

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 * <u>Tuttle Laurie B.</u> (Last) (First) (Middle) ONE ALLISON WAY (Street) INDIANAPOLIS IN 46222 (City) (State) (Zip) | 2. Issuer Name and Ticker or Trading Symbol <u>Allison Transmission Holdings Inc [ALSN]</u> | 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, Hybrid Programs |
| | 3. Date of Earliest Transaction (Month/Day/Year) 09/13/2012 | |
| 4. If Amendment, Date of Original Filed (Month/Day/Year) | | |

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 | 09/13/2012 | | M | | 48,090 | A | \$8.44 | 53,791 | D | |
| Common Stock | 09/13/2012 | | M | | 66,736 | A | \$12.66 | 120,527 | D | |
| Common Stock | 09/13/2012 | | M | | 59,528 | A | \$16.88 | 180,055 | D | |
| Common Stock | 09/13/2012 | | s ⁽¹⁾ | | 174,354 | D | \$19.5802 ⁽²⁾ | 5,701 | D | |
| Common Stock | 09/14/2012 | | M | | 20,300 | A | \$16.88 | 26,001 | D | |
| Common Stock | 09/14/2012 | | s ⁽¹⁾ | | 20,300 | D | \$19.8966 ⁽³⁾ | 5,701 | 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 |
| Employee Stock Option (right to buy) | \$8.44 | 09/13/2012 | | M | | | 48,090 | (4) | 09/30/2017 | Common Stock | 48,090 | \$0 | 146,160 | D | |
| Employee Stock Option (right to buy) | \$12.66 | 09/13/2012 | | M | | | 66,736 | (4) | 09/30/2017 | Common Stock | 66,736 | \$0 | 266,944 | D | |
| Employee Stock Option (right to buy) | \$16.88 | 09/13/2012 | | M | | | 59,528 | (4) | 09/30/2017 | Common Stock | 59,528 | \$0 | 339,613 | D | |
| Employee Stock Option (right to buy) | \$16.88 | 09/14/2012 | | M | | | 20,300 | (4) | 09/30/2017 | Common Stock | 20,300 | \$0 | 319,313 | D | |

Explanation of Responses:

- The sales reported in this Form 4 were effected pursuant to a Rule 10b5-1 trading plan adopted by the reporting person on August 30, 2012.
- The price reported is a weighted average price. These shares were sold in multiple transactions at per share prices ranging from \$19.4400 to \$19.9100. The reporting person undertakes to provide the Company, any security holder of the Company or the staff of the SEC, upon request, full information regarding the number of shares sold at each separate price within the range set forth in this footnote.
- The price reported is a weighted average price. These shares were sold in multiple transactions at per share prices ranging from \$19.7500 to \$19.9900. The reporting person undertakes to provide the Company, any security holder of the Company or the staff of the SEC, upon request, full information regarding the number of shares sold at each separate price within the range set forth in this footnote.
- The option vested in five equal annual installments beginning on August 7, 2008.

/s/ Eric C. Scroggins, attorney-in-fact 09/17/2012

** Signature of Reporting Person Date

* 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.