

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

SCHEDULE 13G
(AMENDMENT NO. 4)

UNDER THE SECURITIES EXCHANGE ACT OF 1934

MITCHAM INDUSTRIES, INC.
(Name of Issuer)

COMMON STOCK
(Title of Class of Securities)

606501 104
(CUSIP Number)

DECEMBER 31, 2000
(Date of Event which Requires Filing 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).

 1 NAME OF REPORTING PERSONS
 I.R.S. IDENTIFICATION NOS. OF ABOVE PERSONS (ENTITIES ONLY)

Billy F. Mitcham, Jr.

 2 CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS)
 (a)

(b)

 3 SEC USE ONLY

 4 CITIZENSHIP OR PLACE OF ORGANIZATION

United States

 5 SOLE VOTING POWER

NUMBER OF

723,638(1)

SHARES

BENEFICIALLY

 6 SHARED VOTING POWER

OWNED BY

N/A

EACH

 7 SOLE DISPOSITIVE POWER

REPORTING

260,000

PERSON

 8 SHARED DISPOSITIVE POWER

WITH:

N/A

 9 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

723,638(1)

 10 CHECK IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES
 (SEE INSTRUCTIONS)

 11 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)

7.8%

 12 TYPE OF REPORTING PERSON

IN

 (1) See Statement 1

Item 1(a). Name of Issuer.

The name of the Issuer is Mitcham Industries, Inc.

Item 1(b). Address of Issuer's Principal Executive Offices.

P. O. Box 1175, Huntsville, Texas 77342.

Item 2(a). Name of Persons Filing.

This statement is being filed on behalf of Billy F. Mitcham, Jr.

Item 2(b). Address of Principal Business Office or, if none, Residence.

P. O. Box 1175, Huntsville, Texas 77342.

Item 2(c). Citizenship.

Billy F. Mitcham, Jr. is a citizen of the United States.

Item 2(d). Title of Class of Securities.

This statement relates to shares of Common Stock of the Issuer (the "Common Stock").

Item 2(e). CUSIP Number.

The CUSIP No. for the shares of Common Stock of the Issuer is 606501 104.

Item 3. Not Applicable.

Item 4. Ownership.

(a) Amount beneficially owed: 723,638

(b) Percent of class: 7.8%

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

(i) Sole power to vote or to direct the vote: 723,638

(ii) Shared power to vote or to direct the vote: NONE

(iii) Sole power to dispose or to direct the disposition
of: 260,000

(iv) Shared power to dispose or to direct the disposition
of: NONE

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

Not applicable

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

Other than as set forth on Statement 1, no person has the right to receive or the power to direct the receipt of dividends from, or the proceeds from the sale of the securities reported. No such person set forth in Statement 1 has such rights relating to more than five percent of the class of securities.

Item 7. Identification and Classification of the Subsidiary Which Acquired the Security Being Reported on By the Parent Holding Company.

Not applicable

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

Not applicable

Item 9. Notice of Dissolution of Group.

Not applicable

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 14, 2001

/s/ BILLY F. MITCHAM, JR.

Billy F. Mitcham, Jr.

STATEMENT 1
TO AMENDMENT NO. 4
TO SCHEDULE 13G
OF BILLY F. MITCHAM, JR.

The number of shares with respect to which the named reporting person has sole voting power (723,638) includes 260,000 shares which he directly owns and an aggregate of 245,638 shares of the indicated class of equity securities owned by Billy F. Mitcham, Sr. (95,040 shares), Paul C. Mitcham (89,930 shares) and two trusts established for the benefit of the named reporting person's sons (60,668 shares), as to which the named reporting person has voting rights under a Voting Agreement.

Also included in the total number of shares to which the named reporting person has sole voting power, when acquired, is an aggregate of 218,000 shares underlying currently exercisable options, as follows: Billy F. Mitcham, Jr. (71,000 shares), Billy F. Mitcham, Sr. (45,500 shares), Paul C. Mitcham (101,500 shares). All shares underlying the above-described options granted to persons other than Billy F. Mitcham, Jr. will, when issued, be subject to the above-described Voting Agreement.