American Aires Inc. - Valuation of Intellectual Property

Estimate Valuation Report

Valuation Date: January 1, 2017

Report Date: September 19, 2019

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Mr. Robert Suttie
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September 19, 2019

To Mr. Suttie:

ESTIMATE VALUATION REPORT

We enclose our Estimate Valuation Report providing our opinion of the Fair Value of the intellectual property[1] of American Aires Inc. as at January 1, 2017.

Our report and supporting calculations detail the valuation methods, considerations, analyses, and conclusions that underlie our valuation. We believe our analysis must be considered as a whole. Selecting portions of our analysis or the factors we considered, without considering all factors and analysis together, could create a misleading view of the process underlying the valuation conclusions. The preparation of a valuation is a complex process and is not necessarily susceptible to partial analysis or summary description. Any attempt to do so could lead to undue emphasis on any particular factor or analysis.

We thank you for the opportunity to provide our business valuation services and will be pleased to discuss the foregoing with you, at your convenience.

Yours sincerely,

Grant Thornton LLP

Grant Thornton LLP

If you have any questions in respect of this report or its contents, please contact:

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1 See the Company Overview section for details of the intellectual property being valued.

Contents

Section 1

Introduction

Section 1: Introduction

Terms of Reference

1.01 As outlined in our engagement letter, dated August 10, 2018, American Aires Inc. ("you" or the "Company") engaged Grant Thornton LLP to prepare an independent Estimate Valuation Report concluding as to the Fair Value ("FV") of the "Company's intellectual property (the "IP"), as at January 1, 2017 (the "Valuation Date"), for financial reporting purposes.

1.02 As at the Valuation Date, we understand the IP was transferred (the "IP Transfer") into the Company by Dimitry Serov and Igor Serov (the "Founders"), who had, up to that date, personally owned the IP; although, we understand the IP had been used by the Company since its inception in 2012.

Restrictions

1.03 You have agreed you will use our valuation analysis only for the purpose stated above. No other use is intended or permitted without the prior written consent of Grant Thornton LLP.

1.04 We reserve the right, but are under no obligation, to review calculations included in or referred to in this report and, if we consider it necessary, to revise our estimate of FV in light of any information existing at the Valuation Date that subsequently becomes known to us following the date of our report.

1.05 Our valuation analysis views the IP on a "stand-alone" basis. That is, our conclusion is based upon the IP's projected financial performance and in consideration of the rates of return required by investors, given economic and business conditions existing at the Valuation Date. Potential purchasers, who perceive post-acquisition net economic value (e.g., higher earnings due to economies of scale or elimination of a competitor) through acquiring the Company's IP, may be willing to pay a higher price. Such prices, if available, can only be accurately quantified in an actual negotiation.

1.06 Our estimate of FV in a notional market must be differentiated from the concept of price. Actual transaction prices for a particular business or asset can vary due to such things as differing negotiating strengths, unequal motivation to transact, and the purchase consideration being other than cash. As a result, the price at which a sale of the asset or business might take place may be higher or lower than the notional FV estimated herein.

1.07 Therefore, while our conclusion is suitable for notional valuation (e.g., financial reporting) purposes, the asset values determined in this report may not be an appropriate asking price if the IP was actually exposed to the market for sale.

Currency

1.08 All monetary amounts in this report and the accompanying schedules are in Canadian dollars ("CAD" or "$"), unless otherwise noted.

Section 2

Valuation Conclusion

Section 2: Valuation Conclusion

Fair Value Conclusion

2.01 Based on the scope of our review and subject to the assumptions, restrictions and qualifications noted herein, the estimated FV of the IP transferred to the Company as at the Valuation Date is in a range from $1,087,000 to $1,394,000. If asked to be more specific, we would select the midpoint of our range or $1,233,000.

Section 3

Key Definitions

Section 3: Key Definitions

Valuation Report

3.01 The Canadian Institute of Chartered Business Valuators ("CICBV") Professional Standard 110 ("CICBV Standard 110") defines a valuation report as "any written communication containing a conclusion as to the value of shares, assets or an interest in a business, prepared by a Valuator acting independently."

3.02 Under the CICBV's professional standards, the report type being issued is distinguished by the scope of review, amount of disclosure, and the level of assurance provided in the conclusion.

3.03 Specifically, CICBV Standard 110 defines three types of valuation report as follows:

> *A Comprehensive Valuation Report contains a conclusion as to the value of shares, assets or an interest in a business that is based on a comprehensive review and analysis of the business, its industry and all other relevant factors, adequately corroborated and generally set out in a detailed valuation report.*
>
> *An Estimate Valuation Report contains a conclusion as to the value of shares, assets or an interest in a business that is based on limited review, analysis and corroboration of relevant information and generally set out in a less detailed valuation report.*
>
> *A Calculation Valuation Report contains a conclusion as to the value of shares, assets or an interest in a business that is based on minimal review and analysis and little or no corroboration of relevant information, and generally set out in a brief valuation report.*

3.04 We have been requested to prepare an Estimate Valuation Report as to the FV of the Company's IP.

Definition of Value

3.05 As well, we have been guided by the definition of FV under IFRS 13, *Fair Value Measurement*:

> *The price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date.*

3.06 FV is considered a market-based measurement, as opposed to an entity-specific measurement. Underlying the definition of FV is a presumption that FV reflects an exit price received by a market participant in an orderly transaction. Therefore, FV is not the amount a Market Participant would receive or pay in a forced transaction, involuntary liquidation, or distress sale.

3.07 The objective of a FV measurement is to estimate a transaction price for the subject asset, liability, or equity instrument. The transaction should be determined from the perspective of a market participant who owns the asset or owes the liability. Therefore, the FV measurement should incorporate the same assumptions a market participant would use to price the asset or liability, including the market participant's assessment of risk. In addition, the transaction price should reflect an orderly transaction between market participants and the market conditions prevailing at the measurement date.

3.08 Fair Value as defined above may or may not equal the purchase or sale price in an actual open market transaction. There may exist in the open market special interest or strategic purchasers who may be willing to pay a price in excess of FV because they can, or believe they can, enjoy post-acquisition synergies, economies of scale or strategic advantages by combining the acquired business interest or asset with their own business. Such synergies, economies of scale or strategic advantages are referred to as net economic value added.

Section 3: Key Definitions

3.09 The quantification of the premiums such purchasers may pay, if any, is difficult, if not impossible, to determine without identifying specific purchasers or exposing the Company's IP for sale in the open market. Therefore, we have provided an estimate of the FV of the Company’s IP on a “stand-alone” basis without reference to the prices that might be paid by purchasers who perceive post-acquisition net economic value added.

A.01 A more detailed list of terminology used in our report is located in Appendix C.

Section 4

Scope of Review

Section 4: Scope of Review

Scope

4.01 We have prepared an Estimate Valuation Report that reflects the intended purpose and use of the report, as well as the limitations regarding the availability of certain information, as discussed below.

4.02 We have not been engaged to express our comprehensive opinion of the FV of the Company's IP. Accordingly, the estimate of value contained in this report and the attached supporting schedules do not constitute our comprehensive opinion of the FV of the Company's IP. Rather, they are intended to provide you with an estimate of value for the purpose outlined under the section titled Purpose.

4.03 If we had been engaged to express our comprehensive opinion of the FV of the Company's IP, additional investigation and procedures would have been undertaken, and our conclusions may have differed from those contained in this report.

4.04 We provide this report for your use only. We strongly advise that third parties, potential investors, lenders, and others seek out independent valuation, corporate finance, accounting, and income tax advice.

Limitations

4.05 We have relied upon representations and financial information provided by Robert Suttie and Dimitry Serov ("Management"). We have not verified Management's representations nor have we verified information contained in the financial information provided by Management.

Documentation

4.06 In completing our report, we reviewed and relied on the following:

a) Documents as listed in Appendix B.

b) Discussions with Management.

4.07 We discussed with Management the past and future operations of the Company, the risks around attaining forecast revenue levels, and the Company's competitive position and opportunities for growth. In keeping with our terms of reference, we completed limited review, analysis, and corroboration of this information provided to us.

Section 5

Company Overview

Section 5: Company Overview

History

5.01 The Company was founded on May 15, 2012 for the purpose of the development, production, and sale of technologies that minimize the harmful effects of, and control the electromagnetic fields that are emitted by, modern electric devices.

5.02 The Aires Human Genome Research Foundation ("Aires Research"), a non-profit foundation based and governed pursuant to the laws of the Russian Federation, was founded by Igor Serov in 1998 to conduct research in various scientific areas, including controlling the harmful effects of electromagnetic radiation ("EMR") emissions. The core technology used in the Company's products was originally developed, as part of a 1999 Russian Military tender, by Aires Research; it was put in place to reduce the harmful effects of EMR on officers serving in ground-based air-defense radar stations.

5.03 Beginning in 1999, the Aires Research team, consisting of Russian biologists and scientists, began developing the original EMR protection product. However, the IP itself was owned personally by Dimitry Serov and Igor Serov.

5.04 In 2012, the Founders established the Company to continue to develop the technology and to bring it to market. The Company immediately began completing late-stage research and development, creating the first set of consumer-oriented prototypes, and product sales commenced in FY13.

5.05 As at the Valuation Date, Dimitry Serov was the only employee of the Company. The Company engages Aires Research to perform all required technological research and development, and uses independent labs to test their products. In addition, the Company uses third party manufacturing facilities to produce their products.

Corporate Structure

5.06 As at the Valuation Date, the Company was fully owned by the Founders and they had each given informal verbal consent for the Company to use the IP as necessary to conduct its business. Up to the Valuation Date, the Company used the IP as if it directly owned the IP; however, it remained personally owned by the Founders until the Valuation Date.

The IP Transfer

5.07 In order to formalize the control and management of the Company's IP, on the Valuation Date, the IP was transferred from the Founders to the Company, in exchange for the issuance of common shares of the Company.

5.08 Specifically, we understand the Company entered into intellectual property assignment agreements (the "Transfer Agreements") with each of the Founders, whereby they transferred their proprietary rights to the IP to the Company (the "IP Transfer"). More specifically, at the Valuation Date, the Founders transferred, among other things, any and all trademarks, patents, proprietary rights, and know-how related to products or devices sold under the trade names of: Aires Black Crystal, Aires Shield, Aires Shield Extreme, Aires Defender, Aires Defender Automotive, and Aires Defender Infinity.

5.09 In consideration for the transfer of the Dimitry Serov's share of the IP, the Company issued 26,999,940 common shares to Dimitry Serov, at a stated value of $0.10 per share.

5.10 In consideration for the transfer of Igor Serov's share of the IP and the extinguishment of approximately $223,000 of shareholder loans, the Company issued 17,999,960 common shares to Igor Serov, at a stated value of $0.10 per share.

Section 5: Company Overview

5.11 The total consideration for the IP Transfer and the forgiveness of shareholder loans was approximately $4.5 million, of which approximately $4.28 million was related to the IP transferred.

Product Overview

5.12 At the Valuation Date, the Company has three product categories, each with one or more individual products (together, the "Aires Products"):

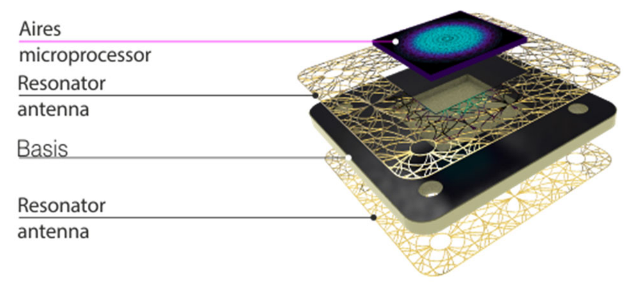
Category	Products
Device Protection	• Aires Black Crystal • Aires Shield • Aires Shield Extreme
Personal Protection	• Aires Defender • Aires Defender Infinity
Area Protection	• Aires Defender Automotive

5.13 The Company also has additional products in the development phase.

5.14 The technology used in each of the above products is the same:

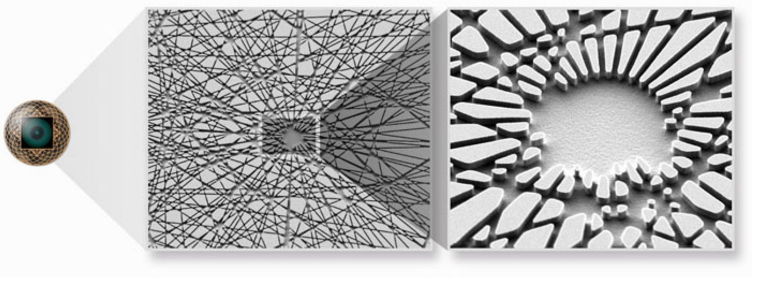
a) A resonator antenna captures electromagnetic impulses from the attached/nearby electronic device(s) and when sufficient charge is accumulated, the charge is reallocated onto the microprocessor.

Figure 1 Image of the component layers of an Aires Black Crystal unit



b) A surface wave is generated by the charge and the microprocessor's slot matrix creates a three-dimensional field structure, consisting of regularly alternating maximum and minimum field gradients.

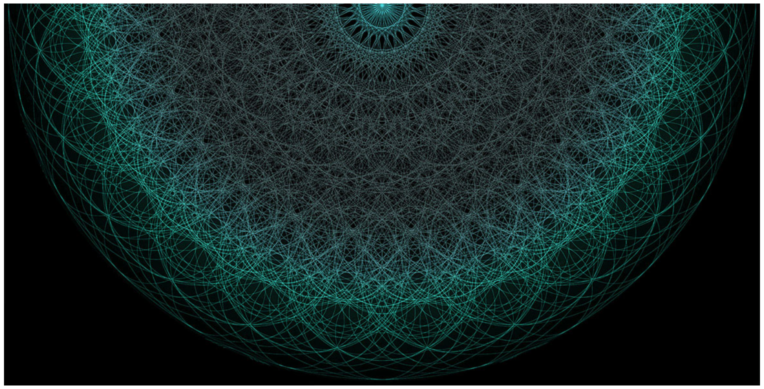
Figure 2 Photo of the Aires Microprocessor at extreme magnification



c) This three-dimensional field structure (a hologram) interacts with external radiation, modifies it by forward and inverse Fourier conversion, and harmonizes it with the body's own radiation, thus preventing conflict between external radiation and radiation of biological cells.

Section 5: Company Overview

Figure 3 Image of the circular diffraction lattice

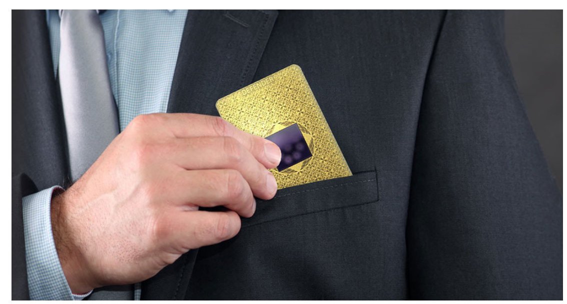


5.15 The Device Protection units have a manufacturer's recommended selling price ("MSRP") of USD 60 to USD 75; however, the Company regularly discounts the prices to USD 41 to USD 50. These units are designed to minimize electromagnetic anomalies to reduce the effects of EMR emitted by electronic devices such as: small handheld data transmitting electronic devices (e.g., cell phones, cordless phones, Bluetooth earpieces, Bluetooth headsets) and large data-transmitting electronic devices (e.g., computers, laptops, monitors, Smart TVs, Smart Meters, Wi-Fi Routers). These units are approximately the size of a nickel or a quarter and are generally placed on the body of the device via an adhesive backing.

Figure 4 Image of an Aires Shield on a cell phone

5.16 The Personal Protection units have a MSRP of USD 230 to USD 310; however, the Company regularly has sales, which drop the price to USD 160 to USD 215. These are designed to minimize electromagnetic anomalies to reduce the effects of EMR from electromagnetic background radiation, generated by numerous radiation sources such as: office and household appliances, electrical wires, wireless communication, TV antenna and similar large products. These units approximately the size of a credit card and are typically carried by an individual, inserted into a wallet or a pocket.

Figure 5 Image of an Aires Defender being placed in a pocket



5.17 The Aires Defender Automotive units have a MSRP of USD 360; however, the Company regularly has sales, which drop the price to USD 250. These units are designed to provide universal protection from

Section 5: Company Overview

EMR pollution from widely spread devices found in and around a typical automobile. This unit may also be used for area protection.

Figure 6 Image of an Aires Defender Automotive adhered to a vehicle windshield

Intellectual Property Overview

5.18 We understand the Company had intellectual property in the form of know-how, proprietary rights, patents, and trademarks.

Know-How & Proprietary Rights

5.19 We understand the Company's know-how and proprietary rights to the technology included in the design of the Aires Products allowed them to go to market as premium providers of EMR protection devices.

Patents

5.20 As at the Valuation Date, the Company had been granted three design patents (two in Russia and one in Canada) and had one design patent pending (in the United States). The first of the expiration dates of these patents is in 2022. We understand the Company did not have any utility patents.

5.21 In addition, as at the Valuation Date, Igor Serov had been granted seven invention and design patents by the Russian Federation. The first expiration of these patents will occur in 2024. These patents were effectively transferred to the Company as part of the IP Transfer. We understand these are equivalent to Canadian design patents.

5.22 We understand additional design patent applications, in Canada and in other regions, were contemplated at the Valuation Date, but had not yet been filed.

5.23 While none of the patents held by the Company were utility patents, we understand the Company marketed their products by highlighting the patents they did hold. This marketing method increased the credibility of the Company in the eyes of consumers, and thus supported these patents having value to the Company, as they resulted in increased sales.

Trademarks

5.24 As at the Valuation Date, the Company had not yet registered its trademarks; this occurred in May 2018, subsequent to the Valuation Date. Our valuation did not consider the value of these trademarks, as they did not exist as at the Valuation Date.

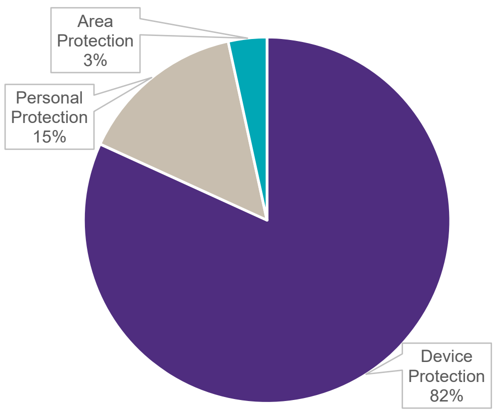
Customer Overview

5.25 The Company's target market is comprised of global consumers of electronic devices such as smartphones, tablets, and computers. The target demographic includes consumers aged 38 to 64 who are health conscious and new parents who are concerned about the health impact of EMR emitting devices. The Company's customer base is well diversified, with no significant concentrations. Approximately 30% of sales are from repeat customers. Per Management, the average purchase is approximately USD 200.

Section 5: Company Overview

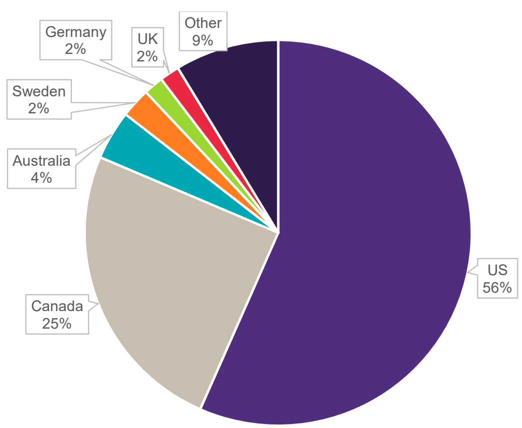
5.26 For the three years leading up to the Valuation Date, approximately 80% of the units sold were Device Protection units, as presented in Figure 7

Figure 7 Fiscal 2016 Unit Sales by Category



5.27 In fiscal 2016, approximately 82% of sales were to the North American market, with the remainder spread across the globe, as presented in Figure 8.

Figure 8 Sales by Country Fiscal 2016



5.28 The Aires Products were initially sold through independent stores, such as Baby Land, Healthy Planet, Nature's Emporium, and Smith's Pharmacy. However, during fiscal 2016, the Company switched its distribution model to a direct-to-consumer e-commerce platform.

5.29 As at the Valuation Date, the Company advertises its product through search engine optimization, search engine marketing via Google AdWords, and through social media. The Company's future marketing plans include obtaining one or more celebrity endorsements.

Supplier Overview

5.30 The Company does not have any guaranteed supply agreements in place; however, in the event the current suppliers are not able to manufacture the resonator antenna and microprocessor components, alternative suppliers exist.

5.31 As at the Valuation Date, the Aires Products are assembled and packaged in the Russian Federation; however, alternative manufacturing facilities also exist.

Section 5: Company Overview

S.W.O.T. Assessment

5.32 Based on discussions with Management, we identified the Company's strengths, weaknesses, opportunities and threats, as outlined below.

Strengths & Opportunities			Weaknesses & Threats
	• Key personnel – one of the Founders is well respected in the EMR industry and has won numerous awards for his research and development in the field of EMR technology. • Governance and oversight – the Company's Board of Directors consists of a mix of individuals with technological and capital markets expertise. • Market – there is a large and rapidly growing number of EMR emitting devices in use by consumers. • Industry – there is growing consumer interest in reducing the harmful effects of EMR. • Intellectual property – the Company has been granted three patents and Igor Serov has been granted seven patents, all relating to the IP, as at the Valuation Date. • Traction – the Company has gained traction in the market since incorporation, and generated annual revenue of approximately $260,000 between FY14 and FY16, even with a limited advertising and promotion budget.	• Financing risks – failure to obtain additional financing could result in an inability to fund sufficient marketing to reach the forecast sales targets. • Financing risks – could result in delay or indefinite postponement of further research and development of the Company's in-process projects. • Limited operating history – only four years of operating history; investors must rely on the expertise of the Company's Management. • Limited operating history – does not have a history of earnings or the provision of return on investment, and there is no assurance it will produce the forecast revenue, operate profitably, or provide a sufficient return on investment in the future. • Key personnel risk – dependent on retaining the services of a small number of key employees. The loss of one or more of these employees could have a materially adverse effect on the Company. • Industry – the markets for the Aires Products are competitive and rapidly changing. • Competition – there are a number of products, currently being offered by competitors that, from a consumer's perspective, may appear similar to the Aires Products. • Intellectual property – risks associated with defending IP rights. • Lack of brand development – the Company is in the early stages of developing brand awareness and limited advertising funds have been deployed to date.	

Section 6

Financial Performance Overview

6.0 Financial Performance Overview

Revenue, Gross Margins and EBITDA

6.01 From FY13 to FY16 the Company's revenue grew from approximately $77,000 to $241,000, while earnings before interest, taxes, depreciation and amortization ("EBITDA") has fluctuated from negative $68,000 in FY13 to a high of $132,000 in FY15, and negative $70,000 in FY16. Gross margins fluctuated from a low of 48% to a high of 63%, with an average of 56% during the same period.

6.02 The revenue and EBITDA figures relating to the forecast period, which is from January 2, 2017 through December 31, 2027 (the "Forecast Period"), reflect Management's best estimate of the future financial results of the Company, as at the Valuation Date.

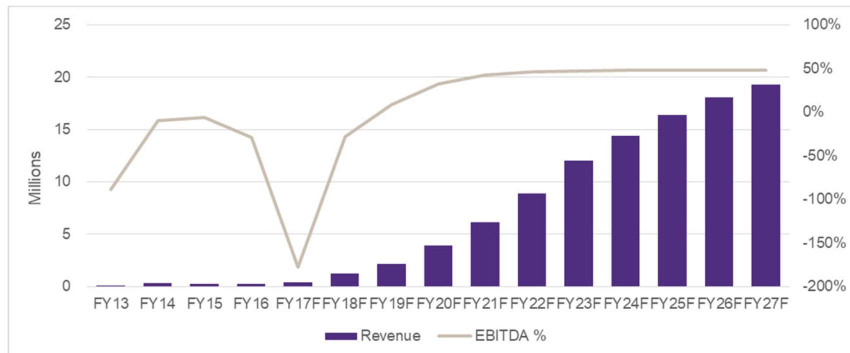
6.03 Management prepared a detailed forecast for FY17 to FY21, and has projected revenue growth at a cumulative annual growth rate ("CAGR") of 97% during that period. Management asserted a slow-down in growth would occur from F22 to F27, until reaching a long-term growth rate post-FY27 of 5%. The revenue growth CAGR over this later period was approximately 17%. Management's revenue forecast was contingent on the expected marketing spend to increase sales. Should this marketing spend not occur, or not occur in the period(s) expected, or should it be less successful in attracting customers than otherwise expected, forecast sales levels are unlikely to be achieved.

6.04 Management forecast gross margins at approximately 74%, which is based on their expectation of achieving certain cost savings once sufficient sales volumes are reached.

6.05 Negative EBITDA is expected for FY17 and FY18, as revenue growth lags behind an expected high advertising and promotion spend, before improving to 9% in FY19, 32% in FY20, 43% in FY 21, 46% in FY22 and 48% in FY23, where it is expected to remain for the remainder of the Forecast Period.

6.06 Figure 9 shows the historical and forecast revenues and EBITDA margin for the Company.

Figure 9 Historical and forecast revenue and EBITDA margin %



6.07 Historically, operating expenses primarily consisted of office and administrative expenses, salaries, advertising and promotion, and professional fees.

6.08 In the forecast period, Management also included research and development costs and patent costs, with the expectation these costs would need to be incurred in order to achieve the forecast sales targets. Before the IP Transfer, we understand these costs were borne personally by the Founders.

6.0 Financial Performance Overview

Financial Position

6.09 The Company's assets and liabilities at the Valuation Date is set out in the table below:

Table 1 Summarized historical balance sheet

	FY13	FY14	FY15	FY16
Cash	9,990	28,901	34,160	12,037
Non-cash net working capital	23,981	73,034	25,566	(15,632)
Property, plant & equipment	-	18,292	50,021	-
Bank loan	-	20,052	5,586	-
Shareholder loan	134,334	232,161	271,653	258,831
Shareholders' equity	**(100,363)**	**(131,986)**	**(167,492)**	**(262,426)**

Capital Reinvestment

6.10 Sustaining capital reinvestment is the expected annual capital outlay required to sustain the current operating capacity of the business. However, for the purposes of our analysis, given the Company is in a growth phase, we have considered the capital investment required to achieve and then maintain the forecast sales to be sustaining.

6.11 Management estimates annual sustaining capital reinvestment to decline from approximately 2.0% of revenue in FY17 ($7,000) to 0.3% of revenue in FY27 ($64,000), based on management estimate. As the business outsources most operational requirements, which expenses are thus reflected in EBITDA, this level of capital expenditure is expected to be sufficient to provide office equipment, furniture, and computers throughout the forecast period.

Section 7

Valuation Approaches

Section 7: Valuation Approaches

Approach to Valuing IP

7.01 There are three valuation approaches normally used to value intangible assets: cost, market, and income.

Cost Approach

7.02 The Cost Approach is based on the premise that a prudent investor would pay no more for an asset than its replacement or reproduction costs. The cost approach is not typically used as the primary approach, as the historical cost of developing an asset generally has little to do with its FV today. However, a replacement cost methodology can occasionally provide insight into the FV of the asset.

Market Approach

7.03 The Market Approach is a valuation technique that estimates FV based on market prices in actual transactions and on asking prices for assets currently available for sale. The valuation process is a comparison and correlation between the subject asset and other similar assets. The market approach provides strong support for FV; however, comparable transactions are normally challenging to source for specific intangible assets.

Income Approach

7.04 The Income Approach focuses on the income producing ability of the asset. This approach estimates the FV of an asset based on the cash flows that the asset is expected to generate over its remaining useful life and converting these cash flows to their present values through discounting.

7.05 An intangible asset has value to the extent that it provides an economic advantage in the marketplace or serves as a barrier to competition.

a) The economic advantage can take the form of lower manufacturing and operating costs or allowing a company to charge a premium price for its goods or services.

b) A technological asset can also serve as a barrier to competition if, for example, a potential competitor is capable of developing similar technology, but the costs and time involved make it prohibitive.

7.06 Two commonly used methods under the income approach are the multi-period excess earnings method ("MEEM") and the relief from royalty method.

The MEEM

7.07 The MEEM is commonly used to value the primary income-generating asset of a company or of a segment of a company. The MEEM estimates value based on the expected future excess earnings stream attributable to a particular asset.

7.08 In applying the MEEM, it is important to determine if the intangible asset allows the business to generate incremental income or if it acts as part of a group of assets to produce income. For the latter, contributory assets must be considered in the income calculations.

7.09 In arriving at the FV of assets valued using the MEEM, consideration must be given to notional after-tax charges for contributory assets. The contributory assets required to generate the after-tax cash flows generally include non-cash working capital, capital assets, and assembled workforce. Depending on the situation, charges for other intangible assets may also be considered.

Section 7: Valuation Approaches

The Relief from Royalty Method

7.10 This method is based on the notion that a company owning an asset can license its use to a third party. The notional price paid by the third party to the owner of the asset is expressed as a royalty rate. The net present value of all of the forecast royalty payments represents the value of the asset.

7.11 The attraction of this method is that it is based on commercial practice in the real world. It involves estimating likely future sales, applying an appropriate royalty rate to them, and then discounting estimated future, after-tax royalties, to arrive at the net present value of the royalty cash flow stream.

Identification of IP Transferred

7.12 As noted previously, the Founders transferred all trademarks, patents and proprietary rights related to products or devices sold under the trade names of: Aires Black Crystal, Aires Shield, Aires Shield Extreme, Aires Defender, Aires Defender Automotive, and Aires Defender Infinity.

7.13 Based on our discussions with Management and review of the transfer agreements, the patented technology is the sole identifiable asset considered to have been transferred, as it can be sold or licensed to a third party, and the value can be reliably measured based upon either future cash flows of the asset or development costs avoided through acquisition.

7.14 In general, technology has value to the extent it provides an economic advantage in the marketplace or serves as a barrier to competition. The economic advantage can take the form of lower manufacturing and operating costs or allow a company to charge a premium price for its goods or services. The technology can also serve as a barrier to competition if, for example, a potential competitor is capable of developing similar technology, but the costs and time involved make it prohibitive.

7.15 Other assets we considered but did not value separately were:

a) Brand and Trademarks: At the Valuation Date, the IP was being marketed by the Company as if it owned the IP directly, using its own branding. It is our understanding that there were no brand or trademark assets acquired as part of the IP Transfer.

b) Patents: We consider the patents and the technology to be inseparable. The patents enhance the commercialization of the technology, and no significant cash flows can be ascribed to the patents alone. Therefore, no separate value has been ascribed to the patents on a stand-alone basis as at the Valuation Date, and we valued them as part of the value of the IP valuation.

Selected Valuation Approach

7.16 In determining the FV of the IP at the Valuation Date, the FV is equal to the present value of the estimated cash flows to be realized from the asset over its useful life. We have selected an income approach to value the IP, specifically the relief-from-royalty method.

7.17 We corroborated the FV, as determined with an income approach, with a cost approach, specifically the replacement cost method.

Section 8

Valuation

Section 8: Valuation

Income Approach – Relief-from-Royalty Method

8.01 On Schedule 2, we calculated the value of the IP using the Relief-from-Royalty Method.

8.02 As the Company's revenue is all attributable to the IP, the revenue per the financial projections provided by Management has been used as the basis for the cash flows attributable to the asset.

8.03 We utilized Management's forecast revenues for the years from FY17 to FY27 (an 11-year period) to determine the expected avoided royalty payments. We did not include a terminal period, as the majority of the existing patents expire within 9 to 11 years.

8.04 We determined the applicable royalty rate based on the following considerations:

a) Identified notional royalty rates in the range of 3% to 9% based on our search of patents for technology of this type (a summary of the patent search is set out on Schedule 11)

b) The forecast EBITDA margin for the IP, of 57.7% over the long term, influences the ultimate royalty rate that would be negotiated between arm's length parties. In this regard, a KPMG study[2] assessing the correlation of royalty rates and profitability concluded:

> *there is a linear relationship between the reported royalty rates and three profitability measures…Such a linear relationship suggests that the licencing market is efficient and cost structure and profitability across industries have been factored into royalty rate negotiations.*
>
> *Also, the EBITDA margin seems to be a more reasonable base upon which to apply the 25 percent rule compared to gross margin and EBITDA.*

8.05 Utilizing the 25% rule to the prospective EBITDA margin of the IP implies a royalty rate of 12.0%.

8.06 Given the early stage of the business and the expected revenue growth in the forecast compared to many of the technologies in our license search (which we felt were more mature), combined with the high margins expected to be earned on the sales of products developed using this technology, we determined a notional royalty rate of 10%.

8.07 While the 10% royalty rate exceeds the upper end of the royalty rate range identified in our comparable patent search, we are in the view that it is reasonable considering the forecasted EBITDA margin, and the KPMG study which concludes that there exists a linear relationship between royalty rates and profitability. We did not adopt the implied 12.0% royalty rate based on the 25 percent rule, given the uncertainty of achieving the forecasted EBITDA margin given the early stage of the Company, and its variance from actual comparable data points identified.

2 Source: KPMG. *Profitability and royalty rates across industries: Some preliminary evidence*. 2012

Section 8: Valuation

8.08 We adjusted the avoided royalty payment for the expected cash taxes at 26.5%, the effective blended federal and Ontario provincial rate as at the Valuation Date.

Determination of the Discount Rate

8.09 We estimated the Company's market participant weighted average cost of capital ("WACC") on Schedule 7 of our analysis. To be consistent with the views of a market participant, our determination of the Company's WACC included the cost of equity and the after-tax cost of debt, weighted by their respective proportions under the market participant's long-term view of the Company's capital structure.

8.10 To estimate the market participant's cost of equity, we applied the Build-Up Method. In doing so, we calculated a market participant cost of equity for the Company to be in the range of approximately 29% to 33%.

8.11 To determine an appropriate market participant cost of debt for the Company, we reviewed yields-to-maturity on non-investment grade corporate debt with credit risk similar to the Company's expected long-term credit risk. In doing so, we calculated a market participant cost of debt for the Company to be in the range of approximately 9.5% to 10.0%.

8.12 As part of our calculations, we assumed a long-term capital structure of, on average, approximately 0% to 5% debt to total capital. This assumption was based on analysis of the Company's debt capacity, our understanding and knowledge of the business, and reflected a notional buyer's ability to refinance the Company at the Valuation Date.

8.13 Applying the capital structure to the market participant cost of equity and cost of debt, we determined the Company's WACC to be in the range from 27.9% to 33.0%.

8.14 As the Company's only source of revenue is through the commercialization and sale of the products developed from the IP, and as the Company has minimal other net assets, as at the Valuation Date, we determined the overall WACC to be a reasonable proxy for the discount rate on the IP on a stand-alone basis.

Present Value of the After-Tax Royalty Cash Flows

8.15 We then discounted the after-tax royalty payments at discount rates ranging from 27.9% to 33.0%, reflecting the expected return an investor would require on a comparable investment.

Tax Amortization Benefit

8.16 We then grossed up the present values to reflect the available tax shield on the asset, based on upon the capital cost allowance tax amortization available to a Class 14.1 asset.

Conclusion – Relief-from-Royalty Method

8.17 Based on the Relief-from-Royalty Method, and subject to the scope, assumptions, and restrictions and qualifications noted herein, the FV of the IP was determined to fall in the range from approximately $1.09 million to $1.39 million, with a midpoint of $1.23 million.

Section 8: Valuation

Cost Approach – Replacement Cost Method

8.18 On Schedule 3, we calculated FV of the IP using the Replacement Cost Method.

8.19 Management estimated it would take between 9 to 12 months to recreate the IP, if sufficient time and resources were allocated to the task.

Direct Costs

8.20 We utilized Management's assessment of the expected costs, including both labour and materials costs, to recreate the IP. These costs included:

a) Engineering labour costs for product design and computer modelling

b) Prototype development, testing, and refinement

c) Packaging and design development.

8.21 These direct recreation costs were then adjusted for the tax savings resulting from the expenses incurred at a rate of 26.5%, based upon federal and Ontario provincial corporate tax rates.

8.22 The after-tax direct costs were then adjusted for the lost profit an investor could have made on an investment, if they did not have to make these cash outflows to develop the IP. The lost profit was calculated using a cost of equity-like return of 28% to 33%, reflecting an investor's perspective of the required rate of return on an investment at this stage.

8.23 The total direct costs, including lost profit, were then discounted back to the present using an appropriate discount rate for the IP of approximately 28% to 33%.

Opportunity Costs

8.24 In addition, in developing the IP, a purchaser would also forego the cash flows that could be generated during the development period, i.e., the opportunity cost of recreating the technology. Given the Company is still earning negative EBITDA, we compared the forecast discounted cash flows ("DCF") for the years from 2017 to 2027 (Schedule 4) to the same cash flows pushed out in time by 9 to 12 months (Schedules 5 and 6), the difference being the foregone cash flows during development. We did not include a terminal period in any of the DCFs, as the majority of the existing patents expire within approximately 10 to 12 years.

8.25 The opportunity costs were then added to the direct costs of recreation to determine the total costs to develop the IP.

Tax Amortization Benefit

8.26 The total costs to develop the IP were then grossed-up to reflect the available tax shield on the asset based upon the capital cost allowance tax amortization available to a Class 14.1 asset.

Conclusion – Replacement Cost Method

8.27 Based on the Replacement Cost Method, and subject to the scope, assumptions, and restrictions and qualifications noted herein, the FV of the IP was determined to fall in the range from approximately $1.33 million to $1.69 million, with a midpoint of $1.51 million.

Section 8: Valuation

Value Conclusion

8.28 Based on the two approaches selected, as noted above, we determined FV ranges as follows:

Table 2 Summary of Value Ranges from Selected Valuation Methods

	Low	Midpoint	High
Relief from roy alty method	1,087,000	1,233,000	1,394,000
Replacement cost method	1,326,000	1,509,000	1,692,000

8.29 In our experience, a purchaser would not pay more than: (a) the present value of the future cash flows from the asset; or (b) the cost avoided by not having to recreate the asset.

8.30 Given the Relief-from-Royalty Method provides the lower value range, and subject to the scope, assumptions, and restrictions and qualifications noted herein, we concluded the FV of the IP to be in the range from approximately $1.09 million to $1.39 million, with a midpoint of $1.23 million.

Section 9

Assumptions

Section 9: Assumptions

9.01 In preparing our report, we have made a number of assumptions that may affect our estimate of the FV of the IP. The major assumptions are as follows:

a) No undisclosed significant events and/or transactions have occurred between the Valuation Date and the date of our report that would materially affect our report.

b) The federal and provincial income tax laws prevailing as at the Valuation Date would continue to prevail into the foreseeable future, and proposed income tax rate changes in any federal or provincial budgets up to the Valuation Date will be enacted.

c) All transactions that occur with related parties are at FV.

d) The Company's audited historical financial statements and projected results are free from material misstatement, and there are no unrecorded commitments or contingencies.

e) The FY17 to FY27 forecast provided by Management is representative of the Company's best estimate of the results of operations and reflects nominal cash flows.

f) The Company background information included in the Prospectus was known or knowable at the Valuation Date, and does not constitute hindsight information.

g) Remuneration paid to the shareholders and/or non-arm's length parties is comparable to market rates.

h) Annual capital reinvestment of approximately $7,000 to $64,000 is required to sustain the operations of the Company throughout the forecast period.

i) No undisclosed significant events and/or transactions have occurred between the Valuation Date and the date of our report that would materially affect our report.

j) Recreating the IP (microchip and antenna technology) would require the following:

(1) Nine (9) to twelve (12) months to develop

(2) Labour costs for two engineers with annual compensation of approximately $100,000

(3) Direct material costs of approximately $400,000 to $490,000

(4) Testing costs of approximately $279,000 to $341,000.

k) A 10% royalty on revenues could be charged for the IP.

l) Other asset specific assumptions are included elsewhere in the report.

9.02 It should be noted that if the assumptions on which this report were based are found to be incorrect, our estimate of the FV might be different and would be subject to revision.

Section 10

Restrictions

Section 10: Restrictions

10.01 This report is not intended for general circulation or publication nor is it to be reproduced or used for any purpose other than that outlined above without our prior written permission in each specific instance. More specifically, this valuation conclusion should not be used as the sole or primary basis to determine the price for a transaction in the open market since vendors and purchasers usually have varying negotiating and financial abilities. We will not assume any responsibility or liability for losses occasioned to the Company, the shareholders of the Company or any third party, as a result of the circulation, publication, reproduction, or use of this report contrary to the provisions of this paragraph.

A.02 Our analyses are based upon information provided by and/or on behalf of the Company. We assume no responsibility and make no representations with respect to the accuracy or completeness of any information provided by and/or on behalf of the Company. There will usually be differences between estimated and actual results because events and circumstances frequently do not occur as expected, and those differences may be material. You acknowledge that no reliance shall be placed on draft analyses, conclusions, or advice, whether oral or written, issued by us, since the same may be subject to further work, revision, and other factors, which may mean that such drafts are substantially different from any final advice issued.

10.02 The liability of Grant Thornton LLP and any of our employees or other personnel for any claim in tort or contract related to professional services provided pursuant to our agreement is limited to the amount of professional fees actually paid for those services.

10.03 Nothing contained in this document is to be construed as a legal interpretation of, or an opinion on, any contract, document, legal or otherwise, nor is it to be interpreted as a recommendation to invest or divest.

10.04 We reserve the right, but are under no obligation, to review all calculations included in or referred to in this report and, if we consider it necessary, to revise our estimate in the light of any information existing at the Valuation Date, which becomes known to us after the date of this report.

10.05 This report, and the comments and conclusions expressed herein, are valid only in the context of the whole report. Selected comments or conclusions should not be examined outside the context of the report in its entirety.

Section 11

Qualifications

Section 11: Qualifications

11.01 In preparing this report, we relied upon the documents and information listed herein.

11.02 We are not guarantors of the information upon which we have relied in preparing our report, and except as stated, we have not audited or otherwise attempted to verify any of the underlying information or data contained in this report.

11.03 Given the nature of our assignment, we have not exposed the IP for sale in the open market. Therefore, we were unable to determine whether there were any special interest purchasers who might be willing to pay a price greater than the FV expressed in this report. Such special purchasers might be willing to pay a price in excess of FV as a result of economic synergies or strategic advantages that they perceive to be associated with the IP. Given the difficulty in quantifying the premium such purchasers may pay, if any, we have not considered such possible premiums in our valuation.

11.04 By accepting our valuation report, management and shareholders acknowledge they have disclosed all information of a material nature concerning the IP, the Company and its business prospects that could have a significant impact on our valuation conclusions.

11.05 We certify that we have no active or contemplated interest in the Company and our fee is not contingent upon our conclusions.

11.06 This valuation report has been prepared by a Chartered Business Valuator in accordance with the professional standards of the CICBV.

Appendices

Appendix A

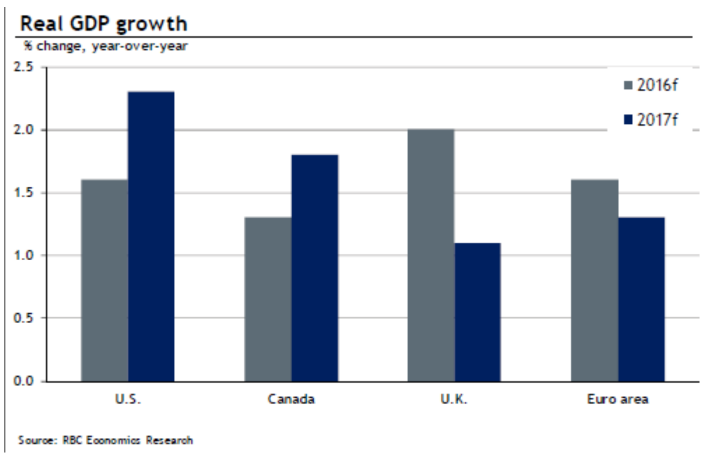
Economic Overview

Appendix A Economic Overview

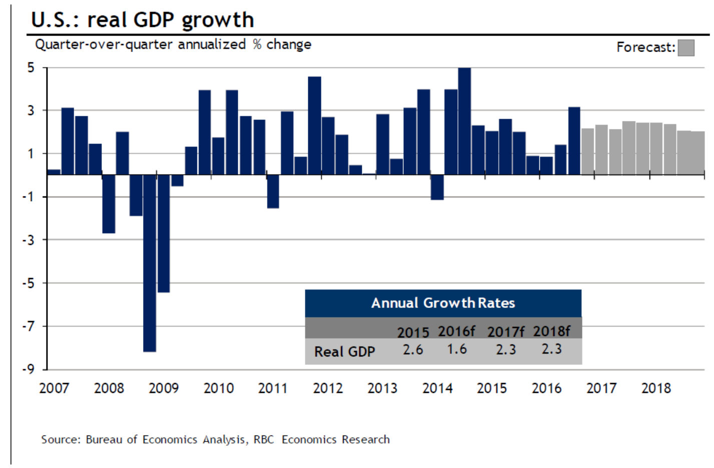
Economy[3]

A.01 Based on our review of various information sources, we observed the following trends and outlook for the general economic environment.

A.02 It is expected that the global economy's growth will be challenged by elevated levels of uncertainty, following the UK's decision to leave the European Union and Donald Trump's election as President of the United States, and by rising interest rates.



A.03 US growth is expected to average 2.3% in both 2017 and 2018, while growth in consumer spending is expected to grow by 2.5% and 2.4% during the same time period. 2016 saw another year of solid consumer spending and 2017 was expected to be bolstered by employment gains and quicker wage increases as the labour market reached full employment.



A.04 The Canadian economy stalled in the second quarter of 2016 as the impact of the wildfires that occurred in Alberta were felt across the country. The pullback in oil sands production was the key driver of the 1.6% decline in real GDP in that quarter.

A.05 It is expected that there will be an uptick in growth in the first quarter of 2017. Higher growth is expected mid-2017 led by manufacturing exports due to a boost from past exchange rate depreciations.

A.06 Real GDP growth is expected to increase to 1.8% and 2.1% in 2017 and 2018 respectively, an increase from the growth rate of 1.3% realized in 2016.

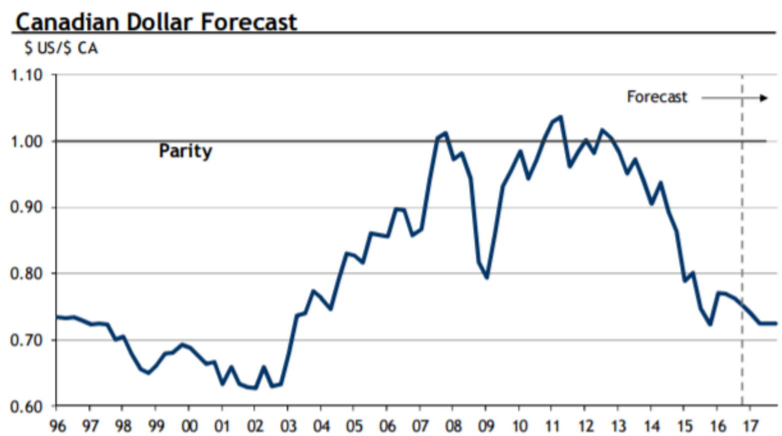
A.07 As supply and demand of oil continue to move closer together, the rise in oil prices that began in mid-February 2016 is expected to continue. This rise in oil prices will prevent further declines in investment in the energy industry that were felt over the past few years.

[3] Quarterly Economic Forecast, RBC Economics, Q4 2016

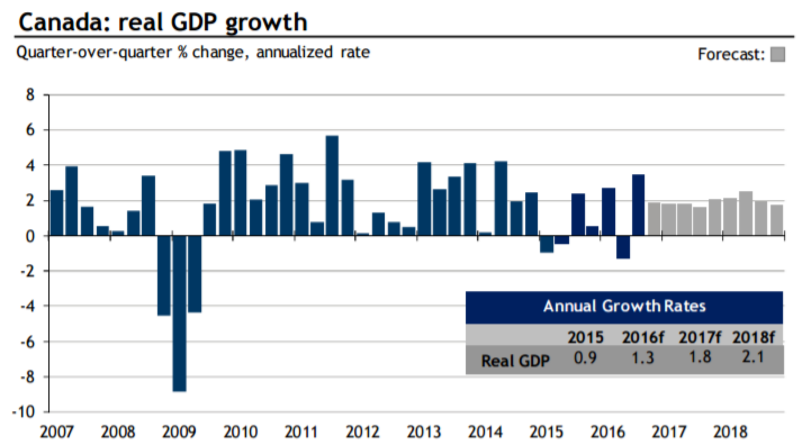
Appendix A Economic Overview

A.08 The combination of low interest rates and rising energy prices will provide support to Canada's economy over the short term. Despite rising energy costs, this burden on consumers will be offset by the firming of the labour market conditions and affordable credit. Companies outside of the energy industry will begin to expand their capacity on the back of firmer demand in the market.

A.09 It is anticipated the overnight rate of 0.5% will remain intact through 2017, as further reducing rates would undo part of the cooling in housing market activity from lack of affordability.



Source: Bank of Canada, RBC Economics Research



	2015	2016f	2017f	2018f
Real GDP	0.9	1.3	1.8	2.1

Source: Statistics Canada, RBC Economics Research

Appendix B

Scope of Review

Appendix B Scope of Review

B.01 In completing this assignment, we reviewed and relied upon the following information, documents and data:

a) American Aires Inc. audited financial statements for the year ended December 31, 2017.

b) American Aires Inc. unaudited Notice to Reader basis financial statements for the year ended December 31, 2013.

c) Prospectus for the initial public offering of 24,000,000 to 25,000,000 common shares for gross proceeds of $7.2 million to $7.56 million, dated September 19, 2019.

d) Historical sales by country data for 2016, as provided by Management.

e) Forecast financial information, as provided by Management.

f) Recreation costs for the IP, as provided by Management.

g) American Aires Inc. T2 Corporation Income Tax Returns for 2014, 2015, and 2016.

h) Summary of patents registered and applied for, as provided by Management.

i) RoyaltyStat royalty rate information.

j) KPMG. *Profitability and royalty rates across industries: Some preliminary evidence*. 2012.

k) Duff & Phelps, 2016 Valuation Yearbook: Guide to Cost of Capital.

l) S&P Capital IQ.

m) American Aires Inc.'s website.

n) Discussions and correspondence with the following individuals regarding the historical, current, and future operations of the Company:

(1) Dimitry Serov (Co-founder and President)

(2) Robert Suttie (CFO).

B.02 In addition, we relied upon a letter of representation, dated September 16, 2019, obtained from Dimitry Serov and Rob Suttie, on behalf of the shareholders, wherein they confirmed certain representations and warranties made to us, including a general representation that they had no information or knowledge of any facts or material information not specifically noted in the Report, which, in their view, would reasonably be expected to affect the valuation conclusions set out herein.

B.03 Without independent verification, we relied upon this data as accurately reflecting the results of American Aires' operations and financial positions. In keeping with our terms of reference, we completed limited review, analysis, and corroboration of the information provided to us. We have not audited this data and express no opinion or other form of assurance regarding its accuracy or fairness of presentation.

Appendix C

Glossary

Appendix C Glossary

General Terms	
CAD	Canadian Dollar
CAGR	Cumulative annual growth rate
CCA	Capital Cost Allowance
CICBV	The Canadian Institute of Chartered Business Valuators
CICBV Standard 110	The CICBV Practice Standard No. 110, *Valuation Report Standards and Recommendations*
DCF	Discounted cash flow
EBITDA	Earnings before interest, taxes, depreciation and amortization
FV	Fair Value
Grant Thornton	Grant Thornton LLP
SR&ED	Scientific research and experimental development
UCC	Undepreciated capital cost
WACC	Weighted average cost of capital
We	Grant Thornton LLP

Periods	
FY13	12 month period ended December 31, 2013
FY14	12 month period ended December 31, 2014
FY15	12 month period ended December 31, 2015
FY16	12 month period ended December 31, 2016
FY17	Forecast 12 month period ended December 31, 2017
FY27	Forecast 12 month period ended December 31, 2027
Forecast Period	January 2, 2017 through December 31, 2027

Appendix C Glossary

Company Specific	
Aires Products	Products sold under the trade names: Aires Black Crystal, Aires Shield, Aires Shield Extreme, Aires Defender, Aires Defender Automotive, and Aires Defender Infinity.
Company	American Aires Inc.
Prospectus	Prospectus for the initial public offering of 24,000,000 to 25,000,000 common shares for gross proceeds of $7.2 million to $7.56 million, dated September 19, 2019.
EMR	Electromagnetic radiation
Founders	Igor Serov and Dimitry Serov
IP	All trademarks, patents, know-how, trade secrets, and proprietary rights related to products or devices sold under the trade names or trademarks of: Aires Black Crystal, Aires Shield, Aires Shield Extreme, Aires Defender, Aires Defender Automotive and Aires Defender Infinity.
IP Transfer	The transfer of all trademarks, patents, and proprietary rights related to products or devices sold under the trade names or trademarks of: Aires Black Crystal, Aires Shield, Aires Shield Extreme, Aires Defender, Aires Defender Automotive and Aires Defender Infinity from the Founders to the Company on the Valuation Date.
Management	Robert Suttie and Dimitry Serov
Valuation Date	January 1, 2017
Transfer Agreements	The agreements between the Company and Dimitry Serov and Igor Serov setting out the terms of the IP Transfer.

Appendix D

Valuation Schedules

Estimate Valuation Report
Schedule 1

American Aires Inc.

As at January 1, 2017

Summary

		Notes	Low	Midpoint	High
	Fair value of Intellectual Property				
1	Relief from royalty method	Schedule 2	1,087,000	1,233,000	1,394,000
2	Replacement cost method	Schedule 3	1,326,000	1,509,000	1,692,000
3	**Selected fair value range**	1	**1,087,000**	**1,233,000**	**1,394,000**

Notes:

1 Selected based on the minimum of the two methodologies. The expectation is that a market participant would not pay more for an asset than the expected cash flows they could recover from that asset or that they would need to incur to recreate the asset.

Estimate Valuation Report — Schedule 2

American Aires Inc.

As at January 1, 2017

Fair Value of Intellectual Property - Relief from Royalty Method

		Notes	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
			For the years ending December 31,										
1	Revenue	1	406,200	1,200,000	2,137,500	3,912,500	6,125,000	8,881,250	11,989,688	14,387,625	16,401,893	18,042,082	19,305,027
2	Avoided royalty payment	2	40,620	120,000	213,750	391,250	612,500	888,125	1,198,969	1,438,763	1,640,189	1,804,208	1,930,503
3	Less: Cash taxes	3	(10,764)	(31,800)	(56,644)	(103,681)	(162,313)	(235,353)	(317,727)	(381,272)	(434,650)	(478,115)	(511,583)
4	After-tax royalty payments		29,856	88,200	157,106	287,569	450,188	652,772	881,242	1,057,490	1,205,539	1,326,093	1,418,920
5	Time factor		0.50	1.50	2.50	3.50	4.50	5.50	6.50	7.50	8.50	9.50	10.50
6	Present value factor - Low value		0.8670	0.6517	0.4898	0.3682	0.2767	0.2080	0.1564	0.1175	0.0883	0.0664	0.0499
7	Present value factor - Midpoint value		0.8756	0.6712	0.5146	0.3945	0.3024	0.2318	0.1777	0.1363	0.1045	0.0801	0.0614
8	Present value factor - High value		0.8841	0.6910	0.5401	0.4222	0.3300	0.2579	0.2016	0.1576	0.1232	0.0963	0.0753
	Present value of cash flows												
9	Low	4,6	25,884	57,477	76,955	105,878	124,587	135,787	137,788	124,282	106,496	88,053	70,818
10	Midpoint	4,6	26,141	59,202	80,843	113,440	136,144	151,337	156,623	144,084	125,922	106,187	87,103
11	High	4,6	26,395	60,950	84,860	121,410	148,562	168,376	177,671	166,649	148,494	127,675	106,781

		Low	Midpoint	High
12	Sum of present values	1,054,005	1,187,026	1,337,824
13	Add: Tax amortization benefit	33,166	46,099	56,074
14	**Fair value of Intellectual Property**	**1,087,171**	**1,233,124**	**1,393,898**
	Fair value of Intellectual Property (rounded)	**1,087,000**	**1,233,000**	**1,394,000**

Notes:

1. Revenue per management forecast (see Schedule 10).
2. Royalty payments avoided through acquisition of the technology are calculated as 10.0% of revenue.
3. Taxes are calculated at the combined federal and Ontario provincial tax rate of 26.5%.
4. Present value of after-tax royalty payments are calculated assuming cash flows are received evenly through the year, using a discount rate of 27.9% to 33.0%.
5. Given the existing patents have a remaining life of approximately 10 years, no terminal value has been included.
6. The tax amortization benefit has been calculated using the half-year rule and a CCA rate of 5.0% per annum, as applicable to Class 14.1 assets.

Estimate Valuation Report **Schedule 3**

American Aires Inc.

As at January 1, 2017

Fair Value of Intellectual Property - Replacement Cost Method

		Notes	Low	Midpoint	High
	Direct Costs to recreate				
	Labour costs				
1	Months to develop	1	9		12
2	Engineers required	1	2		2
3	Monthly cost per engineer	1	8,333		8,333
4	Total labour costs		150,000	175,000	200,000
	Other direct costs				
5	Materials	1	400,500		489,500
6	Testing costs	1	279,000		341,000
7	Total labour and direct costs		829,500	930,000	1,030,500
8	Less: Cash taxes	2	(219,818)		(273,083)
9	After-tax labour and direct costs		609,683	683,550	757,418
10	Add: Lost profit margin on cash outflows	3	177,052		250,251
11	Fully loaded direct costs		786,734	897,201	1,007,668
12	Discount period	4	0.38	0.44	0.50
13	Discount rate		33.0%	30.4%	27.9%
14	Multiplied by: Discount factor		0.8985	0.8902	0.8841
15	**Present value of direct costs of recreating the IP**		**706,862**	**798,717**	**890,880**
	Opportunity cost				
16	Fair value of cash flows with the IP	Schedule 4	3,189,865	3,189,865	3,189,865
17	Less: Fair value of cash flows without the IP	Schedule 5, Schedule 6	(2,614,360)	(2,529,719)	(2,445,078)
18	**Forgone cash flows**		**575,505**	**660,146**	**744,787**

Estimate Valuation Report

Schedule 3

American Aires Inc.

As at January 1, 2017

Fair Value of Intellectual Property - Replacement Cost Method

		Notes	Low	Midpoint	High
	Fair value of Intellectual Property				
19	Direct costs to recreate		706,862	798,717	890,880
20	Opportunity costs		575,505	660,146	744,787
21	Total cost to develop		1,282,367	1,458,863	1,635,667
22	Add: Tax amortization benefit	5	43,792	49,819	55,857
21	**Fair value of Intellectual Property**		**1,326,159**	**1,508,682**	**1,691,523**
23	**Fair value of Intellectual Property (rounded)**		**1,326,000**	**1,509,000**	**1,692,000**

Notes:

1 Source: Management.

2 Taxes are calculated at the combined federal and Ontario provincial tax rate of 26.5%.

3 Profit margin calculated based on expected equity return, at 29.0% to 33.0%.

4 Assumed cash flows incurred evenly throughout the recreation period.

5 The tax amortization benefit has been calculated using the half-year rule and a CCA rate of 5.0% per annum, as applicable to Class 14.1 assets.

Estimate Valuation Report **Schedule 4**

American Aires Inc.

As at January 1, 2017

Discounted Cash Flows - With Intellectual Property

		Notes	For the years ending 31/Dec/17	31/Dec/18	31/Dec/19	31/Dec/20	31/Dec/21	31/Dec/22	31/Dec/23	31/Dec/24	31/Dec/25	31/Dec/26	31/Dec/27
1	Forecast revenue	1	406,200	1,200,000	2,137,500	3,912,500	6,125,000	8,881,250	11,989,688	14,387,625	16,401,893	18,042,082	19,305,027
2	Forecast EBITDA	1	(723,886)	(336,500)	184,250	1,253,250	2,619,500	4,060,775	5,696,246	6,894,968	7,860,263	8,606,966	9,209,454
3	Less: Income taxes	2	-	-	-	(64,584)	(694,168)	(1,076,105)	(1,509,505)	(1,827,166)	(2,082,970)	(2,280,846)	(2,440,505)
4	Net after-tax debt-free cash flow		(723,886)	(336,500)	184,250	1,188,666	1,925,333	2,984,670	4,186,741	5,067,801	5,777,293	6,326,120	6,768,949
5	Changes in working capital	3	(44,593)	(169,535)	(204,779)	(88,533)	(287,234)	(350,569)	(395,364)	(304,995)	(256,196)	(208,616)	(160,635)
6	Sustaining capital expenditures, net	4	(7,074)	(20,899)	(37,227)	(55,444)	(56,550)	(57,682)	(58,832)	(60,007)	(61,209)	(62,437)	(63,682)
7	Net after-tax debt-free cash flows		(775,553)	(526,935)	(57,756)	1,044,688	1,581,549	2,576,419	3,732,546	4,702,799	5,459,889	6,055,067	6,544,632
8	Time factor		0.50	1.50	2.50	3.50	4.50	5.50	6.50	7.50	8.50	9.50	10.50
9	Present value factor - midpoint value		0.8760	0.6719	0.5152	0.3949	0.3027	0.2321	0.1779	0.1364	0.1045	0.0802	0.0615
10	**Present value of cash flows**	6	**(679,358)**	**(354,046)**	**(29,755)**	**412,522**	**478,677**	**597,907**	**664,171**	**641,403**	**570,766**	**485,346**	**402,231**

		Fair Value
11	**Sum of present values of after-tax cash flows**	**3,189,865**

Notes:

1 Forecast revenue and EBITDA per management projections (see Schedule 10).

2 Taxes are calculated at the combined federal and Ontario provincial tax rate in effect as of the Valuation Date, of 26.5%, and in consideration of the forecast use of the opening loss carryforward balance of $133,400.

3 Non-cash net working capital was specifically forecast in the first five years of the forecast. Long-term non-cash net working capital was assumed to be 12.7% of annual revenue.

4 Sustaining capital expenditures net of tax were forecast based on Management assumptions, and reduced by the tax shield calculated using the half year rule and an implied weighted CCA rate of 37.5%.

5 Given the existing patents have a remaining life of approximately 10 to 12 years, no terminal value has been included.

6 Present value of after-tax royalty payments are calculated assuming cash flows are received evenly through the year, using a discount rate of 30.4%.

American Aires Inc.

As at January 1, 2017

Discounted Cash Flows - Recreating Intellectual Property - Short Timeline

		Notes	30/Sep/18	30/Sep/19	30/Sep/20	30/Sep/21	30/Sep/22	30/Sep/23	30/Sep/24	30/Sep/25	30/Sep/26	30/Sep/27	30/Sep/28
			For the years ending										
1	Forecast revenue	1	406,200	1,200,000	2,137,500	3,912,500	6,125,000	8,881,250	11,989,688	14,387,625	16,401,893	18,042,082	19,305,027
2	Forecast EBITDA	1	(723,886)	(336,500)	184,250	1,253,250	2,619,500	4,060,775	5,696,246	6,894,968	7,860,263	8,606,966	9,209,454
3	Less: Income taxes	2	-	-	-	(64,584)	(694,168)	(1,076,105)	(1,509,505)	(1,827,166)	(2,082,970)	(2,280,846)	(2,440,505)
4	Net after-tax debt-free cash flow		(723,886)	(336,500)	184,250	1,188,666	1,925,333	2,984,670	4,186,741	5,067,801	5,777,293	6,326,120	6,768,949
5	Changes in working capital	3	(44,593)	(169,535)	(204,779)	(88,533)	(287,234)	(350,569)	(395,364)	(304,995)	(256,196)	(208,616)	(160,635)
6	Sustaining capital expenditures, net	4	(7,074)	(20,899)	(37,227)	(55,444)	(56,550)	(57,682)	(58,832)	(60,007)	(61,209)	(62,437)	(63,682)
7	Net after-tax debt-free cash flows		(775,553)	(526,935)	(57,756)	1,044,688	1,581,549	2,576,419	3,732,546	4,702,799	5,459,889	6,055,067	6,544,632
8	Time factor		1.24	2.24	3.24	4.25	5.24	6.24	7.24	8.25	9.24	10.24	11.24
9	Present value factor - midpoint value		0.7184	0.5508	0.4222	0.3236	0.2481	0.1903	0.1458	0.1118	0.0857	0.0657	0.0504
10	**Present value of cash flows**	6	**(557,169)**	**(290,262)**	**(24,385)**	**338,080**	**392,439**	**490,190**	**544,318**	**525,658**	**467,938**	**397,907**	**329,646**

		Fair Value
11	**Sum of present values of after-tax cash flows**	**2,614,360**

Notes:

1 Forecast revenue and EBITDA per management projections (see Schedule 10), pushed forward by 9 months.

2 Taxes are calculated at the combined federal and Ontario provincial tax rate in effect as of the Valuation Date, of 26.5%, and in consideration of the forecast use of the opening loss carryforward balance of $133,400.

3 Non-cash net working capital was specifically forecast in the first five years of the forecast. Long-term non-cash net working capital was assumed to be 12.7% of annual revenue.

4 Sustaining capital expenditures net of tax were forecast based on Management assumptions, and reduced by the tax shield calculated using the half year rule and an implied weighted CCA rate of 37.5%.

5 Given the existing patents have a remaining life of approximately 10 to 12 years, no terminal value has been included.

6 Present value of after-tax royalty payments are calculated assuming cash flows are received evenly through the year, using a discount rate of 30.4%.

Estimate Valuation Report — **Schedule 6**

American Aires Inc.

As at January 1, 2017

Discounted Cash Flows - Recreating Intellectual Property - Long Timeline

		Notes	For the years ending 31/Dec/18	31/Dec/19	31/Dec/20	31/Dec/21	31/Dec/22	31/Dec/23	31/Dec/24	31/Dec/25	31/Dec/26	31/Dec/27	31/Dec/28
1	Forecast revenue	1	406,200	1,200,000	2,137,500	3,912,500	6,125,000	8,881,250	11,989,688	14,387,625	16,401,893	18,042,082	19,305,027
2	Forecast EBITDA	1	(723,886)	(336,500)	184,250	1,253,250	2,619,500	4,060,775	5,696,246	6,894,968	7,860,263	8,606,966	9,209,454
3	Less: Income taxes	2	-	-	-	(64,584)	(694,168)	(1,076,105)	(1,509,505)	(1,827,166)	(2,082,970)	(2,280,846)	(2,440,505)
4	Net after-tax debt-free cash flow		(723,886)	(336,500)	184,250	1,188,666	1,925,333	2,984,670	4,186,741	5,067,801	5,777,293	6,326,120	6,768,949
5	Changes in working capital	3	(44,593)	(169,535)	(204,779)	(88,533)	(287,234)	(350,569)	(395,364)	(304,995)	(256,196)	(208,616)	(160,635)
6	Sustaining capital expenditures, net	4	(7,074)	(20,899)	(37,227)	(55,444)	(56,550)	(57,682)	(58,832)	(60,007)	(61,209)	(62,437)	(63,682)
7	Net after-tax debt-free cash flows		(775,553)	(526,935)	(57,756)	1,044,688	1,581,549	2,576,419	3,732,546	4,702,799	5,459,889	6,055,067	6,544,632
8	Time factor		1.50	2.50	3.50	4.50	5.50	6.50	7.50	8.50	9.50	10.50	11.50
9	Present value factor - midpoint value		0.6719	0.5152	0.3949	0.3027	0.2321	0.1779	0.1364	0.1045	0.0802	0.0615	0.0471
10	**Present value of cash flows**	6	**(521,092)**	**(271,467)**	**(22,806)**	**316,189**	**367,029**	**458,450**	**509,073**	**491,622**	**437,639**	**372,142**	**308,301**

		Fair Value
11	**Sum of present values of after-tax cash flows**	**2,445,078**

Notes:

1 Forecast revenue and EBITDA per management projections (see Schedule 10), pushed forward by 12 months.

2 Taxes are calculated at the combined federal and Ontario provincial tax rate in effect as of the Valuation Date, of 26.5%, and in consideration of the forecast use of the opening loss carryforward balance of $133,400.

3 Non-cash net working capital was specifically forecast in the first five years of the forecast. Long-term non-cash net working capital was assumed to be 12.7% of annual revenue.

4 Sustaining capital expenditures net of tax were forecast based on Management assumptions, and reduced by the tax shield calculated using the half year rule and an implied weighted CCA rate of 37.5%.

5 Given the existing patents have a remaining life of approximately 10 to 12 years, no terminal value has been included.

6 Present value of after-tax royalty payments are calculated assuming cash flows are received evenly through the year, using a discount rate of 30.4%.

Weighted Average Cost of Capital

		Notes	Low	Midpoint	High
	Unadjusted cost of equity				
1	Risk-free rate	1	2.7%	2.7%	2.7%
2	Equity premium	2	5.0%	5.0%	5.0%
3	Industry risk premium	3	-0.4%	-0.4%	-0.4%
4	Size risk premium	4	11.8%	11.8%	11.8%
5	Premium for specific risks	5	10.0%	12.0%	14.0%
6	**Cost of equity**		**29.0%**	**31.0%**	**33.0%**
	Weighted average cost of capital				
	Cost of debt				
7	Corporate interest rate	6	9.5%	9.8%	10.0%
8	Corporate income tax rate	7	26.5%	26.5%	26.5%
9	**Cost of debt**		**7.0%**	**7.2%**	**7.4%**
	Weighting				
10	Debt/business enterprise	8	5.0%	2.5%	0.0%
11	Equity/business enterprise		95.0%	97.5%	100.0%
	Weighted components				
12	Cost of debt (after-tax)		0.3%	0.2%	0.0%
13	Cost of equity		27.6%	30.3%	33.0%
14	**Unadjusted nominal discount rate**		**27.9%**	**30.4%**	**33.0%**

Weighted Average Cost of Capital

Notes:

1 The risk free rate is the Long-term (20-year) US Treasury Coupon Bond Yield, as per Duff & Phelps, 2016 Valuation Handbook: Guide to Cost of Capital.

2 The long-term equity risk premium as per Duff & Phelps, 2016 Valuation Handbook: Guide to Cost of Capital.

3 Average industry risk premium for SIC 59, 596, 5961, 599, from the Duff & Phelps, 2016 Valuation Handbook: Guide to Cost of Capital.

4 The size premium for the 10z decile as per Duff & Phelps, 2016 Valuation Handbook: Guide to Cost of Capital.

5 Based on the scope of our review.

6 Source: Capital IQ, Corporate bond yields for USD - Consumer Discretionary - B rated debt as at the Valuation Date.

7 The effective blended corporate tax rate for an Ontario corporation, as at the Valuation Date.

8 Based on our judgement and review of similar public companies.

Estimate Valuation Report **Schedule 8**

American Aires Inc.

As at January 1, 2017

Historical Balance Sheets

		As at December 31,			
		2013	2014	2015	2016
	Assets				
1	Current assets				
2	Cash	9,990	28,901	34,160	12,037
3	Accounts receivable	10,081	45,544	24,712	994
4	Prepaid expenses	-	7,983	2,411	3,538
5	Inventory	13,900	89,122	67,067	46,605
6		33,971	171,550	128,350	63,174
	Fixed assets				
7	Property plant and equipment	-	18,292	50,021	-
8		-	18,292	50,021	-
9	**Total Assets**	**33,971**	**189,842**	**178,371**	**63,174**
	Liabilities				
10	Current liabilities				
11	Bank loan	-	20,052	5,586	-
12	Accounts payable and accrued liabilities	-	69,615	68,624	66,769
13	Shareholder loan	134,334	232,161	271,653	258,831
14	Total liabilities	134,334	321,828	345,863	325,600
	Shareholders' equity				
15	Share capital	100	100	100	100
16	Deficit	(100,463)	(132,086)	(167,592)	(262,526)
17	Total shareholders' equity	(100,363)	(131,986)	(167,492)	(262,426)
18	**Total Liabilities and Shareholders' Equity**	**33,971**	**189,842**	**178,371**	**63,174**

Notes:

1 Source: Management.

Estimate Valuation Report

Schedule 9

American Aires Inc.

As at January 1, 2017

Historical Income Statements

		For the years ended December 31,			
		2013	2014	2015	2016
1	Revenue	76,966	275,062	265,956	240,567
2	Cost of goods sold	40,010	102,396	113,514	105,991
3	Gross profit	36,956	172,666	152,442	134,576
4	*Gross margin*	*48.0%*	*62.8%*	*57.3%*	*55.9%*
	Expenses				
5	Advertising and promotion	5,906	83,951	8,555	62,969
6	Bad debt expense	-	-	-	14,676
7	Consulting fees	-	3,220	11,676	1,530
8	Foreign exchange	-	4,104	9,939	2,054
9	Impairment of property and equipment	-	-	-	35,898
10	Office and general	67,033	33,379	25,915	29,777
11	Professional fees	6,778	17,176	26,248	21,050
12	Rent expense	-	6,064	47,229	32,317
13	Research and development	-	-	-	-
14	Salaries and benefits	6,000	41,381	33,332	-
15	Travel	19,702	10,715	5,206	4,537
16	Total operating expenses	105,419	199,990	168,100	204,808
17	**EBITDA**	**(68,463)**	**(27,324)**	**(15,658)**	**(70,232)**
18	*EBITDA margin*	*-89.0%*	*-9.9%*	*-5.9%*	*-29.2%*
19	Depreciation	-	2,461	14,483	20,245
20	Interest expense	-	1,838	5,365	4,457
		-	4,299	19,848	24,702
21	**Pre-tax net income (loss)**	**(68,463)**	**(31,623)**	**(35,506)**	**(94,934)**
22	*Pre-tax net income (loss) margin*	*-89.0%*	*-11.5%*	*-13.4%*	*-39.5%*

Notes:

1 Source: Management.

Estimate Valuation Report | **Schedule 10**

American Aires Inc.

As at January 1, 2017

Projections

		For the years ending December 31,											
		2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	Terminal
1	Revenue	406,200	1,200,000	2,137,500	3,912,500	6,125,000	8,881,250	11,989,688	14,387,625	16,401,893	18,042,082	19,305,027	20,270,279
2	Cost of goods sold	95,086	291,500	543,250	1,034,250	1,655,500	2,400,475	3,240,641	3,888,770	4,433,197	4,876,517	5,217,873	5,478,767
3	Gross profit	311,114	908,500	1,594,250	2,878,250	4,469,500	6,480,775	8,749,046	10,498,856	11,968,695	13,165,565	14,087,154	14,791,512
4	*Gross margin*	*76.6%*	*75.7%*	*74.6%*	*73.6%*	*73.0%*	*73.0%*	*73.0%*	*73.0%*	*73.0%*	*73.0%*	*73.0%*	*73.0%*
	Operating expenses												
5	Management fees	150,000	150,000	150,000	150,000	150,000	180,000	212,400	246,384	280,878	314,583	336,604	343,336
6	Advertising and promotion	175,000	350,000	450,000	600,000	800,000	1,160,000	1,566,000	1,879,200	2,142,288	2,356,517	2,521,473	2,647,547
7	Research and development	275,000	275,000	275,000	275,000	275,000	330,000	389,400	451,704	514,943	576,736	617,107	629,449
8	Travel	15,000	15,000	15,000	15,000	15,000	18,000	21,240	24,638	28,088	31,458	33,660	34,334
9	Patent costs	200,000	200,000	200,000	200,000	200,000	240,000	283,200	328,512	374,504	419,444	448,805	457,781
10	Wages and benefits	130,000	130,000	170,000	210,000	210,000	252,000	297,360	344,938	393,229	440,416	471,245	480,670
11	Rent and office	90,000	125,000	150,000	175,000	200,000	240,000	283,200	328,512	374,504	419,444	448,805	457,781
12	Total operating expenses	1,035,000	1,245,000	1,410,000	1,625,000	1,850,000	2,420,000	3,052,800	3,603,888	4,108,432	4,558,598	4,877,700	5,050,899
13	**EBITDA**	**(723,886)**	**(336,500)**	**184,250**	**1,253,250**	**2,619,500**	**4,060,775**	**5,696,246**	**6,894,968**	**7,860,263**	**8,606,966**	**9,209,454**	**9,740,614**
14	*EBITDA margin*	*-178.2%*	*-28.0%*	*8.6%*	*32.0%*	*42.8%*	*45.7%*	*47.5%*	*47.9%*	*47.9%*	*47.7%*	*47.7%*	*48.1%*

Notes:

1 Source: Management

Comparable Royalty Rates

	Licensee	Licensor	Effective Year	Description	Royalty Rate
1	UT-Battelle, LLC, successor to Lockheed Martin Energy Research Corp.	Caliper Technologies Corp. f/k/a Caliper Microanalytic Systems, Inc.	2002	Exclusive patent license to commercialize, manufacture, have manufactured, use , sell, offer, import and sublicense chips consisting of a glass or polymer base with reservoirs, microchannels or similar features and a glass or polymer cover, in the field of chemical analysis, but excluding the field of analysis of nucleic acids for diagnostic applications and non-electrophoretic means of gene discovery.	3.0%
2	National Aeronautics and Space Administration	Nanotailor Inc.	2007	Nonexclusive patent license to practice, make, have made, use, offer, sell, transfer and dispose of carbon nanotubes and products related to carbon nanotube production.	7.0%
3	UT-Battelle, LLC, successor to Lockheed Martin Energy Research Corp.	Caliper Technologies Corp. f/k/a Caliper Microanalytic Systems, Inc.	2002	Exclusive patent license to commercialize, manufacture, have manufactured, use , sell, offer, import and sublicense products and devices related to microfluidic manipulations for chemical analysis and electrokinetic focusing of fluid streams using cytometry, that are not chips, and excluding the field of analysis of nucleic acids for diagnostic applications and non-electrophoretic means of gene discovery.	2.0%
4	Rugters, The State University of New Jersey	Axion International Inc.	2007	Exclusive patent and technology license to make, have made, use, offer, sell, modify, develop, import, sublicense, or export products related to polystyrene and polyolefin plastics derived from recycled plastics.	3.0%
5	EMC Corp.	MYLEX Corp	1998	Nonexclusive patent license to make, have made, use sell, lease and dispose of array controllers, which are single or multi-processor devices operable to physically and logically configure a plurality of physical mass storage devices as one or more independently accessible arrays, and to control the communication of data between the arrays and external data sources, and data storage subsystems including one or more arrays of physical mass storage devices and one or more array controllers.	3.0%
6	Discovision Associates	Zomax Optical Media	1994	Nonexclusive patent license to make, have made, use, rent, lease, sell and transfer optical disc products such as compact, CD-ROM, video, and digital discs having pre-recorded thereon audio, video and graphic images for interactive use by means of computer apparatus.	3.0%
7	Rick L. Chapman, individual	Allergy Free L	1997	Exclusive patent and know-how license to manufacture, use, and sell adjustable, electro-static and radial pleated air filter systems for the removal of particulates and odors of air.	3.3%
8	GPS Industries Inc.	Optimal Royalty LP	2004	Nonexclusive patent license to make, have made, use, sell, offer, lease, import and dispose of handheld GPS devices on golf courses for measuring distances and for course management, such as tracking the positions of golfers.	5.0%
9	Lucent Technologies Inc.	Electronic Control Security Inc.	1997	Nonexclusive patent and know-how license to make, have made, use, lease, sell and import products related to optical fiber sensing systems, which are instruments for sensing any intrusion into an optical fiber.	4.4%
10	Broadcom Corp.	Emulex Corp.	2011	Amendment to injunction from a lawsuit, with royalty due to make, use, import, sell and offer the BladeEngine 2, BladeEngine 3, and Lancer chips and related products such as network adapters, network interface card devices, converged network adapters, iSCSI adapter devices, converged fabric controllers, ethernet controller devices, and ASIC devices, sold to existing customers.	9.0%

Comparable Royalty Rates

	Royalty Rate
Minimum	**2.0%**
First quartile	**3.0%**
Average	**4.3%**
Third quartile	**4.9%**
Maximum	**9.0%**

Notes:

1 Source: Royalty Stat

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