

**UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION  
WASHINGTON, D.C. 20549**

**FORM 8-K**

**CURRENT REPORT  
Pursuant to Section 13 or 15(d)  
of the Securities Exchange Act of 1934**

**Date of Report (Date of earliest event reported):  
February 6, 2023**

**NORTHROP GRUMMAN CORPORATION**

(Exact name of registrant as specified in its charter)

**Delaware**  
(State or other jurisdiction  
of incorporation)

**1-16411**  
(Commission  
File Number)

**80-0640649**  
(IRS Employer  
Identification No.)

**2980 Fairview Park Drive, Falls Church, VA 22042**  
(Address of principal executive offices) (Zip Code)

**(703) 280-2900**  
Registrant's telephone number, including area code

(Former name or former address if changed since last report)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions:

- Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
- Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
- Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
- Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common Stock	NOC	New York Stock Exchange

Indicate by check mark whether the registrant is an emerging growth company as defined in Rule 405 of the Securities Act of 1933 or Rule 12b-2 of the Securities Exchange Act of 1934.

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 13(a) of the Exchange Act.

**Item 1.01 Entry into a Material Definitive Agreement.**

On February 8, 2023, Northrop Grumman Corporation (the “Company”) issued \$1,000,000,000 in aggregate principal amount of 4.700% senior notes due 2033 (the “2033 Notes”) and \$1,000,000,000 in aggregate principal amount of 4.950% senior notes due 2053 (the “2053 Notes” and, together with the 2033 Notes, the “Notes”). The Notes were issued pursuant to an indenture (the “Original Indenture”), dated as of November 21, 2001, as supplemented by the first supplemental indenture, dated as of July 30, 2009 (the “First Supplemental Indenture”), the third supplemental indenture, dated as of March 30, 2011 (the “Third Supplemental Indenture”), the fourth supplemental indenture, dated as of March 30, 2011 (the “Fourth Supplemental Indenture”) and the eleventh supplemental indenture, dated as of February 8, 2023 (the “Eleventh Supplemental Indenture”) by and between the Company and The Bank of New York Mellon, as successor to JPMorgan Chase Bank, as trustee (the “Trustee”) (the Original Indenture as supplemented by the First Supplemental Indenture, the Third Supplemental Indenture, the Fourth Supplemental Indenture and the Eleventh Supplemental Indenture, the “Indenture”). The Notes were sold pursuant to an Underwriting Agreement, dated February 6, 2023, by and among the Company and Wells Fargo Securities, LLC, J.P. Morgan Securities LLC and Mizuho Securities USA LLC, as representatives of the several underwriters named therein.

The 2033 Notes will mature on March 15, 2033 and the 2053 Notes will mature on March 15, 2053, in each case, unless redeemed earlier. The Company may redeem any of the series of notes at its option, as a whole or in part, at any time or from time to time, at the redemption prices described in the Final Prospectus Supplement filed with the Securities and Exchange Commission dated February 6, 2023.

The Indenture governing the Notes contains certain covenants, including covenants related to our ability to create liens, engage in certain sale and leaseback transactions and engage in certain transactions and asset sales. These covenants are subject to exceptions and qualifications.

The terms and conditions of the Notes are set forth in the Original Indenture, filed as an exhibit to the Company’s current report on Form 8-K filed on November 21, 2001, the First Supplemental Indenture, filed as an exhibit to the Company’s current report on Form 8-K filed on July 30, 2009, the Third Supplemental Indenture, filed as an exhibit to the Company’s quarterly report on Form 10-Q for the quarter ended March 31, 2011, filed on April 27, 2011, the Fourth Supplemental Indenture, filed as an exhibit to the Company’s quarterly report on Form 10-Q for the quarter ended March 31, 2011, filed on April 27, 2011, and the Eleventh Supplemental Indenture attached hereto as Exhibit 4.1. The foregoing description of the Notes and the Indenture is qualified in its entirety by reference to these documents. The Company has on file with the Securities and Exchange Commission an effective registration statement on Form S-3 dated March 31, 2020 (Registration No. 333-237504, the “Registration Statement”) and incorporates by reference the exhibits filed with this report into the Registration Statement.

**Item 2.03 Creation of a Direct Financial Obligation or an Obligation Under an Off-Balance Sheet Arrangement of a Registrant.**

The information in Item 1.01 is incorporated herein by reference.

**Item 9.01 Financial Statements and Exhibits.**

(d) Exhibits

<u>Exhibit No.</u>	<u>Description</u>
1.1	<a href="#"><u>Underwriting Agreement, dated February 6, 2023, among Northrop Grumman Corporation and Wells Fargo Securities, LLC, J.P. Morgan Securities LLC and Mizuho Securities USA LLC, as representatives of the several underwriters named therein</u></a>
4.1	<a href="#"><u>Eleventh Supplemental Indenture, dated as of February 8, 2023, between Northrop Grumman Corporation and The Bank of New York Mellon, as successor to JPMorgan Chase Bank, Trustee, to Indenture dated as of November 21, 2001</u></a>
4.2	<a href="#"><u>Form of 4.700% Senior Note due 2033 (included in Exhibit 4.1)</u></a>
4.3	<a href="#"><u>Form of 4.950% Senior Note due 2053 (included in Exhibit 4.1)</u></a>
5.1	<a href="#"><u>Opinion of Cravath, Swaine &amp; Moore LLP</u></a>
23.1	<a href="#"><u>Consent of Cravath, Swaine &amp; Moore LLP (included in Exhibit 5.1)</u></a>
104	Cover Page Interactive Data File (embedded within the Inline XBRL document)

**SIGNATURE**

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

**NORTHROP GRUMMAN CORPORATION  
(Registrant)**

By: /s/ Jennifer C. McGarey  
Jennifer C. McGarey  
Corporate Vice President and Secretary

Date: February 8, 2023

\$2,000,000,000

Northrop Grumman Corporation

\$1,000,000,000 4.700% Senior Notes due 2033

\$1,000,000,000 4.950% Senior Notes due 2053

**UNDERWRITING AGREEMENT**

February 6, 2023

Wells Fargo Securities, LLC  
550 South Tryon Street, 5th Floor  
Charlotte, North Carolina 28202

J.P. Morgan Securities LLC  
383 Madison Avenue  
New York, New York 10179

Mizuho Securities USA LLC  
1271 Avenue of the Americas  
New York, New York 10020

As Representatives of the  
Several Underwriters

Ladies and Gentlemen:

Northrop Grumman Corporation, a Delaware corporation (the "Company"), proposes to issue and sell to the several underwriters (the "Underwriters") named in Schedule I hereto for whom you are acting as representatives (the "Representatives") \$1,000,000,000 aggregate principal amount of its 4.700% Senior Notes due 2033 (the "2033 Notes") and \$1,000,000,000 aggregate principal amount of its 4.950% Senior Notes due 2053 (the "2053 Notes") (collectively, the "Notes"). The respective principal amounts of the Notes to be so purchased by the several Underwriters are set forth opposite their respective names in Schedule I hereto. The Notes are to be issued under an indenture, dated as of November 21, 2001 (the "Original Indenture"), by and between the Company and The Bank of New York Mellon, as successor to JPMorgan Chase Bank, as trustee (the "Trustee"), as supplemented by the first supplemental indenture, dated as of July 30, 2009 (the "First Supplemental Indenture"), the third supplemental indenture, dated as of March 30, 2011 (the "Third Supplemental Indenture"), the fourth supplemental indenture, dated as of March 30, 2011 (the "Fourth Supplemental Indenture") and the eleventh supplemental indenture, to be dated as of February 8, 2023 (the "Eleventh Supplemental Indenture," and the Original Indenture as supplemented by the First Supplemental Indenture, the Third Supplemental Indenture, the Fourth Supplemental Indenture and the Eleventh Supplemental Indenture, the "Indenture"), by and between the Company and the Trustee.

As the Representatives, you have advised the Company (a) that you are authorized to enter into this underwriting agreement (the "Agreement") on behalf of the several Underwriters, and (b) that the several Underwriters are willing, acting severally and not jointly, to purchase the respective principal amounts of Notes set forth opposite their respective names in Schedule I.

In consideration of the mutual agreements contained herein and of the interests of the parties in the transactions contemplated hereby, the parties hereto agree as follows:

1. Representations and Warranties of the Company.

The Company represents and warrants to each of the Underwriters as follows:

(a) An "automatic shelf registration statement" as defined in Rule 405 under the Securities Act of 1933, as amended (the "Act"), on Form S-3 (File No. 333-237504) in respect of the Notes, including a form of prospectus (the "Base Prospectus"), has been prepared and filed by the Company not earlier than three years prior to the date hereof, in conformity with the requirements of the Act and the rules and regulations promulgated by the Securities and Exchange Commission (the "Commission") thereunder (the "Rules and Regulations"). Such registration statement, which shall be deemed to include all information omitted therefrom in reliance upon Rules 430A, 430B or 430C under the Act, is herein referred to as the "Registration Statement." The Registration Statement became effective upon filing under Rule 462(e) under the Act on March 31, 2020. The Company has not filed a post-effective amendment to the Registration Statement. As used herein, the term "Prospectus" means the Base Prospectus together with the prospectus supplement relating to the Notes first filed with the Commission pursuant to and within the time limits described in Rule 424(b) under the Act and in accordance with Section 4(a). The Base Prospectus, as supplemented by any preliminary prospectus supplement relating to the Notes filed with the Commission pursuant to Rule 424(b) under the Act, is herein referred to as a "Preliminary Prospectus." Any reference herein to the Registration Statement, any Preliminary Prospectus or to the Prospectus or to any amendment or supplement to any of the foregoing documents shall be deemed to refer to and include the documents incorporated by reference therein pursuant to Item 12 of Form S-3 under the Act, as of the effective date of the Registration Statement or the date of such Preliminary Prospectus or the Prospectus, as the case may be, and any reference to "amend," "amendment" or "supplement" with respect to the Registration Statement, any Preliminary Prospectus or the Prospectus shall be deemed to include any documents incorporated by reference therein, and any supplements or amendments thereto (other than supplements relating only to securities other than the Notes), filed with the Commission after the date of filing of the Prospectus under Rule 424(b) under the Act, and prior to the termination of the offering of the Notes by the Underwriters.

(b) As of the Applicable Time (as defined below) and as of the Closing Date (as defined below), neither (i) the General Use Free Writing Prospectus(es) (as defined below) and the Statutory Prospectus (as defined below), considered together (collectively, the "General Disclosure Package"), nor (ii) any individual Limited Use Free Writing Prospectus (as defined below), when considered together with the General Disclosure Package, included or will include any untrue statement of a material fact or omitted or will omit to state a material fact necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading; provided, however, that the Company makes no representations or

warranties as to information contained in or omitted from the Statutory Prospectus or any Issuer Free Writing Prospectus (as defined below), in reliance upon, and in conformity with, written information furnished to the Company by or on behalf of any Underwriter through any Representative, specifically for use therein, it being understood and agreed that the only such information is that described in Section 13. As used in this Agreement:

“Applicable Time” means 4:40 p.m. (Eastern time) on the date of this Agreement, or such other time as may be agreed by the Company and the Representatives.

“Applicable Date” means (i) with respect to a registration statement or any amendment thereto, the effective date thereof; (ii) with respect to a prospectus, prospectus supplement, pricing supplement or free-writing prospectus, the date thereof; and (iii) with respect to any filing made under the Exchange Act, the filing date thereof.

“Statutory Prospectus” means the Preliminary Prospectus, as amended and supplemented by any document incorporated by reference therein and any prospectus supplement (including any preliminary prospectus supplement), in each case immediately prior to the Applicable Time.

“Issuer Free Writing Prospectus” means any “issuer free writing prospectus,” as defined in Rule 433 under the Act, relating to the Notes in the form filed or required to be filed with the Commission or, if not required to be filed, in the form retained in the Company’s records pursuant to Rule 433(g) under the Act.

“General Use Free Writing Prospectus” means any Issuer Free Writing Prospectus that is identified on Schedule II to this Agreement.

“Limited Use Free Writing Prospectus” means any Issuer Free Writing Prospectus that is not a General Use Free Writing Prospectus.

(c) The Company has been duly incorporated and is validly existing as a corporation in good standing under the laws of the State of Delaware, with the corporate power and authority to own or lease its properties and conduct its business as described in the Registration Statement, the General Disclosure Package and the Prospectus. The significant subsidiaries (as defined in Rule 1-02(w) of Regulation S-X of the Commission) of the Company are listed in Schedule III to this Agreement (the “Subsidiaries”). Each of the Subsidiaries has been duly incorporated or organized and is validly existing and in good standing under the laws of the respective jurisdiction of its incorporation or organization, with all corporate power and authority to own or lease its properties and conduct its business as described in the Registration Statement, the General Disclosure Package and the Prospectus. The Company and each of the Subsidiaries are duly qualified as foreign corporations to transact business in all jurisdictions in which the conduct of their business requires such qualification, except where the failure to be so qualified would not, individually or in the aggregate, be reasonably expected to have a Material Adverse Effect (as defined below). The outstanding shares of capital stock of each of the Subsidiaries have been duly authorized and validly issued, are fully paid and non-assessable and are owned by the Company or another Subsidiary free and clear of all liens, encumbrances and equities and claims; and no options, warrants or other rights to purchase, agreements or other obligations to issue or other rights to convert any obligations into shares of capital stock or ownership interests in the Subsidiaries are outstanding.

(d) The Commission has not issued an order preventing or suspending the use of the Registration Statement, any Preliminary Prospectus, any Issuer Free Writing Prospectus or the Prospectus relating to the proposed offering of the Notes, and no proceeding for that purpose or pursuant to Section 8A of the Act has been instituted or, to the Company's knowledge, threatened by the Commission. The Registration Statement, the Prospectus and any amendments or supplements thereto at their respective Applicable Dates contained or will contain all statements which are required to be stated therein by, and conformed or will conform in all material respects to, the requirements of the Act, the Trust Indenture Act of 1939, as amended (the "Trust Indenture Act"), and the Rules and Regulations. The documents incorporated, or to be incorporated, by reference in the Prospectus, at the time filed with the Commission, conformed, or will conform, in all material respects to the requirements of the Securities Exchange Act of 1934, as amended, and the rules and regulations of the Commission thereunder (collectively, the "Exchange Act"). The Registration Statement as of its effective date did not contain, and any post-effective amendment thereto as of its effective date will not contain, any untrue statement of a material fact and did not omit, and will not omit, to state a material fact required to be stated therein or necessary in order to make the statements therein not misleading. As of the date of the Prospectus, as of the date of any amendments and supplements thereto, and as of the Closing Date, the Prospectus and any such amendments and supplements did not contain, and will not contain, any untrue statement of a material fact, and did not omit, and will not omit, to state a material fact necessary in order to make the statements therein, in light of the circumstances under which they were made, not misleading; provided, however, that the Company makes no representations or warranties as to (i) information contained in or omitted from the Registration Statement or the Prospectus, or any such amendment or supplement, in reliance upon, and in conformity with, written information furnished to the Company by or on behalf of any Underwriter through any Representative, specifically for use therein, it being understood and agreed that the only such information is that described in Section 13, or (ii) that part of the Registration Statement that constitutes the Statement of Eligibility (Form T-1) of the Trustee under the Trust Indenture Act.

(e) Each Issuer Free Writing Prospectus, as of its issue date and at all subsequent times through the completion of the public offer and sale of the Notes, did not, does not and will not include any information that conflicted, conflicts or will conflict with the information contained in the Registration Statement, any Preliminary Prospectus not superseded or modified or the Prospectus, including any document incorporated by reference and any Prospectus Supplement deemed to be a part thereof that has not been superseded or modified; provided, however, that the Company makes no representations or warranties as to information contained in or omitted from any Issuer Free Writing Prospectus in reliance upon, and in conformity with, written information furnished to the Company by or on behalf of any Underwriter through any Representative, specifically for use therein, it being understood and agreed that the only such information is that described in Section 13.

(f) The Company has not, directly or indirectly, distributed and will not distribute any offering material in connection with the offering and sale of the Notes other than (i) any Preliminary Prospectus, (ii) the Prospectus, (iii) the General Use Free Writing



Prospectus(es), (iv) each Limited Use Free Writing Prospectus approved in writing in advance by the Representatives, and (v) other materials, if any, permitted under the Act and consistent with Section 4(b) and 4(c) below. The Company will file with the Commission all Issuer Free Writing Prospectuses in the time and manner required under Rules 163(b)(2) and 433(d) under the Act.

(g) (i) At the time of filing of the Registration Statement, (ii) at the time of the most recent amendment thereto for the purposes of complying with Section 10(a)(3) under the Act (whether such amendment was by post-effective amendment, incorporated report filed pursuant to Section 13 or 15(d) of the Exchange Act or form of prospectus), (iii) at the time the Company or any person acting on its behalf (within the meaning, for this clause only, of Rule 163(c) under the Act) made any offer relating to the Notes in reliance on the exemption of Rule 163 under the Act and (iv) at the date hereof, the Company is a “well-known seasoned issuer” as defined in Rule 405 under the Act. The Company is eligible to use the Registration Statement as an automatic shelf registration statement and has not received from the Commission any notice pursuant to Rule 401(g)(2) under the Act objecting to the use of such registration form.

(h) (i) At the earliest time after the filing of the Registration Statement that the Company or another offering participant made a *bona fide* offer (within the meaning of Rule 164(h)(2) under the Act) of the Notes and (ii) as of the date hereof (with such date being used as the determination date for purposes of this clause (ii)), the Company was not and is not an “ineligible issuer” (as defined in Rule 405 under the Act, without taking into account any determination by the Commission pursuant to Rule 405 under the Act that it is not necessary that the Company be considered an ineligible issuer), including for purposes of Rules 164 and 433 under the Act with respect to the offering of the Notes as contemplated by the Registration Statement.

(i) The historical consolidated financial statements of the Company and its consolidated subsidiaries, together with related notes and schedules thereto, set forth or incorporated by reference in the Registration Statement, the General Disclosure Package and the Prospectus, comply as to form in all material respects with the requirements of the Act. Such historical financial statements fairly present in all material respects the consolidated financial position of the Company and its consolidated subsidiaries at the respective dates indicated and the results of their operations and their cash flows for the respective periods indicated, as the case may be, in conformity with United States generally accepted accounting principles (“GAAP”) applied on a consistent basis throughout such periods, except as disclosed therein. The other financial and statistical information and data included in the Registration Statement, the General Disclosure Package and the Prospectus are, in all material respects, accurately presented and prepared on a basis consistent with the financial statements presented therein and the books and records of the Company. The interactive data in eXtensible Business Reporting Language incorporated by reference in the Registration Statement, the General Disclosure Package and the Prospectus fairly present the information called for in all material respects and have been prepared in all material respects in accordance with the Commission’s rules and guidelines applicable thereto.

(j) To the knowledge of the Company, Deloitte & Touche LLP, who have audited certain of the consolidated financial statements of the Company and its consolidated subsidiaries filed with the Commission as part of, or incorporated by reference in, the

Registration Statement, the General Disclosure Package and the Prospectus, as stated in their reports filed with the Commission, are an independent registered public accounting firm with respect to the Company and its subsidiaries as required by the Act and the applicable Rules and Regulations and by the Public Company Accounting Oversight Board (United States) (the “PCAOB”).

(k) Except as set forth in the Registration Statement, the General Disclosure Package and the Prospectus, no action, suit, claim or proceeding is pending or, to the knowledge of the Company, threatened against the Company or any of the Subsidiaries before any court or administrative agency or otherwise which is reasonably likely to either (i) have, individually or in the aggregate, a material adverse effect on the business, properties, financial position or results of operations of the Company and its subsidiaries, taken as a whole, or (ii) prevent the consummation of the transactions contemplated hereby (the occurrence of any such effect or any such prevention described in the foregoing clauses (i) and (ii) being referred to as a “Material Adverse Effect”).

(l) The Company and the Subsidiaries have good and marketable title to all real property and good and marketable title to all personal property owned by them, in each case free and clear of all liens, encumbrances and defects except such liens, encumbrances and defects as are described in the Registration Statement, the General Disclosure Package and the Prospectus or such as would not have a Material Adverse Effect; and any real property and buildings held under lease by the Company and the Subsidiaries are held by them under valid, subsisting and enforceable leases with such exceptions as would not, individually or in the aggregate, have a Material Adverse Effect.

(m) Except as described in or contemplated by the General Disclosure Package, since the date of the most recent financial statements of the Company included or incorporated by reference in the General Disclosure Package, there has not been (i) any Material Adverse Effect, or (ii) any development reasonably likely to involve a prospective material adverse change in, or materially and adversely affecting, the business, properties, financial position or results of operations of the Company and its subsidiaries, taken as a whole, whether or not occurring in the ordinary course of business, other than changes and transactions described in the Registration Statement, the General Disclosure Package and the Prospectus.

(n) Neither the Company nor any of the Subsidiaries is or with the giving of notice or lapse of time or both, will be, (i) in violation of its certificate or articles of incorporation, by-laws, certificate of formation, limited liability agreement, partnership agreement or other organizational documents or (ii) in violation of or in default under any agreement, lease, contract, indenture or other instrument or obligation to which it is a party or by which it, or any of its properties, is subject, except solely with respect to this clause (ii), for any such violation or default that would not be reasonably expected to have, individually or in the aggregate, a Material Adverse Effect. The execution and delivery of this Agreement and the Indenture and the consummation of the transactions herein and therein contemplated and the fulfillment of the terms hereof and thereof (including the issuance and sale of the Notes to the Underwriters) will not conflict with or result in a breach of any of the terms or provisions of, or constitute a default under, (i) any indenture, mortgage, deed of trust or other agreement or instrument to which the Company or any Subsidiary is a party or by which the Company or any

Subsidiary or any of its properties, is subject, (ii) the certificate or articles of incorporation or by-laws of the Company, or (iii) any law, order, rule or regulation, judgment, order, writ or decree applicable to the Company or any Subsidiary of any court or of any government, regulatory body or administrative agency or other governmental body having jurisdiction; except solely with respect to clauses (i) and (iii) next above, for any such conflict, breach or default that would not be reasonably expected to have, individually or in the aggregate, a Material Adverse Effect.

(o) This Agreement has been duly and validly authorized, executed and delivered by the Company.

(p) The Company has all requisite corporate power and authority to execute, deliver and perform each of its obligations under the Notes. The Notes, when issued, will be in the form contemplated by the Indenture. The Notes have been duly and validly authorized by the Company and, when executed by the Company and authenticated by the Trustee in accordance with the provisions of the Indenture and when delivered to and paid for by the Underwriters in accordance with the terms of this Agreement, will constitute valid and legally binding obligations of the Company, entitled to the benefits of the Indenture, and enforceable against the Company in accordance with their terms, except that the enforcement thereof may be subject to (i) bankruptcy, insolvency, fraudulent transfer, reorganization, moratorium and other similar laws now or hereafter in effect of general applicability relating to or affecting creditors' rights, and (ii) general principles of equity and the discretion of the court before which any proceeding therefor may be brought, regardless of whether considered in equity or at law (collectively, the "Enforceability Exceptions").

(q) The Company has all requisite corporate power and authority to perform its obligations under the Indenture. The Original Indenture has been duly qualified under the Trust Indenture Act. The Original Indenture, the First Supplemental Indenture, the Third Supplemental Indenture and the Fourth Supplemental Indenture have been duly and validly authorized and duly executed and delivered by the Company and (assuming the due authorization, execution and delivery by the Trustee) constitute valid and legally binding agreements of the Company, enforceable against the Company in accordance with its terms, except that the enforcement thereof may be subject to the Enforceability Exceptions. The Eleventh Supplemental Indenture has been duly and validly authorized and, when executed and delivered by the Company (assuming the due authorization, execution and delivery by the Trustee), will constitute a valid and legally binding agreement of the Company, enforceable against the Company in accordance with its terms, except that the enforcement thereof may be subject to the Enforceability Exceptions.

(r) Each approval, consent, order, authorization, designation, declaration or filing by or with any regulatory, administrative or other governmental body necessary in connection with the execution and delivery by the Company of this Agreement and the consummation of the transactions herein contemplated (except such additional steps as may be required by the Commission, the Financial Industry Regulatory Authority, Inc. ("FINRA") or such additional steps as may be necessary to qualify the Notes for public offering by the Underwriters under state securities or "Blue Sky" laws) has been obtained or made and is in full force and effect.

(s) Neither the Company, nor to the Company's knowledge, any of its affiliates, has taken, directly or indirectly, any action designed to cause or result in, or which has constituted or which might reasonably be expected to constitute, the stabilization or manipulation of the price of any security of the Company to facilitate the sale or resale of the Notes.

(t) Neither the Company nor any Subsidiary is or, after giving effect to the offering and sale of the Notes contemplated hereunder and the application of the net proceeds from such sale as described in the Registration Statement, General Disclosure Package and the Prospectus, will be, an "investment company" within the meaning of such term under the Investment Company Act of 1940, as amended (the "1940 Act"), and the rules and regulations of the Commission thereunder.

(u) The Company maintains a system of "internal control over financial reporting" (as defined in Rule 13a-15(f) of the Exchange Act) that complies with the requirements of the Exchange Act and has been designed by the Company's principal executive and principal financial officers, or persons performing similar functions, or under their supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with GAAP. As of December 31, 2022, the Company's internal control over financial reporting was effective, and the Company is not aware of any material weaknesses in its internal control over financial reporting.

(v) The Company has established and maintains an effective system of "disclosure controls and procedures" (as defined in Rule 13a-15(e) under the Exchange Act) and has carried out evaluations of the effectiveness of such "disclosure controls and procedures" as required by Rule 13a-15 of the Exchange Act.

(w) Neither the Company nor any of the Subsidiaries is in violation of any statute, rule, regulation, decision or order of any governmental agency or body or any court, domestic or foreign, relating to the use, disposal or release of hazardous or toxic substances or relating to the protection or restoration of the environment or human exposure to hazardous or toxic substances (collectively, "environmental laws"), owns or operates any real property contaminated with any substance that is subject to environmental laws, is liable for any off-site disposal or contamination pursuant to any environmental laws, or is subject to any claim relating to any environmental laws, which violation, contamination, liability or claim would, individually or in the aggregate, be reasonably expected to have a Material Adverse Effect.

(x) The Notes and the Indenture will conform in all material respects to the descriptions thereof in the Prospectus and the General Disclosure Package and will be in substantially the respective forms filed or incorporated by reference, as the case may be, as exhibits to the Registration Statement.

2. Purchase, Sale and Delivery of the Notes. On the basis of the representations, warranties, agreements and covenants herein contained and subject to the terms and conditions herein set forth, the Company agrees to issue and sell to the Underwriters, and the Underwriters, acting severally and not jointly, agree to purchase the Notes in the respective principal amounts set forth on Schedule I hereto from the Company at 99.448% of the principal amount of the 2033

Notes and at 98.714% of the principal amount of the 2053 Notes, in each case together with accrued interest, if any, from February 8, 2023 to the Closing Date. The Notes will each be represented by one or more definitive global certificates in book-entry form, in such denomination or denominations as the Representatives request upon notice to the Company (collectively for all series of Notes, the “Global Notes”), that will be deposited by or on behalf of the Company with The Depository Trust Company (“DTC”) or its designated custodian. The Company will deliver the Global Notes to the Representatives, for the account of each Underwriter, against payment by or on behalf of the Underwriters of the respective purchase prices therefor by wire transfer (immediately available funds), to such account or accounts as the Company shall specify in writing at least 48 hours prior to the Closing Date, by causing DTC to credit the Notes to the accounts of the Representatives at DTC (such time and date of delivery against payment, the “Closing Date”). The Company will make the Global Notes available for checking and packaging by the Representatives at the offices of DTC or its designated custodian at least 24 hours prior to the Closing Date.

### 3. Offering by the Underwriters.

It is understood that the several Underwriters are to make a public offering of the Notes as soon as the Representatives deem it advisable to do so. The Notes are to be initially offered to the public at the initial public offering price set forth in the General Disclosure Package and the Prospectus. The Representatives may from time to time thereafter change the public offering price and other selling terms.

### 4. Covenants of the Company.

The Company covenants and agrees with the several Underwriters that:

(a) The Company will (A) prepare and timely file with the Commission under Rule 424(b) (without reliance on Rule 424(b)(8)) under the Act a Prospectus in a form approved by the Representatives containing information previously omitted at the time of effectiveness of the Registration Statement in reliance on Rule 430A, 430B or 430C under the Act, (B) not, prior to the expiration of the Prospectus Delivery Period (as defined below), file any amendment to the Registration Statement, or distribute an amendment or supplement to the General Disclosure Package or the Prospectus or document incorporated by reference therein (in each case other than (i) an amendment or supplement consisting solely of the filing of a document required to be filed under the Exchange Act following the Closing Date or (ii) an amendment to the Registration Statement or a supplement relating to an offering of securities other than the Notes) of which the Representatives shall not previously have been advised and furnished with a copy or to which the Representatives shall have reasonably objected in writing or which is not in compliance in all material respects with the Rules and Regulations and (C) promptly file all reports and any definitive proxy or information statements required to be filed by the Company with the Commission subsequent to the date of the Prospectus and prior to the expiration of the Prospectus Delivery Period.

(b) The Company will (i) not make any offer relating to the Notes that would constitute an Issuer Free Writing Prospectus or that would otherwise constitute a “free writing prospectus” (as defined in Rule 405 under the Act) required to be filed by the Company with the

Commission under Rule 433 under the Act unless the Representatives approve its use in writing prior to first use (each, a “Permitted Free Writing Prospectus”); provided that the prior written consent of the Representatives hereto shall be deemed to have been given in respect of the Issuer Free Writing Prospectus(es) included in Schedule II hereto, (ii) treat each Permitted Free Writing Prospectus as an Issuer Free Writing Prospectus, (iii) comply with the requirements of Rules 163, 164 and 433 under the Act applicable to any Issuer Free Writing Prospectus, including the requirements relating to timely filing with the Commission, legending and record keeping and (iv) not take any action that would result in an Underwriter or the Company being required to file with the Commission pursuant to Rule 433(d) under the Act a “free writing prospectus” (as defined in Rule 405 under the Act) prepared by or on behalf of such Underwriter that such Underwriter otherwise would not have been required to file thereunder.

(c) The Company will prepare a final term sheet (the “Final Term Sheet”) reflecting the final terms of the Notes, in form and substance reasonably satisfactory to the Representatives, and shall file such Final Term Sheet as an Issuer Free Writing Prospectus pursuant to Rule 433 under the Act prior to the close of business two business days after the date hereof; provided that the Company shall provide the Representatives with copies of any such Final Term Sheet a reasonable amount of time prior to such proposed filing and will not use or file any such document to which the Representatives or counsel to the Underwriters shall reasonably object.

(d) The Company will advise the Representatives promptly (A) when any post-effective amendment to the Registration Statement, or new registration statement, relating to the Notes shall have become effective, or any supplement to the Prospectus shall have been filed, (B) of the receipt of any comments from the Commission relating to the Registration Statement, the Prospectus or the General Disclosure Package, (C) of any request of the Commission for amendment of the Registration Statement or the filing of a new registration statement or any amendment or supplement to the General Disclosure Package or the Prospectus or any document incorporated by reference therein or otherwise deemed to be a part thereof or for any additional information, in each case relating to the offering or sale of the Notes, and (D) of the issuance by the Commission of any stop order suspending the effectiveness of the Registration Statement or such new registration statement or any order preventing or suspending the use of any Preliminary Prospectus, any Issuer Free Writing Prospectus or the Prospectus, or of the institution of any proceedings for that purpose or pursuant to Section 8A of the Act. The Company will use its reasonable best efforts to prevent the issuance of any such order and to obtain as soon as possible the lifting thereof, if issued.

(e) If at any time during the Prospectus Delivery Period the Company receives from the Commission a notice pursuant to Rule 401(g)(2) under the Act or otherwise ceases to be eligible to use the automatic shelf registration statement form, the Company will (i) promptly notify the Representatives, (ii) promptly file a new registration statement or post-effective amendment on the proper form relating to the Notes, in a form satisfactory to the Representatives, (iii) use its reasonable best efforts to cause such registration statement or post-effective amendment to be declared effective as soon as practicable (if such filing is not otherwise effective immediately pursuant to Rule 462 under the Act), and (iv) promptly notify the Representatives of such effectiveness. The Company will take all other action necessary to permit the public offering and sale of the Notes to continue as contemplated in the Registration

Statement that was the subject of the notice under Rule 401(g)(2) under the Act or for which the Company has otherwise become ineligible. References herein to the Registration Statement relating to the Notes shall include such new registration statement or post-effective amendment, as the case may be.

(f) The Company agrees to pay the required filing fees to the Commission relating to the Notes within the time required by Rule 456(b)(1) under the Act without regard to the proviso therein and otherwise in accordance with Rules 456(b) and 457(r) under the Act.

(g) The Company will cooperate with the Representatives in endeavoring to qualify the Notes for sale under the securities laws of such jurisdictions in the United States as the Representatives may reasonably have designated in writing and will make such applications, file such documents, and furnish such information as may be reasonably required for that purpose; provided the Company shall not be required to qualify as a foreign corporation or to file a general consent to service of process in any jurisdiction where it is not now so qualified or required to file such a consent. The Company will, from time to time, prepare and file such statements, reports, and other documents, as are or may be required to continue such qualifications in effect for so long a period as the Representatives may reasonably request for distribution of the Notes.

(h) The Company will deliver to the Representatives as many copies of any Preliminary Prospectus or any Issuer Free Writing Prospectus as the Representatives may reasonably request. The Company will deliver to the Representatives during the period when delivery of a Prospectus (or, in lieu thereof, the notice referred to under Rule 173(a) under the Act) is required by law to be delivered by an Underwriter or dealer (the "Prospectus Delivery Period"), as many copies of the Prospectus in final form, or as thereafter amended or supplemented, as the Representatives may reasonably request. The Company will deliver to the Representatives at or before the Closing Date, four photocopies of an executed copy of the Registration Statement and all amendments thereto including all exhibits filed therewith, and will deliver to the Representatives such number of conformed copies of the Registration Statement (including such number of copies of the exhibits filed therewith that may reasonably be requested) and of all amendments thereto, as the Representatives may reasonably request.

(i) The Company will comply with the Act, the Rules and Regulations, the Exchange Act and the Trust Indenture Act, and the rules and regulations of the Commission thereunder, so as to permit the completion of the distribution of the Notes as contemplated in this Agreement and the Prospectus. If during the Prospectus Delivery Period any event shall occur as a result of which, in the judgment of the Company or in the reasonable opinion of the Underwriters, the Prospectus includes any untrue statement of a material fact or omits to state a material fact necessary in order to make the statements therein, in the light of the circumstances existing at the time the Prospectus is delivered to a purchaser, not misleading, or, if it is necessary at any time to amend or supplement the Prospectus to comply in all material respects with the Act or the Rules and Regulations, the Company promptly will either (i) prepare and file with the Commission an appropriate amendment to the Registration Statement or amendment or supplement to the Prospectus or (ii) prepare and file with the Commission an appropriate filing under the Exchange Act which shall be incorporated by reference in the Prospectus; so that in either case the Prospectus as so amended or supplemented (1) does not include any untrue

statement of a material fact or omit to state a material fact necessary in order to make the statements therein, in the light of the circumstances existing when it is so delivered, not misleading, or (2) so complies with such law.

(j) If the General Disclosure Package is being used to solicit offers to buy the Notes at a time when the Prospectus is not yet available to prospective purchasers and any event shall occur as a result of which, in the judgment of the Company or in the reasonable opinion of the Underwriters, the General Disclosure Package at the time the General Disclosure Package is being used includes any untrue statement of a material fact or omits to state a material fact necessary in order to make the statements therein, in the light of the circumstances existing, not misleading, the statements therein conflict with the information contained in the Registration Statement then on file in any material respect, or, if it is necessary at any time to amend or supplement the General Disclosure Package to comply in any material respect with the Act or the Rules and Regulations, the Company promptly will either (i) prepare, file with the Commission (if required) and furnish to the Underwriters and any dealers an appropriate amendment or supplement to the General Disclosure Package or (ii) prepare and file with the Commission an appropriate filing under the Exchange Act which shall be incorporated by reference in the General Disclosure Package; so that in either case the General Disclosure Package as so amended or supplemented at such time (1) does not include any untrue statement of a material fact or omit to state a material fact necessary in order to make the statements therein, in the light of the circumstances existing, not misleading, (2) does not so conflict with the Registration Statement then on file, or (3) so complies with such law.

(k) The Company will make generally available to its securityholders, as soon as it is practicable to do so, but in any event not later than 15 months after the effective date of the Registration Statement (as defined in Rule 158(c) under the Act), an earnings statement or statements (which need not be audited) complying with the requirements of Section 11(a) of the Act and Rule 158 under the Act.

(l) During the period beginning on the date hereof and continuing to the date that is seven days after the Closing Date, without the prior written consent of the Representatives, the Company will not offer, sell, contract to sell or otherwise dispose of, except as provided hereunder, any securities of the Company (or guaranteed by the Company) that are substantially similar to the Notes.

(m) The Company shall apply the net proceeds of its sale of the Notes as set forth in the Registration Statement, the General Disclosure Package and the Prospectus.

(n) The Company shall not invest, or otherwise use, the proceeds received by the Company from its sale of the Notes in such a manner as would require the Company or any of the Subsidiaries to register as an investment company under the 1940 Act.

(o) The Company will not take, directly or indirectly, any action designed to cause or result in, or that has constituted or might reasonably be expected to constitute, the stabilization or manipulation of the price of the Notes.



## 5. Covenants of the Underwriters.

(a) Each Underwriter hereby agrees that it has not and will not use, authorize use of, refer to, or participate in the planning for use of, any “free writing prospectus” (as defined in Rule 405 under the Act) (which term includes use of any written information furnished to the Commission by the Company and not incorporated by reference into the Registration Statement and any press release issued by the Company) other than (i) a free writing prospectus that, solely as a result of use by such Underwriter, would not trigger an obligation to file such free writing prospectus with the Commission or is not required to be retained by the Company pursuant to Rule 163 or Rule 433, (ii) any Issuer Free Writing Prospectus listed on Schedule II or prepared pursuant to Section 4(b) or Section 4(c) above, or (iii) any free writing prospectus prepared by such Underwriter and approved by the Company in advance in writing.

(b) Each Underwriter hereby (i) agrees that it will not knowingly offer, sell or deliver any of the Notes in any jurisdiction outside the United States except under circumstances that will result in compliance with the applicable laws thereof, and that it will take at its own expense whatever action is required to permit its resale of the Notes in such jurisdictions, and (ii) acknowledges that no action has been taken by such Underwriter to permit a public offering in any jurisdiction outside the United States where action would be required for such purpose.

## 6. Costs and Expenses.

(a) The Company will pay all costs, expenses and fees incident to the performance of the obligations of the Company under this Agreement, including, without limiting the generality of the foregoing, the following: accounting fees of the Company; the fees and disbursements of counsel for the Company; any roadshow expenses; the cost of printing and delivering to, or as reasonably requested by, the Underwriters copies of the Registration Statement, Preliminary Prospectuses, Statutory Prospectus, the Issuer Free Writing Prospectuses, the Prospectus, this Agreement and the Indenture; the filing fees of the Commission; the filing fees and expenses (including reasonable legal fees and disbursements of counsel for the Underwriters) incident to securing any required review by FINRA of the terms of the sale of the Notes; any fees payable to rating agencies in connection with the rating of the Notes; the reasonable expenses, including the reasonable fees and disbursements of counsel for the Underwriters, incurred in connection with the qualification of the Notes under State securities or “Blue Sky” laws and the preparation, printing and distribution of a “Blue Sky” memorandum and any supplements or amendments thereto; and the fees and expenses of the Trustee, including reasonable fees and expenses of counsel for the Trustee.

(b) The Company shall not be required to pay for any of the Underwriters’ expenses (other than those related to qualification under FINRA regulations and state securities or “Blue Sky” laws) except that, if this Agreement shall not be consummated because this Agreement is terminated by the Representatives pursuant to Section 7, unless the failure to satisfy the applicable conditions thereof is due primarily to the default or omission of any Underwriter, the Company shall reimburse the several Underwriters that have not defaulted under Section 9 for reasonable out-of-pocket expenses, including reasonable fees and disbursements of counsel for the Underwriters, reasonably incurred in connection with investigating, marketing and proposing to market the Notes.

## 7. Conditions of Obligations of the Underwriters.

The several obligations of the Underwriters to purchase the Notes on the Closing Date are subject to the accuracy, as of the Applicable Time or the Closing Date, as the case may be, of the representations and warranties of the Company contained herein, and to the performance by the Company of its covenants and obligations hereunder and to the following additional conditions:

(a) The Registration Statement and all post-effective amendments thereto shall have become effective and the Prospectus and each Issuer Free Writing Prospectus required shall have been filed as required by Rules 424(b) (without reliance on Rule 424(b)(8)), 430A, 430B, 430C or 433 under the Act, as applicable, within the time period prescribed by, and in compliance with, the Rules and Regulations, and any request of the Commission for additional information (to be included in the Registration Statement or otherwise) shall have been disclosed to the Representatives and complied with to their reasonable satisfaction. No stop order suspending the effectiveness of the Registration Statement, as amended from time to time, shall have been issued and no proceedings for that purpose or pursuant to Section 8A under the Act shall have been taken or, to the knowledge of the Company, shall be contemplated or threatened by the Commission and no injunction, restraining order or order of any nature by a federal or state court of competent jurisdiction shall have been issued as of the Closing Date which would prevent the issuance of the Notes.

(b) The Representatives shall have received on the Closing Date the opinion of Cravath, Swaine & Moore LLP, counsel for the Company, dated the Closing Date, addressed to the Underwriters, in form and substance reasonably satisfactory to the Representatives.

(c) The Representatives shall have received on the Closing Date the opinion of the general counsel of the Company, dated the Closing Date, addressed to the Underwriters, in form and substance reasonably satisfactory to the Representatives.

(d) The Representatives shall have received from Simpson Thacher & Bartlett LLP, counsel for the Underwriters, an opinion dated the Closing Date covering such matters as the Representatives may reasonably request.

(e) The Representatives shall have received, on each of the date hereof and the Closing Date, a letter dated the date hereof and the Closing Date, in form and substance satisfactory to the Representatives and addressed to the Underwriters, of Deloitte & Touche LLP confirming that they are an independent registered public accounting firm with respect to the Company and its subsidiaries within the meaning of the Act and the applicable Rules and Regulations and the PCAOB and stating that in their opinion the financial statements and schedules examined by them and included or incorporated by reference in the Registration Statement, the General Disclosure Package and the Prospectus comply in form in all material respects with the applicable accounting requirements of the Act and the related Rules and Regulations; and containing such other statements and information as is ordinarily included in accountants' "comfort letters" to Underwriters with respect to the financial statements and certain financial information contained in the Registration Statement, the General Disclosure Package and the Prospectus.

(f) The Representatives shall have received on the Closing Date a certificate of an executive officer of the Company who has specific knowledge of the Company's financial matters and is reasonably satisfactory to the Representatives, in his capacity as an officer of the Company, to the effect that, as of the Closing Date, he certifies to the best of his knowledge as follows:

(i) The Registration Statement has become effective under the Act and no stop order suspending the effectiveness of the Registration Statement or no order preventing or suspending the use of any Preliminary Prospectus, any Issuer Free Writing Prospectus or the Prospectus has been issued, and no proceedings for such purpose or pursuant to Section 8A of the Act have been taken or are, to his or her knowledge, contemplated or threatened by the Commission;

(ii) The representations and warranties of the Company contained in Section 1 are true and correct as of the Closing Date;

(iii) All filings required to have been made pursuant to Rules 424(b), 430A, 430B or 430C under the Act have been made as and when required by such rules;

(iv) Since the respective dates as of which information is given in the Registration Statement, the General Disclosure Package and Prospectus, there has not been any material adverse change, or any development reasonably likely to involve a prospective material adverse change, in or affecting the business, properties, financial position or results of operations of the Company and its subsidiaries, taken as a whole, whether or not arising in the ordinary course of business.

(g) The Representatives shall have been furnished with such further certificates and documents confirming the representations and warranties, covenants and conditions contained herein and related matters as the Representatives may reasonably have requested.

(h) Subsequent to the earlier of (A) the Applicable Time and (B) the execution and delivery of this Agreement, (i) no downgrading shall have occurred in the rating of the Notes or any other debt securities or preferred stock of or guaranteed by the Company or any Subsidiary by any "nationally recognized statistical rating organization", as such term is defined under Section 3(a)(62) under the Exchange Act and (ii) no such organization shall have publicly announced that it has under surveillance or review, or has changed its outlook with respect to, its rating of the Notes or of any other debt securities or preferred stock of or guaranteed by the Company or any Subsidiary (other than an announcement with positive implications of a possible upgrading).

(i) Subsequent to the earliest of (A) the Applicable Time, (B) the execution and delivery of this Agreement and (C) the respective dates as of which information is given in the Registration Statement, the General Disclosure Package and Prospectus, there has not been (i) any material adverse change, or any development reasonably likely to involve a prospective material adverse change, in or affecting the business, properties, financial position or results of operations of the Company and its subsidiaries, taken as a whole, whether or not arising in the

ordinary course of business, the effect of which would, in your judgment, make it impracticable or inadvisable to market the Notes or to enforce contracts for the sale of the Notes, or (ii) any suspension of trading of the Company's common stock by the New York Stock Exchange, the Commission, or any other governmental authority.

The opinions and certificates mentioned in this Agreement shall be deemed to be in compliance with the provisions hereof only if they are in all material respects reasonably satisfactory to the Representatives and to Simpson Thacher & Bartlett LLP, counsel for the Underwriters.

If any of the conditions hereinabove provided for in this Section 7 shall not have been fulfilled when and as required by this Agreement to be fulfilled, the obligations of the Underwriters hereunder may be terminated by the Representatives by notifying the Company of such termination in writing or by telegram at or prior to the Closing Date.

#### 8. Indemnification.

(a) The Company agrees:

(1) to indemnify and hold harmless each Underwriter, the directors and officers of each Underwriter and each person, if any, who controls any Underwriter within the meaning of either Section 15 of the Act or Section 20 of the Exchange Act, against any losses, claims, damages or liabilities to which such Underwriter or any such controlling person may become subject under the Act or otherwise, insofar as such losses, claims, damages or liabilities (or actions or proceedings in respect thereof) arise out of or are based upon (i) any untrue statement or alleged untrue statement of any material fact contained in the Registration Statement, any Preliminary Prospectus, any Issuer Free Writing Prospectus, the Prospectus or any amendment or supplement thereto, (ii) with respect to the Registration Statement or any amendment or supplement thereto, the omission or alleged omission to state therein a material fact required to be stated therein or necessary to make the statements therein not misleading or (iii) with respect to any Preliminary Prospectus, any Issuer Free Writing Prospectus, the Prospectus or any amendment or supplement thereto, the omission or alleged omission to state therein a material fact required to be stated therein or necessary to make the statements therein not misleading in the light of the circumstances under which they were made; provided, however, that the Company will not be liable in any such case to the extent that any such loss, claim, damage or liability arises out of or is based upon an untrue statement or alleged untrue statement, or omission or alleged omission made in the Registration Statement, any Preliminary Prospectus, any Issuer Free Writing Prospectus, the Prospectus, or such amendment or supplement, in reliance upon and in conformity with written information furnished to the Company through any Representative, specifically for use therein, it being understood and agreed that the only such information furnished by any Underwriter consists of the information described as such in Section 13; and

(2) to reimburse each Underwriter, each Underwriter's directors and officers, and each such controlling person upon demand for any legal or other out-of-pocket expenses reasonably incurred by such Underwriter or such controlling person in

connection with investigating or defending any such loss, claim, damage or liability, action or proceeding or in responding to a subpoena or governmental inquiry related to the offering of the Notes, whether or not such Underwriter or controlling person is a party to any action or proceeding. In the event that it is finally judicially determined that the Underwriters or such controlling person, director or officer were not entitled to receive payments for legal and other expenses pursuant to this subparagraph, the Underwriters, on behalf of themselves or on behalf of such controlling person, director or officer, as the case may be, will promptly return all sums that had been advanced pursuant hereto.

(b) Each Underwriter severally and not jointly will indemnify and hold harmless the Company, each of its directors, each of its officers who have signed the Registration Statement and each person, if any, who controls the Company within the meaning of the Act, against any losses, claims, damages or liabilities to which the Company or any such director, officer or controlling person may become subject under the Act or otherwise, insofar as such losses, claims, damages or liabilities (or actions or proceedings in respect thereof) arise out of or are based upon (i) any untrue statement or alleged untrue statement of any material fact contained in the Registration Statement, any Preliminary Prospectus, any Issuer Free Writing Prospectus, the Prospectus or any amendment or supplement thereto, (ii) with respect to the Registration Statement or any amendment or supplement thereto, the omission or alleged omission to state therein a material fact required to be stated therein or necessary to make the statements therein not misleading or (iii) with respect to any Preliminary Prospectus, any Issuer Free Writing Prospectus, the Prospectus or any amendment or supplement thereto, the omission or alleged omission to state therein a material fact required to be stated therein or necessary to make the statements therein not misleading in the light of the circumstances under which they were made; and will reimburse any legal or other expenses reasonably incurred by the Company or any such director, officer or controlling person in connection with investigating or defending any such loss, claim, damage, liability, action or proceeding; provided, however, that each Underwriter will be liable in each case to the extent, but only to the extent, that such untrue statement or alleged untrue statement or omission or alleged omission has been made in the Registration Statement, any Preliminary Prospectus, any Issuer Free Writing Prospectus, the Prospectus or such amendment or supplement, in reliance upon and in conformity with written information furnished to the Company through any Representative, specifically for use therein, it being understood and agreed that the only such information furnished by any Underwriter consists of the information described as such in Section 13. This indemnity agreement will be in addition to any liability which such Underwriter may otherwise have.

(c) In case any proceeding (including any governmental investigation) shall be instituted involving any person in respect of which indemnity may be sought pursuant to this Section 8, such person (the "indemnified party") shall promptly notify the person against whom such indemnity may be sought (the "indemnifying party") in writing. No indemnification provided for in Section 8(a) or (b) shall be available to any party who shall fail to give notice as provided in this Section 8(c) if the party to whom notice was not given was unaware of the proceeding to which such notice would have related and was materially prejudiced by the failure to give such notice, but the failure to give such notice shall not relieve the indemnifying party or parties from any liability which it or they may have to the indemnified party for contribution or otherwise than on account of the provisions of Section 8(a) or (b). In case any such proceeding shall be brought against any indemnified party and it shall notify the indemnifying party of the

commencement thereof, the indemnifying party shall be entitled to participate therein and, to the extent that it shall wish, jointly with any other indemnifying party similarly notified, to assume the defense thereof, with counsel reasonably satisfactory to such indemnified party and shall pay as incurred the reasonable fees and disbursements of such counsel related to such proceeding. In any such proceeding, any indemnified party shall have the right to retain its own counsel at its own expense. Notwithstanding the foregoing, the indemnifying party shall pay as incurred (or within 30 days of presentation) the reasonable fees and expenses of the counsel retained by the indemnified party in the event (i) the indemnifying party and the indemnified party shall have mutually agreed to the retention of such counsel, (ii) the named parties to any such proceeding (including any impleaded parties) include both the indemnifying party and the indemnified party and, in the opinion of outside counsel, representation of both parties by the same counsel would be inappropriate due to actual or potential differing interests between them or (iii) the indemnifying party shall have failed to assume the defense and employ counsel acceptable to the indemnified party within a reasonable period of time after notice of commencement of the action. It being understood, however, that the indemnifying party shall not be liable for the expenses of more than one separate counsel and that such firm shall be designated in writing by you in the case of parties indemnified pursuant to Section 8(a) and by the Company in the case of parties indemnified pursuant to Section 8(b). The indemnifying party shall not be liable for any settlement of any proceeding effected without its written consent but if settled with such consent or if there be a final judgment for the plaintiff not subject to further appeal, the indemnifying party agrees to indemnify the indemnified party from and against any loss or liability by reason of such settlement or judgment. In addition, the indemnifying party will not, without the prior written consent of the indemnified party, settle or compromise or consent to the entry of any judgment in any pending or threatened claim, action or proceeding of which indemnification may be sought hereunder (whether or not any indemnified party is an actual or potential party to such claim, action or proceeding) unless such settlement, compromise or consent (x) includes an unconditional release of each indemnified party from all liability arising out of such claim, action or proceeding and (y) does not include a statement as to or an admission of fault, culpability or a failure to act by or on behalf of any indemnified party.

(d) To the extent the indemnification provided for in this Section 8 is unavailable to or insufficient to hold harmless an indemnified party under Section 8(a) or (b) above in respect of any losses, claims, damages or liabilities (or actions or proceedings in respect thereof) referred to therein, then each indemnifying party shall contribute to the amount paid or payable by such indemnified party as a result of such losses, claims, damages or liabilities (or actions or proceedings in respect thereof) in such proportion as is appropriate to reflect the relative benefits received by the Company on the one hand and the Underwriters on the other from the offering of the Notes. If, however, the allocation provided by the immediately preceding sentence is not permitted by applicable law then each indemnifying party shall contribute to such amount paid or payable by such indemnified party in such proportion as is appropriate to reflect not only such relative benefits but also the relative fault of the Company on the one hand and the Underwriters on the other in connection with the statements or omissions which resulted in such losses, claims, damages or liabilities (or actions or proceedings in respect thereof), as well as any other relevant equitable considerations. The relative benefits received by the Company on the one hand and the Underwriters on the other shall be deemed to be in the same proportion as the total net proceeds from the offering (before deducting expenses) received by the Company bear to the total underwriting discounts and commissions received by the

Underwriters, in each case as set forth in the table on the cover page of the Prospectus. The relative fault shall be determined by reference to, among other things, whether the untrue or alleged untrue statement of a material fact or the omission or alleged omission to state a material fact relates to information supplied by the Company on the one hand or the Underwriters on the other and the parties' relative intent, knowledge, access to information and opportunity to correct or prevent such statement or omission.

The Company and the Underwriters agree that it would not be just and equitable if contributions pursuant to this Section 8(d) were determined by pro rata allocation (even if the Underwriters were treated as one entity for such purpose) or by any other method of allocation which does not take account of the equitable considerations referred to above in this Section 8(d). The amount paid or payable by an indemnified party as a result of the losses, claims, damages or liabilities (or actions or proceedings in respect thereof) referred to above in this Section 8(d) shall be deemed to include any legal or other expenses reasonably incurred by such indemnified party in connection with investigating or defending any such action or claim. Notwithstanding the provisions of this Section 8(d), (i) no Underwriter shall be required to contribute any amount in excess of the underwriting discounts and commissions applicable to the Notes purchased by such Underwriter, and (ii) no person guilty of fraudulent misrepresentation (within the meaning of Section 11(f) of the Act) shall be entitled to contribution from any person who was not guilty of such fraudulent misrepresentation. The Underwriters' obligations in this Section 8(d) to contribute are several in proportion to their respective underwriting obligations and not joint.

(e) In any proceeding relating to the Registration Statement, any Preliminary Prospectus, any Issuer Free Writing Prospectus, the Prospectus or any supplement or amendment thereto, each party against whom contribution may be sought under this Section 8 hereby consents to the jurisdiction of any court having jurisdiction over any other contributing party, agrees that process issuing from such court may be served upon it by any other contributing party and consents to the service of such process and agrees that any other contributing party may join it as an additional defendant in any such proceeding in which such other contributing party is a party.

(f) Any losses, claims, damages, liabilities or expenses for which an indemnified party is entitled to indemnification or contribution under this Section 8 shall be paid by the indemnifying party to the indemnified party as such losses, claims, damages, liabilities or expenses are incurred. The indemnity and contribution agreements contained in this Section 8 and the representations and warranties of the Company set forth in this Agreement shall remain operative and in full force and effect, regardless of (i) any investigation made by or on behalf of any Underwriter, its directors or officers or any person controlling any Underwriter, the Company, its directors or officers or any persons controlling the Company, (ii) acceptance of any Notes and payment therefor hereunder, and (iii) any termination of this Agreement. A successor to any Underwriter, its directors or officers or any person controlling any Underwriter, or to the Company, its directors or officers, or any person controlling the Company, shall be entitled to the benefits of the indemnity, contribution and reimbursement agreements contained in this Section 8.

#### 9. Default by Underwriters.

If on the Closing Date any Underwriter shall fail to purchase and pay for the principal amount of the Notes which such Underwriter has agreed to purchase and pay for on such date (otherwise than by reason of any default on the part of the Company), you, as Representatives of the Underwriters, shall use your reasonable efforts to procure within 36 hours thereafter one or more of the other Underwriters, or any others, to purchase from the Company such principal amounts as may be agreed upon, and upon the terms set forth herein, the Notes which the defaulting Underwriter or Underwriters failed to purchase. If during such 36 hours you, as such Representatives, shall not have procured such other Underwriters, or any others, to purchase the principal amount of the Notes agreed to be purchased by the defaulting Underwriter or Underwriters, then the Company shall be entitled to a further period of 36 hours within which to procure another party or parties satisfactory to you to purchase from the Company such principal amount of the Notes on such terms. If, after giving effect to any arrangements for the purchase of Notes by a defaulting Underwriter by you or the Company, as provided above in this Section 9, (a) the aggregate principal amount of Notes with respect to which such default shall occur does not exceed 10% of the aggregate principal amount of the Notes to be purchased on the Closing Date, the other Underwriters shall be obligated, severally, in proportion to the respective principal amounts of the Notes which they are obligated to purchase hereunder, to purchase the Notes which such defaulting Underwriter or Underwriters failed to purchase, or (b) the aggregate principal amount of the Notes with respect to which such default shall occur exceeds 10% of the aggregate principal amount of the Notes to be purchased on the Closing Date, the Company or you as the Representatives of the Underwriters will have the right, by written notice given within the next 36-hour period to the parties to this Agreement, to terminate this Agreement without liability on the part of the non-defaulting Underwriters or of the Company, except to the extent provided in Sections 6 and 8. In the event of a default by any Underwriter or Underwriters, as set forth in this Section 9, the Closing Date may be postponed for such period, not exceeding seven days, as you, as Representatives, or the Company may determine in order that the required changes in the Registration Statement, the General Disclosure Package or in the Prospectus or in any other documents or arrangements may be effected. The term "Underwriter" includes any person substituted for a defaulting Underwriter. Any action taken under this Section 9 shall not relieve any defaulting Underwriter from liability in respect of any default of such Underwriter under this Agreement.

#### 10. Notices.

All communications hereunder shall be in writing and, except as otherwise provided herein, will be mailed, delivered, telecopied or telegraphed and confirmed as follows: if to the Underwriters, to (i) Wells Fargo Securities, LLC, 550 South Tryon Street, 5th Floor, Charlotte, North Carolina 28202, Attention: Transaction Management, Email: [tmcapitalmarkets@wellsfargo.com](mailto:tmcapitalmarkets@wellsfargo.com); (ii) J.P. Morgan Securities LLC, c/o Broadridge Financial Solutions, 1155 Long Island Avenue, Edgewood, New York 11717, Telephone: 1-866-803-9204; and (iii) Mizuho Securities USA LLC, 1271 Avenue of the Americas, New York, New York 10020, Attention: Debt Capital Markets, Fax: 212-205-7812; or if to the Company, to 2980 Fairview Park Drive, Falls Church, Virginia 22042, Attention: Corporate Vice President and Secretary, with a copy (which copy shall not constitute notice) to Cravath, Swaine & Moore LLP, 825 8th Avenue, New York, New York 10019-7475, Attention: C. Daniel Haaren.



#### 11. Termination.

This Agreement may be terminated by you by notice to the Company (a) at any time prior to the Closing Date if any of the following has occurred: (i) any outbreak or escalation of hostilities or declaration of war or national emergency or other national or international calamity or crisis after the Applicable Time, if the effect of such outbreak, escalation, declaration, emergency, calamity or crisis on the financial markets of the United States would, in your judgment, make it impracticable or inadvisable to market the Notes or to enforce contracts for the sale of the Notes, (ii) any material change in economic or political conditions after the Applicable Time, if the effect of such change on the financial markets of the United States would, in your judgment, make it impracticable or inadvisable to market the Notes or to enforce contracts for the sale of the Notes, (iii) suspension of trading in securities generally on the New York Stock Exchange or the Nasdaq Global Select Market or limitation on prices (other than limitations on hours or numbers of days of trading) for securities on any such Exchange after the Applicable Time, or (iv) the declaration of a banking moratorium by United States or New York State authorities after the Applicable Time; or (b) as provided in Sections 7 and 9. In such event, the Company, on the one hand, and the Representatives and Underwriters, on the other hand, shall have no liability or any further obligations to the other except to the extent provided in Sections 6, 8 and 9.

#### 12. Successors.

This Agreement has been and is made solely for the benefit of the Underwriters and the Company and their respective successors, executors, administrators, heirs and assigns, and the officers, directors and controlling persons referred to herein, and no other person will have any right or obligation hereunder. No purchaser of any of the Notes from any Underwriter shall be deemed a successor or assign merely because of such purchase.

#### 13. Information Provided by Underwriters.

The Company and the Underwriters acknowledge and agree that the only information furnished or to be furnished by any Underwriter to the Company for inclusion in the Registration Statement, any Preliminary Prospectus, any Issuer Free Writing Prospectus or the Prospectus consists of (i) the names of the Underwriters set forth on the front and back covers of the Preliminary Prospectus, the Prospectus and in any Issuer Free Writing Prospectus and (ii) the information set forth in the first, third and seventh through eleventh paragraphs under the caption "Underwriting" in the Prospectus.

#### 14. No Advisory or Fiduciary Responsibility.

The Company acknowledges and agrees that (i) the purchase and sale of the Notes pursuant to this Agreement is an arm's-length commercial transaction between the Company, on the one hand, and the Underwriters, on the other, (ii) in connection therewith and with the process leading to such transaction each Underwriter is acting solely as a principal and not the agent or fiduciary of the Company, (iii) no Underwriter has assumed an advisory or fiduciary responsibility in favor of the Company with respect to the offering contemplated hereby or the process leading thereto (irrespective of whether such Underwriter has advised or is currently

advising the Company on other matters) or any other obligation to the Company except the obligations expressly set forth in this Agreement and (iv) the Company has consulted its own legal and financial advisors to the extent it deemed appropriate. The Company agrees that it will not claim that any Underwriter has rendered advisory services of any nature or respect, or owes a fiduciary or similar duty to the Company, in connection with such transaction or the process leading thereto.

15. Counterparts.

This Agreement may be executed in two or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument. The words "execution," "signed," "signature," "delivery," and words of like import in or relating to this Agreement or any document to be signed in connection with this Agreement shall be deemed to include Electronic Signatures (as defined below), deliveries or the keeping of records in electronic form, each of which shall be of the same legal effect, validity or enforceability as a manually executed signature, physical delivery thereof or the use of a paper-based recordkeeping system, as the case may be, and the parties hereto consent to conduct the transactions contemplated hereunder by electronic means. "Electronic Signatures" means any electronic symbol or process attached to, or associated with, any contract or other record and adopted by a person with the intent to sign, authenticate or accept such contract or record. Any term or provision of this Agreement which is invalid or unenforceable in any jurisdiction shall, as to such jurisdiction, be ineffective to the extent of such invalidity or unenforceability without rendering invalid or unenforceable the remaining terms and provisions of this Agreement or affecting the validity or enforceability of any of the terms or provisions of this Agreement in any other jurisdiction.

16. Survival Clause.

The reimbursement, indemnification and contribution agreements contained in this Agreement and the representations, warranties and covenants in this Agreement shall remain in full force and effect regardless of (a) any termination of this Agreement, (b) any investigation made by or on behalf of any Underwriter or controlling person thereof, or by or on behalf of the Company or its directors or officers and (c) delivery of and payment for the Notes under this Agreement.

17. Governing Law.

This Agreement shall be governed by, and construed in accordance with, the law of the State of New York, including Section 5-1401 of the New York General Obligations Law.

18. Compliance with USA Patriot Act.

In accordance with the requirements of the USA Patriot Act (Title III of Pub. L. 107-56 (signed into law October 26, 2001)), the Underwriters are required to obtain, verify and record information that identifies their respective clients, including the Company, which information may include the name and address of their respective clients, as well as other information that will allow the Underwriters to properly identify their respective clients.

**19. Recognition of the U.S. Special Resolution Regimes.**

(i) In the event that any Underwriter that is a Covered Entity becomes subject to a proceeding under a U.S. Special Resolution Regime, the transfer from such Underwriter of this Agreement, and any interest and obligation in or under this Agreement, will be effective to the same extent as the transfer would be effective under the U.S. Special Resolution Regime if this Agreement, and any such interest and obligation, were governed by the laws of the United States or a state of the United States.

(ii) In the event that any Underwriter that is a Covered Entity or a BHC Act Affiliate of such Underwriter becomes subject to a proceeding under a U.S. Special Resolution Regime, Default Rights under this Agreement that may be exercised against such Underwriter are permitted to be exercised to no greater extent than such Default Rights could be exercised under the U.S. Special Resolution Regime if this Agreement were governed by the laws of the United States or a state of the United States.

As used in this Section 19:

“BHC Act Affiliate” has the meaning assigned to the term “affiliate” in, and shall be interpreted in accordance with, 12 U.S.C. § 1841(k).

“Covered Entity” means any of the following:

- (i) a “covered entity” as that term is defined in, and interpreted in accordance with, 12 C.F.R. § 252.82(b);
- (ii) a “covered bank” as that term is defined in, and interpreted in accordance with, 12 C.F.R. § 47.3(b); or
- (iii) a “covered FSI” as that term is defined in, and interpreted in accordance with, 12 C.F.R. § 382.2(b).

“Default Right” has the meaning assigned to that term in, and shall be interpreted in accordance with, 12 C.F.R. §§ 252.81, 47.2 or 382.1, as applicable.

“U.S. Special Resolution Regime” means each of (i) the Federal Deposit Insurance Act and the regulations promulgated thereunder and (ii) Title II of the Dodd-Frank Wall Street Reform and Consumer Protection Act and the regulations promulgated thereunder.

If the foregoing letter is in accordance with your understanding of our agreement, please sign and return to us the enclosed duplicates hereof, whereupon it will become a binding agreement among the Company and the several Underwriters in accordance with its terms.

Very truly yours,

NORTHROP GRUMMAN CORPORATION

By /s/ David F. Keffer

Name: David F. Keffer

Title: Corporate Vice President and Chief Financial  
Officer

*[Signature Page to Underwriting Agreement]*

The foregoing Underwriting Agreement is hereby confirmed and accepted as of the date first above written.

WELLS FARGO SECURITIES, LLC  
J.P. MORGAN SECURITIES LLC  
MIZUHO SECURITIES USA LLC

As Representatives of the several Underwriters listed on Schedule I

By: WELLS FARGO SECURITIES, LLC

By /s/ Carolyn Hurley  
Name: Carolyn Hurley  
Title: Managing Director

By: J.P. MORGAN SECURITIES LLC

By /s/ Stephen L. Sheiner  
Name: Stephen L. Sheiner  
Title: Executive Director

By: MIZUHO SECURITIES USA LLC

By /s/ Timothy Blair  
Name: Timothy Blair  
Title: Managing Director

*[Signature Page to Underwriting Agreement]*

## SCHEDULE I

## SCHEDULE OF UNDERWRITERS

<u>Underwriter</u>	<u>Aggregate Principal Amount of 2033 Notes to be Purchased</u>	<u>Aggregate Principal Amount of 2053 Notes to be Purchased</u>
Wells Fargo Securities, LLC	\$ 170,000,000	\$ 170,000,000
J.P. Morgan Securities LLC	150,000,000	150,000,000
Mizuho Securities USA LLC	150,000,000	150,000,000
BNP Paribas Securities Corp.	75,000,000	75,000,000
Credit Suisse Securities (USA) LLC	75,000,000	75,000,000
Goldman Sachs & Co. LLC	75,000,000	75,000,000
Morgan Stanley & Co. LLC	75,000,000	75,000,000
BofA Securities, Inc.	40,250,000	40,250,000
SMBC Nikko Securities America, Inc.	40,250,000	40,250,000
TD Securities (USA) LLC	40,250,000	40,250,000
U.S. Bancorp Investments, Inc.	40,250,000	40,250,000
ANZ Securities, Inc.	10,250,000	10,250,000
BNY Mellon Capital Markets, LLC	10,250,000	10,250,000
Scotia Capital (USA) Inc.	10,250,000	10,250,000
UniCredit Capital Markets LLC	10,250,000	10,250,000
Academy Securities, Inc.	8,000,000	8,000,000
Blaylock Van, LLC	4,000,000	4,000,000
Drexel Hamilton, LLC	4,000,000	4,000,000
Mischler Financial Group, Inc.	4,000,000	4,000,000
Samuel A. Ramirez & Company, Inc.	4,000,000	4,000,000
Siebert Williams Shank & Co., LLC	4,000,000	4,000,000
Total	\$ 1,000,000,000	\$ 1,000,000,000

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SCHEDULE II

SCHEDULE OF ISSUER FREE WRITING PROSPECTUSES

Pricing Term Sheet, dated February 6, 2023, attached hereto



\$2,000,000,000  
Senior Notes Offering

**Pricing Term Sheet**  
**February 6, 2023**

	<u>4.700% Senior Notes due 2033</u>	<u>4.950% Senior Notes due 2053</u>
Issuer:	Northrop Grumman Corporation	Northrop Grumman Corporation
Principal Amount Offered:	\$1,000,000,000	\$1,000,000,000
Pricing Date:	February 6, 2023	February 6, 2023
Settlement Date (T + 2):	It is expected that delivery of the Notes will be made against payment therefor on or about February 8, 2023, which is the second business day following the date hereof.	It is expected that delivery of the Notes will be made against payment therefor on or about February 8, 2023, which is the second business day following the date hereof.
Maturity Date:	March 15, 2033	March 15, 2053
Benchmark Treasury:	4.125% due November 15, 2032	3.00% due August 15, 2052
Benchmark Treasury Price/Yield:	104-00+ / 3.632%	87-18 / 3.696%
Spread to Benchmark Treasury:	+108 basis points	+128 basis points



Yield to Maturity:	4.712%	4.976%
Coupon:	4.700%	4.950%
Day Count Convention:	30 / 360	30 / 360
Price to Public: <sup>(2)</sup>	99.898%	99.589%
Interest Payment Dates:	March 15 and September 15, commencing September 15, 2023	March 15 and September 15, commencing September 15, 2023
Record Dates:	March 1 and September 1	March 1 and September 1
Optional Redemption:	<p>Prior to December 15, 2032 (the "Par Call Date"), at a redemption price equal to the greater of (i) 100% of the principal amount of the notes being redeemed and (ii) the sum of the present values of the remaining scheduled payments of principal and interest thereon discounted to the redemption date (assuming the notes matured on the Par Call Date) at a discount rate of the Treasury Rate +20 basis points.</p> <p>On and after the Par Call Date, at a redemption price equal to 100% of the principal amount of the notes being redeemed.</p>	<p>Prior to September 15, 2052 (the "Par Call Date"), at a redemption price equal to the greater of (i) 100% of the principal amount of the notes being redeemed and (ii) the sum of the present values of the remaining scheduled payments of principal and interest thereon discounted to the redemption date (assuming the notes matured on the Par Call Date) at a discount rate of the Treasury Rate +20 basis points.</p> <p>On and after the Par Call Date, at a redemption price equal to 100% of the principal amount of the notes being redeemed.</p>
CUSIP/ISIN:	666807 CH3 / US666807CH36	666807 CJ9 / US666807CJ91
Denominations:	\$2,000 and multiples of \$1,000 in excess thereof	\$2,000 and multiples of \$1,000 in excess thereof
Joint Book-Running Managers:	Wells Fargo Securities, LLC J.P. Morgan Securities LLC Mizuho Securities USA LLC BNP Paribas Securities Corp. Credit Suisse Securities (USA) LLC Goldman Sachs & Co. LLC Morgan Stanley & Co. LLC	Wells Fargo Securities, LLC J.P. Morgan Securities LLC Mizuho Securities USA LLC BNP Paribas Securities Corp. Credit Suisse Securities (USA) LLC Goldman Sachs & Co. LLC Morgan Stanley & Co. LLC
Senior Co-Managers	BofA Securities, Inc. SMBC Nikko Securities America, Inc. TD Securities (USA) LLC U.S. Bancorp Investments, Inc.	BofA Securities, Inc. SMBC Nikko Securities America, Inc. TD Securities (USA) LLC U.S. Bancorp Investments, Inc.

Co-Managers:

ANZ Securities, Inc.  
BNY Mellon Capital Markets, LLC  
Scotia Capital (USA) Inc.  
UniCredit Capital Markets LLC  
Academy Securities, Inc.  
Blaylock Van, LLC  
Drexel Hamilton, LLC  
Mischler Financial Group, Inc.  
Samuel A. Ramirez & Company, Inc.  
Siebert Williams Shank & Co., LLC

ANZ Securities, Inc.  
BNY Mellon Capital Markets, LLC  
Scotia Capital (USA) Inc.  
UniCredit Capital Markets LLC  
Academy Securities, Inc.  
Blaylock Van, LLC  
Drexel Hamilton, LLC  
Mischler Financial Group, Inc.  
Samuel A. Ramirez & Company, Inc.  
Siebert Williams Shank & Co., LLC

(2) Plus accrued interest, if any, from February 8, 2023.

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The issuer has filed a registration statement (including a prospectus) with the SEC for the offering to which this communication relates. Before you invest, you should read the prospectus in that registration statement and other documents the issuer has filed with the SEC for more complete information about the issuer and this offering. You may get these documents for free by visiting EDGAR on the SEC website at [www.sec.gov](http://www.sec.gov). Alternatively, the issuer, any underwriter or any dealer participating in the offering will arrange to send you the prospectus if you request it by calling one of the numbers listed below:

Wells Fargo Securities, LLC  
1-800-645-3751(toll-free)

J.P. Morgan Securities LLC  
1-212-834-4533 (collect)

Mizuho Securities USA LLC  
1-866-271-7403 (toll-free)

**Any disclaimer or other notice that may appear below is not applicable to this communication and should be disregarded. Such disclaimer or notice was automatically generated as a result of this communication being sent by Bloomberg or another email system.**

SCHEDULE III

SIGNIFICANT SUBSIDIARIES

Name of Subsidiary

Northrop Grumman Systems Corporation (formerly Northrop Grumman Corporation)  
Northrop Grumman Overseas Holdings, Inc.

Jurisdiction of  
Incorporation

Delaware  
Delaware

NORTHROP GRUMMAN CORPORATION

AND

THE BANK OF NEW YORK MELLON, TRUSTEE

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ELEVENTH SUPPLEMENTAL INDENTURE

Dated as of February 8, 2023

to

INDENTURE

Dated as of November 21, 2001

as amended and supplemented by the

FIRST SUPPLEMENTAL INDENTURE

Dated as of July 30, 2009

THIRD SUPPLEMENTAL INDENTURE

Dated as of March 30, 2011

FOURTH SUPPLEMENTAL INDENTURE

Dated as of March 30, 2011

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4.700% SENIOR NOTES DUE 2033

4.950% SENIOR NOTES DUE 2053

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This ELEVENTH SUPPLEMENTAL INDENTURE dated as of February 8, 2023 (this “Eleventh Supplemental Indenture”) between NORTHROP GRUMMAN CORPORATION, a corporation duly organized and existing under the laws of the State of Delaware (herein called the “Company”), having its principal office at 2980 Fairview Park Drive, Falls Church, Virginia 22042, and THE BANK OF NEW YORK MELLON, a corporation duly organized and existing under the laws of the State of New York, as successor to JPMorgan Chase Bank, as trustee (herein called the “Trustee”), under the Indenture (as hereinafter defined), having its Corporate Trust Office at 240 Greenwich Street, New York, New York 10286.

#### RECITALS

WHEREAS, the Company and the Trustee have executed and delivered an Indenture, dated as of November 21, 2001 (the “Original Indenture”), the First Supplemental Indenture, dated as of July 30, 2009 (the “First Supplemental Indenture”), the Third Supplemental Indenture, dated as of March 30, 2011 (the “Third Supplemental Indenture”), and the Fourth Supplemental Indenture, dated as of March 30, 2011 (the “Fourth Supplemental Indenture”), each of which amends and supplements the Original Indenture;

WHEREAS, Section 901 of the Original Indenture, as amended, provides, among other things, that the Company, when authorized by a Board Resolution, and the Trustee, at any time and from time to time, without the consent of any Holders, may enter into an indenture supplemental to the Original Indenture to establish the form or terms of Securities of any series as permitted by Sections 201 and 301 of the Original Indenture, as amended;

WHEREAS, pursuant to the terms of the Original Indenture, as amended, the Company desires to provide for the establishment of two new series of its Securities to be known as its “4.700% Senior Notes due 2033” (the “2033 Notes”) and its “4.950% Senior Notes due 2053” (the “2053 Notes”, and, together with the 2033 Notes, the “Notes”), respectively, the form and substance of each such series of Notes and the terms, provisions and conditions thereof to be set forth as provided in the Original Indenture, as amended by the First Supplemental Indenture, the Third Supplemental Indenture, the Fourth Supplemental Indenture and this Eleventh Supplemental Indenture (collectively, the “Indenture”);

WHEREAS, the Company has requested that the Trustee execute and deliver this Eleventh Supplemental Indenture; and

WHEREAS, all things necessary to make the Notes, when executed by the Company and authenticated and delivered by the Trustee and issued upon the terms and subject to the conditions hereinafter and in the Indenture set forth against payment therefor, the valid, binding and legal obligations of the Company, and to authorize the execution and delivery of this Eleventh Supplemental Indenture and make it a valid, binding and legal agreement of the Company, have been done or performed.

NOW, THEREFORE, THIS ELEVENTH SUPPLEMENTAL INDENTURE WITNESSETH:

For and in consideration of the promises and the purchase of the Securities by the Holders thereof, it is mutually agreed, for the equal and proportionate benefit of all Holders, as follows:

Article I  
DEFINITIONS

Unless the context otherwise requires, capitalized terms used but not defined in this Eleventh Supplemental Indenture shall have the respective meaning ascribed to them by the Original Indenture, as heretofore supplemented and amended by the First Supplemental Indenture, the Third Supplemental Indenture and the Fourth Supplemental Indenture. The following additional terms are hereby established for purposes of this Eleventh Supplemental Indenture and shall have the meaning set forth in this Eleventh Supplemental Indenture only for purposes of this Eleventh Supplemental Indenture:

“2033 Global Notes” has the meaning set forth in Section 203 of this Eleventh Supplemental Indenture.

“2053 Global Notes” has the meaning set forth in Section 203 of this Eleventh Supplemental Indenture.

“2033 Notes” has the meaning set forth in the recitals of this Eleventh Supplemental Indenture.

“2053 Notes” has the meaning set forth in the recitals of this Eleventh Supplemental Indenture.

“Additional Notes” has the meaning set forth in Section 201 of this Eleventh Supplemental Indenture.

“Applicable Tax Law” has the meaning set forth in Section 309 of this Eleventh Supplemental Indenture.

“First Supplemental Indenture” has the meaning set forth in the recitals of this Eleventh Supplemental Indenture.

“Fourth Supplemental Indenture” has the meaning set forth in the recitals of this Eleventh Supplemental Indenture.

“Global Notes” has the meaning set forth in Section 203 of this Eleventh Supplemental Indenture.

“Indenture” has the meaning set forth in the recitals of this Eleventh Supplemental Indenture.

“Interest Payment Date” has the meaning set forth in Section 205 of this Eleventh Supplemental Indenture.

“Notes” has the meaning set forth in the recitals of this Eleventh Supplemental Indenture.

“Original Indenture” has the meaning set forth in the recitals of this Eleventh Supplemental Indenture.

“Par Call Date” has the meaning set forth in the form of 2033 Note attached hereto as Exhibit A (with respect to the 2033 Notes) and in the form of 2053 Note attached hereto as Exhibit B (with respect to the 2053 Notes).

“Regular Record Date” has the meaning set forth in Section 205 of this Eleventh Supplemental Indenture.

“Third Supplemental Indenture” has the meaning set forth in the recitals of this Eleventh Supplemental Indenture.

## Article II

### ESTABLISHMENT OF 4.700% SENIOR NOTES DUE 2033 AND 4.950% SENIOR NOTES DUE 2053

#### 201. Establishment and Designation of the Notes

Pursuant to the terms hereof and Section 301 of the Original Indenture, the Company hereby establishes two new series of Securities, the first series designated as the “4.700% Senior Notes due 2033,” and the second series designated as the “4.950% Senior Notes due 2053.” Any such series may be reopened, from time to time, for issuances of an unlimited aggregate principal amount of additional Securities of such series (with respect to such series, the “Additional Notes”). Any such Additional Notes shall have the same ranking, interest rate, maturity date and other terms of the series being reopened, except, if applicable, the issue date, the issue price, the initial Interest Payment Date and corresponding initial Regular Record Date and the initial interest accrual date. Any such Additional Notes, together with the Notes of the series being reopened, shall constitute a single series of Securities for all purposes under the Indenture, including voting, waivers, amendments and redemptions; provided, however, that in the event any such Additional Notes are not fungible with the Notes of the series being reopened for U.S. federal income tax purposes, such nonfungible Additional Notes shall be issued with a separate CUSIP number so that they are distinguishable from the Notes of the series being reopened.

#### 202. Principal Amount of the Notes; Maturity

The maximum aggregate principal amount of the Notes which may be authenticated and delivered pursuant to the Indenture (except for (i) Notes authenticated and delivered upon registration of transfer of, or in exchange for, or in lieu of, other Notes pursuant to Section 304, 305, 306, 906 or 1107 of the Original Indenture, (ii) Notes which, pursuant to Section 303 of the Original Indenture, are deemed never to have been authenticated and delivered under the Indenture, and (iii) for avoidance of doubt, Additional Notes) is \$1,000,000,000 in respect of the 2033 Notes and \$1,000,000,000 in respect of the 2053 Notes. The principal amount of the 2033 Notes shall be due and payable on March 15, 2033 and the principal amount of the 2053 Notes shall be due and payable on March 15, 2053.



203. Form of Notes; Denominations; Depository

The 2033 Notes shall be initially issued in the form of one or more Global Securities (the “2033 Global Notes”) in substantially the form set forth in Exhibit A hereto and the 2053 Notes shall be initially issued in the form of one or more Global Securities (the “2053 Global Notes”) and, together with the 2033 Global Notes, the “Global Notes”) in substantially the form set forth in Exhibit B hereto. The Notes shall be issued in fully registered form without coupons in denominations of \$2,000 and integral multiples of \$1,000 in excess thereof.

The initial Depository in respect of the Global Notes shall be The Depository Trust Company. The Global Notes shall be deposited with, or on behalf of, the Depository and shall be registered in the name of Cede & Co. Except as otherwise set forth in Section 305 of the Original Indenture, the Global Notes may be transferred, in whole or in part, only to the Depository, another nominee of the Depository or to a successor of the Depository or its nominee.

204. Payment

The Company will pay the principal of and premium, if any, and interest on the Notes in money of the United States of America that at the time of payment is legal tender for payment of public and private debts. The Company will make all payments of interest on any Global Note in accordance with the arrangements then existing between the Paying Agent and the applicable Depository, and all payments of principal of and premium, if any, on any Global Note at the Corporate Trust Office upon surrender of such Note for payment. The Company will make all payments of interest on any definitive Note by mailing a check to the address of each Person entitled thereto, and all payments of principal of and premium, if any, on any definitive Note at the Corporate Trust Office upon surrender of such Note for payment.

205. Interest Rate

Interest on the 2033 Notes shall accrue at the rate of 4.700% per annum and interest on the 2053 Notes shall accrue at the rate of 4.950% per annum. Interest on the Notes shall accrue from February 8, 2023 or the most recent Interest Payment Date to which interest was paid or duly provided for. Interest on the 2033 Notes and the 2053 Notes shall be payable semiannually in arrears on March 15 and September 15, commencing on September 15, 2023 (each an “Interest Payment Date” for the 2033 Notes and the 2053 Notes), to the Persons in whose names such Notes are registered at the close of business on the March 1 or September 1, as the case may be (in either case, whether or not a Business Day), immediately preceding such Interest Payment Date (each a “Regular Record Date” for the 2033 Notes and the 2053 Notes). Interest on the Notes shall be computed on the basis of a 360-day year comprised of twelve 30-day months.

206. Paying Agent and Security Registrar

The Trustee shall initially act as the Paying Agent and Security Registrar in respect of the Notes and its Corporate Trust Office is designated as a place where the Notes may be presented for payment or for registration of transfer or exchange. The Company may, however, change the Paying Agent or Security Registrar for the Notes without prior notice to the Holders thereof, and the Company or any Subsidiary may act as Paying Agent or Security Registrar for the Notes.

207. No Sinking Fund

The provisions of Article 12 of the Original Indenture shall not be applicable to the Notes.

208. Optional Redemption

Prior to the applicable Par Call Date, the 2033 Notes are subject to redemption at the option of the Company, in whole or in part, at any time and from time to time, as set forth in the form of 2033 Note attached hereto as Exhibit A. Prior to the applicable Par Call Date, the 2053 Notes are subject to redemption at the option of the Company, in whole or in part, at any time and from time to time, as set forth in the form of 2053 Note attached hereto as Exhibit B. On or after the applicable Par Call Date, the Notes of each series are subject to redemption, in whole or in part, at any time and from time to time, at a Redemption Price equal to 100% of the principal amount of the Notes being redeemed, plus accrued and unpaid interest thereon to, but not including, the Redemption Date.

209. Exchange of the Notes

In addition to the circumstances set forth in Clause (2) of the last paragraph of Section 305 of the Original Indenture, and subject to the arrangements then existing between the Company and the applicable Depositary, the Company may at any time, in its sole discretion, elect to have any Global Note exchanged in whole or in part for Notes of the same series registered in the name or names of Persons other than such Depositary or a nominee thereof.

Article III  
MISCELLANEOUS PROVISIONS

301. Effect of Eleventh Supplemental Indenture

Upon the execution and delivery of this Eleventh Supplemental Indenture by the Company and the Trustee, the Indenture shall be supplemented and amended in accordance herewith, and this Eleventh Supplemental Indenture shall form a part of the Indenture for all purposes. Except as otherwise provided herein, each and every term and condition contained in this Eleventh Supplemental Indenture that modifies, amends or supplements the terms and conditions of the Original Indenture, as heretofore supplemented and amended by the First Supplemental Indenture, the Third Supplemental Indenture and the Fourth Supplemental Indenture, shall apply only to the Notes established hereby and not to any other series of Securities established under the Indenture.

In the event of a conflict between any provisions of the Original Indenture, as heretofore supplemented and amended by the First Supplemental Indenture, the Third Supplemental Indenture and the Fourth Supplemental Indenture, and this Eleventh Supplemental Indenture, the relevant provision or provisions of this Eleventh Supplemental Indenture shall govern.

Except as supplemented or amended hereby, all other provisions in the Original Indenture, as heretofore supplemented and amended by the First Supplemental Indenture, the Third Supplemental Indenture and the Fourth Supplemental Indenture, to the extent not inconsistent with the terms and provisions of this Eleventh Supplemental Indenture, shall remain in full force and effect, and are hereby ratified and confirmed.

302. Effective Date

This Eleventh Supplemental Indenture shall be effective as of the date first above written upon the execution and delivery hereof by the Company and the Trustee.

303. Effect of Headings and Table of Contents

The Article and Section headings herein and the Table of Contents are for convenience only and shall not affect the construction or interpretation hereof.

304. Successors and Assigns

All covenants and agreements in this Eleventh Supplemental Indenture by the Company shall bind its successors and assigns, whether so expressed or not.

305. Separability Clause

In case any provision in this Eleventh Supplemental Indenture or in the Notes shall be invalid, illegal or unenforceable, the validity, legality and enforceability of the remaining provisions shall not in any way be affected or impaired thereby.

306. Counterparts

This Eleventh Supplemental Indenture may be executed in any number of counterparts, each of which so executed shall be deemed to be an original, but all such counterparts shall together constitute but one and the same instrument. The words "execution," "signature," "delivery," and words of like import in or relating to this Eleventh Supplemental Indenture, the Notes or any document to be signed in connection with this Eleventh Supplemental Indenture, including by the Trustee, shall be deemed to include electronic signatures, deliveries or the keeping of records in electronic form, each of which shall be of the same legal effect, validity or enforceability as a manually executed signature, physical delivery thereof or the use of a paper-based recordkeeping system, as the case may be, and the parties hereto consent to conduct the transactions contemplated hereunder by electronic means. For the avoidance of doubt and only with respect to the Notes, this Section 306 shall be deemed to amend Section 303 of the Indenture to permit (i) electronic signatures of the Notes by the officers specified therein and (ii) authentication by the Trustee to be executed by manual, electronic or facsimile signature and provide that any Note executed, authenticated and delivered in such manner shall be valid and obligatory for all purposes under the Indenture and entitled to the benefits thereunder and hereunder.

307. Trustee Not Responsible for Recitals

The recitals herein contained are made by the Company and not by the Trustee, and the Trustee assumes no responsibility for the correctness thereof. The Trustee makes no representation as to the validity or sufficiency of this Eleventh Supplemental Indenture.

308. Governing Law

This Eleventh Supplemental Indenture and the Notes shall be governed by, and construed in accordance with, the law of the State of New York.

309. Applicable Tax Law

In order to comply with applicable tax laws (inclusive of rules, regulations and interpretations promulgated by competent authorities) related to the Indenture in effect from time to time (collectively, "Applicable Tax Law") that a foreign financial institution, issuer, trustee, paying agent or other party is or has agreed to be subject to, the Company agrees (i) upon reasonable written request of the Trustee, to use commercially reasonable efforts to provide to the Trustee, to the extent available, sufficient information about Holders or other applicable parties and/or transactions (including any modification to the terms of such transactions) so that the Trustee can determine whether it has tax related obligations under Applicable Tax Law and (ii) that the Trustee shall be entitled to make any withholding or deduction in respect of taxes from payments under the Indenture to the extent necessary to comply with Applicable Tax Law for which the Trustee shall not have any liability. Nothing in the immediately preceding sentence shall be construed as obligating the Company to make any "gross up" payment or similar reimbursement in connection with a payment in respect of which amounts are so withheld or deducted. The terms of this paragraph shall survive the satisfaction and discharge of the Indenture.

310. Electronic Communications

The Trustee shall have the right to accept and act upon instructions, including funds transfer instructions ("Instructions"), given pursuant to this Eleventh Supplemental Indenture and related documents and delivered using Electronic Means; provided, however, that the Company shall provide to the Trustee an incumbency certificate listing officers with the authority to provide such Instructions ("Authorized Officers") and containing specimen signatures of such Authorized Officers, which incumbency certificate shall be amended by the Company whenever a person is to be added or deleted from the listing. If the Company elects to give the Trustee Instructions using Electronic Means and the Trustee in its discretion elects to act upon such Instructions, the Trustee's understanding of such Instructions shall be deemed controlling. The Company understands and agrees that the Trustee cannot determine the identity of the actual sender of such Instructions and that the Trustee shall conclusively presume that directions that purport to have been sent by an Authorized Officer listed on the incumbency certificate provided to the Trustee have been sent by such Authorized Officer. The Company shall be responsible for ensuring that only Authorized Officers transmit such Instructions to the Trustee and that the Company and all Authorized Officers are solely responsible to safeguard the use and confidentiality of applicable user and authorization codes, passwords and/or authentication keys upon receipt by the Company. The Trustee shall not be liable for any losses, costs or expenses arising directly or indirectly from its reliance upon and

compliance with such Instructions notwithstanding such directions conflict or are inconsistent with a subsequent written instruction. "Electronic Means" shall mean the following communications methods: e-mail, facsimile transmission, secure electronic transmission containing applicable authorization codes, passwords and/or authentication keys issued by the Trustee, or another method or system specified by the Trustee as available for use in connection with its services hereunder.

*[Signature page follows]*

IN WITNESS WHEREOF, the parties hereto have caused this Eleventh Supplemental Indenture to be duly executed, all as of the day and year first above written.

NORTHROP GRUMMAN CORPORATION

By: /s/ David F. Keffer

Name: David F. Keffer

Title: Corporate Vice President and  
Chief Financial Officer

THE BANK OF NEW YORK MELLON,,  
as Trustee

By: /s/ Francine Kincaid

Name: Francine Kincaid

Title: Vice President

*[Signature Page to Eleventh Supplemental Indenture]*

[FORM OF FACE OF 2033 NOTE]

[Global Securities Legend]

[THIS NOTE IS A GLOBAL SECURITY WITHIN THE MEANING OF THE INDENTURE HEREINAFTER REFERRED TO AND IS REGISTERED IN THE NAME OF THE DEPOSITARY NAMED BELOW OR A NOMINEE OF THE DEPOSITARY. THIS NOTE IS NOT EXCHANGEABLE FOR NOTES REGISTERED IN THE NAME OF A PERSON OTHER THAN THE DEPOSITARY OR ITS NOMINEE EXCEPT IN THE LIMITED CIRCUMSTANCES DESCRIBED IN THE INDENTURE, AND NO TRANSFER OF THIS NOTE (OTHER THAN A TRANSFER OF THIS NOTE AS A WHOLE BY THE DEPOSITARY TO A NOMINEE OF THE DEPOSITARY OR BY A NOMINEE OF THE DEPOSITARY TO THE DEPOSITARY OR ANOTHER NOMINEE OF THE DEPOSITARY) MAY BE REGISTERED EXCEPT IN THE LIMITED CIRCUMSTANCES DESCRIBED IN THE INDENTURE.]<sup>1</sup>

[UNLESS THIS CERTIFICATE IS PRESENTED BY AN AUTHORIZED REPRESENTATIVE OF THE DEPOSITORY TRUST COMPANY, A NEW YORK CORPORATION ("DTC"), TO THE COMPANY OR ITS AGENT FOR REGISTRATION OF TRANSFER, EXCHANGE OR PAYMENT, AND ANY CERTIFICATE ISSUED IS REGISTERED IN THE NAME OF CEDE & CO., OR SUCH OTHER NAME AS IS REQUESTED BY AN AUTHORIZED REPRESENTATIVE OF DTC (AND ANY PAYMENT IS MADE TO CEDE & CO., OR TO SUCH OTHER ENTITY AS IS REQUESTED BY AN AUTHORIZED REPRESENTATIVE OF DTC), ANY TRANSFER, PLEDGE OR OTHER USE HEREOF FOR VALUE OR OTHERWISE BY OR TO ANY PERSON IS WRONGFUL INASMUCH AS THE REGISTERED OWNER HEREOF, CEDE & CO., HAS AN INTEREST HEREIN.]<sup>2</sup>

Registered

CUSIP No.: 666807 CH3

No. [\_\_\_\_]

Principal Amount: \$[\_\_\_\_]

NORTHROP GRUMMAN CORPORATION

4.700% Senior Note due 2033

1. Principal and Interest. NORTHROP GRUMMAN CORPORATION, a corporation duly organized and existing under the laws of Delaware (herein called the "Company," which term includes any successor Person under the Indenture hereinafter referred to), for value received, hereby promises to pay to [\_\_\_\_\_] <sup>3</sup> [CEDE & CO.]<sup>4</sup>, or registered assigns, the

<sup>1</sup> To be included only if the Note is a Global Note.

<sup>2</sup> To be included only if the Depository is The Depository Trust Company.

<sup>3</sup> To be included only if the Note is not a Global Note.

<sup>4</sup> To be included only if the Note is a Global Note.

principal sum of \_\_\_\_\_ Dollars, on March 15, 2033 (the “Maturity Date”), and to pay interest thereon from February 8, 2023 (the “Original Issue Date”), or from the most recent Interest Payment Date to which interest has been paid or duly provided for, semi-annually in arrears on March 15 and September 15 in each year (each an “Interest Payment Date”), commencing September 15, 2023, at the rate of 4.700% per annum until the principal hereof is paid or made available for payment. Interest will be computed on the basis of a 360-day year of twelve 30-day months. The interest so payable, and punctually paid or duly provided for, on any Interest Payment Date and on the Maturity Date will, as provided in the Indenture, be paid to the Person in whose name this Note (or one or more Predecessor Securities to this Note (the “Predecessor Notes”)) is registered at the close of business on the March 1 or September 1 (whether or not a Business Day) (each, a “Regular Record Date”), as the case may be, next preceding such Interest Payment Date or the Maturity Date, as applicable. Any such interest not so punctually paid or duly provided for will forthwith cease to be payable to such Person on such Regular Record Date and may either be paid to the Holder in whose name this Note (or one or more Predecessor Notes) is registered at the close of business on a Special Record Date for the payment of such Defaulted Interest to be fixed by the Trustee under the Indenture, notice whereof shall be given to Holders of Notes not less than 10 days prior to such Special Record Date, or be paid at any time in any other lawful manner not inconsistent with the requirements of any securities exchange on which the Notes may be listed, and upon such notice as may be required by such exchange, all as more fully provided in said Indenture. Interest payable on this Note on any Interest Payment Date and on the Maturity Date, as the case may be, will be the amount of interest accrued from and including the immediately preceding Interest Payment Date (or from and including the Original Issue Date, in the case of the initial Interest Payment Date) to but excluding the applicable Interest Payment Date or the Maturity Date, as the case may be. If an Interest Payment Date or the Maturity Date falls on a day that is not a Business Day, the payment will be made on the next Business Day as if it were made on the date the payment was due, and no interest will accrue on the amount so payable for the period from and after that Interest Payment Date or the Maturity Date, as the case may be.

2. **Method of Payment.** The Company will pay the principal of and premium, if any, and interest on the Notes in money of the United States of America that at the time of payment is legal tender for payment of public and private debts. [The Company will make all payments of interest on this Global Note in accordance with the arrangements then existing between the Paying Agent and the Depositary, and all payments of principal of and premium, if any, on this Global Note at the Corporate Trust Office upon surrender of this Global Note for payment.]<sup>5</sup> [The Company will make all payments of interest on this Note by mailing a check to the address of the Person entitled thereto, and all payments of principal of and premium, if any, on this Note at the Corporate Trust Office upon surrender of this Note for payment.]<sup>6</sup>

**Reference is hereby made to the further provisions of this Note set forth on the reverse hereof, which further provisions shall for all purposes have the same effect as if set forth at this place.**

<sup>5</sup> To be included only if the Note is a Global Note.

<sup>6</sup> To be included only if the Note is not a Global Note.



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Unless the certificate of authentication hereon has been executed by the Trustee referred to on the reverse hereof, directly or through an Authenticating Agent, by manual, facsimile or electronic signature, this Note shall not be entitled to any benefit under the Indenture or be valid or obligatory for any purpose.

IN WITNESS WHEREOF, the Company has caused this Note to be duly executed.

NORTHROP GRUMMAN CORPORATION

By: \_\_\_\_\_  
Name:  
Title:

TRUSTEE'S CERTIFICATE OF AUTHENTICATION

This is one of the Securities of the series designated therein referred to in the within-mentioned Indenture

THE BANK OF NEW YORK MELLON, as Trustee

By: \_\_\_\_\_  
Authorized Signatory

Dated: \_\_\_\_\_

4.700% Senior Note due 2033

3. Paying Agent and Security Registrar. The Trustee shall initially act as the Paying Agent and Security Registrar in respect of the Notes and its Corporate Trust Office is designated as a place where the Notes may be presented for payment or for registration of transfer or exchange. The Company may, however, change the Paying Agent or Security Registrar for the Notes without prior notice to any Holders, and the Company or any Subsidiary may act as Paying Agent or Security Registrar for the Notes.

4. Indenture. This Note is one of a duly authorized series of Securities issued or to be issued in one or more series under an Indenture dated as of November 21, 2001 (the "Original Indenture"), as supplemented and amended by a First Supplemental Indenture dated as of July 30, 2009 (the "First Supplemental Indenture"), a Third Supplemental Indenture dated as of March 30, 2011 (the "Third Supplemental Indenture"), a Fourth Supplemental Indenture dated as of March 30, 2011 (the "Fourth Supplemental Indenture"), and an Eleventh Supplemental Indenture dated as of February 8, 2023 (the "Eleventh Supplemental Indenture" and, together with the Original Indenture, the First Supplemental Indenture, the Third Supplemental Indenture and the Fourth Supplemental Indenture, the "Indenture"), by and between the Company and The Bank of New York Mellon, as Trustee (the "Trustee," which term includes any successor trustee under the Indenture), and reference is hereby made to the Indenture for a statement of the respective rights, limitations of rights, duties and immunities thereunder of the Company, the Trustee and the Holders, and of the terms upon which the Notes are, and are to be, authenticated and delivered.

This Note is one of the series designated as the "4.700% Senior Notes due 2033" of the Company initially limited in aggregate principal amount to \$1,000,000,000 (the "Notes"). Such series may be reopened, from time to time, for issuances of an unlimited aggregate principal amount of additional Securities of such series (the "Additional Notes"). Any such Additional Notes shall have the same ranking, interest rate, maturity date and other terms as the Notes, except, if applicable, the issue date, the issue price, the initial Interest Payment Date and corresponding initial Regular Record Date and the initial interest accrual date. Any such Additional Notes, together with the Notes, shall constitute a single series of Securities for all purposes under the Indenture, including voting, waivers, amendments and redemptions; provided, however, that in the event any such Additional Notes are not fungible with the Notes for U.S. federal income tax purposes, such nonfungible Additional Notes shall be issued with a separate CUSIP number so that they are distinguishable from the Notes. Additional series of Securities may be issued pursuant to the Indenture.

The Notes are unsecured senior obligations of the Company and rank pari passu with all unsecured and unsubordinated obligations of the Company.

The terms of the Notes include those stated in the Indenture and those made part of the Indenture by reference to the Trust Indenture Act. The Notes are subject to all those terms, and Holders thereof are referred to the Indenture and the Trust Indenture Act for a statement of all those terms. To the extent permitted by applicable law, in the event of any inconsistency between the terms of this Note and the terms of the Indenture, the terms of the Indenture shall control.

Capitalized terms used but not defined in this Note have the respective meanings ascribed to them by the Indenture.

5. Optional Redemption. Prior to December 15, 2032 (the “Par Call Date”), the Company may redeem the Notes at the Company’s option, in whole or in part, at any time and from time to time, at a Redemption Price (expressed as a percentage of principal amount and rounded to three decimal places) equal to the greater of:

(1) (a) the sum of the present values of the remaining scheduled payments of principal and interest thereon discounted to the Redemption Date (assuming the Notes matured on the Par Call Date) on a semi-annual basis (assuming a 360-day year consisting of twelve 30-day months) at the Treasury Rate (as defined below) plus 20 basis points less (b) interest accrued to the Redemption Date; and

(2) 100% of the principal amount of the Notes to be redeemed;

plus, in either case, accrued and unpaid interest thereon to, but not including, the Redemption Date.

On or after the Par Call Date, the Company may redeem the Notes, in whole or in part, at any time and from time to time, at a Redemption Price equal to 100% of the principal amount of the Notes being redeemed, plus accrued and unpaid interest thereon to, but not including, the Redemption Date.

“Treasury Rate” means, with respect to any Redemption Date, the yield determined by the Company in accordance with the following two paragraphs.

The Treasury Rate applicable to such redemption shall be determined by the Company after 4:15 p.m., New York City time (or after such time as yields on U.S. government securities are posted daily by the Board of Governors of the Federal Reserve System), on the third Business Day preceding the Redemption Date based upon the yield or yields for the most recent day that appear after such time on such day in the most recent statistical release published by the Board of Governors of the Federal Reserve System designated as “Selected Interest Rates (Daily)—H.15” (or any successor designation or publication) (“H.15”) under the caption “U.S. government securities—Treasury constant maturities—Nominal” (or any successor caption or heading) (“H.15 TCM”). In determining the applicable Treasury Rate, the Company shall select, as applicable: (1) the yield for the Treasury constant maturity on H.15 exactly equal to the period from the Redemption Date to the Par Call Date (the “Remaining Life”); or (2) if there is no such Treasury constant maturity on H.15 exactly equal to the Remaining Life, the two yields—one yield corresponding to the Treasury constant maturity on H.15 immediately shorter than and one yield corresponding to the Treasury constant maturity on H.15 immediately longer than the Remaining Life—and shall interpolate to the Par Call Date on a straight-line basis (using the actual number of days) using such yields and rounding the result to three decimal places; or (3) if there is no such Treasury constant maturity on H.15 shorter than or longer than the Remaining

Life, the yield for the single Treasury constant maturity on H.15 closest to the Remaining Life. For purposes of this paragraph, the applicable Treasury constant maturity or maturities on H.15 shall be deemed to have a maturity date equal to the relevant number of months or years, as applicable, of such Treasury constant maturity from the Redemption Date.

If on the third Business Day preceding the Redemption Date H.15 TCM is no longer published, the Company shall calculate the Treasury Rate applicable to such redemption based on the rate per annum equal to the semi-annual equivalent yield to maturity at 11:00 a.m., New York City time, on the second Business Day preceding such Redemption Date of the United States Treasury security maturing on, or with a maturity that is closest to, the Par Call Date, as applicable. If there is no United States Treasury security maturing on the Par Call Date but there are two or more United States Treasury securities with a maturity date equally distant from the Par Call Date, one with a maturity date preceding the Par Call Date and one with a maturity date following the Par Call Date, the Company shall select the United States Treasury security with a maturity date preceding the Par Call Date. If there are two or more United States Treasury securities maturing on the Par Call Date or two or more United States Treasury securities meeting the criteria of the preceding sentence, the Company shall select from among these two or more United States Treasury securities the United States Treasury security that is trading closest to par based upon the average of the bid and asked prices for such United States Treasury securities at 11:00 a.m., New York City time. In determining the Treasury Rate in accordance with the terms of this paragraph, the semi-annual yield to maturity of the applicable United States Treasury security shall be based upon the average of the bid and asked prices, expressed as a percentage of principal amount, at 11:00 a.m., New York City time, of such United States Treasury security, and rounded to three decimal places.

The Company's actions and determinations in determining the Redemption Price shall be conclusive and binding for all purposes, absent manifest error. The Company will notify the Trustee of the Redemption Price promptly after the calculation thereof and the Trustee shall have no duty to determine, or verify the calculation of, the Redemption Price.

Notice of any redemption will be mailed or electronically delivered (or otherwise transmitted in accordance with the Depository's procedures) at least 10 days but not more than 60 days before the Redemption Date to each Holder of Notes to be redeemed, with a copy to the Trustee.

In the case of a partial redemption of a series of Notes, selection of certificated Notes of such series for redemption will be made by lot. No Notes of a principal amount of \$2,000 or less will be redeemed in part. If any certificated Note of a series is to be redeemed in part only, the notice of redemption that relates to such Note of such series will state the portion of the principal amount of the Note of such series to be redeemed. A new certificated Note of such series in a principal amount equal to the unredeemed portion of such Note of such series will be issued in the name of the Holder of such Note upon surrender for cancellation of the original certificated Note. For so long as the Notes are held by DTC (or another Depository), the redemption of the Notes shall be done in accordance with the policies and procedures of DTC (or such other Depository), which may be made on a pro rata pass-through distribution of principal basis.

6. Sinking Fund. The Notes are not subject to any sinking fund or analogous provisions.

7. Denominations; Transfer; Exchange. The Notes are in registered form without coupons in denominations of \$2,000 and integral multiples of \$1,000 in excess thereof. A Holder may transfer or exchange Notes in accordance with the Indenture. Every Note presented or surrendered for registration of transfer or for exchange shall (if so required by the Company or the Trustee) be duly endorsed, or be accompanied by a written instrument of transfer in form satisfactory to the Company and the Security Registrar duly executed by the Holder thereof or its attorney duly authorized in writing. No service charge shall be made for any registration of transfer or exchange of this Note, but the Company may require payment of a sum sufficient to cover any tax or other governmental charge that may be imposed in connection with any such registration of transfer or exchange, other than exchanges pursuant to Section 304, 906 or 1107 not involving any transfer. If the Notes are to be redeemed in part, the Company shall not be required (A) to issue, register the transfer of or exchange any Notes during the period beginning at the opening of business 15 days before the day of the mailing of the applicable notice of redemption and ending at the close of business on the day of such mailing, or (B) to register the transfer of or exchange any Note so selected for redemption in whole or in part (except the unredeemed portion of any Note being redeemed in part).
8. Persons Deemed Owner. The Holder of this Note may be treated as the owner of this Note for all purposes.
9. Unclaimed Funds. If money for the payment of principal, premium or interest of or on the Notes remains unclaimed for two years, the Trustee or Paying Agent shall pay the money back to the Company at its written request, subject to any applicable abandoned property laws. After any such payment, Holders entitled to the money must look only to the Company and not to the Trustee or any Paying Agent for payment.
10. Defeasance and Discharge. The Notes will be subject to defeasance and discharge as set forth in Section 1302 of the Original Indenture and to covenant defeasance as set forth in Section 1303 of the Original Indenture.
11. Amendment; Waiver. The Indenture permits, with certain exceptions as therein provided, the amendment thereof and the modification of the rights and obligations of the Company and the rights of the Holders of the Securities of each series to be affected under the Indenture at any time by the Company and the Trustee with the consent of the Holders of a majority in principal amount of the Securities at the time Outstanding of each series to be affected. The Indenture also contains provisions permitting the Holders of specified percentages in principal amount of the Securities of each series at the time Outstanding, on behalf of the Holders of all Securities of such series, to waive compliance by the Company with certain provisions of the Indenture and certain past defaults under the Indenture and their consequences. Any such consent or waiver by the Holder of this Note shall be conclusive and binding upon such Holder and upon all future Holders of this Note and of any Note issued upon the registration of transfer hereof or in exchange hereof or in lieu hereof, whether or not notation of such consent or waiver is made upon this Note.
12. Defaults and Remedies. If an Event of Default with respect to the Notes shall occur and be continuing, the principal of the Notes may be declared due and payable in the manner and with the effect provided in the Indenture. As provided in and subject to the provisions of the

Indenture, the Holder of this Note shall not have the right to institute any proceeding with respect to the Indenture or for the appointment of a receiver or trustee or for any other remedy thereunder, unless: the Holder shall have previously given the Trustee written notice of a continuing Event of Default with respect to the Notes; the Holders of not less than 25% in principal amount of the Notes at the time Outstanding shall have made written request to the Trustee to institute proceedings in respect of such Event of Default as Trustee and offered the Trustee reasonable indemnity; the Trustee for 60 days after its receipt of such notice, request and offer of indemnity has failed to institute any such proceeding; and no direction inconsistent with such written request has been given to the Trustee during such 60-day period by the Holders of a majority in principal amount of the Outstanding Notes. The foregoing shall not apply to any suit instituted by the Holder of this Note for the enforcement of any payment of principal hereof or any premium or interest hereon on or after the respective due dates expressed herein (including, in case of a redemption, on the Redemption Date).

13. Obligations Absolute. No reference herein to the Indenture and no provision of this Note or of the Indenture shall alter or impair the obligation of the Company, which is absolute and unconditional, to pay the principal of (and premium, if any) and interest on this Note at the times, place and rate, and in the coin or currency, herein prescribed.

14. No Recourse Against Others. No recourse shall be had for the payment of the principal of, or premium, if any, or interest on this Note, or for any claim based hereon or otherwise in respect hereof, or based on or in respect of the Indenture or any indenture supplemental thereto, against any incorporator, stockholder, officer or director, as such, past, present or future, of the Company or of any successor corporation, whether by virtue of any constitution, statute or rule of law, or by the enforcement of any assessment or penalty or otherwise, all such liability being, by the acceptance hereof and as part of the consideration for the issue hereof, expressly waived and released.

15. Trustee Dealings with the Company. Subject to certain limitations imposed by the Trust Indenture Act, the Trustee under the Indenture, in its individual or any other capacity, may become the owner or pledgee of Notes and may otherwise deal with and collect obligations owed to it by the Company or its Affiliates and may otherwise deal with the Company or its Affiliates with the same rights it would have if it were not Trustee, Authenticating Agent, Paying Agent, Security Registrar or such other agent.

16. Successors and Assigns. All covenants and agreements in the Indenture by the Company shall bind its successors and assigns, whether so expressed or not, except as provided in Section 802 of the Original Indenture.

17. Governing Law. THIS NOTE SHALL BE GOVERNED BY, AND CONSTRUED IN ACCORDANCE WITH, THE LAW OF THE STATE OF NEW YORK.

18. CUSIP Numbers. Pursuant to a recommendation promulgated by the Committee on Uniform Security Identification Procedures, the Company has caused CUSIP numbers to be printed on the Notes and has directed the Trustee to use CUSIP numbers in notices of redemption as a convenience to Holders thereof. No representation is made as to the accuracy of such numbers either as printed on the Notes or as contained in any notice of redemption and reliance may be placed only on the other identification numbers placed thereon.

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The Company will furnish to any Holder upon written request and without charge a copy of the Indenture. Requests may be made to:

Northrop Grumman Corporation  
2980 Fairview Park Drive  
Falls Church, Virginia 22042  
Attention: Corporate Vice President and Secretary

A-10



**ABBREVIATIONS**

The following abbreviations, when used in the inscription on the face of this instrument, shall be construed as though they were written out in full according to applicable laws or regulations:

TEN COM –	as tenants in common
TEN ENT –	as tenants by the entireties
JT TEN –	as joint tenants with right of survivorship and not as tenants in common
UNIF GIFT MIN ACT –	_____ Custodian _____ under Uniform Gifts to Minors Act _____ (Cust) (Minor) (State)

Additional abbreviations may also be used though not on the above list.

FORM OF ASSIGNMENT

FOR VALUE RECEIVED, the undersigned hereby sell(s), assign(s) and transfer(s) unto (Please insert Social Security Number, Taxpayer Identification No., or other identifying number of assignee)

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*(Please print or typewrite name and address, including postal zip code, of assignee)*

the within Note of NORTHROP GRUMMAN CORPORATION and all rights thereunder, hereby irrevocably constituting and appointing:

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*(Please print or typewrite name and address, including postal zip code, of attorney)*

as attorney to transfer said Note on the books of the Company, with full power of substitution in the premises.

Dated: \_\_\_\_\_

---

*(Signature)*

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*(Please print or typewrite name and title if signing on behalf of an entity)*

*NOTICE: The signature to this assignment must correspond with the name as written upon the face of the within instrument in every particular without alteration or enlargement, or any change whatsoever.*

Signature(s) Guaranteed:

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*(Signature(s) must be guaranteed by an Eligible Guarantor Institution with membership in an approved signature guarantee program pursuant to Rule 17Ad-15 under the Securities Exchange Act of 1934.)*

[FORM OF FACE OF 2053 NOTE]

[Global Securities Legend]

[THIS NOTE IS A GLOBAL SECURITY WITHIN THE MEANING OF THE INDENTURE HEREINAFTER REFERRED TO AND IS REGISTERED IN THE NAME OF THE DEPOSITARY NAMED BELOW OR A NOMINEE OF THE DEPOSITARY. THIS NOTE IS NOT EXCHANGEABLE FOR NOTES REGISTERED IN THE NAME OF A PERSON OTHER THAN THE DEPOSITARY OR ITS NOMINEE EXCEPT IN THE LIMITED CIRCUMSTANCES DESCRIBED IN THE INDENTURE, AND NO TRANSFER OF THIS NOTE (OTHER THAN A TRANSFER OF THIS NOTE AS A WHOLE BY THE DEPOSITARY TO A NOMINEE OF THE DEPOSITARY OR BY A NOMINEE OF THE DEPOSITARY TO THE DEPOSITARY OR ANOTHER NOMINEE OF THE DEPOSITARY) MAY BE REGISTERED EXCEPT IN THE LIMITED CIRCUMSTANCES DESCRIBED IN THE INDENTURE.]<sup>7</sup>

[UNLESS THIS CERTIFICATE IS PRESENTED BY AN AUTHORIZED REPRESENTATIVE OF THE DEPOSITORY TRUST COMPANY, A NEW YORK CORPORATION ("DTC"), TO THE COMPANY OR ITS AGENT FOR REGISTRATION OF TRANSFER, EXCHANGE OR PAYMENT, AND ANY CERTIFICATE ISSUED IS REGISTERED IN THE NAME OF CEDE & CO., OR SUCH OTHER NAME AS IS REQUESTED BY AN AUTHORIZED REPRESENTATIVE OF DTC (AND ANY PAYMENT IS MADE TO CEDE & CO., OR TO SUCH OTHER ENTITY AS IS REQUESTED BY AN AUTHORIZED REPRESENTATIVE OF DTC), ANY TRANSFER, PLEDGE OR OTHER USE HEREOF FOR VALUE OR OTHERWISE BY OR TO ANY PERSON IS WRONGFUL INASMUCH AS THE REGISTERED OWNER HEREOF, CEDE & CO., HAS AN INTEREST HEREIN.]<sup>8</sup>

Registered

CUSIP No.: 666807 CJ9

No. [     ]

Principal Amount: \$[             ]

## NORTHROP GRUMMAN CORPORATION

4.950% Senior Note due 2053

1. Principal and Interest. NORTHROP GRUMMAN CORPORATION, a corporation duly organized and existing under the laws of Delaware (herein called the "Company," which term includes any successor Person under the Indenture hereinafter referred to), for value received, hereby promises to pay to [             ]<sup>9</sup> [CEDE & CO.]<sup>10</sup>, or registered assigns, the

<sup>7</sup> To be included only if the Note is a Global Note.

<sup>8</sup> To be included only if the Depository is The Depository Trust Company.

<sup>9</sup> To be included only if the Note is not a Global Note.

<sup>10</sup> To be included only if the Note is a Global Note.

principal sum of Dollars, on March 15, 2053 (the “Maturity Date”), and to pay interest thereon from February 8, 2023 (the “Original Issue Date”), or from the most recent Interest Payment Date to which interest has been paid or duly provided for, semi-annually in arrears on March 15 and September 15 in each year (each an “Interest Payment Date”), commencing September 15, 2023, at the rate of 4.950% per annum until the principal hereof is paid or made available for payment. Interest will be computed on the basis of a 360-day year of twelve 30-day months. The interest so payable, and punctually paid or duly provided for, on any Interest Payment Date and on the Maturity Date will, as provided in the Indenture, be paid to the Person in whose name this Note (or one or more Predecessor Securities to this Note (the “Predecessor Notes”)) is registered at the close of business on the March 1 or September 1 (whether or not a Business Day) (each, a “Regular Record Date”), as the case may be, next preceding such Interest Payment Date or the Maturity Date, as applicable. Any such interest not so punctually paid or duly provided for will forthwith cease to be payable to such Person on such Regular Record Date and may either be paid to the Holder in whose name this Note (or one or more Predecessor Notes) is registered at the close of business on a Special Record Date for the payment of such Defaulted Interest to be fixed by the Trustee under the Indenture, notice whereof shall be given to Holders of Notes not less than 10 days prior to such Special Record Date, or be paid at any time in any other lawful manner not inconsistent with the requirements of any securities exchange on which the Notes may be listed, and upon such notice as may be required by such exchange, all as more fully provided in said Indenture. Interest payable on this Note on any Interest Payment Date and on the Maturity Date, as the case may be, will be the amount of interest accrued from and including the immediately preceding Interest Payment Date (or from and including the Original Issue Date, in the case of the initial Interest Payment Date) to but excluding the applicable Interest Payment Date or the Maturity Date, as the case may be. If an Interest Payment Date or the Maturity Date falls on a day that is not a Business Day, the payment will be made on the next Business Day as if it were made on the date the payment was due, and no interest will accrue on the amount so payable for the period from and after that Interest Payment Date or the Maturity Date, as the case may be.

2. **Method of Payment.** The Company will pay the principal of and premium, if any, and interest on the Notes in money of the United States of America that at the time of payment is legal tender for payment of public and private debts. [The Company will make all payments of interest on this Global Note in accordance with the arrangements then existing between the Paying Agent and the Depositary, and all payments of principal of and premium, if any, on this Global Note at the Corporate Trust Office upon surrender of this Global Note for payment.]<sup>11</sup> [The Company will make all payments of interest on this Note by mailing a check to the address of the Person entitled thereto, and all payments of principal of and premium, if any, on this Note at the Corporate Trust Office upon surrender of this Note for payment.]<sup>12</sup>

**Reference is hereby made to the further provisions of this Note set forth on the reverse hereof, which further provisions shall for all purposes have the same effect as if set forth at this place.**

<sup>11</sup> To be included only if the Note is a Global Note.

<sup>12</sup> To be included only if the Note is not a Global Note.

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Unless the certificate of authentication hereon has been executed by the Trustee referred to on the reverse hereof, directly or through an Authenticating Agent, by manual, facsimile or electronic signature, this Note shall not be entitled to any benefit under the Indenture or be valid or obligatory for any purpose.

IN WITNESS WHEREOF, the Company has caused this Note to be duly executed.

NORTHROP GRUMMAN CORPORATION

By: \_\_\_\_\_  
Name:  
Title:

TRUSTEE'S CERTIFICATE OF AUTHENTICATION

This is one of the Securities of the series designated therein referred to in the within-mentioned Indenture

THE BANK OF NEW YORK MELLON, as Trustee

By: \_\_\_\_\_  
Authorized Signatory

Dated: \_\_\_\_\_

4.950% Senior Note due 2053

3. Paying Agent and Security Registrar. The Trustee shall initially act as the Paying Agent and Security Registrar in respect of the Notes and its Corporate Trust Office is designated as a place where the Notes may be presented for payment or for registration of transfer or exchange. The Company may, however, change the Paying Agent or Security Registrar for the Notes without prior notice to any Holders, and the Company or any Subsidiary may act as Paying Agent or Security Registrar for the Notes.

4. Indenture. This Note is one of a duly authorized series of Securities issued or to be issued in one or more series under an Indenture dated as of November 21, 2001 (the "Original Indenture"), as supplemented and amended by a First Supplemental Indenture dated as of July 30, 2009 (the "First Supplemental Indenture"), a Third Supplemental Indenture dated as of March 30, 2011 (the "Third Supplemental Indenture"), a Fourth Supplemental Indenture dated as of March 30, 2011 (the "Fourth Supplemental Indenture"), and an Eleventh Supplemental Indenture dated as of February 8, 2023 (the "Eleventh Supplemental Indenture" and, together with the Original Indenture, the First Supplemental Indenture, the Third Supplemental Indenture and the Fourth Supplemental Indenture, the "Indenture"), by and between the Company and The Bank of New York Mellon, as Trustee (the "Trustee," which term includes any successor trustee under the Indenture), and reference is hereby made to the Indenture for a statement of the respective rights, limitations of rights, duties and immunities thereunder of the Company, the Trustee and the Holders, and of the terms upon which the Notes are, and are to be, authenticated and delivered.

This Note is one of the series designated as the "4.950% Senior Notes due 2053" of the Company initially limited in aggregate principal amount to \$1,000,000,000 (the "Notes"). Such series may be reopened, from time to time, for issuances of an unlimited aggregate principal amount of additional Securities of such series (the "Additional Notes"). Any such Additional Notes shall have the same ranking, interest rate, maturity date and other terms as the Notes, except, if applicable, the issue date, the issue price, the initial Interest Payment Date and corresponding initial Regular Record Date and the initial interest accrual date. Any such Additional Notes, together with the Notes, shall constitute a single series of Securities for all purposes under the Indenture, including voting, waivers, amendments and redemptions; provided, however, that in the event any such Additional Notes are not fungible with the Notes for U.S. federal income tax purposes, such nonfungible Additional Notes shall be issued with a separate CUSIP number so that they are distinguishable from the Notes. Additional series of Securities may be issued pursuant to the Indenture.

The Notes are unsecured senior obligations of the Company and rank *pari passu* with all unsecured and unsubordinated obligations of the Company.

The terms of the Notes include those stated in the Indenture and those made part of the Indenture by reference to the Trust Indenture Act. The Notes are subject to all those terms, and Holders thereof are referred to the Indenture and the Trust Indenture Act for a statement of all those terms. To the extent permitted by applicable law, in the event of any inconsistency between the terms of this Note and the terms of the Indenture, the terms of the Indenture shall control.

Capitalized terms used but not defined in this Note have the respective meanings ascribed to them by the Indenture.

5. Optional Redemption. Prior to September 15, 2052 (the “Par Call Date”), the Company may redeem the Notes at the Company’s option, in whole or in part, at any time and from time to time, at a Redemption Price (expressed as a percentage of principal amount and rounded to three decimal places) equal to the greater of:

(1) (a) the sum of the present values of the remaining scheduled payments of principal and interest thereon discounted to the Redemption Date (assuming the Notes matured on the Par Call Date) on a semi-annual basis (assuming a 360-day year consisting of twelve 30-day months) at the Treasury Rate (as defined below) plus 20 basis points less (b) interest accrued to the Redemption Date; and

(2) 100% of the principal amount of the Notes to be redeemed;

plus, in either case, accrued and unpaid interest thereon to, but not including, the Redemption Date.

On or after the Par Call Date, the Company may redeem the Notes, in whole or in part, at any time and from time to time, at a Redemption Price equal to 100% of the principal amount of the Notes being redeemed, plus accrued and unpaid interest thereon to, but not including, the Redemption Date.

“Treasury Rate” means, with respect to any Redemption Date, the yield determined by the Company in accordance with the following two paragraphs.

The Treasury Rate shall be determined by the Company after 4:15 p.m., New York City time (or after such time as yields on U.S. government securities are posted daily by the Board of Governors of the Federal Reserve System), on the third Business Day preceding the Redemption Date based upon the yield or yields for the most recent day that appear after such time on such day in the most recent statistical release published by the Board of Governors of the Federal Reserve System designated as “Selected Interest Rates (Daily)—H.15” (or any successor designation or publication) (“H.15”) under the caption “U.S. government securities—Treasury constant maturities—Nominal” (or any successor caption or heading) (“H.15 TCM”). In determining the applicable Treasury Rate, the Company shall select, as applicable: (1) the yield for the Treasury constant maturity on H.15 exactly equal to the period from the Redemption Date to the Par Call Date (the “Remaining Life”); or (2) if there is no such Treasury constant maturity on H.15 exactly equal to the Remaining Life, the two yields—one yield corresponding to the Treasury constant maturity on H.15 immediately shorter than and one yield corresponding to the Treasury constant maturity on H.15 immediately longer than the Remaining Life—and shall interpolate to the Par Call Date on a straight-line basis (using the actual number of days) using such yields and rounding the result to three decimal places; or (3) if there is no such Treasury constant maturity on H.15 shorter than or longer than the Remaining Life, the yield for the single Treasury constant maturity on H.15 closest to the Remaining Life. For purposes of this



paragraph, the applicable Treasury constant maturity or maturities on H.15 shall be deemed to have a maturity date equal to the relevant number of months or years, as applicable, of such Treasury constant maturity from the Redemption Date.

If on the third Business Day preceding the Redemption Date H.15 TCM is no longer published, the Company shall calculate the Treasury Rate applicable to such redemption based on the rate per annum equal to the semi-annual equivalent yield to maturity at 11:00 a.m., New York City time, on the second Business Day preceding such Redemption Date of the United States Treasury security maturing on, or with a maturity that is closest to, the Par Call Date, as applicable. If there is no United States Treasury security maturing on the Par Call Date but there are two or more United States Treasury securities with a maturity date equally distant from the Par Call Date, one with a maturity date preceding the Par Call Date and one with a maturity date following the Par Call Date, the Company shall select the United States Treasury security with a maturity date preceding the Par Call Date. If there are two or more United States Treasury securities maturing on the Par Call Date or two or more United States Treasury securities meeting the criteria of the preceding sentence, the Company shall select from among these two or more United States Treasury securities the United States Treasury security that is trading closest to par based upon the average of the bid and asked prices for such United States Treasury securities at 11:00 a.m., New York City time. In determining the Treasury Rate in accordance with the terms of this paragraph, the semi-annual yield to maturity of the applicable United States Treasury security shall be based upon the average of the bid and asked prices, expressed as a percentage of principal amount, at 11:00 a.m., New York City time, of such United States Treasury security, and rounded to three decimal places.

The Company's actions and determinations in determining the Redemption Price shall be conclusive and binding for all purposes, absent manifest error. The Company will notify the Trustee of the Redemption Price promptly after the calculation thereof and the Trustee shall have no duty to determine, or verify the calculation of, the Redemption Price.

Notice of any redemption will be mailed or electronically delivered (or otherwise transmitted in accordance with the Depository's procedures) at least 10 days but not more than 60 days before the Redemption Date to each Holder of Notes to be redeemed, with a copy to the Trustee.

In the case of a partial redemption of a series of Notes, selection of certificated Notes of such series for redemption will be made by lot. No Notes of a principal amount of \$2,000 or less will be redeemed in part. If any certificated Note of a series is to be redeemed in part only, the notice of redemption that relates to such Note of such series will state the portion of the principal amount of the Note of such series to be redeemed. A new certificated Note of such series in a principal amount equal to the unredeemed portion of such Note of such series will be issued in the name of the Holder of such Note upon surrender for cancellation of the original certificated Note. For so long as the Notes are held by DTC (or another Depository), the redemption of the Notes shall be done in accordance with the policies and procedures of DTC (or such other Depository), which may be made on a pro rata pass-through distribution of principal basis.

6. Sinking Fund. The Notes are not subject to any sinking fund or analogous provisions.

7. Denominations; Transfer; Exchange. The Notes are in registered form without coupons in denominations of \$2,000 and integral multiples of \$1,000 in excess thereof. A Holder may transfer or exchange Notes in accordance with the Indenture. Every Note presented or surrendered for registration of transfer or for exchange shall (if so required by the Company or the Trustee) be duly endorsed, or be accompanied by a written instrument of transfer in form satisfactory to the Company and the Security Registrar duly executed by the Holder thereof or its attorney duly authorized in writing. No service charge shall be made for any registration of transfer or exchange of this Note, but the Company may require payment of a sum sufficient to cover any tax or other governmental charge that may be imposed in connection with any such registration of transfer or exchange, other than exchanges pursuant to Section 304, 906 or 1107 not involving any transfer. If the Notes are to be redeemed in part, the Company shall not be required (A) to issue, register the transfer of or exchange any Notes during the period beginning at the opening of business 15 days before the day of the mailing of the applicable notice of redemption and ending at the close of business on the day of such mailing, or (B) to register the transfer of or exchange any Note so selected for redemption in whole or in part (except the unredeemed portion of any Note being redeemed in part).

8. Persons Deemed Owner. The Holder of this Note may be treated as the owner of this Note for all purposes.

9. Unclaimed Funds. If money for the payment of principal, premium or interest of or on the Notes remains unclaimed for two years, the Trustee or Paying Agent shall pay the money back to the Company at its written request, subject to any applicable abandoned property laws. After any such payment, Holders entitled to the money must look only to the Company and not to the Trustee or any Paying Agent for payment.

10. Defeasance and Discharge. The Notes will be subject to defeasance and discharge as set forth in Section 1302 of the Original Indenture and to covenant defeasance as set forth in Section 1303 of the Original Indenture.

11. Amendment; Waiver. The Indenture permits, with certain exceptions as therein provided, the amendment thereof and the modification of the rights and obligations of the Company and the rights of the Holders of the Securities of each series to be affected under the Indenture at any time by the Company and the Trustee with the consent of the Holders of a majority in principal amount of the Securities at the time Outstanding of each series to be affected. The Indenture also contains provisions permitting the Holders of specified percentages in principal amount of the Securities of each series at the time Outstanding, on behalf of the Holders of all Securities of such series, to waive compliance by the Company with certain provisions of the Indenture and certain past defaults under the Indenture and their consequences. Any such consent or waiver by the Holder of this Note shall be conclusive and binding upon such Holder and upon all future Holders of this Note and of any Note issued upon the registration of transfer hereof or in exchange hereof or in lieu hereof, whether or not notation of such consent or waiver is made upon this Note.

12. Defaults and Remedies. If an Event of Default with respect to the Notes shall occur and be continuing, the principal of the Notes may be declared due and payable in the manner and with the effect provided in the Indenture. As provided in and subject to the provisions of the

Indenture, the Holder of this Note shall not have the right to institute any proceeding with respect to the Indenture or for the appointment of a receiver or trustee or for any other remedy thereunder, unless: the Holder shall have previously given the Trustee written notice of a continuing Event of Default with respect to the Notes; the Holders of not less than 25% in principal amount of the Notes at the time Outstanding shall have made written request to the Trustee to institute proceedings in respect of such Event of Default as Trustee and offered the Trustee reasonable indemnity; the Trustee for 60 days after its receipt of such notice, request and offer of indemnity has failed to institute any such proceeding; and no direction inconsistent with such written request has been given to the Trustee during such 60-day period by the Holders of a majority in principal amount of the Outstanding Notes. The foregoing shall not apply to any suit instituted by the Holder of this Note for the enforcement of any payment of principal hereof or any premium or interest hereon on or after the respective due dates expressed herein (including, in case of a redemption, on the Redemption Date).

13. Obligations Absolute. No reference herein to the Indenture and no provision of this Note or of the Indenture shall alter or impair the obligation of the Company, which is absolute and unconditional, to pay the principal of (and premium, if any) and interest on this Note at the times, place and rate, and in the coin or currency, herein prescribed.

14. No Recourse Against Others. No recourse shall be had for the payment of the principal of, or premium, if any, or interest on this Note, or for any claim based hereon or otherwise in respect hereof, or based on or in respect of the Indenture or any indenture supplemental thereto, against any incorporator, stockholder, officer or director, as such, past, present or future, of the Company or of any successor corporation, whether by virtue of any constitution, statute or rule of law, or by the enforcement of any assessment or penalty or otherwise, all such liability being, by the acceptance hereof and as part of the consideration for the issue hereof, expressly waived and released.

15. Trustee Dealings with the Company. Subject to certain limitations imposed by the Trust Indenture Act, the Trustee under the Indenture, in its individual or any other capacity, may become the owner or pledgee of Notes and may otherwise deal with and collect obligations owed to it by the Company or its Affiliates and may otherwise deal with the Company or its Affiliates with the same rights it would have if it were not Trustee, Authenticating Agent, Paying Agent, Security Registrar or such other agent.

16. Successors and Assigns. All covenants and agreements in the Indenture by the Company shall bind its successors and assigns, whether so expressed or not, except as provided in Section 802 of the Original Indenture.

17. Governing Law. THIS NOTE SHALL BE GOVERNED BY, AND CONSTRUED IN ACCORDANCE WITH, THE LAW OF THE STATE OF NEW YORK.

18. CUSIP Numbers. Pursuant to a recommendation promulgated by the Committee on Uniform Security Identification Procedures, the Company has caused CUSIP numbers to be printed on the Notes and has directed the Trustee to use CUSIP numbers in notices of redemption as a convenience to Holders thereof. No representation is made as to the accuracy of such numbers either as printed on the Notes or as contained in any notice of redemption and reliance may be placed only on the other identification numbers placed thereon.

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The Company will furnish to any Holder upon written request and without charge a copy of the Indenture. Requests may be made to:

Northrop Grumman Corporation  
2980 Fairview Park Drive  
Falls Church, Virginia 22042  
Attention: Corporate Vice President and Secretary

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**ABBREVIATIONS**

The following abbreviations, when used in the inscription on the face of this instrument, shall be construed as though they were written out in full according to applicable laws or regulations:

TEN COM – as tenants in common  
TEN ENT – as tenants by the entireties  
JT TEN – as joint tenants with right of survivorship and not as tenants in common  
UNIF GIFT MIN ACT – \_\_\_\_\_ Custodian \_\_\_\_\_ under Uniform Gifts to Minors Act \_\_\_\_\_  
(Cust) (Minor) (State)

Additional abbreviations may also be used though not on the above list.

FORM OF ASSIGNMENT

FOR VALUE RECEIVED, the undersigned hereby sell(s), assign(s) and transfer(s) unto (Please insert Social Security Number, Taxpayer Identification No., or other identifying number of assignee)

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*(Please print or typewrite name and address, including postal zip code, of assignee)*

the within Note of NORTHROP GRUMMAN CORPORATION and all rights thereunder, hereby irrevocably constituting and appointing:

---

*(Please print or typewrite name and address, including postal zip code, of attorney)*

as attorney to transfer said Note on the books of the Company, with full power of substitution in the premises.

Dated: \_\_\_\_\_

---

*(Signature)*

---

*(Please print or typewrite name and title if signing on behalf of an entity)*

*NOTICE: The signature to this assignment must correspond with the name as written upon the face of the within instrument in every particular without alteration or enlargement, or any change whatsoever.*

Signature(s) Guaranteed:

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*(Signature(s) must be guaranteed by an Eligible Guarantor Institution with membership in an approved signature guarantee program pursuant to Rule 17Ad-15 under the Securities Exchange Act of 1934.)*



February 8, 2023

Northrop Grumman Corporation  
\$1,000,000,000 4.700% Senior Notes due 2033  
\$1,000,000,000 4.950% Senior Notes due 2053

Ladies and Gentlemen:

We have acted as counsel for Northrop Grumman Corporation, a Delaware corporation (the “Company”), in connection with the public offering and sale by the Company of \$1,000,000,000 aggregate principal amount of the Company’s 4.700% Senior Notes due 2033 (the “2033 Notes”) and \$1,000,000,000 aggregate principal amount of the Company’s 4.950% Senior Notes due 2053 (the “2053 Notes”) and, together with the 2033 Notes, the “Notes”) to be issued under the Indenture dated as of November 21, 2001, between the Company and The Bank of New York Mellon, as successor to JPMorgan Chase Bank, as trustee (the “Trustee”), as supplemented by the First Supplemental Indenture dated as of July 30, 2009, the Third Supplemental Indenture dated as of March 30, 2011, the Fourth Supplemental Indenture dated as of March 30, 2011 (the Indenture, as so supplemented, the “Base Indenture”) and the Eleventh Supplemental Indenture, dated as of February 8, 2023, between the Company and the Trustee (the “Eleventh Supplemental Indenture”) and, together with the Base Indenture, the “Indenture”).

In connection with this opinion, we have examined originals, or copies certified or otherwise identified to our satisfaction, of such documents, corporate records and other instruments as we have deemed necessary or appropriate for the purposes of this opinion, including the Indenture and the Registration Statement on Form S-3 (Registration No. 333-237504) filed with the Securities and Exchange Commission (the “Commission”) on March 31, 2020 (the “Registration Statement”) for registration under the Securities Act of 1933, as amended (the “Securities Act”) of an indeterminate amount of various securities of the Company to be issued from time to time by the Company.

As to various questions of fact material to this opinion, we have relied upon representations of officers or directors of the Company and documents furnished to us by the Company without independent verification of their accuracy. We have also assumed (a) with your consent and without independent investigation or verification, the genuineness of all signatures, the legal capacity and competency of all natural persons, the authenticity of all documents submitted to us as originals and the conformity to authentic original documents of all documents submitted to us as duplicates or copies and (b) that the Indenture has been duly authorized, executed and delivered by, and represents a legal, valid and binding obligation of, the Trustee.

**NEW YORK**  
 Worldwide Plaza  
 825 Eighth Avenue  
 New York, NY 10019-7475  
 T+1-212-474-1000  
 F+1-212-474-3700

**LONDON**  
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**WASHINGTON, D.C.**  
 1601 K Street NW  
 Washington, D.C. 20006-1682  
 T+1-202-869-7700  
 F+1-202-869-7600

**CRAVATH, SWAINE & MOORE LLP**

Based on the foregoing and subject to the qualifications set forth herein, we are of opinion that, assuming that the Notes to be issued by the Company have been duly authorized and executed by the Company, when the Notes are authenticated in accordance with the provisions of the Indenture and delivered and paid for, the Notes will constitute legal, valid and binding obligations of the Company, enforceable against the Company in accordance with their terms and entitled to the benefits of the Indenture (subject to applicable bankruptcy, insolvency, reorganization, moratorium, fraudulent transfer and other similar laws affecting creditors' rights generally from time to time in effect and to general principles of equity, including, without limitation, concepts of materiality, reasonableness, good faith and fair dealing, regardless of whether considered in a proceeding in equity or at law).

We are admitted to practice only in the State of New York and express no opinion as to matters governed by any laws other than the Delaware General Corporation Law, the laws of the State of New York and the Federal laws of the United States of America.

We hereby consent to the filing of this opinion with the Commission as an exhibit to the Registration Statement. We also consent to the reference to our firm under the caption "Validity of the notes" in the prospectus supplement forming a part of the Registration Statement. In giving this consent, we do not thereby admit that we are included in the category of persons whose consent is required under Section 7 of the Securities Act or the rules and regulations of the Commission.

Very truly yours,

/s/ Cravath, Swaine & Moore LLP

Northrop Grumman Corporation  
2980 Fairview Park Drive  
Falls Church, Virginia 22042