BURLE INDUSTRIES, INC. | 1000 New Holland Ave. | Lancaster, Pennsylvania 17601-5688 | U.S.A. | Telephone (717) 295-6000

1 December 2005

Dr. Andrew Brandt
Associate Professor of Physics
University of Texas, Arlington
P0 Box 19059
Arlington, TX 76019

Dear Dr. Brandt,

As you know, BURLE INDUSTRIES, INC. is a leading manufacturer of photomultiplier tubes for the medical, biomedical and research communities. As an advanced device company we recognize the necessity to maintain a strong effort in the development of new technology. We recently developed a unique 50mm square MCP-PMT with excellent timing performance known as the PLANACON. In addition, these devices utilize construction technique that allows flexible configuration of the anode readout pattern and are insensitive to magnetic fields. All of these features make the PLANACON ideally suited to your Ultra-fast TOF detector.

As part of your proposed Advanced Detector Research Program, BURLE agrees to fabricate a series of prototype test devices based on our 50mm PLANACON. Our current technology utilizes a 25 micron pore MCP for electron multiplication and a standard flat faceplate. To further characterize and improve the timing properties of these devices we will provide you with the following: 2 PLANACONs having 25 micron pore MCPs and a standard faceplate, 2 PLANACONs having 10 micron pore MCPs and a standard faceplate, and 2 PLANACONs having 10 micron pore MCPs and a stepped faceplate which reduces the photocathode-to-MCP gap. This will allow you to characterize the effect of MCP pore size and cathode-to-MCP gap on the timing performance of the PLANACON. Further, we will try to equip at least one of these devices with MCPs having increased current capacity.

I would like to wish you success on your U.S. Department of Energy Advanced Detector Research Program (DE-FG01-05ER05-27) proposal “Development of an Ultra-fast Time of Flight Counter.” BURLE is excited about partnering with you to realize this important advance in Time of Flight instrumentation.

Sincerely,

Paul L. Hink, Ph.D.
VP & General Manager, Photomultiplier Tubes