

Spirit AeroSystems Holdings, Inc.
Form 424B5
May 22, 2018

Use these links to rapidly review the document

[TABLE OF CONTENTS](#)
[TABLE OF CONTENTS](#)

[Table of Contents](#)

Filed Pursuant to Rule 424(b)(5)
Registration No. 333-211423

The information in this preliminary prospectus supplement is not complete and may be changed. This preliminary prospectus supplement and the accompanying prospectus are not an offer to sell these securities, and we are not soliciting an offer to buy these securities in any state or other jurisdiction where the offer or sale is not permitted.

SUBJECT TO COMPLETION, DATED MAY 22, 2018

**PROSPECTUS SUPPLEMENT
(To prospectus dated May 17, 2016)**

\$

Spirit AeroSystems, Inc.

| | |
|----|--|
| \$ | Senior Floating Rate Notes due 2021 |
| \$ | % Senior Notes due 20 |
| \$ | % Senior Notes due 20 |

This is an offering by Spirit AeroSystems, Inc. ("Spirit" or the "Issuer"), a wholly-owned subsidiary of Spirit AeroSystems Holdings, Inc. ("Holdings"), of \$ aggregate principal amount of its senior floating rate notes due , 2021 (the "floating rate notes"), \$ aggregate principal amount of its % senior notes due , 20 (the "20 notes"), and \$ aggregate principal amount of its % senior notes due , 20 (the "20 notes" and, together with the 20 notes, the "fixed rate notes," and the fixed rate notes together with the floating rate notes, the "notes"). Each of the floating rate notes, the 20 notes and the 20 notes is referred to herein as a "series" of notes.

The floating rate notes will bear interest at a rate per annum equal to three-month LIBOR, as determined at the beginning of each quarterly period as described herein, plus basis points and will mature on , 2021. Interest on the floating notes will be payable on , and of each year, beginning on , 2018. The 20 notes will bear interest at a rate of % per year and mature on , 20 . The 20 notes will bear interest at a rate of % per year and mature on , 20 . Interest on the fixed rate notes will be payable on and of each year, beginning on , 2018.

Edgar Filing: Spirit AeroSystems Holdings, Inc. - Form 424B5

Holdings will guarantee Spirit's obligations under the notes on a senior unsecured basis. The notes and the guarantees will be Spirit's and Holdings' unsecured senior obligations and will rank equally in right of payment with all of Spirit's and the Holdings' existing and future senior unsecured indebtedness and senior in right of payment to their future subordinated debt, if any. The notes and the guarantees will be effectively subordinated to any of Spirit's and the Holdings' future secured debt, if any, to the extent of the value of the assets securing such debt and structurally junior to any debt or other obligations of Spirit's subsidiaries.

We may redeem some or all of the notes of a series at any time and from time to time at the prices and at the times indicated for each series under the heading "Description of the Notes Optional Redemption." If a change of control triggering event were to occur, unless Spirit has exercised its option to redeem the notes in full, Spirit will be required to offer to purchase the notes of each series from holders at 101% of their aggregate principal amount, plus accrued and unpaid interest, as described under "Description of the Notes Change of Control Offer to Repurchase."

Each series of notes is a new issue of securities with no established trading market. We do not intend to list the notes of any series on any national securities exchange or to have the notes of any series quoted on any automated dealer quotation system.

Investing in the notes involves significant risks. See "Risk Factors" beginning on page S-7 of this prospectus supplement and on page 1 of the accompanying prospectus.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined if this prospectus supplement or the accompanying prospectus are truthful or complete. Any representation to the contrary is a criminal offense.

| | Per Floating Rate Note | Total | Per 20 Note | Total | Per 20 Note | Total |
|--------------------------------------|---------------------------|-------|----------------|-------|----------------|-------|
| Public offering price(1) | % | \$ | % | \$ | % | \$ |
| Underwriting discount | % | \$ | % | \$ | % | \$ |
| Proceeds, before expenses, to Spirit | % | \$ | % | \$ | % | \$ |

(1) Plus accrued interest, if any, from May , 2018 if settlement occurs after that date.

The notes will be ready for delivery in book-entry form through The Depository Trust Company ("DTC") and its participants, including Euroclear Bank, SA/NV and Clearstream Banking, *société anonyme*, on or about May , 2018.

Joint Book-Running Managers

BofA Merrill Lynch Citigroup Goldman Sachs & Co. LLC Morgan Stanley

Mizuho Securities

RBC Capital Markets

The date of this prospectus supplement is May , 2018.

Table of Contents

TABLE OF CONTENTS

Prospectus Supplement

| | Page |
|--|--------------|
| <u>ABOUT THIS PROSPECTUS SUPPLEMENT</u> | <u>S-ii</u> |
| <u>CAUTIONARY STATEMENT REGARDING FORWARD-LOOKING STATEMENTS</u> | <u>S-iii</u> |
| <u>INCORPORATION OF CERTAIN INFORMATION BY REFERENCE</u> | <u>S-vi</u> |
| <u>WHERE YOU CAN FIND MORE INFORMATION</u> | <u>S-vii</u> |
| <u>SUMMARY</u> | <u>S-1</u> |
| <u>RISK FACTORS</u> | <u>S-7</u> |
| <u>CONSOLIDATED RATIO OF EARNINGS TO FIXED CHARGES</u> | <u>S-12</u> |
| <u>USE OF PROCEEDS</u> | <u>S-13</u> |
| <u>CAPITALIZATION</u> | <u>S-14</u> |
| <u>DESCRIPTION OF NEW SENIOR CREDIT FACILITY</u> | <u>S-15</u> |
| <u>DESCRIPTION OF THE NOTES</u> | <u>S-16</u> |
| <u>CERTAIN U.S. FEDERAL INCOME TAX CONSEQUENCES</u> | <u>S-33</u> |
| <u>UNDERWRITING</u> | <u>S-38</u> |
| <u>VALIDITY OF THE NOTES</u> | <u>S-44</u> |
| <u>EXPERTS</u> | <u>S-45</u> |

Prospectus

| | Page |
|--|-------------|
| <u>ABOUT THIS PROSPECTUS</u> | <u>ii</u> |
| <u>CAUTIONARY STATEMENT REGARDING FORWARD-LOOKING STATEMENTS</u> | <u>iii</u> |
| <u>PROSPECTUS SUMMARY</u> | <u>1</u> |
| <u>CONSOLIDATED RATIO OF EARNINGS TO FIXED CHARGES</u> | <u>1</u> |
| <u>RISK FACTORS</u> | <u>1</u> |
| <u>USE OF PROCEEDS</u> | <u>2</u> |
| <u>DESCRIPTION OF DEBT SECURITIES</u> | <u>3</u> |
| <u>PLAN OF DISTRIBUTION</u> | <u>7</u> |

| | |
|--|---|
| <u>LEGAL MATTERS</u> | 7 |
| <u>EXPERTS</u> | 7 |
| <u>INCORPORATION OF CERTAIN INFORMATION BY REFERENCE</u> | 7 |
| <u>WHERE YOU CAN FIND MORE INFORMATION</u> | 8 |

Table of Contents

ABOUT THIS PROSPECTUS SUPPLEMENT

This prospectus supplement and the accompanying prospectus are part of an automatic shelf registration statement that we filed with the Securities and Exchange Commission (the "SEC") as a "well-known seasoned issuer," as defined in Rule 405 under the Securities Act of 1933, as amended (the "Securities Act"). Under the shelf registration rules, we may, from time to time, sell an indeterminate amount of the debt securities under our shelf registration statement. In the accompanying prospectus, we provide you a general description of the securities we may offer from time to time under our shelf registration statement. This prospectus supplement describes the specific details regarding this offering, including the price, the aggregate principal amount of debt securities being offered and the risks of investing in our securities.

This prospectus supplement, the accompanying prospectus and the documents incorporated by reference herein include important information about us, our debt securities and other information you should know before investing. We urge you to read carefully this entire prospectus supplement and the accompanying prospectus, together with the information described under the headings "Incorporation of Certain Information by Reference" and "Where You Can Find More Information" in this prospectus supplement and the accompanying prospectus. If the description of the offering varies between this prospectus supplement and the accompanying prospectus, you should rely on the information in this prospectus supplement.

In this prospectus supplement, unless the context indicates otherwise, the terms the "Company," "we," "us" and "our" refer to Spirit AeroSystems Holdings, Inc. and all entities owned or controlled by Spirit AeroSystems Holdings, Inc., including Spirit AeroSystems, Inc. The term "Spirit" refers only to Spirit AeroSystems, Inc. and the term "Holdings" refers only to Spirit AeroSystems Holdings, Inc. The term "Asco" refers to S.R.I.F. N.V., the parent company of Asco Industries N.V., together with Asco Industries N.V.

You should rely only on the information contained in or incorporated by reference in this prospectus supplement and the accompanying prospectus. We have not, and the underwriters have not, authorized anyone to provide you with different or additional information. If anyone provides you with different or additional information, you should not rely on it. These securities are not being offered in any state where the offer is not permitted. The information in this prospectus supplement and the accompanying prospectus is accurate as of the date of each document. The information we have filed and will file with the SEC that is incorporated by reference into this prospectus supplement is accurate as of the filing date of those documents. Our business, financial condition, results of operations and prospects may have changed since those dates and may change again.

Notice to Prospective Investors in the European Economic Area

The notes are not intended to be offered, sold or otherwise made available to and should not be offered, sold or otherwise made available to any retail investor in the European Economic Area ("EEA"). For these purposes, a retail investor means a person who is one (or more) of: (i) a retail client as defined in point (11) of Article 4(1) of Directive 2014/65/EU (as amended, "MiFID II"); or (ii) a customer within the meaning of Directive 2002/92/EC (as amended, the "Insurance Mediation Directive"), where that customer would not qualify as a professional client as defined in point (10) of Article 4(1) of MiFID II; or (iii) not a qualified investor as defined in Directive 2003/71/EC (as amended, the "Prospectus Directive." Consequently no key information document required by Regulation (EU) No 1286/2014 (as amended, the "PRIIPs Regulation") for offering or selling the notes or otherwise making them available to retail investors in the EEA has been prepared and therefore offering or selling the notes or otherwise making them available to any retail investor in the EEA may be unlawful under the PRIIPs Regulation. This prospectus supplement has been prepared on the basis that any offer of notes in any Member State of the EEA will be made pursuant to an exemption under the Prospectus Directive from the requirement to publish a prospectus for offers of notes. This prospectus supplement is not a prospectus for the purposes of the Prospectus Directive.

Table of Contents

CAUTIONARY STATEMENT REGARDING FORWARD-LOOKING STATEMENTS

This prospectus supplement and the accompanying prospectus contain certain "forward-looking statements" that may involve many risks and uncertainties. Forward-looking statements reflect our current expectations or forecasts of future events. Forward-looking statements generally can be identified by the use of forward-looking terminology such as "anticipate," "believe," "continue," "estimate," "expect," "forecast," "intend," "may," "plan," "project," "should," "will," and other similar words or phrases, or the negative thereof, unless the context requires otherwise. These statements reflect management's current views with respect to future events and are subject to risks and uncertainties, both known and unknown. Our actual results may vary materially from those anticipated in forward-looking statements. We caution investors not to place undue reliance on any forward-looking statements.

Important factors that could cause actual results to differ materially from those reflected in such forward-looking statements and that should be considered in evaluating our outlook include, but are not limited to, the following:

our ability to continue to grow our business and execute our growth strategy, including the timing, execution, and profitability of new and maturing programs;

our ability to perform our obligations under our new and maturing commercial, business aircraft, and military development programs, and the related recurring production;

our ability to accurately estimate and manage performance, cost, and revenue under our contracts, including our ability to achieve certain cost reductions with respect to the B787 program;

margin pressures and the potential for additional forward losses on new and maturing programs;

our ability to accommodate, and the cost of accommodating, announced increases in the build rates of certain aircraft;

the effect on aircraft demand and build rates of changing customer preferences for business aircraft, including the effect of global economic conditions on the business aircraft market and expanding conflicts or political unrest in the Middle East or Asia;

customer cancellations or deferrals as a result of global economic uncertainty or otherwise;

the effect of economic conditions in the industries and markets in which we operate in the U.S. and globally and any changes therein, including fluctuations in foreign currency exchange rates;

the success and timely execution of key milestones such as the receipt of necessary regulatory approvals, including our ability to obtain in a timely fashion any required regulatory or other third party approvals for the consummation of our announced acquisition of Asco, and customer adherence to their announced schedules;

our ability to successfully negotiate, or re-negotiate, future pricing under our supply agreements with Boeing and our other customers;

our ability to enter into profitable supply arrangements with additional customers;

Edgar Filing: Spirit AeroSystems Holdings, Inc. - Form 424B5

the ability of all parties to satisfy their performance requirements under existing supply contracts with our two major customers, Boeing and Airbus, and other customers, and the risk of nonpayment by such customers;

any adverse impact on Boeing's and Airbus' production of aircraft resulting from cancellations, deferrals, or reduced orders by their customers or from labor disputes, domestic or international hostilities, or acts of terrorism;

S-iii

Edgar Filing: Spirit AeroSystems Holdings, Inc. - Form 424B5

Table of Contents

any adverse impact on the demand for air travel or our operations from the outbreak of diseases or epidemic or pandemic outbreaks;

our ability to avoid or recover from cyber-based or other security attacks, information technology failures, or other disruptions;

returns on pension plan assets and the impact of future discount rate changes on pension obligations;

our ability to borrow additional funds or refinance debt, including our ability to obtain the debt to finance the purchase price for our announced acquisition of Asco on favorable terms or at all;

competition from commercial aerospace original equipment manufacturers and other aerostructures suppliers;

the effect of governmental laws, such as U.S. export control laws and U.S. and foreign anti-bribery laws such as the Foreign Corrupt Practices Act and the United Kingdom Bribery Act, and environmental laws and agency regulations, both in the U.S. and abroad;

the effect of changes in tax law, such as the effect of The Tax Cuts and Jobs Act that was enacted on December 22, 2017, and changes to the interpretations of or guidance related thereto, and the Company's ability to accurately calculate and estimate the effect of such changes;

any reduction in our credit ratings;

our dependence on our suppliers, as well as the cost and availability of raw materials and purchased components;

our ability to recruit and retain a critical mass of highly-skilled employees and our relationships with the unions representing many of our employees;

spending by the U.S. and other governments on defense;

the possibility that our cash flows and our credit facility may not be adequate for our additional capital needs or for payment of interest on, and principal of, our indebtedness;

our exposure under our revolving credit facility to higher interest payments should interest rates increase substantially;

the effectiveness of any interest rate hedging programs;

the effectiveness of our internal control over financial reporting;

Edgar Filing: Spirit AeroSystems Holdings, Inc. - Form 424B5

the outcome or impact of ongoing or future litigation, claims, and regulatory actions;

exposure to potential product liability and warranty claims;

our ability to effectively assess, manage and integrate acquisitions that we pursue, including our ability to successfully integrate the Asco business and generate synergies and other cost savings;

our ability to consummate our announced acquisition of Asco in a timely matter while avoiding any unexpected costs, charges, expenses, adverse changes to business relationships and other business disruptions for ourselves and Asco as a result of the acquisition;

our ability to continue selling certain receivables through our supplier financing program;

the risks of doing business internationally, including fluctuations in foreign current exchange rates, impositions of tariffs or embargoes, compliance with foreign laws, and domestic and foreign government policies; and

S-iv

Table of Contents

our ability to complete the proposed accelerated stock repurchase plan.

These factors are not exhaustive and it is not possible for us to predict all factors that could cause actual results to differ materially from those reflected in our forward-looking statements. These factors speak only as of the date hereof, and new factors may emerge or changes to the foregoing factors may occur that could impact our business. As with any projection or forecast, these statements are inherently susceptible to uncertainty and changes in circumstances.

Except to the extent required by law, we undertake no obligation to, and expressly disclaim any obligation to, publicly update or revise any forward-looking statements, whether as a result of new information, future events or otherwise. You should review carefully the section captioned "Risk Factors" in this prospectus supplement, the section captioned "Risk Factors" in our most recent Annual Report on Form 10-K, and our updates to those Risk Factors in our most recent Quarterly Report on Form 10-Q and in the sections captioned "Management's Discussion and Analysis of Financial Condition and Results of Operations" in our most recent Annual Report on Form 10-K and Quarterly Report on Form 10-Q for a more complete discussion of these and other factors that may affect our business. In light of such risks and uncertainties, we caution you not to rely on these forward-looking statements in deciding whether to invest in our debt securities.

S-v

Table of Contents

INCORPORATION OF CERTAIN INFORMATION BY REFERENCE

The SEC allows us to "incorporate by reference" the information we file with it, which means we can disclose important information to you by referring you to those documents. The information we incorporate by reference is an important part of this prospectus supplement, and information we subsequently file with the SEC will automatically update and supersede that information. We incorporate by reference the documents listed below and any additional documents filed by us with the SEC under Section 13(a), 13(c), 14 or 15(d) of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), to the extent such documents are deemed "filed" for purposes of the Exchange Act after the date of this prospectus supplement until the date all of the notes offered hereby are sold or the offer is otherwise terminated:

our Annual Report on Form 10-K for the year ended December 31, 2017;

our Quarterly Report on Form 10-Q for the quarter ended March 29, 2018; and

our Current Reports on Form 8-K, filed on January 19, 2018, January 29, 2018, February 14, 2018, February 22, 2018, April 27, 2018 and May 2, 2018 (Acc-no: 0001104659-18-029540 (only Item 1.01)).

Any statement contained in this prospectus supplement or in a document incorporated or deemed to be incorporated by reference herein shall be deemed to be modified or superseded for purposes of this prospectus supplement to the extent that a statement contained in this prospectus supplement 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 prospectus supplement. You can obtain any of the documents incorporated by reference through us, the SEC or the SEC's website, <http://www.sec.gov>. Documents we have incorporated by reference are available from us without charge, excluding exhibits to those documents unless we have specifically incorporated by reference such exhibits in this prospectus supplement. Any person, including any beneficial owner, to whom this prospectus supplement is delivered, may obtain the documents we have incorporated by reference in, but not delivered with, this prospectus supplement by requesting them by telephone or in writing at the following address:

Spirit AeroSystems Holdings, Inc.
3801 South Oliver
Wichita, Kansas 67210
Attention: Corporate Secretary
(316) 526-9000

This prospectus supplement summarizes documents and other information in a manner we believe to be accurate, but we refer you to the actual documents for a more complete understanding of the information we discuss in this prospectus supplement. In making an investment decision, you must rely on your own examination of such documents, our business and the terms of the offering, including the merits and risks involved. When we refer to this prospectus supplement, we mean not only this prospectus supplement but also any documents which are incorporated or deemed to be incorporated in this prospectus supplement by reference. You should rely only on the information incorporated by reference or provided in this prospectus supplement. We have not authorized anyone else to provide you with different information. This prospectus supplement is used to offer and sell the debt securities referred to in this prospectus supplement, and only under circumstances and in jurisdictions where it is lawful to do so. The information contained in this prospectus supplement is current only as of the date of this prospectus supplement.

Table of Contents

WHERE YOU CAN FIND MORE INFORMATION

Holdings is subject to the informational requirements of the Exchange Act and files reports and other information with the SEC.

You may read and copy this information at the Public Reference Room of the SEC, 100 F Street N.E., Washington, D.C. 20549. For more information about the operation of the Public Reference Room, call the SEC at 1-800-SEC-0330. The SEC also maintains a website that contains reports and other information about issuers who file electronically with the SEC. The Internet address of the site is <http://www.sec.gov>. Some, but not all, of Holdings' publicly filed information is available through the SEC's web site. You may also obtain certain of these documents at Holdings' website at www.spiritaero.com. We are not incorporating the contents of or accessible through the websites of the SEC, Holdings or any other person into this document. We are only providing information about how you may obtain certain documents that are incorporated into this document by reference at these websites.

This prospectus supplement forms part of the registration statement filed by Spirit AeroSystems, Inc., Spirit AeroSystems Holdings, Inc. and certain subsidiaries of Spirit AeroSystems, Inc. with the SEC under the Securities Act. This prospectus supplement, which constitutes a part of the registration statement on Form S-3, does not contain all the information set forth in the registration statement, certain parts of which are omitted in accordance with the rules and regulations of the SEC. We are referring you to the registration statement and to the exhibits for further information with respect to us and our securities. The statements contained in this prospectus supplement concerning the provisions of any document are not necessarily complete, and, in each instance, we refer you to the copy of such document filed as an exhibit to the registration statement or otherwise filed with the SEC. Each such statement is qualified in its entirety by such reference.

Table of Contents

SUMMARY

This summary highlights selected information contained in, or incorporated by reference into, this prospectus supplement and the accompanying prospectus. It is not complete and may not contain all the information that may be important to you. You should carefully read the entire prospectus supplement and the accompanying prospectus, as well as the information we incorporate by reference, including the matters described in the section entitled "Risk Factors," before making an investment decision.

Company Overview

We are one of the largest independent non-Original Equipment Manufacturer ("OEM") commercial aerostructures designers and manufacturers in the world. We design, engineer, and manufacture large, complex, and highly engineered commercial aerostructures such as fuselages, nacelles (including thrust reversers), struts/pylons, wing structures, and flight control surfaces. In addition to supplying commercial aircraft structures, we also design, engineer, and manufacture structural components for military aircraft. We are a critical partner to our commercial and defense customers due to the broad range of products we currently supply to them and our leading design and manufacturing capabilities using both metallic and composite materials.

For the twelve months ended December 31, 2017, we generated net revenues of \$6,983.0 million and had net income of \$354.9 million. For the three months ended March 29, 2018, we generated net revenues of \$1,736.1 million and had net income of \$125.4 million.

Recent Developments

Acquisition of Asco

On May 2, 2018, we announced a definitive agreement to acquire S.R.I.F. N.V., the parent company of Asco Industries, N.V. ("Asco"), for \$650 million in cash, subject to customary closing adjustments, including foreign currency adjustments. Asco is a leading supplier of high lift wing structures, mechanical assemblies and major functional components to major OEMs and Tier-1 suppliers in the global commercial aerospace and military markets.

Asco employs approximately 1,400 people across four manufacturing sites comprising over 1.5 million square feet including: Vancouver and Stillwater, Oklahoma in North America, Gedern, Germany, and its headquarters in Zaventem, Belgium, in Europe. These are concentrated highly automated state-of-the-art facilities with available capacity to support rate increases and future growth. Asco has well-established customer relationships in its markets with high-value single-source products, including leading and trailing edge wing devices such as slat tracks and flap supports, structural parts and assemblies. Representative commercial aerospace programs include A320, A350 XWB, A380, 737, 787, C-Series and E2. Representative military programs include F-35, A400M, and KC-390.

The transaction, which is expected to close in the second half of 2018, is subject to regulatory approvals and customary closing conditions, including, but not limited to, (i) the absence of certain legal impediments to the consummation of the transaction, (ii) expiration or termination of applicable waiting periods, or receipt of applicable approvals, under antitrust laws, including European Commission approval and the expiration of the applicable waiting period under the Hart-Scott-Rodino Antitrust Improvements Act of 1976, (iii) the receipt of specified third party consents and approvals, including consents from affiliates of The Boeing Company and Airbus SE, and (iv) the absence of a material adverse change with respect to Asco.

Share Repurchase Program

On January 24, 2018, the Board of Directors of Holdings increased the authorization remaining in our share repurchase program to approximately \$1.0 billion. On May 2, 2018, we announced plans to

Table of Contents

execute a \$725 million accelerated share repurchase program (the "ASR") in the second quarter of 2018, which will be financed from the proceeds of this offering and borrowings under our senior credit facility.

Tender Offer

Concurrently with this offering, we commenced an offer to purchase for cash (the "tender offer") any and all of the \$300 million outstanding principal amount of our 5¹/₄% Senior Notes due 2022 (the "2022 notes"). The tender offer is being made pursuant to an Offer to Purchase dated May 22, 2018, and a related Letter of Transmittal and Notice of Guaranteed Delivery, which set forth the terms and conditions of the tender offer in full detail. The tender offer will expire on May 29, 2018 unless extended in accordance with its terms. Merrill Lynch, Pierce, Fenner & Smith Incorporated is acting as dealer manager for the tender offer.

The tender offer is subject to a number of conditions, including a financing condition. The financing condition consists of the receipt of net proceeds from this offering that is sufficient to effect the purchase of the validly tendered 2022 notes. We currently intend to redeem any and all 2022 notes that remain outstanding after completion of the tender offer, although we have no obligation to do so. This prospectus supplement does not constitute an offer to purchase or a notice of redemption with respect to the 2022 notes.

Amendment and Restatement of Credit Agreement

Concurrently with this offering and the tender offer, we have also launched a syndication process pursuant to which Spirit will seek to obtain commitments to amend and restate its existing unsecured senior credit facility (the "existing senior credit facility") for a new senior term loan A facility, a delayed draw term loan facility and a revolving credit facility (collectively, the "new senior credit facility") in an aggregate principal amount anticipated to be up to \$1,256.25 million. The new senior credit facility will be guaranteed by Holdings.

We anticipate that the new senior credit facility will consist of:

a \$800.0 million revolving credit facility,

a senior term loan A facility in an aggregate principal amount of \$206.25 million, and

a delayed draw term loan facility in an aggregate principal amount of \$250.0 million,

each of which is expected to mature in June 2023.

There can be no assurances that we will enter into the new senior credit facility on the terms described herein or at all. The amount of the new senior credit facility may be more or less, depending on market conditions. We refer to the negotiation of the new senior credit facility as the "refinancing."

In connection with the refinancing, we intend to repay approximately \$250.0 million of the senior term loan A facility under the existing senior credit facility with the proceeds of this offering.

Our Principal Offices and Websites

Our principal offices are located at 3801 South Oliver, Wichita, Kansas 67210 and our telephone number at that address is (316) 526-9000. Our website address is www.spiritaero.com. **Information contained on our website is not part of this prospectus supplement or the accompanying prospectus and is not incorporated in this prospectus supplement or the accompanying prospectus by reference.**

Table of Contents

The Offering

The summary below describes some of the principal terms of the notes. Some of the terms and conditions described below are subject to important limitations and exceptions. See "Description of the Notes" for a more detailed description of the terms and conditions of the notes.

| | |
|----------------------------|---|
| Issuer: | Spirit AeroSystems, Inc. |
| Securities Offered: | <p>\$ aggregate principal amount of its senior floating rate notes due 2021 (the "floating rate notes");</p> <p>\$ aggregate principal amount of % senior notes due 20 (the "20 notes"); and</p> <p>\$ aggregate principal amount of % senior notes due 20 (the "20 notes," and together with the 20 notes, the "fixed rate notes" and the fixed rate notes together with the floating rate notes, the "notes").</p> |
| Maturity Date: | <p>The floating rate notes mature on , 2021, the 20 notes mature on , 20 , and the 20 notes mature on , 20 , in each case unless redeemed or repurchased prior to such date.</p> |
| Interest Rate: | <p>Interest on the notes will accrue from May , 2018.</p> <p>Interest on the floating rate notes will be payable at a rate equal to three-month LIBOR, as determined at the beginning of each quarterly period as described herein, plus basis points, quarterly on , , and of each year, beginning on , 2018.</p> <p>Interest on the 20 notes will be payable at a rate of % semi-annually and interest on the 20 notes will be payable at a rate of % semi-annually, in each case on and of each year, beginning on , 2018.</p> |
| Guarantees: | <p>The notes will be guaranteed by Holdings on a senior unsecured basis. See "Description of the Notes Guarantees."</p> |
| Ranking: | <p>The notes will be the Issuer's and Holdings' senior unsecured obligations and will:</p> <p>rank equally and ratably in right of payment with all of the Issuer's and Holdings' existing and future senior unsecured indebtedness;</p> <p>be senior in right of payment to all of the Issuer's and Holdings' existing and future debt that is by its terms expressly subordinated to the notes and guarantees, if any;</p> <p>be effectively subordinated to all of the Issuer's and Holdings' future secured debt, if any, to the extent of the value of the assets securing such debt; and</p> <p>be structurally junior to any debt or obligations of Spirit's subsidiaries.</p> |

Table of Contents

As of March 29, 2018, after giving effect to the Transactions (as set forth under "Use of Proceeds"), Holdings and its subsidiaries would have total debt of approximately \$ million. In addition, Holdings and its subsidiaries would have approximately \$ million of availability under the revolving portion of the Issuer's senior credit facility.

Spirit's subsidiaries accounted for approximately 20% of our revenues for the fiscal year ended December 31, 2017. In addition, these subsidiaries accounted for approximately 27% of our total assets as of March 29, 2018.

Optional Redemption:

We may, at our option, redeem the floating rate notes, in whole or in part, on the first business day after the date that is one year following the date of issuance of the floating rate notes or any time or from time to time thereafter at a price equal to 100% of the aggregate principal amount of the notes being redeemed, plus accrued and unpaid interest thereon up to, but excluding, the redemption date.

We may, at our option, redeem (i) the 20 notes in whole or in part at any time prior to , 20 (the date that is months prior to the maturity date of the 20 notes) and (ii) the 20 notes in whole or in part at any time prior to , 20 (the date that is months prior to the maturity date of the 20 notes), in each case at the make-whole price specified in this prospectus supplement, plus accrued and unpaid interest on the notes being redeemed up to, but excluding, the redemption date.

At any time on or after , 20 (the date that is months prior to the maturity date of the 20 notes) we may, at our option, redeem the 20 notes in whole or in part at a redemption price equal to 100% of the aggregate principal amount of the notes being redeemed, plus accrued and unpaid interest thereon up to, but excluding, the redemption date.

At any time on or after , 20 (the date that is months prior to the maturity date of the 20 notes) we may, at our option, redeem the 20 notes in whole or in part at a redemption price equal to 100% of the aggregate principal amount of the notes being redeemed, plus accrued and unpaid interest thereon up to, but excluding, the redemption date.

See "Description of the Notes Optional Redemption."

Change of Control:

If a change of control triggering event were to occur, unless Spirit has exercised its option to redeem the notes in full, Spirit will be required to offer to purchase the notes of each series from holders at 101% of their aggregate principal amount, plus accrued and unpaid interest, as described under "Description of the Notes Change of Control Offer to Repurchase."

Table of Contents

Covenants:

The indenture governing the notes will contain covenants that, among other things, will limit the ability of the Issuer and Holdings to consolidate, merge, sell or otherwise dispose of all or substantially all of their assets. The indenture will also, among other things, limit Holdings' ability and the ability of Holdings' subsidiaries to:

incur certain liens; and

enter into sale and leaseback transactions.

These covenants will be subject to important exceptions, limitations and qualifications. For more details, see "Description of the Notes - Certain Covenants."

Use of Proceeds:

We estimate that the proceeds from this offering will be approximately \$ million, after deducting the underwriting discounts and estimated fees payable by us.

We plan to use the net proceeds from this offering, together with the proceeds of the delayed draw term loan and borrowings under our revolving credit facility, to (i) repurchase the 2022 notes (whether pursuant to tender offer, redemption or otherwise), (ii) repay approximately \$250.0 million of the senior term loan A facility under the existing senior credit facility in connection with the refinancing, (iii) fund our \$725 million ASR, (iv) pay the purchase price for the acquisition of Asco, and (v) pay accrued interest, fees and expenses (including acquisition related costs) related to the foregoing, as set forth in the table below (assuming that we issue notes with an aggregate principal amount of \$1,300 million). We refer to the items in this paragraph collectively as the "Transactions."

| | Sources | (in millions) | | Uses |
|--|----------------|----------------------|--|-------------------|
| Proceeds of the notes offered hereby | \$ | 1,300.0 | Repurchase 2022 notes | \$ 300.0 |
| Borrowings under revolving credit facility | \$ | 425.0 | Partial repayment of senior term loan A facility | \$ 250.0 |
| Proceeds of delayed draw term loan | \$ | 250.0 | ASR | \$ 725.0 |
| | | | Purchase price for acquisition of Asco | \$ 650.0 |
| | | | Financing and acquisition related costs | \$ 50.0 |
| Total | \$ | 1,975.0 | Total | \$ 1,975.0 |

Absence of Established Market for Notes:

We do not intend to list the notes of any series on any securities exchange. Each series of notes will be a new issue of securities for which there currently is no public market. We can provide no assurances as to the liquidity of, or development of any trading market for, the notes of any series.

S-5

Table of Contents

Further Issuance of Notes:

We may, without the consent of the holders of the notes of any series, create and issue additional notes of any series ranking equally with the notes of such series and otherwise identical in all respects to the notes of such series (except for the issue price, the date from which interest first accrues and the first interest payment date) so that those additional notes will be consolidated and form a single series with the notes of the relevant series. If the additional notes are not fungible with the existing notes of that series for U.S. federal income tax purposes, the additional notes of that series will have a separate CUSIP number. No additional notes may be issued if an event of default under the indenture has occurred.

Denomination and Form:

We will issue the notes of each series in the form of one or more fully registered global notes registered in the name of the nominee of The Depository Trust Company, ("DTC"). Beneficial interests in the notes will be represented through book-entry accounts of financial institutions acting on behalf of beneficial owners as direct and indirect participants in DTC. Except in the limited circumstances described in this prospectus supplement, owners of beneficial interests in the notes will not be entitled to have notes registered in their names, will not receive or be entitled to receive notes in definitive form and will not be considered holders of notes under the indenture. The notes will be issued only in minimum denominations of \$2,000 and integral multiples of \$1,000 in excess thereof.

Trustee and Paying Agent:

The Bank of New York Mellon Trust Company, N.A.

Governing Law:

State of New York

Risk Factors:

You should read carefully the section entitled "Risk Factors" beginning on page S-8 of this prospectus supplement, as well as "Risk Factors" in our Annual Report on Form 10-K for the year ended December 31, 2017 and our updates to those Risk Factors in our most recent Quarterly Report on Form 10-Q, including any amendments to such reports, which are incorporated by reference in this prospectus supplement and the accompanying prospectus, before making a decision to invest in the notes.

S-6

Table of Contents

RISK FACTORS

Investing in the notes involves a high degree of risk. You should carefully consider the risks described below as well as other information and data contained in this prospectus supplement and the accompanying prospectus and the documents we incorporate by reference herein and therein (including our Annual Report on Form 10-K for the year ended December 31, 2017 and our Quarterly Report on Form 10-Q for the fiscal quarter ended March 29, 2018) before making an investment in the notes.

Any of these risks or the occurrence of any one or more of the uncertainties described below could have a material adverse effect on our financial condition and the performance of our business. The risks and uncertainties described below are those that we currently believe may materially and adversely affect our company, our business or results of operations in the future or investments in our debt securities. The risks described below are not the only ones facing our company. Additional risks and uncertainties that we are unaware of or that we currently deem immaterial may also materially and adversely affect our company, our business or results of operations in the future or investments in our debt securities. The risks discussed below also include forward-looking statements and our actual results may differ substantially from those discussed in these forward-looking statements. See "Cautionary Statement Regarding Forward-Looking Statements."

Risks Related to the Notes

The notes and the guarantees are unsecured and will be effectively subordinated to any secured debt Spirit or Holdings may incur.

The notes and the guarantees are Spirit's and Holdings' general unsecured and unsubordinated obligations and will not be secured by any of Spirit's assets or the assets of Spirit's subsidiaries. The notes and the guarantees will be effectively subordinated to any of Spirit's and Holdings' future secured debt, if any, to the extent of the value of the assets securing such debt. In the event of our bankruptcy, liquidation, reorganization or other winding up, Spirit's and Holdings' assets that secure debt will be available to pay obligations on the notes only after such secured debt has been repaid in full from such assets. There may not be sufficient assets to pay any or all obligations on notes then outstanding.

As of March 29, 2018, we had \$37.7 million of capital leases and no other secured debt, including after giving effect to the refinancing.

The notes will be structurally subordinated to all indebtedness and other liabilities of Spirit's subsidiaries.

None of Spirit's subsidiaries will guarantee the notes. Therefore, claims of holders of the notes will be effectively subordinated to all indebtedness and other liabilities of Spirit's subsidiaries. In the event of any bankruptcy, liquidation, dissolution or similar proceeding involving one of Spirit's subsidiaries, any of our rights or the rights of the holders of the notes to participate in the assets of that subsidiary will be effectively subordinated to the claims of creditors of that subsidiary (including any trade creditors, debt holders, secured creditors, taxing authorities and guarantee holders), and following payment by that subsidiary of its liabilities, the subsidiary may not have sufficient assets remaining to make payments to Spirit as a shareholder, member or otherwise. In addition, if we caused a subsidiary to pay a dividend to enable Spirit to make payments in respect of the notes and such a transfer were deemed a fraudulent transfer or an unlawful distribution, the holders of the notes could be required to return the payment to (or for the benefit of) the creditors of Spirit's subsidiaries.

As of March 29, 2018, including after giving effect to the refinancing, Spirit's subsidiaries would have had approximately \$0.0 million of indebtedness outstanding for borrowed money and \$9.2 million of capital leases, as well as significant other liabilities, all of which would be structurally senior to the notes offered hereby. Spirit's subsidiaries accounted for approximately 20% of our total net revenues, for the fiscal year ended December 31, 2017. In addition, these subsidiaries accounted for approximately 27% of our total assets as of March 29, 2018.

Table of Contents

Our ability to meet our obligations under our indebtedness depends in part on the earnings and cash flows of Spirit's subsidiaries and the ability of Spirit's subsidiaries to pay dividends or advance or repay funds to Spirit.

We conduct a portion of our operations through Spirit's subsidiaries, which have not guaranteed the notes. Consequently, our ability to service our debt is dependent, in part, upon the earnings from the businesses conducted by Spirit's subsidiaries. Spirit's subsidiaries are separate and distinct legal entities. The ability of Spirit's subsidiaries to pay dividends and make other payments to Spirit depends on their earnings, capital requirements and general financial conditions and is restricted by, among other things, applicable corporate and other laws and regulations as well as, in the future, agreements to which Spirit's subsidiaries may be a party.

The notes do not restrict our ability to incur additional debt or prohibit us from taking other actions that could negatively impact holders of the notes.

As of March 29, 2018, we had outstanding \$1,153.1 million of indebtedness. After giving effect to the Transactions (as set forth under "Use of Proceeds"), we expect to have outstanding \$ million of indebtedness and approximately \$ million of additional borrowings available to us under the \$800 million revolving portion of our new senior credit facility and the \$250 million delayed draw facility under our new senior credit facility, subject to compliance with our financial and other covenants under the terms of such credit facility. We are not restricted under the terms of the notes from incurring additional indebtedness. The terms of the indenture limit our ability to incur indebtedness secured by liens, to enter into sale and leaseback transactions and to enter into certain mergers or consolidations and to transfer substantially all of our assets. However, these limitations are subject to certain exceptions. In addition, the notes do not require us to achieve or maintain any minimum financial results relating to our financial condition, liquidity or results of operations. Our ability to recapitalize, incur additional debt, secure existing or future debt, or take a number of other actions that are not limited by the terms of the indenture and the notes, including repurchasing subordinated indebtedness or common stock or paying dividends or making other distributions to our stockholders, could have the effect of diminishing our ability to make payments on the notes when due, causing a decline in the market price or liquidity of your notes and increasing the risk that the credit rating(s) of the notes is lowered, placed on negative outlook or watch or withdrawn.

Any reduction in our credit ratings could materially and adversely affect our business or financial condition.

As of March 29, 2018, our corporate credit ratings were Baa3 by Moody's Investors Service ("Moody's") and BBB by S&P Global Ratings ("S&P"). The ratings reflect the agencies' assessment of our ability to pay interest and principal on our debt securities and credit agreements. A rating is not a recommendation to purchase, sell or hold securities. Each rating is subject to revision or withdrawal at any time by the assigning rating organization. Each rating agency has its own methodology for assigning ratings and, accordingly, each rating should be considered independently of all other ratings. Lower ratings would typically result in higher interest costs of debt securities when they are sold, could make it more difficult to issue future debt securities, and would require us to pledge collateral under our existing senior credit facility including substantially all property, plant, and equipment. In addition, if we are unable to complete the refinancing, a downgrade in our fixed or revolving long-term debt rating could result in an increase in borrowing costs under our existing senior credit facility and could trigger a prepayment obligation based on the excess cash flow prepayment provision under our term loan depending on our total leverage ratio. Any downgrade in our credit ratings could thus have a material adverse effect on our business or financial condition.

Table of Contents

Our failure to remain in compliance with the covenants in our senior credit facility may result in an event of default.

Our existing senior credit facility contains, and we expect our new senior credit facility after giving effect to the refinancing will contain, covenants that we believe are customary for credit facilities of this nature, including requiring us to meet specified financial ratios and financial tests. Our ability to borrow under our senior credit facility will depend upon satisfaction of these covenants. Events beyond our control can affect our ability to meet these covenants. If we are unable to meet the terms of our financial or other covenants, or if we breach any of these covenants, a default could occur under our senior credit facility. A default, if not waived by our lenders, could result in the acceleration of our borrowings thereunder and other outstanding indebtedness, including the notes, and cause our debt to become immediately due and payable. In addition, our ability to further access borrowings under the senior credit facility, and potentially other facilities, would cease. If acceleration occurs, we may not be able to repay our debt and may not be able to obtain sufficient funds to refinance our debt. Even if new financing is offered to us, it may not be on terms acceptable to us.

We may not have sufficient cash to repurchase the notes upon the occurrence of a change of control triggering event.

We may be required to offer to repurchase all of the notes upon the occurrence of a change of control triggering event and a related downgrade in the rating of the notes below investment grade by each of Moody's and S&P. We may not, however, have sufficient cash at that time or have the ability to arrange necessary financing on acceptable terms to repurchase all of the notes under such circumstances. If we are unable to repurchase all of the notes upon the occurrence of a change of control triggering event, it would result in an event of default under the indenture. A default under the indenture could also lead to a default under the agreements governing our existing or future debt. If the repayment of the related debt were to be accelerated after any applicable notice or grace periods, we may not have sufficient funds to repay all such debt and repurchase the notes.

You may not be able to determine when a change of control giving rise to your right to have the notes repurchased by us has occurred following a sale of "substantially all" of our assets.

A change of control triggering event, as defined in the indenture, and a related downgrade in the rating of the notes below investment grade by each of Moody's and S&P, will require us to make an offer to repurchase all outstanding notes. The definition of change of control includes a phrase relating to the sale, lease or transfer of "all or substantially all" of our assets. There is no precisely established definition of the phrase "substantially all" under applicable law. Accordingly, the ability of a holder of notes to require us to repurchase their notes as a result of a sale, assignment, transfer, lease, conveyance or disposition of all or substantially all of our properties or assets to another individual, group or entity may be uncertain.

There is currently no market for the notes of any series. We cannot assure you that an active trading market will develop, continue or be liquid.

Each series of notes is a new issue of securities with no established trading market. We do not intend to list the notes of any series on any national securities exchange or to have the notes of any series quoted on any automated dealer quotation system. The underwriters have advised us that they presently intend to make a market in the notes, but they are not obligated to do so and may discontinue any market-making at any time without notice to, or the consent of, holders of the notes. We cannot assure you that an active market for the notes will develop or, if it develops, will continue or be liquid. If an active trading market for the notes does not develop or continue, the market price and liquidity of the notes will be negatively affected. See "Underwriting."

Table of Contents

Our financial performance and other factors could adversely impact our ability to make payments on the notes.

Our ability to make scheduled payments with respect to our debt, including the notes, will depend on our financial and operating performance, which, in turn, is subject to prevailing economic conditions and to financial, business and other factors beyond our control. Our historical financial results have been, and we anticipate that our future financial results will be, subject to fluctuations. We cannot assure you that our business will generate sufficient cash flow from our operations or that future financing will be available to us in an amount sufficient to enable us to service our debt, including the notes.

Fraudulent conveyance laws may permit courts to void Holdings' guarantees of the notes in specific circumstances, which would interfere with the payment under such guarantees.

Federal and state statutes may allow courts, under specific circumstances described below, to void Holdings' guarantees of the notes. If such a voidance occurs, our noteholders might be required to return payments received from Holdings in the event of bankruptcy or other financial difficulty of Holdings. Under United States federal bankruptcy law and comparable provisions of state fraudulent conveyance laws, a guarantee could be set aside if, among other things, a guarantor, at the time it incurred the debt evidenced by its guarantee:

incurred the guarantee with the intent of hindering, delaying or defrauding current or future creditors; or

received less than reasonably equivalent value or fair consideration for incurring the guarantee, and

was insolvent or was rendered insolvent by reason of the incurrence;

was engaged, or about to engage, in a business or transaction for which the assets remaining with it constituted unreasonably small capital to carry on such business or transaction; or

intended to incur, or believed that it would incur, debts beyond its ability to pay as those debts mature.

The tests for fraudulent conveyance, including the criteria for insolvency, will vary depending upon the law of the jurisdiction that is being applied. Generally, however, a debtor would be considered insolvent if, at the time the debtor incurred the debt:

the sum of the debtor's debts and liabilities, including contingent liabilities, was greater than the debtor's assets at fair valuation;

the present fair saleable value of the debtor's assets was less than the amount required to pay the probable liability on the debtor's total existing debts and liabilities, including contingent liabilities, as they became absolute and matured; or

it could not pay its debts as they became due.

If a court voids the guarantees or holds the guarantees unenforceable, you will cease to be a creditor of Holdings and will be a creditor solely of Spirit.

The amount of interest payable on the floating rate notes is set only once per quarter based on the three-month LIBOR rate for U.S. dollar deposits on the interest determination date, which rate may fluctuate substantially.

In the past, the level of the three-month LIBOR rate has experienced significant fluctuations. You should note that historical levels, fluctuations and trends of the three-month LIBOR rate are not

Table of Contents

necessarily indicative of future levels. Any historical upward or downward trend in the three-month LIBOR rate is not an indication that the three-month LIBOR rate is more or less likely to increase or decrease at any time, and you should not take the historical levels of the three-month LIBOR rate as an indication of its future performance. Additionally, although the actual three-month LIBOR rate on an interest payment date or at other times during an interest period may be higher than the three-month LIBOR rate on the applicable interest determination date, the only relevant date for purposes of determining the interest payable on the floating rate notes is the three-month LIBOR rate as of the interest determination date for such interest period. Changes in the three-month LIBOR rates between interest determination dates will not affect the interest payable on the floating rate notes. As a result, changes in the three-month LIBOR rate may not result in a comparable change in the market value of the floating rate notes.

Increased regulatory oversight, changes in the method pursuant to which the LIBOR rates are determined and potential phasing out of LIBOR after 2021 may adversely affect the value of the floating rate notes.

Regulators and law enforcement agencies in the United Kingdom and elsewhere are conducting civil and criminal investigations into whether banks that contributed to the British Bankers' Association in connection with the calculation of daily London Interbank Offered Rate ("LIBOR") may have been under-reporting or otherwise manipulating or attempting to manipulate LIBOR. A number of contributing banks have entered into settlements with their regulators and law enforcement agencies with respect to this alleged manipulation of LIBOR. Since February 1, 2014, the administration of LIBOR has been undertaken by ICE Benchmark Administration (the "IBA"), a subsidiary of Inter-Continental Exchange. Actions by regulators or law enforcement agencies may result in changes to the manner in which LIBOR is determined or the establishment of alternative reference rates.

In addition, on July 27, 2017, the U.K. Financial Conduct Authority (the "FCA") announced that it will no longer persuade or compel banks to submit LIBOR rates after 2021 (the "FCA Announcement"). It is not possible to predict the effect of the FCA Announcement, any changes in the methods pursuant to which the LIBOR rates are determined or any other reforms to LIBOR that will be enacted in the U.K. or elsewhere, which may adversely affect the trading market for LIBOR-based securities, including the floating rate notes, or result in the phasing out of LIBOR as a reference rate for securities.

Any changes announced by the FCA, including the FCA Announcement, the IBA or any other successor governance or oversight body, or future changes adopted by such body, to the method pursuant to which the LIBOR rates are determined may result in a sudden or prolonged increase or decrease in the reported LIBOR rates. If that were to occur the level of interest payments would be affected and, to the extent that the value of your floating rate notes is affected by reported LIBOR rates, the value of the floating rate notes may be affected.

If LIBOR is discontinued prior to the maturity of the floating rate notes, then the rate of interest on the floating rate notes will be determined by the fallback provisions provided for under the caption "Description of the Notes Principal, Maturity and Interest Floating Rate Notes." Such provisions may not operate as intended depending on market circumstances and the availability of rates information at the relevant time. This may result, to the extent that other fallback provisions under such caption herein are not applicable, in the effective application of a fixed rate based on the LIBOR rate that applied in the last period for which the LIBOR rate was available.

Table of Contents

CONSOLIDATED RATIO OF EARNINGS TO FIXED CHARGES

The following table sets forth our ratio of earnings to fixed charges for the periods indicated.

| | Three Months Ended | | Year Ended December 31, | | | |
|---|---------------------------|-------------|--------------------------------|-------------|-------------|----------------|
| | March 29, 2018 | 2017 | 2016 | 2015 | 2014 | 2013(1) |
| Ratio of Earnings to Fixed Charges | 11.7x | 11.2x | 10.5x | 13.5x | 3.7x | (4.3)x |

- (1) Due to our loss in 2013, the ratio coverage was less than 1:1. We needed to generate additional earnings of \$432.3 million to achieve a coverage ratio of 1:1.

Table of Contents

USE OF PROCEEDS

We estimate that the proceeds from this offering will be approximately \$ million, after deducting the underwriting discounts and estimated fees payable by us.

We plan to use the net proceeds from this offering, together with the proceeds of the delayed draw term loan and borrowings under our revolving credit facility, to (i) repurchase the 2022 notes (whether pursuant to tender offer, redemption or otherwise), (ii) repay approximately \$250.0 million of the senior term loan A facility under the existing senior credit facility in connection with the refinancing, (iii) fund our \$725 million ASR, (iv) pay the purchase price for the acquisition of Asco, and (v) pay accrued interest, fees and expenses (including acquisition related costs) related to the foregoing, as set forth in the table below (assuming that we issue notes with an aggregate principal amount of \$1,300 million). We refer to the items in this paragraph collectively as the "Transactions."

| Sources | (in millions) | | Uses |
|--|-------------------|--|-------------------|
| Proceeds of the notes offered hereby | \$ 1,300.0 | Repurchase 2022 notes | \$ 300.0 |
| Borrowings under revolving credit facility | \$ 425.0 | Partial repayment of senior term loan A facility | \$ 250.0 |
| Proceeds of delayed draw term loan | \$ 250.0 | ASR | \$ 725.0 |
| | | Purchase price for acquisition of Asco | \$ 650.0 |
| | | Financing and acquisition related costs | \$ 50.0 |
| Total | \$ 1,975.0 | Total | \$ 1,975.0 |

The existing credit facility matures June 4, 2021 and term loan A borrowings thereunder currently bear interest at a rate determined by reference to the London Interbank Offer Rate (LIBOR) plus 150 basis points.

Certain of the underwriters (or their affiliates) are lenders under the senior term loan A facility under the existing senior credit facility and therefore will receive a portion of the net proceeds of the offering of the notes in connection with the refinancing. See "Underwriting."

Table of Contents**CAPITALIZATION**

The following table sets forth the Company's consolidated capitalization as of March 29, 2018 on an actual basis and as adjusted after giving effect to the Transactions (as set forth under "Use of Proceeds") as if each had occurred as of March 29, 2018.

This table should be read in conjunction with the information included under the headings "Selected Consolidated Financial Information and Other Data" and "Management's Discussion and Analysis of Financial Condition and Results of Operations" and with the Company's consolidated financial statements and related notes thereto included in the Annual Report on Form 10-K for the fiscal year ended December 31, 2017 and the Quarterly Report on Form 10-Q for the fiscal quarter ended March 29, 2018, which are incorporated by reference into this prospectus supplement, and "Use of Proceeds."

| | As of March 29, 2018 | |
|---|----------------------|-------------|
| | Actual | As Adjusted |
| | (in millions) | |
| Cash and cash equivalents | \$ 437.9 | \$ 437.9 |
| Senior Credit Facility(1) | \$ 456.3 | \$ 881.3 |
| 3.850% Senior Notes due 2026, excluding original issue discount | 300.0 | 300.0 |
| 5 ¹ / ₄ % Senior Notes due 2022, excluding original issue discount(2) | 300.0 | |
| Floating Rate Notes offered hereby | | |
| 20 Notes offered hereby | | |
| 20 Notes offered hereby | | |
| Capital Leases and other(3) | 96.8 | 96.8 |
| Total Debt | 1,153.1 | |
| Total Equity | \$ 1,573.0 | \$ |
| Total Capitalization | \$ 1,153.1 | \$ |

-
- (1) Our existing senior secured credit facility consists of a \$650.0 million revolving credit facility and a \$500.0 million term loan A facility. As of March 29, 2018, the outstanding balance of the term loan facility was \$456.3 million and there were no amounts outstanding under the revolving credit facility. The as adjusted amount assumes the successful completion of the refinancing, including the proposed amendment and restatement of our senior credit facility. We currently anticipate that the new senior credit facility will consist of a \$800.0 million revolving credit facility (which will initially be undrawn), a term loan A facility in an aggregate principal amount of \$206.25 million and a delayed draw term loan facility in an aggregate principal amount of \$250.0 million, each of which will mature in June 2023. The amount of the new senior credit facility may be more or less, depending on market conditions. As described above under "Use of Proceeds," in connection with the consummation of the Transactions, we intend to repay approximately \$250.0 million of the senior term loan A facility under the existing senior credit facility, draw the \$250.0 million delayed draw term loan under the new senior credit facility and borrow \$425.0 million under our revolving credit facility.
- (2) Assumes that we will purchase the entire aggregate principal amount outstanding of the 2022 notes and pay all accrued and unpaid interest with respect thereto pursuant to the tender offer.
- (3) Includes capital lease obligations of \$37.7 million as of March 29, 2018.

Table of Contents

DESCRIPTION OF NEW SENIOR CREDIT FACILITY

Concurrently with this offering and the tender offer, we have also launched a syndication process pursuant to which Spirit will seek to obtain commitments for a new senior term loan A facility, a delayed draw term loan facility and a revolving credit facility (collectively, the "new senior credit facility") in an aggregate principal amount anticipated to be up to \$1,256.25 million. The new senior credit facility will refinance and replace the Credit Agreement, dated as of June 6, 2016, as amended, among Spirit, as borrower, Holdings, as parent guarantor, the lenders party thereto, Bank of America, N.A., as administrative agent, and the other agents named therein (the "existing senior credit facility").

We anticipate that the new senior credit facility will consist of :

a \$800.0 million revolving credit facility (the "revolver"),

a senior term loan A facility in an aggregate principal amount of \$206.25 million (the "term loan A"), and

a delayed draw term loan facility in an aggregate principal amount of \$250.0 million (the "delayed draw term loan," and together with the term loan A, the "term loans").

Each of the revolver and the term loans is expected to mature in June 2023, and to bear interest, at Spirit's option, at either LIBOR plus 1.375% or a defined "base rate" plus 0.375%, subject to adjustment to between LIBOR plus 1.125% and LIBOR plus 1.875% (or between base rate plus 0.125% and base rate plus 0.875%, as applicable) based on changes to Spirit's senior unsecured debt rating provided by S&P and/or Moody's. The principal obligations under each of the term loans are to be repaid in equal quarterly installments of 5% per annum, with the balance due at maturity of each of the term loans.

The new senior credit facility is also expected to contain an accordion feature that provides Spirit with the option to increase the revolver commitments and/or institute one or more additional term loans by an amount not to exceed \$750 million in the aggregate, subject to the satisfaction of certain conditions and the participation of the lenders. The new senior credit facility will contain customary affirmative and negative covenants, including certain financial covenants that are tested on a quarterly basis. Spirit's obligations under the new senior credit facility may be accelerated upon an event of default, which includes non-payment of principal or interest, material breach of any representation or warranty, material breach of any covenant, cross-default to material indebtedness, material judgments, ERISA events, change in control, bankruptcy and invalidity of the guarantee of Spirit's obligations under the new senior credit facility made by the Holdings.

Spirit expects to use the proceeds of the new senior credit facility, along with the proceeds of the notes offered hereby, to fund the Transactions. See "Use of Proceeds" and "Capitalization."

There can be no assurances that we will enter into the new senior credit facility on the terms described herein or at all. The amount of the new senior credit facility may be more or less, depending on market conditions.

Table of Contents

DESCRIPTION OF THE NOTES

We will issue each series of notes under an indenture, dated as of the closing date, among Spirit, Holdings and The Bank of New York Mellon Trust Company, N.A., as trustee (the "indenture"). Because this is a summary, it does not contain all the information that may be important to you. The following description of specific terms of the notes is qualified in its entirety by reference to the provisions of the indenture, including the definitions of certain terms contained therein and those terms made part of the indenture by reference to the Trust Indenture Act of 1939, as amended (the "Trust Indenture Act"). Capitalized and other terms not otherwise defined in this prospectus supplement have the meanings given to them in the indenture. As used in this "Description of the Notes," "we," "our," "us," and "Spirit" refer to Spirit AeroSystems, Inc. and any successor thereto permitted under the indenture and "Holdings" refers to Spirit AeroSystems Holdings, Inc. and any successor thereto permitted under the indenture. Such terms do not, unless the context otherwise indicates, include the subsidiaries of such entities. The terms of the notes include those stated in the indenture and those which are made a part of the indenture by the Trust Indenture Act.

Each of the floating rate notes, the 20 notes and the 20 notes is referred to herein as a "series" of notes.

The notes of each series will be issued only in registered form, without coupons, in minimum denominations of \$2,000 and integral multiples of \$1,000 in excess thereof.

Principal, Maturity and Interest

Floating Rate Notes

The floating rate notes will be issued in an aggregate principal amount of \$ and will mature on , 2021. The floating rate notes will bear interest at a rate per annum equal to three-month LIBOR for the applicable initial interest period or interest period (each as defined below) plus basis points, as determined by the calculation agent (as described below) from May , 2018, or, from the most recent date to which interest has been paid or provided for, payable quarterly in arrears to holders of record on the , , or immediately preceding the respective interest payment on , , or of each year, respectively, beginning on , 2018. The interest rate on the floating rate notes will be reset on each interest payment date (each such date, an "interest reset date").

The initial interest period (the "initial interest period") means the period from and including the issue date to but excluding the first interest reset date. Thereafter, each interest period (an "interest period") means the period from and including an interest reset date to but excluding the immediately succeeding interest reset date; provided that the final interest period for the floating rate notes will be the period from and including the interest reset date immediately preceding the maturity date of the floating rate notes to but excluding the maturity date. Interest on the floating rate notes will be computed on the basis of the actual number of days elapsed over a 360-day year.

The interest rate for the initial interest period means the three-month LIBOR, as determined on May , 2018, plus basis points. Thereafter, the interest rate for any interest period will be the three-month LIBOR, as determined on the applicable interest determination date (as defined below), plus basis points. The interest rate will be reset quarterly on each interest reset date (unless notice of redemption has been mailed for the floating rate notes, in which case the interest rate thereon in effect on the date of such notice will be the interest rate thereon through the redemption date). The interest rate applicable to each interest period commencing on the related interest reset date, or the issue date in the case of the initial interest period, will be the rate determined as of the applicable interest determination date. The "interest determination date" means the second London

Table of Contents

business day immediately preceding the issue date, in the case of the initial interest period, or thereafter the second London business day immediately preceding the applicable interest reset date.

The amount of interest for each day that the floating rate notes are outstanding (the "daily interest amount") will be calculated by dividing the interest rate in effect for such day by 360 and multiplying the result by the aggregate principal amount of the floating rate notes outstanding on such day. The amount of interest to be paid on the floating rate notes for each interest period will be calculated by adding such daily interest amounts for each day in such interest period.

If any interest payment date for the floating notes would otherwise be a day that is not a business day, then the interest payment date will be postponed to the following date that is a business day. If the maturity date of the floating rate notes falls on a day that is not a business day, the payment of interest and principal will be made on the next succeeding business day, and no interest on such payment will accrue for the period from and after the maturity date. If any interest payment date (other than the maturity date) is postponed as described above, the amount of interest for the relevant interest period will be adjusted accordingly. The term "business day" means any day, other than a Saturday or Sunday, that is neither a legal holiday nor a day on which banking institutions are authorized or required by law, executive order or regulation to close in The City of New York.

Three-month LIBOR will be determined by the calculation agent as of the applicable interest determination date in accordance with the following provisions:

Three-month LIBOR is the rate for deposits in U.S. dollars for the three-month period that appears on the Designated LIBOR page (as defined below) at approximately 11:00 a.m., London time, on the applicable interest determination date. If no rate appears on the Designated LIBOR page, three-month LIBOR for such interest determination date will be determined in accordance with the immediately following provisions.

With respect to an interest determination date on which no rate appears on the Designated LIBOR page as of approximately 11:00 a.m., London time, on such interest determination date, the calculation agent shall request the principal London offices of each of four major reference banks (which may include affiliates of the underwriters) in the London interbank market selected by us to provide the calculation agent with a quotation of the rate at which deposits of U.S. dollars having a three-month maturity, commencing on the second London business day immediately following such interest determination date, are offered by it to prime banks in the London interbank market as of approximately 11:00 a.m., London time, on such interest determination date in a principal amount equal to an amount of not less than \$1,000,000 that is representative for a single transaction in such market at such time. If at least two such quotations are provided, three-month LIBOR for such interest determination date will be the arithmetic mean of such quotations as calculated by the calculation agent. If fewer than two quotations are provided, three-month LIBOR for such interest determination date will be the arithmetic mean of the rates quoted as of approximately 11:00 a.m., New York City time, on such interest determination date by three major banks (which may include affiliates of the underwriters) selected by us for loans in U.S. dollars to leading European banks having a three-month maturity commencing on the second London business day immediately following such interest determination date and in a principal amount equal to an amount of not less than \$1,000,000 that is representative for a single transaction in such market at such time; provided, however, that if the banks selected as aforesaid by us are not quoting such rates as mentioned in this sentence, three-month LIBOR for such interest determination date will be three-month LIBOR determined with respect to the immediately preceding interest determination date.

The trustee will initially act as the calculation agent in respect of the floating rate notes. We may change the calculation agent without prior notice to or consent of the holders of the floating rate notes. Promptly upon calculation, the calculation agent will inform us of the interest rate for the next interest

Edgar Filing: Spirit AeroSystems Holdings, Inc. - Form 424B5

Table of Contents

period. Upon request from any holder of the floating rate notes, the calculation agent will provide the interest rate then in effect for the floating rate notes for the current interest period and, if it has been determined, the interest rate to be in effect for the next interest period.

All percentages resulting from any calculation of the interest rate on the floating rate notes will be rounded to the nearest one millionth of a percentage point with five ten millionths of a percentage point rounded upwards (e.g., 9.8765445% (or .098765445) would be rounded to 9.876545% (or .09876545)), and all dollar amounts used in or resulting from such calculation on the floating rate notes will be rounded to the nearest cent (with one-half cent being rounded upwards).

Notwithstanding the foregoing, the interest rate on the floating rate notes will in no event be higher than the maximum rate permitted by New York law as the same may be modified by United States law of general application. Additionally, the interest rate on the notes will in no event be lower than zero.

"*Designated LIBOR page*" means Bloomberg L.P. page "BBAM" on that service or any successor service for the purpose of displaying London interbank offered rates for U.S. dollar deposits of major banks.

"*LIBOR*" means the U.S. dollar London Interbank Offered Rate.

"*London business day*" means a day on which dealings in deposits in U.S. dollars are transacted in the London interbank market.

Fixed Rate Notes

The 20 notes will be issued in an aggregate principal amount of \$ and will mature on , 20 . The 20 notes will bear interest at % per annum from May , 2018, or, from the most recent date to which interest has been paid or provided for, payable semiannually in arrears to holders of record on the or immediately preceding the respective interest payment on or of each year, respectively, beginning on , 2018.

The 20 notes will be issued in an aggregate principal amount of \$ and will mature on , 20 . The 20 notes will bear interest at % per annum from May , 2018, or, from the most recent date to which interest has been paid or provided for, payable semiannually in arrears to holders of record on the or immediately preceding the respective interest payment on or of each year, respectively, beginning on , 2018.

Interest on the fixed rate notes will be computed on the basis of a 360-day year consisting of twelve 30-day months.

If any interest payment date for the fixed rate notes would otherwise be a day that is not a business day, then the interest payment date will be postponed to the following date that is a business day. Interest will not accrue for any period from and after the interest payment date or maturity date as a result of any delayed payment. The term "business day" means any day, other than a Saturday or Sunday, that is neither a legal holiday nor a day on which banking institutions are authorized or required by law, executive order or regulation to close in The City of New York.

General

The notes of each series will be in the form of one or more global notes that we will deposit with or on behalf of DTC.

The notes will not be subject to any sinking fund.

Table of Contents

The notes of each series will constitute a separate series of our unsecured and unsubordinated senior debt securities, ranking equally and ratably with any other unsecured and unsubordinated debt of ours. See " Ranking" below.

Payment of the principal of (and premium, if any, on) and interest on the notes, and all other amounts due under the indenture, will be unconditionally guaranteed on an unsecured and unsubordinated basis by Holdings. See " Guarantees" below.

Ranking

The notes will be unsecured senior obligations of Spirit and, as such, will rank equally and ratably in right of payment with all other existing and future unsecured and unsubordinated indebtedness of Spirit and senior in right of payment to all future subordinated indebtedness of Spirit. Because the notes will not be secured, they will be effectively subordinated to any future secured indebtedness of Spirit to the extent of the value of the collateral securing that indebtedness. The notes will also be effectively subordinated to any indebtedness and other liabilities of the subsidiaries of Spirit that do not guarantee the notes.

None of Spirit's subsidiaries will guarantee the notes. Claims of creditors of Spirit's subsidiaries, including trade creditors, secured creditors and creditors holding debt and guarantees issued by those subsidiaries, and claims of preferred stockholders (if any) of those subsidiaries generally will have priority with respect to the assets and earnings of those subsidiaries over the claims of creditors of Spirit, including holders of the notes.

As of March 29, 2018, after giving effect to the Transactions:

Spirit would have had approximately \$ billion in aggregate principal amount of indebtedness outstanding that would have ranked equally and ratably in right of payment with the notes;

Spirit would have had \$37.7 million of capital leases and no other secured indebtedness outstanding; and

Spirit's subsidiaries that will not guarantee the notes would have had approximately \$0.0 million of indebtedness outstanding for borrowed money and \$9.2 million of capital leases (such amount is included in the \$37.7 million of capital leases mentioned in the prior bullet).

See " Guarantees" below and "Capitalization" and "Use of Proceeds" elsewhere in this prospectus supplement.

Guarantees

Payment of the principal of (and premium, if any, on) and interest on the notes and all other amounts due under the indenture, will be fully and unconditionally guaranteed on an unsecured and unsubordinated basis by Holdings. The guarantees of the notes will rank equally and ratably in right of payment with all other existing and future unsecured and unsubordinated indebtedness of Holdings, and senior in right of payment to all future subordinated indebtedness of Holdings. Because the guarantees of the notes will not be secured, they will be effectively subordinated to any existing and future secured indebtedness of Holdings to the extent of the value of the collateral securing that indebtedness. The guarantees will also be effectively subordinated to any indebtedness and other liabilities of the subsidiaries of Holdings, other than Spirit.

Each guarantee of the notes by Holdings will be limited to an amount not to exceed the maximum amount that can be guaranteed by Holdings without rendering the guarantees of the notes voidable under applicable law relating to fraudulent conveyance or fraudulent transfer or similar laws affecting the rights of creditors generally.

Table of Contents

Further Issues

We may, without the consent of the holders of the notes of any series, create and issue additional notes of any series ranking equally with the notes of such series and otherwise identical in all respects to the notes of such series (except for the issue price, the date from which interest first accrues and the first interest payment date) so that those additional notes will be consolidated and form a single series with the notes of the relevant series. If the additional notes are not fungible with the existing notes of that series for U.S. federal income tax purposes, the additional notes of that series will have a separate CUSIP number. No additional notes may be issued if an Event of Default under the indenture has occurred.

Optional Redemption

Floating Rate Notes

Spirit may redeem, at its option, the floating rate notes, in whole or in part, on the first business day after the date that is one year following the date of issuance of the floating rate notes or at any time or from time to time thereafter at a price equal to 100% of the aggregate principal amount of the floating rate notes being redeemed, plus accrued and unpaid interest to, but excluding, the redemption date.

Fixed Rate Notes

Prior to the applicable Par Call Date, the fixed rate notes will be redeemable at Spirit's option, in whole at any time or in part from time to time, for cash, at a redemption price equal to the greater of (i) 100% of the aggregate principal amount of the fixed rate notes to be redeemed, and (ii) as determined by the Quotation Agent, the sum of the present values of the remaining scheduled payments of principal and interest on the fixed rate notes to be redeemed (not including any portion of interest accrued on such fixed rate notes as of the date of redemption) assuming that such fixed rate notes would mature on the applicable Par Call Date but for the redemption, discounted to the date of redemption on a semi-annual basis (assuming a 360-day year consisting of twelve 30-day months) at the Adjusted Treasury Rate (as defined below) plus _____ basis points in the case of the 20 _____ notes or _____ basis points in the case of the 20 _____ notes, plus in either case accrued and unpaid interest, if any, on the aggregate principal amount of the fixed rate notes being redeemed up to, but excluding, the date of redemption.

On and after the applicable Par Call Date, the fixed rate notes will be redeemable at Spirit's option, in whole at any time or in part from time to time, for cash, at a redemption price equal to 100% of the aggregate principal amount of the fixed rate notes to be redeemed, plus accrued and unpaid interest, if any, on the aggregate principal amount of the fixed rate notes being redeemed up to, but excluding, the date of redemption.

"*Adjusted Treasury Rate*" means, with respect to any redemption date, the rate per annum equal to the semi-annual equivalent yield to maturity of the Comparable Treasury Issue, assuming a price for the Comparable Treasury Issue (expressed as a percentage of its principal amount) equal to the Comparable Treasury Price for such redemption date.

"*Comparable Treasury Issue*" means, with respect to any redemption date, the United States Treasury security selected by the Quotation Agent as having a maturity comparable to the remaining term of the notes to be redeemed (assuming that such notes matured on the applicable Par Call Date) that would be utilized, at the time of selection and in accordance with customary financial practice, in pricing new issues of corporate debt securities of comparable maturity to the remaining term of such fixed rate notes to be redeemed.

Edgar Filing: Spirit AeroSystems Holdings, Inc. - Form 424B5

Table of Contents

"*Comparable Treasury Price*" means, with respect to any redemption date, (i) the average as determined by the Company of the Reference Treasury Dealer Quotations for such redemption date, after excluding the highest and lowest such Reference Treasury Dealer Quotations, or (ii) if the Company obtains fewer than four such Reference Treasury Dealer Quotations, the average determined by the Company of all such quotations.

"*Par Call Date*" means, (i) with respect to the 20 notes, , 20 (the date that is months prior to the maturity date of the 20 notes) and (ii) with respect to the 20 notes, , 20 (the date that is months prior to the maturity date of the 20 notes).

"*Quotation Agent*" means the Reference Treasury Dealer appointed by Spirit.

"*Reference Treasury Dealer*" means (i) each of Merrill Lynch, Pierce, Fenner & Smith Incorporated, Citigroup Global Markets Inc., Goldman Sachs & Co. LLC and Morgan Stanley & Co. LLC and their respective successors; provided, however, that if any of the foregoing ceases to be a primary U.S. Government securities dealer in New York City (a "Primary Treasury Dealer"), Spirit will substitute therefor another Primary Treasury Dealer; and (ii) any other Primary Treasury Dealer selected by Spirit.

"*Reference Treasury Dealer Quotations*" means, with respect to each Reference Treasury Dealer and any redemption date, the average, as determined by the Quotation Agent, of the bid and asked prices for the Comparable Treasury Issue (expressed in each case as a percentage of its principal amount) quoted in writing to the Company by such Reference Treasury Dealer at 5:00 p.m., New York City time, on the third business day preceding such redemption date.

The trustee has no responsibility for any calculation or determination in respect of the establishment of the redemption price and shall be entitled to receive and rely conclusively upon an officer's certificate that states the redemption price.

General

Notice of any redemption will be delivered at least 10 days but not more than 60 days before the redemption date to each holder of the notes of the series to be redeemed. Unless Spirit defaults in payment of the redemption price, on and after the redemption date, interest will cease to accrue on the notes of such series or portions thereof called for redemption.

If less than all of the notes of a series are to be redeemed, the notes to be redeemed shall be selected by the trustee pro rata, by lot, or by such method the trustee deems to be fair and appropriate, and the depository will then select beneficial interests in the notes to be redeemed in accordance with applicable procedures.

Change of Control Offer to Repurchase

If a Change of Control Triggering Event occurs, unless we have exercised our right to redeem the notes in full, as described above under "Optional Redemption," holders of notes of each series will have the right to require us to repurchase all or a portion of such holder's notes pursuant to the offer described below (the "Change of Control Offer"). In the Change of Control Offer, Spirit will offer payment, in cash, equal to 101% of the aggregate principal amount of notes of each series repurchased plus accrued and unpaid interest, if any, on the notes repurchased up to but excluding the date of repurchase, subject to the rights of holders of notes on the relevant record date to receive interest due on the relevant interest payment date.

Within 30 days following the date upon which the Change of Control Triggering Event occurred, or at our option, prior to any Change of Control but after the public announcement of such pending Change of Control, we will be required to send, by first class mail, a notice to holders of notes, with a

Table of Contents

copy to the trustee, which notice will govern the terms of the Change of Control Offer. Such notice will state, among other things, the repurchase date, which must be no earlier than 30 days nor later than 60 days from the date such notice is mailed, other than as may be required by law (the "Change of Control Payment Date"). The notice, if mailed prior to the date of consummation of the Change of Control, may state that the Change of Control Offer is conditioned on the Change of Control being consummated on or prior to the Change of Control Payment Date. Holders of notes electing to have their notes repurchased pursuant to a Change of Control Offer will be required to surrender their notes, with the form entitled "Option of Holder to Elect Purchase" on the reverse of the note completed, to the paying agent at the address specified in the notice, or transfer their notes to the paying agent by book-entry transfer pursuant to the applicable procedures of the paying agent, prior to the close of business on the third business day prior to the Change of Control Payment Date.

We will not be required to make a Change of Control Offer if a third party makes such an offer in the manner, at the times and otherwise in compliance with the requirements for such an offer made by us and such third party purchases all notes properly tendered and not withdrawn under its offer.

We will comply with the requirements of Rule 14e-1 under the Exchange Act and any other securities laws and regulations thereunder to the extent those laws and regulations are applicable in connection with the repurchase of the notes as a result of a Change of Control Triggering Event. To the extent that the provisions of any such securities laws or regulations conflict with the Change of Control Offer provisions of the notes, we will comply with those securities laws and regulations and will not be deemed to have breached our obligations under the Change of Control Offer provisions of the notes by virtue of any such conflict.

The definition of "Change of Control" includes a phrase relating to the direct or indirect sale, lease, transfer, conveyance or other disposition of "all or substantially all" of the assets of Holdings and its subsidiaries, or Spirit and its subsidiaries, taken as a whole. Although there is a limited body of case law interpreting the phrase "substantially all," there is no precise, established definition of the phrase under applicable law. Accordingly, the ability of a holder of notes to require us to repurchase the notes as a result of a sale, lease, transfer, conveyance or other disposition of less than all of the assets of Holdings and its subsidiaries, or Spirit and its subsidiaries, taken as a whole, to another "person" (as that term is used in Section 13(d)(3) of the Exchange Act) may be uncertain.

For purposes of the Change of Control Offer discussion above, the following definitions are applicable:

"*Below Investment Grade Rating Event*" with respect to the notes means that such notes become rated below Investment Grade by each Rating Agency on any date from the date of the public notice by Holdings or Spirit of an arrangement that results in a Change of Control until the end of the 60-day period following the earlier of (i) the occurrence of a Change of Control and (ii) such public notice by Holdings or Spirit of an arrangement that could result in a Change of Control (which period will be extended so long as the rating of such notes is under publicly announced consideration for possible downgrade by any of the Rating Agencies).

"*Change of Control*" means the occurrence of any one of the following:

- (1) the direct or indirect sale, lease, transfer, conveyance or other disposition (other than by way of merger or consolidation), in one or a series of related transactions, of all or substantially all of the assets of Holdings and its subsidiaries, or Spirit and its subsidiaries, taken as a whole, to any "person" (as that term is used in Section 13(d)(3) of the Exchange Act) other than to Holdings or one of its subsidiaries;
- (2) the consummation of any transaction (including without limitation, any merger or consolidation) the result of which is that any "person" (as that term is used in Section 13(d)(3) of the Exchange Act) other than Holdings or one of its subsidiaries becomes the "beneficial owner"

Table of Contents

(as defined in Rules 13d-3 and 13d-5 under the Exchange Act), directly or indirectly, of more than 50% of the outstanding Voting Stock of Holdings or Spirit, measured by voting power rather than number of shares provided that a merger shall not constitute a "change of control" under this definition if (i) the sole purpose of the merger is our reincorporation in another state and (ii) our shareholders and the number of shares of our Voting Stock, measured by voting power and number of shares, owned by each of them immediately before and immediately following such merger are identical;

(3) the adoption by the holders of Voting Stock of Holdings of a plan relating to the liquidation, dissolution or winding up of Holdings; or

(4) Holdings ceases to own 100% of the equity interests of Issuer.

"*Change of Control Triggering Event*" means the occurrence of both a Change of Control and a Below Investment Grade Rating Event. Notwithstanding the foregoing, no Change of Control Triggering Event will be deemed to have occurred in connection with any particular Change of Control unless and until such Change of Control has actually been consummated.

"*Investment Grade*" means a rating of BBB or better by S&P (or its equivalent under any successor rating category of S&P) and a rating of Baa3 or better by Moody's (or its equivalent under any successor rating category of Moody's).

"*Moody's*" means Moody's Investors Service, Inc., and its successors.

"*Rating Agency*" means (1) each of S&P and Moody's; and (2) if either S&P or Moody's ceases to rate the notes of each series or fails to make a rating of the notes of each series publicly available for reasons outside of Spirit's control, a "nationally recognized statistical rating organization" as defined in Section 3(a)(62) of the Exchange Act, selected by us (as certified by a resolution of the board of directors of Holdings and reasonably acceptable to the trustee) as a replacement agency for S&P or Moody's, or all of them, as the case may be.

"*S&P*" means S&P Global Ratings, a division of The McGraw-Hill Companies, Inc., and its successors.

"*Voting Stock*" of any specified person as of any date means any and all shares or equity interests (however designated) of such person that are ordinarily, in the absence of contingencies, entitled to vote generally in the election of the board of directors, managers or trustees of such person (or persons performing similar functions) as applicable, even if the right so to vote has been suspended by the happening of a contingency.

Certain Covenants

The indenture does not contain any provisions that would limit our ability to incur indebtedness or that would afford holders of notes protection in the event of a sudden and significant decline in the credit quality of Holdings or Spirit or a takeover, recapitalization or highly leveraged or similar transaction involving Holdings or Spirit.

Limitation on Liens

Holdings will not, and will not permit any Restricted Subsidiary (as defined below) to create, incur, assume, or permit to exist any mortgage, security interest, pledge, lien or other encumbrance ("Liens") upon (i) any Principal Property or (ii) upon any shares of stock of any Restricted Subsidiary, in each

Edgar Filing: Spirit AeroSystems Holdings, Inc. - Form 424B5

Table of Contents

case to secure debt for money borrowed, without equally and ratably securing the notes of each series. This restriction, however, will not apply to:

Liens on property, shares of stock or indebtedness of any person existing at the time such person becomes a Restricted Subsidiary;

Liens on property existing at the time of acquisition of such property directly or indirectly by Holdings or a Restricted Subsidiary, or Liens to secure the payment of all or any part of the purchase price of such property upon the acquisition of such property or to secure indebtedness incurred prior to, at the time of, or within 180 days after, the acquisition of such property for the purpose of financing all or any part of the purchase price thereof;

Liens on Principal Property being constructed or improved securing loans to finance such construction or improvements;

Liens to secure indebtedness of a Restricted Subsidiary owing to Holdings or another Restricted Subsidiary;

Liens existing at the date of the indenture;

statutory Liens of carriers, warehousemen, mechanics, materialmen and other Liens imposed by law or created in the ordinary course of business which are not delinquent or which are being contested in good faith;

Liens securing (i) the non-delinquent performance of bids, trade contracts (other than for borrowed money) or statutory obligations, (ii) surety bonds (excluding appeal bonds and other bonds posted in connection with court proceedings or judgments) and (iii) other non-delinquent obligations of a like nature (including those to secure health, safety and environmental obligations), in each case incurred in the ordinary course of business;

Liens on property of a person existing at the time such person, or the parent entity of such person, is merged into or consolidated with Holdings or a Restricted Subsidiary or at the time of a sale, lease or other disposition of the properties of a person, or the parent entity of such person, as an entirety or substantially as an entirety to Holdings or a Restricted Subsidiary;

Liens in favor of governmental entities or other special purpose entities established by governmental entities (including without limitation for industrial revenue bonds, new market tax credits, pollution control bonds or any other issuance of tax-exempt governmental obligations);

Liens securing obligations in respect of capital leases on assets subject to such leases;

Liens arising by reason of any judgment, decree or other of any court, so long as any appropriate legal proceedings which may have been initiated for the review of such judgment, decree or order shall not have been finally terminated or so long as the period within which such proceedings may be initiated shall not have expired; any deposit or pledge with any surety company or clerk of any court, or in escrow, as collateral in connection with, or in lieu of, any bond on appeal from any judgment or decree against Holdings or any Subsidiary, or in connection with other proceedings or actions at law or in equity by or against Holdings or any Subsidiary;

Liens created in connection with a transaction financed with, and created to secure indebtedness that is not recourse to, our assets or those of any Restricted Subsidiary;

zoning restrictions, easements, rights-of-way, restrictions on use of real property and other similar encumbrances or Liens incurred in the ordinary course of business which, in the aggregate, are not substantial in amount and do not materially detract from the value of the property subject thereto or interfere with the ordinary conduct of the business of Holdings or any of its Subsidiaries; and

S-24

Table of Contents

extensions, renewals or replacements of any Lien referred to in the preceding bullets.

Notwithstanding the restrictions outlined in the preceding paragraph, Holdings or any Restricted Subsidiary will be permitted to issue, assume, guarantee or permit to exist any debt for money borrowed secured by a Lien in addition to those permitted, above, without equally and ratably securing each series of the notes, provided that, after giving effect to such Lien, the aggregate amount of all debt for money borrowed so secured by Liens (not including permitted Liens as described in the preceding paragraph) does not exceed the greater of (i) 15% of the Consolidated Net Tangible Assets of Holdings and its consolidated subsidiaries measured as of the date of the incurrence of any such debt (giving *pro forma* effect to the application of the proceeds therefrom and any transaction in connection with which such debt is being incurred) or (ii) \$600 million.

Limitation on Sale and Leasebacks

Holdings will not, and will not permit any Restricted Subsidiary to, enter into any sale and leaseback transaction with respect to any Principal Property other than any such transaction involving a lease for a term of not more than three years or any lease between Holdings and a Restricted Subsidiary or between Restricted Subsidiaries, unless either:

Holdings or such Restricted Subsidiary would be entitled to incur debt for money borrowed secured by a Lien on such Principal Property at least equal in amount to the Attributable Debt (as defined below) with respect to such sale and leaseback transaction, without equally and ratably securing the notes; or

Holdings or a Restricted Subsidiary shall apply an amount in cash equal to the greater of the net proceeds of such sale and the Attributable Debt with respect to such sale and leaseback transaction to:

the retirement of senior indebtedness that matures more than twelve months after the creation of such senior indebtedness; or

the acquisition, construction, development or improvement of properties, facilities or equipment that are, or upon such acquisition, construction, development or improvement will be, or will be a part of, a Principal Property.

For purposes of the covenants set forth above, the following definitions are applicable:

The term "*Attributable Debt*" when used in connection with a sale and leaseback transaction referred to above shall mean the total net amount of rent (discounted at the weighted average yield to maturity of our outstanding senior debt securities) required to be paid during the remaining term of the applicable lease.

The term "*Consolidated Net Tangible Assets*" means the total amount of assets minus:

all applicable reserves;

all current liabilities (excluding any liabilities which are by their terms extendible or renewable at the option of the obligor to a time more than 12 months after the time as of which the amount thereof is being computed and excluding current maturities of long-term indebtedness); and

all goodwill, trade names, trademarks, patents, unamortized debt discount and expense and other like intangible assets,

all as shown in Holdings' audited consolidated balance sheet contained in Holdings then most recent annual report to stockholders, except that assets will include an amount equal to the Attributable Debt in respect of any sale and leaseback transaction not capitalized on such balance sheet.

Table of Contents

The term "*Principal Property*" means any building, structure or other facility located within the United States (other than its territories and possessions) and owned by the Holdings or any Restricted Subsidiary, the book value of which is not less than the greater of (i) 2% of the Consolidated Net Tangible Assets of Holdings and its consolidated Subsidiaries measured as of the date of the incurrence of any such indebtedness or (b) \$75 million; provided that the term "Principal Property" does not include any such property or asset that is financed through the issuance of tax exempt governmental obligations or an industrial revenue bond, pollution control bond or similar financing arrangement with any U.S. federal, state or municipal government or other governmental body or agency.

The term "*Restricted Subsidiary*" means any Subsidiary (a) substantially all the property of which is located within the United States (other than its territories and possessions) and (b) that owns any Principal Property; provided that the term "Restricted Subsidiary" shall include Spirit and shall not include any Subsidiary that is principally engaged in leasing or in financing receivables or that is principally engaged in financing Holdings' operations outside the United States (other than its territories and possessions), and shall not include Kansas Industrial Energy Supply Company.

The term "*Subsidiary*" means a person more than 50% of the outstanding voting stock of which is owned, directly or indirectly, by Holdings or by one or more other Subsidiaries.

Consolidation, Merger and Sale of Assets

Neither Spirit nor Holdings may consolidate or merge with or into, or sell, lease, convey, transfer or otherwise dispose of its property and assets substantially as an entirety to another person unless:

(i) Spirit or Holdings is the surviving entity, as applicable, or (ii) the successor entity, if other than Spirit or Holdings, is a U.S. corporation, partnership, limited liability company or trust and assumes by supplemental indenture all of Spirit's or Holdings' obligations, as applicable, under the notes or the guarantees, respectively, and the indenture;

immediately after giving effect to the transaction, no Event of Default, and no event that, after notice or lapse of time or both, would become an Event of Default, has occurred and is continuing; and

as a result of any consolidation, merger, sale or lease, conveyance or transfer or other disposition described in this covenant, properties or assets of Spirit or any Restricted Subsidiary would become subject to any Lien that would not be permitted by the lien restriction described above without equally and ratably securing the notes, Spirit or Holdings or such successor entity, as the case may be, will take the steps as are necessary to secure effectively the notes equally and ratably with, or prior to, all debt for borrowed money secured by those Liens as described above, such lien securing the notes to be effective only for so long as such properties or assets shall remain subject to such additional Lien.

In connection with any transaction that is covered by this covenant, we must deliver to the trustee an officer's certificate and an opinion of counsel each stating that the transaction complies with the terms of the indenture.

In the case of any such consolidation, merger, sale, transfer or other conveyance or disposition, but not a lease, in a transaction in which there is a successor entity to Spirit or Holdings, the successor entity will succeed to, and be substituted for, Spirit or Holdings, respectively, under the indenture and Spirit or Holdings, respectively, will be released from its obligations under the notes or the guarantees, as applicable, and the indenture.

Table of Contents

Events of Default

Any one of the following is an "Event of Default" with respect to the notes of each series:

if Spirit defaults in the payment of interest on the notes of such series, and such default continues for 30 days;

if Spirit defaults in the payment of the principal or any premium on the notes of such series when due by declaration, when called for redemption or otherwise;

if Holdings or Spirit fails to perform or breaches any covenant or warranty in the notes of such series or in the indenture and applicable to the notes of such series or the related guarantees continuing for 90 days after notice to Spirit by the trustee or by holders of at least 25% in principal amount of the outstanding notes of such series;

if certain events of bankruptcy or insolvency occur with respect to Spirit or Holdings (the "bankruptcy or insolvency provision");

the guarantees of Holdings cease to be in full force and effect in all material respects or are declared null and void in a judicial proceeding or Holdings denies or disaffirms its obligations under the guarantees (except, in any case, as contemplated by the terms of the indenture) and such default continues for 30 days after notice that Holdings denies or disavows its obligations under the guarantee; and

default under any mortgage, indenture or instrument under which there may be issued or by which there may be secured or evidenced any indebtedness for money borrowed by Holdings or any of its subsidiaries (or the payment of which is guaranteed by the Holdings or any of its subsidiaries), whether such indebtedness or guarantee now exists, or is created after the date of this prospectus supplement, if that default:

- (i) is caused by a failure to pay principal on such indebtedness at its stated final maturity (after giving effect to any applicable grace periods provided in such indebtedness) (a "Payment Default"); or
- (ii) results in the acceleration of such indebtedness prior to its express maturity (an "Acceleration Event"),

and (i) in each case, the principal amount of any such indebtedness, together with the principal amount of any other such indebtedness under which there has been a Payment Default or an Acceleration Event, aggregates \$100 million or more and (ii) in the case of a Payment Default, such indebtedness is not discharged and, in the case of an Acceleration Event, such acceleration is not rescinded or annulled, within 10 days after written notice has been given by the trustee or the holders of at least 25% in principal amount of all of the outstanding notes of such series.

If an Event of Default (other than the bankruptcy or insolvency provision) with respect to the notes of a series occurs and is continuing, the trustee or the holders of at least 25% in principal amount of all of the outstanding notes of such series may declare the principal of all the notes of such series to be due and payable. When such declaration is made, the principal of the notes of such series will be immediately due and payable. If a bankruptcy or insolvency event occurs, the principal of and accrued and unpaid interest on the notes will immediately become due and payable without any declaration or other act on the part of the trustee or the holders of the notes. The holders of a majority in principal amount of notes of a series may rescind such declaration or acceleration and its consequences with respect to the notes of such series if the rescission would not conflict with any judgment or decree and if all existing events of default with respect to the notes of such series have been cured or waived (other than nonpayment of principal or interest that has become due solely as a result of acceleration).

Edgar Filing: Spirit AeroSystems Holdings, Inc. - Form 424B5

Table of Contents

Holders of notes may not enforce the indenture or the notes, except as provided in the indenture. The trustee may require indemnity satisfactory to it before it enforces the indenture or the notes. Subject to certain limitations, the holders of more than 50% in principal amount of the outstanding notes of a series may direct the time, method and place of conducting any proceeding for any remedy available to the trustee or exercising any trust or power of the trustee with respect to the notes of such series. The trustee may withhold from holders notice of any continuing default (except a default in the payment of principal or interest) if it determines that withholding notice is in their interests.

Modification and Waiver

We may amend or modify the indenture without the consent of any holder of notes of any series affected by the modifications or amendments in order to:

cure any ambiguity, omission, defect or inconsistency;

conform the text of the indenture, including any supplemental indenture, or the notes to any corresponding provision of this "Description of the Notes" or the "Description of Debt Securities" found in the accompanying prospectus;

provide for the issuance of additional notes of any series;

provide for the assumption of our obligations in the case of either a merger or consolidation and our discharge upon such assumption provided that the provisions under "Consolidation, Merger and Sale of Assets" of the indenture are complied with;

add covenants or make any change that would provide any additional rights or benefits to the holders of the notes of any series;

add guarantees with respect to the notes or release Holdings as guarantor in accordance with the indenture;

provide for uncertificated notes in addition to or in place of certificated notes;

secure the notes;

add or appoint a successor or separate trustee;

obtain or maintain the qualification of the indenture under the Trust Indenture Act; or

make any other change that does not adversely affect the rights of any holder of notes.

Other amendments and modifications of the indenture or the notes of any series issued may be made with the consent of the holders of at least a majority of the aggregate principal amount of the outstanding notes of each series affected thereby, and our compliance with any provision of the indenture with respect to the notes of a series may be waived by written notice to the trustee by the holders of a majority of the aggregate principal amount of the outstanding notes of each series affected thereby. However, no modification or amendment of the indenture or the notes of any series may, without the consent of each holder of outstanding notes of each series affected thereby:

Edgar Filing: Spirit AeroSystems Holdings, Inc. - Form 424B5

reduce the principal amount, any premium or change the stated maturity of any debt security or alter or waive any of the provisions with respect to the redemption or repurchase of the notes of such series;

change the place of payment or currency in which principal, any premium or interest is paid;

impair the right to institute suit for the enforcement of any payment on the notes of such series;

reduce the interest rate or extend the time for payment of interest on the notes of such series;

S-28

Table of Contents

make any change to the amendment provisions which require the consent of each holder of notes of such series or make any changes to the waiver provisions in the indenture; or

reduce the amount payable upon the repurchase of any note of such series or change the time at which any note of such series may be repurchased as described under " Change of Control Offer to Repurchase," whether through an amendment or waiver of provisions in the covenants, definitions or otherwise.

Except for certain specified provisions, the holders of at least a majority in principal amount of the outstanding notes of a series may, on behalf of the holders of all notes of such series, waive our compliance with provisions of the indenture. The holders of a majority in aggregate principal amount of the outstanding notes of a series may, on behalf of the holders of all the notes of such series, waive any past default or Event of Default under the indenture with respect to such notes and its consequences, except (i) a default or Event of Default with respect to such series in the payment of the principal of, or premium or any interest on, the notes of such series or (ii) a default or Event of Default in respect of a covenant or provision that cannot be modified or amended without the consent of all of the holders of the outstanding notes of such series.

Satisfaction and Discharge

The indenture will be discharged and will, subject to certain surviving provisions, cease to be of further effect as to all notes of a series issued thereunder when:

(1) we deliver to the trustee all outstanding notes of such series issued under the indenture (other than notes replaced because of mutilation, loss, destruction or wrongful taking) for cancellation; or

(2) all notes of such series outstanding under the indenture and not previously delivered to the trustee for cancellation have become due and payable, whether at maturity or as a result of the mailing or sending of a notice of redemption or will become due and payable within one year (including as result of the mailing or sending of a notice of redemption), and we irrevocably deposit with the trustee as funds in trust solely for the benefit of the holders of notes of such series, cash in U.S. dollars, noncallable U.S. government securities, or a combination thereof, sufficient, in the written opinion of a nationally recognized firm of independent public accountants without consideration of any reinvestment, to pay at maturity or upon redemption all notes of such series outstanding under the indenture, including interest thereon.

The trustee will acknowledge satisfaction and discharge of the indenture on our demand accompanied by an officer's certificate and an opinion of counsel, upon which the trustee shall have no liability in relying, stating that all conditions precedent to satisfaction and discharge have been complied with and at our cost and expense.

Defeasance of Notes and Certain Covenants in Certain Circumstances

Legal Defeasance. The indenture provides that, in certain circumstances, we may be discharged from any and all obligations in respect of the notes of a series (except for certain obligations to register the transfer or exchange of notes, to replace stolen, lost or mutilated notes, and to maintain paying agencies and certain provisions relating to the treatment of funds held by paying agents). We will be so discharged upon the deposit with the trustee, in trust, of money and/or U.S. government obligations that, through the payment of interest and principal in accordance with their terms, will provide money in an amount sufficient, without consideration of any reinvestment, in the written opinion of a nationally recognized firm of independent public accountants, a nationally recognized investment bank or a nationally recognized appraisal firm to pay and discharge each installment of principal, premium and interest in accordance with the terms of the indenture and the notes of such series.

Table of Contents

This discharge may occur only if, among other things, we have delivered to the trustee an opinion of counsel stating that we have received from, or there has been published by, the United States Internal Revenue Service a ruling or, since the date of execution of the indenture, there has been a change in the applicable United States federal income tax law, in either case to the effect that, and based thereon such opinion shall confirm that, the beneficial owners of the notes of such series will not recognize income, gain or loss for U.S. federal income tax purposes as a result of the deposit, defeasance and discharge and will be subject to U.S. federal income tax on the same amounts and in the same manner and at the same times as would have been the case if the deposit, defeasance and discharge had not occurred.

Defeasance of Certain Covenants. The indenture provides that, upon compliance with certain conditions, we may be released from our obligation to comply with certain covenants, or covenant defeasance, set forth in the indenture and any supplemental indenture, including those described under " Certain Covenants," " Change of Control Offer to Repurchase" and " Consolidation, Merger and Sale of Assets," and any failure to comply with those covenants will not constitute a default or an Event of Default with respect to the notes of a series. If we exercise our covenant defeasance option, payment of the notes of such series may not be accelerated because of an Event of Default related to certain events of bankruptcy, insolvency or reorganization.

The conditions include:

depositing with the trustee money and/or U.S. government obligations that, through the payment of interest and principal in accordance with their terms, will provide money in an amount sufficient, without consideration of any reinvestment, in the written opinion of a nationally recognized firm of independent public accountants, a nationally recognized investment bank or a nationally recognized appraisal firm to pay and discharge each installment of principal of, premium and interest in accordance with the terms of the indenture and the notes of such series; and

delivering to the trustee an opinion of counsel to the effect that the beneficial owners of the notes of such series will not recognize income, gain or loss for U.S. federal income tax purposes as a result of the deposit and related covenant defeasance and will be subject to U.S. federal income tax on the same amounts and in the same manner and at the same times as would have been the case if the deposit and related covenant defeasance had not occurred.

Governing Law

The indenture and the notes will be governed by, and construed in accordance with, the laws of the State of New York.

The Trustee

The indenture provides that, except during the continuance of an Event of Default, the trustee will undertake to perform such duties and only such duties as are specifically set forth in such indenture. If an Event of Default has occurred and is continuing, the trustee will exercise such of the rights and powers vested in it under the indenture and use the same degree of care and skill in their exercise as a prudent person would exercise or use under the circumstances in the conduct of such person's own affairs.

The indenture and the provisions of the Trust Indenture Act, incorporated by reference therein, contain limitations on the rights of the trustee thereunder should it become a creditor of Holdings, Spirit or any of their subsidiaries, to obtain payment of claims in certain cases or to realize on certain property received by it in respect of any such claims, as security or otherwise. The trustee is permitted

Table of Contents

to engage in other transactions, provided that if it acquires any conflicting interest (as defined in the Trust Indenture Act), it must eliminate such conflict or resign.

Book-Entry, Delivery and Form

The notes of each series will be issued as fully-registered global notes which will be deposited with, or on behalf of, DTC and registered, at the request of DTC, in the name of Cede & Co. Beneficial interests in the global notes will be represented through book-entry accounts of financial institutions acting on behalf of beneficial owners as direct or indirect participants in DTC. Investors may elect to hold their interests in the global notes through either DTC (in the United States) or (in Europe) through Clearstream or through Euroclear. Investors may hold their interests in the global notes directly if they are participants of such systems, or indirectly through organizations that are participants in these systems. Interests held through Clearstream and Euroclear will be recorded on DTC's books as being held by the U.S. depository for each of Clearstream and Euroclear (the "U.S. Depositories"), which U.S. Depositories will, in turn, hold interests on behalf of their participants' customers' securities accounts. Beneficial interests in the global notes will be held in denominations of \$2,000 and integral multiples of \$1,000 in excess thereof. Except as set forth below, the global notes may be transferred, in whole and not in part, only to another nominee of DTC or to a successor of DTC or its nominee.

Notes represented by a global note can be exchanged for definitive securities in registered form only if:

DTC notifies us that it is unwilling or unable to continue as depository for that global note and we do not appoint a successor depository within 90 days after receiving that notice;

at any time DTC ceases to be a clearing agency registered under the Exchange Act and we do not appoint a successor depository within 90 days after becoming aware that DTC has ceased to be registered as a clearing agency; or

we in our sole discretion determine that that global note will be exchangeable for definitive securities in registered form and notify the trustee of our decision.

A global note that can be exchanged as described in the preceding sentence will be exchanged for definitive securities issued in authorized denominations in registered form for the same aggregate amount. The definitive securities will be registered in the names of the owners of the beneficial interests in the global note as directed by DTC.

We will make principal and interest payments on all notes represented by a global note to the paying agent which in turn will make payment to DTC or its nominee, as the case may be, as the sole registered owner and the sole holder of the notes represented by a global note for all purposes under the indenture. Accordingly, we, the trustee and any paying agent will have no responsibility or liability for:

any aspect of DTC's records relating to, or payments made on account of, beneficial ownership interests in a debt security represented by a global note;

any other aspect of the relationship between DTC and its participants or the relationship between those participants and the owners of beneficial interests in a global note held through those participants; or

the maintenance, supervision or review of any of DTC's records relating to those beneficial ownership interests.

DTC has advised us that its current practice is to credit participants' accounts on each payment date with payments in amounts proportionate to their respective beneficial interests in the principal amount of such global note as shown on DTC's records, upon DTC's receipt of funds and

Table of Contents

corresponding detail information. The underwriters will initially designate the accounts to be credited. Payments by participants to owners of beneficial interests in a global note will be governed by standing instructions and customary practices, as is the case with securities held for customer accounts registered in "street name," and will be the sole responsibility of those participants. Book-entry notes may be more difficult to pledge because of the lack of a physical note.

S-32

Table of Contents

CERTAIN U.S. FEDERAL INCOME TAX CONSEQUENCES

This section describes certain U.S. federal income tax consequences of owning the notes we are offering. It applies to you only if you acquire notes in the offering at the offering price indicated on the cover of the prospectus supplement and you hold your notes as capital assets for tax purposes. This section does not apply to you if you are a member of a class of holders subject to special rules, such as:

a dealer in securities or currencies,

a trader in securities that elects to use a mark-to-market method of accounting for your securities holdings,

a bank,

a life insurance company,

a tax-exempt entity,

a person that owns notes that are a hedge or that are hedged against interest rate or currency risks,

a person that owns notes as part of a straddle or conversion transaction for tax purposes,

a person that purchases or sells notes as part of a wash sale for tax purposes,

a person that holds the notes through a non-U.S. broker or other non-U.S. intermediary,

a person required for U.S. federal income tax purposes to conform the timing of income accruals with respect to your notes to your financial statements under section 451 of the Code, or

a United States holder (as defined below) whose functional currency for tax purposes is not the U.S. dollar.

This section is based on the Internal Revenue Code of 1986, as amended, (the "Code") its legislative history, existing and proposed regulations under the Internal Revenue Code, published rulings and court decisions, all as currently in effect. These laws are subject to change, possibly on a retroactive basis.

If a partnership holds the notes, the U.S. federal income tax treatment of a partner will generally depend on the status of the partner and the tax treatment of the partnership. A partner in a partnership holding the notes should consult its tax advisor with regard to the U.S. federal income tax treatment of an investment in the notes.

Characterization of the Notes

As described under "Description of the Notes Change of Control Offer to Repurchase," there are certain circumstances under which we may be obligated to redeem or repurchase the notes. The possibility of such contingent payments could subject the notes to special rules that apply to contingent payment debt instruments. These rules generally require you to accrue interest income at a rate higher than the stated interest rate on the note and to treat as interest income (rather than capital gain) any gain recognized on a sale, exchange or retirement of your note before the resolution of the contingencies. Notwithstanding the possibility of such contingent payments, under applicable U.S. Treasury regulations,

Edgar Filing: Spirit AeroSystems Holdings, Inc. - Form 424B5

payments on a note that are subject to one or more contingencies that are, in the aggregate, remote or incidental or if other certain exceptions apply, may be ignored. We intend to take the position that the contingencies described above should not cause the notes to be subject to the rules governing contingent payment debt instruments. It is possible, however, that the Internal Revenue Service ("IRS") may take a contrary position, in which case the tax consequences to a holder could

S-33

Table of Contents

differ materially and adversely from those described below. The remainder of this disclosure assumes that the notes will not be treated as contingent payment debt instruments.

United States Holders

This subsection describes the tax consequences to a United States holder. You are a United States holder if you are a beneficial owner of a note and you are:

a citizen or resident of the United States,

a domestic corporation,

an estate whose income is subject to U.S. federal income tax regardless of its source, or

a trust if a United States court can exercise primary supervision over the trust's administration and one or more United States persons are authorized to control all substantial decisions of the trust or a trust that has made a qualified election to be treated as a United States person.

If you are not a United States holder, this subsection does not apply to you and you should refer to "United States Alien Holders" below.

Payments of Interest. You will be taxed on interest on your note as ordinary income at the time you receive the interest or when it accrues, depending on your method of accounting for tax purposes.

Purchase, Sale and Retirement of the Notes. Your tax basis in your note generally will be its cost. You will generally recognize capital gain or loss on the sale or retirement of your note equal to the difference between the amount you realize on the sale or retirement, excluding any amounts attributable to accrued but unpaid interest (which will be treated as interest payments), and your tax basis in your note. Your tax basis is generally the cost you paid for the note. Capital gain of a noncorporate United States holder is generally taxed at preferential rates where the property is held for more than one year.

Medicare Tax. A United States holder that is an individual or estate, or a trust that does not fall into a special class of trusts that is exempt from such tax, is subject to a 3.8% tax on the lesser of (1) the United States holder's "net investment income" (or "undistributed net investment income" in the case of an estate or trust) for the relevant taxable year and (2) the excess of the United States holder's modified adjusted gross income for the taxable year over a certain threshold (which in the case of individuals is between \$125,000 and \$250,000, depending on the individual's circumstances). A holder's net investment income generally includes its interest income and its net gains from the disposition of notes, unless such interest income or net gains are derived in the ordinary course of the conduct of a trade or business (other than a trade or business that consists of certain passive or trading activities). If you are a United States holder that is an individual, estate or trust, you are urged to consult your tax advisor regarding the applicability of the Medicare tax to your income and gains in respect of your investment in the notes.

United States Alien Holders

This subsection describes the tax consequences to a United States alien holder. You are a United States alien holder if you are the beneficial owner of a note and are, for U.S. federal income tax purposes:

a nonresident alien individual,

a foreign corporation, or

an estate or trust that in either case is not subject to United States federal income tax on a net income basis on income or gain from a note.

Edgar Filing: Spirit AeroSystems Holdings, Inc. - Form 424B5

Table of Contents

If you are a United States holder, this subsection does not apply to you.

Under United States federal income tax law, and subject to the discussions of FATCA withholding and backup withholding below, if you are a United States alien holder of a note:

we and other U.S. payors generally would not be required to deduct United States withholding tax from payments of principal, premium, if any, and interest, to you if, in the case of payments of interest:

1. you do not actually or constructively own 10% or more of the total combined voting power of all classes of stock of the Issuer entitled to vote,

2. you are not a controlled foreign corporation that is related to the Issuer through stock ownership, and

3. the U.S. payor does not have actual knowledge or reason to know that you are a United States person and:

a. you have furnished to the U.S. payor an IRS Form W-8BEN or W-8BEN-E or an acceptable substitute form upon which you certify, under penalties of perjury, that you are a non-United States person,

b. in the case of payments made outside the United States to you at an offshore account (generally, an account maintained by you at a bank or other financial institution at any location outside the United States), you have furnished to the U.S. payor documentation that establishes your identity and your status as the beneficial owner of the payment for United States federal income tax purposes and as a non-United States person,

c. the U.S. payor has received a withholding certificate (furnished on an appropriate IRS Form W-8 or an acceptable substitute form) from a person claiming to be:

i. a withholding foreign partnership (generally a foreign partnership that has entered into an agreement with the IRS to assume primary withholding responsibility with respect to distributions and guaranteed payments it makes to its partners),

ii. a qualified intermediary (generally a non-United States financial institution or clearing organization or a non-United States branch or office of a United States financial institution or clearing organization that is a party to a withholding agreement with the IRS), or

iii. a U.S. branch of a non-United States bank or of a non-United States insurance company,

and the withholding foreign partnership, qualified intermediary or U.S. branch has received documentation upon which it may rely to treat the payment as made to a non-United States person that is, for United States federal income tax purposes, the beneficial owner of the payment on the notes in accordance with U.S. Treasury regulations (or, in the case of a qualified intermediary, in accordance with its agreement with the IRS),

d. the U.S. payor receives a statement from a securities clearing organization, bank or other financial institution that holds customers' securities in the ordinary course of its trade or business,

Edgar Filing: Spirit AeroSystems Holdings, Inc. - Form 424B5

Table of Contents

i. certifying to the U.S. payor under penalties of perjury that an IRS Form W-8BEN or W-8BEN-E or an acceptable substitute form has been received from you by it or by a similar financial institution between it and you, and

ii. to which is attached a copy of the IRS Form W-8BEN or W-8BEN-E or acceptable substitute form, or

e. the U.S. payor otherwise possesses documentation upon which it may rely to treat the payment as made to a non-United States person that is, for United States federal income tax purposes, the beneficial owner of the payments on the notes in accordance with U.S. Treasury regulations; and

in the case of payments of interest, if you cannot meet any of the requirements listed above, such interest payments will generally be subject to withholding of United States federal income tax at a rate of 30%, unless you provide us or our paying agent with a properly executed IRS Form W-8BEN or W-8BEN-E claiming an exemption from (or reduction in) withholding under an applicable income tax treaty or a properly executed IRS Form W-8ECI claiming that the interest is effectively connected with your conduct of a United States trade or business. Such "effectively connected" interest will be taxed as described below.

no deduction for any United States federal withholding tax would be made from any proceeds that you realize on the sale or exchange of your note.

any gain that you recognize on the sale or exchange of your note generally is not subject to U.S. federal income tax unless (i) you are an individual and are present in the United States for 183 or more days in the taxable year of the sale or exchange and certain other conditions exist, in which case any such gain (net of certain U.S. source losses) will be subject to U.S. federal income tax at a rate of 30% (or at a reduced rate under an applicable income tax treaty) or (ii) such gain is effectively connected with your conduct of a United States trade or business (which will be taxed as described below).

with respect to any interest or gain that is effectively connected with your conduct of a United States trade or business, you will be subject to United States federal income tax generally in the same manner as if you were a United States holder unless an applicable income tax treaty provides otherwise. In addition, if you are a foreign corporation, you may be subject to a branch profits tax at a rate of 30% (or at a reduced rate under an applicable income tax treaty) with respect to your effectively connected earnings and profits (subject to certain adjustments). Any effectively connected interest or gain generally will not be subject to U.S. federal withholding tax unless an applicable income tax treaty provides otherwise.

FATCA Withholding

Pursuant to sections 1471 through 1474 of the Code, commonly known as the Foreign Account Tax Compliance Act ("FATCA"), a 30% withholding tax ("FATCA withholding") may be imposed on certain payments to you or to certain foreign financial institutions, investment funds and other non-US persons receiving payments on your behalf if you or such persons fail to comply with certain information reporting requirements. Such payments will include US-source interest and the gross proceeds from the sale or other disposition of debt securities that can produce US-source interest. Payments of interest that you receive in respect of the notes could be affected by this withholding if you are subject to the FATCA information reporting requirements and fail to comply with them or if you hold notes through a non-US person (e.g., a foreign bank or broker) that fails to comply with these requirements (even if payments to you would not otherwise have been subject to FATCA withholding). Payments of gross proceeds from a sale or other disposition of notes could also be subject to FATCA withholding unless such disposition occurs before January 1, 2019. Certain countries have entered into,

Table of Contents

and other countries are expected to enter into, agreements with the United States to facilitate the type of information reporting required under FATCA. Such intergovernmental agreements may provide different rules with respect to non-U.S. financial institutions. You should consult your tax advisor regarding the relevant U.S. law and other official guidance on FATCA withholding.

Backup Withholding and Information Reporting

In general, if you are a noncorporate United States holder, we and other payors are required to report to the IRS all payments of principal, any premium and interest on your note. In addition, we and other payors are required to report to the IRS any payment of proceeds of the sale of your note before maturity within the United States. Additionally, backup withholding would apply to any payments, if you fail to provide an accurate taxpayer identification number, or (in the case of interest payments) you are notified by the IRS that you have failed to report all interest and dividends required to be shown on your federal income tax returns.

In general, if you are a United States alien holder, we and other payors are required to report payments of interest on your notes on IRS Form 1042-S. Payments of principal, premium or interest made by us and other payors to you would otherwise not be subject to information reporting and backup withholding, provided that the certification requirements described above under " United States Alien Holders" are satisfied or you otherwise establish an exemption. In addition, payment of the proceeds from the sale of notes effected at a United States office of a broker will not be subject to backup withholding and information reporting if (i) the payor or broker does not have actual knowledge or reason to know that you are a United States person and (ii) you have furnished to the payor or broker an appropriate IRS Form W-8, an acceptable substitute form or other documentation upon which it may rely to treat the payment as made to a non-United States person.

In general, payment of the proceeds from the sale of notes effected at a foreign office of a broker will not be subject to information reporting or backup withholding. However, a sale effected at a foreign office of a broker could be subject to information reporting in the same manner as a sale within the United States (and in certain cases may be subject to backup withholding as well) if (i) the broker has certain connections to the United States, (ii) the proceeds or confirmation are sent to the United States or (iii) the sale has certain other specified connections with the United States. In addition, certain foreign brokers may be required to report the amount of gross proceeds from the sale or other disposition of notes under FATCA if you are, or are presumed to be, a United States person.

You generally may obtain a refund of any amounts withheld under the backup withholding rules that exceed your income tax liability by filing a timely refund claim with the IRS.

Table of Contents

UNDERWRITING

Merrill Lynch, Pierce, Fenner & Smith Incorporated, Citigroup Global Markets Inc., Goldman Sachs & Co. LLC and Morgan Stanley & Co. LLC are acting as representatives of each of the underwriters named below. Subject to the terms and conditions set forth in an underwriting agreement among us and the representatives, we have agreed to sell to the underwriters, and each of the underwriters has agreed, severally and not jointly, to purchase from us, the principal amount of notes set forth opposite its name below.

| Underwriter | Principal Amount of Floating Rate Notes | Principal Amount of 20 Notes | Principal Amount of 20 Notes |
|---|--|---|---|
| Merrill Lynch, Pierce, Fenner & Smith Incorporated | \$ | \$ | \$ |
| Citigroup Global Markets Inc. | | | |
| Goldman Sachs & Co. LLC | | | |
| Morgan Stanley & Co. LLC | | | |
| Mizuho Securities USA LLC | | | |
| RBC Capital Markets, LLC | | | |
| Total | \$ | \$ | \$ |

Subject to the terms and conditions set forth in the underwriting agreement, the underwriters have agreed, severally and not jointly, to purchase all of the notes sold under the underwriting agreement if any of these notes are purchased. If an underwriter defaults, the underwriting agreement provides that the purchase commitments of the nondefaulting underwriters may be increased or the underwriting agreement may be terminated.

We have agreed to indemnify the several underwriters and their controlling persons against certain liabilities in connection with this offering, including liabilities under the Securities Act, or to contribute to payments the underwriters may be required to make in respect of those liabilities.

The underwriters are offering the notes, subject to prior sale, when, as and if issued to and accepted by them, subject to approval of legal matters by their counsel, including the validity of the notes, and other conditions contained in the underwriting agreement, such as the receipt by the underwriters of officer's certificates and legal opinions. The underwriters reserve the right to withdraw, cancel or modify offers to the public and to reject orders in whole or in part.

Commissions and Discounts

The representatives have advised us that the underwriters propose initially to offer the notes to the public at the public offering price set forth on the cover page of this prospectus supplement and to certain dealers at such price less a concession not in excess of % of the principal amount of the notes. After the initial offering, the public offering price, concession or any other term of the offering may be changed.

The expenses of the offering, not including the underwriting discounts, are estimated at \$ million and are payable by us.

New Issue of Notes

The notes are a new issue of securities with no established trading market. We do not intend to apply for listing of the notes on any national securities exchange or for inclusion of the notes on any automated dealer quotation system. We have been advised by the underwriters that they presently intend to make a market in the notes after completion of the offering. However, they are under no obligation to do so and may discontinue any market-making activities at any time without any notice.

Table of Contents

We cannot assure the liquidity of the trading market for the notes or that an active public market for the notes will develop. If an active public trading market for the notes does not develop, the market price and liquidity of the notes may be adversely affected. If the notes are traded, they may trade at a discount from their initial offering price, depending on prevailing interest rates, the market for similar securities, our operating performance and financial condition, general economic conditions and other factors.

Settlement

We expect that delivery of the notes will be made to investors on or about May , 2018, which will be the fifth business day following the date of this prospectus supplement (such settlement being referred to as "T+5"). Under Rule 15c6-1 under the Exchange Act, trades in the secondary market are required to settle in two business days, unless the parties to any such trade expressly agree otherwise. Accordingly, purchasers who wish to trade notes prior to the delivery of the notes hereunder will be required, by virtue of the fact that the notes initially settle in T+5, to specify an alternate settlement arrangement at the time of any such trade to prevent a failed settlement. Purchasers of the notes who wish to trade the notes prior to their date of delivery hereunder should consult their advisors.

No Sales of Similar Securities

We have agreed that we will not, for the period following the date of this prospectus supplement and ending on the issue date, without first obtaining the prior written consent of the representatives (which consent may be withheld at the sole discretion of the representatives), directly or indirectly, sell, offer to contract or grant any option to sell, pledge, transfer or otherwise dispose of, or file any registration statement under the Securities Act in respect of, any debt securities or securities exchangeable for or convertible into debt securities, except for the notes sold to the underwriters pursuant to the underwriting agreement.

Short Positions

In connection with the offering, the underwriters may purchase and sell the notes in the open market. These transactions may include short sales and purchases on the open market to cover positions created by short sales. Short sales involve the sale by the underwriters of a greater principal amount of notes than they are required to purchase in the offering. The underwriters must close out any short position by purchasing notes in the open market. A short position is more likely to be created if the underwriters are concerned that there may be downward pressure on the price of the notes in the open market after pricing that could adversely affect investors who purchase in the offering.

Similar to other purchase transactions, the underwriters' purchases to cover short sales may have the effect of raising or maintaining the market price of the notes or preventing or retarding a decline in the market price of the notes. As a result, the price of the notes may be higher than the price that might otherwise exist in the open market.

Neither we nor any of the underwriters make any representation or prediction as to the direction or magnitude of any effect that the transactions described above may have on the price of the notes. In addition, neither we nor any of the underwriters make any representation that the representatives will engage in these transactions or that these transactions, once commenced, will not be discontinued without notice.

Other Relationships

The underwriters and their respective affiliates are full service financial institutions engaged in various activities, which may include sales and trading, commercial and investment banking, advisory, investment management, investment research, principal investment, hedging, market making, brokerage and other financial and non-financial activities and services. Some of the underwriters and their

Table of Contents

affiliates have engaged in, and may in the future engage in, investment banking and other commercial dealings in the ordinary course of business with us or our affiliates. They have received, or may in the future receive, customary fees and commissions for these transactions. The underwriters and their affiliates in the ordinary course of business may at any time hold long or short positions, and may trade or otherwise effect transactions for their own accounts or the accounts of customers in securities of the issuer or its affiliates. In addition, affiliates of the underwriters may from time to time hold long or short positions in the 2022 notes for their own accounts or for the accounts of customers, and as a result, may elect to participate in the tender offer for their own accounts or for the accounts of customers and receive a portion of the proceeds of this offering. We have also retained Merrill Lynch, Pierce, Fenner & Smith Incorporated to act as the dealer manager for the tender offer of the 2022 notes, and we have agreed to reimburse Merrill Lynch, Pierce, Fenner & Smith Incorporated for its reasonable out-of-pocket expenses in connection with such tender offer. Certain of the underwriters (or their affiliates) are lenders under the senior term loan A facility under the existing senior credit facility and therefore will receive a portion of the net proceeds of the offering of the notes in connection with the refinancing. See "Use of Proceeds."

In addition, in the ordinary course of their business activities, the underwriters and their affiliates may make or hold a broad array of investments and actively trade debt and equity securities (or related derivative securities) and financial instruments (including bank loans) for their own account and for the accounts of their customers. Such investments and securities activities may involve securities and/or instruments of ours or our affiliates. Certain of the underwriters or their affiliates that have a lending relationship with us routinely hedge their credit exposure to us consistent with their customary risk management policies. Typically, such underwriters and their affiliates would hedge such exposure by entering into transactions which consist of either the purchase of credit default swaps or the creation of short positions in our securities, including potentially the notes offered hereby. Any such short positions could adversely affect future trading prices of the notes offered hereby. The underwriters and their affiliates may also make investment recommendations and/or publish or express independent research views in respect of such securities or financial instruments and may hold, or recommend to clients that they acquire, long and/or short positions in such securities and instruments.

Notice to Prospective Plan Investors

Each purchaser of the notes that is (1) an employee benefit plan subject to Title I of the Employee Retirement Income Security Act of 1974, as amended ("ERISA"), (2) a plan or account subject to Section 4975 of the Code or (3) an entity deemed to hold "plan assets" of any such employee benefit plan, plan or account, by acceptance of a note, will be deemed to have represented and warranted that a fiduciary acting on its behalf is causing it to purchase the notes and that such fiduciary:

- a) is a bank, an insurance carrier, a registered investment adviser, a registered broker-dealer or an independent fiduciary with at least \$50 million of assets under management or control as specified in 29 CFR Section 2510.3-21(c)(1)(i) (excluding an IRA owner or a relative of an IRA owner if the purchaser is an IRA);
- b) is independent (for purposes of 29 CFR Section 2510.3-21(c)(1)) of Spirit, each underwriter and their respective affiliates (the "Transaction Parties");
- c) is capable of evaluating investment risks independently, both in general and with regard to particular transactions and investment strategies, including the purchaser's transactions with the Transaction Parties hereunder ("the Transactions");
- d) has been advised that none of the Transaction Parties has undertaken or will undertake to provide impartial investment advice, or has given or will give advice in a fiduciary capacity, in connection with the Transactions;

Table of Contents

- e) is a "fiduciary" under Section 3(21)(A) of ERISA or Section 4975(e)(3) of the Code, or both, as applicable, with respect to, and is responsible for exercising independent judgment in evaluating, the Transactions; and
- f) understands and acknowledges the existence and nature of the underwriting discounts, commissions and fees, and any other related fees, compensation arrangements or financial interests, described in this prospectus supplement; and understands, acknowledges and agrees that no such discounts, commissions, fees or other compensation is a fee or other compensation for the provision of investment advice, and that none of the Transaction Parties, nor any of their respective directors, officers, members, partners, employees, principals or agents has received or will receive a fee or other compensation from the purchaser or such fiduciary for the provision of investment advice (rather than other services) in connection with the Transactions.

In the event that the regulation under Section 3(21) of ERISA issued by the U.S. Department of Labor on April 8, 2016 is no longer in effect, the representations above will be deemed to be no longer in effect, provided that such purchaser will be deemed to have represented and warranted that none of the Transaction Parties has acted as such purchaser's fiduciary in connection with the Transactions.

Notice to Prospective Investors in the European Economic Area

The notes are not intended to be offered, sold or otherwise made available to and should not be offered, sold or otherwise made available to any retail investor in the European Economic Area ("EEA"). For these purposes, a retail investor means a person who is one (or more) of: (i) a retail client as defined in point (11) of Article 4(1) of Directive 2014/65/EU (as amended, "MiFID II"); or (ii) a customer within the meaning of Directive 2002/92/EC (as amended, the "Insurance Mediation Directive"), where that customer would not qualify as a professional client as defined in point (10) of Article 4(1) of MiFID II; or (iii) not a qualified investor as defined in Directive 2003/71/EC (as amended, the "Prospectus Directive." Consequently no key information document required by Regulation (EU) No 1286/2014 (as amended, the "PRIIPs Regulation") for offering or selling the notes or otherwise making them available to retail investors in the EEA has been prepared and therefore offering or selling the notes or otherwise making them available to any retail investor in the EEA may be unlawful under the PRIIPs Regulation. This prospectus supplement has been prepared on the basis that any offer of notes in any Member State of the EEA will be made pursuant to an exemption under the Prospectus Directive from the requirement to publish a prospectus for offers of notes. This prospectus supplement is not a prospectus for the purposes of the Prospectus Directive.

Notice to Prospective Investors in the United Kingdom

In addition, in the United Kingdom, this prospectus supplement is being distributed only to, and is directed only at, and any offer subsequently made may only be directed at persons who are "qualified investors" (as defined in the Prospectus Directive) (i) who have professional experience in matters relating to investments falling within Article 19 (5) of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005, as amended (the "Order") and/or (ii) who are high net worth companies (or persons to whom it may otherwise be lawfully communicated) falling within Article 49(2)(a) to (d) of the Order (all such persons together being referred to as "relevant persons"). This prospectus supplement must not be acted on or relied on in the United Kingdom by persons who are not relevant persons. In the United Kingdom, any investment or investment activity to which this prospectus supplement relates is only available to, and will be engaged in with, relevant persons.

Notice to Prospective Investors in Switzerland

This prospectus supplement does not constitute an issue prospectus pursuant to Article 652a or Article 1156 of the Swiss Code of Obligations and the notes will not be listed on the SIX Swiss

Table of Contents

Exchange. Therefore, this prospectus supplement may not comply with the disclosure standards of the listing rules (including any additional listing rules or prospectus schemes) of the SIX Swiss Exchange. Accordingly, the notes may not be offered to the public in or from Switzerland, but only to a selected and limited circle of investors who do not subscribe to the notes with a view to distribution. Any such investors will be individually approached by the underwriters from time to time.

Notice to Prospective Investors in the Dubai International Financial Centre

This prospectus supplement relates to an Exempt Offer in accordance with the Offered Securities Rules of the Dubai Financial Services Authority ("DFSA"). This prospectus supplement is intended for distribution only to persons of a type specified in the Offered Securities Rules of the DFSA. It must not be delivered to, or relied on by, any other person. The DFSA has no responsibility for reviewing or verifying any documents in connection with Exempt Offers. The DFSA has not approved this prospectus supplement nor taken steps to verify the information set forth herein and has no responsibility for the prospectus supplement. The notes to which this prospectus supplement relates may be illiquid and/or subject to restrictions on their resale. Prospective purchasers of the notes offered should conduct their own due diligence on the notes. If you do not understand the contents of this prospectus supplement you should consult an authorized financial advisor.

Notice to Prospective Investors in Canada

The notes may be sold only to purchasers purchasing, or deemed to be purchasing, as principal that are accredited investors, as defined in National Instrument 45-106 Prospectus Exemptions or subsection 73.3(1) of the Securities Act (Ontario), and are permitted clients, as defined in National Instrument 31-103 Registration Requirements, Exemptions and Ongoing Registrant Obligations. Any resale of the notes must be made in accordance with an exemption from, or in a transaction not subject to, the prospectus requirements of applicable securities laws.

Securities legislation in certain provinces or territories of Canada may provide a purchaser with remedies for rescission or damages if this prospectus supplement (including any amendment hereto) contains a misrepresentation, provided that the remedies for rescission or damages are exercised by the purchaser within the time limit prescribed by the securities legislation of the purchaser's province or territory. The purchaser should refer to any applicable provisions of the securities legislation of the purchaser's province or territory for particulars of these rights or consult with a legal advisor.

Pursuant to section 3A.3 (or, in the case of securities issued or guaranteed by the government of a non-Canadian jurisdiction, section 3A.4) of National Instrument 33-105 Underwriting Conflicts (NI 33-105), the underwriters are not required to comply with the disclosure requirements of NI 33-105 regarding underwriter conflicts of interest in connection with this offering.

Notice to Prospective Investors in Hong Kong

The notes may not be offered or sold in Hong Kong by means of any document other than (i) in circumstances which do not constitute an offer to the public within the meaning of the Companies (Winding Up and Miscellaneous Provisions) Ordinance (Cap. 32 of the Laws of Hong Kong) ("Companies (Winding Up and Miscellaneous Provisions) Ordinance") or which do not constitute an invitation to the public within the meaning of the Securities and Futures Ordinance Ordinance (Cap. 571 of the Laws of Hong Kong) ("Securities and Futures Ordinance"), or (ii) to "professional investors" as defined in the Securities and Futures Ordinance and any rules made thereunder, or (iii) in other circumstances which do not result in the document being a "prospectus" as defined in the Companies (Winding Up and Miscellaneous Provisions) Ordinance, and no advertisement, invitation or document relating to the notes may be issued or may be in the possession of any person for the purpose of issue (in each case whether in Hong Kong or elsewhere), which is directed at, or the contents of which are likely to be accessed or read by, the public in Hong Kong (except if permitted to

Table of Contents

do so under the securities laws of Hong Kong) other than with respect to notes which are or are intended to be disposed of only to persons outside Hong Kong or only to "professional investors" in Hong Kong as defined in the Securities and Futures Ordinance and any rules made thereunder.

Notice to Prospective Investors in Singapore

This prospectus supplement has not been registered as a prospectus with the Monetary Authority of Singapore. Accordingly, this prospectus supplement and any other document or material in connection with the offer or sale, or invitation for subscription or purchase, of the notes may not be circulated or distributed, nor may the notes be offered or sold, or be made the subject of an invitation for subscription or purchase, whether directly or indirectly, to persons in Singapore other than (i) to an institutional investor (as defined in Section 4A of the Securities and Futures Act, Chapter 289 of Singapore (the "SFA")) under Section 274 of the SFA, (ii) to a relevant person (as defined in Section 275(2) of the SFA) pursuant to Section 275(1) of the SFA, or any person pursuant to Section 275(1A) of the SFA, and in accordance with the conditions specified in Section 275 of the SFA or (iii) otherwise pursuant to, and in accordance with the conditions of, any other applicable provision of the SFA, in each case subject to conditions set forth in the SFA.

Where the notes are subscribed or purchased under Section 275 of the SFA by a relevant person which is a corporation (which is not an accredited investor (as defined in Section 4A of the SFA)) the sole business of which is to hold investments and the entire share capital of which is owned by one or more individuals, each of whom is an accredited investor, the securities (as defined in Section 239(1) of the SFA) of that corporation shall not be transferable for 6 months after that corporation has acquired the notes under Section 275 of the SFA except: (1) to an institutional investor under Section 274 of the SFA or to a relevant person (as defined in Section 275(2) of the SFA), (2) where such transfer arises from an offer in that corporation's securities pursuant to Section 275(1A) of the SFA, (3) where no consideration is or will be given for the transfer, (4) where the transfer is by operation of law, (5) as specified in Section 276(7) of the SFA, or (6) as specified in Regulation 32 of the Securities and Futures (Offers of Investments) (Shares and Debentures) Regulations 2005 of Singapore ("Regulation 32").

Where the notes are subscribed or purchased under Section 275 of the SFA by a relevant person which is a trust (where the trustee is not an accredited investor (as defined in Section 4A of the SFA)) whose sole purpose is to hold investments and each beneficiary of the trust is an accredited investor, the beneficiaries' rights and interest (howsoever described) in that trust shall not be transferable for 6 months after that trust has acquired the notes under Section 275 of the SFA except: (1) to an institutional investor under Section 274 of the SFA or to a relevant person (as defined in Section 275(2) of the SFA), (2) where such transfer arises from an offer that is made on terms that such rights or interest are acquired at a consideration of not less than S\$200,000 (or its equivalent in a foreign currency) for each transaction (whether such amount is to be paid for in cash or by exchange of securities or other assets), (3) where no consideration is or will be given for the transfer, (4) where the transfer is by operation of law, (5) as specified in Section 276(7) of the SFA, or (6) as specified in Regulation 32.

Notice to Prospective Investors in Japan

The securities have not been and will not be registered under the Financial Instruments and Exchange Act of Japan (Act No. 25 of 1948, as amended), or the FIEA. The securities may not be offered or sold, directly or indirectly, in Japan or to or for the benefit of any resident of Japan (including any person resident in Japan or any corporation or other entity organized under the laws of Japan) or to others for reoffering or resale, directly or indirectly, in Japan or to or for the benefit of any resident of Japan, except pursuant to an exemption from the registration requirements of the FIEA and otherwise in compliance with any relevant laws and regulations of Japan.

Table of Contents

VALIDITY OF THE NOTES

The validity of the notes offered hereby will be passed upon for us by Sullivan & Cromwell LLP, New York, New York. Certain legal matters will be passed upon for the underwriters by Cahill Gordon & Reindel LLP, New York, New York.

S-44

Table of Contents

EXPERTS

The consolidated financial statements of Spirit AeroSystems Holdings, Inc. incorporated by reference in Spirit AeroSystems Holdings, Inc.'s Annual Report (Form 10-K) for the year ended December 31, 2017, and the effectiveness of Spirit AeroSystems Holdings, Inc.'s internal control over financial reporting as of December 31, 2017, have been audited by Ernst & Young LLP, independent registered public accounting firm as set forth in their reports thereon, incorporated by reference therein, and incorporated herein by reference. Such consolidated financial statements are incorporated herein by reference in reliance upon such reports given on the authority of such firm as experts in auditing and accounting.

S-45

Table of Contents

Prospectus

Spirit AeroSystems, Inc.
Spirit AeroSystems Holdings, Inc.
Debt Securities

We may use this prospectus from time to time to offer and sell debt securities. This prospectus also covers guarantees, if any, of our payment obligations, which we may give on terms to be determined at the time of the offering. We refer to our debt securities and guarantees collectively as the "debt securities." We will provide specific terms of these debt securities, and the manner in which these debt securities will be offered, in supplements to this prospectus.

You should carefully read this prospectus and the applicable prospectus supplement, as well as the documents incorporated by reference, before you invest. The supplements may add, update or change information contained in this prospectus. **This prospectus may not be used to offer and sell securities unless accompanied by a prospectus supplement.**

Our common stock is listed for trading on the New York Stock Exchange under the symbol "SPR."

Investing in our securities involves risks. You should carefully read the section entitled "Risk Factors" beginning on page 1 of this prospectus, the section entitled "Risk Factors" in the applicable prospectus supplement and the risk factors contained in our periodic reports and other information filed with the Securities and Exchange Commission before investing in the debt securities.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined if this prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

The date of this prospectus is May 17, 2016

Table of Contents

TABLE OF CONTENTS

As permitted under the rules of the Securities and Exchange Commission, this prospectus incorporates important information about Spirit AeroSystems Holdings, Inc. that is contained in documents we file with the Securities and Exchange Commission but that are not included in or delivered with this prospectus. You may obtain copies of these documents, without charge, from the website maintained by the Securities and Exchange Commission at <http://www.sec.gov>, as well as other sources. See "Where You Can Find More Information."

| | |
|--|------------|
| <u>About this Prospectus</u> | <u>ii</u> |
| <u>Cautionary Statement Regarding Forward-Looking Statements</u> | <u>iii</u> |
| <u>Prospectus Summary</u> | <u>1</u> |
| <u>Consolidated Ratio of Earnings to Fixed Charges</u> | <u>1</u> |
| <u>Risk Factors</u> | <u>1</u> |
| <u>Use of Proceeds</u> | <u>2</u> |
| <u>Description of Debt Securities</u> | <u>3</u> |
| <u>Plan of Distribution</u> | <u>7</u> |
| <u>Legal Matters</u> | <u>7</u> |
| <u>Experts</u> | <u>7</u> |
| <u>Incorporation of Certain Information by Reference</u> | <u>7</u> |
| <u>Where You Can Find More Information</u> | <u>8</u> |

ABOUT THIS PROSPECTUS

In this prospectus, unless the context indicates otherwise, the terms the "Company," "we," "us" and "our" refer to Spirit AeroSystems Holdings, Inc. and all entities owned or controlled by Spirit AeroSystems Holdings, Inc., including Spirit AeroSystems, Inc. The term "Spirit" refers solely to Spirit AeroSystems, Inc. and the terms "Spirit Holdings" or "Holdings" refer only to Spirit AeroSystems Holdings, Inc. References to "OEM" refer to commercial aerospace original equipment manufacturer.

This prospectus is part of an automatic "shelf" registration statement on Form S-3 that we filed with the Securities and Exchange Commission (the "SEC"), as a "well-known seasoned issuer" as defined in Rule 405 under the Securities Act of 1933, as amended (the "Securities Act"). Under this shelf registration process, we may, from time to time, sell an indeterminate amount of the debt securities described in this prospectus in one or more offerings.

This prospectus provides you with a general description of the debt securities we may offer. Each time we offer debt securities under this shelf registration, we will provide you with a prospectus supplement that will contain specific information about the terms of the offering. When we refer to a "prospectus supplement," we are also referring to any free writing prospectus or other offering material authorized by us. The prospectus supplement may also supplement, update or change information contained in this prospectus. If there is any inconsistency between the information in this prospectus and the prospectus supplement, you should rely on the information in the prospectus supplement. The registration statement we filed with the SEC includes exhibits that provide more details of the matters discussed in this prospectus. You should read this prospectus and the related exhibits filed with the SEC and any accompanying prospectus supplement together with additional information described under the headings "Incorporation of Certain Information by Reference" and "Where You Can Find More Information" before investing. The shelf registration statement, including the exhibits thereto, can be read at the SEC's website or at the SEC's Public Reference Room as described under "Where You Can Find More Information."

You should rely only on the information incorporated by reference or provided in this prospectus. We have not authorized anyone else to provide you with different or additional information. If anyone provides you with different or additional information, you should not rely on it. These securities are

Table of Contents

not being offered in any state where the offer is not permitted. The information in this prospectus is accurate as of the date on the front cover. The information we have filed and will file with the SEC that is incorporated by reference into this prospectus is accurate as of the filing date of those documents. Our business, financial condition, results of operations and prospects may have changed since those dates and may change again.

We may offer debt securities for sale directly to purchasers or through underwriters, broker-dealers or agents. The names of any underwriters, broker-dealers or agents employed in the sale of debt securities covered by this prospectus, the principal amount of such debt securities to be purchased by such underwriters, broker-dealers or agents, and the compensation, if any, of such underwriters, broker-dealers or agents will be set forth in an accompanying prospectus supplement.

CAUTIONARY STATEMENT REGARDING FORWARD-LOOKING STATEMENTS

This prospectus contains certain "forward-looking statements" that may involve many risks and uncertainties. Forward-looking statements reflect our current expectations or forecasts of future events. Forward-looking statements generally can be identified by the use of forward-looking terminology such as "anticipate," "believe," "continue," "estimate," "expect," "forecast," "intend," "may," "plan," "project," "should," "will," and other similar words or phrases, or the negative thereof, unless the context requires otherwise. These statements reflect management's current views with respect to future events and are subject to risks and uncertainties, both known and unknown. Our actual results may vary materially from those anticipated in forward-looking statements. We caution investors not to place undue reliance on any forward-looking statements.

Important factors that could cause actual results to differ materially from those reflected in such forward-looking statements and that should be considered in evaluating our outlook include, but are not limited to, the following:

our ability to continue to grow our business and execute our growth strategy, including the timing, execution and profitability of new and maturing programs;

our ability to perform our obligations and manage costs related to our new and maturing commercial, business aircraft and military development programs and the related recurring production;

margin pressures and the potential for additional forward losses on new and maturing programs;

our ability to accommodate, and the cost of accommodating, announced increases in the build rates of certain aircraft;

the effect on aircraft demand and build rates of changing customer preferences for business aircraft, including the effect of global economic conditions on the business aircraft market and expanding conflicts or political unrest in the Middle East or Asia;

customer cancellations or deferrals as a result of global economic uncertainty;

the effect of economic conditions in the industries and markets in which we operate in the U.S. and globally and any changes therein, including fluctuations in foreign currency exchange rates;

the success and timely execution of key milestones such as receipt of necessary regulatory approvals and customer adherence to their announced schedules;

our ability to successfully negotiate future pricing under our supply agreements with The Boeing Company ("Boeing"), Airbus S.A.S., a division of Airbus Group NV ("Airbus") and our other customers;

our ability to enter into profitable supply arrangements with additional customers;

iii

Edgar Filing: Spirit AeroSystems Holdings, Inc. - Form 424B5

Table of Contents

the ability of all parties to satisfy their performance requirements under existing supply contracts with our two major customers, Boeing and Airbus, and other customers, and the risk of nonpayment by such customers;

any adverse impact on Boeing's and Airbus' production of aircraft resulting from cancellations, deferrals or reduced orders by their customers or from labor disputes or acts of terrorism;

any adverse impact on the demand for air travel or our operations from the outbreak of diseases or epidemic or pandemic outbreaks;

our ability to avoid or recover from cyber-based or other security attacks, information technology failures or other disruptions;

returns on pension plan assets and the impact of future discount rate changes on pension obligations;

our ability to borrow additional funds or refinance debt;

competition from commercial aerospace original equipment manufacturers and other aerostructures suppliers;

the effect of governmental laws, such as U.S. export control laws and U.S. and foreign anti-bribery laws such as the Foreign Corrupt Practices Act and the United Kingdom Bribery Act, and environmental laws and agency regulations, both in the U.S. and abroad;

any reduction in our credit ratings;

our dependence on our suppliers, as well as the cost and availability of raw materials and purchased components;

our ability to recruit and retain highly-skilled employees and our relationships with the unions representing many of our employees;

spending by the U.S. and other governments on defense;

the possibility that our cash flows and borrowing facilities may not be adequate for our additional capital needs or for payment of interest on and principal of our indebtedness;

our exposure under our existing senior revolving credit facility to higher interest payments should interest rates increase substantially;

the effectiveness of any interest rate hedging programs;

Edgar Filing: Spirit AeroSystems Holdings, Inc. - Form 424B5

the effectiveness of our internal control over financial reporting;

the outcome or impact of ongoing or future litigation, claims and regulatory actions; and

our exposure to potential product liability and warranty claims.

These factors are not exhaustive and it is not possible for us to predict all factors that could cause actual results to differ materially from those reflected in our forward-looking statements. These factors speak only as of the date hereof, and new factors may emerge or changes to the foregoing factors may occur that could impact our business. As with any projection or forecast, these statements are inherently susceptible to uncertainty and changes in circumstances.

Except to the extent required by law, we undertake no obligation to, and expressly disclaim any obligation to, publicly update or revise any forward-looking statements, whether as a result of new information, future events or otherwise. You should review carefully the section captioned "Risk Factors" in this prospectus, the section captioned "Risk Factors" in our most recent Annual Report on Form 10-K, and our updates to those Risk Factors in our most recent Quarterly Report on Form 10-Q and in the sections captioned "Management's Discussion and Analysis of Financial Condition and Results of Operations" in our most recent Annual Report on Form 10-K and Quarterly Report on Form 10-Q for a more complete discussion of these and other factors that may affect our business. In light of such risks and uncertainties, we caution you not to rely on these forward-looking statements in deciding whether to invest in our debt securities.

Table of Contents**PROSPECTUS SUMMARY****Our Company**

This summary highlights some of the information incorporated by reference into this prospectus. Because this is only a summary, it does not contain all of the information that may be important to you. You should carefully read this prospectus and the applicable prospectus supplement, if any, including the documents incorporated by reference, which are described under "Incorporation by Reference of Certain Documents" and "Where You Can Find More Information." You should also carefully consider, among other things, the matters discussed in the section entitled "Risk Factors."

Our Business

We are one of the largest independent non-OEM aircraft parts designers and manufacturers of commercial aerostructures in the world, based on annual revenues, as well as the largest independent supplier of aerostructures to Boeing. In addition, we are one of the largest independent suppliers of aerostructures to Airbus. Boeing and Airbus are the two largest aircraft OEMs in the world. Aerostructures are structural components such as fuselages, propulsion systems and wing systems for commercial and military aircraft.

Our Principal Offices and Websites

Spirit Holdings was incorporated in the state of Delaware on February 7, 2005. Our principal offices are located at 3801 South Oliver, Wichita, Kansas 67210 and our telephone number at that address is (316) 526-9000. Our website address is www.spiritaero.com. **Information contained on this website is not part of this prospectus and is not incorporated in this prospectus by reference.**

CONSOLIDATED RATIO OF EARNINGS TO FIXED CHARGES

The following table sets forth our ratio of earnings to fixed charges for the periods indicated.

| | Three Months Ended | | Twelve Months Ended | | | |
|------------------------------------|--------------------|--------------|---------------------|--------------|--------------|--------------|
| | March 31, | December 31, | December 31, | December 31, | December 31, | December 31, |
| | 2016 | 2015 | 2014 | 2013 | 2012 | 2011 |
| Ratio of earnings to fixed charges | 17.8 | 13.5 | 3.7 | (4.3)(1) | 1.1 | 4.1 |

(1)

Due to the registrant's loss in 2013, the ratio coverage was less than 1:1. The registrant needed to generate additional earnings of \$432.3 million to achieve a coverage ratio of 1:1.

RISK FACTORS

An investment in our securities involves a high degree of risk. Before making an investment decision, you should consider carefully the risks and uncertainties described under "Risk Factors" and "Cautionary Statement Regarding Forward-Looking Statements" in the applicable prospectus supplement, if any, and in our most recent Annual Report on Form 10-K, our updates to those Risk Factors in our most recent Quarterly Report on Form 10-Q and Current Reports on Form 8-K, including any amendments to such reports, incorporated in the registration statement of which this prospectus is a part, together with all other information contained and incorporated by reference in this prospectus and the applicable prospectus supplements. In addition to those risk factors, there may be additional risks and uncertainties of which management is not aware or focused on or that management deems immaterial. Our business, financial condition or results of operations could be materially adversely affected by any of these risks and you could lose all or part of your investment. The risks discussed below also include forward-looking statements and our actual results may differ substantially from those discussed in these forward-looking statements. See "Cautionary Statement Regarding Forward-Looking Statements."

Table of Contents

USE OF PROCEEDS

We intend to use the net proceeds from the sales of debt securities in the manner and for the purposes set forth in the applicable prospectus supplement. Pending any specific application, we may initially use those proceeds for general corporate purposes.

Table of Contents

DESCRIPTION OF DEBT SECURITIES

The following is a general description of the debt securities which may be issued from time to time by us under this prospectus. The particular terms relating to each debt security will be set forth in a prospectus supplement.

The Indenture

The debt securities covered by this prospectus may be issued in one or more series under an indenture (an "indenture"), between us and The Bank of New York Mellon Trust Company, N.A., as trustee. The form of the indenture has been filed as an exhibit to the registration statement of which this prospectus is a part. The indenture will be subject to and governed by the Trust Indenture Act of 1939, as amended. The statements herein relating to the debt securities and the indenture are summaries and are subject to the detailed provisions of the indenture. The description below is a summary and does not contain all the information you may find useful. We urge you to read the indenture because it, and not this summary, defines many of your rights as a holder of our debt securities.

There is no requirement under the indenture that future issues of our debt securities be issued under such indenture, and we will be free to use other indentures or documentation, containing provisions different from those included in the indenture or applicable to one or more series of debt securities, in connection with future issues of such other debt securities.

To the extent the debt securities are guaranteed, the guarantees will be set forth in the indenture and supplements thereto.

General

The debt securities will be our general obligations. The aggregate principal amount of debt securities that we may issue under the indenture is unlimited. We may issue senior or subordinated debt securities under the indenture up to the aggregate principal amount authorized by our board of directors from time to time.

The indenture provides that the debt securities will be issued in one or more series. The debt securities may be issued at various times and may have differing maturity dates and may bear interest at differing rates. Without the consent of the holders of the debt securities, we may reopen a previous issue of debt securities under the indenture, unless the reopening is restricted when the series of debt securities is created.

Each prospectus supplement relating to a particular offering of debt securities will describe the specific terms of debt securities. Those specific terms will include the following:

the title of the debt securities;

the price or prices (expressed as a percentage of the principal amount) at which we will issue the debt securities;

whether the debt securities will be senior debt securities or subordinated debt securities, and if they are subordinated debt securities, the terms of the subordination;

any limit on the aggregate principal amount of the debt securities;

the date or dates on which we will pay the principal on the debt securities and the right if any, to extend such date or dates;

the rate or rates (which may be fixed or variable) per annum or the method used to determine the rate or rates (including any commodity, commodity index, stock exchange index or financial

Edgar Filing: Spirit AeroSystems Holdings, Inc. - Form 424B5

Table of Contents

index) at which the debt securities will bear interest, the date or dates from which interest will accrue, the date or dates on which interest will commence and be payable and any regular record date for the interest payable on any interest payment date;

the right, if any, to extend the interest periods and the duration of that extension;

the place or places where principal of, and premium, if any, and interest on, the debt securities will be payable;

the terms and conditions upon which we may redeem the debt securities;

any obligation we have to redeem or purchase the debt securities pursuant to any sinking fund or analogous provisions or at the option of a holder of debt securities;

the dates on which and the price or prices at which we will repurchase debt securities at the option of the holders of debt securities and other detailed terms and provisions of these repurchase obligations;

the denominations in which the debt securities will be issued, if other than minimum denominations of \$2,000 and integral multiples of \$1,000 in excess thereof;

whether the debt securities will be issued in the form of certificated debt securities or global debt securities;

the portion of principal amount of the debt securities payable upon declaration of acceleration of the maturity date, if other than the principal amount;

whether the debt securities will be "original issue discount" securities for federal income tax purposes;

the designation of the currency or currencies in which payment of principal of, and premium and interest on, the debt securities will be made if other than U.S. dollars;

any provisions relating to any security provided for the debt securities;

any addition to or change in the events of default described in the indenture with respect to the debt securities and any change in the acceleration provisions described in the indenture with respect to the debt securities;

any addition to or change in the covenants described in the indenture with respect to the debt securities;

any other terms of the debt securities, which may modify or delete any provision of the indenture as it applies to that series; and

any depositories, interest rate calculation agents, exchange rate calculation agents or other agents with respect to the debt securities.

Edgar Filing: Spirit AeroSystems Holdings, Inc. - Form 424B5

Except where specifically described in the applicable prospectus supplement, the indenture does not contain any covenants designed to protect holders of the debt securities against a reduction in our creditworthiness in the event of a highly leveraged transaction or to prohibit other transactions which may adversely affect holders of the debt securities.

Exchange and Transfer

Debt securities may be transferred or exchanged at the office of the registrar or co-registrar designated by us.

Edgar Filing: Spirit AeroSystems Holdings, Inc. - Form 424B5

Table of Contents

We will not impose a service charge for any transfer or exchange, but we may require holders to pay any tax or other governmental charges associated with any transfer or exchange.

In the event of any redemption of debt securities of any series, we will not be required to:

issue, register the transfer of, or exchange, any debt security of that series during a period beginning at the opening of 15 business days before the day of sending of a notice of redemption and ending at the close of business on the day such notice is sent; or

register the transfer of or, exchange any, debt security of that series selected, called or being called for redemption, in whole or in part, except the unredeemed portion of any series being redeemed in part.

We may initially appoint the trustee as the registrar. Any transfer agent, in addition to the registrar initially designated by us, will be named in the prospectus supplement. We may designate additional transfer agents or change transfer agents or change the office of the transfer agent. However, we will be required to maintain a transfer agent in each place of payment for the debt securities of each series.

Global Securities

The debt securities of any series may be represented, in whole or in part, by one or more global securities. Each global security will:

be registered in the name of a depository that we will identify in a prospectus supplement;

be deposited with the trustee as custodian for the depository or its nominee; and

bear any required legends.

No global security may be exchanged in whole or in part for debt securities registered in the name of any person other than the depository or any nominee unless:

the depository has notified us that it is unwilling or unable to continue as depository or has ceased to be qualified to act as depository, and in either case we fail to appoint a successor depository registered as a clearing agency under the Exchange Act within 90 days of such event;

we execute and deliver to the trustee an officer's certificate to the effect that such global securities shall be so exchangeable; or

an event of default with respect to the debt securities represented by such global securities shall have occurred and be continuing.

As long as the depository, or its nominee, is the registered owner of a global security, the depository or nominee will be considered the sole owner and holder of the debt securities represented by the global security for all purposes under the indenture. Except in the above limited circumstances, owners of beneficial interests in a global security:

will not be entitled to have the debt securities registered in their names;

Edgar Filing: Spirit AeroSystems Holdings, Inc. - Form 424B5

will not be entitled to physical delivery of certificated debt securities; and

will not be considered to be holders of those debt securities under the indenture.

Payments on a global security will be made to the depositary or its nominee as the holder of the global security. Some jurisdictions have laws that require that certain purchasers of securities take physical delivery of such securities in definitive form. These laws may impair the ability to transfer beneficial interests in a global security.

Institutions that have accounts with the depositary or its nominee are referred to as "participants." Ownership of beneficial interests in a global security will be limited to participants and to persons that

Table of Contents

may hold beneficial interests through participants. The depositary will credit, on its book-entry registration and transfer system, the respective principal amounts of debt securities represented by the global security to the accounts of its participants. Each person owning a beneficial interest in a global security must rely on the procedures of the depositary (and, if such person is not a participant, on procedures of the participant through which such person owns its interest) to exercise any rights of a holder under the indenture.

Ownership of beneficial interests in a global security will be shown on and effected through records maintained by the depositary, with respect to participants' interests, or by any participant, with respect to interests of persons held by participants on their behalf. Payments, transfers and exchanges relating to beneficial interests in a global security will be subject to policies and procedures of the depositary. The depositary policies and procedures may change from time to time. Neither we nor the trustee will have any responsibility or liability for the depositary's acts or omissions or any participant's records with respect to beneficial interests in a global security.

Payment and Paying Agent

The provisions of this subsection will apply to the debt securities unless otherwise indicated in the prospectus supplement. Payment of interest on a debt security on any interest payment date will be made to the person in whose name the debt security is registered at the close of business on the regular record date. Payment on debt securities of a particular series will be payable at the office of a paying agent or paying agents designated by us. However, at our option, we may pay interest by mailing a check to the record holder.

We may also name any other paying agents in the prospectus supplement. We may designate additional paying agents, change paying agents or change the office of any paying agent. However, we will be required to maintain a paying agent in each place of payment for the debt securities of a particular series.

Subject to any applicable abandoned property law, all moneys paid by us to a paying agent for payment on any debt security that remain unclaimed at the end of two years after such payment was due will be repaid to us. Thereafter, the holder may look only to us for such payment.

Governing Law

The laws of the State of New York will govern each indenture and will govern the debt securities without giving effect to applicable principles of conflicts of law to the extent that the application of the law of another jurisdiction would be required thereby.

Regarding the Trustee

The Bank of New York Mellon Trust Company, N.A. will act as trustee under the indenture. From time to time, we may also enter into other banking or other relationships with The Bank of New York Mellon Trust Company, N.A. or its affiliates.

Table of Contents

PLAN OF DISTRIBUTION

We may sell the offered securities to one or more underwriters for public offering and sale by them or may sell the offered securities to investors directly or through agents, which agents may be affiliated with us. Any underwriter or agent involved in the offer and sale of the offered securities will be named in the applicable prospectus supplement.

LEGAL MATTERS

The validity of the issuance of the securities offered hereby will be passed upon for us by Kaye Scholer LLP, New York, New York. If legal matters in connection with offerings made by this prospectus and any prospectus supplement are passed on by counsel for any underwriters or agents, that counsel will be named in the applicable prospectus supplement.

EXPERTS

The consolidated financial statements for the year ended December 31, 2013 incorporated in this prospectus by reference to the Annual Report on Form 10-K of Spirit AeroSystems Holdings, Inc. for the year ended December 31, 2015 have been so incorporated in reliance on the report of PricewaterhouseCoopers LLP, an independent registered public accounting firm, given on the authority of said firm as experts in auditing and accounting.

The consolidated financial statements of Spirit AeroSystems Holdings, Inc. at December 31, 2015 and 2014, and for each of the two years in the period ended December 31, 2015, appearing in the Annual Report on Form 10-K of Spirit AeroSystems Holdings, Inc. for the year ended December 31, 2015 and the effectiveness of Spirit AeroSystems Holdings, Inc.'s internal control over financial reporting as of December 31, 2015 have been audited by Ernst & Young LLP, independent registered public accounting firm, as set forth in their report thereon, included therein, and incorporated herein by reference. Such consolidated financial statements are incorporated herein by reference in reliance upon such reports given on the authority of such firm as experts in auditing and accounting.

INCORPORATION OF CERTAIN INFORMATION BY REFERENCE

This prospectus incorporates important business and financial information about the Company that is not included in or delivered with this prospectus. We incorporate by reference the documents listed below and any additional documents filed by us with the SEC under Section 13(a), 13(c), 14 or 15(d) of the Exchange Act, to the extent such documents are deemed "filed" for purposes of the Exchange Act after the date of this prospectus until all of our debt securities offered under this prospectus are sold:

our Annual Report on Form 10-K for the year ended December 31, 2015 and any amendments thereto;

our Quarterly Report on Form 10-Q for the Quarter ended March 31, 2016;

the portions of our Definitive Proxy Statement on Schedule 14A filed with the SEC on March 18, 2016 that are incorporated by reference in our Annual Report on Form 10-K for the fiscal year ended December 31, 2015; and

our Current Reports on Form 8-K, filed on February 16, 2016, March 1, 2016 and April 25, 2016.

Any statement contained in this prospectus or in a document incorporated or deemed to be incorporated by reference herein shall be deemed to be modified or superseded for purposes of this prospectus to the extent that a statement contained in this prospectus or in any other subsequently filed document which also is or is deemed to be incorporated by reference herein modifies or supersedes

Table of Contents

such statement. Any statement so modified or superseded shall not be deemed, except as so modified or superseded, to constitute a part of this prospectus. You can obtain any of the documents incorporated by reference through us, the SEC or the SEC's website, <http://www.sec.gov>. Documents we have incorporated by reference are available from us without charge, excluding exhibits to those documents unless we have specifically incorporated by reference such exhibits in this prospectus. Any person, including any beneficial owner, to whom this prospectus is delivered, may obtain the documents we have incorporated by reference in, but not delivered with, this prospectus by requesting them by telephone or in writing at the following address:

Spirit AeroSystems Holdings, Inc.
3801 South Oliver
Wichita, Kansas 67210
Attention: Corporate Secretary
(316) 526-9000

This prospectus summarizes documents and other information in a manner we believe to be accurate, but we refer you to the actual documents for a more complete understanding of the information we discuss in this prospectus. In making an investment decision, you must rely on your own examination of such documents, our business and the terms of the offering, including the merits and risks involved. When we refer to this prospectus, we mean not only this prospectus but also any documents which are incorporated or deemed to be incorporated in this prospectus by reference. You should rely only on the information incorporated by reference or provided in this prospectus or any supplement to this prospectus. We have not authorized anyone else to provide you with different information. This prospectus is used to offer and sell the debt securities referred to in this prospectus, and only under circumstances and in jurisdictions where it is lawful to do so. The information contained in this prospectus is current only as of the date of this prospectus.

WHERE YOU CAN FIND MORE INFORMATION

We have filed with the SEC a registration statement on Form S-3 under the Securities Act with respect to the securities offered hereby. This prospectus, which is a part of the registration statement, does not contain all of the information set forth in the registration statement or the exhibits and schedules filed therewith. For further information with respect to us and our securities offered by this prospectus, please see the registration statement and the exhibits filed with the registration statement. Statements contained in this prospectus regarding the contents of any contract or any other document that is filed as an exhibit to the registration statement are not necessarily complete, and each such statement is qualified in all respects by reference to the full text of such contract or other document that is filed as an exhibit to the registration statement.

We are a reporting company and file annual, quarterly and current reports, proxy statements and other information with the SEC. You may read and copy any document we file with the SEC at the SEC's Public Reference Room at 100 F Street, N.E., Washington, D.C. 20549. You may obtain information on the operation of the Public Reference Room by calling the SEC at 1-800-SEC-0330. The SEC maintains an Internet site that contains our reports, proxy and other information regarding us at <http://www.sec.gov>. Our SEC filings are also available free of charge at our website (www.spiritaero.com). The information on or accessible through our website is not incorporated by reference into this prospectus.

\$

Spirit AeroSystems, Inc.

\$ **Senior Floating Rate Notes due 2021**

\$ **% Senior Notes due 20**

\$ **% Senior Notes due 20**

Prospectus Supplement

Joint Book-Running Managers

**BofA Merrill Lynch
Mizuho Securities**

Citigroup

Goldman Sachs & Co. LLC

**Morgan Stanley
RBC Capital Markets**

May , 2018
