FORM 4

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

| l | OMB APPROVAL | | | | | | | | | |
|---|--------------------------|-----------|--|--|--|--|--|--|--|--|
| | OMB Number: | 3235-0287 | | | | | | | | |
| l | Estimated average burden | | | | | | | | | |

0.5

hours per response:

Check this box if no longer subject to Section 16. Form 4 or Form 5 obligations may continue. See Instruction 1(b).

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934

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|--|---|--|--|--------------------|---------------|---|--------------------|--|---|---|---|---|--|---|---|---|---|---|--|
| 1. Name and Address of Reporting Person* BLUM PETER H | | | | | | 2. Issuer Name and Ticker or Trading Symbol MITCHAM INDUSTRIES INC [MIND] | | | | | | | | 5. Relationship of Reporting Person(s) to Issuer (Check all applicable) | | | | | |
| <u>BLUM PETEK II</u> | | | | | | | | | | | | | | X Directo | r | | 10% O | vner | |
| (Last) (First) (Middle) 4 TRAPPING WAY | | | | | | 3. Date of Earliest Transaction (Month/Day/Year) 07/27/2010 | | | | | | | | Officer below) | (give title | Other (s _l below) | | specify | |
| | | 4.1 | 4. If Amendment, Date of Original Filed (Month/Day/Year) | | | | | | | | 6. Individual or Joint/Group Filing (Check Applicable | | | | | | | | |
| (Street) PLEASANTVILLE NY 10570 | | | | | | | | | | | | Lir | Line) X Form filed by One Reporting Person Form filed by More than One Reporting | | | | | | |
| (City) (State) (Zip) | | | | | | Person | | | | | | | | | | | | | |
| | | Tal | ole I - No | n-Deriv | /ativ | e Se | curitie | s Ac | quired, | Dis | posed of | f, or Bei | neficia | ly Owned | | | | | |
| 1. Title of Security (Instr. 3) 2. Transa Date (Month/D | | | | | | Executio eay/Year) if any | | Deemed ecution Date, any onth/Day/Year) | | 3. Transaction Code (Instr.) 8) | | es Acquire Of (D) (Inst | | Beneficia Owned F | s lly ollowing | 6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4) | | 7. Nature of Indirect Beneficial Ownership | |
| | | | | | | Code | v | Amount | (A) or (D) | Price | Transacti | Reported Transaction(s) (Instr. 3 and 4) | | | (Instr. 4) | | | | |
| MIND Common Stock 07/27/ | | | | | | | /2010 | | A | | 2,500(1 | A \$7.2 | | 316, | 316,936 | | D | | |
| MIND Common Stock | | | | | | | | | | | | | 12,500 | | | | See Footnote ⁽²⁾ | | |
| | | | Table II - | Deriva (e.g., p | tive outs, | Sec call | urities s, warr | Acq ants | uired, [, optio | Disp | osed of, convertib | or Bene ole secu | eficially rities) | / Owned | | , | | | |
| 1. Title of Derivative Security (Instr. 3) | 2. Conversion or Exercise Price of Derivative Security | 3. Transaction Date (Month/Day/Year) | 3A. Deemed Execution Date if any (Month/Day/Yea | Date, T | Code (Instr | | n of | | 6. Date Exercisal Expiration Date (Month/Day/Year | | | 7. Title and Amount of Securities Underlying Derivative Security (Instr. 3 and 4) | | Derivative Security | 9. Numb derivativ Securitie Beneficia Owned Followin Reported Transact (Instr. 4) | ve es ally ig d tion(s) | 10. Ownership Form: Direct (D) or Indirect (I) (Instr. 4 | Beneficial Ownership (Instr. 4) | |
| | | | | С | Code | v | (A) | (D) | Date Exercisab | | Expiration Date | Title | Amoun or Numbe of Shares | | | | | | |
| Option to Purchase Common | \$7.22 | 07/27/2010 | | | A | | 10,000 | | 07/27/201 | 0(3) | 07/27/2020 | Common Stock | 10,000 | \$7.2 | 10,00 | 00 | D | | |

Explanation of Responses:

- 1. Restricted Stock vests upon grant.
- 2. Includes 6,000 shares owned by Mr. Blum's spouse and 6,500 shares owned by Mr. Blum's minor son.
- 3. Options vest upon grant.

Remarks:

/s/ Billy F. Mitcham, Jr. Attorney-in-Fact 07/28/2010

** Signature of Reporting Person Date

Reminder: Report on a separate line for each class of securities beneficially owned directly or indirectly.

- * If the form is filed by more than one reporting person, see Instruction 4 (b)(v).
- ** Intentional misstatements or omissions of facts constitute Federal Criminal Violations See 18 U.S.C. 1001 and 15 U.S.C. 78ff(a).

Note: File three copies of this Form, one of which must be manually signed. If space is insufficient, see Instruction 6 for procedure.

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