

Spirit AeroSystems Holdings, Inc.

Form 424B3

December 22, 2010

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**Filed Pursuant to Rule 424(b)(3)
Registration No. 333-171116**

PROSPECTUS

Spirit AeroSystems, Inc.

**OFFER TO EXCHANGE
\$300,000,000 OF 63/4% SENIOR NOTES DUE 2020
FOR
\$300,000,000 OF 63/4% SENIOR NOTES DUE 2020
WHICH HAVE BEEN REGISTERED
UNDER THE SECURITIES ACT OF 1933, AS AMENDED
THE EXCHANGE OFFER AND WITHDRAWAL RIGHTS WILL EXPIRE AT
5:00 P.M., NEW YORK CITY TIME, ON JANUARY 25, 2011, UNLESS EXTENDED.**

Terms of the exchange offer:

The notes being offered hereby (the Exchange Notes) are being registered with the Securities and Exchange Commission and are being offered in exchange for all of the Spirit AeroSystems, Inc. (Spirit) outstanding 63/4% Senior Notes due 2020 or (the Original Notes) that were previously issued in an offering exempt from the registration requirements of the Securities Act of 1933, as amended (the Securities Act). The terms of the exchange offer are summarized below and are more fully described in this prospectus.

Spirit will exchange all Original Notes that are validly tendered and not withdrawn prior to the expiration of the exchange offer.

You may withdraw tenders of Original Notes at any time prior to the expiration of the exchange offer.

Spirit believes that the exchange of Original Notes will not be a taxable event for U.S. federal income tax purposes, but you should see The Exchange Offer Tax Consequences of the Exchange Offer and Material U.S. Federal Income Tax Considerations on pages 48 and 102, respectively, of this prospectus for more information.

Spirit will not receive any proceeds from the exchange offer.

The terms of the Exchange Notes are substantially identical to the Original Notes, except that the Exchange Notes are registered under the Securities Act and the transfer restrictions and registration rights applicable to the Original Notes do not apply to the Exchange Notes.

The Exchange Notes will be guaranteed on a senior unsecured basis by Spirit AeroSystems Holdings, Inc., and by each of the following wholly owned subsidiaries of Spirit AeroSystems Holdings, Inc.: Spirit AeroSystems Finance, Inc., Spirit AeroSystems International Holdings, Inc., Spirit AeroSystems Investco, LLC, Spirit AeroSystems North Carolina, Inc., Spirit Defense, Inc. and Spirit AeroSystems Operations International, Inc.

Spirit does not intend to list the Exchange Notes on any securities exchange or to have them approved for any automated quotation system.

See the section entitled "Description of the Notes" that begins on page 54 for more information about the Exchange Notes to be issued in this exchange offer.

Each broker-dealer that receives Exchange Notes for its own account pursuant to the exchange offer must acknowledge that it will deliver a prospectus in connection with any resale of such Exchange Notes. The letter of transmittal states that by so acknowledging and by delivering a prospectus, a broker-dealer will not be deemed to admit that it is an "underwriter" within the meaning of the Securities Act. This prospectus, as it may be amended or supplemented from time to time, may be used by a broker-dealer in connection with resales of Exchange Notes received in exchange for outstanding Original Notes where such outstanding Original Notes were acquired by such broker-dealer as a result of market-making activities or other trading activities. Spirit has agreed that, for a period of 180 days after the expiration of this exchange offer (or such shorter period until the date on which a broker-dealer is no longer required to deliver a prospectus), Spirit will make this prospectus available to any broker-dealer for use in connection with any such resale. See "Plan of Distribution."

This investment involves risks. See the section entitled "Risk Factors" that begins on page 13 for a discussion of the risks that you should consider prior to tendering your outstanding Original Notes in the exchange.

Neither the Securities and Exchange Commission nor any state securities commission nor any other regulatory body 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 December 21, 2010.

This prospectus, the letter of transmittal and the notice of guaranteed delivery are first being mailed to all holders of the Original Notes on December 22, 2010.

NO DEALER, SALESPERSON OR OTHER PERSON HAS BEEN AUTHORIZED TO GIVE ANY INFORMATION OR TO MAKE ANY REPRESENTATIONS OTHER THAN THOSE CONTAINED OR INCORPORATED BY REFERENCE IN THIS PROSPECTUS IN CONNECTION WITH THE OFFER CONTAINED IN THIS PROSPECTUS AND, IF GIVEN OR MADE, SUCH INFORMATION OR REPRESENTATIONS MUST NOT BE RELIED UPON AS HAVING BEEN AUTHORIZED BY SPIRIT AEROSYSTEMS, INC., SPIRIT AEROSYSTEMS HOLDINGS, INC. OR ITS SUBSIDIARY GUARANTORS. NEITHER THE DELIVERY OF THIS PROSPECTUS NOR ANY SALE MADE HEREUNDER SHALL CREATE UNDER ANY CIRCUMSTANCES AN IMPLICATION THAT THERE HAS BEEN NO CHANGE IN THE AFFAIRS OF SPIRIT AEROSYSTEMS, INC., SPIRIT AEROSYSTEMS HOLDINGS, INC. OR ITS SUBSIDIARY GUARANTORS SINCE THE DATE HEREOF. THIS PROSPECTUS DOES NOT CONSTITUTE AN OFFER TO SELL OR A SOLICITATION OF AN OFFER TO BUY SECURITIES OTHER THAN THOSE SPECIFICALLY OFFERED HEREBY OR AN OFFER TO SELL ANY SECURITIES OFFERED HEREBY IN ANY JURISDICTION WHERE, OR TO ANY PERSON WHOM, IT IS UNLAWFUL TO MAKE SUCH OFFER OR SOLICITATION. THE INFORMATION CONTAINED IN THIS PROSPECTUS SPEAKS ONLY AS OF THE DATE OF THIS PROSPECTUS UNLESS THE INFORMATION SPECIFICALLY INDICATES THAT ANOTHER DATE APPLIES.

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INDUSTRY AND MARKET DATA

This prospectus includes industry data that we obtained from publicly available sources and periodic industry publications and analyses from industry consultants.

IMPORTANT TERMS USED IN THIS PROSPECTUS

In this prospectus, unless the context indicates otherwise and except as expressly set forth in the section captioned

Description of the Notes, the terms the Company, Spirit Holdings, 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 terms Spirit and the Issuer refer solely to Spirit AeroSystems, Inc.

INCORPORATION OF CERTAIN DOCUMENTS 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 Securities and Exchange Commission (the SEC) under Section 13(a), 13(c), 14 or 15(d) of the Securities Exchange Act, as amended (the Exchange Act), to the extent such documents are deemed filed for purposes of the Exchange Act, until Spirit completes its offering of the Exchange Notes:

our Annual Report on Form 10-K for the fiscal year ended December 31, 2009, filed with the SEC on February 26, 2010 (our 2009 10-K);

our Quarterly Reports on Form 10-Q for the quarterly periods ended April 1, 2010, July 1, 2010 and September 30, 2010, filed with the SEC on May 6, 2010, August 6, 2010 and November 5, 2010, respectively (our 2010 10-Qs);

our Current Reports on Form 8-K filed with the SEC on May 3, 2010, June 15, 2010, August 2, 2010, September 17, 2010, September 28, 2010, October 20, 2010, November 1, 2010, November 15, 2010 and November 18, 2010; and

our Definitive Proxy Statement on Schedule 14A, filed with the SEC on March 25, 2010.

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 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

To obtain timely delivery you must request this information no later than five (5) business days before the date you must make your investment decision. Such date is January 18, 2011.

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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 and the notes, 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 Exchange Notes 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.

DISCLOSURE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus includes certain forward-looking statements that involve many risks and uncertainties. When used, words such as anticipate, believe, continue, estimate, expect, forecast, intend, may, plan, project, other similar words or phrases, or the negative thereof, unless the context requires otherwise, are intended to identify forward-looking statements. 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.

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 and execution of new programs;

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

potential reduction in the build rates of certain Boeing aircraft including, but not limited to, the B737 program, the B747 program, the B767 program and the B777 program, and build rates of the Airbus A320 and A380 programs, which could be negatively impacted by continuing weakness in the global economy and economic challenges facing commercial airlines, and by lack of business and consumer confidence and the impact of continuing instability in the global financial and credit markets, including, but not limited to, sovereign debt concerns in Europe;

the inability to resolve significant claims with Boeing related to non-recurring and recurring costs on the B787 program;

declining business jet manufacturing rates and customer cancellations or deferrals as a result of the weakened global economy;

the success and timely execution of key milestones such as certification and delivery of Boeing's new B787 and Airbus' new A350 XWB (Xtra Wide-Body) aircraft programs, including first flight for the Airbus A350 XWB, receipt of necessary regulatory approvals and customer adherence to their announced schedules;

our ability to enter into supply arrangements with additional customers and the ability of all parties to satisfy their performance requirements under existing supply contracts with Boeing and Airbus, our two major customers, 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;

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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 original equipment manufacturers and other aerostructures suppliers;

the effect of governmental laws, such as U.S. export control laws, the Foreign Corrupt Practices Act, environmental laws and agency regulations, both in the U.S. and abroad;

the cost and availability of raw materials and purchased components;

our ability to successfully extend or renegotiate our primary collective bargaining contracts with our labor unions;

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 and the possibility that we may be unable to borrow additional funds or refinance debt;

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

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

our exposure to potential product liability and warranty claims.

These factors are not exhaustive, and new factors may emerge or changes to the foregoing factors may occur that could impact our business. These forward-looking statements involve a number of risks and uncertainties that could cause actual results to differ materially from those suggested by the forward-looking statements. Forward-looking statements should, therefore, be considered in light of various factors, including those set forth in this prospectus under **Risk Factors** and elsewhere in this prospectus or in the documents incorporated by reference herein. In light of such risks and uncertainties, we caution you not to rely on these forward-looking statements in deciding whether to invest in the notes. 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 are under no obligation to, and expressly disclaim any obligation to, update or alter our forward-looking statements after the date of this prospectus whether as a result of such changes, new information, future events or otherwise.

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PROSPECTUS SUMMARY

The following summary highlights some of the information from this prospectus and does not contain all the information that is important to you. Before deciding to participate in the exchange offer, you should read the entire prospectus, including the section entitled "Risk Factors" and our consolidated financial statements and the related notes and other information incorporated by reference herein. Some statements in this Prospectus Summary are forward-looking statements. See "Disclosure Regarding Forward-Looking Statements." In this prospectus, unless the context indicates otherwise and except as expressly set forth in the section captioned "Description of the Notes", the terms the Company, Spirit Holdings, 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 terms Spirit and the Issuer refer solely to Spirit AeroSystems, Inc.

Our Company

Overview

We are one of the largest independent non-OEM (original equipment manufacturer) 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 The Boeing Company (Boeing). In addition, we are one of the largest independent suppliers of aerostructures to Airbus, a division of European Aeronautic Defense & Space NV (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. For the twelve months ended December 31, 2009 and the nine months ended September 30, 2010, we generated net revenues of \$4,078.5 million and \$3,101.3 million, respectively, and had net income of \$191.7 million and \$157.0 million, respectively.

Spirit was formed in December 2004 and operations commenced on June 17, 2005, following the acquisition by an investor group of Boeing's commercial aerostructures manufacturing operations in Wichita, Kansas and Tulsa and McAlester, Oklahoma, herein referred to as Boeing Wichita. The acquisition of Boeing Wichita is herein referred to as the Boeing Acquisition. Although Spirit began operations as a stand-alone company in 2005, its predecessor, Boeing Wichita, had 75 years of operating history and expertise in the commercial and military aerostructures industry. The Boeing Acquisition was completed by an investor group led by Onex Partners LP and Onex Corporation (Onex). Spirit Holdings, Spirit's parent company, has had publicly traded shares on the New York Stock Exchange under the ticker SPR since November 2006. Onex continues to hold approximately 93% of the class B shares, which represents approximately 71% of total Spirit Holdings stockholder voting power.

On April 1, 2006, we became a supplier to Airbus through our acquisition of the aerostructures division of BAE Systems (Operations) Limited, herein referred to as BAE Systems. The acquired division of BAE Systems is herein referred to as BAE Aerostructures, and the acquisition of BAE Aerostructures is herein referred to as the BAE Acquisition.

We manufacture aerostructures for every Boeing commercial aircraft currently in production, including the majority of the airframe content for the Boeing B737, the most popular major commercial aircraft in history. As a result of our unique capabilities both in process design and composite materials, we were awarded a contract that makes us the largest aerostructures content supplier on the Boeing B787, Boeing's next generation twin aisle aircraft. In addition, we are one of the largest content suppliers of wing systems for the Airbus A320 family, and we are a significant supplier for the Airbus A380 and will be a significant supplier for the new Airbus A350 XWB after the development stage of the program. Sales related to the large commercial aircraft market, some of which may be used in military

applications, represented approximately of 96% and 99% of our net revenues, respectively, for the twelve month period ended December 31, 2009 and the nine month period ended September 30, 2010.

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We derive our revenues primarily through long-term supply agreements with Boeing and Airbus. For the twelve month period ended December 31, 2009 and the nine month period ended September 30, 2010, approximately 85% and 11% and 86% and 10% of our net revenues were generated from sales to Boeing and Airbus, respectively. We are currently the sole-source supplier of 96% of the products we sell to Boeing and Airbus, as measured by dollar value of the products sold. We are a critical partner to our 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. Under our supply agreements with Boeing and Airbus, we supply our products for the life of the aircraft program (other than the A350 XWB and A380), including commercial derivative models. For the A350 XWB and A380, we have long-term requirements contracts with Airbus that cover a fixed number of product units at established prices.

We are organized into three principal reporting segments:

Fuselage Systems, which includes the forward, mid and rear fuselage sections;

Propulsion Systems, which includes nacelles, struts/pylons and engine structural components; and

Wing Systems, which includes wing systems and components, flight control surfaces and other miscellaneous structural parts.

Fuselage Systems, Propulsion Systems and Wing Systems represented approximately 49%, 25%, and 25%, respectively, of our net revenues for the twelve months ended December 31, 2009 and 49%, 26% and 25%, respectively, for the nine months ended September 30, 2010. The Fuselage Systems segment manufactures products at our facilities in Wichita, Kansas and Kinston, North Carolina, the Propulsion Systems segment manufactures products at our facilities in Wichita, Kansas, and the Wing Systems segment manufactures products at our facilities in Tulsa and McAlester, Oklahoma, Prestwick, Scotland, Subang Malaysia and Kinston, North Carolina. We also recently constructed a fuselage assembly plant for the A350 XWB aircraft in Saint-Nazaire, France, which is expected to be ready for operation by the first quarter of 2011. All other activities fall within the All Other segment, representing 1% and less than 1% of our net revenues for the twelve months ended December 31, 2009 and nine months ended September 30, 2010, respectively, principally made up of sundry sales of miscellaneous services, tooling contracts and sales of natural gas through a tenancy-in-common with other companies that have operations in Wichita.

We have a substantial amount of debt, which requires significant interest and principal payments. As of September 30, 2010, after giving pro forma effect to the issuance of the Original Notes and the application of the net proceeds therefrom, we would have had approximately \$1,198.4 million of total debt outstanding, consisting primarily of our senior secured credit facility, the Original Notes and our 7 1/2% Senior Notes due 2017 (the 2017 Notes).

Industry Overview

Based on our research, the global market for aerostructures is estimated to have totaled \$37.9 billion in annual revenues in 2009. Currently, OEMs (principally Boeing, Airbus, Bombardier, Inc. (Bombardier), Embraer-Empresa Brasileira de Aeronautica SA (Embraer), Gulfstream Aerospace Corporation (Gulfstream), Hawker Beechcraft Corporation and Cessna Aircraft Company) outsource more than half of the aerostructures market to independent third parties such as us. The original equipment aerostructures market can be divided by end market application into three market sectors: (1) commercial (including regional and business jets), (2) military and (3) modifications, upgrades, repairs and spares. While we serve all three market sectors, we primarily derive our current revenues from the commercial market sector. We estimate that in 2009, the commercial sector represented approximately 66% of the total aerostructures market, while the military sector represented approximately 27% and the modifications, upgrades, repairs and spares sector (both commercial and military) represented approximately 7%.

Demand for commercial aerostructures is highly correlated to demand for new aircraft. From 2005 through 2008, Boeing and Airbus experienced an unprecedented order intake and backlog growth. In that period, the two manufacturers obtained combined total gross orders of approximately 8,400 aircraft. Their aggregate backlog increased from nearly 2,600 to over 7,400 aircraft. However, largely due to declining

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demand for commercial air travel including both passenger and freight activity, orders fell to 413 in 2009, resulting in a decrease in aggregate backlog. Through the first three quarters of 2010, the aggregate Boeing/Airbus backlog has remained nearly constant, with net orders of 700 nearly equal to deliveries. The high backlog levels continue to drive stable production and delivery forecasts in the near-term from both Boeing and Airbus. If the commercial backlog were to decline, there could be a resulting near-term impact on production rates. If production rates fell, we would take actions to reduce costs and limit capital spending to mitigate the resulting loss of revenues and production base. The following table sets forth the historical deliveries of Boeing and Airbus for 2005 through 2009 and the announced delivery expectations for 2010.

	2005	2006	2007	2008	2009	2010(1)
Boeing	290	398	441	375	481	460
Airbus	378	434	453	483	498	500
Total	668	832	894	858	979	960

(1) Boeing has announced that it expects its 2010 deliveries to be 460. Airbus has announced that it expects its 2010 deliveries to be approximately 500.

Our Competitive Strengths

We believe our key competitive strengths include:

Leading Position in the Growing Commercial Aerostructures Market. We are one of the largest independent non-OEM commercial aerostructures manufacturers, based on annual revenues, with an estimated 16% market share of the global aerostructures market. We are currently the sole-source supplier of 96% of the products we sell to Boeing and Airbus, as measured by dollar value of the products sold. The significant Boeing and Airbus aircraft order backlog for scheduled deliveries between 2011-2015, and our strong relationships with Boeing and Airbus, should enable us to continue to profitably grow our core commercial aerostructures business.

Participation on High Volume and Major Growth Platforms. We derive a high proportion of our Boeing revenues from Boeing's high volume B737 program and a high proportion of our Airbus revenues from the high volume A320 program. Boeing's backlog consists of approximately 2,100 B737s (more than five and one-half years of backlog at current build rates) and Airbus' backlog consists of approximately 2,300 A320s (nearly six years of backlog at current build rates). The B737 and A320 families are Boeing's and Airbus' best selling commercial airplanes, respectively. On September 16, 2010, Boeing announced a production rate increase for the Next-Generation B737 program to 38 airplanes per month beginning in the second quarter of 2013 (up from 31.5 per month currently and 35 per month beginning in early 2012). On July 30, 2010, Airbus announced that it will increase planned production rates for the A320 family to 38 per month in August 2011 and to 40 per month in the first quarter of 2012 (up from 34 per month). We have also been awarded a significant amount of work on the major new twin aisle programs launched by Boeing and Airbus, the B787 and the A350 XWB, respectively.

Stable Base Business with Predictable Cash Flows. We have entered into exclusive long-term agreements with Boeing and Airbus, our two largest customers, making us the exclusive supplier for most of the business covered by these contracts. Under our supply agreements with Boeing and Airbus, we supply our products for

the life of the aircraft program (other than the A380 and A350 XWB), including commercial derivative models. For the A380 and A350 XWB, we have a long-term supply contract with Airbus that covers a fixed number of units. We believe our long-term supply contracts with our two largest customers provide us with a stable base business upon which to build. As of September 30, 2010, our backlog was at \$28.2 billion. Our cash from operations attributable to our mature programs has been stable. We are investing a portion of our cash flow from our base business into long-term growth initiatives, including the B787 and other new programs.

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Strong Incumbent and Competitive Position. We have a strong incumbent position on the products we currently supply to Boeing and Airbus, forged by our long-standing relationships and long-term supply agreements with Boeing and Airbus. Many members of our management team have a long history of working with Boeing and Airbus as employees of our predecessors, Boeing Wichita and BAE Aerostructures. Our relationship with Boeing is further strengthened by the fact that many members of our senior management team are former Boeing executives or managers.

We believe that OEMs incur significant costs to change aerostructures suppliers once contracts are awarded. Such changes after a contract award require additional testing and certification, which may create production delays and significant costs for both the OEM and the new supplier. We also believe it would be cost prohibitive for other suppliers to duplicate our facilities and the over 20,000 major pieces of equipment that we own or operate. The combined insurable replacement value of all the buildings and equipment we own or operate is approximately \$5.7 billion, including approximately \$2.4 billion and approximately \$1.9 billion for buildings and equipment, respectively, that we own and approximately \$1.4 billion for other equipment used in the operation of our business. As a result, we believe that so long as we continue to meet our customers' requirements, the probability that they will change suppliers on our current statement of work is quite low. Our incumbent position also provides us with a competitive advantage with respect to new business from our customers.

Industry Leading Technology, Design Capabilities and Manufacturing Expertise. We possess industry-leading engineering capabilities that include significant expertise in structural design and technology, use of metallic and composite materials, stress analysis, systems engineering and acoustics technology. With over 1,700 engineering and technical employees (including over 100 contract engineers), we possess knowledge and manufacturing know-how that customers depend upon and that would be difficult for other suppliers to replicate.

Competitive and Predictable Cost Structure. In connection with the Boeing Acquisition, we achieved comprehensive cost reductions. The primary contributors to establishing our competitive cost structure were: (1) labor savings, (2) pension and other benefit savings, (3) reduced corporate overhead, and (4) operational efficiency improvements. Historically, collective bargaining agreements with most of our labor unions have typically been three to five years in length and we expect to be able to continue to negotiate labor contracts of at least similar duration. We recently entered into 10-year contracts with the International Association of Machinists and Aerospace Workers (the IAM), the labor union that represents the largest number of our hourly workers, and with the International Brotherhood of Electrical Workers and the International Union, United Automobile, Aerospace & Agricultural Implement Workers of America (UAW). As a result, we expect our labor costs to be fairly stable and predictable during the course of each contract. We maintain continuous focus on expense management and process improvement. We believe that our competitive cost structure has positioned us to win new business and was a key factor in several recent significant contract awards.

Experienced Management Team. We have an experienced and proven management team with an average of more than 20 years of aerospace industry experience. Our management team has successfully expanded our business, reduced costs and established and grown Spirit's stand-alone operations. Many of our executives and senior managers have lengthy experience working for or with our primary customers, Boeing and Airbus, which provides us with detailed insight into how we can better serve our customers.

Our Business Strategy

Our goal is to remain a leading aerostructures manufacturer and to grow revenues while maximizing our profitability. Our strategy includes the following:

Support Aircraft Deliveries. We value our relationships with our major customers. We are the largest independent non-OEM aerostructures supplier to Boeing. In addition, we are one of the largest independent non-OEM aerostructures suppliers to Airbus. Our business strategy is focused on meeting or exceeding our customers' expectations. We are constantly seeking to improve our manufacturing

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efficiency and maintain our high standards of quality and on-time delivery to meet these expectations. We are focused on supporting our customers' increase in new aircraft production and the introduction of key aircraft programs such as the Boeing B787 and the Airbus A350 XWB. We continue to adjust our manufacturing processes, properties and facilities to accommodate an increase in production and a shift in mix to a higher ratio of larger aircraft, which generally have higher dollar value content.

Win New Business from Existing and New Customers. We have established a sales and marketing infrastructure to support our efforts to win business from new and existing customers. We believe that we are well positioned to win additional work from Boeing and Airbus, given our strong relationships, our size, our design and build capabilities and our financial resources. We believe that opportunities for increased business from our customers will arise on work that they currently produce internally and may shift to an external supplier in the future, as well as work on new aircraft programs. We also have significant opportunities to increase our sales to OEMs other than Boeing and Airbus and have significant opportunities to grow business outside our core platforms. We believe our design, engineering and manufacturing capabilities are highly attractive to potential new customers and provide a competitive advantage in winning new aerostructures business. As a result of leveraging our core capabilities, competitive cost position and sales and marketing efforts, we have won several significant contracts from non-Boeing customers through competitive bids since the Boeing Acquisition.

Our customer base has expanded to include Sikorsky, Rolls-Royce, Gulfstream, Bombardier, Mitsubishi Aircraft Corporation, Southwest Airlines and Continental Airlines.

Research and Development Investment in Next Generation Technologies. We invest in research and development, or R&D, for current programs to strengthen our relationships with our customers and new programs to generate new business. As part of our R&D effort, we work closely with OEMs and integrate our engineering teams into their design processes. We believe our close coordination with OEMs positions us to win new business on new commercial and military platforms.

Provide New Value-Added Services to our Customers. We possess the core competencies not only to manufacture, but also to design, integrate and assemble complex system and structural components. We have been selected to assemble and integrate avionics, electrical systems, hydraulics, wiring and other components for the forward fuselage and pylons for the Boeing B787. We believe our ability to integrate complex components into aerostructures is a service that greatly benefits our customers by reducing their flow time and inventory holding costs.

We also intend to increase our aftermarket sales of the products we manufacture and recently opened new sales offices to service international aftermarket customers. We also produce spares for certain out of production aircraft and regional/business jet programs.

Continued Improvement to our Low Cost Structure. We remain focused on further reducing costs and we have identified and begun to implement several such opportunities in our business. We expect that most of our future cost saving opportunities will arise from increased productivity, continued outsourcing of non-core activities, and improved procurement and sourcing through our global sourcing initiatives. We believe our strategic sourcing expertise should allow us to develop and manage low cost supply chains in Asia and Central Europe. One of our goals is to continue to increase our material sourcing from low cost jurisdictions.

Pursue Strategic Acquisitions on an Opportunistic Basis. The commercial aerostructures market is highly fragmented with many small private businesses and divisions of larger public companies. Given this market fragmentation, coupled with the trend by OEMs to outsource work to larger Tier 1 manufacturers that

coordinate suppliers and integrate systems into airframes, we believe our industry could experience significant consolidation in the coming years. Although our main focus is to grow our business organically, we believe we are well positioned to capture additional market share and diversify our current business through opportunistic strategic acquisitions.

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Recent Developments

On November 11, 2010, Boeing announced the postponement of further flight test activities on the B787, following the occurrence of an onboard electrical fire on a test flight on November 10, 2010. On November 24, 2010, Boeing announced that it is developing minor design changes and updates to the systems software of the B787 in response to the electrical fire and that it expected to finalize a revised B787 program schedule in the next few weeks. Once Boeing announces its revised B787 program schedule, we will evaluate the impact of the revised schedule on our business. We have temporarily shifted employees from the B787 program to work on other programs.

On December 18, 2010, Spirit employees represented by the UAW, which represents approximately 1,460 Spirit employees in Tulsa and McAlester, Oklahoma, approved a new ten-year contract effective through November 30, 2020.

Company Information

Spirit, formerly known as Mid-Western Aircraft Systems, Inc., is a Delaware corporation that was formed on December 20, 2004. Spirit's predecessor, Boeing Wichita, had more than 75 years of operating history as a division of Boeing. Our principal executive 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 and is not incorporated in this prospectus by reference.

The Exchange Offer

On November 18, 2010, Spirit completed the offering of \$300.0 million aggregate principal amount of the Original Notes. The Original Notes were sold to qualified institutional buyers in accordance with Rule 144A under the Securities Act and outside the United States only to non-U.S. persons in accordance with Regulation S under the Securities Act. As part of the offering, we entered into a registration rights agreement with the initial purchasers of the Original Notes in which we agreed, among other things, to deliver this prospectus and to complete an exchange offer for the Original Notes. The summary below describes the principal terms of the exchange offer. The section of this prospectus entitled "The Exchange Offer" contains a more detailed description of the terms and conditions of the exchange offer.

Securities Offered: Up to \$300,000,000 aggregate principal amount of 63/4% Senior Notes due 2020 which have been registered under the Securities Act, which we refer to as the "Exchange Notes". The form and terms of the Exchange Notes are identical in all material respects to those of the Original Notes. The Exchange Notes, however, will not contain transfer restrictions and registration rights applicable to the Original Notes.

The Exchange Offer: Spirit is offering to exchange \$1,000 principal amount of the Exchange Notes for each \$1,000 principal amount of outstanding Original Notes.

In order to be exchanged, an Original Note must be properly tendered and accepted. All Original Notes that are validly tendered and not withdrawn will be exchanged. As of the date of this prospectus, there are \$300.0 million in aggregate principal amount of the Original Notes outstanding. Spirit will issue Exchange Notes promptly after the expiration of the exchange offer.

Resales:

We are registering the exchange offer in reliance on the position enunciated by the SEC in Exxon Capital Holdings Corp., SEC No-Action Letter (April 13, 1988), Morgan Stanley & Co, Inc.,

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SEC No-Action Letter (June 5, 1991), and Shearman & Sterling, SEC No-Action Letter (July 2, 1993). Based on interpretations by the staff of the SEC, as set forth in these no-action letters issued to third parties not related to us, we believe that the Exchange Notes issued in the exchange offer may be offered for resale, resold or otherwise transferred by you without compliance with the registration and prospectus delivery requirements of the Securities Act as long as:

you are acquiring the Exchange Notes in the ordinary course of your business;

you are not participating, do not intend to participate and have no arrangement or understanding with any person to participate, in a distribution of the Exchange Notes; and

you are not our affiliate.

Rule 405 under the Securities Act defines *affiliate* as a person that, directly or indirectly, controls or is controlled by, or is under common control with, a specified person. In the absence of an exemption, you must comply with the registration and prospectus delivery requirements of the Securities Act in connection with the resale of the Exchange Notes. If you fail to comply with these requirements you may incur liabilities under the Securities Act, and we will not indemnify you for such liabilities.

Each broker or dealer that receives Exchange Notes for its own account in exchange for Original Notes that were acquired as a result of market-making or other trading activities must acknowledge that it will comply with the registration and prospectus delivery requirements of the Securities Act in connection with any offer to resell, resale, or other transfer of the Exchange Notes issued in the exchange offer.

Record Date:	We mailed this prospectus and the related offer documents to the registered holders of the Original Notes on December 22, 2010.
Expiration Date:	5:00 p.m., New York City time, on January 25, 2011, unless we extend the expiration date.
Withdrawal Rights:	You may withdraw tenders of the Original Notes at any time prior to 5:00 p.m., New York City time, on the expiration date. For more information, see the section entitled <i>The Exchange Offer</i> under the heading <i>Terms of the Exchange Offer</i> .
Conditions to the Exchange Offer:	The exchange offer is subject to certain customary conditions, which we may waive in our sole discretion. For more information, see the section entitled <i>The Exchange Offer</i> under the heading <i>Conditions to the Exchange Offer</i> . The exchange offer is not conditioned upon the exchange of any minimum principal amount of Original Notes.

Procedures for Tendering Original Notes: If you wish to accept the exchange offer, you must (1) complete, sign and date the accompanying letter of transmittal, or a facsimile copy of such letter, in accordance with its instructions and the

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instructions in this prospectus, and (2) mail or otherwise deliver the executed letter of transmittal, together with the Original Notes and any other required documentation to the exchange agent at the address set forth in the letter of transmittal. If you are a broker, dealer, commercial bank, trust company or other nominee and you hold Original Notes through The Depository Trust Company (DTC) and wish to accept the exchange offer, you must do so pursuant to DTC s automated tender offer program. By executing or agreeing to be bound by the letter of transmittal, you will represent to us, among other things, (1) that you are, or the person or entity receiving the Exchange Notes is, acquiring the Exchange Notes in the ordinary course of business, (2) that neither you nor any such other person or entity has any arrangement or understanding with any person to participate in the distribution of the Exchange Notes within the meaning of the Securities Act and (3) that neither you nor any such other person or entity is our affiliate within the meaning of Rule 405 under the Securities Act.

If you are a beneficial owner whose Original Notes are registered in the name of a broker, dealer, commercial bank, trust company or other nominee and you wish to tender in the exchange offer, we urge you to promptly contact the person or entity in whose name your Original Notes are registered and instruct that person or entity to tender on your behalf. If you wish to tender in the exchange offer on your own behalf, you must, prior to completing and executing the letter of transmittal and delivering your Original Notes, either make appropriate arrangements to register ownership of your Original Notes in your name or obtain a properly completed bond power from the person or entity in whose name your Original Notes are registered. The transfer of registered ownership may take considerable time.

Guaranteed Delivery Procedures:

If you wish to tender your Original Notes and your Original Notes are not immediately available or you cannot deliver your Original Notes, the letter of transmittal or any other documents required to the exchange agent (or comply with the procedures for book-entry transfer) prior to the expiration date, you must tender your Original Notes according to the guaranteed delivery procedures set forth in the section entitled The Exchange Offer under the heading Guaranteed Delivery Procedures.

Registration Rights Agreement:

Contemporaneously with the initial sale of the Original Notes, we entered into a registration rights agreement with the initial purchasers pursuant to which we agreed, among other things, (1) to use our reasonable best efforts to consummate an exchange offer and (2) if required, to have a shelf registration statement declared effective with respect to resales of the Original Notes. This exchange offer is intended to satisfy those obligations set forth in the registration rights agreement. After the exchange offer is complete, except in limited circumstances with respect to specific types of holders of Original Notes, we will have no further obligation to provide for the registration under the Securities Act of such Original Notes. See the section entitled The Exchange Offer.

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Federal Income Tax Considerations:	The exchange pursuant to the exchange offer will generally not be a taxable event for U.S. federal income tax purposes. For more details, see the sections entitled "The Exchange Offer – Tax Consequences of the Exchange Offer" and "Material U.S. Federal Income Tax Considerations".
Consequences of Failure to Exchange:	If you do not exchange the Original Notes, they will remain entitled to all the rights and preferences and will continue to be subject to the limitations contained in the indenture governing the Original Notes. However, following the exchange offer, except in limited circumstances with respect to specific types of holders of Original Notes, we will have no further obligation to provide for the registration under the Securities Act of such Original Notes.
Absence of an Established Market for the Notes:	The Exchange Notes will be a new class of securities for which there is currently no market. We do not intend to apply for listing of the Original Notes or the Exchange Notes on any securities exchange or for quotation of such notes. Although certain of the initial purchasers have informed us that they intend to make a market in the Exchange Notes, they are not obligated to do so, and may discontinue market-making activities at any time without notice. Accordingly, we cannot assure you that a liquid market for the Exchange Notes will develop or be maintained.
Use of Proceeds:	We will not receive any proceeds from the exchange offer. For more details, see the "Use of Proceeds" section.
Exchange Agent:	The Bank of New York Mellon Trust Company, N.A., is serving as the exchange agent in connection with the exchange offer. The address, telephone number and facsimile number of the exchange agent are listed under the heading "The Exchange Offer – Exchange Agent".

The Exchange Notes

The form and terms of the Exchange Notes are the same as the form and terms of the Original Notes for which they are being exchanged, except that the Exchange Notes will be registered under the Securities Act. As a result, the Exchange Notes will not bear legends restricting their transfer and will not have provisions providing for the benefit of the registration rights or the obligation to pay additional interest because of our failure to register the Exchange Notes and complete this exchange offer as required. The Exchange Notes represent the same debt as the Original Notes for which they are being exchanged. Both the Original Notes and the Exchange Notes are governed by the same indenture. The summary below describes the principal terms of the Exchange Notes. Certain of the terms and conditions described below are subject to important limitations and exceptions. The "Description of the Notes" section of this prospectus contains a more detailed description of the terms and conditions of the Exchange Notes. We use the term "notes" in this prospectus to collectively refer to the Original Notes and the Exchange Notes.

Issuer:	Spirit AeroSystems, Inc.
Notes Offered:	\$300.0 million aggregate principal amount of 63/4% Senior Notes due 2020.

Maturity Date:

December 15, 2020.

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Interest:	Interest on the Exchange Notes will accrue at a rate of 63/4% per annum, payable in cash semi-annually in arrears, on June 15 and December 15 of each year, commencing June 15, 2011.
Guarantors:	The Exchange Notes will be fully and unconditionally guaranteed, jointly and severally, on a senior unsecured basis by Spirit Holdings and by each of the following wholly owned subsidiaries of Spirit Holdings: Spirit AeroSystems Finance, Inc., Spirit AeroSystems International Holdings, Inc., Spirit AeroSystems Investco, LLC, Spirit AeroSystems North Carolina, Inc., Spirit Defense, Inc. and Spirit AeroSystems Operations International, Inc. (collectively with Spirit Holdings, the Guarantors), and any additional existing and future domestic subsidiaries of Spirit that guarantee Spirit's obligations under its senior secured credit facility.
Optional Redemption:	<p>The Issuer may redeem the Exchange Notes, in whole or in part, at any time on or after December 15, 2015, at the redemption prices specified in Description of the Notes Optional Redemption, plus accrued and unpaid interest and additional interest, if any, to, but not including, the redemption date.</p> <p>At any time prior to December 15, 2015, the Issuer may redeem the Exchange Notes, in whole or in part, at a redemption price equal to 100% of the principal amount plus a make-whole premium as of the date of redemption together with accrued and unpaid interest and additional interest, if any, to the redemption date.</p> <p>The Issuer may redeem up to 35% of the Exchange Notes before December 15, 2013 with the net cash proceeds from certain equity offerings.</p>
Change of Control:	Following specific kinds of changes of control the Issuer will be required to offer to purchase all of the Exchange Notes at a purchase price of 101% of their principal amount, plus accrued and unpaid interest and additional interest, if any, to, but not including, the date of purchase. For more details, see Description of the Notes Change of Control.
Ranking:	<p>The Exchange Notes will be senior unsecured obligations and will:</p> <ul style="list-style-type: none">rank equally in right of payment with all of Spirit's and the Guarantors other existing and future senior debt, including the 2017 Notes;be senior in right of payment to all of Spirit's and the Guarantors existing and future debt that is by its terms expressly subordinated to the notes and guarantees;be effectively subordinated to Spirit's and the Guarantors secured debt, including secured debt under Spirit's existing senior secured credit facility, to the extent of the assets securing such debt; and

be structurally junior to any debt or obligations of any non-Guarantor subsidiaries.

As of September 30, 2010, after giving pro forma effect to the issuance of the Original Notes and the application of the net proceeds

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therefrom, Spirit Holdings and its subsidiaries would have had total debt of approximately \$1,198.4 million, approximately \$585.7 million of which constituted secured debt and effectively ranked senior to the Original Notes to the extent of the assets securing such debt. In addition, Spirit Holdings and its subsidiaries would have had approximately \$389.8 million of availability under the revolving portion of the Issuer's existing senior secured credit facility (excluding outstanding letters of credit), all of which would be senior to the Exchange Notes offered hereby.

Certain Covenants:

The indenture governing the notes, among other things, limits the ability of Spirit and the Guarantors to:

incur additional debt;

pay dividends, redeem stock or make other distributions;

make other restrict