

---

---

**UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION  
WASHINGTON, D.C. 20549**

---

**FORM S-3  
REGISTRATION STATEMENT  
UNDER  
THE SECURITIES ACT OF 1933**

---

**Aerojet Rocketdyne Holdings, Inc.**

(Exact name of registrant as specified in its charter)

---

**Delaware**  
(State or other jurisdiction of  
incorporation or organization)

**34-0244000**  
(I.R.S. Employer  
Identification Number)

**222 N. Pacific Coast Highway, Suite 500  
El Segundo, CA 90245  
(310) 252-8100**

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

---

**Arjun L. Kampani**  
**Vice President, General Counsel and Secretary**  
**Aerojet Rocketdyne Holdings, Inc.**  
**222 N. Pacific Coast Highway, Suite 500**  
**El Segundo, CA 90245**  
**(310) 252-8100**

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

---

*Copies to:*

**Scott J. Calfas**  
**Gibson, Dunn & Crutcher LLP**  
**333 S. Grand Avenue**  
**Los Angeles, CA 90071**  
**tel: (213) 229-7000**  
**fax: (213) 229-7520**

---

**Approximate date of commencement of proposed sale to the public:** From time to time on or after the effective date of this registration statement.

If the only securities being registered on this form are being offered pursuant to dividend or interest reinvestment plans, please check the following box:

If any of the securities being registered on this form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, check the following box:

If this form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this form is a registration statement pursuant to General Instruction I.D. or a post-effective amendment thereto that shall become effective upon filing with the Securities and Exchange Commission pursuant to Rule 462(e) under the Securities Act, check the following box.

If this form is a post-effective amendment to a registration statement filed pursuant to General Instruction I.D. filed to register additional securities or additional classes of securities pursuant to Rule 413(b) under the Securities Act, check the following box.

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer

Accelerated filer

Non-accelerated filer

Smaller reporting company

Emerging growth company

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 7(a)(2)(B) of the Securities Act.

---

**CALCULATION OF REGISTRATION FEE**

---

Title of Each Class of Securities to be Registered	Amount to be Registered(1)(2)	Proposed Maximum Offering Price Per Share (2)	Proposed Maximum Aggregate Offering Price(2)	Amount of Registration Fee
Common Stock, par value \$0.10 per share	2,733,812.00	\$35.25	\$96,366,873.00	\$11,997.68

- (1) Pursuant to Rule 416 under the Securities Act of 1933, as amended (the "Securities Act"), the shares being registered hereunder include any number of shares of common stock as may be issuable with respect to the shares being registered hereunder as a result of stock splits, stock dividends or similar transactions.
- (2) Estimated solely for the purpose of calculating the registration fee under Rule 457(c) of the Securities Act based on the average of the high and low prices of a share of common stock on the New York Stock Exchange on September 10, 2018, which was \$35.25.
- 
-

PROSPECTUS



# Aerojet Rocketdyne Holdings, Inc.

**2,733,812 Shares**

**Common Stock**

---

This prospectus relates to the resale, from time to time, by the selling stockholder, which is a trust maintained in connection with the Aerojet Rocketdyne (GenCorp) Consolidated Pension Plan that we sponsor, or the Plan, of up to 2,733,812 shares of our common stock. The shares of our common stock covered by this prospectus are shares that we have issued to the selling stockholder in a private transaction for the benefit of our current and former employees who participate in such Plan. The shares of our common stock may be offered for sale from time to time by the selling stockholder, at the direction of Newport Trust Company, or the investment manager, which is the investment manager appointed by us to serve as the investment fiduciary that will manage the shares of our common stock covered by this prospectus. The investment manager will determine the time and manner of sale of the shares of our common stock covered by this prospectus. See "Selling Stockholder" and "Plan of Distribution." You should carefully read this prospectus and any accompanying prospectus supplement before you decide to invest in any of these securities.

The common stock may be offered and sold by the selling stockholder from time to time directly or through underwriters, broker-dealers or agents. The common stock may be sold in one or more transactions at market prices prevailing at the time of sale or at prices determined on a negotiated or competitive bid basis. See "Plan of Distribution." We will not receive any portion of the proceeds of the sale of the common stock offered by this prospectus and will bear all expenses incidental to the registration, offering and sale of the common stock to the public, other than commissions, fees and discounts of underwriters, brokers, dealers and agents.

Our common stock is listed on the New York Stock Exchange under the symbol "AJRD." On September 10, 2018, the last reported sales price of a share of our common stock on the New York Stock Exchange was \$34.75.

**Investing in our common stock involves risk. See "Risk Factors" beginning on page 7.**

**Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or passed upon the adequacy or accuracy of this prospectus. Any representation to the contrary is a criminal offense.**

---

The date of this prospectus is September 10, 2018.

**TABLE OF CONTENTS**

<a href="#">ABOUT THIS PROSPECTUS</a>	2
<a href="#">CAUTIONARY STATEMENT REGARDING FORWARD-LOOKING STATEMENTS</a>	3
<a href="#">WHERE YOU CAN FIND MORE INFORMATION</a>	5
<a href="#">INCORPORATION OF CERTAIN INFORMATION BY REFERENCE</a>	5
<a href="#">COMPANY OVERVIEW</a>	6
<a href="#">RISK FACTORS</a>	7
<a href="#">USE OF PROCEEDS</a>	8
<a href="#">DESCRIPTION OF CAPITAL STOCK</a>	9
<a href="#">SELLING STOCKHOLDER</a>	11
<a href="#">PLAN OF DISTRIBUTION</a>	12
<a href="#">LEGAL MATTERS</a>	14
<a href="#">EXPERTS</a>	14

## ABOUT THIS PROSPECTUS

This prospectus is part of a registration statement that we filed with the Securities and Exchange Commission, or the SEC, using a “shelf” registration process. Under this shelf registration process, the selling stockholder may sell certain shares of our common stock in one or more offerings. When the selling stockholder sells shares of common stock under this shelf registration process, we may provide a prospectus supplement that will contain more specific information about the terms of such offering. The prospectus supplement may also add to, update or change any of the information contained in this prospectus. You should carefully read this prospectus and any accompanying prospectus supplement, as well as the information incorporated in this prospectus or the accompanying prospectus supplement by reference. See “Incorporation of Certain Information by Reference.” Any information in any accompanying prospectus supplement or any subsequent material incorporated herein by reference will supersede the information in this prospectus or any earlier prospectus supplement.

We have not authorized anyone to provide you with any information other than that contained or incorporated by reference in this prospectus or any related prospectus supplement. We are not making an offer of these securities in any jurisdiction where the offer is not permitted. Neither we nor the selling stockholder has taken any action that would permit the selling stockholder to sell our common stock publicly in any jurisdiction outside the United States. If you are an investor outside the United States, you should inform yourself about and comply with any restrictions pertaining to the offering of the securities and the distribution of this prospectus. You should not assume that the information in this prospectus or any applicable prospectus supplement is accurate as of any date other than the date on the front of the document or that the information incorporated by reference is accurate as of any date other than the date of the document incorporated by reference.

This prospectus includes information provided by us and by other sources that we believe are reliable. We cannot assure you that this information is accurate or complete. This prospectus summarizes certain documents and other information and we refer you to them for a more complete understanding of what we discuss in this prospectus. In making an investment decision, you must rely on your own examination of the Company and the terms of this offering and the common stock, including the merits and risks involved. The 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.”

We are not making any representation to any purchaser of the common stock regarding the legality of an investment in the common stock by such purchaser. You should not consider any information in this prospectus to be legal, business or tax advice. You should consult with your own attorney, business advisor or tax advisor for legal, business and tax advice regarding an investment in the common stock.

As used in this prospectus and any accompanying prospectus supplement, unless the context otherwise indicates, references to “our,” “we,” “us,” the “Company” and “our business” refer to Aerojet Rocketdyne Holdings, Inc., in each case together with its consolidated subsidiaries.

## CAUTIONARY STATEMENT REGARDING FORWARD-LOOKING STATEMENTS

This prospectus, any accompanying prospectus supplement or any document incorporated by reference may include “forward-looking statements” within the meaning of Section 27A of the Securities Act of 1933, as amended, or the Securities Act, and Section 21E of the Securities Exchange Act of 1934, as amended, or the Exchange Act, and such statements are subject to the safe harbors created thereby. These forward-looking statements present (without limitation) the expectations, beliefs, plans and objectives of management and future financial performance and assumptions underlying, or judgments concerning, the matters discussed in the statements. We have used the words “approximately,” “anticipate,” “assume,” “believe,” “contemplate,” “continue,” “could,” “estimate,” “expect,” “future,” “intend,” “may,” “plan,” “potential,” “predict,” “project,” “seek,” “should,” “target,” “will” and similar terms and phrases to identify forward-looking statements in this prospectus. Forward-looking statements involve certain risks, estimates, assumptions and uncertainties, including with respect to future sales and activity levels, cash flows, contract performance, the outcome of litigation and contingencies, environmental remediation and anticipated costs of capital. A variety of factors could cause actual results or outcomes to differ materially from those expected and expressed in our forward-looking statements. Important risk factors that could cause actual results or outcomes to differ from those expressed in the forward-looking statements are described in the section “Risk Factors” in Item 1A of our Annual Report to the SEC on Form 10-K for the fiscal year ended December 31, 2017, as amended, and include the following:

- future reductions or changes in U.S. government spending;
- cancellation or material modification of one or more significant contracts;
- cost overruns on the Company’s contracts that require the Company to absorb excess costs;
- failure of the Company’s subcontractors or suppliers to perform their contractual obligations;
- failure to secure contracts;
- failure to comply with regulations applicable to contracts with the U.S. government;
- failure to comply with applicable laws, including laws relating to export controls and anti-corruption or bribery laws;
- the Company’s Competitive Improvement Program may not be successful in aligning the Company’s operations to current market conditions or in achieving the anticipated costs savings and other benefits within the expected timeframes;
- costs and time commitment related to potential and/or actual acquisition activities may exceed expectations;
- the Company’s inability to adapt to rapid technological changes;
- failure of the Company’s information technology infrastructure, including a successful cyber-attack, accident, unsuccessful outsourcing of certain information technology and cyber security functions, or security breach that could result in disruptions to the Company’s operations;
- product failures, schedule delays or other problems with existing or new products and systems;
- the release, unplanned ignition, explosion or improper handling of dangerous materials used in the Company’s businesses;
- loss of key qualified suppliers of technologies, components and materials;
- the funded status of the Company’s defined benefit pension plan and the Company’s obligation to make cash contributions in excess of the amount that the Company can recover in its current period overhead rates;
- effects of changes in discount rates and actuarial estimates, actual returns on plan assets and government regulations on defined benefit pension plans;
- the possibility that environmental and other government regulations that impact the Company become more stringent or subject the Company to material liability in excess of its established reserves;
- environmental claims related to the Company’s current and former businesses and operations, including the inability to protect or enforce previously executed environmental agreements;
- reductions in the amount recoverable from environmental claims;
- significant risk exposures and potential liabilities that are inadequately covered by indemnity or insurance;
- inability to protect the Company’s patents and proprietary rights;
- business disruptions to the extent not covered by insurance;
- the substantial amount of debt that places significant demands on the Company’s cash resources and could limit the Company’s ability to borrow additional funds or expand its operations;
- the Company’s ability to comply with the financial and other covenants contained in the Company’s debt agreements;
- risks inherent to the real estate market;

---

## Table of Contents

- changes in economic and other conditions in the Sacramento, California metropolitan area real estate market or changes in interest rates affecting real estate values in that market;
- additional costs related to past or future divestitures;
- the loss of key employees and shortage of available skilled employees to achieve anticipated growth;
- a strike or other work stoppage or the Company's inability to renew collective bargaining agreements on favorable terms;
- fluctuations in sales levels causing the Company's quarterly operating results and cash flows to fluctuate;
- restatement of previously issued consolidated financial statements may lead to additional risks and uncertainties;
- failure to maintain effective internal controls in accordance with the Sarbanes-Oxley Act; and
- the other matters described in "Risk Factors" in this prospectus, any accompanying prospectus supplement and in our SEC filings incorporated by reference and in "Management's Discussion and Analysis of Financial Condition and Results of Operations," and "Business" in our SEC filings incorporated by reference.

The forward-looking statements contained in this prospectus, any accompanying prospectus supplement and any document incorporated by reference are based on historical performance and management's current plans, estimates and expectations in light of information currently available to us and are subject to uncertainty and changes in circumstances. There can be no assurance that future developments affecting us will be those that we have anticipated. Actual results may differ materially from these expectations due to changes in global, regional or local political, economic, business, competitive, market, regulatory and other factors, many of which are beyond our control. We believe that these factors include those described in "Risk Factors" in this prospectus, any accompanying prospectus supplement and any document incorporated by reference. Should one or more of these risks or uncertainties materialize, or should any of our assumptions prove to be incorrect, our actual results may vary in material respects from what we may have expressed or implied by these forward-looking statements. We caution that you should not place undue reliance on any of our forward-looking statements. Any forward-looking statement made by us in this prospectus, any accompanying prospectus supplement and any document incorporated by reference speaks only as of the date on which we make it. Factors or events that could cause our actual results to differ may emerge from time to time, and it is not possible for us to predict all of them. We undertake no obligation to publicly update any forward-looking statement, whether as a result of new information, future developments or otherwise, except as may be required by applicable securities laws.

## WHERE YOU CAN FIND MORE INFORMATION

This prospectus is part of a registration statement we have filed with the SEC under the Securities Act. The registration statement, including the attached exhibits, contains additional relevant information about us and the securities described in this prospectus. The SEC's rules and regulations allow us to omit certain information included in the registration statement from this prospectus. The registration statement may be inspected by anyone without charge at the SEC's principal office at 100 F Street, N.E., Washington, D.C. 20549.

In addition, we file annual, quarterly and current reports, proxy statements and other information with the SEC under the Exchange Act. You may read and copy this information at the following SEC location:

Public Reference Room  
100 F Street, N.E.  
Washington, D.C. 20549

You may also obtain copies of this information by mail from the SEC's Public Reference Room, 100 F Street, N.E., Washington, D.C. 20549, at rates determined by the SEC. You may obtain information on the operation of the Public Reference Room by calling the SEC at 1-800-SEC-0330. You may also inspect reports, proxy statements and other information that we have filed electronically with the SEC at the SEC's web site at <http://www.sec.gov/> and at our website at <http://ir.aerocketdyne.com/>. The contents of our website are not incorporated into this prospectus.

## INCORPORATION OF CERTAIN INFORMATION BY REFERENCE

The SEC allows us to "incorporate by reference" into this prospectus the information we file with the SEC. This permits us to disclose important information to you by referencing these filed documents. Any information referenced in this way is considered part of this prospectus. Any subsequent information filed with the SEC will automatically be deemed to update and supersede the information in this prospectus and in our other filings with the SEC. We incorporate by reference the documents listed below and any filings made by us with the SEC under Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act from the initial filing of this registration statement of which this prospectus forms a part until all of the securities offered in this prospectus are sold; provided, however, we are not incorporating by reference any information furnished (but not filed) under Item 2.02 or Item 7.01 of any Current Report on Form 8-K:

- our Annual Report on Form 10-K for the year ended December 31, 2017 filed with the SEC on February 21, 2018, as amended by Amendment No. 1 on Form 10-K/A filed with the SEC on March 13, 2018;
- our Quarterly Reports on Form 10-Q for the quarterly periods ended March 31, 2018 and June 30, 2018 filed with the SEC on May 1, 2018 and July 30, 2018, respectively; and
- our Current Reports on Form 8-K filed with the SEC on March 2, 2018, March 16, 2018 and May 11, 2018.

Any statement contained in this prospectus, or in a document all or a portion of which is incorporated by reference in this prospectus, will be deemed to be modified or superseded for purposes of this prospectus to the extent that a statement contained in this prospectus modifies or supersedes the statement. Any such statement or document so modified or superseded will not be deemed, except as so modified or superseded, to constitute a part of this prospectus.

You can request a copy of any document incorporated by reference in this prospectus, at no cost, by writing or telephoning us at the following:

**Aerojet Rocketdyne Holdings, Inc.**  
**222 N. Pacific Coast Highway, Suite 500**  
**El Segundo, CA 90245**  
**Attn: General Counsel**  
**(310) 252-8100**



## COMPANY OVERVIEW

### **Our Company**

We are a manufacturer of aerospace and defense products and systems, with a real estate segment. Our operations are organized into two segments:

*Aerospace and Defense* — includes the operations of our wholly-owned subsidiary Aerojet Rocketdyne, Inc., a leading technology-based designer, developer and manufacturer of aerospace and defense products and systems for the United States government, including the Department of Defense, the National Aeronautics and Space Administration, and major aerospace and defense prime contractors.

*Real Estate* — includes the activities of our wholly-owned subsidiary Easton Development Company, LLC related to the re-zoning, entitlement, sale, and leasing of our excess real estate assets. We currently are in the process of seeking zoning changes and other governmental approvals on our excess real estate assets to optimize their value.

We were incorporated in Ohio in 1915 and reincorporated to the State of Delaware on April 11, 2014.

### **Corporate Information**

Our principal executive offices are located at 222 N. Pacific Coast Highway, Suite 500, El Segundo, California 90245 and our telephone number is (310) 252-8100. Our website address is [www.aerjetrocketdyne.com](http://www.aerjetrocketdyne.com). Except for the documents incorporated by reference in this prospectus as described under the heading “Incorporation by Reference,” the information and other content contained on our website are not incorporated by reference and do not constitute part of this prospectus and should not be relied upon in connection with making any investment in our securities.

## **RISK FACTORS**

Investing in our common stock involves a high degree of risk. You should carefully consider the risks, uncertainties and other factors described in our most recent Annual Report on Form 10-K, as amended, as supplemented and updated by subsequent Quarterly Reports on Form 10-Q and Current Reports on Form 8-K that we have filed or will file with the SEC, and in other documents which are incorporated by reference into this prospectus, as well as the risk factors and other information contained in or incorporated by reference into any accompanying prospectus supplement and any related free writing prospectus.

If any of these risks were to occur, our business, affairs, prospects, assets, financial condition, results of operations and cash flows could be materially and adversely affected. If this occurs, the trading price of our securities could decline, and you could lose all or part of your investment. For more information about our SEC filings, please see “Where You Can Find More Information.”

**USE OF PROCEEDS**

The net proceeds from the sale of the shares of common stock offered by this prospectus and any accompanying prospectus supplement are solely for the account of the selling stockholder and for the benefit of employees and retirees and their beneficiaries participating in the Plan under which the selling stockholder is maintained. We will not receive any of the proceeds from the sale of our common stock by the selling stockholder.

## DESCRIPTION OF CAPITAL STOCK

The following is a summary of the material provisions of our capital stock, as well as other material terms of our certificate of incorporation and bylaws. This summary does not purport to be complete and is subject to and qualified by our certificate of incorporation and bylaws, copies of which are incorporated by reference as exhibits to the registration statement of which this prospectus is a part.

### General

Our authorized capital stock consists of 150,000,000 shares of common stock, par value \$0.10 per share, and 15,000,000 shares of preferred stock, par value \$1.00 per share.

### Common Stock

Our certificate of incorporation authorizes the issuance of up to 150,000,000 shares of common stock. All outstanding shares of common stock, including the shares of stock to be sold in the offering contemplated by this prospectus and any prospectus supplement, are validly issued, fully paid and nonassessable.

The holders of our common stock are entitled to one vote per share on all matters submitted to a vote of stockholders and our certificate of incorporation does not provide for cumulative voting in the election of directors. Subject to preferences that may be applicable to any outstanding series of preferred stock, the holders of our common stock will receive ratably any dividends declared by our board of directors out of funds legally available for the payment of dividends. In the event of our liquidation, dissolution or winding-up, the holders of our common stock are entitled to share ratably in all assets remaining after payment of or provision for any liabilities, subject to prior distribution rights of preferred stock, if any, then outstanding. Stockholders holding at least twenty-five percent (25%) of the issued and outstanding shares of our common stock can request a special meeting of our stockholders for any purpose.

### Preferred Stock

Our certificate of incorporation provides that our board of directors has the authority, without further action by the stockholders, to issue up to 15,000,000 shares of preferred stock. Our board of directors may issue preferred stock in one or more series and determine the rights, preferences, privileges, qualifications and restrictions granted to or imposed upon our preferred stock, including dividend rights, conversion rights, voting rights, rights and terms of redemption, liquidation preferences and sinking fund terms, any or all of which may be greater than the rights of our common stock. Issuances of preferred stock could adversely affect the voting power of holders of our common stock and reduce the likelihood that holders of our common stock will receive dividend payments and payments upon liquidation. Any issuance of preferred stock also could have the effect of decreasing the market price of our common stock and could delay, deter or prevent a change in control of our Company. Our board of directors does not presently have any plans to issue shares of preferred stock.

### Limitations on Directors' Liability

Our governing documents limit the liability of, and provide for us to indemnify, our directors to the fullest extent permitted by the Delaware General Corporation Law, or the DGCL. The DGCL permits a corporation to limit or eliminate a director's personal liability to the corporation or the holders of its capital stock for breach of fiduciary duty. This limitation is generally unavailable for acts or omissions by a director (i) which were not in good faith, (ii) which were the result of intentional misconduct or a knowing violation of law, (iii) from which the director derived an improper personal benefit (such as a financial profit or other advantage to which the director was not legally entitled) or (iv) which breached the director's duty of loyalty. The DGCL also prohibits limitations on director liability under Section 174 of the DGCL, which relates to certain unlawful dividend declarations and stock repurchases. The limitation of liability and indemnification provisions in our certificate of incorporation and bylaws may discourage stockholders from bringing a lawsuit against directors for breach of their fiduciary duties. These provisions may also have the effect of reducing the likelihood of derivative litigation against directors and officers, even though such an action, if successful, might otherwise benefit us and our stockholders. In addition, your investment may be adversely affected to the extent we pay the costs of settlement and damage awards against directors and officers pursuant to these indemnification provisions.

---

[Table of Contents](#)

We maintain an officer's and director's liability insurance policy insuring our officers and directors against certain expenses, liabilities and losses incurred by them in their capacities as such, and insuring the Company under certain circumstances, in the event that indemnification payments are made to such officers and directors. We have also entered into indemnification agreements with certain of our directors and executive officers.

**Forum Selection Clause**

Our certificate of incorporation provides that, unless we consent in writing to the selection of an alternative forum, the sole and exclusive forum for any stockholder (including any beneficial owner) to bring (i) any derivative action or proceeding brought on our behalf, (ii) any action asserting a claim of breach of a fiduciary duty owed by any of our directors, officers, or employees to us or to our stockholders, (iii) any action asserting a claim arising pursuant to any provision of the DGCL or (iv) any action asserting a claim governed by the internal affairs doctrine, will be the Court of Chancery of the State of Delaware. Any person or entity purchasing or otherwise acquiring any interest in shares of our capital stock is deemed to have notice of and consented to the foregoing provisions.

**Transfer Agent and Registrar**

The Transfer Agent and Registrar for our common stock is Computershare, Inc.

**Listing**

Our common stock is listed on the New York Stock Exchange under the symbol "AJRD."

## SELLING STOCKHOLDER

This prospectus covers the resale, from time to time, by the selling stockholder, of shares of common stock of the Company. The selling stockholder is a tax-qualified trust that holds the assets for the Plan. The registration of the shares of common stock does not necessarily mean that the selling stockholder will sell all or any of the shares of common stock registered by the registration statement of which this prospectus forms a part. The selling stockholder may offer and sell all or any portion of the shares of common stock covered by this prospectus and any applicable prospectus supplement from time to time, but is under no obligation to offer or sell any such shares. Because the selling stockholder may sell, transfer, or otherwise dispose of all, some, or none of the shares of common stock covered by this prospectus, or may acquire additional shares from us or in the market in the future, we cannot determine the number of such shares of common stock that will be sold, transferred, or otherwise disposed of by the selling stockholder or the amount or percentage of shares of common stock that will be held by the selling stockholder upon termination of any particular offering. See “Plan of Distribution.”

The shares of common stock are held in the custody of the Aerojet Rocketdyne Master Retirement Trust in a separate investment account. Newport Trust Company has been appointed as an independent investment manager to direct the disposition of the shares of common stock. The independent investment manager will have sole authority to manage the shares of common stock and the sole power to vote and to dispose of the shares of common stock.

Based upon information provided to us by the selling stockholder, the 2,733,812 shares contributed to the selling stockholder were the only shares of common stock owned by the selling stockholder as of September 10, 2018.

## PLAN OF DISTRIBUTION

At the direction of the investment manager, the selling stockholder may place trades directly with broker-dealers of its choice to sell the shares of our common stock covered by this prospectus for the account of the selling stockholder. The registration statement, of which this prospectus is a part, registered the shares of our common stock held by the selling stockholder under the Securities Act to facilitate future sales by the selling stockholder to the public.

At the direction of the investment manager, the selling stockholder may offer and sell, from time to time, some or all of the shares of common stock covered by this prospectus. Registration of the shares of common stock covered by this prospectus does not mean, however, that those shares necessarily will be offered or sold. We will not receive any proceeds from any sale by the selling stockholder of the securities. See "Use of Proceeds." We will pay all costs, expenses and fees incurred in connection with the preparation and filing of this prospectus and the related registration statement. The selling stockholder will pay all expenses incurred in connection with sales of the shares of our common stock covered by this prospectus. The selling stockholder will also be responsible for other costs, if any, incurred in selling the shares of our common stock, which costs may include, among other things, underwriters discounts and brokerage fees, fees and expenses of counsel and other advisors to the selling stockholder, transfer taxes and related charges in connection with the offer and sale of these shares of our common stock.

At the direction of the investment manager, the selling stockholder may sell the shares of common stock covered by this prospectus from time to time, at market prices prevailing at the time of sale, at prices related to market prices, at a fixed price or prices subject to change or at negotiated prices, by a variety of methods including the following:

- in privately negotiated transactions;
- through broker-dealers, who may act as agents or principals;
- in a block trade in which a broker-dealer will attempt to sell a block of shares of common stock as agent but may position and resell a portion of the block as principal to facilitate the transaction;
- through one or more underwriters on a firm commitment or best-efforts basis;
- directly to one or more purchasers;
- through agents; or
- in any combination of the above.

As directed by the investment manager, the selling stockholder may effect these transactions by selling the shares of our common stock to or through broker-dealers and these broker-dealers may receive compensation in the form of discounts or concessions from the selling stockholder and/or the purchaser of the shares of our common stock for which such broker-dealers may act as agent or to whom they sell as principal, or both. Broker-dealer transactions may include:

- purchases of the shares of common stock by a broker-dealer as principal and resales of the shares of common stock by the broker-dealer for its account pursuant to this prospectus;
- ordinary brokerage transactions; or
- transactions in which the broker-dealer solicits purchasers.

At any time a particular offer of the shares of common stock covered by this prospectus is made, a revised prospectus or prospectus supplement, if required, will be distributed which will set forth the aggregate amount of shares of common stock covered by this prospectus being offered and the terms of the offering, including the name or names of any underwriters, dealers, brokers or agents, any discounts, commissions, concessions and other items constituting compensation from the selling stockholder and any discounts, commissions or concessions allowed or reallocated or paid to dealers. Such prospectus supplement, and, if necessary, a post-effective amendment to the registration statement of which this prospectus is a part, will be filed with the SEC to reflect the disclosure of additional information with respect to the distribution of the shares of common stock covered by this prospectus.

In effecting sales, brokers or dealers engaged by the investment manager may arrange for other brokers or dealers to participate in the resales. As directed by the investment manager, the selling stockholder may enter into hedging transactions with broker-dealers or other financial institutions, and in connection with those transactions, broker-dealers or other financial institutions may engage in short sales of the shares of our common stock. As directed by the investment manager, the selling stockholder also may sell shares short and deliver the shares of our common stock to close out such

---

## [Table of Contents](#)

short positions. As directed by the investment manager, the selling stockholder also may enter into options or other transactions with broker-dealers or other financial institutions that require the delivery to the broker-dealer or other financial institution of the shares of our common stock, which the broker-dealer or other financial institution may resell pursuant to this prospectus. As directed by the investment manager, the selling stockholder may offer the shares of our common stock in connection with the writing of exchange-traded call options, which would involve the selling of exchange-traded call option contracts over the shares of our common stock. By selling a call option, the selling stockholder may receive a premium payment in return for giving the buyer of such option the right to buy the common stock at a pre-determined price. As directed by the investment manager, the selling stockholder also may loan or pledge the shares of our common stock to a broker, dealer or other financial institution, and upon a default, the broker, dealer or other financial institution may effect sales of the loaned or pledged shares of our common stock pursuant to this prospectus.

There is no assurance that the selling stockholder will sell any or all of the shares of our common stock offered under this prospectus.

In connection with its sales, the selling stockholder and any participating broker/dealer may be deemed to be an “underwriter” within the meaning of Section 2(11) of the Securities Act, and any commissions they receive and the proceeds of any sale of shares of our common stock may be deemed to be underwriting discounts and commissions under the Securities Act.

In addition, any shares of our common stock covered by this prospectus that qualify for sale pursuant to Rule 144 under the Securities Act may be sold under Rule 144 rather than pursuant to this prospectus.

The selling stockholder is a trust that is subject to the Employee Retirement Income Security Act of 1974, as amended, or ERISA, and Section 4975 of the Internal Revenue Code of 1986, as amended, or the Code. Prohibited transactions under Title I of ERISA and Section 4975 of the Code could arise if, absent an available exemption, a person or entity which is a “party in interest,” as defined under ERISA, or a “disqualified person,” as defined under the Code, were to purchase any of the shares of our common stock being offered by the selling stockholder, unless the selling stockholder receives in exchange for the shares at least the price then prevailing on a national securities exchange and no commission is charged to the selling stockholder. Any such potential purchaser should consult with counsel to determine whether an exemption is available with respect to any such purchase.

In order to comply with the securities laws of certain states, if applicable, the shares of our common stock must be sold in such jurisdictions only through registered or licensed brokers or dealers. In addition, in certain states the shares of our common stock may not be sold unless they have been registered or qualified for sale in the applicable state or an exemption from the registration or qualification requirement is available and is complied with.



**LEGAL MATTERS**

The validity of the shares of common stock offered hereby will be passed upon for us by Gibson, Dunn & Crutcher LLP.

**EXPERTS**

The financial statements and management's assessment of the effectiveness of internal control over financial reporting (which is included in Management's Report on Internal Control over Financial Reporting) incorporated in this prospectus by reference to the Annual Report on Form 10-K/A for the year ended December 31, 2017 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.

**PART II**

**INFORMATION NOT REQUIRED IN THE PROSPECTUS**

**Item 14. Other Expenses of Issuance and Distribution**

The following table shows the costs and expenses, other than underwriting discounts and commissions, payable in connection with the sale and distribution of the securities being registered. Except as otherwise noted, we will pay all of these amounts. All amounts except the SEC registration fee are estimated.

<u>Type</u>	<u>Amount</u>
SEC registration fee	\$11,997.68
Legal fees and expenses	50,000.00
Accounting fees and expenses	11,000.00
Miscellaneous expenses	25,000.00
Total	<u>\$97,997.68</u>

**Item 15. Indemnification of Directors and Officers**

Our certificate of incorporation and bylaws provide that we will indemnify to the full extent authorized or permitted by law (as now or hereafter in effect) any person made, or threatened to be made, a party to, or is involved in any action, suit or proceeding (whether civil, criminal, administrative, or investigative) by reason of the fact that he or she is or was a director or officer of the Company or is or was serving at our request as a director, officer, employee, or agent of another corporation or of a partnership, joint venture, trust, or other enterprise, including service with respect to employee benefit plans, or in any other capacity. The right of directors and officers to indemnification, as set forth in our certificate of incorporation and bylaws, also includes the right to be paid by the Company the expenses incurred in defending any such proceeding in advance of its final disposition. Such a right to payments in advance is subject to such an individual's undertaking to repay all such amounts if a court of competent jurisdiction ultimately determines by a final, non-appealable order that such director or officer is not entitled to be indemnified pursuant to our certificate of incorporation or bylaws.

Section 145(a) of the Delaware General Corporation Law, or DGCL authorizes a corporation to indemnify any person who was or is a party, or is threatened to be made a party, to a threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative (other than an action by or in the right of the corporation), by reason of the fact that the person is or was a director, officer, employee or agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise, against expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by the person in connection with such action, suit or proceeding, if the person acted in good faith and in a manner the person reasonably believed to be in, or not opposed to, the best interests of the corporation and, with respect to any criminal action or proceeding, had no reasonable cause to believe the person's conduct was unlawful.

Section 145(b) of the DGCL provides in relevant part that a corporation may indemnify any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action or suit by or in the right of the corporation to procure a judgment in its favor by reason of the fact that the person is or was a director, officer, employee or agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise against expenses (including attorneys' fees) actually and reasonably incurred by the person in connection with the defense or settlement of such action or suit if the person acted in good faith and in a manner the person reasonably believed to be in or not opposed to the best interests of the corporation and except that no indemnification shall be made in respect of any claim, issue or matter as to which such person shall have been adjudged to be liable to the corporation unless and only to the extent that the Court of Chancery or the court in which such action or suit was brought shall determine upon application that, despite the adjudication of liability but in view of all the circumstances of the case, such person is fairly and reasonably entitled to indemnity for such expenses which the Court of Chancery or such other court shall deem proper.

---

## [Table of Contents](#)

The DGCL also provides that indemnification under Sections 145(a) and (b) can only be made upon a determination that indemnification of the present or former director, officer or employee or agent is proper in the circumstances because such person has met the applicable standard of conduct set forth in Sections 145(a) and (b). Such determination shall be made, with respect to a person who is a director or officer at the time of such determination, (1) by a majority vote of directors who are not a party to the action at issue (even though less than a quorum), or (2) by a majority vote of a designated committee of these directors (even though less than a quorum), or (3) if there are no such directors, or these directors authorize, by the written opinion of independent legal counsel, or (4) by the stockholders.

Our certificate of incorporation and bylaws further provide that we may purchase and maintain insurance on behalf of any person who is or was a director, officer, employee or agent of the Company or is serving at the request of the Company as a director, officer, employee or agent of another corporation, partnership, joint venture, trust, employee benefit plan or other enterprise against any such expense, liability, or loss asserted against him and incurred by him in any such capacity, or arising out of his status as such, whether or not the Company would have the power to indemnify him against such liability under the provisions of law.

Section 145(g) of the DGCL empowers a corporation to purchase and maintain insurance on behalf of any person who is or was a director, officer, employee or agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise against any liability asserted against such person and incurred by such person in any such capacity, or arising out of such person's status as such, whether or not the corporation would have the power to indemnify such person against such liability under Section 145 of the DGCL.

The Company maintains an officer's and director's liability insurance policy insuring its officers and directors against certain expenses, liabilities, and losses incurred by them in their capacities as such, and insuring the Company under certain circumstances, in the event that indemnification payments are made to such officers and directors.

Section 102(b)(7) of the DGCL permits a corporation to provide for eliminating or limiting the personal liability of one of its directors for any monetary damages related to a breach of fiduciary duty as a director, as long as the corporation does not eliminate or limit the liability of a director for acts or omissions which (1) were in bad faith, (2) were the result of active and deliberate dishonesty and were material to the cause of action so adjudicated, (3) the director derived an improper personal benefit from (such as a financial profit or other advantage to which such director was not legally entitled) or (4) breached the director's duty of loyalty.

The Company has also entered into indemnification agreements (the "indemnification agreements") with certain of its directors and officers (individually, an "indemnitee"). The indemnification agreements require the Company, among other things, to indemnify the indemnitee against specified expenses and liabilities, such as attorneys' fees, judgments, fines and settlements, reasonably incurred or suffered by the individual in connection with any action, suit or proceeding by reason of the fact that the individual was a director or executive officer of the Company, and to advance expenses incurred by the individual in connection with any proceeding against the individual with respect to which the individual may be entitled to indemnification by the Company; provided however, that the Company shall indemnify indemnitee in connection with a proceeding (or part thereof) initiated by indemnitee only if such proceeding (or part thereof) was authorized by the board of directors of the Company. The indemnification agreements provide for the advancement of all expenses to the indemnitee upon the Company's receipt from or on behalf of indemnitee of reasonable evidence of such expenses, together with a written undertaking by indemnitee to repay all amounts so advanced if it shall ultimately be determined by a final, non-appealable order of a court of competent jurisdiction that indemnitee is not entitled to be indemnified under the indemnification agreement. Accordingly, if such ultimate determination is made, the Company shall be entitled to reimbursement by indemnitee of any amounts paid in advance toward such indemnification.

Any form of underwriting agreement or similar purchase agreement that may be filed as an exhibit to a Current Report on Form 8-K and incorporated by reference into this registration statement may provide for indemnification of our directors and officers by the underwriters against certain liabilities.

---

## Table of Contents

### **Item 16. Exhibits**

<u>Exhibit No.</u>	<u>Exhibit Description</u>
4.1	<a href="#"><u>Certificate of Conversion, as filed with the Secretary of State of the State of Ohio on April 11, 2014 was filed as Exhibit 3.1 to GenCorp Inc.'s Current Report on Form 8-K dated April 11, 2014 (File No. 1-01520), and is incorporated herein by reference.</u></a>
4.2	<a href="#"><u>Certificate of Conversion, as filed with the Secretary of State of the State of Delaware on April 11, 2014 was filed as Exhibit 3.2 to GenCorp Inc.'s Current Report on Form 8-K dated April 11, 2014 (File No. 1-01520), and is incorporated herein by reference.</u></a>
4.3	<a href="#"><u>Certificate of Incorporation, as of April 11, 2014, as amended on April 27, 2015 was filed as Exhibit 3.3 to Aerojet Rocketdyne Holdings, Inc.'s Annual Report on Form 10-K for the fiscal year ended November 30, 2015 (File No. 1-01520), and is incorporated herein by reference.</u></a>
4.4	<a href="#"><u>Aerojet Rocketdyne Holdings, Inc. Second Amended and Restated Bylaws was filed as Exhibit 3.1 to Aerojet Rocketdyne Holdings, Inc.'s Current Report on Form 8-K dated January 20, 2016 (File No. 1-01520), and is incorporated herein by reference.</u></a>
5.1*	<a href="#"><u>Opinion of Gibson, Dunn &amp; Crutcher LLP.</u></a>
23.1*	<a href="#"><u>Consent of PricewaterhouseCoopers LLP.</u></a>
23.2*	<a href="#"><u>Consent of Gibson, Dunn &amp; Crutcher LLP (included in Exhibit 5.1).</u></a>
24.1*	<a href="#"><u>Power of Attorney.</u></a>

\* Filed herewith.

### **Item 17. Undertakings**

The undersigned registrant hereby undertakes:

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

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

(ii) To reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the registration statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than 20% change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement.

---

[Table of Contents](#)

(iii) To include any material information with respect to the plan of distribution not previously disclosed in this registration statement or any material change to such information in this registration statement;

*provided, however*, that paragraphs (1)(i), (1)(ii) and (1)(iii) do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in reports filed with or furnished to the Commission by the registrant pursuant to Section 13 or Section 15(d) of the Exchange Act that are incorporated by reference in this registration statement, or is contained in a form of prospectus filed pursuant to Rule 424(b) that is part of this registration statement.

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

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

(4) That, for the purpose of determining liability under the Securities Act to any purchaser:

(i) each prospectus filed by the registrant pursuant to Rule 424(b)(3) shall be deemed to be part of the registration statement as of the date the filed prospectus was deemed part of and included in the registration statement; and

(ii) each prospectus required to be filed pursuant to Rule 424(b)(2), (b)(5), or (b)(7) as part of a registration statement in reliance on Rule 430B relating to an offering made pursuant to Rule 415(a)(1)(i), (vii) or (x) for the purpose of providing the information required by Section 10(a) of the Securities Act shall be deemed to be part of and included in the registration statement as of the earlier of the date such form of prospectus is first used after effectiveness or the date of the first contract of sale of securities in the offering described in the prospectus. As provided in Rule 430B, for liability purposes of the issuer and any person that is at that date an underwriter, such date shall be deemed to be a new effective date of the registration statement relating to the securities in the registration statement to which that prospectus relates, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof; *provided, however*, that no statement made in a registration statement or prospectus that is part of the registration statement or made in a document incorporated or deemed incorporated by reference into the registration statement or prospectus that is part of the registration statement will, as to a purchaser with a time of contract of sale prior to such effective date, supersede or modify any statement that was made in the registration statement or prospectus that was part of the registration statement or made in any such document immediately prior to such effective date.

(5) That, for the purpose of determining liability of the registrant under the Securities Act to any purchaser in the initial distribution of the securities, the undersigned registrant undertakes that in a primary offering of securities of the undersigned registrant pursuant to this registration statement, regardless of the underwriting method used to sell the securities to the purchaser, if the securities are offered or sold to such purchaser by means of any of the following communications, the undersigned registrant will be a seller to the purchaser and will be considered to offer or sell such securities to such purchaser:

(i) any preliminary prospectus or prospectus of the undersigned registrant relating to the offering required to be filed pursuant to Rule 424;

(ii) any free writing prospectus relating to the offering prepared by or on behalf of the undersigned registrant or used or referred to by the undersigned registrant;

(iii) the portion of any other free writing prospectus relating to the offering containing material information about the undersigned registrant or its securities provided by or on behalf of the undersigned registrant; and

(iv) any other communication that is an offer in the offering made by the undersigned registrant to the purchaser.

(6) That, for purposes of determining any liability under the Securities Act, each filing of the registrant's annual report pursuant to Section 13(a) or 15(d) of the Exchange Act (and, where applicable, each filing of an employee benefit plan's annual report pursuant to Section 15(d) of the Exchange Act) that is incorporated by reference in this registration statement shall be deemed to be a new registration statement relating to the securities offered herein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

---

[Table of Contents](#)

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

(8) That for purposes of determining any liability under the Securities Act, the information omitted from the form of prospectus filed as part of this registration statement in reliance upon Rule 430A and contained in a form of prospectus filed by the registrant pursuant to Rule 424(b)(1) or (4), or 497(h) under the Securities Act shall be deemed to be part of this registration statement as of the time it was declared effective.

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

**SIGNATURES**

Pursuant to the requirements of the Securities Act of 1933, the registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-3 and has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized in the City of El Segundo, State of California, on September 10, 2018.

Aerojet Rocketdyne Holdings, Inc.

By: /s/ Eileen P. Drake  
Name: Eileen P. Drake  
Title: Chief Executive Officer and President

Pursuant to the requirements of the Securities Act of 1933, this registration statement has been signed by the following persons in the capacities and on the dates indicated.

<u>/s/ Eileen P. Drake</u> Eileen P. Drake	Chief Executive Officer, President and Director <i>(Principal Executive Officer)</i>	September 10, 2018
<u>/s/ Paul R. Lundstrom</u> Paul R. Lundstrom	Vice President and Chief Financial Officer <i>(Principal Financial Officer)</i>	September 10, 2018
<u>/s/ Daniel L. Boehle</u> Daniel L. Boehle	Vice President and Controller <i>(Principal Accounting Officer)</i>	September 10, 2018
<u>*</u> Warren G. Lichtenstein	Executive Chairman	September 10, 2018
<u>*</u> Thomas A. Corcoran	Director	September 10, 2018
<u>*</u> James R. Henderson	Director	September 10, 2018
<u>*</u> Lance W. Lord	Director	September 10, 2018
<u>*</u> Merrill A. McPeak	Director	September 10, 2018
<u>*</u> James H. Perry	Director	September 10, 2018
<u>*</u> Martin Turchin	Director	September 10, 2018
<u>* By: /s/ Paul R. Lundstrom</u> Paul R. Lundstrom	Attorney-in-Fact pursuant to Power of Attorney	September 10, 2018

September 10, 2018

Aerojet Rocketdyne Holdings, Inc.  
222 N. Pacific Coast Highway, Suite 500  
El Segundo, CA 90245

Re: *Aerojet Rocketdyne Holdings, Inc.*  
*Registration Statement on Form S-3*

Ladies and Gentlemen:

We have examined the Registration Statement on Form S-3 (the "Registration Statement"), of Aerojet Rocketdyne Holdings, Inc., a Delaware corporation (the "Company"), filed on the date hereof with the Securities and Exchange Commission (the "Commission") pursuant to the Securities Act of 1933, as amended (the "Securities Act"), in connection with the offering by the selling stockholder identified in the Registration Statement of up to 2,733,812 shares of the Company's common stock, par value \$0.1 per share (the "Shares").

In arriving at the opinion expressed below, we have examined originals, or copies certified or otherwise identified to our satisfaction as being true and complete copies of the originals, of specimen common stock certificates and such other documents, corporate records, certificates of officers of the Company and of public officials and other instruments as we have deemed necessary or advisable to enable us to render the opinions set forth below. In our examination, we have assumed without independent investigation the genuineness of all signatures, the legal capacity and competency of all natural persons, the authenticity of all documents submitted to us as originals and the conformity to original documents of all documents submitted to us as copies.

Based upon the foregoing, and subject to the assumptions, exceptions, qualifications and limitations set forth herein, we are of the opinion that the Shares are validly issued, fully paid and non-assessable.

This opinion is limited to the effect of the current state of the Delaware General Corporation Law and the facts as they currently exist. We assume no obligation to revise or supplement this opinion in the event of future changes in such laws or the interpretation thereof or such facts.

We consent to the filing of this opinion as an exhibit to the Registration Statement, and we further consent to the use of our name under the caption "Legal Matters" in the Registration Statement and the prospectus that forms a part thereof. In giving these consents, we do not thereby admit that we are within the category of persons whose consent is required under Section 7 of the Securities Act or the Rules and Regulations of the Commission.

Very truly yours,

/s/ Gibson, Dunn & Crutcher LLP



**CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM**

We hereby consent to the incorporation by reference in this Registration Statement on Form S-3 of Aerojet Rocketdyne Holdings, Inc. of our report dated February 21, 2018 relating to the financial statements and the effectiveness of internal control over financial reporting, which appears in Aerojet Rocketdyne Holdings, Inc.'s Annual Report on Form 10-K/A for the year ended December 31, 2017. We also consent to the reference to us under the heading "Experts" in such Registration Statement.

/s/ PricewaterhouseCoopers LLP

Sacramento, California  
September 10, 2018

**POWER OF ATTORNEY**

KNOW ALL PERSONS BY THESE PRESENTS: That each person whose signature appears below, as a Director of Aerojet Rocketdyne Holdings, Inc., a Delaware corporation (the "Company"), with its principal offices at 222 N. Pacific Coast Highway, Suite 500, El Segundo, California, does hereby make, constitute and appoint Arjun L. Kampani and Paul R. Lundstrom, or one of them acting alone, his true and lawful attorneys, with full power of substitution and resubstitution, in his name, place and stead, in any and all capacities, to execute and sign a Registration Statement on Form S-3, and any and all amendments thereto, and documents in connection therewith, to be filed with the Securities and Exchange Commission under the Securities Act of 1933, as amended, giving and granting unto said attorneys full power and authority to do and perform such actions as fully as they might have done or could do if personally present and executing any of said documents, and hereby ratifying and confirming all that each of said attorneys-in-fact and agents or their substitute or substitutes may lawfully do or cause to be done by virtue hereof.

Dated and effective as of the 10th day of September, 2018.

/s/ Warren G. Lichtenstein

Warren G. Lichtenstein  
Executive Chairman

/s/ Eileen P. Drake

Eileen P. Drake, Director

/s/ Lance W. Lord

Lance W. Lord, Director

/s/ James H. Perry

James H. Perry, Director

/s/ Thomas A. Corcoran

Thomas A. Corcoran, Director

/s/ James R. Henderson

James R. Henderson, Director

/s/ Merrill A. McPeak

Merrill A. McPeak, Director

/s/ Martin Turchin

Martin Turchin, Director