UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, DC 20549

FORM S-8 **REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933**

TRANSDIGM GROUP INCORPORATED

(Exact name of registrant as specified in its charter)

Delaware

(State or other jurisdiction of incorporation or organization)

41-2101738

(I.R.S. Employer Identification Number)

1301 East 9th Street, Suite 3000 Cleveland, Ohio 44114

(216) 706-2960

(Address, including zip code, and telephone number, including area code, of principal executive offices)

TransDigm Group Incorporated 2006 Stock Incentive Plan (Full title of the plan)

> W. Nicholas Howley **Chairman and Chief Executive Officer TransDigm Group Incorporated** 1301 East 9th Street, Suite 3000 Cleveland, Ohio 44114 (216) 706-2960

(Name, address, including zip code, and telephone number, including area code, of agent for service)

Copy to:

Janet A. Spreen, Esq. **Baker & Hostetler LLP 1900 East Ninth Street** Cleveland, Ohio 44114 (216) 621-0200

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

Non-accelerated filer □ (Do not check if a smaller reporting company)

X

Accelerated filer Smaller reporting company

CALCULATION OF REGISTRATION FEE

		Proposed	Proposed	
	Amount	maximum	maximum	
Title of	to be	offering price	aggregate	Amount of
securities to be registered	registered (1)	per share (2)	offering price (2)	registration fee
Common Stock, par value \$0.01 per share	4,000,000	\$82.91	\$331,640,000	\$38,503.40

- (1) This Registration Statement covers 4,000,000 additional shares of Common Stock, par value \$0.01 per share (the "Common Stock"), of TransDigm Group Incorporated authorized to be offered and sold pursuant to the TransDigm Group Incorporated 2006 Stock Incentive Plan, as amended. In addition, this Registration Statement covers an indeterminable number of additional shares as may hereafter be offered or issued pursuant to the Plans to prevent dilution resulting from stock splits, stock dividends or similar transactions effected without the receipt of consideration.
- (2) Estimated solely for calculating the amount of the registration fee, pursuant to paragraphs (c) and (h) of Rule 457 under the Securities Act of 1933, as amended. The proposed maximum aggregate offering price is based upon the average of the high and low prices of the Common Stock on May 9, 2011, as reported on the New York Stock Exchange.

REGISTRATION OF ADDITIONAL SECURITIES

This registration statement on Form S-8 is being filed to register the offer and sale of an additional 4,000,000 shares of common stock, \$0.01 par value (the "Common Stock"), of TransDigm Group Incorporated (the "Company") to be issued under the Company's 2006 Stock Incentive Plan, as amended (the "Plan"). In accordance with General Instruction E to Form S-8, this registration statement incorporates by reference the contents of the registration statement on Form S-8, File No. 333-132808, filed by the Company with the Securities and Exchange Commission ("SEC") on March 29, 2006 relating to the registration of offers and sales of Common Stock under the Plan, except as amended below.

PART II

INFORMATION REQUIRED IN THE REGISTRATION STATEMENT

Item 3. Incorporation of Documents by Reference

The following documents (or filed items contained therein), which have been filed by the Company with the SEC are incorporated by reference in this registration statement and shall be deemed to be a part hereof:

- (a) Annual Report on Form 10-K for the year ended September 30, 2010;
- (b) Quarterly Report on Form 10-Q for the quarters ended January 1, 2011 and April 2, 2011;
- (c) Current Reports on Form 8-K filed on December 1, 2010, December 2, 2010, December 7, 2010, as amended on December 10, 2010, December 9, 2010, December 15, 2010, December 17, 2010, December 22, 2010, December 29, 2010, January 18, 2011, February 1, 2011, February 17, 2011, February 25, 2011, March 7, 2011 (as amended by Form 8-K/A filed May 2, 2011), March 9, 2011, March 28, 2011, April 19, 2011, May 3, 2011 and May 10, 2011;
- (d) The description of the Common Stock which is incorporated by reference into the Company's Registration Statement on Form 8-A pursuant to the Securities Exchange Act of 1934, as amended (the "Exchange Act"), filed on March 10, 2006 and contained in the Company's Registration Statement on Form S-1, Registration No. 333-130483, including any amendment or report filed for the purpose of updating such description.

All documents filed by the Company pursuant to Sections 13(a), 13(c), 14 and 15(d) of the Exchange Act, subsequent to the date hereof and prior to the filing of a post-effective amendment which indicates that all securities offered hereby have been sold or which deregisters all securities remaining unsold, shall be deemed to be incorporated by reference herein and to be a part of this registration statement from the respective dates of filing of such documents. Any statement contained in a document incorporated or deemed to be incorporated by reference herein shall be deemed to be modified or superseded for the purposes of this registration statement to the extent that a statement contained herein or in any other subsequently filed document which also is or is deemed to be incorporated by reference herein modifies or supersedes such statement. Any statement so modified or superseded shall not be deemed, except as so modified or superseded, to constitute a part of this registration statement.

Item 6. Indemnification of Directors and Officers.

The Company is incorporated under the laws of the State of Delaware. Section 145 of the Delaware General Corporation Law, as amended, provides that, under certain circumstances, a corporation may indemnify any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative by reason of the fact that the person is or was a director, officer, employee or agent of the corporation, or is or was serving at its request in such capacity in another corporation, partnership, joint venture, trust or other

enterprise, against expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by the person in connection with such action, suit or proceeding if the person acted in good faith and in a manner the person reasonably believed to be in or not opposed to the best interests of the corporation, and, with respect to any criminal action or proceeding, if they had no reasonable cause to believe the person's conduct was unlawful, except that no indemnification shall be made in respect of any claim, issue or matter by or in the right of the corporation to procure a judgment in its favor as to which such person shall have been adjudged to be liable to the corporation unless and only to the extent that the Delaware Court of Chancery or the court in which such action or suit was brought shall determine upon application that, despite an adjudication of liability but in view of all the circumstances of the case, such person is fairly and reasonably entitled to indemnity for such expenses which the Court of Chancery or such other court shall deem proper.

The Company's Amended and Restated Certificate of Incorporation limits the liability of the directors of the Company to the fullest extent permitted under Delaware corporate law. Specifically, the Company's directors will not be liable to the Company or its stockholders for monetary damages for any breach of fiduciary duty by a director, except for liability:

- for any breach of the director's duty of loyalty to the Company or its stockholders;
- for acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law;
- under Section 174 of the Delaware General Corporation Law; or
- for any transaction from which a director derived an improper personal benefit.

If the Delaware General Corporation Law is amended to authorize corporate action further eliminating or limiting the personal liability of directors, then the liability of a director of the Company shall be eliminated or limited to the fullest extent permitted by the Delaware General Corporation Law, as so amended.

The Company's Amended and Restated Certificate of Incorporation provides that the Company will, in certain situations, indemnify to the fullest extent permitted under and in accordance with the laws of the State of Delaware any person made or threatened to be made a party to a proceeding by reason of that person's former or present official capacity with the Company against expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by the person in connection with such proceeding. Directors of the Company are and certain other persons may be, subject in each case to certain limitations, entitled to payment or reimbursement of reasonable expenses in advance of the final disposition of the proceeding upon providing an undertaking to repay the amount advanced if it is ultimately determined that he or she is not entitled to indemnification for such expenses.

In addition, the Company has entered into employment agreements with certain of its employees, which require it to, among other things and subject to specified exceptions:

- indemnify such employee to the full extent authorized or permitted by applicable law;
- maintain customary director and officer liability insurance policies for the benefit of such employee; and
- advance expenses incurred by such employee in connection with a threatened, pending or complete action relating to such employee's service to the Company.

The Company maintains a directors' and officers' insurance policy that insures the officers and directors of the Company from claims arising out of an alleged wrongful act by such persons in their respective capacities as officers and directors of the Company.

Item 8. Exhibits.

See Exhibit Index.

Item 9. Undertakings.

The Company hereby undertakes:

(1) To file, during any period in which offers or sales are being made, a post-effective amendment to this Registration Statement:

(i) to include any prospectus required by Section 10(a)(3) of the Securities Act;

(ii) to reflect in the prospectus any facts or events arising after the effective date of this Registration Statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in this Registration Statement; and

(iii) to include any material information with respect to the plan of distribution not previously disclosed in the Registration Statement or any material change to such information in the Registration Statement;

provided, however, that paragraphs (1)(i) and (ii) do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in periodic reports filed with or furnished to the Commission by the Company pursuant to Section 13 or Section 15(d) of the Exchange Act that are incorporated by reference in this Registration Statement.

(2) That, for the purpose of determining any liability under the Securities Act, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof; and

(3) To remove from registration by means of a post-effective amendment any of the securities being registered that remain unsold at the termination of the offering.

The Company further undertakes that, for purposes of determining any liability under the Securities Act, each filing of the Company's annual report pursuant to Section 13(a) or Section 15(d) of the Exchange Act that is incorporated by reference in the Registration Statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the Company pursuant to the provisions described under Item 6 above or otherwise, the Company has been advised that in the opinion of the Commission such indemnification is against public policy, as expressed in the Securities Act, and is therefore unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the Company of expenses incurred or paid by a director, officer or controlling person of the Company in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the Company will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question

whether such indemnification by it is against public policy, as expressed in the Securities Act, and will be governed by the final adjudication of such issue.

SIGNATURES

Pursuant to the requirements of the Securities Act, the Company certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-8 and has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized on the 11th day of May, 2011.

TRANSDIGM GROUP INCORPORATED

By:	/s/ W. Nicholas Howley
Name:	W. Nicholas Howley
Title:	Chairman of the Board and Chief Executive Officer

POWER OF ATTORNEY

Each of the undersigned officers and directors of TransDigm Group Incorporated hereby severally constitutes and appoints W. Nicholas Howley and Gregory Rufus, and each of them, with full power to act without the other, as his true and lawful attorney-in-fact and agent for the undersigned, with full power of substitution and resubstitution, for him and in his name, place and stead, in any and all capacities, to sign any and all amendments to this Registration Statement, and to file the same, with all exhibits thereto, and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing requisite and necessary to be done in and about the premises, as fully to all intents and purposes as he might or could do in person, thereby ratifying and confirming all that each said attorney-in-fact and agent, or his substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, as amended, this Registration Statement has been signed by the following persons in the capacities and on the dates indicated:

Name	Title	Date
/s/ W. Nicholas Howley W. Nicholas Howley	Chairman of the Board and Chief Executive Officer (Principal Executive Officer)	May 11, 2011
/s/ Gregory Rufus Gregory Rufus	Executive Vice President, Chief Financial Officer and Secretary (Principal Financial and Accounting Officer)	May 11, 2011
/s/ William Dries William Dries	Director	May 11, 2011
/s/ Mervin Dunn Mervin Dunn	Director	May 11, 2011
/s/ Michael Graff Michael Graff	Director	May 11, 2011
/s/ Sean P. Hennessy Sean P. Hennessy	Director	May 11, 2011

 /s/ Douglas Peacock
 Director

 Douglas Peacock
 Director

 /s/ Robert Small
 Director

May 11, 2011

EXHIBIT INDEX

Description of Exhibits

- 3.1 Amended and Restated Certificate of Incorporation, filed March 14, 2006, of TransDigm Group Incorporated (Incorporated by reference to Amendment No. 3 to TransDigm Group Incorporated's Form S-1 filed March 13, 2006 (File No. 333-130483)).
- 3.2 Amended and Restated Bylaws of TransDigm Group Incorporated (Incorporated by reference to Amendment No. 3 to TransDigm Group Incorporated's Form S-1 filed March 13, 2006 (File No. 333-130483)).
- 3.3 First Amendment to Amended and Restated Bylaws of TransDigm Group Incorporated, dated April 28, 2011 (Incorporated by reference to TransDigm Group Incorporated's Form 8-K filed May 3, 2011 (File No. 001-32833)).
- 5.1 Opinion of Baker & Hostetler LLP regarding the legality of the securities being registered.
- 23.1 Consent of Ernst & Young LLP.

Exhibit

No.

- 23.2 Consent of Baker & Hostetler LLP (included in Exhibit 5.1).
- 24 Power of Attorney (included on the signature page).

[BAKER & HOSTETLER LETTERHEAD]

May 11, 2011

TransDigm Group Incorporated 1301 East 9th Street, Suite 3000 Cleveland, Ohio 44114

Ladies and Gentlemen:

We have acted as counsel to TransDigm Group Incorporated, a Delaware corporation (the "Company"), with respect to the Company's Registration Statement on Form S-8 (the "Registration Statement") to be filed by the Company with the Securities and Exchange Commission on or about May 11, 2011, in connection with the registration under the Securities Act of 1933, as amended (the "Act"), by the Company of 4,000,000 additional shares of the Company's common stock, par value \$0.01 per share (the "Shares"), issuable under the TransDigm Group Incorporated 2006 Stock Incentive Plan, as amended (the "Plan").

We have examined copies of the Amended and Restated Certificate of Incorporation of the Company, the Amended and Restated Bylaws of the Company, as amended, the Plan, the Registration Statement, all relevant resolutions adopted by the Company's Board of Directors, and such other records and documents that we have considered necessary for the purpose of this opinion. As to various questions of fact material to our opinion, we have relied on statements and certificates of officers and representatives of the Company and public officials. In rendering this opinion, we have assumed, without independent investigation, the genuineness of all signatures on all documents examined by us, the legal capacity of natural persons, the conformity to original documents of all documents submitted to us as copies, and the authenticity of all such documents.

We assume that the appropriate action will be taken, prior to the offer and sale of the Shares in accordance with the Plan, to register and qualify the Shares for sale under all applicable state securities or "blue sky" laws.

Based on the foregoing, we are of the opinion that, when the Registration Statement has become effective under the Act, the Shares to be issued by the Company under the Plan, when duly issued, sold and paid for in accordance with the terms of the Plan, will be legally issued, fully paid and non-assessable.

This opinion is limited to the laws of the State of Ohio, the General Corporation Law of the State of Delaware (including the statutory provisions, all applicable provisions of the Delaware Constitution and reported judicial decisions interpreting the foregoing) and the federal laws of the United States of America. It is understood that this opinion is to be used only in connection with the offer and sale of the Shares while the Registration Statement is in effect.

We hereby consent to the filing of this opinion as an exhibit to the Registration Statement. In giving such consent, we do not thereby admit that we are in the category of persons whose consent is required under Section 7 of the Act.

Very truly yours,

/s/ BAKER & HOSTETLER LLP

Consent of Independent Registered Public Accounting Firm

We consent to the incorporation by reference in the Registration Statement (Form S-8 No. 333-00000) pertaining to the TransDigm Group Incorporated 2006 Stock Incentive Plan of our reports dated November 15, 2010, with respect to the consolidated financial statements and schedule and the effectiveness of internal control over financial reporting of TransDigm Group Incorporated included in its Annual Report (Form 10-K) for the year ended September 30, 2010, filed with the Securities and Exchange Commission.

/s/ Ernst & Young LLP

Cleveland, Ohio May 11, 2011