

**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, 2010

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 February 10, 2011, there were 171,416,289 shares of the Registrant’s common stock, no par value per share, outstanding.

GROEN BROTHERS AVIATION, INC.
FORM 10-Q

FOR THE QUARTER ENDED DECEMBER 31, 2010

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PART I - FINANCIAL INFORMATION

Item 1. Financial Statements

GROEN BROTHERS AVIATION, INC. Condensed Consolidated Balance Sheets

<u>Assets</u>	December 31, 2010	June 30, 2010
	(Unaudited)	
Current assets:		
Cash	\$ 1,000	\$ 428,000
Accounts receivable, net of allowance of \$7,000	-	-
Related party accounts and notes receivable	1,000	1,000
Prepaid expenses	189,000	75,000
Total current assets	<u>191,000</u>	<u>504,000</u>
Property and equipment, net	<u>27,000</u>	<u>35,000</u>
Total assets	<u>\$ 218,000</u>	<u>\$ 539,000</u>
 <u>Liabilities and Stockholders' Deficit</u>		
Current liabilities:		
Bank overdraft	\$ 19,000	\$ -
Accounts payable	2,269,000	2,340,000
Accrued expenses	19,582,000	17,020,000
Notes payable and current portion of capital lease obligations	1,415,000	1,449,000
Related party notes payable	79,032,000	73,626,000
Series B 15% cumulative redeemable non-voting preferred stock, no par value, 50,000,000 shares authorized, 43,348 and 40,271 shares issued and outstanding, respectively	43,348,000	40,271,000
Total current liabilities	<u>145,665,000</u>	<u>134,706,000</u>
Long-term liabilities:		
Accrued expenses	6,148,000	5,956,000
Deferred revenue	25,000	25,000
Long-term debt and capital lease obligations	1,000	2,000
Related party long-term debt	90,000	94,000
Dealer deposits	2,105,000	2,105,000
Total liabilities	<u>154,034,000</u>	<u>142,888,000</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	34,941,000	34,877,000
Accumulated deficit	(188,827,000)	(177,296,000)
Total stockholders' deficit	<u>(153,816,000)</u>	<u>(142,349,000)</u>
Total liabilities and stockholders' deficit	<u>\$ 218,000</u>	<u>\$ 539,000</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,	
	2010	2009	2010	2009
Revenues	\$ -	\$ -	\$ 1,000	\$ 73,000
Costs and expenses:				
Cost of sales	3,000	1,000	5,000	260,000
Research and development	361,000	315,000	897,000	413,000
General and administrative expenses	680,000	304,000	1,288,000	528,000
Total costs and expenses	1,044,000	620,000	2,190,000	1,201,000
Loss from operations	(1,044,000)	(620,000)	(2,189,000)	(1,128,000)
Other income (expense):				
Related party interest income	-	-	1,000	1,000
Gain on extinguishment of debt	56,000	68,000	68,000	68,000
Interest expense	(3,219,000)	(2,722,000)	(6,334,000)	(5,364,000)
Series B preferred stock interest expense	(1,567,000)	(1,474,000)	(3,077,000)	(2,891,000)
Total other income (expense)	(4,730,000)	(4,128,000)	(9,342,000)	(8,186,000)
Loss before income taxes	(5,774,000)	(4,748,000)	(11,531,000)	(9,314,000)
Income tax benefit	-	-	-	-
Net loss	\$ (5,774,000)	\$ (4,748,000)	\$ (11,531,000)	\$ (9,314,000)
Net loss per common share – basic and diluted	\$ (0.03)	\$ (0.03)	\$ (0.07)	\$ (0.06)
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,	
	2010	2009
Cash flows from operating activities:		
Net loss	\$ (11,531,000)	\$ (9,314,000)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation and amortization expense	11,000	12,000
Stock options and warrants issued for interest expense	-	(28,000)
Stock options issued for services	4,000	4,000
Stock-based compensation	60,000	96,000
Interest expense accrued on Series B preferred stock	3,077,000	2,891,000
Interest expense added to debt principal	3,652,000	3,180,000
Gain on extinguishment of debt	(68,000)	(68,000)
(Increase) decrease in:		
Accounts and notes receivable	-	124,000
Prepaid expenses	(114,000)	(23,000)
Increase (decrease) in:		
Accounts payable	(71,000)	(229,000)
Accrued expenses	2,793,000	2,255,000
	(2,187,000)	(1,100,000)
Net cash used in operating activities		
Cash flows from investing activities:		
Purchase of property and equipment	(3,000)	-
Payments of related party notes receivable	-	1,000
	(3,000)	1,000
Net cash provided by (used in) investing activities		
Cash flows from financing activities:		
Proceeds from the issuance of debt	1,760,000	1,225,000
Repayment of debt	(16,000)	(82,000)
Increase in bank overdraft	19,000	-
	1,763,000	1,143,000
Net cash provided by financing activities		
Net increase (decrease) in cash	(427,000)	44,000
Cash, beginning of period	428,000	115,000
	\$ 1,000	\$ 159,000
Cash, end of period		

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, 2010, the results of operations for the three months and six months ended December 31, 2010 and 2009, and cash flows for the six months ended December 31, 2010 and 2009. The results of operations for the three months and six months ended December 31, 2010 are not necessarily indicative of the results to be expected for the full fiscal year ending June 30, 2011.

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 the lack of significant operating revenues, recurring operating losses, negative cash flows from operations, the excess of current liabilities over current assets, and the stockholders' deficit, there is substantial doubt about the Company's ability to continue as a going concern.

At December 31, 2010, the Company had total current liabilities of \$145,665,000 and current assets of \$191,000, resulting in a working capital deficiency of \$145,474,000. At December 31, 2010, the Company had a total stockholders' deficit of \$153,816,000.

The Company has ceased production of the SparrowHawk and currently is seeking to transfer the SparrowHawk and its technology to a joint venture to produce fully-assembled light gyroplanes. The Company has entered into an agreement with a Chinese company to form such a joint venture and the parties are preparing an application to the Chinese regulatory authorities for the necessary approvals. There can be no assurance that the Company will be successful in this endeavor.

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 subsequently 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 gyroplane technology capabilities of the Company, through the use of advanced software applied to the versatility of composite materials for rotorcraft, have led to the initial design by the Company of a new six passenger seat (plus pilot) aircraft, preliminarily named the Hawk 6, and now renamed the ArrowHawk. The Company believes this gyroplane aircraft extends and enlarges the commercial market potential of the Company's smaller four-passenger Hawk 4 gyroplane, previously manufactured as a pre-production aircraft and currently flying for market demonstration purposes. We believe that the ArrowHawk can offer economic and performance advantages over competitive aircraft types for such applications as tour operations and pipe/power line patrol. As of the date of this Report, the Company is seeking funding to finalize the design and certification of the ArrowHawk for commercial production and for this purpose exhibited a full scale model of the ArrowHawk at the China International

Aviation & Aerospace Exhibition in November 2010. There can be no assurance that the Company will be successful in obtaining the necessary funding for the ArrowHawk program.

In parallel with the ArrowHawk, the Company has undertaken the initial design of a smaller two-seat gyroplane, named the ShadowHawk, using comparable technology to that of the ArrowHawk and intended for aerial observation for both commercial and public agency usage. As with the ArrowHawk, the Company is seeking funding to finalize the design and certification of the ShadowHawk for commercial production. There can be no assurance that the Company will be successful in obtaining the necessary funding for the ArrowHawk program.

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. During the past two fiscal years, the Company has funded losses from operations primarily from the issuance of debt to related parties (current shareholders and lenders of the Company). Currently, the Company has no significant source of operating revenues, and will require additional outside funding to develop and 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.

Included in current liabilities and the working capital deficiency at December 31, 2010 is a \$43,348,000 Series B Preferred Stock obligation. The holders of the Series B Preferred Stock (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 April 11, 2011, or such later date as agreed to in writing by at least 80% of the Series B Holders.

During 2006 and 2007, the Company obtained debt financing from 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 April 11, 2011.

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, and had an outstanding balance of \$51,315,000 at December 31, 2010. The maturity date for the Dividend Notes has been extended from time to time and currently is April 11, 2011.

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, 2010, the lenders had purchased notes under the Note Purchase Agreement in the aggregate principal amount of \$10,312,000 and the proceeds had been used by the Company to cover its minimum operating cash needs. In addition, \$3,500,000 of the proceeds was used to partially redeem the Series B Preferred Stock. 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 April 11, 2011.

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 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, 2009 have been reclassified to conform to the presentation for the three months and six months ended December 31, 2010.

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, 2010, 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, 2010 and 2009 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,	
	2010	2009	2010	2009
Cost of sales	\$ -	\$ -	\$ -	\$ 33,000
Research and development	16,000	11,000	32,000	23,000
General and administrative	14,000	29,000	28,000	40,000
Total stock-based compensation expense	\$ 30,000	\$ 40,000	\$ 60,000	\$ 96,000

There was no stock compensation expense capitalized during the three months and six months ended December 31, 2010 and 2009.

During the three months and six months ended December 31, 2010, 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, 2010:

	Options and Warrants	Weighted Average Exercise Price	Weighted Average Remaining Contract Term	Aggregate Intrinsic Value
Outstanding at June 30, 2010	26,185,000	\$ 0.21		
Granted	-	-		
Exercised	-	-		
Cancelled	-	-		
Expired	<u>(1,754,000)</u>	0.16		
Outstanding at December 31, 2010	<u>24,431,000</u>	\$ 0.20	1.98	\$ 0
Options and warrants vested and exercisable at December 31, 2010	<u>21,046,000</u>	\$ 0.22	1.66	\$ 0

The aggregate intrinsic value in the preceding table represents the total pretax intrinsic value, based on the Company's closing stock price of \$0.016 as of December 31, 2010, 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, 2010, the total future compensation cost related to non-vested stock-options not yet recognized in the condensed consolidated statements of operations was approximately \$141,000, and the weighted average period over which these awards are expected to be recognized was 0.48 years.

Note 4: Accrued Expenses

Accrued expenses consisted of the following at December 31, 2010:

Compensation and related taxes	\$ 594,000
Related party interest	17,800,000
Interest	856,000
Customer deposits	215,000
Consulting fees	17,000
Finders' compensation	9,000
Royalties to related parties	32,000
Other	<u>59,000</u>
Total	<u><u>\$ 19,582,000</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, 2010, 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, 2010:

Deferred compensation	\$ 5,660,000
Accrued payroll taxes on deferred compensation	189,000
Accrued interest on deferred compensation	<u>299,000</u>
Total	<u><u>\$ 6,148,000</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, 2010, 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, 2010 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 \$1,427,000 that were technically in default at December 31, 2010. In addition, the Company is delinquent in making payments of accrued interest payable of \$833,000 on this debt at December 31, 2010. 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 \$79,032,000 at December 31, 2010 are payable to stockholders of the Company who are considered related parties, including the Series B Holders. The related party notes payable at December, 2010 are comprised of the following:

Series B Holders:	
Dividend Notes	\$ 51,315,000
Note Purchase Notes	10,312,000
2006/2007 Notes	<u>4,400,000</u>
	66,027,000
Other Related Parties	<u>13,005,000</u>
Total Related Party Notes Payable	<u><u>\$ 79,032,000</u></u>

Dividend Notes totaling \$51,315,000 (\$36,962,000 original principal plus \$14,353,000 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 April 11, 2011.

Pursuant to the Note Purchase Agreement discussed in Note 7, the Company borrowed a total of \$10,312,000 from the Series B Holders during the period October 1, 2008 to December 31, 2010, of which \$3.5 million was used on June 28, 2010 to redeem 3,500 shares of the Series B Preferred Stock with a book value of \$3,500,000. 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 April 11, 2011.

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 April 11, 2011.

The Company considered each of the extensions of the due dates for the Dividend Notes, the 2006/2007 Notes and the Note Purchase Notes and applied applicable accounting literature to determine the modification of this debt represented by the extension of the due dates was not a troubled debt restructuring. The Company concluded that the creditors had not granted a concession to the Company because the effective borrowing rate on the restructured debt was no different than the effective borrowing rate of the original debt before the restructuring. The face amount of the debt did not change, there was no modification of the interest rate and no material fees or other concessions were made which would result in a change in the effective interest rate. Only the maturity date was extended, and the Company concluded this did not meet the criteria for a troubled debt restructuring. The Company further concluded that the anticipated future cash payments to retire principal and interest were the same for the restructured debt.

Therefore, the Company subsequently reviewed applicable accounting literature and concluded that there was no difference in the fair market value of the debt before and after the modifications for the extension of the maturity date, and no gain or loss on the transactions were recorded in the accompanying consolidated financial statements.

At December 31, 2010, 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 \$2,007,000.

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, 2010, 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, 2010, 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. As described below, all outstanding shares of the Series A Convertible Preferred Stock, including all voting and conversion rights, will expire on October 8, 2011.

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, 2010, there were 43,348 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) April 11, 2011, 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, 2010, the lenders had purchased notes under the Note Purchase Agreement in the aggregate principal

amount of \$10,312,000 and the proceeds had been used by the Company to cover its minimum cash needs. 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 April 11, 2011, 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.

When the redemption date of the Series B Preferred Stock was extended subsequent to October 2005, the face amount of the Series B Preferred Stock did not change, there was no modification of the stated interest rate and no material fees or other concessions were made which would result in a change in the effective interest rate. Since only the redemption date was extended, the Company concluded that the anticipated future cash payments to retire principal and interest remained unchanged, and there was no difference in the fair market value of the Series B Preferred Stock before and after the modifications for the extension of the redemption date. Therefore, no gain or loss on the extensions of the redemption date was recorded in the accompanying consolidated financial statements.

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, 2010, 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, 2010, the recorded amount of common stock has been increased by \$4,000 for a charge to general and administrative expense for the vesting of the grant date fair value of 500,000 options issued to a non-employee consultant and by \$60,000 for total stock-based compensation (see Note 3).

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 and by \$96,000 for total stock-based compensation (see Note 3).

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, 2010, 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, 2010, \$21,055,000 of principal and interest is convertible into 81,266,070 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

As previously reported, during 2009 the Company held meetings with entities within 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 with Guangzhou Suntrans Aviation Science and Technology Co., Ltd. ("Suntrans"), a company incorporated under the laws of the People's Republic of China ("PRC"), with the objective of setting up a joint venture in the PRC to produce fully-assembled Light Gyroplanes, based upon the SparrowHawk design. Subsequent negotiations related to the Memorandum of Understanding resulted in a non-binding "Terms and Conditions" agreement for the setting up of the joint venture and the parties focused their efforts on entering into a definitive joint venture agreement between Suntrans and Groen Brothers Aviation International, LLC ("Groen LLC"), a wholly owned subsidiary formed to participate in the joint venture.

Groen LLC and Suntrans entered into a Cooperative Joint Venture Contract (the "Agreement") dated as of November 14, 2010 that provides for the establishment of Foshan Suntrans-Groen Aviation Co., Ltd. (the "Joint Venture"). As discussed below, the Agreement will not become effective until a number of significant conditions have been satisfied and no assurances can be given that such conditions will be satisfied or that the Joint Venture will become effective.

The Agreement provides that it will only come into force upon approval by the Chinese Examination and Approval Authority ("CEAA") in accordance with applicable law. If such approval is not granted, the Agreement shall be null and void. If the CEAA suggests changes to the Agreement, the parties shall consult with one another and may agree to accept or reject such suggestions. If the parties decide to reject the suggestions or do not agree to the suggestions within 15 days, the Joint Venture Agreement shall be null and void. Following approval by the CEAA, the Parties shall seek any other required approvals for the establishment of the Joint Venture and the issuance of a business license for the

Joint Venture. The date the business license is issued is referred to in the Agreement as the “Date of Establishment.” If the Business License is not issued within 180 days of the date of signature of the Agreement, the parties shall jointly consult to determine whether to continue with the formation of the Joint Venture and, if after a period of 30 days the parties cannot agree upon a common action to be taken, then either party shall have the option to deem the Agreement void and of no effect by giving written notice to the other party. The Agreement provides that the parties will make all reasonable efforts to ensure the required documents are submitted to the CEEA within 30 days of the date of signature of the Agreement.

The Agreement generally provides for the establishment of a cooperative joint venture between Suntrans and Groen LLC to assemble, manufacture, sell and provide related services for the Registrant’s SparrowHawk Gyroplane Program, including the most advanced version of the SparrowHawk aircraft developed to date, the SparrowHawk III. For purposes of describing the limitations of the technology to be contributed to the Joint Venture by Groen LLC and the limitations of the aircraft to be developed and produced by the Joint Venture, the SparrowHawk and its potential derivative designs are limited to a maximum of two seats inclusive of the pilot’s seat and a maximum gross weight of 680kg (1,500 lbs.). The SparrowHawk program will also include the transfer to the Joint Venture of the Registrant’s rotor blade design that is currently flying on the Hawk 4 Gyroplane, which transfer is specifically limited to the SparrowHawk Gyroplane aircraft and the Registrant specifically reserved all rights to design, manufacture and sell rotor blades using the Hawk 4 Gyroplane rotor blade technology for aircraft other than the SparrowHawk program.

The Joint Venture will be a limited liability company formed under the laws of the PRC with an initial term of 30 years and the legal address of the Joint Venture will be determined by the board of directors. The Joint Venture may establish branches and subsidiaries in the PRC subject to approval from the appropriate Chinese regulatory authorities.

The total amount of registered capital of the Joint Venture will be Chinese Renminbi (“RMB”) 100 Million. Suntrans will contribute RMB 75 million to the Joint Venture in cash with at least 15% of such amount being contributed within three months following the Date of Establishment and the balance being contributed over a period of not to exceed two years as determined by the unanimous vote of the Joint Venture’s board of directors; provided, that such capital contributions shall be in advance of and in greater amounts than the needs of the Joint Venture as determined by the unanimous vote of the board of directors. Groen LLC will transfer assets to the Joint Venture with an agreed value of RMB 25 million consisting of title to the entirety of the SparrowHawk Gyroplane program including manufacturing, technology, sales and marketing and research and development information including analytical data, testing data, records, documents, drawings, engineering, materials, hardware, parts, tooling and other items and the Hawk 4 rotor blade design discussed above. Notwithstanding the foregoing, Groen LLC shall not transfer any technology to the Joint Venture that would violate the U.S. International Traffic in Arms Regulations. Groen LLC will transfer such technology pursuant to the terms of a Technology Transfer Agreement that will be entered into within ten days following the Date of Establishment.

Subject to the Chinese Cooperative Joint Venture Law and Joint Venture Rule and other applicable PRC laws and regulations, on the Date of Establishment, the Joint Venture shall form a board of directors consisting of five directors: three to be appointed by Suntrans and two to be appointed by Groen LLC. A director appointed by Suntrans shall serve as the Chairman of the Board and a director appointed by Groen LLC shall serve as the Vice Chairman of the Board. Each director shall be appointed for a term of three years. Suntrans shall also appoint one supervisor for a term of three years.

The Agreement also contains provisions with respect to governance of the Joint Venture, warranties and representations by each of the parties, the accounting systems and fiscal year, confidentiality, termination and dissolution, liquidation, defaults, remedies and other items. The Agreement generally provides that in the event the Joint Venture is liquidated, after the sale of the Joint

Venture assets, the proceeds from any liquidated properties shall be paid to Suntrans and Groen LLC shall repossess the rights of the SparrowHawk Program under the Technology Transfer Agreement.

Note 10: Supplemental Statement of Cash Flows Information

During the six months ended December 31, 2010, the Company had following non-cash investing and financing activities:

- Decreased notes payable and current portion of capital lease obligations and increased accrued expenses by \$29,000.

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.

Cash paid for interest expense was \$60,000 and \$66,000 for the six months ended December 31, 2010 and 2009, respectively.

No payments of income taxes were made during the six months ended December 31, 2010 and 2009.

Note 11: Recently Issued Accounting Pronouncements

There were no new accounting pronouncements issued during the six months ended December 31, 2010 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

Debt Financing

Subsequent to December 31, 2010, the Company has received proceeds from debt financing pursuant to the Note Purchase Agreement of \$235,000.

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, 2010, filed on October 13, 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.

Background

We are engaged in the business of designing and developing new technology for 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 significant operating revenues.

We have ceased production of the SparrowHawk, and currently are seeking to transfer the SparrowHawk and its technology to a joint venture ("JV") to produce fully-assembled light gyroplanes. Groen Brothers Aviation International, LLC, ("GBA LLC") a wholly owned special purpose subsidiary of the Company, and Guangzhou Suntrans Aviation Science and Technology Co., Ltd. ("Suntrans"), a company incorporated under the laws of the People's Republic of China ("PRC"), entered into a Cooperative Joint Venture Contract (the "Agreement") dated effective as of November 14, 2010 that provides for the establishment of Foshan Suntrans-Groen Aviation Co., Ltd. (the "Joint Venture") to assemble, manufacture, sell and provide related services for the Company's SparrowHawk Gyroplane Program, including the most advanced version of the SparrowHawk aircraft developed to date, the SparrowHawk III. The Joint Venture Agreement provides that it will only come into force upon approval by the Chinese Examination and Approval Authority ("CEAA") in accordance with applicable law and if such approval is not granted, the Agreement shall be null and void. The Joint Venture Agreement generally provides that when and if the Joint Venture becomes effective, Suntrans will contribute 75 million Chinese Renminbi ("RMB") to the Joint Venture in cash over time in exchange for a 75% interest in the Joint Venture and Groen LLC will contribute title to the SparrowHawk Gyroplane program, including manufacturing, technology, sales and marketing and research and development information, and certain rights to the Hawk 4 rotor blade design, in exchange for a 25% interest in the Joint Venture.

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 subsequently served as a subcontractor for rotor systems work to Georgia Institute of Technology (GT), with final payment received by us 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.

Significant Series B Preferred Stock and Debt Obligations

From 2006 through the present, we have obtained debt and equity financing primarily from certain lenders who are also stockholders of the Company. As of December 31, 2010, 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 \$43,348,000 Series B 15% Cumulative Preferred Stock Obligation; 15% secured promissory notes in the aggregate principal amount of \$51,315,000 that were issued in satisfaction of accrued dividends of \$36,962,000 on the Series B Preferred Stock through October 9, 2008 plus \$14,353,000 in interest accrued and added to debt principal through December 30, 2010 (the "Dividend Notes"); and secured 15% promissory notes in the aggregate principal amount of \$10,312,000 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 April 11, 2011. 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 April 11, 2011. 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 the lack of significant operating revenues, recurring operating losses, negative cash flows from operations, the excess of current liabilities over current assets, and the stockholders' deficit, there is substantial doubt about the Company's ability to continue as a going concern.

At December 31, 2010, we had total current liabilities of \$145,665,000 and current assets of \$191,000, resulting in a working capital deficiency of \$145,474,000. At December 31, 2010, we had a total stockholders' deficit of \$153,816,000.

We have ceased production of the SparrowHawk and currently are seeking to transfer the SparrowHawk and its technology to a joint venture to produce fully-assembled light gyroplanes. We have entered into an agreement with a Chinese company to form such a joint venture and the parties are preparing an application to the Chinese regulatory authorities for the necessary approvals. There can be no assurance that we will be successful in this endeavor.

We have completed work on Phase I of a contract with the U.S. Defense Advanced Research Projects Agency ("DARPA") 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 search and rescue roles. We were subsequently 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 gyroplane technology capabilities of the Company, through the use of advanced software applied to the versatility of composite materials for rotorcraft, have led to the initial design by the Company of a new six passenger seat (plus pilot) aircraft, preliminarily named the Hawk 6, and now renamed the ArrowHawk. We believe this gyroplane aircraft extends and enlarges the commercial

market potential of the Company's smaller four-passenger Hawk 4 gyroplane, previously manufactured as a pre-production aircraft and currently flying for market demonstration purposes. We believe that the ArrowHawk can offer economic and performance advantages over competitive aircraft types for such applications as tour operations and pipe/power line patrol. As of the date of this Report, we are seeking funding to finalize the design and certification of the ArrowHawk for commercial production and for this purpose exhibited a full scale model of the ArrowHawk at the China International Aviation & Aerospace Exhibition in November 2010. There can be no assurance that we will be successful in obtaining the necessary funding for the ArrowHawk program.

In parallel with the ArrowHawk, we have undertaken the initial design of a smaller two-seat gyroplane, named the ShadowHawk, using comparable technology to that of the ArrowHawk and intended for aerial observation for both commercial and public agency usage. As with the ArrowHawk, we are seeking funding to finalize the design and certification of the ShadowHawk for commercial production. There can be no assurance that we will be successful in obtaining the necessary funding for the ArrowHawk program.

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. During the past two fiscal years, we have funded losses from operations primarily from the issuance of debt to related parties (current shareholders and lenders of the Company). Currently, we have no significant source of operating revenues, and will require additional outside funding to develop and 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.

Included in current liabilities and the working capital deficiency at December 31, 2010 is a \$43,348,000 Series B Preferred Stock obligation. The holders of the Series B Preferred Stock (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 April 11, 2011, 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 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 April 11, 2011.

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, and had an outstanding balance of \$51,315,000 at December 31, 2010. The maturity date for the Dividend Notes has been extended from time to time and currently is April 11, 2011.

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, 2010, the lenders had purchased notes under the Note Purchase Agreement in the aggregate principal amount of

\$10,312,000 and the proceeds had been used by us to cover our minimum operating cash needs. In addition, \$3,500,000 of the proceeds was used to partially redeem the Series B Preferred Stock. 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 April 11, 2011.

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 we will be successful in our ability to generate income from operations, or to raise capital at favorable rates or at all. The condensed 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,	
	2010	2009	2010	2009
Government contract (DARPA)	\$ -	\$ -	\$ -	\$ 72,000
SparrowHawk kits and parts	-	-	1,000	1,000
Total	\$ -	\$ -	\$ 1,000	\$ 73,000

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 significant operating revenues. As a result, we had no revenues for the three months ended December 31, 2010 and 2009. Total revenues decreased \$72,000 to \$1,000 in the six months ended December 31, 2010 compared to \$73,000 for the six months ended December 31, 2009.

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 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,	
	2010	2009	2010	2009
Government contract (DARPA)	\$ 1,000	\$ -	\$ 1,000	\$ 270,000
SparrowHawk kits and parts	-	1,000	2,000	(10,000)
Other	2,000	-	2,000	-
Total	\$ 3,000	\$ 1,000	\$ 5,000	\$ 260,000

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. Consequently, we currently incur only nominal amounts of cost of sales. Total cost of sales increased \$2,000 to \$3,000 in the three months ended December 31, 2010 from \$1,000 in the three months ended December 31, 2009. Total cost of sales decreased \$255,000 to \$5,000 in the six months ended December 31, 2010 from \$260,000 in the six months ended December 31, 2009.

Research and development expenses for the three months ended December 31, 2010 increased to \$361,000 from \$315,000 for the three months ended December 31, 2009, and increased to \$897,000 for the six months ended December 31, 2010 from \$413,000 for the six months ended December 31, 2009. As work on the DARPA contract has terminated, engineering and management resources have been devoted to research and development projects. Research and development activities that required additional personnel primarily involved advancing the design of the ArrowHawk and ShadowHawk gyroplanes in response to potential customer interest, as well as making preparations for the transfer of technical documentation for SparrowHawk production in China by the Joint Venture if and when approved by the Chinese regulatory authorities. Other activities included the development of opportunities for potential joint venture activities and subcontract opportunities with industry partners, the assessment of variations to the SparrowHawk for the international market and of fully assembled SparrowHawk gyroplane derivatives for the US Light Sport Aircraft market, potential applications of our technology to 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, 2010 increased to \$680,000 from \$304,000 for the three months ended December 31, 2009, and increased to \$1,288,000 for the six months ended December 31, 2010 from \$528,000 for the six months ended December 31, 2009. The increase in our general and administrative expenses in the first six months of the fiscal year ending June 30, 2011 resulted primarily from increased marketing expenses in preparation for and during the major air show in Zhuhai, China in November 2010, 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. We had no related party interest income for the three months ended December 31, 2010 and 2009. Related party interest income was \$1,000 for each of the six months ended December 31, 2010 and 2009.

We realized a gain on extinguishment of debt of \$56,000 in the three months ended December 31, 2010 and \$68,000 in the three months ended December 31, 2009. We recognized a gain on

extinguishment of debt of \$68,000 for each of the six months ended December 31, 2010 and December 31, 2009.

Interest expense for the three months ended December 31, 2010 increased to \$3,219,000 from \$2,722,000 for the three months ended December 31, 2009, and increased to \$6,334,000 for the six months ended December 31, 2010 from \$5,364,000 for the six months ended December 31, 2009. We continue to fund our operations with an increase in related party debt, which has resulted in increased interest expense.

Series B Preferred Stock interest expense for the three months ended December 31, 2010 increased to \$1,567,000 from \$1,474,000 for the three months ended December 31, 2009, and increased to \$3,077,000 for the six months ended December 31, 2010 from \$2,891,000 for the six months ended December 31, 2009. 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.

Net Loss

The net loss for the three months ended December 31, 2010 was \$5,774,000 compared to \$4,748,000 for the three months ended December 31, 2009, and \$11,531,000 for the six months ended December 31, 2010 compared to \$9,314,000 for the six months ended December 31, 2009. The increase in the net loss in the first six months of fiscal year 2011 resulted primarily from the decrease in revenues and the increase in research and development expenses, general and administrative expenses, and interest expense, as further discussed above.

Liquidity and Capital Resources

Series B Preferred Stock Obligation

At December 31, 2010, we had total current liabilities of \$145,665,000 and current assets of \$191,000, resulting in a working capital deficiency of \$145,474,000. Included in current liabilities and the working capital deficiency at December 31, 2010 is a \$43,348,000 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 April 11, 2011, 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 April 11, 2011.

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, and had a balance of \$51,315,000 at December 31, 2010. The maturity date of the Dividend Notes has also been extended from time to time and currently is April 11, 2011.

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, 2010, the lenders had purchased notes under the Note Purchase Agreement in the aggregate principal amount of \$10,312,000 and the proceeds had been used by us to cover our minimum

operating cash needs. In addition, on June 28, 2010, \$3,500,000 of the proceeds was used to redeem 3,500 shares of the Series B Preferred Stock with a book value of \$3,500,000. 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 April 11, 2011.

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, 2010, the Company has received proceeds from debt financing pursuant to the Note Purchase Agreement of \$235,000.

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 April 11, 2011.

Other Debt Obligations

Current liabilities at December 31, 2010 included \$79,032,000 notes payable to related parties, comprised of the following:

Series B Holders:	
Dividend Notes	\$ 51,315,000
Note Purchase Notes	10,312,000
2006/2007 Notes	4,400,000
	<u>66,027,000</u>
Other Related Parties	<u>13,005,000</u>
Total Related Party Notes Payable	<u>\$ 79,032,000</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 \$2,007,000 on this related party debt at December 31, 2010. 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 December 31, 2010 are notes payable and capital lease obligations to unrelated parties of \$1,415,000, a significant portion of which is in default. In addition, we are delinquent in making payments of accrued interest payable of \$833,000 on this debt at December 31, 2010. 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 \$2,187,000 for the six months ended December 31, 2010, compared to net cash used in operating activities of \$1,100,000 for the six months ended December 31, 2009. The increase in the net cash used in operating activities in the first six months of the current fiscal year is due primarily to the increase in our net loss for this period.

Net cash used in investing activities for the six months ended December 31, 2010 was \$3,000, consisting of the purchase of property and equipment. 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.

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 \$1,763,000 for the six months ended December 31, 2010, comprised of proceeds from the issuance of debt of \$1,760,000 and the increase in bank overdraft of \$19,000, partially offset by repayment of debt and capital lease obligations of \$16,000. Net cash provided by financing activities for the six months ended December 31, 2009 was \$1,143,000, comprised of proceeds from the issuance of debt of \$1,255,000, partially offset by repayment of debt and capital lease obligations of \$82,000.

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 February 14, 2010, the lenders had purchased notes under the Note Purchase Agreement in the aggregate principal amount of \$10,517,000 and the proceeds had been used by us to cover our minimum operating cash needs. In addition, \$3,500,000 of the proceeds was used in June 2010 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 currently have no material non-cancelable operating lease commitments in excess of one year:

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, 2010 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, 2010, the end of the period covered by this report. Based on that evaluation, our chief executive officer and chief financial officer concluded that as a result of our failure to timely file a current report on Form 8-K, the disclosure controls and procedures employed at the Company as of December 31, 2010 were not effective such 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 and is accumulated and communicated to our management, including our Chief Executive Officer and Chief Financial Officer, as appropriate to allow timely decisions regarding disclosure.

Subsequent to December 31, 2010, we took additional steps to strengthen our disclosure controls and procedures with regard to the identification of actions that require disclosure on Form 8-K and the notification of our outside consultants before the actions are taken. We believe these enhanced procedures will be adequate to cure the deficiencies in our disclosure controls and procedures that existed as of December 31, 2010. However, it should be noted that a controls system cannot provide absolute

assurance that the objectives of the controls systems are met and no evaluation of controls can provide absolute assurance that all control issues and instances of fraud, if any, within a company have been detected.

As disclosed in our Annual Report on Form 10-K for the year ended June 30, 2010, our management had previously concluded that our disclosure controls and procedures were not effective as a result of material weaknesses in our internal control over financial reporting. Our management had concluded that our internal controls over financial reporting were not effective as a result of certain weaknesses including our lack of adequate accounting and finance personnel to adequately maintain our financial records, prepare our consolidated financial statements and related note disclosure, comply with financial close procedures, provide adequate oversight and review and timely prepare and file our periodic reports with the SEC. During the quarter ended September 30, 2010, we completed certain remedial actions, including the implementation of additional quarterly accounting close procedures and the increased involvement of outside financial consultants such that our financial statements are timely prepared in accordance with generally accepted accounting principles. We also became current in the filing of our reports with the SEC. As a result of these changes, our management believes we cured the identified material weaknesses in our internal control over financial reporting.

Change in Internal Control Over Financial Reporting

There was no change in our internal control over financial reporting during the second quarter of our fiscal year 2011, 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, 2010, 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, 2010.

Item 3. Defaults Upon Senior Securities

As more fully discussed under “Liquidity and Capital Resources” above, as of December 31, 2010, we are delinquent in making payments on notes payable to vendors and others totaling \$1,427,000, notes payable to related parties totaling \$2,611,000, and \$2,840,000 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	Eighth Amendment to Fifth Amended and Restated Articles of Incorporation of Groen Brothers Aviation, Inc. filed October 4, 2010 (1)
3.2	Ninth Amendment to Fifth Amended and Restated Articles of Incorporation of Groen Brothers Aviation, Inc. filed January 5, 2011*
10.1	First Amendment to Promissory Notes dated as of September 24, 2010 among Groen Brothers Aviation, Inc. and Lender F named therein (1)
10.2	Sixth Amendment to Promissory Notes dated as of September 24, 2010 among Groen Brothers Aviation, Inc. and Lender C named therein (1)
10.3	Sixth Amendment to Promissory Notes dated as of September 24, 2010 among Groen Brothers Aviation, Inc. and Lender D named therein (1)
10.4	Sixth Amendment to Promissory Notes dated as of September 24, 2010 among Groen Brothers Aviation, Inc. and Lender C named therein (1)
10.5	Sixth Amendment to Promissory Notes dated as of September 24, 2010 among Groen Brothers Aviation, Inc. and Lender D named therein (1)
10.6	Eighth Amendment to Promissory Notes dated as of September 24, 2010 among Groen Brothers Aviation, Inc. and Lender B named therein (1)
10.7	Eighth Amendment to Promissory Notes dated as of September 24, 2010 among Groen Brothers Aviation, Inc. and Lender A named therein (1)
10.8	Eighth Amendment to Promissory Notes dated as of September 24, 2010 among Groen Brothers Aviation, Inc. and Lender H named therein (1)
10.9	Ninth Amendment to Promissory Notes dated as of September 24, 2010 among Groen Brothers Aviation, Inc. and Lender B named therein (1)
10.10	Ninth Amendment to Promissory Notes dated as of September 24, 2010 among Groen Brothers Aviation, Inc. and Lender H named therein (1)
10.11	Second Amendment to Promissory Notes dated as of December 31, 2010 among Groen Brothers Aviation, Inc. and Lender F named therein*
10.12	Seventh Amendment to Promissory Notes dated as of December 31, 2010 among Groen Brothers Aviation, Inc. and Lender C named therein*
10.13	Seventh Amendment to Promissory Notes dated as of December 31, 2010 among Groen Brothers Aviation, Inc. and Lender D named therein*
10.14	Seventh Amendment to Promissory Notes dated as of December 31, 2010 among Groen Brothers Aviation, Inc. and Lender C named therein*
10.15	Seventh Amendment to Promissory Notes dated as of December 31, 2010 among Groen Brothers Aviation, Inc. and Lender D named therein*
10.16	Ninth Amendment to Promissory Notes dated as of December 31, 2010 among Groen Brothers Aviation, Inc. and Lender B named therein*

<u>Exhibit No.</u>	<u>Description of Exhibit</u>
10.17	Ninth Amendment to Promissory Notes dated as of December 31, 2010 among Groen Brothers Aviation, Inc. and Lender A therein*
10.18	Ninth Amendment to Promissory Notes dated as of December 31, 2010 among Groen Brothers Aviation, Inc. and Lender H named therein*
10.19	Tenth Amendment to Promissory Notes dated as of December 31, 2010 among Groen Brothers Aviation, Inc. and Lender B named therein*
10.20	Tenth Amendment to Promissory Notes dated as of December 31, 2010 among Groen Brothers Aviation, Inc. and Lender H named therein*
10.21	Cooperative Joint Venture Contract between Groen Brothers Aviation International, LLC and Guangzhou Suntrans Aviation Science & Technology Co., Ltd. dated effective as of November 14, 2010 (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 Annual Report on Form 10-K for the year ended June 30, 2010 and incorporated herein by reference.

(2) Exhibit filed with the Company's Current Report on Form 8-K filed on January 14, 2011 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: February 14, 2011

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: February 14, 2011

/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, 2010, 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: February 14, 2011