

# Western Broadcast Services



Engineering • Programming • Management Consultants

1030 WEST EVELYN AVENUE  
SUNNYVALE, CALIF. 94086  
PHONE (408) 738-2100

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Engineer in Charge  
Federal Communications Commission  
323 A Customhouse  
San Francisco, California

Dear Sir:

This will advise that Radio Station \_\_\_\_\_,  
is logging the following equipment status as dated below:

\_\_\_ Out of service:                      \_\_\_ Out of tolerance or calibration:

\_\_\_\_\_ Date \_\_\_\_\_  
\_\_\_\_\_ Date \_\_\_\_\_  
\_\_\_\_\_ Date \_\_\_\_\_

During repair period, the following procedure will be used to insure normal operation:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Expected date of completion of repairs: \_\_\_\_\_

\_\_\_ In service:                                      \_\_\_ Restored to normal operation:

\_\_\_\_\_ Date \_\_\_\_\_  
\_\_\_\_\_ Date \_\_\_\_\_  
\_\_\_\_\_ Date \_\_\_\_\_

Upon completion, calibration of measuring equipment is certified correct as follows:

\_\_\_\_\_  
By \_\_\_\_\_ Date \_\_\_\_\_

\_\_\_ Permission is requested to proceed as indicated above.

Sincerely,

\_\_\_\_\_  
\_\_\_\_\_

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Engineering data used in this report has been obtained through measurements made by \_\_\_\_\_ and \_\_\_\_\_ on the following dates and times:

Item:	Date measured	Time
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

Transmitter parameters maintained during all measurements were as follows:

Test equipment used for all measurements for this report:

Description	Make	Model	Serial #	Date cal.	Cal. by
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

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1255 POST STREET  
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(408) 245-8494

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The following meters and test instruments are a part of radio station \_\_\_\_\_, and have been checked and /or calibrated by Western Broadcast Services on dates shown.

ITEM	READING	ACTUAL VALUE	DATE CAL.	CAL. BY
Final plate voltmeter	_____ V.	_____ V.	19_____	_____
Final plate ammeter	_____ A.	_____ A.	19_____	_____
Antenna or CP ammeter	_____ A.	_____ A.	19_____	_____
Frequency monitor	_____ Kc.	_____ Kc.	19_____	_____
Modulation monitor	_____ Kc.	_____ Kc.	19_____	_____
	_____ Kc.	_____ Kc.	19_____	_____
	_____ Kc.	_____ Kc.	19_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

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## FM STEREO SYSTEM PERFORMANCE DATA

- (A) Pilot carrier frequency measured at \_\_\_\_\_ Hz.  
(B) Pilot carrier modulation of main carrier \_\_\_\_\_ %.  
(C) Sub-carrier #1 frequency measured \_\_\_\_\_ Hz.  
(D) Sub-carrier #1 modulation of main carrier \_\_\_\_\_ %.  
(E) Sub-carrier #2 frequency measured \_\_\_\_\_ Hz.  
(F) Sub-carrier #2 modulation of main carrier \_\_\_\_\_ %.  
(G) Measured separation data:

Frequency in Hertz	Phase difference Main to Stereo sub	Separation in DB Left to right	Separation in DB Right to left
50	_____	_____	_____
100	_____	_____	_____
400	_____	_____	_____
1000	_____	_____	_____
5000	_____	_____	_____
10,000	_____	_____	_____
15,000	_____	_____	_____

\_\_\_\_\_ channel frequency response and distortion data:

Freq. Hz.	Input level for				Distortion (total harmonic)			
	25% Mod.	50%	85%	100%	at 25% Mod.	50%	85%	100%
30								
50								
100								
400								
1000								
5000								
7500								
10,000								
15,000								
20,000								

AM Noise level \_\_\_\_\_ db below 100% modulation.

FM Noise level \_\_\_\_\_ db below 100% modulation.

Carrier shift data (400 Hz modulating frequency)

Modulation percentage	25%	50%	85%	100%
Carrier shift percentage				

WORK SHEET FOR FM STATIONS ONLY

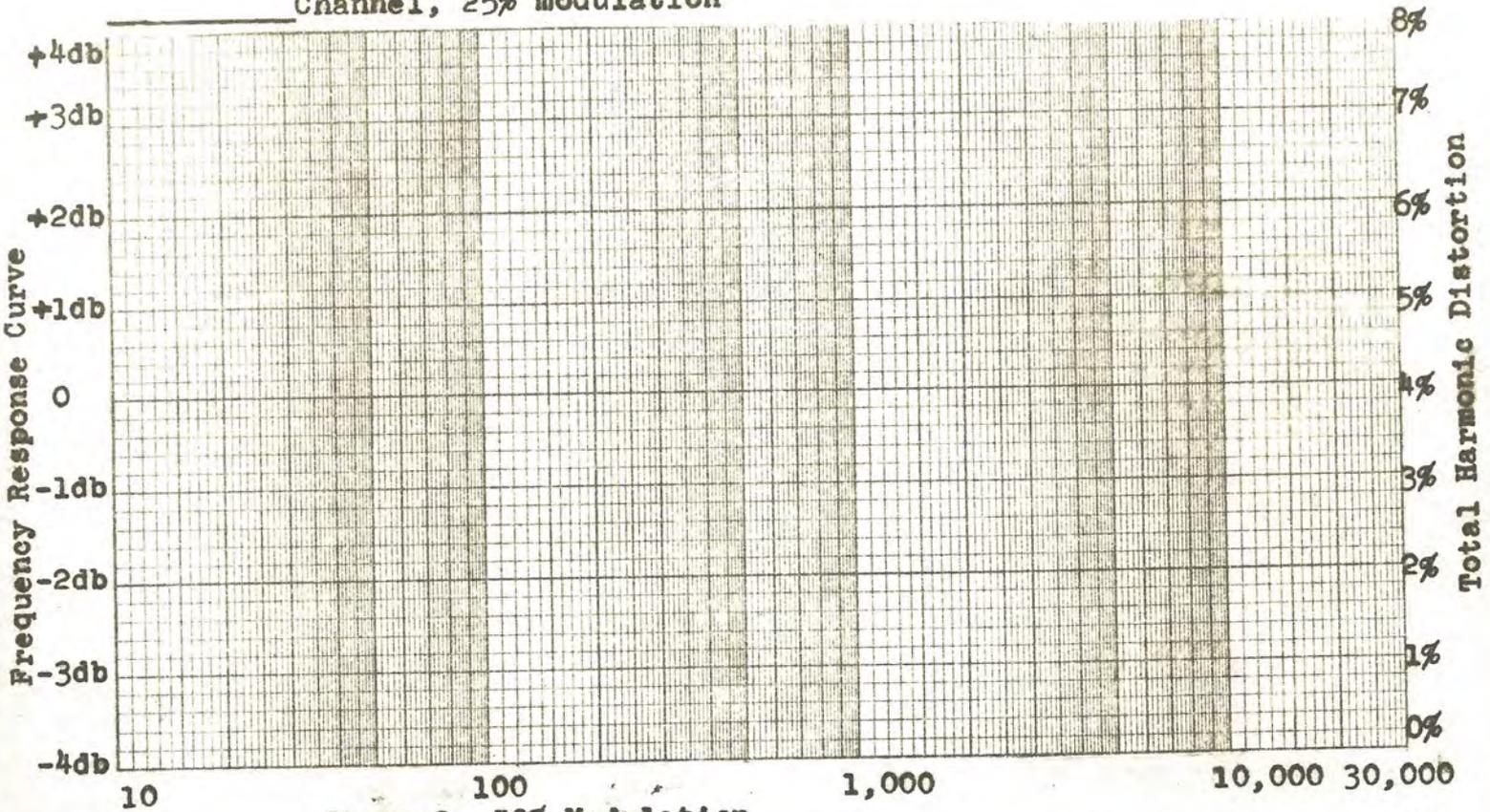
	50	100	400	1000	5000	10,000	15,000
100%	+0.2	+0.2	±0	-0.6	-8.0	-13.4	-16.6
			±0				
	+0.2	+0.2	±0	-0.6	-8.0	-13.4	-16.6
50%							
			±0				
	+0.2	+0.2	±0	-0.6	-8.0	-13.4	-16.6
25%							
			±0				
	+0.2	+0.2	±0	-0.6	-8.0	-13.4	-16.6

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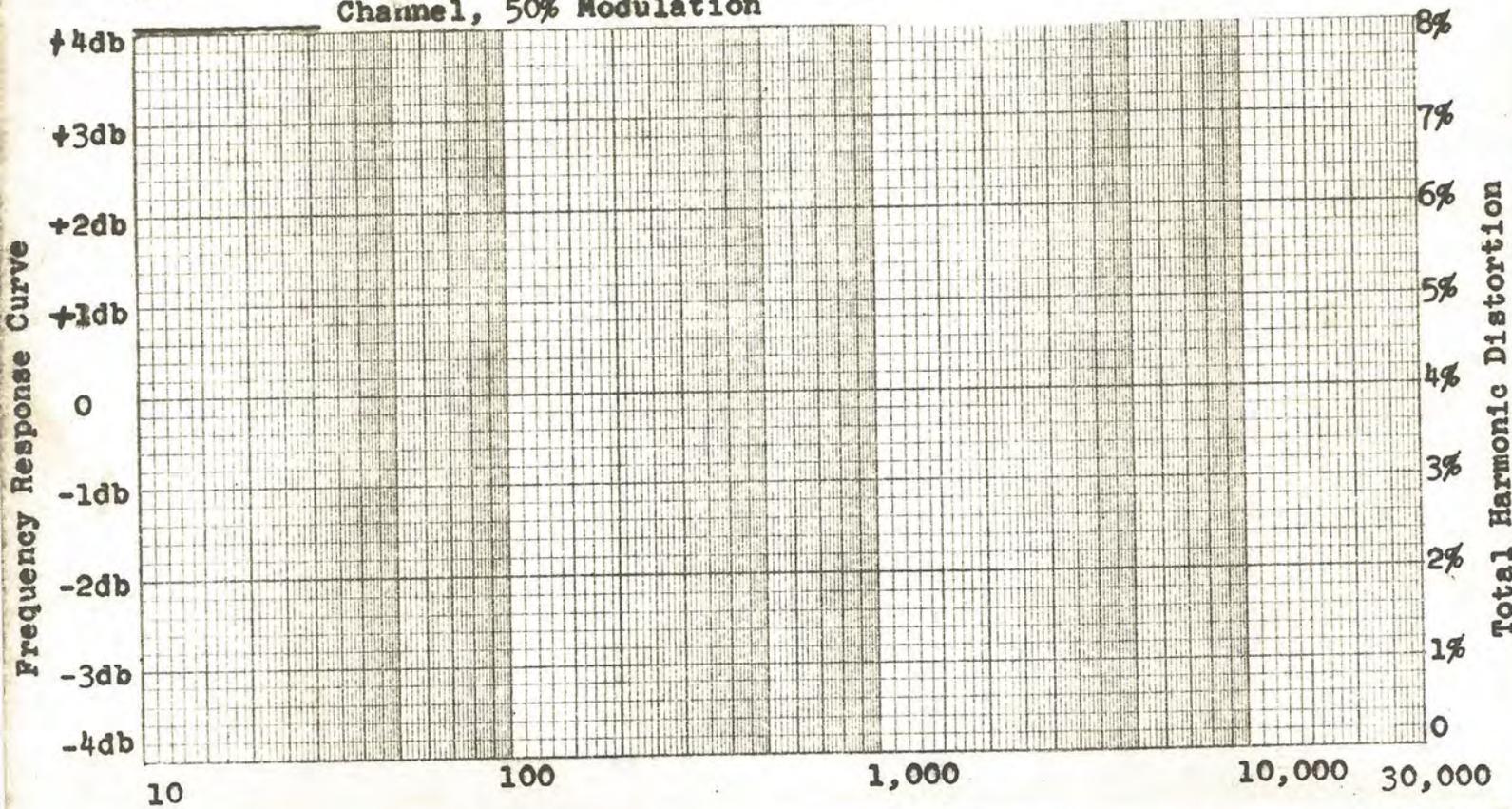
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Channel, 25% modulation



Channel, 50% Modulation



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Harmonic and spurious emission data measurements made at \_\_\_\_\_ which is \_\_\_\_\_ miles from the transmitter antenna (s), on the \_\_\_\_\_ radial from True North. Field strength at carrier frequency was \_\_\_\_\_ mv/meter.

Description	Frequency	Level observed	DB down from carrier level
2nd harmonic	_____	_____	_____
3rd harmonic	_____	_____	_____
4th harmonic	_____	_____	_____
5th harmonic	_____	_____	_____
6th harmonic	_____	_____	_____
7th harmonic	_____	_____	_____
8th harmonic	_____	_____	_____
9th harmonic	_____	_____	_____
10 th harmonic	_____	_____	_____
11th harmonic	_____	_____	_____
12th harmonic	_____	_____	_____
13th harmonic	_____	_____	_____
14th harmonic	_____	_____	_____
15th harmonic	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

