

Company: Northrop Grumman Corporation Ticker: NOC

Current price: \$548.11

Industry: Industrials Sub-industry: Aerospace & Defense

Target Price: \$1231.76	TTM P/E: 15.64	Beta: 0.59	Market Cap: \$84.361 B
Stop Loss: \$420.00	Forward P/E: 20.37	Credit Rating: BBB+	Avg Vol (12M): 846,798
52 Week High/Low: \$515.50/ \$345.90	EPS: 35.05	Rating Outlook: Stable	Dividend Yield: 1.26%

Company Background:

Northrop Grumman is a defense contractor that is diversified across short-cycle and long-cycle businesses. The firm's segments include aeronautics, mission systems, defense services, and space systems. The company's aerospace segment creates the fuselage for the massive F-35 program and produces various piloted and autonomous flight systems. Mission systems create a variety of sensors and processors for defense hardware. The defense systems segment is a long-range missile manufacturer. Finally, the company's space systems segment produces various space structures, sensors, and satellites.

Industry Outlook:

We believe the Defense industry is neutral in the short term, but poised for significant upside in the long term. Due to the Russia-Ukraine war as well as increased China-Taiwan tensions defense spending will increase. This is important as the defense spending makes up about 65% of revenues in this sub-industry. In the short term, profits will be mitigated by high inflation as defense companies deal with higher input costs and supply chain delays. YTD through August 23, the S&P Aerospace & Defense index rose 5% vs. a 13% drop for the S&P Composite 1500. (Scarola). We expect this outperformance to continue into next year.

Investment Thesis:

We focus on our positive industry outlook as a result of increased global political tensions. This will lead to increased contracts, which in turn lead to increased revenues and therefore profits for Northrop's shareholders. Northrop is an industry leader with reliable revenue streams. We also see increased potential for winning contracts over competitors as the DOD looks to companies other than Lockheed Martin.

Regardless of the uncertain nature of political spending, Northrop is a mature business with steady free cash flow and a dividend/share that has increased every year since 2003. In 2021, organic sales grew 3%, adjusted free cash flow was \$3.1B, and segment margin rate increased 40 bps to 11.8%. This is strong growth in a year before the war tensions lead to realized profits.. This proves, although we believe defense spending will increase, Northrop is a stable business able to transfer cash flows to its shareholders, regardless of speculative aspects of our investment thesis.

3-5 take away from last quarter investor call transcript:

- Biden administration National Security guide: CEO, Kathy Warden, discussed the increase in defense spending as a 'long-cycle'. She is predicting a higher defense budget spending than the precedent budget. Increased profits will realize after (18-24 months)
- Backlog has increased across four segments by 5%. Increased demand for Northrop's services, with a strong competitive win rate for bids.
- Global interest remains strong, partnering with the Australian Defense Force for Mission Systems Solutions.
- Space growth remains promising, fueled by a 1.3 billion dollar contract from the US Space Development Agency for missile warning satellites.

Financial performance:

	2018	2019	2020	2021	2022
Revenue (M)	30,095	33,841	36,779	35,667	39,234
Operating Profit	3780	3969	4065	3671	3437
Net Income	3.29	2,25	3.19	7.01	5.53
Revenue Growth (%)	15.73	12.45	8.68	-3.02	10.00
EBITDA%	16.96	12.10	15.19	30.09	24.25
Operating Profit %	12.6	11.7	11.1	10.3	8.8
Net Income Margin	7.81	10.73	6.64	19.64	15.70
D/E	1.70	1.60	1.48	1.11	1.04
EPS	18.49	13.22	19.03	43.54	35.20
PE Ratio	13.24	16.22	12.88	15.10	15.64
Current Ratio	1.17	1.13	1.60	1.30	1.14
ROE(%)	42.20	26.40	32.90	59.60	44.30%
ROA(%)	7.22	4.71	6.18	10.76	13.5%
Dividend/share	4.70	5.16	5.67	6.16	6.92

Discounted Cash Flow:

	2018-2022	2023-2031
Avg Revenue Growth	8.7%	6.2%
Avg Gross Margin	21.2%	26.3%
Avg EBITDA Margin	19.8%	12.4%
Avg NOPLAT Margin	6.5%	8.6%
Avg FCF/Margin	8.3%	9.5%
Tax Rate	-	21%
WACC	-	5.3%
Perpetuity Growth Rate	-	3%

Analyst Opinion

Buy:	Hold:	Sell:
	Rating	Target
S&P Net Advantage	Hold	\$491.00
Bloomberg	Hold	\$512.38
Yahoo Finance	Hold	\$530.21

FCF	1,980	2,036	2,341	4,956	3,501	
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Relative Valuation

Company Information		Financial Metrics			Valuation Metrics				Operational Metrics			
Ticker	Firm	Market Cap	BV of Equity	Total Assets	P/Sal es	P/B	P/E	P/FCF	Gross Margin	EBIT Margin	ROE	ROA
NOC	Northrop Grumman Corp.	\$84.361 B	\$13.94 B	\$42.73 B	2.44	6.05	15.64	41.06	22.26%	11.2%	44.30%	13.5%
LMT	Lockheed Martin	127.081 B	\$10.595 B	\$50.873 B	2.02	10.66	22.37	12.89	13.06%	7.37%	54.35%	11.30%
RTX	Raytheon Tech	\$140.670 B	\$74.669 B	\$161.404 B	2.14	1.99	31.65	25.00	20.49%	-16.62%	6.31%	2.81%
BA	Boeing Co.	\$85.6845 B	\$-14.846 B	\$138.552 B	1.38	1626.81	-	109.89	-1.41%	-	-	-5.94%
Mean		\$74.63 B	\$21.09 B	\$98.39 B	2.00	411.38	17.42	47.21	13.60%	0.49%	26.24%	5.42%
Median		\$106.38 B	\$44.30 B	\$94.72 B	2.08	8.36	19.01	33.03	16.78%	3.69%	25.31%	7.06%

*Industry Avg. includes companies listed

Total Return %

	NOC	Industry Sec(XLI)	S&P 500
YTD	41.60%	-10.58%	-17.15%
2021	79.87%	6.85%	-13.83%
Last 3years	121.10%	45.23%	10.43%
Last 5 years	81.70%	31.73%	10.48%

CSR Characteristics

	NOC	Industry
ESG Disclosure	27.04	34.79
Governance Disclosure Score	5.1	7.8
Social Disclosure Score	14.9	11.79
Environmental Disclosure Score	7.5	15.2

-Prepared by MSFRM Fund 2 (10/31/22) using Bloomberg, S&P Net Advantage, Morningstar, & Yahoo Finance