EASTNET: A Year Later

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The original goal of EASTNET to link the eastern seaboard from Washington DC to Boston was met more or less on August 6, 1984 when packets were exchanged via the repeater path WB4APR-6 in Elk Neck Maryland, WA2LQQ-0 in Warwick NY, WORLI-0 in Westford MA, and KD2S-1 in Lowell MA. Since that time numerous alternate paths have been exercised but the saturation of the primary link frequency of 145.01 MHz during prime evening hours has prevented routine end-to-end multi-hop paths.

About the time that saturation of 145.01 MHz occurred, the emergence of WORLI type bulletin boards based on the XEROX 820 system brought about a new pattern of operation which helped ease the multi-hop loading. The WORLI bulletin board systems (PBBS's) include an auto-forwarding feature which allows the PBBS's to update each other with messages destined for individuals homed on their local PBBS. By programming these PBBS's to auto-forward on the link frequencies during non prime time hours, the need for long distance multi-hop exchanges was minimized. Individuals with messages for a distant user need only post the message on the local PBBS and at the same time pick up his mail using a direct **path** or at most a single hop connection. So the result of auto-forwarding is a two fold reduction in link traffic by encouraging all messages to be posted on local paths, and forcing the multi-hop regional forwarding to occur during off hours.

The next step in relieving congestion on 145.01 is to make the PBBS's frequency agile so that they are available to local users on a local frequency such as 145.05 during prime time and move over to 145.01 only during off hours at scheduled periods for auto-forwarding. In EASTNET we have already moved the WB4APR-5 HF BRIDGE system over to 145.05 and the local PBBS of KS3Q over to 145.09. The W3IWI PBBS remains on 145.01 to serve the link traffic until frequency agility has been achieved.

HF activity is stabalizing on 10,147.900 KHz with the WB4APRO bridge into Washington, K7PYKO into Tuscon, W9TDO into Chicago, and WORLIO into Masachusetts. K7PYKO shifts between 20M and 30M as conditions dictate and WORLIO comes up when time permits.

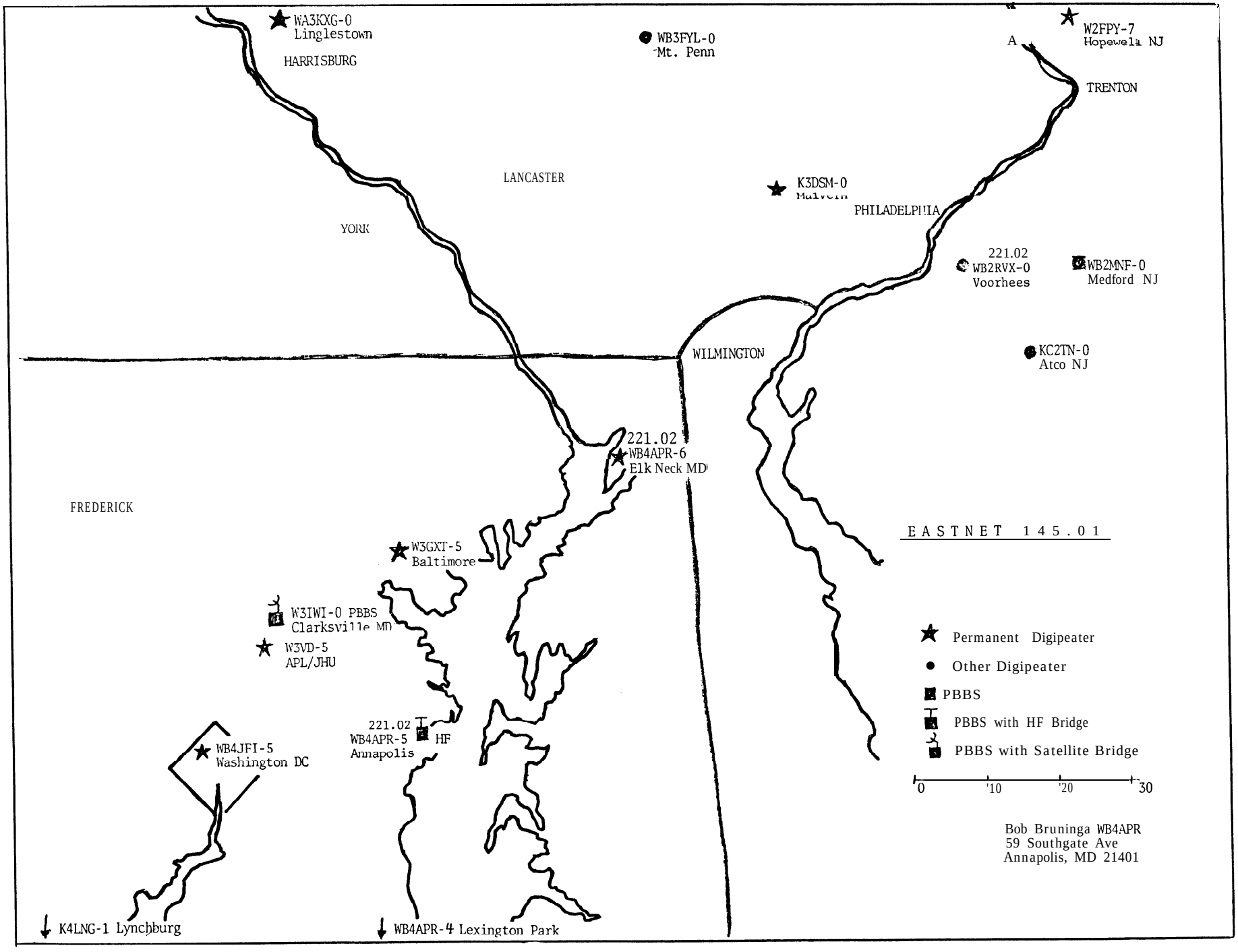
At a recent roadside gathering of enthusiasts from Virginia, Maryland, Pennsylvania, and New Jersey, the Mid-Atlantic Packet Repeater Council (MAPRC) was formed to allow a unified representation of regional packet interests. An arbitrary territory of 100 miles radius about the primary link digipeater of WB4APR6 was chosen as the area of responsibility. A similar group, the Tri-State Packet Repeater Council (TSPRC) has recently been formed to cover Northern New Jersey, New York, and Connecticut.

To encourage use of 220 MHz we will soon be putting a 221.02 MHz piggy-back radio on the WB4APR-6 digipeater. The 221 MHz transceiver will be connected to the same TNC but will also be under subtone control to link directly to 145.01 avoiding the digipeater for stations which are so configured. The subtone control frequency is the reverse channel tone of 367 HZ which is already built into most 202 modems. Another possibility is the use of dual port software which is just becomming available to allow a XEROX 820 system to serve both channels. Our plans still include a number of wideband channels and narrowband channels according to the following plan:

220.55		221.00	
220.65		221.02	
220.75	wideband	221.04	narrow band
220.85	100 KHz	221.06	20 KHz
220.95		221.08	

Note that this is the same as what we proposed last year except that the narrow band channels have moved down 10 KHz to match the existing 20 KHz channel spacing on the band.

On the following maps all of the known wide area use packet repeaters are indicated as well as the PBBS's and gateway stations. Indications of 220 activity should be considered to be in addition to the existing two meter operations at the same location. These maps are not expected to be 100 percent accurate and we apologize for all those who were omitted but we just wanted to give a quick overview of packet activity in various areas of the country. We will attempt to update these maps periodically and make them available next year if you will help by forwarding any permanent updates to the above address.


WA3KXG-0
Linglestown
HARRISBURG
WB3FYL-0
Mt. Penn
W2FPY-7
Hopewell NJ
TRENTON
LANCASTER
K3DSM-0
PHILADELPHIA
YORK
221.02
WB2RVX-0
Voorhees
WB2MNF-0
Medford NJ
WILMINGTON
KC2TN-0
Atco NJ
221.02
WB4APR-6
Elk Neck MD
FREDERICK
W3GXT-5
Baltimore
W3IWI-0 PBBS
Clarksville MD
W3VD-5
APL/JHU
221.02
WB4APR-5 HF
Annapolis
WB4JFI-5
Washington DC
K4LNG-1 Lynchburg
WB4APR-4 Lexington Park
EASTNET 145.01
Permanent Digipeater
Other Digipeater
PBBS
PBBS with HF Bridge
PBBS with Satellite Bridge
0
10
20
30
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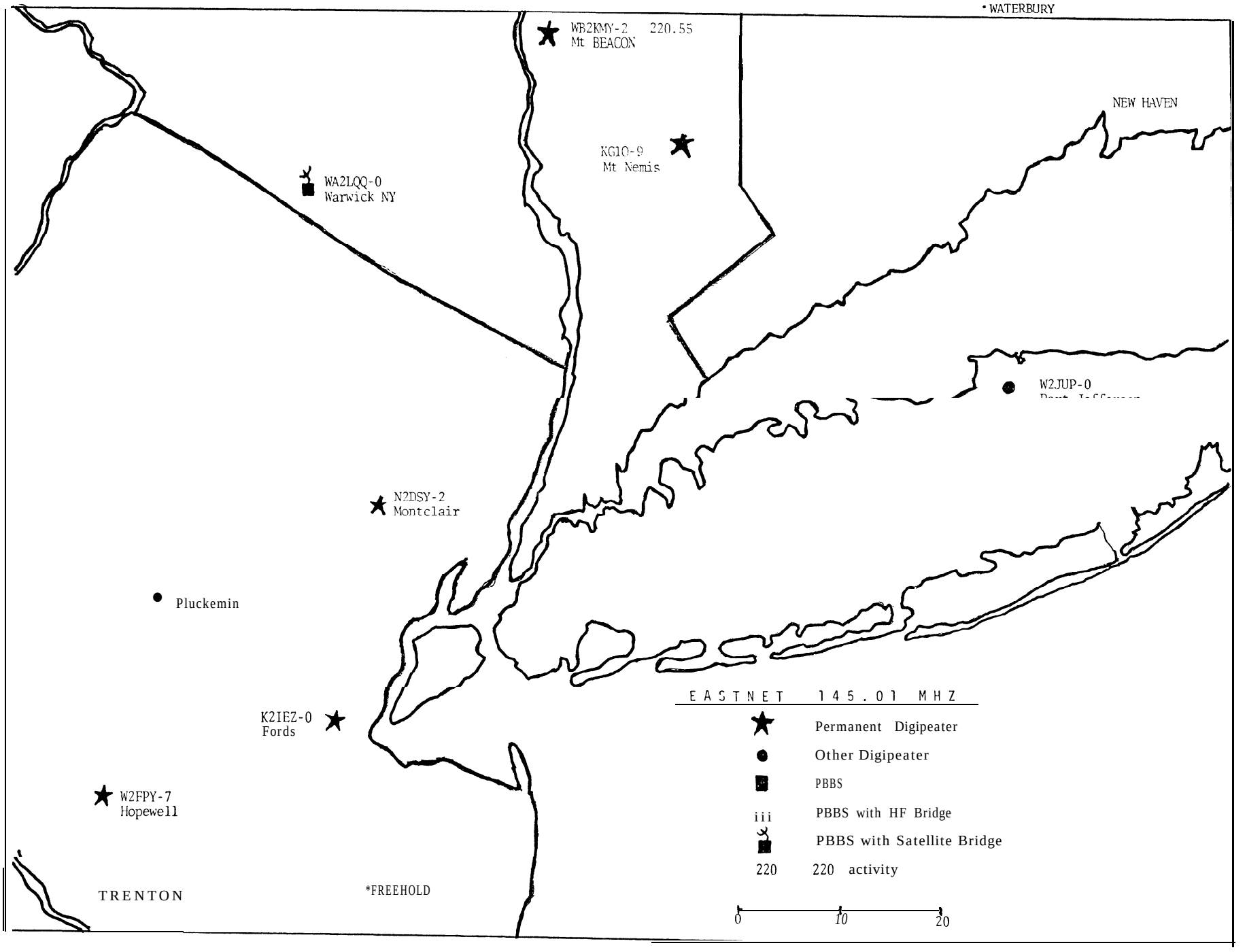
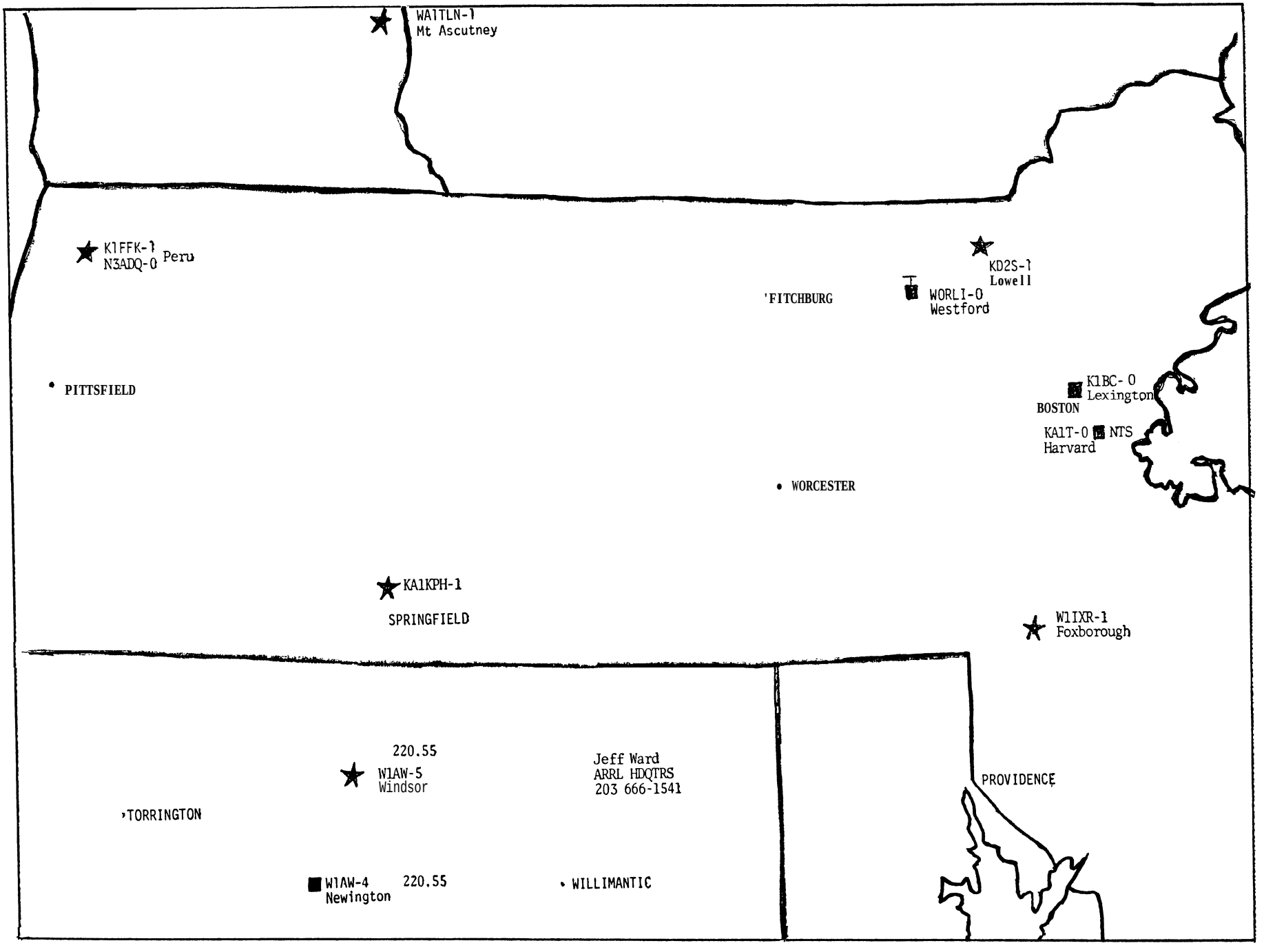
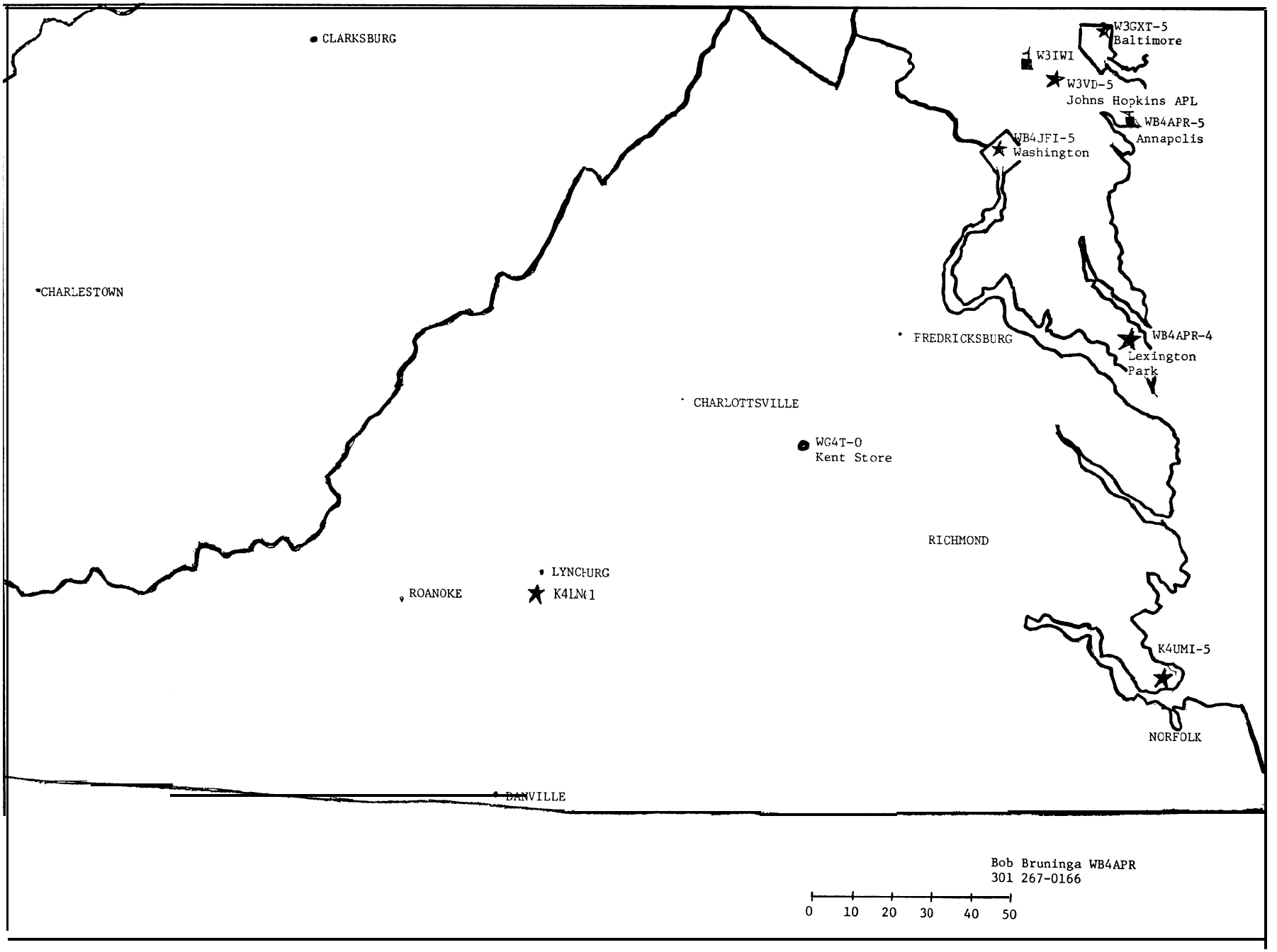
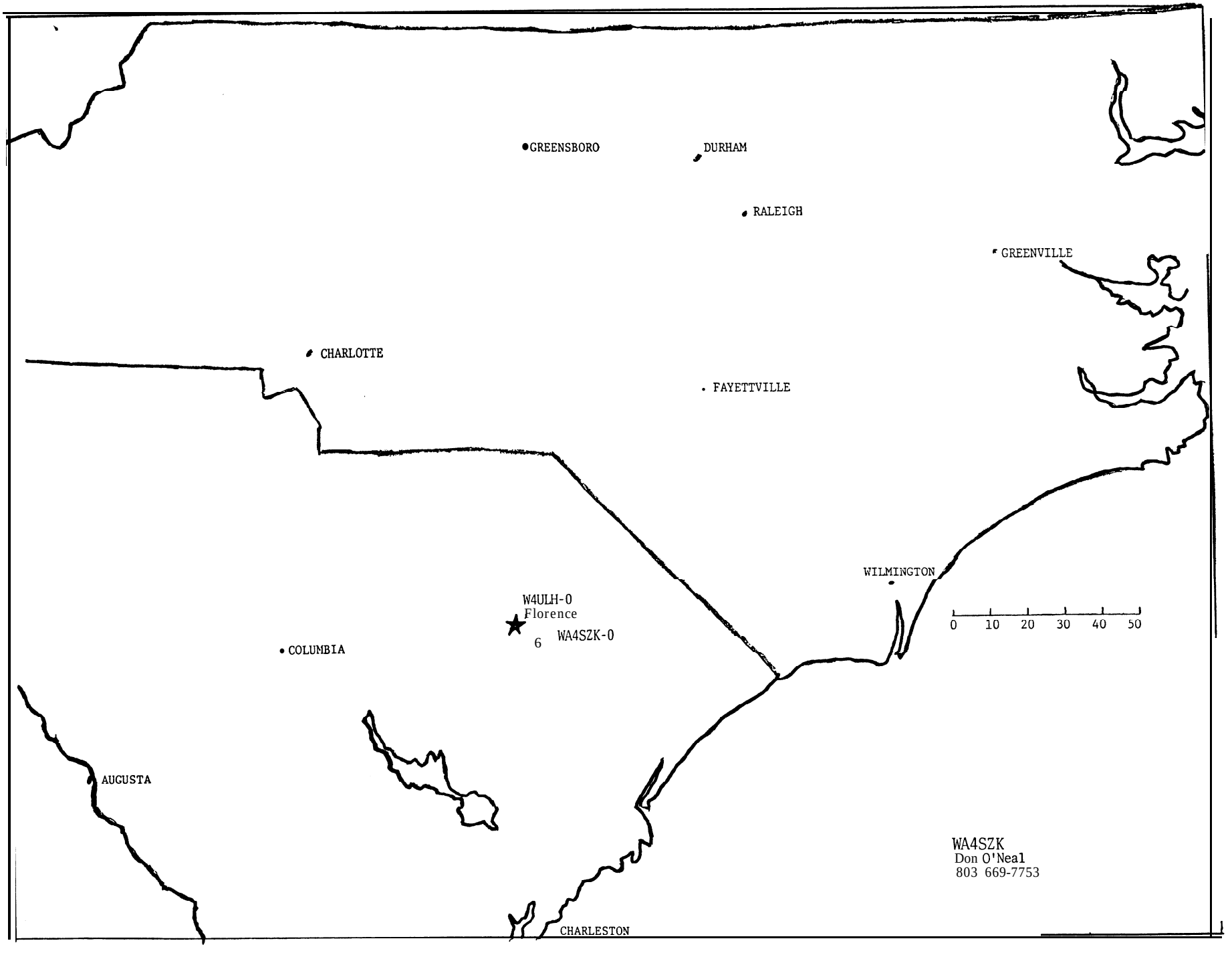
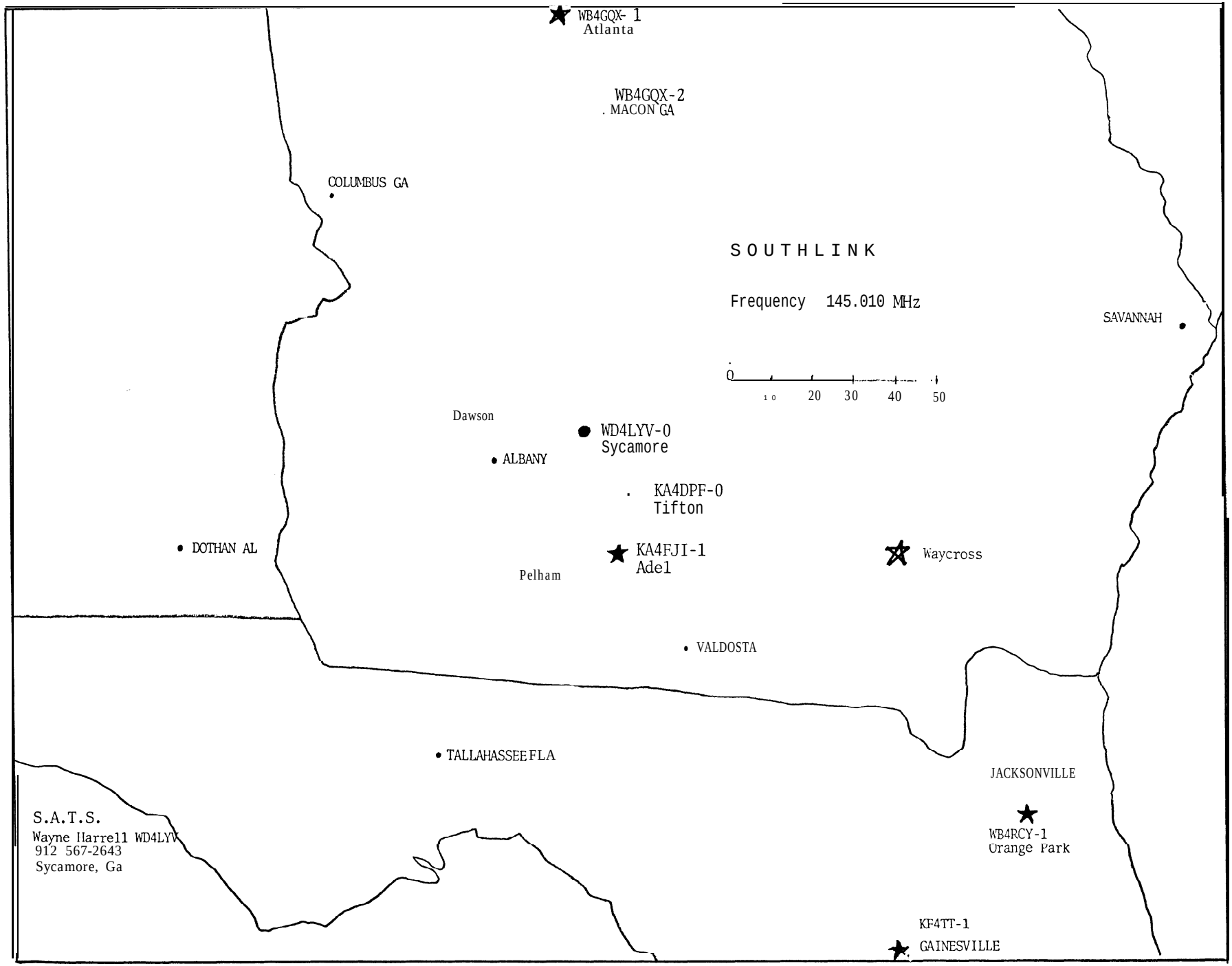
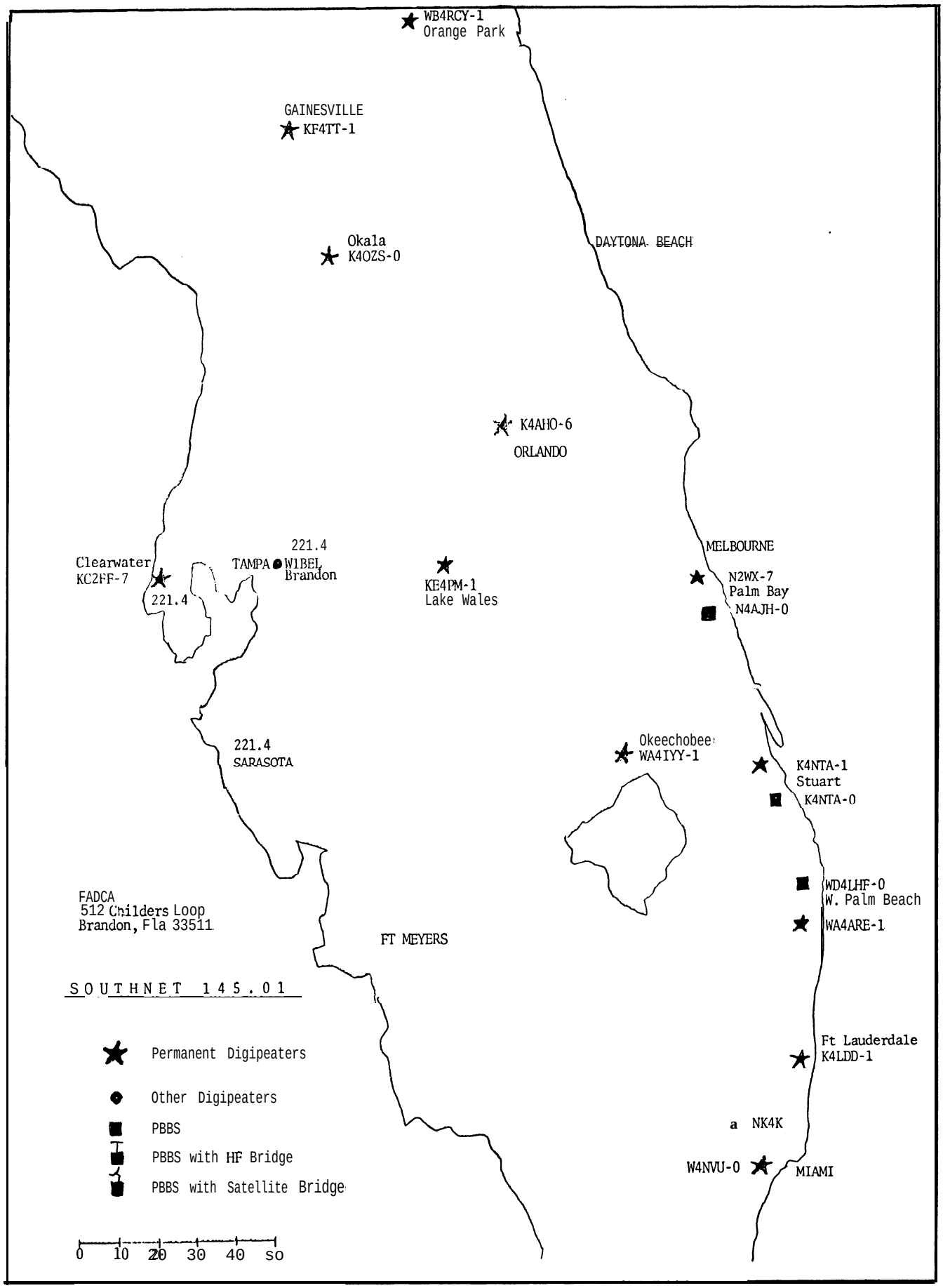

• WATERBURY
WB2KMY-2 220.55
Mt BEACON
NEW HAVEN
KG1O-9
Mt Nemis
WA2LQQ-0
Warwick NY
W2JUP-0
N2DSY-2
Montclair
Pluckemin
K2IEZ-0
Fords
W2FPY-7
Hopewell
TRENTON
*FREEHOLD
EASTNET 145.01 MHZ
Permanent Digipeater
Other Digipeater
PBBS
PBBS with HF Bridge
PBBS with Satellite Bridge
220 220 activity
0
10
20

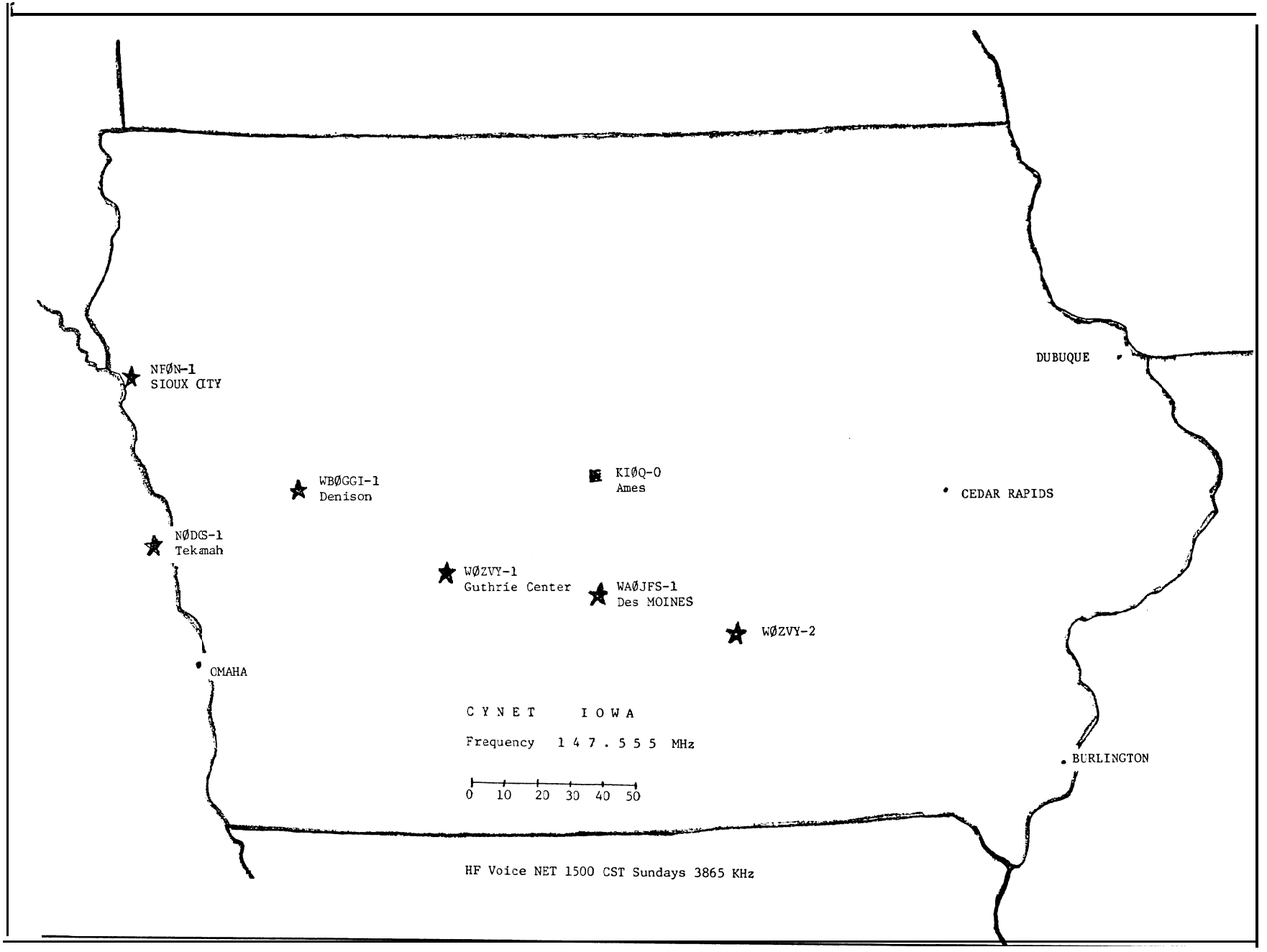

WA1TLN-1
Mt Ascutney
K1FFK-1
N3ADQ-0 Peru
KD2S-1
Lowell
FITCHBURG
WORLI-0
Westford
PITTSFIELD
K1BC-0
Lexington
BOSTON
KA1T-0 NTS
Harvard
WORCESTER
KA1KPH-1
SPRINGFIELD
W1IXR-1
Foxborough
220.55
W1AW-5
Windsor
Jeff Ward
ARRL HDQTRS
203 666-1541
PROVIDENCE
TORRINGTON
W1AW-4 220.55
Newington
WILLIMANTIC

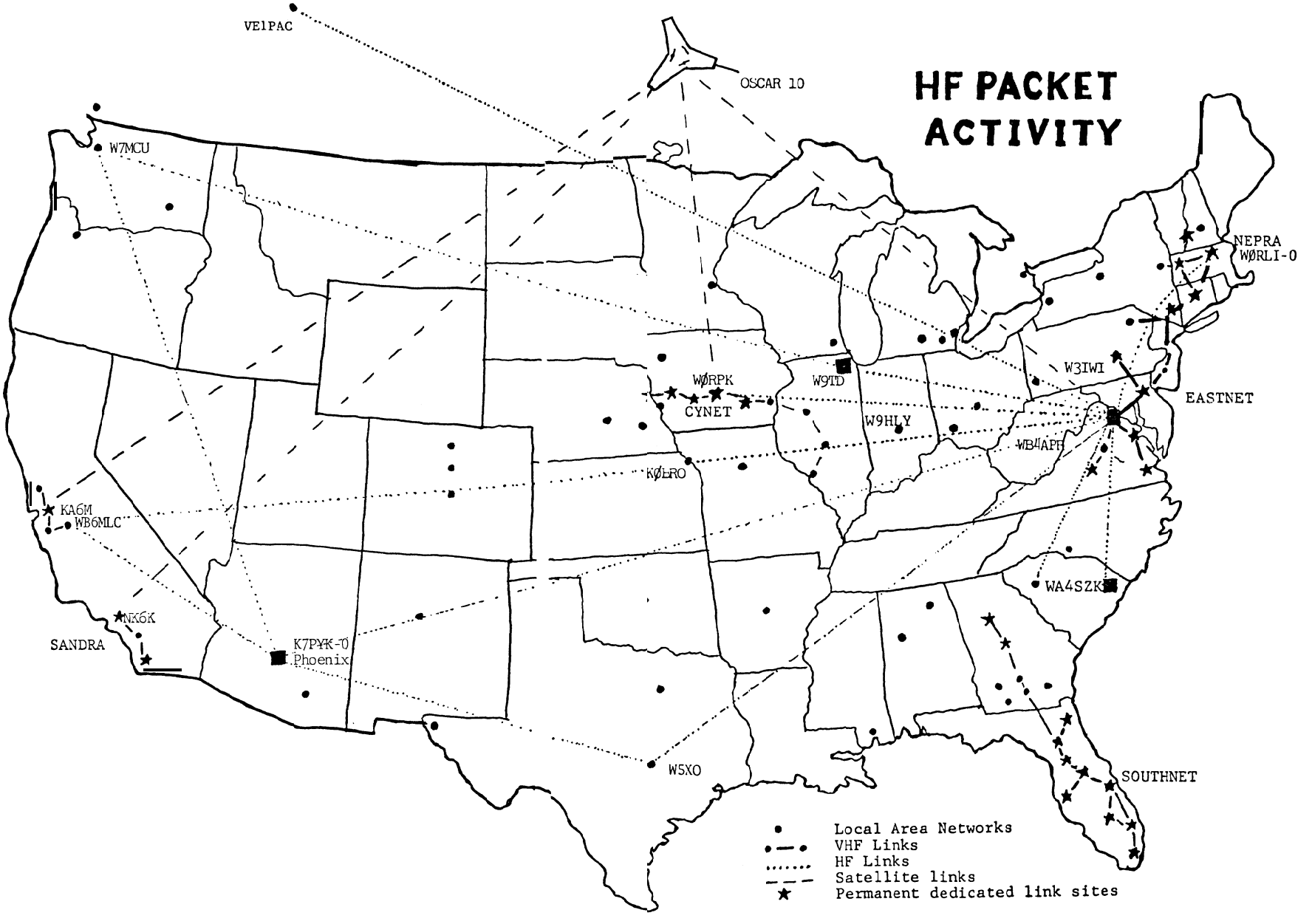

CLARKSBURG
W3GXT-5
Baltimore
W3IWI
W3VD-5
Johns Hopkins APL
WB4APR-5
Annapolis
WB4JFI-5
Washington
CHARLESTOWN
FREDRICKSBURG
WB4APR-4
Lexington
Park
CHARLOTTSVILLE
WG4T-O
Kent Store
RICHMOND
LYNCHURG
ROANOKE
K4LNG1
K4UMI-5
NORFOLK
DANVILLE
Bob Bruninga WB4APR
301 267-0166
0 10 20 30 40 50


GREENSBORO
DURHAM
RALEIGH
GREENVILLE
CHARLOTTE
FAYETTVILLE
WILMINGTON
W4ULH-0
Florence
6
WA4SZK-0
COLUMBIA
AUGUSTA
CHARLESTON
0 10 20 30 40 50
WA4SZK
Don O'Neal
803 669-7753


WB4GQX- 1
Atlanta
WB4GQX-2
. MACON GA
COLUMBUS GA
SOUTHLINK
Frequency 145.010 MHz
SAVANNAH
0
10
20
30
40
50
Dawson
WD4LYV-0
Sycamore
ALBANY
KA4DPF-0
Tifton
DOTHAN AL
KA4FJI-1
Adel
Waycross
Pelham
VALDOSTA
TALLAHASSEE FLA
JACKSONVILLE
S.A.T.S.
Wayne Harrell WD4LYV
912 567-2643
Sycamore, Ga
WB4RCY-1
Orange Park
KF4TT-1
GAINESVILLE


WB4RCY-1
Orange Park
GAINESVILLE
KF4TT-1
Okala
K4OZS-0
DAYTONA BEACH
K4AHO-6
ORLANDO
221.4
Clearwater
KC2FF-7
TAMPA
W1BEL
Brandon
221.4
KE4PM-1
Lake Wales
MELBOURNE
N2WX-7
Palm Bay
N4AJH-0
221.4
SARASOTA
Okeechobee
WA4IYY-1
K4NTA-1
Stuart
K4NTA-0
WD4LHF-0
W. Palm Beach
WA4ARE-1
FADCA
512 Childers Loop
Brandon, Fla 33511
FT MEYERS
SOUTHNET 145.01
Permanent Digipeaters
Other Digipeaters
PBBS
PBBS with HF Bridge
PBBS with Satellite Bridge
Ft Lauderdale
K4LDD-1
a NK4K
W4NVU-0
MIAMI
0 10 20 30 40 50


NFØN-1
SIOUX CITY
WBØGGI-1
Denison
KIØQ-O
Ames
CEDAR RAPIDS
DUBUQUE
NØDCS-1
Tekamah
WØZVY-1
Guthrie Center
WAØJFS-1
Des MOINES
WØZVY-2
OMAHA
C Y N E T I O W A
Frequency 1 4 7 . 5 5 5 MHz
0 10 20 30 40 50
BURLINGTON
HF Voice NET 1500 CST Sundays 3865 KHz


HF PACKET ACTIVITY
VE1PAC
OSCAR 10
W7MCU
NEPRA
WØRLI-0
W3IWI
EASTNET
WØRPK
CYNET
W9TD
W9HLY
WB4APR
KØLRO
KA6M
WB6MLC
NX6K
SANDRA
K7PYK-0
Phoenix
WA4SZK
W5XO
SOUTHNET
Local Area Networks
VHF Links
HF Links
Satellite links
Permanent dedicated link sites