

8 December 1998

Ms. Magalie Roman Salas
Secretary
Federal Communications Commission
The Portals TW-A325
445 12th St., S.W.
Washington, DC 20554

RE: Ultra-Wideband N.O.I., ET Docket 98-153

Dear Ms. Magalie Roman Salas:

- I am Dr. James W. Watson, a physicist by training, currently managing the Simulation Technology Division of SPARTA, Inc. My area of expertise is technically broad covering radar systems, nuclear and fusion energy systems, remote telemetry systems and distributed military system simulation. For the last seven years I have tracked the emerging time-based UWB technology because of the generic potential I recognized for resolving limitations I had encountered with frequency-based telecommunication approaches.
- As Division Manager, I have responsibility for and participate technically in development of military and commercial systems applications using a range of advanced technologies. Two active programs and several proposed programs involve covert communications, precision geo-positioning in urban environments, remote covert telemetry and radar imaging capabilities not practically achievable with frequency based radio technology. The required functions are readily accomplished by reasonable projections of data from available time-based UWB prototype demonstrations.
- SPARTA, Inc. has made a commitment to exploit the wide range of advanced system applications made possible by the time-based UWB technology. We are currently deriving significant (multi-million dollar) revenue from development of military application systems and see great commercial potential if FCC restrictions can be relieved. We have seen no interference or degradation of existing communication systems; this is a major consequence that provides relief for the

saturating frequency bands. This is of profound importance to the future of both commercial and military communications.

- It is our considered opinion that the Federal Communications Commission should modify the current rules to allow for commercial application of time-based UWB. The evidence and experience available supports reasonable modifications to Part 15 of the FCC rules, such as those presented by the Ultra Wide Band Working Group, that will accommodate this revolutionary technology without compromise of existing frequency-based systems. Additionally I would like to add my signature personally and as the authorized representative of SPARTA, Inc. to the Comments of the Ultra Wide Band Working Group which were submitted a few days ago.

Sincerely,

James W. Watson, PhD
Manager,
Simulation Technology Division
SPARTA, Inc.
12443 Research Pkwy
Orlando, FL.