of stock or indebtedness of any Restricted Subsidiary without equally and ratably securing the senior debt securities of a series. The foregoing restriction, however, will not apply to:

- mortgages on property, shares of stock or indebtedness of any corporation existing at the time such corporation becomes a Restricted Subsidiary;
- mortgages on property existing at the time of acquisition of such property by Howmet Aerospace or a Restricted Subsidiary or mortgages to secure the payment of all or any part of the purchase price of such property upon the acquisition or to secure any indebtedness incurred before, at the time of, or within 180 days after, the acquisition of such property for the purpose of financing all or any part of the purchase price thereof, or mortgages to secure the cost of improvements to such acquired property;
- mortgages to secure indebtedness of a Restricted Subsidiary to Howmet Aerospace or another Restricted Subsidiary;

- mortgages existing at the date of the senior indenture;
- mortgages on property of a corporation existing at the time such corporation is merged into or consolidated with Howmet Aerospace or a Restricted Subsidiary or at the time of a sale, lease, or other disposition of the properties of a corporation as an entirety or substantially as an entirety to Howmet Aerospace or a Restricted Subsidiary;
- certain mortgages in favor of governmental entities; or
- extensions, renewals or replacements of any mortgage referred to in the above listed exceptions. (Section 1009)

Notwithstanding the restrictions outlined in the preceding paragraph, Howmet Aerospace or any Restricted Subsidiary will be permitted to create, incur, assume or guarantee any indebtedness secured by a mortgage without equally and ratably securing the senior debt securities of a series, if after giving effect thereto, the aggregate amount of all indebtedness so secured by mortgages, not including mortgages permitted under the listed exceptions above, does not exceed 15% of Consolidated Net Tangible Assets (as defined below). (Section 1009)

Sale and Leaseback Arrangements. Howmet Aerospace covenants that it will not, nor will it permit any Restricted Subsidiary to, enter into any arrangement with any person providing for the leasing to Howmet Aerospace or any Restricted Subsidiary of Principal Property, where such Principal Property has been or is to be sold or transferred by Howmet Aerospace or such Restricted Subsidiary to such person, unless either:

- Howmet Aerospace or such Restricted Subsidiary would be entitled to create, incur, assume or guarantee indebtedness secured by a mortgage on such Principal Property at least equal in amount to the Attributable Debt (as defined below) with respect to such arrangement, without equally and ratably securing the senior debt securities of a series pursuant to the limitation in the senior indenture on liens; or
- Howmet Aerospace applies an amount equal to the greater of the net proceeds of such sale or the Attributable Debt with respect to such arrangement to the retirement of indebtedness that matures more than twelve months after the creation of such indebtedness.

This restriction on sale and leaseback transactions does not apply to any transaction:

- involving a lease for a term of not more than three years; or
- between Howmet Aerospace and a Restricted Subsidiary or between Restricted Subsidiaries. (Section 1010)

Highly leveraged transactions. The senior indenture does not contain provisions that would afford protection to the holders of the senior debt securities of a series in the event of a highly leveraged transaction involving Howmet Aerospace.

Certain Definitions

The following are definitions of certain capitalized words used in this summary. These and other definitions are set forth in their entirety in the senior indenture.

“Attributable Debt” when used in connection with a sale and leaseback transaction referred to above means, at the time of determination, the lesser of:

- the fair value of such property as determined by Howmet Aerospace’s board of directors; or
- the present value, discounted at the annual rate of 9%, compounded semi-annually, of the obligation of the lessee for net rental payments during the remaining term of the lease, including any period for which such lease has been extended.

“Consolidated Net Tangible Assets” means, as of any particular time, the aggregate amount of assets, less applicable reserves and other properly deductible items, adjusted for inventories on the basis of cost, before application of the “last-in first-out” method of determining cost, or current market value, whichever is lower, and deducting therefrom:

- all current liabilities except for:
 - notes and loans payable,
 - current maturities of long-term debt, and
 - current maturities of obligations under capital leases; and

- all goodwill, tradenames, patents, unamortized debt discount and expenses, to the extent included in such aggregate amount of assets, and other like intangibles, all as set forth on the most recent consolidated balance sheet of Howmet Aerospace and its consolidated Subsidiaries and computed in accordance with generally accepted accounting principles.

“Principal Property” means any manufacturing plant or manufacturing facility that is:

- owned by Howmet Aerospace or any Restricted Subsidiary; and
- located within the continental United States of America.

However, any plant that, in the opinion of Howmet Aerospace’s board of directors, is not of material importance to the total business conducted by Howmet Aerospace and the Restricted Subsidiaries taken as a whole will not constitute a Principal Property.

“Restricted Subsidiary” means any Subsidiary substantially all the property of which is located within the continental United States, but excluding any Subsidiary that:

- is principally engaged in leasing or in financing receivables, or
- is principally engaged in financing Howmet Aerospace’s operations outside the continental United States, or
- principally serves as a partner in a partnership.

“Subsidiary” means any corporation of which more than 50% of the outstanding stock having the voting power to elect a majority of the board of directors of such corporation as at the time is owned, directly or indirectly, by Howmet Aerospace or by one or more Subsidiaries.

Events of Default

Unless otherwise provided in the applicable prospectus supplement, the following are events of default under the senior indenture with respect to a series of senior debt securities:

- (a) failure to pay any interest when due, and this failure continues for 30 days;
- (b) failure to pay any principal or premium when due;
- (c) failure to deposit any sinking fund payment when due and this failure continues for 30 days;
- (d) failure to perform any other covenant of Howmet Aerospace in the senior indenture (other than a covenant included in the senior indenture solely for the benefit of a series of senior debt securities other than that series), and this failure continues for 90 days after written notice as provided in the senior indenture;
- (e) default resulting in acceleration of any indebtedness for money borrowed by Howmet Aerospace in a principal amount in excess of \$100,000,000 under the terms of the instrument(s) under which such indebtedness is issued or secured if such acceleration is not rescinded or annulled within 10 days after written notice as provided in the senior indenture, provided that, the resulting event of default under the senior indenture will be cured or waived if such other default is cured or waived;
- (f) certain events in bankruptcy, insolvency or reorganization involving Howmet Aerospace; and
- (g) any other event of default provided with respect to senior debt securities of a series. (Section 501)

Because the applicable threshold amount of indebtedness the acceleration of which would give rise to an event of default under the senior indenture is lower for each series of senior debt securities created under the senior indenture before April 16, 2020 (the date of the fifth supplemental indenture), the acceleration of outstanding indebtedness of Howmet Aerospace may constitute an event of default with respect to one or more of such previously created series, but may not constitute an event of default under the respective terms of any series of senior debt securities created on or after the date of the fifth supplemental indenture.

If an event of default with respect to a series of senior debt securities occurs and is continuing, either the trustee or the holders of at least 25% in aggregate principal amount of the outstanding senior debt securities of that series by notice as provided in the senior indenture may declare the principal amount (or, if the senior debt securities of that series are original issue discount securities, such portion of the principal amount as may be specified in the terms of that series) of all the senior debt securities of that series to be due and payable immediately. At any time after a declaration of acceleration with respect to senior debt securities of any series has been made, but before a judgment or decree for payment of money has been obtained by the trustee, the holders of a majority in aggregate principal amount of the outstanding senior debt securities of that series may, under certain circumstances, rescind and annul such acceleration. (Section 502)

Subject to the duty of the trustee during default to act with the required standard of care, the trustee will be under no obligation to exercise any of its rights or powers under the senior indenture at the request or direction of any of the holders, unless such holders have offered to the trustee reasonable indemnity. (Sections 601 and 603)

The holders of a majority in aggregate principal amount of the outstanding senior debt securities of any series will have the right to direct the time, method and place of conducting any proceeding for any remedy available to the trustee, or exercising any trust or power conferred on the trustee, with respect to the senior debt securities of that series. (Section 512)

Defeasance and Covenant Defeasance

Unless otherwise indicated in the applicable prospectus supplement with respect to the senior debt securities of a series, Howmet Aerospace, at its option:

(a) will be discharged from any and all obligations in respect of the senior debt securities of that series, except for certain obligations to:

- issue temporary senior debt securities pending preparation of definitive senior debt securities of such series,
- register the transfer or exchange of senior debt securities of such series,
- replace stolen, lost or mutilated senior debt securities of such series, and
- maintain paying agents and hold monies for payment in trust, or

(b) need not comply with the covenants that are set forth above under “Certain Limitations” and below under “Consolidation, Merger and Sale of Assets,” and the occurrence of an event described under clause (d) of “Events of Default” with respect to any defeased covenant and clauses (e) and (g) of “Events of Default” (see above) will no longer be events of default, if, in each case, Howmet Aerospace irrevocably deposits with the trustee, in trust, money and/or U.S. government obligations that through the scheduled payment of interest thereon and principal thereof in accordance with their terms will provide money in an amount sufficient to pay all the principal of and any premium and interest on the senior debt securities of such series on the dates such payments are due in accordance with the terms of the senior indenture and the senior debt securities of such series. (Sections 1301, 1302, 1303 and 1304) The trust may only be established if, among other things:

- no event of default, or event that with the giving of notice or lapse of time, or both, would become an event of default, under the senior indenture has occurred and is continuing on the date of such deposit, and no event of default, or event that with the giving of notice or lapse of time, or both, would become an event of default, under clause (f) of “Events of Default” (see above) has occurred and is continuing at any time during the period ending on the 91st day following such date of deposit, and
- Howmet Aerospace has delivered an opinion of counsel (which opinion, in the event of a defeasance of the type described in clause (a) above, shall be based upon a ruling from the Internal Revenue Service or a change in applicable U.S. federal income tax law from the date of the senior indenture) to the effect that the holders of the senior debt securities of the series will not recognize income, gain or loss for U.S. federal income tax purposes as a result of such deposit or defeasance and will be subject to U.S. federal income tax in the same manner as if such defeasance had not occurred. (Section 1304)

If Howmet Aerospace omits to comply with its remaining obligations under the senior indenture after a defeasance of the senior indenture with respect to the senior debt securities of any series as described under clause (b) above and the senior debt securities of such series are declared due and payable because of the occurrence of any undefeased event of default, the amount of money and/or U.S. government obligations on deposit with the trustee may be insufficient to pay amounts due on the senior debt securities of such series at the time of the acceleration resulting from such event of default. However, Howmet Aerospace will remain liable in respect of such payments.

Meetings, Modification and Waiver

Howmet Aerospace and the trustee may make modifications and amendments of the senior indenture with the consent of the holders of not less than 50% in aggregate principal amount of the outstanding senior debt securities of each series affected by the modification or amendment. However, Howmet Aerospace and the trustee may not make any of the following modifications or amendments without the consent of the holder of each outstanding senior debt security affected:

- change the Stated Maturity of the principal of, or any installment of principal of or interest on, any senior debt security;
- reduce the principal amount of, or premium or interest on, any senior debt security;
- change any obligation of Howmet Aerospace to pay additional amounts;
- reduce the amount of principal of an original issue discount security payable upon acceleration of the maturity thereof;
- change the coin or currency in which any senior debt security or any premium or interest thereon is payable;
- impair the right to institute suit for the enforcement of any payment on or with respect to any senior debt security on or after the Stated Maturity thereof (or, in the case of redemption, on or after the redemption date);
- reduce the percentage in principal amount of outstanding senior debt securities of any series, the consent of whose holders is required for modification or amendment of the senior indenture or for waiver of compliance with certain provisions of such senior indenture or for waiver of certain defaults;
- reduce the requirements contained in the senior indenture for quorum or voting;
- change any obligation of Howmet Aerospace to maintain an office or agency in the places and for the purposes required by the senior indenture; or
- modify any of the above provisions. (Section 902)

The holders of at least 50% of the outstanding senior debt securities of a series may waive compliance by Howmet Aerospace with certain restrictive provisions of the senior indenture. (Section 1012)

The holders of not less than a majority in aggregate principal amount of the outstanding senior debt securities of each series may, on behalf of all holders of senior debt securities of that series and any coupons appertaining thereto, waive any past default under the senior indenture with respect to senior debt securities of that series, except a default:

- in the payment of principal of, or any premium or interest on, any senior debt security of the series; and
- in respect of a covenant or provision of the senior indenture that cannot be modified or amended without the consent of the holder of each outstanding senior debt security of the series affected. (Section 513)

In determining whether the holders of the requisite principal amount of the outstanding senior debt securities of a series have given any request, demand, authorization, direction, notice, consent or waiver thereunder or are present at a meeting of holders of senior debt securities of a series for quorum purposes:

- the principal amount of an original issue discount security that will be deemed to be outstanding will be the amount of its principal that would be due and payable as of the date of such determination upon acceleration of its maturity;
- the principal amount of a senior debt security denominated in a foreign currency or currencies will be the U.S. dollar equivalent, determined on the date of original issuance of that security, of the principal amount of the senior debt security (or, in the case of an original issue discount security, the U.S. dollar equivalent, determined on the date of original issuance of the senior debt security, of the amount determined as provided above); and
- senior debt securities owned by Howmet Aerospace or an affiliate of Howmet Aerospace will not be deemed outstanding. (Section 101)

The senior indenture contains provisions for convening meetings of the holders of senior debt securities of a series if senior debt securities of that series are issuable as bearer securities. (Section 1401) A meeting may be called at any time by the trustee, and also, upon request, by Howmet Aerospace or the holders of at least 10% in principal amount of the outstanding senior debt securities of a series, in any case upon notice given in accordance with “Notices” below. (Section 1402)

To be entitled to vote at any meeting of holders of senior debt securities of any series, a person must be:

- a holder of one or more outstanding senior debt securities of the series; or
- a person appointed by an instrument in writing as proxy of a holder, including proxies given to beneficial owners of book-entry securities by the depository or its nominee. (Section 1403)

Except for any consent that must be given by the holder of each outstanding senior debt security affected thereby, as described above,

- any resolution presented at a meeting or adjourned meeting at which a quorum is present may be adopted by the affirmative vote of the holders of a majority in principal amount of the outstanding senior debt securities of that series; and
- any resolution with respect to any request, demand, authorization, direction, notice, consent, waiver or other action that may be made, given or taken by the holders of a specified percentage, which is less than a majority, in principal amount of outstanding senior debt securities of a series may be adopted at a meeting or adjourned meeting duly reconvened at which a quorum is present by the affirmative vote of the holders of such specified percentage in principal amount of the outstanding senior debt securities of that series.

Any resolution passed or decision taken at any meeting of holders of senior debt securities of any series duly held in accordance with the senior indenture will be binding on all holders of senior debt securities of that series and the related coupons.

The quorum at any meeting called to adopt a resolution, and at any reconvened meeting, will be persons holding or representing a majority in principal amount of the outstanding senior debt securities of a series. (Section 1404)

Consolidation, Merger, Sale of Assets and Other Transactions

Howmet Aerospace may, without the consent of the holders of any of the outstanding senior debt securities under the senior indenture, consolidate or merge with or into, or transfer or lease its assets substantially as an entirety to, any person, or any person may consolidate with or merge into or transfer or lease its assets substantially as an entirety to, Howmet Aerospace, provided that:

- any successor person is a corporation, partnership or trust organized and validly existing under the laws of the United States of America, any State thereof or the District of Columbia and assumes Howmet Aerospace’s obligations on the senior debt securities and under the senior indenture;
- after giving effect to the transaction, no event of default, and no event that, after notice or lapse of time, would become an event of default, has occurred and is continuing; and
- certain other conditions are met. (Section 801)

Notices

Except as otherwise provided in the senior indenture, (i) notices to holders of bearer securities will be given by publication at least twice in a daily newspaper in the City of New York and in such other city or cities as may be specified in such senior debt securities and described in the applicable prospectus supplement. Notices to holders of registered securities will be given by mail to the addresses of such holders as they appear in the security register and (ii) so long as any holders of registered securities are registered in the name of Cede & Co., as nominee for The Depository Trust Company (“DTC”), or another depository, and subject to any listing requirements, notices, reports and other information that are required to be sent to the holders of securities may be given by delivery of the relevant notice to DTC for communication by DTC to entitled participants and account holders of such clearing systems. (Sections 101 and 106)

Title

Title to any bearer securities and any coupons will pass by delivery. Howmet Aerospace, the trustee and any agent of Howmet Aerospace or the trustee may treat the bearer of any bearer security and the bearer of any coupon and the registered owner of any registered security as the absolute owner thereof, whether or not the senior debt security or coupon is overdue and notwithstanding any notice to the contrary, for the purpose of making payment and for all other purposes. (Section 308)

Replacement of Securities and Coupons

Howmet Aerospace will replace any mutilated senior debt security or a senior debt security with a mutilated coupon at the expense of the holder upon surrender of the senior debt security to the security registrar.

Howmet Aerospace will replace senior debt securities or coupons that become destroyed, stolen or lost at the expense of the holder upon delivery to the trustee of evidence of the destruction, loss or theft thereof satisfactory to Howmet Aerospace and the trustee. If any coupon becomes destroyed, stolen or lost, that coupon will be replaced by issuance of a new senior debt security in exchange for the senior debt security to which that coupon is attached. In the case of a destroyed, lost or stolen senior debt security or coupon, an indemnity satisfactory to the trustee and Howmet Aerospace may be required at the expense of the holder of such senior debt security or coupon before a replacement senior debt security will be issued. (Section 306)

Governing Law

The senior indenture, the senior debt securities and the coupons will be governed by, and construed in accordance with, the laws of the Commonwealth of Pennsylvania, except to the extent that the Trust Indenture Act applies. (Section 113)

Regarding the Trustee

The Bank of New York Mellon Trust Company, N.A. is the trustee under the senior indenture relating to the senior debt securities. The trustee has, and certain of its affiliates may have, from time to time, commercial and investment banking relationships (including other trusteeships) with us and certain of our affiliates in the ordinary course of business.

The trustee under the senior indenture or its affiliates, from time to time, may make loans to us and perform other services for us in the normal course of business. Under the provisions of the Trust Indenture Act, upon the occurrence of a default under the senior indenture, if a trustee has a conflicting interest (as defined in the Trust Indenture Act), the trustee must, within 90 days, either eliminate such conflicting interest or resign. Under the provisions of the Trust Indenture Act, an indenture trustee shall be deemed to have a conflicting interest, among other things, if the trustee is a creditor of the obligor. If the trustee fails either to eliminate the conflicting interest or to resign within 10 days after the expiration of such 90-day period, the trustee is required to notify security holders to this effect and any security holder who has been a bona fide holder for at least six months may petition a court to remove the trustee and to appoint a successor trustee.

CERTAIN U.S. FEDERAL INCOME TAX CONSIDERATIONS

The prospectus supplement relating to any senior debt security that we may offer will contain a discussion of the material U.S. federal income tax considerations that may be relevant to a holder of such senior debt security.

PLAN OF DISTRIBUTION

We may sell the securities from time to time in one or more transactions:

- through underwriters, dealers or agents;
- directly to agents or other purchasers;
- through a combination of any of these methods of sale; or
- through any other method described in the applicable prospectus supplement.

We may directly solicit offers to purchase securities or agents may be designated to solicit offers. We will, in the prospectus supplement relating to an offering, name any agent that could be viewed as an underwriter under the Securities Act of 1933, as amended (the "Securities Act"), and describe any commissions that we must pay. Any such agent will be acting on a best efforts basis for the period of its appointment or, if indicated in the applicable prospectus supplement, on a firm commitment basis. This prospectus may be used in connection with any offering of our securities through any of these methods or other methods described in the applicable prospectus supplement.

The distribution of the securities may be effected from time to time in one or more transactions:

- at a fixed price or prices which may be changed from time to time;
- at market prices prevailing at the time of sale;
- at prices related to such prevailing market prices; or
- at negotiated prices.

Each prospectus supplement will describe the method of distribution of the securities and any applicable restrictions.

The prospectus supplement with respect to the securities of a particular offering will describe the terms of the offering of the securities, including the following:

- the name of any underwriters, dealers or agents;
- the public offering or purchase price;
- any discounts and commissions to be allowed or paid to the underwriters, dealers or agents;
- all other items constituting underwriting compensation;
- any discounts and commissions to be allowed or paid to dealers; and
- any exchanges on which the securities will be listed.

If any underwriters or agents are utilized in the sale of the securities in respect of which this prospectus is delivered, we will enter into an underwriting agreement or other agreement with them at the time of sale to them, and we will set forth in the prospectus supplement relating to the offering the names of the underwriters or agents and the terms of the related agreement with them.

If a dealer is utilized in the sale of the securities in respect of which the prospectus is delivered, we will sell the securities to the dealer, as principal. The dealer may then resell the securities to the public at varying prices to be determined by the dealer at the time of resale.

Underwriters, dealers and agents participating in a sale of the securities may be deemed to be underwriters as defined in the Securities Act, and any discounts and commissions received by them and any profit realized by them on resale of the securities being offered may be deemed to be underwriting discounts and commissions, under the Securities Act. Agents, underwriters, dealers and other persons may be entitled under agreements which they may enter into with us to indemnification by us against certain civil liabilities, including liabilities under the Securities Act, or to contribution to payments that may be required to be made in respect of these liabilities.

If so indicated in the applicable prospectus supplement, we will authorize underwriters or other persons acting as our agents to solicit offers by certain institutions to purchase senior debt securities from us pursuant to delayed delivery contracts providing for payment and delivery on the date stated in the prospectus supplement. Each contract will be for an amount not less than, and the aggregate amount of senior debt securities sold pursuant to such contracts shall not be less nor more than, the respective amounts stated in the prospectus supplement. Institutions with whom the contracts, when authorized, may be made include commercial and savings banks, insurance companies, pension funds, investment companies, educational and charitable institutions and other institutions, but shall in all cases be subject to our approval. Delayed delivery contracts will not be subject to any conditions except that:

- the purchase by an institution of the senior debt securities covered under that contract may not at the time of delivery be prohibited under the laws of the jurisdiction to which that institution is subject; and
- if the senior debt securities are also being sold to underwriters acting as principals for their own account, the underwriters will have purchased such senior debt securities not sold for delayed delivery. The underwriters and other persons acting as our agents will not have any responsibility in respect of the validity or performance of delayed delivery contracts.

Certain underwriters, dealers and agents, and their associates and affiliates may be customers of, have borrowing relationships with, engage in other transactions with, and/or perform services, including investment banking services, for us or one or more of our respective affiliates in the ordinary course of business.

In order to facilitate the offering of the securities, any underwriters may engage in transactions that stabilize, maintain or otherwise affect the price of the securities or any other securities the prices of which may be used to determine payments on such securities. Specifically, any underwriters may overallocate in connection with the offering, creating a short position for their own accounts. In addition, to cover overallocations or to stabilize the price of the securities or of any such other securities, the underwriters may bid for, and purchase, the securities or any such other securities in the open market. Finally, in any offering of the securities through a syndicate of underwriters, the underwriting syndicate may reclaim selling concessions allowed to an underwriter or a dealer for distributing the securities in the offering if the syndicate repurchases previously distributed securities in transactions to cover syndicate short positions, in stabilization transactions or otherwise. Any of these activities may stabilize or maintain the market price of the securities above independent market levels. Any such underwriters are not required to engage in these activities and may end any of these activities at any time.

We may enter into derivative transactions with third parties or sell securities not covered by this prospectus to third parties in privately negotiated transactions. If the applicable prospectus supplement so indicates, in connection with those derivatives, the third parties may sell securities covered by this prospectus and the applicable prospectus supplement, including in short sale transactions. The third party in such sale transactions may be an underwriter and will be identified in the applicable prospectus supplement.

As of the date of this prospectus, under Rule 15c6-1 of the Exchange Act, trades in the secondary market generally are required to settle in two business days after the date the securities are priced (“T+2”), unless the parties to any such trade expressly agree otherwise. Accordingly, if the applicable prospectus supplement specifies that the issue date is more than two business days after the date on which the securities are priced, purchasers who wish to trade such securities at any time prior to the second business day preceding the issue date will be required, by virtue of the fact that the securities will not settle in T+2, to specify an alternative settlement cycle at the time of any such trade to prevent a failed settlement; such purchasers should also consult their own advisors in this regard. In February 2023, Rule 15c6-1 of the Exchange Act was amended to require trades in the secondary market to settle in one business day after the date the securities are priced (“T+1”), effective May 28, 2024. Therefore, for any securities offered under this prospectus on or after the May 28, 2024 effective date, the same process described in this paragraph will apply and purchasers who wish to trade such securities at any time prior to the first business day preceding the issue date will be required to specify an alternative settlement cycle as described in this paragraph.

The securities may be new issues of securities and may have no established trading market. The securities may or may not be listed on a national securities exchange. Any underwriters that purchase the securities for public offering and sale may make a market in such securities, but such underwriters will not be obligated to do so and may discontinue any market making at any time without notice. We can make no assurance as to the liquidity of or the existence of trading markets for any of the securities.

LEGAL MATTERS

Unless otherwise indicated in the applicable prospectus supplement, the validity of the senior debt securities offered by Howmet Aerospace will be passed upon by K&L Gates LLP, Pittsburgh, Pennsylvania.

EXPERTS

The consolidated financial statements and management's assessment of the effectiveness of internal control over financial reporting (which is included in Management's Report on Internal Control over Financial Reporting) incorporated in this prospectus by reference to the Annual Report on Form 10-K for the year ended December 31, 2022 have been so incorporated in reliance on the report of PricewaterhouseCoopers LLP, an independent registered public accounting firm, given on the authority of said firm as experts in auditing and accounting.

PART II. INFORMATION NOT REQUIRED IN THE PROSPECTUS

Item 14. Other Expenses of Issuance and Distribution

Set forth below is an estimate (except in the case of the registration fee) of the amount of fees and expenses to be incurred in connection with the issuance and distribution of the offered securities, other than underwriting discounts and commissions.

SEC registration fee	\$	*
Printing and engraving		**
Accounting services		**
Legal fees of registrant's counsel		**
Trustee's fees and expenses		**
Rating agency fees		**
Miscellaneous		**
Total	\$	**

* Deferred in reliance upon Rules 456(b) and 457(r).

** These fees are calculated based on the securities offered and the number of issuances and accordingly cannot be estimated at this time.

Item 15. Indemnification of Directors and Officers

The following summary is qualified in its entirety by reference to the complete Delaware General Corporation Law ("DGCL") and the registrant's certificate of incorporation as amended to date ("Certificate of Incorporation").

The registrant's Certificate of Incorporation provides that to the fullest extent permitted by the DGCL, as the same exists or may hereafter be amended, a director of the Company shall not be personally liable either to the Company or to any of its stockholders for monetary damages for breach of fiduciary duty as a director. Any amendment, modification or repeal of the foregoing provision in the Certificate of Incorporation shall not adversely affect any right or protection of a director of the registrant in respect of any act or omission occurring prior to the time of such amendment, modification or repeal. The Certificate of Incorporation provides that if the DGCL is amended to further eliminate or limit the liability of a director, then a director of the registrant, in addition to the circumstances in which a director is not personally liable as set forth in the preceding sentence, shall not be liable to the fullest extent permitted by the amended DGCL.

Under Section 145 of the DGCL, a Delaware corporation must indemnify its present or former directors and officers against expenses (including attorney's fees) actually and reasonably incurred to the extent that the officer or director has been successful on the merits or otherwise in defense of any action, suit or proceeding brought against him or her by reason of the fact that he or she is or was a director or officer of the corporation. The DGCL generally permits a Delaware corporation to indemnify directors and officers against expenses, judgments, fines and amounts paid in settlement of any action or suit for actions taken in good faith and in a manner they reasonably believed to be in, or not opposed to, the best interests of the corporation and, with respect to any criminal action, which they had no reasonable cause to believe was unlawful.

The registrant is governed by the provisions of the DGCL permitting the registrant to purchase director's and officer's insurance to protect itself and any director, officer, employee or agent of the registrant. The registrant has an insurance policy which insures the directors and officers of the registrant and its subsidiaries against certain liabilities which might be incurred in connection with the performance of their duties. The registrant also has indemnification agreements with its directors and officers that provide for the maximum indemnification allowed by law.

The underwriters or agents on whose behalf the agreement listed as Exhibit 1(a) to this registration statement will be executed will agree in those agreements to indemnify directors and officers of the registrant, and persons controlling the registrant, within the meaning of the Securities Act of 1993, as amended, against certain liabilities that might arise out of or are based upon certain information furnished to the registrant by any such underwriter or agent or to contribute to payments that may be required to be made in respect of these liabilities.

Item 16. Exhibits

<u>Exhibit Number</u>	<u>Description of Exhibit</u>
1(a)	Form of Underwriting Agreement for senior unsecured debt.*
4(a)	Indenture, dated as of September 30, 1993, between Alcoa Inc. and The Bank of New York Trust Company, N.A., as successor to J. P. Morgan Trust Company, National Association (formerly Chase Manhattan Trust Company, National Association), as successor trustee to PNC Bank, National Association, as trustee (undated form of Indenture incorporated by reference to Exhibit 4(a) to Registration Statement No. 33-49997 on Form S-3).
4(b)	<u>First Supplemental Indenture, dated as of January 25, 2007, between Alcoa Inc. and The Bank of New York Trust Company, N.A., as successor to J.P. Morgan Trust Company, National Association (formerly Chase Manhattan Trust Company, National Association), as successor trustee to PNC Bank, National Association, as trustee, incorporated by reference to Exhibit 99.4 to the Company's Current Report on Form 8-K (Commission file number 1-3610) dated January 25, 2007.</u>
4(c)	<u>Second Supplemental Indenture, dated as of July 15, 2008, between Alcoa Inc. and The Bank of New York Mellon Trust Company, N.A., as successor in interest to J. P. Morgan Trust Company, National Association (formerly Chase Manhattan Trust Company, National Association, as successor to PNC Bank, National Association), as trustee, incorporated by reference to Exhibit 4(c) to the Company's Current Report on Form 8-K (Commission file number 1-3610) dated July 15, 2008.</u>
4(d)	<u>Fourth Supplemental Indenture, dated as of December 31, 2017, between Arconic Inc. (f/k/a Alcoa Inc.), a Pennsylvania corporation, Arconic Inc. (which subsequently changed its name to Howmet Aerospace Inc.), a Delaware corporation, and The Bank of New York Mellon Trust Company, N.A., as trustee, incorporated by reference to Exhibit 4.3 to the Company's Current Report on Form 8-K (Commission file number 1-3610) dated January 4, 2018.</u>
4(e)	<u>Fifth Supplemental Indenture, dated as of April 16, 2020, between Howmet Aerospace Inc., a Delaware corporation, and The Bank of New York Mellon Trust Company, N.A., as trustee, incorporated by reference to Exhibit 4(e) to the Company's Registration Statement on Form S-3 (Registration Statement No. 333-237705) dated April 16, 2020.</u>
4(f)	Form of Senior Debt Security.*
5(a)	<u>Opinion of K&L Gates LLP.**</u>
23(a)	<u>Consent of PricewaterhouseCoopers LLP, independent registered public accounting firm.**</u>
23(b)	<u>Consent of K&L Gates LLP (included in the opinion filed as Exhibit 5(a) filed herewith).</u>
24(a)	<u>Power of Attorney for directors and certain officers.**</u>
25(a)	<u>Form T-1 Statement of Eligibility of Trustee for Senior Indenture under the Trust Indenture Act of 1939.**</u>
107	<u>Filing Fee Table.**</u>

* To be filed by amendment or as an exhibit to a document filed under the Securities Exchange Act of 1934, as amended, and incorporated herein by reference.

** Filed herewith.

Item 17. Undertakings

The undersigned registrant hereby undertakes:

(a) To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:

(i) to include any prospectus required by Section 10(a)(3) of the Securities Act of 1933, as amended (the "Securities Act");

(ii) to reflect in the prospectus any facts or events arising after the effective date of this registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in this registration statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the Securities and Exchange Commission (the "Commission") pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than a 20 percent change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement; and

(iii) to include any material information with respect to the plan of distribution not previously disclosed in this registration statement or any material change to such information in this registration statement;

provided, however, that paragraphs (a)(i), (a)(ii) and (a)(iii) do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in reports filed with or furnished to the Commission by the registrant pursuant to Section 13 or Section 15(d) of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), that are incorporated by reference in this registration statement, or is contained in a form of prospectus filed pursuant to Rule 424(b) that is part of this registration statement.

(b) That, for the purpose of determining any liability under the Securities Act, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof.

(c) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.

(d) That, for the purpose of determining liability under the Securities Act to any purchaser:

(i) each prospectus filed by the registrant pursuant to Rule 424(b)(3) shall be deemed to be part of the registration statement as of the date the filed prospectus was deemed part of and included in the registration statement; and

(ii) each prospectus required to be filed pursuant to Rule 424(b)(2), (b)(5), or (b)(7) as part of a registration statement in reliance on Rule 430B relating to an offering made pursuant to Rule 415(a)(1)(i), (vii) or (x) for the purpose of providing the information required by Section 10(a) of the Securities Act shall be deemed to be part of and included in the registration statement as of the earlier of the date such form of prospectus is first used after effectiveness or the date of the first contract of sale of securities in the offering described in the prospectus. As provided in Rule 430B, for liability purposes of the issuer and any person that is at that date an underwriter, such date shall be deemed to be a new effective date of the registration statement relating to the securities in the registration statement to which that prospectus relates, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof. *Provided, however*, that no statement made in a registration statement or prospectus that is part of the registration statement or made in a document incorporated or deemed incorporated by reference into the registration statement or prospectus that is part of the registration statement will, as to a purchaser with a time of contract of sale prior to such effective date, supersede or modify any statement that was made in the registration statement or prospectus that was part of the registration statement or made in any such document immediately prior to such effective date.

(e) That, for the purpose of determining liability of the registrant under the Securities Act to any purchaser in the initial distribution of the securities, the undersigned registrant undertakes that in a primary offering of securities of such undersigned registrant pursuant to this registration statement, regardless of the underwriting method used to sell the securities to the purchaser, if the securities are offered or sold to such purchaser by means of any of the following communications, such undersigned registrant will be a seller to the purchaser and will be considered to offer or sell such securities to such purchaser:

(i) any preliminary prospectus or prospectus of such undersigned registrant relating to the offering required to be filed pursuant to Rule 424;

(ii) any free writing prospectus relating to the offering prepared by or on behalf of such undersigned registrant or used or referred to by such undersigned registrant;

(iii) the portion of any other free writing prospectus relating to the offering containing material information about such undersigned registrant or its securities provided by or on behalf of such undersigned registrant; and

(iv) any other communication that is an offer in the offering made by such undersigned registrant to the purchaser.

(f) That, for purposes of determining any liability under the Securities Act, each filing of the registrant's annual report pursuant to Section 13(a) or 15(d) of the Exchange Act (and, where applicable, each filing of an employee benefit plan's annual report pursuant to Section 15(d) of the Exchange Act) that is incorporated by reference in the registration statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof.

(g) To file an application for the purpose of determining the eligibility of the trustee to act under subsection (a) of Section 310 of the Trust Indenture Act in accordance with the rules and regulations prescribed by the Commission under Section 305(b)(2) of the Trust Indenture Act.

(h) Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the Commission such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of such Registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, as amended, the Registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-3 and has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Pittsburgh, State of Pennsylvania, on May 23, 2023.

HOWMET AEROSPACE INC.

By: /s/ W. Paul Myron
W. Paul Myron
Vice President and Treasurer

Pursuant to the requirements of the Securities Act of 1933, this registration statement has been signed by the following persons in the capacities and on the date indicated.

<u>Signature</u>	<u>Title</u>	<u>Date</u>
<u>*</u> John C. Plant	Executive Chairman and Chief Executive Officer (Principal Executive Officer and Director)	May 23, 2023
<u>/s/ Kenneth J. Giacobbe</u> Kenneth J. Giacobbe	Executive Vice President, Chief Financial Officer (Principal Financial Officer)	May 23, 2023
<u>/s/ Barbara L. Shultz</u> Barbara L. Shultz	Vice President and Controller (Principal Accounting Officer)	May 23, 2023
<u>*</u> James F. Albaugh	Director	May 23, 2023
<u>*</u> Amy E. Alving	Director	May 23, 2023
<u>*</u> Sharon R. Barner	Director	May 23, 2023
<u>*</u> Joseph S. Cantie	Director	May 23, 2023
<u>*</u> Robert F. Leduc	Director	May 23, 2023
<u>*</u> David J. Miller	Director	May 23, 2023
<u>*</u> Jody G. Miller	Director	May 23, 2023
<u>*</u> Ulrich R. Schmidt	Director	May 23, 2023
*By: <u>/s/ W. Paul Myron</u> W. Paul Myron <i>As Attorney-in-Fact</i>		May 23, 2023

The logo for K&L GATES, featuring the text "K&L GATES" in a white, sans-serif font on a dark blue rectangular background.

May 23, 2023

Howmet Aerospace Inc.
201 Isabella Street, Suite 200
Pittsburgh, PA 15212-5872

Re: Registration Statement on Form S-3

We have acted as counsel to Howmet Aerospace Inc., a Delaware corporation (the “Company”), in connection with the Registration Statement on Form S-3 filed concurrently herewith by the Company with the Securities and Exchange Commission (the “SEC”) under the Securities Act of 1933, as amended (the “Securities Act”), on the date hereof (the “Registration Statement”), relating to the issuance and sale, from time to time on a delayed or continuous basis pursuant to Rule 415 under the Securities Act, of an indeterminate amount of the senior debt securities of the Company (the “Senior Debt Securities”).

In connection with rendering the opinions set forth below, we have examined (i) the Registration Statement, including the exhibits filed therewith, and the prospectus contained therein (the “Prospectus”); (ii) the Company’s Certificate of Incorporation, as amended (the “Certificate”); (iii) the Company’s Bylaws, as amended (the “Bylaws”); and (iii) resolutions adopted by the board of directors of the Company authorizing and providing for the filing of the Registration Statement.

For the purposes of this opinion letter, we have assumed that (i) each document submitted to us is accurate and complete; (ii) each such document that is an original is authentic; (iii) each such document that is a copy conforms to an authentic original; and (iv) all signatures on each such document are genuine. We have further assumed the legal capacity of natural persons, and we have assumed that each party to the documents we have examined or relied on (other than the Company) has the legal capacity or authority and has satisfied all legal requirements that are applicable to that party to the extent necessary to make such documents enforceable against that party. We have not verified any of the foregoing assumptions or any other assumptions set forth in this opinion letter.

The opinions expressed in this opinion letter are limited to the laws of the Commonwealth of Pennsylvania, the General Corporation Law of the State of Delaware, and applicable federal securities laws of the United States. We are not opining on, and we assume no responsibility for, the applicability to or effect on any of the matters covered herein of (i) any other laws; (ii) the laws of any other jurisdiction; or (iii) the law of any county, municipality or other political subdivision or local governmental agency or authority.

Based on the foregoing, and subject to the foregoing and the additional qualifications and other matters set forth below, it is our opinion that, assuming the terms of any series of Senior Debt Securities offered pursuant to the Registration Statement have been duly established in accordance with terms of the Indenture (as defined below) pursuant to which such Senior Debt Securities are to be issued, when such Senior Debt Securities have been duly executed, authenticated (if required), issued and delivered as contemplated by the Registration Statement and any Prospectus Supplement and in accordance with the Indenture, such Senior Debt Securities will constitute valid and binding obligations of the Company, enforceable against the Company in accordance with their terms.

K&L GATES LLP
K&L GATES CENTER 210 SIXTH AVENUE PITTSBURGH PA 15222-2613
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The opinions set forth above are subject to the following additional assumptions:

- (a) The Registration Statement and any amendment thereto (including any post-effective amendment) will have become effective under the Securities Act, and such effectiveness will not have been terminated, suspended or rescinded;
- (b) One or more Prospectus Supplements will have been prepared and timely filed with the SEC describing the Senior Debt Securities offered thereby;
- (c) All Senior Debt Securities offered pursuant to the Registration Statement will be issued and sold (i) in compliance with all applicable federal and state securities laws, rules and regulations and solely in the manner provided in the Registration Statement and any Prospectus Supplement or free writing prospectus (as defined in Rule 405 under the Securities Act) and (ii) only upon payment of the consideration fixed therefor in accordance with any applicable definitive underwriting, purchase, agency or similar agreement relating to the particular offering, including any amendment or supplement thereto (each a "Purchase Agreement"), and any other applicable agreement relating to the particular offering (including the Indenture or other agreement pursuant to which any Senior Debt Securities offered pursuant to the Registration Statement are to be issued or governed, including any amendment or supplement to any of the foregoing), and there will not have occurred any change in law or fact affecting the validity of any of the opinions rendered herein with respect thereto;
- (d) Any Senior Debt Securities offered pursuant to the Registration Statement are to be issued or governed by the Indenture, dated as of September 30, 1993, between Alcoa Inc. (formerly known as Aluminum Company of America), a Pennsylvania corporation, and The Bank of New York Mellon Trust Company, N.A. (formerly known as The Bank of New York Trust Company, N.A.), as trustee, as successor to J.P. Morgan Trust Company, National Association (formerly known as Chase Manhattan Trust Company, N.A., as successor to PNC Bank, National Association)), as supplemented by the First Supplemental Indenture, dated as of January 25, 2007, between Alcoa Inc., a Pennsylvania corporation, and such trustee, the Second Supplemental Indenture, dated as of July 15, 2008, between Alcoa Inc., a Pennsylvania corporation, and such trustee, the Fourth Supplemental Indenture, dated as of December 31, 2017, among Arconic Inc. (formerly known as Alcoa Inc.), a Pennsylvania corporation, Arconic Inc., a Delaware corporation, and such trustee, and the Fifth Supplemental Indenture, dated as of April 16, 2020, between Howmet Aerospace Inc. (formerly known as Arconic Inc.) and such trustee (collectively, the "Senior Indenture"), as it may hereafter be supplemented from time to time, among other things at the time of and in connection with the issuance of such Senior Debt Securities (collectively, the "Indenture"); any supplemental indenture (a "Supplemental Indenture") under the Senior Indenture relating to a series of Senior Debt Securities to be issued will be duly authorized, executed and delivered by the parties thereto in substantially the form reviewed by us; and there will have been no addition, deletion or modification of the terms or provisions contained in the Indenture or Supplemental Indenture that would affect the validity of any of the opinions rendered herein;

(e) A definitive Purchase Agreement, any other applicable agreement relating to the particular offering (including the Indenture or other agreement pursuant to which any Senior Debt Securities offered pursuant to the Registration Statement are to be issued or governed, including any amendment or supplement to any of the foregoing) and, if applicable, the Senior Debt Securities themselves, will have been duly authorized and approved by all necessary action of the board of directors of the Company, or a duly authorized committee thereof, and duly executed and delivered by the Company, and each of the other parties thereto;

(f) In the case of any Purchase Agreement, Indenture or other agreement pursuant to which any Senior Debt Securities offered pursuant to the Registration Statement are to be issued or governed, including any amendment or supplement to any of the foregoing, there will be no terms or provisions contained therein which would affect the validity of any of the opinions rendered herein;

(g) The final terms of any Senior Debt Securities offered pursuant to the Registration Statement, and, when issued, the issuance, sale and delivery thereof, and the incurrence and performance of the obligations thereunder or in respect thereof in accordance with the terms thereof, and any consideration to be received for any such issuance, sale and delivery, (i) will comply with, and will not violate, (A) the Certificate and the Bylaws, as they may be amended or supplemented hereafter, or (B) any applicable law, rule or regulation; (ii) will not result in a default under or breach of any agreement or instrument binding upon the Company; (iii) will comply with any requirement or restriction imposed by any court or governmental body having jurisdiction over the Company, or to which the issuance, sale and delivery of such Senior Debt Securities or the incurrence and performance of such obligations may be subject; and (iv) will not violate any applicable public policy or be subject to any defense in law or equity; and

(h) The Company will have taken any action required to be taken by it to authorize the offer and issuance thereof, and such authorization will remain in effect and unchanged at all times during which the Senior Debt Securities are offered and issued and will not have been modified or rescinded (subject to the further assumption that the sale of any such Senior Debt Security takes place in accordance with such authorization); the board of directors of the Company, or a duly authorized committee thereof, will have duly established the terms of such Senior Debt Security and duly authorized and taken any other necessary corporate action to approve the issuance and sale of such Senior Debt Security in conformity with the Certificate and the Bylaws, as they may be amended or supplemented hereafter (in each case subject to the further assumption that any such organic documents of the Company will have not been amended from the date hereof in a manner that would affect the validity of any of the opinions rendered herein), and such authorization will remain in effect and unchanged at all times during which such Senior Debt Securities are offered and issued and will not have been modified or rescinded (subject to the further assumption that the sale of any such Senior Debt Security will take place in accordance with such authorization).

To the extent that the obligations of the Company under any offered Senior Debt Securities and the Indenture may be dependent upon such matters, we assume for purposes of this opinion letter that (i) the applicable financial institution serving as trustee pursuant to the terms of the Indenture, as it may be amended or supplemented (the "Trustee"), will be duly organized, validly existing and in good standing under the laws of its jurisdiction of organization; (ii) the Trustee will be duly qualified to engage in the activities contemplated by the Indenture, as it may be amended or supplemented; (iii) such Indenture and any amendment or supplement thereto will have been duly authorized, executed and delivered by the Trustee and will constitute the valid and binding obligations of the Trustee, enforceable against the Trustee in accordance with its terms; (iv) the Trustee will be in compliance, with respect to acting as a trustee under the Indenture and any amendment or supplement thereto, with all applicable laws and regulations; (v) the Trustee will have the requisite organizational and legal power and authority to perform its obligations under the Indenture and any amendment or supplement thereto; and (vi) the Trustee will have been qualified under the Trust Indenture Act of 1939, as amended, and a Form T-1 with respect to the Trustee shall have been properly filed as an exhibit to the Registration Statement.

The opinions set forth above are subject to the effects of (a) bankruptcy, insolvency, fraudulent conveyance, fraudulent transfer, voidable transactions, reorganization, receivership, moratorium and other similar laws relating to or affecting the enforcement of creditors' rights or remedies generally; (b) general principles of equity, regardless of whether such principles are considered in a proceeding at law or in equity; and (c) an implied covenant of good faith, reasonableness, fair dealing and standards of materiality.

We express no opinion with respect to any provision (i) that purports to waive forum non conveniens or trial by jury; (ii) that relates to judgments in currencies other than U.S. dollars; (iii) that purports to limit any person's liability, or relieve any party of the consequences of, its own unlawful, willful, reckless, bad faith, or negligent acts or omissions, or that grants indemnity or a right of contribution; (iv) that purports to allow any party to interfere unreasonably in the conduct of another party's business; (v) that purports to require the payment or reimbursement of fees, costs, expenses or other amounts that are unreasonable in nature or amount or without a reasonable accounting of the sums purportedly due or that are contrary to applicable law or public policy; (vi) that purports to prohibit the assignment of rights that are assignable pursuant to applicable law notwithstanding an agreement not to assign such rights; (vii) that purports to require that amendments or waivers to any agreement be in writing; (viii) relating to severability or set-off; (ix) that purports to limit access exclusively to any particular courts; (x) that purports to place a limitation on lawsuits to the extent that it may conflict with federal bankruptcy law, in which case such provision may be deemed void or voidable under federal bankruptcy law; (xi) that provides that no recourse may be had against any successors of the Company or any stockholder of the Company that may be a controlling person under federal securities laws; (xii) that purports to waive or modify any party's obligations of good faith, fair dealing, diligence, mitigation of damages, reasonableness or due notice, or the right of redemption under the Uniform Commercial Code or other applicable law; (xiii) that provides for advance waivers of claims, defenses, rights granted by law, or notice, opportunity for hearing, evidentiary requirements, statutes of limitation, trial by jury or at law, or other procedural rights; (xiv) that provides that decisions by a party are conclusive or may be made in its sole discretion; (xv) that consents to, or restricts governing law, jurisdiction, venue, arbitration, remedies or judicial relief; (xvi) that waives broadly or vaguely stated rights; (xvii) that provides for exclusivity, election or cumulation of rights or remedies; (xviii) that provides a proxy, power of attorney or trust; (xix) that prohibits, restricts, or requires consent to assignment or transfer of any right or property; and (xx) that provides for liquidated damages, an increased interest rate on default, interest on interest, late charges, monetary penalties, make-whole premiums or other economic remedies to the extent such provisions may be found to constitute a penalty. We also express no opinion concerning whether a U.S. federal court would accept jurisdiction in any dispute, action, suit or proceeding arising out of or relating to any agreement or the transactions contemplated thereby or the net impact or result of any conflict of laws between or among laws of competing jurisdictions and the applicability of the law of any jurisdiction in such instance.

We assume no obligation to update or supplement any of our opinions to reflect any changes of law or fact that may occur after the date hereof.

We hereby consent to the filing of this opinion letter as an exhibit to the Registration Statement and to the reference to this firm in the Prospectus under the caption “Legal Matters”. In giving our consent, we do not thereby admit that we are experts with respect to any part of the Registration Statement, the Prospectus or any Prospectus Supplement within the meaning of the term “expert”, as used in Section 11 of the Securities Act or the rules and regulations promulgated thereunder, nor do we admit that we are in the category of persons whose consent is required under Section 7 of the Securities Act or the rules and regulations thereunder.

Yours truly,

/s/ K&L Gates LLP

K&L Gates LLP

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the incorporation by reference in this Registration Statement on Form S-3 of Howmet Aerospace Inc. of our report dated February 14, 2023 relating to the financial statements and the effectiveness of internal control over financial reporting, which appears in Howmet Aerospace Inc.'s Annual Report on Form 10-K for the year ended December 31, 2022. We also consent to the reference to us under the heading "Experts" in such Registration Statement.

/s/ PricewaterhouseCoopers LLP
Pittsburgh, Pennsylvania
May 23, 2023

POWER OF ATTORNEY

Each of the undersigned directors of Howmet Aerospace Inc., a Delaware corporation (the "Company"), hereby constitutes and appoints Kenneth J. Giacobbe, Lola F. Lin, W. Paul Myron and Barbara L. Shultz, and each of them with power to act alone, his or her true and lawful attorney-in-fact, with full power of substitution and resubstitution, for him or her and in his or her name, place and stead, in any and all capacities, to execute a Registration Statement on Form S-3 for the registration of an indeterminate amount of securities of the Company under the Securities Act of 1933, as amended (the "Securities Act"), and any and all amendments (including post-effective amendments) to such Registration Statement and any Registration Statement relating to any offering made pursuant to such Registration Statement that is to be effective upon filing pursuant to Rule 462(b) under the Securities Act, and to file the same, with all exhibits thereto, and all documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorney-in-fact full power and authority to do and perform each and every act and thing necessary or desirable to be done in and about the premises, as fully to all intents and purposes, as he or she might or could do in person, hereby ratifying and confirming all that said attorney-in-fact or his substitute or substitutes may lawfully do or cause to be done by virtue hereof.

IN WITNESS WHEREOF, the undersigned has hereunto subscribed this power of attorney this 23rd day of May, 2023.

/s/ James F. Albaugh
James F. Albaugh,
Director

/s/ Amy E. Alving
Amy E. Alving
Director

/s/ Sharon R. Barner
Sharon R. Barner
Director

/s/ Joseph S. Cantie
Joseph S. Cantie
Director

/s/ Robert F. Leduc
Robert F. Leduc
Director

/s/ David J. Miller
David J. Miller
Director

/s/ Jody G. Miller
Jody G. Miller
Director

/s/ John C. Plant
John C. Plant
Executive Chairman and
Chief Executive Officer

/s/ Ulrich R. Schmidt
Ulrich R. Schmidt
Director

=====

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

FORM T-1
STATEMENT OF ELIGIBILITY
UNDER THE TRUST INDENTURE ACT OF 1939 OF A
CORPORATION DESIGNATED TO ACT AS TRUSTEE

CHECK IF AN APPLICATION TO DETERMINE
ELIGIBILITY OF A TRUSTEE PURSUANT TO
SECTION 305(b)(2)

THE BANK OF NEW YORK MELLON
TRUST COMPANY, N.A.
(Exact name of trustee as specified in its charter)

(Jurisdiction of incorporation
if not a U.S. national bank) 95-3571558
(I.R.S. employer
identification no.)

333 South Hope Street
Suite 2525
Los Angeles, California 90071
(Address of principal executive offices) (Zip code)

Howmet Aerospace Inc.
(Exact name of obligor as specified in its charter)

Delaware 25-0317820
(State or other jurisdiction of
incorporation or organization) (I.R.S. employer
identification no.)

201 Isabella Street, Suite 200
Pittsburgh, Pennsylvania 15212
(Address of principal executive offices) (Zip code)

Senior Debt Securities
(Title of the indenture securities)

=====

1. General information. Furnish the following information as to the trustee:

(a) Name and address of each examining or supervising authority to which it is subject.

Name	Address
Comptroller of the Currency United States Department of the Treasury	Washington, DC 20219
Federal Reserve Bank	San Francisco, CA 94105
Federal Deposit Insurance Corporation	Washington, DC 20429

(b) Whether it is authorized to exercise corporate trust powers.

Yes.

2. Affiliations with Obligor.

If the obligor is an affiliate of the trustee, describe each such affiliation.

None.

16. List of Exhibits.

Exhibits identified in parentheses below, on file with the Commission, are incorporated herein by reference as an exhibit hereto, pursuant to Rule 7a-29 under the Trust Indenture Act of 1939 (the "Act") and 17 C.F.R. 229.10(d).

1. A copy of the articles of association of The Bank of New York Mellon Trust Company, N.A., formerly known as The Bank of New York Trust Company, N.A. (Exhibit 1 to Form T-1 filed with Registration Statement No. 333-121948 and Exhibit 1 to Form T-1 filed with Registration Statement No. 333-152875).
2. A copy of certificate of authority of the trustee to commence business. (Exhibit 2 to Form T-1 filed with Registration Statement No. 333-121948).
3. A copy of the authorization of the trustee to exercise corporate trust powers (Exhibit 3 to Form T-1 filed with Registration Statement No. 333-152875).

4. A copy of the existing by-laws of the trustee (Exhibit 4 to Form T-1 filed with Registration Statement No. 333-229762).
6. The consent of the trustee required by Section 321(b) of the Act (Exhibit 6 to Form T-1 filed with Registration Statement No. 333-152875).
7. A copy of the latest report of condition of the Trustee published pursuant to law or to the requirements of its supervising or examining authority.

SIGNATURE

Pursuant to the requirements of the Act, the Trustee, The Bank of New York Mellon Trust Company, N.A., a banking association organized and existing under the laws of the United States of America, has duly caused this statement of eligibility to be signed on its behalf by the undersigned, thereunto duly authorized, all in the City of Jacksonville, and State of Florida, on the 19th day of May, 2023.

THE BANK OF NEW YORK MELLON TRUST COMPANY, N.A.

By: /s/ Daniel Todd
Name: Daniel Todd
Title: Vice President

Consolidated Report of Condition of
THE BANK OF NEW YORK MELLON TRUST COMPANY, N.A.
of 333 South Hope Street, Suite 2525, Los Angeles, CA 90071

At the close of business March 31, 2023, published in accordance with Federal regulatory authority instructions.

Dollar amounts
in thousands

ASSETS

Cash and balances due from depository institutions:	
Noninterest-bearing balances and currency and coin	2,821
Interest-bearing balances	524,227
Securities:	
Held-to-maturity securities	0
Available-for-sale debt securities	1,038
Equity securities with readily determinable fair values not held for trading	0
Federal funds sold and securities purchased under agreements to resell:	
Federal funds sold in domestic offices	0
Securities purchased under agreements to resell	0
Loans and lease financing receivables:	
Loans and leases held for sale	0
Loans and leases, held for investment	0
LESS: Allowance for loan and lease losses	0
Loans and leases held for investment, net of allowance	0
Trading assets	0
Premises and fixed assets (including capitalized leases)	14,362
Other real estate owned	0
Investments in unconsolidated subsidiaries and associated companies	0
Direct and indirect investments in real estate ventures	0
Intangible assets	856,313
Other assets	116,025
	116,025
Total assets	\$ 1,514,786

LIABILITIES

Deposits:	
In domestic offices	1,079
Noninterest-bearing	1,079
Interest-bearing	0
Federal funds purchased and securities sold under agreements to repurchase:	
Federal funds purchased in domestic offices	0
Securities sold under agreements to repurchase	0
Trading liabilities	0
Other borrowed money:	
(includes mortgage indebtedness and obligations under capitalized leases)	0
Not applicable	
Not applicable	
Subordinated notes and debentures	0
Other liabilities	286,970
Total liabilities	288,049
Not applicable	

EQUITY CAPITAL

Perpetual preferred stock and related surplus	0
Common stock	1,000
Surplus (exclude all surplus related to preferred stock)	325,877
Not available	
Retained earnings	899,862
Accumulated other comprehensive income	-2
Other equity capital components	0
Not available	
Total bank equity capital	1,226,737
Noncontrolling (minority) interests in consolidated subsidiaries	0
Total equity capital	1,226,737
Total liabilities and equity capital	<u>1,514,786</u>

I, Matthew J. McNulty, CFO of the above-named bank do hereby declare that the Reports of Condition and Income (including the supporting schedules) for this report date have been prepared in conformance with the instructions issued by the appropriate Federal regulatory authority and are true to the best of my knowledge and belief.

Matthew J. McNulty) CFO

We, the undersigned directors (trustees), attest to the correctness of the Report of Condition (including the supporting schedules) for this report date and declare that it has been examined by us and to the best of our knowledge and belief has been prepared in conformance with the instructions issued by the appropriate Federal regulatory authority and is true and correct.

Antonio I. Portuondo, President)
Loretta A. Lundberg, Managing Director) Directors (Trustees)
Jon M. Pocchia, Managing Director)

Calculation of Filing Fee Table

Form S-3
(Form Type)

Howmet Aerospace Inc.

(Exact Name of Registrant as Specified in its Charter)

Table 1: Newly Registered and Carry Forward Securities

	Security Type	Security Class Title	Fee Calculation or Carry Forward Rule	Amount Registered	Proposed Maximum Offering Price Per Unit	Maximum Aggregate Offering Price	Fee Rate	Amount of Registration Fee	Carry Forward Form Type	Carry Forward File Number	Carry Forward Initial Effective Date	Filing Fee Previously Paid in Connection with Unsold Securities to be Carried Forward
Newly Registered Securities												
Fees to Be Paid	Debt	Senior Debt Securities	(1)	(2)	(2)	(2)	(1)	(1)				
Fees Previously Paid	-	-	-	-	-	-	-	-	-	-	-	-
Carry Forward Securities												
Carry Forward Securities	-	-	-	-	-	-	-	-	-	-	-	-
		Total Offering Amounts				N/A	-	N/A				
		Total Fees Previously Paid						N/A				
		Total Fee Offsets						N/A				
		Net Fee Due						N/A				

- (1) The registrant is relying on Rule 456(b) and Rule 457(r) under the Securities Act of 1933, as amended, to defer payment of all of the registration fee. In connection with the securities offered hereby, the registrant is deferring payment of all registration fees and will pay the registration fees subsequently in advance or on a "pay-as-you-go" basis. The registrant will calculate the registration fee applicable to an offer of securities pursuant to this Registration Statement based on the fee payment rate in effect on the date of such fee payment.
- (2) An indeterminate aggregate initial offering price and amount of the securities of each identified class is being registered and may from time to time be offered hereunder at indeterminate prices.