

# Memorandum

**Date:** 11/11/01

**To:** Antenna Design Group, CheapRUs Research Corporation, A Wholly Owned Subsidiary of GiveUsTheMoney, Inc.

**From:** The not quite so pointy-haired Boss since it is all falling out

**RE:** RFP from Sparty Needs a Break, LLP.

**Priority:** [Urgent]

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Confidential: Due to recent possible investigations by the Security and Exchange Commission (SEC) for creative book-keeping by the firm's CFO and lax accounting and auditing we, the management, have decided to solicit funding from non-traditional sources to increase our "cash in hand" prior to my upcoming trip to the Bahamas. Recently (a month ago) we discovered a Request-for-Proposals (RFP) from the "Sparty Needs a Break, LLP" organization. This group is actively engaged in trying to distract local and national media from on-campus events and news.

Anyway, their competing organization, Wolverines are Native to Michigan, is trying to stir up as much attention to Spartan-land as they can to distract the national media from their own sorry state of affairs. Our customer wants to monitor all the transmissions from that nefarious group as much as possible. Since those Wolverines are rascally folks, they are using a variety of communication devices ranging from VHF to microwave bands. All are, fortunately, vertically polarized signals, whatever that means. The customer requires the delivery of up to fifty (50) antenna subsystems to be mated with a wideband receiver supplied by Rothwell Beer and Communications Group, LLC. The wideband receiver uses a BNC connector and is designed for a 50 Ohm antenna. We are required to return a preliminary design to our customer within fourteen (14) days (I was at a management planning meeting on how to improve our employee's quality of life held in sunny Cleveland for past week thus causing the compressed schedule). Hence, your preliminary design is due: November 25, 2002.

This preliminary design should give sufficient detail to justify a full prototype development by CheapRUs. This preliminary design should include background information regarding your design group, antenna design, and any supporting information you have available (e.g. computer simulations, past performance, etc.). Groups selected to continue on to the prototype phase will be asked to provide the following information by December 10, 2002: Full written proposal including data to support all requirements listed below and a three-minute oral proposal. The report and presentation MUST include test data substantiating your claim as to whether the antenna works. Please keep copious notes on your design since I intend to sell the details to lawyers representing both sides.

The antenna must be able to receive at least a 10% bandwidth anywhere between the low end of VHF and 20 GHz.

The antenna must also be person-portable (e.g. light weight) and compact. Specifications subject to change without notice.

Needless to say, the performance of your design group on this critical proposal will weigh heavily (say, 25 %) on future raise and promotion decisions. The technical point-of-contact (TPOC) for this effort is: Dr. Leo Kempel, 517-353-9944, [kempel@egr.msu.edu](mailto:kempel@egr.msu.edu).

Suggested Antennas:

1. Log-periodic dipole array
2. Conical spiral
3. Discone antenna
4. Fractal Antenna
5. Multi-resonant Dipole Forest
6. Printed Spiral (Greg Charvat and friends)
7. Printed Zig-zag Antenna (Sim Loo and friends)