

September 20, 2016

Professor Andrew Brandt University of Texas Arlington Physics Department P.O. Box 19059 Arlington, TX 76019 **Dr. Robert G. Wagner** Physicist

High Energy Physics Division Detector R&D Group Argonne National Laboratory 9700 South Cass Avenue, Bldg. 360 Argonne, IL 60439-4814

phone: 1-630-252-6321 rgwcdf@anl.gov

Dear Andrew:

This letter is to confirm that we will provide to you one of our $6\text{cm} \times 6\text{cm}$ active area microchannel plate (MCP) photodetectors with a 7-strip line anode readout and a bialkali ($K_2C_8S_9$) photocathode on a borosilicate window. You indicated a need for delivery of the tube for use next spring/summer. We can certainly meet this date. I would target deliver of the tube to you by first week of March, 2017. If you need it earlier, we can arrange that I believe. We understand the tube will be used for lifetime testing implying that the tube will likely be tested to end of its useful lifetime. So we do not expect return of the tube. We would appreciate receiving any report on the results of the testing.

You have requested a second tube from us for later in 2017 that has a pixellated pad readout. We are at present working on producing the initial version of this tube. Work on this is in collaboration with a commercial vendor for the tube body/anode assembly. The initial tube will be provided to another institution that has requested such readout. I expect this will require a few iterations to implement successfully. I am optimistic that we can have a tube with a pad readout available for you around the last quarter of calendar year 2017.

I looking forward to working with you on understanding and improving the lifetime performance of MCP detectors.

1/Agall

Sincerely,

Robert G. Wagner Detector R&D Group Leader High Energy Physics Division

Argonne National Laboratory