Tech Info Library

ARA 1.0 and Express Modem FAX (1/94)

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Security: Everyone

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TOPIC ---

I'm using the Express Modem software with his Quadra 840AV and GeoPort
Adapter. I have installed AppleTalk Remote Access (ARA) 1.0 and the
GeoPort Adapter software. I would like to be able to set AppleTalk Remote
Access and FAX Terminal to auto-answer. Unfortunately, my Quadra 840AV
with GeoPort Adapter will not accept a FAX from his FAX machine in this
configuration. According to Appendix A on page 81 of the Express FAX/Modem
User's Guide, this should work. The manual states:

 "If both programs are set to auto-answer, the modem answers after the
  number of rings designated in the Data User Program. If the call is a
  FAX call, it is passed to the FAX server. If the call is intended for
  the data server, it is not passed to the data server (data user programs
  take precedence over data server programs) because the data port cannot
  distinguish between the two data programs."

I tested my configuration and found that I could get this to work if I went
from Express Modem to Express Modem. However, as soon as I went from a
Lanier FAX Model 3800 to Express Modem, the system would not accept a FAX.
It would answer and then hang up.

What is happening here and is there a fix?

DISCUSSION --

The problem quite simply is that some FAX machines do not send the
mandatory FAX "calling tone" and therefore are not recognized as "FAX" when
the FAX Arbitrator is active and deciding whether an incoming call is FAX
or Data.

There is nothing that can be done by the receiving software to determine
that it is a FAX when this calling tone is missing from the sending FAX
machine. When only FAX Terminal is active and waiting to answer there is

no problem, as it assumes that all calls are for it.

Both the Konica FAX 280 Intelligent Facsimile and the Lanier FAX models 2235 and 3800 do not send this calling tone. The Panasonic Panafax PX-350 does send the calling tone and therefore it works with both FAX Terminal and ARA waiting to answer calls on the GeoPort.

For a customer who questions whether their sending FAX should be able to work with both FAX Terminal and ARA waiting to receive calls, the calling tone is a one-second beep, followed by a one-second pause, followed by the 'phone ring'. The beep can actually occur before -- or after -- the phone ring, that is the sequence can be ring-pause-beep instead. Regardless, this three-second sequence must start as soon as the dialing modem goes off-hook.

The following is specified in the CCITT specification:

 "Calling Tone: To indicate a calling non-speech terminal. This signal is
  mandatory for automatic calling and optional for manual units."

This is not an Express Modem problem, but rather a limitation of the calling FAX machine.

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