PYROGENESIS CANADA INC.

MANAGEMENT'S DISCUSSION AND ANALYSIS

This management's discussion and analysis ("MD&A") is intended to assist readers in understanding the business environment, strategies, performance and risk factors of PyroGenesis Canada Inc. ("PyroGenesis", or the "Company"). The MD&A provides the reader with a view and analysis, from the perspective of management, of the Company's financial results for the three and the nine months ended September 30, 2017. The MD&A has been prepared in accordance with National Instrument 51-102, Continuous Disclosure Requirements, and should be read in conjunction with the audited financial statements and related notes thereto of the Company for the year ended December 31, 2016.

The condensed financial statements and MD&A have been reviewed by PyroGenesis' Audit Committee and were approved by its Board of Directors on November 28, 2017. The Board of Directors is responsible for ensuring that the Company fulfills its responsibilities for financial reporting and is ultimately responsible for reviewing and approving the MD&A. The Board of Directors carries out this responsibility principally through its Audit Committee. The Audit Committee is appointed by the Board of Directors and is comprised of independent and financially literate directors. The Audit Committee reports its findings to the Board of Directors for its consideration when it approves the MD&A and financial statements for issuance to shareholders.

The following information takes into account all material events that took place up until November 28, 2017, the date on which the Company's Board of Directors approved this MD&A. Unless otherwise indicated, all amounts are presented in Canadian dollars. The Company's functional and reporting currency is the Canadian dollar.

Additional information regarding PyroGenesis is available on SEDAR (www.sedar.com), OTC Markets (www.otcmarkets.com) and on the Company's website at www.pyrogenesis.com.

FORWARD-LOOKING STATEMENTS

This MD&A contains forward-looking statements. All statements other than statements of historical fact contained in this MD&A are forward-looking statements, including, without limitation, the Company's statements regarding its products and services; relations with suppliers and clients; future financial position; business strategies; potential acquisitions; potential business partnering; litigation; and plans and objectives. In certain cases, forward-looking statements can be identified by the use of words such as "plans", "expects" or "does not expect", "is expected", "budget", "scheduled", "estimates", "forecasts", "intends", "anticipates" or "does not anticipate", or "believes", or variations of such words and phrases or state that certain actions, events or results "may", "could", "would", "might" or "will be taken", "occur" or "be achieved" and similar words or the negative thereof. Although management of the Company believes that the expectations represented in such forward-looking statements are reasonable, there can be no assurance that such expectations will prove to be correct.

In particular, this MD&A contains forward-looking statements that relate, but are not limited, to:

- the Company's business strategies, strategic objectives and growth strategy;
- the Company's current and future capital resources and the need for additional financing;
- the Company's ability to increase sales, including the results of the successful completion of the Company's current projects;
- management's expectation that the Company will achieve sustained annual growth and profitability, and that gross margins will increase resulting in a decrease in cost of sales as a percentage of revenue; and
- the Company's overall financial performance.

By their nature, forward-looking statements require assumptions and are subject to inherent risks and uncertainties including those discussed herein. In particular, forward-looking statements relating to future sales, growth and profitability are based on the assumption that current projects will be completed, and the Company will be awarded certain anticipated contracts pursuant to recent negotiations with, and statements made by, third parties. There is significant risk that predictions and other forward-looking statements will not prove to be accurate. Readers are cautioned to not place undue reliance on forward-looking statements made herein because several factors could cause actual future results, conditions, actions or events to differ materially from the targets, expectations, estimates or intentions expressed in the forward-looking statements.

The future outcomes that relate to forward-looking statements may be influenced by many factors, including, but not limited to, the strength of the Canadian, US and Asian economies; operational, funding, and liquidity risks; unforeseen engineering and environmental problems; delays or inability to obtain required financing and/or anticipated contracts; risks associated with licenses, permits and regulatory approvals; supply interruptions or labour disputes; foreign exchange fluctuations and collection risk; competition from other suppliers, or alternative, less capital intensive, energy solutions; and risk factors described elsewhere in this document under the heading "Risk Factors". We caution that the foregoing list of factors is not exhaustive, and that, when relying on forward-looking statements to make decisions with respect to the Company, investors and others should carefully consider these factors, as well as other uncertainties and potential events, and the inherent uncertainty of forward-looking statements.

Although the Company has attempted to identify significant factors that could cause actions, events or results to differ materially from those described in forward-looking statements, there may be other factors that cause actions, events or results not to be as anticipated, estimated or intended. There can be no assurance that forward-looking statements will prove to be accurate, as actual results and future events could differ materially from those anticipated in such statements. Accordingly, readers should not place undue reliance on forward-looking statements. Forward-looking statements are provided as of the date of this MD&A, and the Company assumes no obligation to update or revise such forward-looking statements to reflect new events or circumstances except as required under applicable securities laws.

The forward-looking statements contained herein are expressly qualified in their entirety by this cautionary statement. The forward-looking statements included in this MD&A are made as of the date of this MD&A or such other date specified herein.

OVERVIEW

PyroGenesis Canada Inc. is the world leader in the design, development, manufacturing and commercialization of advanced plasma processes. The Company provides engineering and manufacturing expertise, cutting-edge contract research, as well as turnkey process equipment packages to the defense, metallurgical, mining, advanced materials (including 3D printing), oil & gas, and environmental industries. With a team of experienced engineers, scientists and technicians working from its Montreal office and its 3,800m^2 production facility, PyroGenesis maintains its competitive advantage by remaining at the forefront of technology development and commercialization. PyroGenesis' core competencies allow the Company to be a leader in providing innovative plasma torches, plasma waste processes, plasma atomisation processes, high-temperature metallurgical processes, and technical sales and support services to the global marketplace. PyroGenesis' operations are ISO 9001:2008 certified, and have been ISO certified since 1997. PyroGenesis is a publicly-traded Canadian company on the TSX Venture Exchange (Ticker symbol: PYR.V) and on the OTCQB in the United States (Ticker symbol: PYRNF).

SELECTED FINANCIAL INFORMATION

	Three months ended Sept 30, 2017	2016	% Change 2017vs2016	Nine months ended Sept 30, 2017	2016	% Change 2017vs2016
Revenue	$ **2,026,557**	$ 1,902,748	$ 7%	$ **5,896,092**	$ 3,738,590	$ 58%
Cost of sales and services before amortization of intangible assets	**870,352**	682,104	28%	**2,820,911**	2,150,287	31%
Gross margin before amortization of intangible assets	**1,156,205**	1,220,644	-5%	**3,075,181**	1,588,303	94%
Amortization of intangible assets	**-**	349,268	-100%	**-**	1,047,805	-100%
Gross profit (loss)	**1,156,205**	871,374	33%	**3,075,181**	540,498	469%
Expenses						
Selling, general and administrative	**1,160,752**	1,397,638	-17%	**3,443,123**	3,446,054	0%
Research and development	**82,951**	45,283	83%	**213,158**	106,872	99%
Finance income and finance costs	**272,585**	145,495	87%	**686,176**	298,277	130%
	1,516,288	1,588,415	-5%	**4,342,457**	3,851,202	13%
Net loss and comprehensive loss	**(360,083)**	(717,041)	-50%	**(1,267,276)**	(3,310,704)	-62%
Other income						
Impairment loss on property and equipment	**-**	-		**-**	-	
Comprehensive loss	$ **(360,083)**	$ (717,041)	$ -50%	$ **(1,267,276)**	$ (3,310,704)	$ -62%
Basic and diluted loss per share	$ **(0.00)**	$ (0.01)	$	$ **(0.01)**	$ (0.03)	$
Modified EBITDA (loss)	$ **91,713**	$ 238,860	-62%	$ **(73,846)**	$ (1,112,263)	-93%

Modified EBITDA (loss) is not a performance measure defined under IFRS and it is not considered an alternative to Income (Loss) from operations or Comprehensive Earnings (Loss) in the context of measuring a Company's performance. Management believes that providing certain non-GAAP performance measures, in addition to IFRS measures, provides users of the Company's financial statements with an enhanced understanding of their results and related trends, and as such increases transparency and clarity. Modified EBITDA (loss) is an important measure of operating performance because it allows management, investors and others to evaluate and compare the Company's core operating results, including our return on capital and operating efficiencies, from period to period, by removing the impact of its capital structure (interest expense to service outstanding debt), asset base (depreciation and amortization), tax consequences, and other non-operating items not requiring cash outlays including share-based compensation and change in fair value of investment. Securities regulations require that companies caution readers that earnings and other measures adjusted to a basis other than IFRS do not have standardized meanings and are unlikely to be comparable to similar measures used by other companies. Accordingly, they should not be considered in isolation.

Extract from Statement of Financial Position at:

		Sept 30, 2017		Dec 31 2016
Current assets		**2 107 588**		1 968 963
Non-current assets		**2 489 110**		1 279 968
Total assets	**$**	**4 596 699**	$	3 248 931
Current liabilities		**7 697 689**		4 048 316
Non-current liabilities		**12 433**		3 605 897
Total liabilities	**$**	**7 710 122**	$	7 654 213
Shareholders' equity (deficiency)	**$**	**(3 113 423)**	$	(4 405 282)

RESULTS OF OPERATIONS

Revenue

PyroGenesis recorded revenue of $2,026,557 in the third quarter of 2017 ("Q3, 2017"), representing an increase of 7% compared with $1,902,748 recorded in the third quarter of 2016 ("Q3, 2016"). Revenue for the nine months of fiscal 2017 were $5,896,092, an increase of 58% over revenue of $3,738,590 during the same period in 2016.

Revenues recorded in Q3, 2017 and for the nine months of fiscal 2017 were generated primarily from:

- (i) the development of a vacuum arc reducing process to convert Silica into high purity Silicon metal,
- (ii) the manufacture and further field testing of Tactical PACWADS, the first mobile plasma system for destruction of chemical warfare agents under contract with an international military consortium,
- (iii) the demonstration of the viability of PyroGenesis' existing plasma chemical warfare agent destruction platform with locally available materials, for the complete eradication of chemical warfare agents without creating hazardous by-products,
- (iv) support services related to PAWDS-Marine systems supplied to the US Navy.

Cost of Sales and Services and Gross Margin

	Three months ended Sept 30, 2017	2016	% Change 2017vs2016	Nine months ended Sept 30, 2017	2016	% Change 2017vs2016
Employee compensation	$ **477,553**	$ 397,653	20%	$ **1,455,904**	$ 1,379,448	6%
Subcontracting	**9,123**	(119)	-7752%	**75,755**	128,277	-41%
Direct materials	**153,988**	171,237	-10%	**960,705**	361,081	166%
Manufacturing overhead & other	**279,656**	125,046	124%	**628,541**	423,863	48%
Foreign exchange loss	**38,370**	4,642	727%	**57,583**	9,007	539%
Investment tax credits	**(88,338)**	(16,354)	440%	**(357,577)**	(151,389)	136%
Sub-total before amortization of intangible assets	**870,352**	682,105	28%	**2,820,911**	2,150,287	31%
Amortization of intangible assets		349,268	-100%	**-**	1,047,806	-100%
Total Cost of Sales and Services	$ **870,352**	$ 1,031,373	-16%	$ **2,820,911**	$ 3,198,092	-12%

Gross Margin

	Three months ended Sept 30, 2017	2016	Nine months ended Sept 30, 2017	2016
Revenue	$ **2,026,557**	$ 1,902,748	$ **5,896,092**	$ 3,738,590
Cost of Sales and Services before amortization of intangible assets	**870,352**	682,105	**2,820,911**	2,150,287
Gross Margin before amortization of intangible assets	**1,156,205**	1,220,643	**3,075,181**	1,588,303
Gross Margin % before amortization of intangible assets	**57.1%**	64.2%	**52.2%**	42.5%
Amortization of intangible assets	**-**	349,268	**-**	1,047,805
Gross Margin after amortization of intangible assets	$ **1,156,205**	$ 871,375	$ **3,075,181**	$ 540,498
Gross Margin % after amortization of intangible assets	**57.1%**	45.8%	**52.2%**	14.5%

Gross margin before amortization of intangible assets is not a performance measure defined under IFRS and it is not considered an alternative to gross margin in the context of measuring the Company's performance. Management believes that providing certain non-GAAP performance measures, in addition to IFRS measures, provides users of the Company's financial statements with an enhanced understanding of its results and related trends, and increases transparency and clarity. Gross margin before amortization of intangible assets is an important measure of operating performance because it allows management, investors and others to evaluate and compare the Company's core operating results, including its return on capital and operating efficiencies, from period to period, by removing the impact of non-operating items not requiring cash outlays. Securities regulations require that companies caution readers that earnings and other measures adjusted to a basis other than IFRS do not have standardized meanings and are unlikely to be comparable to similar measures used by other companies. Accordingly, they should not be considered in isolation.

Cost of sales and services before amortization of intangible assets was $870,352 in Q3, 2017, representing an increase of 28% compared with $682,105 in Q3, 2016. On a year-to-date basis, the cost of sales and services before amortization of intangible assets was $2,820,911 an increase of 31% as compared to $2,150,287 for the same period in 2016.

In Q3, 2017 subcontracting costs and manufacturing overhead and other increased to $9,123 (Q3, 2016: -$119) and $279,656 (Q3, 2016: $125,046) respectively, while cost of direct materials decreased to $153,988 (Q3, 2016 $171,237).

On a year-to-date basis, cost of direct materials and manufacturing overhead and other increased to $960,705 (2016: $361,081) and $628,541 (2016: $423,863) respectively, while subcontracting costs decreased to $75,755 (2016: $128,277).

The type of contracts being executed and the nature of the project activity during any given quarter has a significant impact on both the overall level of cost of sales and services reported in a period, as well as the composition of the cost of sales and services, as the mix between labour, materials and subcontracts may be significantly different.

Investment tax credits recorded against cost of sales are primarily related to client funded projects that qualify for tax credits from the provincial government of Quebec. Qualifying tax credits increased to $88,338 in Q3, 2017, compared with $16,354 in Q3, 2016. This represents an increase of 440%. On a year-to-date basis, qualifying tax credits increased to $357,577 in 2017, compared with $151,389 in 2016. The Company continues to make investments in research and development projects involving strategic partners and government bodies.

The gross margin for Q3, 2017, before amortization of intangible assets was $1,156,205, or 57.1% of revenue. This compares with a gross margin before amortization of intangible assets of $1,220,643 (64.2% of revenue) for Q3, 2016. On a year-to-date basis, the gross margin before amortization represents 52.2% of revenue versus 42.5% over the same period in 2016.

The amortization of intangible assets of $Nil in Q3, 2017 and $349,268 in Q3, 2016 relates to the licenses and know-how purchased in 2011 from a company under common control. Of note, this expense is a non-cash item and the underlying asset was fully amortized in Fiscal 2016.

Selling, General and Administrative Expenses

	Three months ended Sept 30, 2017	2016	% Change 2017vs2016	Nine months ended Sept 30, 2017	2016	% Change 2017vs2016
Employee compensation	$ 598,116	$ 526,994	13%	$ 1,704,448	$ 1,606,317	6%
Professional fees	172,805	249,985	-31%	552,664	693,385	-20%
Office and general	113,416	97,633	16%	359,434	308,439	17%
Travel	42,521	16,552	157%	160,498	99,828	61%
Depreciation on property and equipment	27,503	31,310	-12%	81,952	95,821	-14%
Government grants	(4,500)	-	-100%	(9,000)	(28,457)	-68%
Other expenses	59,183	45,337	31%	167,824	138,597	21%
Sub-total before Share-based payments	1,009,044	967,811	4%	3,017,820	2,913,930	4%
Share-based payments	151,708	429,827	-65%	425,303	532,123	-20%
Total selling, general and administrative	$ 1,160,752	$ 1,397,638	-17%	$ 3,443,123	$ 3,446,053	0%

Included within Selling, General and Administrative expenses ("SG&A") are costs associated with corporate administration, business development, project proposals, operations administration, investor relations and employee training.

SG&A expenses for Q3,2017 excluding the costs associated with share-based payments (a non-cash item in which options vest over a four year period), were $1,009,044, representing an increase of 4% compared with $967,811 reported for Q3, 2016. On a year-to-date basis, SG&A expenses before share-based payments were $3,017,820 compared with $2,913,930 in the same period in 2016.

The increase in SG&A expenses in Q3, 2017 over the same period in 2016 is mainly attributable to the net effect of:

i) an increase of 13% in employee compensation,
ii) a decrease of 31% for professional fees, primarily due to decrease in accounting fees and deferred patent expenses,
iii) an increase of 16% in office and general expenses, due to an increase in computers and internet expenses,
iv) travel costs increased by 157%, due to an increase in travel abroad,
v) depreciation on property and equipment decreased by 12%, asset under development in Q3, 2017 will begin to be depreciated when the asset is available or ready for use,
vi) government grants increased by 100% due to increased level of activities supported by such grants and,
vii) other expenses increased by 31%, primarily due to higher cost of freight and shipping.

Separately, share based payments decreased by 65% in Q3, 2017 over the same period in 2016 as a result of the vesting structure of the stock option plan including the stock options offered on September 25, 2016.

Research and Development ("R&D") Costs

Internal R&D Project Costs

		Three months ended Sept 30,			% Change		Nine months ended Sept 30,			% Change
		2017		2016	2017vs2016		2017		2016	2017vs2016
Employee compensation	$	78 096	$	42 864	82%	$	198 611	$	83 847	137%
Subcontracting		1 991		-	100%		3 833		-	100%
Materials and equipment		2 332		1 992	17%		9 538		21 038	-55%
Other expenses		532		427	25%		1 176		1 987	-41%
Total net R&D costs	$	82 951	$	45 283	83%	$	213 158	$	106 872	99%

The Company incurred $82,951 of R&D costs in Q3, 2017, compared with $45,283 in Q3, 2016, representing an increase of 83%. During the first nine months of fiscal 2017, net spending on internal R&D was $213,158 as compared to $106,872 in 2016.

In addition to internally funded R&D projects, the Company also incurred R&D expenditures during the execution of client funded projects. These expenses are eligible for Scientific Research and Experimental Development ("SR&ED") tax credits. SR&ED tax credits on client funded projects are applied against cost of sales and services (see "Cost of Sales" above).

Finance Income and Finance Costs

	Three months ended Sept 30, 2017	2016	% Change 2017vs2016	Nine months ended Sept 30, 2017	2016	% Change 2017vs2016
Adjustment to the fair value of investments	$ 101 099	$ (14 414)	-801%	$ 196 834	$ (124 414)	-258%
Gain on disposal of investments	-	-		-	(50 000)	-100%
Finance expenses	$ **171 486**	$ 159 909	7%	$ **489 342**	$ 472 691	4%
Net finance expenses	$ **272 585**	$ 145 495	87%	$ **686 176**	$ 298 277	130%

Finance expenses for Q3, 2017 and the first nine months of fiscal 2017 totaled $171,486 and $489,342, respectively, as compared with $159,909 and $472,691 for the same periods in 2016, representing an increase of 7% and 4%.

The increase in net finance costs in 2017, is mostly attributable to the decrease in fair value of investments of $101,099 (2016 – Income of $14,414) in Q3, 2017. On a year-to-date basis, the decrease in fair value of investments amounted to $196,834 (2016 – revenue of $174,414 including a gain on disposal of investments of $50,000).

Depreciation on Property and Equipment

	Three months ended Sept 30, 2017	2016	% Change 2017vs2016	Nine months ended Sept 30, 2017	2016	% Change 2017vs2016
Depreciation on property and equipment	$ **27 503**	$ 31 311	-12%	$ **81 951**	$ 95 822	-14%

The depreciation on property and equipment decreased to $27,503 and $81,951 in Q3, 2017 and the first nine months of fiscal 2017, compared with $31,311 and $95,822 in the same periods in 2016. The 12% and 14% decrease reflect a reduced level of investments in machinery and equipment from 2010 to 2015. The asset under development in the nine first months of fiscal 2017 will begin to be depreciated when the asset is available or ready for use.

Net loss and comprehensive loss

	Three months ended Sept 30, 2017	2016	% Change 2017vs2016	Nine months ended Sept 30, 2017	2016	% Change 2017vs2016
Loss from operations	$ **(360 083)**	$ (717 041)	-50%	$ **(1 267 276)**	$ (3 310 704)	-62%
Comprehensive loss	$ **(360 083)**	$ (717 041)	-50%	$ **(1 267 276)**	$ (3 310 704)	-62%

The loss from operations and comprehensive loss for Q3, 2017, was $360,083 compared to $717,041 in Q3, 2016 representing a decrease of 50% year-over-year. Year-to-date, loss from operations was $1,267,276 as compared to a loss of $3,310,704 for the same period in 2016.

The decrease in net comprehensive loss in Q3, 2017 compared to the same period in 2016 is primarily attributable to increase in revenue of $123,809 offset by the factors described above, which have been summarized as follows:

i) an increase in cost of sales and services totaling $188,249 in Q3, 2017,
ii) a decrease in amortization of intangible assets in Q3 2017 of $349,268,
iii) a decrease in SG&A expenses of $236,886 arising in Q3, 2017 as explained above,

iv) an increase in R&D expenses of $37,668 primarily since many of the Company's engineering and R&D resources were concentrated on activities within projects under construction for clients in 2016, with such costs being recorded within cost of sales.

v) an increase in net finance costs of $127,090 in Q3, 2017 due the decrease in the fair value of investments of $115,513 compared to the same period in 2016.

EBITDA, Adjusted and Modified

	Three months ended Sept 30, 2017	2016	% Change 2017vs2016	Nine months ended Sept 30, 2017	2016	% Change 2017vs2016
Comprehensive loss	$ (360,083)	$ (717,041)	-50%	$ (1,267,276)	$ (3,310,704)	-62%
Depreciation on property and equipment	27,503	31,311		81,951	95,822	
Amortization of intangible assets	-	349,268		-	1,047,806	
Financing charges	171,486	$ 159,909		489,342	$ 472,691	
EBITDA (loss)	$ (161,094)	$ (176,553)	-9%	$ (695,983)	$ (1,694,386)	-59%
Other non-cash items:						
Share-based payments	151,708	429,827		425,303	532,123	
Adjusted EBITDA (loss)	(9,386)	253,274		(270,680)	(1,162,263)	
Change in fair value of investments	101,099	(14,414)		196,834	50,000	
Modified EBITDA (loss)	$ 91,713	$ 238,860	-62%	$ (73,846)	$ (1,112,263)	-93%

EBITDA is defined as Earnings (from operations) before Net Financing Charges, Taxes, Depreciation and Amortization, Adjusted EBITDA is defined as Earnings (from operations) before Net Financing Charges, Taxes, Depreciation, Amortization and other non-cash items including share-based payment costs, and Modified EBITDA is defined as Earnings (from operations) before Net Financing Charges, Taxes, Depreciation, Amortization and other non-cash items including share-based payment costs and change in fair value of investments.

EBITDA, Adjusted EBITDA and Modified EBITDA are not performance measures defined under IFRS and they are not considered an alternative to income or loss from operations, or to comprehensive earnings or loss, in the context of measuring a company's performance. Management believes that providing certain non-GAAP performance measures, in addition to IFRS measures, provides users of the Company's financial statements with an enhanced understanding of its results and related trends and increases transparency and clarity. Management believes that EBITDA, Adjusted EBITDA and Modified EBITDA are important measures of operating performance because it allows management, investors and others to evaluate and compare the Company's operating results, including its return on capital and operating efficiencies, from period-to-period by removing the impact of the Company's capital structure (interest expense to service outstanding debt), asset base (depreciation and amortization), tax consequences, and other non-operating items not requiring cash outlays including the adjustment to the fair value of investments and share-based compensation. Securities regulations require that companies caution readers that earnings and other measures adjusted to a basis other than IFRS do not have standardized meanings and are unlikely to be comparable to similar measures used by other companies. Accordingly, they should not be considered in isolation.

The EBITDA loss in Q3, 2017 was $161,094 compared with an EBITDA loss of $176,553 for Q3, 2016, representing a decrease of 9%. On a year-to-date basis, the EBITDA loss was $695,983 in 2017 compared with $1,694,386 in 2016, representing a decrease of 59%. The decrease in the EBITDA loss in Q3, 2017 and the first nine month of fiscal 2017 compared with the same periods in 2016 is primarily attributable to higher level of revenues in 2017.

Modified EBITDA in Q3, 2017 was $91,713 compared with a Modified EBITDA of $238,860 for Q3, 2016. On a year-to-date basis, the Modified EBITDA loss was $73,846 in 2017 compared with $1,112,263 in 2016. The decrease of $147,147 in the Modified EBITDA in Q3, 2017 is mainly attributable to the decreased comprehensive loss, a decrease in depreciation on property and equipment, a decrease of amortization of intangible assets, an increase in finance charges, a decrease in share-based payments and other non-cash items.

SUMMARY OF QUARTERLY RESULTS

The majority of PyroGenesis' revenue is recognised using the percentage of completion basis, and is dependent on the timing of project initiation and execution, including project engineering, manufacturing, and testing.

LIQUIDITY AND CAPITAL RESOURCES

The following table summarizes the contractual maturities of financial liabilities as at September 30, 2017.

	Total	6 months or less	6 to 12 months	1-2 year	2-3 year
	$	$	$		$
Accounts payable and accrued liabilities	**1,926,302**	**1,926,302**	**-**	**-**	**-**
Capital lease obligations	**21,851**	**4,521**	**4,521**	**9,042**	**3,767**
Long-term debts	**259,278**	**259,278**	**-**	**-**	**-**
Convertible debentures	**4,150,000**	**-**	**4,150,000**	**-**	**-**
	6,357,431	**2,190,101**	**4,154,521**	**9,042**	**3,767**

The Company has incurred, in the last several years, operating losses and negative cash flows from operations, resulting in an accumulated deficit of $38,293,681 and a negative working capital of $5,590,101 as at September 30, 2017 (December 31, 2016 - $37,026,405 and $2,079,353 respectively). Furthermore, as at September 30, 2017, the Company's current liabilities and expected level of expenses for the next twelve months exceed cash on hand of $317,931 (December 31, 2016 - $385,257). The Company has relied upon external financings to fund its operations in the past, primarily through the issuance of equity, debt, and convertible debentures, as well as from investment tax credits.

Revenue generated from active projects does not yet produce sufficient positive cash flow to fund operations. However, based on current backlog of $7.41MM at November 28, 2017 (over 142% of 2016 revenues), together with the pipeline of prospective new projects, cash flow from operations are expected to become positive in the very near future.

OFF-BALANCE SHEET ARRANGEMENTS

The Company had no off-balance sheet arrangements as at September 30, 2017.

SUMMARY OF CASH FLOWS

	Three months ended Sept 30, 2017	2016	Nine months ended Sept 30, 2017	2016
Cash provided by (used in) operating activities	**$ (714 479)**	$ (628 766)	**$ (541 989)**	$ (2 114 536)
Cash provided by (used in) investing activities	**(344 015)**	(248 500)	**(1 292 407)**	(248 500)
Cash provided by (used in) financing activities	**1 118 287**	1 024 907	**1 767 070**	1 801 821
Increase (decrease) in cash	**59 793**	147 641	**(67 326)**	(561 215)
Cash - end of period	**317 931**	206 153	**317 931**	206 153

For the three months ended Q3, 2017, cash flow used by operating activities was $714,479 compared to $628,766 for the same period in the prior year. On a year to date basis, cash flow from operating activities resulted in a net use of cash of $541,989 compared to a net use of $2,114,536 for the same period in the prior year.

The use of cash during Q3, 2017 consists of the comprehensive loss of $360,083 (Q3, 2016 - $717,041) plus adjustment for non-cash items totalling $451,470 (Q3, 2016 - $905,901) less a negative net change in non-cash operating working capital items of $713,671 (Q3, 2016 - negative net change in non-cash operating working capital items of $667,853) plus interest paid of $92,195 (Q3, 2016 - interest paid of $93,297).

The net change in non-cash operating working capital items in Q3, 2017 was driven by:

a) a decrease in accounts receivable of $549,891 in Q3, 2017, compared to an increase of $150,141 in Q3, 2016;
b) a decrease in sales tax receivable of $29,639 in Q3, 2017, compared to a decrease of $22,371 in Q3, 2016;
c) a decrease in costs and profits in excess of billings on uncompleted contracts of $108,968 in Q3, 2017, compared to an increase of $223,531 in Q3, 2016;
d) an increase in inventory of $114,091 compared to nil in Q3, 2016;
e) an increase in investment tax credits receivable of $88,336 in Q3, 2017, compared to an increase of $16,354 in Q3, 2016;
f) an increase in prepaid expenses of $108,259 in Q3, 2017, compared to an increase of $46,387 in Q3, 2016;
g) an increase in accounts payable and accrued liabilities of $360,440 in Q3, 2017, compared to a decrease of $11,002 in Q3, 2016;
h) a decrease in billings in excess of costs and profits on uncompleted contracts of $1,451,923 in Q3, 2017, compared to a decrease of $242,809 in Q3, 2016.

Investing activities resulted in a use of cash of $344,015 in Q3, 2017, compared to a use of cash of $248,500 in Q3, 2016 resulting from the purchase of property and equipment and additions to deferred development costs.

Financing activities in Q3, 2017 and the first nine month of fiscal 2017 resulted in a net source of funds of $1,118,287 and $1,767,070 respectively, compared with a net source of funds of $1,024,907 and $1,801,821 for the same periods in 2016. In the first nine month of fiscal 2017, the Company issued common shares upon exercise of warrants, units and stock options for a cash proceeds of $2,133,832 raised for general working capital purposes, and repaid of $366,762 in loans and capital lease obligations. In 2016, the Company completed loans and a private placement for a net cash proceed of $1,138,721.

The net cash position of the Company increased by $59,793 for Q3, 2017 and decreased by $67,326 for the first nine months of fiscal 2017, compared to a net increase of $147,641 and a net decrease of $561,215 for the same periods in the prior year.

CAPITAL STOCK INFORMATION

The authorized share capital of the Company consists of an unlimited number of Class A common shares (the “Common Shares”). As at November 28, 2017, PyroGenesis had 110,299,791 Class A Common Shares, 4,190,290 warrants, 9,402,000 outstanding options issued, and 7,216,000 exercisable options issued.

GOING CONCERN

Cash generated from contracts and from providing technical sales and support to clients has historically been insufficient to meet the overall cash requirements of the Company to cover operating costs. For the Company to generate sufficient positive cash flows from operations and meet current cash requirements, the level of business must exceed that recorded to date. Management expects that the investments currently being made in accelerating projects under development for various clients, together with executing on the $7.41MM backlog at November 28, 2017, (over 142% of 2016 revenues) which is primarily related to the Company’s successful diversification into niche markets of the additive manufacturing (including 3D printing), and metals & mining industries, will continue to improve the Company’s cash position.

To date, the Company has raised financing primarily through successive issuances of equity and convertible debentures. There is no certainty that the Company will continue to be able to raise additional financing or expand its sales to fund its operations, although management is confident that it will be able to do so. These conditions indicate the existence of a material uncertainty that may cast significant doubt on the Company’s ability to continue as a going concern.

The September 30, 2017 condensed financial statements have been prepared using International Financial Reporting Standards (“IFRS”) applicable to a going concern, which contemplates the realization of assets and settlement of liabilities in the normal course of business as they become due. If the going concern assumption were not appropriate for these financial statements then adjustments would be necessary to the carrying value of assets and liabilities, the reported expenses and the statements of financial position classifications used. The impact on the financial statements could be material.

RELATED PARTY TRANSACTIONS

During the three and the nine months ended September 30, 2017, the company concluded the following transactions with related parties:

Rent was charged by a trust beneficially owned by a shareholder of the Company in the amount of $44,198 and $124,437 (2016 - $47,765 and $143,091), respectively. As at September 30, 2017, a balance due of $119,575 (December 31, 2016 - $40,688) is included in accounts payable and accrued liabilities.

The balance of interest on balance of sale charged by a company under common control that has not been paid of $70,678 (December 31, 2016 - $317,319) is included in loans.

Interest on the convertible debentures was charged by a shareholder of the Company in the amount of $14,171 and $42,513 (2016 – $14,156 and $42,469), respectively.

Fees of $26,000 and $85,000 were charged for services rendered by the independent directors who are members of the Company's Board of Directors (2016 - $23,000 and $76,000). A balance of $63,000 (December 31, 2016 – $Nil) is included in accounts payable and accrued liabilities.

Fees of Nil were charged for professional services rendered by a company controlled by a director of the Company (2016 – Nil and $47,000).

During Q3, 2017 and the nine-month months ended September 30, 2017, the total compensation to key management amounted to $142,047 and $426,047 (2016 - $140,233 and $485,141) respectively.

SUBSEQUENT EVENTS

In November 2017, the Company issued 2,600,000 options exercisable at $0.58 each to employees and a director.

A total of 2,551,000 options with expiry dates in September and November 2017 were exercised for net proceeds of $510,460.

In November 2017, the Company signed a non-disclosure agreement ("NDA") with a Global Engine Manufacturer.

In November 2017, the Company received a purchase order, in the amount of US$ 800,000 (Can$ 1.02 million), for the sale of a second (2nd) DROSRITE™ Furnace System (the "System"), and received a down payment of US$ 400,000 (Can$ 501,000).

CRITICAL ACCOUNTING ESTIMATES, NEW AND FUTURE ACCOUNTING POLICIES AND FINANCIAL INSTRUMENTS

For a discussion of critical accounting estimates, new and future accounting policies and financial instruments, please refer to notes 4, 5 and 19 of the annual 2016 Consolidated Financial Statements.

RISK FACTORS

PyroGenesis is subject to a number of risks and uncertainties that could significantly affect the Company's financial condition and performance. This list of risk factors may not be exhaustive as the Company operates in a rapidly changing business environment and new risk factors emerge from time to time. The Company cannot predict such risk factors, nor can the Company assess the impact, if any, of such risk factors or uncertainties on its business or the extent to which any factor, or combination of factors, may cause actual results to differ materially from those projected in any forward-looking statements. Accordingly, neither shareholders of the Company nor purchasers of securities of the Company should rely on forward-looking statements as a prediction of actual results. If any of these risks actually occur, the Company's business, results of operations, financial position and cash flows could be adversely affected. In any such case, the market price of the Company's common shares could decline and investors may lose all or part of their investment.

Revenue Risks

PyroGenesis may experience delays in achieving revenues, particularly with plasma gasification projects which have a long sales cycle. Revenues may be delayed or negatively impacted by issues encountered by the Company or its clients including:

(a) unforeseen engineering and/or environmental problems;
(b) delays or inability to obtain required financing, licenses, permits and/or regulatory approvals;
(c) supply interruptions and/or labour disputes;
(d) foreign exchange fluctuations and/or collection risk; and
(e) competition from other suppliers and/or alternative energy solutions that are less capital intensive.

There is no assurance that the business will perform as expected or that returns from the business will support the expenditures needed to develop it.

Technology Development and Manufacturing Capability Risks

PyroGenesis recently expanded into new areas of business and, as a result, many of the Company's products are at various stages of the development cycle. The Company may be unable to commercialise such products or it may be unable to manufacture such products in a commercially viable manner. Whilst management is confident in both its technology and in its team of experienced engineers, scientists and technicians, it cannot know with certainty, which of its products will be commercialised, when such products will be commercialised, or whether such products will be able to be manufactured and distributed profitably.

Lack of Product Revenues/History of Losses

PyroGenesis has incurred losses in the majority of years since its inception. The Company's operations have not generated sufficient earnings and cash flows to date to result in consistent profitability or positive cash flow. Consequently, the Company's continued existence is dependent upon its ability to generate profitable operations by establishing and expanding its client base and/or raising adequate long-term financing. PyroGenesis has relied primarily on equity financing, debt financing, partner funding and government funding to carry on its business to date. The ability of the Company to achieve profitable sustainable operations in the future is uncertain. PyroGenesis has not yet demonstrated its ability to consistently achieve positive gross margins and its ongoing efforts to improve product gross margins may be insufficient to result in profitability.

Additional financing and dilution

PyroGenesis will require additional financing to support ongoing operations and to undertake capital expenditures. There can be no assurance that additional financing will be available to the Company when needed, or on terms acceptable to the Company. PyroGenesis' inability to raise financing to support ongoing operations or to fund capital expenditures could limit the Company's growth and may have a material adverse effect upon the Company.

The Company does not exclude raising additional funds by equity financing. In addition, at November 28, 2017, 9,402,000 stock options are currently issued and outstanding, together with 4,190,290 warrants and 5,000,000 convertible debentures. The exercise of stock options and/or warrants, together with the conversion of debentures, as well as any new equity financings, represents dilution factors for present and future shareholders.

Sales Cycle and Fixed Price Contracts

PyroGenesis sales cycle is long and the signing of new contracts is subject to delay, over which the Company has little control. The Company also enters into sales contracts with fixed pricing, which may be impacted by changes over the period of implementation. There is no assurance that delays or problems in fulfilling contracts with clients will not adversely affect the Company's activities, operating results or financial position.

Reliance on Technology

PyroGenesis will depend upon continuous improvements in technology to meet client demands in respect of performance and cost, and to explore additional business opportunities. There can be no assurance that the Company will be successful in its efforts in this regard or that it will have the resources available to meet this demand. Whilst management anticipates that the research and development will allow the Company to explore additional business opportunities, there is no guarantee that such business opportunities will be presented or realised. The commercial advantage of the Company will depend to a significant extent on the intellectual property and proprietary technology of PyroGenesis and the ability of the Company to prevent others from copying such proprietary technologies. PyroGenesis currently relies on intellectual property rights and other contractual or proprietary rights, including (without limitation) copyright, trade secrets, confidential procedures, contractual provisions, licenses and patents, to protect its proprietary technology. PyroGenesis may have to engage in litigation in order to protect its patents or other intellectual property rights, or to determine the validity or scope of the proprietary rights of others. This type of litigation can be expensive and time consuming, regardless of whether or not the Company is successful. PyroGenesis may seek patents or other similar protections in respect of particular technology; however, there can be no assurance that any future patent applications will actually result in issued patents, or that, even if patents are issued, they will be of sufficient scope or strength to provide meaningful protection or any commercial advantage to the Company. Moreover, the process of seeking patent protection can itself be long and expensive. In the meantime, competitors may develop technologies that are similar or superior to PyroGenesis' technology or design around the patents owned by the Company, thereby adversely affecting the Company's competitive advantage in one or more of its areas of business. Despite the efforts of the Company, its intellectual property rights may be invalidated, circumvented, challenged, infringed or required to be licensed to others. It cannot be assured that any steps the Company may take to protect its intellectual property rights and other rights to such proprietary technologies that are central to the Company's operations will prevent misappropriation or infringement of its technology.

Changes to Contracts

PyroGenesis is dependent upon its ability to establish and develop new relationships and to build on existing relationships with current clients. The Company cannot provide assurance that it will be successful in maintaining or advancing its relationships with current clients or procure additional clients. In addition, PyroGenesis cannot provide assurance that the U.S. Military and/or other military clients will continue to provide the Company with business. Sales to governments and governmental entities are subject to specific additional risks, such as delays in funding, termination of contracts or sub-contracts at the convenience of the government, termination, reduction or modification of contracts or sub-contracts in the event of changes in the government's policies or as a result of budgetary constraints, and increased or unexpected costs resulting in losses or reduced profits under fixed price contracts.

Foreign Exchange Exposure

PyroGenesis' products and services are increasingly being sold in markets outside of Canada, whilst most of its operating expenses and capital expenditures are denominated in Canadian dollars. As a result, the Company is exposed to fluctuations in the foreign exchange rates between Canadian dollar and the currency in which a particular sale is transacted, which may result in foreign exchange losses that could affect earnings.

Competition

The industry is competitive and PyroGenesis competes with a substantial number of companies which have greater technical and financial resources. There can be no assurance that such competitors will not substantially increase the resources devoted to the development and marketing of products and services that compete with those of the Company or that new or existing competitors will not enter the various markets in which PyroGenesis is active. There can be no assurance that competitors will not develop new and unknown technologies with which the Company may have difficulty competing. Furthermore, failure to remain cost competitive may result in PyroGenesis losing business to its competitors.

Management and Key Personnel

PyroGenesis depends on the skills and experience of its management team and other key employees. The Company relies heavily on its ability to attract and retain highly-skilled personnel in a competitive environment. PyroGenesis may be unable to recruit, retain, and motivate highly-skilled employees in order to assist the Company's business, especially activities that are essential to the success of the Company. Failure to recruit and retain highly-skilled employees may adversely affect PyroGenesis' business, financial condition and results of operations.

Implementation of a strategic plan

PyroGenesis' commercial strategy aims to leverage its products, consumables, and services whilst focusing on the resolution of problems within niche markets within the industries served by the Company. There can be no assurances as to the success of the Company's strategic plan, which should be considered under the risks perspective and difficulties frequently encountered by a developing business.

Adverse Decisions of Sovereign Governments

PyroGenesis conducts an increasing portion of its business internationally. There is no assurance that any sovereign government, including Canada's, will not establish laws or regulations that will not be detrimental to the Company's interests or that, as a foreign corporation, it will continue to have access to the regulatory agencies in other countries. Governments have, from time to time, established foreign exchange controls, which could have a material adverse effect on the Company's business, financial condition and results of operations.

Governmental Regulation

PyroGenesis is subject to a variety of federal, provincial, state, local and international laws and regulations relating namely to the environment, health and safety, export controls, currency exchange, labour and employment and taxation. These laws and regulations are complex, change frequently and have tended to become more stringent over time. Failure to comply with these laws and regulations may result in a variety of administrative, civil and criminal enforcement measures, including assessment of monetary penalties, imposition of remedial requirements and issuance of injunctions as to future compliance. The Company may be subject to compliance audits by regulatory authorities in the various countries in which it operates.

Environmental Liability

PyroGenesis is subject to various environmental laws and regulations enacted in the jurisdictions in which it operates, which govern the manufacturing, processing, importation, transportation, handling and disposal of certain materials used in the Company's operations. Management believes that it has adequate procedures in place to address compliance with current environmental laws and regulations. Furthermore, management monitors the Company's practices concerning the handling of environmentally hazardous materials. However, there can be no assurance that the Company's procedures will prevent environmental damage occurring from spills of materials handled by the Company or that such damage has not already occurred. On occasion, substantial liabilities to third parties may be incurred. The Company may have the benefit of insurance maintained by it or the operator, however, the Company may become liable for damages against which it cannot adequately insure or against which it may elect not to insure because of high costs or other reasons. The Company's clients are subject to similar environmental laws and regulations, as well as limits on emissions to the air and discharges into surface and sub-surface waters. While regulatory developments that may follow in subsequent years could have the effect of reducing industry activity, the Company cannot predict the nature of the restrictions that may be imposed. The Company may be required to increase operating expenses or capital expenditures in order to comply with any new restrictions or regulations.

Product Liability and Other Lawsuits

PyroGenesis is subject to a variety of potential product liabilities claims and other lawsuits related with its operations, including liabilities and expenses associated with product defects. The Company maintains product liability and other insurance coverage that management believes is generally in accordance with the market practice in its industry, but there can be no assurance that the Company will always be adequately insured against all such potential liabilities.

Market Liquidity

The market price for the common shares of the Company could be subject to wide fluctuations. Factors such as the announcement of significant contracts, technological innovations, new commercial products, patents, a change in regulations, quarterly financial results, future sales of common shares by the Company or current shareholders, and many other factors could have considerable repercussions on the price of the Company's common shares. In addition, the financial markets may experience significant price and value fluctuations that affect the market prices of equity securities of companies that sometimes are unrelated to the operating performance of these companies. Broad market fluctuations, as well as economic conditions generally may adversely affect the market price of the Company's common shares.

Information systems disruptions

The Company's business depends on the efficient and uninterrupted operation of its computer and communications software, hardware systems, and its other information technology. If such systems were to fail, or the Company was unable to successfully expand the capacity of these systems or integrate new technologies into its existing systems, its operations and financial results could be adversely affected.

OUTLOOK

At year end 2016, we described the preceding twelve months as being a pivotal year for PyroGenesis as the Company shifted its focus away from being a fabricator of plasma-based systems that produced unique titanium powders, in favour of becoming a producer of metal powders for the Additive Manufacturing Industry (the "Industry").

Given their unique properties (pure, small, spherical, and uniform) which make them flow like water these powders are greatly sought after in the Industry, particularly for 3D printing. Given this strategic shift, together with the backlog of signed contracts from our non-additive manufacturing business ("Core/Traditional Lines of Business"), we projected that 2017 was shaping up to be a break out year for PyroGenesis, and the first nine months of 2017 have not been disappointing as (i) our powder production system comes on-line (ii) an order for a second Drosrite system from an existing client (iii) US Navy poised to order a 3rd waste destruction system, and (iv) our chemical warfare weapon destruction system is in the testing phase.

Results for the first nine (9) months, and Q3, of 2017 reflected the following:

Nine (9) month revenues increased 58% to $5.90MM over that of $3.74MM posted in the same period in 2016;

Revenues for Q3 2017 increased 7% to $2.03MM over that of $1.9MM posted in the same period in 2016.

Gross Margin Before Amortization of Intangible Assets increased to 52.2% in the first 9 months of 2017 from 42.5% posted over the same period in 2016.

Gross Margin After Amortization of Intangible Assets increased to 52.2% from 14.5% over the same period in 2016.

Gross Margin Before Amortization of Intangible Assets decreased to 57.1% in the third Quarter of 2017, from 64.2% posted in the same period in 2016.

Gross Margin After Amortization of Intangible Assets increased to 57.1% from 45.8% over the same period in 2016.

Most importantly, for the first nine months of 2017 EBITDA (mod.) improved to a loss of $73.8K as compared to an EBITA (Mod.) loss of $1.1 Million posted in the same period of 2016.

For Q3 2017 we posted an EBITA (Mod.) of $92K versus that of $239K for the same period in 2016.

Backlog of signed contracts as of the date of this writing is $7.41MM.

What is important to note is that these results reflect revenues from what we call our Core/Traditional Lines of Business (with little to no revenues from powder sales). During this period we completed our first powder production system which following certain improvements came on stream in Q1-2017 and ramped up to full production mode during Q3-2017 and is now complete.

We are more convinced than ever before that 2017 is becoming the break out year for which we have positioned the Company for a number of reasons:

- The healthy gross margins established in 2016 (before consideration of the 2016 write-offs) have improved, and are expected to continue to improve once powder production is in full swing.

- Established backlog of signed contracts.

- Our Core/Traditional Lines of Business are poised to contribute significantly to the bottom line and be both profitable and significant in their own right.

The following is a non-exhaustive review of PyroGenesis' main commercial activities:

A) Powder Production: The Company has met every major milestone previously announced on the road to making metal powders for the Industry; particularly, the completion of the assembly of its first powder production system; the first powder run; and the completion of ramp-up.

Also, as previously announced in recent press releases, interest has far exceeded managements' expectations as several initial contracts were received for sample powders during the ramp-up phase. Furthermore, the Company announced having signed several agreements with significant players in the Industry, whereby the Company is in discussions regarding the possibility of concluding business relationships or transactions geared to the production of its powders.

These discussions are continuing as the Company actively expands the number, and type, of agreements it is entering into with potential clients. The Company cannot comment on the specific details of these discussions, or communicate the comments that it has received with regards to the samples provided, other than to say that nothing negative has been reported.

Of note, during the first nine months of 2017, not only was the Company's first powder production system completed but the Company successfully delivered sample orders for Titanium powder, as well as for Inconel powders. Furthermore, during this period, the Company announced one of the most significant developments to date, possibly even more significant than the Company's original invention of Plasma Atomization, which is that it has developed a new plasma-based process that provides significant control over its particle size distributions with little to no waste and which, in turn, has enabled the production of MIM cut powders in quantity.

The current system is the first of many PyroGenesis expects to make in order to address an increasing need for metal powders in the Industry[1].

B) DROSRITE™: As the Company positioned itself, during the first 9 months of 2017, to become a significant powder producer to the Additive Manufacturing Industry, it also positioned

[1] Wohlers Report 2016 (ISBN 978-0-9913332-2-6)

its DROSRITE™ Furnace System to become a fully commercial product line in and of its own right.

The DROSRITE™ Furnace System was proven at a North American customer's Mexican facility during the first half of 2016. Soon thereafter, a successful demonstration of the DROSRITE™ System took place in the Middle East, following which an unsolicited request to exclusively market the process in the region was received, and is, as of this writing, in the closing months of being concluded. The Company has also received a request to demonstrate DROSRITE's™ capabilities in India in early 2018. This flurry of activity and interest for the DROSRITE™ System resulted in the Company dedicating a full time business development manager to market the DROSRITE™ System.

With the recent announced reorder for a DROSRITE™ system by an existing client, management believes it has succeeded in positioning DROSRITE™ as a fully commercial product line.

The market potential for PyroGenesis' DROSRITE™ System from aluminium dross alone exceeds $400MM.

C) HPQ: On August 2, 2016, PyroGenesis announced that it had signed contracts totalling CAN$8,260,000 with HPQ Silicon Resources Inc., formally Uragold Bay Resources Inc. ("HPQ") for the sale of IP and to provide a 200 metric tonne (MT) per year PUREVAP™ pilot system to produce silicon metal directly from quartz. Of particular note, if successful, PyroGenesis benefits from a 10% royalty on all revenues derived from the use of this system by HPQ, subject to annual minimums.

D) Chemical Warfare Destruction System: The Company recently announced that PyroGenesis has, in coordination with the US-based Southwest Research Institute (SwRI), successfully completed long-duration performance tests using the Company's tactical Plasma Arc Chemical Warfare Agents Destruction System ("PACWADS") against surrogate chemical warfare agent material. These tests supported the Defense Advanced Research Projects Agency (DARPA) Agnostic Compact Demilitarization of Chemical Agents (ACDC) program and far exceeded minimum requirements with over 99.9999% destruction efficiency. The PACWADS has been delivered to the testing site and is currently going through final testing using real chemical warfare agents. The completion of these tests has been delayed due to unrelated program testing schedules. The testing timeline is out of the Company's control but now looks like it will be concluded in early 2018.

E) Other Contracts: The Company is in discussions relative to other contracts such as a third order for a PAWDS for a New US Aircraft Carrier which is expected to be ordered sometime in the first half of 2018 with an estimated value of approximately $6MM and the sale of the Company's SPARC system.

Management remains focused on reducing PyroGenesis' dependency on long-cycle projects by developing a strategic portfolio of volume driven, high margin/low risk products that resolve specific problems within niche markets, and doing so by introducing these plasma-based technologies to industries that have yet to consider such solutions.

Management is also actively targeting recurring revenue opportunities that will generate a growing, and profitable, regular cash flow to the Company.

PyroGenesis has one of the largest concentrations of plasma expertise in the world, with over 250 years of accumulated technical experience and 54 patents (issued/pending), combined with unique relationships with major universities performing cutting edge plasma research and development, which positions the Company well to execute upon its various strategies.

Additional information regarding the Company can be found on SEDAR at www.sedar.com OTC Markets (www.otcmarkets.com) and on the Company's website at www.pyrogenesis.com