FORM 4

## UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

| <b>STATEMENT</b>      | <b>OF CHANGES</b> | IN BENEFICIAL    | <b>OWNERSHIP</b> |
|-----------------------|-------------------|------------------|------------------|
| O I/A I E IVI E I A I | OI OII/IIIOEO     | III DEIIEI IOIAE | OWNER            |

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

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

| 1. Name and Address of Reporting Person*  Cronin John J.   |  |            |                                   |                 | <u>M</u>  | 2. Issuer Name and Ticker or Trading Symbol  Mastech Holdings, Inc. [ MHH ] |  |                               |   |  |   |  | 5. Relationship of Reporting Person(s) to Issuer (Check all applicable)  Director 10% Owner  X Officer (give title Other (specify       |  |  |           |  |
|--|--|------------|-----------------------------------|-----------------|---|---|--|-------------------------------|---|--|---|--|---|--|--|-----------|--|
| (Last) (First) (Middle) 1000 COMMERCE DRIVE, SUITE 500   |  |            |                                   |                 | 3. Date of Earliest Transaction (Month/Day/Year) 12/18/2009 |   |  |                               |   |  |   | below) below)  CFO, Sec & Treasurer  |   |  |  |           |  |
| (Street) PITTSBI   | URGH PA  |            | 15275<br>(Zip)                    |                 | -   4. I  | 4. If Amendment, Date of Original Filed (Month/Day/Year)                    |  |                               |   |  |   | Line   | ndividual or Joint/Group Filing (Check Applicable e)  X Form filed by One Reporting Person 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. Transa Date (Month/D   |  |            |                                   | Execution Date, |   | Code (Ins   | n   Dispose  | ties Acquire<br>d Of (D) (Ins | ed (A) or<br>tr. 3, 4 and   | 5. Amou<br>Securitie<br>Beneficia<br>Owned F | Form<br>lly (D) (D) (I) (I) (I)                     |  | m: Direct<br>or Indirect<br>Instr. 4)   | 7. Nature<br>of Indirect<br>Beneficial<br>Ownership                      |  |           |  |
|  |  |            |                                   |                 |   |   |  | Code V                        | Amount  | (A) or<br>(D)                                | Price   | Transact   | eported<br>ansaction(s)<br>nstr. 3 and 4)   |  |  | Instr. 4) |  |
| Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned (e.g., puts, calls, warrants, options, convertible securities)   |  |            |                                   |                 |   |   |  |                               |   |  |   |  |   |  |  |           |  |
| . Title of berivative security Instr. 3)  2. Conversion or Exercise Price of Derivative Security  3. Transaction Date (Month/Day/Year)  (Month/Day/Year)  3. Transaction Execution Date, if any (Month/Day/Year) |  | Date,      | Transaction<br>Code (Instr.<br>8) |                 | of E  |   | 6. Date Exercisable and<br>Expiration Date<br>(Month/Day/Year) |                               | 7. Title and Amount<br>of Securities<br>Underlying<br>Derivative Security<br>(Instr. 3 and 4) |  | 8. Price of<br>Derivative<br>Security<br>(Instr. 5) | 9. Number of<br>derivative<br>Securities<br>Beneficially<br>Owned<br>Following<br>Reported<br>Transaction(s)<br>(Instr. 4) |   | 10.<br>Ownership<br>Form:<br>Direct (D)<br>or Indirect<br>(I) (Instr. 4) | 11. Nature<br>of Indirect<br>Beneficial<br>Ownership<br>(Instr. 4) |           |  |
|  |  |            |                                   |                 | Code  | v   | (A)  | (D)                           | Date<br>Exercisable   | Expiration<br>Date                           | Title   | Amount<br>or<br>Number<br>of<br>Shares   |   |  |  |           |  |
| Employee<br>Stock<br>Option<br>(Right to<br>Buy)   | \$4.95   | 12/18/2009 |                                   |                 | A   |   | 25,000   |                               | (1)   | 12/18/2019                                   | Common<br>Stock                                     | 25,000   | \$0   | 25,000   | )  | D         |  |

## **Explanation of Responses:**

1. 6,250 shares will vest on December 18, 2010 and, thereafter, the remaining shares vest equally on a quarterly basis through December 18, 2013.

/s/ Eric L. Billings, attorney-in-12/23/2009 **fact** 

\*\* 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.