NOVA SCHOOL OF BUSINESS AND ECONOMICS

Master in Finance / Management

PRIVATE EQUITY CHALLENGE

Professors:

Luís Mota Duarte

Fábio Santos

Carolina Lopes
30394 / 4108

Mathieu Bourque
29792 / 3980

Pedro Pinto Coelho
20220 / 3898

Pedro Mendes
20740 / 3737

INVESTMENT COMMITTEE PAPER

CAE

AGENDA

4 Executive Summary

5 Company Overview
- CAE Profile
- Business Model
- Competitive Positioning

10 Market Overview
- Simulation & Training Overview
- Civil Aviation Market
- Defence & Security Market
- Healthcare Market
- Competitive Landscape

16 Historical Financial Analysis
- Income Statement
- Balance Sheet
- Cashflow

21 Investment Thesis
- Deal Rationale and Strategy
- Value creation

31 Business Plan & Forecasts
- Business Plan
- Revenues
- Operating Income
- Cashflow

36 Capital Structure
- Valuation
- Leverage Market Overview
- Sources and Uses
- LBO Returns

41 Exit & Due Diligence
- Exit Overview
- Trade Sale
- Initial Public Offering
- Due Diligence

46 Appendix

INVESTMENT COMMITTEE PAPER

EXECUTIVE SUMMARY

ENTRY

- CAE Inc. is a **simulation and training company** that operates across three segments – **Civil Aviation, Defence & Security and Healthcare**
- Based in Canada, CAE currently has operations worldwide in over 35 countries and **has been a consistent dominant player in its industry** (with 51% and 19% market share in simulator market for Civil and Defence, respectively, thus taking the #1 spot, and 9% in the Healthcare). Its strong competitive moat, network of training centres and broad client base, alongside a diversified offer of unique, innovative and integrated products and services have allowed it to seize market share over the years
- The company has shown **outstanding historical financials**, with **above-market sustainable growth** in already fast-growing industries, an increasing contribution of recurring revenue and **consistent cashflow generation which**, aligned with its **strong asset base** results in a leverageable balance sheet
- Overall, **CAE presents an opportunity to create value**, taking advantage of CAE's positioning, favourable macroeconomic conditions and identification of untapped opportunities
- Based on an analysis performed on trading comparables and precedent transactions, as well as a standalone valuation, CAE **should be priced at an EV/EBITDA around 10.3x**, corresponding to an EV of C$ 7.1b
- The deal will be funded in **5.5x by debt** and the remaining by equity. The former will be comprised exclusively of senior debt with 3 tranches issued in USD, EUR and GDP, in rapport to revenue composition
- The proposed financing structure incentivizes management by granting them a 9% stake of ordinary shares in return of C$ 29.8m

VALUE CREATION

CAE's value creation plan consists of a Buy & Build strategy allied with portfolio expansion and operational improvements

- With **tremendous demand for pilots** from airlines over the next couple of decades, supply is expected to follow such trend. **CAE has the potential and expertise to further tap into the *ab initio* training** of aspiring pilots to seize the expected growth in this sub-industry. Considering this trend is especially noteworthy in North America and APAC region, **the company can exploit strategic aquisitions** in the regions to grab onto and improve on existing infrastructure of flight schools
- Moreover, as CAE becomes a training superpower of aspiring pilots, it increases its attractiveness towards the pilot-hungry airlines which, in turn, will lead to more contracts for CAE's other services
- The **healthcare S&T market is expected to grow tremendously** over the next years – 14.5% CAGR –, and CAE is well-positioned to enjoy this growth. **By diversifying and optimizing its product portfolio**, the company will become an increasingly attrative supplier of medical simulation equipment. By investing through both R&D and targeted acquisitions, CAE can tap into attractive opportunities in **orthopedic, ophthalmological and surgical** devices segments
- Finally, **the company is well-positioned to improve its operations**, namely its worsening cash conversion cycle and the increase in the utilization rate of its simulators as it integrates centres across the business lines

EXIT

- The most suitable exit strategy is a **carve-out of the Healthcare branch while pursuing a sale of the other two segments to a strategic partner**
- The HC segment is most likely to list in the Nasdaq stock exchange. Civil aviation and Defence & Security can be bought out by a major competitor, as is the case of L3 Technologies
- **By splitting the company, the exit is eased**, given the large expected size of CAE at exit and lack of competitors operating simultaneously across the three segments
- Furthermore, exiting by parts can potentiate multiple arbitrage by eliminating a potential conglomerate discount as the Healthcare peers display higher valuation multiples
- Given uncertainty over the exit strategy, a dual-track process will be put in place to evaluate the optimal strategy
- After an optimal investment period of 5 years, the company is conservatively expected to sell at a flat multiple, yielding a **3.22x return for the fund** and 21.2x for the management. The institutional investor will earn C$ 11.8b, accounting for the ordinary shares and the FRI, thus enjoying an **IRR of 26.4%**
- If the exit multiple is 0.5x higher, accounting for benefit of carving out Healthcare, the investments yield a 27.6% IRR in the same 5 years


CAE, INC.
COMPANY OVERVIEW

- COMPANY PROFILE
- PRODUCT MIX
- BUSINESS MODEL
- COMPETITIVE POSITIONING

COMPANY OVERVIEW | CAE PROFILE

From humble beginnings, CAE is now the training partner of choice for numerous companies and agencies

COMPANY PROFILE

- CAE Inc. is a manufacturer and supplier of simulation equipment and training services
- Formerly known as Canadian Aviation Electronics, CAE – based in St-Laurent, Canada – has **consistently innovated** and **secured a record number of industry firsts** which helped propel the company as a **market leader in Simulation & Training**
- By combining **innovative technological tools with legacy training solutions**, CAE give itself the mission to:

Make flying safer

Improve forces' readiness

Increase patients' well-being

- As a **pure-play training company**, CAE offers great characteristics:

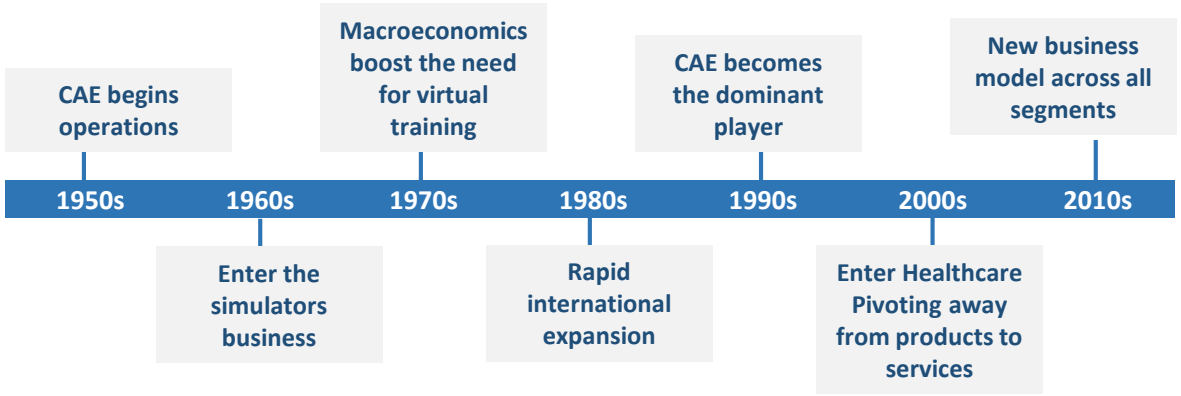
High level of recurring revenue (60%)

Strong position to take market share

Culture based on innovation

Compelling competitive moat

- The company has always been at the forefront of technology advancement. In the age of big data, augmented reality and super computers, CAE is well-positioned to maintain its spot as the market leader – **CAE is the trainer by excellence**



CONQUERING THE WORLD, ONE REGION AT A TIME

COMPANY OVERVIEW | PRODUCT MIX

Teachers, leave the disruption alone!

CIVIL AVIATION

PRODUCTS

- CAE produces **the most innovative full-flight simulators** (FFS) and **flight training devices** (FTD)
- **Follow-on** includes product **upgrades** – in the form of software, visual systems, and customizations – and provision of **spare parts** – to modify or fix the FFS

SERVICES

- CAE's **training centres** provide for **commercial and business pilots** the **Type Rating** training, the Multi-Crew Cooperation (**MCC**) course, among others. Also, provide maintenance and cabin crew training
- Services provided follow the **full life-cycle of a pilot/staff** – continuous training from sourcing until retirement continuous training. CAE also provides **aviation personnel recruitment**
- CAE's **flight schools** include the **ATPL** and **MPL** courses for ***ab initio*** **training (cadets)**

Products and services **sold in a package**

D&S

PRODUCTS

- Comprehensive portfolio across **air, naval and land** as well as **public safety** segments
- These products range from desktop trainers to the highest fidelity full-mission simulators

SERVICES

- Move to **Training Systems Integrator** (TSI), merging live, virtual and constructive solutions – a big spectrum of services ranging from aeromedical evacuation training systems to fuselage trainers
- **TSI facilitates training operations between the various military forces** and eases cooperation with allied forces

Access to confidential biddings broadens CAE's product mix

HEALTHCARE

PRODUCTS

- CAE's portfolio includes **patient manikins and simulators, ultrasound and surgical simulators**, and a powerful simulation center management solution platform

SERVICES

- CAE's **Turnkey** offering delivers bundled solutions – including **soft/hardware platforms, accreditation support, professional services**, and others – that advance healthcare education and patient safety goals
- Big focus on **nursing and emergency technician training**
- **Continuous training services to physicians** (mandatory) in collaboration with medical associations

Tremendous growth opportunity, especially high fidelity products and AR

More detailed information in Appendix I,II,III,IV

BUSINESS MODEL | LEGACY *VS* NEW

Pivoting away from its legacy business model, CAE is accelerating the trend of training outsourcing

	CIVIL AVIATION	DEFENCE & SECURITY	HEALTHCARE
LEGACY BUSINESS MODEL	▪ **CAE sells/leases FFS and related products** ▪ Includes maintenance services and training for operating the Sims ▪ **Focus mainly on the development of pilots**	▪ **Mostly product oriented** ▪ CAE sells/leases simulators to militaries ▪ **Heavily tilted towards air forces**, synergizing from Civil Aviation segment	▪ **No legacy business model** ▪ **Industry in early stage** with CAE actively trying to develop it ▪ Still, business plan mirrors that of the other segments' early days – CAE is focusing more on selling product
NEW ERA BUSINESS MODEL	▪ Alongside selling Sims, **CAE operates them through its network of JV, partnerships and owned training centres** ▪ CAE takes care of the development of pilots *from A-Z* but **also other personnel** operating in the industry (e.g. flight attendants) ▪ These contracts are **long-term and fixed**, which provides more stable and **recurring revenues**	▪ Focus on **integrated training solutions** ▪ Provides **services to all forces** that combine live and virtual training ▪ CAE works in **collaboration with defence and public safety agencies** to implement collaborative training operations ▪ Contracts with the militaries are subject to intense scrutiny and can be volatile due to their sensitivity to the political atmosphere	▪ **Potential for similar new-era business model** ▪ With the need of continuous education in the medical field, CAE is **exploring potential partnerships** with medical tech companies and healthcare associations to provide continuous training and implementation of fellowship program

Training centres

+40 Partnerships/JV with Airlines and OEMs

Integration of training capabilities and different forces

Collaboration with Military and Public Security forces

Currently providing mainly products

Partnership with medical associations and companies

COMPETITIVE POSITIONING | CAE'S ADVANTAGES

CAE enjoys strong and sustainable competitive advantages that crystalize the company's leading position across segments

COMPETITIVE POSITIONING

DEFENCE & SECURITY

- **CAE shares first spot with L3 as market leader** in Sims and CAE estimates having 7% market share in the overall Defence S&T market
- CAE's **Training Systems Integration approach** provides the full spectrum of the training continuum, making it a more appealing offer to defence and security forces
- CAE is **one of very few providers of training services with full capabilities** to address the overall market needs

Long-term relationships held with major global defence agencies

HEALTHCARE

- Leading through innovation in the healthcare market with **the broadest portfolio of healthcare training solutions available**
- World's **first childbirth simulator with augmented reality**
- **Innovation awards** evidence their thought leadership in healthcare simulation

Partnerships with key associations in the healthcare market

American Heart Association. | American Society of Anesthesiologists | European Society of Anaesthesiology ESA

INDDUSTRY ATTRACTIVENESS

INVEST / GROW

CAE is leading in 3 attractive industries with a supportive backdrop and favourable long-term growth prospects

COMPETITIVE STRENGHT OF BUSINESS UNIT

CIVIL AVIATION

- CAE holds a **long-standing leading position** in the aviation market with over **half of total of FFS market share**, significantly ahead of number two – Berkshire's FlightSafety
- **Product portfolio leadership** as the most comprehensive and innovative amongst its competitors
- CAE leads through **quality** – 91% of its FFS were give the highest level of FFS qualification available (FFS-D) the greatest level of any manufacturer
- **Unmatched global reach and scale –** currently the largest and most global aviation training network

Well-established long-term strategic agreements with major airlines and agencies (including in emerging markets)

Emirates | IBERIA | Singapore Airlines | AirAsia | Federal Aviation Administration | EASA European Aviation Safety Agency

More detailed information in Appendix V (Swot Analysis) & XI (Market Share)



SIMULATION & TRAINING MARKET OVERVIEW

- CIVIL AVIATION
- DEFENCE & SECURITY
- HEALTHCARE
- COMPETITIVE LANDSCAPE

SIMULATION & TRAINING | OVERVIEW

The S&T industry is gaining further relevancy in the training of professionals of fundamental areas

The ever-growing Simulation and Training (S&T) business has been positively impacting the Civil Aviation (Civil), Defence & Security (D&S) and Healthcare industries

- The Civil training market corresponds to **training solutions** for flight, maintenance and ground personnel in commercial, business and helicopter aviation
- Most of the training for airline pilots is made in flight simulation training devices. Therefore, the **Civil market** is **divided** into two main segments: **Civil Simulators** (Product) and **Civil Training** (Service)

- The **D&S virtual and simulation-based training** industry tackles the **three** main components of a military - army, naval and air - as well as **public security forces** - police forces, border patrols and others
- Defence government agencies seek these products and services to train personnel across various domains including combat operations, medical treatment, modeling, maintenance and more in multiple platforms and realistic scenarios

- Medical simulation is **the virtual duplication of *in situ* activities,** an advanced technological process of providing **training** to medical professionals of various industries. It provides an artificial demonstration of a real-world process, in order to attain educational training through experimental learning. It reduces surgery errors and provides a learning environment to do experiments
- Simulation is regarded as the **most prominent advancement** in the field of medical education, as it has completely changed the way of medical research and training

CIVIL AVIATION | S&T MARKET OVERVIEW

The competitive landscape is strong with more players turning to the service segment

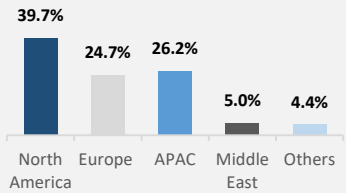
PORTER'S FIVE FORCES

SUPPLIERS	MEDIUM	Data, equipment and other inputs are supplied from **various** subcontractors, OEMS and others. However, there are some that can only be **sole** sourced
BUYERS	LOW	There are several buyers in the market and switching costs are **large** as training services contracts are usually between 5 to 20 years
NEW ENTRANTS	LOW	Barriers to entry are **high** due to a highly capital intensive and regulated market alongside the importance of reputation
COMPETITION	HIGH	The **training segment is fragmented** with players such as independent services providers, airlines or OEMs. The **simulators market is highly consolidated** amongst 4 major players
SUBSTITUTES	LOW	Virtual training services have proven to be **better** than the traditional methods

MARKET SIZE

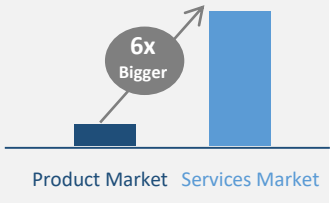
There are **1,694** FFS around the world

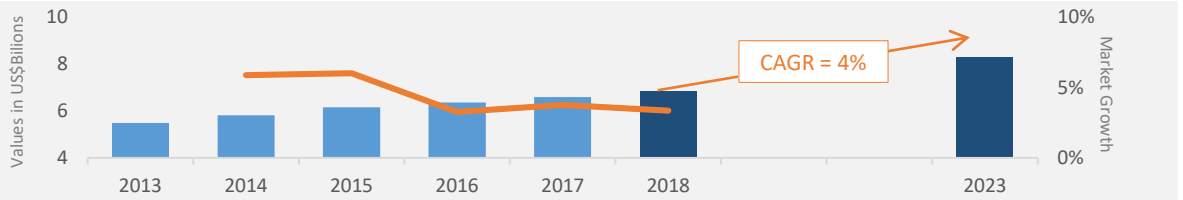
Source: Halldale Group



In 2018, the market size was **6.8b**

Sources: CAE Inc, Visiongain





Sources: Visiongain, CAE Inc., Cision PR Newswire, Mordorintelligence, Orbis Research

MAIN MARKET DRIVERS

IMPACT

Pilot training and certification regulations: Regulatory requirements and processes are becoming increasingly **more complex** and strict which led to the **prominence** of simulation-based pilot training worldwide

Expected long term high growth in air travel: increase in world passenger and cargo air traffic will lead to a **soaring demand** for qualified personnel

Safety and efficiency imperatives of commercial airline and business aircraft operators: rise of focus on safety and efficiency will drive the S&T market as it is perceived safer, more cost-effective and allows for an extended training scope

Demand for trained aviation professionals: innovative and efficient training solutions will be **required** as demand for pilots heightens due to a rapid **fleet expansion** and high pilot retirement rates

More detailed information in Appendix VII

GEOGRAPHICAL OVERVIEW

AMERICAS

- USA is world's **largest** market
- Very high demand for pilots and aircrafts in the future

APAC

- Expected to exhibit the **highest growth rate**
- High demand for experienced pilots

EUROPE

- There are some geopolitical **uncertainties**
- Low-cost carriers are supporting pilot creation programs

MIDDLE EAST & AFRICA

- Airlines have been agressively **expanding** in the Middle East
- Africa is the world's **smallest** air travel region yet it has some space to grow

Sources: CAE Inc., IATA, Mordorintelligence

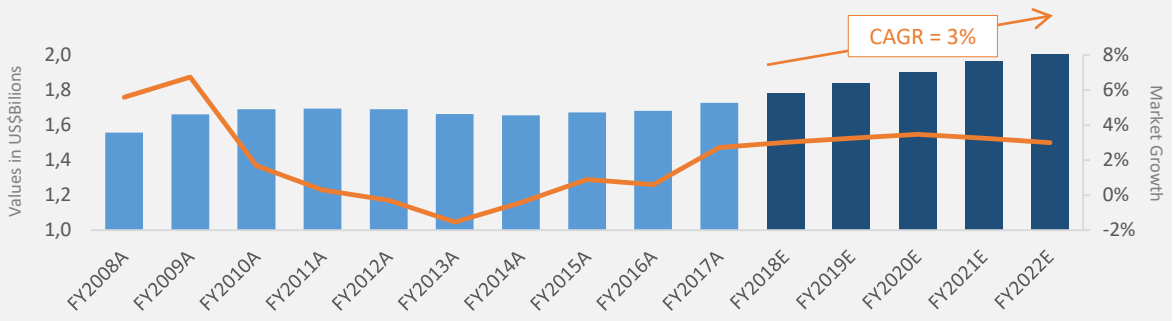
DEFENCE & SECURITY| S&T MARKET OVERVIEW

Highly regulated and demanding industry makes the D&S segment an auspicious market for innovative training technologies

PORTER'S FIVE FORCES

SUPPLIERS	HIGH	Key components are often sourced from a very **small number** of suppliers
BUYERS	HIGH	Buyers have **enormous power** in this industry as they are scarce and can direct the company due to the sensitivities of its activities
NEW ENTRANTS	LOW	**High** barriers to entry notably due its high capital requirement, regulations, the importance of a strong reputation and technology expertise
COMPETITION	HIGH	The industry is composed of **few** well-established players with **strong** competition amongst them. Players that manufacture the training equipment have a competitive advantage
SUBSTITUTES	LOW	Traditional methods are substitutes to virtual training services which are **often costly** and more dangerous

MARKET SIZE



Source: Deloitte

MAIN MARKET DRIVERS

IMPACT

Outsourcing of training and maintenance services: In an effort to streamline costs and improve forces readiness, militaries around the world are looking at outsourcing and non-traditional training capabilities

Growing defence budget: After years of neglect in defence spending, the USA and NATO countries are diverting more money to their military. Global defence spending will reach a level never seen since the Cold War

Drive for more efficient spending: Governments are trying to find ways to spend their money more efficiently and are actively looking at virtual and simulation-based technologies due to its attractive profile.

More detailed information in Appendix VIII

GEOGRAPHICAL OVERVIEW

AMERICAS

- Trump build-up: The current President has vowed to and is **increasing** defence spending which has been long awaited due to the overstretched current resources (e.g. Navy collisions)

APAC

- Japan **reactivating** its army
- China's operation in the South China Sea pushes ASEAN countries to **push** spending
- India will become the third largest spender in defence

EUROPE

- American administration pushing NATO countries to reach 2% of GDP target
- CEE countries **increase** spending to counter Russian belligerent attitude

MIDDLE EAST & AFRICA

- **Slowdown** in spending from oil dependent countries with the exception of the Gulf States
- Ongoing tensions and conflicts, notably between Iran and Saudi Arabia, might be able to sustain **strong** order flows

HEALTHCARE | S&T MARKET OVERVIEW

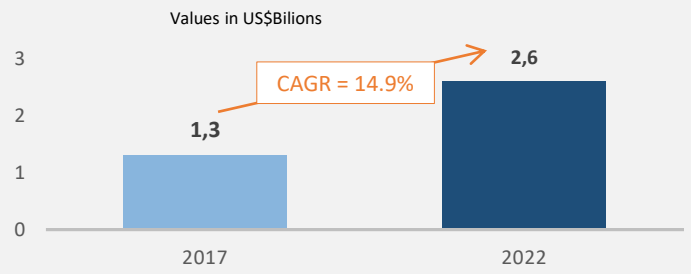
Simulation is a disruptive technology in the field of medical education

PORTER'S FIVE FORCES

SUPPLIERS	MEDIUM	There are **diverse** sourcing entities available but also threat of forward integration
BUYERS	MEDIUM	Moderate switching costs as each product requires **different** handling care and training
NEW ENTRANTS	LOW	**High** barriers to entry due to the advanced technology needed, high initial capital requirements and need to have a global scale and established reputation
COMPETITION	HIGH	**Fragmented** industry in early stages of development
SUBSTITUTES	LOW	Traditional patient observation and experimentation are substitutes. These often lead to medical **errors** due to lack of practice and unfamiliarity with procedures. However, its cost is significantly **lower**

MARKET SIZE

- The double digit growth reflects the **relatively infant adoption stage of simulator-based training** techniques within the industry



MAIN MARKET DRIVERS

IMPACT

- **Medical technology revolution:** The surge of new and advanced medical products led to the need for improved training solutions
- **Limited access to live patients:** Constrained availability of patients leads to limitation in the development of critical skills and access to high-risk procedures
- **Surge in emphasis on patient safety & outcome:** Since medical errors are a leading cause of death nowadays, new and effective training methods are increasingly gaining traction in order to minimize risks and provide clinicians with the expertise necessary

More detailed information in Appendix IX

GEOGRAPHICAL OVERVIEW

AMERICAS

- **North America** accounted for the **largest** share of the medical simulations market, followed by Europe and Asia Pacific
- The US market holds the largest market share in 2017 in N.A. region due to the presence of **high quality** healthcare system and **modern** medical technology
- The firmly established **distribution channel** and increasing adoption of **advanced technologies** such as V.R. have proven to be the **major drivers** of growth in the region

APAC

- APAC is expected to emerge as the **fastest growing** region with a CAGR of 15,6% during 2017-2023
- This high growth derives from the **rise** in the number of hospitals, commercialization and innovation in simulators

EUROPE

- **Second** largest market share but still in an early adoption phase comparing to North America – Germany is at the upfront
- It is expected to play an **important** role as assessment tool for clinical competencies

Sources: Mordorintelligence, Healthcare in Europe

COMPETITION | LANDSCAPE

While the Civil Aviation and D&S industries deeply overlap in terms of competitive dynamics, Healthcare runs independently

	CIVIL AVIATION	DEFENCE & SECURITY	HEALTHCARE
PLAYERS AND PRODUCTS	▪ Concentrated simulator market – 4 major players own 95% market share – while training is more fragmented and becoming increasingly more crowded	▪ 59% of military SIMs sold belong to 4 top players ▪ Training market share is difficult to estimate, mostly due to the secrecy involved with most contracts	▪ The 4 most important companies account for 29% of the market for simulators ▪ Training market is even more fragmented
	▪ **Most players operate across the broader aerospace/defence industries**, sometimes even beyond such markets ▪ While simulators tend to be similar to most extent, **training services have offered greater differentiation** ▪ Common offer of products besides simulators and training services: supplies of aircraft parts, aviation-related management systems such as air traffic control, military gear, amongst others		▪ Vast majority of competitors are **pure-plays** ▪ Although most products across companies compete directly, **some manufacturers focus on specific unexplored surgical procedures**
	BOTH → ONLY D&S		
	FlightSafety International, TRU Simulation + Training, AIRBUS, THALES, L3, Rockwell Collins, BOEING	LOCKHEED MARTIN	Laerdal helping save lives, Gaumard Simulators for Health Care Education, Simbionix, mentice
SALES DYNAMICS	▪ Usually **highly competitive bidding process** for contracts ▪ SIMs procurement decisions **increasingly focused on price**	▪ Contracts similarly assigned via tenders, but bidding **companies need clearance to participate** ▪ End users still **largely focused on value**	▪ **Innovative products and the companies' brand awareness** are regarded as key decision drivers for end users, although cost also plays a big role
INDUSTRY TRENDS	▪ **Surging number of smaller competitors** in the services segment on the back of more facilitated development of new technologies and focus on niche segments ▪ Consequent **M&A activity** as incumbents make use of deals to capture market share, advanced know-how and expand geographically and across their product portfolio		▪ **New players providing stiff competition** to the dominant existing players ▪ Strategically, **companies increasingly focus on product launches, collaborations and partnerships and JVs** to seize market share

More detailed information in Appendix XI



CAE, INC.
HISTORICAL FINANCIAL ANALYSIS

- INCOME STATEMENT
- BALANCE SHEET
- CASHFLOW

FINANCIALS | INCOME STATEMENT

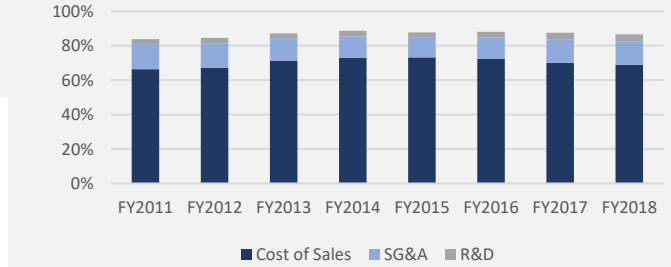
CAE is focusing more on the services segment where it can achieve better margins

Values in C$m, except %	FY2011	FY2012	FY2013	FY2014	FY2015	FY2016	FY2017	FY2018
1 **Total Revenue**	**1,630.8**	**1,821.2**	**2,035.2**	**2,077.9**	**2,246.3**	**2,512.5**	**2,704.5**	**2,830.0**
% Revenue Growth		*11.7%*	*11.8%*	*2.1%*	*8.1%*	*11.9%*	*7.6%*	*4.6%*
2 **Gross Profit**	**548.8**	**600.1**	**584.8**	**565.1**	**603.7**	**697.5**	**811.2**	**876.9**
% Gross Margin	*33.7%*	*33.0%*	*28.7%*	*27.2%*	*26.9%*	*27.8%*	*30.0%*	*31.0%*
% growth		*9.3%*	*(2.5%)*	*(3.4%)*	*6.8%*	*15.5%*	*16.3%*	*8.1%*
2 **Operating Expenses**	**268.4**	**299.5**	**298.9**	**311.4**	**327.5**	**371.0**	**460.9**	**462.9**
SG&A	*239.9*	*256.4*	*264.5*	*259.3*	*264.6*	*311.5*	*364.4*	*380.8*
R&D	*44.5*	*62.8*	*60.1*	*67.7*	*64.1*	*87.6*	*111.0*	*114.9*
Other	*(16.0)*	*(19.7)*	*(19.7)*	*(15.6)*	*(1.2)*	*(28.1)*	*(6.1)*	*(32.8)*

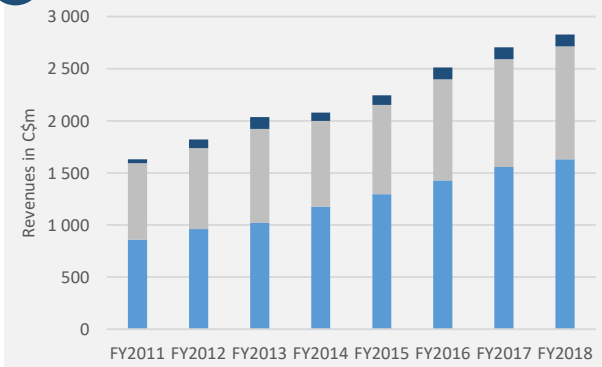
2

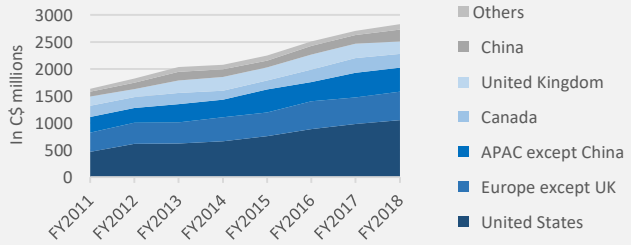
- CAE's **cost structure** is split between Cost of Sales, R&D and SG&A
- While CoS – comprising raw materials, salaries, some D&A and others – still constitutes the biggest block, it has been decreasing as % revenue (~3 pp) due to a process improvement program initiated in 2016 that aimed at strengthening competitiveness
- Contrarily, R&D have increased as of late as a strategy to keep CAE in the forefront of the training industry with projects such as the ongoing C$1b-worth Digital Intelligence (on big data, AI, AR, and cybersecurity)

AS % OF TOTAL REVENUES



1



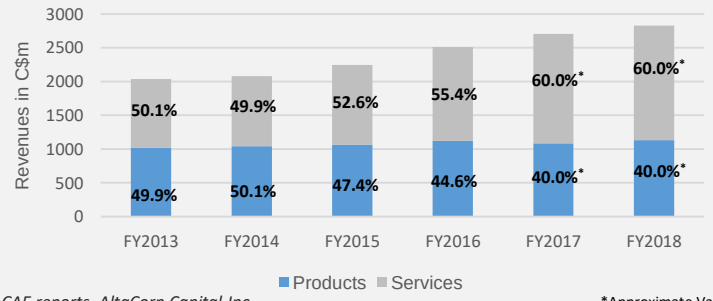


	Civil	Defence	Healthcare	CAE
% Total Rev (2018)	58%	38%	4%	
CAGR (11-18)	9.6%	5.7%	17.2%	8.2%

- **Civil and Defence have been the core businesses** of CAE, and it is visible a well establishment in both markets
- **Civil** has been the segment with **more stable and continuous growth**. **Defence and Healthcare** have shown a **less stable**, with in some years, negative growth. In 2012 for example, there was a budget sequestration in the U.S.A leading to defence spending cuts that cause a sizable decrease in revenues (FY 2013) for the defence segment
- This event also shows **CAE's exposure to the American market (CAE's biggest market). Europe** and the **APAC** region are gaining pace with countries such as United Kingdom and China showing good prospects
- With an acquisition track record averaging ~**1 deal per year**, CAE's **growth is mainly organic**

PRODUCTS VS. SERVICES

- CAE is **growing its focus on Training and Services (recurring revenue)** as this segment shows much better prospects



Sources: CAE reports, AltaCorp Capital Inc.

*Approximate Values

FINANCIALS | INCOME STATEMENT

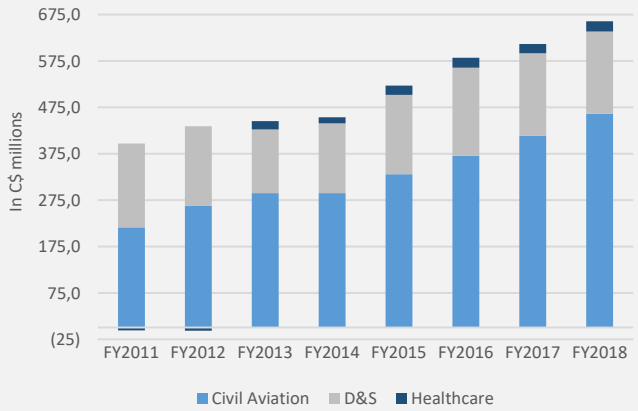
After a decrease in margins in 2013, CAE is already fast recovering its pace

Values in C$m, except %	FY2011	FY2012	FY2013	FY2014	FY2015	FY2016	FY2017	FY2018
EBITDA	**392.3**	**427.9**	**376.7**	**453.9**	**521.9**	**553.3**	**576.6**	**660.6**
% growth		*9.1%*	*(12.0%)*	*20.5%*	*15.0%*	*6.0%*	*4.2%*	*14.6%*
% margin	*24.1%*	*23.5%*	*18.5%*	*21.8%*	*23.2%*	*22.0%*	*21.3%*	*23.3%*
Net Income	**160.3**	**180.3**	**137.7**	**190.0**	**201.8**	**229.5**	**251.5**	**347.0**
% margin	*9.8%*	*9.9%*	*6.8%*	*9.1%*	*9.0%*	*9.1%*	*9.3%*	*12.3%*

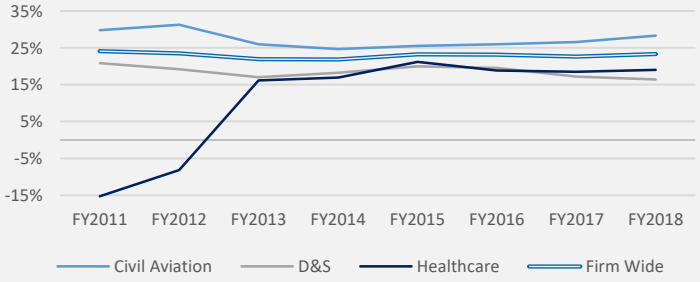
1

1

EBITDA per segment



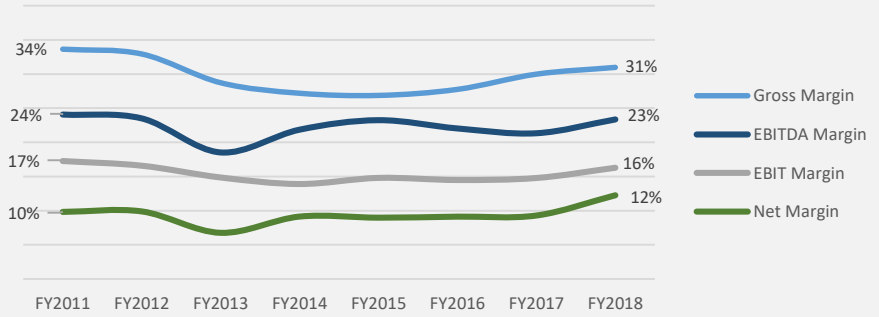
EBITDA margins per segment



- **The EBITDA margin has been stable** mainly due to the fact that the decrease in D&S margin has been compensated by the increase seen in Civil and Healthcare margins
- In Civil, the **increase of the margin** is due to **higher utilization rate** of its simulators, combined with the effect of **wet training**. Furthermore, the process improvement program initiated in 2016 should **support margin improvement in upcoming future**
- With the sequestration period, Defense revenues were not the only affected. **EBITDA margins decline substantialy (~10bp) in 2013** due to the jeopardize of some contracts that lead to high fixed costs that were not being offset by revenue
- Healthcare **is beginning its contribution to the firm overall profitability**, but is still in early stages

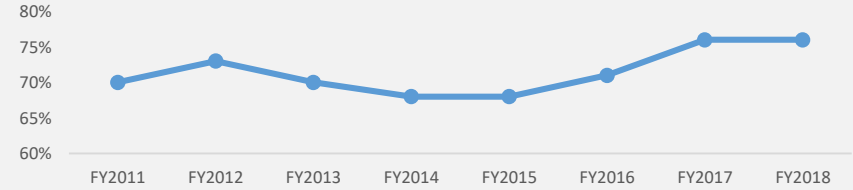
MARGIN COMPARISON

- Until 2014, following economic recession, heightened competition, redistribution of FFS, and military spending eased by the Obama administration, CAE has seen its margins slightly erode
- After 2015, Revenue growth picked up on the back of improving economic prospects, aligned with the successful acquisition of Lockheed Martin's Commercial Flight Training unit, the expansion of their military training portfolio, winning a series of contracts with the US Army and major airlines
- By 2018, margins had recovered albeit below 2011 levels, with the exception of Net Margin which felt the result of a US income tax recovery



UTILIZATION RATE

- CAE have been able to **increase its simulators utilization rate.** The impact of the redistribution of FFS decreased the utilization rate in 2013-2014
- It is a key driver for the improvement of the operational margin

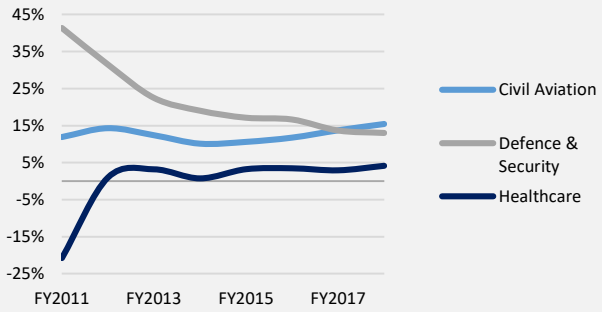


FINANCIALS | BALANCE SHEET

Strengthened Balance Sheet as a result of FCF generation

Values in C$m, except %	FY2011	FY2012	FY2013	FY2014	FY2015	FY2016	FY2017	FY2018
Total Assets	**2,817.3**	**3,028.9**	**3,691.3**	**4,236.7**	**4,656.9**	**4,996.7**	**5,354.8**	**5,719.2**
ROA	*5.7%*	*6.0%*	*3.7%*	*4.5%*	*4.3%*	*4.6%*	*4.7%*	*6.1%*
Capital Employed	**1,544.7**	**1,843.0**	**2,198.4**	**2,567.6**	**2,866.2**	**2,943.4**	**3,090.8**	**3,290.3**
1 *ROCE*	*18.2%*	*16.3%*	*13.9%*	*11.0%*	*10.9%*	*12.6%*	*13.0%*	*13.9%*
Equity	**932.9**	**1,051.4**	**1,146.4**	**1,482.2**	**1,686.4**	**1,940.3**	**2,081.0**	**2,366.6**
2 *ROE*	*30.1%*	*28.6%*	*26.7%*	*19.1%*	*18.6%*	*19.1%*	*19.3%*	*19.3%*
Net Debt	**416.4**	**489.4**	**854.1**	**897.8**	**994.5**	**837.6**	**804.8**	**706.0**

1



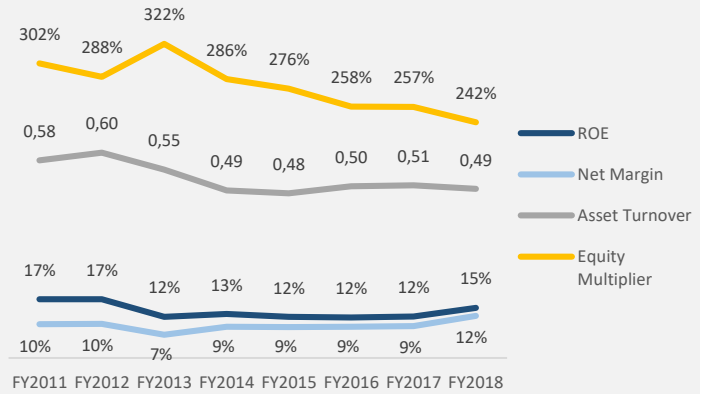
Overall ROCE slightly increasing since 2014 with downward pressure from D&S

- **ROCE has been slightly improving for the CA segment**, jumping 5 pp over the last five years and finishing 2018 at 15.5% – result of an **increasing utilization rate** (operational measure of sold hours *vs* capacity of training hours)
- **The *start-up-like* Healthcare business line vastly increased the profitability of its invested capital** from -20.8% in 2011 to 4.2% in 2018 as EBIT growth starts to outpace investment
- Contrarily, **D&S has seen its ROCE sharply decline** reaching a third of its 2011 figure by 2018 (40% *vs* 13%), a result of *i.* lowering revenue growth from sequestration alongside high fixed-cost base and *ii.* increasing capital employed from larger NWC and investment in PP&E without an increase in returns to keep up
- **CAE has not been allocating capital most efficiently** as growth Capex in D&S has been pushing down returns

2

DUPONT ANALYSIS

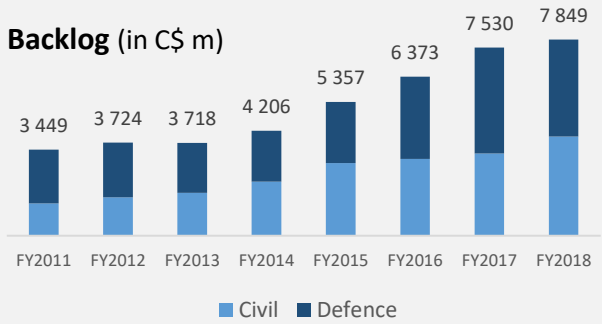
- ROE dropped most substantially in 2013 pressured down by a lower net margin
- Then on, **ROE stabilized carried by margin improvements and higher asset efficiency** that offset the (de)leverage effect
- Asset turnover is upward sloping in the second half, although it is **still below levels of efficiency seen in the early years**



	FY2011	FY2012	FY2013	FY2014	FY2015	FY2016	FY2017	FY2018
Net Debt / Equity	*44.6%*	*46.5%*	*74.5%*	*60.6%*	*59.0%*	*43.2%*	*38.7%*	*29.8%*
Net Debt / EBITDA	*1.1*	*1.3*	*1.9*	*2.0*	*2.0*	*1.4*	*1.3*	*1.1*
Interest Coverage Ratio	*4.4*	*4.3*	*4.1*	*5.4*	*5.7*	*6.6*	*6.3*	*7.3*

- CAE has been strengthening its Balance Sheet as it pays down debt. The deleveraging has helped place ND/EBITDA almost within the company's own targets
- Also, **interest coverage has been consistently on the rise** as lowering interest payments are met with higher EBITDA

Backlog (in C$ m)



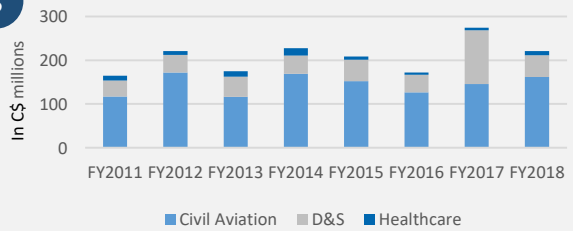
- Due to the nature of the business, CAE intakes large volumes of orders, accounted for as backlog
- Naturally, it plays a key role in proxying forthcoming revenue
- **Backlog has been rapidly increasing** since 2015 (16.1% CAGR), specially in the CA segment

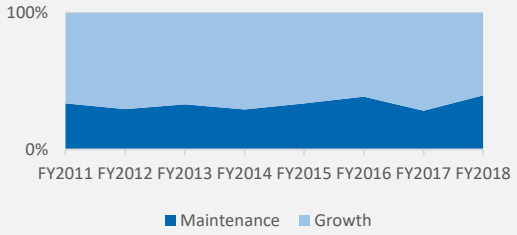
FINANCIALS | CASHFLOW

Flirting with the goal of reaching a 1-to-1 EBITDA/FCF conversion

	CASHFLOW	FY2011	FY2012	FY2013	FY2014	FY2015	FY2016	FY2017	FY2018
	NOPAT	**201.1**	**223.3**	**208.7**	**248.6**	**267.7**	**327.7**	**326.1**	**417.0**
	D&A	109.7	125.8	142.7	164.6	189.1	217.9	211.9	199.6
1	Non-Cash-Items	46.7	10.9	(44.3)	(52.6)	(55.4)	(108.8)	(32.9)	(87.1)
	NOWC	*81.5*	*190.8*	*252.5*	*166.2*	*232.4*	*239.1*	*247.1*	*237.5*
2	Investment in NOWC	-	(109.3)	(61.7)	86.3	(66.3)	(6.6)	(8.0)	9.6
	Operating CF	**-**	**250.7**	**245.5**	**446.9**	**335.1**	**430.2**	**497.1**	**539.1**
	OCF growth	-	-	*(2.1%)*	*82.1%*	*(25.0%)*	*28.4%*	*15.5%*	*8.5%*
3	Total Capex	(164.5)	(220.8)	(174.9)	(227.5)	(208.5)	(171.7)	(274.0)	(221.2)
	Total Capex % Rev	*10.1%*	*12.1%*	*8.6%*	*10.9%*	*9.3%*	*6.8%*	*10.1%*	*7.8%*
	Investing CF	**(164.5)**	**(220.8)**	**(174.9)**	**(227.5)**	**(208.5)**	**(171.7)**	**(274.0)**	**(221.2)**
	ICF growth	-	-	*(20.8%)*	*30.1%*	*(8.4%)*	*(17.6%)*	*59.6%*	*(19.3%)*
4	**FREE CF**	**-**	**29.9**	**70.6**	**219.4**	**126.6**	**258.5**	**223.1**	**317.9**
	FCF growth	-	-	*135.7%*	*211.0%*	*(42.3%)*	*104.1%*	*(13.7%)*	*42.5%*

3



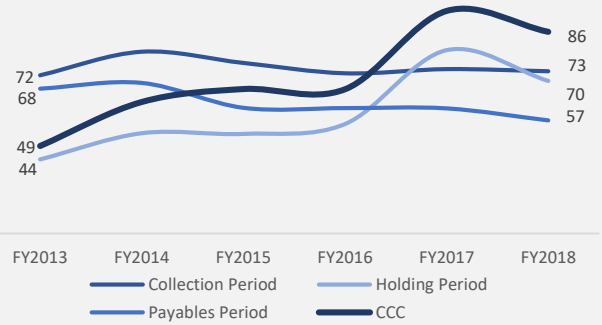


- **CAE prioritizes capital allocation raking investment in accretive growth first**, followed by investment in market-led opportunities that are expected to generate additional return
- CAE is set on lowering capital intensity, thus starting **rolling back on Capex relative to sales**
- 2014: Protective acquisition of Oxford flight school network (CA) to improve market share on a growing segment
- 2017: Exceptional deployment of capital on the newly won US Army Fixed-Wing Program (yet to start) and Lockheed Martin's aviation unit deal
- 2018: Investment jump mostly the result of deployment of Sims to support client demand and growing outsourcings

1

- Besides D&A, other items that do not represent cash movements include stock-based compensation, deferred income taxes and some non-cash adjustments

2



- CAE maintains a **conservative NWC policy** that accounts for cyclicality – also pictured in an increasing Current Ratio that clocks in at 1.56 in 2018
- Consequently, **Cash Conversion Cycle has been volatile**, averaging 59 days, with a steep increase in 2017 driven by worsening inventory and payables management

RECEIVABLES

- Despite a hike in 2014 – due to sequestration delaying defence payments –, **collection period quickly recovered and further improved** due to stronger client relationships

INVENTORIES

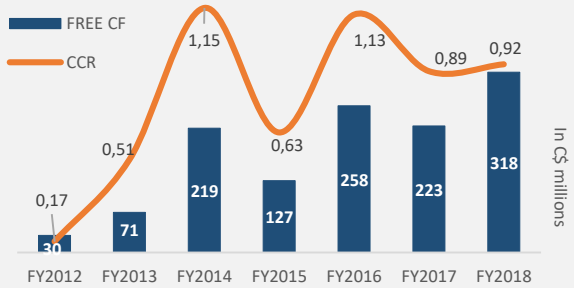
- **Holding period has been consistently on the rise.** Considerable jump in 2017 following product captured from LM's air unit buyout with slight recovery in the following year

PAYABLES

- **Large number of sole-sourced key components** and **required data supplied by OEMs** (that are increasing own presence) have been keeping **payments ever more promptly**

4

- With decreasing Capex (*vs* sales) that has been outpaced by OCF growth, **FCF generation quadrupled** since 2013
- Although volatile, the **cash conversion ratio has largely improved** since 2012 bottoms, and shows how the company has managed to accumulate cash





BUYOUT
INVESTMENT THESIS

- DEAL RATIONALE
- VALUE CREATION | CIVIL B&B
- VALUE CREATION | HEALTHCARE EXPANSION
- VALUE CREATION | OPTIMIZATION OF OPERATIONS

INVESTMENT THESIS | DEAL RATIONALE AND FUTURE STRATEGY

Highly leverageable company offers high growth opportunity

DEAL RATIONALE

1 LEADING MARKET POSITION

CAE enjoys a **leading position** in the three segments it operates in, offering a **unique product portfolio** and integrated solutions. **All segments** are showing **strong** prospects of sustainable **profitable growth**, with CAE having the opportunity **to retain more growth than its competitors due to its competitive advantages** (strong reputation and innovation)

2 GREAT FINANCIALS

CAE presents **outstanding financials** with a consistent track record of increasing **recurrent revenues** and **robust free cash flow generation** which, aligned with a **strong asset base**, results in a **leverageable balance sheet**

3 EXPERIENCED MANAGEMENT TEAM

On the back of diverse backgrounds, the long-standing management team has shown **strong leadership capabilities** and **industry knowledge**, mirrored by their ability to maintain CAE as a reference in simulation and training for over 70 years

FUTURE STRATEGY

Segment	Maturity	Untapped opportunities	Operations efficiency
Civil			
D&S			
Healthcare			

- Both Civil and D&S markets are already **mature** and CAE is established in both segments as the **stronger player** in the market
- Due to the nature of the D&S market and the strategy that CAE has been performing, there is little room to find untapped opportunities, but there is still a margin for improvement regarding **efficiency of operations**
- Regarding the civil segment, we believe the exponential increase of pilots demand is an opportunity that **CAE is not fully taking advantage** of and hence should focus on creating a **pilot pipeline** that the industry is requiring
- With respect to the Healthcare segment, it is still in an infant phase and we believe CAE should seize the momentum and try to **increase its portfolio**

A FLIGHT SCHOOLS EXPANSION – BUY & BUILD

With the **increase in pilot demand** over the next 20 years, it is expected that **supply will follow**. Thus, CAE has a **big opportunity to extend its *ab initio* academies worldwide** which can be exploited through strategic acquisitions

B HEALTHCARE – PORTFOLIO EXPANSION

CAE has the potential to **leverage its position as a leader in the fast-growing healthcare segment,** diversify and optimize its product portfolio. By investing through both R&D and targeted acquisitions, CAE can tap into attractive opportunities orthopedic, ophthalmological and surgical devices simulation

C OPTIMIZATION OF OPERATIONS

CAE is well positioned to boost its margins via operation improvements such as the enhancement in **net working capital management** and gradually lessening R&D as well as Selling, General & Administrative expenses

VALUE CREATION | B&B STRATEGY OF *AB INITIO* FLIGHT SCHOOLS

The shortage of pilots will increase the demand for Ab initio training solutions and jump start a race for market share

WHY?

GROWING DEMAND

- On **average**, for the **next 20 years**, the demand for pilots **per year** will be:

Worldwide	**34K** →	**50% increase** compared to current year
Americas Market	**11K**	
APAC Market	**12K**	

- It is estimated that most of the **supply** will come from **United States of America**, **APAC region** and Europe

Sources: Boeing; Airbus; CAE Inc.

AB INITIO COURSE STRUCTURE

- *Ab initio* **course structure is changing**. Due to the shortage of pilots, **airlines are trying to create partnerships with training solutions providers** to secure the next generation of pilots
- The **MPL** programme (more **simulation-based** training) is expected **to** be the **major source** of pilots in the future (see appendix II)

MARKET CONSOLIDATION

- By acquiring flight schools, we are not only **creating value** by **consolidating the market**, but also by **building a pipeline** for the **human resources need** of the aviation industry
- This expansion in CAE school network will enhance our position towards both prospective cadets and airlines in **markets** that are yet **under-explored**
- It will **reinforce our already strong position** as the go-to provider of training services in the aviation sector

REVENUE SYNERGIES

- By expanding CAE pool of cadets, we will be able to **convert a greater number of ATPL students towards the MPL programs,** and the ones in which we have partnerships with airlines
- The **MPL programs** are **more expensive** than the ATPL by an average of **US$ 25k**
- Benefitting from a greater talent pool, **airlines** will be **more attracted to CAE** for their **recruiting** needs. It will also boost revenue in CAE's other lines of business (e.g. products)
- For an airline, by partnering with CAE for their recruits training, it will be logical to sign an agreement for their on-going education

HOW?

BUY & BUILD

Acquisition is the optimal strategy

vs.

Building academies from scratch:

- Swiftly gaining market share **requires a fast strategy**
- **Proven business plan** unlike greenfield investments that are more opaque
- Acquisitions can potentially expose CAE to **new airline contracts**, thus expanding MPL contracts

STRATEGIC APPROACH

- CAE will acquire several flight schools in the **APAC and North American markets** due to their **pilots supply attractiveness**
- CAE will leverage on its **already established relations with airlines and several training centres (that own FFS)** so that can attract new aspiring pilots by mostly **providing MPL programmes** with **competitive prices, geographical convenience, high quality expertise** and **higher job security** for the applicants
- A **marteking** and **sales** campaign will be performed in the first two years to boost the **promotion of the programme**
- CAE will target flight academies with the **aim to increase its capacity**. Acquisitions of flight schools will depend on:
  - Geography
  - # cadets that graduate per year
  - Course Structure
  - # Training aircraft

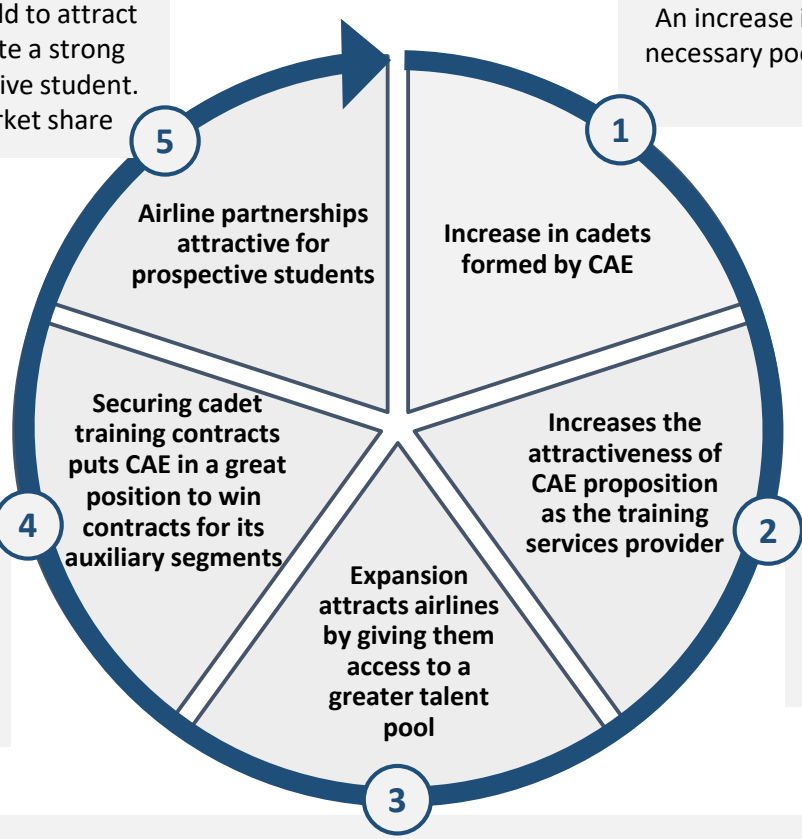
FUNDING

- **Cash-cow operations** (internally-generated funds from Civil Aviation)
- **Cash ins** from expansion of ongoing sales and leaseback program
- Combination of **Capex facility** and **leveraged loans**

VALUE CREATION | FROM CADETS TO CAPTAIN, CAE DOES IT ALL

Ab-initio school network: key component for a visionary pilot pipeline for the aviation sector

An increase in the number of schools and their capacity will create the necessary pool of talent to build a pipeline of new pilots for the aviation industry



With the new airlines partnerships, the company will be able to leverage its strong relationship with them and with militaries around the world to attract more cadets into its schools. CAE network will be able to generate a strong placement rate which is a key measure looked at by any prospective student. This will create a virtuous circle and will enable CAE to gain market share

By having direct access to the formation of more cadets, CAE will have the fuel to act as a midstream player, thus increasing the attractiveness of its proposition on being the number one training service provider

With more partnerships secured for cadet training, the airlines preference to outsource all of their training needs to a sole provider will help CAE generate revenue synergies by offering ongoing training services, training services to auxiliary personnel and through the sales of more simulators

With a juiced up pipeline, CAE will have greater leverage to sign partnerships with airlines related to their next generation of pilot needs. Furthermore, CAE will be in a position in which they will be able to negotiate financing solutions with financial institutions, governments or even the airlines themselves

VALUE CREATION | B&B STRATEGY OF *AB INITIO* FLIGHT SCHOOLS

Several factors were considered to handpick which countries to invest in the acquisition of flight schools

GEOGRAPHICAL PICK

CAE is already **present in the American flight school market** in Phoenix and has 6 flight training centres where it provides the simulator part of the MPL program for cadets, trains airline pilots, cabin crew members, maintenance and does aviation recruitment. In the **APAC region**, we decided to develop a research to understand what would be the best countries to acquire flight schools. Evidently, it is in CAE's interest to **enter in countries where it already is present with flight training centres**, so it can provide the **simulator part** of the MPL programmes, attract new cadets for the aimed pilots pipeline, and subsequently airlines. The table below show the major characteristics of the country that where taken into account

Country	CAE Presence Flight School	CAE Presence Training Centre	Market Size	Regulation*	Competition**	Attractiveness	Remarks
USA	**1**	**6**					It is a very attractive country due to **market size** (very popular for Chinese, Japanese, South Korean, European students, among others). **Competition: Fragmented**
Australia	**2**	**1**					Australia is the **most mature market** in the APAC region. Is known for its high quality facilities, abundance of space and **high safety standards**
China	**-**	**1**					It is **arduous to enter** in the in the Chinese market if not by JV. CAE has a training centre in Hong Kong (easier entry) Trend: students **study abroad** in Australia and USA
Japan	**-**	**1**					Is the **most expensive country in the APAC region** to provide flight courses Course Language: Just Japanese Trend: students **study abroad** in Australia and USA
South Korea	**-**	**1**					While some schools provide the course in English, the exams are **only** in **the local language**. Trend: students **study abroad** in USA
India	**1**	**2**					The aviation market is expected to **triple**. **Cheapest country** in the APAC region. Capacity to **attract foreign** students. I**ncreasing regulation** to prevent forged courses
Philippines	**-**	**1**					Poised for **fast growth**. **Optimal** weather conditions, **low-cost** course price and living, alongside **easy and quick visa** process. Capacity to **attract foreign** students
Singapore	**-**	**1**					Really **expensive** course structure. **Increasing demand** for pilot courses. **Well-paying** national airlines (students prefer to do the course in **home country**)
Malaysia	**-**	**1**					Most imcumbent schools provide courses **not recognised** by major airlines. **Increasing regulation** due to recent aviation crashes and security focus
Vietnam	**-**	**1**					The market size is not appealing to enter. Trend: students **study abroad** in USA, Indonesia, Australia and Europe

**Taking into consideration 2 factors: i.The legal barriers to acquire a company, and ii. The possibility to provide the course structure that CAE is already providing (high level meaning that is hard to provide the structure of the course in a specific country)*

***Taking into consideration 2 factors: i.The number of players in the market, and ii. The size of the players in the market (high level meaning that is a highly competitve market)*

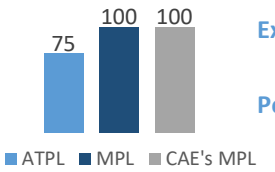
Sources: Federal Aviation Administration; International Civil Aviation Organization; International Air Transport Association; Civil Aviation Administration of China; Sky Asian Group; Flight Global; Aviation Fly; Financial Times; Reuters; CAE Inc

VALUE CREATION | ACQUISITION STRATEGY OF AB INITIO FLIGHT SCHOOLS

Alongside with US, Australia and India will be the core markets as they have great attributes to attract foreign cadets

USA

AV. PRICE (US$k)



Sources: L3 Academy; CAE.Inc; IbisWorld Planetandpilotmag

AIRLINE PARTNERSHIPS

Existing: American Airlines, jetBlue, Shenzhen Airlines, AEROMEXICO.

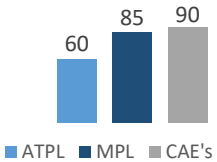
Potential: Southwest, spirit, DELTA, volaris, United Airlines

STRATEGY

- CAE will acquire **ATP Flight school,** America's **largest** flight school**,** that operates **38** flight schools across **18** states of the United States of America
- ATP Flight school already graduates a sizable amount of pilots per year and CAE would increase its capacity by **investing** in infrastructure and aircraft
- With such a vast network of schools, it is expected that **CAE** will **increase** its MPL agreements, by the **acquisition** itself, and by **partnering** with new airlines
- The training centres in **Phoenix, Dallas, Miami, Minneapolis and Orlando** will support the MPL programmes

AUSTRALIA

AV. PRICE (US$k)



Sources: Sky Asian Group; CAE.Inc

AIRLINE PARTNERSHIPS

Existing: Jetstar Japan Airlines

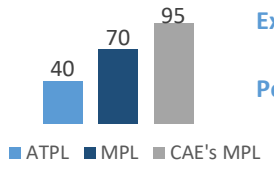
Potential: 中國東方航空 China Eastern, QANTAS, AIR CHINA

STRATEGY

- CAE will buy **Soar Aviation (Australia's largest flight school)**. **CAE is already present in the market** with two academies located in the South East Coast. The aim is not only to attract domestic students, but **specially foreigners (Chinese, Japanese and South Korean).** CAE already **has strong relations with Japan Airlines** (has a JV in Tokyo)
- CAE will increase the capacity of the schools by **investing in infrastructure and aircraft**
- The training centres in **Perth, Hong Kong, Tokyo, Singapore** and **Manila** will support the MPL programmes

INDIA

AV. PRICE (US$k)



Sources: Sky Asian Group; CAE.Inc

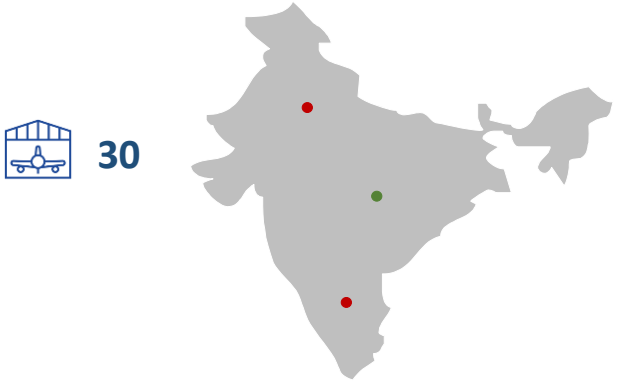
AIRLINE PARTNERSHIPS

Existing: IndiGo, JET AIRWAYS

Potential: spicejet, AIR INDIA, SriLankan Airlines

STRATEGY

- CAE **will increase its own flight school capacity** by investing in infrastructure and aircraft fleet. Most **potential targets have been blacklisted** as not being **properly regulated.** CAE could risk to lower its impecable reputation by acquiring one of the schools
- **CAE's flight school already offers MPL** for India's largest Airlines (IndiGo) that employs 56% of indian pilots, and Jet Airways
- The training centres in **Bengalore** and **New Delhi** will support the cadets with the necessary simulators



Legend

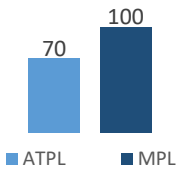
- *# Country's Flight Schools*
- *CAE's Flight Schools*
- *Target Flight Schools*
- *CAE's Pilot Training centres*

VALUE CREATION | ACQUISITION STRATEGY OF AB INITIO FLIGHT SCHOOLS

CAE will aim to be the largest pilots' provider in Malaysia and Philippines

MALAYSIA

AV. PRICE (US$k)



Source: Sky Asian Group

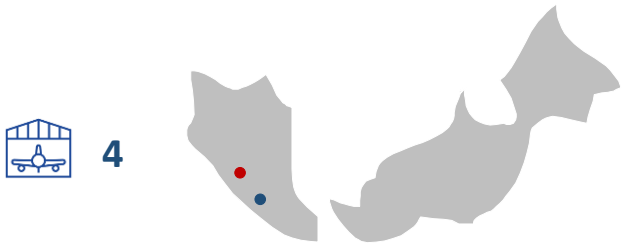
AIRLINE PARTNERSHIPS

Existing: AirAsia

Potential: Firefly, Malindo Air, Malaysia Airlines, MASwings

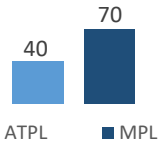
STRATEGY

- CAE will buy **Malaysian Flying Academy (the biggest player in the market)**, and increase its capacity by investing in infrastructure and aircraft. The training center in Kuala Lumpur was a result of a JV with **AirAsia** that today is **totally owned by CAE** and will support the MPL programmes
  - CAE still **has a strong relationship with AirAsia** by providing MPL programmes to its cadets and Type Rating to its pilots



PHILIPPINES

AV. PRICE (US$k)



Source: Sky Asian Group

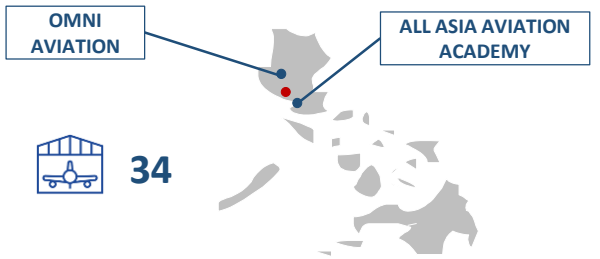
AIRLINE PARTNERSHIPS

Existing: Cebu Pacific

Potential: Philippine Airlines, Air China, China Eastern, Japan Airlines

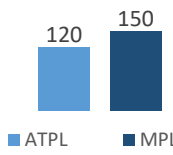
STRATEGY

- CAE will take advantage of the flight school profile of the country (easy visa, cheaper courses and fully-english programmes) that makes it an **optimal magnet to capture international aspiring-pilots**
- CAE will acquire **two players** and invest in its infrastructure and aircraft in order to **increase its capacity.** The targets are close to the training centre in **Manila** that will support the cadets with the necessary simulators



SINGAPORE

AV. PRICE (US$k)



Source: Sky Asian Group; CAAS

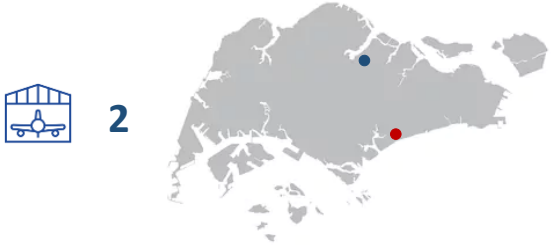
AIRLINE PARTNERSHIPS

Existing: Singapore Airlines, Jetstar

Potential: SilkAir, Scoot

STRATEGY

- CAE would buy **Singapore Youth Flying Club** that today only provides recreational programmes. The school has the capacity to perform Commercial pilot licenses
- By investing in **infrastructure and in an aircraft fleet**, the school could increase its capacity and start performing the MPL programme
- The training centre in Singapore will support the MPL programmes



Legend

- *# Country's Flight Schools*
- *CAE's Flight Schools*
- *Target Flight Schools*
- *CAE's Pilot Training centres*

VALUE CREATION | HEALTHCARE EXPANSION

CAE will extend its adressable market and enter in new attractive and strategic territories

WHY

- CAE holds a **leadership position in an infant stage industry** with high expected growth
- Currently, its **avant-garde portfolio** is limited to certain fields of medicine, namely nursing, trauma, cardiac surgical and pediatric
- It has the know-how and infrastructures **to tap into new markets and increase their portfolio**, offering a broader spectrum of products and **a more complete training solution** for hospital, clinics and research centres **with the acquisition of the right technologies**

CURRENT PORFOLIO STRATEGY

- Current portfolio **of 21 products** - patient, surgical and ultrasound simulators with VR and AR, center management systems and solutions
- With headquarters in Florida, CAE Healthcare **has 6 training centres in 4 countries** (Canada, US, Germany, Brazil)
- Most **innovative portfolio amongst competitors**

HOW

OPHTAMOLOGICAL

- Discipline that requires high degree of motor-skilled based competencies
- CAE currently possesses suitable technology to address this niche - **SIMEyes** used in different high-fidelity patient simulators and **VR and AR technology**

- **Develop in-house technology** in order to address a new market, focusing on VR and AR simulators for ophthalmic surgery and leveraging CAE's own expertise
- Benefit from the **established strong and stable relationship with customers** to introduce product to the market
- **Gradually and steadily decrease of R&D expenses** for the upcoming 5 years

EXPANSION

- **Increase addressable market** by tapping new segments and further servicing a **growing industry**

- **Selective acquisition** of **medium cap companies** that already have the **necessary technology for simulations in untapped niche markets** (i.e. acquiring technologies)
- Among potential targets, besides the technological expertise, **take into consideration the location** where they operate to maximize the benefits of acquisitions

MDM

- **Develop their presence in the medical and surgical device simulation** niche market taking advantage of the increase of regulatory certification to handle electronical surgical devices
- Exploit CAE's own technology: perfect fit for certification of health professionals

- Target companies servicing **leading players in the US$ 21.57b surgical and medical device market** to acquire with a focus on complementary surgeries with CAE's simulators (cardiac and peripheral vascular, neurological, amongst others)

VALUE CREATION | HEALTHCARE EXPANSION

When life gives you SymEyes, make Thea simulator

SIMULAIDS INC.

Starting as a trauma moulage products producer, USA-based Simulaids is currently a relevant player in the simulation industry

SNAPSHOT

- Present in the **high, medium and low fidelity patient simulators** market, it provides EMS, nursing and medical skills training
- Also present in **rescue skills training** market (fire rescue, water rescue and trauma management)
- The **first patient communication simulator** and iPad controlled simulators
- **Rotational moulding in-house manufacturing**
- Around **US$ 38m in revenues** for FY2017

DEAL RATIONALE

- **Increase product offering** and combine innovative technologies in the simulation market
- Take advantage of **Simulaids rotational moulding expertise and resources to decrease overall cost of sales**
- Complement both the healthcare and military segments with the **additional rescue skills training products** and services

MENTICE AB

Mentice is the world leader in virtual reality-based interventional medical simulation solutions

SNAPSHOT

- Offers training modules, simulators and add-ons
- Serves hospital and training centres along with **the medical device industry**
- Based in Sweden, Mentice has currently offices in the USA, Switzerland and Japan
- It has a strong established network of distributors around the world, with **strong presence in APAC, a high growth region**

DEAL RATIONALE

- Increase addressable market by leveraging CAE's technology and **Mentice footprint in the medical device industry**
- Seize opportunities through **partnerships with the medical device manufacturers**
- Take advantage of Mentice's widespread distribution network **and reach untapped geographical regions** such as China, Asia-Pacific countries and Saudi Arabia

VIRTAMED

Swiss company that develops high-fidelity surgical sims, with focus on custom-made sims, orthopedics, hysteroscopy

SNAPSHOT

- Present in key **niche** markets
- Member of different associations and international organizations focused on medical **simulation** and surgical education
- Big players in the med tech industry as **clients** – Bayer, Smith & Nephew, Hologic, Richard Wolf, Biolitec
- Sales representatives present all **over** the world

DEAL RATIONALE

- **Enter the high-growth orthopaedic simulation niche market**, combining their existing product portfolio with CAE's in-house technology
- Use Virtamed's network of clients in the MD industry to capture value from the increase of minimally invasive surgeries and surgical robotization

THEA SIMULATOR

CAE currently owns advanced technology in the field of ophthalmological simulation - fully reactive eyes and SymEyes and **VR and AR technology**

CURRENTLY

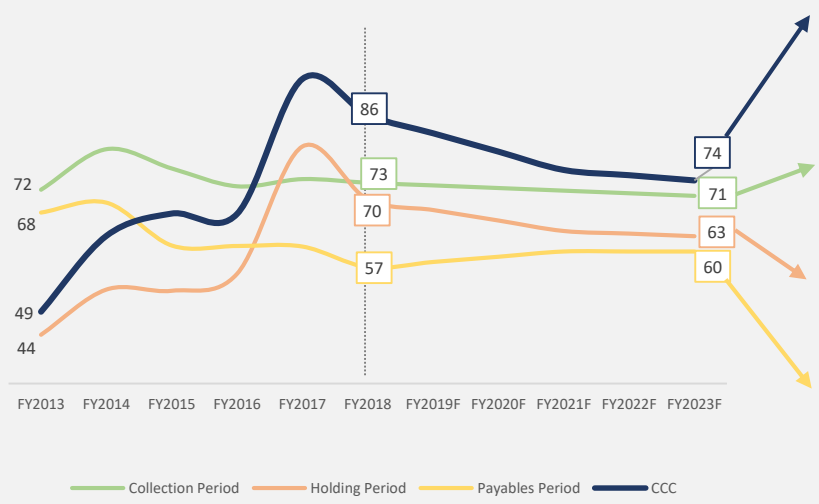
SymEyes display patient conditions in the Ares simulator sclera, pupils and eyelids, including jaundice, haemorrhage, bloodshot sclera, keyhole pupils, ptosis or droopy eyelids and cataract

- **Leverage CAE's technology** to create a surgical patient simulator focused on ophthalmological surgery – no need for higher R&D expenses
- **Enter a growing market** that is fuelled by the same market drivers as global healthcare with **only one relevant player**

Each of the acquisition targets has developed in-house technology that is state of the art in their field or niche market. This will allow a decrease in R&D expenses in the upcoming years while allowing CAE to maintain its innovation leader status

VALUE CREATION | OPERATIONAL EFFICIENCY

Although a well-performing machine, CAE shows indication of a few screws left to tighten

	DESCRIPTION	IMPACT
SG&A AND R&D COST-CUTTING	▪ Large scale R&D efforts will be diminished as they mature, as well as a decrease in sales force expenses related to the high costs of releasing new products in the market ▪ Integration of our sourcing business with CAE recruiting needs and aspiring cadets applications by either outsourcing to a ERP provider or centralizing the infrastructure ▪ When looking at *comparable* companies, CAE has been showing **above-average** and increasing Selling, General and Administrative expenses (as % sales: 3-12% for comps *vs* 11-13.5% for CAE), which shows **indication of potential improvements**	▪ **Reduce costs and increase efficiency**
NET WORKING CAPITAL OPTIMIZATION	 ▪ **By 2018, CAE showed a CCC of 86 days**, well above its historical average and its peers' CCC of 64 days. Although this has been propelled by a spike in inventory holding period in 2017, the company started rolling back the year after. **We believe there is room for further improvement over the years towards a 72-day CCC by 2023** ▪ With a **collection period** well above that of its comparables, CAE is expected to lower 2.5 days by **leveraging brand recognition**, **existing relations** and a **great track record of renegotiating contracts** ▪ Gradually **reversing the spike in Holding Period to 63 days**, more in line with its previous average of 49 days by introducing **improved inventory management systems** and **reverting back the M&A-driven accumulation of stock** in 2017 ▪ With worsening **Payables Period**, we expect to delay payments to supplier by 1 day a year in the first 3 years by exploring a **more proactive procurement process**, **take advantage of the facilitated contact with potential suppliers** via a dedicated link in CAE's website and focus on suppliers for the most commoditized inputs where bargaining power is greater than when dealing with data suppliers such as OEMs	▪ **Improve cashflow** – If as expected, accumulated FCF savings from NWC optm. amount to around C§ 125m
FIXED ASSETS OPTIMIZATION	▪ Our growth strategy will enable us to use our assets **more efficiently** by throwing more revenue into our training centres translating into **higher utilization rate**. This will bring in **higher margins** since the training centres have strong operating leverage ▪ The access to a larger pool of potential FFS users, mainly coming from our flight schools and MPL programmes, will enable us to divert revenue towards under-utilized FFS, thus **reducing the need to move and transport FFS** out of low performing areas. This has the ability to not only stabilize our utilization rate but also slightly **increase it** ▪ With overlapping training need in our three segments, notably in emergency and first aid training, there is a possibility to **integrate the space** used for these type of training and replicate on a smaller scale the **multi-purpose** CAE Brunei Facility	▪ **Optimize operations** ▪ **Reduce overhead**


BUYOUT
BUSINESS PLAN & FORECASTS

- TIMELINE
- FORECASTED FINANCIALS

BUSINESS PLAN | TIMELINE

CAE's strategy moving forward is focused on creating value by consolidating the market

2019

CIVIL AVIATION

- Acquisition of **ATP** Flight School and **Soar** Aviation as they are the largest targets. It will instantly help **consolidate** CAE's position in the North American and Australian flight school market

HEALTHCARE

- Acquisition of **Simulaids** in 2019 given its size and overlapping operation with CAE Healthcare
- A restructuring from this *merger* in this segment is best done from day one and the company is expected to leverage from **cost synergies**
- Simultaneously, CAE is expected to start developing **ophthalmological** products on top of already-owned technology and know-how

OPERATION OPTIMIZATION

- On a solidify footing, we will be in a better position to **renegotiate supplier** contract and **clients** contract

2020

CIVIL AVIATION

- Solidify the **Indian** market position by investing in CAE's own flight school
- Penetrate the **Malaysian** and the **Philippine** markets because of the **high** growth rate and the potential of being market leaders

HEALTHCARE

- **Mentice** is expected to be acquired in the second year to enter the medical device industry and increase CAE's addressable market

OPERATION OPTIMIZATION

- **Sourcing**, recruitment and cadet application integration
- Diversion of revenue towards under utilize training centres

2021

CIVIL AVIATION

- Lastly, CAE will acquire other target in the Philippines and target the **Singaporean** market to further consolidate its position within the APAC region

HEALTHCARE

- By 2021, CAE is expected to buyout **Virtamed** to enter the **orthopedics** market and finalize its strategy of expanding the addressable market

FINANCIAL FORECAST | REVENUES

Turnover boost from targeted acquisitions aligned with organic growth sustained by CAE's competitive advantages

REVENUES	FY2014	FY2015	FY2016	FY2017	FY2018	FY2019F	FY2020F	FY2021F	FY2022F	FY2023F	FY2024F	FY2025F	FY2026F
Total Revenue	**2,077.9**	**2,246.3**	**2,512.5**	**2,704.5**	**2,830.0**	**3,410.5**	**3,799.1**	**4,223.4**	**4,608.3**	**4,873.7**	**5,117.5**	**5,364.9**	**5,628.4**
Civil Aviation	**1,176.7**	**1,294.6**	**1,429.0**	**1,556.9**	**1,629.7**	**2,090.3**	**2,375.6**	**2,703.2**	**2,995.4**	**3,166.0**	**3,312.1**	**3,453.2**	**3,600.6**
Growth	*5.4%*	*10.0%*	*10.4%*	*9.0%*	*4.7%*	*28.3%*	*13.6%*	*13.8%*	*10.8%*	*5.7%*	*4.6%*	*4.3%*	*4.3%*
CAE Revenue without B&B strategy	1,176.7	1,294.6	1,429.0	1,556.9	1,629.7	1,758.2	1,887.9	2,017.9	2,146.6	2,272.9	2,395.2	2,512.2	2,634.8
Growth	*5.4%*	*10.0%*	*10.4%*	*9.0%*	*4.7%*	*7.9%*	*7.4%*	*6.9%*	*6.4%*	*5.9%*	*5.4%*	*4.9%*	*4.9%*
Revenue B&B strategy						328.8	481.1	672.9	833.7	867.6	890.0	912.9	936.4
Revenue synergies						3.3	6.5	12.4	15.1	25.5	26.9	28.2	29.4
Defence & Security	**822.0**	**857.4**	**970.1**	**1,036.9**	**1,085.1**	**1,152.2**	**1,217.6**	**1,280.7**	**1,340.7**	**1,396.7**	**1,448.2**	**1,501.5**	**1,556.8**
Growth	*1.9%*	*4.3%*	*13.1%*	*6.9%*	*4.6%*	*6.2%*	*5.7%*	*5.2%*	*4.7%*	*4.2%*	*3.7%*	*3.7%*	*3.7%*
Healthcare	**79.2**	**94.3**	**113.4**	**110.7**	**115.2**	**168.1**	**205.9**	**239.5**	**272.2**	**311.0**	**357.2**	**410.2**	**471.0**
Growth	*(29.3%)*	*19.1%*	*20.3%*	*(2.4%)*	*4.1%*	*45.9%*	*22.5%*	*16.3%*	*13.6%*	*14.3%*	*14.9%*	*14.8%*	*14.8%*
CAE Revenue without B&B strategy	79.2	94.3	113.4	110.7	115.2	126.7	140.7	157.5	178.0	202.9	233.4	268.4	308.6
Growth	*(29.3%)*	*19.1%*	*20.3%*	*(2.4%)*	*4.1%*	*10.0%*	*11.0%*	*12.0%*	*13.0%*	*14.0%*	*15.0%*	*15.0%*	*15.0%*
Revenue B&B strategy						41.3	64.8	81.0	92.7	106.1	121.5	139.1	159.3
Revenue synergies						0.1	0.5	1.0	1.4	1.9	2.3	2.7	3.1

ORGANIC GROWTH DRIVERS

- Considering that Civil Aviation's sales growth has **consistently outperformed** the industry historic (on average by 440bp in the last 4 years), and CAE still enjoys **established competitive advantages (market leader, strong reputation, innovative portfolio)** we will assume that the company will sustain that **growth premium**
- Yet, **as it matures, the growth rate is expected to decrease** towards the industry average

- While the market is forecasted to grow at 3%, **CAE will benefit from the newly-signed contract with the US Army** (Dothan Training Centre) **and the recent acquisition of AOCE** (which will enable CAE to bid on higher clearence contracts and gain market share in UAV subsegment), **thus supporting relatively higher growth**
- However, **growth rate is forecasted to gradually go down** as no major change in D&S is contemplated

- Despite an expected industry growth rate of 14% moving forward, **CAE will start growing at 10% in FY2019 as it is still in its infant stage**
- As the company develops **in-house new products** and enlarges its addressable market, on top of enjoying **synergies** in its existing portfolio from acquisitions, **growth rate will expand over the forecasting horizon**

ACQUISITIVE REVENUE AND SYNERGIES

- **CAE's acquisitive strategy is expected to boost turnover** as the company **buys out targets** and **benefits from revenue synergies**
- Revenue synergies will translate **into new contracts and partnerships with airlines**
- **Flight school targets' revenues were estimated based on the number of cadets expected to do the training and the course price**. Both variables account for the country they relate to – e.g. Singapore will have the highest price while USA is expected to have more graduates per year

- Revenue synergies will translate **into cross selling of products and services** for the Healthcare segment
- **CAE will encompass the medical targets' revenue** (as reported by the companies) in the year of acquisition and then on **enjoy synergies** from the consolidation

At exit year **2023**, it is expected that **flight schools** will globally add close to **C$ 3,246.9m**, while the **medical targets'** up to **C$ 390.8m**

FINANCIAL FORECAST | OPERATING INCOME AND MARGIN

Operating margins are expected to boost in the Civil and Healthcare segments supported by the B&B strategy

	FY2014	FY2015	FY2016	FY2017	FY2018	FY2019F	FY2020F	FY2021F	FY2022F	FY2023F	FY2024F	FY2025F	FY2026F
Gross Profit	**565.1**	**603.7**	**697.5**	**811.2**	**876.9**	**1,061.5**	**1,187.8**	**1,326.6**	**1,447.4**	**1,530.8**	**1,607.4**	**1,685.1**	**1,767.9**
Gross Margin	*27.2%*	*26.9%*	*27.8%*	*30.0%*	*31.0%*	*31.1%*	*31.3%*	*31.4%*	*31.4%*	*31.4%*	*31.4%*	*31.4%*	*31.4%*

OPERATING INCOME	FY2014	FY2015	FY2016	FY2017	FY2018	FY2019F	FY2020F	FY2021F	FY2022F	FY2023F	FY2024F	FY2025F	FY2026F
Civil Aviation	**179.8**	**210.5**	**237.4**	**273.2**	**324.5**	**416.2**	**480.1**	**568.0**	**647.4**	**703.2**	**735.7**	**767.0**	**799.8**
Operating margin	*15.3%*	*16.3%*	*16.6%*	*17.5%*	*19.9%*	*19.9%*	*20.2%*	*21.0%*	*21.6%*	*22.2%*	*22.2%*	*22.2%*	*22.2%*
Defence & Security	**107.8**	**115.6**	**119.8**	**120.4**	**127.7**	**132.1**	**147.0**	**159.7**	**167.2**	**174.2**	**180.6**	**187.2**	**194.1**
Operating margin	*13.1%*	*13.5%*	*12.3%*	*11.6%*	*11.8%*	*11.5%*	*12.1%*	*12.5%*	*12.5%*	*12.5%*	*12.5%*	*12.5%*	*12.5%*
Healthcare	**1.7**	**6.7**	**7.2**	**6.6**	**8.8**	**13.2**	**17.2**	**22.4**	**27.3**	**33.4**	**38.4**	**44.1**	**50.6**
Operating margin	*2.1%*	*7.1%*	*6.3%*	*6.0%*	*7.6%*	*7.8%*	*8.3%*	*9.3%*	*10.0%*	*10.7%*	*10.7%*	*10.7%*	*10.7%*

OPERATING MARGINS

- The Civil segment will enjoy an operating margin **improvement** from 2019 to 2023, stabilizing at 22.2% from the fifth year onwards. This will occur as a result of **the continuity of the process improvement of simulators** started in **2016**, a shift of focus to the **services segments (higher margins)**, the expected **increase** in the **utilization rate** of CAE's **simulators** due to its MPL programs, and a slight **decrease** of R&D as a percentage of sales, that will **offset** the expected **increase** in SG&A in the first two years to promote the MPL programme
- The Defence segment will have an operating margin increase of **70bp.** A **decrease** is expected in R&D as percentage of sales in the first 3 years derived from **economies of scale** in the R&D department. SG&A is expected to **increase** due to the **marketing push** needed to become the **TSI partner of choice** for high security programs. However, we believe in the **long term** it will have a 40bp **decrease**
- As the Healthcare segment matures, the costs related to bringing a new product to market will lead to a **decrease** in SG&A as a percentage of sales. However, in the first two years, SG&A is expected to **increase** derived from **marketing** and **sales investment**. An overtime **decrease** of **40bp** per year in R&D expenses as % of sales will follow the historical trend and won't injure CAE's leading position in innovation as the **acquisitions will incorporate state of the art technology.** The steady incorporation of the **rotational molding** in our **production process** will lead to a **decrease** in cost of sales of **90bp** in the first three years

OPERATING EXPENSES

- Firm wide, **Cost of Sales** will experience a **negligible decrease** as percentage of sales **partly due to economies of scale** in production process and a more advantageous position towards **suppliers**. We are expecting a decrease of **42bp** in the five year investment plan
- Selling, General and Administrative expenses as percentage of sales will **slightly decrease by 28bp** in the five year investment plan. In the first two years, CAE will **bring more product** on the market and **push sales effort** to **gain market share** by poaching clients from other facilities (increasing SG&A as percentage of sales), that will be **offset** by the decrease in last years' investment. In 2022, SG&A as percentage of sales will reach 2018 values and **continue to decrease**, stabilizing at 13.2% as a percentage of sales
- **Research and Development** expenses as percentage of sales will **decrease by 116bp.** It is expected that the Healthcare segment **matures** and CAE can **incorporate** the respective departments of the **acquired targets**

FINANCIAL FORECAST | CASHFLOW

Deal spending puts a dent in the first year's FCF, which swiftly resuscitates as CAE consolidates the market

CASH FLOWS	FY2014	FY2015	FY2016	FY2017	FY2018	FY2019F	FY2020F	FY2021F	FY2022F	FY2023F	FY2024F	FY2025F	FY2026F
NOPAT	**248.6**	**267.7**	**327.8**	**326.1**	**417.0**	**476.1**	**546.2**	**635.9**	**713.7**	**772.2**	**809.3**	**846.4**	**885.5**
D&A	164.6	189.1	217.9	211.9	199.6	253.1	295.2	332.1	360.9	380.2	400.8	414.6	429.1
Other Non cash	(52.6)	(55.4)	(108.8)	(32.9)	(87.1)	(52.6)	(58.6)	(65.1)	(71.1)	(75.2)	(78.9)	(82.7)	(86.8)
Change in NWC	86.3	(66.3)	(6.6)	(8.0)	9.6	23.1	(0.4)	2.9	(10.1)	(2.4)	(12.0)	(12.2)	(13.0)
as % of Revenues	4.2%	(3.0%)	(0.3%)	(0.3%)	0.3%	0.7%	(0.0%)	0.1%	(0.2%)	(0.0%)	(0.2%)	(0.2%)	(0.2%)
Operating Cash Flows	**446.9**	**335.1**	**430.3**	**497.1**	**539.1**	**699.6**	**782.4**	**905.7**	**993.5**	**1,074.8**	**1,119.2**	**1,166.0**	**1,214.8**
Growth	82.1%	(25.0%)	28.4%	15.5%	8.5%	29.8%	11.8%	15.8%	9.7%	8.2%	4.1%	4.2%	4.2%
Total Capex	**227.5**	**208.5**	**171.7**	**274.0**	**221.2**	**672.1**	**326.6**	**322.9**	**310.8**	**332.2**	**350.6**	**368.8**	**389.3**
Growth and Acquisitive Capex	**152.1**	**139.4**	**114.8**	**183.2**	**147.9**	**594.8**	**230.7**	**215.7**	**191.5**	**201.8**	**213.0**	**224.8**	**237.7**
Civil Aviation	**112.8**	**101.6**	**84.7**	**97.2**	**108.3**	**481.5**	**153.2**	**152.7**	**136.6**	**145.4**	**153.2**	**160.4**	**168.4**
CAE without B&B Strategy	112.8	101.6	84.7	97.2	108.3	110.3	120.6	129.8	136.6	145.4	153.2	160.4	168.4
B&B Strategy						371.3	32.6	22.9	-	-	-	-	-
Defence & Security	**28.3**	**33.0**	**27.1**	**82.1**	**32.9**	**37.5**	**39.6**	**41.7**	**43.6**	**45.5**	**47.1**	**48.9**	**50.7**
Healthcare	**11.0**	**4.9**	**3.1**	**4.0**	**6.7**	**75.8**	**37.9**	**21.3**	**11.3**	**11.0**	**12.7**	**15.5**	**18.6**
CAE without B&B Strategy	11.0	4.9	3.1	4.0	6.7	8.3	9.2	10.2	11.3	11.0	12.7	15.5	18.6
B&B Strategy						67.5	28.7	11.1	-	-	-	-	-
Maintenance Capex	**75.4**	**69.1**	**56.9**	**90.8**	**73.3**	**77.3**	**95.9**	**107.2**	**119.2**	**130.4**	**137.6**	**144.0**	**151.6**
Civil Aviation	**55.9**	**50.3**	**41.9**	**48.1**	**53.7**	**54.6**	**70.8**	**80.0**	**90.0**	**100.0**	**105.2**	**109.1**	**113.8**
Defence & Security	**14.0**	**16.3**	**13.4**	**40.6**	**16.3**	**18.6**	**19.6**	**20.7**	**21.6**	**22.5**	**23.3**	**24.2**	**25.1**
Healthcare	**5.5**	**2.4**	**1.5**	**2.0**	**3.3**	**4.1**	**5.5**	**6.5**	**7.6**	**7.8**	**9.0**	**10.6**	**12.7**
FCF	**219.4**	**126.6**	**258.6**	**223.1**	**317.9**	**27.5**	**455.8**	**582.8**	**682.7**	**742.6**	**768.6**	**797.3**	**825.5**
	211.0%	(42.3%)	104.2%	(13.7%)	42.5%	(91.3%)	1555.5%	27.9%	17.1%	8.8%	3.5%	3.7%	3.5%

CASH FLOW

- **Operating cashflow will grow at a CAGR of 14.8% up to 2023**, mainly boosted by the incremental revenues of the **acquired targets** and a favourable **organic growth rate**
- Growth and Acquisitive CAPEX will **average** an amount of **C$ 286m** for the next 5 years, **in line** with our B&B strategy and CAE's organic needs to maintain its competitive position and high growth prospects
- Free Cash Flow will experience a sharp fall after entry as **the two biggest acquisitions should be completed in 2019**. However, it will pick up immediately in the following year **as it integrates targets, optimizes operations and reaps the benefits of revenue and cost synergies**



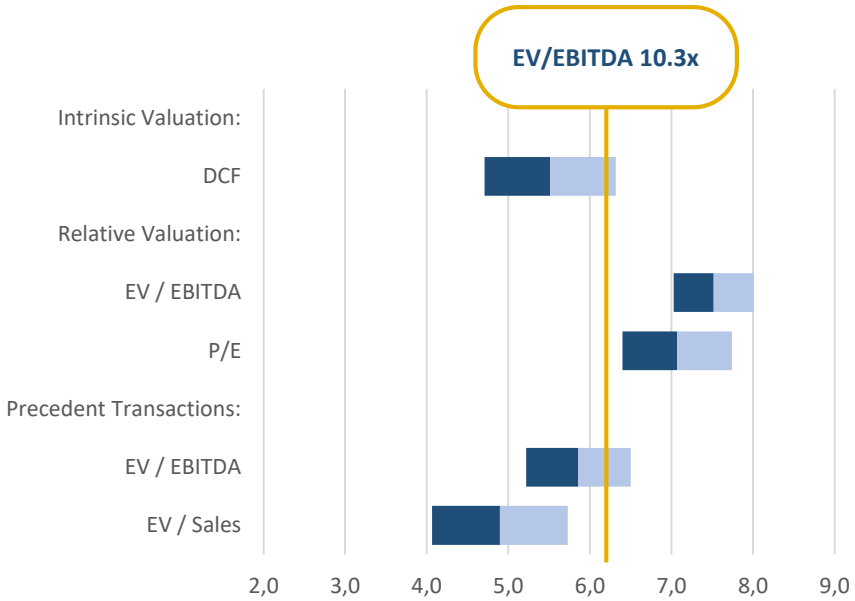
BUYOUT
CAPITAL STRUCTURE & RETURNS

- ENTRY VALUATION
- LEVERAGE MARKET OVERVIEW
- LBO CAPITAL STRUCTURE
- LBO EXPECTED RETURNS

VALUATION | FOOTBALL FIELD

A comprehensive sum-of-the-parts and DCF valuations of CAE arrives at a 10.3x EV/EBITDA multiple

FOOTBALL FIELD

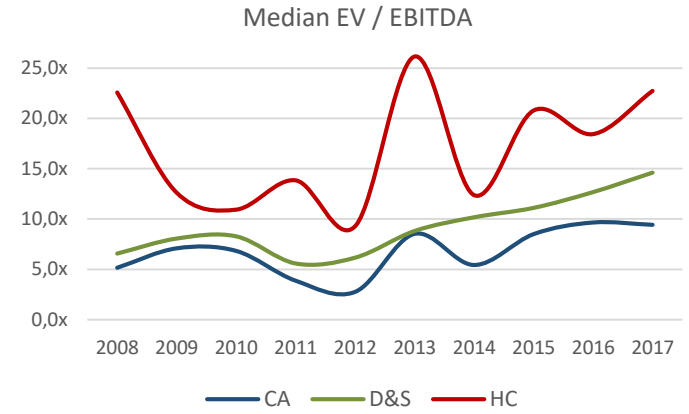


CAE should be reasonably **priced between 10x – 10.6x estimated EBITDA at entry**

- The Football Field analysis arrives at an equity value for CAE of C$ 6.2b which, after Net Debt and Debt-like adjustments, corresponds to an EV around C$ 7.1b
- The different methodologies arrive at similar results, implying a **robust overall valuation**

METHODOLOGIES	EV/EBITDA
DCF ▪ The financial forecast was established under the assumption that CAE will grow differently than under the LBO scenario as it is not expected to pursue any point in our investment thesis	**8.1x – 10.4x**
TRADING COMPS ▪ Based on industry, product offering and some niche-focused businesses, a total of 17 peers were considered (CA: 6, D&S: 11; HC:5)	**10.5x – 12.8x**
PRECEDENT TRANSACTIONS ▪ Based on transactions over targets similar to CAE's different segments ▪ Out of a total of 56 proxy deals, 10 were considered for the TV/EBITDA multiple. TV/Sales was also included as it allowed for a larger dataset of 32 transactions	**7.2x – 10.7x**
LBO ▪ Targeting a 25% IRR in a five-year horizon and 5.5x leverage, CAE is expected to be valued up to 11x by potential sponsors	**11.0x**

THROUGH-THE-CYCLE



Assessing multiples over a 10-year cycle and since the turn of the century **does not give rise to any convincing pattern predictability**

- CA's multiple has historically been relatively trendless, averaging 7.0x in the last decade. Still, this figure is below the average of 7.2x starting in 2000
- Although lacking signs of cyclicality, the D&S sector has been showing valuations slowly rising from 2012 onwards above the decade-long average of 8.5x
- HC is the most cyclical segment, although heavily impacted by spikes in the market cap of specific companies (at times, right after listing) that soon roll back. Still, there is no recognizable trend but it shows a 10-year average multiple (17.7x) larger than the longer period (15.8x), suggesting increasing valuations of these companies

DEBT STRUCTURE | LEVERAGE MARKET OVERVIEW

Eager lenders aligned with a strong asset will allow for a highly leverageable transaction

PRECEDENT LBO COMP & LEVERAGE MARKET CONDITIONS

Bridgepoint — BUYS OUT → element

Provider of testing services in airspace, transportations and other industries

DETAILS	
Date	Dec 2015
EV	US$ 978m
Valuation	11.5x
Total Debt	6.4x
Lenders	HSBC Goldman Sachs ING Credit Agricole Bank of Ireland Mizuho

DEBT STRUCTURE	
Total Debt	US$ 541.66m (6.4x)
1st Lien	**5.2x**, corresponding to US$ 441.66m, nearly halved into two tranches: Term Loan B1 issued in USD (2.6x) Term Loan B2 issued in EUR (2.5x)
Capex Facility	**0.82x**, totaling US$ 70m
RCF	**0.35x**, totaling US$ 30m
Spread	1st Lien: **475 bps** over EURIBOR CapexF: USD LIBOR **+0 bps** RCF: USD LIBOR **+0 bps**
Maturities	1st Lien and Capex Facility: little over **7 years** RCF: **6 years**

Sources: MergerMarkets; Invesco FI Desk

CAE CREDIT SOUNDENESS

		Impact on spread
Asset base	Large asset base including equipment, simulators and facilities	↓
FFC	Large stable FCF (when excluding the impact of major acquisitions) FCF conversion nearing 50%	↓
Size	Large cap – equity valued at C$ 6.2b, totaling a C$ 7.1b EV	↓
Governance	Strong track record steering the company Incentive package of sweet equity to align interests between managers and the fund	↓
Diversification	CAE is well-diversified in its: ▪ Geographies ▪ Product portfolio (Outsider HC segment interesting to investors) ▪ Client base	↓
Competition risk	CAE has maintained its competitive advantages, as clearly displayed in market share gains Still, there is incresing competition from new players and	→
Leverage	High senior debt level of 5.5x EBITDA	↑

- **Very favorable market conditions** for raising leverage following the ongoing period of **low interest rates** and **decreasing credit spreads**
- As seen with Element Materials Technology, **investors and banking institutions have been showing appetite** for LBO-related debt issues and are comfortable with 10x-11x valuations
- Data from S&P sees increasing debt levels in LBOs – deals leveraged upwards of 6x EBITDA accounted for 53% of all PE buyouts in the US and high levels of debt are especially observed in megadeals
- Continued demand for these transactions is also fueling **covenant-light issuances**

- Considering CAE's credit health and market conditions, we can expect to **raise 5.5x EBITDA in senior debt**
- The debt should be **in the form of leveraged loans** as the company should step away from the public bond markets
- The term loan is expected to be **issued in three tranches – in USD, EUR, and GBP** –, as these account for the most relevant currencies in CAE's revenues, thus offering a natural hedge: **USD (73%); EUR (19%); GBP (8%)**

CAPITAL STRUCTURE | SOURCES AND USES

The final capital structure would be nearly equally-weighted between Equity and Debt

SOURCES OF FUNDS	C$m	x EBITDA	%
Senior Debt	**3,651.6**	**5.5x**	
1 Leverage Loan USD	2,668.6	4.0x	36.3%
2 Leverage Loan EUR	682.6	1.0x	9.3%
3 Leverage Loan GBP	300.4	0.5x	4.1%
Second Lien	**-**	**0.0x**	
Total Debt	**3,651.6**	**5.5x**	**49.7%**
Fixed Return Instrument	**3,359.3**	**5.1x**	**45.8%**
Fund	3,359.3	5.1x	45.8%
Ordinary Equity	**330.7**	**0.5x**	**4.5%**
Ordinary Shares	301.0	0.5x	4.1%
Sweet Equity	29.8	0.05x	0.4%
Total Equity	**3,690.0**	**5.6x**	**50.3%**
Total Sources	**7,341.5**	**11.1x**	

DEBT CARACHTERISTICS

TYPE

1
- 4.0x EBITDA senior secured loan in USD
- 7 years term at +4.25% over 3 year USD swap rate

2
- 1.0x EBITDA senior secured loan in EUR
- 7 years term at +3.75% over 3 year EUR swap rate

3
- 0.5x EBITDA senior secured loan in GDP
- 7 years term at +4.50% over 3 year GDP swap rate

- **CAPEX Facility** with a commitment fee of **170bps and interest of 425bps**
- Covering **max 40% of CAPEX needs** which amounts to C$ 430 m.
- 3 year drawdown period with a subsequent 2 year repayment period

REPAYMENTS

- **Optional repayments** of excess cash with **no prepayment penalties**
- CAE will voluntary **repay the 3 tranches**

WHEN

Precedent year cash closing balance and current cash flow available for debt repayment are superior to 100 C$ m.

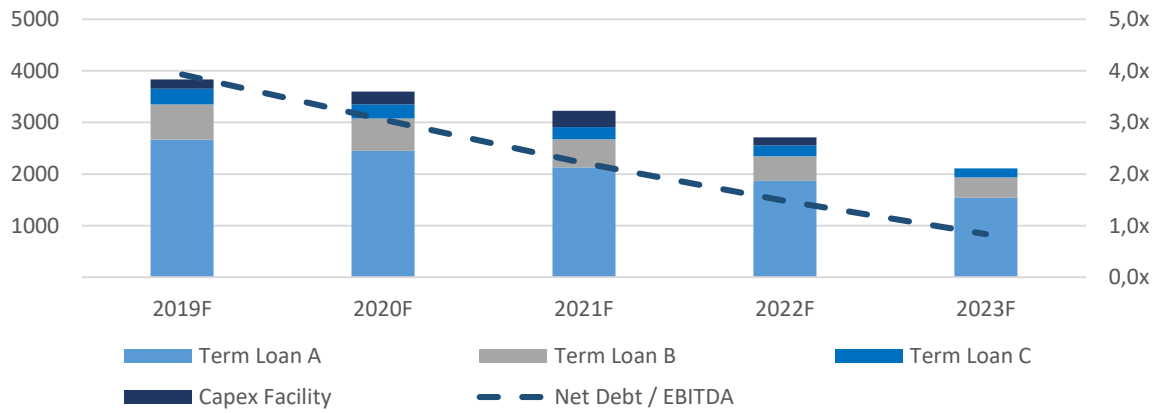
HOW

By allocating the exceeding amount (>100m) of cash flow available for debt repayment to all 3 tranches proportionally

MARGIN RATCHET

25bps decrease in margins with 5.0x debt level and an additional 25bps with lower than 4.5x

DELEVERAGING PROCESS



EQUITY CARACHTERISTICS

FUND

- FRI at **5.1x EBITDA, totalling C$3.4b**, fully owned by the institutional strip
- **10% PIK element**
- Total **Fund ownership of ordinary shares of 91%**

MGMT

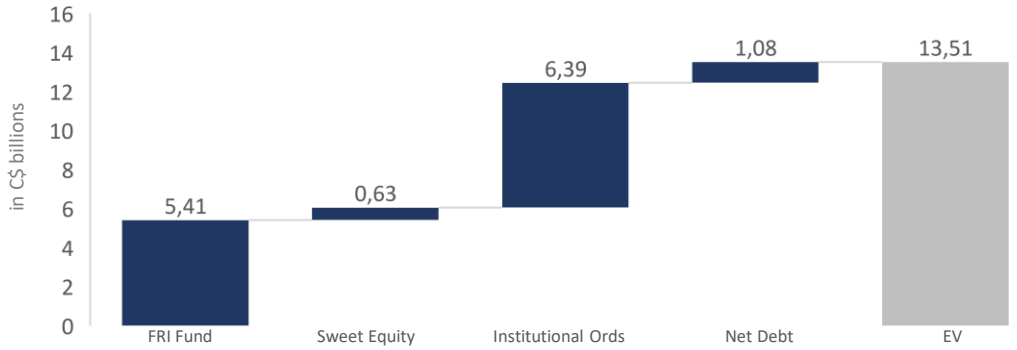
- Due to insignificant pre-buyout management ownership, no rollover will be carried out
- Management will own 9% of ordinary shares – **sweet equity –** which will account for 0.05x EBITDA
- Sweet equity will be granted in return of 1.5x their annual compensation package of around C$20m

Sources: BNP Leverage Finance Desk Madrid; Invesco FI Desk

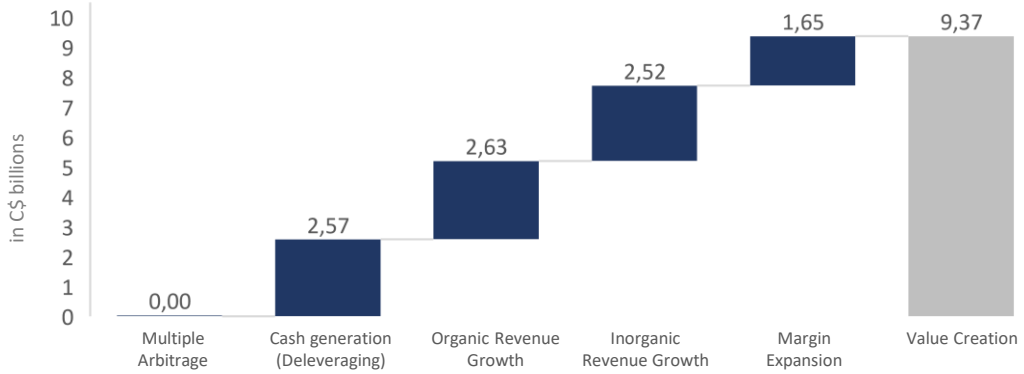
LBO RETURNS | BREAKDOWN

Highly leverageable and facing strong secular tailwinds, CAE is posed to generate attractive returns

EXIT WATERFALL (INVESTMENT CASE)



VALUE CREATION (INVESTMENT CASE)



- Value creation will mainly come from an increase in **organic growth representing 28%** of the total value created. Inorganic growth coming from our **Buy and Build strategy came in at 27%**
- Our ability to cut costs, increase our assets efficiency and create synergies through our acquisition should represent **18%** of the value create, while **deleveraging would explain 27%**
- For a five year investment horizon, the fund, through its holding of ordinary shares and Fixed Return Instrument should **generate a 26.4% IRR**, while the **management an IRR of 84.25%**, representing a **proceed of $632m**

SENSITIVITY ANALYSIS

	All	W/O ATP	W/O Soa	W/O CAE	W/O Mal	W/O Omn	W/O All	W/O Sin	None
All	26.4%	22.2%	25.6%	25.9%	26.0%	26.2%	26.2%	26.3%	19.8%
W/O Simulaids	26.2%	22.0%	25.4%	25.7%	25.8%	26.0%	26.0%	26.1%	19.5%
W/O Mentice	26.3%	22.1%	25.5%	25.8%	26.0%	26.1%	26.1%	26.2%	19.7%
W/O Virtamed	26.4%	22.2%	25.6%	25.9%	26.0%	26.2%	26.2%	26.2%	19.7%
None	26.1%	21.9%	25.3%	25.6%	25.8%	25.9%	25.9%	26.0%	19.4%

Entry \ Exit	9.8x	10.3x	10.8x	11.3x	11.8x
9.8x	26.2%	26.2%	27.5%	28.8%	30.0%
10.3x	24.8%	26.2%	27.5%	28.8%	30.0%
10.8x	22.4%	25.1%	26.3%	27.5%	28.7%
11.3x	19.6%	23.3%	24.4%	25.5%	26.5%
11.8x	17.1%	21.5%	22.4%	23.3%	24.2%

Exit Year	2021	2022	2023	2024	2025
9.8x	35.8%	31.9%	27.5%	24.7%	22.6%
10.3x	35.8%	31.9%	27.5%	24.7%	22.6%
10.8x	34.1%	30.5%	26.3%	23.7%	21.7%
11.3x	31.5%	28.2%	24.4%	22.1%	20.2%
11.8x	28.6%	25.8%	22.4%	20.3%	18.6%

- According to the first sensitivity analysis, we see that our biggest value driver and the most important is the acquisition of ATP Flight School. Without this acquisition, it will be extremely difficult to attain a 25% IRR. Regarding to our Health Care strategy, it slightly contribute to our IRR. However, we believe HC contributes to the firm multiple. By carving out the HC division, we believe we will be able to increase the implied exit multiple which could offer a great payoff, hence should be seen as an embedded option

CREDIT METRICS

	FY2019F	FY2020F	FY2021F	FY2022F	FY2023F	FY2024F	FY2025F	FY2026F
Cash	629.6	729.6	829.6	929.6	1,029.6	1,129.6	506.2	1,435.0
Cash Flow	74.7	100.0	100.0	100.0	100.0	100.0	-623.4	928.8
Cash Cover	1.3x	2.7x	3.4x	3.4x	4.4x	7.1x	0.6x	-
Interest Cover	3.8x	4.3x	5.3x	7.2x	9.6x	13.5x	20.9x	-
FCF/Debt	3.0%	15.2%	21.1%	28.7%	39.8%	59.7%		
Net Debt / EBITDA	3.9x	3.1x	2.2x	1.5x	0.8x	0.2x	-0.4x	-1.0x

More detailed information in Appendix XIII


BUYOUT
EXIT & DUE DILIGENCE

- APPROPRIATE EXIT OPTION
- TRADE SALE
- INITIAL PUBLIC OFFERING
- DUE DILIGENCE

EXIT STRATEGY | OPTIONS OVERVIEW

With all options on the table, CAE is likely to do a Dual Track process mixing a trade sale and a stock listing

TRADE SALE

- **Robust cash flow generation**, strong global **brand recognition**, and potential **synergies** make CAE an attractive target for strategic buyers
- Over the last years, all **three industries** have **experienced recurring M&A activity**, with larger players acquiring smaller competitors or simply targeting a business unit of a larger firm
- Likewise, there have also been talks of companies showing **interest in acquiring CAE**
- This trend of deal flow supports the possibility of a strategic sale as an **attractive exit strategy** that can provide a **complete and likely immediate exit** from the investment

INITIAL PUBLIC OFFERING

- Revitalized company after the PE operations, with **strong financials and cash flows** that can allow for a **significant payout ratio**, strong market positioning and a strong governance profile act together to make CAE an attractive asset to institutional investors
- **Most of CAE's main competitors** across the three segments are **already listed on the stock markets**, having had, for the most part, successful listing operations and aftermarket performance
- CAE's specific factors and this **solid track record of IPOs** opens the door for listing CAE on the stock market

SECONDARY SALE

- A secondary sale would involve alienating the asset to another PE fund, which would be a **swifter process and an immediate full exit**
- **Potential PE firms** would include Carlyle, GE Capital, Baird or Berkshire Partners, as CAE fits their investment profile and all **have had similar companies in their portfolio**
- However, the large size of CAE at exit and the strategy set for the investment thesis **make it unlikely to be of significant interest** for a follow-on LBO

CONSIDERATIONS ON STRATEGIC SALE AND IPO

- **The large size of the deal** restrains the number of potential buyers from having the financial power to acquire CAE
- CAE **operates across three distinct segments** (even though these overlap at times) which are rarely shared within a single competitor, making it **harder to find a player interested in the company as a whole**
- There is the **possibility of selling segments individually** – CA and D&S together due to their nature (similar operations and competitors that capture both industries are able to enjoy synergies) –, or the entire company
- The **HC segment has also experienced significant deal volume**, with companies being acquired at a high multiple while, at the same time, **tech-leaned HC companies have been widely received in the public markets**, with successful IPOs and investor appetite driving outperformance. With the segment being in such an infant phase, and projected to boost over the next years**, we believe CAE would maximize the return of this segment's exit by doing it individually at a higher multiple**, than by selling the entire company together, thus eliminating a potential conglomerate discount

OPTIMAL EXIT VIA DUAL TRACK PROCESS

At exit, CAE is better off following a **dual-track workstream** that runs an **M&A and an IPO preparation** until a certain decision date

By doing so, the **company can better secure the most optimal and value-maximizing exit strategy** as it will decide on top of the information gathered from the two processes nearing the expected exit date

Simultaneously, **CAE will evaluate carving-out the HC segment**, potentially into an IPO if market sentiment is expected to drive multiple arbitrage

While **dual tracking entails greater execution costs**, some synergies arise between the two such as elaborating an **Equity Story**, audited financial information for the past years or the similarities between Prospectus and Info Memorandum

EXIT STREATEGY | TRADE SALE

Trade sale looks as a very attractive exit strategy with different strong potential acquirers on the table

PROS & CONS

+

- An M&A is the optimal strategy for a **faster and complete exit** by selling the full stake in CAE
- The outcome of the deal process is **less uncertain** than going public
- **Valuations might be higher** than an IPO (dependent on market conditions), given the strategic goal of the potential buyer seeking **synergies** and the **control premium**

–

- **Maximizing value requires trade negotiations with several buyers** to give rise to price competition. However, it is not likely that there will be numerous interested parties on the buy-side
- Given CAE's industry positioning and highly substantial market share, **antitrust issues may arise**. Rulings from regulatory bodies can delay the exit timing and even cancel the deal
- M&A deal requires a **more burdensome due diligence** process

POTENTIAL ACQUIRER OF CA AND D&S SEGMENTS

BOEING

- World's largest aerospace company. Its portfolio includes **commercial** and **military** aircraft, satellites, **simulation and training**, among others
- Market Cap: US$ 182.4b

- **Deal Rationale:** Boeing already has a worldwide network of training centres and is trying to create a pilot training pipeline. By acquiring CAE, Boeing could acquire the exceptional **know-how** that CAE holds, **reach new clients** that are long-term bonded with the company, and **enjoy revenue synergies** when the creation of simulators of Boeing aircrafts. Additionally, it would **consolidate** its strategy of becoming a leader in the flight school market

L3 Technologies

- L3 is one of **CAE's main competitors**. It operates in both **CA and D&S segments,** with a vast portfolio of services and products, such as: **simulation and training**, ISR and communication systems, **ab initio flight schools**, among others

- Market Cap: US$ 14.5b
- **Deal Rationale:** Combining operations would allow L3 to own **cost savings (supply chain efficiencies)**, as well as **revenue synergies (complementary geographies and customers)**. L3 could transform to an **indisputable leader** in the Civil and D&S segments of simulation training, as well as in the flight school market. Further, **CAE's lower multiple** could also be an attractive element for the deal

COMPARABLE TRANSACTIONS

FlightSafety international | UIC United Industrial Corporation Limited

Year	1996	2007
Deal Size	$ 1.5b	$ 950m

POTENTIAL ACQUIRERS OF HEALTHCARE SEGMENT

Laerdal helping save lives

- Laerdal is one of the biggest vendors of medical simulation and clinical education equipment

- **Market Cap**: N/A (Private company). Estimated Revenues of US$ 451m
- **Deal Rationale:** Laerdal would reap both cost and revenue **synergies**, while **consolidating** market share and **diversifying** its portfolio

More information in Appendix XVIII

SIEMENS Healthineers

- SH is a med-tech company, part of German conglomerate Siemens AG. It supplies technologies and innovative solutions to the HC industry and is a leader in diagnostic imaging and laboratory diagnostics.

- **Market Cap**: € 37.4b ; **Revenues:** € 13.4m
- **Deal Rationale: SH** has **pursued a strong acquisition strategy** to grow its portfolio of products and solutions. We believe **simulation might be an interesting field to enter** for a company that is characterized by its advanced technology and innovation

COMPARABLE TRANSACTIONS

METI®

Year	2011
Deal Size	$ 130m

More detailed information in Appendix

EXIT STRATEGY | INITIAL PUBLIC OFFERING

Going public may be the optimal exit strategy for CAE

PROS & CONS

+

- Under bullish market conditions, an **IPO may price the company at a higher premium** *vs* even a strategic sale
- The prospect of going public is likely to further **motivate sweet equity management** over the investment period out of the prestige factor
- Transparency of the IPO requirements will **consolidate the PE firm's image** as a value-adding investment vehicle
- Listing is more likely to allow management to remain at the wheel
- CAE's stock can act as currency on future deals
- Going public will help advertise CAE and increase its credibility going forward

–

- **Lock-up period** (commonly 180-270 days for IPOs), wherein shareholders cannot liquidate their shares, thus **delaying the exit timing**
- The IPO process is **very costly** to the listing firm
- Listing a company is highly dependent on market fluctuations and sentiment, which can affect valuation and even the success of the offer
- The process is **time-consuming** and greatly involves management (e.g. roadshow), which will be more distracted from CAE's operations

OFFER DETAILS

OFFER STRUCTURE

- Focus on secondary offering of shares, potentially disregarding any capital increase
- Maximize immediate sale without jeopardizing the offer's attractiveness to investors as these are usually skeptical of a full equity sale and require commitment from existing shareholders
- A 50-70% stake would be reasonable and is likely to come from the fund as management is expected to grab onto their 10% stake
- Remaining equity stake of the PE can be liquidated via the swifter process of an Accelerated Bookbuilding (ABB) after the lock-up expires

TEAMS INVOLVED

- The offer requires the involvement of investment banks, law firms and auditors
- Based on comparable IPOs, CAE is better placed with banks that have experience in the sector – namely GS or MS –, but is likely to also include relationship banks such as ScotiaBank
- CAE's current auditor is PwC

PROCESS & TIMING

- An IPO involves DD, establishing an equity story, marketing the company, filings with the regulatory bodies, roadshow, pricing and allocation, and other inbetween steps
- Whole process can take 6 to 12 months

COSTS

- Going public involves a series of costs related to the preparation of the deal, namely:

1. Underwriting and coordination fees
2. Legal fees
3. Audit/accounting expenses
4. Marketing/printing costs
5. Listing fees

LISTING

- CAE is most likely to trade at home on the Toronto Stock Exchange – TSX – and potentially do a dual-listing alongside the NYSE. HC as one more likely to list in the Nasdaq

DUE DILIGENCE | KEY AREAS

There are important factors that should be further looked into

	AREA	KEY AREAS TO ANALYSE	WARNING SIGNAL	IMPACT
COMMERCIAL	MARKET ANALYSIS	▪ **How dependent are the markets growth** from macroeconomic conditions ▪ Verify the **future trends for each market** where CAE operates	▪ **Lower expected market's growth** ▪ Future trends that CAE is **not able to supply**	
	COMPETITORS	▪ **Competitors' services and products** analysis ▪ Compare CAE's **price strategy** (p.s) with its competitors' p.s ▪ Compare CAE's **competitive advantages** (c.a) with its competitors' c.a	▪ CAE having products/services that are **not difficult to replicate,** and competitors creating **innovative** products/services **hard to replicate** ▪ CAE's **inability to outperform the market**	
	M&A STRATEGY	▪ Determine the **value creation** of CAE's past acquisitions, past **M&A team performance,** and **capital needs to grow the business** ▪ Analyse **each target from the B&B strategy** and the **markets** where operate (**entry barriers, local competition, regulatory procedures**, among others)	▪ **Poor performance** of the M&A team – need to contract outsider talent to ensure a successful B&B strategy ▪ **Inability to follow the B&B strategy** due to constraints with specific targets	
	CUSTOMERS	▪ Who are the customers who make the **largest purchases** from the company ▪ Evaluate if there are major customers that CAE **lost** within the past 3 to 5 years, and **why** it happened	▪ **Highly dependency** on some customers ▪ **Lower rate** of renewal of contracts	
OPERATIONAL	SUPPLY CHAIN	▪ How heavily is the company **dependent on a single supplier/distributor** ▪ **Possibility of renegotiating** the suppliers' contracts without damaging the business (compare with the market standards) ▪ **Capacity** of the training centres (simulation training in the civil segment) ▪ **Verify the potential synergies** when acquiring the B&B targets	▪ Highly dependence on a single supplier, who can **jeopardize** the improvement on NWC strategy ▪ **Inability to pursue the B&B strategy** in Civil segment, due to low capacity of the training centres	
	INTELECTUAL PROPERTY	▪ Schedule of **patents and patent applications**	▪ **Expiration** of important patents	
FINANCIAL	OPERATING EXPENSES	▪ How are Cost of sales, SG&A and R&D **distributed per each business segment**, and **distributed between products and services**	▪ **Large operating costs** in a specific business segment	
	FINANCIALS	▪ Do a **deep Financial Statement analysis**. Investigate backlog, revenue creation, debt valuation assumptions, among others ▪ What are **CAE's projections** (CAPEX plan, debtors and creditors, schedule of inventory, among others)	▪ **Reported inflated FCF** due to accounting procedures ▪ **Large differences** between our estimates, and CAE's estimates	
LEGAL	FOREIGN INVESTMENT	▪ What are the main foreign government restrictions in the B&B strategy	▪ **Inability to surpass** government restrictions	
	TAX	▪ Verify the status of any tax-related case pending with the tax authorities	▪ **Large tax due** to domestic and international governments	



APPENDIX
COMPANY OVERVIEW

- PRODUCT & SERVICES PER SEGMENT
- SWOT ANALYSIS
- MANAGEMENT TEAM

APPENDIX I | CIVIL AVIATION PRODUCTS

CAE's XR Series suite of flight training devices (FTD) is the most advanced and comprehensive offering in the fixed-based

Flight Training Devices are replicas of **aircraft instruments, equipment, panels, and controls** in an open flight deck area or an enclosed aircraft flight deck replica. There is **no regulatory requirement** that an FTD must **totally emulate a specific model of an aircraft.** The **extent** to which an FTD must emulate a specific model **depends on the FTD's certification level.** Level 4 is the least sophisticated type, while **Level 5 an 6 must replicate the cockpits and flight characteristics of the aircraft with higher precision**

CAE's FTDs

- CAE's **400/500/600XR FTDs** cover the **widest range of training tasks** and offers users the **most cost-effective and flexible** training equipment solutions for pilots **to practice fundamental skills in a realistic cockpit environment**
- The most **common clients** for these products are **flight schools**
- CAE's most recent FTDs can be seen on the right

NAME	DESCRIPTION	ILLUSTRATION
500XR Series (FAA Level 5)	▪ Responsive **multi-touch cockpit graphic** interface ▪ **Tactile flight controls** and FMS display units	 
600XR Series (FAA Level 6)	▪ **Full tactile cockpit** with exact panel positioning ▪ Representative **flight deck sorround and crew seats** ▪ The **most innovative FTD** in the market	

Source: CAE Inc., Aero Expo, Bruce Air

APPENDIX I | CIVIL AVIATION PRODUCTS

CAE operates 255 Full Flight Simulators across the world with a product suite supporting more than 135 aircraft

Full Flight Simulators are **replicas** of a **specific model** of an **aircraft**. **FFSs** are **much more complex than FTDs**, as it includes the **equipment and computer programs** indispensable to **simulate air operations in ground and flight conditions**. It re-creates an airplane with **high fidelity,** from the its **cockpit to the actual physical controls and airplane's flight movement**

CAE's FFSs

- CAE provides the **most innovative** FFS in the market. It manufactures simulators to replicate **fixed wing aircraft and helicopters**
- All FFSs **surpass Level D regulatory requirements**, **improving training efficiency, increasing operational efficiency,** and offering **advanced capabilities**
- In FY2018, CAE sold **50 FFS**
- CAE's FFS examples can be seen on the right

NAME	DESCRIPTION	ILLUSTRATION
3000 Series Helicopter Simulator	▪ Operates with **several aircraft types and allows configurations to models of different OEMs** such as Boeing, Bell, Eurocopter, among many others ▪ Price: $4M - $6M	 
7000XR Series Full-Flight Simulator	▪ Operates with **several aircraft types** such as fixed-wing wide-body commercial aircraft and other complex aircraft ▪ It **utilizes OEM components** ▪ **Highly customized** ▪ Price: $11M - $18M	 

Source: CAE Inc., Aero Expo, Bruce Air

APPENDIX II | CIVIL AVIATION SERVICES

CAE provides training in the commercial, business and helicopter segments, along being an aviation personnel recruitment provider

CAE offers a **wide range** of training **courses.** Besides providing courses for **fixed wing aircraft pilots** (**commercial and business**) and **helicopter pilots**, it also provides **cabin crew** and **maintenance** training, as well as **aviation personnel recruitment** (CAE currently has more than 1,000 pilots on assignment with over 50 airlines across the world, and 40,000 in its database)

The company ensures that **follows the fixed wing pilot's learning path** by instructing and graduating **cadets in its 8 flight schools (aviation academies),** and **afterwards training the pilots** that are already working in **airlines,** in its **50+ training centres**

Every year, CAE **trains more** than **120,000 pilots,** and **graduates 1500** new pilots

Moreover, **flight schools** have **aircraft** and **FTDs** due to the nature of the courses, while **training centres** have mostly **FFS** for simulation training and **aircraft replicas** for the maintenance and cabin crew training**.** CAE counts with more than **2,000 highly skilled instructors** that provide all sort of training

Some examples of services provided in the **training centres** can be seen below

SEGMENT	NAME	LOCATION	DESCRIPTION	ILLUSTRATION
Commercial and Business Training	**Type Rating**	**Training Centre**	▪ Type rating is a **regulating agency's certification** of an airplane pilot to **fly a certain aircraft type** that **requires additional training beyond the scope of the initial license** and aircraft class training ▪ Includes **adverse weather conditions**, low energy states, stalls, upset prevention and recovery and high altitude operations ▪ **Most** of the airline companies **demand a pilot to perform this course. It is entirely done in FFS**	
Commercial and Business Training	**Multi-crew cooperation**	**Training Centre**	▪ Multi-Crew Cooperation aims to **develop the technical and non-technical components of the knowledge**, skills and attitudes required to **operate a multi-crew aircraft** ▪ Some cadet courses already include the MCC component, while others don't**.** It is a **simulator based course**	

Source: CAE Inc.

APPENDIX II | CIVIL AVIATION SERVICES

CAE provides the two most common cadet courses: the ATPL and the MPL

The MPL vs. ATPL debate has been **highly discussed** in recent times. The ATPL course **was the normal route** for a cadet who wanted to become a pilot, until in 2006 **ICAO** (International Civil Aviation Organization) decided to create a more **airline-specific alternative;** the **MPL**. Several airline players **estimate** that **MPL** will be the **major source** of pilots in the future.
Summarily, there are **major differences** that can be pointed:

MPL

- **Pre-contract** with an **airline**
- Must be taken as an **integrated course**
- At the end of the course, a cadet as to **work for a specific airline**
- Type Rating **included**
- **More competitve (#restrictions)**
- Partially **subdized** by the airline
- Average Duration: 18 months
- **The course includes FFS** training

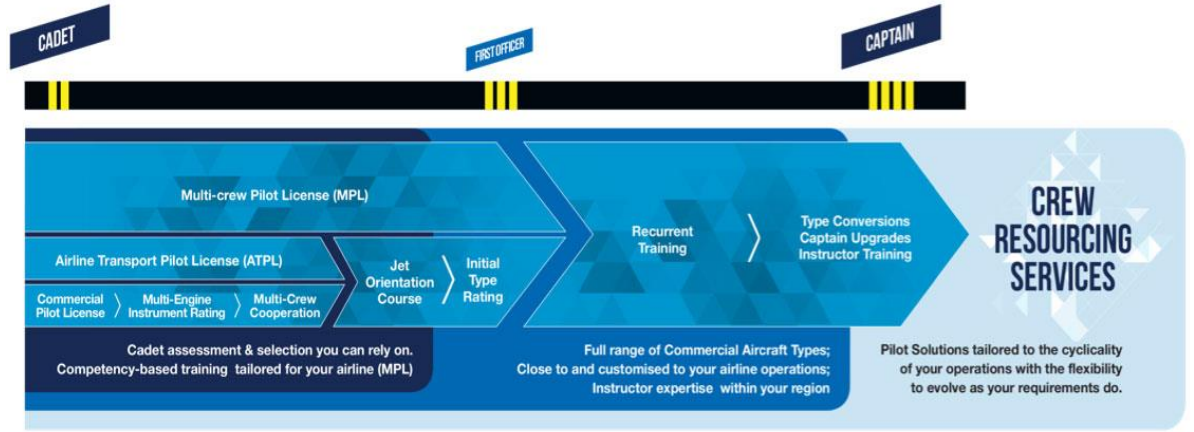
ATPL

- **No contract** associated
- Can be done in a more **flexible route**
- At the end of the course, a cadet **can apply to any airline**
- Type Rating **not included**
- No entry barriers
- The **cadet pays** the entire course
- Average Duration: 20 months
- The course **does not include FFS** training

It is argued that the MPL can be **more cost-efficient,** as it **already includes** the **type rating** course. This depends on the type rating cost, but is being more common for airlines that before paid the type rating costs, are **now laying the costs on pilots** (as an example the Portuguese airline TAP) making the **MPL course more appealing**
There is also the important factor that the MPL is **partially subsidized by the airline,** who leads to a **less risk investment for the cadet** (paid after in salary deductions)
Additionally, MPL provides **more job security** as the cadet already enters in a legal contract with the airline

Sources: CAE Inc., Linkedin, L3, Alpha Aviation Group, European Flight Academy, European Cockpit Association, The Journal for Civil Aviation Training

CAE's Pilot Training Program



Source: CAE Inc.

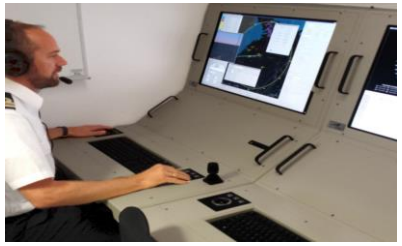
- CAE **provides both courses** in its **8** flight schools that are located in Belgium, India, Spain, Australia (2), UK, USA and Saudi Arabia
- Currently, CAE has **cadet courses' partnerships** with **airlines** such as: EasyJet, Vueling, CityJet, Indigo, Jet Airways, Jetstar, JetBlue, Kuwait Airways, AeroMexico, AirAsia, among others
- It operates an aircraft fleet of **165 airplanes**, and **255 FFS**
- The **prices** of each course **vary** per region, and depend on the **partnership** with the specific airline
- Currently, as previously mentioned, CAE **forms 1500 pilots per year** while having the **capacity to form 2000**
- CAE enjoys **strong competitive advantages** comparing to other flight schools (fs): **big fs network**, **strong** and long **partnerships** with **airlines**, and training centres equipped with **FFS**

Sources: CAE Inc., Frasca Flight Simulation

APPENDIX III | DEFENCE & SECURITY PRODUCTS AND SERVICES

With over 39 products and services, CAE caters to the outsourcing needs of the World militaries

CAE D&S operates in **4 different markets**. Some examples of products and services supplied can be seen below

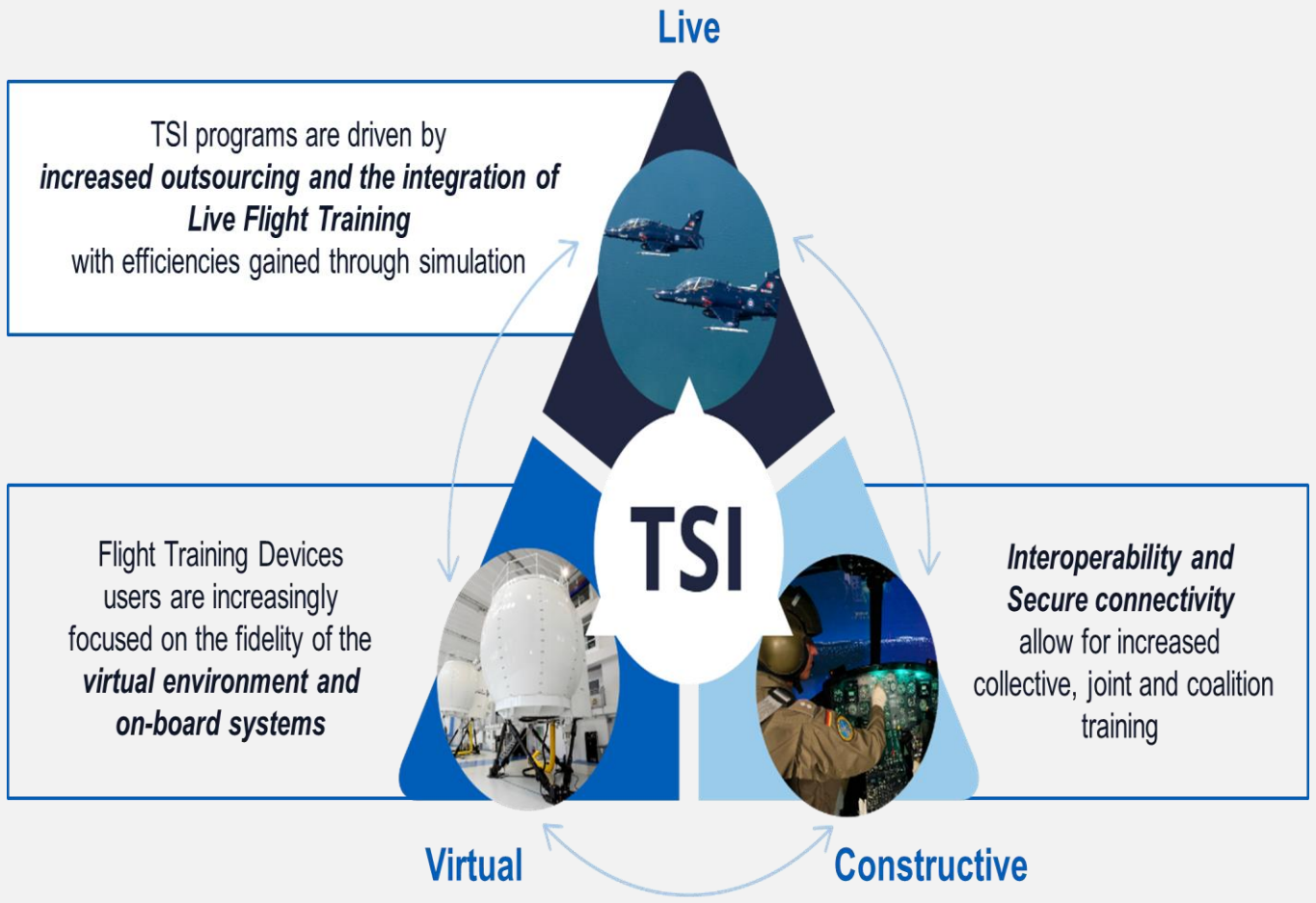
MARKET	DESCRIPTION	EXAMPLE	ILLUSTRATION
Air	▪ CAE services and products supports the **training** needs of **pilots, rear crew, sensor operators and maintenance staff** on a broad array of military aircraft platform. These include **combat aircrafts** to **unmanned aerial systems** to special **missions platform** like maritime patrol aircraft and tanker/transport aircraft. CAE also offers **consulting services**, **obsolescence management** and technology insertion expertise, instructors and **support staff** to maintain the equipment and facilities	**CAE Mission Crew Trainer**	
Naval	▪ As a key component of their training service integrator offering, CAE's offer a **broad range of turnkey training solutions** to Navies across the World. Their offering range from **full spectrum services**, like their **integrated whole ship training**, to more specific services like **briefing/debriefing capabilities**. CAE also offers **consulting services**, **maintenance** services and **obsolescence management**	**Combat Information Centre**	
Land	▪ CAE Land training services offer the **integration expertise** and agility required by forces in the new era of **digitalization and sophisticated weapon system**. Land is also a key component of their TSI offerings as shown by their Air Defence Training capabilities. CAE also offers services to train **combat and maintenance** personnel of **armored vehicles,** and is able to train commanders through **simulation-based training** that enable its users to test/prepare combat strategy	**Tank/AFV Direct Fire Training**	
Public Safety & Security	▪ At the **intersection** of CAE's Defence and Healthcare segment, Public Safety products and services caters to the training needs of **first responders**. Through its product portfolio, training services and training centres, CAE helps its customers to **improve public safety efficiency**, readiness and mitigate the impact of disastrous events. CAE offerings caters to **government** agencies (e.g. FEMA), **security** forces, **health** agencies and **emergency medical** technicians	**CAE Emmersion**	

Source: CAE Inc.

APPENDIX III | DEFENCE & SECURITY PRODUCTS AND SERVICES

CAE is a world-class training systems integrator that offers integrated LVC training solutions across air, naval, land and public safety

CAE TRAINING SYSTEMS INTEGRATION



Source: CAE Inc.

- CAE Training Service Integration services enable the company to **design and deliver innovative training solutions in a live constructive-virtual environment**
- Through its training assets, CAE can cover computer-based and part-task training, up to **full mission simulators**
- To build a truly comprehansive training integrator, CAE is responsible for **designing and delivering databases** at the forefront of technologic advancements. This enable CAE to build **high fidelity scenarios** and provide valuable data to **improve tactical skills** and test strategies in a safe and secure way
- CAE TSI programs includes a **tactical control center** which control and monitor military exercises and permits the **integration of large teams** and **joint exercise**
- With a **workforce** comprise with **ex-military** personnel, CAE can provide **class room courses** and other live instructional services, freeing up soldiers for operational activities
- The systemic approach within a closed loop process used by CAE's training programs, **provides data on the performace** of the training solution guaranteeing **continuous improvement** and **optimization** of the training solution. This data is used to ensure high fidelity and used to compare results from the training devises with operational systems. If there is a gap between them, it is easy to tweak and obtain the desired outcome

APPENDIX IV | HEALTHCARE PRODUCTS AND SERVICES

CAE Healthcare offers a portfolio of 21 products. From patient manikins to patient simulators, ultrasound and surgical simulation

TYPE		MODEL EXAMPLE	DESCRIPTION	ILLUSTRATION
PATIENT SIMULATOR	▪ Allows for a **realistic practice of technical skills**, **diagnosis** and **interprofessional team** training in the fields of **pediatrics, nursing, emergency care**, amongst others	**Ares**	▪ Mid-fidelity manikin ▪ Designed to fulfill the requirements for Advanced Life Support (ALS), Advanced Cardiac Life Support (ACLS) and emergency care team training ▪ Portable, lightweight and durable with tablet-based software that allows facilitators to have a more flexible teaching experience	
SURGICAL SIMULATION	▪ Prepare residents and **surgical students** for **interventions** through **high fidelity simulators** with augmented reality and built-in feedback for a **more real experience** and comprehensive assessment	**NeuroVR**	▪ Neurological surgical simulator that allows the development of expert skills ▪ Provides a high-fidelity, immersive training experience with virtual reality state of the art technology ▪ Tactile feedback ▪ Suitable for the development of instrument handling skills	
ULTRASOUND SIMULATION	▪ Provide a deeper learning experience and development of skills and confidence in assessing a wide range of pathologies through a **realistic** and **durable ultrasound training modules**	**Vimedix**	▪ High-fidelity multipurpose ultrasounf simulator, serving a a wide range of medical fields - cardiac, abdominal, ob/gyn ▪ With augmented reality technology for a more immersive leaning environment ▪ The most advanced of its kind in the market	

Source: CAE Inc.

APPENDIX V | SWOT ANALYSIS

CAE is a market leader operating in an attractive industry with an enabling environment for growth

STRENGHTS

- **Top leadership** position across Civil Aviation, D&S and Healthcare
- **Global reach and scale** which enables them to capitalize on the growth expected in developing countries
- **Innovation leader** in the healthcare simulation market
- **Unique** wide **portfolio** of services and products
- Supportive industry **backdrop**
- **High brand reputation** and **recognition**
- Top secret **clearance** for a variety of bidding processes in Defence

WEAKENESSES

- **Inability** to **penetrate** in the D&S industry in the last 5 years, maintaining its market share
- **Dependence** on financial contributions from governments
- **Cyclicality** of its revenues and cash flows
- **Fixed-priced** long-term contracts
- **Dependence** on OEMs for the supply of data
- **High investment** in R&D that can translate into sunk costs
- American **favoritism** for national companies could pose risk on gaining neighboring contracts

OPPORTUNITIES

- Headroom to **penetrate** in the **Civil** training market and **D&S** through innovative training solutions and **strong position** in higher growth emerging markets
- Infant stage of healthcare simulation market with expected **double-digit growth**
- **Increasing** defence **spending** in the US, Eastern Europe, APAC and other NATO countries
- Growing **shortage of pilot** training capacity in emerging markets
- Development of the **nearly-untapped** defence training market – land training – that is valued at US$ 3.6b

THREATS

- **Increasing regulations** in the healthcare simulation market can hinder CAE's competitive positioning
- Potential **reduction** of outsourced training services: aircraft manufacturers are investing in in-house training
- Potential future **decreases** in military budgets
- **Consolidation** of aerospace and defence companies
- **Automation** of treatments in healthcare

APPENDIX VI | MANAGEMENT TEAM

Combining years of experience, leadership skills and technical expertise has been the key to success

KEY EXECUTIVES OVERVIEW

PRESIDENT & CEO
MARC PARENT
(0.09% shareholdings)

- Holding position since **2009**
- Over **30 years of experience**
- Started as an **engineer** at Canadair
- Then moved to **Bombardier** to head a broad range of development programs, later holding executive position
- Afterwards, **joined CAE in 2005** as Group President of Simulation Products
- **Honored numerous awards for his leadership skills** and contribution to the aviation and Canadian corporate landscape

GROUP PRESIDENT
CIVIAL AVIATION
NICK LEONTIDIS
(0.02%)

- Holding position since **2013**
- He is a CAE veteran having first joined the company in **1988** as a software **engineer**
- Following his arrival, Leontidis quickly rose the ranks of the corporate ladder
- Held a series of executive position in the Civil business where he played a **pivotal role** in the creation and growth of the training and services business

GROUP PRESIDENT
D&S
GENE COLABATISTTO
(0.01%)

- Holding position since **2012**
- Over **25 years of experience** in the global defence industry
- Before joining CAE, Colabatistto held senior leadership positions in both the military and the private sector
- He was a SVP in the Intelligence, Surveillance and Reconnaissance Group at SAIC
- In its military career, he was responsible of SIGINT in the US Marines and was deployed during operation Desert Storm

PRESIDENT, CAE HEALTHCARE
DR. ROBERT AMYOT
(0.004%)

- Holding position since **2014**
- Before, spent two years as CAE's VP for Medical Program and Chief Medical Officer
- **Well-published researcher** with involvement in over 30 clinical trials in echocardiography
- **Cofounded VIMEDIX Virtual Imaging Training System** (acquired by CAE in 2010)
- He is the **inventor of the first simulator for transthoracic echocardiography** to incorporate virtual reality

VP, FINANCE, CFO
SONYA BRANCO

- With CAE **for over 10 years**
- Currently responsible for the financials operations of CAE worldwide as well as financing strategy and activities
- Her previous positions include M&A at BCE and Audit and Advisory t PWC
- She joined CAE as Corporate Controller and has since taken a more strategic role
- **Her valuable skills set include M&A, strategic planning and financial reporting**



APPENDIX
MARKET OVERVIEW

- MARKET GROWTH DRIVERS
- MARKET DYNAMICS
- COMPETITION | MARKET SHARES

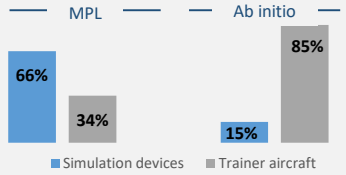
APPENDIX VII | CIVIL AVIATION S&T MARKET DRIVERS

Great time to be alive - The massive expected growth on the active fleet is a good sign for the training sector

MARKET DRIVER	IMPACT	DESCRIPTION
Pilot training and certification regulations	↑	▪ **The market is highly regulated** by agencies such as the US FAA and international ICAO ▪ Pilot certification processes and regulatory requirements have become **increasingly exigent** ▪ Simulation-based pilot training as Multi-crew Pilot License (MPL) and the Airline Transport Pilot (ATP) are taking **a great role worldwide**
Safety and efficiency imperatives of commercial airline and business aircraft operators	↑	▪ **Training and certification needs are expected to continue to evolve** due to the increasing focus on safety and efficiency ▪ The **simulator training method is usually preferred to live training** due to:
Growing active fleet of commercial	↑	▪ Both Airbus and Boeing predict that **aircraft fleet will double in the next 20 years**. ▪ **Simulators and training devices are expected to grow proportionally** to the fleet growth, with new models entering the service

MPL

- **There is a greater focus on simulation training** versus traditional ab initio training programs



Source: AltaCorp Capital Inc.

ATP

- The new ATP requirements and aircraft specific type rating demand **pilots to complete more simulation based training**
- It includes features such as low energy states, stalls, adverse weather conditions, among others

SAFETY

Can replicate **all emergency situations in a safe environment**

EXTENDED TRAINING SCOPE

More options and targeted training around certain extreme scenarios / conditions

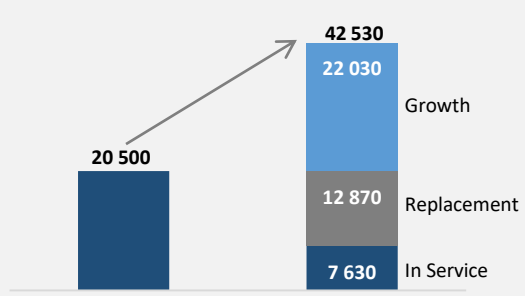
AVAILABILITY

Simulators are **available 24/7** in all weather conditions

COST EFFECTIVE

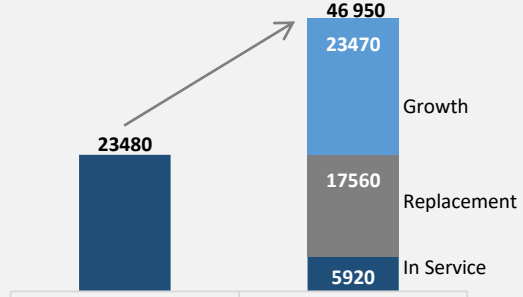
Estimates that is **only 5-10% of the live training cost**

Boeing's Global aircraft Fleet forecast



Source: Boeing

Airbus' Global aircraft Fleet forecast

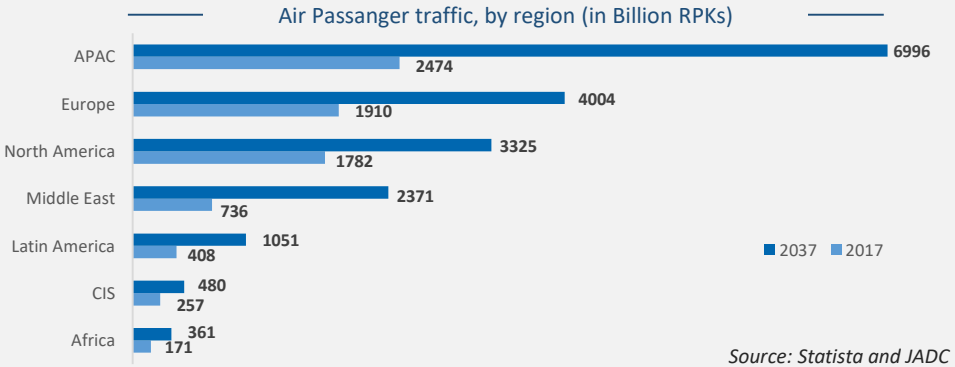


Source: Airbus

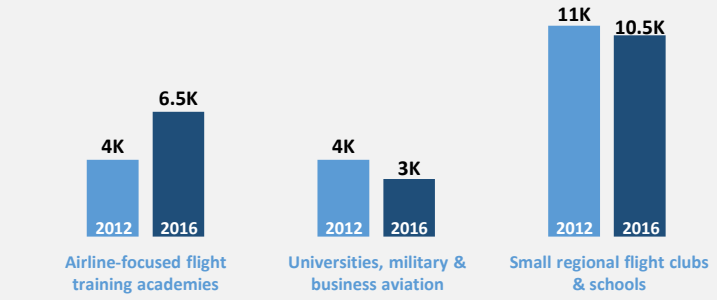
APPENDIX VII | CIVIL AVIATION S&T MARKET DRIVERS

Great time to be alive - increase on demand for training is also caused by the growth in air travel and pilots increment

MARKET DRIVER	IMPACT	DESCRIPTION
Expected long-term global growth in air travel	⬆	▪ Over the last 12 years, Global industry revenue-passenger-kilometer **(RPK) growth averaged 5.7%** ▪ It is expected that over the next 20 years: ✓ World passenger traffic will **grow by 4.5% per year** ✓ World cargo traffic will **grow by 4.1% per year** ▪ The growth in air travel **drives demand for training solutions, due to the increase in** demand for flight, cabin, maintenance and ground personnel
Demand for trained aviation professionals	⬆	PILOT SUPPLY ▪ **Airlines are more actively involved in cadets training** from day one by **realizing partnerships with training services providers** ▪ Air-focused flight and training academies are **increasing the number of pilots supplied** in contrast to the other two main sources PILOT DEMAND ▪ **Demand** for airline pilot **is immense** due to rapid fleet expansion and high pilot retirement rates. ▪ The aviation industry will require innovative solutions leading to an **increase in demand** for simulation based training services and products.

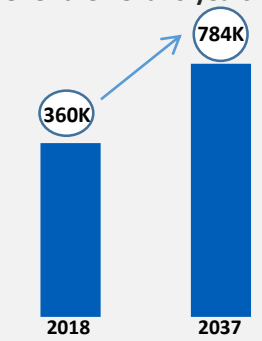


Source: Statista and JADC



Source: CAE Inc.

Over the next 20 years:



Pilot Replacements: 260k
Additional Pilots for Growth: 424k

684K New Business Jet and Airline Pilots

APAC	237K
Americas	219K
Europe, Middle East, Central Asia & Africa	228K

Source: Boeing; Airbus; CAE Inc.

APPENDIX VIII | DEFENCE & SECURITY S&T MARKET DRIVERS

Government's are allocating resources more efficiently to military expenditures to be able meet new complex challenges

MARKET DRIVER	IMPACT	DESCRIPTION
Growing defence budget		▪ Lackluster investments in defence have stressed militaries resources to a dangerous level and created tensions (NATO) ▪ Governments are increasing budget to increase readiness, and ability to meet new more complex situations
Outsourcing of training and maintenance services		▪ Militaries are pressured to find ways to cut costs but at the same time increase the ability of their forces to meet with new challenges ▪ Ability to combine product and services will enable the industry to generate more recurrent revenue and offer them greater visibility which is instrumental for cash flows management
Drive for more efficient spending		▪ Increase desire to use synthetic training as a source of cost reduction ▪ Technological advancement and new training techniques gives militaries greater flexibility at a lower cost ▪ Increase safety by reducing the risks of accidents (thus decreasing related costs e.g. insurance) and reduces depreciation costs
Reputation and established relationship		• Sustainable recurrent business since defence procurement are usually unwilling to change contractors • Able to leverage existing infrastructure instead of switching which is a long term and costly process
Strategic Partnership		▪ Partnership with OEMs to develop training systems for their new and legacy products ▪ Increases the volume of contract but also their dependency and give more pricing power to OEMs
Integration of training system, both traditional and synthetic		▪ Stressed resources forces governments to seek partners to develop, manage and maintain training systems to support this complex platforms and operations ▪ Gives defence forces an integrated and holistic approach to training ▪ Synthetic training attractive to integrated different branches and joint forces, especially with increase desire to conduct mission rehearsal in a virtual environment

APPENDIX IX | HEALTHCARE S&T MARKET DRIVERS

The need for more qualified technicians to reduce medical errors and increase favorable patient outcomes will drive growth

MARKET DRIVER	IMPACT	DESCRIPTION
Medical technology revolution	↑	▪ The surge of new and advanced medical products led to the need for improved training solutions ▪ Regulatory and certification agencies start **to require specific qualifications and training to handle disruptive technologies**
Perceived benefits of use of simulation in healthcare education	↑	▪ **Feasibility to recreate most medical emergencies** with acceptable realism (higher fidelity due to the introduction of advanced technology such as AR and VR) allowed for an increasing adoption of use of simulation ▪ **Increase of perceived benefits of medical simulation** due to growing evidence demonstrating medical simulation improves clinical competency and favorable patient outcomes ▪ A 2014 study conducted by the Loyola University Health System found that simulation-based learning improved outcomes in four key areas including educational laboratory, patient care practices, patient outcomes and reduced healthcare costs
Limited access to live patients	↑	▪ **Traditional educational methods** are based in **students learning by observing more experienced staff** – limited access to live patients leads to limitation in the development of critical skills and access to high-risk procedures ▪ Studies have **proven the effectiveness of simulation training** in pre-license nursing programs - in April 2018, Nursing Council lifted the cap on the number of hours nursing students can spend in simulation-based training in place of clinical hours.
Surge in emphasis on patient safety & outcomes	↑	▪ Rise in deaths due to medical errors - **3rd leading cause of death in the US** ▪ Search for means **to improve patient safety result in demand** for not only educational purposes but training of clinicians to gain expertise and knowledge **to reduce medical errors**
Limited Fund availability	↓	▪ **High fixed cost structure of simulation centres** and difficulty in attaining multimodal simulations restrain the manufacturing of medical simulation systems ▪ The **estimated average cost** of developing a well-equipped simulation lab **is C$ 590k** with up-front costs that include space development or remodeling and purchase of trainer systems ▪ Limited availability of funds, namely in underdeveloped and developing countries also hinders the growth of the market ▪ Simulation centres **can require between C$ 15.74k to 393.5K annually**, for consumable materials

APPENDIX X | MARKET DYNAMICS

Complex supply chain is the name of the game

SUPPLY CHAIN

PRODUCT

- Highly complex global supply chain
- Dependent on free flow of technological software and hardware. Highly competitive semiconductor industry has been beneficial for the industry (price deflation)
- Data and other key components are provided by OEMs (e.g. Boeing) to make the simulators closer to reality
- Require constant technological innovations

SERVICES

- Channels for the flow of information
- Qualified labor pipeline
- Highly dependent on key personnel

DISTRIBUTION CHANNELS

PRODUCT

- B2B, direct to customer
- Trade shows play a major role in the distribution of marketing materials (e.g. Farnborough Intl. Airshow)
- Healthcare segment uses third party distributors

SERVICES

- **On-site:** Services are provided on the site of the provider
- **Off-site:** Services are provided on the client site (e.g. on military bases)
- **Mixed:** Services are provided that are jointly operated.

OVERALL

Contracts are won after an extensive competitive bidding process. Usually long term and fixed price contracts

END USERS

CIVIL AVIATION

- Commercial and business airlines, flight schools, and cadets
- Dependent on economic cycle and the need of new labor in the aviation market
- Dependent on the renewal of airlines fleet

DEFENCE

- Governments (defence and public safety arms)
- Dependent on business cycle and political cycle
- Highly regulated and scrutinized (e.g. clearance, audit)

HEALTHCARE

- Academic Institution, Research centres, Hospitals and clinics
- Dependent on the economic cycle to a lesser extent.

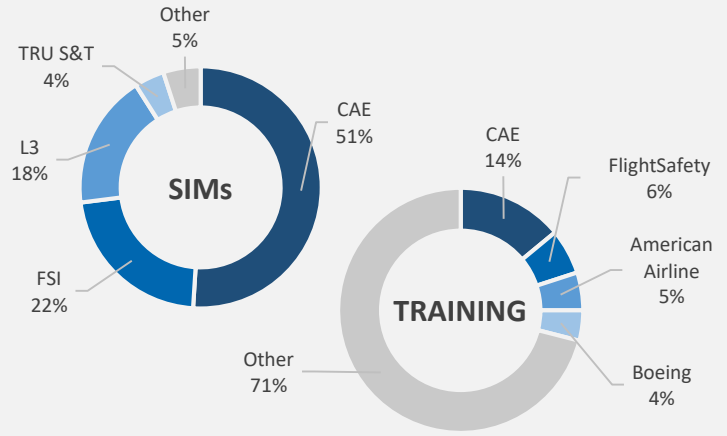
APPENDIX XI | COMPETITION MARKETS SHARES

Naturally, the capital-intensive manufacturing market is more consolidated when compared to the training end of the market

MARKET SHARE AND COMPETITORS

CIVIL AVIATION

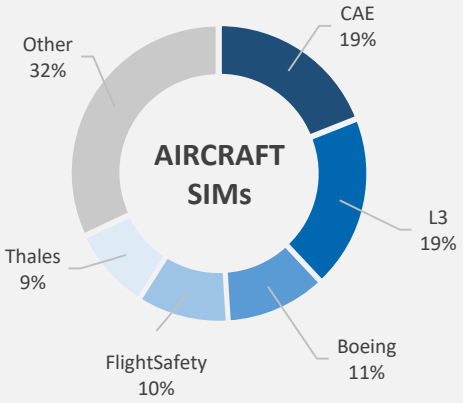
- **Mature and highly concentrated simulator market** – a few main global players have dominated over the past years: 95% of existing commercial Sims have been produced by 4 players
- **The training segment is much more fragmented** – largest 3 players capture 25% of the market – and the marketplace has been getting more crowded by smaller vendors and large conglomerate OEMs which have been softly trying to seize market share



Sources: World Civil Full Flight Simulator Census, Halldale Group, 2018; "Civil Simulator Census: who owns what devices and where?", FlightGlobal, 2015

DEFENCE & SECURITY

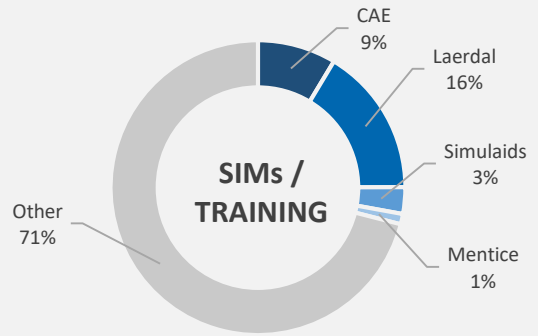
- **The D&S simulator market is relatively more fragmented** – the 4 major companies hold 59% of military aircraft Sims, whereas the remaining is captured by over 65 manufacturers
- Market share for the training end of the market is difficult to estimate, especially considering the secrecy behind most contracts



Source: Military Simulator Census, FlightGlobal, 2017

HEALTHCARE

- **The global market for medical simulation is fragmented** although with the presence of 8 dominating players at the top, including Laerdal, CAE and 3D Systems operating under Simbionix
- The training side however is characterized by the presence of various small and local players



Note: Market shares proxied by revenue of competitors (if available) and global market size. Simulaid and Mentice not top 4

Sources: CAE and Orbis



APPENDIX
D&S ORGANIC GROWTH

DEFENCE & SECURITY ORGANIC GROWTH

APPENDIX XII | DEFENCE & SECURITY ORGANIC GROWTH

CAE's latest investments in their defence segment combine with an extraordinary team will prove to be a winning strategy

THREE REASONS WHY D&S WILL GROW FASTER THAN THE MARKET

The defence segment plays an interesting part in our investment thesis. We believe by **supporting the current management** in **their strategy** will prove to be the correct one. Given the defence industry goes through long and laborious processes to win contracts, it is of the utmost importance to maintain a team that has the **experience** with the **military procurement processes**. However, we reserve the right to make a **key hire** of a senior U.S. military personnel that could add value through its deep knowledge and network. Given the possibility, we believe **hiring** ex-NSA Lt-Gen. H.R. **McMaster** could add tremendous value due to its experience as director of U.S. Army Training and Doctrine Command's Army Capabilities Integration Center. Apart from the management team, we believe **three key reasons** will drive organic growth in the years to come: the recent **acquisition of AOCE**, the state-of-the-art **Dothan Facility** and the potential of **revenue synergies** from our civil aviation strategy

AOCE

- Alpha-Omega Change Engineering (AOCE) was a **training service provider** for the U.S. Military
- No financial divulgation, however by implying an approximate multiple of 10x EBITDA (industry avg.), we expect **$3-5M in incremental EBITDA**
- **Reinforce CAE positions** in: UAVs, fighters/bombers and higher-security level programmes
- Expand CAE addressable market by $3bn and AOCE is the current **prime contractor** for numerous programmes
- Boost CAE proposition as a **training system integrator** by leveraging AOCE capabilities
- We believe this will make CAE propositions **more attractive** in terms of value but also will enable to take CAE's brand and expertise in areas previously not accessible

Dothan Facility

- CAE Dothan Facility opened in March 2017 and already saw some **great achievement**
- It is a U.S. Army Fixed Wing training facility located in Alabama
- The facility has the capacity to train approximately 600 pilots a year
- By having a **state-of-the-art facility** instead of using US Forces facilities **improves the quality** of the learning environment
- A **higher utilization rate** of simulations improves the instructor-student feedback, thus improving quality
- Enable them to win the U.S. Fixed Wing contract **over FlightSafety** which was the incumbent for 40 years

TSI & Revenue Synergies

- The key strategy we believe is **transformative** in itself is the focus on positioning CAE as a **training system integrator**
- 38% of aviation training in the US Military is **outsourced** and bound to increase, same trend regarding other forces, **highlighting the need** of a service integrator
- TSI contracts offer greater earning visibility by being in **nature longer**
- CAE latest investments in defence **increases** the company **position** and ability to remain the **number one** integrator
- We also believe our strategy in Civil Aviation could add value and create some **revenue synergies**
- A bigger school network could supplement our defence offering through **data collection** but also through our sourcing business which could enable CAE to find prospective pilots willing to **join the Forces**



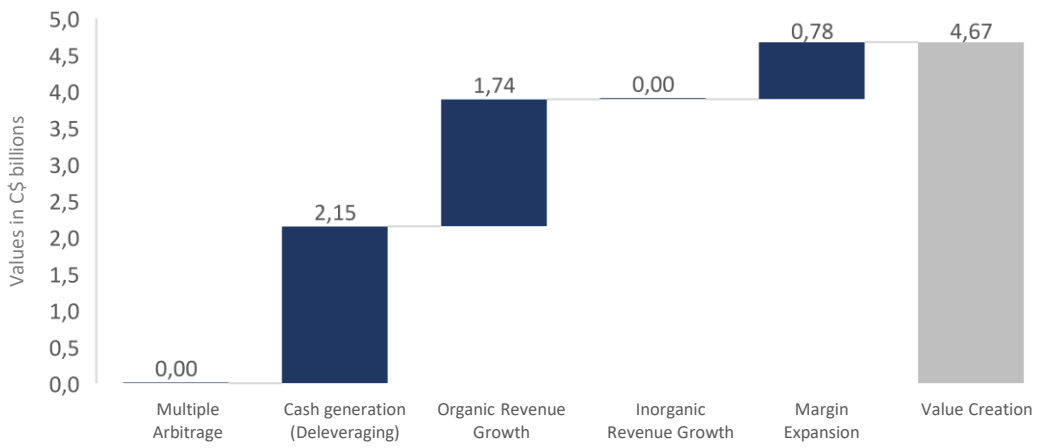
APPENDIX
LBO

- LBO RETURNS
- PAST DEALS & M&A TEAM
- 100-DAY PLAN
- VALUATION METHODOLOGIES
- INITIAL PUBLIC OFFERING ANALYSIS
- EXIT STRATEGY

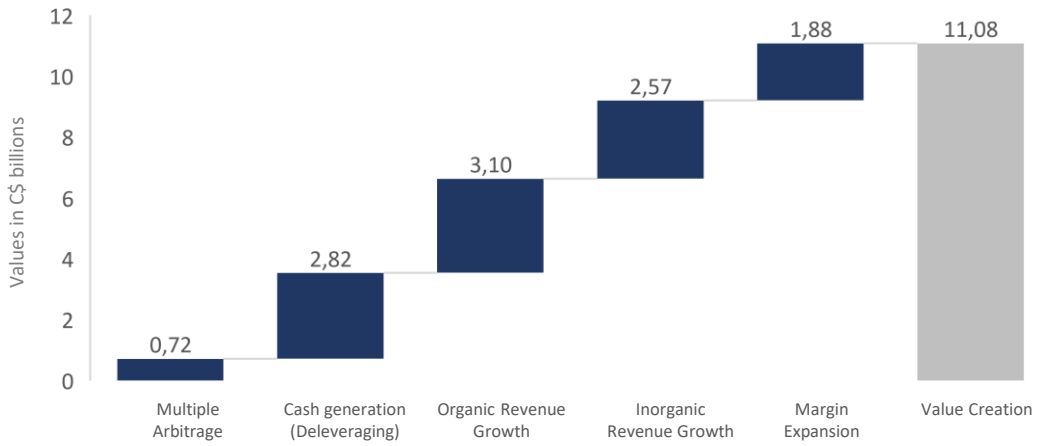
APPENDIX XIII | LBO RETURNS - SCENARIO ANALYSIS

IRR ranging from ~16% to ~29% suggest a decent margin of safety and in all scenarios easily able to sustain debt

VALUE CREATION (PESSIMISTIC)



VALUE CREATION (OPTIMISTIC)



SENSITIVITY ANALYSIS (PESSIMISTIC)

Entry \ Exit	9.8x	10.3x	10.8x	11.3x	11.8x
9.8x	15.4%	15.4%	16.7%	1.0%	19.2%
10.3x	14.0%	15.4%	16.7%	18.0%	19.2%
10.8x	11.9%	14.6%	15.8%	17.0%	18.1%
11.3x	9.6%	13.3%	14.3%	15.4%	16.3%
11.8x	7.5%	11.8%	12.7%	13.6%	14.4%

Entry \ Exit Year	2021	2022	2023	2024	2025
9.8x	20.8%	18.9%	16.7%	15.6%	14.5%
10.3x	20.8%	18.9%	16.7%	15.6%	14.5%
10.8x	19.5%	17.8%	15.8%	14.7%	13.8%
11.3x	17.5%	16.1%	14.3%	13.4%	12.6%
11.8x	15.4%	14.3%	12.7%	12.0%	11.3%

CREDIT METRICS (PESSIMISTIC)

	FY2019F	FY2020F	FY2021F	FY2022F	FY2023F	FY2024F	FY2025F	FY2026F
Cash	654.9	754.9	854.9	954.9	1,054.9	1,154.9	-630.5	-79.0
Cash Flow	100.0	100.0	100.0	100.0	100.0	100.0	-1,785.4	551.6
Cash Cover	2.3x	2.5x	2.8x	2.5x	2.9x	3.7x	0.2x	-
Interest Cover	3.3x	3.9x	4.4x	5.3x	6.2x	7.3x	7.6x	137.1x
FCF/Debt	13.3%	13.8%	15.9%	18.2%	21.3%	24.9%		
Net Debt / EBITDA	4.1x	3.4x	2.8x	2.2x	1.7x	1.2x	0.7x	0.1x

SENSITIVITY ANALYSIS (OPTIMISTIC)

Entry \ Exit	9.8x	10.3x	10.8x	11.3x	11.8x
9.8x	28.0%	28.0%	29.4%	30.6%	31.8%
10.3x	26.7%	28.0%	29.4%	30.6%	31.8%
10.8x	24.2%	26.9%	28.1%	29.3%	30.5%
11.3x	21.4%	25.1%	26.2%	27.2%	28.2%
11.8x	18.7%	23.1%	24.0%	24.9%	25.8%

Entry \ Exit Year	2021	2022	2023	2024	2025
9.8x	43.8%	37.6%	31.9%	28.4%	25.7%
10.3x	43.8%	37.6%	31.9%	28.3%	25.7%
10.8x	39.1%	34.2%	29.3%	26.3%	23.9%
11.3x	31.3%	28.5%	24.9%	22.6%	20.9%
11.8x	22.3%	21.8%	19.6%	18.3%	17.2%

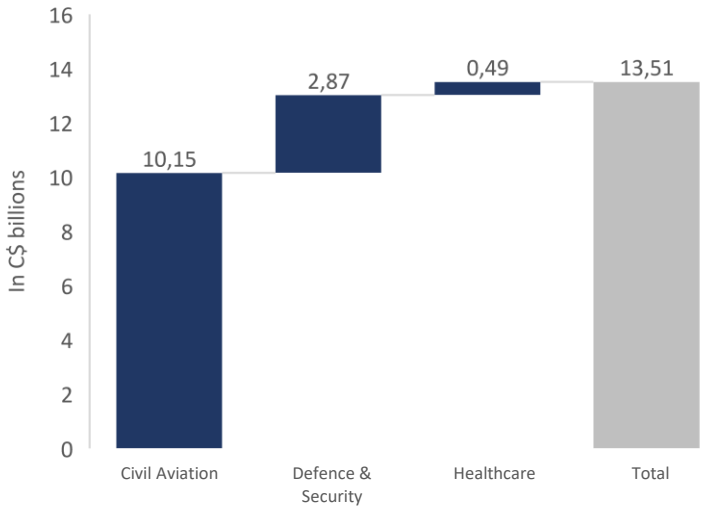
CREDIT METRICS (OPTIMISTIC)

	FY2019F	FY2020F	FY2021F	FY2022F	FY2023F	FY2024F	FY2025F	FY2026F
Cash	654.9	754.9	854.9	954.9	1,054.9	1,154.9	902.6	1,914.9
Cash Flow	100.0	100.0	100.0	100.0	100.0	100.0	-252.3	1,012.4
Cash Cover	1.4x	2.9x	3.6x	3.7x	5.1x	8.4x	0.8x	-
Interest Cover	3.9x	4.6x	5.6x	7.8x	10.9x	16.5x	32.4x	-
FCF/Debt	3.9%	17.0%	23.1%	32.2%	47.1%	79.2%		
Net Debt / EBITDA	3.7x	2.8x	2.0x	1.3x	0.6x	0.0x	-0.6x	-1.2x

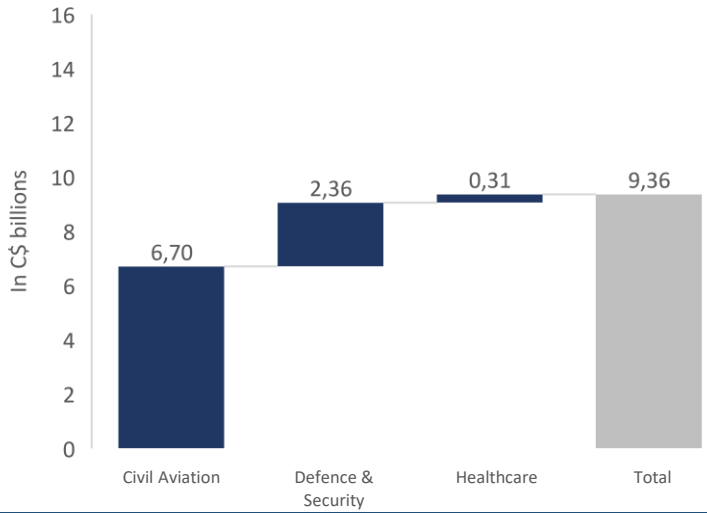
APPENDIX XIII | LBO RETURNS – SEGMENTED BREAKDOWN

Civil Aviation is without doubt the biggest driver of value

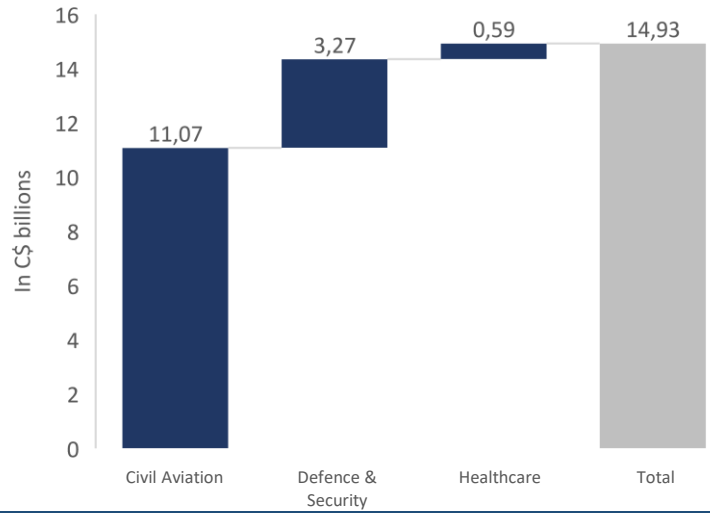
EV (INVESTMENT CASE)



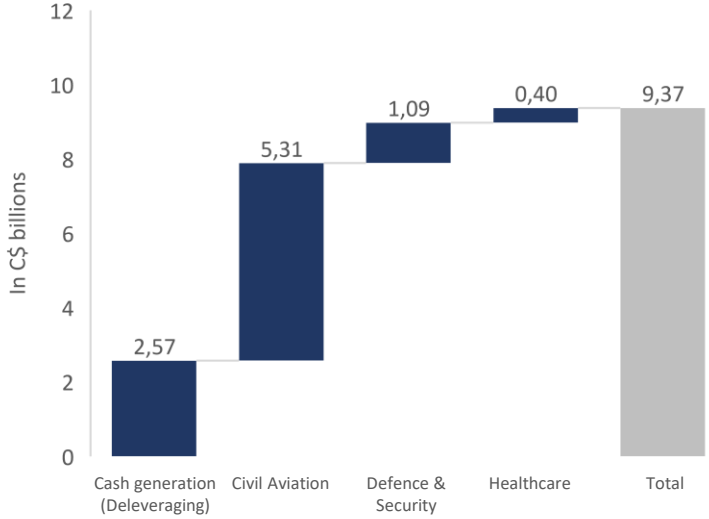
EV (PESSIMISTIC CASE)



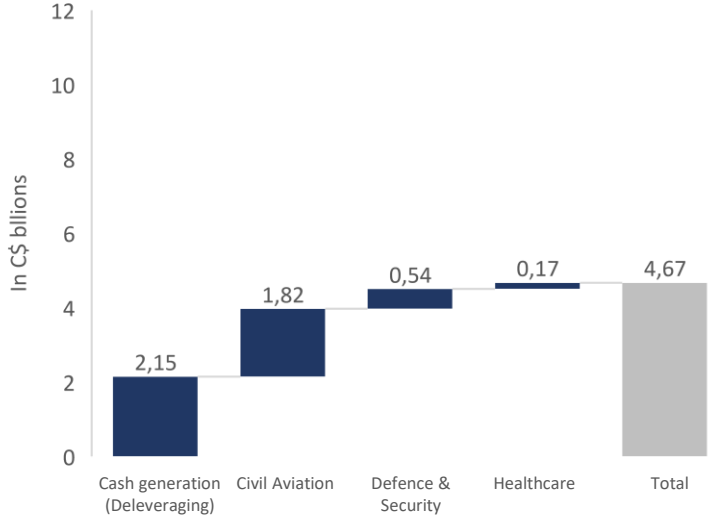
EV (OPTIMISTIC CASE)



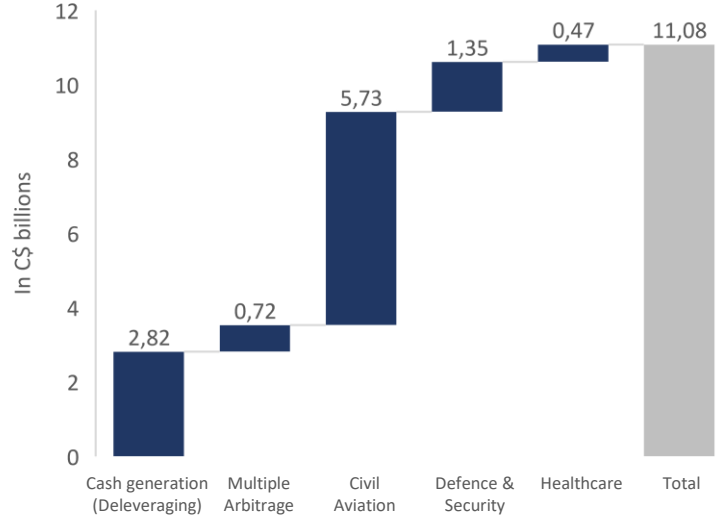
VALUE CREATION (INVESTMENT CASE)



VALUE CREATION (PESSIMISTIC CASE)



VALUE CREATION (OPTIMISTIC CASE)



APPENDIX XIII | LBO RETURNS - SCENARIO ANALYSIS

Pessimistic case the most sensitive to changes in operating assumptions, while the optimistic case is the most sensitive towards leverage

GROWTH & MARGINS SENSITIVITY (INVESTMENT CASE IRR)

Variation in margin \ Variation in Org. Growth	-0.8%	-0.3%	0.3%	0.8%	1.3%
-0.8%	24.6%	25.4%	26.1%	26.8%	27.5%
-0.3%	25.1%	25.8%	26.5%	27.2%	27.9%
0.3%	25.5%	26.2%	26.9%	27.5%	28.2%
0.8%	25.8%	26.5%	27.1%	27.8%	28.4%
1.3%	26.1%	26.7%	27.4%	28.0%	28.6%

RETURN SENSITIVITY TOWARDS LEVERAGE (INVESTMENT CASE)

Entry \ Variation in Leverage	5.0x	5.3x	5.5x	5.8x	6.0x
9.8x	26.0%	26.7%	27.5%	28.3%	29.1%
10.3x	26.0%	26.7%	27.5%	28.3%	29.1%
10.8x	25.1%	25.7%	26.3%	27.0%	27.7%
11.3x	23.4%	23.9%	24.4%	25.0%	25.5%
11.8x	21.7%	22.0%	22.4%	22.8%	23.1%

GROWTH & MARGINS SENSITIVITY (PESSIMISTIC CASE IRR)

Variation in margin \ Variation in Org. Growth	-0.8%	-0.3%	0.3%	0.8%	1.3%
-0.8%	10.5%	12.1%	13.7%	15.1%	16.5%
-0.3%	12.7%	14.2%	15.7%	17.0%	18.3%
0.3%	14.6%	16.0%	17.4%	18.7%	19.9%
0.8%	16.3%	17.6%	18.9%	20.2%	21.4%
1.3%	17.7%	19.0%	20.3%	21.5%	22.6%

RETURN SENSITIVITY TOWARDS LEVERAGE (PESSISMISTIC CASE)

Entry \ Variation in Leverage	5.0x	5.3x	5.5x	5.8x	6.0x
9.8x	15.9%	16.3%	16.7%	17.2%	17.5%
10.3x	15.9%	16.3%	16.7%	17.2%	17.5%
10.8x	15.1%	15.5%	15.8%	16.2%	16.5%
11.3x	13.8%	14.1%	14.3%	14.6%	14.8%
11.8x	12.4%	12.6%	12.7%	12.9%	13.0%

GROWTH & MARGINS SENSITIVITY (OPTIMISTIC CASE IRR)

Variation in margin \ Variation in Org. Growth	-0.8%	-0.3%	0.3%	0.8%	1.3%
-0.8%	27.9%	29.4%	30.8%	32.2%	33.6%
-0.3%	27.6%	29.1%	30.5%	31.8%	33.1%
0.3%	27.0%	28.4%	29.8%	31.1%	32.3%
0.8%	26.1%	27.5%	28.8%	30.1%	31.3%
1.3%	25.0%	26.3%	27.6%	28.8%	30.0%

RETURN SENSITIVITY TOWARDS LEVERAGE (OPTIMISTIC CASE)

Entry \ Variation in Leverage	5.0x	5.3x	5.5x	5.8x	6.0x
9.8x	30.3%	31.1%	31.9%	32.8%	33.7%
10.3x	30.3%	31.1%	31.9%	32.8%	33.7%
10.8x	27.9%	28.6%	29.3%	30.1%	30.8%
11.3x	23.9%	24.4%	24.9%	25.4%	25.9%
11.8x	19.0%	19.3%	19.6%	20.0%	20.2%

APPENDIX XIV | PAST DEALS AND M&A TEAM

With an experienced team and great track record of integration, CAE has been keen on consolidating and expanding via M&A

ACQUISITIONS STRATEGY

- CAE has spent an accumulated sum of nearly **US$ 1.4b** (value not available for all deals) in strategically-picked acquisitions since the turn of the century, totaling **25 buyouts**
- The acquisitions imply a strategy focusing on:

1. **Consolidation** of the company's position across segments, noticeable in early-2000s for civil aviation and the start of the 2010s for the newly-born healthcare business unit
2. **Expand portfolio** of offering and **entering new segments** such as ab-initio training of aspiring pilots
3. **Deepen position in new markets** as was the case for the APAC region
4. **Capturing technology, skilled workforce and R&D** to remain at the forefront of innovation

M&A TEAM

NICK LEONTIDIS

Group President of CA

- Previously responsible for CAE's global strategy, overseeing all M&A activities

DOMENIC PEITRANTONIO

Director of M&A

- Led over 30 transactions over the last 12 years at CAE
- Previously worked as VP in a Canadian Private Equity

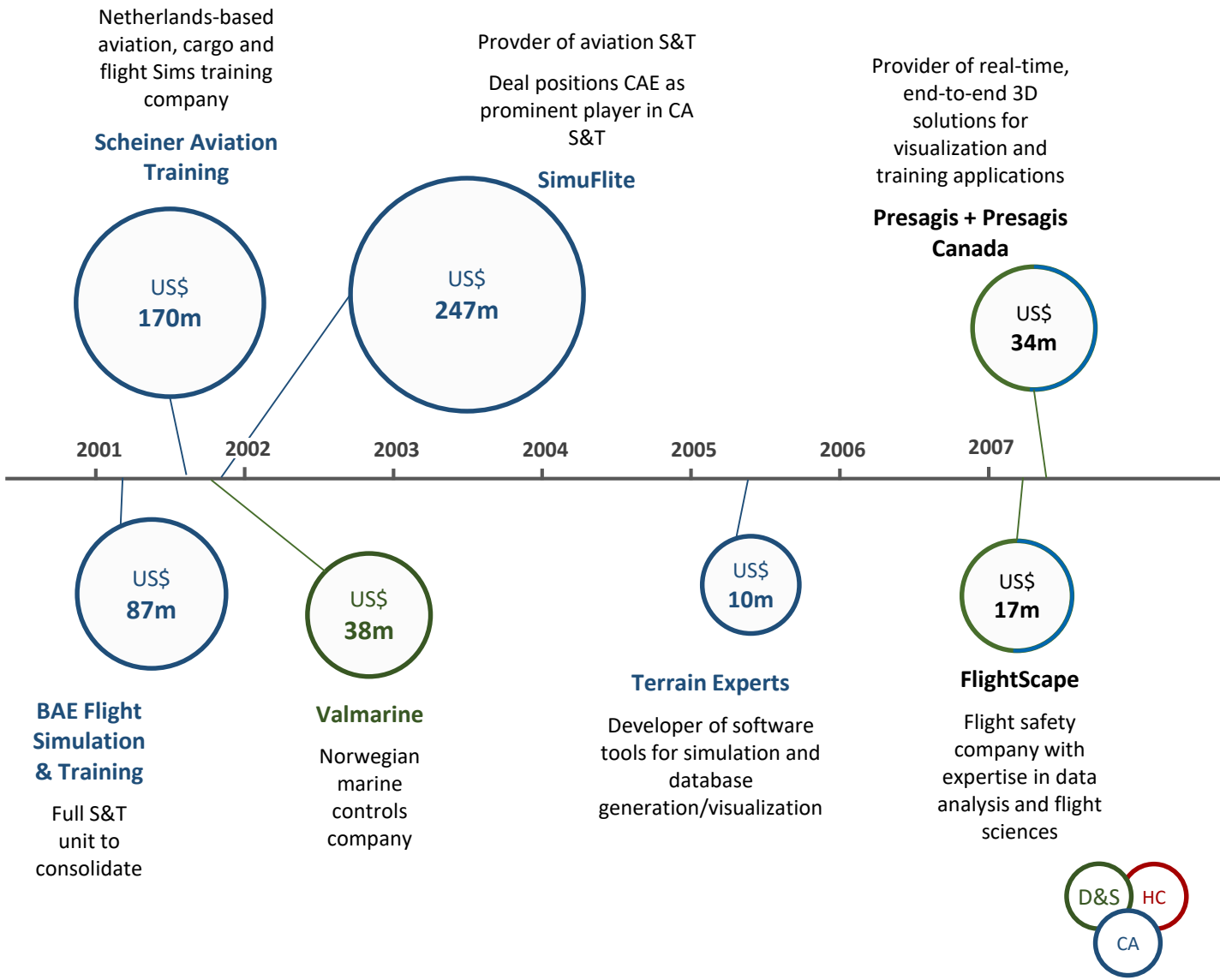
SONYA BRANCO

CFO

- Sonya has a great experience in acquisitions, having worked in M&A at BCE for several years

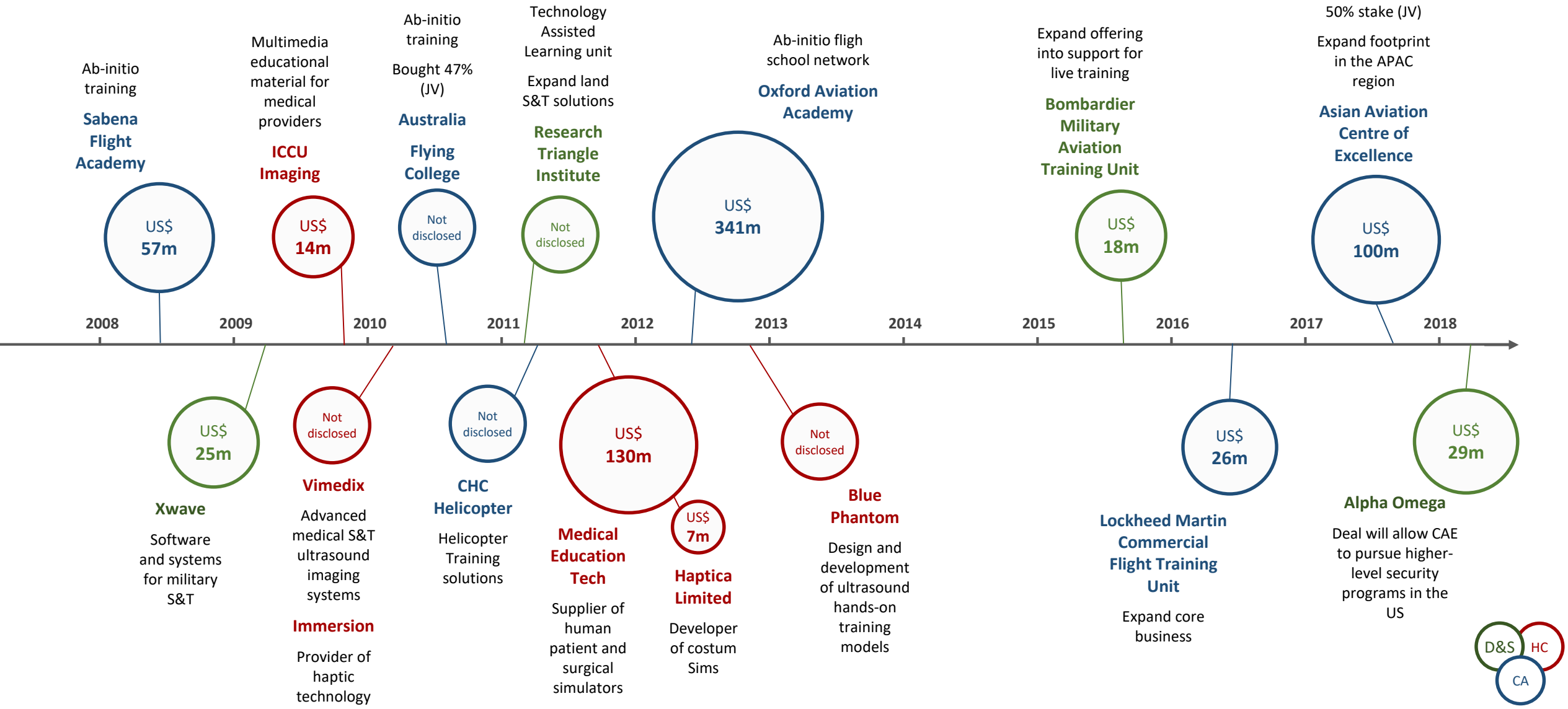
Accomplished M&A team – solid track record of numerous successful deals (including acquisitions, JVs and partnerships) across the three segments, different geographies and target sizes

The existing team is optimal to lead the B&B strategy set forth



APPENDIX XIV | PAST DEALS AND M&A TEAM

After a 5-year period rich in deal activity, CAE started rolling back its inorganic growth strategy from 2013 onwards



APPENDIX XV | THE 100-DAY PLAN

A plan that will smooth out the transition and put the company on the path to success

	1st MONTH	2nd MONTH	3RD MONTH
MANAGEMENT	Add inventory management / Working Capital efficiency specialist as advisor	Approach Lt-Gen. McMaster to become an advisor for our Defence department	Add an integration specialist to smooth out post-merger operations of our acquisitions
HUMAN RESOURCES	Develop a communication strategy to explain the change of ownership and make sure the culture is not affected	Integration of the firms recruitment process with the firms sourcing services and cadet applications	Develop a strategy to integrate workforce of our acquisition target
SALES AND MARKETING	Review the current sales and bidding process in the Defence segment and make the necessary changes to push TSI and get new contracts	Create a sales department that will be able to streamline the sales force following our HC acquisition.	**Launch marketing campaign to attract potential cadets and** (be present at congresses, trade shows, in journals, hospital workshops etc.)
OPERATIONS, MANUFACTURING & SOURCING	Review and **evaluate supplier relationships**, start looking for potential new suppliers	Implement a strategic plan to **enhance the utilization of the training centres** (following DD either by closing facilities, adding services)	Start **negotiations with suppliers** to reduce prices
NWC MANAGEMENT	Review inventory management and implement **efficiency measures**	Start negotiations with suppliers to **increase payment deadlines**	Review operational assets and liabilities and their cash needs to determine the feasibility of converting 100% EBITDA to FCF
BUSINESS DEVELOPMENT	Reorganize the M&A team in two component: Civil Aviation and Healthcare. Allocate more resources to the CA team	Approach ATP and Soar Aviation Approach Simulaid Begin negotiations	Optimize **sales rep incentivization model** to protect sales of lower-margin products
R&D	Evaluate possible synergies between the different business lines in terms of simulation software	Implement plans to centralize the R&D efforts	Allocate capital to develop a forecasting algorithm for FFS productions and utilization rate

APPENDIX XVI | VALUATION METHODOLOGIES

Deeper dive into the valuation methods

DISCOUNTED CASHFLOW

FCF	2019E	2020E	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E
OCF	434.6	616.5	687.2	712.5	737.3	782.9	835.7	872.0	913.8	947.0	979.5	1 013.2
ICF	241.7	266.3	289.8	308.6	330.4	332.4	353.3	377.6	392.0	402.8	415.3	426.2
Unlevered FCF	**192.9**	**350.2**	**397.4**	**403.9**	**406.9**	**450.5**	**482.5**	**494.3**	**521.7**	**544.2**	**564.2**	**587.0**
Terminal Value											**8 970.4**	
Discounted UFCF	**177.0**	**295.0**	**307.3**	**286.7**	**265.0**	**269.3**	**264.8**	**249.0**	**241.2**	**230.9**	**3 713.6**	

Canadian 5y T-Bond @March 31s, AAA rated
Raw Beta

Cost of Equity	
Rf	1.96%
Beta	0.771
MRP	10.11%
Re	**9.75%**

Average CAE's loan yield
Yield for M2025 Bonds
Yield for M2020 Bonds

Cost of Debt	
Loans	2.93%
Bond	4.06%
Bond	3.53%
Rd	**3.51%**

Equity as of end-18Q1

Capital Structure	
Equity	5 250.0
Net Debt	706.0
D/(D+E)	11.9%
E/(D+E)	88.1%
Effective tax rate	15%
WACC	**8.95%**

Input data: Bloomberg

← WACC

Perpetuity Growth →

EV	1.4%	1.9%	2.4%	2.9%	3.4%
7.95%	6 750.2	7 070.1	7 447.7	7 900.2	8 452.2
8.45%	6 297.7	6 558.6	6 862.6	7 221.5	7 651.6
8.95%	5 836.8	6 051.9	**6 299.9**	6 589.0	6 930.2
9.45%	5 434.4	5 613.6	5 818.1	6 054.0	6 328.8
9.95%	5 151.8	5 302.3	5 472.7	5 667.2	5 891.5

Perpetual growth	
CA weight	*59%*
CA Industry g	2.4%
D&S weight	*35%*
D&S Industry g	2.4%
HC weight	*6%*
HC Industry g	2.5%
Growth rate	**2.4%**

Perpetual growth rate assumed to be around 2.4%, with the Healthcare segment slightly above with 2.5%

VALUATION	Min	Valuation	Max
EV	**5 613.6**	**6 299.9**	**7 221.5**
- Net Debt	706.0	706.0	706.0
- Debt-like items	200.6	200.6	200.6
Equity	**4 707.0**	**5 393.3**	**6 314.9**

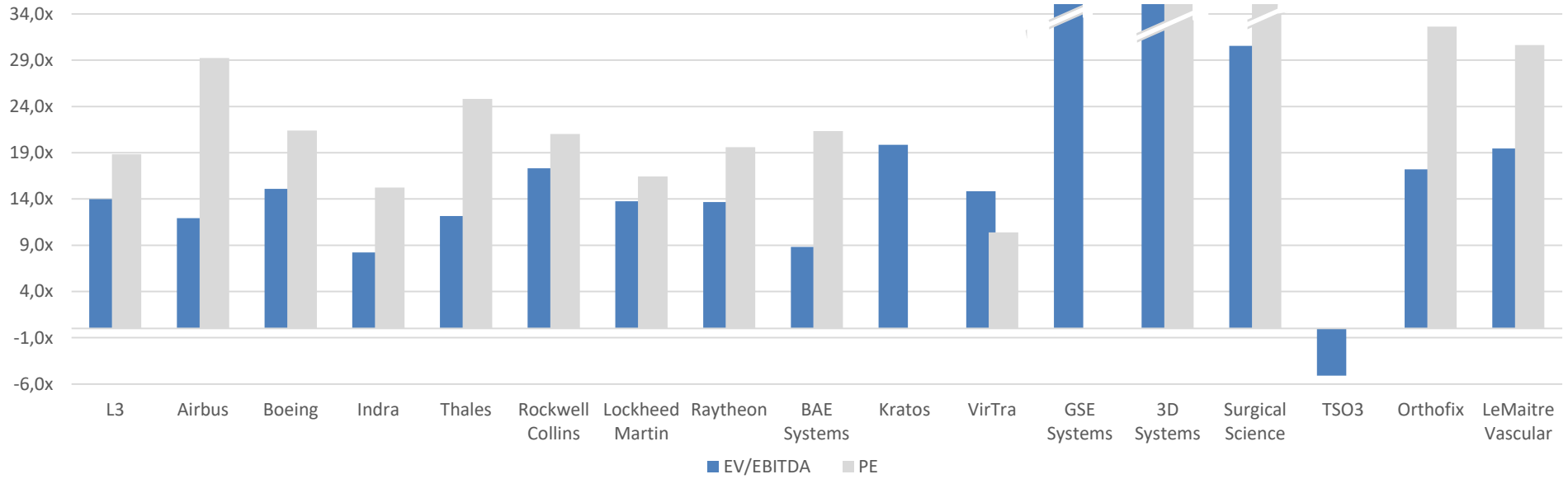
- Forecast assuming that the company is expected to continue its current operations and strategy, without the intervention of the PE fund
- A 10-year forecast horizon was used so as to have stable growing unlevered FCF before applying the Gordon Growth Model method for the Terminal Value
- The valuation range is obtained with a scenario analysis changing both the firm-wide cost of capital and the perpetuity growth
- A multiple-based Terminal Value was not considered given the large disparity to the GGM case

DCF CENTER VALUATION
9.1x EBITDA

APPENDIX XVI | VALUATION METHODOLOGIES

Deeper dive into the valuation methods

TRADING COMPS



Median EV/EBITDA
CA: 12.1x
D&S: 12.5x
HC: 18.1x

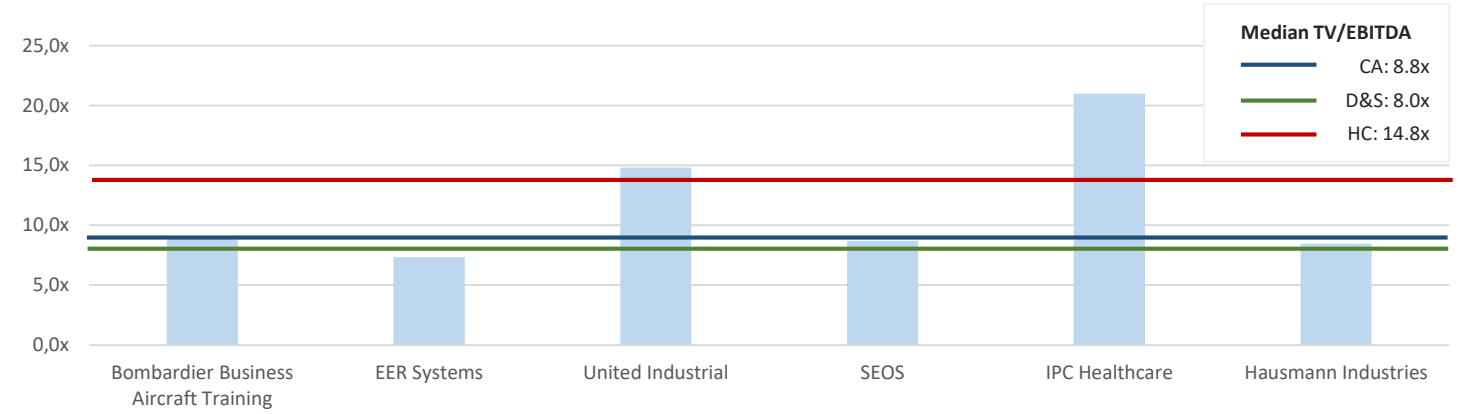
Median PE
CA: 19.5x
D&S: 18.1x
HC: 49.3x

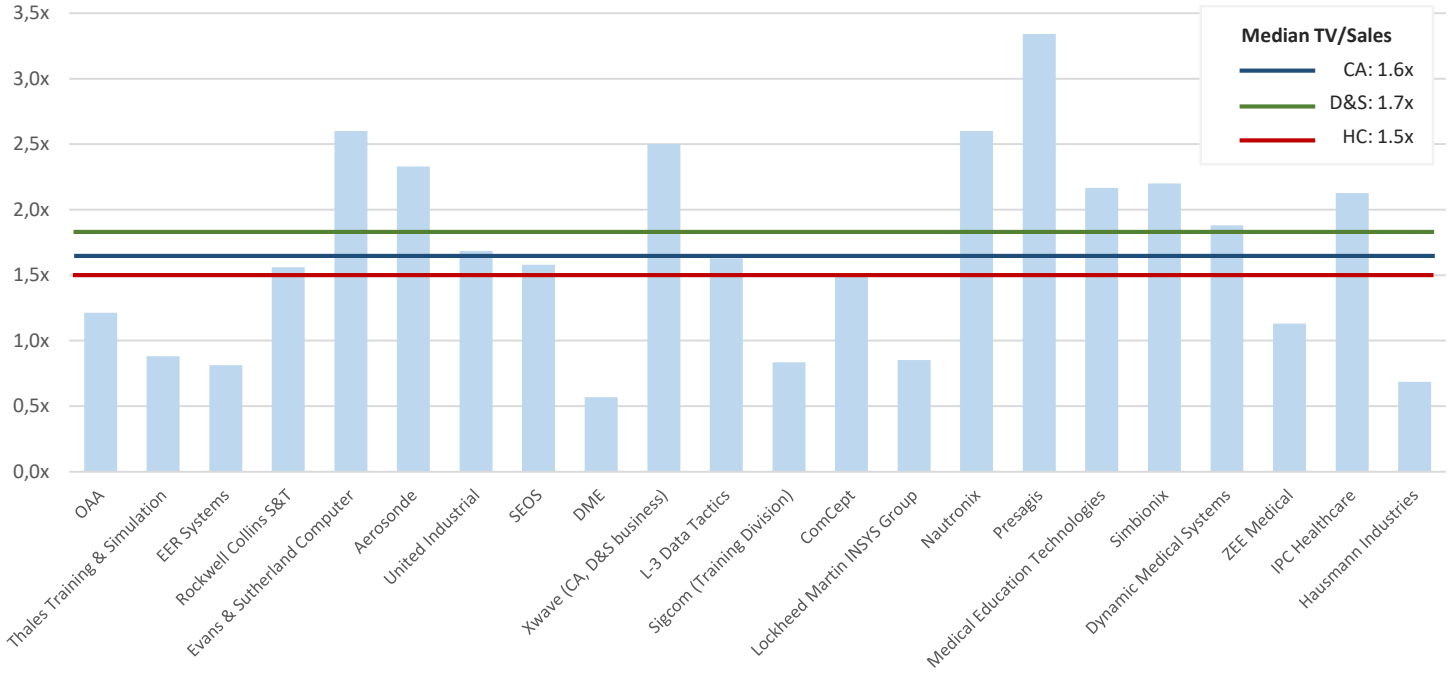
- A total number of 17 companies were considered and allocated per segment for a sum-of-the-parts valuation
- EV/EBITDA was the prime choice for the comp multiple as it does not consider the companies' own capital structure and is less prone to creative accounting practices (Bloomberg's own computation and, when available, analysts' 2019E consensus)
- PE was also tested to allow for more data points and was ultimately considered as it resulted in a similar valuation to that of EV/EBITDA and the other methodologies
- With an issue on the limited number of truly comparable companies, some *below-par* comps were taken into account. This was the case of, for example, some hand-picked MedTech companies in the HC segment as these are considered reasonable proxies when looking at the industry they operate in, the similar growth prospects, client base and other factors

APPENDIX XVI | VALUATION METHODOLOGIES

Deeper dive into the valuation methods

PRECEDENT TRANSACTIONS





- A dataset of 56 precedent transactions was first considered and then limited to 47 – the truest comparable deals – by excluding targets that were not perfectly operating in the industry, despite having been bought out to consolidate within the buyer's S&T business. This is the case, for instance, of general-software companies acquired so as to integrate the technology in the simulation business
- The deals then allocated towards the segment they overlap with
- Out of these transactions, a total of 23 and 7 showed information on the TV/Sales and TV/EBITDA multiples, respectively

- Looking at deal size over the years, both CA and D&S have maintained constant deal activity, whereas the HC segment seems to just recently begin consolidating itself via M&A
- The largest outliers by deal size are the acquisition of Sikorsky by Lockheed Martin in 2015 for a consideration of US$ 9.2b and Rockwell Collins' buyout of B/E Aerospace two years after for US$ 8.2b, both within the CA industry
- In the HC market, Team Health's acquisition of IPC Healthcare in 2015 totaled US$ 1.5b

- While the median TV/Sales across the three industries is relatively similar around the 1.6x mark, the TV/EBITDA multiple shows greater dispersion
- This result is unsurprising as most companies operating in the HC S&T market are in their infant stage (some still testing new technology or software) and still displaying lower margins on average
- This is also visible via the low considerations paid for HC companies over the years

Source: MergerMarket

APPENDIX XVII | INITIAL PUBLIC OFFERING DETAILED ANALYSIS

Looking back at comparable IPOs highlights the blueprint for the exit process in the stock market

PREVIOUS IPOs	Year	Exchange	Size (US$ m)	Size (% Val.)	Valuation (Mkt cap @ listing)	6m Return	Deal duration after announc. (months)	IB fees (US$m)	IB fees (% deal)
Orthofix International	1992	Nasdaq	36.0	29%	123.0	9.5%	2	2.5	7.0%
Lockheed Martin	1994	NYSE	202.3	20%	1 035.0	-9.8%	3	12.1	6.0%
GSE Systems	1995	Amex	24.2	43%	56.0	-5.4%	5	1.7	7.0%
L3 Technologies	1998	NYSE	151.8	26%	582.1	109.1%	4	10.6	7.0%
Airbus	1999	Paris Frankfurt	2 314.9	18%	13 046.9	15.8%	1	50.9	2.2%
Kratos	1999	Nasdaq	69.0	12%	585.4	199.6%	4	4.8	7.0%
TSO3	2001	Toronto	3.3	13%	25.3	15.8%	3	0.3	10.0%
LeMaitre Vascular	2006	Nasdaq	38.5	35%	110.4	-16.0%	7	2.7	7.0%
VirTra	2017	Nasdaq	10.0	15%	65.5	-8.7%	-	0.7	7.0%
Surgical Science Sweden	2017	FSE	8.0	41%	19.5	125.0%	2	-	-

Sources: Dealogic, Prospectus, Nasdaq

EXPECTED COSTS

Expected value of fees for a deal the size of CAE

Values in C$m	CAE	HC
Investment Bank	7% of deal size	
Legal	1.62	1.28
Auditing and Accounting	1.62	1.15
IPO Consultant / Coordination	1.76	1.08
Printing materials	0.68	0.54
Listing Fees	0.01	0.01

Sources: Dealogic, KPMG, PwC, Torys

- Most IPOs listed in their home country
- CAE as a whole is likely to list in the Toronto Stock Exchange
- In the case of an HC carve-out, **CAE Healthcare is to follow suit on a series of HC and/or tech-related companies listing on the American Nasdaq**

- Considering industry multiples and through-the-cycle analysis, CAE (or CAE HC) is expected to exit at a flat multiple
- Commonly **these companies issued around 25% of their equity at listing**, with HC companies selling on average a 30% stake of the company

- Looking back at past performances for reference, **comps have performed relatively well in the first 6 months** (the time previous investors are usually locked in)
- On average they have allowed for a 44% return (**HC 34%**)
- It is worth mentioning this is purely indicative as performance in deeply dependent on a series of factors and while CAE stock may appreciate, depressing market conditions can also pose an unsuccessful listing for the company

- On average, these deals last 3.5 months from announcement to settlement date
- However, there is preparation for the process than can last a couple of months before the information is public
- **Overall, CAE's listing is expected to last between 5-7 months**

- When looking at Investment Banks responsible for the comparable IPOs, there is no bank overrepresented
- However, **Goldman Sach concluded three deals and both Morgan Stanley and BNP Paribas conluded 2 each**, which might indicate expertise in the industry
- **CAE is also likely to choose relationship banks, namely Royal Bank of Canada or Scotia Bank**

APPENDIX XVIII | EXIT STRATEGY - TRADE SALE

Trade sale looks as a very attractive exit strategy with different strong potential acquirers on the table

EXTRA POTENTIAL ACQUIRER OF CA AND D&S SEGMENT

TEXTRON

- Textron is an American aerospace, defence, security and advanced technologies industrial conglomerate. It owns subsidiaries like Bell Helicopter, Cessna Aircraft company, and **Tru Simulation and Training**
- Market Cap: US$ 10.9b
- **Deal Rationale:** Textron could acquire CAE to **increase its market share** in the Civil and D&S segments. The company could also enjoy **revenue synergies** with the manufacturing of simulators and **diversify its portfolio** by providing *ab initio* courses

AIRBUS

- Airbus is an aerospace company that manufactures and sells **civil and military aerospace products**. It also operates in the **simulation training market** for both Civil and D&S segments
- Market Cap: US$ 72.3b
- **Deal Rationale:** Airbus already has a worldwide network of training centres. By acquiring CAE, Airbus could **expand** its network, **enjoy revenue synergies** when the creation of simulators of Airbus aircrafts, **decrease operational margins (CAE supplies simulators to Airbus)**, and **consolidate its web** of flight schools

COMPARABLE TRANSACTIONS

FlightSafety international / UIC United Industrial Corporation Limited

Year	1996	2007
Deal Size	$1.5bn	$950m

POTENTIAL ACQUIRERS OF D&S SEGMENT

LOCKHEED MARTIN

- Lockheed Martin is a global aerospace, **D&S**, and advanced technologies company. It provides world-class **simulation training in the D&S** segment
- Market Cap: US$ 84.0b
- **Deal Rationale:** Lockheed Martin would be able to **expand its business**, acquire **exceptional full-flight simulators**, **technology** and a **skilled workforce**. It could also enjoy **cost synergies** through the **integration of its centres** with CAE's centres

THALES

- Thales Group designs and builds electrical systems (**simulators** for example) and provides **tailored training services in the D&S** segment
- Market Cap: US$ 23.5b
- **Deal Rationale:** Thales could increase its **market share** in the overall market, enjoy **cost synergies** through **supply chain efficiencies** and **integration of centres** with CAE's centres

COMPARABLE TRANSACTIONS

Aerospace & Defense Group WESTAR A QinetiQ Company

Year 2004 Deal Size $130m



SOURCES

SOURCES

- 3D systems company website. Retrieved from https://www.3dsystems.com/industries/healthcare
- "Airbus launches ab initio Pilot Cadet Training Programme" (2018), Airbus Press Release, Retrieved from: https://www.airbus.com/newsroom/press-releases/en/2018/07/airbus-launches-ab-initio-pilot-cadet-training-programme-.html (September 2018)
- Arthur, Steve & Shi, Niki, "CAE Inc.: Assessing 2018 market share data and 5-year earnings and share price scenarios" (2018), Research Report, RBC Capital Markets
- "Asia-Pacific Training School Report 2016" (2016), Asian Sky Group
- ATP Flight School, Corporate website
- Bland & Smyth, "China buys up flying schools as pilot demand rises" (2018), Financial Times, retrieved from: https://www.ft.com/content/448b059e-4ea4-11e8-9471-a083af05aea7 (September 2018)
- "Boeing Forecasts Greatest Demand for Pilots, Technicians, Cabin Crew in Asia Pacific Region" (2018), Boeing Press Release, Retrieved from: http://investors.boeing.com/investors/investor-news/press-release-details/2018/Boeing-Forecasts-Greatest-Demand-for-Pilots-Technicians-Cabin-Crew-in-Asia-Pacific-Region/default.aspx (September 2018)
- Burke, Laura, "MPL vs. ATPL – The great debate" (2017), Aileron Group, Retrieved from: https://www.ailerongroup.co.uk/news/mpl-vs-atpl-the-great-debate (October 2018)
- CAE acquires METI, Healthy Simulation. Retrieved from https://www.healthysimulation.com/937/cae-acquires-meti/
- "CAE announces ab-initio pilot training and resourcing agreements with commercial airlines including IndiGo, CityJet and China's Schenzhen Airlines" (2016), CAE Press Release
- Santorelli, Leisha, "Boeing says Asia needs 240,000 pilots over next two decades" (2018), BBC News, Retrieved from: https://www.bbc.com/news/business-45330440 (September 2018)
- CAE buys medical tech company for US$130-million (2011) Financial Post. Retrieved from https://business.financialpost.com/uncategorized/cae-buys-medical-tech-company-for-us130-million
- "CAE buys Oxford Aviation for C$314 mln" (2012), Reuters, Retrieved from: https://www.reuters.com/article/cae/update-1-cae-buys-oxford-aviation-academy-for-c314-mln-idUSL4E8GGA4R20120516 (October 2018)
- CAE company website. Retrieved from www.cae.com
- Cae Executive Compensation Data retrieved from www.mornigstar.ca in December 2018
- CAE Healthcare Acquires Immersion Medical Simulation Product Lines and Licenses TouchSense Technology, (2010, March). Immersion. Retrieved from https://ir.immersion.com/news-releases/news-release-details/cae-healthcare-acquires-immersion-medical-simulation-product

SOURCES

- CAE Healthcare acquisitions allows for imaging training services (2010, June). Health Imaging. Retrieved from https://www.healthimaging.com/topics/diagnostic-imaging/cae-healthcare-acquisitions-allows-imaging-training-services
- CAE Inc. (2018). Financial report for FY2018 of CAE Inc., Financial report for FY2017 of CAE Inc., Financial report for FY2016 of CAE Inc., Financial report for FY2015 of CAE Inc., Financial report for FY2014 of CAE Inc., Financial report for FY2013 of CAE Inc., Financial report for FY2012 of CAE Inc., Financial report for FY2011 of CAE Inc. Retrieved from https://www.cae.com/investors/financial-reports/
- CAE Inc. (2018). Annual Information form FY2018 for CAE Inc., Annual Information form FY2017 for CAE Inc., Annual Information form FY2016 for CAE Inc., Annual Information form FY2015 for CAE Inc., Annual Information form FY2014 for CAE Inc., Annual Information form FY2013 for CAE Inc.,
- CAE Inc., (2018), 2019 first quarter investor presentation, 2018 second quarter investor presentation, Retrieved from: https://www.cae.com/investors (October 2018)
- CAE Inc., (2018), 2019 first quarter press release, 2018 fourth quarter press release, Retrieved from: https://www.cae.com/investors (October 2018)
- CAE Inc., (2018), 2019 second quarter financial report of CAE Inc., Retrieved from: https://www.cae.com/investors (November 2018)
- CAE Inc., (2018), 2019 second quarter press release, Retrieved from: https://www.cae.com/investors (November 2018)
- "CAE signs four major European training deals", (2018), Wings Magazine, Retrieved from: https://www.wingsmagazine.com/news/cae-europe-15962 (November 2018)
- "CAE to invest C$1 billion in professional pilot, aircrew and healthcare training" (2018), The Journal for Civil Aviation Training, Retrieved from: https://www.civilaviation.training/pilot/cae-invests-pilot-aircrew-healthcare-training/ (October 2018)
- "Canadian company soars in training simulator market", The Canadian Trade Commissioner, (2018), Retrieved from: https://tradecommissioner.gc.ca/canadexport/0002526.aspx?lang=eng (September 2018)
- Capt Schroeder & Capt. Harms, "MPL represents a state-of-the-art ab initio airline pilot training programme" (2007), ICAO journal, Volume 62, Issue 3 2007
- Chamoun, Fadi & al., "Added Capabilities in Defense Segment Position CAE for Sustained Growth" (2018), BMO Capital Markets
- Chamoun, Fadi & al., "CAE acquires AOCE; Strategically Good Fit & Slightly Accretive" (2018), BMO Capital Markets
- Chamoun, Fadi & Lung, Fransisco, "CAE: Attractive Valuation in Light of Sizeable Opportunity in Civil Training" (2011), Research Report, BMO Capital Markets
- Chiang, Kevin & al., "Strong Top-line Growth Environment" (2018), CIBC World Markets
- Chiang, Kevin & al., "Touring Dohan Facility" (2018), CIBC World Markets
- Cision PR Newswire, (2014), "The Civil Aviation Flight Simulation and Simulation Training Market 2013-2023", Retrieved from: https://www.prnewswire.com/news-releases/the-civil-aviation-flight-simulation-and-simulation-training-market-2013-2023-260762631.html?fbclid=IwAR2Fo0-wJ2AayLRQ6jyANvxyLgEbT54-IN5jX77oek-Uxxs37g7CP-EQPGE (September 2018)
- "Civil Full Flight Simulator Census", (2017), CAT Magazine, Vol. 28, Issue 4/2017, Retrieved from: https://www.civilaviation.training/ (September 2018)
- Companies Data, retrieved from Nova SBE's Bloomberg Terminal
- Companies Data, retrieved from Orbis Data Base

SOURCES

- Cox, Bill, “ATP: All In With Archer” (2017), Plane and Pilot, Retrieved from: https://www.planeandpilotmag.com/article/atp-all-in-with-archer/#.XC-4D1z7TIW (November 2018
- Equity Capital Markets Analytics platform, Dealogic, Retrieved from: http://gib.dealogic.com/ (November 2018)
- European Aeronautic Defence and Space Company, (2000), Initial Public Offering Prospectus, Retrieved from: https://www.airbus.com/content/dam/corporate-topics/financial-and-company-information/eads-ipo-en.pdf (December 2018)
- “Faciliting Safety Culture with Simulation Science, (2017), Medical Training Magazine, Vol. 6, Issue 2/2017, Retrieved from: https://medicalsimulation.training/
- Fafard, Antoine, (2018), “ANALYSIS: Civil simulator fleet nears 1,300 mark”, FlightGlobal, Retrieved from: https://www.flightglobal.com/news/articles/analysis-civil-simulator-fleet-nears-1300-mark-449266/ (September 2018)
- Fafarde, Antoine, (2017), “ANALYSIS: CAE, L-3 Link continue to lead military simulators market”, FlightGlobal, Retrieved from: https://www.flightglobal.com/news/articles/analysis-cae-l-3-link-continue-to-lead-military-si-443377/ (October 2018)
- Fafard, Antoine, (2015), “Civil Simulator Census: who owns what devices and where?”, FlightGlobal, Retrieved from: https://www.flightglobal.com/news/articles/civil-simulator-census-who-owns-what-devices-and-wh-412421/ (September 2018)
- FlightGlobal, (2018), “Civil Simulator Census 2018”, Retrieved from: https://www.flightglobal.com/asset/24074 (October 2018)
- FlightGlobal, (2016), “Civil Simulator Census 2016”, Retrieved from: https://www.flightglobal.com/asset/2810 (October 2018)
- FlightGlobal, (2016), “Military Simulator Census 2016”, Retrieved from: https://www.flightglobal.com/asset/14208 (October 2018)
- FlightGlobal, (2015), “Military Simulator Census 2015”, Retrieved from: https://www.flightglobal.com/asset/6136 (October 2018)
- “Flying Schools Industry in the US” (2018), IBIS World, Retrieved from: https://www.ibisworld.com/industry-trends/specialized-market-research-reports/consumer-goods-services/education-providers/flying-schools.html (November 2018)
- Garcia, Keziah, “AAG Explains Why MPL Training is the Future for Commercial Aviation” (2015), Alpha Aviation Group
- Global Health Care Outlook Report (2018), Deloitte
- “Global Market Forecast 2018-2037: Global Networks, Global Citizen”, Airbus Group
- Global Patient Simulator Market 2018 (2018, November). Retrieved from https://thefuturegadgets.com/96649/global-patient-simulator-market-2018-laerdal-medical-cae-healthcare-gaumard-scientific-3b-scientific-simulaids-2/
- Goh, Brenda, “Airlines, flight schools try to lure pilots with cheaper – or free – training” (2018), Reuters, Retrieved from: https://www.reuters.com/article/us-singapore-airshow-pilots/airlines-flight-schools-try-to-lure-pilots-with-cheaper-or-free-training-idUSKBN1FT0JJ (October 2018)
- Hatch, Patrick, “Airlines say they can't get enough pilots. But pilots don't agree” (2018), The Sydney Morning Herald, Retrieved from: https://www.smh.com.au/business/companies/captains-call-airlines-say-they-can-t-get-enough-pilots-20180525-p4zhdz.html (September 2018)

SOURCES

- Healthcare/Medical Simulation Market – Global Forecast (2017-2022), (2017, May) Meticulous Research. Retrieved from https://www.meticulousresearch.com/product/healthcare-medical-simulation-market-global-outlook-forecast-to-2022/
- Healthcare/Medical Simulation Market - North America Accounted for the Largest Share of the Medical Simulations Market in 2016, Followed by Europe and Asia Pacific (2018, November). SBWire. Retrieved from http://www.sbwire.com/press-releases/healthcare-medical-simulation-/release-1086416.htm?utm_source=djournal&utm_medium=feed&utm_campaign=distribution
- Healthcare/Medical Simulation Market Worth 2.575.4 Million USD by 2022 (2018) Markets and Markets. Retrieved from https://www.marketsandmarkets.com/PressReleases/healthcare-medical-simulation.asp
- Home Healthcare Market Analysis Report By Component (2018, August. Retrieved from https://www.grandviewresearch.com/industry-analysis/home-healthcare-industry
- "IN FOCUS: Is there room for so many players in civil simulator manufacturing" (2013), FlightGlobal, Retrieved from: https://www.flightglobal.com/news/articles/in-focus-is-there-room-for-so-many-players-in-civil-387883/ (September 2018)
- Johannesen, Alex, (2018), "Why CAE Inc (TSE:CAE) Is An Attractive Stock On Right Now", SimplyWallst, Retrieved from: https://simplywall.st/stocks/ca/capital-goods/tsx-cae/cae-shares/news/why-cae-inc-tsecae-is-an-attractive-stock-on-right-now/ (October 2018)
- KPMG, (2015), "A Guide to Going Public", Retrieved from: https://assets.kpmg/content/dam/kpmg/pdf/2015/06/KPMG-A-Guide-to-Going-Public-Interactive.pdf (December 2018)
- Kruzins & McFarlane, "Australian Defense Simulation – Status", NATO
- Laboda, Amy, "The future of ab initio professional flight training" (2018), Aviation International News
- Laerdal company website. Retrieved from www.laerdal.com
- Lineberger & Hussain, "2018 Global aerospace and defense industry outlook" (2018), Deloitte Touche Tohmatsu Ltd
- List of Siemens Healthineers's 9 Acquisitions, Crunchbase. Retrieved from https://www.crunchbase.com/search/acquisitions/field/organizations/num_acquisitions/siemens-healthcare in December 2018Medical Simulation Market by Product & Service, Fidelity, and End User - Global Opportunity Analysis and Industry Forecast, 2017-2023. Research and Markets. Retrieved from https://www.researchandmarkets.com/research/kc8gj2/medical?w=4
- "LVC Today: Embracing Virtual Training on a Global Scale" (2018), Modern Military Training, Retrieved from: https://modernmilitarytraining.com/lvc-today/lvc-today-embracing-virtual-training-global-scale/ (September 2018)
- "Looking to the Future in Asian Ab initio Pilot Training" (2014), The Journal for Civil Aviation Training, Retrieved from: https://www.civilaviation.training/pilot/looking-future-asian-ab-initio-pilot-training/ (September 2018)
- Medical Simulation Market Growth Analysis (2018, April), Mordor Intelligence. Retrieved from https://www.mordorintelligence.com/industry-reports/medical-simulation-market
- Mentice company website. Retrieved from https://www.mentice.com

SOURCES

- MergerMarket platform, Acuris, Retrieved from: https://www.mergermarket.com/homepage (November 2018)
- "Military Flight Simulators 2017", (2017), MS&T Magazine, Vol. 34, Issue 4/2017, Retrieved from: https://militarysimulation.training/ (September 2018)
- Military Simulation & Training Magazine, (2015), "Military Flight Simulators 2015", Halldale Group, Retrieved from: http://www.bluetoad.com/publication/?i=266341 (November 2018)
- MordorIntelligence, (2018), "Civil Aviation Flight Training and Simulation Market - Segmented by Aircraft Type and Geography - Growth, Trends And Forecasts (2019 - 2024)", Retrieved from: https://www.mordorintelligence.com/industry-reports/global-civil-aviation-flight-training-and-simulation-market-industry (September 2018)
- "Multi-Crew Pilot Licence (MPL)", Australian Government, Civil Aviation Safety Authority
- "NINE CITIES MAKE PROPOSED QANTAS PILOT ACADEMY SHORTLIST" (2018), Australian Aviation, Retrieved from: http://australianaviation.com.au/2018/06/nine-cities-make-proposed-qantas-pilot-academy-shortlist/ (October 2018)
- Morrison, Murdo, (2018), "ANALYSIS: Civil simulator manufacturer strategies compared", FlightGlobal, Retrieved from: https://www.flightglobal.com/news/articles/analysis-civil-simulator-manufacturer-strategies-co-449555/ (September 2018)
- Morrison, Murdo, (2018), "FARNBOROUGH: Why CAE's shift to services proved smart", FlightGlobal, Retrieved from: https://www.flightglobal.com/news/articles/farnborough-why-caes-shift-to-services-proved-smar-450032/ (October 2018)
- Murray, Chris, "CAE Inc.: Leading the Simulation and Training Market in an Increasingly Contested Space" (2015), Initiating Coverage, AltaCorp Capital
- Nasdaq, (2017), VirTra Inc. listing, Retrieved from: https://www.nasdaq.com/markets/ipos/company/virtra-inc-69755-84711 (December 2018)
- Orbis, (2018), "Global Civil Aerospace Simulation and Training Market Outlook 2018- Advanced Technologies, Trends, Growth Opportunities and Forecast Analysis 2023", Reuters, Retrieved from: https://www.reuters.com/brandfeatures/venture-capital/article?id=36606 (September 2018)
- Patria Corporate website, https://www.patriapilottraining.fi/
- "Pilot & Technician Outlook 2018-2037" (2018), The Boeing Company
- PilotCareerNews, (2018), "CAE's digital transformation to make Canada world leader in training", Retrieved from: https://www.pilotcareernews.com/caes-digital-transformation-to-make-canada-world-leader-in-training/ (October 2018)
- PilotCareerNews, (2018), "CAE expands business jet training with new Global simulators", Retrieved from: https://www.pilotcareernews.com/cae-expands-business-jet-training-with-new-global-simulators/ (October 2018)
- PilotCareerNews, (2018), "CAE launches Rise pilot training system with AirAsia", Retrieved from: https://www.pilotcareernews.com/cae-launches-rise-pilot-training-system-with-airasia/ (October 2018)
- PilotCareerNews, (2018), "CAE to train easyJet pilots in £100m deal", Retrieved from: https://www.pilotcareernews.com/cae-to-train-all-easyjet-pilots-in-100m-deal/ (November 2018)

SOURCES

- PilotCareerNews, (2017), “First CAE-trained MPL AirAsia cadets now flying as Captains”, Retrieved from: https://www.pilotcareernews.com/first-cae-trained-mpl-airasia-cadets-now-flying-as-captains/ (October 2018)
- PilotCareerNews, (2018), “Oman to open pilot training academy with CAE’s help”, Retrieved from: https://www.pilotcareernews.com/oman-to-open-pilot-training-academy-with-caes-help/ (October 2018)
- PricewaterhouseCoopers, (2017), “Considering an IPO to fuel your company’s future? Insight into the costs of going public and being public”, Retrieved from: https://www.pwc.com/us/en/deals/publications/assets/cost-of-an-ipo.pdf (December 2018)
- ResearchandMarkets, (2018), “Global Civil Aerospace Simulation and Training Market Analysis, Trends, Forecast & Analysis 2018-2023, With an Estimated CAGR of 3.9%”, Yahoo, Retrieved from: https://finance.yahoo.com/news/global-civil-aerospace-simulation-training-114200242.html (September 2018)
- Siemens Healthineers company website. Retrieved from https://www.healthcare.siemens.com
- Sim-X, Corporate website, https://sim-x.net/ (September 2018)
- Simulaids Inc. company website. Retrieved from https://www.simulaids.com/
- Simulation Training in Europe (2019, July), Healthcare in Europe. Retrieved from https://healthcare-in-europe.com/en/news/simulation-training-in-europe.html
- Singapore Flying College, Corporate Website
- The Canadian Trade Commissioner, (2018), “Canadian company soars in training simulator market”, Retrieved from: https://tradecommissioner.gc.ca/canadexport/0002526.aspx?lang=eng (September 2018)
- The European healthcare market is changing (2018, April), Retrieved from https://capio.com/en/about/healthcare-market/
- The Journal For Civil Aviation Training, (2017), “World Civil Full Flight Simulator Census”, Halldale Group, Retrieved from: https://www.bluetoad.com/publication/?i=433452 (November 2018)
- The Training Course”, European Flight Academy, Retrieved from: https://www.european-flight-academy.com/en/your-flying_future/training_course (November 2018)
- Thomson, Sarah, “Flight school hires Canterbury Partners to test buyer appetite’ (2018), The Australian Financial Review, Retrieved from: https://www.afr.com/street-talk/flight-school-hires-canterbury-partners-to-test-buyer-appetite-20180509-h0ztte?fbclid=IwAR2R8Dgdb9GiiP3i4LK9gWX5lWmd_o_wMT1JNg2GCNrrDteXPnWNItBjzhE (November 2018)
- Torys LLP, “The Benefits and Costs of Going Public”, Torys, Retrieved from: https://www.torys.com/pages/trends/the-benefits-and-costs-of-going-public (December 2018)
- “Training System Integrator Brochure” (2018), CAE Inc
- Virtamed company website. Retrieved from https://www.virtamed.com
- VisionGain, (2016), “Civil Aviation Flight Simulation & Simulation Training Market Report 2016-2026”, Retrieved from: https://www.visiongain.com/report/civil-aviation-flight-simulation-simulation-training-market-report-2016-2026/ (September 2018)
- Waldron, Greg, “East meets the West”, FlightGlobal, Retrieved from: https://www.flightglobal.com/sponsored/recruitment/editorial/asia/ (September 2018)
- Willemse, Michael & Galison, David, “CAE Inc.: Solid Growth Story With Too Many Options To Ignore” (2010), Initiating Coverage, CIBC World Markets