IEEE 802.11
802 LAN Access Method for Wireless Physical Medium

DATE: March 6, 1994

AUTHOR: Chandos A. Rypinski,
              Chief Technical Officer
              LACE, Inc.   Tel: +01 415 389 6659
              655 Redwood Highway #340   Fax: +01 415 389 6746
              Mill Valley, CA 94954 USA   E-m: rypinski@netcom.com

---

TITLE: RECOMMENDATION: The DFWMAC Shall Be Modified to Designate
              the "Point Control Function" as the Primary Mode, and the
              "Distributed Control Function" as Secondary or Default

---

PURPOSE OF RECOMMENDATION

The first step toward making the DFWMAC useful is to recognize that the "client-server" mode is the principal 802 application. While "peer-to-peer" is useful and must be supported, it is not required that this mode be "primary."

If this change is adopted, the simplest *distributed control function* (DCF) station need not be equipped to participate in the *point control function* (PCF). However, the station must recognize PCF messages which define when the DCF mode is permitted. In the absence of a PCF, such a station may operate in the simplest DCF (CSMA) mode.

An infrastructure can allow an adaptive fraction of available channel time for peer-to-peer autonomous communication, but it is unacceptable for cooperating stations to transmit at will within a PCF coverage area.

Primary is a psychological term in many aspects. 802.11 has already decided that both modes will be supported. This change does not require a material change in the way the present system works. It will reduce *apprehension concerning "loose cannon" transmitters causing uncontrolled degradation of premises area installations.*

The main functional benefit from this motion is the potential for an improved PCF. The PCF function may be optimized for its own requirements without prejudice from maximizing reuse of existing DCF functions. If this is not done, certain aspects of a satisfactory connection type service may be much more complex because of residual dependence upon DCF.

Passage of a motion to this effect would correct a major philosophical flaw in the DFWMAC, and would be a first step toward a rational conclusion.