

## Foreword for Plasma Antennas, 2<sup>nd</sup> Edition

I have personally known Ted Anderson for over 10 years now and had followed his work even before I actually met him. I am honored to be asked to write this foreword as his work is particularly relevant to current antenna research and more importantly, lays a pathway to the future, which will no doubt employ this technology for wide spread use.

Interestingly, the concept of plasma antennas is not new; patents exist from the early 1900s that show their great potential. It was not until Dr. Anderson pioneered the practical design and application of these useful devices that their great potential became obvious. He showed that antennas made of plasma are reconfigurable, low noise and able to be stacked upon one another. These are attractive attributes that lend themselves to current antenna applications. In addition, some of the most challenging requirements for stealth and multi-band use in a confined space are only achievable with this technology. Industry had taken notice, in particular the aerospace industry which is responsible for most advanced space, military and commercial applications. As the chief systems engineer or one such aerospace firm, myself and other prominent antenna engineers evaluated all of the hottest technologies one year and found plasma antennas to be the number one solution to a significant amount of challenges. We referred to Dr. Anderson as “the real deal.” He taught us that you can place phased arrays in close proximity to each other to minimize the footprint of these sophisticated antenna systems which not possible without a plasma solution. Plasma windows and reflectors are also possible as well as frequency selective surfaces.

Amongst the most prominent antenna engineers of the last 150 years, Dr. Anderson deserves a place. History will treat him well. My advice is to enjoy the book, then keep it as it will be increase in value every day you have it on the bookshelf.

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