

5-3536-EX-1998

Now not

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October 15, 1998

15x1=25
Leaves

VIA HAND DELIVERY

Federal Communications Commission
Experimental Radio Service
PO Box 358320
Pittsburgh, PA 15251-5320

Re: *REQUEST FOR EXTENSION OF SPECIAL TEMPORARY AUTHORITY FOR
WIRELESS ONE, INC. (FCC File No. 53335EX98)*

Dear Sirs:

On behalf of Wireless One, Inc. ("Wireless One") we submit an original and one copy of a request for an extension of the Special Temporary Authority granted to Wireless One, Inc. on April 17, 1998 (FCC file No. 5335EX98) and FCC Form 159. Also enclosed is a check made payable to the Federal Communications Commission in the amount of Forty Five Dollars in payment of the applicable filing fee.

We would be appreciative if you would date-stamp the enclosed additional copy of this application to evidence your receipt and return it to our courier.

Should you have any questions regarding this application, please contact the undersigned.

Respectfully submitted,



Dawn G. Alexander
Counsel for Wireless One, Inc.

Enclosures

cc: Mr. Carl Huie (via Hand Delivery)
Mr. Thomas G. Noulles (via U.S. Mail)

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554

In the matter of	)	
	)	
WIRELESS ONE, INC.	)	File No. 53335EX98
	)	
	)	

REQUEST FOR EXTENSION OF SPECIAL TEMPORARY AUTHORIZATION

Wireless One, Inc. ("Wireless One"), by its attorneys, hereby requests an extension of the special temporary authority ("STA") (FCC File No. 53335EX98), which was granted on April 17, 1998, to allow for the continued testing of the equipment as described in the attached engineering statement (the "Equipment"). There is presently no type accepted equipment that will allow Wireless One to provide two way services utilizing both the Multipoint Distribution Service ("MDS") frequencies and the Wireless Communication Service ("WCS") frequencies. A letter from Bell South Wireless Cable, Inc. giving its consent to allow Wireless One to use the WCS frequencies in the markets specified in Wireless One's original request was previously filed with the Commission. During the last six months, Wireless One has been using the Equipment to provide Internet services to the public and schools. Wireless One requests an extension of its STA for an additional six months to allow it to complete its testing of the Equipment. Wireless One believes that a grant of this request for an extension of the STA is in the public interest because it will allow it to finish its research and testing of the Equipment which will bring Internet service to many schools and the public utilizing WCS and MDS

frequencies. Upon completion of the testing of the Equipment, the manufacturers will be filing for type acceptance with the Commission.

WHEREFORE, the Commission is respectfully urged to grant this request for an extension of the STA to allow Wireless One to complete its testing of the Equipment on the WCS frequencies listed in the attached engineering statement.

Respectfully submitted,
Wireless One, Inc.

By: 
Dawn G. Alexander

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Attorneys for Wireless One, Inc.

**Request for an Extension for Developmental Authority
Wireless Communication Service
Wireless One, Inc.**

Introduction

Wireless One, Inc., licensee of the A and B block Wireless Communication Service ("WCS") frequencies in numerous MEA's as well as licensee and operator of numerous wireless cable frequencies in the southeast, have certain assignment applications pending with Commission as more fully set forth in the table below. Wireless One is applying for an extension to a Developmental Authority in the WCS frequency band. The purpose of the Developmental is to allow Wireless One to continue testing newly developed equipment, not yet type accepted per the Commission's Rules, for transmissions in the WCS frequency band. The tests will be conducted by Wireless One on the WCS frequencies.

Frequencies under Assignment

File #	Call Sign	Market	MEA	Frequency
50333-WS-AL-98	KNLB232	Birmingham, AL	ME 24	B Block
50334-WS-AL-98	KNLB235	Memphis-Jackson, TN	ME 26	B Block
50335-WS-AL-98	KNLB221	Charlotte-Greensboro-Greenville, NC	ME 07	2310-2315 MHz
50336-WS-AL-98	KNLB223	Atlanta, GA	ME 08	2310-2315 MHz
50337-WS-AL-98	KNLB224	Jacksonville, FL	ME 09	2310-2315 MHz
50338-WS-AL-98	KNLB226	Tampa-St. Petersburg-Orlando, FL	ME 10	2310-2315 MHz
50339-WS-AL-98	KNLB231	Louisville-Lexington-Evansville, KY	ME 23	2310-2315 MHz
50340-WS-AL-98	KNLB234	Nashville, TN	ME 25	2310-2315 MHz
50341-WS-AL-98	KNLB237	New Orleans-Baton Rouge, LA	ME 27	2310-2315 MHz
50342-WS-AL-98	KNLB201	Charlotte-Greensboro-Greenville, NC	ME 07	2305-2310 MHz
50343-WS-AL-98	KNLB222	Atlanta, GA	ME 08	2305-2310 MHz
50344-WS-AL-98	KNLB225	Tampa-St. Petersburg-Orlando, FL	ME10	2305-2310 MHz
50345-WS-AL-98	KNLB230	Louisville-Lexington-Evansville, KY	ME 23	2305-2310 MHz
50346-WS-AL-98	KNLB233	Nashville, TN	ME 25	2305-2310 MHz
50347-WS-AL-98	KNLB236	New Orleans-Baton Rouge, LA	ME 27	2305-2310 MHz

Discussion

Wireless One is currently utilizing the WCS frequencies as the return path for a wireless overlay of a Hybrid Fiber Coax (HFC) high-speed data delivery service. As such a cable modem manufactured by Hybrid Networks, Inc. ("Hybrid") is located at the subscribers premise emitting signals from 5 MHz to 42 MHz is fed into an integrated amplifier and upconverter that takes these signals to the WCS band (see Figure 1). However when installing this equipment there are several varying component outputs that need to be better understood. It is desired to have an equivalent input from each upstream source to the hub receive antenna. This will avoid any unnecessary delays due to the slew rate of the hub receiver's LNA. When this constraint has been placed on the system, the dynamic range required from both the output of the modem and the amplifier gain will become large. Both California Amplifier and Hybrid are working to

implement a standard that will work in this manner while maintaining the spectral mask specified for the WCS band from Part 27.53 of the Commission's Rules. As such these manufacturers have not submitted applications for FCC Type Acceptance due to the complex nature of this situation. Submitted as Figure 2 are plots of spectral mask's measured from this testing. As such Wireless One would like to continue the development of this technology and would like to request an extension of their developmental to continue developing this new technology.

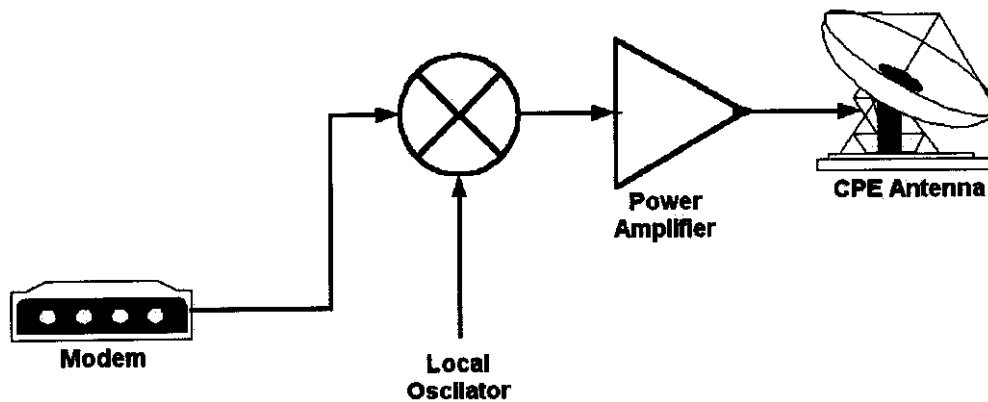
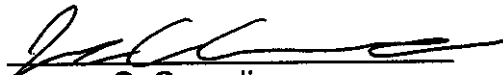


Figure 1

Statement of Engineer

This statement was prepared by James C. Cornelius a consulting engineer with the firm of Hardin and Associates, Inc., a professional engineering firm licensed in the state of Virginia and whose credentials are a matter of record with the Commission.

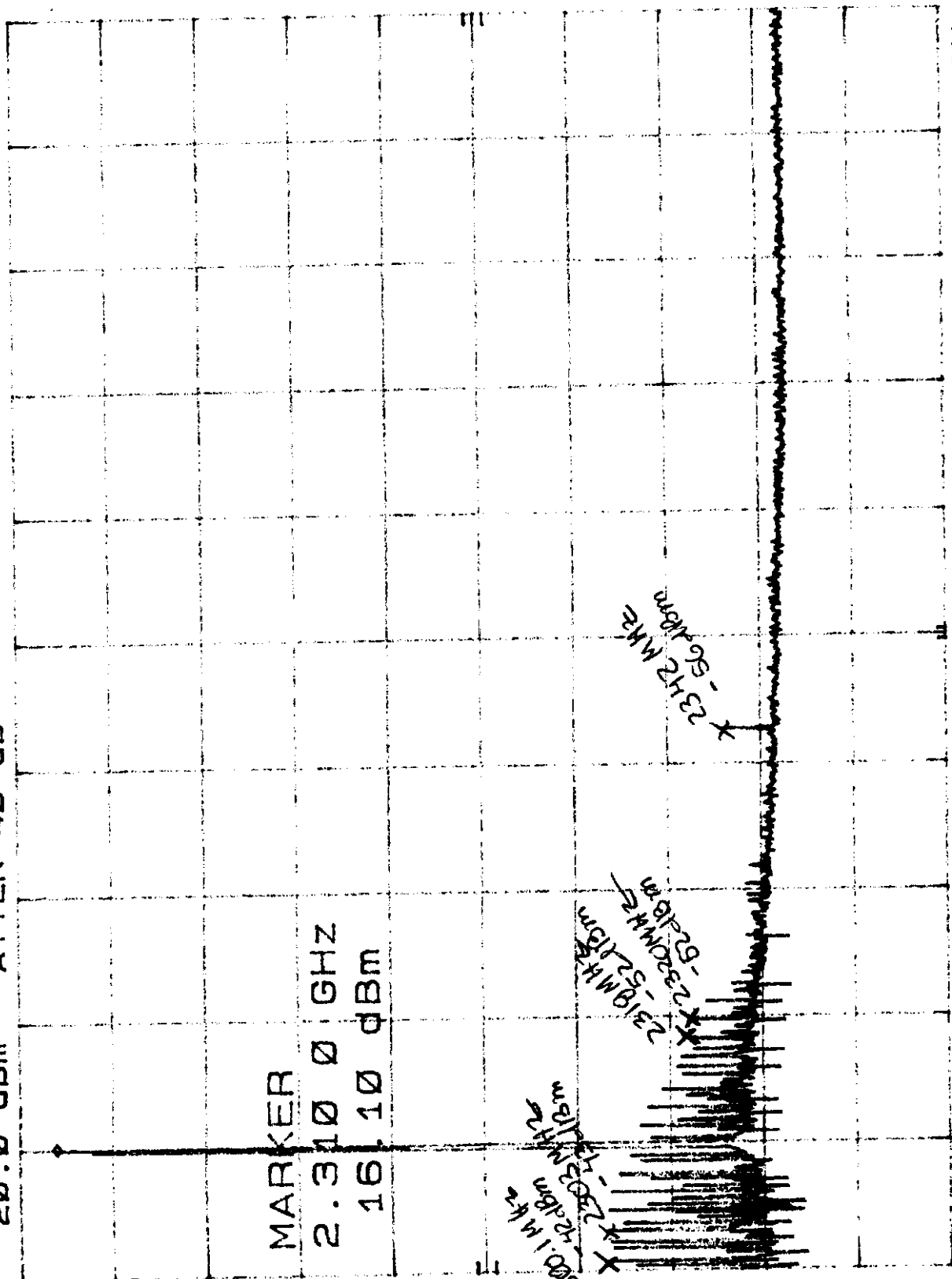

James C. Cornelius

October 14, 1998

Figure 2

START 2.300 GHZ
RES BW 30 KHZ

10 dB/



STOP 2.400 GHz
SWP 30.0 sec

VBW 300 HZ

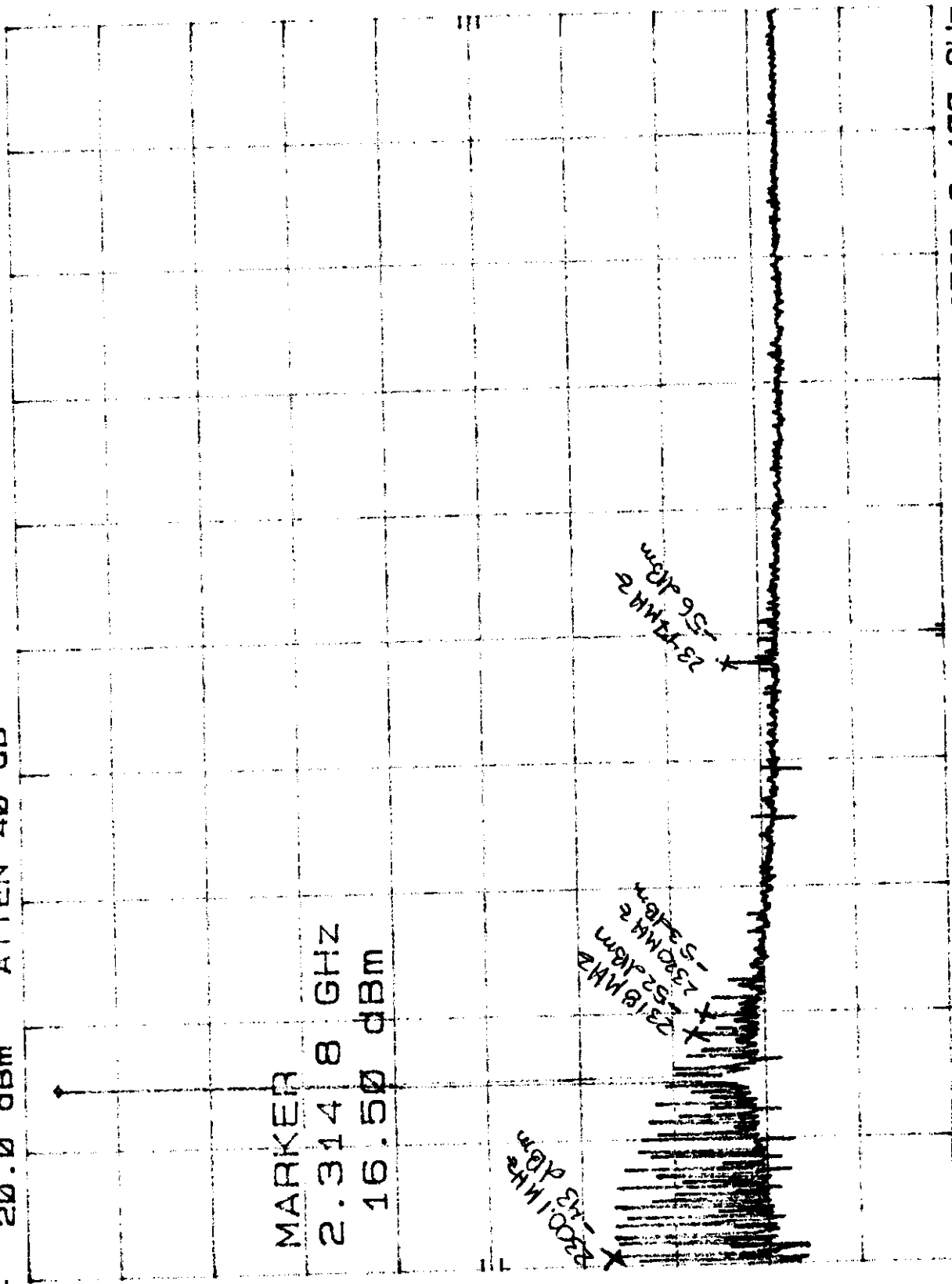
START 2.300 GHZ
RES BW 30 KHZ

3

MKR 2.314 8 GHz
16.50 dBm

hp REF 20.0 dBm ATTN 40 dB

10 dB/



STOP 2.400 GHz
SWP 30.0 sec

VBW 300 Hz

START 2.300 GHz
RES BW 30 KHz

IF = 28.1 MHz

P.05

(4)

MARK 2.304 98 GHz
16.20 dBm

ATTEN 40 dB

REF 20.0 dBm

HP

10 dB/

MARKER
2.304 98 GHz
16.20 dBm

2.304 MHz
-2.91 dBm
LOE2

2.308 MHz
-10.41 dBm
LOE2

STOP 2.320 0 GHz
SWP 600 msec

START 2.300 0 GHz
RES BW 10 KHz

VBW 30 KHz

(5)

14 = 28.1 MHz

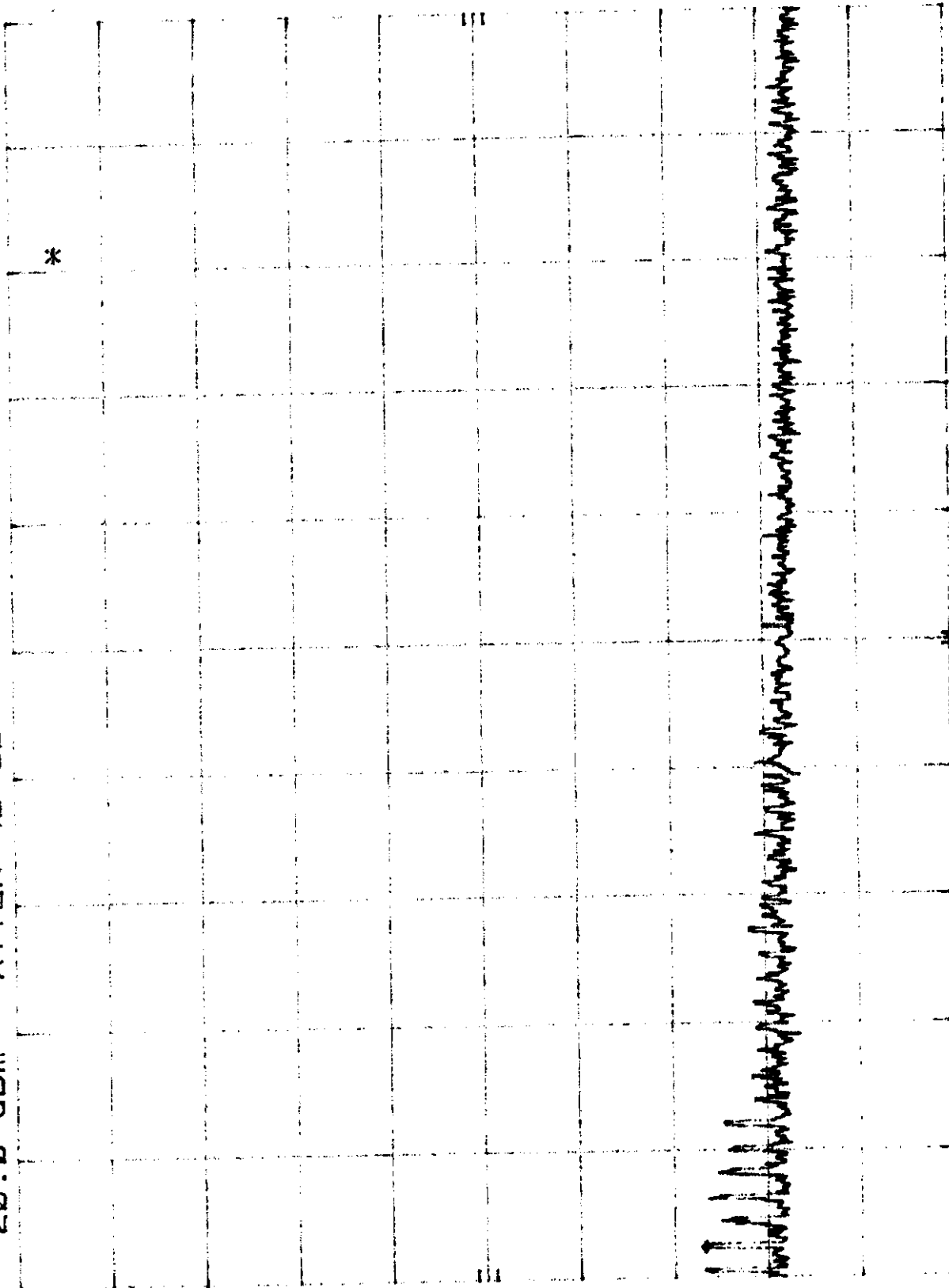
hp

REF 20.0 dBm ATTN 40 dB

10 dB/

MKR 2.320 50 GHz
-53.30 dBm

*



START 2.320 0 GHz
RES BW 3 KHz

VBW 3 KHz

STOP 2.345 0 GHz
SWP 7.50 sec