

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

FORM 10-Q

**QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE
SECURITIES EXCHANGE ACT OF 1934**

For the Quarterly Period Ended March 31, 2019
or

**TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE
SECURITIES EXCHANGE ACT OF 1934**

Commission File Number 1-16411

NORTHROP GRUMMAN CORPORATION

(Exact name of registrant as specified in its charter)

DELAWARE

(State or other jurisdiction of
incorporation or organization)

80-0640649

(I.R.S. Employer
Identification No.)

**2980 Fairview Park Drive,
Falls Church, Virginia**

(Address of principal executive offices)

22042

(Zip Code)

(703) 280-2900

(Registrant's telephone number, including area code)

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days.

Yes

No

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files).

Yes

No

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

Large accelerated filer

Accelerated filer

Non-accelerated filer

Smaller reporting company

Emerging growth company

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act.

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act).

Yes

No

Indicate the number of shares outstanding of each of the issuer's classes of common stock, as of the latest practicable date.
As of April 19, 2019, 169,799,679 shares of common stock were outstanding.

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NORTHROP GRUMMAN CORPORATION

PART I. FINANCIAL INFORMATION

Item 1. Financial Statements

CONDENSED CONSOLIDATED STATEMENTS OF EARNINGS AND COMPREHENSIVE INCOME
(Unaudited)

<i>\$ in millions, except per share amounts</i>	Three Months Ended March 31	
	2019	2018
Sales		
Product	\$ 5,728	\$ 4,289
Service	2,461	2,446
Total sales	8,189	6,735
Operating costs and expenses		
Product	4,517	3,269
Service	1,976	1,907
General and administrative expenses	760	711
Operating income	936	848
Other (expense) income		
Interest expense	(138)	(143)
FAS (non-service) pension benefit	200	254
Other, net	36	40
Earnings before income taxes	1,034	999
Federal and foreign income tax expense	171	159
Net earnings	\$ 863	\$ 840
Basic earnings per share	\$ 5.08	\$ 4.82
Weighted-average common shares outstanding, in millions	170.0	174.3
Diluted earnings per share	\$ 5.06	\$ 4.79
Weighted-average diluted shares outstanding, in millions	170.7	175.4
Net earnings (from above)	\$ 863	\$ 840
Other comprehensive loss		
Change in unamortized prior service credit, net of tax	(11)	(15)
Change in cumulative translation adjustment and other, net	4	(3)
Other comprehensive loss, net of tax	(7)	(18)
Comprehensive income	\$ 856	\$ 822

The accompanying notes are an integral part of these unaudited condensed consolidated financial statements.

NORTHROP GRUMMAN CORPORATION
CONDENSED CONSOLIDATED STATEMENTS OF FINANCIAL POSITION
(Unaudited)

<i>\$ in millions, except par value</i>	March 31, 2019	December 31, 2018
Assets		
Cash and cash equivalents	\$ 755	\$ 1,579
Accounts receivable, net	2,166	1,448
Unbilled receivables, net	5,785	5,026
Inventoried costs, net	778	654
Prepaid expenses and other current assets	959	973
Total current assets	10,443	9,680
Property, plant and equipment, net of accumulated depreciation of \$5,493 for 2019 and \$5,369 for 2018	6,420	6,372
Operating lease right-of-use assets	1,283	—
Goodwill	18,698	18,672
Intangible assets, net	1,289	1,372
Deferred tax assets	84	94
Other non-current assets	1,534	1,463
Total assets	\$ 39,751	\$ 37,653
Liabilities		
Trade accounts payable	\$ 1,932	\$ 2,182
Accrued employee compensation	1,404	1,676
Advance payments and billings in excess of costs incurred	1,969	1,917
Other current liabilities	3,516	2,499
Total current liabilities	8,821	8,274
Long-term debt, net of current portion of \$523 for 2019 and \$517 for 2018	13,863	13,883
Pension and other postretirement benefit plan liabilities	5,646	5,755
Operating lease liabilities	1,098	—
Deferred tax liabilities	133	108
Other non-current liabilities	1,451	1,446
Total liabilities	31,012	29,466
Commitments and contingencies (Note 7)		
Shareholders' equity		
Preferred stock, \$1 par value; 10,000,000 shares authorized; no shares issued and outstanding	—	—
Common stock, \$1 par value; 800,000,000 shares authorized; issued and outstanding: 2019—169,873,750 and 2018—170,607,336	170	171
Paid-in capital	—	—
Retained earnings	8,628	8,068
Accumulated other comprehensive loss	(59)	(52)
Total shareholders' equity	8,739	8,187
Total liabilities and shareholders' equity	\$ 39,751	\$ 37,653

The accompanying notes are an integral part of these unaudited condensed consolidated financial statements.

NORTHROP GRUMMAN CORPORATION

CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS
(Unaudited)

<i>\$ in millions</i>	Three Months Ended March 31	
	2019	2018
Operating activities		
Net earnings	\$ 863	\$ 840
Adjustments to reconcile to net cash provided by operating activities:		
Depreciation and amortization	234	122
Non-cash lease expense	68	—
Stock-based compensation	26	19
Deferred income taxes	33	(22)
Changes in assets and liabilities:		
Accounts receivable, net	(718)	(187)
Unbilled receivables, net	(759)	(404)
Inventoried costs, net	(124)	(37)
Prepaid expenses and other assets	(23)	13
Accounts payable and other liabilities	(480)	(590)
Income taxes payable, net	140	197
Retiree benefits	(142)	(190)
Other, net	(31)	2
Net cash used in operating activities	(913)	(237)
Investing activities		
Capital expenditures	(284)	(305)
Other, net	4	(2)
Net cash used in investing activities	(280)	(307)
Financing activities		
Net payments to credit facilities	(20)	(14)
Net borrowings on commercial paper	814	—
Common stock repurchases	(60)	—
Cash dividends paid	(211)	(198)
Payments of employee taxes withheld from share-based awards	(61)	(79)
Other, net	—	(21)
Net cash provided by (used in) financing activities	462	(312)
Decrease in cash, cash equivalents and restricted cash	(731)	(856)
Cash, cash equivalents and restricted cash, beginning of year	1,579	11,225
Cash, cash equivalents and restricted cash, end of period	\$ 848	\$ 10,369

The accompanying notes are an integral part of these unaudited condensed consolidated financial statements.

NORTHROP GRUMMAN CORPORATION

CONDENSED CONSOLIDATED STATEMENTS OF CHANGES IN SHAREHOLDERS' EQUITY
(Unaudited)

<i>\$ in millions, except per share amounts</i>	Three Months Ended March 31	
	2019	2018
Common stock		
Beginning of year	\$ 171	\$ 174
Common stock repurchased	(1)	—
End of period	170	174
Paid-in capital		
Beginning of year	—	44
Stock compensation	—	(44)
End of period	—	—
Retained earnings		
Beginning of year	8,068	6,913
Impact from adoption of ASU 2018-02 and ASU 2016-01	—	(21)
Common stock repurchased	(62)	—
Net earnings	863	840
Dividends declared	(206)	(195)
Stock compensation	(35)	(35)
End of period	8,628	7,502
Accumulated other comprehensive (loss) income		
Beginning of year	(52)	1
Impact from adoption of ASU 2018-02 and ASU 2016-01	—	21
Other comprehensive loss, net of tax	(7)	(18)
End of period	(59)	4
Total shareholders' equity	\$ 8,739	\$ 7,680
Cash dividends declared per share	\$ 1.20	\$ 1.10

The accompanying notes are an integral part of these unaudited condensed consolidated financial statements.

NORTHROP GRUMMAN CORPORATION**NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (Unaudited)****1. BASIS OF PRESENTATION****Principles of Consolidation and Reporting**

These unaudited condensed consolidated financial statements (the “financial statements”) include the accounts of Northrop Grumman Corporation and its subsidiaries and joint ventures or other investments for which we consolidate the financial results (herein referred to as “Northrop Grumman,” the “company,” “we,” “us,” or “our”). Material intercompany accounts, transactions and profits are eliminated in consolidation. Investments in equity securities and joint ventures where the company has significant influence, but not control, are accounted for using the equity method.

On June 6, 2018 (the “Merger date”), the company completed its previously announced acquisition of Orbital ATK, Inc. (“Orbital ATK”) (the “Merger”). On the Merger date, Orbital ATK became a wholly-owned subsidiary of the company and its name was changed to Northrop Grumman Innovation Systems, Inc., which we established as a new, fourth business sector (“Innovation Systems”). The operating results of Innovation Systems subsequent to the Merger date have been included in the company's unaudited condensed consolidated results of operations. See Note 2 for further information regarding the Merger.

These financial statements are prepared in conformity with accounting principles generally accepted in the United States of America (“GAAP” or “FAS”) and in accordance with the rules of the Securities and Exchange Commission (SEC) for interim reporting. The financial statements include adjustments of a normal recurring nature considered necessary by management for a fair presentation of the company's unaudited condensed consolidated financial position, results of operations and cash flows.

The results reported in these financial statements are not necessarily indicative of results that may be expected for the entire year. These financial statements should be read in conjunction with the information contained in the company's 2018 Annual Report on Form 10-K.

The quarterly information is labeled using a calendar convention; that is, first quarter is consistently labeled as ending on March 31, second quarter as ending on June 30 and third quarter as ending on September 30. It is legacy Northrop Grumman's long-standing practice to establish actual interim closing dates using a “fiscal” calendar, in which we close our books on a Friday near these quarter-end dates in order to normalize the potentially disruptive effects of quarterly closings on business processes. Similarly, Innovation Systems uses a “fiscal” calendar by closing its books on a Sunday near these quarter-end dates and will continue this practice until its business processes are aligned with legacy Northrop Grumman's. This practice is only used at interim periods within a reporting year.

As previously announced, effective January 1, 2019, we adopted Accounting Standards Codification (ASC) Topic 842, *Leases*, using the optional transition method to apply the standard through a cumulative effect adjustment in the period of adoption. The adoption of this standard is reflected in the amounts and disclosures set forth in this Form 10-Q.

Accounting Estimates

Preparation of the financial statements requires management to make estimates and judgments that affect the reported amounts of assets and liabilities and the disclosure of contingencies at the date of the financial statements, as well as the reported amounts of sales and expenses during the reporting period. Estimates have been prepared using the most current and best available information; however, actual results could differ materially from those estimates.

Revenue Recognition

The majority of our sales are derived from long-term contracts with the U.S. government for the production of goods, the provision of services, or a combination of both. The company classifies sales as product or service based on the predominant attributes of each contract.

The company recognizes revenue for each separately identifiable performance obligation in a contract representing a promise to transfer a distinct good or service to a customer. In most cases, goods and services provided under the company's contracts are accounted for as single performance obligations due to the complex and integrated nature of our products and services. These contracts generally require significant integration of a group of goods and/or services to deliver a combined output. In some contracts, the company provides multiple distinct goods or services to a customer, most commonly when a contract covers multiple phases of the product lifecycle (e.g., development, production, sustainment, etc.). In those cases, the company accounts for the distinct contract deliverables as separate performance obligations and allocates the transaction price to each performance obligation based on its relative standalone selling price, which is generally estimated using a cost plus a reasonable margin approach. Warranties are

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provided on certain contracts, but do not typically provide for services beyond standard assurances and are therefore not considered to be separate performance obligations. Our accounting for costs to obtain or fulfill a contract are not material.

Contracts are often modified for changes in contract specifications or requirements, which may result in scope and/or price changes. Most of the company's contract modifications are for goods or services that are not distinct in the context of the contract and are therefore accounted for as part of the original performance obligation through a cumulative estimate-at-completion (EAC) adjustment.

The company recognizes revenue as control is transferred to the customer, either over time or at a point in time. In general, our U.S. government contracts contain termination for convenience and/or other clauses that generally provide the customer rights to goods produced and/or in-process. Similarly, our non-U.S. government contracts generally contain contractual termination clauses or entitle the company to payment for work performed to date for goods and services that do not have an alternative use. As control is effectively transferred while we perform on our contracts, we generally recognize revenue over time using the cost-to-cost method (cost incurred relative to total cost estimated at completion) as the company believes this represents the most appropriate measurement towards satisfaction of its performance obligations. Revenue for contracts in which the control of goods produced does not transfer until delivery to the customer is recognized at a point in time (i.e., typically upon delivery).

Contract Estimates

Use of the cost-to-cost method requires us to make reasonably dependable estimates regarding the revenue and cost associated with the design, manufacture and delivery of our products and services. The company estimates profit on these contracts as the difference between total estimated sales and total estimated cost at completion and recognizes that profit as costs are incurred. Significant judgment is used to estimate total revenue and cost at completion.

Contract sales may include estimates of variable consideration, including cost or performance incentives (such as award and incentive fees), contract claims and requests for equitable adjustment (REAs). Variable consideration is included in total estimated sales to the extent it is probable that a significant reversal in the amount of cumulative revenue recognized will not occur when the uncertainty associated with the variable consideration is subsequently resolved. We estimate variable consideration as the most likely amount to which we expect to be entitled.

We recognize changes in estimated contract sales or costs and the resulting changes in contract profit on a cumulative basis. Cumulative EAC adjustments represent the cumulative effect of the changes on current and prior periods; sales and operating margins in future periods are recognized as if the revised estimates had been used since contract inception. If it is determined that a loss is expected to result on an individual performance obligation, the entire amount of the estimable future loss, including an allocation of general and administrative (G&A) costs, is charged against income in the period the loss is identified. Each loss provision is first offset against costs included in Unbilled receivables or Inventoried costs; remaining amounts are reflected in Other current liabilities.

Significant EAC adjustments on a single contract could have a material effect on the company's financial statements. When such adjustments occur, we generally disclose the nature, underlying conditions and financial impact of the adjustments. No discrete event or adjustments to an individual contract were material to the financial statements during the three months ended March 31, 2019 and 2018.

The following table presents the effect of aggregate net EAC adjustments:

<i>\$ in millions, except per share data</i>	Three Months Ended March 31	
	2019	2018
Operating income	\$ 138	\$ 116
Net earnings ⁽¹⁾	109	92
Diluted earnings per share ⁽¹⁾	0.64	0.52

⁽¹⁾ Based on a 21 percent statutory tax rate.

Revenue recognized from performance obligations satisfied in previous reporting periods was \$166 million and \$133 million for the three months ended March 31, 2019 and 2018, respectively.

Backlog

Backlog represents the future sales we expect to recognize on firm orders received by the company and is equivalent to the company's remaining performance obligations at the end of each period. It comprises both funded backlog (firm orders for which funding is authorized and appropriated) and unfunded backlog. Unexercised contract options

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and indefinite delivery indefinite quantity (IDIQ) contracts are not included in backlog until the time the option or IDIQ task order is exercised or awarded.

Company backlog as of March 31, 2019 was \$57.3 billion. We expect to recognize approximately 50 percent and 75 percent of our March 31, 2019 backlog as revenue over the next 12 and 24 months, respectively, with the remainder to be recognized thereafter.

Contract Assets and Liabilities

For each of the company's contracts, the timing of revenue recognition, customer billings, and cash collections results in a net contract asset or liability at the end of each reporting period. Fixed-price contracts are typically billed to the customer either using progress payments, whereby amounts are billed monthly as costs are incurred or work is completed, or performance based payments, which are based upon the achievement of specific, measurable events or accomplishments defined and valued at contract inception. Cost-type contracts are typically billed to the customer on a monthly or semi-monthly basis.

Contract assets are equivalent to and reflected as Unbilled receivables in the unaudited condensed consolidated statements of financial position and are primarily related to long-term contracts where revenue recognized under the cost-to-cost method exceeds amounts billed to customers. Unbilled receivables are classified as current assets and, in accordance with industry practice, include amounts that may be billed and collected beyond one year due to the long-cycle nature of many of our contracts. Accumulated contract costs in unbilled receivables include costs such as direct production costs, factory and engineering overhead, production tooling costs, and allowable G&A. Unbilled receivables also include certain estimates of variable consideration described above. These contract assets are not considered a significant financing component of the company's contracts as the payment terms are intended to protect the customer in the event the company does not perform on its obligations under the contract.

Contract liabilities are equivalent to and reflected as Advance payments and billings in excess of costs incurred in the unaudited condensed consolidated statements of financial position. Certain customers make advance payments prior to the company's satisfaction of its obligations on the contract. These amounts are recorded as contract liabilities until such obligations are satisfied, either over time as costs are incurred or at a point in time when deliveries are made. Contract liabilities are not a significant financing component as they are generally utilized to pay for contract costs within a one-year period or are used to ensure the customer meets contractual requirements.

The amount of revenue recognized for the three months ended March 31, 2019 and 2018 that was included in the contract liability balances at the beginning of each year was \$674 million and \$706 million, respectively.

Disaggregation of Revenue

See Note 11 for information regarding the company's sales by customer type, contract type and geographic region for each of our segments. We believe those categories best depict how the nature, amount, timing and uncertainty of our revenue and cash flows are affected by economic factors.

Accumulated Other Comprehensive Loss

The components of accumulated other comprehensive loss are as follows:

<i>\$ in millions</i>	March 31, 2019	December 31, 2018
Unamortized prior service credit, net of tax expense of \$28 for 2019 and \$32 for 2018	\$ 87	\$ 98
Cumulative translation adjustment	(143)	(144)
Other, net	(3)	(6)
Total accumulated other comprehensive loss	\$ (59)	\$ (52)

Reclassifications from accumulated other comprehensive loss to net earnings related to the amortization of prior service credit were \$11 million and \$15 million, net of taxes, for the three months ended March 31, 2019 and 2018, respectively. The reclassifications are included in the computation of net periodic pension cost (benefit). See Note 8 for further information.

Reclassifications from accumulated other comprehensive loss to net earnings relating to cumulative translation adjustments and effective cash flow hedges were not material for the three months ended March 31, 2019 and 2018.

Leases

The company leases certain buildings, land and equipment. Under ASC 842, at contract inception we determine whether the contract is or contains a lease and whether the lease should be classified as an operating or a financing

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lease. Operating leases are included in Operating lease right-of-use (ROU) assets, Other current liabilities, and Operating lease liabilities in our unaudited condensed consolidated statements of financial position.

The company recognizes operating lease ROU assets and operating lease liabilities based on the present value of the future minimum lease payments over the lease term at commencement date. We use our incremental borrowing rate based on the information available at commencement date to determine the present value of future payments and the appropriate lease classification. Many of our leases include renewal options aligned with our contract terms. We define the initial lease term to include renewal options determined to be reasonably certain. In our adoption of ASC 842, we elected not to recognize a right-of-use asset and a lease liability for leases with an initial term of 12 months or less; we recognize lease expense for these leases on a straight-line basis over the lease term. We elected the practical expedient to not separate lease components from nonlease components and applied that practical expedient to all material classes of leased assets.

Many of the company's real property lease agreements contain incentives for tenant improvements, rent holidays, or rent escalation clauses. For tenant improvement incentives, if the incentive is determined to be a leasehold improvement owned by the lessee, the company generally records a deferred rent liability and amortizes the deferred rent over the term of the lease as a reduction to rent expense. For rent holidays and rent escalation clauses during the lease term, the company records rental expense on a straight-line basis over the term of the lease. For these lease incentives, the company uses the date of initial possession as the commencement date, which is generally when the company is given the right of access to the space and begins to make improvements in preparation for intended use.

Finance leases are not material to our unaudited condensed consolidated financial statements and the company is not a lessor in any material arrangements. We do not have any material restrictions or covenants in our lease agreements, sale-leaseback transactions, land easements or residual value guarantees.

Restricted Cash

On occasion, we are required to maintain cash deposits with banks in connection with certain contingent obligations. This restricted cash is included in Prepaid expenses and other current assets in the unaudited condensed consolidated statements of financial position. As of March 31, 2019 our restricted cash totaled approximately \$93 million. We had no restricted cash as of December 31, 2018.

Related Party Transactions

The company had no material related party transactions in any period presented.

Accounting Standards Updates

On February 25, 2016, the FASB issued ASU No. 2016-02, *Leases (Topic 842)*. ASC Topic 842 supersedes existing lease guidance, including ASC 840 - *Leases*. Among other things, ASU 2016-02 requires recognition of a right-of-use asset and liability for future lease payments for contracts that meet the definition of a lease and requires disclosure of certain information about leasing arrangements. On July 30, 2018, the FASB issued ASU No. 2018-11, *Leases (Topic 842): Targeted Improvements*, which, among other things, allows companies to elect an optional transition method to apply the new lease standard through a cumulative-effect adjustment in the period of adoption.

We adopted the standard on January 1, 2019 using the optional transition method and, as a result, did not recast prior period unaudited condensed comparative financial statements. All prior period amounts and disclosures are presented under ASC 840. We elected the package of practical expedients, which, among other things, allows us to carry forward our prior lease classifications under ASC 840. We did not elect to adopt the hindsight practical expedient and are therefore maintaining the lease terms we previously determined under ASC 840. Adoption of the new standard resulted in the recording of additional lease assets and lease liabilities on the unaudited condensed consolidated statements of financial position with no cumulative impact to retained earnings and did not have a material impact on our results of operations or cash flows.

Other accounting standards updates adopted and/or issued, but not effective until after March 31, 2019, are not expected to have a material effect on the company's unaudited condensed consolidated financial position, annual results of operations and/or cash flows.

NORTHROP GRUMMAN CORPORATION**2. ACQUISITION OF ORBITAL ATK**

On June 6, 2018, the company completed its previously announced acquisition of Orbital ATK, by acquiring all of the outstanding shares of Orbital ATK for a purchase price of \$7.7 billion in cash. On the Merger date, Orbital ATK became a wholly-owned subsidiary of the company and its name was changed to Northrop Grumman Innovation Systems, Inc. We established Innovation Systems as a new, fourth business sector. Its main products include precision munitions and armaments; tactical missiles and subsystems; ammunition; launch vehicles; space and strategic propulsion systems; aerospace structures; space exploration products; and national security and commercial satellite systems and related components/services. The acquisition was financed with proceeds from the company's debt financing completed in October 2017 and cash on hand. We believe this acquisition will enable us to broaden our capabilities and offerings, provide additional innovative solutions to meet our customers' emerging requirements, create value for shareholders and provide expanded opportunities for our combined employees.

Preliminary Purchase Price Allocation

The acquisition was accounted for as a purchase business combination. As such, the company recorded the assets acquired and liabilities assumed at fair value, with the excess of the purchase price over the fair value of assets acquired and liabilities assumed recorded as goodwill. Determining the fair value of assets acquired and liabilities assumed requires significant judgment, including the amount and timing of expected future cash flows, long-term growth rates and discount rates. In some cases, the company used discounted cash flow analyses, which were based on our best estimate of future sales, earnings and cash flows after considering such factors as general market conditions, customer budgets, existing firm and future orders, changes in working capital, long term business plans and recent operating performance. Use of different estimates and judgments could yield materially different results.

During the second quarter of 2018, the company completed a preliminary analysis to determine the fair values of the assets acquired and liabilities assumed and the amounts recorded reflected management's initial assessment of fair value as of the Merger date. Based on additional information obtained to date, the company refined its initial assessment of fair value and recognized the following significant adjustments to our preliminary purchase price allocation: Intangible assets increased \$220 million, Other current liabilities increased \$114 million, Pension and other postretirement benefit (OPB) plan liabilities increased \$56 million, Other non-current liabilities increased \$53 million and Goodwill decreased \$47 million. These adjustments did not result in a material impact on the financial results of prior periods.

The company expects to finalize its purchase price allocation within one year of the Merger date. We are continuing to analyze and assess relevant information in the following areas to determine the fair value of assets acquired and liabilities assumed as of the Merger date: certain income tax, legal and contract-related matters. The final fair value determination could result in material adjustments to the values presented in the preliminary purchase price allocation table below.

The Merger date fair value of the consideration transferred totaled \$7.7 billion in cash, which was comprised of the following:

\$ in millions, except per share amounts

	Purchase price
Shares of Orbital ATK common stock outstanding as of the Merger date	57,562,152
Cash consideration per share of Orbital ATK common stock	\$ 134.50
Total purchase price	\$ 7,742

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The following preliminary purchase price allocation table presents the company's refined estimate of the fair values of assets acquired and liabilities assumed at the Merger date:

<i>\$ in millions</i>	As of June 6, 2018
Cash and cash equivalents	\$ 85
Accounts receivable	596
Unbilled receivables	1,264
Inventoried costs	220
Other current assets	226
Property, plant and equipment	1,509
Goodwill	6,248
Intangible assets	1,525
Other non-current assets	151
Total assets acquired	11,824
Trade accounts payable	(397)
Accrued employee compensation	(158)
Advance payments and billings in excess of costs incurred	(222)
Below market contracts ⁽¹⁾	(151)
Other current liabilities	(412)
Long-term debt	(1,687)
Pension and OPB plan liabilities	(613)
Deferred tax liabilities	(253)
Other non-current liabilities	(189)
Total liabilities assumed	(4,082)
Total purchase price	\$ 7,742

⁽¹⁾ Included in Other current liabilities in the unaudited condensed consolidated statements of financial position.

The following table presents a summary of purchased intangible assets and their related estimated useful lives:

	Fair Value (in millions)	Estimated Useful Life in Years
Customer contracts	\$ 1,245	9
Commercial customer relationships	280	13
Total customer-related intangible assets	\$ 1,525	

The preliminary purchase price allocation resulted in the recognition of \$6.2 billion of goodwill, a majority of which was allocated to the Innovation Systems sector. The goodwill recognized is attributable to expected revenue synergies generated by the integration of Aerospace Systems, Mission Systems and Technology Services products and technologies with those of legacy Orbital ATK, synergies resulting from the consolidation or elimination of certain costs, and intangible assets that do not qualify for separate recognition, such as the assembled workforce of Orbital ATK. None of the goodwill is expected to be deductible for tax purposes.

NORTHROP GRUMMAN CORPORATION*Unaudited Supplemental Pro Forma Information*

The following table presents unaudited pro forma financial information prepared in accordance with Article 11 of Regulation S-X and computed as if Orbital ATK had been included in our results as of January 1, 2017:

<i>\$ in millions, except per share amounts</i>	Three Months Ended March 31, 2018	
Sales	\$	8,000
Net earnings		914
Diluted earnings per share		5.21

The unaudited supplemental pro forma financial data has been calculated after applying our accounting policies and adjusting the historical results of Orbital ATK with pro forma adjustments, net of tax, that assume the acquisition occurred on January 1, 2017. Significant pro forma adjustments include the following:

1. The elimination of intercompany sales and costs of sales between the company and Orbital ATK of \$47 million for the three months ended March 31, 2018.
2. The elimination of nonrecurring transaction costs incurred by the company and Orbital ATK in connection with the Merger of \$7 million for the three months ended March 31, 2018.
3. The recognition of additional depreciation expense, net of removal of historical depreciation expense, of \$6 million for the three months ended March 31, 2018 related to the step-up in fair value of acquired property, plant and equipment.
4. The recognition of additional amortization expense, net of removal of historical amortization expense, of \$66 million for the three months ended March 31, 2018 related to the fair value of acquired intangible assets.
5. The elimination of Orbital ATK's historical amortization of net actuarial losses and prior service credits and impact of the revised pension and OPB net periodic benefit cost as determined under the company's plan assumptions of \$31 million for the three months ended March 31, 2018.
6. The income tax effect on the pro forma adjustments, which was calculated using the federal statutory tax rate, of \$7 million for the three months ended March 31, 2018.

The unaudited pro forma financial information does not reflect the potential realization of revenue synergies or cost savings, nor does it reflect other costs relating to the integration of the two companies. This unaudited pro forma financial information should not be considered indicative of the results that would have actually occurred if the acquisition had been consummated on January 1, 2017, nor are they indicative of future results.

3. EARNINGS PER SHARE, SHARE REPURCHASES AND DIVIDENDS ON COMMON STOCK**Basic Earnings Per Share**

We calculate basic earnings per share by dividing net earnings by the weighted-average number of shares of common stock outstanding during each period.

Diluted Earnings Per Share

Diluted earnings per share include the dilutive effect of awards granted to employees under stock-based compensation plans. The dilutive effect of these securities totaled 0.7 million shares and 1.1 million shares for the three months ended March 31, 2019 and 2018, respectively.

Share Repurchases

On September 16, 2015, the company's board of directors authorized a share repurchase program of up to \$4.0 billion of the company's common stock (the "2015 Repurchase Program"). Repurchases under the 2015 Repurchase Program commenced in March 2016.

On December 4, 2018, the company's board of directors authorized a new share repurchase program of up to an additional \$3.0 billion in share repurchases of the company's common stock (the "2018 Repurchase Program"). By its terms, repurchases under the 2018 Repurchase Program will commence upon completion of the 2015 Repurchase Program and will expire when we have used all authorized funds for repurchases.

During the fourth quarter of 2018, the company entered into an accelerated share repurchase (ASR) agreement with Goldman Sachs & Co. LLC (Goldman Sachs) to repurchase \$1.0 billion of the company's common stock under the 2015 Repurchase Program. Under the agreement, we made a payment of \$1.0 billion to Goldman Sachs and

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received an initial delivery of 3.0 million shares valued at \$800 million that were immediately canceled by the company. The remaining balance was settled on January 4, 2019 with a final delivery of 0.9 million shares from Goldman Sachs. The final average purchase price was \$260.32 per share.

As of March 31, 2019, repurchases under the 2015 Repurchase Program totaled \$3.0 billion; \$1.0 billion remained under this share repurchase authorization. By its terms, the 2015 Repurchase Program is set to expire when we have used all authorized funds for repurchases.

Share repurchases take place from time to time, subject to market conditions and management's discretion, in the open market and in privately negotiated transactions. The company retires its common stock upon repurchase and, in the periods presented, has not made any purchases of common stock other than in connection with these publicly announced repurchase programs.

The table below summarizes the company's share repurchases to date under the authorizations described above:

Repurchase Program Authorization Date	Amount Authorized (in millions)	Total Shares Retired (in millions)	Average Price Per Share ⁽¹⁾	Date Completed	Shares Repurchased (in millions)	
					Three Months Ended March 31 2019	2018
September 16, 2015	\$ 4,000	12.4	\$ 241.36		1.1	—
December 4, 2018	\$ 3,000	—	\$ —		—	—

⁽¹⁾ Includes commissions paid.

Dividends on Common Stock

In May 2018, the company increased the quarterly common stock dividend 9 percent to \$1.20 per share from the previous amount of \$1.10 per share.

In January 2018, the company increased the quarterly common stock dividend 10 percent to \$1.10 per share from the previous amount of \$1.00 per share.

4. INCOME TAXES

<i>\$ in millions</i>	Three Months Ended March 31	
	2019	2018
Federal and foreign income tax expense	\$ 171	\$ 159
<i>Effective income tax rate</i>	16.5%	15.9%

The effective tax rate for the first quarter of 2019 increased to 16.5 percent from 15.9 percent in the first quarter of 2018 primarily due to lower tax benefits related to employee share-based compensation and claims for prior year manufacturing deductions, partially offset by higher research credits. The company's effective rate for the first quarter of 2019 includes \$31 million of research credits and \$13 million of excess tax benefits for employee share-based compensation. The company's effective tax rate for the first quarter of 2018 included \$26 million of excess tax benefits for employee share-based compensation, \$20 million of research credits and \$8 million of claims for prior year manufacturing deductions.

During the three months ended March 31, 2019, we increased our unrecognized tax benefits related to our methods of accounting associated with the Tax Cuts and Jobs Act by approximately \$15 million and it is reasonably possible that within the next twelve months those unrecognized tax benefits may increase by up to an additional \$70 million.

We file income tax returns in the U.S. federal jurisdiction and in various state and foreign jurisdictions. The Northrop Grumman 2014-2017 federal tax returns and refund claims related to its 2007-2016 federal tax returns are currently under IRS examination. In addition, legacy Orbital ATK federal tax returns for the year ended March 31, 2015, the nine-month transition period ended December 31, 2015 and calendar year 2016 are currently under IRS examination.

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5. FAIR VALUE OF FINANCIAL INSTRUMENTS

The company holds a portfolio of marketable securities consisting of securities to partially fund non-qualified employee benefit plans. A portion of these securities are held in common/collective trust funds and are measured at fair value using net asset value (NAV) per share as a practical expedient; and therefore are not required to be categorized in the fair value hierarchy table below. Marketable securities are included in Other non-current assets in the unaudited condensed consolidated statements of financial position.

The company's derivative portfolio consists primarily of commodity forward contracts and foreign currency forward contracts. The company periodically uses commodity forward contracts to hedge forecasted purchases of certain commodities. The contracts generally establish a fixed price for the underlying commodity and are designated and qualify as effective cash flow hedges of such commodity purchases. Commodity derivatives are valued based on prices of future exchanges and recently reported transactions in the marketplace. For foreign currency forward contracts, where model-derived valuations are appropriate, the company utilizes the income approach to determine the fair value and uses the applicable London Interbank Offered Rate (LIBOR) swap rates.

The following table presents the financial assets and liabilities the company records at fair value on a recurring basis identified by the level of inputs used to determine fair value:

<i>\$ in millions</i>	March 31, 2019			December 31, 2018		
	Level 1	Level 2	Total	Level 1	Level 2	Total
Financial Assets (Liabilities)						
Marketable securities	\$ 347	\$ —	\$ 347	\$ 319	\$ 1	\$ 320
Marketable securities valued using NAV	—	—	16	—	—	15
Total marketable securities	347	—	363	319	1	335
Derivatives	—	(5)	(5)	—	(10)	(10)

At March 31, 2019, the company had commodity forward contracts outstanding that hedge forecasted commodity purchases of 19 million pounds of copper and 7 million pounds of zinc. Gains or losses on the commodity forward contracts are recognized in product and service cost as the performance obligations on related contracts are satisfied.

The notional value of the company's foreign currency forward contracts at March 31, 2019 and December 31, 2018 was \$111 million and \$114 million, respectively. The portion of notional value designated as a cash flow hedge at March 31, 2019 was \$12 million. At December 31, 2018, no portion of the notional value was designated as a cash flow hedge.

The derivative fair values and related unrealized gains/losses at March 31, 2019 and December 31, 2018 were not material. There were no transfers of financial instruments between the three levels of the fair value hierarchy during the three months ended March 31, 2019.

The carrying value of cash and cash equivalents and commercial paper approximates fair value.

Long-term Debt

The estimated fair value of long-term debt was \$14.8 billion and \$14.3 billion as of March 31, 2019 and December 31, 2018, respectively. We calculated the fair value of long-term debt using Level 2 inputs, based on interest rates available for debt with terms and maturities similar to the company's existing debt arrangements. The carrying value of long-term debt was \$14.4 billion as of March 31, 2019 and December 31, 2018. The current portion of long-term debt is recorded in Other current liabilities in the unaudited condensed consolidated statements of financial position.

6. INVESTIGATIONS, CLAIMS AND LITIGATION
Litigation

On May 4, 2012, the company commenced an action, *Northrop Grumman Systems Corp. v. United States*, in the U.S. Court of Federal Claims. This lawsuit relates to an approximately \$875 million firm fixed-price contract awarded to the company in 2007 by the U.S. Postal Service (USPS) for the construction and delivery of flats sequencing systems (FSS) as part of the postal automation program. The FSS have been delivered. The company's lawsuit is based on various theories of liability. The complaint seeks approximately \$63 million for unpaid portions of the contract price, and approximately \$115 million based on the company's assertions that, through various acts and omissions over the life of the contract, the USPS adversely affected the cost and schedule of performance and materially altered the company's obligations under the contract. The United States responded to the company's

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complaint with an answer, denying most of the company's claims, and counterclaims seeking approximately \$410 million, less certain amounts outstanding under the contract. The principal counterclaim alleges that the company delayed its performance and caused damages to the USPS because USPS did not realize certain costs savings as early as it had expected. On April 2, 2013, the U.S. Department of Justice informed the company of a False Claims Act complaint relating to the FSS contract that was filed under seal by a relator in June 2011 in the U.S. District Court for the Eastern District of Virginia. On June 3, 2013, the United States filed a Notice informing the Court that the United States had decided not to intervene in this case. The relator alleged that the company violated the False Claims Act in a number of ways with respect to the FSS contract, alleged damage to the USPS in an amount of at least approximately \$179 million annually, alleged that he was improperly discharged in retaliation, and sought an unspecified partial refund of the contract purchase price, penalties, attorney's fees and other costs of suit. The relator later voluntarily dismissed his retaliation claim and reasserted it in a separate arbitration, which he also ultimately voluntarily dismissed. On September 5, 2014, the court granted the company's motion for summary judgment and ordered the relator's False Claims Act case be dismissed with prejudice. On December 19, 2014, the company filed a motion for partial summary judgment asking the court to dismiss the principal counterclaim referenced above. On June 29, 2015, the Court heard argument and denied that motion without prejudice to filing a later motion to dismiss. On February 16, 2018, both the company and the United States filed motions to dismiss many of the claims and counterclaims in whole or in part. The United States also filed a motion seeking to amend its answer and counterclaim, including to reduce its counterclaim to approximately \$193 million, which the court granted on June 11, 2018. On October 17, 2018, the court granted in part and denied in part the parties' motions to dismiss. On December 17, 2018, the court issued a Scheduling Order, proposed by the parties, providing for the parties to engage in mediation through March 1, 2019. After the government shutdown, the mediation was rescheduled for May 2019. The Scheduling Order provides for pretrial activities to resume, if and as necessary, with trial to commence on or about September 23, 2019. Although the ultimate outcome of these matters ("the FSS matters," collectively), including any possible loss, cannot be predicted or reasonably estimated at this time, the company intends vigorously to pursue and defend the FSS matters.

On August 8, 2013, the company received a court-appointed expert's report in litigation pending in the Second Federal Court of the Federal District in Brazil brought by the Brazilian Post and Telegraph Corporation (ECT), a Brazilian state-owned entity, against Solystic SAS (Solystic), a French subsidiary of the company, and two of its consortium partners. In this suit, commenced on December 17, 2004, and relatively inactive for some period of time, ECT alleges the consortium breached its contract with ECT and seeks damages of approximately R\$111 million (the equivalent of approximately \$28 million as of March 31, 2019), plus interest, inflation adjustments and attorneys' fees, as authorized by Brazilian law, which amounts could be significant over time. The original suit sought R\$89 million (the equivalent of approximately \$23 million as of March 31, 2019) in damages. In October 2013, ECT asserted an additional damage claim of R\$22 million (the equivalent of approximately \$6 million as of March 31, 2019). In its counterclaim, Solystic alleges ECT breached the contract by wrongfully refusing to accept the equipment Solystic had designed and built and seeks damages of approximately €31 million (the equivalent of approximately \$35 million as of March 31, 2019), plus interest, inflation adjustments and attorneys' fees, as authorized by Brazilian law. The Brazilian court retained an expert to consider certain issues pending before it. On August 8, 2013 and September 10, 2014, the company received reports from the expert, which contain some recommended findings relating to liability and the damages calculations put forth by ECT. Some of the expert's recommended findings were favorable to the company and others were favorable to ECT. In November 2014, the parties submitted comments on the expert's most recent report. On June 16, 2015, the court published a decision denying the parties' request to present oral testimony. In a decision dated November 13, 2018, the trial court ruled in ECT's favor on one of its claims against Solystic, and awarded damages of R\$41 million (the equivalent of approximately \$10 million as of March 31, 2019) against Solystic and its consortium partners, with that amount to be adjusted for inflation and interest from November 2004 through any appeal, in accordance with the Manual of Calculations of the Federal Justice, as well as attorneys' fees. On March 22, 2019, ECT appealed the trial court's decision to the intermediate court of appeals. Solystic filed its appeal on April 11, 2019. The parties are exploring possible resolution under a newly-established short term ECT dispute resolution program.

We are engaged in remediation activities relating to environmental conditions allegedly resulting from historic operations at the former United States Navy and Grumman facilities in Bethpage, New York. For over 20 years, we have worked closely with the United States Navy, the United States Environmental Protection Agency, the New York State Department of Environmental Conservation, the New York State Department of Health and other federal, state and local governmental authorities, to address legacy environmental conditions in Bethpage. We have incurred, and expect to continue to incur, as included in Note 7, substantial remediation costs related to these environmental conditions. The remediation standards or requirements to which we are subject are being reconsidered and may

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change and costs may increase materially. The State of New York has notified us that it intends to seek to impose additional remedial requirements and, among other things, is also evaluating natural resource damages. In addition, we are a party to various, and expect to become a party to additional, legal proceedings and disputes related to remediation and/or alleged environmental impacts in Bethpage, including with federal and state entities, local municipalities and water districts, insurance carriers and class action and individual plaintiffs alleging personal injury and property damage and seeking both monetary and non-monetary relief. These Bethpage matters could result in additional costs, fines, penalties, sanctions, compensatory or other damages (including natural resource damages), determinations on allocation, allowability and coverage, and non-monetary relief. We cannot at this time predict or reasonably estimate the potential cumulative outcomes or ranges of possible liability of these aggregate Bethpage matters.

On August 12, 2016, a putative class action complaint, naming Orbital ATK and two of its then-officers as defendants, Steven Knurr, et al. v. Orbital ATK, Inc., No. 16-cv-01031 (TSE-MSN), was filed in the United States District Court for the Eastern District of Virginia. The complaint asserts claims on behalf of purchasers of Orbital ATK securities for violations of Sections 10(b) and 20(a) of the Exchange Act and Rule 10b-5, allegedly arising out of false and misleading statements and the failure to disclose that: (i) Orbital ATK lacked effective control over financial reporting; and (ii) as a result, it failed to record an anticipated loss on a long-term contract with the U.S. Army to manufacture and supply small caliber ammunition at the U.S. Army's Lake City Army Ammunition Plant. On April 24, 2017 and October 10, 2017, the plaintiffs filed amended complaints naming additional defendants and asserting claims for alleged violations of additional sections of the Exchange Act and alleged false and misleading statements in Orbital ATK's Form S-4 filed in connection with the Orbital-ATK Merger. The complaint seeks damages, reasonable costs and expenses at trial, including counsel and expert fees, and such other relief as deemed appropriate by the Court. On August 8, 2018, plaintiffs sought leave to file an additional amended complaint; defendants filed an opposition. The parties engaged in mediation on November 6, 2018. On December 27, 2018, the parties reached a preliminary agreement to resolve the litigation for \$108 million subject to agreement on additional terms and to court approval. On February 22, 2019, the court preliminarily approved the parties' proposed settlement and set a schedule for final settlement proceedings, including a final approval settlement hearing on June 7, 2019. The company is also negotiating with and pursuing coverage litigation against various of its insurance carriers. The company intends vigorously to defend itself in connection with these matters. We currently expect related contingencies will continue to be included in the company's measurement period adjustments of the fair value of assets acquired and liabilities assumed in the Merger (see Note 2).

The SEC is investigating Orbital ATK's historical accounting practices relating to the restatement of Orbital's unaudited condensed consolidated financial statements for the quarterly periods ended July 5, 2015 and October 4, 2015 described in the Transition Report on Form 10-K for the nine-month period ending December 31, 2015 previously filed on March 15, 2016. The SEC is also investigating matters relating to a voluntary disclosure Orbital ATK made concerning the restatement described in Orbital ATK's Form 10-K/A for the nine-month period ending December 31, 2015 filed on February 24, 2017. The ultimate outcome of these matters, including any possible loss, cannot be predicted or reasonably estimated at this time and the company intends to continue to cooperate with the SEC.

The company is a party to various other investigations, lawsuits, arbitration, claims, enforcement actions and other legal proceedings, including government investigations and claims, that arise in the ordinary course of our business. The nature of legal proceedings is such that we cannot assure the outcome of any particular matter. However, based on information available to the company to date, the company does not believe that the outcome of any of these other matters pending against the company is likely to have a material adverse effect on the company's unaudited condensed consolidated financial position as of March 31, 2019, or its annual results of operations and/or cash flows.

7. COMMITMENTS AND CONTINGENCIES

U.S. Government Cost Claims

From time to time, the company is advised of claims by the U.S. government concerning certain potential disallowed costs, plus, at times, penalties and interest. When such findings are presented, the company and U.S. government representatives engage in discussions to enable the company to evaluate the merits of these claims, as well as to assess the amounts being claimed. Where appropriate, provisions are made to reflect the company's estimated exposure for such potential disallowed costs. Such provisions are reviewed periodically using the most recent information available. The company believes it has adequately reserved for disputed amounts that are probable and reasonably estimable, and that the outcome of any such matters would not have a material adverse

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effect on its unaudited condensed consolidated financial position as of March 31, 2019, or its annual results of operations and/or cash flows.

Environmental Matters

The table below summarizes management's estimate of the range of reasonably possible future costs for environmental remediation, the amount accrued within that range, and the deferred costs expected to be recoverable through overhead charges on U.S. government contracts as of March 31, 2019 and December 31, 2018:

<i>\$ in millions</i>	Range of Reasonably Possible Future Costs ⁽¹⁾	Accrued Costs ⁽²⁾	Deferred Costs ⁽³⁾
March 31, 2019	\$460 - \$836	\$ 473	\$ 353
December 31, 2018	447 - 835	461	343

⁽¹⁾ Estimated remediation costs are not discounted to present value. The range of reasonably possible future costs does not take into consideration amounts expected to be recoverable through overhead charges on U.S. government contracts.

⁽²⁾ As of March 31, 2019, \$172 million is recorded in Other current liabilities and \$301 million is recorded in Other non-current liabilities.

⁽³⁾ As of March 31, 2019, \$139 million is deferred in Prepaid expenses and other current assets and \$214 million is deferred in Other non-current assets.

Although management cannot predict whether new information gained as our environmental remediation projects progress, or as changes in facts and circumstances occur, will materially affect the estimated liability accrued, except with respect to Bethpage, we do not anticipate that future remediation expenditures associated with our currently identified projects will have a material adverse effect on the company's unaudited condensed consolidated financial position as of March 31, 2019, or its annual results of operations and/or cash flows. With respect to Bethpage, as described in Note 6, we cannot at this time estimate the range of reasonably possible additional future costs that could result from potential changes to remediation standards or requirements to which we are subject.

Financial Arrangements

In the ordinary course of business, the company uses standby letters of credit and guarantees issued by commercial banks and surety bonds issued principally by insurance companies to guarantee the performance on certain obligations. At March 31, 2019, there were \$493 million of stand-by letters of credit and guarantees and \$200 million of surety bonds outstanding.

Commercial Paper

The company maintains a commercial paper program that serves as a source of short-term financing with capacity to issue unsecured commercial paper notes up to \$2.0 billion. At March 31, 2019, there were \$1.0 billion of outstanding short-term commercial paper borrowings at a weighted-average interest rate of 3.04 percent that have original maturities of three months or less from the date of issuance. The outstanding balance of commercial paper borrowings is recorded in Other current liabilities in the unaudited condensed consolidated statements of financial position.

Credit Facilities

The company maintains a five-year senior unsecured credit facility in an aggregate principal amount of \$2.0 billion (the "2018 Credit Agreement") that matures in August 2023. At March 31, 2019, there was no balance outstanding under this facility; however, the outstanding balance of commercial paper borrowings reduces the amount available for borrowing under the 2018 Credit Agreement.

In December 2016, a subsidiary of the company entered into a two-year credit facility, with two additional one-year option periods, in an aggregate principal amount of £120 million (the equivalent of approximately \$156 million as of March 31, 2019) (the "2016 Credit Agreement"). The company exercised the second option to extend the maturity to December 2020. The 2016 Credit Agreement is guaranteed by the company. At March 31, 2019, there was £70 million (the equivalent of approximately \$91 million) outstanding under this facility, which bears interest at a rate of LIBOR plus 1.10 percent. All of the borrowings outstanding under this facility mature less than one year from the date of issuance, but may be renewed under the terms of the facility. Based on our intent and ability to refinance the obligations on a long-term basis, a large majority of the borrowings are classified as non-current.

At March 31, 2019, the company was in compliance with all covenants under its credit agreements.

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8. RETIREMENT BENEFITS

The cost to the company of its retirement plans is shown in the following table:

<i>\$ in millions</i>	Three Months Ended March 31			
	Pension Benefits		OPB	
	2019	2018	2019	2018
Components of net periodic benefit cost				
Service cost	\$ 92	\$ 99	\$ 4	\$ 5
Interest cost	340	290	20	19
Expected return on plan assets	(525)	(529)	(23)	(25)
Amortization of prior service credit	(15)	(15)	(1)	(5)
Net periodic benefit cost (benefit)	\$ (108)	\$ (155)	\$ —	\$ (6)

Employer Contributions

The company sponsors defined benefit pension and OPB plans, as well as defined contribution plans. We fund our defined benefit pension plans annually in a manner consistent with the Employee Retirement Income Security Act of 1974, as amended by the Pension Protection Act of 2006.

Contributions made by the company to its retirement plans are as follows:

<i>\$ in millions</i>	Three Months Ended March 31	
	2019	2018
Defined benefit pension plans	\$ 23	\$ 22
OPB plans	12	11
Defined contribution plans	191	104

9. STOCK COMPENSATION PLANS AND OTHER COMPENSATION ARRANGEMENTS
Stock Awards

The following table presents the number of restricted stock rights (RSRs) and restricted performance stock rights (RPSRs) granted to employees under the company's long-term incentive stock plan and the grant date aggregate fair value of those stock awards for the periods presented:

<i>in millions</i>	Three Months Ended March 31	
	2019	2018
RSRs granted	0.1	0.1
RPSRs granted	0.2	0.2
Grant date aggregate fair value	\$ 91	\$ 87

RSRs typically vest on the third anniversary of the grant date, while RPSRs generally vest and pay out based on the achievement of financial metrics over a three-year period.

NORTHROP GRUMMAN CORPORATION
Cash Awards

The following table presents the minimum and maximum aggregate payout amounts related to cash units (CUs) and cash performance units (CPUs) granted to employees in the periods presented:

<i>\$ in millions</i>	Three Months Ended March 31	
	2019	2018
Minimum aggregate payout amount	\$ 36	\$ 35
Maximum aggregate payout amount	203	196

CUs typically vest and settle in cash on the third anniversary of the grant date, while CPUs generally vest and pay out in cash based on the achievement of financial metrics over a three-year period.

10. LEASES

As described in Note 1, effective January 1, 2019, we adopted ASC 842 using the optional transition method. In accordance with the optional transition method, we did not recast the prior period unaudited condensed consolidated financial statements and all prior period amounts and disclosures are presented under ASC 840. Finance leases are not material to our unaudited condensed consolidated financial statements and are therefore not included in the following disclosures.

Total Lease Cost

Total lease cost is included in Product and Service costs and General and administrative expenses in the unaudited condensed consolidated statement of earnings and comprehensive income and is recorded net of immaterial sublease income. Total lease cost is comprised of the following:

<i>\$ in millions</i>	Three Months Ended March 31, 2019	
Operating lease cost	\$	82
Variable lease cost		2
Short-term lease cost		17
Total lease cost	\$	101

Supplemental Balance Sheet Information

Supplemental operating lease balance sheet information consists of the following:

<i>\$ in millions</i>	March 31, 2019	
Operating lease right-of-use assets	\$	1,283
Other current liabilities		229
Operating lease liabilities		1,098
Total operating lease liabilities	\$	1,327

Other Supplemental Information

Other supplemental operating lease information consists of the following:

<i>\$ in millions</i>	Three Months Ended March 31, 2019	
Cash paid for amounts included in the measurement of operating lease liabilities	\$	84
Right-of-use assets obtained in exchange for new lease liabilities		54
Weighted average remaining lease term		11.0 years
Weighted average discount rate		4.0%

NORTHROP GRUMMAN CORPORATION**Maturities of Lease Liabilities**

Maturities of operating lease liabilities as of March 31, 2019 were as follows:

\$ in millions

Year Ending December 31		
2019 ⁽¹⁾	\$	208
2020		260
2021		207
2022		170
2023		134
Thereafter		737
Total lease payments		1,716
Less: imputed interest		(389)
Present value of operating lease liabilities	\$	1,327

⁽¹⁾ Excludes the three months ended March 31, 2019.

As of March 31, 2019, we have a rental commitment of \$226 million for a real estate lease that has not yet commenced. This operating lease is expected to commence in the fourth quarter of 2019 with a lease term of approximately 17 years.

Rental expense for operating leases classified under ASC 840 for the three months ended March 31, 2018 was \$92 million, net of immaterial amounts of sublease income. As of December 31, 2018, future minimum lease payments under long-term non-cancelable operating leases as classified under ASC 840 were as follows:

\$ in millions

Year Ending December 31		
2019	\$	312
2020		270
2021		221
2022		186
2023		152
Thereafter		939
Total minimum lease payments	\$	2,080

NORTHROP GRUMMAN CORPORATION**11. SEGMENT INFORMATION**

The company is aligned in four operating sectors, which also comprise our reportable segments: Aerospace Systems, Innovation Systems, Mission Systems and Technology Services.

The following table presents sales and operating income by segment:

<i>\$ in millions</i>	Three Months Ended March 31	
	2019	2018
Sales		
Aerospace Systems	\$ 3,496	\$ 3,280
Innovation Systems	1,438	—
Mission Systems	2,886	2,883
Technology Services	977	1,144
Intersegment eliminations	(608)	(572)
Total sales	8,189	6,735
Operating income		
Aerospace Systems	382	341
Innovation Systems	167	—
Mission Systems	383	371
Technology Services	102	122
Intersegment eliminations	(67)	(72)
Total segment operating income	967	762
Net FAS (service)/CAS pension adjustment	108	127
Unallocated corporate expense	(139)	(41)
Total operating income	\$ 936	\$ 848

Net FAS (Service)/CAS Pension Adjustment

For financial statement purposes, we account for our employee pension plans in accordance with FAS. However, the cost of these plans is charged to our contracts in accordance with the Federal Acquisition Regulation (FAR) and the related U.S. Government Cost Accounting Standards (CAS). The net FAS (service)/CAS pension adjustment reflects the difference between CAS pension expense included as cost in segment operating income and the service cost component of FAS expense included in total operating income.

Unallocated Corporate Expense

Unallocated corporate expense includes the portion of corporate costs not considered allowable or allocable under applicable CAS or FAR, and therefore not allocated to the segments, such as a portion of management and administration, legal, environmental, compensation, retiree benefits and other corporate unallowable costs. Unallocated corporate expense also includes costs not considered part of management's evaluation of segment operating performance, such as amortization of purchased intangible assets and the additional depreciation expense related to the step-up in fair value of property, plant and equipment acquired through business combinations.

NORTHROP GRUMMAN CORPORATION
Disaggregation of Revenue
Sales by Customer Type

<i>\$ in millions</i>	Three Months Ended March 31			
	2019		2018	
	\$	% ⁽³⁾	\$	% ⁽³⁾
Aerospace Systems				
U.S. government ⁽¹⁾	\$ 3,022	86%	\$ 2,908	89%
International ⁽²⁾	394	11%	271	8%
Other customers	34	1%	42	1%
Intersegment sales	46	2%	59	2%
Aerospace Systems sales	3,496	100%	3,280	100%
Innovation Systems				
U.S. government ⁽¹⁾	1,015	71%	—	—
International ⁽²⁾	247	17%	—	—
Other customers	114	8%	—	—
Intersegment sales	62	4%	—	—
Innovation Systems sales	1,438	100%	—	—
Mission Systems				
U.S. government ⁽¹⁾	2,167	75%	2,190	76%
International ⁽²⁾	367	13%	379	13%
Other customers	34	1%	30	1%
Intersegment sales	318	11%	284	10%
Mission Systems sales	2,886	100%	2,883	100%
Technology Services				
U.S. government ⁽¹⁾	553	57%	602	53%
International ⁽²⁾	209	21%	220	19%
Other customers	33	3%	93	8%
Intersegment sales	182	19%	229	20%
Technology Services sales	977	100%	1,144	100%
Total				
U.S. government ⁽¹⁾	6,757	83%	5,700	85%
International ⁽²⁾	1,217	15%	870	13%
Other customers	215	2%	165	2%
Total Sales	\$ 8,189	100%	\$ 6,735	100%

⁽¹⁾ Sales to the U.S. government include sales from contracts for which we are the prime contractor, as well as those for which we are a subcontractor and the ultimate customer is the U.S. government. Each of the company's segments derives substantial revenue from the U.S. government.

⁽²⁾ International sales include sales from contracts for which we are the prime contractor, as well as those for which we are a subcontractor and the ultimate customer is an international customer. These sales include foreign military sales contracted through the U.S. government.

⁽³⁾ Percentages calculated based on total segment sales.

NORTHROP GRUMMAN CORPORATION
Sales by Contract Type

<i>\$ in millions</i>	Three Months Ended March 31			
	2019		2018	
	\$	% ⁽¹⁾	\$	% ⁽¹⁾
Aerospace Systems				
Cost-type	\$ 2,002	58%	\$ 1,902	59%
Fixed-price	1,448	42%	1,319	41%
Intersegment sales	46		59	
Aerospace Systems sales	3,496		3,280	
Innovation Systems				
Cost-type	408	30%	—	—
Fixed-price	968	70%	—	—
Intersegment sales	62		—	
Innovation Systems sales	1,438		—	
Mission Systems				
Cost-type	1,274	50%	1,279	49%
Fixed-price	1,294	50%	1,320	51%
Intersegment sales	318		284	
Mission Systems sales	2,886		2,883	
Technology Services				
Cost-type	392	49%	437	48%
Fixed-price	403	51%	478	52%
Intersegment sales	182		229	
Technology Services sales	977		1,144	
Total				
Cost-type	4,076	50%	3,618	54%
Fixed-price	4,113	50%	3,117	46%
Total Sales	\$ 8,189		\$ 6,735	

⁽¹⁾ Percentages calculated based on external customer sales.

NORTHROP GRUMMAN CORPORATION
Sales by Geographic Region

<i>\$ in millions</i>	Three Months Ended March 31			
	2019		2018	
	\$	% ⁽²⁾	\$	% ⁽²⁾
Aerospace Systems				
United States	\$ 3,056	89%	\$ 2,950	92%
Asia/Pacific	239	7%	129	4%
All other ⁽¹⁾	155	4%	142	4%
Intersegment sales	46		59	
Aerospace Systems sales	3,496		3,280	
Innovation Systems				
United States	1,129	82%	—	—
Asia/Pacific	45	3%	—	—
All other ⁽¹⁾	202	15%	—	—
Intersegment sales	62		—	
Innovation Systems sales	1,438		—	
Mission Systems				
United States	2,201	86%	2,220	85%
Asia/Pacific	146	5%	153	6%
All other ⁽¹⁾	221	9%	226	9%
Intersegment sales	318		284	
Mission Systems sales	2,886		2,883	
Technology Services				
United States	586	74%	695	76%
Asia/Pacific	38	4%	32	3%
All other ⁽¹⁾	171	22%	188	21%
Intersegment sales	182		229	
Technology Services sales	977		1,144	
Total				
United States	6,972	85%	5,865	87%
Asia/Pacific	468	6%	314	5%
All other ⁽¹⁾	749	9%	556	8%
Total Sales	\$ 8,189		\$ 6,735	

⁽¹⁾ All other is principally comprised of Europe and the Middle East.

⁽²⁾ Percentages calculated based on external customer sales.

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Shareholders of
Northrop Grumman Corporation
Falls Church, Virginia

Results of Review of Interim Financial Information

We have reviewed the accompanying condensed consolidated statement of financial position of Northrop Grumman Corporation and subsidiaries (the “Company”) as of March 31, 2019, and the related condensed consolidated statements of earnings and comprehensive income, cash flows and changes in shareholders’ equity for the three-month periods ended March 31, 2019 and 2018, and the related notes (collectively referred to as the “interim financial information”). Based on our review, we are not aware of any material modifications that should be made to the accompanying interim financial information for it to be in conformity with accounting principles generally accepted in the United States of America.

We have previously audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the consolidated statement of financial position of Northrop Grumman Corporation and subsidiaries as of December 31, 2018, and the related consolidated statements of earnings and comprehensive income, changes in shareholders’ equity, and cash flows for the year then ended (not presented herein); and in our report dated January 30, 2019, we expressed an unqualified opinion on those consolidated financial statements, which included an explanatory paragraph regarding the Company’s change in its method of accounting for recognizing pension and other postretirement benefit plans actuarial gains and losses and the manner in which it accounts for revenue from contracts with customers. In our opinion, the accompanying condensed consolidated statement of financial position as of December 31, 2018, is consistent, in all material respects, with the audited consolidated financial statements from which it has been derived.

Basis for Review Results

This interim financial information is the responsibility of the Company’s management. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our reviews in accordance with standards of the PCAOB. A review of interim financial information consists principally of applying analytical procedures and making inquiries of persons responsible for financial and accounting matters. It is substantially less in scope than an audit conducted in accordance with the standards of the PCAOB, the objective of which is the expression of an opinion regarding the financial statements taken as a whole. Accordingly, we do not express such an opinion.

/s/ Deloitte & Touche LLP
McLean, Virginia
April 23, 2019

NORTHROP GRUMMAN CORPORATION**Item 2. Management’s Discussion and Analysis of Financial Condition and Results of Operations****OVERVIEW**

Northrop Grumman Corporation (herein referred to as “Northrop Grumman,” the “company,” “we,” “us,” or “our”) is a leading global security company. We offer a broad portfolio of capabilities and technologies that enable us to deliver innovative platforms, systems and solutions for applications that range from undersea to outer space and into cyberspace. We provide capabilities in autonomous systems; cyber; command, control, communications and computers, intelligence, surveillance and reconnaissance (C4ISR); space; strike; and logistics and modernization. We participate in many high-priority defense and government programs in the United States (U.S.) and abroad. We conduct most of our business with the U.S. government, principally the Department of Defense (DoD) and intelligence community. We also conduct business with foreign, state and local governments, as well as commercial customers.

The following discussion should be read along with the financial statements included in this Form 10-Q, as well as our 2018 Annual Report on Form 10-K, which provides additional information on our business and the environment in which we operate and our operating results.

Acquisition of Orbital ATK

On June 6, 2018 (the “Merger date”), the company completed its previously announced acquisition of Orbital ATK, Inc. (“Orbital ATK”) (the “Merger”). On the Merger date, Orbital ATK became a wholly-owned subsidiary of the company and its name was changed to Northrop Grumman Innovation Systems, Inc., which we established as a new, fourth business sector (“Innovation Systems”). The operating results of Innovation Systems subsequent to the Merger date have been included in the company’s unaudited condensed consolidated results of operations. See Note 2 to the financial statements for further information regarding the acquisition of Orbital ATK.

U.S. Political and Economic Environment

Since the filing of our 2018 Annual Report on Form 10-K, full year appropriations for FY 2019 have been enacted for all remaining U.S. government agencies and the President has proposed a FY 2020 budget requesting \$750 billion for national security, which will be the subject of debate in Congress. The President’s budget request addresses various capabilities highlighted in the U.S. National Security Strategy, the National Defense Strategy and the Missile Defense Review. We believe our capabilities in space, missiles, missile defense, hypersonics, counter-hypersonics, survivability and cyber will allow us to continue to profitably grow our business in support of our customers’ needs.

CONSOLIDATED OPERATING RESULTS

Selected financial highlights are presented in the table below:

<i>\$ in millions, except per share amounts</i>	Three Months Ended March 31		% Change
	2019	2018	
Sales	\$ 8,189	\$ 6,735	22%
Operating costs and expenses	7,253	5,887	23%
<i>Operating costs and expenses as a % of sales</i>	<i>88.6%</i>	<i>87.4%</i>	
Operating income	936	848	10%
<i>Operating margin rate</i>	<i>11.4%</i>	<i>12.6%</i>	
Federal and foreign income tax expense	171	159	8%
<i>Effective income tax rate</i>	<i>16.5%</i>	<i>15.9%</i>	
Net earnings	863	840	3%
Diluted earnings per share	\$ 5.06	\$ 4.79	6%

Sales

First quarter 2019 sales increased \$1.5 billion primarily due to the addition of \$1.4 billion of sales from Innovation Systems and higher sales at Aerospace Systems, partially offset by lower sales at Technology Services.

See “Segment Operating Results” below for further information by segment and “Product and Service Analysis” for product and service detail. See Note 11 to the financial statements for information regarding the company’s sales by customer type, contract type and geographic region for each of our segments.

NORTHROP GRUMMAN CORPORATION**Operating Income and Margin Rate**

First quarter 2019 operating income increased \$88 million, or 10 percent, primarily due to higher segment operating income, including \$167 million of operating income from Innovation Systems, partially offset by a \$98 million increase in unallocated corporate expense due to intangible asset amortization and PP&E step-up depreciation. First quarter 2019 operating margin rate declined to 11.4 percent from 12.6 percent due to the increase in unallocated corporate expense, partially offset by improved segment performance.

General and administrative (G&A) costs as a percentage of sales for the first quarter of 2019 decreased to 9.3 percent from 10.6 percent primarily due to cost management and the addition of Innovation Systems at a lower G&A rate.

For information regarding product and service operating costs and expenses, see “Product and Service Analysis” below.

Federal and Foreign Income Taxes

The effective tax rate for the first quarter of 2019 increased to 16.5 percent from 15.9 percent in the first quarter of 2018. See Note 4 to the financial statements for additional information.

Net Earnings

Net earnings for the first quarter of 2019 increased \$23 million primarily due to the increase in operating income, partially offset by a \$54 million decrease in our FAS (non-service) pension benefit and the higher effective tax rate.

Diluted Earnings Per Share

Diluted earnings per share for the first quarter of 2019 increased \$0.27, or 6 percent, reflecting a 3 percent increase in net earnings and a 3 percent reduction in weighted-average diluted shares outstanding.

SEGMENT OPERATING RESULTS**Basis of Presentation**

The company is aligned in four operating sectors, which also comprise our reportable segments: Aerospace Systems, Innovation Systems, Mission Systems and Technology Services. As described above, on the effective date of the Merger, we established Innovation Systems as a new, fourth business sector. The segment operating results below include sales and operating income for Innovation Systems subsequent to the Merger date.

We present our sectors in the following business areas, which are reported in a manner reflecting core capabilities:

Aerospace Systems	Innovation Systems	Mission Systems	Technology Services
Autonomous Systems	Defense Systems	Advanced Capabilities	Global Logistics and Modernization
Manned Aircraft	Flight Systems	Cyber and ISR	Global Services
Space	Space Systems	Sensors and Processing	

Effective January 1, 2019, the former Advanced Defense Services and System Modernization and Services business areas of Technology Services were merged to create the Global Services business area. This change had no impact on the segment operating results of Technology Services as a whole.

This section discusses segment sales, operating income and operating margin rates. In evaluating segment operating performance, we look primarily at changes in sales and operating income. Where applicable, significant fluctuations in operating performance attributable to individual contracts or programs, or changes in a specific cost element across multiple contracts, are described in our analysis. Based on this approach and the nature of our operations, the discussion of results of operations below first focuses on our four segments before distinguishing between products and services. Changes in sales are generally described in terms of volume, while changes in margin rates are generally described in terms of performance and/or contract mix. For purposes of this discussion, volume generally refers to increases or decreases in sales or cost from production/service activity levels and performance generally refers to non-volume related changes in profitability. Contract mix generally refers to changes in the ratio of contract type and/or lifecycle (e.g., cost-type, fixed-price, development, production, and/or sustainment).

NORTHROP GRUMMAN CORPORATION
Segment Operating Income and Margin Rate

Segment operating income, as reconciled in the table below, and segment operating margin rate (segment operating income divided by sales) are non-GAAP (accounting principles generally accepted in the United States of America) measures that reflect total earnings from our four segments, including allocated pension expense recognized under the Federal Acquisition Regulation (FAR) and the related U.S. Government Cost Accounting Standards (CAS), and excluding FAS pension expense and unallocated corporate expenses (certain corporate-level expenses, which are not considered allowable or allocable under applicable CAS or FAR, and costs not considered part of management's evaluation of segment operating performance). These non-GAAP measures may be useful to investors and other users of our financial statements as supplemental measures in evaluating the financial performance and operational trends of our sectors. These measures may not be defined and calculated by other companies in the same manner and should not be considered in isolation or as alternatives to operating results presented in accordance with GAAP.

<i>\$ in millions</i>	Three Months Ended March 31		%
	2019	2018	Change
Segment operating income	\$ 967	\$ 762	27 %
Segment operating margin rate	11.8%	11.3%	
CAS pension expense	200	226	(12)%
Less: FAS (service) pension expense	(92)	(99)	(7)%
Net FAS (service)/CAS pension adjustment	108	127	(15)%
Intangible asset amortization and PP&E step-up depreciation	(96)	—	NM
Other unallocated corporate expense	(43)	(41)	5 %
Unallocated corporate expense	(139)	(41)	239 %
Operating income	\$ 936	\$ 848	10 %

First quarter 2019 segment operating income increased \$205 million, or 27 percent, primarily due to the addition of \$167 million of operating income from Innovation Systems and higher operating income at Aerospace Systems. Segment operating margin rate increased due to improved performance at Aerospace Systems and Mission Systems.

Net FAS (service)/CAS Pension Adjustment

The decrease in our net FAS (service)/CAS pension adjustment during the first quarter of 2019 is primarily due to lower CAS expense largely as a result of changes in actuarial assumptions as of December 31, 2018, partially offset by increased CAS expense due to the addition of Innovation Systems.

Unallocated Corporate Expense

The increase in unallocated corporate expense during the first quarter of 2019 is primarily due to \$96 million of intangible asset amortization and PP&E step-up depreciation.

Net Estimate-at-Completion (EAC) Adjustments - We record changes in estimated contract earnings at completion (net EAC adjustments) using the cumulative catch-up method of accounting. Net EAC adjustments can have a significant effect on reported sales and operating income and the aggregate amounts are presented in the table below:

<i>\$ in millions</i>	Three Months Ended March 31	
	2019	2018
Favorable EAC adjustments	\$ 235	\$ 207
Unfavorable EAC adjustments	(97)	(91)
Net EAC adjustments	\$ 138	\$ 116

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Net EAC adjustments by segment are presented in the table below:

<i>\$ in millions</i>	Three Months Ended March 31	
	2019	2018
Aerospace Systems	\$ 50	\$ 54
Innovation Systems ⁽¹⁾	50	—
Mission Systems	30	45
Technology Services	11	22
Eliminations	(3)	(5)
Net EAC adjustments	\$ 138	\$ 116

⁽¹⁾ Amounts reflect EAC adjustments after the percent complete on Innovation Systems contracts was reset to zero as of the Merger date.

For purposes of the discussion in the remainder of this Segment Operating Results section, references to operating income and operating margin rate reflect segment operating income and segment operating margin rate, respectively.

AEROSPACE SYSTEMS

<i>\$ in millions</i>	Three Months Ended March 31		% Change
	2019	2018	
Sales	\$ 3,496	\$ 3,280	7%
Operating income	382	341	12%
Operating margin rate	10.9%	10.4%	

Sales

First quarter 2019 sales increased \$216 million, or 7 percent, due to higher sales in all three business areas. Manned Aircraft sales reflect higher volume on restricted, F-35 and E-2D programs. Autonomous Systems sales increased due to higher volume on several programs, including Triton, partially offset by lower NATO AGS volume as that program nears completion. Space sales reflect higher volume on a secure communications satellite program.

Operating Income

First quarter 2019 operating income increased \$41 million, or 12 percent, due to higher sales and a higher operating margin rate. Operating margin rate increased to 10.9 percent from 10.4 percent principally due to improved performance on Manned Aircraft and Autonomous Systems programs, partially offset by the timing of risk retirements and changes in contract mix on Space programs.

INNOVATION SYSTEMS

<i>\$ in millions</i>	Three Months Ended March 31		% Change
	2019	2018	
Sales	\$ 1,438	—	—
Operating income	167	—	—
Operating margin rate	11.6%	—	

The sales and operating income above reflect the operating results of Innovation Systems subsequent to the Merger date. In our comparative discussion below, we reference pro forma sales prepared in accordance with Article 11 of Regulation S-X and computed as if Orbital ATK had been included in our results in the year prior to the Merger, or as of January 1, 2017. Refer to Note 2 to the financial statements for additional supplemental consolidated pro forma financial information. This pro forma financial information should not be considered indicative of the results that would have actually occurred if the Merger had been consummated on January 1, 2017, nor are they indicative of future results.

Sales

First quarter 2019 sales increased \$126 million, or 10 percent, compared with pro forma sales of \$1.3 billion in the first quarter of 2018, due to higher sales in all three business areas. Space Systems sales reflect higher volume on national security satellite systems. Defense Systems sales increased due to higher volume on tactical missiles and subsystems, including the Advanced Anti-Radiation Guided Missile (AARGM) program, and precision munitions

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and armament products, partially offset by lower sales on ammunition products. Flight Systems sales reflect higher volume on launch vehicles, principally Ground-based Midcourse Defense, and aerospace structures.

Operating Income

First quarter 2019 operating income totaled \$167 million and operating margin rate was 11.6 percent. First quarter results benefited from the timing of favorable negotiations on certain commercial contracts.

MISSION SYSTEMS

<i>\$ in millions</i>	Three Months Ended March 31		% Change
	2019	2018	
Sales	\$ 2,886	\$ 2,883	—%
Operating income	383	371	3%
Operating margin rate	13.3%	12.9%	

Sales

First quarter 2019 sales were comparable to the first quarter of 2018, and reflect higher Cyber and ISR volume, offset by lower Advanced Capabilities and Sensors and Processing volume. Cyber and ISR sales increased principally due to higher volume on space payloads and mission programs. Advanced Capabilities sales decreased due to lower missile defense volume, primarily related to the JRDC program, which completed during the first quarter of 2018, partially offset by higher volume on advanced technology restricted programs. Sensors and Processing sales reflect lower volume on targeting programs and communications programs, partially offset by higher restricted volume.

Operating Income

First quarter 2019 operating income increased \$12 million, or 3 percent, due to a higher operating margin rate. Operating margin rate increased to 13.3 percent from 12.9 percent, primarily due to improved performance on Advanced Capabilities and Sensors and Processing programs, partially offset by lower performance on Cyber and ISR programs.

TECHNOLOGY SERVICES

<i>\$ in millions</i>	Three Months Ended March 31		% Change
	2019	2018	
Sales	\$ 977	\$ 1,144	(15)%
Operating income	102	122	(16)%
Operating margin rate	10.4%	10.7%	

Sales

First quarter 2019 sales declined \$167 million, or 15 percent, primarily due to program completions across the sector. Global Services sales declined principally due to the completion of a state and local services contract and certain defense services contracts, largely the JRDC program. Global Logistics and Modernization sales declined primarily due to the completion of a manned aircraft sustainment program, KC-10, partially offset by sales growth on strategic and electronic systems sustainment programs.

Operating Income

First quarter 2019 operating income declined \$20 million, or 16 percent, primarily due to lower sales. Operating margin rate decreased to 10.4 percent from 10.7 percent.

NORTHROP GRUMMAN CORPORATION
PRODUCT AND SERVICE ANALYSIS

The following table presents product and service sales and operating costs and expenses by segment:

<i>\$ in millions</i>	Three Months Ended March 31			
	2019		2018	
Segment Information:	Sales	Operating Costs and Expenses	Sales	Operating Costs and Expenses
Aerospace Systems				
Product	\$ 2,974	\$ 2,652	\$ 2,751	\$ 2,465
Service	522	462	529	474
Innovation Systems				
Product	1,240	1,096	—	—
Service	198	175	—	—
Mission Systems				
Product	1,784	1,523	1,719	1,476
Service	1,102	980	1,164	1,036
Technology Services				
Product	123	116	106	97
Service	854	759	1,038	925
Segment Totals				
Total Product	\$ 6,121	\$ 5,387	\$ 4,576	\$ 4,038
Total Service	2,676	2,376	2,731	2,435
Intersegment eliminations	(608)	(541)	(572)	(500)
Total segment⁽¹⁾	\$ 8,189	\$ 7,222	\$ 6,735	\$ 5,973

⁽¹⁾ A reconciliation of segment operating income to total operating income is included in “Segment Operating Results.”

Product Sales and Costs

First quarter 2019 product sales increased \$1.5 billion, or 34 percent. The increase was primarily due to the addition of \$1.2 billion of product sales from Innovation Systems and higher restricted and F-35 volume at Aerospace Systems.

First quarter 2019 product costs increased \$1.3 billion, or 33 percent, consistent with the higher product sales described above and reflects higher product margin rates at Mission Systems and Aerospace Systems.

Service Sales and Costs

First quarter 2019 service sales decreased \$55 million, or 2 percent. The decrease was primarily driven by lower service sales at Technology Services and Mission Systems principally due to several program completions, partially offset by the addition of \$198 million of service sales from Innovation Systems.

First quarter 2019 service costs decreased \$59 million, or 2 percent, consistent with the lower service sales described above and reflects higher service margin rates at Aerospace Systems.

BACKLOG

Backlog represents the future sales we expect to recognize on firm orders received by the company and is equivalent to the company’s remaining performance obligations at the end of each period. It comprises both funded backlog (firm orders for which funding is authorized and appropriated) and unfunded backlog. Unexercised contract options and indefinite delivery indefinite quantity (IDIQ) contracts are not included in backlog until the time the option or IDIQ task order is exercised or awarded. Backlog is converted into sales as costs are incurred or deliveries are made.

Backlog consisted of the following as of March 31, 2019 and December 31, 2018:

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<i>\$ in millions</i>	March 31, 2019			2018	% Change in 2019
	Funded	Unfunded	Total Backlog	Total Backlog	
Aerospace Systems	\$ 12,269	\$ 15,841	\$ 28,110	\$ 26,440	6 %
Innovation Systems	5,623	2,478	8,101	8,207	(1)%
Mission Systems	11,073	6,767	17,840	15,408	16 %
Technology Services	2,797	487	3,284	3,445	(5)%
Total backlog	\$ 31,762	\$ 25,573	\$ 57,335	\$ 53,500	7 %

New Awards

First quarter 2019 net awards totaled \$12.3 billion. Significant new awards include \$3.2 billion for restricted space, \$1.0 billion for submarine subsystems production, \$805 million for F-35, \$633 million for IBCS - Poland and \$323 million for AARGM-ER.

LIQUIDITY AND CAPITAL RESOURCES

We endeavor to ensure the most efficient conversion of operating income into cash for deployment in our business and to maximize shareholder value through cash deployment activities. In addition to our cash position, we use various financial measures to assist in capital deployment decision-making, including cash provided by operating activities and free cash flow, a non-GAAP measure described in more detail below.

Cash and cash equivalents and cash generated from operating activities, supplemented by borrowings under credit facilities, commercial paper and/or in the capital markets, if needed, are expected to be sufficient to fund our operations for at least the next 12 months.

Operating Cash Flow

The table below summarizes key components of cash flow used in operating activities:

<i>\$ in millions</i>	Three Months Ended March 31		% Change
	2019	2018	
Net earnings	\$ 863	\$ 840	3 %
Non-cash items ⁽¹⁾	361	119	203 %
Changes in assets and liabilities:			
Trade working capital	(1,964)	(1,008)	95 %
Retiree benefits	(142)	(190)	(25)%
Other, net	(31)	2	NM
Net cash used in operating activities	\$ (913)	\$ (237)	(285)%

⁽¹⁾ Includes depreciation and amortization, non-cash lease expense, stock based compensation expense and deferred income taxes.

Net cash used in operating activities during the first quarter of 2019 increased \$676 million, principally due to changes in trade working capital. These changes reflect the completion of an ERP conversion as well as the inclusion of Innovation Systems. Although successfully completed, the ERP conversion delayed billings and cash receipts of approximately \$350 million, which the company expects will be recovered in the second quarter of 2019. Innovation Systems used approximately \$250 million of operating cash during the quarter. First quarter cash trends are generally consistent with prior years where operating cash flows have been heavily weighted toward the second half of the year.

Free Cash Flow

Free cash flow, as reconciled in the table below, is a non-GAAP measure defined as net cash used in operating activities less capital expenditures, and may not be defined and calculated by other companies in the same manner. We use free cash flow as a key factor in our planning for, and consideration of, acquisitions, the payment of dividends and stock repurchases. This non-GAAP measure may be useful to investors and other users of our financial statements as a supplemental measure of our cash performance, but should not be considered in isolation, as a measure of residual cash flow available for discretionary purposes, or as an alternative to operating cash flows presented in accordance with GAAP.

NORTHROP GRUMMAN CORPORATION

The table below reconciles net cash used in operating activities to free cash flow:

<i>\$ in millions</i>	Three Months Ended March 31		%
	2019	2018	Change
Net cash used in operating activities	\$ (913)	\$ (237)	(285)%
Less: capital expenditures	(284)	(305)	(7)%
Free cash flow	\$ (1,197)	\$ (542)	(121)%

First quarter 2019 free cash flow decreased \$655 million, principally due to the increase in net cash used in operating activities.

Investing Cash Flow

Net cash used in investing activities during the first quarter of 2019 decreased to \$280 million from \$307 million principally due to lower capital expenditures.

Financing Cash Flow

Net cash provided by financing activities during the first quarter of 2019 was \$462 million, as compared to net cash used in financing activities of \$312 million for the same period in 2018, principally driven by net commercial paper borrowings of \$814 million.

Credit Facilities, Commercial Paper and Financial Arrangements - See Note 7 to the financial statements for further information on our credit facilities, commercial paper and our use of standby letters of credit and guarantees.

Share Repurchases - See Note 3 to the financial statements for further information on our share repurchase programs.

Long-term Debt - See Note 5 to the financial statements for further information.

CRITICAL ACCOUNTING POLICIES, ESTIMATES AND JUDGMENTS

There have been no material changes to our critical accounting policies, estimates or judgments from those discussed in our 2018 Annual Report on Form 10-K.

ACCOUNTING STANDARDS UPDATES

See Note 1 to our financial statements for further information on accounting standards updates.

FORWARD-LOOKING STATEMENTS AND PROJECTIONS

This Form 10-Q and the information we are incorporating by reference contain statements that constitute “forward-looking statements” within the meaning of the Private Securities Litigation Reform Act of 1995. Words such as “will,” “expect,” “anticipate,” “intend,” “may,” “could,” “should,” “plan,” “project,” “forecast,” “believe,” “estimate,” “outlook,” “trends,” “goals” and similar expressions generally identify these forward-looking statements. Forward-looking statements include, among other things, statements relating to our future financial condition, results of operations and/or cash flows. Forward-looking statements are based upon assumptions, expectations, plans and projections that we believe to be reasonable when made, but which may change over time. These statements are not guarantees of future performance and inherently involve a wide range of risks and uncertainties that are difficult to predict. Specific risks that could cause actual results to differ materially from those expressed or implied in these forward-looking statements include, but are not limited to, those identified and discussed more fully in the section entitled “Risk Factors” in our 2018 Annual Report on Form 10-K and from time to time in our other filings with the Securities and Exchange Commission (SEC). They include:

- our dependence on the U.S. government for a substantial portion of our business
- significant delays or reductions in appropriations for our programs and U.S. government funding more broadly
- investigations, claims, disputes, enforcement actions and/or litigation
- the use of estimates when accounting for our contracts and the effect of contract cost growth and/or changes in estimated contract revenues and costs
- our exposure to additional risks as a result of our international business, including risks related to geopolitical and economic factors, laws and regulations

NORTHROP GRUMMAN CORPORATION

- the improper conduct of employees, agents, subcontractors, suppliers, business partners or joint ventures in which we participate and the impact on our reputation, our ability to do business, and our financial position, results of operations and/or cash flows
- cyber and other security threats or disruptions faced by us, our customers or our suppliers and other partners
- the performance and financial viability of our subcontractors and suppliers and the availability and pricing of raw materials, chemicals and components
- changes in procurement and other laws, regulations and practices applicable to our industry, findings by the U.S. government as to our compliance with such laws and regulations, and changes in our customers' business practices globally
- increased competition within our markets and bid protests
- the ability to maintain a qualified workforce
- our ability to meet performance obligations under our contracts, including obligations that are technologically complex, require certain manufacturing expertise or are dependent on factors not wholly within our control
- environmental matters, including unforeseen environmental costs and government and third party claims
- natural disasters
- the adequacy and availability of our insurance coverage, customer indemnifications or other liability protections
- products and services we provide related to hazardous and high risk operations, including the production and use of such products, which subject us to various environmental, regulatory, financial, reputational and other risks
- the future investment performance of plan assets, changes in actuarial assumptions associated with our pension and other postretirement benefit plans and legislative or other regulatory actions impacting our pension, postretirement and health and welfare plans
- our ability successfully to integrate the Orbital ATK business and realize fully the anticipated benefits of the acquisition, without adverse consequences
- our ability to exploit or protect intellectual property rights
- our ability to develop new products and technologies and maintain technologies, facilities, and equipment to win new competitions and meet the needs of our customers
- changes in business conditions that could impact business investments and/or recorded goodwill or the value of other long-lived assets
- unanticipated changes in our tax provisions or exposure to additional tax liabilities, including qualification of the Alliant Techsystems Inc. spin-off of Vista Outdoor Inc. as a tax-free transaction

You are urged to consider the limitations on, and risks associated with, forward-looking statements and not unduly rely on the accuracy of forward-looking statements. These forward-looking statements speak only as of the date this report is first filed or, in the case of any document incorporated by reference, the date of that document. We undertake no obligation to publicly update or revise any forward-looking statements, whether as a result of new information, future events or otherwise, except as required by applicable law.

CONTRACTUAL OBLIGATIONS

There have been no material changes to our contractual obligations from those discussed in our 2018 Annual Report on Form 10-K.

Item 3. Quantitative and Qualitative Disclosures About Market Risk

There have been no material changes to our market risks from those discussed in our 2018 Annual Report on Form 10-K.

NORTHROP GRUMMAN CORPORATION

Item 4. Controls and Procedures

DISCLOSURE CONTROLS AND PROCEDURES

Our principal executive officer (Chief Executive Officer and President) and principal financial officer (Corporate Vice President and Chief Financial Officer) have evaluated the company's disclosure controls and procedures (as defined in Rule 13a-15(e) and Rule 15d-15(e) of the Securities Exchange Act of 1934 (the Exchange Act)) as of March 31, 2019, and have concluded that these controls and procedures are effective to ensure that information required to be disclosed by us in the reports that we file or submit under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms. These disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that information required to be disclosed in the reports that we file or submit is accumulated and communicated to management, including the principal executive officer and the principal financial officer, as appropriate to allow timely decisions regarding required disclosure.

CHANGES IN INTERNAL CONTROL OVER FINANCIAL REPORTING

As part of our ongoing integration of Northrop Grumman Innovation Systems, we have integrated certain controls and related procedures for legacy Orbital ATK with those of legacy Northrop Grumman. During the three months ended March 31, 2019, no changes occurred in our internal control over financial reporting that materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

NORTHROP GRUMMAN CORPORATION

PART II. OTHER INFORMATION

Item 1. Legal Proceedings

We have provided information about certain legal proceedings in which we are involved in Notes 6 and 7 to the financial statements.

We are a party to various investigations, lawsuits, arbitration, claims, enforcement actions and other legal proceedings, including government investigations and claims, that arise in the ordinary course of our business. These types of matters could result in administrative, civil or criminal fines, penalties or other sanctions (which terms include judgments or convictions and consent or other voluntary decrees or agreements); compensatory, treble or other damages; non-monetary relief or actions; or other liabilities. Government regulations provide that certain allegations against a contractor may lead to suspension or debarment from future government contracts or suspension of export privileges for the company or one or more of its components. The nature of legal proceedings is such that we cannot assure the outcome of any particular matter. For additional information on pending matters, please see Notes 6 and 7 to the financial statements, and for further information on the risks we face from existing and future investigations, lawsuits, arbitration, claims, enforcement actions and other legal proceedings, please see “Risk Factors” in our 2018 Annual Report on Form 10-K.

Item 1A. Risk Factors

For a discussion of our risk factors please see the section entitled “Risk Factors” in our 2018 Annual Report on Form 10-K.

Item 2. Unregistered Sales of Equity Securities and Use of Proceeds

Purchases of Equity Securities – The table below summarizes our repurchases of common stock during the first quarter of 2019:

Period	Number of Shares Purchased	Average Price Paid per Share ⁽¹⁾⁽²⁾	Number of Shares Purchased as Part of Publicly Announced Plans or Programs	Approximate Dollar Value of Shares that May Yet Be Purchased under the Plans or Programs (\$ in millions)
January 1, 2019 - January 25, 2019	876,678	NM ⁽²⁾	876,678	\$ 4,084
January 26, 2019 - February 22, 2019	75,264	\$ 282.15	75,264	4,063
February 23, 2019 - March 29, 2019	153,777	275.40	153,777	4,021
Total	1,105,719	NM ⁽²⁾	1,105,719	\$ 4,021

⁽¹⁾ Includes commissions paid.

⁽²⁾ In October 2018, the company entered into an accelerated share repurchase (ASR) agreement with Goldman Sachs & Co. LLC, which was completed in January 2019 with a final delivery of 0.9 million shares. Pursuant to the terms of the ASR, a total of approximately 3.9 million shares of our common stock were repurchased with an average final purchase price of \$260.32 per share.

Share repurchases take place from time to time, subject to market conditions and management’s discretion, in the open market and in privately negotiated transactions. The company retires its common stock upon repurchase and, in the periods presented, has not made any purchases of common stock other than in connection with these publicly announced repurchase programs.

See Note 3 to the financial statements for further information on our share repurchase programs.

Item 3. Defaults Upon Senior Securities

No information is required in response to this item.

Item 4. Mine Safety Disclosures

No information is required in response to this item.

Item 5. Other Information

No information is required in response to this item.

NORTHROP GRUMMAN CORPORATION

Item 6. Exhibits

- 2.1 [Agreement and Plan of Merger among Titan II, Inc. \(formerly Northrop Grumman Corporation\), Northrop Grumman Corporation \(formerly New P, Inc.\) and Titan Merger Sub Inc., dated March 30, 2011 \(incorporated by reference to Exhibit 10.1 to Form 8-K filed April 4, 2011, File No. 001-16411\)](#)
- 2.2 [Separation and Distribution Agreement dated as of March 29, 2011, among Titan II, Inc. \(formerly Northrop Grumman Corporation\), Northrop Grumman Corporation \(formerly New P, Inc.\), Huntington Ingalls Industries, Inc., Northrop Grumman Shipbuilding, Inc. and Northrop Grumman Systems Corporation \(incorporated by reference to Exhibit 10.2 to Form 8-K filed April 4, 2011, File No. 001-16411\)](#)
- 2.3 [Agreement and Plan of Merger, dated as of September 17, 2017, among Northrop Grumman Corporation, Neptune Merger, Inc. and Orbital ATK, Inc. \(incorporated by reference to Exhibit 2.1 to Form 8-K filed September 18, 2017\)](#)
- 2.4 [Transaction Agreement, dated as of April 28, 2014, among Alliant Techsystems Inc., Vista Spinco Inc., Vista Merger Sub Inc. and Orbital Sciences Corporation \(incorporated by reference to Exhibit 2.1 to Alliant Techsystems Inc. \(now known as Northrop Grumman Innovation Systems, Inc.\) Form 8-K filed May 2, 2014\)](#)

+*10.1 [2019 Restricted Stock Rights Grant Agreement Under the 2011 Long-Term Incentive Stock Plan](#)

+*10.2 [2019 Restricted Performance Stock Rights Grant Agreement Under the 2011 Long-Term Incentive Stock Plan](#)

+*10.3 [Group Personal Excess Liability Policy dated February 14, 2019 and effective January 1, 2019](#)

+*10.4 [Executive Basic Life Insurance and Accidental Death and Dismemberment Insurance Policy dated January 1, 2019](#)

+*10.5 [Executive Long-Term Disability Insurance Policy dated January 1, 2019](#)

*15 [Letter from Independent Registered Public Accounting Firm](#)

*31.1 [Certification of Kathy J. Warden pursuant to Section 302 of the Sarbanes-Oxley Act of 2002](#)

*31.2 [Certification of Kenneth L. Bedingfield pursuant to Section 302 of the Sarbanes-Oxley Act of 2002](#)

**32.1 [Certification of Kathy J. Warden pursuant to Section 906 of the Sarbanes-Oxley Act of 2002](#)

**32.2 [Certification of Kenneth L. Bedingfield pursuant to Section 906 of the Sarbanes-Oxley Act of 2002](#)

*101 Northrop Grumman Corporation Quarterly Report on Form 10-Q for the quarter ended March 31, 2019, formatted in XBRL (Extensible Business Reporting Language): (i) the Condensed Consolidated Statements of Earnings and Comprehensive Income, (ii) Condensed Consolidated Statements of Financial Position, (iii) Condensed Consolidated Statements of Cash Flows, (iv) Condensed Consolidated Statements of Changes in Shareholders' Equity, and (v) Notes to Condensed Consolidated Financial Statements

+ Management contract or compensatory plan or arrangement

* Filed with this report

** Furnished with this report

NORTHROP GRUMMAN CORPORATION

SIGNATURES

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

NORTHROP GRUMMAN CORPORATION
(Registrant)

By:

/s/ Michael A. Hardesty

Michael A. Hardesty
Corporate Vice President, Controller and
Chief Accounting Officer
(Principal Accounting Officer)

Date: April 23, 2019

NORTHROP GRUMMAN CORPORATION

2019 RESTRICTED STOCK RIGHTS GRANT AGREEMENT

This 2019 Restricted Stock Rights Grant Agreement (“Agreement”) applies to certain “Restricted Stock Rights” (“RSRs”) granted by Northrop Grumman Corporation (the “Company”) in 2019 under its 2011 Long-Term Incentive Stock Plan. If you were granted an RSR award by the Company in 2019, the date of grant of your RSR award (the “Grant Date”) and the number of RSRs applicable to your award are set forth in the letter from the Company announcing your RSR award (your “Grant Letter”) and are also reflected in the electronic stock plan award recordkeeping system (“Stock Plan System”) maintained by the Company or its designee. This Agreement applies only with respect to the 2019 RSR award, and you are subject to this Agreement upon accepting your grant. If you were granted an RSR award, you are referred to as the “Grantee” with respect to your award. Capitalized terms are generally defined in Section 12 below if not otherwise defined herein.

Each RSR represents a right to receive one share of the Company’s Common Stock, or cash of equivalent value as provided herein, subject to vesting as provided herein. The number of RSRs subject to your award is subject to adjustment as provided herein. The RSR award is subject to all of the terms and conditions set forth in this Agreement, and is further subject to all of the terms and conditions of the Plan, as it may be amended from time to time, and any rules adopted by the Committee, as such rules are in effect from time to time. If you do not formally accept your RSR award by entering into this Agreement in accordance with the instructions and time limit set forth in your Grant Letter, you will be deemed to have forfeited your RSR award.

1. Vesting; Issuance of Shares.

Subject to Sections 2, 3, 4 and 6 below, one hundred percent (100%) of the number of RSRs (and any Dividend Equivalents (as defined below)) subject to your award (subject to adjustment as provided in Section 6.1) shall vest upon the third anniversary of the Grant Date, provided that if the third anniversary of the Grant Date falls on a weekend or holiday, then the award shall vest on the next business day.

1.1 Payment of RSRs. Except as otherwise provided below, the Company shall pay an RSR subject to the award that vests (“Vested RSR”) (and related Dividend Equivalents) within 60 days following the vesting of the RSR on the third anniversary of the Grant Date. The Company shall pay such Vested RSRs in either an equivalent number of shares of Common Stock, or, in the discretion of the Committee, in cash or in a combination of shares of Common Stock and cash. In the event of a cash payment, the amount of the payment for each Vested RSR to be paid in cash will equal the Fair Market Value (as defined below) of a share of Common Stock as of the date that such RSR became vested.

1.2 Dividend Equivalents. The Grantee shall be entitled to payment for Dividend Equivalents (if any) with respect to any Vested RSRs. For purposes of this Agreement, “Dividend Equivalents” means the aggregate amount of dividends paid by the Company on a number of shares of Common Stock equivalent to the number of

Vested RSRs during the period from the Grant date until the date the Vested RSRs are paid (without interest or other adjustments to reflect the time value of money). Dividend Equivalents (if any) will be paid at the same time as the Vested RSRs to which they relate are paid. Dividend Equivalents will be paid in cash.

2. Early Termination of Award; Termination of Employment.

2.1 General. The RSRs (and related Dividend Equivalents) subject to the award, to the extent not previously vested, shall terminate and become null and void if and when (a) the award terminates in connection with a Change in Control pursuant to Section 6 below, or (b) except as provided in Sections 2.6 and 2.7, and in Section 6, the Grantee ceases for any reason to be an employee of the Company or one of its subsidiaries.

2.2 Leave of Absence. Unless the Committee otherwise provides (at the time of the leave or otherwise), if the Grantee is granted a leave of absence by the Company, the Grantee (a) shall not be deemed to have incurred a termination of employment at the time such leave commences for purposes of the award, and (b) shall be deemed to be employed by the Company for the duration of such approved leave of absence for purposes of the award. A termination of employment shall be deemed to have occurred if the Grantee does not timely return to active employment upon the expiration of such approved leave or if the Grantee commences a leave that is not approved by the Company.

2.3 Salary Continuation. Subject to Section 2.2 above, the term “employment” as used herein means active employment by the Company and salary continuation without active employment (other than a leave of absence approved by the Company that is covered by Section 2.2) will not, in and of itself, constitute “employment” for purposes hereof (in the case of salary continuation without active employment, the Grantee’s cessation of active employee status shall, subject to Section 2.2, be deemed to be a termination of “employment” for purposes hereof). Furthermore, salary continuation will not, in and of itself, constitute a leave of absence approved by the Company for purposes of the award.

2.4 Sale or Spinoff of Subsidiary or Business Unit. For purposes of the RSRs (and related Dividend Equivalents) subject to the award, a termination of employment of the Grantee shall be deemed to have occurred if the Grantee is employed by a subsidiary or business unit and that subsidiary or business unit is sold, spun off, or otherwise divested, the Grantee does not otherwise continue to be employed by the Company or one of its subsidiaries after such event, and the divested entity or business (or its successor or a parent company) does not assume the award in connection with such transaction. In the event of such a termination of employment, the termination shall be deemed to be an Early Retirement unless the Grantee was otherwise eligible at the time of termination for Normal Retirement (in which case, the termination shall be considered a Normal Retirement) treated as provided for in Section 2.7 (subject to Section 6).

2.5 Continuance of Employment Required. Except as expressly provided in Section 2.6, Section 2.7 and in Section 6, the vesting of the RSRs (and related Dividend Equivalents) subject to the award requires continued employment through the third anniversary of the Grant Date as a condition to the vesting of any portion of the award. Employment for only a portion of the vesting period, even if a substantial portion, will not entitle the Grantee to any proportionate vesting or avoid or mitigate a termination of rights and benefits upon or following a termination of employment. Nothing contained in this Agreement, the Stock Plan System, or the Plan constitutes an employment commitment by the Company or any subsidiary, affects the Grantee’s status (if the Grantee is otherwise an at-will employee) as an employee at will who is subject to termination without cause, confers upon the Grantee any right to continue in the employ of the Company or any subsidiary, or interferes in any way with the right of the Company or of any subsidiary to terminate such employment at any time.

2.6 Death or Disability. If the Grantee dies or incurs a Disability while employed by the Company or a subsidiary and such death or Disability occurs more than six months after the Grant Date, the outstanding and previously unvested RSRs (and related Dividend Equivalents) subject to the award shall vest as of the date of the Grantee’s death or Disability, as applicable. RSRs (and related Dividend Equivalents) vesting under this Section shall be paid within 60 days following the earlier of (a) Grantee’s death or (b) Grantee’s Disability. In the event of the Grantee’s death prior to the delivery of shares or other payment with respect to any vested RSRs (and related Dividend Equivalents), the Grantee’s Successor shall be entitled to any payments to which the Grantee would have been entitled under this Agreement with respect to such vested and unpaid RSRs (and related Dividend Equivalents).

2.7 Termination of Employment Due to Retirement. If the Grantee ceases to be employed by the Company or one of its subsidiaries due to the Grantee’s Early Retirement and such Early Retirement occurs more than six months after the Grant Date, the RSRs (and related Dividend Equivalents) subject to the award shall vest on a prorated basis. Such prorating of RSRs (and related Dividend Equivalents) shall be determined based on the number of days the Grantee was employed by the Company or a subsidiary in the period commencing with the Grant Date through and including the date on which the Grantee is last employed by the Company or a subsidiary, over the number of calendar days in the period commencing with the Grant Date through and including the third anniversary of the Grant Date. Any remaining unvested RSRs (and related Dividend Equivalents), after giving effect to the foregoing acceleration of vesting, shall terminate immediately upon the Grantee’s Early Retirement. If the Grantee ceases to be employed by the Company or one of its subsidiaries due to the Grantee’s Normal Retirement and such Normal Retirement occurs more than six months after the Grant Date, the RSRs (and related Dividend Equivalents) subject to the award shall vest in full.

Subject to the following provisions of this paragraph, RSRs (and related Dividend Equivalents) vesting under this Section shall be paid within 60 days following the Grantee’s Separation from Service. However, in the case of a Governmental Service Retirement by the Grantee, payment of the vested RSRs (and related Dividend Equivalents) will be made within 20 days after the Grantee’s Early or Normal Retirement. If the Grantee is a Key Employee as of the date of the Grantee’s Separation from Service, the Grantee shall not be entitled to payment of his or her vested RSRs (and related Dividend Equivalents) pursuant to this Section until the earlier of (and payment shall be made upon or

promptly after, and in all events within thirty (30) days after, the first to occur of) (a) the date which is six (6) months and one day after the Grantee's Separation from Service, or (b) the date of the Grantee's death. The provisions of the preceding sentence shall only apply if, and to the extent, required to avoid the imputation of any tax, penalty or interest pursuant to Section 409A of the Code.

In determining the Grantee's eligibility for Early or Normal Retirement, service is measured by dividing (a) the number of days the Grantee was employed by the Company or a subsidiary in the period commencing with his or her last date of hire by the Company or a subsidiary through and including the date on which the Grantee is last employed by the Company or a subsidiary, by (b) 365. If the Grantee ceased to be employed by the Company or a subsidiary and was later rehired by the Company or a subsidiary, the Grantee's service prior to the break in service shall be disregarded in determining service for such purposes; provided that, if the Grantee's employment with the Company or a subsidiary had terminated due to the Grantee's Early Retirement, Normal Retirement, or by the Company or a subsidiary as part of a reduction in force (in each case, other than a termination by the Company or a subsidiary for Cause) and, within the two-year period following such termination of employment (the "break in service") the Grantee was subsequently rehired by the Company or a subsidiary, then the Grantee's period of service with the Company or a subsidiary prior to and ending with the break in service will be included in determining service for such purposes. In the event the Grantee is employed by a business that is acquired by the Company or a subsidiary, the Company shall have discretion to determine whether the Grantee's service prior to the acquisition will be included in determining service for such purposes.

3. Non-Transferability and Other Restrictions.

3.1 Non-Transferability. The award, as well as the RSRs (and related Dividend Equivalents) subject to the award, are non-transferable and shall not be subject in any manner to sale, transfer, anticipation, alienation, assignment, pledge, encumbrance or charge. The foregoing transfer restrictions shall not apply to transfers to the Company. Notwithstanding the foregoing, the Company may honor any transfer required pursuant to the terms of a court order in a divorce or similar domestic relations matter to the extent that such transfer does not adversely affect the Company's ability to register the offer and sale of the underlying shares on a Form S-8 Registration Statement and such transfer is otherwise in compliance with all applicable legal, regulatory and listing requirements.

3.2 Forfeiture or Recoupment of Awards. If, prior to payment or issuance of shares with respect to the award, Grantee's employment is terminated for Cause (or Grantee has engaged in misconduct that could have resulted in Grantee's termination of employment for Cause if Grantee had remained an employee), the Company may reduce or eliminate any payments or issuances of shares with respect to the award. Further, any payments or issuances of shares with respect to the award are subject to recoupment pursuant to the Company's Policy Regarding the Recoupment of Certain Performance-Based Compensation Payments as in effect from time to time, as well as any recoupment or similar provisions of applicable law, and the Grantee shall promptly make any reimbursement requested by the Board or Committee pursuant to such policy or applicable law with respect to the award. The Grantee agrees, by accepting the award, that the Company and its affiliates may deduct from any amounts it may owe the Grantee from time to time (such as wages or other compensation) to the extent of any amounts the Grantee is required to reimburse the Company pursuant to such policy or applicable law with respect to the award.

4. Post-Employment Conduct.

4.1 Corporate Policy Council Contribution. You acknowledge and agree that as a member of the Corporate Policy Council ("CPC"), you are involved in managing the global operations of the Company, incorporated in Delaware and headquartered in Virginia. You are involved in the most sensitive and proprietary matters affecting the Company, its subsidiaries, predecessors, and/or affiliates (collectively, "Northrop Grumman"), including from a technical, strategic and financial perspective, and are widely exposed to confidential, sensitive and proprietary information concerning Northrop Grumman's global operations, at the headquarters and each of the operating sectors, including in the areas of manned and unmanned aircraft, space, C4ISR, cyber, sensors, electronics, through-life support and technical services. Your job responsibilities require that you have a primary office location in Virginia and/or you spend substantial time at the corporate headquarters in Virginia, among other things, attending CPC and other leadership meetings, and managing operations and employees in Virginia. You occupy one of the most senior executive positions in the Company and have far-reaching access to highly confidential, valuable and sensitive information, customer, vendor and employee relationships, intellectual property, strategic and tactical plans, and financial information and plans. The Company has a legitimate business interest in restricting your ability to compete in the specific manner set forth below. The Company has provided you this grant, subject to this

Agreement and as consideration for the restrictive covenants set forth in this Section 4.

4.2 Non-Competition. For a period of twelve (12) months from the date of the termination of Grantee's employment for any reason (other than a Reduction-in-Force as determined at the Company's sole discretion) ("Termination"), you will not, directly or indirectly, oversee, control, participate in, or support the design, operation, research, manufacture, marketing, sale, or distribution of "Competitive Products and Services". For the purpose of this section, "Competitive Products and Services" shall mean products or services that compete for resources with, or are an alternative or potential alternative to, the products sold or services provided by Northrop Grumman, including without limitation products and services in the areas of manned and unmanned aircraft, space, C4ISR, cyber, sensors, electronics, through-life support and technical services.

4.3 Non-Solicitation of Customers. For a period of eighteen (18) months from your Termination, you shall not, directly or indirectly, solicit any customer, supplier, or teammate of Northrop Grumman with whom you engaged, or about whom you received confidential, sensitive, or proprietary information, in the course of your employment with Northrop Grumman, for purposes of providing products or services in competition with Northrop Grumman. In the case of a governmental, regulatory or administrative agency, commission, department or other governmental authority, the customer is determined by reference to the specific program offices or activities for which Northrop Grumman provides goods or services.

4.4 Non-Solicitation of Employees. For a period of twenty-four (24) months from your Termination, you shall not, directly or indirectly, solicit or offer to hire, any person who was, within a period of six months prior to your Termination, employed by Northrop Grumman, with whom you worked or about whom you received information in the course of your employment with Northrop Grumman.

4.5 Non-Disparagement. You will not issue or communicate any statement, whether verbal or written, or take any other action that disparages or may be interpreted to disparage the Company, its products, services, officers, directors, or employees; provided that the foregoing shall not apply to any truthful statements made in connection with a legal process, including government investigation, or as otherwise provided by law.

4.6 Exceptions. You may request an exception to the covenants in Sections 4.2, 4.3, or 4.4 by making a

written request to the Company's Chief Human Resources Officer, with such exceptions being considered at the sole discretion of the Company and communicated in writing to you.

4.7 Reasonableness. You agree that the restrictions set forth in Sections 4.2, 4.3, and 4.4 are (i) reasonable and necessary in all respects, including duration, territory and scope of activity, in order to protect the Company's legitimate business interests, (ii) that the parties have attempted to limit your right to compete only to the extent necessary to protect the Company's legitimate business interests, and (iii) that you will be able to earn a livelihood without violating the restrictions in this section. It is the intent of the parties that the provisions of this section shall be enforced to the fullest extent permissible under applicable law. However, if any portion of Sections 4.2, 4.3, or 4.4 is deemed unenforceable, the parties agree that a court or arbitrator may revise the portion deemed unenforceable to the maximum extent possible to achieve the objective of the parties, and the remainder of the section shall remain in full force and affect.

4.8 Remedies. If you violate any provision in Section 4.2, 4.3, 4.4 and/or 4.5 of this section, the Company shall have the right to terminate without payment to you any unvested and/or unpaid RSRs (and associated Dividend Equivalents) and require that you immediately deliver to the Company an amount in cash equal to the aggregate Fair Market Value, determined as of the vesting and/or payment date of all RSRs already received, including any Dividend Equivalents, within one year prior to the breach. Further, you acknowledge and agree that a breach of any of the provisions of this section will result in immediate, irreparable, and continuing damage to the Company for which there is no adequate remedy at law, and the Company will be entitled to injunctive relief, a decree of specific performance, and other relief as may be proper, including monetary damages, to the maximum extent available.

5. Compliance with Laws; No Stockholder Rights Prior to Issuance.

The Company's obligation to make any payments or issue any shares with respect to the award is subject to full compliance with all then applicable requirements of law, the Securities and Exchange Commission, or other regulatory agencies having jurisdiction over the Company and its shares, and of any exchange upon which stock of the Company may be listed. The Grantee shall not have the rights and privileges of a stockholder, including without limitation the right to vote or receive dividends (except as expressly provided in this

Agreement with respect to Dividend Equivalents), with respect to any shares which may be issued in respect of the RSRs until the date appearing on the certificate(s) for such shares (or, in the case of shares entered in book entry form, the date that the shares are actually recorded in such form for the benefit of the Grantee), if such shares become deliverable.

6. Adjustments; Change in Control.

6.1. *Adjustments.* The RSRs, Dividend Equivalents, and the shares subject to the award are subject to adjustment upon the occurrence of events such as stock splits, stock dividends and other changes in capitalization in accordance with Section 6(a) of the Plan.

6.2. *Possible Acceleration on Change in Control.* Notwithstanding the provisions of Section 2 hereof, and further subject to the Company's ability to terminate the award as provided in Section 6.3 below, the outstanding and previously unvested RSRs (and related Dividend Equivalents) subject to the award shall become fully vested as of the date of the Grantee's termination of employment if the termination occurs either within the Protected Period corresponding to a Change in Control of the Company or within twenty-four (24) calendar months following the date of a Change in Control of the Company, the Grantee's employment by the Company and its subsidiaries is involuntarily terminated by the Company and its subsidiaries for reasons other than Cause or by the Grantee for Good Reason.

Notwithstanding anything else contained herein to the contrary, the termination of the Grantee's employment (or other events giving rise to Good Reason) shall not entitle the Grantee to any accelerated vesting pursuant to this Section 6.2 if there is objective evidence that, as of the commencement of the Protected Period, the Grantee had specifically been identified by the Company as an employee whose employment would be terminated as part of a corporate restructuring or downsizing program that commenced prior to the Protected Period and such termination of employment was expected at that time to occur within six (6) months.

Payment of any RSRs (and related Dividend Equivalents) that vest under this Section will be made at the time provided for in Section 2.7 as though the termination of the Grantee's employment was due to a Normal Retirement.

6.3. *Automatic Acceleration; Early Termination.* If the Company undergoes a Change in Control triggered by clause (iii) or (iv) of the definition thereof and the Company is not the surviving entity and the successor to the Company (if any) (or a Parent thereof) does not agree

in writing prior to the occurrence of the Change in Control to continue and assume the award following the Change in Control, or if for any other reason the award would not continue after the Change in Control, then upon the Change in Control the outstanding and previously unvested RSRs (and related Dividend Equivalents) subject to the award shall vest fully and completely. Unless the Committee expressly provides otherwise in the circumstances, no acceleration of vesting of the award shall occur pursuant to this Section 6.3 in connection with a Change in Control if either (a) the Company is the surviving entity, or (b) the successor to the Company (if any) (or a Parent thereof) agrees in writing prior to the Change in Control to assume the award. The Committee may make adjustments pursuant to Section 6(a) of the Plan and/or deem an acceleration of vesting of the award pursuant to this Section 6.3 to occur sufficiently prior to an event if necessary or deemed appropriate to permit the Grantee to realize the benefits intended to be conveyed with respect to the shares underlying the RSRs (and related Dividend Equivalents); provided, however, that, the Committee may reinstate the original terms of the award if the related event does not actually occur.

Payment of any RSRs (and related Dividend Equivalents) that vest under this Section 6.3 will be made within 60 days of the third anniversary of the Grant Date unless, prior to such date: (i) the Grantee dies or has a Disability, in which case such payment will be made within 60 days of the Grantee's death or Disability, as the case may be, or (ii) the Grantee has a Separation from Service, in which case such payment will be made at the time provided for in Section 2.7 as though the termination of the Grantee's employment was due to a Normal Retirement.

7. Tax Matters.

7.1. *Tax Withholding.* The Company or the subsidiary which employs the Grantee shall be entitled to require, as a condition of making any payments or issuing any shares upon vesting of the RSRs (and related Dividend Equivalents), that the Grantee or other person entitled to such shares or other payment pay the minimum sums required to be withheld by federal, state, local or other applicable tax law with respect to such vesting or payment. Alternatively, the Company or such subsidiary, in its discretion, may make such provisions for the withholding of taxes as it deems appropriate (including, without limitation, withholding the taxes due from compensation otherwise payable to the Grantee or reducing the number of shares otherwise deliverable with respect to the award (valued at their then Fair Market Value) by the amount necessary to satisfy such statutory minimum withholding obligations).

7.2. Transfer Taxes. The Company will pay all federal and state transfer taxes, if any, and other fees and expenses in connection with the issuance of shares in connection with the vesting of the RSRs.

7.3. Compliance with Code. The Committee shall administer and construe the award in a manner designed to comply with the Code and to avoid adverse tax consequences under Code Section 409A.

7.4. Unfunded Arrangement. The right of the Grantee to receive payment under the award shall be an unsecured contractual claim against the Company. As such, neither the Grantee nor any Successor shall have any rights in or against any specific assets of the Company based on the award. Awards shall at all times be considered entirely unfunded for tax purposes.

7.5 Code Section 280G. Notwithstanding any other provision of this Agreement to the contrary, in the event that any amounts payable to you as a result of Section 6.2 or 6.3 hereof, either alone or together with amounts payable pursuant to any other plan, program or arrangement (a) constitute “parachute payments” within the meaning of Section 280G of the Code, and (b) but for this Section 7.5 would be subject to the excise tax imposed by Section 4999 of the Code or any comparable successor provisions (the “Excise Tax”), then the vesting acceleration provided in Section 6.2 or 6.3, as applicable, shall be either (a) provided to you in full, or (b) provided to you to such lesser extent that would result in no portion of the payments so accelerated being subject to the Excise Tax, whichever of the foregoing amounts, when taking into account applicable federal, state, local and foreign income and employment taxes, the Excise Tax, and any other applicable taxes, results in the receipt by you, on an after-tax basis, of the greatest amount of benefits, notwithstanding that all or some portion of such benefits may be subject to the Excise Tax. All determinations required to be made under this Section 7.5 shall be made by a registered public accounting firm selected by the Company, which shall provide supporting calculations both to the Company and you no later than the date of the applicable Change in Control. In the event that the Payments are to be reduced pursuant to this Section 7.5, such Payments shall be reduced such that the reduction of compensation to be provided to the Executive as a result of this Section 7.5 is minimized. In applying this principle, the reduction shall be made in a manner consistent with the requirements of Section 409A and where two economically equivalent amounts are subject to reduction but payable at different times, such amounts shall be reduced on a pro rata basis but not below zero.

8. Choice of Law; Venue; Arbitration.

This agreement shall be governed by the laws of the State of Delaware. Any cause of action or claim arising out of or related to the terms and conditions applicable to this grant will be determined through final and binding arbitration, in accordance with Northrop Grumman CTM H200 USHR 2-32, provided that the prevailing party in the arbitration shall be entitled to receive from the losing party reasonably incurred attorneys’ fees and costs. You and the Company agree that any arbitration hearing and related proceedings shall be convened and conducted in Falls Church, VA. If you or the Company believes they require immediate relief to enforce or challenge this Agreement, before arbitration is commenced or concluded, either party may seek injunctive or other provisional equitable relief from a state or federal court in the Commonwealth of Virginia. All court actions or proceedings arising under this Agreement shall be heard in a state or federal court in the Commonwealth of Virginia. The Company and you hereby agree to the jurisdiction of the state and federal courts in the Commonwealth of Virginia and waive any right to object to such actions on grounds of venue, jurisdiction or convenience.

9. Committee Authority.

The Committee has the discretionary authority to determine any questions as to the date when the Grantee’s employment terminated and the cause of such termination and to interpret any provision of this Agreement, the Grant Letter, the Stock Plan System, the Plan, and any other applicable rules. Any action taken by, or inaction of, the Committee relating to or pursuant to this Agreement, the Grant Letter, the Stock Plan System, the Plan, or any other applicable rules shall be within the absolute discretion of the Committee and shall be conclusive and binding on all persons.

10. Plan; Amendment.

The RSRs (and related Dividend Equivalents) subject to the award are governed by, and the Grantee’s rights are subject to, all of the terms and conditions of the Plan and any other rules adopted by the Committee, as the foregoing may be amended from time to time. The Grantee shall have no rights with respect to any amendment of this Agreement or the Plan unless such amendment is in writing and signed by a duly authorized officer of the Company. In the event of a conflict between the provisions of the Grant Letter and/or the Stock Plan System and the provisions of this Agreement and/or the Plan, the provisions of this Agreement and/or the Plan, as applicable, shall control.

11. Required Holding Period.

The holding requirements of this Section 11 shall apply to any Grantee who is an elected or appointed officer of the Company on the date Vested RSRs are paid (or, if earlier, on the date the Grantee's employment by the Company and its subsidiaries terminates for any reason). Any Grantee subject to this Section 11 shall not be permitted to sell, transfer, anticipate, alienate, assign, pledge, encumber or charge the number of shares equal to 50% of the total payout of Vested RSRs (net of taxes withheld) until the earlier of (A) the third anniversary of the date such shares of Common Stock are paid to the Grantee, (B) the date the Grantee's employment by the Company and its subsidiaries terminates due to the Grantee's death or Disability, (C) the occurrence of a Change in Control that results in termination and payment under Section 6.2 or 6.3 above, or (D) with respect to Grantee's entering a U.S. federal government position only, the latest of (i) the date the Grantee's employment with the Company terminates, or (ii) the date the Grantee formally accepts the government position in writing, or (iii) the date the government confirms the Grantee (for positions requiring nomination and confirmation). For purposes of this Section 11, the total payout of Vested RSRs shall be determined on a net basis after taking into account any shares otherwise deliverable with respect to the award that the Company withholds to satisfy tax obligations pursuant to Section 7.1. If Grantee is paid less than 50% of the total payout of Vested RSRs (net of taxes) in shares, then all of the shares received will be subject to the holding period requirements in this Section 11. Any shares of Common Stock received in respect of shares that are covered by the holding period requirements of this Section 11 (such as shares received in respect of a stock split or stock dividend) shall be subject to the same holding period requirements as the shares to which they relate.

12. Definitions.

Whenever used in this Agreement, the following terms shall have the meanings set forth below and, when the meaning is intended, the initial letter of the word is capitalized:

“**Board**” means the Board of Directors of the Company.

“**Cause**” means the occurrence of either or both of the following:

- (i) The Grantee's conviction for committing an act of fraud, embezzlement, theft, or other act constituting a felony (other than traffic related offenses, as a result of vicarious liability, or as a

result of good faith actions as an officer of the Company); or

- (ii) Willful misconduct by the Grantee that causes financial or reputational harm to the Company. However, no act, or failure to act, on the Grantee's part shall be considered “willful” unless done, or omitted to be done, by the Grantee not in good faith and without reasonable belief that his or her action or omission was in the best interest of the Company.

“**Change in Control**” is used as defined in the Plan.

“**Code**” means the United States Internal Revenue Code of 1986, as amended.

“**Committee**” means the Company's Compensation Committee or any successor committee appointed by the Board to administer the Plan.

“**Common Stock**” means the Company's common stock.

“**Disability**” means, with respect to a Grantee, that the Grantee: (i) is unable to engage in any substantial gainful activity by reason of any medically determinable physical or mental impairment which can be expected to result in death or can be expected to last for a continuous period of not less than twelve months; or (ii) is, by reason of any medically determinable physical or mental impairment which can be expected to result in death or can be expected to last for a continuous period of not less than twelve months, receiving income replacement benefits for a period of not less than three months under an accident and health plan covering employees of the Grantee's employer; all construed and interpreted consistent with the definition of “Disability” set forth in Code Section 409A(a)(2)(C).

“**Early Retirement**” means that the Grantee's employment terminates in any of the following circumstances, and other than a termination of employment that constitutes a Normal Retirement or occurs in connection with a termination by the Company or a subsidiary for Cause:

- (i) a termination of employment after the Grantee has attained age 55 with at least 10 years of service.
- (ii) a termination of employment by the Company or a subsidiary as part of a reduction in force and, at the time of such termination, the Grantee has attained age 53 with at least 10 years of service.

- (iii) a termination of employment by the Company or a subsidiary as part of a reduction in force and, at the time of such termination, the sum of the Grantee's age and years of service is at least 75.

“**Fair Market Value**” is used as defined in the Plan; provided, however, the Committee in determining such Fair Market Value for purposes of the award may utilize such other exchange, market, or listing as it deems appropriate.

“**Good Reason**” means, without the Grantee's express written consent, the occurrence of any one or more of the following:

- (i) A material and substantial reduction in the nature or status of the Grantee's authorities or responsibilities (when such authorities and/or responsibilities are viewed in the aggregate) from their level in effect on the day immediately prior to the start of the Protected Period, other than (A) an inadvertent act that is remedied by the Company promptly after receipt of notice thereof given by the Grantee, and/or (B) changes in the nature or status of the Grantee's authorities or responsibilities that, in the aggregate, would generally be viewed by a nationally-recognized executive placement firm as resulting in the Grantee having not materially and substantially fewer authorities and responsibilities (taking into consideration the Company's industry) when compared to the authorities and responsibilities applicable to the position held by the Grantee immediately prior to the start of the Protected Period. The Company may retain a nationally-recognized executive placement firm for purposes of making the determination required by the preceding sentence and the written opinion of the firm thus selected shall be conclusive as to this issue.

In addition, if the Grantee is a vice president, the Grantee's loss of vice-president status will constitute “Good Reason”; provided that the loss of the title of “vice president” will not, in and of itself, constitute Good Reason if the Grantee's lack of a vice president title is generally consistent with the manner in which the title of vice president is used within the Grantee's business unit or if the loss of the title is the result of a promotion to a higher level office. For the purposes of the preceding sentence, the Grantee's lack of a vice-president title will only be considered generally consistent with the manner in which such title is used if most persons in the business unit with authorities, duties, and responsibilities comparable to those of the

Grantee immediately prior to the commencement of the Protected Period do not have the title of vice-president.

- (ii) A material reduction by the Company in the Grantee's annualized rate of base salary as in effect at the start of the Protected Period, or as the same shall be increased from time to time.
- (iii) A material reduction in the aggregate value of the Grantee's level of participation in any of the Company's short and/or long-term incentive compensation plans (excluding stock-based incentive compensation plans), employee benefit or retirement plans, or policies, practices, or arrangements in which the Grantee participates immediately prior to the start of the Protected Period; provided, however, that a reduction in the aggregate value shall not be deemed to be “Good Reason” if the reduced value remains substantially consistent with the average level of other employees who have positions commensurate with the position held by the Grantee immediately prior to the start of the Protected Period.
- (iv) A material reduction in the Grantee's aggregate level of participation in the Company's stock-based incentive compensation plans from the level in effect immediately prior to the start of the Protected Period; provided, however, that a reduction in the aggregate level of participation shall not be deemed to be “Good Reason” if the reduced level of participation remains substantially consistent with the average level of participation of other employees who have positions commensurate with the position held by the Grantee immediately prior to the start of the Protected Period.
- (v) The Grantee is informed by the Company that his or her principal place of employment for the Company will be relocated to a location that is greater than fifty (50) miles away from the Grantee's principal place of employment for the Company at the start of the corresponding Protected Period; provided that, if the Company communicates an intended effective date for such relocation, in no event shall Good Reason exist pursuant to this clause (v) more than ninety (90) days before such intended effective date.

The Grantee's right to terminate employment for Good Reason shall not be affected by the Grantee's incapacity due to physical or mental illness. The Grantee's continued employment shall not constitute a

consent to, or a waiver of rights with respect to, any circumstances constituting Good Reason herein.

“**Governmental Service Retirement**” means an Early or Normal Retirement by the Grantee where the Grantee accepts a position in the federal government or a state or local government and an accelerated distribution under the award is permitted under Code Section 409A based on such government employment and related ethics rules.

“**Key Employee**” means an employee treated as a “specified employee” under Code section 409A(a)(2)(B)(i) of the Company or an Affiliated Company (i.e., a key employee (as defined in Code section 416(i) without regard to paragraph (5) thereof) if the Company’s or an Affiliated Company’s stock is publicly traded on an established securities market or otherwise. The Company shall determine in accordance with a uniform Company policy which participants are Key Employees as of each December 31 in accordance with IRS regulations or other guidance under Section 409A. Such determination shall be effective for the twelve (12) month period commencing on April 1 of the following year.

“**Normal Retirement**” means that the Grantee terminates employment after attaining age 65 with at least 10 years of service (other than in connection with a termination by the Company or a subsidiary for Cause). In the case of a Grantee who is an officer of the Company subject to the Company’s mandatory retirement at age 65 policy and who, at the applicable time, is not otherwise eligible for Normal Retirement as defined in the preceding sentence, “Normal Retirement” as to that Grantee means that the Grantee’s employment is terminated pursuant to such mandatory retirement policy (regardless of the Grantee’s years of service and other than in connection with a termination by the Company or a subsidiary for Cause).

“**Parent**” is used as defined in the Plan.

“**Plan**” means the Northrop Grumman 2011 Long-Term Incentive Stock Plan, as it may be amended from time to time.

The “**Protected Period**” corresponding to a Change in Control of the Company shall be a period of time determined in accordance with the following:

- (i) If the Change in Control is triggered by a tender offer for shares of the Company’s stock or by the offeror’s acquisition of shares pursuant to such a tender offer, the Protected Period shall commence on the date of the initial tender offer and shall continue through and including the date

of the Change in Control; provided that in no case will the Protected Period commence earlier than the date that is six (6) months prior to the Change in Control.

- (ii) If the Change in Control is triggered by a merger, consolidation, or reorganization of the Company with or involving any other corporation, the Protected Period shall commence on the date that serious and substantial discussions first take place to effect the merger, consolidation, or reorganization and shall continue through and including the date of the Change in Control; provided that in no case will the Protected Period commence earlier than the date that is six (6) months prior to the Change in Control.
- (iii) In the case of any Change in Control not described in clause (i) or (ii) above, the Protected Period shall commence on the date that is six (6) months prior to the Change in Control and shall continue through and including the date of the Change in Control.

“**Separation from Service**” means when the Grantee dies, retires, or otherwise has a termination of employment with the Company and its subsidiaries that constitutes a “separation from service” within the meaning of United States Treasury Regulation Section 1.409A-1(h)(1), without regard to the optional alternative definitions available thereunder.

“**Successor**” means the person acquiring a Grantee’s rights to a grant under the Plan by will or by the laws of descent or distribution.

NORTHROP GRUMMAN CORPORATION

2019 RESTRICTED PERFORMANCE STOCK RIGHTS GRANT AGREEMENT

This 2019 Restricted Performance Stock Rights Grant Agreement (“Agreement”) applies to certain “Restricted Performance Stock Rights” (“RPSRs”) granted by Northrop Grumman Corporation (the “Company”) in 2019 under its 2011 Long-Term Incentive Stock Plan. If you were granted an RPSR award by the Company in 2019, the date of grant of your RPSR award and the target number of RPSRs applicable to your award are set forth in the letter from the Company announcing your RPSR award (your “Grant Letter”) and are also reflected in the electronic stock plan award recordkeeping system (“Stock Plan System”) maintained by the Company or its designee. This Agreement applies only with respect to the 2019 RPSR award, and you are subject to this Agreement upon accepting your grant. If you were granted an RPSR award, you are referred to as the “Grantee” with respect to your award. Capitalized terms are generally defined in Section 12 below if not otherwise defined herein.

Each RPSR represents a right to receive one share of the Company’s Common Stock, or cash of equivalent value as provided herein subject to vesting as provided herein. The performance period applicable to your award is January 1, 2019 to December 31, 2021 (the “Performance Period”). The target number of RPSRs subject to your award is subject to adjustment as provided herein. The RPSR award is subject to all of the terms and conditions set forth in this Agreement, and is further subject to all of the terms and conditions of the Plan, as it may be amended from time to time, and any rules adopted by the Committee, as such rules are in effect from time to time. If you do not formally accept your RPSR award, by entering into this Agreement in accordance with the instructions and time limit set forth in your Grant Letter, you will be deemed to have forfeited your RPSR award.

1. Vesting; Payment of RPSRs.

The RPSRs are subject to the vesting and payment provisions established by the Committee with respect to the Performance Period. RPSRs (and any Dividend Equivalents (as defined below)) that vest based on such provisions will be paid as provided below.

1.1. *Performance-Based Vesting of RPSRs.* Subject to Sections 2, 3, 4 and 6 below, the RPSRs subject to the award shall vest and become nonforfeitable based on the performance methodology and goals established by the Committee for the Performance Period. At the conclusion of the Performance Period, the Committee shall determine whether and the extent to which the performance goals have been achieved. The percentage of target RPSRs subject to the award (if any) that have vested for the Performance Period (the “Earnout Percentage”) shall be determined by the Committee based on the methodology and goals as established by the Committee, and its determination of the Earnout Percentage shall be conclusive and binding. Any RPSRs (and related Dividend Equivalents) subject to the award that are not vested as of the conclusion of the Performance Period after giving effect to the Committee’s determinations under this Section 1.1 shall terminate and become null and void as of the last day of the Performance Period.

1.2. *Payment of RPSRs.* The number of RPSRs payable at the conclusion of the Performance Period (“Vested RPSRs”) shall be determined by multiplying the Earnout Percentage by the target number of RPSRs

subject to the award. The Vested RPSRs and any RPSRs that vest and become payable pursuant to Section 2 or 6 may be paid out in either an equivalent number of shares of Common Stock, or, in the discretion of the Committee, in cash or in a combination of shares of Common Stock and cash. In the event of a cash payment, the amount of payment for each Vested RPSR to be paid in cash will equal the Fair Market Value (as defined below) of a share of Common Stock as of the date the Committee determines the extent to which the applicable RPSR performance criteria have been achieved. Vested RPSRs will be paid within 60 days of the vesting date, but in no event later than March 15 of the year following the last day of the Performance Period.

1.3. *Dividend Equivalents.* The Grantee shall be entitled to payment for Dividend Equivalents (if any) with respect to any Vested RPSRs and any RPSRs that vest and become payable pursuant to Section 2 or 6. For purposes of this Agreement, “Dividend Equivalents” means the aggregate amount of dividends paid by the Company on a number of shares of Common Stock equivalent to the number of Vested RPSRs (or the number of RPSRs that vest and become payable pursuant to Section 2 or 6) during the period from the beginning of the Performance Period until the date the Vested RPSRs (or the RPSRs that vest and become payable pursuant to Section 2 or 6) are paid, without interest or other adjustments to reflect the time value of money. For these purposes, any Vested RPSRs or RPSRs that vest and become payable pursuant to Section 2 or 6 in excess of the target number of RPSRs subject to the award shall

be considered to have been granted at the beginning of the Performance Period. Dividend Equivalents (if any) will be paid at the same time as the Vested RPSRs (or the RPSRs that vest and become payable pursuant to Section 2 or 6) to which they relate are paid. Dividend Equivalents will be paid in cash.

2. Early Termination of Award; Termination of Employment.

2.1 General. The RPSRs (and related Dividend Equivalents) subject to the award shall terminate and become null and void prior to the conclusion of the Performance Period if and when (a) the award terminates in connection with a Change in Control pursuant to Section 6 below, or (b) except as provided below in this Section 2 and in Section 6, the Grantee ceases for any reason to be an employee of the Company or one of its subsidiaries.

2.2 Termination of Employment Due to Retirement, Death or Disability. The number of RPSRs (and related Dividend Equivalents) subject to the award shall vest on a prorated basis as provided herein if the Grantee's employment by the Company and its subsidiaries terminates due to the Grantee's Early Retirement, death, or Disability and, in each case, only if the Grantee has completed at least six (6) consecutive calendar months of employment with the Company or a subsidiary during the three-year Performance Period. Such prorating of RPSRs (and related Dividend Equivalents) shall be based on the number of calendar days the Grantee was actually employed by the Company or one of its subsidiaries over the number of calendar days in the Performance Period (the number of prorated RPSRs, the "Prorated RPSRs"). If the Grantee ceases to be employed by the Company or one of its subsidiaries due to the Grantee's Normal Retirement and such Normal Retirement occurs more than six (6) months after the Grant Date, the RPSRs will vest as if the employee had remained an employee for the full Performance Period. Any RPSRs (and related Dividend Equivalents) subject to the award that do not vest in accordance with this Section 2.2 upon a termination of the Grantee's employment due to Early Retirement or Normal Retirement (collectively "Retirement"), death or Disability shall terminate immediately upon such termination of employment.

Death or Disability. In the case of death or Disability (a) the Earnout Percentage of the Grantee's Prorated RPSRs (and related Dividend Equivalents) will be deemed to be 100% (target), regardless of actual performance, and (b) payment of the Prorated RPSRs (and related Dividend Equivalents) that vest pursuant to this Section 2.2 will be made within 60 days of the Grantee's death or Disability, but in no event later than

March 15 of the year following the date of the death or Disability.

Retirement in General. Subject to the following provisions of this Section 2.2, in the case of Retirement, the Earnout Percentage will be used to calculate the Grantee's Vested RPSRs, and payment of the Vested RPSRs (and related Dividend Equivalents) will be made in accordance with Section 1.2 above.

In determining the Grantee's eligibility for Retirement, service is measured by dividing (a) the number of days the Grantee was employed by the Company or a subsidiary in the period commencing with his or her last date of hire by the Company or a subsidiary through and including the date on which the Grantee is last employed by the Company or a subsidiary, by (b) 365. If the Grantee ceased to be employed by the Company or a subsidiary and was later rehired by the Company or a subsidiary, the Grantee's service prior to the break in service shall be disregarded in determining service for such purposes; provided that, if the Grantee's employment with the Company or a subsidiary had terminated due to the Grantee's Retirement, or by the Company or a subsidiary as part of a reduction in force (in each case, other than a termination by the Company or a subsidiary for Cause) and, within the two-year period following such termination of employment (the "break in service") the Grantee was subsequently rehired by the Company or a subsidiary, then the Grantee's period of service with the Company or a subsidiary prior to and ending with the break in service will be included in determining service for such purposes. In the event the Grantee is employed by a business that is acquired by the Company or a subsidiary, the Company shall have discretion to determine whether the Grantee's service prior to the acquisition will be included in determining service for such purposes.

Retirement Due to Governmental Service. In the case of a Governmental Service Retirement by the Grantee (a) the Performance Period used to calculate the Grantee's Vested RPSRs will be deemed to have ended as of the most recent date that performance has been measured by the Company with respect to the RPSRs prior to the Grantee's Retirement (but in no event shall such date be more than one year before the Grantee's Retirement), (b) the Earnout Percentage of the Grantee's Prorated RPSRs (and related Dividend Equivalents) will be determined based on actual performance for that short Performance Period, and (c) payment of the Prorated RPSRs that become Vested RPSRs (and Dividend Equivalents thereon) will be made within 20 days after Retirement.

2.3 Other Terminations of Employment. Subject to Section 6.2, all RPSRs (and related Dividend Equivalents) subject to the award shall terminate immediately upon a termination of the Grantee's employment: (a) for any reason other than due to the Grantee's Retirement, death or Disability; or (b) for Retirement, death or Disability, if the six-month employment requirement under Section 2.2 above is not satisfied.

2.4 Leave of Absence. Unless the Committee otherwise provides (at the time of the leave or otherwise), if the Grantee is granted a leave of absence by the Company, the Grantee (a) shall not be deemed to have incurred a termination of employment at the time such leave commences for purposes of the award, and (b) shall be deemed to be employed by the Company for the duration of such approved leave of absence for purposes of the award. A termination of employment shall be deemed to have occurred if the Grantee does not timely return to active employment upon the expiration of such approved leave or if the Grantee commences a leave that is not approved by the Company.

2.5 Salary Continuation. Subject to Section 2.4 above, the term "employment" as used herein means active employment by the Company and salary continuation without active employment (other than a leave of absence approved by the Company that is covered by Section 2.4) will not, in and of itself, constitute "employment" for purposes hereof (in the case of salary continuation without active employment, the Grantee's cessation of active employee status shall, subject to Section 2.4, be deemed to be a termination of "employment" for purposes hereof). Furthermore, salary continuation will not, in and of itself, constitute a leave of absence approved by the Company for purposes of the award.

2.6 Sale or Spinoff of Subsidiary or Business Unit. For purposes of the RPSRs (and related Dividend Equivalents) subject to the award, a termination of employment of the Grantee shall be deemed to have occurred if the Grantee is employed by a subsidiary or business unit and that subsidiary or business unit is sold, spun off, or otherwise divested, the Grantee does not otherwise continue to be employed by the Company or one of its subsidiaries after such event, and the divested entity or business (or its successor or a parent company) does not assume the award in connection with such transaction. In the event of such a termination of employment, the termination shall be deemed to be a Retirement treated as provided for in Section 2.2 (subject to Section 6).

2.7 Continuance of Employment Required. Except as expressly provided in Section 2.2, Section 2.4

and in Section 6, the vesting of the RPSRs (and related Dividend Equivalents) subject to the award requires continued employment through the last day of the Performance Period as a condition to the vesting of any portion of the award. Employment for only a portion of the Performance Period, even if a substantial portion, will not entitle the Grantee to any proportionate vesting or avoid or mitigate a termination of rights and benefits upon or following a termination of employment. Nothing contained in this Agreement, the Grant Letter, the Stock Plan System, or the Plan constitutes an employment commitment by the Company or any subsidiary, affects the Grantee's status (if the Grantee is otherwise an at-will employee) as an employee at will who is subject to termination without cause, confers upon the Grantee any right to continue in the employ of the Company or any subsidiary, or interferes in any way with the right of the Company or of any subsidiary to terminate such employment at any time.

2.8 Death. In the event of the Grantee's death subsequent to the vesting of RPSRs but prior to the delivery of shares or other payment with respect to such RPSRs (and related Dividend Equivalents), the Grantee's Successor shall be entitled to any payments to which the Grantee would have been entitled under this Agreement with respect to such RPSRs.

3. Non-Transferability and Other Restrictions.

3.1 Non-Transferability. The award, as well as the RPSRs (and related Dividend Equivalents) subject to the award, are non-transferable and shall not be subject in any manner to sale, transfer, anticipation, alienation, assignment, pledge, encumbrance or charge. The foregoing transfer restrictions shall not apply to transfers to the Company. Notwithstanding the foregoing, the Company may honor any transfer required pursuant to the terms of a court order in a divorce or similar domestic relations matter to the extent that such transfer does not adversely affect the Company's ability to register the offer and sale of the underlying shares on a Form S-8 Registration Statement and such transfer is otherwise in compliance with all applicable legal, regulatory and listing requirements.

3.2 Forfeiture or Recoupment of Awards. If, prior to payment or issuance of shares with respect to the award, Grantee's employment is terminated for Cause (or Grantee has engaged in misconduct that could have resulted in Grantee's termination of employment for Cause if Grantee had remained an employee), the Company may reduce or eliminate any payments or issuances of shares with respect to the award. Further, any payments or issuances of shares with respect to the award are subject to recoupment pursuant to the

Company's Policy Regarding the Recoupment of Certain Performance-Based Compensation Payments as in effect from time to time as well as any recoupment or similar provisions of applicable law, and the Grantee shall promptly make any reimbursement requested by the Board or Committee pursuant to such policy or applicable law with respect to the award. The Grantee agrees, by accepting the award, that the Company and its affiliates may deduct from any amounts it may owe the Grantee from time to time (such as wages or other compensation) to the extent of any amounts the Grantee is required to reimburse the Company pursuant to such policy or applicable law with respect to the award.

4. Post-Employment Conduct.

4.1 *Corporate Policy Council Contribution.* You acknowledge and agree that as a member of the Corporate Policy Council ("CPC"), you are involved in managing the global operations of the Company, incorporated in Delaware and headquartered in Virginia. You are involved in the most sensitive and proprietary matters affecting the Company, its subsidiaries, predecessors, and/or affiliates (collectively, "Northrop Grumman"), including from a technical, strategic and financial perspective, and are widely exposed to confidential, sensitive and proprietary information concerning Northrop Grumman's global operations, at the headquarters and each of the operating sectors, including in the areas of manned and unmanned aircraft, space, C4ISR, cyber, sensors, electronics, through-life support and technical services. Your job responsibilities require that you have a primary office location in Virginia and/or you spend substantial time at the corporate headquarters in Virginia, among other things, attending CPC and other leadership meetings, and managing operations and employees in Virginia. You occupy one of the most senior executive positions in the Company and have far-reaching access to highly confidential, valuable and sensitive information, customer, vendor and employee relationships, intellectual property, strategic and tactical plans, and financial information and plans. The Company has a legitimate business interest in restricting your ability to compete in the specific manner set forth below. The Company has provided you this grant, subject to this Agreement and as consideration for the restrictive covenants set forth in this Section 4.

4.2 *Non-Competition.* For a period of twelve (12) months from the date of the termination of Grantee's employment for any reason (other than a Reduction-in-Force as determined at the Company's sole discretion) ("Termination"), you will not, directly or indirectly, oversee, control, participate in, or support the design, operation, research, manufacture, marketing, sale, or

distribution of "Competitive Products and Services". For the purpose of this section, "Competitive Products and Services" shall mean products or services that compete for resources with or are an alternative or potential alternative to, the products sold or services provided by Northrop Grumman, including without limitation products and services in the areas of manned and unmanned aircraft, space, C4ISR, cyber, sensors, electronics, through-life support and technical services.

4.3 *Non-Solicitation of Customers.* For a period of eighteen (18) months from your Termination, you shall not, directly or indirectly, solicit any customer, supplier, or teammate of Northrop Grumman with whom you engaged, or about whom you received confidential, sensitive, or proprietary information, in the course of your employment with Northrop Grumman, for purposes of providing products or services in competition with Northrop Grumman. In the case of a governmental, regulatory or administrative agency, commission, department or other governmental authority, the customer is determined by reference to the specific program offices or activities for which Northrop Grumman provides goods or services.

4.4 *Non-Solicitation of Employees.* For a period of twenty-four (24) months from your Termination, you shall not, directly or indirectly, solicit or offer to hire, any person who was, within a period of six months prior to your Termination, employed by Northrop Grumman, with whom you worked or about whom you received information in the course of your employment with Northrop Grumman.

4.5 *Non-Disparagement.* You will not issue or communicate any statement, whether verbal or written, or take any other action that disparages or may be interpreted to disparage the Company, its products, services, officers, directors, or employees; provided that the foregoing shall not apply to any truthful statements made in connection with a legal process, including government investigation or as otherwise provided by law.

4.6 *Exceptions.* You may request an exception to the covenants in Sections 4.2, 4.3, or 4.4 by making a written request to the Company's Chief Human Resources Officer, with such exceptions being considered at the sole discretion of the Company and communicated in writing to you.

4.7 *Reasonableness.* You agree that the restrictions set forth in Sections 4.2, 4.3, and 4.4 are (i) reasonable and necessary in all respects, including duration, territory and scope of activity, in order to

protect the Company's legitimate business interests, (ii) that the parties have attempted to limit your right to compete only to the extent necessary to protect the Company's legitimate business interests, and (iii) that you will be able to earn a livelihood without violating the restrictions in this section. It is the intent of the parties that the provisions of this section shall be enforced to the fullest extent permissible under applicable law. However, if any portion of Section 4.2, 4.3, or 4.4 is deemed unenforceable, the parties agree that a court or arbitrator may revise the portion deemed unenforceable to the maximum extent possible to achieve the objective of the parties, and the remainder of the section shall remain in full force and affect.

4.8 Remedies. If you violate any provision in Section 4.2, 4.3, 4.4, and/or 4.5 of this section, the Company shall have the right to terminate without payment to you any unvested and/or unpaid RPSRs (and associated Dividend Equivalents) and require that you immediately deliver to the Company an amount in cash equal to the aggregate Fair Market Value, determined as of the vesting and/or payment date of all RPSRs already received, including any Dividend Equivalents, within one year prior to the breach. Further, you acknowledge and agree that a breach of any of the provisions of this section will result in immediate, irreparable, and continuing damage to the Company for which there is no adequate remedy at law, and the Company will be entitled to injunctive relief, a decree of specific performance, and other relief as may be proper, including monetary damages, to the maximum extent available.

5. Compliance with Laws; No Stockholder Rights Prior to Issuance.

The Company's obligation to make any payments or issue any shares with respect to the award is subject to full compliance with all then applicable requirements of law, the Securities and Exchange Commission, or other regulatory agencies having jurisdiction over the Company and its shares, and of any exchange upon which stock of the Company may be listed. The Grantee shall not have the rights and privileges of a stockholder, including without limitation the right to vote or receive dividends (except as expressly provided in this Agreement with respect to Dividend Equivalents), with respect to any shares which may be issued in respect of the RPSRs until the date appearing on the certificate(s) for such shares (or, in the case of shares entered in book entry form, the date that the shares are actually recorded in such form for the benefit of the Grantee), if such shares become deliverable.

6. Adjustments; Change in Control.

6.1 Adjustments. The RPSRs and the shares subject to the award are subject to adjustment upon the occurrence of events such as stock splits, stock dividends and other changes in capitalization in accordance with Section 6(a) of the Plan. In addition, for RPSRs that do not use a relative total shareholder return metric as the applicable performance criterion, the applicable performance criteria and goals are subject to adjustment pursuant to Section 8 of the Plan. Any such adjustment or determination not to make any adjustment shall be conclusive and binding.

6.2 Possible Acceleration on Change in Control.

Notwithstanding the provisions of Section 2 hereof, and further subject to the Company's ability to terminate the award as provided in Section 6.3 below, the Grantee shall be entitled to vesting of the award as provided below in the event of the Grantee's termination of employment if at the time of the termination, the termination occurs either within the Protected Period corresponding to a Change in Control of the Company or within twenty-four (24) calendar months following the date of a Change in Control of the Company, and the Grantee's employment by the Company and its subsidiaries is involuntarily terminated by the Company and its subsidiaries for reasons other than Cause or by the Grantee for Good Reason.

Notwithstanding anything else contained herein to the contrary, the termination of the Grantee's employment (or other events giving rise to Good Reason) shall not entitle the Grantee to any accelerated vesting pursuant to this Section 6.2 if there is objective evidence that, as of the commencement of the Protected Period, the Grantee had specifically been identified by the Company as an employee whose employment would be terminated as part of a corporate restructuring or downsizing program that commenced prior to the Protected Period and such termination of employment was expected at that time to occur within six (6) months.

In the event the Grantee is entitled to payment in accordance with the foregoing provisions of this Section 6.2, then the Grantee will be eligible for payment of a number of RPSRs (and related Dividend Equivalents) determined in accordance with the following formula: (a) the Earnout Percentage determined in accordance with Section 1 but calculated based on performance for the portion of the three-year Performance Period ending on the last day of the month coinciding with or immediately preceding the date of the termination of the Grantee's employment, multiplied by (b) the target number of RPSRs subject to the award. Payment of any amount due under this Section 6.2 will be made within 60 days of the date of the termination of Grantee's

employment, but in no event later than March 15th of the year following the Grantee's termination of employment.

6.3 Automatic Acceleration; Early Termination. If the Company undergoes a Change in Control triggered by clause (iii) or (iv) of the definition thereof and the Company is not the surviving entity and the successor to the Company (if any) (or a Parent thereof) does not agree in writing prior to the occurrence of the Change in Control to continue and assume the award following the Change in Control, or if for any other reason the award would not continue after the Change in Control, then upon the Change in Control the Grantee shall be entitled to a payment of the RPSRs (and related Dividend Equivalents) as provided below and the award shall terminate. Unless the Committee expressly provides otherwise in the circumstances, no acceleration of vesting of the award shall occur pursuant to this Section 6.3 in connection with a Change in Control if either (a) the Company is the surviving entity, or (b) the successor to the Company (if any) (or a Parent thereof) agrees in writing prior to the Change in Control to assume the award. The Committee may make adjustments pursuant to Section 6(a) of the Plan and/or deem an acceleration of vesting of the award pursuant to this Section 6.3 to occur sufficiently prior to an event if necessary or deemed appropriate to permit the Grantee to realize the benefits intended to be conveyed with respect to the shares underlying the award; provided, however, that, the Committee may reinstate the original terms of the award if the related event does not actually occur.

In the event the Grantee is entitled to a payment in accordance with the foregoing provisions of this Section 6.3, then the Grantee will be eligible for payment of a number of RPSRs (and related Dividend Equivalents) determined in accordance with the following formula: (a) the Earnout Percentage determined in accordance with Section 1 but calculated based on performance for the portion of the three-year Performance Period ending on the date of the Change in Control of the Company, multiplied by (b) the target number of RPSRs subject to the award. Payment of any amount due under this Section 6.3 will be made within 60 days of the Change of Control, but in no event later than March 15 of the year following the Change in Control. In the event the Grantee is employed by the Company or a subsidiary immediately prior to the Change in Control and is entitled to payment in accordance with the foregoing provisions of this Section 6.3, then this Section 6.3 shall control as to the amount and timing of the payment of the award notwithstanding anything in Section 2.2 or 6.2 to the contrary. In the event of the Grantee's Retirement pursuant to Section 2.2 prior to a Change in Control described in the first paragraph of this Section 6.3 in which the award is to be terminated, the Earnout

Percentage shall no longer be based on the portion of the Performance Period otherwise considered for purposes of Section 2.2 but shall instead be calculated based on performance for the portion of the three-year Performance Period ending on the date of the Change in Control of the Company.

7. Tax Matters.

7.1 Tax Withholding. The Company or the subsidiary which employs the Grantee shall be entitled to require, as a condition of making any payments or issuing any shares upon vesting of the RPSRs and related Dividend Equivalents, that the Grantee or other person entitled to such shares or other payment pay the minimum sums required to be withheld by federal, state, local or other applicable tax law with respect to such vesting or payment. Alternatively, the Company or such subsidiary, in its discretion, may make such provisions for the withholding of taxes as it deems appropriate (including, without limitation, withholding the taxes due from compensation otherwise payable to the Grantee or reducing the number of shares otherwise deliverable with respect to the award (valued at their then Fair Market Value) by the amount necessary to satisfy such statutory minimum withholding obligations).

7.2 Transfer Taxes. The Company will pay all federal and state transfer taxes, if any, and other fees and expenses in connection with the issuance of shares in connection with the vesting of the RPSRs.

7.3 Compliance. This Agreement is designed to be exempt from Code Section 409A, and the Committee shall administer and construe the award in such a way as to be exempt from and to avoid adverse tax consequences under Code Section 409A.

7.4 Unfunded Arrangement. The right of the Grantee to receive payment under the award shall be an unsecured contractual claim against the Company. As such, neither the Grantee nor any Successor shall have any rights in or against any specific assets of the Company based on the award. Awards shall at all times be considered entirely unfunded for tax purposes.

7.5 Code Section 280G. Notwithstanding any other provision of this Agreement to the contrary, in the event that any amounts payable to you as a result of Section 6.2 or 6.3 hereof, either alone or together with amounts payable pursuant to any other plan, program or arrangement (a) constitute "parachute payments" within the meaning of Section 280G of the Code, and (b) but for this Section 7.5 would be subject to the excise tax imposed by Section 4999 of the Code or any comparable successor provisions (the "Excise Tax"), then the vesting acceleration provided in Section 6.2 or 6.3, as applicable,

shall be either (a) provided to you in full, or (b) provided to you to such lesser extent that would result in no portion of the payments so accelerated being subject to the Excise Tax, whichever of the foregoing amounts, when taking into account applicable federal, state, local and foreign income and employment taxes, the Excise Tax, and any other applicable taxes, results in the receipt by you, on an after-tax basis, of the greatest amount of benefits, notwithstanding that all or some portion of such benefits may be subject to the Excise Tax. All determinations required to be made under this Section 7.5 shall be made by a registered public accounting firm selected by the Company, which shall provide supporting calculations both to the Company and you no later than the date of the applicable Change in Control. In the event that the Payments are to be reduced pursuant to this Section 7.5, such Payments shall be reduced such that the reduction of compensation to be provided to the Executive as a result of this Section 7.5 is minimized. In applying this principle, the reduction shall be made in a manner consistent with the requirements of Section 409A and where two economically equivalent amounts are subject to reduction but payable at different times, such amounts shall be reduced on a pro rata basis but not below zero.

8. Choice of Law; Venue; Arbitration.

This agreement shall be governed by the laws of the State of Delaware. Any cause of action or claim arising out of or related to the terms and conditions applicable to this grant will be determined through final and binding arbitration, in accordance with Northrop Grumman CTM H200 USHR 2-32, provided that the prevailing party in the arbitration shall be entitled to receive from the losing party reasonably incurred attorneys' fees and costs. You and the Company agree that any arbitration hearing and related proceedings shall be convened and conducted in Falls Church, VA. If you or the Company believes they require immediate relief to enforce or challenge this Agreement, before arbitration is commenced or concluded, either party may seek injunctive or other provisional equitable relief from a state or federal court in the Commonwealth of Virginia. All court actions or proceedings arising under this Agreement shall be heard in a state or federal court in the Commonwealth of Virginia. The Company and you hereby agree to the jurisdiction of the state and federal courts in the Commonwealth of Virginia and waive any right to object to such actions on grounds of venue, jurisdiction or convenience.

9. Committee Authority.

The Committee has the discretionary authority to determine any questions as to the date when the Grantee's employment terminated and the cause of such

termination and to interpret any provision of this Agreement, the Grant Letter, the Stock Plan System, the Plan, and any other applicable rules. Any action taken by, or inaction of, the Committee relating to or pursuant to this Agreement, the Grant Letter, the Stock Plan System, the Plan, or any other applicable rules shall be within the absolute discretion of the Committee and shall be conclusive and binding on all persons.

10. Plan; Amendment.

The RPSRs (and related Dividend Equivalents) subject to the award are governed by, and the Grantee's rights are subject to, all of the terms and conditions of the Plan and any other rules adopted by the Committee, as the foregoing may be amended from time to time. The Grantee shall have no rights with respect to any amendment of this Agreement or the Plan unless such amendment is in writing and signed by a duly authorized officer of the Company. In the event of a conflict between the provisions of the Grant Letter and/or the Stock Plan System and the provisions of this Agreement and/or the Plan, the provisions of this Agreement and/or the Plan, as applicable, shall control.

11. Required Holding Period.

The holding requirements of this Section 11 shall apply to any Grantee who is an elected or appointed officer of the Company on the date any RPSRs are paid (or, if earlier, on the date the Grantee's employment by the Company and its subsidiaries terminates for any reason). Any Grantee subject to this Section 11 shall not be permitted to sell, transfer, anticipate, alienate, assign, pledge, encumber or charge the number of shares equal to 50% of the total payout of Vested RPSRs (net of taxes withheld) until the earlier of (A) the third anniversary of the date such shares of Common Stock are paid to the Grantee, (B) the date the Grantee's employment by the Company and its subsidiaries terminates due to the Grantee's death or Disability, (C) the occurrence of a Change in Control that results in termination and payment under Section 6.2 or 6.3 above, or (D) with respect to Grantee's entering a U.S. federal government position only, the latest of (i) the date the Grantee's employment with the Company terminates, or (ii) the date the Grantee formally accepts the government position in writing, or (iii) the date the government confirms the Grantee (for positions requiring nomination and confirmation). Should the Grantee's employment by the Company and its subsidiaries terminate (regardless of the reason for such termination, but other than due to the Grantee's death or Disability or a Change in Control related termination under Section 6.2 or entering a U.S. federal government position), such holding period requirement shall not apply as to any shares acquired upon payment of RPSRs to the extent such payment is

made more than one year after such termination of employment. (For purposes of clarity, in such circumstances the holding period requirement will apply as to any shares acquired upon payment of RPSRs within one year after such a termination of employment.) For purposes of this Section 11, the total payout of Vested RPSRs shall be determined on a net basis after taking into account any shares otherwise deliverable with respect to the award that the Company withholds to satisfy tax obligations pursuant to Section 7.1. If Grantee is paid less than 50% of the total payout of Vested RPSRs (net of taxes) in shares, then all of the shares received will be subject to the holding period requirements in this Section 11. Any shares of Common Stock received in respect of shares that are covered by the holding period requirements of this Section 11 (such as shares received in respect of a stock split or stock dividend) shall be subject to the same holding period requirements as the shares to which they relate.

12. Definitions.

Whenever used in this Agreement, the following terms shall have the meanings set forth below and, when the meaning is intended, the initial letter of the word is capitalized:

“**Board**” means the Board of Directors of the Company.

“**Cause**” means the occurrence of either or both of the following:

- (i) The Grantee’s conviction for committing an act of fraud, embezzlement, theft, or other act constituting a felony (other than traffic related offenses, as a result of vicarious liability, or as a result of good faith actions as an officer of the Company); or
- (ii) Willful misconduct by the Grantee that causes financial or reputational harm to the Company. However, no act, or failure to act, on the Grantee’s part shall be considered “willful” unless done, or omitted to be done, by the Grantee not in good faith and without reasonable belief that his or her action or omission was in the best interest of the Company.

“**Change in Control**” is used as defined in the Plan.

“**Code**” means the United States Internal Revenue Code of 1986, as amended.

“**Committee**” means the Company’s Compensation Committee or any successor committee appointed by the Board to administer the Plan.

“**Common Stock**” means the Company’s common stock.

“**Disability**” means, with respect to a Grantee, that the Grantee: (i) is unable to engage in any substantial gainful activity by reason of any medically determinable physical or mental impairment which can be expected to result in death or can be expected to last for a continuous period of not less than twelve months; or (ii) is, by reason of any medically determinable physical or mental impairment which can be expected to result in death or can be expected to last for a continuous period of not less than twelve months, receiving income replacement benefits for a period of not less than three months under an accident and health plan covering employees of the Grantee’s employer.

“**Early Retirement**” means that the Grantee’s employment terminates in any of the following circumstances, and other than a termination of employment that constitutes a Normal Retirement or occurs in connection with a termination by the Company or a subsidiary for Cause:

- (i) a termination of employment after the Grantee has attained age 55 with at least 10 years of service.
- (ii) a termination of employment by the Company or a subsidiary as part of a reduction in force and, at the time of such termination, the Grantee has attained age 53 with at least 10 years of service.
- (iii) a termination of employment by the Company or a subsidiary as part of a reduction in force and, at the time of such termination, the sum of the Grantee’s age and years of service is at least 75.

“**Fair Market Value**” is used as defined in the Plan; provided, however, the Committee in determining such Fair Market Value for purposes of the award may utilize such other exchange, market, or listing as it deems appropriate.

“**Good Reason**” means, without the Grantee’s express written consent, the occurrence of any one or more of the following:

- (i) A material and substantial reduction in the nature or status of the Grantee’s authorities or responsibilities (when such authorities and/or responsibilities are viewed in the aggregate) from their level in effect on the day immediately prior to the start of the Protected Period, other than (A) an inadvertent act that is remedied by the Company promptly after receipt of notice

thereof given by the Grantee, and/or (B) changes in the nature or status of the Grantee's authorities or responsibilities that, in the aggregate, would generally be viewed by a nationally-recognized executive placement firm as resulting in the Grantee having not materially and substantially fewer authorities and responsibilities (taking into consideration the Company's industry) when compared to the authorities and responsibilities applicable to the position held by the Grantee immediately prior to the start of the Protected Period. The Company may retain a nationally-recognized executive placement firm for purposes of making the determination required by the preceding sentence and the written opinion of the firm thus selected shall be conclusive as to this issue.

In addition, if the Grantee is a vice president, the Grantee's loss of vice-president status will constitute "Good Reason"; provided that the loss of the title of "vice president" will not, in and of itself, constitute Good Reason if the Grantee's lack of a vice president title is generally consistent with the manner in which the title of vice president is used within the Grantee's business unit or if the loss of the title is the result of a promotion to a higher level office. For the purposes of the preceding sentence, the Grantee's lack of a vice-president title will only be considered generally consistent with the manner in which such title is used if most persons in the business unit with authorities, duties, and responsibilities comparable to those of the Grantee immediately prior to the commencement of the Protected Period do not have the title of vice-president.

- (ii) A material reduction by the Company in the Grantee's annualized rate of base salary as in effect on the first to occur of the start of the Performance Period or the start of the Protected Period, or as the same shall be increased from time to time.
- (iii) A material reduction in the aggregate value of the Grantee's level of participation in any of the Company's short and/or long-term incentive compensation plans (excluding stock-based incentive compensation plans), employee benefit or retirement plans, or policies, practices, or arrangements in which the Grantee participates immediately prior to the start of the Protected Period provided; however, that a reduction in the aggregate value shall not be deemed to be "Good Reason" if the reduced value remains substantially consistent with the average level of

other employees who have positions commensurate with the position held by the Grantee immediately prior to the start of the Protected Period.

- (iv) A material reduction in the Grantee's aggregate level of participation in the Company's stock-based incentive compensation plans from the level in effect immediately prior to the start of the Protected Period; provided, however, that a reduction in the aggregate level of participation shall not be deemed to be "Good Reason" if the reduced level of participation remains substantially consistent with the average level of participation of other employees who have positions commensurate with the position held by the Grantee immediately prior to the start of the Protected Period.
- (v) The Grantee is informed by the Company that his or her principal place of employment for the Company will be relocated to a location that is greater than fifty (50) miles away from the Grantee's principal place of employment for the Company at the start of the corresponding Protected Period; provided that, if the Company communicates an intended effective date for such relocation, in no event shall Good Reason exist pursuant to this clause (v) more than ninety (90) days before such intended effective date.

The Grantee's right to terminate employment for Good Reason shall not be affected by the Grantee's incapacity due to physical or mental illness. The Grantee's continued employment shall not constitute a consent to, or a waiver of rights with respect to, any circumstances constituting Good Reason herein.

"Governmental Service Retirement" means a Retirement by the Grantee where the Grantee accepts a position in the federal government or a state or local government and an accelerated distribution under the award is permitted under Code Section 409A based on such government employment and related ethics rules.

"Normal Retirement" means that the Grantee terminates employment after attaining age 65 with at least 10 years of service (other than in connection with a termination by the Company or a subsidiary for Cause). In the case of a Grantee who is an officer of the Company subject to the Company's mandatory retirement at age 65 policy and who, at the applicable time, is not otherwise eligible for Normal Retirement as defined in the preceding sentence, "Normal Retirement" as to that Grantee means that the Grantee's employment is terminated pursuant to such mandatory retirement policy (regardless of the Grantee's years of service and

other than in connection with a termination by the Company or a subsidiary for Cause).

“**Parent**” is used as defined in the Plan.

“**Plan**” means the Northrop Grumman 2011 Long-Term Incentive Stock Plan, as it may be amended from time to time.

The “**Protected Period**” corresponding to a Change in Control of the Company shall be a period of time determined in accordance with the following:

- (i) If the Change in Control is triggered by a tender offer for shares of the Company’s stock or by the offeror’s acquisition of shares pursuant to such a tender offer, the Protected Period shall commence on the date of the initial tender offer and shall continue through and including the date of the Change in Control; provided that in no case will the Protected Period commence earlier than the date that is six (6) months prior to the Change in Control.
- (ii) If the Change in Control is triggered by a merger, consolidation, or reorganization of the Company with or involving any other corporation, the Protected Period shall commence on the date that serious and substantial discussions first take place to effect the merger, consolidation, or reorganization and shall continue through and including the date of the Change in Control; provided that in no case will the Protected Period commence earlier than the date that is six (6) months prior to the Change in Control.
- (iii) In the case of any Change in Control not described in clause (i) or (ii) above, the Protected Period shall commence on the date that is six (6) months prior to the Change in Control and shall continue through and include the date of the Change in Control.

“**Successor**” means the person acquiring a Grantee’s rights to a grant under the Plan by will or by the laws of descent or distribution.

Group Personal Excess Liability Policy**CHUBB"****Coverage Summary***Name and address of Insured*

NORTHROP GRUMMAN CORPORATION GROUP PERSONAL
EXCESS PROGRAM
2980 FAIRVIEW PARK DRIVE
FALLS CHURCH, VIRGINIA 22042

Producer No.: 0017806

Sponsoring Organization and Address

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

Chubb Group of Insurance Companies
PO BOX 1600,
Whitehouse Station, NJ 08889-1600

Policy Number: (20) 7993-14-03

Issued by the stock insurance company indicated below, herein called the company.

FEDERAL INSURANCE COMPANY

Incorporated under the laws of INDIANA

Policy Period

From: JANUARY 01, 2019 To: JANUARY 01, 2020
12:01 A.M. Standard Time at the Named Insured's mailing address.

Premium

Amount
\$160,553.00

Limit Of Liability

SEE ENDT Each Occurrence

SEE ENDT Excess Uninsured / Underinsured

Motorists Protection Each
Occurrence

Required Primary Underlying Insurance

Personal Liability (Homeowners) for personal injury and property damage in the minimum amount of \$100,000 each occurrence.

Registered vehicles in the minimum amount of \$250,000 / \$500,000 bodily injury and \$100,000 property damage; or \$300,000 single limit each occurrence.

Required Primary Underlying Insurance

(continued)

Unregistered vehicles in the minimum amount of \$300,000 bodily injury and property damage each occurrence.

Registered vehicles with less than four wheels and motorhomes in the minimum amount \$250,000 / \$500,000 bodily injury and \$100,000 property damage; or \$300,000 single limit each occurrence.

Watercraft less than 26 feet and 50 engine rated horsepower or less for bodily and property damage in the minimum amount of \$300,000 each occurrence.

Watercraft 26 feet or longer or more than 50 engine rated horsepower for bodily injury and property damage in the minimum amount of \$500,000 each occurrence.

Uninsured motorists/underinsured motorists protection in the minimum amount of \$250,000 / \$500,000 bodily injury and \$100,000 property damage; or \$300,000 single limit occurrence.

FAILURE TO COMPLY WITH THE REQUIRED PRIMARY UNDERLYING INSURANCE WILL RESULT IN A GAP IN COVERAGE.

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CHUBB

Effective Date JANUARY 01, 2019

Policy Number 7993-14-03

Group Personal Excess Liability Policy

Coverage Summary

Authorization

In Witness Whereof, the company issuing this policy has caused this policy to be signed by its authorized officers and signed by a duly authorized representative of the company.

FEDERAL INSURANCE COMPANY



President


Secretary

Date

FEBRUARY 14, 2019



Authorized Representative

Producer's Name & Address

MARSH USA, INC (PHILADELPHIA)
1717 ARCH STREET 1100
PHILADELPHIA, PA 19103-0000

Chubb. Insured™

CHUBB® Schedule of Forms

Policy Number: (20) 7993-14-03

Insured: NORTHROP GRUMMAN CORPORATION GROUP PERSONAL EXCESS PROGRAM

Policy Period From: JANUARY 01, 2019 to JANUARY 01, 2020

The following is a schedule of forms issued with the policy at inception:

Form Name	Form Number	
PRIVACY NOTICE - GROUP MASTER POLICY	10-02-1058	(10/ 16)
IMPORTANT NOTICE - OFAC	99-10-0796	(09/04)
COVERAGE SUMMARY/DECLARATIONS	10-02-0690	(08/07)
GROUP PERSONAL EXCESS - CONTRACT/POLICY TERMS	10-02-0691	(07/16)
NAMED INSURED ENDORSEMENT	10-02-0692	(08/96)
UNDERLYING LIMITS ENDORSEMENT	10-02-0692	(08/96)
ANNUAL PREMIUM ADJUSTMENT CLAUSE	10-02-0692	(08/96)

CHUBB.

***GROUP PERSONAL EXCESS
LIABILITY
POLICY***

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GROUP PERSONAL EXCESS LIABILITY POLICY**INTRODUCTION**

This is your Chubb Group Personal Excess Liability Policy. Together with your Coverage Summary, it explains your coverages and other conditions of your insurance in detail.

This policy is a contract between you and us. **READ YOUR POLICY CAREFULLY** and keep it in a safe place.

Agreement

We agree to provide the insurance described in this policy in return for the premium paid by you or the Sponsoring Organization and your compliance with the policy conditions.

Definitions

In this policy, we use words in their plain English meaning. Words with special meanings are defined in the part of the policy where they are used. The few defined terms used throughout the policy are defined here:

You means the individual who is a member of the Defined Group shown as the Insured named in the Coverage Summary.

Spouse means a partner in marriage or a partner in a civil union recognized under state law and who lives with you.

We and us mean the insurance company named in the Coverage Summary.

Family member means your spouse or domestic partner or other relative who lives with you, or any other person under 25 in your care or your relative's care who lives with you.

Domestic partner means a person in a legal or personal relationship with you, who lives with you and shares a common domestic life with you, and meeting all of the benefits eligibility criteria as defined by the Sponsoring Organization.

Sponsoring Organization means the entity, corporation, partnership or sole proprietorship sponsoring and defining the criteria for qualification as an Insured.

Policy means your entire Group Personal Excess Liability Policy, including the Coverage Summary.

Coverage Summary means the most recent Coverage Summary we issued to you, including any endorsements.

Occurrence means an accident or offense to which this insurance applies and which begins within the policy period. Continuous or repeated exposure to substantially the same general conditions unless excluded is considered to be one occurrence.

Business means any employment, trade, occupation, profession, or farm operation including the raising or care of animals or any activities intended to realize a benefit or financial gain engaged in on a full-time, part-time or occasional basis.

Defined Group means those individuals meeting the criteria for qualification as an Insured as defined by the Sponsoring Organization and accepted by us.

Follow form means we cover damages to the extent they are both covered under the Required Primary Underlying Insurance and, not excluded under this policy. Also, the amount of coverage, defense coverages, cancellation and "other insurance" provisions of this policy supersede and replace the similar provisions contained in such other policies. When this policy is called upon to pay losses in excess of required primary underlying policies exhausted by payment of claims, we do not provide broader coverage than provided by such policies. When no primary underlying coverage exists, the extent of coverage provided on a follow form basis will be determined as if the required primary underlying insurance had been purchased from us.

Covered person means:

- you or a family member;
- any person using a vehicle or watercraft covered under this policy with permission from you or a family member with respect to their legal responsibility arising out of its use;
- any other person who is a covered person under your Required Primary Underlying Insurance;
- any person or organization with respect to their legal responsibility for covered acts or omissions of you or a family member; or
- any combination of the above.

Definitions

(continued)

Damages mean the sum that is paid or is payable to satisfy a claim settled by us or resolved by judicial procedure or by a compromise we agree to in writing.

Personal injury means the following injuries, and resulting death:

- bodily injury;
- shock, mental anguish, or mental injury;
- false arrest, false imprisonment, or wrongful detention;
- wrongful entry or eviction;
- malicious prosecution or humiliation; and
- libel, slander, defamation of character, or invasion of privacy.

Bodily injury means physical bodily harm, including sickness or disease that results from it, and required care, loss of services and resulting death.

Property damage means physical injury to or destruction of tangible property and the resulting loss of its use. Tangible property includes the cost of recreating or replacing stocks, bonds, deeds, mortgages, bank deposits, and similar instruments, but does not include the value represented by such instruments. Tangible property does not include the cost of recreating or replacing any software, data or other information that is in electronic form.

Registered vehicle means any motorized land vehicle not described in "unregistered vehicle."

Unregistered vehicle means:

- any motorized land vehicle not designed for or required to be registered for use on public roads;
- any motorized land vehicle which is in dead storage at your residence;
- any motorized land vehicle used solely on and to service your residence premises;
- any motorized land vehicle used to assist the disabled that is not designed for or required to be registered for use on public roads; or
- golf carts.

GROUP PERSONAL EXCESS COVERAGE

This part of your Group Personal Excess Liability Policy provides you or a family member with liability coverage in excess of your underlying insurance anywhere in the world unless stated otherwise or an exclusion applies.

Payment for a Loss

Amount of coverage

The amount of coverage for liability is shown in the Coverage Summary. We will pay on your behalf up to that amount for covered damages from any one occurrence, regardless of how many claims, homes, vehicles, watercraft, or people are involved in the occurrence.

Any costs we pay for legal expenses (see **Defense coverages**) are in addition to the amount of coverage.

Underlying Insurance

We will pay only for covered damages in excess of all underlying insurance covering those damages, even if the underlying coverage is for more than the minimum amount.

"Underlying insurance" includes all liability coverage that applies to the covered damages, except for other insurance purchased in excess of this policy.

Required primary underlying insurance

Regardless of whatever other primary underlying insurance may be available in the event of a claim or loss, it is a condition of your policy that you and your family members must maintain in full effect primary underlying liability insurance of the types and in at least the amounts set forth below unless a different amount is shown in your Coverage Summary, covering your personal liability and to the extent you or a family member have such liability exposures, all vehicles and watercraft you or your family members own, or rent for longer than 60 days, or have furnished for longer than 60 days, as follows:

Personal liability (homeowners) for personal injury and property damage in the minimum amount of \$300,000 each occurrence.

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Payment for a Loss

(continued)

Registered vehicles in the minimum amount of:

- \$250,000/\$500,000 bodily injury and \$100,000 property damage;
- \$300,000/\$300,000 bodily injury and \$100,000 property damage; or
- \$300,000 single limit each occurrence.

Unregistered vehicles in the minimum amount of \$300,000 bodily injury and property damage each occurrence.

Registered vehicles with less than four wheels and motorhomes in the minimum amount of:

- \$250,000/\$500,000 bodily injury and \$100,000 property damage;
- \$300,000/\$300,000 bodily injury and \$100,000 property damage; or
- \$300,000 single limit each occurrence.

Watercraft less than 26 feet and 50 engine rated horsepower or less for bodily injury and property damage in the minimum amount of \$300,000 each occurrence.

Watercraft 26 feet or longer or more than 50 engine rated horsepower for bodily injury and property damage in the minimum amount of \$500,000 each occurrence.

Uninsured motorists/underinsured motorist protection in the minimum amounts of:

- \$250,000/\$500,000 bodily injury and \$100,000 property damage;
- \$300,000/\$300,000 bodily injury and \$100,000 property damage; or
- \$300,000 single limit each occurrence.

With respect to you and your family members residing outside of the United States, the required primary underlying insurance limits of liability shall be the same limits of liability as shown above, unless you and your family members reside in a country where the minimum required primary underlying insurance limits of liability are not available. In these countries, you and your family members must maintain in full effect primary underlying liability insurance limits equal to the maximum limits of liability available in that country for all coverages up to the minimum required primary underlying limits shown in the Coverage Summary under Required Primary Underlying Insurance.

Failure by you or your family members to comply with this condition, or failure of any of your primary underlying insurers due to insolvency or bankruptcy, shall not invalidate this policy. In the event of any such failure, we shall only be liable in excess of the foregoing minimum amounts and to no greater extent with respect to coverages, amounts and defense costs than we would have been had this failure not occurred.

You must also give notice of losses and otherwise cooperate and comply with the terms and conditions of such primary underlying insurance.

Group Personal Excess Liability Coverage

We cover damages a covered person is legally obligated to pay for personal injury or property damage, caused by an occurrence:

- in excess of damages covered by the underlying insurance; or
- from the first dollar of damage where no underlying insurance is required under this policy and no underlying insurance exists; or
- from the first dollar of damage where underlying insurance is required under this policy but no coverage is provided by the underlying insurance for a particular occurrence;

unless stated otherwise or an exclusion applies. Exclusions to this coverage are described in **Exclusions**.

Excess uninsured motorists/underinsured motorist protection

This coverage is in effect only if excess uninsured motorists/underinsured motorists protection is shown in the Coverage Summary.

Group Personal Excess Liability Coverage

(continued)

We cover damages for bodily injury and property damage a covered person is legally entitled to receive from the owner or operator of an uninsured motorized/underinsured motorized land vehicle. We cover these damages in excess of the underlying insurance or the Required Primary Underlying Insurance, whichever is greater, if they are caused by an occurrence during the policy period, unless otherwise stated.

Amount of coverage. The maximum amount of excess uninsured motorists/underinsured motorists protection available for any one occurrence is the excess uninsured motorists/underinsured motorists protection amount shown in the Coverage Summary regardless of the number of vehicles covered by the Required Primary Underlying Insurance. We will not pay more than this amount in any one occurrence for covered damages regardless of how many claims, vehicles or people are involved in the occurrence. This coverage will follow form.

Uninsured motorists/underinsured motorists protection arbitration

If we and a covered person disagree whether that person is legally entitled to recover damages from the owner or operator of an uninsured motor vehicle/underinsured motor vehicle, or do not agree as to the amount of damages, either party may make a written demand for arbitration. In this event, each party will select an arbitrator. The two arbitrators will select a third. If they cannot agree on a third arbitrator within 45 days, either may request that the arbitration be submitted to the American Arbitration Association. When the covered person's recovery exceeds the minimum limit specified in the applicable jurisdiction's financial responsibility law, each party will pay the expenses it incurs, and bear the expenses of the third arbitrator equally. Otherwise, we will bear all the expenses of the arbitration.

Unless both parties agree otherwise, arbitration will take place in the county and state in which the covered person lives. Local rules of law as to procedure and evidence will apply. A decision agreed to by two arbitrators will be binding unless the recovery amount for bodily injury exceeds the minimum limit specified by the applicable jurisdiction's financial responsibility law. If the amount exceeds that limit, either party may demand the right to a trial. This demand must be made within 60 days of the arbitrator's decision. If this demand is not made, the amount of damages agreed to by the arbitrators will be binding.

Uninsured/underinsured liability coverage

This coverage is in effect only if excess uninsured motorists/underinsured motorists protection is shown in the Coverage Summary.

We cover up to a maximum of \$1 million for bodily injury and personal injury you or a family member are legally entitled to receive from an uninsured or underinsured negligent person caused by an occurrence, unless stated otherwise or an exclusion applies. We will not pay more than this amount for covered damages from any one occurrence, regardless of how many claims or people are involved in the occurrence. This coverage is excess over the total of any other collectible insurance that covers damages from the occurrence.

All the exclusions under the Group Personal Excess Liability Coverage are applicable to this Uninsured/underinsured liability coverage, and where used, the definition of you or a family member is extended to include negligent person. This coverage also does not apply to damages from an occurrence arising out of any business activities; any activities involving business property or the sale or transfer of property; or the ownership, maintenance, use, loading, unloading, or towing of any motor vehicle, watercraft, or aircraft. In addition, this coverage does not apply to damages from an occurrence arising from any employment related harassment, termination, demotion, breach of an oral or written employment contract or agreement or violation of any state or federal wrongful employment practices act or similar law.

We also do not cover any fines, penalties, taxes, punitive, exemplary or multiplied damages, or any claim or suit seeking non monetary relief, including but not limited to, injunctive relief, declaratory relief or other equitable remedies.

"Negligent person" means an identifiable natural person by legal name who is not a family member, and who is legally responsible for damages sustained by you or a family member caused by an occurrence.

Duplication of coverage. We will not make a duplicate payment for any portion of damages for which payment has been made by or on behalf of persons who may be legally responsible, or otherwise covered by any other collectible insurance. Nor will we pay for any portion of damages if you or a family member is entitled to receive payment for the same portion of damages under any workers' compensation law, disability benefits law or similar law.

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**GROUP PERSONAL EXCESS LIABILITY
POLICY**

Group Personal Excess Liability Coverage

(continued)

Defense coverages

We will defend a covered person against any suit seeking covered damages for personal injury or property damage that is either:

- not covered by any underlying insurance; or
- covered by an underlying policy. This will apply to each Defense Coverage as it has been exhausted by payment of claims.

We provide this defense at our expense, with counsel of our choice, even if the suit is groundless, false, or fraudulent. We may investigate, negotiate, and settle any such claim or suit at our discretion.

As part of our investigation, defense, negotiation, or settlement, we will pay:

- all premiums on appeal bonds required in any suit we defend;
- all premiums on bonds to release attachments for any amount up to the amount of coverage (but we are not obligated to apply for or furnish any bond);
- all expenses incurred by us;
- all costs taxed against a covered person;
- all interest accruing after a judgment is entered in a suit we defend on only that part of the judgment we are responsible for paying. We will not pay interest accruing after we have paid the judgment up to the amount of coverage;
- all prejudgment interest awarded against a covered person on that part of the judgment we pay or offer to pay.

We will not pay any prejudgment interest based on that period of time after we make an offer to pay the amount of coverage;

- all earnings lost by each covered person at our request, up to \$25,000;
- other reasonable expenses incurred by a covered person at our request; and
- the cost of bail bonds required of a covered person because of a covered loss.

In jurisdictions where we may be prevented by local law from carrying out these Defense Coverages, we will pay only those defense expenses that we agree in writing to pay and that are incurred by you.

Extra Coverages

In addition to covering damages and defense costs, we also provide other related coverages. These coverages are in addition to the amount of coverage for damages and defense costs unless stated otherwise.

Shadow defense coverage

If we are defending you or a family member in a suit seeking covered damages, we will pay reasonable expenses you or a family member incur up to \$10,000 or the amount shown in the Coverage Summary for a law firm of your choice to review and monitor the defense. However any recommendation by your persona attorney is not binding on us. We will pay these costs provided that you obtain prior approval from us before incurring any fees or expenses.

Identity fraud

We will pay for your or a family member's identity fraud expenses, up to a maximum of \$25,000, for each identity fraud occurrence.

"Identity fraud" means the act of knowingly transferring or using, without lawful authority, your or a family member's means of identity which constitutes a violation of federal law or a crime under any applicable state or local law.

"Identity fraud occurrence" means any act or series of acts of identity fraud by a person or group commencing in the policy period.

"Identity fraud expenses" means:

- the costs for notarizing affidavits or similar documents for law enforcement agencies, financial institutions or similar credit grantors, and credit agencies;
- the costs for sending certified mail to law enforcement agencies, financial institutions or similar credit grantors, and credit agencies;

Extra Coverages

(continued)

- the loan application fees for reapplying for loan(s) due to the rejection of the original application because the lender received incorrect credit information;
- the telephone expenses for calls to businesses, law enforcement agencies, financial institutions or similar credit grantors, and credit agencies;
- earnings lost by you or a family member as a result of time off from work to complete fraud affidavits, meet with law enforcement agencies, credit agencies, merchants, or legal counsel;
- the reasonable attorney fees incurred with prior notice to us for:
- the defense of you or a family member against any suit(s) by businesses or their collection agencies;
- the removal of any criminal or civil judgements wrongly entered against you or a family member;
- any challenge to the information in your or a family member's consumer credit report; and
- the reasonable fees incurred with prior notice to us by an identity fraud mitigation entity to:
- provide services for the activities described above;
- restore accounts or credit standing with financial institutions or similar credit grantors and credit agencies; and
- monitor for up to one year the effectiveness of the fraud mitigation and to detect additional identity fraud activity after the first identify fraud occurrence.

However, such monitoring must begin no later than one year after you or a family member first report an identity fraud occurrence to us.

However, "identity fraud expenses" does not include expenses incurred due to any fraudulent, dishonest or criminal act by a covered person or any person acting with a covered person, or by any authorized representative of a covered person, whether acting alone or in collusion with others.

"Identity fraud mitigation entity" means a company that principally provides professional, specialized services to counter identity fraud for individuals or groups of individuals, or a financial institution that provides similar services.

In addition to the duties described in Policy Terms, Liability Conditions, Your duties after a loss, you shall notify an applicable law enforcement agency.

Kidnap expenses

We will pay up to a maximum of \$100,000 for kidnap expenses you or a family member incurs solely and directly as a result of a kidnap and ransom occurrence. In addition, we also will pay up to \$25,000 to any person for information not otherwise available leading to the arrest and conviction of any person(s) who kidnaps you, a family member or a covered relative. The following are not eligible to receive this reward payment:

- you or a family member; or
- a covered relative who witnessed the occurrence.

"Kidnap and ransom occurrence" means the actual or alleged wrongful taking of:

- you;
- one or more family members; or
- one or more covered relatives while visiting or legally traveling with you or a family member; from anywhere in the world except those places listed on the United States State Department Bureau of Consular Affairs Travel Warnings list at the time of the occurrence. The occurrence must include a demand for ransom payment which would be paid by you or a family member in exchange for the release of the kidnapped person(s).

"Kidnap expenses" means the reasonable costs for:

- a professional negotiator;
- a professional security consultant;
- professional security guard services;
- a professional public relations consultant;
- travel, meals, lodging and phone expenses incurred by you or a family member;
- advertising, communications and recording equipment;
- related medical, cosmetic, psychiatric and dental expenses incurred by a kidnapped person within 12 months from that person's release;
- attorneys fees;
- a professional forensic analyst;
- earnings lost by you or a family member, up to \$25,000.

CHUBB" GROUP PERSONAL EXCESS LIABILITY POLICY

Extra Coverages

(continued)

However, "kidnap expenses" does not include expenses incurred due to any kidnap and ransom occurrence caused by:

- you or a family member;
 - a covered relative;
 - any guardian, or former guardian of you, a family member or covered relative;
 - any estranged spouse or domestic partner, or former spouse or domestic partner of you or a family member;
 - any person unrelated to you or a family member who lives with you or a family member or has ever lived with you or a family member for 6 or more months, other than a domestic employee, residential staff, or a person employed by you or a family member for farm work; or
 - a civil authority,
- or any person acting on behalf of any of the above, whether acting alone or in collusion with others.

"Covered relative" means the following relatives of you, or a spouse or domestic partner who lives with you, or any family member:

- children, their children or other descendants of theirs;
 - parents, grandparents or other ancestors of theirs; or
 - siblings, their children or other descendants of theirs;
- who do not live with you, including spouses or domestic partners of all of the above. Parents, grandparents and other ancestors include adoptive parents, stepparents and stepgrandparents.

Reputational injury. If we are defending you or a family member in a suit seeking covered damages, we will pay reasonable and necessary fees or expenses that you or a family member incur for services provided by a reputation management firm to minimize potential injury to the reputation of you or a family member solely as a result of personal injury or property damage, caused by an occurrence if:

- the reputational injury is reported to us as soon as reasonably possible but not later than 30 days after the personal injury or property damage occurrence; and
- you obtain approval of the reputation management firm from us before incurring any fees or expenses, unless stated otherwise or an exclusion applies. There is no deductible for this coverage.

A Reputation management firm means a professional public relations consulting firm, a professional security consulting firm or a professional media management consulting firm.

The maximum amount of coverage for Reputational injury available for any one occurrence is \$25,000 or the amount shown in the Coverage Summary. We will not pay more than this amount in any one occurrence for covered damages regardless of how many claims or people are involved in the occurrence.

The maximum annual amount of coverage for Reputational injury shown in the Coverage Summary is the most we will pay for the sum of all covered damages you or a family member incur during the policy period regardless of the number of claims, people, or occurrences.

This coverage does not apply to loss caused by a wrongful employment act covered by Employment Practices Liability Insurance.

Exclusions

These exclusions apply to your Group Personal Excess Liability Coverage, unless stated otherwise.

Aircraft. We do not cover any damages arising out of the ownership, maintenance, use, loading, unloading, or towing of any aircraft, except aircraft chartered with crew by you. We do not cover any property damages to aircraft rented to, owned by, or in the care, custody or control of a covered person.

Hovercraft. We do not cover any damages arising out of the ownership, maintenance, use, loading, unloading or towing of any hovercraft. We do not cover any property damages to hovercraft rented to, owned by, or in the care, custody or control of a covered person.

Exclusions

(continued)

Motorized land vehicle racing or track usage. We do not cover any damages arising out of the ownership, maintenance or use of any motorized land vehicle:

- during any instruction, practice, preparation for, or participation in, any competitive, prearranged or organized racing, speed contest, rally, gymkhana, sports event, stunting activity, or timed event of any kind; or
- on a racetrack, test track or other course of any kind.

Watercraft and aircraft racing or track usage. We do not cover any damages arising out of the ownership, maintenance or use of any watercraft or aircraft during any instruction, practice, preparation for, or participation in, any competitive, prearranged or organized racing, speed contest, rally, sports event, stunting activity or timed event of any kind. This exclusion does not apply to you or a family member for sailboat racing even if the sailboat is equipped with an auxiliary motor.

Motorized land vehicle-related jobs. We do not cover any damages arising out of the ownership, maintenance, or use of a motorized land vehicle by any person who is employed or otherwise engaged in the business of selling, repairing, servicing, storing, parking, testing, or delivering motorized land vehicles. This exclusion does not apply to you, a family member, or your employee or an employee of a family member for damages arising out of the ownership, maintenance or use of a motorized land vehicle owned by, rented to, or furnished to you or a family member.

Watercraft related jobs. We do not cover any damages arising out of the ownership, maintenance, or use of a watercraft by any person who is engaged by or employed by, or is operating a marina, boat repair yard, shipyard, yacht club, boat sales agency, boat service station, or other similar organization. This exclusion does not apply to damages arising out of the ownership, maintenance, or use of a watercraft by you, a family member, or your or a family member's captain or full time paid crew member maintaining or using this watercraft with permission from you or a family member.

Motorized land vehicle and watercraft loading. We do not cover any person or organization, other than you or a family member or your or a family member's employees, with respect to the loading or unloading of motorized land vehicles or watercraft.

Workers' compensation or disability. We do not cover any damages a covered person is legally:

- required to provide; or
- voluntarily provides under any:
- workers' compensation;
- disability benefits;
- unemployment compensation; or
- other similar laws.

But we do provide coverage in excess over any other insurance for damages you or a family member is legally required to pay for bodily injury to a domestic employee of a residence covered under the Required Primary Underlying Insurance which are not compensable under workers' compensation, unless another exclusion applies.

Director's liability. We do not cover any damages for any covered person's actions or failure to act as an officer or member of a board of directors of any corporation or organization. However, we do cover such damages if you are or a family member is an officer or member of a board of directors of a:

- homeowner, condominium or cooperative association; or
- not for profit corporation or organization for which he or she is not compensated; unless another exclusion applies.

Damage to covered person's property. We do not cover any person for property damage to property owned by any covered person.

Damage to property in your care. We do not cover any person for property damage to property rented to, occupied by, used by, or in the care of any covered person, to the extent that the covered person is required by contract to provide insurance. But we do cover such damages for loss caused by fire, smoke, or explosion unless another exclusion applies.

Wrongful employment act. We do not cover any damages arising out of a wrongful employment act. A wrongful employment act means any employment discrimination, sexual harassment, or wrongful termination of any residential staff actually or allegedly committed or attempted by a covered person while acting in the capacity as an employer, that violates applicable employment law of any federal, state, or local statute, regulation, ordinance, or common law of the United States of America, its territories or possessions, or Puerto Rico.

GROUP PERSONAL EXCESS LIABILITY POLICY

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Exclusions

(continued)

Employment discrimination as it relates solely to a wrongful employment act means a violation of applicable employment discrimination law protecting any residential staff based on his or her race, color, religion, creed, age, sex, disability, national origin or other status according to any federal, state, or local statute, regulation, ordinance, or common law of the United States of America, its territories or possessions, or Puerto Rico.

Sexual harassment as it relates solely to a wrongful employment act means unwelcome sexual advances, requests for sexual favors, or other conduct of a sexual nature that:

- is made a condition of employment of any residential staff;
- is used as a basis for employment decisions;
- interferes with performance of any residential staff's duties; or
- creates an intimidating, hostile, or offensive working environment.

Wrongful termination as it relates solely to a wrongful employment act means:

- the actual or constructive termination of employment of any residential staff by you or a family member in violation of applicable employment law; or
- breach of duty and care when you or a family member terminates an employment relationship with any residential staff.

Residential staff as it relates solely to a wrongful employment act means your or a family member's employee who is:

- employed by you or a family member, or through a firm under an agreement with you or a family member, to perform duties related only to a covered person's domestic, personal, or business pursuits covered under this part of your policy;
- compensated for labor or services directed by you or a family member; and
- employed regularly to work 15 or more hours per week.

Residential staff includes a temporary worker. Residential staff does not include an independent contractor or any covered person.

Temporary worker as it relates solely to a wrongful employment act means your or a family member's employee who is:

- employed by you or a family member, or through a firm under an agreement with you or a family member, to perform duties related only to a covered person's domestic, personal, or business pursuits covered under this part of your policy;
- compensated for labor or services directed by you or a family member; and
- employed to work 15 or more hours per week to substitute for any residential staff on leave or to meet seasonal or short-term workload demands for 30 consecutive days or longer during a 6 month period.

Temporary worker does not include an independent contractor or any covered person.

Discrimination. We do not cover any damages arising out of discrimination due to age, race, color, sex, creed, national origin, or any other discrimination.

Intentional acts. We do not cover any damages arising out of a willful, malicious, fraudulent or dishonest act or any act intended by any covered person to cause personal injury or property damage, even if the injury or damage is of a different degree or type than actually intended or expected. But we do cover such damages if the act was intended to protect people or property unless another exclusion applies. An intentional act is one whose consequences could have been foreseen by a reasonable person.

Molestation, misconduct or abuse. We do not cover any damages arising out of any actual, alleged or threatened:

- sexual molestation;
- sexual misconduct or harassment; or
- abuse.

Nonpermissive use. We do not cover any person who uses a motorized land vehicle or watercraft without permission from you or a family member.

Exclusions

(continued)

Business pursuits. We do not cover any damages arising out of a covered person's business pursuits, investment or other for-profit activities, for the account of a covered person or others, or business property except on a follow form basis.

But we do cover damages arising out of volunteer work for an organized charitable, religious or community group, an incidental business away from home, incidental business at home, incidental business property, incidental farming, or residence premises conditional business liability unless another exclusion applies. We also cover damages arising out of your or a family member's ownership, maintenance, or use of a private passenger motor vehicle in business activities other than selling, repairing, servicing, storing, parking, testing, or delivering motorized land vehicles.

Unless stated otherwise in your Coverage Summary:

"Incidental business away from home" is a self-employed sales activity, or a self-employed business activity normally undertaken by person under the age of 18 such as newspaper delivery, babysitting, caddying, and lawn care. Either of these activities must:

- not yield gross revenues in excess of \$15,000 in any year;
- have no employees subject to worker's compensation or other similar disability laws;
- conform to local, state, and federal laws.

"Incidental business at home" is a business activity, other than farming, conducted on your residence premises which must:

- not yield gross revenues in excess of \$15,000, in any year, except for the business activity of managing one's own personal investments;
- have no employees subject to worker's compensation or other similar disability laws;
- conform to local, state, and federal laws.

"Incidental business property" is limited to the rental or holding for rental, to be used as a residence, of a condominium or cooperative unit owned by you or a family member, an apartment unit rented to you or a family member, a one or two family dwelling owned by you or a family member, or a three or four family dwelling owned and occupied by you or a family member. We provide this coverage only for premises covered under the Required Primary Underlying Insurance unless the rental or holding for rental is for:

- a residence of yours or a family member's that is occasionally rented and that is used exclusively as a residence; or
- part of a residence of yours or a family member's by one or two roomers or boarders; or
- part of a residence of yours or a family member's as an office, school, studio, or private garage.

"Incidental farming" is a farming activity which meets all of the following requirements:

- is incidental to your or a family member's use of the premises as a residence;
- does not involve employment of others for more than 1,500 hours of farm work during the policy period;
- does not produce more than \$25,000 in gross annual revenue from agricultural operations;
- and with respect to the raising or care of animals:
 - does not produce more than \$50,000 in gross annual revenues;
 - does not involve more than 25 sales transactions during the policy period;
 - does not involve the sale of more than 50 animals during the policy period.

"Residence premises conditional business liability" is limited to business or professional activities when legally conducted by you or a family member at your residence. We provide coverage only for personal injury or property damage arising out of the physical condition of that residence if:

- you or a family member do not have any employees involved in your business or professional activities who are subject to workers' compensation or other similar disability laws; or, if you or a family member are a doctor or dentist, you do not have more than two employees subject to such laws;
- you or a family member do not earn annual gross revenues in excess of \$5,000, if you or a family member are a home day care provider.

We do not cover damages or consequences resulting from business or professional care or services performed or not performed.

CHUBB. GROUP PERSONAL EXCESS LIABILITY POLICY

Exclusions

(continued)

The following additional exclusion applies only to "incidental farming" as described under the exclusion, **Business pursuits**.

Contamination. We do not cover any actual or alleged damages arising out of the discharge, dispersal, seepage, migration or release or escape of pollutants. Nor do we cover any cost or expense arising out of any request, demand or order to:

- extract pollutants from land or water;
- remove, restore or replace polluted or contaminated land or water; or
- test for, monitor, clean up, remove, contain, treat, detoxify or neutralize pollutants, or in any way respond to or assess the effects of pollutants.

However, this exclusion does not apply if the discharge, dispersal, seepage, migration, release or escape is sudden and accidental. A "pollutant" is any solid, liquid, gaseous or thermal irritant or contaminant, including smoke (except smoke from a hostile fire), vapor, soot, fumes, acids, alkalis, chemicals and waste. A "contaminant" is an impurity resulting from the mixture of or contact of a substance with a foreign substance. "Waste" includes materials to be disposed of, recycled, reconditioned or reclaimed.

Financial guarantees. We do not cover any damages for any covered person's financial guarantee of the financial performance of any covered person, other individual or organization.

Professional services. We do not cover any damages for any covered person's performing or failure to perform professional services, or for professional services for which any covered person is legally responsible or licensed.

Acts of war. We do not cover any damages caused directly or indirectly by war, undeclared war, civil war, insurrection, rebellion, revolution, warlike acts by military forces or personnel, the destruction or seizure of property for a military purpose, or the consequences of any of these actions.

Contractual liability. We do not cover any assessments charged against a covered person as a member of a homeowners, condominium or cooperative association. We also do not cover any damages arising from contracts or agreements made in connection with any covered person's business. Nor do we cover any liability for unwritten contracts, or contracts in which the liability of others is assumed after a covered loss.

Covered person's or dependent's personal injury. We do not cover any damages for personal injury for any covered person or their dependents where the ultimate beneficiary is the offending party or defendant. We also do not cover any damages for personal injury for which you can be held legally liable, in any way, to a family member, your spouse or domestic partner or for which a family member, your spouse or domestic partner can be held legally liable, in any way, to you.

However, we do cover damages for bodily injury arising out of the use of a motorized land vehicle for which you can be held legally liable to a family member, your spouse or domestic partner or for which a family member, your spouse or domestic partner can be held legally liable to you to the extent that coverage is provided under this policy. This coverage applies only to the extent such damages are covered by primary underlying insurance and exceed the limits of insurance required for that motorized land vehicle under the Required Primary Underlying Insurance provisions of this policy.

Liability for dependent care. We do not cover any damages for personal injury for which a covered person's only legal liability is by virtue of a contract or other responsibility for a dependent's care.

Illness. We do not cover personal injury or property damage resulting from any illness, sickness or disease transmitted intentionally or unintentionally by a covered person to anyone, or any consequence resulting from that illness, sickness or disease. We also do not cover any damages for personal injury resulting from the fear of contracting any illness, sickness or disease, or any consequence resulting from the fear of contracting any illness, sickness or disease.

Fungi and mold. We do not cover any actual or alleged damages or medical expenses arising out of mold, the fear of mold, or any consequences resulting from mold or the fear of mold. "Mold" means fungi, mold, mold spores, mycotoxins, and the scents and other byproducts of any of these.

Exclusions

(continued)

Nuclear or radiation hazard. We do not cover any damages caused directly or indirectly by nuclear reaction, radiation, or radioactive contamination, regardless of how it was caused.

POLICY TERMS

This part of your Group Personal Excess Liability Policy explains the conditions that apply to your policy.

General Conditions

These conditions apply to your policy in general, and to each coverage provided in the policy.

Policy period

The effective dates of your policy are shown in the Coverage Summary. Those dates begin at 12:01 a.m. standard time at the mailing address shown.

All coverages on this policy apply only to occurrences that take place while this policy is in effect.

Transfer of rights

If we make a payment under this policy, we will assume any recovery rights a covered person has in connection with that loss, to the extent we have paid for the loss.

All of your rights of recovery will become our rights to the extent of any payment we make under this policy. A covered person will do everything necessary to secure such rights; and do nothing after a loss to prejudice such rights. However, you may waive any rights of recovery from another person or organization for a covered loss in writing before the loss occurs.

Concealment or fraud

We do not provide coverage if you or any covered person has intentionally concealed or misrepresented any material fact relating to this policy before or after a loss.

Application of coverage

Coverage applies separately to each covered person. However, this provision does not increase the amount of coverage for any one occurrence.

Assignment

You cannot transfer your interest in this policy to anyone else unless we agree in writing to the transfer.

Policy changes

This policy can be changed only by a written amendment we issue.

Bankruptcy or insolvency

We will meet all our obligations under this policy regardless of whether you, your estate, or anyone else or their estate becomes bankrupt or insolvent.

In case of death

In the event of your death, coverage will be provided until the end of the policy period or policy anniversary date, whichever occurs first, for any surviving member of your household who is a covered person at the time of death. We will also cover your legal representative or any person having proper temporary custody of your property.

Liberalization

We may extend or broaden the coverage provided by this policy. If we do this during the policy period or within 60 days before it begins, without increasing the premium, then the extended or broadened coverage will apply to occurrences after the effective date of the extended or broadened coverage.

Conforming to state law

If any provision of this policy conflict with any applicable laws of the state you live in, this policy is amended to conform to those laws.

Conforming to trade sanction laws

This policy does not apply to the extent that trade or economic sanctions or other laws or regulations prohibit us from providing insurance.

CHUBB. GROUP PERSONAL EXCESS LIABILITY POLICY

Liability Conditions

These conditions apply to all liability coverages in this policy.

Other Insurance

This insurance is excess over any other insurance except for those policies that

- are written specifically to cover excess over the amount of coverage that applies in this policy; and
- schedule this policy as underlying insurance.

Your duties after a loss

In case of an accident or occurrence, the covered person shall perform the following duties that apply:

Notification. You must notify us or your agent or broker as soon as possible.

Assistance. You must provide us with all available information. This includes any suit papers or other documents which help us in the event that we defend you.

Cooperation. You must cooperate with us fully in any legal defense. This may include any association by us with the covered person in defense of a claim reasonably likely to involve us.

Examination. A person making a claim under this policy must submit as often as we reasonably require:

- to physical exams by physicians we select, which we will pay for; and
- to examination under oath and subscribe the same; and authorize us to obtain:
 - medical reports; and
 - other pertinent records.

Appeals

If a covered person, or any primary insurer, does not appeal a judgment for covered damages, we may choose to do so. We will then become responsible for all expenses, taxable costs, and interest arising out of the appeal. However, the amount of coverage for damages will not be increased.

Special Conditions

In the event of conflict with any other conditions of your policy, these conditions supersede.

Legal action against us

You agree not to bring action against us unless you have first complied with all conditions of this policy.

You also agree not to bring any action against us until the amount of damages you are legally obligated to pay has been finally determined after an actual trial or appeal, if any, or by a written agreement between you, us and the claimant. No person or organization has any right under this policy to bring us into any action to determine the liability of a covered person.

Notice of cancellation and coverage termination conditions

The Sponsoring Organization may cancel this policy by returning it to us or notifying us in writing at any time subject to the following:

- the Sponsoring Organization must notify us in advance of the requested cancellation date; and
- the Sponsoring Organization must provide proof of notification to each member of the Defined Group covered under this policy.

We may cancel this policy or any part of it subject to the following conditions. Our right to cancel applies to each coverage or limit in this policy. In the event we cancel this policy, we are under no obligation to provide you with an opportunity to purchase equivalent coverage.

Special Conditions

(continued)

Within 60 days. When this policy or any part of it has been in effect for less than 60 days, we may cancel with 30 days notice for any reason.

Non payment of premium. We may cancel this policy or any part of it with 10 days notice if the Sponsoring Organization or you fail to pay the premium by the due date, regardless of whether the premium is payable to us, to our agent, or under any financial credit.

Misrepresentation. We may cancel this policy or any part of it with 30 days notice if the coverage was obtained through misrepresentation, fraudulent statements, or omissions or concealment of a fact that is relevant to the acceptance of the risk or to the hazard we assumed.

Increase in hazard. We may cancel this policy or any part of it with 30 days notice if there has been a substantial change in the risk which increases the chance of loss after insurance coverage has been issued or renewed, including but not limited to an increase in exposure due to rules, legislation, or court decision.

Procedure. To cancel this policy or any part of it, we must notify you in writing. This notice will be mailed to the Sponsoring Organization at the mailing address shown in the Coverage Summary and we will obtain a certificate of mailing. This notice will include the date the cancellation is to take effect.

Termination. Should an individual for any reason no longer qualify as a member of the Defined Group, coverage will cease sixty (60) days from the date that individual no longer qualifies as a member of the Defined Group, or the policy expiration or cancellation date, whichever comes first.

Refund. In the event of cancellation by the Sponsoring Organization or us, we will refund any unearned premium on the effective date of cancellation, or as soon as possible afterwards to the Sponsoring Organization. The unearned premium will be computed short rate for the unexpired term of the policy.

CHUBB"

ENDORSEMENT

GROUP EXCESS LIABILITY POLICY

Policy Period Effective Date Policy Number

JANUARY 01, 2019

JANUARY 01, 2019

(20) 7993-14-03

to JANUARY 01, 2020

Insured

NORTHROP GRUMMAN CORPORATION GROUP
PERSONAL EXCESS PROGRAM

Name of Company FEDERAL INSURANCE COMPANY

Date Issued FEBRUARY 14, 2019

All Vice Presidents, Non Officers designated by the company and Designated Retirees of Northrop Grumman Corporation

\$20,000,000 Limit of Liability
\$ 5,000,000 UM/UIM Protection Limit

\$15,000,000 Limit of Liability
\$ 5,000,000 UM/UIM Protection Limit

\$15,000,000 Limit of Liability
\$ 3,000,000 UM/UIM Protection Limit

\$15,000,000 Limit of Liability
\$ 2,000,000 UM/UIM Protection Limit

\$10,000,000 Limit of Liability
\$ 5,000,000 UM/UIM Protection Limit

\$10,000,000 Limit of Liability
\$ 3,000,000 UM/UIM Protection Limit

\$10,000,000 Limit of Liability
\$ 2,000,000 UM/UIM Protection Limit

\$ 5,000,000 Limit of Liability
\$ 2,000,000 UM/UIM Protection Limit

ALL OTHER TERMS AND CONDITIONS REMAIN UNCHANGED.


Authorized Representative

ENDORSEMENT

Policy Period JANUARY 01, 2019 to JANUARY 01, 2020

Effective Date JANUARY 01, 2019

Policy Number (20) 7993-14-03

Insured NORTHROP GRUMMAN CORPORATION
GROUP PERSONAL EXCESS PROGRAM

Name of Company FEDERAL INSURANCE COMPANY

Date Issued FEBRUARY 14, 2019

UNDERLYING LIMITS ENDORSEMENT

IT IS HEREBY UNDERSTOOD AND AGREED THAT THE REQUIRED PRIMARY UNDERLYING LIABILITY INSURANCE LIMITS ARE AMENDED TO:

Personal Liability (Homeowners) for personal injury and property damage in the minimum amount of \$100,000 each occurrence.

Registered vehicles in the minimum amount of:

\$250,000/\$500,000 bodily injury and \$100,000 property damage;
\$300,000/\$300,000 bodily injury and \$100,000 property damage; or
\$300,000 single limit each occurrence.

Unregistered vehicles in the minimum amount of \$300,000 bodily injury and property damage each occurrence.

Registered vehicles with less than four wheels and motorhomes in the minimum amount of:

\$250,000/\$500,000 bodily injury and \$100,000 property damage;
\$300,000/\$300,000 bodily injury and \$100,000 property damage; or
\$300,000 single limit each occurrence.

Watercraft less than 26 feet and 50 engine rated horsepower or less for bodily injury and property damage in the minimum amount of \$300,000 each occurrence.

Watercraft 26 feet or longer or more than 50 engine rated horsepower for bodily injury and property damage in the minimum amount of \$500,000 each occurrence.

Uninsured motorists /underinsured motorist protection in the minimum amount of:

\$250,000/\$500,000 bodily injury and \$100,000 property damage;
\$300,000/\$300,000 bodily injury and \$100,000 property damage; or

\$300,000 single limit each occurrence.

FAILURE TO COMPLY WITH THE REQUIRED PRIMARY UNDERLYING INSURANCE WILL RESULT IN A GAP IN COVERAGE.---

ALL OTHER TERMS AND CONDITIONS REMAIN UNCHANGED.

Authorized Representative

A handwritten signature in black ink, appearing to be "P. M. Q.", written over a horizontal line.

ENDORSEMENT

Policy Period JANUARY 01, 2019 to JANUARY 01, 2020

Effective Date JANUARY 01, 2019

Policy Number (20) 7993-14-03

Insured NORTHROP GRUMMAN CORPORATION
 GROUP PERSONAL EXCESS PROGRAM

Name of Company FEDERAL INSURANCE COMPANY

Date Issued FEBRUARY 14, 2019

ANNUAL PREMIUM ADJUSTMENT CLAUSE

It is agreed that this policy is written with a deposit premium to be adjusted on either each policy anniversary or at policy expiration. The premium will be adjusted on the basis of the difference between the total number of participants at inception and the actual number of participants at each policy anniversary. This difference is to be multiplied by fifty percent (50%) of the annual rate per participant, resulting in either an additional or return premium.

ALL OTHER TERMS AND CONDITIONS REMAIN UNCHANGED.

Authorized Representative



YOUR BENEFIT PLAN

Northrop Grumman Corporation

**All Actively at Work Employees Participating
In One of The Following Executive Classes:**

Class I – Chief Executive Officer (CEO)

**Class II – Elected Officers Who Are Direct Reports To
The Chief Executive Officer (CEO)**

**Class III – Elected Officers Who Are Non-Direct Reports To
The Chief Executive Officer (CEO)**

**Class IV – All Other Vice Presidents of The
Northrop Grumman Corporation**

Class V – Chairman

Basic Life Insurance

Accidental Death and Dismemberment Insurance

Certificate Date: January 1, 2019

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

TO OUR EMPLOYEES:

All of us appreciate the protection and security insurance provides.

This certificate describes the benefits that are available to you. We urge you to read it carefully.

Northrop Grumman Corporation

MetLife

Metropolitan Life Insurance Company
200 Park Avenue, New York, New York 10166

CERTIFICATE OF INSURANCE

Metropolitan Life Insurance Company ("MetLife"), a stock company, certifies that You are insured for the benefits described in this certificate, subject to the provisions of this certificate. This certificate is issued to You under the Group Policy and it includes the terms and provisions of the Group Policy that describe Your insurance. **PLEASE READ THIS CERTIFICATE CAREFULLY.**

This certificate is part of the Group Policy. The Group Policy is a contract between MetLife and the Policyholder and may be changed or ended without Your consent or notice to You.

Policyholder: Northrop Grumman Corporation

Group Policy Number: 91360-2-G

Type of Insurance: Term Life & Accidental Death and Dismemberment Insurance

MetLife Toll Free Number(s):
For Claim Information FOR LIFE CLAIMS: 1-800-638-6420

PLEASE AFFIX THE STICKER
SHOWING THE EMPLOYEE'S
NAME AND EFFECTIVE DATE
IN THIS SPACE.

THIS CERTIFICATE ONLY DESCRIBES TERM LIFE AND ACCIDENTAL DEATH AND DISMEMBERMENT INSURANCE.

THE BENEFITS OF THE POLICY PROVIDING YOUR COVERAGE ARE GOVERNED PRIMARILY BY THE LAW OF A STATE OTHER THAN FLORIDA.

THE GROUP INSURANCE POLICY PROVIDING COVERAGE UNDER THIS CERTIFICATE WAS ISSUED IN A JURISDICTION OTHER THAN MARYLAND AND MAY NOT PROVIDE ALL THE BENEFITS REQUIRED BY MARYLAND LAW.

WE ARE REQUIRED BY STATE LAW TO INCLUDE THE NOTICE(S) WHICH APPEAR ON THIS PAGE AND IN THE NOTICE(S) SECTION WHICH FOLLOWS THIS PAGE. PLEASE READ THE(SE) NOTICE(S) CAREFULLY.

GCERT2000
fp

IMPORTANT NOTICE

To obtain information or make a complaint:

You may call MetLife's toll free telephone number for information or to make a complaint at:

1-800-638-6420

You may contact the Texas Department of Insurance to obtain information on companies, coverages, rights, or complaints at:

1-800-252-3439

You may write the Texas Department of Insurance:

P.O. Box 149104
Austin, TX 78714-9104
Fax: (512) 490-1007

Web: www.tdi.texas.gov

Email: ConsumerProtection@tdi.texas.gov

PREMIUM OR CLAIM DISPUTES: Should you have a dispute concerning your premium or about a claim, you should contact MetLife first. If the dispute is not resolved, you may contact the Texas Department of Insurance.

ATTACH THIS NOTICE TO YOUR CERTIFICATE: This notice is for information only and does not become a part or condition of the attached document.

AVISO IMPORTANTE

GCERT2000 For Texas Residents
notice/tx 11/14

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Para obtener información o para presentar una queja:

Usted puede llamar al número de teléfono gratuito de MetLife's para obtener información o para presentar una queja al:

1-800-638-6420

Usted puede comunicarse con el Departamento de Seguros de Texas para obtener información sobre compañías, coberturas, derechos, o quejas al:

1-800-252-3439

Usted puede escribir al Departamento de Seguros de Texas a:

P.O. Box 149104
Austin, TX 78714-9104
Fax: (512) 490-1007

Sitio Web: www.tdi.texas.gov

Email: ConsumerProtection@tdi.texas.gov

DISPUTAS POR PRIMAS DE SEGUROS O RECLAMACIONES: Si tiene una disputa relacionada con su prima de seguro o con una reclamación, usted debe comunicarse con MetLife primero. Si la disputa no es resuelta, usted puede comunicarse con el Departamento de Seguros de Texas.

ADJUNTE ESTE AVISO A SU CERTIFICADO:

Este aviso es solamente para propósitos informativos y no se convierte en parte o en condición del documento adjunto.

NOTICE FOR RESIDENTS OF WASHINGTON

LIFE INSURANCE: ACCELERATED BENEFIT OPTION (ABO)

The Life Insurance accelerated benefit does not and is not intended to qualify as long-term care under Washington state law. Washington state law prevents this accelerated life benefit from being marketed or sold as long-term care.

GCERT2000
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NOTICE FOR RESIDENTS OF ALL STATES

LIFE INSURANCE BENEFITS WILL BE REDUCED IF AN ACCELERATED BENEFIT IS PAID

DISCLOSURE: The Life Insurance accelerated benefit offered under this certificate is intended to qualify for favorable tax treatment under the Internal Revenue Code of 1986. If this benefit qualifies for such favorable tax treatment, the benefit will be excludable from Your income and not subject to federal taxation. Tax laws relating to accelerated benefits are complex. You are advised to consult with a qualified tax advisor about circumstances under which You could receive an accelerated benefit excludable from income under federal law.

DISCLOSURE: Receipt of an accelerated benefit may affect Your, Your Spouse's or Your family's eligibility for public assistance programs such as Medical Assistance (Medicaid), Aid to Families with Dependent Children (AFDC), Supplementary Social Security Income (SSI), and drug assistance programs. You are advised to consult with a qualified tax advisor and with social service agencies concerning how receipt of such payment will affect Your, Your Spouse's and Your family's eligibility for public assistance.

NOTICE FOR RESIDENTS OF ARKANSAS

If You have a question concerning Your coverage or a claim, first contact the Policyholder or group account administrator. If, after doing so, You still have a concern, You may call the toll free telephone number shown on the Certificate Face Page.

If You are still concerned after contacting both the Policyholder and MetLife, You should feel free to contact:

Arkansas Insurance Department
Consumer Services Division
1200 West Third Street
Little Rock, Arkansas 72201
(501) 371-2640 or (800) 852-5494

GCERT2000
notice/ar

NOTICE FOR RESIDENTS OF CALIFORNIA

IMPORTANT NOTICE

TO OBTAIN ADDITIONAL INFORMATION, OR TO MAKE A COMPLAINT, CONTACT THE POLICYHOLDER OR METLIFE AT:

**METROPOLITAN LIFE INSURANCE COMPANY
ATTN: CONSUMER RELATIONS DEPARTMENT
500 SCHOOLHOUSE ROAD
JOHNSTOWN, PA 15904**

1-800-438-6388

IF, AFTER CONTACTING THE POLICYHOLDER AND/OR METLIFE, YOU FEEL THAT A SATISFACTORY SOLUTION HAS NOT BEEN REACHED, YOU MAY FILE A COMPLAINT WITH THE CALIFORNIA DEPARTMENT OF INSURANCE DEPARTMENT AT:

**DEPARTMENT OF INSURANCE
CONSUMER SERVICES
300 SOUTH SPRING STREET
LOS ANGELES, CA 90013**

WEBSITE: <http://www.insurance.ca.gov/>

1-800-927-4357 (within California)

1-213-897-8921 (outside California)

NOTICE FOR RESIDENTS OF GEORGIA

IMPORTANT NOTICE

The laws of the state of Georgia prohibit insurers from unfairly discriminating against any person based upon his or her status as a victim of family violence.

GCERT2000

notice/ga

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NOTICE FOR RESIDENTS OF IDAHO

If You have a question concerning Your coverage or a claim, You may call the toll free telephone number shown on the Certificate Face Page.

If You are still concerned after contacting MetLife, You should feel free to contact:

Idaho Department of Insurance
Consumer Affairs
700 West State Street, 3rd Floor
PO Box 83720
Boise, Idaho 83720-0043
1-800-721-3272 (for calls placed within Idaho) or 208-334-4250 or www.DOI.Idaho.gov

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notice/id

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NOTICE FOR RESIDENTS OF ILLINOIS

IMPORTANT NOTICE

To make a complaint to MetLife, You may write to:

MetLife
200 Park Avenue
New York, New York 10166

The address of the Illinois Department of Insurance is:

Illinois Department of Insurance
Public Services Division
Springfield, Illinois 62767

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NOTICE FOR RESIDENTS OF INDIANA

Questions regarding your policy or coverage should be directed to:

Metropolitan Life Insurance Company

1-800-438-6388

If you (a) need the assistance of the government agency that regulates insurance; or (b) have a complaint you have been unable to resolve with your insurer you may contact the Department of Insurance by mail, telephone or email:

State of Indiana Department of Insurance

Consumer Services Division

311 West Washington Street, Suite 300

Indianapolis, Indiana 46204

Consumer Hotline: (800) 622-4461; (317) 232-2395

Complaint can be filed electronically at www.in.gov/idoi

NOTICE FOR MASSACHUSETTS RESIDENTS

CONTINUATION OF ACCIDENTAL DEATH AND DISMEMBERMENT (AD&D) INSURANCE

1. If Your AD&D Insurance ends due to a Plant Closing or Covered Partial Closing, such insurance will be continued for 90 days after the date it ends.
2. If Your AD&D Insurance ends because:
 - You cease to be in an Eligible Class; or
 - Your employment terminates;

for any reason other than a Plant Closing or Covered Partial Closing, such insurance will continue for 31 days after the date it ends.

Continuation of Your AD&D Insurance under the CONTINUATION OF INSURANCE WITH PREMIUM PAYMENT subsection will end before the end of continuation periods shown above if You become covered for similar benefits under another plan.

Plant Closing and **Covered Partial Closing** have the meaning set forth in Massachusetts Annotated Laws, Chapter 151A, Section 71A.

NOTICE FOR RESIDENTS OF MINNESOTA

This is a life insurance policy which pays accelerated death benefits at your option under conditions specified in the policy. This policy is not a long-term care policy meeting the requirements of sections M.S.62A.46 to 62A.56 or chapter 62S.

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NOTICE FOR RESIDENTS OF MISSOURI

ACCIDENTAL DEATH AND DISMEMBERMENT INSURANCE

EXCLUSIONS

If You reside in Missouri the exclusion for "suicide or attempted suicide" is as follows:

"suicide or attempted suicide while sane"

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NOTICE FOR RESIDENTS OF TEXAS

THE INSURANCE POLICY UNDER WHICH THIS CERTIFICATE IS ISSUED IS NOT A POLICY OF WORKERS' COMPENSATION INSURANCE. YOU SHOULD CONSULT YOUR EMPLOYER TO DETERMINE WHETHER YOUR EMPLOYER IS A SUBSCRIBER TO THE WORKERS' COMPENSATION SYSTEM.

**GCERT2000
notice/tx/wc**

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NOTICE FOR RESIDENTS OF TEXAS

LIFE INSURANCE: ACCELERATED BENEFIT OPTION (ABO)

The laws of the state of Texas mandate that the terms "Terminally Ill" and "Terminal Illness" when used in the LIFE INSURANCE: ACCELERATED BENEFIT OPTION (ABO) FOR YOU provision means that due to injury or sickness, You are expected to die within 24 months of the date You request payment of an Accelerated Benefit.

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NOTICE FOR RESIDENTS OF UTAH

Notice of Protection Provided by Utah Life and Health Insurance Guaranty Association

This notice provides a brief summary of the Utah Life and Health Insurance Guaranty Association ("the Association") and the protection it provides for policyholders. This safety net was created under Utah law, which determines who and what is covered and the amounts of coverage.

The Association was established to provide protection in the unlikely event that your life, health, or annuity insurance company becomes financially unable to meet its obligations and is taken over by its insurance regulatory agency. If this should happen, the Association will typically arrange to continue coverage and pay claims, in accordance with Utah law, with funding from assessments paid by other insurance companies.

The basic protections provided by the Association are:

- Life Insurance
 - o \$500,000 in death benefits
 - o \$200,000 in cash surrender or withdrawal values
- Health Insurance
 - o \$500,000 in hospital, medical and surgical insurance benefits
 - o \$500,000 in long-term care insurance benefits
 - o \$500,000 in disability income insurance benefits
 - o \$500,000 in other types of health insurance benefits
- Annuities
 - o \$250,000 in withdrawal and cash values

The maximum amount of protection for each individual, regardless of the number of policies or contracts, is \$500,000. Special rules may apply with regard to hospital, medical and surgical insurance benefits.

Note: Certain policies and contracts may not be covered or fully covered. For example, coverage does not extend to any portion of a policy or contract that the insurer does not guarantee, such as certain investment additions to the account value of a variable life insurance policy or a variable annuity contract. Coverage is conditioned on residency in this state and there are substantial limitations and exclusions. For a complete description of coverage, consult Utah Code, Title 31A, Chapter 28.

Insurance companies and agents are prohibited by Utah law to use the existence of the Association or its coverage to encourage you to purchase insurance. When selecting an insurance company, you should not rely on Association coverage. If there is any inconsistency between Utah law and this notice, Utah law will control.

To learn more about the above protections, as well as protections relating to group contracts or retirement plans, please visit the Association's website at www.utlifega.org or contact:

Utah Life and Health Insurance Guaranty Assoc. Utah Insurance Department
60 East South Temple, Suite 500 3110 State Office Building
Salt Lake City UT 84111 Salt Lake City UT 84114-6901
(801) 320-9955 (801) 538-3800

A written complaint about misuse of this Notice or the improper use of the existence of the Association may be filed with the Utah Insurance Department at the above address.

NOTICE FOR RESIDENTS OF VIRGINIA

IMPORTANT INFORMATION REGARDING YOUR INSURANCE

In the event You need to contact someone about this insurance for any reason please contact Your agent. If no agent was involved in the sale of this insurance, or if You have additional questions You may contact the insurance company issuing this insurance at the following address and telephone number:

MetLife
200 Park Avenue
New York, New York 10166
Attn: Corporate Consumer Relations Department

To phone in a claim related question, You may call Claims Customer Service at:
1-800-275-4638

If You have been unable to contact or obtain satisfaction from the company or the agent, You may contact the Virginia State Corporation Commission's Bureau of Insurance at:

The Office of the Managed Care Ombudsman
Bureau of Insurance
P.O. Box 1157
Richmond, VA 23218
1-877-310-6560 - toll-free
1-804-371-9944 - fax
www.scc.virginia.gov - web address
ombudsman@scc.virginia.gov - email

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NOTICE FOR RESIDENTS OF WISCONSIN

KEEP THIS NOTICE WITH YOUR INSURANCE PAPERS

PROBLEMS WITH YOUR INSURANCE? - If You are having problems with Your insurance company or agent, do not hesitate to contact the insurance company or agent to resolve Your problem.

MetLife
Attn: Corporate Consumer Relations Department
200 Park Avenue
New York, New York 10166
1-800-438-6388

You can also contact the **OFFICE OF THE COMMISSIONER OF INSURANCE**, a state agency which enforces Wisconsin's insurance laws, and file a complaint. You can contact the **OFFICE OF THE COMMISSIONER OF INSURANCE** by contacting:

Office of the Commissioner of Insurance
Complaints Department
P.O. Box 7873
Madison, WI 53707-7873
1-800-236-8517 outside of Madison or 608-266-0103 in Madison.

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SCHEDULE OF BENEFITS

This schedule shows the benefits that are available under the Group Policy. You will only be insured for the benefits:

- for which You become and remain eligible;
- which You elect, if subject to election; and
- which are in effect.

BENEFIT

BENEFIT AMOUNTS AND HIGHLIGHTS

How We Will Pay Benefits

Unless the Beneficiary requests payment by check, when the Certificate states that We will pay benefits in "one sum" or a "single sum", We may pay the full benefit amount:

- by check;
- by establishing an account that earns interest and provides the Beneficiary with immediate access to the full benefit amount; or
- by any other method that provides the Beneficiary with immediate access to the full benefit amount.

Other modes of payment may be available upon request. For details, call Our toll free number shown on the Certificate Face Page.

Life Insurance For You

Basic Life Insurance is Portability Eligible Insurance

For Class I – V Active Employees	An amount equal to 3 times Your Basic Annual Earnings, rounded to the next higher \$1,000
Maximum Life Benefit	\$2,000,000
Accelerated Benefit Option	Up to 80% of Your Basic Life amount not to exceed \$500,000

Accidental Death and Dismemberment Insurance (AD&D) For You

Full Amount for AD&D

Accidental Death and Dismemberment Insurance for You is Portability Eligible Insurance

SCHEDULE OF BENEFITS (continued)

For Class I – V Active Employees	An amount equal to 6 times Your Basic Annual Earnings, rounded to the next higher \$1,000
Minimum Accidental Death and Dismemberment Full Amount	\$1,000
Maximum Accidental Death and Dismemberment Full Amount	\$1,000,000

Additional Benefits:

Seat Belt Benefit	Yes
Air Bag Use Benefit	Yes
Surviving Spouse Benefit	Yes
Hospital Confinement Benefit	Yes
Rehabilitative Physical Therapy Benefit	Yes

Schedule of Covered Losses for Accidental Death and Dismemberment Insurance

All amounts listed are stated as percentages of the Full Amount.

Covered Losses

Loss of life	100%
Loss of a hand permanently severed at or above the wrist but below the elbow	75%
Loss of a foot permanently severed at or above the ankle but below the knee	75%
Loss of an arm permanently severed at or above the elbow	75%
Loss of a leg permanently severed at or above the knee	75%
Loss of sight in one eye	60%
Loss of two or more hands or feet.....	100%
Loss of sight in both eyes.....	100%

Loss of sight means permanent and uncorrectable loss of sight in the eye. Visual acuity must be 20/200 or worse in the eye or the field of vision must be less than 20 degrees.

Loss of any combination of hand, foot, or sight of one eye, as defined above	100%
Loss of the thumb and index finger of same hand	25%

SCHEDULE OF BENEFITS (continued)

Loss of thumb and index finger of same hand means that the thumb and index finger are permanently severed through or above the third joint from the tip of the index finger and the second joint from the tip of the thumb.

Loss of speech and loss of hearing	100%
Loss of speech or loss of hearing	85%

Loss of speech means the entire and irrecoverable loss of speech that continues for 6 consecutive months following the accidental injury.

Loss of hearing means the entire and irrecoverable loss of hearing in both ears that continues for 6 consecutive months following the accidental injury.

Paralysis of both arms and both legs	100%
Paralysis of both legs	75%
Paralysis of the arm and leg on either side of the body	50%
Paralysis of one arm or leg	25%

Paralysis means loss of use of a limb, without severance. A Physician must determine the paralysis to be permanent, complete and irreversible.

Brain Damage	100%
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Brain Damage means permanent and irreversible physical damage to the brain causing the complete inability to perform all the substantial and material functions and activities normal to everyday life. Such damage must manifest itself within 30 days of the accidental injury, require a hospitalization of at least 5 days and persists for 12 consecutive months after the date of the accidental injury.

Coma	1% monthly beginning on the 7th day of the Coma for 11 months, and then 100% in the 12th month for the duration of the Coma to a maximum of 12 months
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Coma means a state of deep and total unconsciousness from which the comatose person cannot be aroused. Such state must begin within 30 days of the accidental injury and continue for 7 consecutive days.

SCHEDULE OF BENEFITS (continued)

Portability Eligible Life and AD&D Insurance

Life and AD&D Insurance For You:

Portability Eligible Life Insurance For You:

Minimum Portability Eligible Life Insurance Amount	\$10,000
Maximum Portability Eligible Life Insurance Amount	The lesser of Your total Life Insurance in effect on the date You elect to Port or \$2,000,000

Portability Eligible AD&D Insurance For You:

Minimum Portability Eligible AD&D Insurance Amount	\$10,000
Maximum Portability Eligible AD&D Insurance Amount	The lesser of Your total AD&D Insurance in effect on the date You elect to Port or \$2,000,000

If Your Portability Eligible Insurance ends due to the end of the Group Policy or the amendment of the Group Policy to end the Portability Eligible Insurance for an eligible class of which You are a member, the maximum amount of insurance that You may Port is the lesser of:

- the amount of Your Portability Eligible Insurance that ends under the Group Policy less the amount of life and AD&D insurance for which You become eligible under any group policy issued to replace this Group Policy; or
- \$10,000.

DEFINITIONS

As used in this certificate, the terms listed below will have the meanings set forth below. When defined terms are used in this certificate, they will appear with initial capitalization. The plural use of a term defined in the singular will share the same meaning.

Actively at Work or Active Work means that You are performing all of the usual and customary duties of Your job. This must be done at:

- the Policyholder's place of business;
- an alternate place approved by the Policyholder; or
- a place to which the Policyholder's business requires You to travel.

You will be deemed to be Actively at Work during weekends or Policyholder approved vacations, holidays or business closures if You were Actively at Work on the last scheduled work day preceding such time off.

Basic Annual Earnings means Your gross annual rate of pay as determined by Your Policyholder, excluding overtime and other extra pay. "Basic Annual Earnings" for You if You are a salesman includes commissions and/or bonuses which shall be averaged for the most recent 12 month period.

Beneficiary means the person(s) to whom We will pay insurance as determined in accordance with the GENERAL PROVISIONS section.

Common Carrier means a government regulated entity that is in the business of transporting fare paying passengers.

The term does not include:

- chartered or other privately arranged transportation;
- taxis; or
- limousines.

Domestic Partner means each of two people, one of whom is an Employee of the Policyholder, who:

- have registered as each other's domestic partner, civil union partner or reciprocal beneficiary with a government agency where such registration is available; or
- are of the same or opposite sex and have a mutually dependent relationship so that each has an insurable interest in the life of the other. Each person must be:
 1. 18 years of age or older;
 2. unmarried;
 3. the sole domestic partner of the other person and have been so for the immediately preceding 6 months;
 4. sharing a primary residence with the other person and have been so for the immediately preceding 6 months; and
 5. not related to the other in a manner that would bar their marriage in the jurisdiction in which they reside.

GCERT2000

def 25

as amended by GCR09-08 dp

DEFINITIONS (continued)

A Domestic Partner declaration attesting to the relationship between the employee and the employee's domestic partner must be completed and Signed by the Employee. The declaration must establish that each person has either a substantial interest in the other engendered by love and affection; or a lawful and substantial economic interest in the continued life, health or bodily safety of each other, as distinguished from an interest which would arise only by, or would be enhanced in value by, the death, disablement or injury of the other person.

Hospital means a facility which is licensed as such in the jurisdiction in which it is located and:

- provides a broad range of medical and surgical services on a 24 hour a day basis for injured and sick persons by or under the supervision of a staff of Physicians; and
- provides a broad range of nursing care on a 24 hour a day basis by or under the direction of a registered professional nurse.

Noncontributory Insurance means insurance for which the Policyholder does not require You to pay any part of the premium.

Physician means:

- a person licensed to practice medicine in the jurisdiction where such services are performed; or
- any other person whose services, according to applicable law, must be treated as Physician's services for purposes of the Group Policy. Each such person must be licensed in the jurisdiction where he performs the service and must act within the scope of that license. He must also be certified and/or registered if required by such jurisdiction.

The term does not include:

- You;
- Your Spouse; or
- any member of Your immediate family including Your and/or Your Spouse's:
 - parents;
 - children (natural, step or adopted);
 - siblings;
 - grandparents; or
 - grandchildren.

Proof means Written evidence satisfactory to Us that a person has satisfied the conditions and requirements for any benefit described in this certificate. When a claim is made for any benefit described in this certificate, Proof must establish:

- the nature and extent of the loss or condition;
- Our obligation to pay the claim; and
- the claimant's right to receive payment.

Proof must be provided at the claimant's expense.

Signed means any symbol or method executed or adopted by a person with the present intention to authenticate a record, which is on or transmitted by paper or electronic media which is acceptable to Us and consistent with applicable law.

Spouse means Your lawful spouse. Wherever the term "Spouse" appears in the certificate it shall, unless otherwise specified, be read to include Your Domestic Partner.

We, Us and Our mean MetLife.

Written or Writing means a record which is on or transmitted by paper or electronic media which is acceptable to Us and consistent with applicable law.

You and Your mean an employee who is insured under the Group Policy for the insurance described in this certificate.

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def 26

as amended by GCR09-08 dp

DEFINITIONS (continued)

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def 27

as amended by GCR09-08 dp

ELIGIBILITY PROVISIONS: INSURANCE FOR YOU

ELIGIBLE CLASS(ES)

All Actively at Work employees of the Policyholder participating in one of the following executive classes:

Class I – Chief Executive Officer (CEO).

Class II – Elected Officers, who are direct reports to the Chief Executive Officer (CEO).

Class III – Elected Officers, who are non-direct reports to the Chief Executive Officer (CEO).

Class IV – All other Vice Presidents of the Northrop Grumman Corporation.

Class V – Chairman.

DATE YOU ARE ELIGIBLE FOR INSURANCE

You may only become eligible for the insurance available for Your eligible class as shown in the SCHEDULE OF BENEFITS.

If You are in an eligible class on January 1, 2019, You will be eligible for the insurance described in this certificate on that date.

If You enter an eligible class after January 1, 2019, You will be eligible for the insurance described in this certificate on the date You enter that class.

Previous Employment With The Policyholder

If You were employed by the Policyholder and insured by Us under a policy of group life insurance when Your employment ended, You will not be eligible for life insurance under this Group Policy if You are re-hired by the Policyholder within 2 years after such employment ended, unless You surrender:

- any individual policy of life insurance to which You converted when Your employment ended; and
- any certificate of insurance continued as ported insurance when such employment ended.

The cash value, if any, of such surrendered insurance will be paid to You.

ENROLLMENT PROCESS

If You are eligible for insurance, You may enroll for such insurance by completing an enrollment form.

DATE YOUR INSURANCE TAKES EFFECT

Rules for Noncontributory Insurance

When You complete the enrollment process for Noncontributory Insurance, such insurance will take effect on the date You become eligible, provided You are Actively at Work on that date.

If You are not Actively at Work on the date the Noncontributory Insurance would otherwise take effect, insurance will take effect on the day You resume Active Work.

ELIGIBILITY PROVISIONS: INSURANCE FOR YOU (continued)

For Basic Life Insurance

Increase in Insurance

An increase in insurance due to an increase in Your earnings will take effect on the date of the increase in Your earnings.

If You are not Actively at Work on the date insurance would otherwise take effect, insurance will take effect on the day You resume Active Work.

Decrease in Insurance

A decrease in insurance due to a decrease in Your earnings will take effect on the date of change.

For Basic Accidental Death and Dismemberment Insurance

Increase in Insurance

An increase in insurance due to an increase in Your earnings will take effect on the date of the increase in Your earnings.

If You are not Actively at Work on the date insurance would otherwise take effect, insurance will take effect on the day You resume Active Work.

Decrease in Insurance

A decrease in insurance due to a decrease in Your earnings will take effect on the date of change.

DATE YOUR INSURANCE ENDS

Your insurance will end on the earliest of:

1. the date the Group Policy ends; or
2. the date insurance ends for Your class; or
3. the end of the period for which the last premium has been paid for You; or
4. the date Your employment ends; Your employment will end if You cease to be Actively at Work in any eligible class, except as stated in the section entitled CONTINUATION OF INSURANCE WITH PREMIUM PAYMENT; or
5. the date You retire in accordance with the Policyholder's retirement plan.

Please refer to the section entitled LIFE INSURANCE: CONVERSION OPTION FOR YOU for information concerning the option to convert to an individual policy of life insurance if Your Life Insurance ends.

In certain cases insurance may be continued as stated in the section entitled CONTINUATION OF INSURANCE WITH PREMIUM PAYMENT.

CONTINUATION OF INSURANCE WITH PREMIUM PAYMENT

FOR FAMILY AND MEDICAL LEAVE

Certain leaves of absence may qualify for continuation of insurance under the Family and Medical Leave Act of 1993 (FMLA), or other legally mandated leave of absence or similar laws. Please contact the Policyholder for information regarding such legally mandated leave of absence laws.

AT YOUR OPTION: PORTABILITY

For Life and Accidental Death and Dismemberment Insurance

If Your Portability Eligible Insurance ends for any of the reasons stated below, You have the option to continue that insurance under another group policy in accordance with the conditions and requirements of this section. This is referred to as Porting. Evidence of Your insurability will not be required.

For purposes of this subsection the term "Portability Eligible Insurance" refers to Your Life Insurance and Accidental Death and Dismemberment Insurance benefits for which the Portability Eligible Insurance is shown as available in the SCHEDULE OF BENEFITS.

When Porting is an Option

Porting may only be exercised by a request in Writing during the Request Period specified below.

If You choose not to Port, Life Insurance benefits may be converted in accordance with the section entitled LIFE INSURANCE: CONVERSION OPTION FOR YOU.

1. You may choose to Port if Portability Eligible Insurance ends because:
 - You become retired from active service with the Employer; or
 - Your employment ends, due to a reason other than retirement; or
 - You cease to be in a class that is eligible for such insurance; or
 - the Policy is amended to end the Portability Eligible Insurance, unless such insurance is replaced by similar insurance under another group insurance policy issued to the Policyholder or its successor; or
 - this Policy has ended, unless such insurance is replaced by similar insurance under another group insurance policy issued to the Policyholder or its successor.
2. You may choose to Port the reduced amount of insurance if Your Portability Eligible Insurance is reduced due to:
 - an amendment to the Plan which affects the amount of insurance for Your class.

If a request is made under this subsection, We will issue a new certificate of insurance which will explain the new insurance benefits. The insurance benefits under the new certificate may not be the same as those that ended under this Policy.

A request under this subsection may be made, if on the date the Portability Eligible Insurance ended, the following requirements are met:

- the Group Policy is in effect;
- with respect to any amount of Portability Eligible Life Insurance that is to be Ported, no application has been made to convert that amount of insurance to an individual policy of life insurance as provided in the section entitled LIFE INSURANCE: CONVERSION OPTION FOR YOU; and
- the person making the request resides in a jurisdiction that permits this Portability feature.

Request Period

If written notice of the option to Port is given within 15 days before or after the date such insurance ends, the Request Period:

- begins on the date the insurance ends, and
- expires 31 days after the date.

CONTINUATION OF INSURANCE WITH PREMIUM PAYMENT (continued)

If written notice of the option to Port is given more than 15 days after but within 91 days of the date such insurance ends, the Request Period:

- begins on the date the insurance ends, and
- expires 45 days after the date of the notice.

If written notice of the option to Port is not given within 91 days of the date such insurance ends, the Request Period:

- begins on the date the insurance ends, and
- expires at the end of such 91 day period.

Amount of the New Certificate

The amount of Ported Insurance for You that may be continued is shown in the SCHEDULE OF BENEFITS. However, at the time of Porting You may change the amount of Portability Eligible Insurance in the following circumstances:

Your Increase in Amount

For Portability Eligible Life Insurance

At the time of Porting, You may increase the amount of Your Portability Eligible Life Insurance. This may be done in increments of \$25,000, up to a maximum ported amount of \$2,000,000. To be eligible for this increased amount, You must provide evidence of Your insurability satisfactory to us, at Your expense. If We approve the increase, it will take effect on the date We state in Writing.

For Portability Eligible Accidental Death and Dismemberment Insurance

At the time of Porting, You may increase the amount of Your Portability Eligible Accidental Death and Dismemberment Insurance. This may be done in increments of \$25,000, up to a maximum ported amount of \$2,000,000. This increase will take effect on the date We state in Writing.

Your Decrease in Amount

If We receive a request to decrease an amount of insurance, any such decrease will take place on the date We state in Writing.

Premiums for the New Certificate

All premium payments must be made directly to Us. When We issue the new certificate, We will also provide a schedule of premiums and payment instructions.

You are not required to provide evidence of insurability to Port Your existing amount of Portability Eligible Life and Accidental Death and Dismemberment Insurance. However, to qualify for a lower premium rate, You may give us, at Your expense, evidence of Your insurability satisfactory to Us. If We determine that the evidence satisfies Us, We will notify You that the lower premium rates will apply to You.

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CONTINUATION OF INSURANCE WITH PREMIUM PAYMENT (continued)

Right to Convert Life Insurance Amounts Not Ported

Any amount of Life Insurance not Ported under this subsection may be converted under the section entitled LIFE INSURANCE: CONVERSION OPTION FOR YOU.

If You Die Within 31 Days of the Date Portability Eligible Life Insurance Ends

If You die within 31 days of the date Portability Eligible Life Insurance ends and an application to Port is not received by Us during such period, We will determine whether Your life insurance qualifies for payment. This determination will be made in accordance with the section entitled LIFE INSURANCE: CONVERSION OPTION FOR YOU.

AT YOUR OPTION: CONTINUATION OF YOUR LIFE INSURANCE AND ACCIDENTAL DEATH AND DISMEMBERMENT INSURANCE DURING A LABOR DISPUTE

You may elect to continue Life Insurance for You and Accidental Death and Dismemberment Insurance for You, if You cease to be Actively at Work as the result of a labor dispute. Such insurance will continue for up to 6 months if the following conditions are met:

- at least 75% of the employees eligible to continue insurance elect to continue this insurance for such time period; and
- You pay the required premium for such insurance.

If continued, Life Insurance for You and Accidental Death and Dismemberment Insurance for You, will end if:

- premium payment is required and You fail to pay premiums for such insurance;
- the number of employees who elect to continue such insurance falls below 75% of all employees eligible to continue this insurance for such time period; or
- You cease to be eligible to continue Life Insurance for You and Accidental Death and Dismemberment Insurance for You, under this section and You do not immediately resume Active Work in a class that is eligible for such insurance.

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CONTINUATION OF INSURANCE WITH PREMIUM PAYMENT (continued)

AT THE POLICYHOLDER'S OPTION

The Policyholder has elected to continue insurance by paying premiums for employees who cease Active Work in an eligible class for any of the reasons specified below:

1. if You cease Active Work due to injury or sickness, up to 24 months;
2. if You cease Active Work due to part-time work, for a period in accordance with the Policyholder's general practice for an employee in Your job class;
3. if You cease Active Work due to strike, for a period in accordance with the Policyholder's general practice for an employee in Your job class;
4. if You cease Active Work due to any other Policyholder approved leave of absence, up to 1 month following the end of the month in which the leave began.

The Policyholder's general practice for employees in a job class determines which employees with the above types of absences are to be considered as still insured and for how long among persons in like situations.

At the end of any of the continuation periods listed above, Your insurance will be affected as follows:

- if You resume Active Work in an eligible class at this time, You will continue to be insured under the Group Policy;
- if You do not resume Active Work in an eligible class at this time, Your employment will be considered to end and Your insurance will end in accordance with the DATE YOUR INSURANCE ENDS subsection of the section entitled ELIGIBILITY PROVISIONS: INSURANCE FOR YOU.

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EVIDENCE OF INSURABILITY

No evidence of insurability is required for the insurance described in this certificate.

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LIFE INSURANCE: FOR YOU

If You die, Proof of Your death must be sent to Us. When We receive such Proof with the claim, We will review the claim and, if We approve it, will pay the Beneficiary the Life Insurance in effect on the date of Your death.

PAYMENT OPTIONS

We will pay the Life Insurance in one sum. Other modes of payment may be available upon request. For details, call Our toll free number shown on the Certificate Face Page.

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LIFE INSURANCE: ACCELERATED BENEFIT OPTION (ABO) FOR YOU

For purposes of this section, the term “ABO Eligible Life Insurance” refers to each of Your Life Insurance benefits for which the Accelerated Benefit Option is shown as available in the SCHEDULE OF BENEFITS.

If You become Terminally Ill, You or Your legal representative have the option to request Us to pay ABO Eligible Life Insurance before Your death. This is called an accelerated benefit. The request must be made while ABO Eligible Life Insurance is in effect.

Terminally Ill or Terminal Illness means that due to injury or sickness, You are expected to die within 6 months.

Requirements For Payment of an Accelerated Benefit

Subject to the conditions and requirements of this section, We will pay an accelerated benefit to You or Your legal representative if:

- the amount of each ABO Eligible Life Insurance benefit to be accelerated equals or exceeds \$10,000; and
- the ABO Eligible Life Insurance to be accelerated has not been assigned; and
- We have received Proof that You are Terminally Ill.

We will only pay an accelerated benefit for each ABO Eligible Life Insurance benefit once.

Proof of Your Terminal Illness

We will require the following Proof of Your Terminal Illness:

- a completed accelerated benefit claim form;
- a signed Physician’s certification that You are Terminally Ill; and
- an examination by a Physician of Our choice, at Our expense, if We request it.

You or Your legal representative should contact Us to obtain a claim form and information regarding the accelerated benefit.

Upon Our receipt of Your request to accelerate benefits, We will send You a letter with information about the accelerated benefit payment You requested. Our letter will describe the amount of the accelerated benefits We will pay and the amount of Life Insurance remaining after the accelerated benefit is paid.

Accelerated Benefit Amount

We will pay an accelerated benefit up to the percentage shown in the SCHEDULE OF BENEFITS for each ABO Eligible Life Insurance benefit in effect for You, subject to the following:

Maximum Accelerated Benefit Amount. The maximum amount We will pay for each ABO Eligible Life Insurance benefit is shown in the SCHEDULE OF BENEFITS.

Scheduled Reduction of an ABO Eligible Life Insurance Benefit. If an ABO Eligible Life Insurance benefit is scheduled to reduce within the 6 month period after the date You or Your legal representative request an accelerated benefit, We will calculate the accelerated benefit using the amount of such ABO Eligible Life Insurance that will be in effect immediately after the reduction(s) scheduled for such period.

Scheduled End of an ABO Eligible Life Insurance Benefit. If an ABO Eligible Life Insurance benefit is scheduled to end within 6 months after the date You or Your legal representative request an accelerated benefit, We will not pay an accelerated benefit for such ABO Eligible Life Insurance benefit.

Previous Conversion of an ABO Eligible Life Insurance Benefit. We will not pay an accelerated benefit for any amount of ABO Eligible Life Insurance which You previously converted under the section entitled LIFE INSURANCE: CONVERSION OPTION FOR YOU.

We will pay the accelerated benefit in one sum unless You or Your legal representative select another payment mode.

LIFE INSURANCE: ACCELERATED BENEFIT OPTION (ABO) FOR YOU (continued)

Effect of Payment of an Accelerated Benefit

On Contribution for Your Life Insurance. After We pay the accelerated benefit, any future contributions for Life Insurance You are required to pay will be waived.

On Your Life Insurance at Your death. The amount of Life Insurance that We will pay at Your death will be decreased by the amount of the accelerated benefit paid by Us.

On Your Life Insurance at conversion. The amount to which You are entitled to convert under the section entitled LIFE INSURANCE: CONVERSION OPTION FOR YOU will be decreased by the amount of the accelerated benefit paid by Us.

On Your Accidental Death and Dismemberment Insurance. Payment of an accelerated benefit will not affect Your Accidental Death and Dismemberment Insurance.

Date Your Option to Accelerate Benefits Ends

The accelerated benefit option will end on the earliest of:

- the date the ABO Eligible Life Insurance ends;
- the date You or Your legal representative assign all ABO Eligible Life Insurance; or
- the date You or Your legal representative have accelerated all ABO Eligible Life Insurance benefits.

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LIFE INSURANCE: CONVERSION OPTION FOR YOU

If Your life insurance ends or is reduced for any of the reasons stated below, You have the option to buy an individual policy of life insurance (“new policy”) from Us during the Application Period in accordance with the conditions and requirements of this section. This is referred to as the “option to convert”. Evidence of Your insurability will not be required.

When You Will Have the Option to Convert

You will have the option to convert when:

- A. Your life insurance ends because:
- You cease to be in an eligible class;
 - Your employment ends;
 - this Group Policy ends, provided You have been insured for life insurance for at least 5 continuous years; or
 - this Group Policy is amended to end all life insurance for an eligible class of which You are a member, provided You have been insured for at least 5 continuous years; or
- B. Your life insurance is reduced:
- on or after the date You attain age 65;
 - because You change from one eligible class to another; or
 - due to an amendment of this Group Policy.

If You opt not to convert a reduction in the amount of Your life insurance as described above, You will not have the option to convert that amount at a later date.

A reduction in the amount of Your life insurance as a result of the payment of an accelerated benefit will not give rise to a right to convert under this section.

Application Period

If You opt to convert Your life insurance for any of the reasons stated above, We must receive a completed conversion application form from You within the Application Period described below.

If You are given Written notice of the option to convert within 15 days before or after the date Your life insurance ends or is reduced, the Application Period begins on the date that such life insurance ends or is reduced and expires 31 days after such date.

If You are given Written notice of the option to convert more than 15 days after the date Your life insurance ends or is reduced, the Application Period begins on the date such life insurance ends or is reduced and expires 25 days from the date of such notice. In no event will the Application Period exceed 91 days from the date Your life insurance ends or is reduced.

Option Conditions

The option to convert is subject to the following:

- A. Our receipt within the Application Period of:
- Your Written application for the new policy; and
 - the premium due for such new policy;

LIFE INSURANCE: CONVERSION OPTION FOR YOU (continued)

- B. the premium rates for the new policy will be based on:
- Our rates then in use;
 - the form and amount of insurance for which you apply;
 - Your class of risk; and
 - Your age;
- C. the new policy may be on any form then customarily offered by Us excluding term insurance;
- D. the new policy will be issued without an accidental death and dismemberment benefit, an accelerated benefit option, a waiver of premium benefit or any other rider or additional benefit; and
- E. the new policy will take effect on the 32nd day after the date Your life insurance ends or is reduced; this will be the case regardless of the duration of the Application Period.

Maximum Amount of the New Policy

If Your Life Insurance ends due to the end of this Group Policy or the amendment of this Group Policy to end all life insurance for an eligible class of which You are a member, the maximum amount of insurance that You may elect for the new policy is the lesser of:

- the amount of Your life insurance that ends under this Group Policy less the amount of life insurance for which You become eligible under any group policy within 31 days after the date insurance ends under this Group Policy; or
- \$10,000.

If Your life insurance ends or is reduced due to the Policyholder's organizational restructuring, the maximum amount of insurance that You may elect for the new policy is the amount of Your life insurance that ends under this Group Policy less the amount of life insurance for which You become eligible under any other group policy within 31 days after the date insurance ends under this Group Policy.

If Your life insurance ends or is reduced for any other reason, the maximum amount of insurance that You may elect for the new policy is the amount of Your life insurance which ends under this Group Policy.

ADDITIONAL PROVISIONS IF YOU DIE

If You Die Within 31 Days After Your Life Insurance Ends Or Is Reduced

If You die within 31 days after Your life insurance ends or is reduced by an amount You are entitled to convert, Proof of Your death must be sent to Us. When We receive such Proof with the claim, We will review the claim and if We approve it will pay the Beneficiary. The amount We will pay is the amount You were entitled to convert.

The amount You were entitled to convert will not be paid as insurance under both a new individual conversion policy and the Group Policy.

ACCIDENTAL DEATH AND DISMEMBERMENT INSURANCE

If You sustain an accidental injury that is the Direct and Sole Cause of a Covered Loss described in the SCHEDULE OF BENEFITS, Proof of the accidental injury and Covered Loss must be sent to Us. When We receive such Proof We will review the claim and, if We approve it, will pay the insurance in effect on the date of the injury.

Direct and Sole Cause means that the Covered Loss occurs within 12 months of the date of the accidental injury and was a direct result of the accidental injury, independent of other causes.

We will deem a loss to be the direct result of an accidental injury if it results from unavoidable exposure to the elements and such exposure was a direct result of an accident.

PRESUMPTION OF DEATH

You will be presumed to have died as a result of an accidental injury if:

- the aircraft or other vehicle in which You were traveling disappears, sinks, or is wrecked; and
- the body of the person who has disappeared is not found within 1 year of:
 - the date the aircraft or other vehicle was scheduled to have arrived at its destination, if traveling in an aircraft or other vehicle operated by a Common Carrier; or
 - the date the person is reported missing to the authorities, if traveling in any other aircraft or other vehicle.

EXCLUSIONS (See notice page for residents of Missouri)

We will not pay benefits under this section for any loss caused or contributed to by:

1. physical or mental illness or infirmity, or the diagnosis or treatment of such illness or infirmity;
2. infection, other than infection occurring in an external accidental wound;
3. suicide or attempted suicide;
4. intentionally self-inflicted injury;
5. service in the armed forces of any country or international authority. However, service in reserve forces does not constitute service in the armed forces, unless in connection with such reserve service an individual is on active military duty as determined by the applicable military authority other than weekend or summer training. For purposes of this provision reserve forces are defined as reserve forces of any branch of the military of the United States or of any other country or international authority, including but not limited to the National Guard of the United States or the national guard of any other country;
6. any incident related to travel in an aircraft or device:
 - as a pilot or crew member of an Aircraft for which You are not qualified;
 - flight student or flight instructor except in the course of Your job for the Policyholder;
 - for parachuting or otherwise exiting from the aircraft while the aircraft is in flight except for the purpose of self-preservation;
 - travel in an aircraft for the purpose of parachuting or otherwise exiting from such aircraft while it is in flight;
 - for testing or experimental purposes;
 - by or for any military authority; or
 - for travel or designed for travel beyond the earth's atmosphere;
7. committing or attempting to commit a felony;

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ACCIDENTAL DEATH AND DISMEMBERMENT INSURANCE (continued)

8. the voluntary intake or use by any means of:
 - any drug, medication or sedative, unless it is:
 - taken or used as prescribed by a Physician; or
 - an "over the counter" drug, medication or sedative taken as directed;
 - alcohol in combination with any drug, medication, or sedative; or
 - poison, gas, or fumes; or
9. war, whether declared or undeclared; or act of war, insurrection, rebellion or riot.

Exclusion for Intoxication

We will not pay benefits under this section for any loss if the injured party is intoxicated at the time of the incident and is the operator of a vehicle or other device involved in the incident.

Intoxicated means that the injured person's blood alcohol level met or exceeded the level that creates a legal presumption of intoxication under the laws of the jurisdiction in which the incident occurred.

BENEFIT PAYMENT

For loss of Your life, We will pay benefits to Your Beneficiary.

For any other loss sustained by You We will pay benefits to You.

If You sustain more than one Covered Loss due to an accidental injury, the amount We will pay, on behalf of any such injured person, will not exceed the Full Amount.

We will pay benefits in one sum. Other modes of payment may be available upon request. For details call Our toll free number shown on the Certificate Face Page.

APPLICABILITY OF PROVISIONS

The provisions set forth in this ACCIDENTAL DEATH AND DISMEMBERMENT INSURANCE section apply to all Accidental Death and Dismemberment Insurance – Additional Benefit sections included in this certificate except as may otherwise be provided in such Additional Benefit sections.

ACCIDENTAL DEATH AND DISMEMBERMENT INSURANCE (continued)

ADDITIONAL BENEFIT: SEAT BELT USE

If You die as a result of an accidental injury, We will pay this additional Seat Belt Use benefit if:

1. We pay a benefit for loss of life under the ACCIDENTAL DEATH AND DISMEMBERMENT INSURANCE section;
2. this benefit is in effect on the date of the injury; and
3. We receive Proof that the deceased person:
 - was in an accident while driving or riding as a passenger in a Passenger Car;
 - was wearing a Seat Belt which was properly fastened at the time of the accident; and
 - died as a result of injuries sustained in the accident.

A police officer investigating the accident must certify that the Seat Belt was properly fastened. A copy of such certification must be submitted to Us with the claim for benefits.

Passenger Car means any validly registered four-wheel private passenger car, four-wheel drive vehicle, sports-utility vehicle, pick-up truck or mini-van. It does not include any commercially licensed car, any private car being used for commercial purposes, or any vehicle used for recreational or professional racing.

Seat Belt means any restraint device that:

- meets published United States Government safety standards;
- is properly installed by the car manufacturer; and
- is not altered after the installation.

The term includes any child restraint device that meets the requirements of state law.

BENEFIT AMOUNT

The Seat Belt Use benefit is an additional benefit equal to 20% of the Full Amount shown in the SCHEDULE OF BENEFITS. However, the amount We will pay for this benefit will not be less than \$500 or more than \$25,000.

BENEFIT PAYMENT

For loss of Your life, We will pay benefits to Your Beneficiary.

ACCIDENTAL DEATH AND DISMEMBERMENT INSURANCE (continued)

ADDITIONAL BENEFIT: AIR BAG USE

If You die as a result of an accidental injury, We will pay this additional benefit if:

1. We pay a benefit for loss of life under the ACCIDENTAL DEATH AND DISMEMBERMENT INSURANCE section;
2. this benefit is in effect on the date of the injury; and
3. We receive Proof that the deceased person:
 - was in an accident while driving or riding as a passenger in a Passenger Car equipped with an Air Bag(s);
 - was riding in a seat protected by an Air Bag;
 - was wearing a Seat Belt which was properly fastened at the time of the accident; and
 - died as a result of injuries sustained in the accident.

A police officer investigating the accident must certify that the Seat Belt was properly fastened and that the Passenger Car in which the deceased was traveling was equipped with Air Bags. A copy of such certification must be submitted to Us with the claim for benefits.

Passenger Car means any validly registered four-wheel private passenger car, four-wheel drive vehicle, sports-utility vehicle, pick-up truck or mini-van. It does not include any commercially licensed car, any private car being used for commercial purposes, or any vehicle used for recreational or professional racing.

Seat Belt means any restraint device that:

- meets published United States government safety standards;
- is properly installed by the car manufacturer; and
- is not altered after the installation.

The term includes any child restraint device that meets the requirements of state law.

Air Bag means an inflatable restraint device that:

- meets published United States government safety standards;
- is properly installed by the car manufacturer; and
- is not altered after the installation.

BENEFIT AMOUNT

The Air Bag Use Benefit is an additional benefit equal to 10% of the Full Amount shown in the SCHEDULE OF BENEFITS. However, the amount We will pay for this benefit will not be less than \$250 or more than \$10,000.

BENEFIT PAYMENT

For loss of Your life, We will pay benefits to Your Beneficiary.

ACCIDENTAL DEATH AND DISMEMBERMENT INSURANCE (continued)

ADDITIONAL BENEFIT: SURVIVING SPOUSE

If You die as a result of an accidental injury, We will pay this benefit if:

1. We pay a benefit for loss of Your life under the ACCIDENTAL DEATH AND DISMEMBERMENT INSURANCE section;
2. We receive Proof that the death was a result of an injury sustained in an accident;
3. this benefit is in effect on the date of the injury; and
4. You have a surviving Spouse who has survived You by at least 48 hours.

BENEFIT AMOUNT

We will pay an additional amount equal to 2% of the Full Amount of insurance under the ACCIDENTAL DEATH AND DISMEMBERMENT INSURANCE for each of the 12 months immediately following the date of Your death.

If this benefit is in effect on the date of death and there is no Spouse who could qualify for payment, We will pay \$1,000 to Your Beneficiary in one sum.

BENEFIT PAYMENT

For loss of Your life We will pay this benefit to Your Spouse.

If Your Spouse dies before all monthly payments have been made, We will pay any remaining amount to the Spouse's estate in one sum.

ACCIDENTAL DEATH AND DISMEMBERMENT INSURANCE (continued)

ADDITIONAL BENEFIT: HOSPITAL CONFINEMENT

Subject to the provisions of the ACCIDENTAL DEATH AND DISMEMBERMENT INSURANCE, We will pay this additional benefit if:

1. We receive Proof that You are confined in a Hospital as a result of an accidental injury which is the direct cause of such confinement independent of other causes; and
2. this benefit is in effect on the date of the injury.

BENEFIT AMOUNT

We will pay an amount for each full month of Hospital Confinement equal to the lesser of:

- 5% of the Full Amount shown in the SCHEDULE OF BENEFITS; and
- \$1,000.

We will pay this benefit on a monthly basis beginning on the 7th day of confinement, for up to 12 months of continuous confinement. This benefit will be paid on a pro-rata basis for any partial month of confinement.

We will only pay benefits for one period of continuous confinement for any accidental injury. That period will be the first period of confinement that qualifies for payment.

BENEFIT PAYMENT

Benefit payments will be made monthly. Payment will be made to You.

ACCIDENTAL DEATH AND DISMEMBERMENT INSURANCE (continued)

ADDITIONAL BENEFIT: REHABILITATIVE PHYSICAL THERAPY

We will pay this additional benefit if:

1. We pay a benefit for a loss resulting from an accidental injury to You, under the ACCIDENTAL DEATH AND DISMEMBERMENT INSURANCE section;
2. We receive Proof that rehabilitative physical therapy has been prescribed within 90 days of the Covered Loss by the attending Physician as necessary to treat a physical condition resulting from the Covered Loss; and
3. this benefit is in effect on the date of the injury.

Such rehabilitative physical therapy must be provided within 1 year of the prescription by a Physician or therapist licensed to provide the therapy in the jurisdiction where such services are performed.

BENEFIT AMOUNT

We will pay an amount equal to the least of:

- the actual charges incurred for such Rehabilitative Physical Therapy;
- 20% of the Full Amount shown in the SCHEDULE OF BENEFITS; or
- \$18,000.

BENEFIT PAYMENT

We will pay this benefit quarterly when We receive Proof that charges for Rehabilitative Physical Therapy have been paid. Payment will be made to You.

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FILING A CLAIM

CLAIMS FOR LIFE INSURANCE BENEFITS

When there has been the death of an insured person, notify Us by calling 1-800-638-6420. This notice should be given to Us as soon as is reasonably possible after the death. The claim form will be sent to the beneficiary or beneficiaries of record.

The beneficiary or beneficiaries should complete the claim form and send it and Proof of the death to Us as instructed on the claim form.

When We receive the claim form and Proof, We will review the claim and, if We approve it, We will pay benefits subject to the terms and provisions of this certificate and the Group Policy.

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FILING A CLAIM

CLAIMS FOR ACCIDENTAL DEATH AND DISMEMBERMENT BENEFITS

When there has been a Covered Loss, notify Us by calling 1-800-638-6420. This notice should be given to Us as soon as is reasonably possible but in any case within 20 days of the Covered Loss. The claim form will be sent to You or the beneficiary or beneficiaries of record.

The claim form should be completed and sent along with Proof of the Covered Loss to Us as instructed on the claim form. If You or the beneficiary have not received a claim form within 15 days of giving notice of the claim, Proof may be sent using any form sufficient to provide Us with the required Proof.

The claimant must give us Proof no later than 90 days after the date of the Covered Loss.

If notice of claim or Proof is not given within the time limits described in this section, the delay will not cause a claim to be denied or reduced if such notice or Proof are given as soon as is reasonably possible.

When We receive the claim form and Proof, We will review the claim and, if We approve it, We will pay benefits subject to the terms and provisions of this certificate and the Group Policy.

Time Limit on Legal Actions. A legal action on a claim may only be brought against Us during a certain period. This period begins 60 days after the date Proof is filed and ends 3 years after the date such Proof is required.

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GENERAL PROVISIONS

Assignment

The rights and benefits under the Group Policy are not assignable prior to a claim for benefits, except as required by law. We are not responsible for the validity of an assignment.

Beneficiary

You may designate a Beneficiary in Your application or enrollment form. You may change Your Beneficiary at any time. To do so, You must send a Signed and dated, Written request to the Policyholder using a form satisfactory to Us. Your Written request to change the Beneficiary must be sent to the Policyholder within 30 days of the date You Sign such request.

You do not need the Beneficiary's consent to make a change. When We receive the change, it will take effect as of the date You Signed it. The change will not apply to any payment made in good faith by Us before the change request was recorded.

If two or more Beneficiaries are designated and their shares are not specified, they will share the insurance equally.

If there is no Beneficiary designated or no surviving designated Beneficiary at Your death, We will determine the Beneficiary according to the following order:

1. Your Spouse or Domestic Partner;
2. Your child(ren), if there is no surviving Spouse or Domestic Partner; or
3. Your estate, if there is no surviving child.

Any payment made in good faith will discharge our liability to the extent of such payment.

If a Beneficiary or a payee is a minor or incompetent to receive payment, We will pay that person's guardian.

Entire Contract

Your insurance is provided under a contract of group insurance with the Policyholder. The entire contract with the Policyholder is made up of the following:

1. the Group Policy and its Exhibits, which include the certificate(s);
2. the Policyholder's application; and
3. any amendments and/or endorsements to the Group Policy.

Incontestability: Statements Made by You

Any statement made by You will be considered a representation and not a warranty. We will not use such statement to avoid insurance, reduce benefits or defend a claim unless the following requirements are met:

1. the statement is in a Written application or enrollment form;
2. You have Signed the application or enrollment form; and
3. a copy of the application or enrollment form has been given to You or Your Beneficiary.

For Life Insurance

We will not use Your statements which relate to insurability to contest insurance after it has been in force for 2 years during Your life. In addition, We will not use such statements to contest an increase or benefit addition to such insurance after the increase or benefit has been in force for 2 years during Your life.

GENERAL PROVISIONS (continued)

For Accidental Death and Dismemberment Insurance

We will not use Your statements which relate to insurability to contest Accidental Death and Dismemberment Insurance after it has been in force for 2 years during Your life, unless the statement is fraudulent. In addition, We will not use such statements to contest an increase or benefit addition to such insurance after the increase or benefit has been in force for 2 years during Your life, unless the statement is fraudulent.

Misstatement of Age

If Your age is misstated, the correct age will be used to determine if insurance is in effect and, as appropriate, We will adjust the benefits and/or premiums.

Conformity with Law

If the terms and provisions of this certificate do not conform to any applicable law, this certificate shall be interpreted to so conform.

Physical Exams

If a claim is submitted for insurance benefits other than life insurance benefits, We have the right to ask the insured to be examined by a Physician(s) of Our choice as often as is reasonably necessary to process the claim. We will pay the cost of such exam.

Autopsy

We have the right to make a reasonable request for an autopsy where permitted by law. Any such request will set forth the reasons We are requesting the autopsy.

Zurich American Life Insurance Company

Certificate Of Coverage

Long Term Disability Plan

Policyholder: Northrop Grumman Corporation

Policy Number: CLPEX01084

Eligible Class: Class 1

Zurich American Life Insurance Company is pleased to welcome *you* to the *Plan*. This is *your* Certificate of Coverage, hereinafter "Certificate", as long as *you* are eligible for coverage and *you* meet the requirements for becoming insured. *You* will want to read this Certificate carefully and keep it in a safe place. This Certificate may be delivered electronically when agreed to by the *Policyholder* and *us*.

This Long Term Disability Plan provides financial protection for *you* by paying a portion of *your* income if *you* become disabled due to an *illness* or *injury* while covered under this *Plan*. The amount *you* receive is based on the amount *you* earned before *your* disability began. In some cases, *you* can receive disability payments even if *you* work while *you* are disabled.

Throughout this document the words "*we*", "*our*", "*us*", and "the Company" means Zurich American Life Insurance Company. The words "*you*" and "*your*" mean the insured *employee* of the *Policyholder* sponsoring this *Plan*. Some terms and provisions are written as required by insurance *law*. Important terms are defined in the "Glossary" Section of the Certificate. Defined terms appear in italic print. If *you* should have any questions about the content or provisions, please consult *us* at the toll-free number provided below. *We* will assist *you* in any way to help *you* understand *your* benefits.

The benefits described in this Certificate are subject in every way to the entire Group Insurance Policy. If the terms and provisions of the Certificate are different, the *Policy* will govern. The Group Insurance Policy includes this Certificate, the Benefits Schedule(s), and any riders or amendments issued with the Group Insurance Policy. The *Policyholder's* application and any application or *evidence of insurability* completed by *you* or on *your* behalf, when applying for coverage or an increase in coverage, are also considered part of the *Policy*.

Your coverage may be cancelled or changed in whole or in part under the terms and provisions of the *Policy*. The *Policy* is delivered in and is governed by the *laws* of the governing jurisdiction and to the extent applicable by the Employee Retirement Income Security Act of 1974 (ERISA) and any amendments. When making a benefit determination under the *Policy*, *we* have discretionary authority to determine *your* eligibility for benefits and to interpret the terms and provisions of the *Policy*.

For purposes of effective dates and ending dates under the Group Policy, all days begin at 12:01 a.m. and end at 12:00 midnight Eastern Standard Time at the *Policyholder's* address.

Zurich American Life Insurance Company is located at:

**1299 Zurich Way
Schaumburg, Illinois 60196**

Our toll-free number is: 1-800-244-8017

Outside the United States: 719-268-2416.

Our website address is: myzurichleave@ zurichna.com.

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SPECIAL NOTICES

Toll Free Number: 1-800-244-8017
Social Security Advocacy Program: 1-800-244-8017
Claim Information Toll Free Number: 1-800-244-8017
Outside the United States: 719-268-2416

IMPORTANT INFORMATION REGARDING YOUR INSURANCE

In the event you need to contact someone about this insurance policy for any reason, please contact your *Policyholder*. If you have additional questions you may contact *us* at the following address and telephone number:

1299 Zurich Way
Schaumburg, IL 60196
800-206-8826

If you have been unable to contact or obtain satisfaction from the company, you may contact the Virginia State Corporation Commission's Bureau of Insurance at:

1300 E. Main Street
Richmond, Virginia 23219

Toll Free Number for Virginia Residents 1-(800) 552-7945
Toll Free Number for Non-Virginia Residents 1-(877) 310-6560

Written correspondence is preferable as a record of the inquiry is maintained. When contacting the Company or the Bureau of insurance, have the *Policy* number available.

No benefits are covered under this Certificate in the absence of payment of current premiums subject to the *grace period* and the "Premium" Section of the Group Insurance Policy. Unless specifically provided for in any applicable termination or continuation of coverage provision, described in this Certificate or under the terms of the Group Insurance Policy, this *Plan* does not pay benefits for a disability incurred before coverage starts under this *Plan*. This *Plan* will not pay any benefits for any losses, claims or expenses that start after coverage ends.

Benefits may be modified during the term of this *Plan* as specifically provided under the terms of the Group Insurance Policy or upon renewal. If benefits are modified, the revised benefits (including any reduction in benefits or elimination of benefits) apply to any losses incurred that start on or after the effective date of the *Plan* modification. There are no vested rights to receive any benefits described in the Group Insurance Policy or in this Certificate beyond the date of termination or renewal including if the loss, accident or disability starts on or after the effective date of the *Plan* modification, but prior to *your* receipt of amended *Plan* documents.

Notice

Any person with the intent to defraud or knowing that he is facilitating a fraud against an insurer, submits an application or files a claim containing a false or deceptive statement may have violated state law.

DISCLOSURE NOTICES

For Residents of the Following States:

INDIANA

NOTICE TO EMPLOYEES

Questions regarding *your Policy* or coverage should be directed to:

**Zurich American Life Insurance Company
7045 College Blvd, Overland Park, KS 66211-1523
1-888-634-6780**

If *you* (a) need the assistance of the governmental agency that regulates insurance; or (b) have a complaint *you* have been unable to resolve with *your insurer you* may contact the Department of Insurance by mail, telephone or email:

State of Indiana Department of Insurance
Consumer Services Division
311 West Washington Street
Suite 300
Indianapolis, IN 46204

Consumer Hotline:
1-800-622-4461

In the Indianapolis Area:
1-317-232-2395

Complaints can be filed electronically at www.in.gov/idoi

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QUESTIONS OR PROBLEMS WITH YOUR POLICY?

If *you* have any questions or problems with *your Policy*, *you* may contact *us* at the address below or one of the other organizations listed:

Zurich American Life Insurance Company
7045 College Boulevard
Overland Park, Kansas 66211-1523
Telephone: (877) 678-7534

Arkansas Insurance Department
Consumer Services Division
1200 West Third Street
Little Rock, Arkansas 72201-1904
Telephone: (501) 371-2640 or (800) 852-5494

GEORGIA

NOTICE

The *laws* of the State of Georgia prohibit insurers from unfairly discriminating against any person based upon his or her status as a victim of family violence.

ILLINOIS

NOTICE TO EMPLOYEES - ILLINOIS

This notice is to advise *you* that should any complaints arise regarding this insurance, *you* may contact the following:

Zurich American Life Insurance Company
7045 College Blvd, Overland Park, KS 66211-1523
(888) 634-6780

For *your* information, the following is *your* state's Department of Insurance contact information:

Illinois Department of Insurance
Consumer Division
320 W Washington St
Springfield, IL 62767
(217) 782-4515

WISCONSIN

NOTICE TO EMPLOYEES – WISCONSIN

KEEP THIS NOTICE WITH YOUR INSURANCE PAPERS

PROBLEMS WITH YOUR INSURANCE? – If *you* are having problems with *your* insurance company or agent, do not hesitate to contact the insurance company or agent to resolve *your* problem.

Zurich American Life Insurance Company
7045 College Blvd, Overland Park, KS 66211-1523
(888) 634-6780

You can also contact the **OFFICE OF THE COMMISSIONER OF INSURANCE**, a state agency which enforces Wisconsin's insurance *laws*, and file a complaint. *You* can contact the **OFFICE OF THE COMMISSIONER OF INSURANCE** by contacting :

Office of the Commissioner of Insurance
Complaints Department
P.O. Box 7873
Madison, WI 53707-7873
Toll-Free: (800) 236-8517
Telephone: (608) 266-0103

Zurich American Life Insurance Company

Your Long Term Disability Plan

GENERAL PROVISIONS

This disability plan provides *you* with a source of monthly income if *you* should become disabled and unable to work because of an *sickness* or *injury* while covered under this *Plan*.

What Is The Certificate?

This Certificate of Coverage ("Certificate") is a written document prepared by the Company. It tells *you* important information about *your Plan* such as:

- the coverage to which *you* may be entitled;
- claim processing and administrative procedures;
- to whom *we* will make a payment; and
- the limitations, exclusions and requirements that apply within the *Plan*.

The Certificate may include attachments such as amendments and riders, which describe additional provisions about *your Plan*. Please read the entire document carefully to fully understand *your* long term disability plan.

Eligibility

Who Is Eligible For Coverage

To be eligible for coverage under this *Plan*, the following requirements must be met:

- *you* must be employed by the *Policyholder*;
- *you* must be in *active employment*;
- *you* must be in an *eligible class*.

Determining Your Eligible Class

Your employer determines the criteria that are used to define the *eligible class(es)* for insurance coverage under this *Plan*. *Your employer* determines if *you* are in an *eligible class*. Such criteria are based solely upon the conditions related to *your* employment.

The criteria describing *eligible classes* of *employees* are listed on the Benefits Schedule attached to this Certificate. Refer to the Benefits Schedule or contact *your employer* to determine if *you* are in an *eligible class*.

When Are You Eligible For Coverage?

If *you* are working for *your employer* in an *eligible class*, the date *you* are eligible for coverage is the *Plan* effective date.

New Hires

If *you* are in an *eligible class* on the date of hire, *your eligibility date* is the date *you* are hired. If *you* enter an *eligible class* after *your* date of hire, *your eligibility date* is the date *you* enter the *eligible class*.

Effective Date Of Coverage

When Does Your Coverage Begin?

If *you* have met all *your* eligibility requirements, and *you* are in *active employment*, *your* coverage takes effect at 12:01 a.m. Eastern Standard Time on the date *you* are eligible for coverage.

What If You Are Absent From Work On The Date Your Coverage Would Normally Begin?

If *you* are absent from work due to *injury, sickness, a mental illness, temporary layoff or leave of absence*, on the date *your* insurance would otherwise become effective, *your* coverage, increase in coverage or a new benefit will begin the date *you* return to *active employment*.

Enrollment

How Do You Enroll For Coverage?

You will be provided with plan design and enrollment information when *you* first become eligible. If *you* are not required to contribute towards the cost of coverage, *you* are not required to request coverage or complete an enrollment form. *Your* enrollment will be handled by *your employer*.

After Coverage Begins

When Will Changes To Your Coverage Take Effect?

Effective Date For Benefit Changes Due To A Change In Covered Monthly Earnings

A change in your *monthly benefit* due to a change in your *covered monthly earnings* will be effective on the date of the change if *you* are in *active employment* or if *you* are on a covered *layoff or leave of absence*. If *you* are not in *active employment* due to *injury or sickness*, any increased or additional coverage will begin on the date *you* return to *active employment*.

Effective Date For Benefit Changes Due To A Change In Insurance Class

A change in your *monthly benefit* due to a change in your *eligible class* will be effective on the date of the change if *you* are in *active employment* or if *you* are on a covered *layoff or leave of absence*. If *you* are not in *active employment* due to *injury or sickness*, any increased or additional coverage will begin on the date *you* return to *active employment*.

Effective Date For Benefit Changes By Policy Amendment

A change in your *covered monthly benefit* due to a change in the *Policy* by an amendment elected by the *Policyholder*, will be effective on the date of the change, if *you* are in *active employment*, or if *you* are on a covered *layoff or leave of absence*. If *you* are not in *active employment* on the date a benefit payable change would otherwise be effective, any increased or additional coverage will begin on the date *you* return to *active employment*. A change in your benefit payable because of a change made by the Company will normally be effective on the *Policy Anniversary Date*, or as otherwise determined by state or federal *law*, or by *us*. However, if *you* are not in *active employment* on the date a benefit payable change would otherwise be effective, the benefit payable change will not be in force until *you* return to *active employment*.

Neither an increase nor a decrease in coverage will affect a *payable claim* that occurs prior to the increase or decrease.

How Do You Pay For Your Coverage?

We will bill *your employer* for the premium and any amount *you* owe. *Your employer* will pay the premium on *your* behalf.

Once *you* have satisfied the *elimination period*, *your* premium and contributions, if any, will be waived for any period *you* are eligible to receive monthly benefits.

When Coverage Ends

When Does Your Coverage End?

Your coverage under this *Plan* ends on the earliest of:

- the date the *Policy* or a *Plan* is cancelled;
- the date *you* are no longer in an *eligible class*;
- the date *you* are no longer eligible for coverage;
- the date *your eligible class* is no longer covered;
- the last day *you* are in *active employment* except as provided under the covered *layoff* or *leave of absence* provision;
- the date *your* employment stops for any reason, including job elimination, or being placed on severance. This will be the date *you* stop *active employment*;
- the date on which *you* retire;
- the date on which *you* voluntarily or involuntarily lose *your* professional license; or
- the date on which *you* begin active duty in the armed forces of any country.

When Will Your Coverage Continue If You Are Temporarily Not Working?

If premium payments continue to be made on *your* behalf, we may deem *your* employment to continue for purposes of remaining eligible for coverage under this *Plan* as described below.

If *you* are not in *active employment* due to *illness* or *injury*, or medical or occupational leave as agreed to by *your employer* and *us*, *your* coverage may continue for the duration of the leave, up to 12 months.

If *you* are on an *employer-approved leave of absence* or educational leave, and if premium is paid, *you* will be covered through the end of the month that immediately follows the month in which *your leave of absence* begins.

Reinstatement Of Coverage

If *your* Long Term Disability coverage ends, *you* may apply to reinstate coverage, subject to the rules described in the "When Does Your Coverage Begin?" Section. If we approve *your* request, the reinstatement will be effective on the first day of the month coinciding with or following the approval date.

If *you* return to *active employment* within six months of the date *your* coverage terminated, and *you* request coverage from *your employer* within 31 days of *your* return, the *pre-existing condition* limitation will apply only to the extent it would have applied if *your* coverage had not ended.

What Happens To My Coverage Under This Policy While I Am On A Family And Medical Leave Of Absence?

If *you* were granted a *leave of absence* according to the "Family and Medical Leave Act of 1993", *your* coverage will continue under this provision through the end of the month plus four additional months from the date *your* leave begins.

Coverage will be continued until the end of the later of:

- the leave period required by the federal Family and Medical Leave of Absence Act of 1993 and any amendments; or
- the leave period required by applicable national, state or local *law*, or any similar *law, plan* or *act*; or
- If the *Policyholder's* policy does not provide for continuation of *your* coverage during a family and medical *leave of absence*, *your* coverage will be reinstated when *you* return to *active employment*.

How Can Statements Made In Your Application For This Coverage Be Used?

We consider any statements *you* or *your employer* makes in a signed application for coverage or an *evidence of insurability* form, or that *your employer* makes in the application process, a representation and not a warranty. If any of the statements *you* or *your employer* make are not complete and/or not true at the time they are made, we can:

- reduce or deny any claim; or
- cancel *your* coverage from the original effective date or any the increase in coverage.

We will use only statements made by the *employer* in the application process and statements made by *you* in a signed application as a basis for doing this. If a statement is used in a contest, a copy of that statement will be furnished to *you* or, in the event of *your* death or incapacity, to *your eligible survivor* or personal representative.

If the *Policyholder* gives *us* information about *you* that is incorrect, we will:

- use the facts to decide whether *you* have coverage under the *Plan* and in what amounts; and
- make a fair adjustment of the premium.

Our failure to implement or insist upon compliance with any provision of this *Policy* at any given time or times shall not constitute a waiver of *our* right to implement or insist upon compliance with that provision at any other time or times. This applies whether or not the circumstances are the same.

Incontestability

During the first two years that *your* insurance is in force, we may use any statement *you* have made in contesting the validity of that coverage. This also applies to any increase in *your* coverage for the two years that follow the effective date of that increase, if *evidence of insurability* was required in order for the increase to take effect.

Once coverage, including an increase in coverage has been continuously in effect for two years, the validity of *your* insurance may not be contested by *us* unless *your* statement was in writing on a form signed by *you* and was fraudulently made in order to obtain that coverage or increase.

Subrogation And Right Of Reimbursement

As used herein, the term "*third party*," means any party that is, or may be, or is claimed to be responsible for *illness* or *injuries* to *you* that caused *your* disability. Such *illness* or *injuries* are referred to as "*third party injuries*". "*Third party*" includes any party responsible for payment of benefits for loss of time or wages as a result of *third party injuries*.

By accepting benefits under this *Plan*, *you* specifically acknowledge *our* right of subrogation. When this *Plan* pays benefits for disabilities incurred due to *third party injuries*, we shall be subrogated to *your* right of recovery against any party to the extent of all benefits provided by this *Plan*. We may proceed against any party with or without *your* consent.

By accepting benefits under this *Plan*, *you* or *your* representatives further agree to:

- notify *us* within 30 days and in writing when notice is given to any party, including an insurance company or attorney, of the intention to investigate or pursue a claim to recover damages or obtain compensation due to *third party injuries* sustained by *you*;
- cooperate with *us* and do whatever is necessary to secure *our* rights of subrogation and recovery under this Certificate;

- give *us* a first-priority lien on any recovery, settlement, or judgment or other source of compensation which may be had from any party to the extent of the full cost of all benefits associated with *third party injuries* provided by this *Plan* (regardless of whether specifically set forth in the recovery, settlement, judgment or compensation agreement);
- pay, as the first priority, from any recovery, settlement judgment, or other *source* of compensation, any and all amounts due *us* as recovery of the full cost of all benefits associated with *third party injuries* paid by this *Plan* (regardless of whether specifically set forth in the recovery, settlement, judgment, or compensation agreement), unless otherwise agreed to by *us* in writing;
- do nothing to prejudice *our* rights as set forth above. This includes, but is not limited to, refraining from making any settlement or recovery, which specifically attempts to reduce or exclude the full cost of all benefits paid by the *Plan*.
- serve as a constructive trustee for the benefits of this *Plan* over any settlement or recovery funds received as a result of *third party injuries*.

We may recover full cost of all benefits paid by this *Plan* under this Certificate without regard to any claim of fault on *your* part, whether by comparative negligence or otherwise.

Does The Coverage Under A Plan Replace Or Affect Any Workers' Compensation Or State Disability Insurance?

The coverage under a *Plan* does not replace or affect the requirements for coverage by Workers' Compensation or State Disability Insurance. However, any Workers' Compensation benefits are considered a *deductible source of income*.

Recovery Of Overpayments

If payments are made in amounts greater than the benefits that *you* are entitled to receive, *we* have the right to recover any overpayments. Refer to the "Claim Information" Section for the process *we* use to recover overpayments.

Does The Policyholder Act As Our Agent?

No. For purposes of the *Policy*, the *Policyholder* acts on their own behalf. Under no circumstances will the *Policyholder* be deemed *our* agent.

LONG TERM DISABILITY BENEFITS

How Do We Define A Long Term Disability?

During the *elimination period* and the first 24 months benefits are payable, *you* are disabled when we determine that:

- *you* are unable to perform the *material and substantial duties* of your *regular occupation* due solely to your *sickness or injury*;
- *you* are under the *regular care* of a *physician*; and
- *you* have a 20% or more loss in your *indexed monthly earnings* due to that *sickness or injury*.

After 24 months *benefits* have been payable, *you* are disabled when we determine that due to the same *sickness or injury*:

- *you* are unable to perform the duties of any *gainful occupation* for which *you* are reasonably fitted by education, training or experience;
- *you* are under the *regular care* of a *physician*; and
- *you* have a 40% or more loss in your *indexed monthly earnings* due to the same *sickness or injury*.

We will assess *your* ability to work and the extent to which *you* are able to work by considering the facts and opinions from *your physicians*, and *physicians* and medical practitioners or vocational experts of *our* choice.

We may require *you* to be examined by a *physician*, other medical practitioner and/or vocational expert of *our* choice. We will pay for this examination. We can require an examination as often as it is reasonable to do so. We may also require *you* to be interviewed by *our* authorized representative. Refusal to be examined or interviewed may result in denial or termination of *your* claim.

How Long Must You Be Disabled Before You Are Eligible To Receive Benefits?

You must be continuously disabled through *your elimination period*. The days that *you* are not disabled will not count toward *your elimination period*. We will treat *your* disability as continuous if *your* disability stops for 30 days or less during the *elimination period*. No benefit is payable for or during the *elimination period*.

Your elimination period is described in the Benefits Schedule.

Can You Satisfy Your Elimination Period If You Are Working?

Yes. If *you* are working while *you* are disabled, the days *you* are disabled will count toward *your elimination period*.

When Will You Begin To Receive Benefits?

You will begin to receive *benefits* when we approve *your* claim, providing the *elimination period* has been satisfied and *you* are disabled. We will send *you* a *monthly benefit* for any period for which we are liable.

What Are Your Covered Monthly Earnings?

"Covered Monthly Earnings" means *your* gross monthly income from *your employer* in effect just prior to *your* date of disability. It includes *your* total income before taxes. It is prior to any deductions made for pre-tax contributions to a qualified deferred compensation plan, Section 125 plans, or flexible spending account.

It does not include income received from commissions, bonuses, overtime pay, any other extra compensation, or income received from sources other than *your employer*.

How Is Your Benefit Determined If You Are Disabled And Not Working?

We will follow this process to calculate *your* benefit amount:

- 1) Multiply *your covered monthly earnings* by the *monthly benefits* percentage shown in the Benefits Schedule.
- 2) The *maximum monthly benefit* is listed in *your* Benefits Schedule.
- 3) Compare the answer from Item 1) with the *maximum monthly benefit*. The lesser of these two amounts is *your gross disability benefit*.
- 4) Subtract from *your gross disability benefit* any *deductible sources of income*.

The amount figured in Item 4) is *your monthly benefit*. The *monthly benefit* will be recalculated when *your income* changes or *you* receive any new *deductible sources of income*.

After the *elimination period*, if *you* are disabled for less than one month, we will send *you* 1/30th of *your* benefit for each day of disability.

Monthly Benefit means *your* benefit amount after any *deductible sources of income* have been subtracted from *your gross disability benefit*.

Maximum Monthly Benefit means the maximum benefit amount for which *you* are insured under this *Plan* as shown in the Benefits Schedule.

Gross Disability Benefit means the benefit amount before we subtract *deductible sources of income* and *disability earnings*.

Deductible Sources of Income means other *income* from deductible sources listed in the *Plan* that *you* receive or are entitled to receive while *you* are disabled. This *income* will be subtracted from *your gross disability benefit*.

How Is Your Benefit Determined If You Are Disabled And Working?

For the first 12 months of payable benefits:

1. If *you* are disabled and return to work, we will not reduce *your monthly benefit* for *disability earnings* if:
 - *your monthly disability earnings*, if any, are less than 20% of *your indexed monthly earnings* due to the same *sickness or injury*; and
 - *you* have satisfied the *elimination period*.
2. If *you* are disabled and *your monthly disability earnings* are 20% or more of *your indexed monthly earnings*, due to the same *sickness or injury*, we will calculate *your monthly benefit* as follows:
 - during the first 12 months of payable benefits, while working, *your monthly benefit* will not be reduced by *your disability earnings* as long as *disability earnings* plus the *gross disability benefit* does not exceed 100% of *indexed monthly earnings*.
 - 1) Add *your monthly disability earnings* to *your gross disability benefit*.
 - 2) Compare the answer in Item 1) to *your indexed monthly earnings*.

If the answer from Item 1) is less than or equal to 100% of *your indexed monthly earnings*, we will not further reduce *your monthly benefit*.

If the answer from Item 1) is more than 100% of *your indexed monthly earnings*, we will subtract the amount over 100% from *your monthly benefit*.

- After benefits have been payable for 12 months, while working, the amount of *your monthly benefit* will change, and we will consider a portion of *your disability earnings* to be a *deductible source of income*. Fifty percent of *your disability earnings* will be added to *your other deductible sources of*

income, if any. The sum will be deducted from *your gross disability benefit*. This amount will be *your monthly benefit*.

We may require *you* to send proof of *your disability earnings* on a monthly basis. We will re-calculate *your benefit* each month and adjust *your monthly benefit* based on *your monthly disability earnings*.

As part of *your proof of disability earnings*, we can require that *you* send *us* appropriate financial records, including copies of *your IRS federal income tax return, W-2's and 1099's*, which we believe are necessary to substantiate *your income*.

After the *elimination period*, if *you* are disabled for less than one month, we will send *you 1/30th of your monthly benefit* for each day of disability.

When Will Your Monthly Benefits End If Working While Disabled?

During the first 24 months of *disability benefits*, if *your monthly disability earnings* exceed 80% of *your indexed monthly earnings*, we will stop *your benefits* and *your claim* will end.

Beyond 24 months of *disability benefits*, if *your monthly disability earnings* exceed 60% of *your indexed monthly earnings*, we will stop *your benefits* and *your claim* will end.

Disability earnings means the earnings which *you* receive while *you* are disabled and working, plus the earnings *you* could receive if *you* were working to *your greatest extent possible*. this would be, based on *your restrictions and limitation*:

- during the first 24 months of *disability benefits*, the greatest extent of work *you* are able to do in *your regular occupation*, that is reasonably available;
- beyond 24 months of disability payments, the greatest extent of work *you* are able to do in any occupation, that is reasonably available, for which *you* are reasonably fitted by education, training or experience.

Salary continuance paid to supplement *your disability earnings* will not be considered payment for work performed.

We will review *your status* from time to time. We will require satisfactory proof of earnings and continued disability. No *disability benefits* will be paid, and insurance will end if we determine *you* are able to work under a transitional work arrangement or other modified work arrangement and *you* refuse to do so without *good cause*.

What Will We Use For Covered Monthly Earnings If You Become Disabled During A Covered Leave Of Absence?

If *you* become disabled while *you* are on a covered *layoff or leave of absence*, we will use *your monthly earnings* from *your employer* in effect just prior to the date *your absence* begins.

How Can We Protect You If Your Disability Earnings Fluctuate?

If *your disability earnings* routinely fluctuate widely from month to month, we may average *your disability earnings* over the most recent three months to determine if *your claim* should continue.

If we average *your disability earnings*, we will terminate *your claim* if:

- during the first 24 months of *disability benefits*, the average of *your disability earnings* from the last three months exceeds 80% of *indexed monthly earnings*; or
- beyond 24 months of *disability benefits*, the average of *your disability earnings* from the last three months exceeds 60% of *indexed monthly earnings*.

We will not pay *you* for any month during which *disability earnings* exceed the above amounts. The *minimum monthly benefit* will not be paid when *disability earnings* exceed the above amounts.

What Are "Deductible Sources Of Income" And How Do They Affect My Benefits?

Deductible Sources of Income are other income benefits *you, your spouse or your dependent children* may be entitled to receive because of *your* disability or retirement. These benefits are taken into consideration when *your monthly benefit* is calculated and may reduce *your monthly benefit*.

We will subtract from *your gross disability benefit* the following *deductible sources of income*:

1. The amount that *you* receive or are entitled to receive under:
 - a Workers' Compensation law;
 - an occupational disease law; or
 - any other *plan, act or law* with similar intent.

2. The amount that *you* receive or are entitled to receive as disability income *benefits* under any:
 - state compulsory benefit act or law;
 - automobile liability insurance policy;
 - other group insurance plan; or
 - governmental retirement system as a result of *your* job with *your employer*.

3. The gross amount that *you, your spouse* and children receive or are entitled to receive as disability *benefits* because of *your* disability under:
 - the United States Social Security Act;
 - the Canada Pension Plan;
 - the Quebec Pension Plan;
 - the Railroad Retirement Act; or
 - any similar *plan, act or law* of any country, state or province.

Amounts paid to *your former spouse* or to *your* children living with such *spouse* will not be included.

4. The gross amount that *you* receive as retirement payments or the amount *your spouse* and children receive as retirement payments because *you* are receiving retirement payments under:
 - the United States Social Security Act;
 - the Canada Pension Plan;
 - the Quebec Pension Plan;
 - the Railroad Retirement Act; or
 - any similar *plan, act or law* of any country, state or province.

Benefits paid to *your former spouse* or *your* children living with such *spouse* will not be included.

5. The amount that *you*:
 - receive as *disability benefits* under *your employer's retirement plan*;
 - voluntarily elect to receive as retirement *benefits* under *your employer's retirement plan*;
 - receive as retirement benefits when *you* reach the later of age 62 or normal retirement age, as defined in *your employer's retirement plan*; or
 - receive as pension benefits from *your employer*.

Disability payments under a *retirement plan* will be those benefits which are paid due to disability and do not reduce the retirement benefit which would have been paid if the disability had not occurred.

Retirement *benefits* will be those benefits that are paid based on *your employer's* contribution to the *retirement plan*. *Disability benefits* which reduce the retirement benefit under the *Plan* will also be considered as a retirement benefit.

Regardless of how the retirement funds from the *retirement plan* are distributed, we will consider *your* and *your employer's* contributions to be distributed simultaneously throughout *your* lifetime.

Amounts received do not include amounts rolled over or transferred to any eligible *retirement plan*. We will use the definition of eligible *retirement plan* as defined in Section 402 of the Internal Revenue code including any future amendments that affect the definition.

6. One hundred percent of the amount *you* receive under Title 46, United States Code Section 688 (The Jones Act).
7. Third party payments, damages, settlements or judgments received for *your* disability (after subtracting attorney's fees).
8. One hundred percent of the amount *you* receive under the maritime doctrine of maintenance, wages and cure. This includes only the "wages" part of such benefits.
9. The amount of loss of time benefits that *you* receive or are entitled to receive under any *salary continuation or accumulated sick leave*.
10. The amount *you* receive or are entitled to receive under any unemployment *income* act or law due to the end of employment with *your employer* or payable by *insured* and uninsured *plans* or as a result of *your* membership or association in any group, union or other organization.

With the exception of retirement payments, or amounts that *you* receive from a partnership, proprietorship or any similar draws, we will only subtract *deductible sources of income* which are payable as a result of the same disability.

We will not reduce *your* payment by *your* Social Security retirement income if *your* disability begins after age 65 and *you* were already receiving Social Security retirement payments.

What Are Not Deductible Sources Of Income?

We will not subtract from *your gross disability benefit income* you receive from, but not limited to, the following:

- 401(k) plans;
- profit sharing plans;
- thrift plans;
- tax sheltered annuities;
- stock ownership plans;
- non-qualified plans of deferred compensation;
- military pension and military disability income plans;
- individual retirement accounts (IRA);
- individual disability income plans;
- 457 deferred compensation plans;
- 403(b) tax sheltered annuity plans; or
- retirement benefits from a former employer.

What If Subtracting Deductible Sources of Income Results In A Zero Benefit (Minimum Monthly Benefit)?

If *your monthly benefit* is reduced to zero due to subtracting *deductible sources of income*, you will receive a *minimum monthly benefit*. Your *minimum monthly benefit* is listed on the Benefits Schedule.

We may apply *your minimum monthly benefit* toward any outstanding overpayment.

What Happens When You Receive A Cost Of Living Increase From Deductible Sources of Income?

Once we have subtracted any *deductible source of income* from your *gross disability benefit*, we will not further reduce your *monthly benefit* due to a cost of living increase from that source.

What If We Determine You May Qualify For Deductible Income Benefits?

1. When we determine that you may qualify for benefits under the “Deductible Sources of Income” Section, we will estimate your entitlement to these benefits. We can reduce your *monthly benefit* by the estimated amounts if such benefits:

- have not been awarded or received; and
- have not been denied; or
- have been denied, and the denial is being appealed, if appeal rights are provided.

Your *monthly benefit* may **not** be reduced by the estimated amount if you:

- apply for the *disability benefits* under the “Deductible Sources of Income” Section, and appeal your denial to all administrative levels we feel are necessary; and
- sign our reimbursement agreement form. This form states that you promise to pay us any overpayment caused by an award.

2. If your benefit has been reduced by an estimated amount, your benefit will be adjusted when we receive proof:

- of the amount awarded; or
- that benefits have been denied and all appeals we feel are necessary have been completed. In this case, a lump sum refund of the estimated amount will be made to you.

What Happens If You Receive A Lump Sum Payment?

If you receive a lump sum payment from any *deductible source of income*, the lump sum will be pro-rated on a monthly basis over the time period for which the sum was given. If no time period is stated, we will use a reasonable one.

What Is The Maximum Benefit Period?

You will receive a benefit for each month you remain disabled up to the *maximum benefit period*.

Your *maximum benefit period* is based on your age when your disability occurred. Refer to the Benefits Schedule for specific *maximum benefit period* durations.

When Will Benefits Stop?

Your claim will end, and benefits will stop on the earliest of the following:

- the end of the *maximum benefit period*;
- the date you are no longer disabled under the terms of the *Plan*;
- during the first 24 months of benefits, when you are able to work in your *regular occupation* on a part-time basis, but you choose not to;
- after 24 months of benefits, when you are able to work in any *gainful occupation* on a *part-time* basis, but you choose not to;
- during the first 24 months of benefits, if you are working and your monthly *disability earnings* exceed 80% of your *indexed monthly earnings*, the date your earnings exceed 80%;
- after 24 months of benefits, if you are working and your monthly *disability earnings* exceed 60% of your *indexed monthly earnings*, the date your earnings exceed 60%;
- the date you fail to submit proof of continuing disability;
- if you are incarcerated;

- the date you die;
- the date your employer offers you another or modified job position, which *physicians* agree you are able to perform, at a pay rate that exceeds 80% of your *indexed monthly earnings*.

Disability Benefits Will Not Be Paid For Any Period Of Disability During Which You:

- are not following a plan of *appropriate care* for your disability, or complications of your disability;
- are not receiving *appropriate care*;
- refuse to participate in *our rehabilitation program*, a *worksite modification program*, a transitional work arrangement or other modified work arrangement which may be for your *regular occupation* or *any reasonable occupation*; or
- you fail to cooperate with us in the administration of the claim. Such cooperation includes, but is not limited to providing any information or documents needed to determine whether benefits are payable or the actual benefit amount due.

What Disabilities Have A Limited Pay Period Under Your Plan?

We will pay *disability benefits* on a limited basis for a disability caused by, or contributed to by, any one or more of the following conditions:

- disabilities, which as determined by us, due in whole or in part to *mental illness* have a limited pay period during your lifetime.
- disabilities which as determined by us, due in whole or in part to alcohol abuse, drug abuse or dependency have a limited pay period during your lifetime.

The lifetime cumulative *maximum benefit period* for all disabilities caused by, or contributed to by:

- *mental illness*; and
- alcohol abuse and drug abuse or dependency

is 24 months during your lifetime. Only 24 months of benefits will be paid for any combination of such disabilities even if the disabilities:

- are not continuous; and/or
- are not related.

Benefit Extension

We will continue your benefits beyond the 24-month period if you meet one or both of these conditions:

1. if you are *confined* to a *hospital* or *institution* at the end of the 24-month period, we will continue your benefits during your *confinement*. If you are still disabled when you are discharged, we will continue your benefits for a recovery period of up to 90 days.

If you become *re-confined* at any time during the recovery period and remain confined for at least 14 days in a row, we will continue your benefits during that additional *confinement* and for one additional recovery period up to 90 more days.

2. In addition to Item 1), if, after the 24-month period for which you have received benefits, you continue to be disabled and subsequently become *confined* to a *hospital* or *institution* for at least 14 days in a row, we will continue benefits during the length of the *re-confinement*.

We will not pay beyond the limited pay period as indicated above, or the *maximum benefit period*, whichever occurs first. We will not apply any period of *confinement* to your lifetime cumulative maximum.

Exceptions

We will not apply the *mental illness* limitation to dementia if it is a result of:

- stroke;
- trauma;
- viral infection;
- Alzheimer's disease; or
- other conditions not listed which are not usually treated by a mental health provider or other qualified provider using psychotherapy, psychotropic drugs, or other similar.

What Disabilities Are Not Covered Under Your Plan?

Your *Plan* does not cover any disabilities caused by, contributed to by, or resulting directly or indirectly from:

- a *pre-existing condition*;
- intentionally self-inflicted injuries or attempted suicide;
- active participation in a riot or an act of insurrection, rebellion or civil commotion;
- war, declared or undeclared, or any act of war;
- the revocation, restriction or non-renewal of *your* license, permit or certification necessary to perform the duties of *your* occupation unless due solely to *injury* or illness otherwise covered by the Group Insurance Policy;
- participation in an illegal activity or illegal act or to which a contributing cause was *your* being engaged in an illegal occupation;
- commission of a crime for which *you* have been convicted, this includes but is not limited to local, state, country, provincial or federal *law*, or the disability results from commission of, or attempting to commit a criminal act;
- intoxication, including driving a motor vehicle while intoxicated. ("Intoxicated" means *your* blood alcohol or drug level meets or exceeds the level at which intoxication would be presumed under the law of the state, country, or jurisdiction in which the event, activity or *accident* occurred;
- *injury* or *sickness* while *you* are serving on full-time active duty in any armed forces; or
- influence of a controlled substance, unless administered by a *physician*, or taken according to a *physician's* instructions, and within clinical guidelines.

What Is a Pre-Existing Condition?

You have a *pre-existing condition* if both 1 and 2 are true:

1. *you* received medical treatment, consultation, care or services including diagnostic measures, or were prescribed drugs or medicines in the three months just prior to *your* effective date of coverage or the date an increase in benefits through amendment or *your* enrollment in another *Plan* option, would otherwise be available;
2. the disability begins in the first 12 months after *your* effective date of coverage.

What If You Are Not In Active Employment When Your Employer Changes Insurance Carriers To Us (Continuity of Coverage)?

When the *Plan* becomes effective, we will provide coverage for *you* if:

- *you* are not in *active employment* because of a *sickness* or *injury*; and
- *you* were covered by the prior policy.

Your coverage is subject to payment of premium.

Your *monthly benefit* will be limited to the amount that would have been paid by the prior carrier. We will reduce *your monthly benefit* by any amount for which *your* prior carrier is liable.

How Does the Pre-Existing Condition Work If You Were Covered Under Your Employer's Prior Plan (Continuity Of Coverage)?

You may be eligible for a *monthly benefit* even if *your* disability results from a *pre-existing condition* if, *you* were:

- in *active employment* and insured under the *Plan* on its effective date; and
- insured by the prior policy at the time of change.

In order to receive a *monthly benefit* you must satisfy the *pre-existing condition* provision under:

1. *our Plan*; or
2. the prior carrier's plan, if benefits would have been paid had that *Policy* remained in force.

If *you* do not satisfy item one or two above, we will not pay benefits under *our Plan*.

If *you* satisfy item one, we will determine *your* benefits according to *our Plan* provisions.

If *you* only satisfy item 2), we will administer *your* claim according to *our Plan* provisions. However, *your monthly benefit* will be the lesser of:

- the *monthly benefit* that would have been payable under the terms of the *prior plan* if it had remained in force.
- the *monthly benefit* under *our Plan*.

Your benefits will end on the earlier of the following dates:

- the end of the *maximum benefit period* under *our Plan*; or
- the date benefits would have ended under the *prior plan* if it had remained in force.

What Happens If You Return To Work Full Time With Your Employer And Your Disability Occurs Again?

If *you* have a *recurrent disability*, as determined by *us*, we will treat *your* disability as part of *your* prior claim and *you* will not have to complete another benefit *elimination period* if:

- *you* were continuously *insured* under the *Plan* for the period between the end of *your* prior claim and *your recurrent disability*; and
- *your* recurrent disability occurs within six months from the end of *your* prior claim.
Your recurrent disability will be subject to the same terms of the *Plan* as *your* prior claim and will be treated as a continuation of that disability.

Any disability, which occurs after six months from the date *your* prior claim ended, will be treated as a new claim. The new claim will be subject to all of the *Policy* provisions, including the *elimination period*.

If *you* become covered under any other group long term disability plan, *you* will not be eligible for benefits under this disability *Plan*.

ADDITIONAL LONG TERM DISABILITY BENEFITS AND PROGRAMS

Zurich American Life Insurance Company

Survivor Benefit

What Benefits Will Be Provided To Your Family If You Die?

When we receive proof that *you* have died, while *totally disabled*, we will pay *your Eligible Survivor* a lump sum benefit equal to three months of *your gross disability monthly benefit* if, on the date of *your* death:

- *your* disability had continued for six months; and
- *you* were receiving or were entitled to receive payments under this *Plan*.

However, we will first apply the *survivor benefit* to any overpayment that may exist on *your* claim.

If *you* have no *Eligible Survivors*, payment will be made to *your* Estate, unless there is none.

Rehabilitation Program

A program to help you return to work.

We have a *vocational rehabilitation program* available to assist *you* in returning to work. We will determine whether *you* are eligible for this program, at *our* sole discretion. In order to be eligible for rehabilitation services and benefits, *you* must be medically able to engage in a return to work program.

Your claim file will be reviewed by one of our rehabilitation professionals to determine if a *rehabilitation program* might help *you* return to *gainful employment*. As *your* file is reviewed, medical and vocational information will be analyzed to determine an appropriate return to work program. We will make the final determination of *your* eligibility for participation in the program. We will provide *you* with a written rehabilitation plan developed specifically for *you*.

The *rehabilitation program* may include at our sole discretion, but is not limited to, the following services and benefits:

- coordination with *your employer* to assist *you* to return to work;
- adaptive equipment or job accommodations to allow *you* to work;
- vocational evaluation to determine how *your* disability may impact *your* employment options;
- job placement services;
- resume preparation;
- job seeking skills training; or
- education and retraining expenses for a new occupation.

Additional Benefits While You Participate In Our Rehabilitation Program

We will pay an additional benefit of ten percent of *your gross disability benefit* to a maximum benefit of \$5,000. This benefit is not subject to policy provisions which would otherwise increase or reduce the benefit amount such as *deductible sources of income*. However, the *maximum benefit* and *maximum benefit period* will apply.

In addition, we will continue benefits for *you* for three months following the date *your* disability ends if we determine *you* are no longer disabled while:

- *you* are participating in our *rehabilitation program*; and
- *you* are not able to find employment.

This benefit payment may be paid in a lump sum.

When Will The Rehabilitation Program Benefits End?

Benefits for the *rehabilitation program* will end on the earliest of the following dates:

- the date we determine that *you* are no longer eligible to participate in our *rehabilitation programs*; or
- any other date on which benefits would stop in accordance with this *Plan*.

Worksite Modification Benefit

How Can We Help Your Employer Identify And Provide Worksite Modification?

A *worksite modification* might be what is needed to allow *you* to perform the *material and substantial duties* of *your regular occupation* with *your employer*. One of *our* designated professionals will assist *you* and *your employer* to identify a modification we agree is likely to help *you* remain at work or return to work. This agreement will be in writing and must be signed by *you*, *your employer* and *us*. When this occurs, we will assist *your employer* with the cost of the modification, up to the greater of:

- \$1,000, or
- the equivalent of 2 months of *your monthly benefit*. This benefit is available to *you* on a one time only basis.

CLAIM INFORMATION

Zurich American Life Insurance Company

Long Term Disability

Reporting Of Claims

You are required to submit a claim to us in writing by mail or fax. Claim forms may be obtained from your employer or from us. Follow the procedure chosen by your employer to report a disability claim to us.

When Do You Notify Us Of A Claim?

We encourage you to notify us of your disability claim as soon as possible, so that a claim decision will be made in a timely manner. Written notice of a claim should be sent within 90 days after the date your disability begins. Failure to give notice within the time prescribed does not invalidate or reduce any claim if it is shown that it was not reasonably possible to give the notice within that time, and notice was given as soon as was reasonably possible. However, you must send us written proof of your claim no later than 90 days after your elimination period. If it is not possible to give proof within 90 days it must be given no later than two years after the time proof is otherwise required except in the absence of legal capacity.

If you submit a claim before you have been notified of our decision on any coverage amount requiring evidence of insurability, your amount of coverage will be determined as if our final underwriting decision had been made prior to the date of claim.

The claim form is available from your employer, or you can request a claim form from us. If you do not receive the form from us within 15 days of your request, send us written proof of claim without waiting for the form.

You must notify us immediately when you return to work in any capacity.

How Do You File A Claim?

You and your employer must fill out your own sections of the claim form. You must then give your claim form to your attending physician for your disability. Your physician should fill out his or her section of the form and send it directly to us.

What Information Is Needed As Proof Of Your Claim?

Your proof of claim must be provided at your expense. It must include the following information:

1. that you are under the regular care of a licensed physician;
2. appropriate documentation of your monthly covered income;
3. appropriate documentation that you are not working at any job during the elimination period for your long term disability claim;
4. the date your disability began;
5. the cause of your disability;
6. the extent of your disability, including restrictions and limitations preventing you from performing your regular occupation or any gainful occupation or an activity of daily living; and
7. the name and address of any inpatient or outpatient facility, hospital, or institution where you received treatment, including all attending physicians.

We may request that you provide us with proof of continuing disability indicating that you are under the regular care of a physician. This proof shall be in writing and satisfactory to us.

You will be required to give *us* authorization to obtain additional medical information from *your* medical providers. *You* may also be required to provide *us* with non-medical information such as copies of *your* IRS Federal Income Tax return, W-2's and 1099's, as part of *your* proof of continuing disability.

This proof must be provided at *your* own expense and must be received within 30 days of a request by *us*. *We* will deny *your* claim or stop sending *you* payments if the appropriate information is not submitted.

Benefit Payment

Benefits will be paid to *you* on a monthly basis upon *our* receipt of satisfactory proof of loss. Benefits payable other than for loss of time will be paid within sixty days of *our* receipt of satisfactory proof of loss.

What Happens If We Overpay Your Claim?

We have the right to recover any overpayments for amounts paid greater than the benefits that *you* are entitled to receive. This includes but is not limited to *our* error, *your* receipt of deductible sources of income or fraud. *We* will not recover more money than the amount *we* paid *you*.

We have the right to do any one or all of the following:

- require *you* to return the overpayment on request;
- stop payment of benefits until the overpayment is recovered;
- take any legal action needed to recover the overpayment; and
- place a lien, if not prohibited by *law*, in the amount of the overpayment on the proceeds of any other income, whether on a periodic or lump sum basis.

If the overpayment occurred as a result of *your* receipt of *deductible sources of income*, during the period for which *you* have received a benefit under this *Plan*, *we* will exclude from the amount to be recovered, any advocate or legal fees incurred by *you* to obtain such *deductible sources of income*, provided *you* return the overpayment to *us* within 30 days of *our* written request. If *you* do not return the overpayment to *us* within 30 days, such fees will not be excluded. *You* will remain responsible for repayment of the total overpaid amount.

Examples of *deductible sources of income* are:

- Workers' compensation;
- Federal Social Security benefits;
- Disability payments made by, or on behalf of, a third party as a result of any person's action or inaction.

All full list of *deductible sources of income* is located in the "Long Term Disability Benefits" Section of the Certificate.

Unpaid Premium Due

Any unpaid premium due for *your* coverage under this *Policy* may be recovered by *us* by offsetting against amounts otherwise payable to *you* under this *Policy*, or by other legally permitted means.

When Will We Require You To Obtain Physical Examinations And Evaluations?

We will have the right and opportunity to have a *physician*, dentist, vocational expert or other medical or vocational professional of *our* choice examine *you* when *you* request benefits for new and ongoing claims under this *Plan*.

Multiple exams, evaluations and functional capacity exams may be required during *your* disability for an ongoing claim. This will be done at all reasonable times while a claim for benefits is pending or under review. This will be done at *our* expense at no cost to *you*.

What Are The Time Limits For Legal Proceedings?

You can start legal action regarding *your* claim 60 days after proof of claim has been given to *us* and up to three years from the time proof of claim is required, unless otherwise provided under federal *law*.

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CLAIM PROCEDURES AND APPEAL INFORMATION

Zurich American Life Insurance Company

Applicability Of ERISA

If this Policy provides benefits under a *Plan* which is subject to the Employee Retirement Income Security Act of 1974 (ERISA), the following provisions apply. Whether a *Plan* is governed by ERISA is determined by a court, however, *your employer* may have information related to ERISA applicability. If ERISA applies, the following items constitute the *Plan*: the additional information contained in this document, the *Policy*, including *your* Certificate of Coverage, the Benefits Schedule and any additional summary plan description information provided by the *Plan Administrator*. Benefit determinations are controlled exclusively by the *Policy*, *your* Certificate of Coverage, and the information in this document.

How To File A Claim

If *you* wish to file a claim for benefits, *you* should follow the claim procedures described in *your* certificate of coverage. To complete *your* claim filing, *we* must receive the claim information it requests from *you* (or *your* authorized representative), *your* attending physician, and *your employer*. If *you* or *your* authorized representative has any questions about what to do, *you* or *your* authorized representative should contact *us* directly.

Claims Procedures

We will give *you* notice of the decision no later than 45 days after the claim is filed. This time period may be extended twice by 30 days if *we* determine that such an extension is necessary due to matters beyond the control of the *Plan* and *we* notify *you* of the circumstances requiring the extension of time and the date by which *we* expect to render a decision. If such an extension is necessary due to *your* failure to submit the information necessary to decide the claim, the notice of extension will specifically describe the required information, and *you* will be afforded at least 45 days within which to provide the specified information. If *you* deliver the requested information within the time specified, any 30-day extension period will begin after *you* have provided that information. If *you* fail to deliver the requested information within the time specified, *we* may decide *your* claim without that information.

If *your* claim for benefits is wholly or partially denied, the notice of adverse benefit determination under the *Plan* will:

- state the specific reason(s) for the determination;
- reference specific *Plan* provision(s) on which the determination is based;
- describe additional material or information necessary to complete the claim and why such information is necessary;
- describe *Plan* procedures and time limits for appealing the determination, and *your* right to obtain information about those procedures and the right to bring a lawsuit under Section 502(a) of ERISA following an adverse determination from *us* on appeal; and
- disclose any internal rule, guidelines, protocol or similar criterion relied on in making the adverse determination (or state that such information will be provided free of charge upon request).

Notice of the determination may be provided in written or electronic form. Electronic notices will be provided in a form that complies with any applicable legal requirements.

Appeal Procedures

You have 180 days from the receipt of notice of an adverse benefit determination to file an appeal. Requests for appeals should be sent to the address specified in the claim denial. A decision on review will be made no later than 45 days following receipt of the written request for review. If *we* determine that special circumstances require an extension of time for a decision on review, the review period may be extended by an additional 45 days (90 days in total). *We* will notify *you* in writing if an additional 45-day extension is needed.

If an extension is necessary due to *your* failure to submit the information necessary to decide the appeal, the notice of extension will specifically describe the required information, and *you* will be afforded at least 45 days to provide

the specified information. If *you* deliver the requested information within the time specified, the 45-day extension of the appeal period will begin after *you* have provided that information. If *you* fail to deliver the requested information within the time specified, we may decide *your* appeal without that information.

You will have the opportunity to submit written comments, documents, or other information in support of *your* appeal. *You* will have access to all relevant documents as defined by, applicable U.S. Department of Labor regulations. The review of the adverse benefit determination will take into account all new information, whether or not presented or available at the initial determination. No deference will be afforded to the initial determination.

The review will be conducted by *us* and will be made by a person different from the person who made the initial determination and such person will not be the original decision maker's subordinate. In the case of a claim denied on the grounds of a medical judgment, we will consult with a health professional with appropriate training and experience. The health care professional who is consulted on appeal will not be the individual who was consulted during the initial determination or a subordinate. If the advice of a medical or vocational expert was obtained by the *Plan* in connection with the denial of *your* claim, we will provide *you* with the names of each such expert, regardless of whether the advice was relied upon.

A notice that *your* request on appeal is denied will contain the following information:

- the specific reason(s) for the determination;
- a reference to the specific *Plan* provision(s) on which the determination is based;
- a statement disclosing any internal rule, guidelines, protocol or similar criterion relied on in making the adverse determination (or a statement that such information will be provided free of charge upon request);
- a statement describing *your* right to bring a lawsuit under Section 502(a) of ERISA if *you* disagree with the decision;
- the statement that *you* are entitled to receive upon request, and without charge, reasonable access to or copies of all documents, records or other information relevant to the determination; and
- the statement that "*You or your Plan may have other voluntary alternative dispute resolution options, such as mediation. One way to find out what may be available is to contact your local U.S. Department of Labor Office and your State insurance regulatory agency*".

Notice of the determination may be provided in written or electronic form. Electronic notices will be provided in a form that complies with any applicable legal requirements.

Unless there are special circumstances, this administrative appeal process must be completed before *you* begin any legal action regarding *your* claim.

Other Rights

The Company, for itself and as claims fiduciary for the *Plan*, is entitled to legal and equitable relief to enforce its right to recover any benefit overpayments caused by *your* receipt of *deductible sources of income* from a third party. This right of recovery is enforceable even if the amount *you* receive from the third party is less than the actual loss suffered by *you* but will not exceed the benefits paid *you* under the *Policy*. The Company and the *Plan* have an equitable lien over such sources of income until any *benefit overpayments have been recovered in full*.

Discretionary Acts

The *Plan*, acting through the *Plan Administrator*, Zurich American Life Insurance Company delegates to and its affiliate's discretionary authority to make benefit determinations under the *Plan*. The Company may act directly or through their employees and agents or further delegate their authority through contracts, letters or other documentation or procedures to other affiliates, persons or entities. Benefit determinations include determining

eligibility for benefits and the amount of any benefits, resolving factual disputes, and interpreting and enforcing the provisions of the *Plan*. All benefit determinations must be reasonable and based on the terms of the *Plan* and the facts and circumstances of each claim.

Once *you* are deemed to have exhausted *your* appeal rights under the *Plan*, *you* have the right to seek court review under section 502(a) of ERISA of any benefit determinations with which *you* disagree. The court will determine the standard of review it will apply in evaluating those decisions.

GLOSSARY

General definitions used throughout this Certificate include:

Accident means a sudden unforeseeable external event that caused bodily injury to an *Insured* while coverage is in force under the *Policy*.

Active Employment means *you* are working for *your employer* for earnings that are paid regularly and that *you* are performing the *material and substantial duties of your regular occupation*. *You* must be working at least the minimum number of hours as described under *eligible class(es)* in each *plan*.

Your work site must be:

- *your employer's* usual place of business;
- an alternative work site at the direction of *your employer*, other than *your* home unless clear specific expectations and duties are documented;
- a location to which *your* job requires *you* to travel; or
- at a location to which *your employer's* business requires *you* to relocate live for an extended period of time.

Normal vacation is considered *active employment*.

If *your* employment status is being continued under a severance or termination agreement, *you* will not be considered in *active employment*.

Temporary and seasonal workers are excluded from coverage

Administrator means the person(s) or organization(s) that are designated by the *Policyholder* to perform certain functions on behalf of the *Policyholder*.

Appropriate Care means the determination of an accurate and medically supported diagnosis of the *Insured's* disability, or ongoing medical treatment and care of the *Insured's* disability by a *physician* that conforms to generally-accepted medical standards, including frequency of treatment and care.

Confined or Confinement means a hospital stay of at least 8 hours per day.

Covered Monthly Earnings means *your* gross monthly income from *your employer* in effect just prior to *your* date of disability. It includes *your* total income before taxes. It is prior to any deductions made for pre-tax contributions to a qualified deferred compensation plan, Section 125 plans, or flexible spending account.

It does not include income received from commissions, bonuses, overtime pay, any other extra compensation, or income received from sources other than *your employer*.

Deductible Sources of Income means income from the deductible sources listed in the *Plan* that *you* receive or are entitled to receive while *you* are disabled. This income will be subtracted from *your gross disability benefit*.

Disability Benefit when used with the term *retirement plan*, means money which:

- is payable under a *retirement plan* due to a disability, as defined in the *Plan*, and
- does not reduce the amount of money, which would have been paid as retirement benefits which would have been paid as retirement benefits under the *Plan* if the disability had not occurred. If the payment does cause a reduction, it will be considered a retirement benefit as defined in this certificate.

Eligible Classes means the classes of *employees* that *your employer* has selected as being eligible to receive coverage under a *Plan*. *Your employer* alone determines the criteria that is used to define the *eligible class(es)* for insurance coverage under this *Plan*.

Eligibility Date means the date *you* become eligible for insurance.

Eligible Survivor means *your spouse*, if living, otherwise *your children* under age 26 equally.

Elimination Period means a period of continuous disability that must be satisfied before *you* are eligible to receive benefits from this *Plan*.

Employee means a person who is in *active employment* with the *employer* and the *employees*, individual proprietors, and partners of one or more affiliated corporations, proprietorships or partnerships if the business of the *employer* and such affiliated corporations, proprietorships or partnerships is under common control. *Employee* shall exclude in any case, temporary *employees* and *employees* who work for the *employer* less than the number of hours per week indicated in the Benefits Schedule. This term does not include *employees* who normally work less than 20 hours a week for the *employer*.

Employer means the *Policyholder* and subsidiaries or affiliates of the *Policyholder* that the *Policyholder* has requested in writing to have included under the *Policy*, and *we*, which request *we* have approved such request.

Expatriate means an *employee* who is working outside his or her country of permanent residence or citizenship.

Full-Time means the number of hours set by the *employer* as a regular work day for *full-time employees* in the *Insured's eligible class*.

Gainful Occupation means an occupation for which you are or become reasonably fitted by training, education or experience.

Good Cause means a medical reason preventing *your* participation in the rehabilitation program or in a transitional work arrangement. Satisfactory proof of good cause must be provided to *us*.

Grace Period means a period of time following the premium due date during which premium payment may be made.

Gross Disability Benefit means the total benefit amount for which an *employee* is insured under this *Plan* before *we* subtract *deductible sources of income* and *disability earnings* subject to the maximum benefit.

Home Office means means 1299 Zurich Way, Schaumburg, Illinois 60196.

Hospital or Institution means an accredited facility licensed to provide care and treatment for the condition causing *your* disability.

Indexed Monthly Earnings For the first year you are disabled your *indexed monthly earnings* will be equal to your *monthly covered earnings*. After you have been disabled for one year, your *indexed monthly earnings* means your *covered monthly earnings* adjusted on each anniversary of benefit payments, after a 12 month period of disability by the lesser of 10% or the current annual percentage increase in the Consumer Price Index. Your *indexed monthly earnings* may increase or remain the same, but will never decrease.

The U.S. Department of Labor publishes the consumer price Index (CPI-W). *We* reserve the right to use some other similar measurement if the Department of Labor changes or stops publishing the CPI-W. Indexing is only used as a factor in the determination of the percentage of lost earnings while you are disabled and working in the determination of any *gainful occupation*.

Injury means bodily injury that is a direct result of an *accident* and independent of all other causes. The injury must occur, and the disability must begin while *you* are covered under this *Plan*. Exception: any disability that occurs more than 60 days after the *injury* will be considered a *sickness* for the purpose of determining benefits under this *Policy*.

Insured means any person covered under this *Plan* for whom premium has been paid.

Law, Plan or Act means the original enactment of the *law, plan* or *act* and all amendments.

Leave of Absence means *you* are temporarily absent from *active employment* for a period of time that has been agreed to in advance in writing by *your employer*. *Your* normal vacation time or any period of disability is not considered a *Leave of Absence*.

Limited means what *you* cannot or are unable to do.

Master Policy means the Group Insurance Policy obtained by the *Policyholder* under which *your employer* participates and receives group long term disability insurance to cover eligible *employees*.

Material and Substantial Duties means duties that:

- are normally required for the performance of *your regular occupation*; and
- cannot be reasonably omitted or modified, except that if *you* are required to work an average in excess of 40 hours per week, we will consider *you* able to perform that requirement if *you* are working or have the capacity to work 40 hours per week.

Maximum Capacity means based on *your* restrictions and limitations:

- during the first 24 months of disability, the greatest extent of work *you* are able to do in *your regular occupation* that is reasonably available; and
- beyond 24 months of disability the greatest extent of work *you* are able to do in any occupation, that is reasonably available, for which *you* are reasonably qualified by education, training or experience.

Maximum Period of Payment means the longest period of time we will make payments to *you* for any one period of disability.

Mental Illness means a psychiatric or psychological condition classified in the Diagnostic and Statistical Manual of Mental Health Disorders (DSM) published by the American Psychiatric Association, most current as of the start of a disability. Such disorders include, but are not limited to, psychotic, emotional or behavioral disorders, schizophrenia, depression, bipolar illness, or disorders relating from stress or to substance abuse or dependency. If the DSM is discontinued or replaced, these disorders will be those classified in the diagnostic manual then used by the American Psychiatric Association as of the start of the disability. These conditions are usually treated by a mental health provider or other qualified provider using psychotherapy, psychotropic drugs, or other methods of treatment as standardly accepted in the practice of medicine.

Monthly Benefit means *your* benefit amount after any *deductible sources of income* and *disability earnings* have been subtracted from *your gross disability benefit*.

Part-Time Basis means the ability to work and earn between 20% and 80% of *your indexed monthly earnings*.

Payable Claim means a claim for which we are liable under the terms of the *Policy*.

Physician means a person performing tasks that are within the limits of his or her medical license; and:

- a person who is licensed to practice medicine, and prescribe and administer drugs and medicines, or to perform surgery; or
- a person with a doctoral degree in Psychology (Ph.D. or Psy.D.) whose primary practice is treating patients; or
- a person who is a legally qualified medical practitioner according to the laws and regulations of the governing jurisdiction.

We will not recognize *you* or a person related to *you* as a *physician* for a claim that *you* send to us. This includes but not limited to *your spouse*, children, parents, siblings, brothers-in-law, sisters-in-law, or step children.

Plan means a line of coverage under the *Policy*.

Policy means the *Policy* provided to the *employer*.

Policyholder means an *employer* who as applied for coverage under the *Policy* for eligible *employees* and their *dependents*.

Prior Plan means the *Plan* of insurance providing similar benefits sponsored by the *employer* in effect directly prior to the *Policy* effective date.

Reasonable Accommodation means modifications or adjustments to a job, an employment practice or the work environment that makes it possible for a disabled person to perform the material duties of their occupation without causing undue hardship to any *employer*. It must meet federal standards of Reasonable Accommodation as detailed in the Americans with Disabilities Act of 1991 and any later amendments.

Reasonable Occupation means any gainful activity for which *you* are, or may reasonably become fitted by education, training, or experience.

Recurrent Disability means a disability, which is:

- caused by a worsening in *your* condition; and
- due to the same cause(s) as *your* prior disability for which we made a long term disability payment, or *you* satisfied *your elimination period*.

Regular Care means:

- *you* personally visit a *physician* as frequently as is medically required, according to generally accepted medical standards, to effectively manage and treat *your* disabling condition(s); and
- *you* are receiving the most appropriate treatment and care, which conform with generally accepted, medical standards, for *your* disabling condition(s) by a *physician* whose specialty or experience is the most appropriate for *your* disabling conditions(s) according to generally accepted medical standards.

Regular Occupation means the occupation *you* are routinely performing when *your* disability begins. We will look at *your* occupation as it is normally performed in the national economy, instead of how the work tasks are performed for a specific *employer* or at a specific location.

Rehabilitation Program means a program, approved by *us*, designed to assist *you* to return to work.

Retirement Plan means a defined contribution plan or defined benefit plan. These are plans, which provide retirement benefits to *employees* and are not funded entirely by *employee* contributions. *Retirement plan* includes but is not limited to any plan that is part of any federal, state, county, municipal or association retirement system.

Salary Continuation or Accumulated Sick Leave means continued payments to *you* by *your employer* of all or part of *your monthly earnings*, after *you* become disabled as defined by the *Policy*. This continued payment must be part of an established *Plan* maintained by *your employer* for the benefit of all *employees* covered under the *Policy*. *Salary continuation* or *accumulated sick leave* does not include compensation paid to *you* by *your employer* for work *you* actually perform after *your* disability begins. Such compensation is considered *disability earnings* and would be taken into account in calculating *your monthly benefit*.

Sickness means an *illness*, disease or disabling pregnancy. The sickness must begin while *you* are covered under this *Plan*.

Spouse means the *Insured's* lawful *spouse*, (not including a *spouse* who is legally separated from the *Insured*).

We, Us and Our means Zurich American Life Insurance Company.

You, Your means an insured *employee* who is eligible for *our* coverage under this *Plan*.

SCHEDULE FINAL

Zurich American Life Insurance Company Long Term Disability Plan Benefits Schedule

This Long Term Disability Plan provides financial protection for *you* by paying a portion of *your income* if *you* become disabled due to an *illness* or *injury* while covered under this *Plan*. The amount *you* receive is based on the amount *you* earned before *your* disability began. In some cases, *you* can receive disability payments even if *you* work while *you* are disabled.

This Benefits Schedule (hereinafter "Schedule") is a summary of some of the features and benefits of *your employer's* Long Term Disability Plan. It is not a contract. *You* are not necessarily entitled to insurance because *you* received this Schedule. *You* are only entitled to insurance if *you* are eligible in accordance with the terms of the certificate, *you* have met *your employer's* eligibility requirements and premium has been paid. For a complete description of the terms, conditions, exclusions and limitations of *your employer's Plan*, refer to *your* Certificate. In the event of a discrepancy between this Schedule and the Certificate, the Certificate will control.

Policyholder:	Northrop Grumman Corporation
Policy Number:	CLPEX01084
Policy Effective Date:	January 1, 2019
Plan Year:	January 1, 2019 through December 31, 2019 and each following January 1 st .
Eligible Classes: All persons in the following class(es) are eligible for <i>employee</i> coverage: Class 1: All Elected or Appointed Officers in <i>active employment</i> who are elected by the Board of Directors.	
Minimum Hours Requirement For Active Employment: <i>Employees</i> must be working at least 20 regularly scheduled hours per week.	
Service Waiting Period: None.	
Who Pays For The Coverage: <i>Your employer</i> pays the cost of <i>your</i> coverage (pre-tax).	
Premium Waiver: If <i>you</i> become disabled, no premium payments are required for <i>your</i> coverage while <i>you</i> are receiving benefits under this <i>Plan</i> , provided the premium was paid during the <i>elimination period</i> .	
Elimination Period: Benefits start after the later of: <ul style="list-style-type: none">• the first 180 days;• the date <i>your employer</i>-sponsored Short Term Disability benefits end; or• the date <i>you</i> have exhausted accumulated sick time or salary continuation. Benefits begin the day after the <i>elimination period</i> is completed.	

Monthly Benefit

Monthly Benefit Percentage: 65% of covered *monthly earnings* to the maximum monthly benefit per month, less *deductible sources of income*.

Your benefit may be reduced by deductible sources of income and disability earnings. Some disabilities may not be covered or may have limited coverage under this Plan.

The Maximum Monthly Benefit Is:	\$15,000 per month
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The Minimum Monthly Benefit Is:	<p>Greater of \$100 or 10% of <i>your gross disability benefit</i>.</p> <p>You are not eligible for the <i>minimum monthly benefit</i> during periods of overpayment until the overpayment has been recovered by us, or offset by <i>your monthly benefit</i>.</p>
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Survivor Benefit:	3 times the <i>gross disability benefit</i>
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Rehabilitation Program Benefit:

Ten percent of *your gross disability benefit* to a maximum of \$5,000. Refer to the Certificate for program details.

In addition, we will provide a *monthly benefit* to you for three months following the date *your* disability ends if we determine you are no longer disabled while:

- you are participating in the *rehabilitation program*; and
- you are not able to find employment.

Limited Benefits for Mental Illness, Mental Disorders, Substance Abuse, Drug or Alcohol Addiction:

Benefits for *Mental Illness*, Mental Disorders, Drug and Alcohol Addiction are limited to 24 months while insured under the *Policy* unless you are confined as a resident inpatient in a *hospital* at the end of the 24-month period. The *monthly benefit* will continue to be paid during such confinement.

Pre-Existing Condition Limitation:	3/12 applies; refer to the Certificate for a full description.
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Maximum Benefit Duration Table

The table below shows the maximum duration for which benefits may be paid. All other limitations of the Policy will apply.

Age At Disability	Maximum Benefit Period
Less than age 60	To age 65 but not less than 5 years
Age 60	60 months
Age 61	48 months
Age 62	42 months
Age 63	36 months
Age 64	30 months
Age 65	24 months
Age 66	21 months
Age 67	18 months
Age 68	15 months
Age 69 and over	12 months

Limited And Excluded Conditions And Disabilities:

Total Benefit: The total benefit payable to *you* on a monthly basis (including all benefits provided under this *Plan*) will not exceed 100% of *your covered monthly earnings* unless otherwise stated in the Certificate under specific conditions.

Your Plan does not cover disabilities related to all *injuries, illness* or disease. Refer to *your* Certificate for a complete list of exclusions and limitations.

The following disabilities have limited benefits under this *Plan*: *mental illness*, mental disorders, drug and alcohol addiction. Refer to the Certificate for a detailed description of the benefits and the limitations.

If *you* are receiving or are eligible to receive benefits for a disability under a prior disability *Plan* that was sponsored by *your employer* or was terminated before the effective date of this *Plan*, then no benefits will be payable for the disability under this *Policy*.

IMPORTANT: THIS SCHEDULE SHOULD BE ATTACHED TO YOUR CERTIFICATE. THIS SCHEDULE REPLACES ANY PRIOR SCHEDULES ISSUED TO YOU WITH RESPECT TO THE COVERAGES DESCRIBED IN THE CERTIFICATE.

LETTER FROM INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

April 23, 2019

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

We have reviewed, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the unaudited interim financial information of Northrop Grumman Corporation and subsidiaries for the periods ended March 31, 2019, and 2018, as indicated in our report dated April 23, 2019; because we did not perform an audit, we expressed no opinion on that information.

We are aware that our report referred to above, which is included in your Quarterly Report on Form 10-Q for the quarter ended March 31, 2019, is incorporated by reference in Registration Statement Nos. 033-59815, 033-59853, 333-67266, 333-100179, 333-107734, 333-121104, 333-125120, 333-127317, and 333-175798 on Form S-8; and Registration Statement No. 333-217087 on Form S-3.

We also are aware that the aforementioned report, pursuant to Rule 436(c) under the Securities Act of 1933, is not considered a part of the Registration Statement prepared or certified by an accountant or a report prepared or certified by an accountant within the meaning of Sections 7 and 11 of that Act.

/s/ Deloitte & Touche LLP
McLean, Virginia

**CERTIFICATION PURSUANT TO
SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002**

I, Kathy J. Warden, certify that:

1. I have reviewed this report on Form 10-Q of Northrop Grumman Corporation (“company”);
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the company as of, and for, the periods presented in this report;
4. The company's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the company and have:
 - a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the company, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c) Evaluated the effectiveness of the company's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d) Disclosed in this report any change in the company's internal control over financial reporting that occurred during the company's most recent fiscal quarter (the company's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the company's internal control over financial reporting; and
5. The company's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the company's auditors and the audit committee of the company's board of directors (or persons performing the equivalent functions):
 - a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the company's ability to record, process, summarize and report financial information; and
 - b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the company's internal control over financial reporting.

Date: April 23, 2019

/s/ **Kathy J. Warden**

Kathy J. Warden
Chief Executive Officer and President

**CERTIFICATION PURSUANT TO
SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002**

I, Kenneth L. Bedingfield, certify that:

1. I have reviewed this report on Form 10-Q of Northrop Grumman Corporation (“company”);
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the company as of, and for, the periods presented in this report;
4. The company's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the company and have:
 - a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the company, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c) Evaluated the effectiveness of the company's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d) Disclosed in this report any change in the company's internal control over financial reporting that occurred during the company's most recent fiscal quarter (the company's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the company's internal control over financial reporting; and
5. The company's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the company's auditors and the audit committee of the company's board of directors (or persons performing the equivalent functions):
 - a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the company's ability to record, process, summarize and report financial information; and
 - b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the company's internal control over financial reporting.

Date: April 23, 2019

/s/ **Kenneth L. Bedingfield**

Kenneth L. Bedingfield
Corporate Vice President and Chief Financial Officer

**CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002**

In connection with the Quarterly Report of Northrop Grumman Corporation (the “company”) on Form 10-Q for the period ended March 31, 2019, as filed with the Securities and Exchange Commission on the date hereof (the “Report”), I, Kathy J. Warden, Chief Executive Officer and President of the company, certify, pursuant to 18 U.S.C. § 1350, as adopted pursuant to § 906 of the Sarbanes-Oxley Act of 2002, that:

- (1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended; and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the company.

Date: April 23, 2019

/s/ Kathy J. Warden

Kathy J. Warden
Chief Executive Officer and President

**CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002**

In connection with the Quarterly Report of Northrop Grumman Corporation (the “company”) on Form 10-Q for the period ended March 31, 2019, as filed with the Securities and Exchange Commission on the date hereof (the “Report”), I, Kenneth L. Bedingfield, Corporate Vice President and Chief Financial Officer of the company, certify, pursuant to 18 U.S.C. § 1350, as adopted pursuant to § 906 of the Sarbanes-Oxley Act of 2002, that:

- (1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended; and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the company.

Date: April 23, 2019

/s/ **Kenneth L. Bedingfield**

Kenneth L. Bedingfield
Corporate Vice President and Chief Financial Officer