



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

DIVISION OF  
CORPORATION FINANCE

December 15, 2017

Mr. Heinz Mäusli  
Advanced Accelerator Applications S.A.  
20 rue Diesel  
01630 Saint Genis Pouilly, France

**Re: Advanced Accelerator Applications S.A.  
Schedule 14D-9  
Filed December 7, 2017  
File No. 005-89192**

Dear Mr. Mäusli:

We have reviewed your filing and have the following comments. In some of our comments, we may ask you to provide us with information so we may better understand the disclosure.

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

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

Item 3. Past Contracts, Transactions, Negotiations and Agreements, page 3

1. Please revise to include tabular disclosure detailing the total consideration to be received by each of your officers and directors by source (e.g., shares owned, incentive awards, change in control payments, and exercise or acceleration of options, warrants and similar securities).

Forward-Looking Statements, page 35

2. We note the reference to the Private Securities Litigation Reform Act of 1995. Please note that the safe harbor provisions for forward-looking statements contained in the federal securities laws do not apply to statements made in connection with a tender offer. See Section 21E(b)(2)(C) of the Securities Exchange Act of 1934. Please revise accordingly.

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We remind you that the filing persons are responsible for the accuracy and adequacy of their disclosures, notwithstanding any review, comments, action or absence of action by the staff.

Please contact me at (202) 551-3589 if you have any questions regarding our comments.

Sincerely,

/s/ Tiffany Piland Posil

Tiffany Piland Posil  
Special Counsel  
Office of Mergers and Acquisitions

Cc: William H. Aaronson  
Davis Polk & Wardwell LLP