SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 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)

51-0484716

(I.R.S. Employer Identification Number)

1301 East 9th Street, Suite 3710 Cleveland, Ohio 44114 (216) 706-2939

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

TransDigm Group Incorporated 2006 Stock Incentive Plan TD Holding Corporation Third Amended and Restated 2003 Stock Option Plan

(Full title of the plan)

W. Nicholas Howley Chairman and Chief Executive Officer TransDigm Group Incorporated 1301 East 9th Street, Suite 3710 Cleveland, Ohio 44114 (216) 706-2939

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

Copy to:

Steven J. Gartner, Esq. Cristopher Greer, Esq. Willkie Farr & Gallagher LLP 787 Seventh Avenue New York, New York 10019-6099 (212) 728-8000

CALCULATION OF REGISTRATION FEE

Title of securities to be registered

Amount to be registered⁽¹⁾

Proposed maximum offering price per share⁽²⁾

Proposed maximum

aggregate offering price(2) Amount of registration fee

Common Stock, par value \$0.01 per share

10,965,354

\$21.00

\$230,272,435

\$24,639.15

- This Registration Statement covers 2,619,668 shares of the 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 (the "2006 Plan") and 8,345,686 shares of Common Stock authorized to be offered and sold pursuant to the TD Holding Corporation Third Amended and Restated 2003 Stock Option Plan (together with the 2006 Plan, the "Plans"). 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.

PART II

Item 3. INCORPORATION OF CERTAIN DOCUMENTS BY REFERENCE

The following documents, filed with the Securities and Exchange Commission (the "Commission") by TransDigm Group Incorporated (formerly known as TD Holding Corporation), a Delaware corporation (the "Company"), are incorporated by reference into the Registration Statement:

- The Company's Prospectus, filed on March 15, 2006 pursuant to Rule 424(b) under the Securities Act of 1933, as amended (the "Securities Act"), relating to the Company's Registration Statement on Form S-1, Registration No. 333-130483 (the "S-1 Registration Statement"); and
- The description of the Common Stock which is incorporated by reference into the Company's Registration Statement on Form 8-A (h) pursuant to the Securities Exchange Act of 1934, as amended (the "Exchange Act"), filed on March 10, 2006 and contained in the S-1 Registration Statement.

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

DESCRIPTION OF SECURITIES Item 4.

Inapplicable.

INTERESTS OF NAMED EXPERTS AND COUNSEL Item 5.

Inapplicable.

INDEMNIFICATION OF DIRECTORS AND OFFICERS Item 6.

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. In addition, the employment agreements to which the Company is a party provide for indemnification of the employees who are party thereto.

EXEMPTION FROM REGISTRATION CLAIMED Item 7.

Inapplicable.

EXHIBITS Item 8.

| Exhibit No. | Description of Exhibits | |
|-------------|--|--|
| 5.1 | Opinion of Willkie Farr & Gallagher LLP regarding the legality of the securities being registered. | |
| 23.1 | Consent of Ernst & Young LLP. | |
| 23.2 | Consent of Deloitte & Touche LLP. | |
| 23.2 | Consent of Willkie Farr & Gallagher LLP (included in Exhibit 5.1). | |
| 24 | Power of Attorney (reference is made to the signature page). | |

Item 9. UNDERTAKINGS

- 1. The undersigned registrant hereby undertakes:
 - (a) To file, during any period in which offers or sales are being made, a post-effective amendment to the 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 the 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 the Registration Statement;
 - (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;

<u>provided</u>, <u>however</u>, that paragraphs (a)(i) and (a)(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 by the Company pursuant to Section 13 or Section 15(d) of the Exchange Act that are incorporated by reference in the Registration Statement.

- (b) 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.
- (c) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.
- 2. The undersigned registrant hereby 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.
- 3. 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 foregoing provisions, 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 29th day of March, 2006.

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 |
|-----|---|--|----------------|
| By: | /s/ W. Nicholas Howley W. Nicholas Howley | Chairman of the Board and Chief Executive Officer (Principal Executive Officer) | March 29, 2006 |
| By: | /s/ Gregory Rufus Gregory Rufus | Executive Vice President, Chief Financial Officer and Secretary (Principal Financial and Accounting Officer) | March 29, 2006 |
| Ву: | /s/ David Barr David Barr | Director | March 29, 2006 |
| Ву: | /s/ Michael Graff Michael Graff | Director | March 29, 2006 |
| Ву: | /s/ Kevin Kruse Kevin Kruse | Director | March 29, 2006 |
| By: | /s/ Kewsong Lee Kewsong Lee | Director | March 29, 2006 |
| By: | /s/ Douglas Peacock Douglas Peacock | Director | March 29, 2006 |

[WILLKIE FARR & GALLAGHER LLP LETTER HEAD]

March 29, 2006

TransDigm Group Incorporated 1301 East 9th Street, Suite 3710 Cleveland, Ohio 44114

Ladies and Gentlemen:

We have acted as counsel to TransDigm Group Incorporated, a corporation organized under the laws of the State of Delaware (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 March 29, 2006, in connection with the registration under the Securities Act of 1933, as amended (the "Act"), by the Company of 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 and the TD Holding Corporation Third Amended and Restated 2003 Stock Option Plan (collectively, the "Plans").

We have examined copies of the Amended and Restated Certificate of Incorporation of the Company, the Amended and Restated Bylaws of the Company, the Registration Statement, all relevant resolutions adopted by the Company's Board of Directors, and such other records and documents that we have deemed necessary for the purpose of this opinion. We have also examined and are familiar with originals or copies, certified or otherwise identified to our satisfaction, of such other documents, corporate records, papers, statutes and authorities as we have deemed necessary to form a basis for the opinions hereinafter expressed.

In our examination, we have assumed the genuineness of all signatures and the conformity to original documents of all copies submitted to us. 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.

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 Plans, when duly issued, sold and paid for in accordance with the terms of the Plans, will be legally issued, fully paid and non-assessable.

This opinion is limited to the laws of the State of New York, 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.

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/ WILLKIE FARR & GALLAGHER LLP

Consent of Independent Registered Public Accounting Firm

We consent to the incorporation by reference in the Registration Statement on Form S-8 pertaining to the TransDigm Group Incorporated 2006 Stock Incentive Plan and the TD Holding Corporation Third Amended and Restated 2003 Stock Option Plan, of our report dated November 22, 2005, with respect to the consolidated financial statements and schedules of TransDigm Group Incorporated and subsidiaries, included in its Registration Statement (Form S-1 No. 333-130483) and related Prospectus dated March 15, 2006, filed with the Securities and Exchange Commission.

ERNST & YOUNG LLP

Cleveland, Ohio March 28, 2006

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in this Registration Statement on Form S-8 of our report dated April 1, 2004 (which report expresses an unqualified opinion and includes an explanatory paragraph relating to the adoption of SFAS No. 123, "Accounting for Stock-Based Compensation") relating to the consolidated statements of operations, changes in stockholders equity/(deficiency) and cash flows and financial statement schedule of TransDigm Group Incorporated (formerly, TD Holding Corporation) and subsidiaries and our report dated December 19, 2003 relating to the consolidated statements of operations, changes in stockholders equity/(deficiency) and cash flows and financial statement schedule of TransDigm Holding Company and subsidiaries appearing in the Prospectus included in Registration Statement No. 333-130483 of TransDigm Group Incorporated on Form S-1, which is incorporated by reference in this Registration Statement.

DELOITTE & TOUCHE LLP

Cleveland, Ohio March 28, 2006