

February 29, 2008

Ms. Catherine Colwell  
Mainland High School  
Daytona Beach, Florida

Re: ISTF Project – Cutting the Cord

Dear Ms. Colwell,

It has been a privilege to communicate with your ISTF team members over the past few weeks as they developed and refined their project ideas for microwave power transmission from the moon to the Earth. The questions submitted to me were well reasoned and became increasingly focused as the project moved ahead. I have been impressed by the way the team redirected their research and refined the product as their understanding of the technology increased.

I have had a chance to review the research conducted by the team and the presentation of the project based on that research. I believe both the concept and the product envisioned by the team are sound.

I have worked with aerospace manufacturers over the past eight years to evaluate manufacturing processes and required workforce skills. The components for first generation supercooled semiconductor amplifiers now exist and are produced for limited use, but they have not yet progressed to a mass production level. However, a project of the scope and scale as envisioned by this team would provide the economic incentives to bring production costs for the next generation of technology into line with project goals.

In my opinion the application of supercooled semiconductor amplifiers to a phased array transmission system represents a viable concept with components that could be mass producible in the next few years. The improvement in performance and efficiency represented by this application would be a vital step in bringing a project of this magnitude to reality.

Regards,



Michael Friend, M.A.  
Advanced Program Coordinator