

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

SCHEDULE 13D

Under the Securities Exchange Act of 1934

American Superconductor Corporation

(Name of Issuer)

Common Stock, \$.01 par value

(Title of Class of Securities)

030111108

(CUSIP Number)

George W. Lloyd
Testa, Hurwitz & Thibault, LLP
High Street Tower
125 High Street
Boston, MA 02110

(Name, Address and Telephone Number of Person
Authorized to Receive Notices and Communications)

April 7, 1997

(Date of Event which Requires Filing of this Statement)

If the filing person has previously filed a statement on Schedule 13G to report the acquisition which is the subject of this Schedule 13D, and is filing this schedule because of Rule 13d-1(b)(3) or (4), check the following box [].

Note: Six copies of this statement, including all exhibits, should be filed with the Commission. See Rule 13d-1(a) for other parties to whom copies are to be sent.

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SCHEDULE 13D

CUSIP No. 030111108	Page 2 of 8 Pages
1	NAME OF REPORTING PERSON S.S. OR I.R.S. IDENTIFICATION NO. OF ABOVE PERSON CHARTH (Compagnie Holding d'Applications et de Realisations Thermiques et Hydrauliques) S.A.
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP* (a) [] (b) []
3	SEC USE ONLY
4	SOURCE OF FUNDS* WC
5	CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED [] PURSUANT TO ITEMS 2(d) or 2(e)
6	CITIZENSHIP OR PLACE OF ORGANIZATION France
7	SOLE VOTING POWER 1,000,000

NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	8	SHARED VOTING POWER	-0-
	9	SOLE DISPOSITIVE POWER	1,000,000
	10	SHARED DISPOSITIVE POWER	-0-
11	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON		
	1,000,000		
12	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES*		[]
13	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)		
	8.6%		
14	TYPE OF REPORTING PERSON*		
	CO		

*SEE INSTRUCTIONS BEFORE FILLING OUT!
INCLUDE BOTH SIDES OF THE COVER PAGE, RESPONSES TO ITEMS 1-7
(INCLUDING EXHIBITS) OF THE SCHEDULE, AND THE SIGNATURE ATTESTATION.

Item 1. Security and Issuer

This statement on Schedule 13D relates to the Common Stock, \$.01 par value per share (the "Common Stock"), of American Superconductor, a Delaware corporation (the "Issuer"). The principal executive offices of the Issuer are located at Two Technology Drive, Westborough, MA 01581.

Item 2. Identity and Background

(i) This statement is being filed by CHARTH (Compagnie Holding D'Applications et De Realisations Thermiques et Hydrauliques) S.A., a corporation organized under the laws of France ("CHARTH"). CHARTH is a wholly-owned subsidiary of Electricite de France, S.A., a corporation organized under the laws of France ("EDF").

(ii) The address of the principal office and principal business of CHARTH is 57 F.D. Roosevelt, Paris, France 75008. The address of the principal office and principal business of EDF is 2 rue Louis Murat, Paris, France 75383.

(iii) The EDF is a large French electricity utility corporation and is principally engaged in the production and distribution of electricity in France. CHARTH is a holding company for investments in companies developing new applications and technology of relevance to the electricity industry.

(iv) Set forth in Schedule I and Schedule II is the name and present principal occupation or employment and the name, principal business and address of any corporation or other organization in which such employment is conducted, of each of the directors and executive officers of CHARTH and EDF, respectively, as of the date hereof.

(v) During the past five years, none of CHARTH, EDF, and, to the best knowledge of CHARTH and EDF, any person named in Schedule I to this Schedule 13D has been convicted in a criminal proceeding (excluding traffic violations or similar misdemeanors).

(vi) During the past five years, none of CHARTH, EDF, and, to the best knowledge of CHARTH and EDF, any person named in Schedules I and II to this Schedule 13D, was a party to a civil proceeding of a judicial or administrative body of competent jurisdiction as a result of which such person was or is subject to a judgment, decree or final order enjoining future violations of or prohibiting or mandating activity subject to Federal or state securities laws or finding any violation with respect to such laws.

(vii) All of the directors and executive officers of CHARTH named in Schedule I are citizens of France and all of the directors and executive officers of EDF named in Schedule II are citizens of France.

Item 3. Source and Amount of Funds or Other Consideration

On April 1, 1997, the Issuer and CHARTH entered into a Strategic Alliance Agreement (the "Strategic Alliance Agreement"), pursuant to which CHARTH agreed to make an equity investment of \$10,000,000 in the Issuer in return for 1,000,000 shares of Common Stock. The purchase price for this investment was paid out of the available cash of CHARTH.

Item 4. Purpose of Transaction

As described more fully in Item 3 above, this statement relates to the acquisition of 1,000,000 shares of Common Stock by the CHARTH. Pursuant to the Strategic Alliance Agreement, the Issuer agreed to increase the number of members of the Issuer's Board of Directors by one, and that an individual designated by CHARTH be elected to serve on the Board. The Issuer and CHARTH have also agreed to establish an advisory board, to be comprised of three members from each of the Issuer and CHARTH, to exchange information regarding the electricity market.

Pursuant to the Strategic Alliance Agreement, CHARTH has been granted certain registration rights relating to the Common Stock held by CHARTH. In addition, CHARTH has agreed not to acquire, directly or indirectly any voting securities, if after such acquisition, CHARTH would own of record or beneficially in the aggregate more than 12% of the voting securities of the Issuer. The shares of Common Stock acquired by CHARTH have been acquired for the purpose of making an investment in the Issuer and not with the present intention of acquiring control of the Issuer's business.

CHARTH intends from time to time intend to review its investment in the Issuer on the basis of various factors, including the Issuer's business, financial condition, results of operations and prospects, general economic and industry conditions, the securities markets in general and those for the Issuer's securities in particular, as well as other developments and other investment opportunities. Based upon such review, CHARTH will take such actions in the future as CHARTH may deem appropriate in light of the circumstances existing from time to time. If CHARTH believes that further investment in the Issuer is attractive, whether because of the market price of the Issuer's securities or otherwise, they may acquire shares of Common Stock or other securities of the Issuer either in the open market or in privately-negotiated transactions. Similarly, depending on market and other factors, CHARTH may determine to dispose of some or all of the Common Stock currently owned by CHARTH or otherwise acquired by CHARTH either in the open market or in privately negotiated transactions.

Except as stated above, CHARTH, EDF and all those listed on Schedules I and II have no present plans which relate to or would result in:

- (a) The acquisition by any person of additional securities of the Issuer, or the disposition of securities of the Issuer;
- (b) An extraordinary corporate transaction, such as a merger, reorganization or liquidation, involving the Issuer or any of its subsidiaries;
- (c) A sale or transfer of a material amount of assets of the Issuer or any of its subsidiaries;
- (d) Any change in the present board of directors or management of the Issuer, including any plans or proposals to change the number or term of directors or to fill any existing vacancies on the board;
- (e) Any material change in the present capitalization or dividend policy of the Issuer;
- (f) Any other material change in the Issuer's business or corporate structure;
- (g) Changes in the Issuer's charter, bylaws or instruments corresponding thereto or other actions which may impede the acquisition of control of the Issuer by any person;

- (h) Causing a class of securities of the Issuer to be delisted from a national securities exchange or to cease to be authorized to be quoted in an inter-dealer quotation system of a registered national securities association;
- (i) A class of equity securities of the Issuer becoming eligible for termination of registration pursuant to Section 12(g)(4) of the Securities Exchange Act of 1934; or
- (j) Any action similar to any of those enumerated above.

Item 5. Interest in Securities of the Issuer

(a) Amount Beneficially Owned:

CHARTH beneficially owns 1,000,000 shares of Common Stock.

Percent of Class:

Based on shares outstanding as of June 20, 1997, CHARTH owns 8.6% of the outstanding Common Stock.

(b) Number of shares as to which CHARTH has:

- (i) sole power to vote or direct the vote: 1,000,000 shares
- (ii) shared power to vote or direct the vote: Not applicable.
- (iii) sole power to dispose or to direct the disposition of: 1,000,000 shares
- (iv) shared power to dispose or to direct the disposition of: Not applicable.

(c) Except as set forth in Item 3 herein, none of CHARTH, EDF, and, to the best knowledge of CHARTH and EDF, any person named in Schedules I and II, has affected any transaction in the Common Stock during the past 60 days.

(d) Not applicable.

(e) Not applicable.

Item 6. Contracts, Arrangements, Understandings or Relationships With Respect to Securities of the Issuer

Except as described in Item 4 above, to CHARTH and EDF's knowledge, there are no contracts, arrangements, understandings or relationships (legal or otherwise) among the persons named in Item 2 and between such persons and any person with respect to any securities of the Issuer, including but not limited to transfer or voting of any of the securities, finder's fees, joint ventures, loan or option arrangements, puts or calls, guarantees of profits, division of profits or loss, or the giving or withholding of proxies.

Item 7. Material to Be Filed as Exhibits

The Strategic Alliance Agreement dated April 1, 1997 between the Issuer and CHARTH is incorporated by reference to the Exhibits to the Issuer's Annual Report on Form 10-K filed with the Securities and Exchange Commission on June 30, 1997.

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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 current.

Date: October 16, 1997

CHARTH (COMPAGNIE HOLDING
D'APPLICATIONS ET DE REALISATIONS
THERMIQUES ET HYDRAULIQUES) S.A.

By: /s/ Alain Bertay

Name: Alain Bertay
Title: Chief Executive Officer

SCHEDULE I

Executive Officers and Directors
of
CHARTH (Compagnie Holding d'Applications et de
Realisations Thermiques et Hydrauliques) S.A

Name	Principal Occupation or Employment	Name and Address of Corporation or Other Organization in Which Employed
Paul Godin	Chairman	Electricite de France
Alain Bertay	Chief Executive Officer	Electricite de France
Yves Cousin	Administrator	Electricite de France
Christian Gitiaux	Administrator	Electricite de France
Bernard Esteve	Administrator	Electricite de France
Jean-Paul Brugnot	Administrator	Electricite de France
Jean-Pierre Benque	Administrator	Electricite de France
Jacques Masson	Administrator	Electricite de France
Alain Genel	Administrator	Electricite de France
Vincent de Rivaz	Administrator	Electricite de France
Jacques Chauvin	Administrator	Electricite de France

SCHEDULE II

Conseil D'Administration
of
Electricite de France, S.A.

Name	Principal Occupation or Employment	Name and Address of Corporation or Other Organization in Which Employed
Edmond Alphantery	President	Electricite de France
Francois Ailleret	Administrator	Electricite de France
Christophe Blanchard-Dignac	Administrator	Ministere de l'Economie, des Finances et de l'Industrie
Pascale Bochard	Administrator	Orgeco
Jean-Pierre Cremona	Administrator	Electricite de France
Yannick d'Escatha	Administrator	Commissariat a l'Energie Atomique
Henri Guaino	Administrator	Commisariat au Plan
Jochen Holzer	Administrator	VIAG et Bayenwerk
Anne Le Lorier	Administrator	Ministere de l'Economie, des Finances et de l'Industrie
Jean-Marc Mauchauffee	Administrator	Electricite de France
Alain Martin	Administrator	Electricite de France
Francis Mer	Administrator	Usinor
Robert Pantaloni	Administrator	Electricite de France
Alain Pluchet	Administrator	Retraite
Jean Renard	Administrator	Retraite
Francois Rey	Administrator	Retraite
Christine Saincy	Administrator	Electricite de France
Serge Terrier	Administrator	Electricite de France