# United Technologies – Raytheon Merger

# Agenda

1	Company Overviews	Amrit Kabo
2	Industry Overview	Amrit Kabo
3	Merger Overview	Louis Gaudette and Jonathan Dybka
4	Valuation	Thierry Matin
5	Conclusion	Thierry Matin

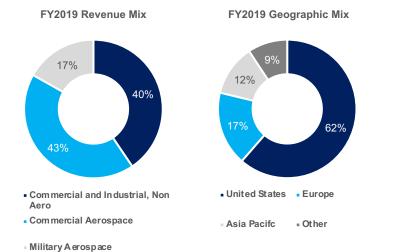
SECTION 1. Company Overviews

# **United Technologies**

#### **COMPANY OVERVIEW**

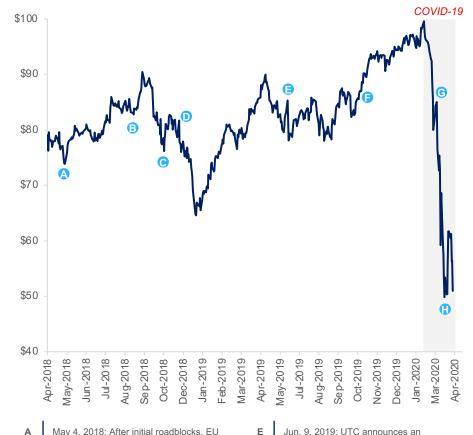
- UTC was initially founded in 1934 as United Aircraft Corp., however through an emphasized M&A strategy, the company diversified into different industries and rebranded itself as UTC in 1975
- Operating Segments<sup>1</sup>:
  - Otis: Provides elevator and escalator manufacturing, installation and service to commercial, residential and infra property sectors; spun off in Q2'2020
  - Pratt & Whitney: Manufacturer of aircraft engines, which are sold to commercial and military end markets
  - Carrier: Provides heating, ventilating, air conditioning, refrigeration, fire and security solutions for residential, commercial and industrial markets; spun off in Q2'2020
  - Collins Aerospace Systems: Manufacturer of advanced aerospace products and aftermarket service for general aviation markets
- End Markets:
  - Predominantly oriented towards commercial and industrial; key clients include Airbus and Boeing
  - Exposure to military end markets is mostly oriented to the U.S. government and the Department of Defence

#### FY 2019 BUSINESS MIX



#### L2Y SHARE PRICE PERFORMANCE<sup>2</sup>

Share Price (US\$)



May 4, 2018: After initial roadblocks, EU regulatory agencies approve UTC's acquisition of Rockwell Collins

Α

- Sep. 25, 2018: UTC's CEO states that both В China and the DOJ will approve the acquisition of Rockwell Collins
- С Nov. 11, 2018: UTC receives approval from China regarding Rockwell Collins acquisition
- D Nov. 26, 2018: Rockwell Collins acquisition closes; UTC announces plans to spin off Otis and Carrier businesses to shareholders

- Jun. 9, 2019: UTC announces an agreement to merge with the Raytheon Company
- Oct. 10, 2019: Raytheon's CFO stats that regulatory approvals look likely regarding the mega-merger with UTC
- Mar. 3, 2020: Amidst the Pandemic, equities slightly recover as the Fed cuts rates
- Mar. 23, 2020: Trough of COVID-19 Bear Market (S&P 500 YTD: -34%)

Notes: Information as of November 12, 2020. All amounts in US\$ millions, unless otherwise stated.

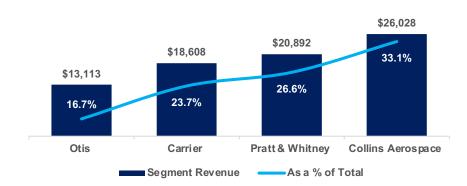
- Prior to divestments related to the merger
- Prior to merger completion date (April 3, 2020) Source: Bloomberg, Company filings and Capital IQ

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# **United Technologies**

#### **Company Financials**

#### **BUSINESS SEGMENTS**



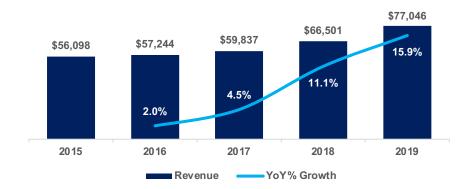
 Prior to the merger, majority of UTC's business was driven by the aerospace industry, with the bulk being oriented towards commercial

#### **EBITDA**



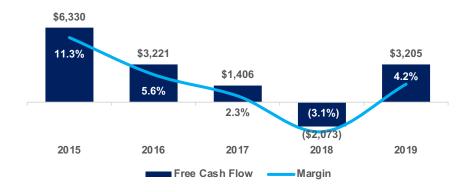
 UTC had been subject to margin pressure as a result of increasing costs related to acquisitions; however, margins largely recovered in 2019

#### **REVENUE**



 The Company had seen strong revenue growth over the past few years, which had been driven primarily by acquisitions of brands such as Collins

#### FREE CASH FLOW GENERATION



 Due to UTC's acquisition-intensive nature, free cash flow generation has been lumpy, particularly in 2018 when Rockwell Rollins was acquired

# The Raytheon Company

#### **COMPANY OVERVIEW**

- Raytheon was founded in 1922 and together with its subsidiaries was a major defence contractor for the United Sates
- As of 2019, it was the fourth-largest defence contractor in terms of contracts won and majority of the business relies on said contracts
- Operating Segments<sup>1</sup>:
  - Integrated Defence Systems (IDS): Provides integrated air and missile defence systems, notably the patriot-missile systems
  - Missile Systems (MS): Develops missile and combat systems for the U.S. Forces and allied nations
  - Intelligence, Information and Services (IIS): Specializes in items such as cybersecurity and data analysis, which are provided to operators such as the U.S. Intelligence Community
  - Systems, Space and Airborne Systems (SAS): Provides sensors and communication systems for operators such as the U.S. Air Force
  - Forcepoint: Develops cyber security and loss prevention products
- End Markets:
  - In 2019, 69% of total revenue was generated by military defence contracts from the U.S. government, with an additional 14% of total revenue being generated by foreign military sales through the government

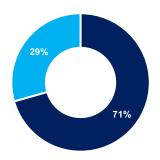
#### FY 2019 BUSINESS MIX

FY2019 Revenue Mix



- U.S. Direct Commercial Sales
- Foreign Military Sales
- Foreign Commercial Sales

#### FY2019 Geographic Mix



United States International

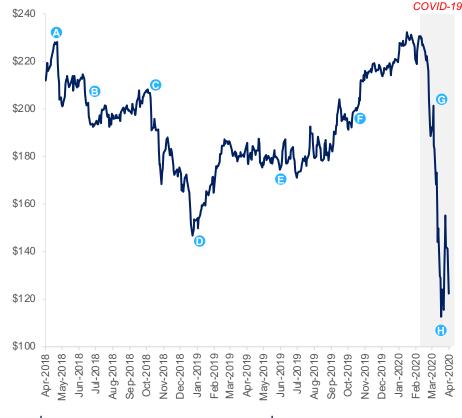
Notes: Information as of November 12, 2020. All amounts in US\$ millions, unless otherwise stated.

Prior to divestments related to the merger

Prior to merger completion date (April 3, 2020) Source: Bloomberg, Company filings and Capital IQ

#### L2Y SHARE PRICE PERFORMANCE<sup>2</sup>

Share Price (US\$)



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Apr. 24, 2018: Defence sector sells off as Α Lockheed fails to boost forecasts and geopolitics appeared to be stable

В Jun. 12, 2018: Defence sector sells off as a potential deal between the U.S. and North Korea is on the horizon

С Oct. 2018: A wave of M&A hits the defence sector as UTC acquires Rockwell and L3 Tech merges with Harris

D

Jan. 2, 2019: Raytheon wins £250M contract with U.K.'s Ministry of Defence but impacted by U.S. government shutdown

Jun. 9. 2019: UTC announces an agreement to merge with the Raytheon Company

Oct. 10, 2019: Raytheon's CFO stats that regulatory approvals look likely regarding the mega-merger with UTC

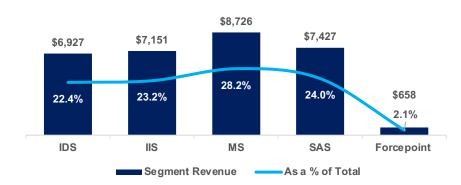
Mar. 3, 2020: Amidst the Pandemic, equities slightly recover as the Fed cuts rates

Mar. 23, 2020: Trough of COVID-19 Bear Market (S&P 500 YTD: -34%)

# The Raytheon Company

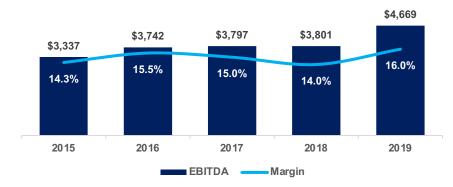
#### **Company Financials**

#### **BUSINESS SEGMENTS (FY2019)**



 Sales were spread across four major segments all concerning the defence industry; with Missile Systems being the primary segment

#### **EBITDA**



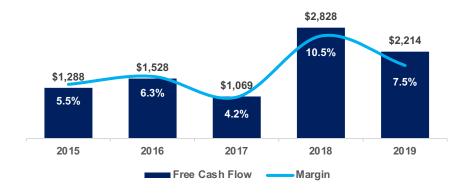
 The Company had been able to sustain consistent margins despite the downturn in the commercial aero industry

#### REVENUE (FY2019)



 Revenue had been driven by predominantly organic growth via defence contracts as well as some minor acquisitions such as of Forcepoint

#### FREE CASH FLOW GENERATION



 Free cash flow generation has also been consistent due to the strong organic business model Raytheon possessed SECTION 2. Industry Overview

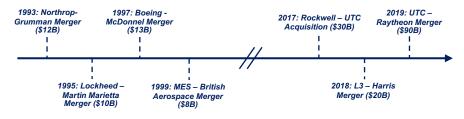
# **Industry Analysis**

#### Aerospace and Defense

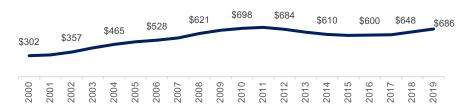
#### **OVERVIEW**

- The Aerospace and Defence industry drastically changed following the end of the Cold War
- The emphasis shifted away from large arsenals and towards innovative weapon systems, rapid deployment and extreme precision
- As a result, the industry has seen significant amounts of consolidation/M&A, which has led to large companies such as Lockheed, the Boeing Company and the newly formed Raytheon Technologies, winning a large portion of federal contracts issued by the U.S. Department of Defence
- As such, it is evident that scale and innovation are key drivers in the industry

#### HISTORICAL CONSOLIDATION AND U.S. DoD BUDGET



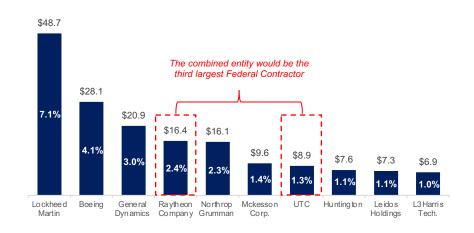
#### U.S. HISTORICAL DEFENCE SPENDING (US\$ B)



#### THE SIGNIFICANCE OF CONTRACTS

- Majority of the industry is driven by military is driven by military spend, particular by the United States
- In FY2019, global military expenditure was estimated to be ~\$1.9T, with the U.S. Department of Defence accounting for \$686B of that total spend
- Defence spending continues to remain a priority for the U.S. but has somewhat stagnated in recent years further increasing competition and emphasizing the importance of winning contracts
- In terms of market share, majority of large contracts for innovative weapon systems are tied up across the top 5 companies
- Outlook: A larger deficit may pressure defence spending but the situation is not the same compared to years following the GFC

#### TOP 10 FEDERAL DEFENSE CONTRACTORS FY20191



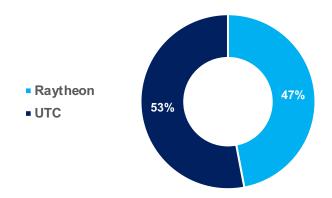
SECTION 3. Merger Overview

#### **Transaction Terms**

#### **TERMS**

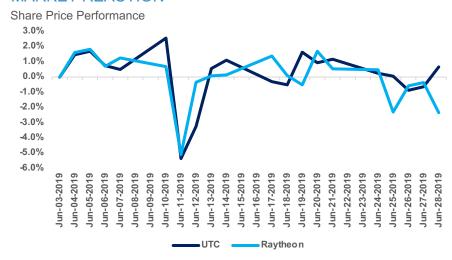
- The transaction was a mergers of equals, structured as an allstock deal worth roughly \$90B based on an implied forward EV/EBITDA multiple of ~13.0x
  - No implied premium; termination fees of \$2.4B (UTC to RTN) and \$1.8B (RTN to UTC)
- Raytheon shareowners received 2.3348 shares in the combined company for each Raytheon share they held
- Net debt (Pro Forma) of \$26B, of which UTC contributed ~\$24B
  - Resulted in an "A-rated" credit profile for the merged entity
- Although both boards approved the transaction, there was shareholder backlash
  - Bill Ackman, CEO of hedge fund Pershing Square, and Daniel Loeb, CEO of hedge fund Third Point, both voiced their opposition against the deal

#### PRO-FORMA OWNERSHIP<sup>2</sup>



 Upon completion of the deal, UTC shareholders owned 53% of the merged entity, while the remaining 47% was owned by Raytheon shareholders

#### MARKET REACTION<sup>1</sup>



#### **BOARD OF DIRECTORS AND MANAGEMENT**



# Raytheon

Raytheon would be given seven of the board seats in the merged entity, with RTC CEO Thomas Kennedy becoming Chairman of RTX



UTC would be given eight of the board seats in the merged entity, with UTC CEO Greg Haynes becoming CEO of RTX

Source: Bloomberg and Raytheon Technologies

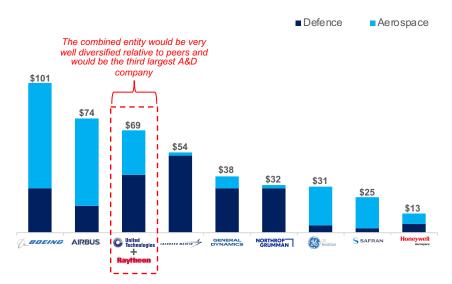
- . June 3, 2019 set as Index:100
- On a fully diluted share basis

# Reasons for Merger

#### REASONS BEHIND THE MERGER

- Technology:
  - Significant potential overlap in technological competencies in both Defense and Commercial Aerospace areas
- Value Creation Through Synergies:
  - ~\$1B+ in gross annual cost synergies expected by "year 4"
- Increasing Competitive Advantage and Scale:
  - The transaction creates the 2<sup>nd</sup> largest U.S. A&D company by revenue and scale in the A&D market is key since it unlocks the potential to direct more investments on advanced capabilities
- Diversification:
  - Given how the defense and aerospace industries have very different cycles, the combined portfolio of Raytheon's steady cash flow profile complements United's more cyclical business

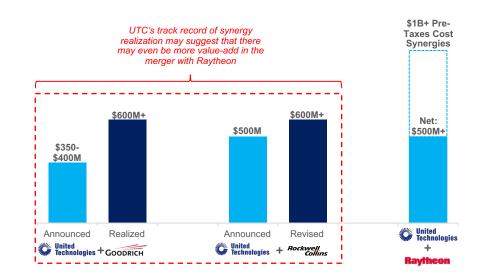
#### COMPETITIVE LANDSCAPE<sup>1</sup>



#### VALUE CREATION THROUGH COST SYNERGIES



#### TRACK RECORD OF SYNERGY REALIZATION



Notes: Information as of November 12, 2020.

A&D sales In US\$ billions

 In US\$ billions; market Share as a % of total DOD contract spend in 2019 Source: Bloomberg and Raytheon Technologies

## Regulatory Approval

#### REGULATORY PROCESS

- Due to the sheer sizes of the companies involved and their positions in the A&D industry, the merger was subject to much scrutiny
- Both UTC and Raytheon were companies that were the only manufacturers of certain products:
  - Raytheon and UTC were two of the very few suppliers of the core military GPS technology worldwide
  - As such, the merged entity would have faced very limited competition from alternative suppliers following the completion of the transaction
- Following the necessary divestitures, RTX announced that it had received all necessary regulatory approvals, March 30, 2020, from the likes of the DoJ and the EU

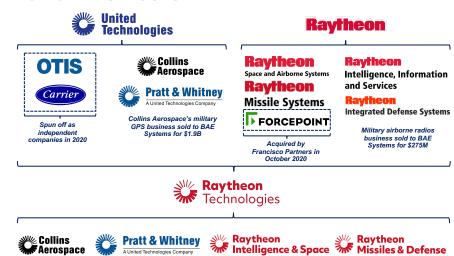
#### **HISTORICAL M&A**

Target	Acquirer	Deal Specifics	Approval?		
Rockwell Collins	United Technologies	\$30B acquisition of Rockwell Collins by UTC in 2017; resulted in the Collins Aerospace segment	✓		
HARRIS'	Technologies	\$20B merger of equals in 2018 between L3 Technologies and Harris, resulting in L3 Harris	<b>√</b>		
NORTHROP GRUMMAN	LOCKHEED MARTIN	Proposed merger in 1998, which was abandoned as a result of DoD and DoJ resistance	×		
MARTIN MARIETTA	≒, Lockheed	\$10B merger between Lockheed and Martin Marietta in 1993; resulted in Lockheed Martin	✓		
GRUMMAN'	No.	\$12B merger between Northrop and Grumman in 1993; resulted in Northrop Grumman	✓		

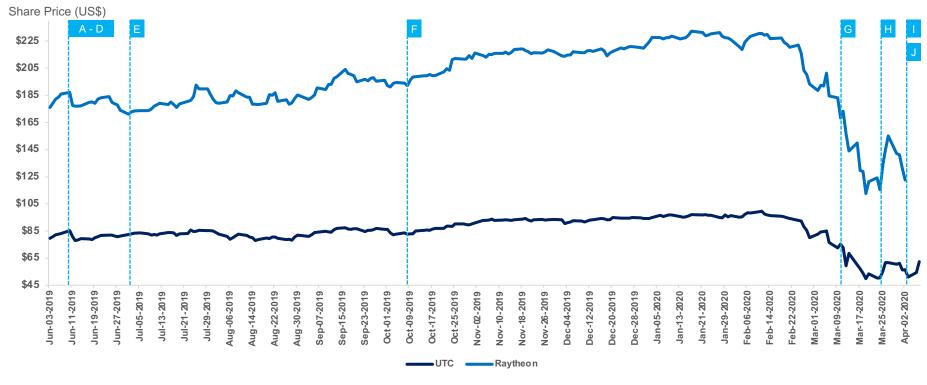
#### REQUIRED DIVESTITURES

- Following UTC's acquisition of Rockwell Collins, UTC announced that it was splitting itself into three separate entities:
  - The Otis elevator segment and the Carrier segment were set to be spun off into independent companies;
  - These spin offs were completed in Q2'2020 following the merger with Raytheon
- For the merger to be completed, the DOJ required UTC and Raytheon to divest the following:
  - Raytheon's military airborne radios business and UTC's military GPS and large space-based optical systems businesses
  - The U.S. DoJ cited that without these divestitures, the merger would eliminate competition between two of the primary suppliers to the DoD

#### PRO-FORMA STRUCTURE



#### Timeline





- October 11, 2019: Both Raytheon and UTC's shareholders vote to approve the proposed deal; UTC's CEO states that the deal will likely be approved by regulators
- March 13, 2020: The European Commission approves the deal pending the divestitures of certain GPS and military radio segments
- H March 26, 2020: The Anti-Trust Commission approves the deal pending the necessary divestitures
- April 3, 2020: Deal is completed, and Raytheon's stock is unlisted while UTC's stock is relisted as Raytheon Technologies (RTX);
- J April 3, 2020: Following the completion of the deal, UTC segments Otis and Carrier Group are spun off as independent companies

Notes: Information as of November 30, 2020.

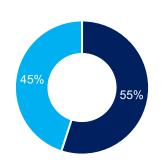
<sup>.</sup> A&D sales In US\$ billions

In US\$ billions; market Share as a % of total DOD contract spend in 2019 Source: Bloomberg and Raytheon Technologies

# Merger Overview **Pro-Forma Entity**

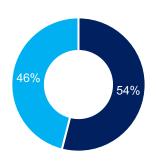
# **END MARKET EXPOSURE**

#### **Pro-Forma Sales by Geography**



United States
 International

#### **Pro-Forma Sales by End Market**



■ Defence ■ Commercial

#### **PRODUCT OFFERINGS**

	<ul><li>Avionics</li></ul>
United Technologies	<ul> <li>Commercial Propulsion systems</li> </ul>
	<ul> <li>Power generation</li> </ul>
	<ul> <li>Cyber protection</li> </ul>

Raytheon

- Air traffic management

**Commercial Aerospace** 

Autonomy, Al & Machine Learning

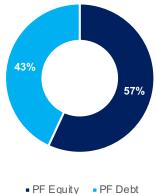
#### **Defence**

- Electro-Optical Intelligence, Surveillance & Reconnaissance
- Military Propulsion Systems
- Resilient Position, Navigation & Communications
- Radar, Sensor & Electronic Warfare
- Missiles and Air & Missile Defence
- System-of-Systems Integration

#### PRO-FORMA FINANCIAL PROFILE

	United Technologies	Raytheon	Raytheon Technologies
Sales	~\$44.7B	~\$28.9B	~\$73.6B
Operating Profit	~\$5.8B	~\$3.5B	~\$9.3B
Operating Margin	~12.9%	~12.2%	~12.6%
EBITDA	~\$8.0B	~\$5.4B	~\$13.5B
FCF	~\$3.2B	~\$2.8B	~\$6.0B
Net Debt	~\$24.0B	~\$2.0B	~\$26.0B

#### PRO-FORMA CAPITAL STRUCTURE

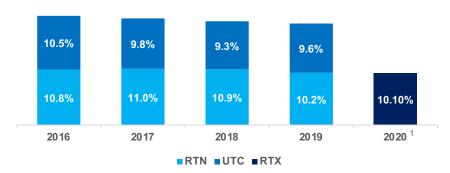


#### Post-Merger Integration

#### **COVID-19 PANDEMIC IMPACT**

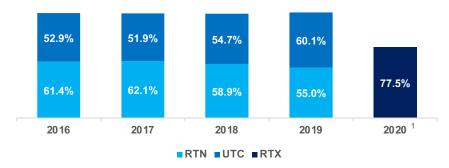
- RTX had planned to cut 1,000 corporate jobs as a result of the merger, however the pandemic exacerbated the layoffs, as the decrease in commercial aerospace sales resulted in 20,000 employees being laid off
  - Management stated it does not expect commercial air traffic to return to 2019 levels until at least 2023
- In addition, RTX also reduced its infrastructure, which takes up 31 million sq. ft., by 20% beyond the 10 percent goal for the merger
- Management had set goals such as reducing costs by about \$2B in Q1 making the reduction in headcount a necessary action
- The pandemic has slowed the post-merger integration as many customers have cancelled orders; as such RTX's defence business will be the main source of cash flows in the near future

#### **SG&A MARGIN**



 Despite the push to cut SG&A costs, from a margin perspective, the merged entity has not been effectively cut costs through the first 6 months postmerger; however, the bulk of cost synergies are not expected until Year 3-4

#### COST OF GOODS SOLD MARGIN



 The COGS margin has increased predominantly due to the pandemic and UTC divesting its Carrier and Otis segments, which were more cost-efficient

#### **VALUATION**

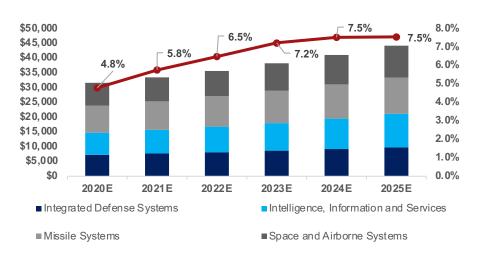
# 6.75x 6.11x 5.27x RTN UTC RTX (Apr. 2020) RTX (Nov. 2020)

SECTION 5. Valuation

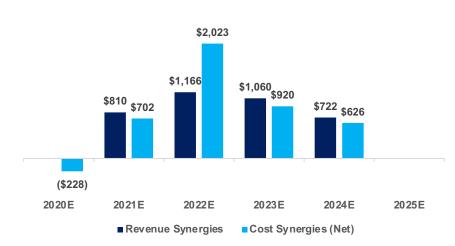
## Valuation

# Target Valuation - Raytheon

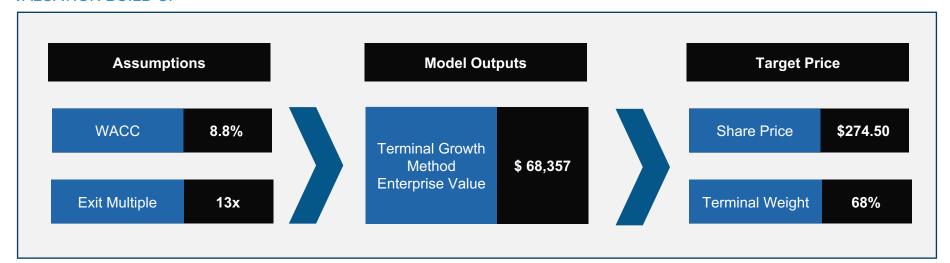
#### **REVENUE FORECAST**



#### **NET SYNERGIES FORECAST**



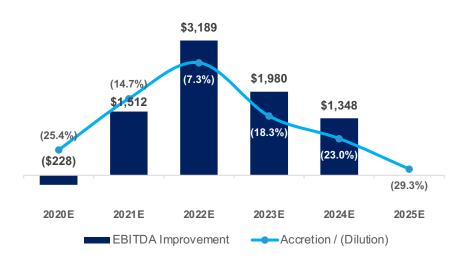
#### VALUATION BUILD UP



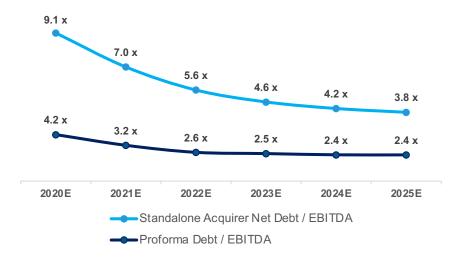
#### **Valuation**

#### **Pro Forma Entity**

#### PRO FORMA EBITDA IMPROVEMENT & ACCRETION

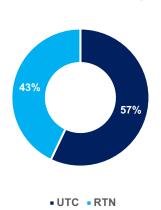


#### CAPITAL STRUCTURE IMPROVEMENT



#### **DEAL STRUCTURE**

#### **Pro-Forma Ownership**





#### **FAIRNESS OPINION**

- The acquisition was dilutive over the forecast period, with most of the synergies coming in around year 3
- Being a dilutive acquisition, we realize that the majority of the value created through the merger is likely to materialize over the long term given Raytheon's growth prospects
- We believe United undersold themselves, limiting the firm's intrinsic value which could have resulted in a compressed exchange ratio. This likely would have led to a potentially accretive acquisition in the short term
- The dilutive nature of the acquisition limits the value to shareholders

# **Precedent Transactions**

# Commercial Aerospace and Defence

Target	Acquirer	Deal Value	Premium <sup>(1)</sup>	Implied TEV/EBITDA <sup>(2)</sup>	Description
Rockwell Collins	United Technologies	\$29.5B	8.62%	14.0x	<ul> <li>Friendly acquisition of Rockwell Collins, a producer of aircraft equipment, by United Technologies in a cash/stock deal</li> <li>Deal was announced on September 5<sup>th</sup>, 2017 and closed on November 27<sup>th</sup>, 2018</li> </ul>
(3)	HARRIS	\$19.6B		14.2x	<ul> <li>Merger of equals between Harris and I3 Technologies in an all-stock merger at an exchange ratio of 1.3</li> <li>Deal was announced on October 14<sup>th</sup>, 2018 and closed on July 1<sup>st</sup>, 2019</li> </ul>
GOODRICH	United Technologies	\$16.5B	43.57%	12.8x	<ul> <li>Friendly acquisition of Goodrich, a producer of aircraft equipment such as landing systems, by United Technologies in an all-cash deal</li> <li>Deal was announced on September 21<sup>st</sup>, 2011 and closed on July 27<sup>th</sup>, 2012</li> </ul>
CSRA=	GENERAL DYNAMICS	\$9.7B	28.3%	13.5x	<ul> <li>Friendly acquisition of CSRA, a provider of IT solutions, by General Dynamics in an all-cash deal</li> <li>Deal was announced on February 12<sup>th</sup>, 2018 and closed on April 4<sup>th</sup>, 2018</li> </ul>
Orbital ATK	NORTHROP GRUMMAN	\$9.2B	25.4%	14.8x	<ul> <li>Friendly acquisition of Orbital ATK, a defence and space contractor, by Northrop Grumman in an all-cash deal</li> <li>Deal was announced on September 18<sup>th</sup>, 2017 and closed on June 7<sup>th</sup>, 2018</li> </ul>
Esterline	TRANSDIGM GROUP INC.	\$3.9B	36.4%	13.8x	<ul> <li>Friendly acquisition of Orbital ATK, a defence and space contractor, by Northrop Grumman in an all-cash deal</li> <li>Deal was announced on October 10<sup>th</sup>, 2018 and closed on March 14<sup>th</sup>, 2019</li> </ul>
Average			28.4%	13.9x	

Notes: As at November 30, 2020

Source: Bloomberg

As of announcement date LTM EBITDA

SECTION 5. Conclusion

## Conclusion

#### AN INDUSTRY BEHEMOTH ...

- The merger created an industry giant with exposure across both aerospace and defence
  - This diversification has proven to be key as the pandemic has significantly set back the commercial aerospace industry
  - Additionally, international sales offer further end-market diversification
- On paper, the merger should benefit greatly from synergies as both businesses have complimentary product offerings
  - Raytheon should be able to leverage UTC's commercial aero products to amplify its military offerings and vice versa
  - The pro-forma entity also benefits from a solid balance sheet;
     which ample cash flow generation and reasonable leverage

#### ... BUT THE JURY IS STILL OUT

- Despite the potential for synergies and the benefits of diversifying the business, concerns are still present for RTX:
  - Recovery in the commercial aero industry is critical, however the outlook remains cloudy given the pandemic
  - The pandemic has also minimized the initial benefits of costcutting synergies
  - On a quantitative basis, the value-add of the net synergies are modest and the deal structure may have not been in the best interest of UTC
  - The timing of the merger is also a bit odd, considering UTC was undergoing a significant restructuring and was still attempting to integrate Rockwell Collins into its business

Although the pro-forma entity is a significant player in the A&D industry, post-merger integration and synergy realization will be key amidst a turbulent industry



SECTION 6. Appendix

# **Deal Calculations**

#### **DEAL TERMS**

Enterprise Value			
	UTC R	RTN	RTN @ Offer
Current Share Price	\$80.00 \$	208.00	\$208.0
Premium	N/A	N/A	-9
Offer Price	N/A	N/A	\$208.0
Diluted Shares Outstanding (m)	864	280	28
Equity Value	69,112	58,282	58,282
Funding Requirements and Funding Sources			
Funding Requirements			
Equity Market Value			58,282
Equity Premium Paid			
Minority Interest			
Repayment of Debt			4,760
Transaction Fees (1%)			630
Funding Requirements			63,672
Funding Sources Waterfall			
Funding Requirements			63,672
Less: Excess Combined Cash Available			(11,670
External Funding Requirement		Stock	52,002
Less: Stock Issuance	1	100.0%	(52,002
Funding Requirement after Stock Issuance			
Excess Cash Available at Acquirer			
Debt Financing Requirement			
Less: Debt Financing			
Funding Sources			
Stock Issued		,	52,002
New Debt			
Cash from Acquirer			
External Funding			52,002
Cash Available at Target			11,670
Total Funding Sources			63,672
Pro Forma Share Issuance			
Acquirer Stock Consideration			52,00
Acquirer Diluted Shares Outstanding (mm)			86
New Acquirer Shares Issued (mm)			650

57.1%

42.9%

2.320x

#### PRO-FORMA CASHFLOWS

Synergies							
		2020	2021	2022	2023	2024	202
Revenue Synergies (% of combined entity)		0.0%	0.8%	1.0%	0.8%	0.5%	0.09
CostSynergies (%ofcombined entity)		0.2%	1.3%	2.0%	0.8%	0.5%	0.09
Integration Costs (%ofcombined entitiy)		0.5%	0.5%	0.0%	0.0%	0.0%	0.0%
	Key Outputs:	2019	2020	2021	2022	2023	202
	% Change in EPS	-7.0%	-8.9%	-4.6%	1.3%	4.6%	4.6
	EBITDA Improvement	4,256	2,188	1,679	2,057	2,082	
Pro Forma (PF) Financial Summary							
(\$ millions)				Cashflow	Forecast		
		2020	2021	2022	2023	2024	202
Acquirer Revenues		57,074	68,932	82,212	95,641	104,662	112,28
TargetRevenues		30,573	32,335	34,432	36,919	39,695	42,69
Total		87,648	101,267	116,644	132,559	144,358	154,97
Revenue Synergies		-	810	1,166	1,060	722	
Total PF Revenue		87,648	102,077	117,810	133,620	145,079	154,97
Growth			16.5%	15.4%	13.4%	8.6%	6.89
Acquirer OPEX		50,228	60,663	72,350	84,167	92,107	98,81
TargetOPEX		25,620	27,096	28,785	30,827	33,145	35,64
Total		75,848	87,759	101,135	114,995	125,252	134,45
CostSynergies		(228)	702	2,023	920	626	
Total PF OPEX		76,075	87,057	99,112	114,075	124,626	134,45
Growth			14.4%	13.8%	15.1%	9.2%	7.99
Acquirer EBITDA		6,847	8,269	9,862	11,473	12,556	13,47
TargetEBITDA		4,953	5,238	5,647	6,092	6,550	7,04
EBITDA Improvement		(228)	1,512	3,189	1,980	1,348	
Total PF EBITDA		11,572	15,020	18,698	19,545	20,453	20,51
Less: Acquirer D&A		1,717	1,827	1,964	2,129	2,326	2,52
Less:TargetD&A		574	633	698	767	843	836
Less: Acquirer Interest		1,746	1,746	1,746	1,746	1,746	1,746
Less:TargetInterest		180	180	180	180	180	180
Earnings Before Taxes		7,355	10,634	14,110	14,724	15,358	15,22
Tax Rate		26%	26%	26%	26%	26%	269
Taxes		1,912.4	2,764.8	3,668.6	3,828.1	3,993.0	3,957.8
NetIncome		5,442.8	7,869.0	10,441.3	10,895.4	11,364.8	11,264.4
PF Diluted Shares Outstanding		1,514	1,514	1,514	1,514	1,514	1,51
PF Diluted EPS		3.60	5.20	6.90	7.20	7.51	7.44
Standalone Acquirer Diluted EPS		4.82	6.10	7.44	8.81	9.75	10.53
Accretion/(Dilution)		-25%	-15%	-7%	-18%	-23%	-29
Proforma Debt / EBITDA 2019E		4.2 x	3.2 x	2.6 x	2.5 x	2.4 x	2.4
Standalone Acquirer Net Debt / EBITDA 2	2019E	9.1 x	7.0 x	5.6 x	4.6 x	4.2 x	3.8

PF Ownership (Acquirer / Target)

Implied Exchange Ratio

# RTC Projected Income Statement

asat12.07/2020		2017A	2018A	<b>2019A</b> 2019-12-31	2020E	2021E	2022E	<b>2023E</b> 2023-12-31	<b>2024E</b> 2024-12-31	<b>2025E</b> 2025-12-31
Daysin a period		365	365	365	366	365	365	365	366	365
Income Statement										
Revenues										
Integrated Defence Systems		5,804	6,180	6,927	7,273	7,710	8,172	8,663	9,182	9,733
Intelligence, Information and Services		6,177	6,722	7,151	7,509	7,959	8,596	9,369	10,306	11,337
Missile Systems		7,787	8,298	8,726	9,162	9,712	10,295	10,912	11,567	12,261
Space Airborne Systems		6,430	6,748	7,427	7,724	8,110	8,597	9,285	10,027	10,830
Forcepoint		608	634	658	684	725	776	838	922	1,014
Eliminations		(1,423)	(1,514)	(1,712)	(1,779)	(1,882)	(2,004)	(2,149)	(2,310)	(2,485)
Total Revenues		25,348	27,058	29,176	30,573	32,335	34,432	36,919	39,695	42,691
Cost of Services and Product Development		18,340	19,573	21,413	22,410	23,701	25,170	26,951	28,977	31,164
Selling, General and Administrative		2,777	2,947	2,989	3,210	3,395	3,615	3,876	4,168	4,483
Total Operating Expenses		21,117	22,520	24,402	25,620	27,096	28,785	30,827	33,145	35,647
Operating Income		4,231	4,538	4,774	4,953	5,238	5,647	6,092	6,550	7,044
Non Operating (Income) Expense, Net			***************************************		***************************************		***************************************		***************************************	***************************************
Retirement Benefits Non-Service Expense		913	1,230	688	688	688	688	688	688	688
Interest Expense		205	184	180	180	180	180	180	180	180
Interest Income		(21)	(31)	(42)	-	-	-	-	-	-
Other (Income) Expense, Net		21	8	(38)	-	-	-	-	-	-
Total Non-Operating (Income) Expense, Net		1,118	1,391	788	868	868	868	868	868	868
Income from Continuing Operations Before Taxes		3,113	3,147	3,986	4,085	4,370	4,779	5,224	5,682	6,176
Federal and Foreign Income Taxes		(1,114)	(264)	(658)	(898.7)	(961.4)	(1,051.3)	(1,149.2)	(1,250.0)	(1,358.7)
Income from Continuing Operations		1,999	2,883	3,328	3,186	3,409	3,727	4,074	4,432	4,817
Income (Loss) from Discountinued Operations, Net of Tax		2	(1)	1	0	0	0	0	0	0
Net Income		2,001	2,882	3,329	3,186	3,409	3,727	4,074	4,432	4,817
Less: Net Income (loss) Attributable to NCI in Subsidiaries		(23)	(27)	(14)	0	0	0	0	0	0
Net Income Attributable to Raytheon Company		2,024	2,909	3,343	3,186	3,409	3,727	4,074	4,432	4,817
Margin		8.0%	10.8%	11.5%	10.4%	10.5%	10.8%	11.0%	11.2%	11.3%
Net Income per Share:										
Basic		7.02	10.31	12.01	11.44	12.24	13.39	14.64	15.92	17.30
Diluted		6.95	10.14	11.93	11.37	12.17	13.30	14.54	15.82	17.19
Weighted Average Shares Outstanding										
Basic		288	282	278	278	278	278	278	278	278
	I	291		280	280	280				280

# RTC Projected Balance Sheet

Assets									
Current Assets	 								
Cash and Cash Equivalents	3,400	3,608	4,292	6,614	9,458	12,595	16,030	19,807	13,735
Receivables, Net	1,324	1,648	1,364	1,524	1,617	1,722	1,846	1,979	12,197
Contract Assets	5,247	5,594	6,122	6,352	6,736	7,173	7,691	8,247	8,894
Inventories	594	758	671	984	1,043	1,111	1,191	1,277	1,377
Prepaid Expenses	 761	529	633	673	711	758	812	873	939
Total Current Assets	 11,326	12,137	13,082	16,147	19,565	23,358	27,570	32,184	37,14
PPE, Net	2,439	2,840	3,353	3,696	4,033	4,368	4,708	5,056	5,501
Operating Lease Right-of-Use Assets		805	875	875	875	875	875	875	875
Goodwill	14,871	14,864	14,882	14,882	14,882	14,882	14,882	14,882	14,882
Other Assets	 2,224	2,024	2,374	2,374	2,374	2,374	2,374	2,374	2,374
Total Assets	30,860	32,670	34,566	37,974	41,729	45,857	50,409	55,371	60,774
Liabilities									
Current Liabilities									
Commercial Paper and Current Portion of Long-Term Debt	300	300	1,499	1,499	1,499	1,499	1,499	1,499	1,499
Contract Liabilities	2,927	3,309	3,267	3,410	3,616	3,840	4,112	4,409	4,755
Accounts Payable	1,519	1,964	1,796	1,878	1,992	2,115	2,265	2,428	2,619
Accrued Employee Compensation	1,342	1,509	1,813	1,834	1,940	2,066	2,215	2,382	2,561
Other Current Liabilities	1,260	1,381	1,416	1,529	1,617	1,722	1,846	1,985	2,135
Total Current Liabilities	7,348	8,463	9,791	10,150	10,664	11,242	11,937	12,703	13,569
Accrued Retiree Benefits and Other Long-Term Liabilities	8,287	6,922	8,553	8,553	8,553	8,553	8,553	8,553	8,553
Long-Term debt	4,750	4,755	3,261	3,261	3,261	3,261	3,261	3,261	3,261
Operating Lease Liabilities	-	647	706	706	706	706	706	706	706
Total Lia bilities	20,385	20,787	22,311	22,670	23,184	23,762	24,457	25,223	26,089
Stockholders' Equity									
Common Stock	3	3	3	3	3	3	3	3	3
APIC	-	-	-	0	0	0	0	0	0
Accumulated Other Comprehensive Loss	(7,935)	(8,618)	(9,260)	(9,260)	(9,260)	(9,260)	(9,260)	(9,260)	(9,260
Retained Earnings	17,895	20,087	21,480	24,666	28,075	31,802	35,877	40,309	45,126
Total Stockholders' Equity	9,963	11,472	12,223	15,409	18,818	22,545	26,620	31,052	35,869
Redeemable Noncontrolling Interests	512	411	32						
Total Liabilities and Stockholders' Equity	30,860	32,670	34,566	37,974	41,729	45,857	50,409	55,371	60,774
Balance Check									

# RTC DCF Valuation

Rayilleon DCF Valuation															
	General Inputs			ı	Financial Inputs			D	CFAssumptions				Intrinsi	: Value	
# #NAME? Bioomberg Tider CurrentPrice USD TodaysDate CurrentFiscal Year End LastReported QuarterEnd Reporting Currency Slock Price Currency	RTC \$ USC USC	)		ST Debt LT Debt Cash & Equivalents Financial Net Debt Net Debt	n USD	1,499 3,261 4,292 468 468	; ;	CostofEquity Risk-freerate Adjusted Beta Market Risk Premiur CostofDebt NACC Used		9.5% 1.27% 1.04 7.9% 1.70% 8.81%		Sum of PV of FCFF PV of Terminal Value Enterprise Value Implied EV/EBITD AI Add: Other Assets Less: Minorities Less: Adjusted Net I Less: Preferreds	(2 FY)	30% 70%	22,763 52,608 75,371 13.5x - - 468
1 USD:USD FX Rate		1.00		Preferred Shares Other Assets / Investr	nents		E	Exp EquityValue Per Sh	ected Return & IF are USD	\$ 267.32		Equity Value			74,903
Shares Outstanding Basic Shares Outstanding F.D.		278.4 280.2		Minority Interests Book Equity				Expected Return		42.6%		Shares Outstanding Equity Value Per Si		-	280 267.32
Unlevered FCF for year end Dec31			2016-12-30	<b>1A</b> 2017-12-30	<b>2A</b> 2018-12-30	<b>3A</b> 2019-12-30	<b>4E</b> 2020-12-30	<b>5E</b> 2021-12-30	<b>6E</b> 2022-12-30	<b>7E</b> 2023-12-30	<b>8E</b> 2024-12-30	<b>9E</b> 2025-12-31	<b>10E</b> 2027-01-01	11E 2028-01-02	<b>Terminal</b> 2028-01-03
Revenue growth Bull Base Base				25,348	27,058 6.7%	29,176 7.8%	30,573 4.8%	32,335 5.8%	34,432 6.5%	36,919 7.2%	39,695 7.5%	42,672 7.5% 9.0% 7.5% 4.0%	45,446 6.5% 8.0% 6.5% 3.0%	48,173 6.0% 7.0% 6.0% 2.0%	
EBITDA margin margin expansion (bps)				4,954 19.5%	5,271 19.5% -6	5,563 19.1% -41	5,136 16.8% -227	5,432 16.8% 0	5,853 17.0% 20	6,313 17.1% 10	6,788 17.1% 0	5,665 13.3% -383	6,020 13.2% -3	6,371 13.2% -2	
EBIT margin margin expansion (bps) Bull Base Base				3,113 12.3%	3,147 11.6% -65	3,986 13.7% 203	4,085 13.4% -30	4,370 13.5% 15	4,779 13.9% 36	5,224 14.1% 27	5,682 14.3% 16	4,054 9.5% -481 11.0% 9.5% 6.0%	4,317 9.5% 0 10.0% 9.5% 5.5%	4,576 9.5% 0 9.5% 9.5% 5.0%	
Net Synergies							1,428	1,034	1,049	543					
EBIT w/Synergies taxrate							5,513 24.2%	5,404 24.2%	5,827 24.2%	5,766 24.2%	5,682 24.2%	4,054 24.2%	4,317 24.2%	4,576 24.2%	
NOPAT							4,179	4,096	4,417	4,371	4,307	3,073	3,273	3,469	55503
CapexIntensity				0.0%	2.8%	3.2%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	
Depreciation and amortization Capital Expenditure				550 0	568 (763)	605 (942)	574 (917)	633 (970)	698 (1,033)	767 (1,108)	843 (1,191)	885.3 - 1,280.17	929.6 1,363.38	976.1 - 1,445.18	
Change in NetWorking Capital				0	512	(132)	(384)	(61)	(1,033)	(1,100)	(70)	(70)	(70)	(70)	
Total Reinvestment Reinvestmentrate as a % of NOPAT		_		550.0	317.0	-469.0	-727.0 -17.4%	-397.7 -9.7%	-412.3 -9.3%	-423.0 -9.7%	-417.9 -9.7%	-465.0 -15.1%	-504.0 -15.4%	-539.3 -15.5%	
Unlevered FCF							3,452	3,699	4,005	3,948	3,889	3,538	3,777	4,008	95571
WACC EV/EBITD A Exit Multiple	8.8% 13x														
DiscountFactor							0.1	1.1	2.1	3.1	4.1	5.1	6.1	7.1	7.1
PV of Unlevered FCF							3,433	3,381	3,365	3,048	2,760	2,307	2,263	2,207	52608

# Raytheon Valuation Sensitivity Table

Target Price:						EV/EBITDA			
		_	12.0x	13.0x	14.0x	15.0x	16.0x	17.0x	18.0x
		10.8%	213.73	224.73	235.73	246.74	257.74	268.74	279.74
		10.3%	219.24	230.60	241.96	253.32	264.68	276.04	287.40
		9.8%	224.93	236.66	248.39	260.12	271.86	283.59	295.32
	ပ္ပ	9.3%	230.83	242.94	255.06	267.17	279.29	291.41	303.52
	WACC	8.8%	236.93	249.44	261.96	274.47	286.99	299.50	312.02
	>	8.3%	243.25	256.18	269.10	282.03	294.96	307.89	320.82
		7.8%	249.79	263.15	276.51	289.87	303.23	316.58	329.94
		7.3%	256.56	270.37	284.17	297.98	311.79	325.59	339.40
		6.8%	263.58	277.85	292.12	306.39	320.66	334.93	349.20
Upside/Downside:						EV/EBITDA			
Upside/Downside:		_	12.0x	13.0x	14.0x	EV/EBITDA 15.0x	16.0x	17.0x	18.0x
Upside/Downside:		10.8%	12.0x 14%	13.0x 20%	14.0x 26%		16.0x 37%	17.0x 43%	18.0x 49%
Upside/Downside:		10.8% 10.3%				15.0x			
Upside/Downside:			14%	20%	26%	<b>15.0x</b> 32%	37%	43%	49%
Upside/Downside:	9	10.3%	14% 17%	20% 23%	26% 29%	15.0x 32% 35%	37% 41%	43% 47%	49% 53%
Upside/Downside:	VACC	10.3% 9.8%	14% 17% 20%	20% 23% 26%	26% 29% 32%	15.0x 32% 35% 39%	37% 41% 45%	43% 47% 51%	49% 53% 58%
Upside/Downside:	WACC	10.3% 9.8% 9.3%	14% 17% 20% 23%	20% 23% 26% 30%	26% 29% 32% 36%	15.0x 32% 35% 39% 42%	37% 41% 45% 49%	43% 47% 51% 55%	49% 53% 58% 62%
Upside/Downside:	WACC	10.3% 9.8% 9.3% 8.8%	14% 17% 20% 23% 26%	20% 23% 26% 30% 33%	26% 29% 32% 36% 40%	15.0x 32% 35% 39% 42% 46%	37% 41% 45% 49% 53%	43% 47% 51% 55% 60%	49% 53% 58% 62% 66%
Upside/Downside:	WACC	10.3% 9.8% 9.3% 8.8% 8.3%	14% 17% 20% 23% 26% 30%	20% 23% 26% 30% 33% 37%	26% 29% 32% 36% 40% 44%	15.0x 32% 35% 39% 42% 46% 50%	37% 41% 45% 49% 53% 57%	43% 47% 51% 55% 60% 64%	49% 53% 58% 62% 66% 71%

# UTC Projected Income Statement

14,691	16,634	26,028	35,138	45,679	57,099	68,519	75,371	80,6
16,160	19,397	20,892	21,937	23,253	25,113	27,122	29,292	31,6
17,812	18,922	18,608	0	0	0	0	0	
12,341	12,904	13,113	0	0	0	0	0	
(1,167)	(1,356)	(1,595)	0	0	0	0	0	
59,837	66,501	77,046	57,074	68,932	82,212	95,641	104,662	112,
44,201	49,985	57,065	43,091	52,044	62,070	72,209	79,020	84
6,429	6,904	8,331	5,993	7,238	8,632	10,042	10,990	11
2,427	2,462	3,015	2,226	2,688	3,206	3,730	4,082	4
(1,853)	(1,249)	(1,461)	(1,082)	(1,307)	(1,559)	(1,814)	(1,985)	(2
51,204	58,102	66,950	50,228	60,663	72,350	84,167	92,107	98
8,633	8,399	10,096	6,847	8,269	9,862	11,473	12,556	13
1,017	1,225	1,773	1,746	1,746	1,746	1,746	1,746	1 1
(108)	(187)	(162)	- 152	- 167	- 160	- 160	- 163	-
(531)	(813)	(756)	- 700	- 756	- 737	- 731	- 742	-
71	175	123	-	-	-	-	-	
o	48	0	-	-	-		-	
(799)	632	(47)	-	-	-		-	
253	311	425	330	330	330	330	330	
(500)	0	108	-	-	-	-	-	
283	306	(59)	-	-	-	-	-	
 -314	1,391	1,405	1,223	1.152	1.178	1.184	1,171	
 8,947	7,008	8,691	5,624	7,117	8,685	10,289		12
 (2,843)	(2,626)	(2,295)	(1,462)	(1,850)	(2,258)	(2,675)		(
 6,104	4,382	6,396		5,267				9
6,104	4,382	6,396	4,161	5,267	6,427	7,614	8,424	5
 6,104	4,382	6,396	4.161	5.267	6,427	7.614	8,424	9
 10.2%	6.6%	8.3%	7.3%	7.6%	7.8%	8.0%	8.0%	
7.64	5.41	7.40	4.82	6.10	7.44	8.81	9.75	1 1
7.64	5.41	7.40	4.82	6.10	7.44	8.81	9.75	1
				2.20			2	'
790	800.4	854 R	864	864	864	864	864	
799	810	864	864	864	864	864	864	
	16,160 17,812 12,341 (1,167) 59,837 44,201 6,429 2,427 (1,853) 51,204 8,633  1,017 (108) (531) 71 0 (799) 253 (500) 283 -314 8,947 (2,843) 6,104 6,104 10.2%	16,160 19,397 17,812 18,922 12,341 12,904 (1,167) (1,356) 59,837 66,501 44,201 49,985 6,429 6,904 2,427 2,462 (1,853) (1,249) 51,204 58,102 8,633 8,399  1,017 1,225 (108) (187) (531) (813) 71 175 0 48 (799) 632 253 311 (500) 0 283 306 -314 1,391 8,947 7,008 (2,843) (2,626) 6,104 4,382 6,104 4,382 10.2% 6.6%	16,160 19,397 20,892 17,812 18,922 18,608 12,341 12,904 13,113 (1,167) (1,356) (1,595) 59,837 66,501 77,046 44,201 49,985 57,065 6,429 6,904 8,331 2,427 2,462 3,015 (1,853) (1,249) (1,461) 51,204 58,102 66,950 8,633 8,399 10,096  1,017 1,225 1,773 (108) (187) (162) (531) (813) (756) 71 175 123 0 48 0 (799) 632 (47) 253 311 425 (500) 0 108 283 306 (59) -314 1,391 1,405 8,947 7,008 8,691 (2,843) (2,626) (2,295) 6,104 4,382 6,396 10,2% 6,6% 8,3%  7,64 5,41 7,40 7,90 80,04 854.8	16,160 19,397 20,892 21,937 17,812 18,922 18,608 0 12,341 12,904 13,113 0 (1,167) (1,356) (1,595) 0  59,837 66,501 77,046 57,074 44,201 49,985 57,065 43,091 6,429 6,904 8,331 5,993 2,427 2,462 3,015 2,226 (1,853) (1,249) (1,461) (1,082) 51,204 58,102 66,950 50,228 8,633 8,399 10,096 6,847  1,017 1,225 1,773 1,746 (108) (187) (162) - 152 (531) (813) (756) - 700 71 175 123 - 0 0 48 0 0 - (799) 632 (47) - 253 311 425 330 (500) 0 108 - 283 (500) 0 108 - 283 306 (59) - 314 1,391 1,405 1,223 8,947 7,008 8,691 5,624 (2,843) (2,626) (2,295) (1,462) 6,104 4,382 6,396 4,161 10.2% 6.6% 8.3% 7.3%	16,160 19,397 20,892 21,937 23,253 17,812 18,922 18,608 0 0 0 12,341 12,904 13,113 0 0 0 (1,167) (1,356) (1,595) 0 0 0  59,837 66,501 77,046 57,074 68,932 44,201 49,985 57,065 43,091 52,044 6,429 6,904 8,331 5,993 7,238 2,427 2,462 3,015 2,226 2,688 (1,853) (1,249) (1,461) (1,082) (1,307) 51,204 58,102 66,950 50,228 60,663  8,633 8,399 10,096 6,847 8,269  1,017 1,225 1,773 1,746 1,746 (108) (187) (162) - 152 - 167 (531) (813) (756) - 700 - 756 (531) (813) (756) - 700 - 756 (71 175 123 0 (799) 632 (47)	16,160	16,160	16,160 19,397 20,892 21,937 23,253 25,113 27,122 29,292 17,812 18,922 18,608 0 0 0 0 0 0 0 0 0 0 0 0 0 12,341 12,904 13,113 0 0 0 0 0 0 0 0 0 0 0 0 0 0 14,167) (1,356) (1,595) 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

# UTC Projected Balance Sheet

Statement of Financial Position									
Assets									
Current Assets									
Cash and Cash Equivalents	8,985	6,152	7,378	12,078	16,379	21,532	27,625	34,775	42,525
Receivables, Net	12,595	14,271	13,524	10,349	12,533	14,948	17,389	18,978	20,415
Contract Assets (Current)	0	3,486	4,184	2,854	3,447	4,111	4,782	5,233	5,614
Inventories	9,881	10,083	10,950	10,946	13,256	15,810	18,392	20,072	21,593
Other Current Assets	1,397	1,511	1,461	1,141	1,379	1,644	1,913	2,093	2,246
Total Current Assets	32,858	35,503	37,497	37,367	46,993	58,044	70,101	81,151	92,392
PPE, Net	10,186	12,297	15,354	12,926	13,168	13,669	14,410	15,223	16,062
DTAs (long term)	1,723	1,646	1,611	1,611	1,611	1,611	1,611	1,611	1,611
Other Intangible Assets	15,883	26,424	26,046	26,046	26,046	26,046	26,046	26,046	26,046
Goodwill	27,910	48,112	48,063	48,063	48,063	48,063	48,063	48,063	48,063
Other Noncurrent Assets	5,988	7,206	7,668	7,668	7,668	7,668	7,668	7,668	7,668
Security Deposits (Asset)	2,372	3,023	3,477	3,477	3,477	3,477	3,477	3,477	3,477
Total Assets	96,920	134,211	139,716	137,159	147,026	158,579	171,376	183,239	195,320
Liabilities									
Current Liabilities									
Accounts Payable - Trade	9,579	11,080	10,809	8,595	10,409	12,414	14,442	15,761	16,955
Current Portion of Long-Term Debt	2,104	2,876	3,496	3,496	3,496	3,496	3,496	3,496	3,496
Short-Term Borrowings	392	1,469	2,364	2,364	2,364	2,364	2,364	2,364	2,364
Accrued Expenses	12,316	10,223	11,737	8,847	10,684	12,743	14,824	16,223	17,404
Contract Liabilities - Current	-	5,720	6,180	4,566	5,515	6,577	7,651	8,373	8,983
Other Current Liabilities	-	_	_	0	0	0	0	0	0
Total Current Liabilities	24,391	31,368	34,586	27,867	32,468	37,594	42,777	46,217	49,201
Long Term Debt	24,989	41,192	37,788	37,788	37,788	37,788	37,788	37,788	37,788
Pension/Postretirement Liabilities	3,036	4,018	3,502	3,502	3,502	3,502	3,502	3,502	3,502
Operating Lease Liabilities	-	-	2,144	2,144	2,144	2,144	2,144	2,144	2,144
Contract Liabilities - Long Term	-	5,069	5,732	5,732	5,732	5,732	5,732	5,732	5,732
Other Noncurrent Liabilities	12,952	11,845	11,638	11,638	11,638	11,638	11,638	11,638	11,638
Total Liabilities	65,368	93,492	95,390	88,671	93,272	98,398	103,581	107,021	110,005
Total Stockholders' Equity	31,552	40,719	44,326	48,487	53,754	60,181	67,795	76,219	85,315
Redeemable Noncontrolling Interests					,	,	,		
	96,920	134,211	139,716	137,159	147,026	158,579	171,376	183,239	195,320
Total Liabilities and Stockholders' Equity									