AeroVironment Inc Form SC 13G February 12, 2008

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

SCHEDULE 13G

Under the Securities Exchange Act of 1934 (Amendment No.)*

Aerovironment, Inc.

(Name of Issuer)

Common

(Title of Class of Securities)

251893103

(CUSIP Number)

Check the following box if a fee is being paid with this statement []. (A fee is not required only if the filing person: (1) has a previous statement on file reporting beneficial ownership of more than five percent of the class of securities described in Item 1; and (2) has filed no amendment subsequent thereto reporting beneficial ownership of five percent or less of such class.) (See Rule 13d-7.)

*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).

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Schedule 13G (continued)

CUSIP No. 251893103

NAME OF REPORTING PERSON S.S. OR I.R.S. IDENTIFICATION NO. OF ABOVE PERSON

Baron Capital Group, Inc.

2 CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP*

		(a) [] (b) []				
3 SEC	USE ONLY					
4 CIT	IZENSHIP OR PLACE OF ORGANIZATION					
New	York					
NUMBER SHARE BENEFICI	S 0					
OWNED EACH REPORTI	BY 6 SHARED VOTING POWER 1,500,000					
PERSO WITH	N 7 SOLE DISPOSITIVE POWER					
	8 SHARED DISPOSITIVE POWER 1,500,000					
	REGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING	NG PERSON				
11 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9) 7.4%						
12 TYP	E OF REPORTING PERSON*					
HC,	CO					
	*SEE INSTRUCTIONS BEFORE FILLING OUT					
Page 3 of 11 Pages						
Sche	dule 13G (continued)					
CUSIP No.	251893103					
	E OF REPORTING PERSON OR I.R.S. IDENTIFICATION NO. OF ABOVE PERSON					
BAM	CO, Inc.					
2 CHE	CK THE APPROPRIATE BOX IF A MEMBER OF A GROUP*	(a) [] (b) []				
3 SEC	USE ONLY					

4 CITIZENSHIP OR PLACE OF ORGANIZATION

	New York					
SHARES BENEFICIALLY OWNED BY EACH REPORTING		5 SOLE VOTING POWER 0				
		6 SHARED VOTING POWER 1,500,000				
		7 SOLE DISPOSITIVE POWER 0				
		8 SHARED DISPOSITIVE POWER 1,500,000				
		AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON				
	1,500,000					
10	CHECK BOX	IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES*				
11	PERCENT OF	CLASS REPRESENTED BY AMOUNT IN ROW (9)				
	7.4%					
12	TYPE OF RE	PORTING PERSON*				
	IA, CO					
		*SEE INSTRUCTIONS BEFORE FILLING OUT				
	Page 4 of 11 Pages					
S	chedule 13	G (continued)				
CUSIP N	o. 2518931	03				
1		PORTING PERSON R.S. IDENTIFICATION NO. OF ABOVE PERSON				
	Baron Smal	1 Cap Fund				
2	CHECK THE	APPROPRIATE BOX IF A MEMBER OF A GROUP* (a) [] (b) []				
	CEC LICE ON					
3	SEC USE ON					
4	CITIZENSH	P OR PLACE OF ORGANIZATION				
	USA					
SH	ER OF ARES ICIALLY	5 SOLE VOTING POWER 0				

OWNED BY EACH REPORTING PERSON WITH			HARED VOTING POWER ,500,000			
		7	GOLE DISPOSITIVE POWER 0			
			SHARED DISPOSITIVE POWER			
9	AGGREGATE	AMOUNT	BENEFICIALLY OWNED BY EACH REPORTING PERSON			
	1,500,000					
10	CHECK BOX	IF THE	AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES*			
11	PERCENT OF	CLASS	REPRESENTED BY AMOUNT IN ROW (9)			
	7.4%					
12	TYPE OF RE	PORTIN	; person*			
	IV					
		*S	E INSTRUCTIONS BEFORE FILLING OUT			
			Page 5 of 11 Pages			
	Schedule 13	G (con	inued)			
	No. 2518931					
1	NAME OF RE	PORTIN	PERSON			
	NAME OF REPORTING PERSON S.S. OR I.R.S. IDENTIFICATION NO. OF ABOVE PERSON					
	Ronald Bar	on				
2	CHECK THE	APPROP	RIATE BOX IF A MEMBER OF A GROUP*			
			(b) []			
3	SEC USE ON	ILY				
4	 CITIZENSHI	P OR P	JACE OF ORGANIZATION			
	USA					
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH		5	OLE VOTING POWER			
			SHARED VOTING POWER ,,500,000			
		7	GOLE DISPOSITIVE POWER 0			
		8	SHARED DISPOSITIVE POWER			

1,500,000

9 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 1,500,000 ______ 10 CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES* 11 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9) 7.4% ._____ 12 TYPE OF REPORTING PERSON* HC, IN *SEE INSTRUCTIONS BEFORE FILLING OUT Page 6 of 11 Pages Item 1. (a) Name of Issuer: Aerovironment, Inc. Address of Issuer's Principal Executive Offices: 181 West Huntington Drive, Suite 202 Monrovia, CA 91016 Item 2. (a) Name of Persons Filing: Baron Capital Group, Inc. ("BCG") BAMCO, Inc. ("BAMCO") Baron Small Cap Fund ("BSC") Ronald Baron Address of Principal Business Office: (b) 767 Fifth Avenue New York, NY 10153 (c) Citizenship: BCG and BAMCO are New York corporations. Baron Small Cap Fund is a series of a Massachusetts business trust. Ronald Baron is a citizen of the United States. (d) Title of Class Securities: Common (e) CUSIP Number: 251893103 Item 3. PERSONS FILING: BCG and Ronald Baron are: (g) Parent holding companies, in accordance with Section 240.13d-1(b)(ii)(G) (e) Investment Advisers registered under Section 203 of the Investment Advisers Act of 1940 BSC is:

- (d) Investment Company registered under Section 8 of the Investment Company Act.
- All persons filing are:
 - (j) Group, in accordance with Rule 13d-1(b)(1)(ii)(J)

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Item 4. OWNERSHIP^

(a) Amount Beneficially Owned as of December 31, 2007:

BCG: 1,500,000 shares
BAMCO: 1,500,000 shares
BSC: 1,500,000 shares
Ronald Baron: 1,500,000 shares

(b) Percent of Class#:

BCG: 7.4%
BAMCO: 7.4%
BSC: 7.4%
Ronald Baron 7.4%

^BCG and Ronald Baron disclaim beneficial ownership of shares held by their controlled entities (or the investment advisory clients thereof) to the extent such shares are held by persons other than BCG and Ronald Baron. BAMCO disclaims beneficial ownership of shares held by its investment advisory clients to the extent such shares are held by persons other than BAMCO and its affiliate.

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(c) Number of shares as to which such person has:

(i) sole power to vote or direct the vote:

BCG: 0
BAMCO: 0
BSC: 0
Ronald Baron: 0

(ii) shared power to vote or direct the vote:

BCG: 1,500,000
BAMCO: 1,500,000
BSC: 1,500,000
Ronald Baron: 1,500,000

(iii) sole power to dispose or to direct

the disposition of:*

BCG: 0
BAMCO: 0
BSC: 0
Ronald Baron: 0

(iv) shared power to dispose or direct

the disposition of:*

BCG: 1,500,000

BAMCO: 1,500,000 BSC: 1,500,000 Ronald Baron: 1,500,000

- Item 5. OWNERSHIP OF 5% OR LESS OF A CLASS
 Not applicable.
- Item 6. OWNERSHIP OF MORE THAN 5% ON BEHALF OF ANOTHER PERSON

 The advisory clients of BAMCO have the right to receive
 or the power to direct the receipt of dividends from, or the proceeds
 from the sale of, the Issuer's common stock in their accounts. To the
 best of the Filing Persons' knowledge, no such person has such interest
 relating to more than 5% of the outstanding class of securities.
- Item 7. IDENTIFICATION AND CLASSIFICATION OF THE SUBSIDIARY WHICH ACQUIRED THE SECURITY BEING REPORTED ON BY THE PARENT HOLDING COMPANY

BAMCO is a subsidiary of BCG. Baron Small Cap Fund is an advisory client of BAMCO. Ronald Baron owns a controlling interest in BCG.

Item 8. IDENTIFICATION AND CLASSIFICATION OF MEMBERS OF THE GROUP

See Item 3.

* By virtue of investment advisory agreements with its clients, BAMCO has been given the discretion to dispose of the securities in the advisory accounts.

All such discretionary agreements, are however, revocable.

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Item 9. NOTICE OF DISSOLUTION OF GROUP

Not applicable.

Item 10. Certification

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

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.

Date: February 12, 2008

Baron Capital Group, Inc. and BAMCO, Inc.

By:

/s/ Ronald Baron

Ronald Baron, Chairman and CEO Baron Small Cap Fund By: /s/ Ronald Baron Ronald Baron, CEO Ronald Baron, Individually By: /s/ Ronald Baron Ronald Baron Page 10 of 11 Pages Joint Filing Agreement The undersigned each hereby agree that the Schedule 13G dated February 12, 2008, which relates to the common stock of Aerovironment, Inc. to be filed jointly on behalf of each of them for the reasons stated therein, and any amendments thereto shall be filed jointly by the undersigned. Dated: February 12, 2008 Baron Capital Group, Inc. and BAMCO, Inc. By: /s/ Ronald Baron Ronald Baron, Chairman and CEO Baron Small Cap Fund By: /s/ Ronald Baron Ronald Baron, CEO Ronald Baron, Individually By: /s/ Ronald Baron

Ronald Baron