

NORTHROP GRUMMAN CORP /DE/

Form 11-K

June 29, 2005

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# SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

## FORM 11-K

(Mark One)

ANNUAL REPORT PURSUANT TO SECTION 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the fiscal year ended December 31, 2004

OR

TRANSITION REPORT PURSUANT TO SECTION 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the transition period from \_\_\_\_\_ to \_\_\_\_\_ .

Commission file number: 1-12385

A. Full title of the plan and address of the plan, if different from that of the issuer named below:

**NORTHROP GRUMMAN PEI**

**RETIREMENT SAVINGS PLAN**

B. Name of issuer of the securities held pursuant to the plan and the address of its principal executive office:

**NORTHROP GRUMMAN CORPORATION**

**1840 Century Park East**

**Los Angeles, California 90067**

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***Northrop Grumman PEI  
Retirement Savings Plan***

*Financial Statements as of December 31, 2004 and 2003*

*and for the Year Ended December 31, 2004,*

*Supplemental Schedule and*

*Report of Independent Registered Public Accounting Firm*

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**NORTHROP GRUMMAN PEI RETIREMENT SAVINGS PLAN**

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**REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM**

To the Administrative Committee of the

Northrop Grumman PEI Retirement Savings Plan

We have audited the accompanying statements of net assets available for plan benefits of the Northrop Grumman PEI Retirement Savings Plan (the Plan ) as of December 31, 2004 and 2003, and the related statement of changes in net assets available for plan benefits for the year ended December 31, 2004. These financial statements are the responsibility of the Plan s management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. The Plan is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. Our audits included consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Plan s internal control over financial reporting. Accordingly, we express no such opinion. An audit also includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, such financial statements present fairly, in all material respects, the net assets available for plan benefits of the Plan as of December 31, 2004 and 2003, and the changes in net assets available for plan benefits for the year ended December 31, 2004 in conformity with accounting principles generally accepted in the United States of America.

Our audits were conducted for the purpose of forming an opinion on the basic financial statements taken as a whole. The supplemental schedule of assets (held at end of year) as of December 31, 2004 is presented for the purpose of additional analysis and is not a required part of the basic financial statements, but is supplementary information required by the Department of Labor s Rules and Regulations for Reporting and Disclosure under the Employee Retirement Income Security Act of 1974. This schedule is the responsibility of the Plan s management. Such schedule has been subjected to the auditing procedures applied in our audit of the basic 2004 financial statements and, in our opinion, is fairly stated in all material respects when considered in relation to the basic financial statements taken as a whole.

/s/ DELOITTE & TOUCHE LLP

Los Angeles, California

June 27, 2005



Table of Contents**NORTHROP GRUMMAN PEI RETIREMENT SAVINGS PLAN****STATEMENTS OF NET ASSETS AVAILABLE FOR PLAN BENEFITS****AS OF DECEMBER 31, 2004 AND 2003**

	<u>2004</u>	<u>2003</u>
<b>ASSETS:</b>		
Investment in Northrop Grumman Corporation PEI Pension and 401(k) Plans Master Trust at fair value	\$ 1,616,814	\$ 1,433,306
Participant contributions receivable	20,905	18,947
Employer contributions receivable	9,259	8,505
	<u>          </u>	<u>          </u>
<b>NET ASSETS AVAILABLE FOR PLAN BENEFITS</b>	<b>\$ 1,646,978</b>	<b>\$ 1,460,758</b>
	<u>          </u>	<u>          </u>

See accompanying notes to financial statements.

Table of Contents**NORTHROP GRUMMAN PEI RETIREMENT SAVINGS PLAN****STATEMENT OF CHANGES IN NET ASSETS AVAILABLE FOR PLAN BENEFITS**

YEAR ENDED DECEMBER 31, 2004

**INVESTMENT INCOME:**

Plan interest in Northrop Grumman Corporation PEI Pension and 401(k) Plans Master Trust investment income	\$ 116,479
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Total investment income	116,479
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**CONTRIBUTIONS:**

Employer	72,257
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Participant	163,041
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Total contributions	235,298
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Total additions	351,777
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<b>BENEFITS PAID TO PARTICIPANTS</b>	<b>(165,557)</b>
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<b>NET INCREASE</b>	<b>186,220</b>
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**NET ASSETS AVAILABLE FOR PLAN BENEFITS:**

Beginning of year	1,460,758
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End of year	\$ 1,646,978
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See accompanying notes to financial statements.



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## NORTHROP GRUMMAN PEI RETIREMENT SAVINGS PLAN

### NOTES TO FINANCIAL STATEMENTS

DECEMBER 31, 2004 AND 2003

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#### 1. DESCRIPTION OF THE PLAN

The following description of the Northrop Grumman PEI Retirement Savings Plan (the Plan) provides only general information. Participants should refer to the Plan document for a more complete description of the Plan's provisions.

**General** The Plan is a qualified profit-sharing plan sponsored by the Productos Electronicos Industriales division of Northrop Grumman Electronicos, Inc. (the Company). The Plan includes a 401(k) feature and employer matching contributions. Both the savings and employee stock ownership features are reported within the Plan's 2004 financial statements as they have been in prior periods.

The Plan was established by the Company on March 1, 1996, as a successor to the Westinghouse de Puerto Rico Retirement Savings Plan (the Predecessor Plan), maintained by Westinghouse de Puerto Rico, Inc. for the benefit of Puerto Rican employees of certain Westinghouse Electric Corporation affiliated companies who became employees of the Company, and any other subsequent eligible employees of the Company. It is covered by the Employee Retirement Income Security Act of 1974, as amended (ERISA).

Plan assets are invested 100 percent in the Northrop Grumman Corporation PEI Pension and 401(k) Plans Master Trust (the PEI Master Trust), which is administered by Banco Popular de Puerto Rico (the PEI Trustee). The PEI Master Trust, in turn, has invested 100 percent of the Plan's assets in the Northrop Grumman Defined Contribution Plans Master Trust (the DC Master Trust) which is administered by State Street Bank and Trust Company (State Street). As an agent to the PEI Trustee, State Street is responsible for tracking the individual assets and reporting month-end plan accounting to the PEI Trustee.

**Contributions** Plan participants may contribute between 1 percent and 8 percent of total compensation, in increments of 1 percent on a pre-tax basis through payroll withholdings. Basic contributions may be made in amounts of 1 percent to 4 percent of total compensation. Eligible employees who have authorized the maximum Basic contribution may make Supplementary contributions in amounts between 1 percent and 4 percent of total compensation. Contributions are subject to certain limitations imposed by the Internal Revenue Code of 1986, as amended (the 1986 Code).

The Company contributes a match of 50 percent of the amount of a participant's Basic contribution. The maximum matching contribution will not exceed 2 percent of the total compensation of the participant.

An eligible employee may roll over any amount from another qualified plan or from an Individual Retirement Account into the Plan, provided that such rollover amount is paid to the Trustee within 60 days of the date the employee received the qualifying rollover distribution.

***Participant Accounts*** A separate account is maintained for each participant, each of which has two subaccounts. Basic and Supplementary contributions are allocated to the participant's contribution account. Company matching contributions are allocated to the participant's Company

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matching contribution account. Assets of the DC Master Trust are valued at the end of each month, and on any other date, and take into account earnings and losses of the Plan along with appreciation or depreciation, expenses and distributions. The benefit to which a participant is entitled is the benefit that can be provided from the participant's vested account.

***Vesting*** Plan participants are 100 percent vested in, and have a nonforfeitable right to, the balance of their Basic and Supplementary contributions at all times. Plan participants become 100 percent vested in Company contributions after three years of service and have no vesting prior to that time. Company contributions become 100 percent vested upon the attainment of age 65 or the death of a participant. Rollovers are 100 percent vested at all times and are not subject to forfeiture.

***Investment Options*** Upon enrollment in the Plan, each participant directs his or her contributions, including employer matching contributions, to be invested in any of the following investment funds within the DC Master Trust:

***Northrop Grumman Fund*** The Northrop Grumman Fund invests primarily in Northrop Grumman Corporation common stock.

***U.S. Equity Fund*** The U.S. Equity Fund consists predominantly of holdings in large and medium sized U.S. company stocks. The fund's objectives are capital appreciation over the long term, along with current income (dividends). The fund's stock investments are selected by independent professional investment managers appointed by the Plan's Investment Committee.

***Money Market Fund*** The Money Market Fund invests in the Northrop Grumman Stable Value Fund (the Stable Value Fund, see Notes 5 and 6). Investments of the Stable Value Fund are diversified among U.S. Government securities and obligations of government agencies, bonds, short-term investments, cash and investment contracts issued by insurance companies and banks. The Stable Value Fund is managed by an independent professional investment manager appointed by the Plan's Investment Committee.

***U.S. Bond Fund*** The U.S. Bond Fund consists of holdings in marketable, fixed income securities rated within the three highest investment grades (i.e., A or better) assigned by Moody's Investor Services or Standard & Poor's Corporation, U.S. Treasury or federal agency obligations, or cash equivalent instruments. The fund is broadly diversified and maintains an average maturity of 10 years. The securities are selected by independent professional investment managers appointed by the Plan's Investment Committee.

***Payment of Benefits*** All withdrawals from the Plan during employment shall be paid in cash. All distributions from the Plan upon retirement, termination or death shall be paid in cash and/or shares of Northrop Grumman Corporation common stock held in the account. A participating employee may elect to withdraw all or a portion of the vested portion of the participant account only in the case of hardship, as defined by the Plan, and may make withdrawals twice per year but not more than once per month. If a participating employee retires or employment is terminated, the vested portion of the participant account shall be distributed to the participant as soon as practicable following the next valuation date after retirement or termination occurs. Any nonvested portion of the participant account shall be forfeited at that time. In the case of death of

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a participating employee, the entire account shall be distributed in a lump sum to the participant's beneficiary(ies).

**Forfeited Accounts** Any amounts forfeited shall be used to reduce the Company's obligation to make company matching contributions under the Plan. In 2004, no employer contributions were reduced by forfeited nonvested amounts.

## 2. SIGNIFICANT ACCOUNTING POLICIES

**Basis of Accounting** The accompanying financial statements have been prepared in accordance with accounting principles generally accepted in the United States of America.

**Use of Estimates** The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets, liabilities and changes therein, and disclosure of contingent assets and liabilities. Actual results could differ from those estimates.

**Risk and Uncertainties** The Plan invests in various securities, including U.S. Government securities, corporate debt instruments and corporate stocks. Investment securities, in general, are normally exposed to various risks, such as interest rate, credit and overall market volatility. Due to the ongoing level of risk associated with investment securities, changes in the values of investment securities may occur in the near term, which could materially affect the amounts reported in the statements of net assets available for plan benefits.

**Investment Valuation and Income Recognition** The Plan's investments in the PEI Master Trust (which in turn invests in the DC Master Trust) are stated at fair value as determined by State Street. The PEI Trustee relies on the prices provided by State Street as a certification as to value in performing any valuations or calculations required of the PEI Trustee. The underlying investment in the PEI Master Trust is valued as follows:

Investments in common and preferred stock are valued at the last reported sales price of the stock on the last business day of the plan year. The shares of registered investment companies are valued at quoted market prices that represent the net asset values of shares held by the Plan at year end. Investments in common trust funds are valued based on the redemption price of units owned by the Plan, which is based on the current fair value of the funds underlying assets. Fair values for securities are based on information in financial publications of general circulation, statistical and valuation services, records of security exchanges, appraisals by qualified persons, transactions and bona fide offers in assets of the type in question and other information customarily used in the valuation of assets or if market values are not available, at their fair values as provided to State Street by the party with authority to trade in such securities (investment managers or the Plan's Investment Committee, as applicable).

Guaranteed investment contracts held by the Plan through the Stable Value Fund are considered to be fully benefit-responsive and therefore are recorded at contract value. Contract value represents contributions made under the contract, plus interest at the contract rate, less withdrawals and contract administrative expenses. Contract value approximates fair value. In addition, the Plan entered into synthetic investment contracts in order to manage the market risk and return of certain securities held by the Plan (See Notes 5 and 6).

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All securities and cash or cash equivalents are quoted in the local currency and then converted into U.S. dollars using the appropriate exchange rate obtained by the Trustee. Purchases and sales of securities are recorded on a trade-date basis. Interest income is recorded on the accrual basis. Dividends are recorded on the ex-dividend date. Broker commissions, transfer taxes, and other charges and expenses incurred in connection with the purchase, sale, or other disposition of securities or other investments are added to the cost of such securities or other investments, or are deducted from the proceeds of the sale or other disposition thereof, as appropriate. Taxes, if any, on the assets of the funds, or on any gain resulting from the sale or other disposition of such assets, or on the earnings of the funds, are apportioned among the participants whose interests in the Plan are affected, and the share of such taxes apportioned to each such person is charged against his or her account in the Plan.

The PEI Master Trust and the DC Master Trust allocate investment income, realized gains and losses and unrealized appreciation and depreciation on the underlying securities to the participating plans monthly and daily, respectively, based on the market value of each plan's investment. The unrealized appreciation or depreciation in the aggregate current value of investments is the difference between current value and the cost of investments. The realized gain or loss on investments is the difference between the proceeds received and the average cost of the investments sold.

**Administrative Expenses** Administrative expenses of the Plan are paid by the Company.

**Payment of Benefits** Benefits are recorded when paid.

**Reclassifications** Certain prior-year amounts have been reclassified to conform to current-year presentation.

**3. INVESTMENTS**

**PEI Master Trust** The investments of the Plan as of December 31, 2004 and 2003 are stated at fair values and reported by the PEI Trustee. Proportionate interests of each participating plan were ascertained on the basis of the Trustee's plan accounting method for master trust arrangements. Plan assets represented 48 percent and 52 percent of total PEI Master Trust net assets reported by the PEI Trustee as of December 31, 2004 and 2003, respectively.

The net assets of the PEI Master Trust at fair value consist of the following as of December 31:

	<b>2004</b>	<b>2003</b>
<b>Assets:</b>		
Investment in Northrop Grumman Employee Benefit Plan Master Trust	\$ 1,756,922	\$ 1,345,885
Investment in Northrop Grumman Defined Contribution Plans Master Trust	1,564,357	1,391,441
Other investments	52,457	41,865
<b>Net Assets of the PEI Master Trust</b>	<b>\$ 3,373,736</b>	<b>\$ 2,779,191</b>



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Investment income for the PEI Master Trust is as follows for the year ended December 31, 2004:

Net appreciation in fair value of investments:	
Plan interest in Northrop Grumman Employee Benefit Plan Master Trust	\$ 200,502
Plan interest in Northrop Grumman Defined Contribution Plans Master Trust	116,479
	<hr/>
Total Investment Gain	\$ 316,981
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**DC Master Trust** Plan assets represented 0.02 percent of total net assets reported by the trustee of the DC Master Trust as of both December 31, 2004 and December 31, 2003. Proportionate interests of each participating plan were ascertained on the basis of the trustee's plan accounting method for master trust arrangements. The net assets of the DC Master Trust at fair value consist of the following as of December 31:

	<b>2004</b>	<b>2003</b>
	<hr/>	<hr/>
<b>Assets:</b>		
Common stock	\$ 3,958,338,184	\$ 2,487,376,512
Guaranteed and synthetic investment contracts (See Notes 5 and 6)	2,726,708,728	1,757,340,661
Common/collective trust funds	2,497,187,691	1,507,330,059
Temporary investments	326,396,803	152,963,469
U.S. and foreign government securities	282,951,795	411,233,413
Corporate debt instruments	159,625,861	174,859,840
Other investments	38,363,119	11,684,933
Receivable for investments sold	33,120,224	28,549,033
Dividends, interest and tax receivable	10,142,786	8,511,236
Other receivables	37,008	
	<hr/>	<hr/>
Total Assets	10,032,872,199	6,539,849,156
<b>Liabilities:</b>		
Due to broker for securities purchased	66,552,095	80,811,923
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<b>Net assets of the DC Master Trust</b>	<b>\$ 9,966,320,104</b>	<b>\$ 6,459,037,233</b>
	<hr/>	<hr/>

Investment income for the DC Master Trust is as follows for the year ended December 31, 2004:

Net appreciation (depreciation) in fair value of investments:	
Common stock	\$ 303,447,058
Common/collective trust funds	126,237,526
U.S. and foreign government securities	2,828,925
Corporate debt instruments	(187,538)
Other investments	(7,899,496)
	<hr/>
	424,426,475
Interest	129,930,067

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Dividends	71,658,668
Other income	551,553
Investment manager fees	(10,681,589)
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Total investment income	\$ 615,885,174
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As of December 31, 2004 and 2003, DC Master Trust assets of \$945,632,923 and \$695,984,508, respectively, were on loan to third party borrowers under security lending agreements. Such assets could be subject to sale restrictions in the event security lending agreements are terminated and the securities have not been returned to the DC Master Trust. The DC Master Trust held \$964,720,499 and \$709,646,197 of collateral for securities on loan as of December 31, 2004 and December 31, 2003, respectively.

Other than the Plan's interest in the PEI Master Trust (which is, in turn, invested in the DC Master Trust), there are no assets held for investment that represent 5 percent or more of the Plan's net assets at December 31, 2004 and 2003.

## **4. DERIVATIVE FINANCIAL INSTRUMENTS**

Derivative financial instruments may be used by the investment managers of the DC Master Trust as part of their respective strategies. These strategies include the use of futures contracts, interest rate swaps and options as substitutes for certain types of securities. During 2004, the investment managers utilized the following types of derivative financial instruments.

***Futures Contracts*** The DC Master Trust enters into futures contracts in the normal course of investing activities to manage market risk associated with equity and fixed income investments and to achieve overall investment portfolio objectives. These contracts involve elements of market risk in excess of amounts recognized in the statements of net assets available for plan benefits. The credit risk associated with these contracts is minimal as they are traded on organized exchanges and settled daily. The terms of these contracts typically do not exceed one year.

As of December 31, 2004, the DC Master Trust was a party to U.S. Treasury and Eurodollar futures contracts held for trading purposes to purchase (sell) aggregate notional amounts of (\$106,707,141) and \$103,801,483 at December 31, 2004, respectively. The fair value of futures contracts in the statements of net assets available for benefits was (\$801,549) at December 31, 2004.

***Interest Rate Swaps*** The DC Master Trust enters into interest rate swap contracts in the normal course of its investing activities to manage the interest rate exposure associated with fixed income investments. The credit risk associated with these contracts is minimal as they are entered into with a limited number of highly rated counterparties. As of December 31, 2004, the DC Master Trust had interest rate swap contracts with aggregate notional amounts and fair values of \$46,370,000 and (\$305,818), respectively.

Notional amounts disclosed above do not quantify risk or represent assets or liabilities of the DC Master Trust, but are used in the calculation of cash settlements under the contracts. Changes in fair value are accounted for as appreciation (depreciation) in fair value of investments of the DC Master Trust.

## **5. INTEREST IN NORTHROP GRUMMAN STABLE VALUE FUND**

The Plan's investment in the PEI Master Trust (which, in turn, is invested in the DC Master Trust) includes amounts in the Northrop Grumman Stable Value Fund, established for the investment of the assets of certain savings plans sponsored by Northrop Grumman Corporation and its affiliates. Each participating savings plan has an undivided interest in the Stable Value Fund. At December 31, 2004 and 2003, the Plan's interests in the net assets of the Stable Value Fund were .03 percent and .04 percent, respectively, of the total fund value. Investment income and administrative expenses relating to the Stable Value Fund are allocated among the participating plans on a daily basis.



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Investments held in the Stable Value Fund were as follows as of December 31, 2004 and 2003:

	<b>2004</b>	<b>2003</b>
Guaranteed and Synthetic Investment Contracts (at contract value)	\$ 2,726,708,728	\$ 1,757,340,661
Merrill Lynch Retirement Preservation Trust		353,175,048
Cash and cash equivalents	22,365,697	7,241,405
<b>Total</b>	<b>\$ 2,749,074,425</b>	<b>\$ 2,117,757,114</b>

Investment income of the Stable Value Fund totaled \$103,762,307 for the year ended December 31, 2004.

The DC Master Trust has an arrangement with the investment manager of the Stable Value Fund whereby the investment manager has the ability to borrow amounts from third parties to satisfy liquidity needs of the Stable Value Fund, if necessary. As of December 31, 2004, no borrowings under this arrangement were outstanding.

**6. INVESTMENT CONTRACTS WITH INSURANCE COMPANIES**

Guaranteed investment contracts at contract value owned by the Stable Value Fund consisted of the following as of December 31 (at contract value):

	<b>2004</b>	<b>2003</b>
Synthetic Investment Contracts	\$ 2,699,669,681	\$ 1,753,314,248
Separate account assets	16,025,472	
General account assets	11,013,575	4,026,413
<b>Totals</b>	<b>\$ 2,726,708,728</b>	<b>\$ 1,757,340,661</b>

The Stable Value Fund holds wrapper contracts in order to manage the market risk and return of certain securities held by the Stable Value Fund. The wrapper contracts generally modify the investment characteristics of certain underlying securities similar to those of guaranteed investment contracts. Each wrapper contract and its related underlying assets is referred to as a Synthetic Investment Contract ( SIC ) and is recorded at contract value.

The fair value of the underlying assets related to the SICs was \$2,760,543,569 as of December 31, 2004 and \$1,834,125,347 as of December 31, 2003. The fair value of non-synthetic contracts held by the Stable Value Fund approximated their contract value as of December 31, 2004. The weighted average yield (excluding administrative expenses) for all investment contracts was 4.74 percent and 4.68 percent at December 31, 2004 and December 31, 2003, respectively. Average duration for all investment contracts was 2.91 years and 3.16 years at December 31, 2004 and December 31, 2003 respectively. The crediting interest rate for all investment contracts was 4.74 percent at December 31, 2004, and 4.68

percent at December 31, 2003. Crediting interest rates were reset on a quarterly basis. Resets were determined based upon the market-to-book ratio, along with the yield and duration of the underlying investments.

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**7. PARTY-IN-INTEREST TRANSACTIONS**

Party-in-interest transactions include the purchase and sale of investments managed by State Street affiliates, transactions involving Northrop Grumman Corporation common stock, and payments made by the Company for certain Plan administrative costs. The Plan held 570 shares of Northrop Grumman common stock at December 31, 2004 and December 31, 2003. The Plan received dividends of \$507 from its investment in Northrop Grumman Corporation common stock during the year ended December 31, 2004.

The Plan had transactions with the PEI Trustee s and State Street s short-term investment funds, liquidity pooled funds in which participation commences and terminates on a daily basis.

**8. PLAN TERMINATION**

Although it has not expressed any intent to do so, the Company has the right under the Plan to discontinue its contributions at any time and to terminate the Plan subject to the provisions of the Employee Retirement Income Security Act of 1974, as amended ( ERISA ). In the event of the Plan s termination, participants will become 100 percent vested in their accounts.

**9. FEDERAL INCOME TAX STATUS**

The Plan is intended to be qualified under the 1986 Code and the Puerto Rico Income Tax Code of 1994. The Plan obtained its latest determination letter dated December 11, 2000 in which the Internal Revenue Service determined that the Plan terms at the time of the determination letter application were in compliance with the applicable sections of the 1986 Code and, therefore, the related trust is exempt from taxation. The Plan has been amended since receiving the determination letter. Although the amendments have not yet been filed for a favorable determination letter, management will make any changes necessary to maintain the Plan s tax-qualified status. However, management believes that the Plan and the related trust are designed and currently being operated in compliance with the applicable provisions of the 1986 Code and Puerto Rico Income Tax Code of 1994, and that the related trust was tax exempt as of the financial statement date. Therefore, no provision for income taxes has been included in the Plan s financial statements.

**10. RECONCILIATION OF FINANCIAL STATEMENTS TO FORM 5500**

The Plan is subject to ERISA and must therefore file a Form 5500, *Annual Return/Report of Employee Benefit Plan*, with the U.S. Department of Labor. Form 5500 reports financial information based on the audited financial statements with particular modifications based on the Form 5500 instructions.

The following is a reconciliation of net assets available for plan benefits per the financial statements to Form 5500 as of December 31:

	<b>2004</b>	<b>2003</b>
Net assets available for plan benefits per the financial statements	\$ 1,646,978	\$ 1,460,758
Less: Amounts allocated to withdrawing participants	(2,653)	(1,495)

Net assets per Form 5500	<u>\$ 1,644,325</u>	<u>\$ 1,459,263</u>
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The following is a reconciliation of benefits paid to participants per the financial statements to Form 5500 for the year ended December 31, 2004:

Benefits paid to participants per the financial statements	\$ 165,557
Add: Amounts allocated to withdrawing participants at December 31, 2004	2,653
Less: Amounts allocated to withdrawing participants at December 31, 2003	(1,495)
	<hr/>
Benefits paid per Form 5500	\$ 166,715
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Amounts allocated to withdrawing participants are recorded on Form 5500 for benefit claims that have been processed and approved for payment prior to December 31 but not yet paid as of that date.

\* \* \* \* \*

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FORM 5500 SCHEDULE H, PART IV, LINE 4i

SCHEDULE OF ASSETS (HELD AT END OF YEAR)

DECEMBER 31, 2004

Identity of Issue, Borrower, Lessor or Similar Party	Description of Investment, Including Maturity Date, Rate of Interest, Collateral, Par or Maturity Value	Current Value
* Northrop Grumman Defined Contribution Plans Master Trust	Participation in Northrop Grumman Defined Contribution Plans Master Trust	\$ 1,564,357
* State Street Bank and Trust Company	21,472 Shares of Participation in the Cash/STIF Accounts	21,472
* Northrop Grumman Corporation	570 Shares of Northrop Grumman Corporation common stock	30,985
		<u>\$ 1,616,814</u>

\* Party-in-interest



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**SIGNATURES**

Pursuant to the requirements of the Securities and Exchange Act of 1934, the trustees (or other persons who administer the employee benefit plan) have duly caused this annual report to be signed on its behalf by the undersigned hereunto duly authorized.

NORTHROP GRUMMAN PEI RETIREMENT SAVINGS PLAN

By */s/ J. MICHAEL HATELEY*  
**J. Michael Hateley**

Dated: June 29, 2005

**Chairman, Administrative Committee**

t you hold, denominated in U.S. dollars. The Redemption Amount per note will be calculated as follows:

If the Ending Value of **each** Underlying is greater than or equal to its Coupon Barrier, the Redemption Amount will equal the principal amount plus the Contingent Coupon Payment with respect to the final Observation Date.

If the Ending Value of **any** Underlying is less than its Coupon Barrier but the Ending Value of **each** Underlying is greater than or equal to its Threshold Value, the Redemption Amount will equal the principal amount.

If the Ending Value of **any Underlying** is less than its Threshold Value, the Redemption Amount per note will equal:

In this case, the Redemption Amount will be less than the principal amount and you could lose up to 70% of your principal.

With respect to each Underlying, its “Underlying Return” will equal:

Ending Value – Starting Value

Starting Value

The “Price Multiplier” of the GDX will be 1, subject to adjustment by the calculation agent in its sole discretion and as it deems reasonable for certain corporate events relating to that Underlying described in the product supplement under “Description of the Notes-Anti-Dilution and Discontinuance Adjustments Relating to ETFs-Anti-Dilution Adjustments for an ETF.”

**Determining the Starting Value, the Observation Value and the Ending Value of Each Underlying**

With respect to the SX7E, the “Starting Value” will be its closing level on the pricing date. With respect to the GDX, the “Starting Value” will be its Closing Market Price on the pricing date.

With respect to the SX7E, the “Observation Value” will be its closing level on the applicable Observation Date. With respect to the GDX, the “Observation Value” will be its Closing Market Price on the applicable Observation Date multiplied by its Price Multiplier on that day.

With respect to each Underlying, the “Ending Value” will be its Observation Value on the final Observation Date.

With respect to the SX7E, a “Trading Day” means a day on which (1) the Eurex or any successor is open for trading and (2) the SX7E or any successor is calculated and published.

With respect to each Underlying, a day is a scheduled Trading Day if, as of the pricing date, such day is expected to be a Trading Day for such Underlying.

The Observation Dates are subject to postponement as set forth in the product supplement, in the section “Description of the Notes—Certain Terms of the Notes—Events Relating to Observation Dates.” If a monthly Observation Date is postponed, the Contingent Payment Date relating to such Observation Date will not be postponed.

### **Events of Default and Acceleration**

If an Event of Default, as defined in the senior indenture and in the section entitled “Events of Default and Rights of Acceleration” beginning on page 35 of the accompanying prospectus, with respect to the notes occurs and is continuing, the amount payable to a holder of the notes upon any acceleration permitted under the senior indenture will be equal to the amount described under the caption “—Redemption Amount,” calculated as though the date of acceleration were the maturity date of the notes and as though the final Observation Date were the third trading day prior to the date of acceleration. We will also determine whether the final Contingent Coupon Payment is payable based upon the prices of the Underlyings on the deemed final Observation Date; any such final Contingent Coupon Payment will be prorated by the calculation agent to reflect the length of the final contingent payment period. In case of a

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default in the payment of the notes, whether at their maturity or upon acceleration, the notes will not bear a default interest rate.

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## **THE UNDERLYINGS**

### **The EURO STOXX® Banks Index**

All information contained in this pricing supplement regarding the SX7E, including, without limitation, its make-up, method of calculation and changes in its components, has been derived from publicly available information, without independent verification. This information reflects the policies of, and is subject to change by, STOXX Limited. The SX7E is calculated, maintained and published by STOXX Limited. STOXX Limited has no obligation to continue to publish, and may discontinue publication of, the SX7E.

The SX7E is calculated in euros and is reported by Bloomberg under the ticker symbol “SX7E.”

The SX7E was created by STOXX Limited, a wholly owned subsidiary of Deutsche Börse AG. Publication of the SX7E began on June 15, 1998, based on an initial value of 100 at December 31, 1991. The SX7E is disseminated on the STOXX Limited website: <http://www.stoxx.com>, which sets forth, among other things, the country and industrial sector weightings of the securities included in the SX7E. Information contained in the STOXX Limited website is not incorporated by reference in, and should not be considered a part of, this pricing supplement.

### **Index Composition and Maintenance**

The SX7E is one of 19 EURO STOXX® Supersector indices that compose the STOXX® Europe 600 Index (the “STOXX Europe 600 Index”). The STOXX Europe 600 Index contains the 600 largest European stocks by free float market capitalization. Each of the 19 EURO STOXX® Supersector indices contain the companies within the Eurozone subset of the STOXX Europe 600 Index that fall within the relevant supersector, determined by reference to the Industry Classification Benchmark (“ICB”), an international system for categorizing companies that is maintained by FTSE International Limited. The SX7E includes companies in the banks supersector, which tracks companies providing a broad range of financial services, including retail banking, loans and money transmissions. SX7E currently includes 30 stocks of banks market sector leaders mainly from the ten largest Eurozone countries: Austria, Belgium, France, Germany, Greece, Ireland, Italy, the Netherlands, Portugal and Spain.

The composition of each of the EURO STOXX® Supersector indices is reviewed quarterly, based on the closing stock data on the last trading day of the month following the implementation of the last quarterly index review. The component stocks are announced on the fourth Tuesday of the month immediately prior to the review implementation month. Changes to the component stocks are implemented on the third Friday in each of March, June, September and December and are effective the following trading day.

The SX7E is also reviewed on an ongoing basis, and any changes affecting the STOXX Europe 600 Index are also applied to the relevant EURO STOXX® Supersector index. Corporate actions (including initial public offerings, mergers and takeovers, spin-offs, delistings and bankruptcy) that affect the STOXX Europe 600 Index composition are immediately reviewed. Any changes are announced, implemented and effective in line with the type of corporate action and the magnitude of the effect.

The free float factors and weighting cap factors for each component stock used to calculate the EURO STOXX® Supersector indices, as described below, are reviewed, calculated and implemented on a quarterly basis and are fixed until the next quarterly review. All components of the SX7E are subject to a 30.00% cap for the largest company and a 15.00% cap for the second-largest company.

### **Index Calculation**

The SX7E is calculated with the “Laspeyres formula,” which measures the aggregate price changes in the component stocks against a fixed base quantity weight. The formula for calculating the SX7E value can be expressed as follows:

$$\text{SX7E} = \frac{\text{Free float market capitalization of the SX7E}}{\text{Divisor}}$$

The “free float market capitalization of the Index” is equal to the sum of the product of the price, the number of shares and the free float factor and the weighting cap factor for each component stock as of the time the SX7E is being calculated.

The SX7E is also subject to a divisor, which is adjusted to maintain the continuity of the index values across changes due to corporate actions, such as the deletion and addition of stocks, the substitution of stocks, stock dividends, and stock splits.

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Neither we nor any of our affiliates, including MLPF&S, accepts any responsibility for the calculation, maintenance, or publication of, or for any error, omission, or disruption in, the SX7E or any successor to the SX7E. STOXX does not guarantee the accuracy or the completeness of the SX7E or any data included in the SX7E. STOXX assumes no liability for any errors, omissions, or disruption in the calculation and dissemination of the SX7E. STOXX disclaims all responsibility for any errors or omissions in the calculation and dissemination of the SX7E or the manner in which the SX7E is applied in determining the amount payable on the notes at maturity.

*The following graph sets forth the daily historical performance of the SX7E in the period from January 1, 2008 through September 17, 2018. This historical data on the SX7E is not necessarily indicative of its future performance or what the value of the notes may be. Any historical upward or downward trend in the level of the SX7E during any period set forth below is not an indication that the level of the SX7E is more or less likely to increase or decrease at any time over the term of the notes. The horizontal red line in the graph represents the hypothetical Threshold Value of 75.71 (rounded to two decimal places), which is 70% of a hypothetical Starting Value of 108.16, which was the closing level of the SX7E on September 17, 2018. The horizontal green line in the graph represents a hypothetical Coupon Barrier of 86.53 (rounded to two decimal places), which is 80% of the hypothetical Starting Value. The actual Starting Value, the Threshold Value and the Coupon Barrier will be determined on the pricing date.*

Before investing in the notes, you should consult publicly available sources for the levels of the SX7E.

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## License Agreement

One of our affiliates has entered into a non-exclusive license agreement with STOXX providing for the license to it and certain of its affiliated companies, including us, of the right to use indices owned and published by STOXX (including the SX7E) in connection with certain securities, including the notes.

The license agreement requires that the following language be stated in this pricing supplement:

“STOXX Limited, Deutsche Börse Group and their licensors, research partners or data providers have no relationship to us other than the licensing of the SX7E and the related trademarks for use in connection with the notes.

### **STOXX, Deutsche Börse Group and their licensors, research partners or data providers do not:**

- sponsor, endorse, sell or promote the notes.
- recommend that any person invest in the notes or any other securities.
  - have any responsibility or liability for or make any decisions about the timing, amount or pricing of the notes.
    - have any responsibility or liability for the administration, management or marketing of the notes.
- consider the needs of the notes or the owners of the notes in determining, composing or calculating the SX7E or have any obligation to do so.

**STOXX, Deutsche Börse Group and their licensors, research partners or data providers give no warranty, and exclude any liability (whether in negligence or otherwise), in connection with the notes or their performance.**

STOXX does not assume any contractual relationship with the purchasers of the notes or any other third parties.

### **Specifically,**

STOXX, Deutsche Börse Group and their licensors, research partners or data providers do not give any warranty, express or implied, and exclude any liability about:

The results to be obtained by the notes, the owner of the notes or any other person in connection with the use of the SX7E and the data included in the SX7E;

- o The accuracy, timeliness, and completeness of the SX7E and its data;
- o The merchantability and the fitness for a particular purpose or use of the SX7E and its data;
- o The performance of the notes generally.

STOXX, Deutsche Börse Group and their licensors, research partners or data providers give no warranty and exclude any liability, for any errors, omissions or interruptions in the SX7E or its data;

Under no circumstances will STOXX, Deutsche Börse Group or their licensors, research partners or data providers be liable (whether in negligence or otherwise) for any lost profits or indirect, punitive, special or consequential damages or losses, arising as a result of such errors, omissions or interruptions in the SX7E or its data or generally in relation to the notes, even in circumstances where STOXX, Deutsche Börse Group or their licensors, research partners or data providers are aware that such loss or damage may occur.

The licensing agreement discussed above is solely for our benefit and that of STOXX, and not for the benefit of the owners of the notes or any other third parties.”

## **The VanEck Vectors® Gold Miners ETF**

We have derived the following information from publicly available documents published by VanEck Vectors ETF Trust (the “Trust”). None of us, the Guarantor, MLPF&S or any of our other affiliates has independently verified the accuracy or completeness of the following information.

We are not affiliated with the GDX, and the GDX will not have any obligations with respect to the notes. This pricing supplement relates only to the notes and does not relate to the GDX or to any securities included in the Underlying Index. None of us, the Guarantor, MLPF&S or any of our other affiliates has participated or will participate in the preparation of the publicly available documents. None of us, the Guarantor, MLPF&S or any of our other affiliates has made any due diligence inquiry with respect to the GDX in connection with the offering of the notes. There can be no assurance that all events occurring prior to the date of this pricing supplement, including events that would affect the accuracy or completeness of these publicly available documents, that would affect the trading price of the GDX have been or will be publicly disclosed. Subsequent disclosure of any events or the disclosure of or failure to disclose material future events concerning the GDX could affect the price of the GDX and therefore could affect your return on the notes.

Information provided to or filed with the SEC by the Trust pursuant to the Securities Act of 1933 and the Investment Company Act of 1940 can be located at the SEC’s facilities or through the SEC’s website by reference to SEC file number 333-123257 and 811-10325, respectively. We have not independently verified the accuracy or completeness of the information or reports.

## **The GDX**

The GDX is an investment portfolio maintained, managed and advised by the Trust. The GDX is an exchange traded fund that trades on NYSE Arca under the ticker symbol “GDX.” The GDX seeks to provide investment results that correspond generally to the price and yield performance, before fees and expenses, of the NYSE Arca Gold Miners Index. The GDX utilizes a “passive” or “indexing” investment approach in attempting to track the performance of the Underlying Index. The GDX will invest in all of the securities which comprise the Underlying Index. The GDX will normally invest at least 80% of its total assets in common stocks that comprise the Underlying Index. As of September 14, 2018, the expense ratio was 0.53%.

## **The NYSE Arca Gold Miners Index**

The Underlying Index is a modified market capitalization weighted index comprised of securities issued by publicly traded companies involved primarily in the mining of gold or silver. The Underlying Index was developed by the NYSE Amex and is calculated, maintained and published by NYSE Arca.

### ***Eligibility Criteria for Index Components***

The Underlying Index includes common stocks, ADRs or GDRs of selected companies that are involved in mining for gold and silver and that are listed for trading and electronically quoted on a major stock market that is accessible by foreign investors. Generally, this includes exchanges in most developed markets and major emerging markets, and includes companies that are cross-listed, i.e., both U.S. and Canadian listings. NYSE Arca will use its discretion to avoid exchanges and markets that are considered “frontier” in nature or have major restrictions to foreign ownership. The Underlying Index includes companies that derive at least 50% of their revenues from gold mining and related activities (40% for companies that are already included in the Underlying Index). Also, the Underlying Index will maintain an exposure to companies with a significant revenue exposure to silver mining in addition to gold mining, which will not exceed 20% of the Underlying Index weight at each rebalance.



Currently, only companies with a market capitalization of greater than \$750 million that have an average daily trading volume of at least 50,000 shares and an average daily value traded of at least \$1 million over the past three months are eligible for inclusion in the Underlying Index. Starting in December 2013, for companies already included in the Underlying Index, the market capitalization requirement at each rebalance will be \$450 million, the average daily volume requirement will be at least 30,000 shares over the past three months and the average daily value traded requirement will be at least \$600,000 over the past three months.

NYSE Arca has the discretion to not include all companies that meet the minimum criteria for inclusion.

### *Calculation of the Underlying Index*

The Underlying Index is calculated by NYSE Arca on a net total return basis. The calculation is based on the current modified market capitalization divided by a divisor. The divisor was determined on the initial capitalization base of the Underlying Index and the base level and may be adjusted as a result of corporate actions and composition changes, as described below. The level of the Underlying Index was

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set at 500.00 on December 20, 2002 which is the index base date. The Underlying Index is calculated using the following formula:

Where:

$t$  = day of calculation;

$N$  = number of constituent equities in the Underlying Index;

$Q_{i,t}$  = number of shares of equity  $i$  on day  $t$ ;

$M_{i,t}$  = multiplier of equity  $i$ ;

$C_{i,t}$  = price of equity  $i$  on day  $t$ ; and

DIV = current index divisor on day  $t$ .

### ***Underlying Index Maintenance***

The Underlying Index is reviewed quarterly to ensure that at least 90% of the Underlying Index weight is accounted for by index components that continue to meet the initial eligibility requirements. NYSE Arca may at any time and from time to time change the number of securities comprising the group by adding or deleting one or more securities, or replacing one or more securities contained in the group with one or more substitute securities of its choice, if in NYSE Arca's discretion such addition, deletion or substitution is necessary or appropriate to maintain the quality and/or character of the Underlying Index. Components will be removed from the Underlying Index during the quarterly review if either (1) the market capitalization falls below \$450 million or (2) the traded average daily shares for the previous three months is less than 30,000 shares and the average daily traded value for the previous three months is less than \$600,000.

At the time of the quarterly rebalance, the component security weights (also referred to as the multiplier or share quantities of each component security) will be modified to conform to the following asset diversification requirements:

1. the weight of any single component security may not account for more than 20% of the total value of the Underlying Index;
2. the component securities are split into two subgroups-large and small, which are ranked by market capitalization weight in the Underlying Index. Large securities are defined as having a starting index weight greater than or equal to 5%. Small securities are defined as having a starting index weight below 5%; and
3. the final aggregate weight of those component securities which individually represent more than 4.5% of the total value of the Underlying Index may not account for more than 45% of the total index value.

The weights of the components securities (taking into account expected component changes and share adjustments) are modified in accordance with the Underlying Index's diversification rules.

*Diversification Rule 1:* If any component stock exceeds 20% of the total value of the Underlying Index, then all stocks greater than 20% of the Underlying Index are reduced to represent 20% of the value of the Underlying Index. The aggregate amount by which all component stocks are reduced is redistributed proportionately across the remaining stocks that represent less than 20% of the index value. After this redistribution, if any other stock then exceeds 20%,

the stock is set to 20% of the index value and the redistribution is repeated.

*Diversification Rule 2:* The components are sorted into two groups, large are components with a starting index weight of 5% or greater and small are components with a weight of under 5% (after any adjustments for Diversification Rule 1). The large group will represent in the aggregate 45% and the small group will represent 55% in the aggregate of the final index weight. This will be adjusted through the following process: The weight of each of the large stocks will be scaled down proportionately (with a floor of 5%) so that the aggregate weight of the large components will be reduced to represent 45% of the Underlying Index. If any large component stock falls below a weight equal to the product of 5% and the proportion by which the stocks were scaled down following this distribution, then the weight of the stock is set equal to 5% and the components with weights greater than 5% will be reduced proportionately. The weight of each of the small components will be scaled up proportionately from the redistribution of the large components. If any small component stock exceeds a weight equal to the product of 4.5% and the proportion by which the stocks were scaled down following this distribution, then the weight of the stock

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is set equal to 4.5%. The redistribution of weight to the remaining stocks is repeated until the entire amount has been redistributed.

Changes to the Underlying Index composition and/or the component security weights in the Underlying Index are determined and announced prior to taking effect. These changes typically become effective after the close of trading on the third Friday of each calendar quarter month in connection with the quarterly index rebalance. The share quantities of each component security in the index portfolio remains fixed between quarterly reviews except in the event of certain types of corporate actions such as stock splits, reverse stock splits, stock dividends, or similar events. The share quantities used in the Underlying Index calculation are not typically adjusted for shares issued or repurchased between quarterly reviews. However, in the event of a merger between two components, the share quantities of the surviving entity may be adjusted to account for any stock issued in the acquisition. NYSE Arca may substitute securities or change the number of securities included in the Underlying Index, based on changing conditions in the industry or in the event of certain types of corporate actions, including mergers, acquisitions, spin-offs, and reorganizations. In the event of component or share quantity changes to the index portfolio, the payment of dividends other than ordinary cash dividends, spin-offs, rights offerings, re-capitalization, or other corporate actions affecting a component security of the Underlying Index, the index divisor may be adjusted to ensure that there are no changes to the index level as a result of nonmarket forces.

***The following graph sets forth the daily historical performance of the GDX in the period from January 1, 2008 through September 17, 2018. This historical data on the GDX is not necessarily indicative of its future performance or what the value of the notes may be. Any historical upward or downward trend in the level of the GDX during any period set forth below is not an indication that the level of the GDX is more or less likely to increase or decrease at any time over the term of the notes. The horizontal red line in the graph represents the hypothetical Threshold Value of 12.82 (rounded to two decimal places), which is 70% of a hypothetical Starting Value of 18.32, which was the closing level of the SX7E on September 17, 2018. The horizontal green line in the graph represents a hypothetical Coupon Barrier of 14.66 (rounded to two decimal places), which is 80% of the hypothetical Starting Value. The actual Starting Value, the Threshold Value and the Coupon Barrier will be determined on the pricing date.***

Before investing in the notes, you should consult publicly available sources for the prices of the GDX.

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## **SUPPLEMENTAL PLAN OF DISTRIBUTION; ROLE OF MLPF&S AND CONFLICTS OF INTEREST**

MLPF&S, a broker-dealer affiliate of ours, is a member of the Financial Industry Regulatory Authority, Inc. (“FINRA”) and will participate as selling agent in the distribution of the notes. Accordingly, the offering of the notes will conform to the requirements of FINRA Rule 5121. MLPF&S may not make sales in this offering to any of its discretionary accounts without the prior written approval of the account holder.

Under our distribution agreement with MLPF&S, MLPF&S will purchase the notes from us as principal at the public offering price indicated on the cover of this term sheet, less the indicated underwriting discount. MLPF&S will sell the notes to other broker-dealers that will participate in the offering and that are not affiliated with us, at an agreed discount to the principal amount. Each of those broker-dealers may sell the notes to one or more additional broker-dealers. MLPF&S has informed us that these discounts may vary from dealer to dealer and that not all dealers will purchase or repurchase the notes at the same discount.

We expect to deliver the notes against payment therefor in New York, New York on a date that is greater than two business days following the pricing date. Under Rule 15c6-1 of the Securities Exchange Act of 1934, trades in the secondary market generally are required to settle in two business days, unless the parties to any such trade expressly agree otherwise. Accordingly, if the initial settlement of the notes occurs more than two business days from the pricing date, purchasers who wish to trade the notes more than two business days prior to the original issue date will be required to specify alternative settlement arrangements to prevent a failed settlement.

MLPF&S and any of our other broker-dealer affiliates, may use this pricing supplement, and the accompanying product supplement, prospectus supplement and prospectus for offers and sales in secondary market transactions and market-making transactions in the notes. However, they are not obligated to engage in such secondary market transactions and/or market-making transactions. The selling agent may act as principal or agent in these transactions, and any such sales will be made at prices related to prevailing market conditions at the time of the sale.

At MLPF&S’s discretion, for a short, undetermined initial period after the issuance of the notes, MLPF&S may offer to buy the notes in the secondary market at a price that may exceed the initial estimated value of the notes. Any price offered by MLPF&S for the notes will be based on then-prevailing market conditions and other considerations, including the performance of the Underlyings and the remaining term of the notes. However, none of us, the Guarantor, MLPF&S or any of our other affiliates is obligated to purchase your notes at any price or at any time, and we cannot assure you that any party will purchase your notes at a price that equals or exceeds the initial estimated value of the notes.

Any price that MLPF&S may pay to repurchase the notes will depend upon then prevailing market conditions, the creditworthiness of us and the Guarantor, and transaction costs. At certain times, this price may be higher than or lower than the initial estimated value of the notes.

No Prospectus (as defined in Directive 2003/71/EC, as amended (the “Prospectus Directive”)) will be prepared in connection with these notes. Accordingly, these notes may not be offered to the public in any member state of the European Economic Area (the “EEA”), and any purchaser of these notes who subsequently sells any of these notes in any EEA member state must do so only in accordance with the requirements of the Prospectus Directive, as implemented in that member state.

The notes are not intended to be offered, sold or otherwise made available to, and should not be offered, sold or otherwise made available to, any retail investor in the EEA. For these purposes, the expression “offer” includes the communication in any form and by any means of sufficient information on the terms of the offer and the notes to be offered so as to enable an investor to decide to purchase or subscribe the notes, and a “retail investor” means a person

who is one (or more) of: (a) a retail client, as defined in point (11) of Article 4(1) of Directive 2014/65/EU, as amended (“MiFID II”); or (b) a customer, within the meaning of Insurance Distribution Directive 2016/97/EU, as amended, where that customer would not qualify as a professional client as defined in point (10) of Article 4(1) of MiFID II; or (c) not a qualified investor as defined in the Prospectus Directive. Consequently, no key information document required by Regulation (EU) No 1286/2014, as amended (the “PRIIPs Regulation”), for offering or selling the notes or otherwise making them available to retail investors in the EEA has been prepared, and therefore, offering or selling the notes or otherwise making them available to any retail investor in the EEA may be unlawful under the PRIIPs Regulation.

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## **STRUCTURING THE NOTES**

The notes are our debt securities, the return on which is linked to the performance of the Underlyings. The related guarantees are BAC's obligations. As is the case for all of our and BAC's respective debt securities, including our market-linked notes, the economic terms of the notes reflect our and BAC's actual or perceived creditworthiness at the time of pricing. In addition, because market-linked notes result in increased operational, funding and liability management costs to us and BAC, BAC typically borrows the funds under these types of notes at a rate, which we refer to in this pricing supplement as BAC's internal funding rate, that is more favorable to BAC than the rate that it might pay for a conventional fixed or floating rate debt security. This generally relatively lower internal funding rate, which is reflected in the economic terms of the notes, along with the fees and charges associated with market-linked notes, typically results in the initial estimated value of the notes on the pricing date being less than their public offering price.

In order to meet our payment obligations on the notes, at the time we issue the notes, we may choose to enter into certain hedging arrangements (which may include call options, put options or other derivatives) with MLPF&S or one of our other affiliates. The terms of these hedging arrangements are determined based upon terms provided by MLP&S and its affiliates, and take into account a number of factors, including our and BAC's creditworthiness, interest rate movements, the volatility of the Underlyings, the tenor of the notes and the hedging arrangements. The economic terms of the notes and their initial estimated value depend in part on the terms of these hedging arrangements.

MLPF&S has advised us that the hedging arrangements will include hedging related charges, reflecting the costs associated with, and our affiliates' profit earned from, these hedging arrangements. Since hedging entails risk and may be influenced by unpredictable market forces, actual profits or losses from these hedging transactions may be more or less than any expected amounts.

For further information, see "Risk Factors" beginning on page PS-8 above and "Supplemental Use of Proceeds" on page PS-16 of product supplement EQUITY-1.

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## U.S. FEDERAL INCOME TAX SUMMARY

The following summary of the material U.S. federal income tax considerations of the acquisition, ownership, and disposition of the notes supplements, and to the extent inconsistent supersedes, the discussions under “U.S. Federal Income Tax Considerations” in the accompanying prospectus and under “U.S. Federal Income Tax Considerations” in the accompanying prospectus supplement and is not exhaustive of all possible tax considerations. In addition, any reference to “Morrison & Foerster LLP” in the aforementioned tax discussions in the accompanying prospectus and prospectus supplement should be read as a reference to “Sidley Austin LLP.” This summary is based upon the Internal Revenue Code of 1986, as amended (the “Code”), regulations promulgated under the Code by the U.S. Treasury Department (“Treasury”) (including proposed and temporary regulations), rulings, current administrative interpretations and official pronouncements of the IRS, and judicial decisions, all as currently in effect and all of which are subject to differing interpretations or to change, possibly with retroactive effect. No assurance can be given that the IRS would not assert, or that a court would not sustain, a position contrary to any of the tax consequences described below. This summary does not include any description of the tax laws of any state or local governments, or of any foreign government, that may be applicable to a particular holder.

Although the notes are issued by us, they will be treated as if they were issued by Bank of America Corporation for U.S. federal income tax purposes. Accordingly throughout this tax discussion, references to “we,” “our” or “us” are generally to Bank of America Corporation unless the context requires otherwise.

This summary is directed solely to U.S. Holders and Non-U.S. Holders that, except as otherwise specifically noted, will purchase the notes upon original issuance and will hold the notes as capital assets within the meaning of Section 1221 of the Code, which generally means property held for investment, and that are not excluded from the discussion under “U.S. Federal Income Tax Considerations” in the accompanying prospectus.

*You should consult your own tax advisor concerning the U.S. federal income tax consequences to you of acquiring, owning, and disposing of the notes, as well as any tax consequences arising under the laws of any state, local, foreign, or other tax jurisdiction and the possible effects of changes in U.S. federal or other tax laws.*

### General

Although there is no statutory, judicial, or administrative authority directly addressing the characterization of the notes, we intend to treat the notes for all tax purposes as contingent income bearing single financial contracts with respect to the Underlyings and under the terms of the notes, we and every investor in the notes agree, in the absence of an administrative determination or judicial ruling to the contrary, to treat the notes in accordance with such characterization. In the opinion of our counsel, Sidley Austin LLP, it is reasonable to treat the notes as contingent income bearing single financial contracts with respect to the Underlyings. However, Sidley Austin LLP has advised us that it is unable to conclude that it is more likely than not that this treatment will be upheld. This discussion assumes that the notes constitute contingent income bearing single financial contracts with respect to the Underlyings for U.S.



federal income tax purposes. If the notes did not constitute contingent income bearing single financial contracts, the tax consequences described below would be materially different.

*This characterization of the notes is not binding on the IRS or the courts. No statutory, judicial, or administrative authority directly addresses the characterization of the notes or any similar instruments for U.S. federal income tax purposes, and no ruling is being requested from the IRS with respect to their proper characterization and treatment. Due to the absence of authorities on point, significant aspects of the U.S. federal income tax consequences of an investment in the notes are not certain, and no assurance can be given that the IRS or any court will agree with the characterization and tax treatment described in this pricing supplement. Accordingly, you are urged to consult your tax advisor regarding all aspects of the U.S. federal income tax consequences of an investment in the notes, including possible alternative characterizations.*

Unless otherwise stated, the following discussion is based on the characterization described above. The discussion in this section assumes that there is a significant possibility of a significant loss of principal on an investment in the notes.

We will not attempt to ascertain whether the issuer of any component stocks included in an Underlying that is an index would be treated as a “passive foreign investment company” (“PFIC”), within

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the meaning of Section 1297 of the Code, or a United States real property holding corporation, within the meaning of Section 897(c) of the Code. If the issuer of one or more stocks included in an Underlying that is an index were so treated, certain adverse U.S. federal income tax consequences could possibly apply to a holder of the notes. You should refer to information filed with the SEC by the issuers of the component stocks included in the SX7E and consult your tax advisor regarding the possible consequences to you, if any, if any issuer of a component stock included in the SX7E is or becomes a PFIC or is or becomes a United States real property holding corporation.

## **U.S. Holders**

Although the U.S. federal income tax treatment of any Contingent Coupon Payment on the notes is uncertain, we intend to take the position, and the following discussion assumes, that any Contingent Coupon Payment constitutes taxable ordinary income to a U.S. Holder at the time received or accrued in accordance with the U.S. Holder's regular method of accounting. By purchasing the notes you agree, in the absence of an administrative determination or judicial ruling to the contrary, to treat any Contingent Coupon Payment as described in the preceding sentence.

Upon receipt of a cash payment at maturity or upon a sale, exchange, or redemption of the notes prior to maturity, a U.S. Holder generally will recognize capital gain or loss equal to the difference between the amount realized (other than amounts representing any Contingent Coupon Payment, which would be taxed as described above) and the U.S. Holder's tax basis in the notes. A U.S. Holder's tax basis in the notes will equal the amount paid by that holder to acquire them. Subject to the discussion below concerning the possible application of the "constructive ownership" rules of Section 1260 of the Code, this capital gain or loss generally will be long-term capital gain or loss if the U.S. Holder held the notes for more than one year. The deductibility of capital losses is subject to limitations.

*Possible Application of Section 1260 of the Code.* Since one Underlying is the type of financial asset described under Section 1260 of the Code (including, among others, any equity interest in pass-through entities such as exchange traded funds, regulated investment companies, real estate investment trusts, partnerships, and passive foreign investment companies, each a "Section 1260 Financial Asset"), while the matter is not entirely clear, there may exist a risk that an investment in the notes will be treated, in whole or in part, as a "constructive ownership transaction" to which Section 1260 of the Code applies. If Section 1260 of the Code applies, all or a portion of any long-term capital gain recognized by a U.S. Holder in respect of the notes will be recharacterized as ordinary income (the "Excess Gain"). In addition, an interest charge will also apply to any deemed underpayment of tax in respect of any Excess Gain to the extent such gain would have resulted in gross income inclusion for the U.S. Holder in taxable years prior to the taxable year of the sale, exchange, redemption, or settlement (assuming such income accrued at a constant rate equal to the applicable federal rate as of the date of sale, exchange, or settlement).

If an investment in the notes is treated as a constructive ownership transaction, it is not clear to what extent any long-term capital gain of a U.S. Holder in respect of the notes will be recharacterized as ordinary income. It is possible, for example, that the amount of the Excess Gain (if any) that would be recharacterized as ordinary income in respect of the notes will equal the excess of (i) any long-term capital gain recognized by the U.S. Holder in respect of

the notes and attributable to Section 1260 Financial Assets, over (ii) the “net underlying long-term capital gain” (as defined in Section 1260 of the Code) such U.S. Holder would have had if such U.S. Holder had acquired an amount of the corresponding Section 1260 Financial Assets at fair market value on the original issue date for an amount equal to the portion of the issue price of the notes attributable to the corresponding Section 1260 Financial Assets and sold such amount of Section 1260 Financial Assets at maturity or upon sale, exchange, or redemption of the notes at fair market value. Unless otherwise established by clear and convincing evidence, the net underlying long-term capital gain is treated as zero and therefore it is possible that all long-term capital gain recognized by a U.S. Holder in respect of the notes will be recharacterized as ordinary income if Section 1260 of the Code applies to an investment in the notes. U.S. Holders should consult their tax advisors regarding the potential application of Section 1260 of the Code to an investment in the notes.

As described below, the IRS, as indicated in Notice 2008-2 (“Notice”), is considering whether Section 1260 of the Code generally applies or should apply to the notes, including in situations where the Underlying is not the type of financial asset described under Section 1260 of the Code.

*Alternative Tax Treatments.* Due to the absence of authorities that directly address the proper tax treatment of the notes, prospective investors are urged to consult their tax advisors regarding all possible alternative tax treatments of an investment in the notes. In particular, the IRS could seek to subject the notes to the Treasury regulations governing contingent payment debt instruments. If the IRS were successful in that regard, the timing and character of income on the notes would be affected significantly. Among other things, a U.S. Holder would be required to accrue original issue discount every year at a

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“comparable yield” determined at the time of issuance. In addition, any gain realized by a U.S. Holder at maturity or upon a sale, exchange, or redemption of the notes generally would be treated as ordinary income, and any loss realized at maturity would be treated as ordinary loss to the extent of the U.S. Holder’s prior accruals of original issue discount, and as capital loss thereafter.

In addition, it is possible that the notes could be treated as a unit consisting of a deposit and a put option written by the note holder, in which case the timing and character of income on the notes would be affected significantly.

The Notice sought comments from the public on the taxation of financial instruments currently taxed as “prepaid forward contracts.” The scope of the Notice may extend to instruments similar to the notes. According to the Notice, the IRS and Treasury are considering whether a holder of such instruments should be required to accrue ordinary income on a current basis, regardless of whether any payments are made prior to maturity. It is not possible to determine what guidance the IRS and Treasury will ultimately issue, if any. Any such future guidance may affect the amount, timing and character of income, gain, or loss in respect of the notes, possibly with retroactive effect.

The IRS and Treasury are also considering additional issues, including whether additional gain or loss from such instruments should be treated as ordinary or capital, whether foreign holders of such instruments should be subject to withholding tax on any deemed income accruals, whether Section 1260 of the Code, concerning certain “constructive ownership transactions,” generally applies or should generally apply to such instruments, and whether any of these determinations depend on the nature of the underlying asset.

In addition, proposed Treasury regulations require the accrual of income on a current basis for contingent payments made under certain notional principal contracts. The preamble to the regulations states that the “wait and see” method of accounting does not properly reflect the economic accrual of income on those contracts, and requires current accrual of income for some contracts already in existence. While the proposed regulations do not apply to prepaid forward contracts, the preamble to the proposed regulations expresses the view that similar timing issues exist in the case of prepaid forward contracts. If the IRS or Treasury publishes future guidance requiring current economic accrual for contingent payments on prepaid forward contracts, it is possible that you could be required to accrue income over the term of the notes.

Because of the absence of authority regarding the appropriate tax characterization of the notes, it is also possible that the IRS could seek to characterize the notes in a manner that results in tax consequences that are different from those described above. For example, the IRS could possibly assert that any gain or loss that a holder may recognize at maturity or upon the sale, exchange or redemption of the notes should be treated as ordinary gain or loss.

Because the SX7E is an index that periodically rebalances, it is possible that the notes could be treated as a series of contingent income bearing single financial contracts, each of which matures on the next rebalancing date. If the notes

were properly characterized in such a manner, a U.S. Holder would be treated as disposing of the notes on each rebalancing date in return for new notes that mature on the next rebalancing date, and a U.S. Holder would accordingly likely recognize capital gain or loss on each rebalancing date equal to the difference between the holder's tax basis in the notes (which would be adjusted to take into account any prior recognition of gain or loss) and the fair market value of the notes on such date.

### **Non-U.S. Holders**

Because the U.S. federal income tax treatment of the notes (including any Contingent Coupon Payment) is uncertain, we will withhold U.S. federal income tax at a 30% rate (or at a lower rate under an applicable income tax treaty) on the entire amount of any Contingent Coupon Payment made unless such payments are effectively connected with the conduct by the Non-U.S. Holder of a trade or business in the U.S. (in which case, to avoid withholding, the Non-U.S. Holder will be required to provide a Form W-8ECI). We will not pay any additional amounts in respect of such withholding. To claim benefits under an income tax treaty, a Non-U.S. Holder must obtain a taxpayer identification number and certify as to its eligibility under the appropriate treaty's limitations on benefits article, if applicable. In addition, special rules may apply to claims for treaty benefits made by Non-U.S. Holders that are entities rather than individuals. The availability of a lower rate of withholding under an applicable income tax treaty will depend on whether such rate applies to the characterization of the payments under U.S. federal income tax laws. A Non-U.S. Holder that is eligible for a reduced rate of U.S. federal withholding tax pursuant to an income tax treaty may obtain a refund of any excess amounts withheld by filing an appropriate claim for refund with the IRS.

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A Non-U.S. Holder will generally not be subject to U.S. federal income or withholding tax on any gain (not including, for the avoidance of doubt, any amounts representing accrued Contingent Coupon Payments which would be subject to the rules discussed in the previous paragraph) from the sale, exchange or redemption of the notes or their settlement at maturity, provided that the Non-U.S. Holder complies with applicable certification requirements and that the payment is not effectively connected with the conduct by the Non-U.S. Holder of a U.S. trade or business. Notwithstanding the foregoing, gain from the sale, exchange, or redemption of the notes or their settlement at maturity may be subject to U.S. federal income tax if that Non-U.S. Holder is a non-resident alien individual and is present in the U.S. for 183 days or more during the taxable year of the sale, exchange, or redemption and certain other conditions are satisfied.

If a Non-U.S. Holder of the notes is engaged in the conduct of a trade or business within the U.S. and if any Contingent Coupon Payment and gain realized on the sale, exchange, redemption, or settlement of the notes, is effectively connected with the conduct of such trade or business (and, if certain tax treaties apply, is attributable to a permanent establishment maintained by the Non-U.S. Holder in the U.S.), the Non-U.S. Holder, although exempt from U.S. federal withholding tax, generally will be subject to U.S. federal income tax on such Contingent Coupon Payment and gain on a net income basis in the same manner as if it were a U.S. Holder. Such Non-U.S. Holders should read the material under the heading “—U.S. Holders,” for a description of the U.S. federal income tax consequences of acquiring, owning, and disposing of the notes. In addition, if such Non-U.S. Holder is a foreign corporation, it may also be subject to a branch profits tax equal to 30% (or such lower rate provided by any applicable tax treaty) of a portion of its earnings and profits for the taxable year that are effectively connected with its conduct of a trade or business in the U.S., subject to certain adjustments.

A “dividend equivalent” payment is treated as a dividend from sources within the United States and such payments generally would be subject to a 30% U.S. withholding tax if paid to a Non-U.S. Holder. Under U.S. Treasury Department regulations, payments (including deemed payments) with respect to equity-linked instruments (“ELIs”) that are “specified ELIs” may be treated as dividend equivalents if such specified ELIs reference an interest in an “underlying security,” which is generally any interest in an entity taxable as a corporation for U.S. federal income tax purposes, if a payment with respect to such interest could give rise to a U.S. source dividend. However, IRS guidance provides that withholding on dividend equivalent payments will not apply to specified ELIs that are not delta-one instruments and that are issued before January 1, 2019. Based on our determination that the notes are not delta-one instruments, Non-U.S. Holders should not be subject to withholding on dividend equivalent payments, if any, under the notes. However, it is possible that the notes could be treated as deemed reissued for U.S. federal income tax purposes upon the occurrence of certain events affecting the Underlyings or the notes, and following such occurrence the notes could be treated as subject to withholding on dividend equivalent payments. Non-U.S. Holders that enter, or have entered, into other transactions in respect of the Underlyings or the notes should consult their tax advisors as to the application of the dividend equivalent withholding tax in the context of the notes and their other transactions. If any payments are treated as dividend equivalents subject to withholding, we (or the applicable paying agent) would be entitled to withhold taxes without being required to pay any additional amounts with respect to amounts so withheld.

As discussed above, alternative characterizations of the notes for U.S. federal income tax purposes are possible. Should an alternative characterization, by reason of change or clarification of the law, by regulation or otherwise, cause payments as to the notes to become subject to withholding tax in addition to the withholding tax described above, tax will be withheld at the applicable statutory rate. Non-U.S. Holders should consult their own tax advisors

regarding the tax consequences of such alternative characterizations.

*U.S. Federal Estate Tax.* Under current law, while the matter is not entirely clear, individual Non-U.S. Holders, and entities whose property is potentially includible in those individuals' gross estates for U.S. federal estate tax purposes (for example, a trust funded by such an individual and with respect to which the individual has retained certain interests or powers), should note that, absent an applicable treaty benefit, a note is likely to be treated as U.S. situs property, subject to U.S. federal estate tax. These individuals and entities should consult their own tax advisors regarding the U.S. federal estate tax consequences of investing in a note.

### **Backup Withholding and Information Reporting**

Please see the discussion under “U.S. Federal Income Tax Considerations — Taxation of Debt Securities — Backup Withholding and Information Reporting” in the accompanying prospectus for a

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description of the applicability of the backup withholding and information reporting rules to payments made on the notes.

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