

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

SCHEDULE 13G

Under the Securities Exchange Act of 1934

American Superconductor Corporation

(Name of Issuer)

Common Stock

(Title of Class of Securities)

030111207

(CUSIP Number)

May 5, 2017

(Date of Event Which Requires Filing of this Statement)

Check the appropriate box to designate the rule pursuant to which this Schedule is filed:

- Rule 13d-1(b)
- Rule 13d-1(c)
- Rule 13d-1(d)

*The remainder of this cover page shall be filled out for a reporting person's initial filing on this form with respect to the subject class of securities, and for any subsequent amendment containing information which would alter the disclosures provided in a prior cover page.

The information required in the remainder of this cover page shall not be deemed to be "filed" for the purpose of Section 18 of the Securities Exchange Act of 1934 ("Act") or otherwise subject to the liabilities of that section of the Act but shall be subject to all other provisions of the Act (however, see the Notes).

Persons who are to respond to the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB control number.

1.	NAMES OF REPORTING PERSONS I.R.S. IDENTIFICATION NO. OF ABOVE PERSONS (ENTITIES ONLY) ARDSLEY ADVISORY PARTNERS		
2.	CHECK THE APPROPRIATE BOX IF A GROUP*		(a) <input checked="" type="checkbox"/> (b) <input type="checkbox"/>
3.	SEC USE ONLY		
4.	CITIZENSHIP OR PLACE OF ORGANIZATION NEW YORK, UNITED STATES OF AMERICA		
NUMBER OF SHARES	5.	SOLE VOTING POWER	0
BENEFICIALLY OWNED BY	6.	SHARED VOTING POWER	1,340,000
EACH REPORTING	7.	SOLE DISPOSITIVE POWER	0
PERSON WITH:	8.	SHARED DISPOSITIVE POWER	1,340,000
9.	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON		1,340,000
10.	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS)		0
11.	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)		7.4%
12.	TYPE OF REPORTING PERSON (SEE INSTRUCTIONS)		PN, IA

1.	NAMES OF REPORTING PERSONS I.R.S. IDENTIFICATION NO. OF ABOVE PERSONS (ENTITIES ONLY) PHILIP J. HEMPLEMAN		
2.	CHECK THE APPROPRIATE BOX IF A GROUP*		(a) <input checked="" type="checkbox"/> (b) <input type="checkbox"/>
3.	SEC USE ONLY		
4.	CITIZENSHIP OR PLACE OF ORGANIZATION UNITED STATES OF AMERICA		
NUMBER OF SHARES	5.	SOLE VOTING POWER	0
BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH:	6.	SHARED VOTING POWER	1,340,000
	7.	SOLE DISPOSITIVE POWER	0
	8.	SHARED DISPOSITIVE POWER	1,340,000
9.	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON		1,340,000
10.	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS)		0
11.	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)		7.4%
12.	TYPE OF REPORTING PERSON (SEE INSTRUCTIONS)		IN

1.	NAMES OF REPORTING PERSONS I.R.S. IDENTIFICATION NO. OF ABOVE PERSONS (ENTITIES ONLY) ARDSLEY PARTNERS I		
2.	CHECK THE APPROPRIATE BOX IF A GROUP*		(a) <input checked="" type="checkbox"/> (b) <input type="checkbox"/>
3.	SEC USE ONLY		
4.	CITIZENSHIP OR PLACE OF ORGANIZATION NEW YORK, UNITED STATES OF AMERICA		
NUMBER OF SHARES	5.	SOLE VOTING POWER	0
BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH:	6.	SHARED VOTING POWER	1,340,000
	7.	SOLE DISPOSITIVE POWER	0
	8.	SHARED DISPOSITIVE POWER	1,340,000
9.	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON		1,340,000
10.	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS)		0
11.	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)		7.4%
12.	TYPE OF REPORTING PERSON (SEE INSTRUCTIONS)		PN

1.	NAMES OF REPORTING PERSONS I.R.S. IDENTIFICATION NO. OF ABOVE PERSONS (ENTITIES ONLY) ARDSLEY PARTNERS FUND II, L.P.		
2.	CHECK THE APPROPRIATE BOX IF A GROUP*		(a) <input checked="" type="checkbox"/> (b) <input type="checkbox"/>
3.	SEC USE ONLY		
4.	CITIZENSHIP OR PLACE OF ORGANIZATION DELAWARE, UNITED STATES OF AMERICA		
NUMBER OF SHARES	5.	SOLE VOTING POWER	0
BENEFICIALLY OWNED BY	6.	SHARED VOTING POWER	234,100
EACH REPORTING	7.	SOLE DISPOSITIVE POWER	0
PERSON WITH:	8.	SHARED DISPOSITIVE POWER	234,100
9.	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON		234,100
10.	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS)		0
11.	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)		1.3%
12.	TYPE OF REPORTING PERSON (SEE INSTRUCTIONS)		PN

1.	NAMES OF REPORTING PERSONS I.R.S. IDENTIFICATION NO. OF ABOVE PERSONS (ENTITIES ONLY) ARDSLEY PARTNERS INSTITUTIONAL FUND, L.P.		
2.	CHECK THE APPROPRIATE BOX IF A GROUP*		(a) <input checked="" type="checkbox"/> (b) <input type="checkbox"/>
3.	SEC USE ONLY		
4.	CITIZENSHIP OR PLACE OF ORGANIZATION DELAWARE, UNITED STATES OF AMERICA		
NUMBER OF SHARES	5.	SOLE VOTING POWER	0
BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH:	6.	SHARED VOTING POWER	294,700
	7.	SOLE DISPOSITIVE POWER	0
	8.	SHARED DISPOSITIVE POWER	294,700
9.	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON		294,700
10.	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS)		0
11.	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)		1.6%
12.	TYPE OF REPORTING PERSON (SEE INSTRUCTIONS)		PN

1.	NAMES OF REPORTING PERSONS I.R.S. IDENTIFICATION NO. OF ABOVE PERSONS (ENTITIES ONLY) ARDSLEY PARTNERS ADVANCED HEALTHCARE FUND, L.P.		
2.	CHECK THE APPROPRIATE BOX IF A GROUP*		(a) <input checked="" type="checkbox"/> (b) <input type="checkbox"/>
3.	SEC USE ONLY		
4.	CITIZENSHIP OR PLACE OF ORGANIZATION DELAWARE, UNITED STATES OF AMERICA		
NUMBER OF SHARES	5.	SOLE VOTING POWER	0
BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH:	6.	SHARED VOTING POWER	171,200
	7.	SOLE DISPOSITIVE POWER	0
	8.	SHARED DISPOSITIVE POWER	171,200
9.	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON		171,200
10.	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS)		0
11.	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)		0.9%
12.	TYPE OF REPORTING PERSON (SEE INSTRUCTIONS)		PN

1.	NAMES OF REPORTING PERSONS I.R.S. IDENTIFICATION NO. OF ABOVE PERSONS (ENTITIES ONLY) ARDSLEY PARTNERS RENEWABLE ENERGY FUND, L.P.		
2.	CHECK THE APPROPRIATE BOX IF A GROUP*		(a) <input checked="" type="checkbox"/> (b) <input type="checkbox"/>
3.	SEC USE ONLY		
4.	CITIZENSHIP OR PLACE OF ORGANIZATION DELAWARE, UNITED STATES OF AMERICA		
NUMBER OF SHARES	5.	SOLE VOTING POWER	0
BENEFICIALLY OWNED BY	6.	SHARED VOTING POWER	640,000
EACH REPORTING	7.	SOLE DISPOSITIVE POWER	0
PERSON WITH:	8.	SHARED DISPOSITIVE POWER	640,000
9.	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON		640,000
10.	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS)		0
11.	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)		3.5%
12.	TYPE OF REPORTING PERSON (SEE INSTRUCTIONS)		PN

Item 1.

- (a) Name of Issuer: **American Superconductor Corporation**
 (b) Address of Issuer's Principal Executive Offices: **64 Jackson Road
 Devens, Massachusetts 01434**

Item 2.

- (a) Name of Person Filing: **This Schedule 13G (the "Schedule") is being filed with respect to shares of Common Stock (as defined below) of American Superconductor Corporation (the "Issuer") which are beneficially owned by Ardsley Advisory Partners (the "Advisor"), Ardsley Partners I (the "General Partner"), Phillip J. Hempleman ("Hempleman"), Ardsley Partners Fund II, L.P. (the "Fund II"), Ardsley Partners Institutional Fund, L.P. (the "Institutional Fund"), Ardsley Partners Advanced Healthcare Fund, L.P. (the "Healthcare Fund") and Ardsley Partners Renewable Energy Fund (the "Renewable Energy Fund") (together, the "Reporting Persons"). See Item 4 below.**
- (b) Address of Principal Business Office or, if none, Residence: **262 Harbor Drive
 Stamford, CT 06902**
- (c) Citizenship: **The Fund II, the Institutional Fund, the Advanced Healthcare Fund, and the Renewable Energy Fund are Delaware limited partnerships. The Advisor and the General Partner are New York general partnerships. Hempleman is a United States Citizen.**
- (d) Title of Class of Securities: **Common Stock**
- (e) CUSIP Number: **030111207**

Item 3. If this statement is filed pursuant to §§240.13d-1(b) or 240.13d-2(b) or (c), check whether the person filing is a:

- (a) Broker or dealer registered under section 15 of the Act (15 U.S.C. 78o).
 (b) Bank as defined in section 3(a)(6) of the Act (15 U.S.C. 78c).
 (c) Insurance company as defined in section 3(a)(19) of the Act (15 U.S.C. 78c).
 (d) Investment company registered under section 8 of the Investment Company Act of 1940 (15 U.S.C. 80a-8).
 (e) An investment adviser in accordance with §240.13d-1(b)(1)(ii)(E);
 (f) An employee benefit plan or endowment fund in accordance with §240.13d-1(b)(1)(ii)(F);
 (g) A parent holding company or control person in accordance with § 240.13d-1(b)(1)(ii)(G);
 (h) A savings associations as defined in Section 3(b) of the Federal Deposit Insurance Act (12 U.S.C. 1813);
 (i) A church plan that is excluded from the definition of an investment company under section 3(c)(14) of the Investment Company Act of 1940 (15 U.S.C. 80a-3);
 (j) Group, in accordance with §240.13d-1(b)(1)(ii)(J).

Item 4. Ownership.

Provide the following information regarding the aggregate number and percentage of the class of securities of the issuer identified in Item 1.

The Information required by Items 4(a) - (c) is set forth in Rows 5-11 of the cover page for each Reporting Person hereto and is incorporated by reference for each Reporting Person. The percentage ownership of the Reporting Persons is based on the sum of 4,000,000 shares of Common Stock being offering in connection with a public offering announced by the Issuer in a press release dated May 5, 2017 and 14,219,985 outstanding shares of Common Stock of the Issuer, as disclosed on the Issuer's 10-Q filed with the SEC on February 6, 2017.

Item 5. Ownership of Five Percent or Less of a Class.

If this statement is being filed to report the fact that as of the date hereof the reporting person has ceased to be the beneficial owner of more than five percent of the class of securities, check the following: o.

Item 6. Ownership of More Than Five Percent on Behalf of Another Person.

Not applicable.

Item 7. Identification and Classification of the Subsidiary which Acquired the Security Being Reported on by the Parent Holding Company or Control Person.

Not applicable.

Item 8. Identification and Classification of Members of the Group.

See Exhibit 2

Item 9. Notice of Dissolution of Group.

Not applicable.

Item 10. Certification.

The following certification shall be included if the statement is filed pursuant to §240.13d-1(b) with respect to Ardsley Advisory Partners:

- (a) By signing below I certify that, to the best of my knowledge and belief, the securities referred to above were acquired and are held in the ordinary course of business and were not acquired and are not held for the purpose of or with the effect of changing or influencing the control of the issuer of the securities and were not acquired and are not held in connection with or as a participant in any transaction having that purpose or effect. x

The following certification shall be included if the statement is filed pursuant to §240.13d-1(c) with respect to Ardsley Partners I:

- (b) By signing below I certify that, to the best of my knowledge and belief, the securities referred to above were not acquired and are not held for the purpose of or with the effect of changing or influencing the control of the issuer of the securities and were not acquired and are not held in connection with or as a participant in any transaction having that purpose or effect. x

The following certification shall be included if the statement is filed pursuant to §240.13d-1(c) with respect to Philip J Hempleman :

- (c) By signing below I certify that, to the best of my knowledge and belief, the securities referred to above were not acquired and are not held for the purpose of or with the effect of changing or influencing the control of the issuer of the securities and were not acquired and are not held in connection with or as a participant in any transaction having that purpose or effect. x

The following certification shall be included if the statement is filed pursuant to §240.13d-1(c) with respect to Ardsley Partners Fund II, L.P.:

- (d) By signing below I certify that, to the best of my knowledge and belief, the securities referred to above were not acquired and are not held for the purpose of or with the effect of changing or influencing the control of the issuer of the securities and were not acquired and are not held in connection with or as a participant in any transaction having that purpose or effect. x

The following certification shall be included if the statement is filed pursuant to §240.13d-1(c) with respect to Ardsley Partners Institutional Fund, L.P.:

- (e) By signing below I certify that, to the best of my knowledge and belief, the securities referred to above were not acquired and are not held for the purpose of or with the effect of changing or influencing the control of the issuer of the securities and were not acquired and are not held in connection with or as a participant in any transaction having that purpose or effect. x

The following certification shall be included if the statement is filed pursuant to §240.13d-1(c) with respect to Ardsley Partners Advanced Healthcare Fund, L.P. :

- (f) By signing below I certify that, to the best of my knowledge and belief, the securities referred to above were not acquired and are not held for the purpose of or with the effect of changing or influencing the control of the issuer of the securities and were not acquired and are not held in connection with or as a participant in any transaction having that purpose or effect. x

The following certification shall be included if the statement is filed pursuant to §240.13d-1(c) with respect to Ardsley Partners Renewable Energy Fund, L.P. :

- (g) By signing below I certify that, to the best of my knowledge and belief, the securities referred to above were not acquired and are not held for the purpose of or with the effect of changing or influencing the control of the issuer of the securities and were not acquired and are not held in connection with or as a participant in any transaction having that purpose or effect. x
-

SIGNATURE

After reasonable inquiry and to the best of my knowledge and belief, I certify that the information set forth in this statement is true, complete and correct.

May 8, 2017

Date

ARDSLEY ADVISORY PARTNERS

/s/ Steve Napoli

Signature

Steve Napoli/Partner

Name/Title

May 8, 2017

Date

ARDSLEY PARTNERS I

/s/ Steve Napoli

Signature

Steve Napoli/General PartnerMay 8, 2017

Date

PHILIP J. HEMPLEMAN

/s/ Steve Napoli*

Signature

Steve Napoli/Attorney-in Fact for Philip J. Hempleman

Name/Title

May 8, 2017

Date

ARDSLEY PARTNERS FUND II, L.P.

By: Ardsley Partners I, General Partner

/s/ Steve Napoli

Signature

Steve Napoli/General Partner

May 8, 2017

Date

ARDSLEY PARTNERS INSTITUTIONAL FUND, L.P.

By: Ardsley Partners I, General Partner

/s/ Steve Napoli

Signature

Steve Napoli/General Partner

May 8, 2017

Date

ARDSLEY PARTNERS ADVANCED HEALTHCARE FUND, L.P.

By: Ardsley Partners I, General Partner

/s/ Steve Napoli

Signature

Steve Napoli/General Partner

May 8, 2017

Date

ARDSLEY PARTNERS RENEWABLE ENERGY FUND, L.P.

By: Ardsley Partners I, General Partner

/s/ Steve Napoli

Signature

Steve Napoli/General Partner

* Executed by Steve Napoli as Attorney-in-Fact for Philip J. Hempleman. The Power of Attorney for Mr. Hempleman is attached as Exhibit 2 to the Statement on Schedule 13G/A with respect to the Common Stock of Vaxgen, Inc., filed on February 15, 2006, and is incorporated herein by reference.

The original statement shall be signed by each person on whose behalf the statement is filed or his authorized representative. If the statement is signed on behalf of a person by his authorized representative other than an executive officer or general partner of the filing person, evidence of the representative's authority to sign on behalf of such person shall be filed with the statement, provided, however, that a power of attorney for this purpose which is already on file with the Commission may be incorporated by reference. The name and any title of each person who signs the statement shall be typed or printed beneath his signature.

NOTE: Schedules filed in paper format shall include a signed original and five copies of the schedule, including all exhibits. See §240.13d-7 for other parties for whom copies are to be sent.

Attention: Intentional misstatements or omissions of fact constitute Federal criminal violations (See 18 U.S.C. 1001)

JOINT FILING AGREEMENT

In accordance with Rule 13d-1(f) under the Securities Exchange Act of 1934, as amended, the persons named below agree to the joint filing on behalf of each of them of this Schedule 13G (including amendments thereto) with respect to the Common Stock of American Superconductor Corporation and further agree that this Joint Filing Agreement be included as an Exhibit to such joint filing. In evidence thereof, the undersigned, hereby execute this Agreement this May 8, 2017.

May 8, 2017

Date

ARDSLEY ADVISORY PARTNERS

/s/ Steve Napoli

Signature

Steve Napoli/Partner

Name/Title

May 8, 2017

Date

ARDSLEY PARTNERS I

/s/ Steve Napoli

Signature

Steve Napoli/General Partner

May 8, 2017

Date

PHILIP J. HEMPLEMAN

/s/ Steve Napoli*

Signature

Steve Napoli/Attorney-in Fact for Philip J. Hempleman

Name/Title

May 8, 2017

Date

ARDSLEY PARTNERS FUND II, L.P.

By: Ardsley Partners I, General Partner

/s/ Steve Napoli

Signature

Steve Napoli/General Partner

May 8, 2017

Date

ARDSLEY PARTNERS INSTITUTIONAL FUND, L.P.

By: Ardsley Partners I, General Partner

/s/ Steve Napoli

Signature

Steve Napoli/General Partner

May 8, 2017

Date

ARDSLEY PARTNERS ADVANCED HEALTHCARE FUND, L.P.

By: Ardsley Partners I, General Partner

/s/ Steve Napoli

Signature

Steve Napoli/General Partner

May 8, 2017

Date

ARDSLEY PARTNERS RENEWABLE ENERGY FUND, L.P.

By: Ardsley Partners I, General Partner

/s/ Steve Napoli

Signature

Steve Napoli/General Partner

* Executed by Steve Napoli as Attorney-in-Fact for Philip J. Hempleman. The Power of Attorney for Mr. Hempleman is attached as Exhibit 2 to the Statement on Schedule 13G/A with respect to the Common Stock of Vaxgen, Inc., filed on February 15, 2006, and is incorporated herein by reference.

IDENTIFICATION AND CLASSIFICATION OF MEMBERS OF THE GROUP

ARDSLEY ADVISORY PARTNERS

ARDSLEY PARTNERS I

PHILIP J. HEMPLEMAN

ARDSLEY PARTNERS FUND II, L.P.

ARDSLEY PARTNERS INSTITUTIONAL FUND, L.P.

ARDSLEY PARTNERS ADVANCED HEALTHCARE FUND, L.P.

ARDSLEY PARTNERS RENEWABLE ENERGY FUND, L.P.
