

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

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 or Section 30(h) of the Investment Company Act of 1940

| OMB APPROVAL | |
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| OMB Number: | 3235-0287 |
| Estimated average burden hours per response: | 0.5 |

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| 1. Name and Address of Reporting Person * MAPES HAROLD (Last) (First) (Middle) 603 QUEENSBURY AVE. (Street) QUEENSBURY NY 12804 (City) (State) (Zip) | 2. Issuer Name and Ticker or Trading Symbol ANGIODYNAMICS INC [ANGO] | 5. Relationship of Reporting Person(s) to Issuer (Check all applicable) Director 10% Owner <input checked="" type="checkbox"/> Officer (give title below) Other (specify below) VP - Operations |
| | 3. Date of Earliest Transaction (Month/Day/Year) 09/04/2009 | |
| | | 6. Individual or Joint/Group Filing (Check Applicable Line) <input checked="" type="checkbox"/> Form filed by One Reporting Person <input type="checkbox"/> Form filed by More than One Reporting Person |

Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned

| 1. Title of Security (Instr. 3) | 2. Transaction Date (Month/Day/Year) | 2A. Deemed Execution Date, if any (Month/Day/Year) | 3. Transaction Code (Instr. 8) | | 4. Securities Acquired (A) or Disposed Of (D) (Instr. 3, 4 and 5) | | | 5. Amount of Securities Beneficially Owned Following Reported Transaction(s) (Instr. 3 and 4) | 6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4) | 7. Nature of Indirect Beneficial Ownership (Instr. 4) |
|---------------------------------|--------------------------------------|--|--------------------------------|---|---|------------|-------|---|--|---|
| | | | Code | V | Amount | (A) or (D) | Price | | | |
| Common Stock | | | | | | | 5,537 | D | | |

Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned (e.g., puts, calls, warrants, options, convertible securities)

| 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/Year) | 4. Transaction Code (Instr. 8) | | 5. Number of Derivative Securities Acquired (A) or Disposed of (D) (Instr. 3, 4 and 5) | | 6. Date Exercisable and Expiration Date (Month/Day/Year) | | 7. Title and Amount of Securities Underlying Derivative Security (Instr. 3 and 4) | 8. Price of Derivative Security (Instr. 5) | 9. Number of derivative Securities Beneficially Owned Following Reported Transaction(s) (Instr. 4) | 10. Ownership Form: Direct (D) or Indirect (I) (Instr. 4) | 11. Nature of Indirect Beneficial Ownership (Instr. 4) | |
|--|--|--------------------------------------|--|--------------------------------|---|--|-----|--|-----------------|---|--|--|---|--|-------|
| | | | | Code | V | (A) | (D) | Date Exercisable | Expiration Date | | | | | | Title |
| Non-Qualified Stock Option (right to buy) | \$13.29 | 09/04/2009 | | A | | 5,000 | | 09/04/2010 | 09/04/2016 | Common Stock | 5,000 | \$0 | 5,000 | D | |
| Restricted Stock Units | \$0 | 09/04/2009 | | A | | 5,000 | | 09/04/2010 | 09/04/2016 | Common Stock | 5,000 | \$0 | 5,000 | D | |
| Non-Qualified Stock Option (right to buy) | \$13.18 | | | | | | | 07/20/2005 ⁽¹⁾ | 07/20/2014 | Common Stock | 8,000 | | 8,000 | D | |
| Non-Qualified Stock Option (right to buy) | \$16.33 | | | | | | | 08/15/2009 | 08/15/2015 | Common Stock | 10,000 | | 10,000 | D | |
| Non-Qualified Stock Option (right to buy) | \$17.76 | | | | | | | 07/27/2008 ⁽²⁾ | 07/27/2017 | Common Stock | 14,100 | | 14,100 | D | |
| Non-Qualified Stock Option (right to buy) | \$18.4 | | | | | | | 08/15/2007 ⁽³⁾ | 08/15/2016 | Common Stock | 19,600 | | 19,600 | D | |
| Non-Qualified Stock Option (right to buy) | \$24.21 | | | | | | | 07/29/2006 ⁽⁴⁾ | 07/29/2015 | Common Stock | 8,000 | | 8,000 | D | |
| Restricted Stock Units | \$0 ⁽⁵⁾ | | | | | | | 05/30/2009 | 05/29/2019 | Common Stock | 4,000 | | 4,000 | D | |

Explanation of Responses:

1. Options for 25% of the shares are each exercisable on 7/20/05, 7/20/06, 7/20/07, 7/20/08, respectively.
2. Options for 25% of the total number of shares each become exercisable on 7/27/08, 7/27/09, 7/27/10, and 7/27/11.
3. Options for 25% of the shares will each become exercisable on 8/15/07, 8/15/08, 8/15/09, and 8/15/10, respectively.
4. Options for 25% of the shares are each exercisable on 7/29/06, 7/29/07, 7/29/08, and 7/29/09, respectively.
5. Each restricted stock unit represents a contingent right to receive one share of AngioDynamics, Inc. common stock.

By: K. Wayne McDougall For: 09/09/2009
Harold C Mapes Jr.

** 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.