



DIVISION OF
CORPORATION FINANCE

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

January 5, 2011

Via Facsimile ((804) 343-4574) and U.S. Mail

Gary E. Thompson, Esq.
Hunton & Williams LLP
951 E. Byrd Street
Riverfront Plaza, East Tower
Richmond, VA 23219

**Re: Applied Signal Technology, Inc.
Schedule TO-T filed December 30, 2010 by RN Acquisition Company and
Raytheon Company
SEC File No. 005-52819**

Dear Mr. Thompson:

We have limited our review of the filing to those issues we have addressed in our comments. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure.

Please respond to this letter by amending your filing, by providing the requested information, or by advising us when you will provide the requested response. If you do not believe our comments apply to your facts and circumstances or do not believe an amendment is appropriate, please tell us why in your response.

After reviewing any amendment to your filing and the information you provide in response to these comments, we may have additional comments.

Offer to Purchase

Certain Conditions of the Offer, page 43

1. We refer to the last paragraph of this section. In our view, you may condition a tender offer on any number of conditions, as long as they are described with reasonable specificity, capable of objective verification, and outside of your control. The phrase “regardless of the circumstances (including action or inaction by Parent or the Purchaser...) giving rise to any such condition . . .” implies that you may assert an offer condition even when the condition is “triggered” by your own action or inaction. Please revise the disclosure throughout to remove the implication that you may trigger a condition through your action or inaction.

2. We note the language in the last paragraph in this section that the bidders' failure "at any time to exercise any of the foregoing rights shall not be deemed a waiver of any such right." If an event triggers a listed offer condition, and the bidders determine to proceed with the offer anyway, they have waived the offer condition. When an offer condition is triggered by events that occur during the offer period and before the expiration of the offer, the bidders should inform security holders how they intend to proceed promptly, rather than waiting until the end of the offer period, unless the condition is one where satisfaction of the condition may be determined only upon expiration. Please confirm your understanding supplementally.
3. With respect to the same paragraph referenced immediately above, we note that the disclosure suggests that once an offer condition is triggered, you must decide whether or not to waive the condition. When a condition is triggered and you decide to proceed with the offer anyway, we believe that this constitutes a waiver of the triggered condition(s). Depending on the materiality of the waived condition and the number of days remaining in the offer, you may be required to extend the offer and recirculate new disclosure to security holders. You may not, as this language seems to imply, simply fail to assert a triggered offer condition and thus effectively waive it without officially doing so. Please confirm your understanding supplementally.
4. We note that in the last paragraph you reserve the right to include or exclude, for purposes of determining whether the minimum tender condition has been satisfied, shares tendered pursuant to guaranteed delivery procedures. The provision has the effect of allowing the bidders to determine the satisfaction or failure of a condition in their own offer. The ability of a bidder to determine, in its sole discretion, whether a condition has occurred may render the offer illusory. Please revise.

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filing to be certain that the filing includes all information required under the Securities Exchange Act of 1934 and that they have provided all information investors require for an informed investment decision. Since the bidders are in possession of all facts relating to their disclosure, they are responsible for the accuracy and adequacy of the disclosures they have made.

In connection with responding to our comments, please provide, in writing, a statement from each of the bidders acknowledging that:

- the bidder is responsible for the adequacy and accuracy of the disclosure in the filing;
- staff comments or changes to disclosure in response to staff comments do not foreclose the Commission from taking any action with respect to the filing; and
- the bidder may not assert staff comments as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

Gary E. Thompson, Esq.
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Please direct any questions to me at (202) 551-3619. You may also contact me via facsimile at (202) 772-9203. Please send all correspondence to us at the following ZIP code: 20549-3628.

Sincerely,

Daniel F. Duchovny
Special Counsel
Office of Mergers & Acquisitions