

XEROX

ETHER!



MEMO

MAY 22, 1973

TO: ALTO ALOHA DISTRIBUTION
FROM: BOB METCALFE
SUBJECT: ETHER ACQUISITION

HERE IS MORE ROUGH STUFF ON THE ALTO ALOHA NETWORK.

I PROPOSE WE STOP CALLING THIS THING "THE ALTO ALOHA NETWORK".
FIRST, BECAUSE IT SHOULD SUPPORT ANY NUMBER OF DIFFERENT KINDS
OF STATION -- SAY, NOVA, PDP-11, SECOND, BECAUSE
THE ORGANIZATION IS BEGINNING TO LOOK VERY MUCH MORE BEAUTIFUL
THAN THE ALOHA RADIO NETWORK -- TO USE CHARLES'S "BEAUTIFUL".

MAYBE: "THE ETHER NETWORK". SUGGESTIONS?

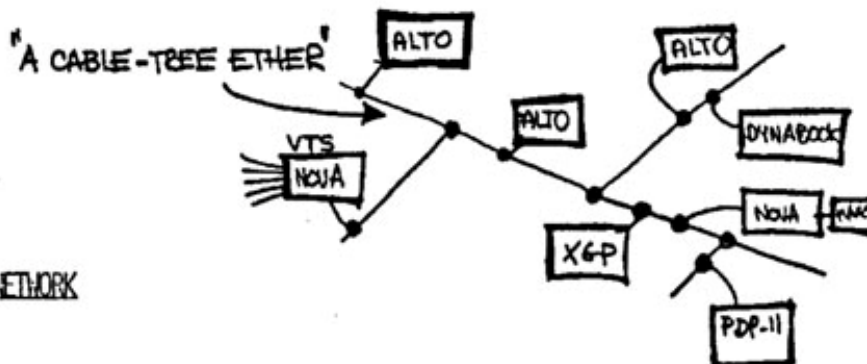
I HOPE TO BE SIMULATING SOON. HELP? INPUTS?

LAZY SUZAN
BULLETIN BOARD
PARLEY
PARLIAMENTARY
PROCEDURE

I HOPE YOU WILL NOT BE OFFENDED BY MY ATTEMPTS TO MAKE THIS
THINKING AND DESIGN APPEAR THEORETICAL.

Bd

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THE ETHER NETWORK

WE PLAN TO BUILD A SO-CALLED BROADCAST COMPUTER COMMUNICATION NETWORK, NOT UNLIKE THE ALPHA SYSTEM'S RADIO NETWORK, BUT SPECIFICALLY FOR IN-BUILDING MINICOMPUTER COMMUNICATION. WE THINK IN TERMS OF NOVA'S AND ALTO'S JOINED BY COAXIAL CABLES.

WHILE WE MAY END UP USING COAXIAL CABLE TREES TO CARRY OUR BROADCAST TRANSMISSIONS, IT SEEMS WISE TO TALK IN TERMS OF AN ETHER, RATHER THAN 'THE CABLE', FOR AS LONG AS POSSIBLE. THIS WILL KEEP THINGS GENERAL AND WHO KNOWS WHAT OTHER MEDIA WILL PROVE BETTER THAN CABLE FOR A BROADCAST NETWORK; MAYBE RADIO OR TELEPHONE CIRCUITS, OR POWER WIRING OR FREQUENCY-MULTI-PLEXED CATV, OR MICROWAVE ENVIRONMENTS, OR EVEN COMBINATIONS THEREOF.

THE ESSENTIAL FEATURE OF OUR MEDIUM -- THE ETHER -- IS THAT IT CARRIES TRANSMISSIONS, PROPAGATES BITS TO ALL STATIONS. WE ARE TO INVESTIGATE THE APPLICABILITY OF ETHER NETWORKS.

