

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549**

FORM 10-Q

(Mark One)

Quarterly Report Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934

For the quarterly period ended December 31, 2009

Transition Report Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934

For the transition period from _____ to _____

Commission File No. 0-18958

Groen Brothers Aviation, Inc.

(Exact Name of Registrant as Specified in Its Charter)

Utah
(State or other jurisdiction of
incorporation or organization)

87-0489865
(I.R.S. Employer
Identification No.)

**2640 West California Avenue
Salt Lake City, Utah 84104-4593**
(Address of principal executive offices, including zip code)

(801) 973-0177
(Registrant's telephone number, including area code)

Indicate by check mark whether the Registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the Registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes No

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). The registrant has not yet been phased into the Interactive Data reporting system.

Yes No

Indicate by check mark whether the Registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer or a smaller reporting company. See the definitions of "large accelerated filer,"

“accelerated filer” and “smaller reporting company” in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer

Accelerated filer

Non-accelerated filer

Smaller reporting company

Indicate by check mark whether the Registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes No

As of December 31, 2009 and August 30, 2010, there were 171,416,289 shares of the Registrant’s common stock, no par value per share, outstanding.

**CAUTIONARY STATEMENT REGARDING THE FILING DATE OF THIS REPORT
AND THE ANTICIPATED FUTURE FILINGS OF ADDITIONAL PAST-DUE REPORTS**

This Quarterly Report on Form 10-Q for the fiscal quarter ended December 31, 2009 is first being filed in August 2010. The Company is in the process of preparing its other periodic reports, including the Form 10-K for the fiscal year ended June 30, 2010, and plans to file such reports at the earliest practicable date. Shareholders and others are cautioned that the financial statements included in this report are several months old and are not necessarily indicative of the operating results that may be expected for the year ended June 30, 2010.

**GROEN BROTHERS AVIATION, INC.
FORM 10-Q**

FOR THE QUARTER ENDED DECEMBER 31, 2009

PART I - Financial Information

Item 1. Financial Statements (Unaudited)

Condensed Consolidated Balance Sheets	3
Condensed Consolidated Statements of Operations	4
Condensed Consolidated Statements of Cash Flows	5
Notes to Condensed Consolidated Financial Statements.....	6

Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations	17
--	----

Item 3. Quantitative and Qualitative Disclosures About Market Risk	26
--	----

Item 4T. Controls and Procedures	26
--	----

PART II - Other Information

Item 1. Legal Proceedings	27
---------------------------------	----

Item 1A. Risk Factors	28
-----------------------------	----

Item 2. Unregistered Sales of Equity Securities and Use of Proceeds.....	28
--	----

Item 3. Defaults Upon Senior Securities.....	28
--	----

Item 4. (Removed and Reserved)	
--------------------------------	--

Item 5. Other Information.....	28
--------------------------------	----

Item 6. Exhibits.....	28
-----------------------	----

Signatures	30
------------------	----

PART I - FINANCIAL INFORMATION

Item 1. Financial Statements

GROEN BROTHERS AVIATION, INC. Condensed Consolidated Balance Sheets

<u>Assets</u>	<u>December 31, 2009</u>	<u>June 30, 2009</u>
	<u>(Unaudited)</u>	
Current assets:		
Cash	\$ 159,000	\$ 115,000
Accounts receivable, net of allowance of \$7,000	-	124,000
Related party accounts and notes receivable	1,000	2,000
Prepaid expenses	35,000	12,000
Total current assets	<u>195,000</u>	<u>253,000</u>
Property and equipment, net	<u>47,000</u>	<u>59,000</u>
 Total assets	 <u>\$ 242,000</u>	 <u>\$ 312,000</u>
 <u>Liabilities and Stockholders' Deficit</u>		
Current liabilities:		
Accounts payable	\$ 2,297,000	\$ 2,526,000
Accrued expenses	14,739,000	12,705,000
Notes payable and current portion of capital lease obligations	1,455,000	1,405,000
Related party notes payable	65,390,000	61,161,000
Series B 15% cumulative redeemable non-voting preferred stock, no par value, 50,000,000 shares authorized, 40,667 and 37,776 shares issued and outstanding, respectively	40,667,000	37,776,000
Total current liabilities	<u>124,548,000</u>	<u>115,573,000</u>
Long-term liabilities:		
Accrued expenses	5,765,000	5,574,000
Deferred revenue	25,000	25,000
Long-term debt and capital lease obligations	5,000	95,000
Related party long-term debt	97,000	-
Dealer deposits	2,105,000	2,105,000
Total liabilities	<u>132,545,000</u>	<u>123,372,000</u>
Stockholders' deficit:		
Series A convertible preferred stock, no par value, 50,000,000 shares authorized, 1,400,000 shares issued and outstanding	70,000	70,000
Common stock, no par value, 500,000,000 shares authorized, 171,416,289 shares issued and outstanding	34,816,000	34,745,000
Accumulated deficit	(167,189,000)	(157,875,000)
Total stockholders' deficit	<u>(132,303,000)</u>	<u>(123,060,000)</u>
 Total liabilities and stockholders' deficit	 <u>\$ 242,000</u>	 <u>\$ 312,000</u>

See accompanying notes to condensed consolidated financial statements

GROEN BROTHERS AVIATION, INC.
Condensed Consolidated Statements of Operations
(Unaudited)

	Three Months Ended December 31,		Six Months Ended December 31,	
	2009	2008	2009	2008
Revenues	\$ -	\$ 1,000	\$ 73,000	\$ 384,000
Costs and expenses:				
Cost of sales	1,000	274,000	260,000	417,000
Research and development	315,000	106,000	413,000	165,000
General and administrative expenses	304,000	113,000	528,000	455,000
Total costs and expenses	620,000	493,000	1,201,000	1,037,000
Loss from operations	(620,000)	(492,000)	(1,128,000)	(653,000)
Other income (expense):				
Related party interest income	-	-	1,000	1,000
Interest and other income	-	-	-	1,000
Gain on sale of property and equipment	-	3,000	-	45,000
Gain on extinguishment of debt	68,000	-	68,000	-
Interest expense	(2,722,000)	(2,266,000)	(5,364,000)	(3,268,000)
Series B preferred stock interest expense	(1,474,000)	(1,408,000)	(2,891,000)	(3,962,000)
Total other income (expense)	(4,128,000)	(3,671,000)	(8,186,000)	(7,183,000)
Loss before income taxes	(4,748,000)	(4,163,000)	(9,314,000)	(7,836,000)
Income tax benefit	-	-	-	-
Net loss	\$ (4,748,000)	\$ (4,163,000)	\$ (9,314,000)	\$ (7,836,000)
Net loss per common share – basic and diluted	\$ (0.03)	\$ (0.03)	\$ (0.06)	\$ (0.05)
Weighted average number of common shares outstanding – basic and diluted	166,066,000	166,066,000	166,066,000	166,066,000

See accompanying notes to condensed consolidated financial statements

GROEN BROTHERS AVIATION, INC.
Condensed Consolidated Statements of Cash Flows
(Unaudited)

	Six Months Ended December 31,	
	2009	2008
Cash flows from operating activities:		
Net loss	\$ (9,314,000)	\$ (7,836,000)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation and amortization expense	12,000	27,000
Stock options and warrants issued for interest expense	(28,000)	3,000
Stock options issued for services	4,000	4,000
Stock-based compensation	96,000	149,000
Interest expense accrued on Series B preferred stock	2,891,000	3,962,000
Interest expense added to debt principal	3,180,000	1,274,000
Gain on sale of property and equipment	-	(45,000)
Gain on extinguishment of debt	(68,000)	
(Increase) decrease in:		
Accounts and notes receivable	124,000	(5,000)
Prepaid expenses	(23,000)	(7,000)
Increase (decrease) in:		
Accounts payable	(229,000)	(429,000)
Accrued expenses	2,255,000	1,798,000
	(1,100,000)	(1,105,000)
Cash flows from investing activities:		
Proceeds from sale of property and equipment	-	27,000
Payments of related party notes receivable	1,000	1,000
	1,000	28,000
Cash flows from financing activities:		
Proceeds from the issuance of debt	1,225,000	1,331,000
Repayment of debt	(82,000)	(88,000)
Repayment of bank overdraft	-	(20,000)
Repayment of bank overdraft line of credit	-	(47,000)
	1,143,000	1,176,000
Net increase in cash	44,000	99,000
Cash, beginning of period	115,000	3,000
Cash, end of period	\$ 159,000	\$ 102,000

See accompanying notes to condensed consolidated financial statements

GROEN BROTHERS AVIATION, INC.
Notes to Condensed Consolidated Financial Statements
(Unaudited)

Note 1. Basis of Presentation

Organization and Consolidation

The unaudited condensed consolidated financial statements include the accounts of Groen Brothers Aviation, Inc. (the "Company") and its wholly owned subsidiary, Groen Brothers Aviation USA, Inc. ("GBA USA"), and include all adjustments (consisting of normal recurring adjustments) which are, in the opinion of management, necessary to present fairly the financial position as of December 31, 2009, the results of operations for the three months and six months ended December 31, 2009 and 2008, and cash flows for the six months ended December 31, 2009 and 2008. The results of operations for the three months and six months ended December 31, 2009 are not necessarily indicative of the results to be expected for the full fiscal year ended June 30, 2010.

Basis of Presentation and Going Concern Uncertainty

The accompanying condensed consolidated financial statements have been prepared assuming that the Company will continue as a going concern. Because of recurring operating losses, the excess of current liabilities over current assets, the stockholders' deficit, and negative cash flows from operations, there is substantial doubt about the Company's ability to continue as a going concern.

At December 31, 2009, the Company had total current liabilities of \$124,548,000 and current assets of \$195,000, resulting in a working capital deficiency of \$124,353,000. At December 31, 2009, the Company had a total stockholders' deficit of \$132,303,000.

In May 2008, the Company ceased production of the SparrowHawk and currently is seeking to either sell the program to a buyer with more compatible operating conditions and strategic interests or to transfer the SparrowHawk and its technology to a joint venture to produce fully-assembled light gyroplanes. There can be no assurance that the Company will be successful in either of these two endeavors.

The Company has completed work on Phase I of a contract with the U.S. Defense Advanced Research Projects Agency ("DARPA") where it served as prime contractor to design a proof of concept high speed, long range, vertical takeoff and landing aircraft. This modern rotorcraft, named the "Heliplane" by DARPA, is an intended demonstration vehicle for future gyrodynes to be used in combat search and rescue roles. The Company was engaged by Georgia Institute of Technology ("GT") as a subcontractor for rotor system work for Phase IB of the DARPA contract, with final payment received from GT in September 2009. As of the date of this report, DARPA has not yet announced funding for Phase II and the future involvement of the Company in the DARPA contract is uncertain.

The Company's continuation as a going concern is dependent on attaining profitable operations, obtaining additional outside financing and/or restructuring its debt obligations, including its Series B Preferred Stock. The Company has funded losses from operations primarily from the issuance of debt to related parties (current shareholders and lenders of the Company), the increase in accounts payable and accrued expenses, and the sale of the Company's restricted common stock in private placement transactions. Currently, the Company has no source of operating revenues, and will require additional funding from these sources to sustain its future operations.

In order to repay its debt obligations in full or in part when due, the Company will be required to raise significant capital from other sources. Alternatively, the Company will be required to negotiate further extensions of the Series B Preferred Stock maturity date and its notes payable, as it has

accomplished in the past. There is no assurance, however, that the Company will be successful in these efforts.

During 2006 and 2007, the Company obtained debt financing from the holders of the Series B Preferred Stock (the "Series B Holders") in the aggregate principal amount of \$4,400,000 (the "2006/2007 Notes"). The 2006/2007 Notes provide for the payment of simple interest at the rate of 36% per annum. The maturity date for the 2006/2007 Notes has been extended from time to time and currently is October 9, 2010.

Included in current liabilities and the working capital deficiency at December 31, 2009 is a \$40,667,000 Series B Preferred Stock obligation. The Series B Holders have agreed to extend the redemption date of the Series B Preferred Stock from time to time and the current redemption date is October 9, 2010, or such later date as agreed to in writing by at least 80% of the Series B Holders.

In October 2008, as part of a Note Purchase Agreement between the Company and the Series B Holders, the Company issued short-term interest bearing notes in the principal amount of \$36,962,000 in satisfaction of the accrued and unpaid dividends on the Series B Preferred Stock through October 9, 2008 (the "Dividend Notes"). Because the Company had paid such dividends in kind by issuing additional shares of Series B Preferred Stock, the issuance of the Dividend Notes resulted in the redemption of \$36,962,000 of Series B Preferred Stock. The Dividend Notes provide for the payment of interest at the rate of 15% per annum, compounded quarterly. The maturity date for the Dividend Notes has been extended from time to time and currently is October 9, 2010.

The Note Purchase Agreement, as amended, provides for the periodic sale by the Company to the lenders of short-term promissory notes in the aggregate principal amount of up to \$12,750,000 to provide the Company with operating capital, as specified in the draw requests for such notes (the "Note Purchase Notes"). The draw requests must be approved by the lenders. Through December 31, 2009, the lenders had purchased notes under the Note Purchase Agreement in the aggregate principal amount of \$3,592,000 and the proceeds had been used by the Company to cover its minimum cash needs in excess of funding provided by payments from Georgia Tech for the Company's work on the DARPA contract. The Note Purchase Notes provide for the payment of simple interest at the rate of 15% per annum. The maturity date for the Note Purchase Notes has been extended from time to time and currently is October 9, 2010.

Substantially all assets of the Company, including its intellectual property, have been pledged as collateral for the Company's debt.

There can be no guarantee or assurance that the Company will be successful in its ability to generate income from operations, or to raise capital at favorable rates or at all. The condensed consolidated financial statements do not include any adjustments that might result from the outcome of this uncertainty.

Reclassifications

Certain amounts in the condensed consolidated financial statements for the three months and six months ended December 31, 2008 have been reclassified to conform to the presentation for the three months and six months ended December 31, 2009.

Note 2: Loss per Common Share

The computation of basic net loss per common share is computed using the weighted average number of common shares outstanding during each period. The computation of diluted net loss per common share is based on the weighted average number of shares outstanding during the period plus common stock equivalents which would arise from the exercise of stock options and warrants outstanding using the treasury stock method and the average market price per share during the period, as well as common shares issuable upon the conversion of debt to common stock. Common stock equivalents were not included in the diluted loss per share calculation because the effect would have been anti-dilutive.

The calculation of the weighted average number of common shares outstanding excludes common shares that have been issued as collateral for certain notes payable to related parties. These collateral shares are restricted and bear a legend prohibiting the holder from selling or transferring the shares at any time. The Company has assigned no value to these shares, and the terms of the notes payable require the holder of the collateral shares to return the shares to the Company when the applicable note and accrued interest are paid in full. At December 31, 2009, the Company had issued 5,350,000 shares of common stock as collateral.

Note 3: Stock Based Compensation

The Company accounts for stock-based compensation in accordance with Financial Accounting Standards Board (“FASB”) Accounting Standards Codification (“ASC”) Topic 718, *Compensation – Stock Compensation*. Under the fair value recognition provisions of this statement, stock-based compensation cost is measured at the grant date based on the value of the award granted using the Black-Scholes option pricing model, and recognized over the period in which the award vests. The stock-based compensation expense for the three months and six months ended December 31, 2009 and 2008 has been allocated to the various categories of operating costs and expenses in a manner similar to the allocation of payroll expense as follows:

	Three Months Ended December 31,		Six Months Ended December 31,	
	2009	2008	2009	2008
Cost of sales	\$ -	\$ 33,000	\$ 33,000	\$ 64,000
Research and development	11,000	13,000	23,000	26,000
General and administrative	29,000	29,000	40,000	59,000
Total stock-based compensation expense	<u>\$ 40,000</u>	<u>\$ 75,000</u>	<u>\$ 96,000</u>	<u>\$ 149,000</u>

There was no stock compensation expense capitalized during the three months and six months ended December 31, 2009 and 2008.

During the six months ended December 31, 2009, no new stock options or warrants were issued. The following table summarizes the stock option and warrant activity during the six months ended December 31, 2009:

	Options and Warrants	Weighted Average Exercise Price	Weighted Average Remaining Contract Term	Aggregate Intrinsic Value
Outstanding at June 30, 2009	51,953,000	\$ 0.28		
Granted	-	-		
Exercised	-	-		
Cancelled	(25,000)	1.00		
Expired	<u>(12,306,000)</u>	0.45		
Outstanding at December 31, 2009	<u>39,622,000</u>	0.24	1.83	\$ 0
Options and warrants vested and exercisable at December 31, 2009	<u>33,979,000</u>	0.26	1.34	\$ 0

The aggregate intrinsic value in the preceding table represents the total pretax intrinsic value, based on the Company's closing stock price of \$0.011 as of December 31, 2009, which would have been received by the holders of in-the-money options had the option holders exercised their options as of that date.

As of December 31, 2009, the total future compensation cost related to non-vested stock-options not yet recognized in the condensed consolidated statements of operations was approximately \$271,000, and the weighted average period over which these awards are expected to be recognized was 0.76 years.

Note 4: Accrued Expenses

Accrued expenses consisted of the following at December 31, 2009:

Compensation and related taxes	\$ 492,000
Related party interest	13,081,000
Interest	779,000
Customer deposits	260,000
Consulting fees	27,000
Finders' compensation	9,000
Royalties to related parties	32,000
Other	<u>59,000</u>
Total	<u><u>\$ 14,739,000</u></u>

Accrued related party interest payable is comprised of interest expense payable on notes payable to related parties, consisting primarily of stockholders of the Company.

Royalty payments totaling 1% of the gross sales price of gyroplanes are to be paid to the Company's founders, David Groen and the estate of the late Jay Groen. Through December 31, 2009, royalties payable totaled \$16,000 to each of these individuals, which amounts are accrued as a component of cost of sales in the condensed consolidated statements of operations.

Long-term accrued expenses consisted of the following at December 31, 2009:

Deferred compensation	\$ 5,285,000
Accrued payroll taxes on deferred compensation	181,000
Accrued interest on deferred compensation	<u>299,000</u>
Total	<u><u>\$ 5,765,000</u></u>

The deferred compensation is payable to certain current and former officers, directors, and senior management of the Company, with amounts originating from fiscal year 1998 through the current fiscal year. In addition to cash compensation, the Company has a deferred compensation arrangement for executive officers and certain of its senior management that accrues additional salary. The terms of the Company's Series B 15% Preferred Stock preclude the Company from making any deferred compensation payments until all outstanding amounts due relating to the Series B 15% Preferred Stock have been paid in full. Absent payment restrictions related to outstanding Series B 15% Preferred Stock or other restrictions, the deferred compensation is payable in part or in whole only by resolution of the Company's Board of Directors. Through December 31, 2009, the Board of Directors has not authorized payment of any of the deferred compensation, and will not authorize payments until the Board determines such payments are allowed under the Company's outstanding financing agreements and would be prudent in light of the Company's financial condition and availability of cash. In fiscal year 2001, the Company began accruing interest expense on the deferred compensation at the rate of 8% per annum. The accrual of interest was permanently discontinued on July 1, 2004. The deferred compensation and related accrued payroll taxes and interest payable are classified as long-term liabilities at December 31, 2009 as the Company does not anticipate payment of any of these amounts in the next twelve months.

Note 5: Debt

Notes payable and current portion of capital lease obligations include notes payable totaling \$1,351,000 that were technically in default at December 31, 2009. In addition, the Company is delinquent in making payments of accrued interest payable of \$718,000 on this debt at December 31, 2009. The Company maintains contact with most of these lenders and has, in most instances, been granted grace periods and extensions without receipt of formal notices of default or threat of legal action.

Substantially all related party notes payable of \$65,390,000 at December 31, 2009 are payable to stockholders of the Company who are considered related parties, including the Series B Holders. The related party notes payable at December 31, 2009 are comprised of the following:

Series B Holders:	
Dividend Notes	\$ 44,328,000
Note Purchase Notes	3,592,000
2006/2007 Notes	<u>4,400,000</u>
	52,320,000
Other Related Parties	<u>13,070,000</u>
Total Related Party Notes Payable	<u><u>\$ 65,390,000</u></u>

Dividend Notes totaling \$44,328,000 (\$36,962,000 original principal plus \$7,366,000 in accrued interest expense added to note principal) resulted from the redemption of 36,962 shares of Series B Preferred Stock in October 2008. The Dividend Notes provide for the payment of interest at the rate of 15% per annum, compounded quarterly, and a rate of interest of 18% per annum during any period in

which an event of default has occurred and is continuing. The maturity date for the Dividend Notes has also been extended from time to time and currently is October 9, 2010.

Pursuant to the Note Purchase Agreement discussed in Note 7, the Company borrowed a total of \$3,592,000 from the Series B Holders during the period October 1, 2008 to December 31, 2009. The Note Purchase Notes provide for the payment of simple interest at the rate of 15% per annum. The maturity date for the Note Purchase Notes has been extended from time to time and currently is October 9, 2010.

During 2006 and 2007, the Company also borrowed a total of \$4,400,000 through the issuance of other promissory notes payable to the Series B Holders that provide for the payment of simple interest at the rate of 36% per annum. The maturity date for the 2006/2007 Notes has been extended from time to time and currently is October 9, 2010.

At December 31, 2009, the Company is delinquent in making payments on related party notes payable totaling \$2,611,000 and accrued interest payable on related party notes payable totaling \$1,554,000.

Note 6: Dealer Deposits

Dealer deposits consist of amounts received from the Company's authorized dealers on aircraft in anticipation of full-scale production of the Company's Hawk 4 gyroplane. The deposit guarantees a delivery sequence number and represents a percentage of the total estimated purchase price. The Company has also issued common stock to dealers as partial consideration for the delay in the certification of the Hawk 4 gyroplane. These costs have been charged to interest expense as incurred. The dealers have been given the opportunity to convert a portion of their deposits into shares of the Company's restricted common stock. Those dealers that have converted deposits into shares and are now stockholders of the Company are considered related parties. The Company's intention is to obtain the funding to complete the certification of the ArrowHawk, as a replacement of the Hawk 4, and to convert the Hawk 4 dealer deposits to ArrowHawk dealer deposits. Once such funding is obtained, the Company estimates the certification process of the ArrowHawk will require at least three years to complete. Because of the long-term prospects of obtaining the funding and completing the certification, dealer deposits have been recorded as long-term liabilities.

Note 7: Preferred Stock

The Company has authorized 200,000,000 shares of preferred stock having no par value. There are two series of preferred stock with 50,000,000 shares authorized within each series. The rights, terms and preferences of preferred stock are set by the Board of Directors. As of December 31, 2009, the Board of Directors has set rights, terms and preferences of Series A and Series B Preferred Stock for issue.

Series A Convertible Preferred Stock

As of December 31, 2009, 1,400,000 shares of Series A Convertible Preferred Stock were issued and outstanding, and held by the following: David Groen, President and member of the Board of Directors, 1,025,000 shares; Robin Wilson, Senior Vice President and member of the Board of Directors 125,000 shares; the widow of the late Jay Groen 125,000 shares; and Dennis Gauger, former member of the Board of Directors, 125,000 shares.

The rights, terms and preferences of the Series A Convertible Preferred Stock, as amended, are summarized as follows:

- Each share may cast one hundred (100) votes on all matters submitted to the stockholders for a vote, voting together with the holders of the common stock of the Company as a single class, effectively giving current voting control to the Company's founders.
- The voting rights expire seven years from the date of issue, or October 8, 2011.
- Upon, and only upon, the Company reaching significant revenue milestones, the shares are convertible into common stock of the Company through payment of a cash conversion price of \$0.50 per share of common stock, convertible on a one-for-one hundred (1:100) basis (100 shares of common stock for each share of Series A Convertible Preferred Stock). Conversion is allowed at the rate of 25% of the preferred shares for each \$30 million in defined cumulative gross sales, for a total of \$120 million in sales. This convertibility is also only available if these significant revenue milestones are met within seven years from the date of issue of the Series A Convertible Preferred Stock.
- The shares, including all voting and conversion rights, to the extent not converted into common shares, will expire seven years from the date of issue, and will be cancelled by the Company.
- Upon the death or permanent incapacity of a holder of Series A Convertible Preferred Stock, all shares held by such holder will be divided equally between the then existing members of the Company's Board of Directors and the holder's survivor(s) (if more than one person, treated collectively as one person). Upon a temporary mental incapacity of a holder of Series A Convertible Preferred Stock, all shares will be voted by the remaining holders of the Series A Convertible Preferred Stock until the end of the temporary incapacity.
- The shares are non-transferable, non-assignable, and have no dividend or liquidation rights.

Series B Preferred Stock

At December 31, 2009, there were 40,667 shares of Series B 15% Cumulative Redeemable Non-Voting Preferred Stock (the "Series B Preferred Stock") outstanding. The rights, terms, and preferences of the outstanding preferred shares, as amended, are as follows:

- The shares have no voting rights.
- Each share's original Stated Value, upon which unpaid dividends may accumulate, is \$1,000.
- The shares have right to dividends at a 15% annual dividend rate, payable in cash or in kind at the end of each fiscal quarter. Accumulated but unpaid dividends shall be cumulative and shall be added to the Stated Value for purposes of subsequent quarterly dividend calculations.
- The shares shall have superior liquidation priority to any other series of the Company's capital stock, equal to the Stated Value plus all accrued but unpaid dividends thereon.
- The redemption price of the shares must be paid by the Company in cash.
- The Company may incur indebtedness of up to \$18.5 million without consent of the holders of the shares.
- The Company is required to give notice to holders of the shares prior to making any capital expenditures in excess of \$300,000.

- The maturity date of the shares is defined as the first to occur of (a) October 9, 2010, or such later date as agreed to in writing by at least 80% of the Series B Holders, (b) the occurrence of a defined “liquidation event”, or (c) the date that is six months following the receipt by the Company or its affiliates of proceeds from one or more financing transactions in excess of \$50 million.
- If the Company should default in its obligation under the Series B Preferred Stock, the Series B Holders may require the Company to redeem the Series B Preferred Stock by providing written notice three days prior to the requested redemption date.
- At any time after March 1, 2008, the holders of not less than 80% of the outstanding shares of Series B Preferred Stock may elect from time to time to have the outstanding shares of Series B Preferred Stock redeemed in whole or in part.
- The Company is required to make pro rata redemptions of the shares in the event the Company receives proceeds from certain financing transactions that exceed \$20 million in the aggregate.

On October 9, 2008, as part of a Note Purchase Agreement between the Company and the Series B Holders, the Company redeemed 36,962 shares of the Series B Preferred Stock with a book value of \$36,962,000, representing the cumulative total of dividends paid in kind through October 9, 2008. Short-term, interest bearing promissory notes totaling \$36,962,000 were issued to the Series B Holders in the redemption.

The Note Purchase Agreement also provides for the periodic sale by the Company to the lenders of short-term promissory notes to provide the Company with operating capital, as specified in the draw requests for such notes. The draw requests must be approved by the lenders. Through December 31, 2009, the lenders had purchased notes under the Note Purchase Agreement in the aggregate principal amount of \$3,592,000 and the proceeds had been used by the Company to cover its minimum cash needs in excess of funding provided by payments from Georgia Tech for the Company’s work on the DARPA contract. The lenders and the Company have amended the October 9, 2008 Note Purchase Agreement from time to time to increase the aggregate amount of promissory notes that can be purchased to \$12,750,000, to provide funding to meet the Company’s monthly minimum financial needs. The lenders are not obligated to purchase notes pursuant to the Note Purchase Agreement and there can be no assurance that the lenders will continue to purchase notes or otherwise provide funding to the Company.

The redemption date of the Series B Preferred Stock has been extended from time to time and currently is October 9, 2010, or such later date as agreed to in writing by the holders of at least 80% of the outstanding shares of Series B Preferred Stock.

In connection with the execution of the Note Purchase Agreement and the issuance of the Series B Preferred Stock, substantially all assets of the Company, including its intellectual property, have been pledged as collateral for the Company’s debt.

The Company has determined that the extension of the redemption date of the original issuance of the Company’s Series B Preferred Stock in October 2003 met the criteria of a troubled debt restructuring outlined in ASC Topic 470-60, *Troubled Debt Restructurings by Debtors*. No gain or loss was recorded on the October 2003 extension and subsequent extension of the due date in October 2005. The value of the warrants issued to the Series B Holders in connection with the extensions of the due dates, estimated by the Black-Scholes option pricing model, was charged to interest expense. The Series B Preferred Stock will be classified through its redemption as a troubled debt restructuring.

In accordance with ASC Topic 480, *Distinguishing Liabilities from Equity*, the Company reports its Series B Preferred Stock as a liability. This pronouncement establishes standards for how an issuer

classifies and measures certain financial instruments with characteristics of both liabilities and equity. It requires that an issuer classify a financial instrument that is within its scope as a liability (or an asset in some circumstances).

Note 8: Common Stock

During the six months ended December 31, 2009, the Company did not issue any shares of its common stock or any options and warrants to purchase shares of common stock. During the six months ended December 31, 2009, the recorded amount of common stock has been decreased by \$28,000 for the periodic adjustments to the value of 3,200,000 variable stock options issued during the year ended June 30, 2006 computed using the Black-Scholes option pricing model. The Company also charged a total of \$4,000 to general and administrative expense for the current year vesting of the grant date fair value of 500,000 options issued to a non-employee consultant. In addition, common stock was increased by \$1,000 to adjust finders' compensation on the sale of common stock.

During the six months ended December 31, 2008, the Company did not issue any shares of its common stock or any options and warrants to purchase shares of common stock. During the six months ended December 31, 2008, the recorded amount of common stock has been increased by \$3,000 for the periodic adjustments to the value of 3,200,000 variable stock options issued during the year ended June 30, 2006 computed using the Black-Scholes option pricing model. The Company also charged a total of \$4,000 to general and administrative expense for the current year vesting of the grant date fair value of 500,000 options issued to a non-employee consultant. In addition, common stock was increased by \$5,000 to adjust finders' compensation on the sale of common stock.

The Company has issued shares of its common stock as collateral for certain notes payable to related parties. These collateral shares are restricted and bear a legend prohibiting the holder from selling or transferring the shares at any time. The legend will only be removed if the Company is in default on the applicable loan, at which time, a new certificate will be issued and a value recorded for the shares to account for the loan and accrued interest settled. In addition, the terms of the notes payable require the holder of the collateral shares to return the shares to the Company when the applicable loan and accrued interest are paid in full. The Company has assigned no value to the collateral shares and does not include these shares in the calculation of loss per share. At December 31, 2009, the Company had issued 5,350,000 shares of common stock as collateral.

Certain shareholder related party note holders may choose to convert outstanding principal and interest balances to common stock of the Company. The conversion prices per share range from \$0.10 per share to \$1.25 per share. At December 31, 2009, \$18,204,000 of principal and interest is convertible into 66,545,124 shares of the Company's common stock. The cash price per common share and the conversion prices per share approximated the quoted market price per share of the Company's common stock on or near the date the note agreements were negotiated. The conversion prices per share have all been set at the market price of the common stock, or above the market price whenever possible, with market price typically established at the price per share that the Company was selling restricted common shares for cash at the time. Because the conversion price per share was generally "under water" in substantially all of these transactions, the Company concluded that the conversion terms did not represent a beneficial conversion feature. Therefore, no beneficial conversion features have been accounted for in the Company's consolidated financial statements for these transactions.

Note 9: Joint Venture

The Company has held meetings with agencies in China in relation to the use of the SparrowHawk and its technology in China, and in May 2009, entered into a non-binding Memorandum of Understanding (MOU) with a Chinese Company, with the objective of setting up a joint venture ("JV") in

China to produce fully-assembled Light Gyroplanes, focused on production of SparrowHawks, initially for power line patrol.

Note 10: Supplemental Statement of Cash Flows Information

During the six months ended December 31, 2009, the Company had the following non-cash investing and financing activities:

- Decreased related party notes receivable through reduction of accrued expenses payable to related parties of \$1,000.
- Decreased notes payable and current portion of capital lease obligations and increased accrued expenses by \$35,000.

During the six months ended December 31, 2008 the Company had the following non-cash investing and financing activities:

- Decreased related party notes receivable through reduction of accrued expenses payable to related parties of \$1,000.
- Decreased property and equipment and decreased accounts payable by \$19,000 for property and equipment returned to vendor.
- Decreased accrued expenses and increased common stock by \$5,000 for changes to accrued finders' compensation.
- Increased related party notes payable and decreased Series B Preferred Stock by \$36,962,000 upon partial redemption of Series B Preferred Stock.

Cash paid for interest expense was \$66,000 and \$14,000 for the six months ended December 31, 2009 and 2008, respectively.

No payments of income taxes were made during the six months ended December 31, 2009 and 2008.

Note 11: Recently Issued Accounting Pronouncements

There were no new accounting pronouncements issued during the six months ended December 31, 2009 and through the date of this filing that the Company believes are applicable or would have a material impact on the consolidated financial statements of the Company.

Note 12: Subsequent Events

Series B Preferred Stock – Subsequent to December 31, 2009, the redemption date of the Series B Preferred Stock has been extended from time to time and currently is October 9, 2010, or such later date as agreed to in writing by the holders of at least 80% of the outstanding shares of Series B Preferred Stock.

The lenders and the Company have amended the October 9, 2008 Note Purchase Agreement from time to time to increase the aggregate amount of promissory notes that can be purchased to \$12,750,000

to provide funding to meet the Company's monthly minimum financial needs. The lenders are not obligated to purchase notes pursuant to the Note Purchase Agreement and there can be no assurance that the lenders will continue to purchase notes or otherwise provide funding to the Company.

Debt Financing

Subsequent to December 31, 2009 through August 30, 2010, the Company has received net proceeds from debt financing pursuant to the Note Purchase Agreement of approximately \$5.4 million, of which \$3.5 million was used to partially redeem Series B Preferred Stock.

The maturity date for the 2006/2007 Notes, the Dividend Notes and the Note Purchase Notes has been extended from time to time and currently is October 9, 2010.

Joint Venture

Subsequent negotiations related to the MOU for a possible joint venture in China resulted in a non-binding "Terms and Conditions" agreement for the setting up of the JV and, as of the issuance of this report, an agreement has been reached and agreed to by both parties. Signing of this agreement by both parties is expected shortly. Under the terms of this anticipated agreement, the parties will prepare an application to the appropriate government authorities to set up the JV. Upon the establishment of this JV, the Company, through a special purpose subsidiary, expects to receive 25% of the equity in the JV in return for its contribution to the JV of its SparrowHawk III assets and rights to SparrowHawk designs and defined SparrowHawk derivatives. The Company can give no assurance that the parties will obtain approval from the relevant Chinese authority to establish the JV or that the signing of this agreement will ever take place.

On July 13, 2010, the Company formed Groen Brothers Aviation International, LLC, a wholly owned special purpose subsidiary to participate in the JV.

Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations

Forward Looking Statements

This management's discussion and analysis of financial condition and results of operations and other portions of this Quarterly Report on Form 10-Q contain forward-looking information that involves risks and uncertainties. Our actual results could differ materially from those anticipated by this forward-looking information. Factors that could cause or contribute to such differences include, but are not limited to, those discussed or referred to in the Annual Report on Form 10-K for the year ended June 30, 2009, filed on August 2, 2010, under the heading "Forward Looking Statements" and elsewhere. Investors should review this quarterly report on Form 10-Q in combination with our Annual Report on Form 10-K in order to have a more complete understanding of the principal risks associated with an investment in our common stock. This management's discussion and analysis of financial condition and results of operations should be read in conjunction with our unaudited condensed consolidated financial statements and related notes included elsewhere in this document.

Late Filing

This Quarterly Report on Form 10-Q for the fiscal quarter ended December 31, 2009 is first being filed in August 2010. The Company is in the process of preparing its other periodic reports, including the Form 10-K for the fiscal year ended June 30, 2010, and plans to file such reports at the earliest practicable date. Shareholders and others are cautioned that the financial statements included in this report are several months old and are not necessarily indicative of the operating results that may be expected for the year ended June 30, 2010.

Background

We are engaged in the business of designing and developing new technology gyroplane and gyrodyne rotor-wing aircraft for military and commercial uses. Following the delays in our Heliplane program for DARPA, lower than anticipated results from sales of SparrowHawk kits, and negative conditions in capital markets, we undertook cost-cutting measures that we hope will allow us to continue to develop our technology on a reduced scale. We effected a substantial reduction in force and have reduced other operating expenditures as well. We currently have no operating revenues.

We have ceased production of the SparrowHawk, and currently are seeking to either sell the program to a buyer with more compatible operating conditions and strategic interests or to transfer the SparrowHawk and its technology to a joint venture ("JV") to produce fully-assembled light gyroplanes. We have held meetings with agencies in China in relation to the use of the SparrowHawk and its technology in China, and in May 2009, entered into a non-binding Memorandum of Understanding (MOU) with a Chinese Company, with the objective of setting up a JV in China to produce fully-assembled Light Gyroplanes, focused on production of SparrowHawks, initially for power line patrol. Subsequent negotiations related to this MOU resulted in a non-binding "Terms and Conditions" agreement for the setting up of the JV and, as of the issuance of this report, an agreement has been reached and agreed to by both parties. Signing of this agreement by both parties is expected shortly. Under the terms of this anticipated agreement, the parties will prepare an application to the appropriate government authorities to set up the JV. Upon the establishment of this JV, the Company, through its special purpose subsidiary, Groen Brothers International, expects to receive 25% of the equity in the JV in return for its contribution to the JV of its SparrowHawk III assets and rights to SparrowHawk designs and defined SparrowHawk derivatives. We can give no assurance that the parties will obtain approval from the relevant Chinese authority to establish the JV or that the signing of this agreement will ever take place.

We have completed work on those milestones of Phase I of the DARPA contract where we served as prime contractor and on Phase IB of the DARPA contract where we served as a subcontractor for rotor systems work to Georgia Institute of Technology (GT). As of the date of this report, DARPA has not yet announced funding for Phase II and the future involvement of the Company in the DARPA contract is uncertain.

Significant Series B Preferred Stock and Debt Obligations

From 2006 through the present, in addition to other debt, we have obtained debt and equity financing from certain lenders who are also stockholders of the Company. As of December 31, 2009, our obligations to such lenders included: 36% promissory notes issued during 2006 and 2007 in the aggregate principal amount of \$4,400,000 (the "2006/2007 Notes"); a \$40,667,000 Series B 15% Cumulative Preferred Stock Obligation; 15% secured promissory notes in the aggregate principal amount of \$44,328,000 that were issued in satisfaction of accrued dividends of \$36,962,000 on the Series B Preferred Stock through October 9, 2008 plus \$7,366,000 in interest accrued and added to debt principal through December 31, 2009 (the "Dividend Notes"); and secured 15% promissory notes in the aggregate principal amount of \$3,592,000 issued pursuant to the Note Purchase Agreement dated October 9, 2008 (the "Note Purchase Notes"). As discussed in more detail below, the redemption date of the Series B Preferred Stock and the maturity dates of the 2006/2007 Notes, the Dividend Notes and the Note Purchase Notes have been extended to October 9, 2010. We currently have no operating revenues to pay the interest accruing on the debt described above and we will be unable to repay such debt when it becomes due on October 9, 2010. Substantially all our assets have been pledged to secure our debts and if the lenders should fail to further extend the redemption dates and maturity dates for such debts as they have done in the past, such lenders could foreclose on substantially all our assets and we would be forced to discontinue our operations. No assurances can be given that the lenders will further extend the redemption and maturity dates for such preferred stock and debt obligations or that if extended, we will be able to generate revenue or other sources of funds in the significant amount required in order to service and ultimately repay such debt.

Going Concern Uncertainty

The accompanying condensed consolidated financial statements have been prepared assuming that the Company will continue as a going concern. Because of recurring operating losses, the excess of current liabilities over current assets, the stockholders' deficit, and negative cash flows from operations, there is substantial doubt about the Company's ability to continue as a going concern.

At December 31, 2009, we had total current liabilities of \$124,548,000 and current assets of \$195,000, resulting in a working capital deficiency of \$124,353,000. At December 31, 2009, we had a total stockholders' deficit of \$132,303,000.

In May 2008, we ceased production of the SparrowHawk and currently are seeking to either sell the program to a buyer with more compatible operating conditions and strategic interests or to transfer the SparrowHawk and its technology to a joint venture to produce fully-assembled light gyroplanes. There can be no assurance that we will be successful in either of these two endeavors.

We have completed work on Phase I of the DARPA contract where we served as prime contractor to design a proof of concept high speed, long range, vertical takeoff and landing aircraft. This modern rotorcraft, named the "Heliplane" by DARPA, is an intended demonstration vehicle for future gyrodynes to be used in combat research and rescue roles. We were engaged by GT as a subcontractor for rotor system work for Phase IB of the DARPA contract, with final payment received from GT in September 2009. As of the date of this report, DARPA has not yet announced funding for Phase II and our future involvement in the DARPA contract is uncertain.

Our continuation as a going concern is dependent on attaining profitable operations, obtaining additional outside financing and/or restructuring our debt obligations, including our Series B Preferred Stock. We have funded losses from operations primarily from the issuance of debt to related parties (our current shareholders and lenders), the increase in accounts payable and accrued expenses, and the sale of our restricted common stock in private placement transactions. Currently, we have no source of operating revenues, and will require additional funding from these sources to sustain our future operations.

In order to repay our debt obligations in full or in part when due, we will be required to raise significant capital from other sources. Alternatively, we will be required to negotiate further extensions of the Series B Preferred Stock maturity date and our notes payable, as we have accomplished in the past. There is no assurance, however, that we will be successful in these efforts.

During 2006 and 2007, we obtained debt financing from the holders of our Series B Preferred Stock (the "Series B Holders") in the aggregate principal amount of \$4,400,000 (the "2006/2007 Notes"). The 2006/2007 Notes provide for the payment of simple interest at the rate of 36% per annum. The maturity date for the 2006/2007 Notes has been extended from time to time and currently is October 9, 2010.

Included in current liabilities and the working capital deficiency at December 31, 2009 is a \$40,667,000 Series B Preferred Stock obligation. The Series B Holders have agreed to extend the redemption date of the Series B Preferred Stock from time to time and the current redemption date is October 9, 2010, or such later date as agreed to in writing by at least 80% of the Series B Holders.

In October 2008, as part of a Note Purchase Agreement between the Company and the Series B Holders, we issued short-term interest bearing notes in the principal amount of \$36,962,000 in satisfaction of the accrued and unpaid dividends on the Series B Preferred Stock through October 9, 2008 (the "Dividend Notes"). Because we had paid such dividends in kind by issuing additional shares of Series B Preferred Stock, the issuance of the Dividend Notes resulted in the redemption of \$36,962,000 of Series B Preferred Stock. The Dividend Notes provide for the payment of interest at the rate of 15% per annum, compounded quarterly. The maturity date for the Dividend Notes has been extended from time to time and currently is October 9, 2010.

The Note Purchase Agreement, as amended, provides for the periodic sale by the Company to the lenders of short-term promissory notes in the aggregate principal amount of up to \$12,750,000 to provide us with operating capital, as specified in the draw requests for such notes (the "Note Purchase Notes"). The draw requests must be approved by the lenders. Through December 31, 2009, the lenders had purchased notes under the Note Purchase Agreement in the aggregate principal amount of \$3,592,000 and the proceeds had been used by us to cover our minimum cash needs in excess of funding provided by payments from Georgia Tech for our work on the DARPA contract. The Note Purchase Notes provide for the payment of simple interest at the rate of 15% per annum. The maturity date for the Note Purchase Notes has been extended from time to time and currently is October 9, 2010.

Substantially all our assets, including our intellectual property, have been pledged as collateral for our debt.

There can be no guarantee or assurance that we will be successful in our ability to generate income from operations, or to raise capital at favorable rates or at all. The condensed consolidated financial statements do not include any adjustments that might result from the outcome of this uncertainty.

Results of Operations

Revenues

Our consolidated revenues are comprised of the following:

	Three Months Ended December 31,		Six Months Ended December 31,	
	2009	2008	2009	2008
Government contract (DARPA)	\$ -	\$ -	\$ 72,000	\$ 363,000
SparrowHawk kits and parts	-	-	1,000	17,000
Other operating	-	1,000	-	4,000
Total	\$ -	\$ 1,000	\$ 73,000	\$ 384,000

As discussed above, we have significantly scaled back the level of our operations, including ceasing production of the SparrowHawk, eliminating substantially all flight training and reducing the level of our involvement in the DARPA contract. We currently have no operating revenues. As a result, total revenues for the three months ended December 31, 2009 were \$0 compared to \$1,000 for the three months ended December 31, 2008. Total revenues decreased \$311,000 to \$73,000 in the six months ended December 31, 2009 from \$384,000 in the six months ended December 31, 2008. The decrease in revenues is attributed to the decrease in all revenue sources.

We recognized revenue on the DARPA contract as each defined milestone was completed and the requisite meetings were held and technical data submitted and accepted by DARPA. At that time, DARPA instructed us to submit an invoice for payment for the respective milestone at the amount specified in the contract.

Phase I of the DARPA contract ended in November 2007, except for final reports and some continued work on completing a test article rotor blade for the Heliplane. We received final payment on Phase I in February 2009. Phase IB of the DARPA contract, where we were engaged as a GT subcontractor for rotor systems work, has been completed, with final payment received from GT by us in September 2009.

Costs and Expenses

Our consolidated cost of sales is comprised of the following:

	Three Months Ended December 31,		Six Months Ended December 31,	
	2009	2008	2009	2008
Government contract (DARPA)	\$ -	\$ 271,000	\$ 270,000	\$ 418,000
SparrowHawk kits and parts	-	3,000	(11,000)	(1,000)
Total	\$ -	\$ 274,000	\$ 259,000	\$ 417,000

Total cost of sales decreased \$274,000 to \$0 in the three months ended December 31, 2009 from \$274,000 in the three months ended December 31, 2008. Total cost of sales decreased \$158,000 to \$259,000 in the six months ended December 31, 2009 from \$417,000 in the six months ended December 31, 2008. As discussed above, we significantly scaled back the level of our operations, including ceasing

production of the SparrowHawk, eliminating substantially all flight training and reducing the level of our involvement in the DARPA contract.

Research and development expenses for the three months ended December 31, 2009 increased to \$316,000 from \$106,000 for the three months ended December 31, 2008. Similarly, research and development expenses for the six months ended December 31, 2009 increased to \$414,000 from \$165,000 for the six months ended December 31, 2008. As work on the DARPA contract has decreased, engineering resources have been devoted to research and development projects. Research and development activities include the development of opportunities for potential joint venture activities, subcontract opportunities with industry partners, variations to the SparrowHawk, fully assembled SparrowHawk gyroplane derivatives, potential applications of our technology to heavy lift vertical take-off military aircraft, runway independent short-haul airliners and other aircraft, including government contract opportunities.

General and administrative expenses for the three months ended December 31, 2009 increased to \$316,000 from \$106,000 for the three months ended December 31, 2008. Similarly, general and administrative expenses for the six months ended December 31, 2009 increased to \$528,000 from \$455,000 for the six months ended December 31, 2008. The increase in our general and administrative expenses in the first six months of the fiscal year ended June 30, 2010 resulted primarily from increase legal and accounting expenses and less general and administrative resources devoted to work on the DARPA project.

Other Income and Expenses

As a result of the reduction in our related party notes receivable, related party interest income is currently insignificant to our consolidated financial statements. Related party interest income was \$1,000 for each of the six-month periods ended December 31, 2009 and 2008.

Interest and other income decreased to \$0 in the three months ended December 31, 2009 and 2008 and in the six months ended December 31, 2009. Interest and other income was \$1,000 for the six months ended December 31, 2008. Interest and other income is also currently insignificant to our consolidated financial statements, with the decrease in reported amounts resulting from the reduction in our level of operations and continued low levels of interest bearing cash.

We realized a gain on the sale of property and equipment of \$3,000 in the three months ended December 31, 2008 and \$45,000 for the six months ended December 31, 2008. We did not have any sales of property and equipment in the three months and six months ended December 31, 2009.

We realized a gain on extinguishment of debt of \$68,000 in the three months and six months ended December 31, 2009. We did not realize a gain on extinguishment of debt in the three months and six months ended December 31, 2008.

Interest expense for the three months ended December 31, 2009 increased to \$2,722,000 from \$2,266,000 for the three months ended December 31, 2008. Similarly, interest expense for the six months ended December 31, 2009 increased to \$5,364,000 from \$3,268,000 for the six months ended December 31, 2008. We continue to fund our operations with an increase in related party debt. In addition, in October 2008, we increased our interest-bearing debt by \$36,962,000 through a partial redemption of our Series B Preferred Stock.

Series B Preferred Stock interest expense for the three months ended December 31, 2009 increased to \$1,474,000 from \$1,408,000 for the three months ended December 31, 2008. Dividends on the Series B Preferred Stock, which are recorded as interest expense, have been "paid in kind" with additional shares of Series B Preferred Stock. This results in increasing levels of Series B Preferred Stock

interest expense. Series B Preferred Stock interest expense for the six months ended December 31, 2009 decreased to \$2,891,000 from \$3,962,000 for the six months ended December 31, 2008. This decrease is attributed to the \$36,962,000 redemption of Series B Preferred Stock for the Dividend Notes in October 2008.

Net Loss

The net loss for the three months ended December 31, 2009 was \$4,748,000 compared to \$4,163,000 for the three months ended December 31, 2008. The net loss for the six months ended December 31, 2009 was \$9,314,000 compared to \$7,836,000 for the six months ended December 31, 2008. The increase in the net loss in the first two quarters of fiscal year 2009 resulted primarily from the decrease in revenues, the increase in research and development expenses and general and administrative expenses, and the increase in interest expense as further discussed above.

Liquidity and Capital Resources

Series B Preferred Stock Obligation

At December 31, 2009, we had total current liabilities of \$124,548,000 and current assets of \$195,000, resulting in a working capital deficiency of \$124,353,000. Included in current liabilities and the working capital deficiency at December 31, 2009 is a \$40,667,000 Series B Preferred Stock obligation. With the approval of the Series B Holders, the maturity date of the Series B Preferred Stock has been extended from time to time and currently is October 9, 2010, or such later date as agreed to in writing by at least 80% of the Series B Holders.

During 2006 and 2007, we obtained debt financing from the Series B Holders in exchange for 2006/2007 Notes in the aggregate principal amount of \$4,400,000. The 2006/2007 Notes provide for the payment of simple interest at the rate of 36% per annum. The maturity date of the 2006/2007 Notes has been extended from time to time and currently is October 9, 2010.

In October 2008, as part of a Note Purchase Agreement between the Company and the Series B Holders, we redeemed \$36,962,000 of the outstanding Series B Stock in exchange for short-term interest bearing Dividend Notes. The Dividend Notes provide for the payment of interest at the rate of 15% per annum, compounded quarterly. The maturity date of the Dividend Notes has also been extended from time to time and currently is October 9, 2010.

In addition, the Note Purchase Agreement, as amended, provides for the periodic sale by the Company to the lenders of short-term Note Purchase Notes to provide us with operating capital, as specified in the draw requests for such notes. The draw requests must be approved by the lenders. Through December 31, 2009, the lenders had purchased notes under the Note Purchase Agreement in the aggregate principal amount of \$3,592,000 and the proceeds had been used by us to cover our minimum cash needs in excess of funding provided by payments from GT for our work on the DARPA contract. The Note Purchase Notes provide for the payment of simple interest at the rate of 15% per annum. The maturity date of the Note Purchase Notes has been extended from time to time and currently is October 9, 2010.

The lenders and the Company have amended the October 9, 2008 Note Purchase Agreement from time to time to increase the aggregate amount of promissory notes than can be purchased to \$12,750,000 to provide funding to meet our monthly minimum financial needs. The lenders are not obligated to purchase notes pursuant to the Note Purchase Agreement and there can be no assurance that the lenders will continue to purchase notes or otherwise provide funding to us.

Subsequent to December 31, 2009 through August 30, 2010, the Company has received net proceeds from debt financing pursuant to the Note Purchase Agreement of approximately \$5.4 million, \$3.5 million of which was used to partially redeem shares of the Series B Preferred Stock.

In connection with the execution of the Note Purchase Agreement and the issuance of the Series B Preferred Stock, substantially all our assets, including our intellectual property, have been pledged as collateral for our debt.

In order to repay these obligations in full or in part when due, we will be required to raise significant capital from other sources and to meet certain capital requirements under Utah State law. Alternatively, we will be required to negotiate another extension of the Series B Preferred Stock redemption date and the maturity dates of the 2006/2007 Notes, the Dividend Notes and the Stock Purchase Notes, as we have accomplished in the past. There is no assurance, however, that we will be successful in raising the capital required to repay the Series B Preferred Stock and related notes payable obligations or in obtaining a further extension of the Series B Preferred Stock redemption date and the related notes payable maturity dates beyond October 9, 2010.

Other Debt Obligations

Current liabilities at December 31, 2009 included \$65,390,000 notes payable to related parties, comprised of the following:

Series B Holders:	
Dividend Notes	\$ 44,328,000
Note Purchase Notes	3,592,000
2006/2007 Notes	4,400,000
	<u>52,320,000</u>
Other Related Parties	<u>13,070,000</u>
Total Related Party Notes Payable	<u><u>\$ 65,390,000</u></u>

Of the other related parties notes, \$2,611,000 is in default. In addition, we are delinquent in making payments of accrued interest payable of \$1,554,000 on this related party debt at December 31, 2009. Most of these related party notes payable are held by long-time shareholders and lenders of the Company and are payable on demand or are short-term in nature. There is no assurance that these related party lenders will not demand payment of this short-term indebtedness in the near future.

Also included in current liabilities at June 30, 2009 are notes payable and capital lease obligations to unrelated parties of \$1,455,000, a significant portion of which is in default. In addition, we are delinquent in making payments of accrued interest payable of \$718,000 on this debt at December 31, 2009. We continue to make some payments on this indebtedness and continue discussions with many of these vendors and lenders, and have, in most instances, been granted grace periods and extensions without receipt of formal notices of default or threat of legal action. There is no assurance that these vendors and lenders will continue to forebear from collection or legal action.

Operating, Investing and Financing Activities

Net cash used in operating activities was \$1,100,000 for the six months ended December 31, 2009, a level comparable to \$1,105,000 for the six months ended December, 2008.

Net cash provided by investing activities for the six months ended December 31, 2009 was \$1,000, consisting of payments of related party notes receivable. Net cash provided by investing

activities for the six months ended December 31, 2008 was \$28,000 consisting of proceeds from the sale of property and equipment of \$27,000 and payments of related party notes receivable of \$1,000.

We have recently funded losses from operations and net cash used in investing activities primarily from the issuance of debt to related parties (current shareholders and lenders of the Company) and the increase in accrued expenses, and will require additional funding from these sources to sustain our future operations.

Net cash provided by financing activities was \$1,143,000 for the six months ended December 31, 2009, comprised of proceeds from the issuance of debt of \$1,225,000, partially offset by repayment of debt of \$82,000. Net cash provided by financing activities for the six months ended December 31, 2008 was \$1,176,000, comprised of proceeds from the issuance of debt of \$1,331,000, partially offset by repayment of debt of \$88,000, repayment of bank overdraft of \$20,000, and repayment of bank overdraft line of credit of \$47,000.

We currently do not have sufficient cash to sustain our operations for the next twelve months. We are dependent on the lenders under the Note Purchase Agreement to continue to fund operating losses in the short-term, or until revenues grow to the point where they are sufficient to cover operating costs and expenses. As discussed above, the Note Purchase Agreement provides for the periodic sale by the Company to the lenders of short-term promissory notes to provide us with operating capital, as specified in the draw requests for such notes. The draw requests must be approved by the lenders. Through August 30, 2009, the lenders had purchased notes under the Note Purchase Agreement in the aggregate principal amount of \$8,952,000 and the proceeds had been used by us to cover our minimum cash needs in excess of funding provided by payments from GT for our work on the DARPA contract, funding that was completed in September 2009. In addition, \$3,500,000 of the proceeds was used to partially redeem our Series B Preferred Stock. There is no assurance that this funding under the Note Purchase Agreement will continue beyond the current short-term agreement, and there is no assurance that we will be successful in either raising sufficient capital from other sources or improving operations.

Management does not anticipate that revenues or expenses will be materially affected by inflation during the next twelve months of operations.

Our operations are not subject to material seasonal fluctuations.

Off Balance Sheet Commitments

We lease facilities under non-cancelable operating leases. Future minimum rental payments required under these leases are as follows:

Years Ending June 30,

2010	\$ 271,000
2011	<u>73,000</u>
	<u>\$ 344,000</u>

Critical Accounting Policies

Our critical accounting policies include the following:

Revenue Recognition – We recognize revenues from goods and services when there is a binding agreement, the product has been completely shipped or service has been delivered, collection is reasonably assured, and we have no significant obligations remaining. Portions of the purchase price of our products collected from customers in advance of product delivery are recorded as deferred revenue. Therefore, revenues from the sale of SparrowHawk gyroplane kits are not recorded until all kit components and parts are delivered to the customer and collection of any remaining amounts due is reasonably assured.

We recognize revenue on government contracts where we serve as the lead contractor as each defined milestone is completed and the requisite meetings are held and technical data submitted and accepted by the contracting party. At that time, we submit an invoice for payment for the respective milestone at the amount specified in the contract. Contract-related expenses incurred by us for each milestone of the contract, including our own labor, travel, supplies and other costs, and the costs of subcontractors and consultants, are deferred as work-in-process inventory and expensed to cost of sales as the contract revenue for the milestone is recognized. When a loss on a contract is projected, however, all contract-related costs and expenses are expensed as incurred.

We recognize revenue on commercial and sub-contractor contracts as each scheduled phase of the contract is completed and invoices are submitted. Contract-related expenses incurred by us for each phase of the contract, including our own labor, travel, supplies and other costs, and the costs of subcontractors and consultants, are deferred as work-in-process inventory and expensed to cost of sales as the contract revenue for the milestone is recognized. When a loss on a contract is projected, however, all contract-related costs and expenses are expensed as incurred.

Impairment of Long-Lived Assets – We periodically review our long-lived assets for impairment when events or changes in circumstances indicate that the carrying value of an asset may not be recoverable. We evaluate, at each balance sheet date, whether events and circumstances have occurred which indicate possible impairment. The carrying value of a long-lived asset is considered impaired when the anticipated cumulative undiscounted cash flows of the related asset or group of assets is less than the carrying value. In that event, a loss is recognized based on the amount by which the carrying value exceeds the estimated fair market value of the long-lived asset.

Research and Development Costs – Research and development costs are expensed as incurred in accordance with Financial Accounting Standards Board (FASB) Accounting Standards Codification (“ASC”) Topic 730, *Research and Development*. The costs of materials and other costs acquired for research and development activities are charged to expense as incurred. Salaries, wages, and other related costs of personnel, as well as other facility operating costs are allocated to research and development expense through management’s estimate of the percentage of time spent by personnel in research and development activities.

Stock-Based Compensation – We have adopted the fair value recognition provisions of ASC Topic 718, *Compensation – Stock Compensation*, which requires the Company to measure the compensation cost of stock options and other stock-based awards to employees and directors at fair value at the grant date and recognize compensation expense over the requisite service period for awards expected to vest. The grant-date fair value of stock options and other stock-based awards is estimated using the Black-Scholes option-pricing model. The stock-based compensation expense has been allocated to the various categories of costs and expenses in a manner similar to the allocation of payroll expense.

Non-Employee Stock Options and Warrants – In accordance with ASC Topic 505-50, *Equity-Based Payments to Non-Employees*, we estimate the fair value of the consideration recorded for stock options and warrants issued to non-employees using the Black-Scholes option-pricing model. For those stock options and warrants that have variable characteristics, we will continue to use this methodology to periodically reassess the fair value of the consideration to determine if the value of the consideration

recorded in the consolidated financial statements requires adjustment. Changes in the assumptions used in the option-pricing model, including the market price of the Company's common stock and risk-free interest rates, may result in fluctuations in the estimated fair value and carrying value of the consideration recorded for variable non-employee stock options and warrants.

Financial Instruments with Characteristics of Both Liabilities and Equity – In accordance with ASC Topic 480, *Distinguishing Liabilities from Equity*, we report our Series B Preferred Stock as a liability. This pronouncement establishes standards for how an issuer classifies and measures certain financial instruments with characteristics of both liabilities and equity. It requires that an issuer classify a financial instrument that is within its scope as a liability (or an asset in some circumstances).

Income Taxes – We account for income taxes according to the asset and liability method. The asset and liability method requires the recognition of deferred tax liabilities and assets for the expected future tax consequences of temporary differences between tax bases and financial reporting bases of existing assets and liabilities. Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in income in the period that includes the enactment date.

Recently Issued Accounting Pronouncements

There were no new accounting pronouncements issued during the six months ended December 31, 2009 and through the date of this filing that the Company believes are applicable or would have a material impact on the consolidated financial statements of the Company.

Item 3. Quantitative and Qualitative Disclosures About Market Risk

Not applicable. The Company is a smaller reporting company.

Item 4T. Controls and Procedures

Evaluation of Disclosure Controls and Procedures

Our management, under the supervision and with the participation of our chief executive officer and chief financial officer, evaluated the effectiveness of the design and operation of our disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act) as of December 31, 2009, the end of the period covered by this report. Based on that evaluation, and as further discussed below, our chief executive officer and chief financial officer concluded that the disclosure controls and procedures employed at the Company as of December 31, 2009 were not effective to ensure that the information required to be disclosed by us in the reports that we file or submit under the Securities Exchange Act of 1934 is recorded, processed, summarized and reported within the time periods specified in SEC rules and forms.

Management is responsible for establishing and maintaining adequate internal control over financial reporting, as such term is defined under Exchange Act Rules 13a-15(f). Our internal control system is designed to provide reasonable assurance to our management and board of directors regarding the preparation and fair presentation of published financial statements. As provided in Item 9A(T) of our 2009 annual report on Form 10-K, under the supervision and with the participation of our management, including our principal executive officer and principal financial officer, we conducted an annual evaluation of the effectiveness of our internal control over financial reporting based on the framework in Internal Control – Integrated Framework issued by the Committee of Sponsoring Organizations of the

Treadway Commission. Based on our evaluation under that framework, management concluded that our internal control over financial reporting was not effective as of June 30, 2009.

As a result of our decision to cease production of the SparrowHawk, our reduced involvement in the DARPA contract, and the resulting substantial decrease in our operations, we eliminated substantially all full time accounting and finance personnel. We have not, therefore, timely prepared our consolidated financial statements and filed our periodic reports with the SEC. We currently utilize primarily former employees, working either as part time employees or outside consultants, to maintain the financial records of the Company and to prepare the consolidated financial statements and footnote disclosures of the Company. This has resulted in less segregation of accounting duties and less compliance with financial close procedures than had previously been implemented when a fully staffed accounting and finance department was in place. This lack of internal oversight and review resulted in adjusting journal entries not detected by us that were material to our consolidated financial statements. In addition, the Audit Committee of our Board of Directors is currently comprised of two individuals who are not independent directors.

We concluded that these deficiencies in the design and operation of our internal control over financial reporting may be considered material weaknesses. A material weakness is a control deficiency (within the meaning of the Public Company Accounting Oversight Board (PCAOB) Auditing Standard No. 2) or combination of control deficiencies, such that there is a reasonable possibility that a material misstatement of the annual or interim financial statements will not be prevented or detected. In light of the material weaknesses described above, we performed additional analyses and other post-closing procedures and increased the involvement of outside consultants to ensure our financial statements were prepared in accordance with generally accepted accounting principles. Accordingly, we believe that the consolidated financial statements included in this report fairly present, in all material respects, our financial condition, results of operations and cash flows for the periods presented. We intend to continue the involvement of outside consultants and further implement additional analyses and financial close procedures to ensure that our financial statements are timely prepared in accordance with generally accepted accounting procedures.

Change in Internal Control Over Financial Reporting

Other than those matters discussed above, there was no change in our internal control over financial reporting during the second quarter of our fiscal year 2010, that materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

PART II – OTHER INFORMATION

Item 1. Legal Proceedings

We are not involved in any material pending legal proceedings other than ordinary routine litigation incidental to our business and, to the best of our knowledge, no material legal proceedings against the Company have been threatened. We are subject to the potential of various claims and legal actions arising in the ordinary course of business, including certain matters relating to past due amounts to creditors. The past due amounts are recorded as liabilities in our consolidated financial statements, and management believes that the amount, if any, that may result from other claims will not have a material adverse effect on our consolidated financial statements.

Item 1A. Risk Factors

In addition to the other information set forth in this report, you should carefully consider the factors discussed in Item 1A – “Risk Factors” in our Annual Report on Form 10-K for the year ended June 30, 2009, which could materially affect our business, financial condition or future results of operations.

Item 2. Unregistered Sales of Equity Securities and Use of Proceeds

There were no sales of unregistered equity securities during the three months ended December 31, 2009.

Item 3. Defaults Upon Senior Securities

As more fully discussed under “Liquidity and Capital Resources” above, as of December 31, 2009, we are delinquent in making payments on notes payable to vendors and others totaling \$1,351,000, notes payable to related parties totaling \$2,611,000, and \$2,272,000 of accrued interest payable on debt.

Item 4. (Removed and Reserved)

Item 5. Other Information

Not applicable.

Item 6. Exhibits

The following exhibits are filed as part of this report:

<u>Exhibit No.</u>	<u>Description of Exhibit</u>
3.1	Third Amendment to Fifth Amended and Restated Articles of Incorporation of Groen Brothers Aviation, Inc. filed October 5, 2009 (1)
10.1	Fourth Amendment to Note Purchase Agreement dated as of December 3, 2009 among Groen Brothers Aviation, Inc., Groen Brothers Aviation USA, Inc. and Lender A named therein (2)
10.2	Fourth Amendment to Note Purchase Agreement dated as of December 3, 2009 among Groen Brothers Aviation, Inc., Groen Brothers Aviation USA, Inc. and Lender B named therein (2)
10.3	Fourth Amendment to Note Purchase Agreement dated as of December 3, 2009 among Groen Brothers Aviation, Inc., Groen Brothers Aviation USA, Inc. and Lender C named therein (2)
10.4	Fourth Amendment to Note Purchase Agreement dated as of December 3, 2009 among Groen Brothers Aviation, Inc., Groen Brothers Aviation USA, Inc. and Lender D named therein (2)

<u>Exhibit No.</u>	<u>Description of Exhibit</u>
10.5	Fourth Amendment to Promissory Notes between Groen Brothers Aviation, Inc. and Lender E named therein dated as of December 3, 2009 (2)
10.6	Fourth Amendment to Promissory Notes between Groen Brothers Aviation, Inc. and Lender B named therein dated as of December 3, 2009 (2)
31.1	Section 302 Certification of Chief Executive and Chief Financial Officer*
32.1	Section 1350 Certification of Chief Executive Officer and Chief Financial Officer*

* Exhibits filed with this report.

(1) Exhibits filed with the Company's Quarterly Report on Form 10-Q for the quarter ended December 31, 2008 and incorporated herein by reference.

(2) Exhibits filed with the Company's Annual Report on Form 10-K for the year ended June 30, 2009 and incorporated herein by reference.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

GROEN BROTHERS AVIATION, INC.

/s/ David Groen

David Groen, President, Chief Executive Officer
and Chief Financial Officer
(Principal Executive and Principal Financial Officer)

Date: August 31, 2010

RULE 13a-14(a) CERTIFICATION

I, David Groen, certify that:

1. I have reviewed this report on Form 10-Q of Groen Brothers Aviation, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements and other financial information included in this report, fairly present in all material respects the financial condition, results of operations, and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: August 31, 2010

/s/ David Groen

David Groen
President, Chief Executive Officer and Chief Financial Officer
(Principal Executive and Principal Financial Officer)

**CERTIFICATION PURSUANT TO 18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002**

In connection with the Quarterly Report of Groen Brothers Aviation, Inc. (the "Company") on Form 10-Q for the period ending December 31, 2009, as filed with the Securities and Exchange Commission (the "Report"), I, David Groen, Chief Executive Officer and Chief Financial Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

- (1) The Report fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/s/ David Groen

David Groen
President, Chief Executive Officer and Chief Financial Officer
(Principal Executive and Principal Financial Officer)

Date: August 31, 2010