MFA M. Flom Associates, Inc. - Global Compliance Center
3356 North San Marcos Place, Suite 107, Chandler, Arizona 85225-7176
www.mflom.com general@mflom.com (480) 926-3100, FAX: 926-3598

Date: June 12, 2001

Federal Communications Commission
VIA ELECTRONIC FILING

Attention: Authorization & Evaluation Division

Applicant: Comtek Communications Technology, Inc.
Equipment: M-216
FCC ID: C6ZM216
FCC Rules: 95G, 95.629(b) and (c), Confidentiality

Gentlemen:

On behalf of the Applicant, enclosed please find Application Form 731, Engineering Test Report and all pertinent documentation, the whole for approval of the referenced equipment as shown.

Filing fees are attached. Please note that except for the Radiated tests, all testing has been conducted by the Applicant.

We trust the same is in order. Should you need any further information, kindly contact the writer who is authorized to act as agent.

Sincerely yours,

Morton Flom, P. Eng.

enclosure(s)
cc: Applicant
MF/cvr

LIST OF EXHIBITS
(FCC **CERTIFICATION** (TRANSMITTERS) - REVISED 9/28/98)

APPLICANT: Comtek Communications Technology, Inc.

FCC ID: C6ZM216

BY APPLICANT:

1. LETTER OF AUTHORIZATION

2. IDENTIFICATION DRAWINGS, 2.1033(c)(11)
   ___ LABEL
   ___ LOCATION OF LABEL
   ___ COMPLIANCE STATEMENT
   ___ LOCATION OF COMPLIANCE STATEMENT

3. PHOTOGRAPHS, 2.1033(c)(12)

4. DOCUMENTATION: 2.1033(c)
   (3) USER MANUAL
   (9) TUNE UP INFO
   (10) SCHEMATIC DIAGRAM
   (10) CIRCUIT DESCRIPTION
   BLOCK DIAGRAM
   PARTS LIST
   ACTIVE DEVICES

5. PART 95.1015(a) ATTESTATION

BY M.F.A. INC.

A. TESTIMONIAL & STATEMENT OF CERTIFICATION

B. STATEMENT OF QUALIFICATIONS

M. Flom Associates, Inc. - Global Compliance Center
3356 North San Marcos Place, Suite 107, Chandler, Arizona 85225-7176
www.mflom.com general@mflom.com (480) 926-3100, FAX: 926-3598

T R A N S M I T T E R C E R T I F I C A T I O N

of

FCC ID: C6ZM216
MODEL: M-216

to

FEDERAL COMMUNICATIONS COMMISSION

Rule Part(s) 95G, 95.629(b) and (c), Confidentiality

DATE OF REPORT: June 12, 2001

ON THE BEHALF OF THE APPLICANT:

Comtek Communications Technology, Inc.

AT THE REQUEST OF: P.O. F0061

Comtek Communications Technology, Inc.
357 W. 2700 South
Salt Lake City, UTAH 84115

Attention of: Ralph Belgique, President
(801) 446-3463, FAX: 484-6906

SUPERVISED BY: Morton Flom, P. Eng.

THE APPLICANT HAS BEEN CAUTIONED AS TO THE FOLLOWING:

15.21 INFORMATION TO USER.

The users manual or instruction manual for an intentional radiator shall caution the user that changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

15.27(a) SPECIAL ACCESSORIES.

Equipment marketed to a consumer must be capable of complying with the necessary regulations in the configuration in which the equipment is marketed. Where special accessories, such as shielded cables and/or special connectors are required to enable an unintentional or intentional radiator to comply with the emission limits in this part, the equipment must be marketed with, i.e. shipped and sold with, those special accessories. However, in lieu of shipping or packaging the special accessories with the unintentional or intentional radiator, the responsible party may employ other methods of ensuring that the special accessories are provided to the consumer, without additional charge.

Information detailing any alternative method used to supply the special accessories for a grant of equipment authorization or retained in the verification records, as appropriate. The party responsible for the equipment, as detailed in § 2.909 of this chapter, shall ensure that these special accessories are provided with the equipment. The instruction manual for such devices shall include appropriate instructions on the first page of text concerned with the installation of the device that these special accessories must be used with the device. It is the responsibility of the user to use the needed special accessories supplied with the equipment.

TABLE OF CONTENTS

PAGE NO. 1 of 22.

Required information per ISO/IEC Guide 25-1990, paragraph 13.2:

a) TEST REPORT

b) Laboratory: M. Flom Associates, Inc.
(FCC: 31040/SIT) 3356 N. San Marcos Place, Suite 107
(Canada: IC 2044) Chandler, AZ 85225

c) Report Number: d0160006

d) Client: Comtek Communications Technology, Inc.
357 W. 2700 South
Salt Lake City, UTAH 84115

e) Identification: M-216
FCC ID: C6ZM216
Description: Wireless Microphone Transmitter

f) EUT Condition: Not required unless specified in individual tests.

g) Report Date: June 12, 2001
EUT Received: June 6, 2001

h, j, k): As indicated in individual tests.

i) Sampling method: No sampling procedure used.

l) Uncertainty: In accordance with MFA internal quality manual.

m) Supervised by:

Morton Flom, P. Eng.

n) Results: The results presented in this report relate only to the item tested.

o) Reproduction: This report must not be reproduced, except in full, without written permission from this laboratory.

PAGE NO. 2 of 22.

GENERAL INFORMATION REQUIRED FOR CERTIFICATION

Sub-part 2.948:

(a)(b) DESCRIPTION OF MEASUREMENT FACILITIES:
FILE: 31040/511

A description of the measurement facilities was filed with the Commission and was found to be in compliance with the requirements of Section 2.948, by letter dated March 3, 1997. All pertinent changes will be reported to the Commission by up-date prior to March 2000.

(b)(4): SUPPORTING STRUCTURES:

SKETCH – ATTACHED EXHIBITS

(b)(5)(6): TEST INSTRUMENTATION:

LIST – SEE EXHIBITS

2.925: IDENTIFICATION OF AN AUTHORIZED DEVICE:

DRAWING – SEE EXHIBITS

LOCATION OF LABEL – SEE PHOTOS

(c)(1): NAME AND ADDRESS OF APPLICANT:

Comtek Communications Technology, Inc.
357 W. 2700 South
Salt Lake City, UTAH 84115

VENDOR:

Applicant

(c)(2): FCC ID: C6ZM216

MODEL NO: M-216

PHOTOGRAPHS:

SEE LIST OF EXHIBITS

PAGE NO. 3 of 22.

LIST OF GENERAL INFORMATION REQUIRED FOR CERTIFICATION

IN ACCORDANCE WITH FCC RULES AND REGULATIONS,
VOLUME II, PART 2 AND TO

95G, 95.629(b) and (c), Confidentiality

Sub-part 2.1033
(c)(1): NAME AND ADDRESS OF APPLICANT:

Comtek Communications Technology, Inc.
357 W. 2700 South
Salt Lake City, UTAH 84115

MANUFACTURER:

Applicant

(c)(2): FCC ID: C6ZM216

MODEL NO: M-216

(c)(3): INSTRUCTION MANUAL(S):

PLEASE SEE ATTACHED EXHIBITS

(c)(4): TYPE OF EMISSION: 16K0F3E, 11K0F3E

(c)(5): FREQUENCY RANGE, MHz: 216 to 217

(c)(6): POWER RATING, Watts: 10 mw
___ Switchable ___ Variable _x_ N/A

(c)(7): MAXIMUM POWER RATING, Watts: 100×13^{-3}

95.647: ANTENNA REQUIREMENT:

_x_ The antenna is permanently attached to the EUT
___ The antenna uses a unique coupling
___ The EUT must be professionally installed
___ The antenna requirement does not apply

PAGE NO. 4 of 22.

M. Flom Associates, Inc. is accredited by the American Association for Laboratory Association (A2LA) as shown in the scope below.

THE AMERICAN
ASSOCIATION
FOR LABORATORY
ACCREDITATION

ACCREDITED LABORATORY

A2LA has accredited

M. FLOM ASSOCIATES, INC.
Chandler, AZ

for technical competence in the field of

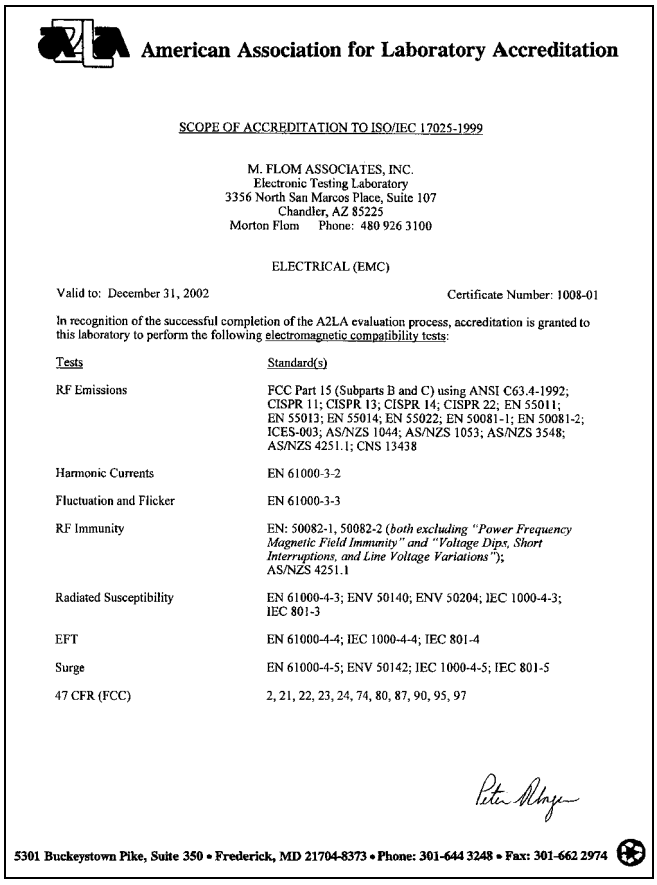
Electrical (EMC) Testing

The accreditation covers the specific tests and types of tests listed on the agreed scope of accreditation. This laboratory meets the requirements of ISO/IEC 17025 - 1999 "General Requirements for the Competence of Testing and Calibration Laboratories" and any additional program requirements in the identified field of testing. Testing and calibration laboratories that comply with this International Standard also operate in accordance with ISO 9001 or ISO 9002.

Presented this 2nd day of March, 2001.

President
For the Accreditation Council
Certificate Number 1008.01
Valid to December 31, 2002

For tests or types of tests to which this accreditation applies, please refer to the laboratory's Electrical (EMC) Scope of Accreditation



American Association for Laboratory Accreditation

SCOPE OF ACCREDITATION TO ISO/IEC 17025-1999

M. FLOM ASSOCIATES, INC.
Electronic Testing Laboratory
3356 North San Marcos Place, Suite 107
Chandler, AZ 85225
Morton Flom Phone: 480 926 3100

ELECTRICAL (EMC)

Valid to: December 31, 2002 Certificate Number: 1008-01

In recognition of the successful completion of the A2LA evaluation process, accreditation is granted to this laboratory to perform the following electromagnetic compatibility tests:

Tests	Standard(s)
RF Emissions	FCC Part 15 (Subparts B and C) using ANSI C63.4-1992; CISPR 11; CISPR 13; CISPR 14; CISPR 22; EN 55011; EN 55013; EN 55014; EN 55022; EN 50081-1; EN 50081-2; ICES-003; AS/NZS 1044; AS/NZS 1053; AS/NZS 3548; AS/NZS 4251.1; CNS 13438
Harmonic Currents	EN 61000-3-2
Fluctuation and Flicker	EN 61000-3-3
RF Immunity	EN: 50082-1, 50082-2 (*both excluding "Power Frequency Magnetic Field Immunity" and "Voltage Dips, Short Interruptions, and Line Voltage Variations"*); AS/NZS 4251.1
Radiated Susceptibility	EN 61000-4-3; ENV 50140; ENV 50204; IEC 1000-4-3; IEC 801-3
EFT	EN 61000-4-4; IEC 1000-4-4; IEC 801-4
Surge	EN 61000-4-5; ENV 50142; IEC 1000-4-5; IEC 801-5
47 CFR (FCC)	2, 21, 22, 23, 24, 74, 80, 87, 90, 95, 97

5301 Buckeystown Pike, Suite 350 • Frederick, MD 21704-8373 • Phone: 301-644 3248 • Fax: 301-662 2974

"This laboratory is accredited by the American Association for Laboratory Accreditation (A2LA) and the results shown in this report have been determined in accordance with the laboratory's terms of accreditation unless stated otherwise in the report."

Should this report contain any data for tests for which we are not accredited, or which have been undertaken by a subcontractor that is not A2LA accredited, such data would not covered by this laboratory's A2LA accreditation.

PAGE NO. 5 of 22.

Sub-part 2.1033(c)(14): TEST AND MEASUREMENT DATA

All tests and measurement data shown were performed in accordance with FCC Rules and Regulations, Volume II; Part 2, Sub-part J, Sections 2.947, 2.1033(c), 2.1041, 2.1046, 2.1047, 2.1079, 2.1051, 2.1053, 2.1055, 2.1057 and the following individual Parts:

____ 21 – Domestic Public Fixed Radio Services
____ 22 – Public Mobile Services
____ 22 Subpart H - Cellular Radiotelephone Service
____ 22.901(d) - Alternative technologies and auxiliary services
____ 23 – International Fixed Public Radiocommunication services
____ 24 – Personal Communications Services
____ 74 Subpart H - Low Power Auxiliary Stations
____ 80 – Stations in the Maritime Services
____ 80 Subpart E - General Technical Standards
____ 80 Subpart F - Equipment Authorization for Compulsory Ships
____ 80 Subpart K - Private Coast Stations and Marine Utility Stations
____ 80 Subpart S - Compulsory Radiotelephone Installations for Small Passenger Boats
____ 80 Subpart T - Radiotelephone Installation Required for Vessels on the Great Lakes
____ 80 Subpart U - Radiotelephone Installations Required by the Bridge-to-Bridge Act
____ 80 Subpart V - Emergency Position Indicating Radiobeacons (EPIRB'S)
____ 80 Subpart W - Global Maritime Distress and Safety System (GMDSS)
____ 80 Subpart X - Voluntary Radio Installations
____ 87 – Aviation Services
____ 90 – Private Land Mobile Radio Services
____ 94 – Private Operational-Fixed Microwave Service
____ 95 Subpart A - General Mobile Radio Service (GMRS)
____ 95 Subpart C - Radio Control (R/C) Radio Service
____ 95 Subpart D - Citizens Band (CB) Radio Service
_x_ 95 Subpart E - Family Radio Service
____ 95 Subpart F - Interactive Video and Data Service (IVDS)
____ 97 - Amateur Radio Service
____ 101 – Fixed Microwave Services

STANDARD TEST CONDITIONS and ENGINEERING PRACTICES

Except as noted herein, the following conditions and procedures were observed during the testing:

In accordance with ANSI C63.4-1992/2000, section 6.1.9, and unless otherwise indicated in the specific measurement results, the ambient temperature of the actual EUT was maintained within the range of 10° to 40°C (50° to 104 °F) unless the particular equipment requirements specify testing over a different temperature range. Also, unless otherwise indicated, the humidity levels were in the range of 10% to 90% relative humidity.

Prior to testing, the EUT was tuned up in accordance with the manufacturer's alignment procedures. All external gain controls were maintained at the position of maximum and/or optimum gain throughout the testing.

Measurement results, unless otherwise noted, are worst case measurements.

PAGE NO. 7 of 22.

NAME OF TEST: Carrier Output Power (Radiated)

SPECIFICATION: 47 CFR 2.1046(a)

GUIDE: ANSI/TIA/EIA-603-1992, Paragraph 2.2.1

TEST EQUIPMENT: As per attached page

MEASUREMENT PROCEDURE (RADIATED)

1. The EUT was placed on an open-field site and its radiated field strength at a known distance was measured by means of a spectrum analyzer. Equivalent loading of a dipole was calculated from the equation $P_t=((E \times R)^2/49.2)$ watts, where R = 3m.

2. Measurement accuracy is ±1.5 dB.

MEASUREMENT RESULTS

Wide Band g0160022: 2001-Jun-06 Wed 13:55:00

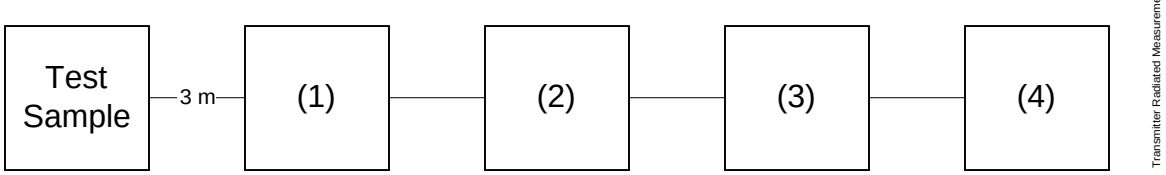
FREQUENCY TUNED, MHz	FREQUENCY EMISSION, MHz	Level, dBuV/m	CF, dB	Calc, dBuV/m	ERP, Watts
216.025000	216.026300	85.39	16.1	101.5	2.6×10^{-3}
216.525000	216.526300	85.32	16.12	101.4	2.6×10^{-3}
216.975000	216.988800	85.46	16.14	101.6	2.6×10^{-3}

Narrow Band g0160021: 2001-Jun-06 Wed 13:09:00

FREQUENCY TUNED, MHz	FREQUENCY EMISSION, MHz	Level, dBuV/m	CF, dB	Calc, dBuV/m	ERP, Watts
216.012500	216.012500	85.3	16.1	101.4	2.58×10^{-3}
216.362500	216.363800	85.39	16.11	101.5	2.58×10^{-3}
216.987500	216.988800	85.34	16.14	101.5	2.58×10^{-3}

PAGE NO. 8 of 22.

TRANSMITTER RADIATED MEASUREMENTS



Transmitter Radiated Measurements

Asset	Description (as applicable)	s/n
(1) TRANSDUCER		
i00091	Emco 3115	001469
i00089	Aprel Log Periodic	001500
(2) HIGH PASS FILTER		
i00	Narda µPAD (In-Band Only)	
i00	Trilithic (Out-Of-Band Only)	
(3) PREAMP		
i00028	HP 8449 (+30 dB)	2749A00121
(4) SPECTRUM ANALYZER		
i00048	HP 8566B	2511A01467
i00057	HP 8557A	1531A00191
i00029	HP 8563E	3213A00104

PAGE NO. 9 of 22.

NAME OF TEST: Field Strength of Spurious Radiation

SPECIFICATION: 47 CFR 2.1053(a)

GUIDE: ANSI/TIA/EIA-603-1992, Paragraph 1.2.12

MEASUREMENT PROCEDURE

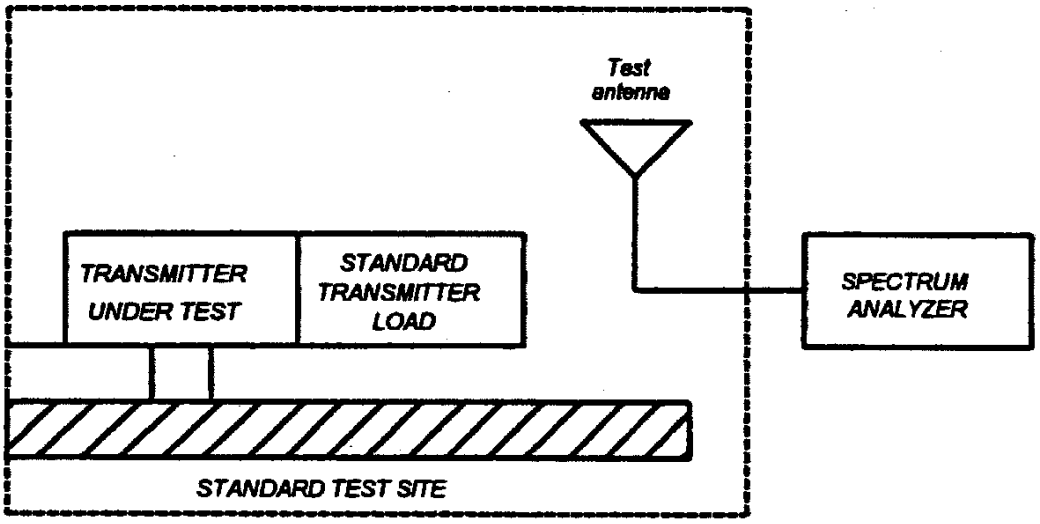
1.2.12.1 Definition: Radiated spurious emissions are emissions from the equipment when transmitting into a non-radiating load on a frequency or frequencies which are outside an occupied band sufficient to ensure transmission of information of required quality for the class of communications desired.

1.2.12.2 Method of Measurement

A) Connect the equipment as illustrated

B) Adjust the spectrum analyzer for the following settings:
1) Resolution Bandwidth ≤3 kHz.
2) Video Bandwidth ≥10 kHz
3) Sweep Speed ≤2000 Hz/second
4) Detector Mode = Positive Peak

C) Place the transmitter to be tested on the turntable in the standard test site. The transmitter is transmitting into a non-radiating load which is placed on the turntable. The RF cable to this load should be of minimum length.



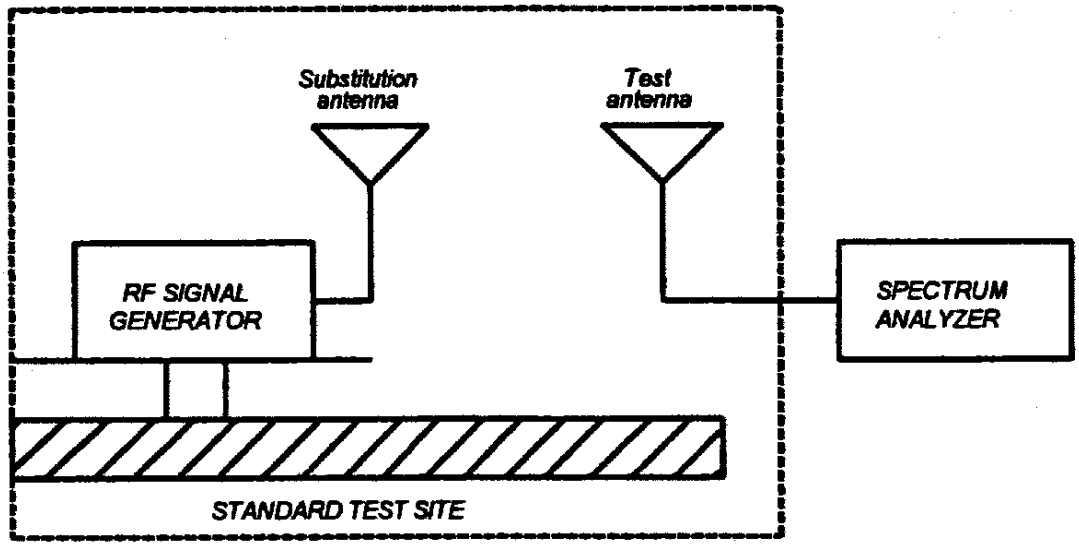
PAGE NO. 10 of 22.

NAME OF TEST: Field Strength of Spurious Radiation (Cont.)

D) For each spurious measurement the test antenna should be adjusted to the correct length for the frequency involved. This length may be determined from a calibration ruler supplied with the equipment. Measurements shall be made from the lowest radio frequency generated in the equipment to the tenth harmonic of the carrier, except for the region close to the carrier equal to ± the test bandwidth (see section 1.3.4.4).

E) For each spurious frequency, raise and lower the test antenna from 1 m to 4 m to obtain a maximum reading on the spectrum analyzer with the test antenna at horizontal polarity. Repeat this procedure to obtain the highest possible reading. Record this maximum reading.

F) Repeat step E) for each spurious frequency with the test antenna polarized vertically.



G) Reconnect the equipment as illustrated.

H) Keep the spectrum analyzer adjusted as in step B).

I) Remove the transmitter and replace it with a substitution antenna (the antenna should be half-wavelength for each frequency involved). The center of the substitution antenna should be approximately at the same location as the center of the transmitter. At lower frequencies, where the substitution antenna is very long, this will be impossible to achieve when the antenna is polarized vertically. In such case the lower end of the antenna should be 0.3 m above the ground.

PAGE NO. 11 of 22.

NAME OF TEST: Field Strength of Spurious Radiation (Cont.)

J) Feed the substitution antenna at the transmitter end with a signal generator connected to the antenna by means of a non-radiating cable. With the antennas at both ends horizontally polarized and with the signal generator tuned to a particular spurious frequency, raise and lower the test antenna to obtain a maximum reading at the spectrum analyzer. Adjust the level of the signal generator output until the previously recorded maximum reading for this set of conditions is obtained. This should be done carefully repeating the adjustment of the test antenna and generator output.

K) Repeat step J) with both antennas vertically polarized for each spurious frequency.

L) Calculate power in dBm into a reference ideal half-wave dipole antenna by reducing the readings obtained in steps J) and K) by the power loss in the cable between the generator and the antenna and further corrected for the gain of the substitution antenna used relative to an ideal half-wave dipole antenna.

M) The levels recorded in step L) are absolute levels of radiated spurious emissions in dBm. The radiated spurious emissions in dB can be calculated by the following:

Radiated spurious emissions dB =
$10\log_{10}$(TX power in watts/0.001) – the levels in step l)

NOTE: It is permissible that other antennas provided can be referenced to a dipole.

Test Equipment:

Asset	Description (as applicable)	s/n	Cycle (Per ANSI C63.4-1992/2000 Draft, 10.1.4)	Last Cal
TRANSDUCER				
i00088	EMCO 3109-B 25MHz-300MHz	2336	12 mo.	Sep-00
i00065	EMCO 3301-B Active Monopole	2635	12 mo.	Sep-00
i00089	Aprel 2001 200MHz-1GHz	001500	12 mo.	Sep-00
i00103	EMCO 3115 1GHz-18GHz	9208-3925	12 mo.	Sep-00
AMPLIFIER				
i00028	HP 8449A	2749A00121	12 mo.	Mar-01
SPECTRUM ANALYZER				
i00029	HP 8563E	3213A00104	12 mo.	Aug-00
i00033	HP 85462A	3625A00357	12 mo.	May-01
i00048	HP 8566B	2511AD1467	6 mo.	May-01

PAGE NO. 12 of 22.

NAME OF TEST: Field Strength of Spurious Radiation

Wide Band g0160024: 2001-Jun-08 Fri 13:37:00

FREQUENCY TUNED, MHz	FREQUENCY EMISSION, MHz	METER, dBuV/m	CF, dB	ERP, dBm	ERP, dBc
216.525000	433.050000	42.03	23.02	-32.3	≤-39.6
216.525000	649.575000	37.54	26.77	-33.1	≤-39.6
216.525000	866.100000	30.47	28.53	-38.4	≤-39.6
216.525000	1082.625000	12.97	32.09	-52.3	≤-39.6
216.525000	1299.150000	15.93	33.94	-47.5	≤-39.6
216.525000	1515.686300	26.1	35.5	-35.8	≤-39.6
216.525000	1732.211300	7.72	36.84	-52.8	≤-39.6
216.525000	1948.736300	10.1	38.04	-49.2	≤-39.6
216.525000	2165.261300	6.12	39.59	-51.7	≤-39.6

Narrow Band g0160023: 2001-Jun-06 Wed 14:48:00

FREQUENCY TUNED, MHz	FREQUENCY EMISSION, MHz	METER, dBuV/m	CF, dB	ERP, dBm	ERP, dBc
216.362500	432.738800	44.76	23.02	-29.6	≤-42.3
216.362500	649.105000	40.06	26.77	-30.5	≤-42.3
216.362500	865.464300	32.56	28.52	-36.3	≤-42.3
216.363000	1081.815000	21.79	32.09	-43.5	≤-42.3
216.363000	1298.178000	20.33	33.93	-43.1	≤-42.3
216.363000	1514.541000	16.75	35.49	-45.1	≤-42.3
216.363000	1730.904000	5.84	36.84	-54.7	≤-42.3
216.363000	1947.267000	6.97	38.04	-52.4	≤-42.3
216.363000	2163.630000	9.77	39.58	-48	≤-42.3

SUPERVISED BY: Morton Flom, P. Eng.

Measurement Test Procedures

Carrier frequency versus temperature tests were conducted by placing the entire transmitter into the environmental chamber. Power was supplied by an internal 9 Volt battery. RF radiation was inductively coupled to an antenna which fed the energy through a 50 ohm coaxial cable to a spectrum analyzer and a frequency counter. A five-minute per degree centigrade rest was allowed for stabilization. This test was performed at Comtek laboratory. See the associated transmitter carrier frequency versus temperature graph.

Carrier frequency versus battery voltage tests were conducted by powering the transmitter with multiple batteries which represented various discharged conditions. RF output radiation was monitored as in the previous test. Battery Voltage was monitored with a digital Volt meter. This test was conducted at 72° Fahrenheit on a test bench at Comtek laboratory. See the associated carrier frequency versus battery voltage graph.

Audio input versus deviation measurements were made with audio generator plugged directly into the microphone and auxiliary input ports on the front of the transmitter. Output of the transmitter was monitored by radiation from the transmitter. This signal was connected to the peak deviation meter. A 50 ohm attenuator was used to attenuate signal to proper level for the deviation meter. Audio analyzer generator was set to produce two mV increments to establish graph. Deviation meter employed analogue meter output for monitoring. Tests were conducted on a test bench at 72° Fahrenheit at Comtek laboratory. See the associated input versus deviation measurement graph.

Measurements of occupied bandwidth an modulation data were conducted on a completed transmitter. The RF output was radiated to an antenna which fed the signal through a 50 ohm coaxial cable. All deviation measurements were made with a spectrum analyzer and a deviation meter to ensure accurate readings. The audio input to the transmitter was connected to an audio analyzer generator with digital readout. Refer to spectrum analyzer photos for test data results. All additional radiation measurements were conducted by M. Flom & Assoc.

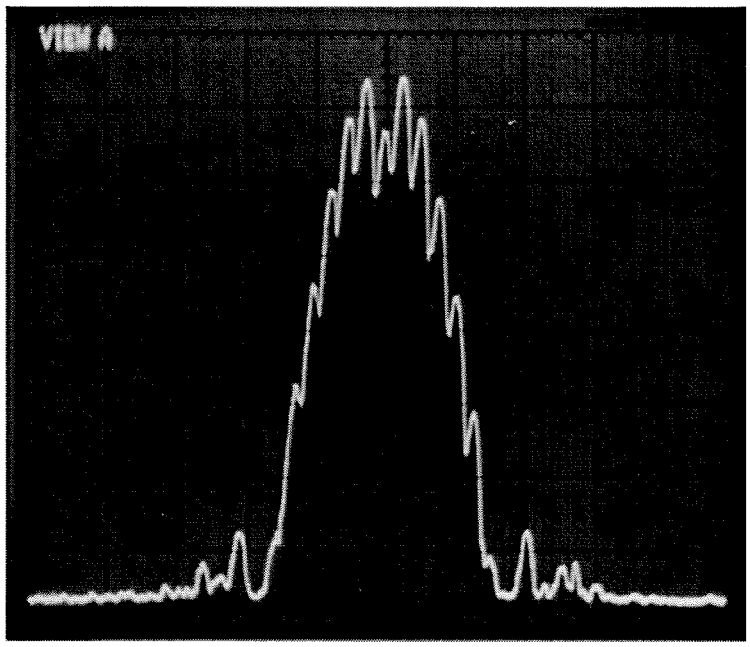
TEST EQUIPMENT USED

Hewlett Packard 8558 Spectrum Analyzer
Anritsu MS 710A Spectrum Analyzer
Hewlett Packard 8903 Audio Analyzer
Hewlett Packard 8640 RF Generator / Frequency Counter
Hewlett Packard 197B Camera
Marconi TF2300B Modulation Meter
Bird 4410 mW RF Power Meter
Tektronix 475 Oscilloscope
Associated Testing Laboratories RA1100 Environment Chamber
Fluke 8010 AC/DC Volt Meter

M-216 216 MHz Extra Band Channels
Occupied Bandwidth and Modulation Data

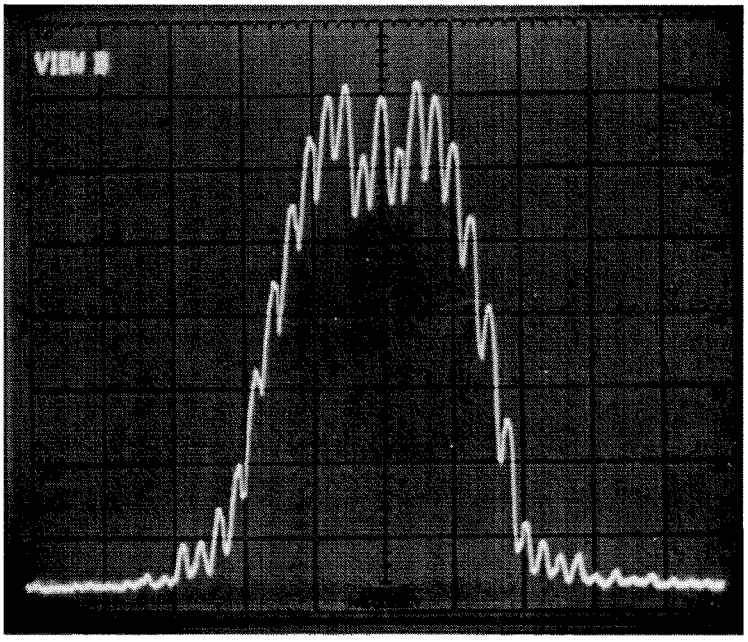
50% Modulation at 2500 Hz

Ref +10 dBm
216.5 MHz
Span 100 KHz
Res BW 1 KHz
Swp .5 sec/div



100% Modulation at 2500 Hz

Ref +1 0 dBm
216.5 MHz
Span 100 KHz
Res BW 1 KHz
Swp .5 sec/div

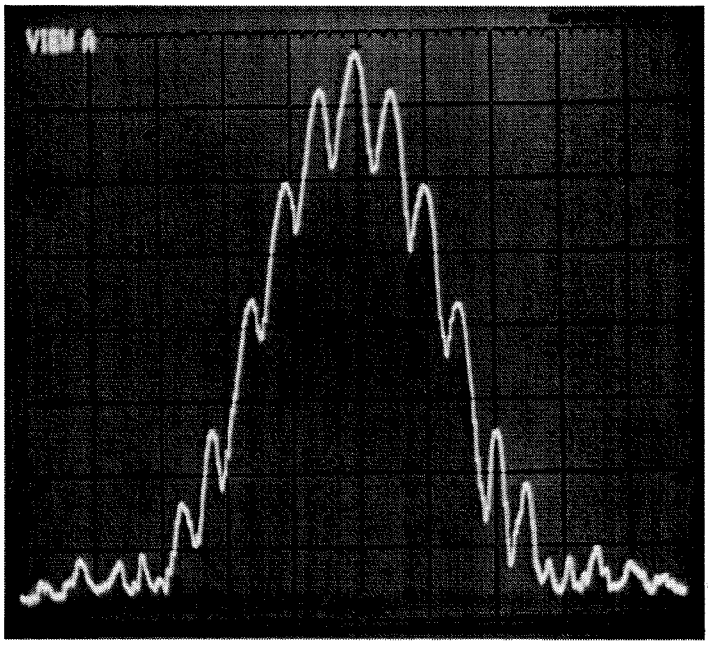


M-216 216 MHz Standard Band Channels
Occupied Bandwidth and Modulation Data

50% Modulation at 2500 Hz

Ref +10 dBm
216.5 MHz

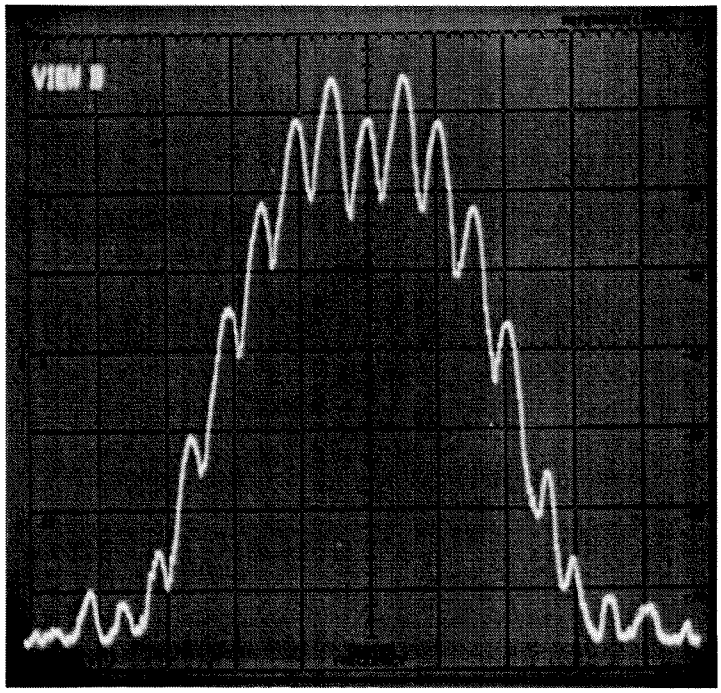
Span 50 KHz
Res BW 1 KHz
Swp .5 sec/div



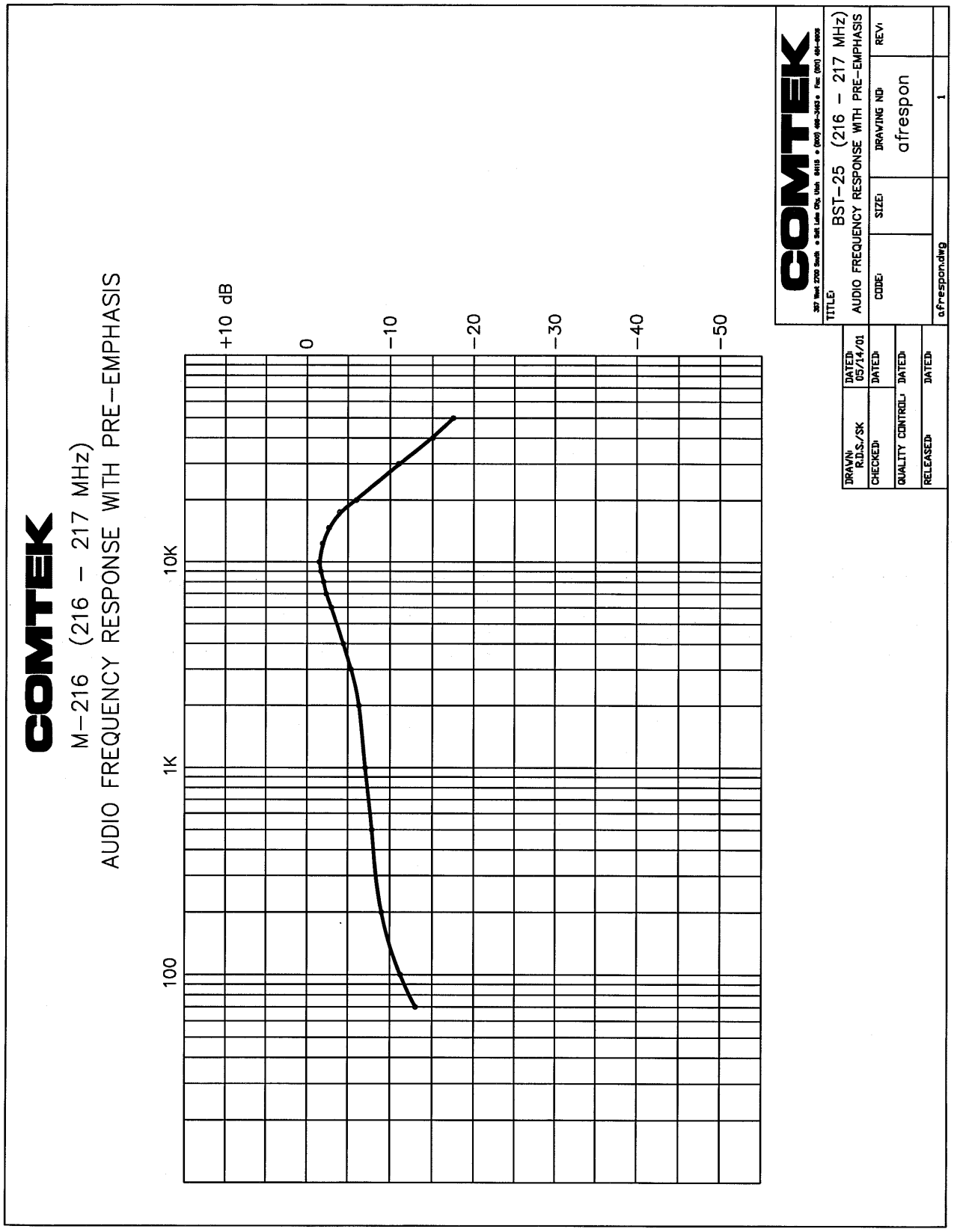
100 % Modulation at 2500 Hz with audio 20 dB above 50% modulation

Ref +10 dBm
216.5 MHz

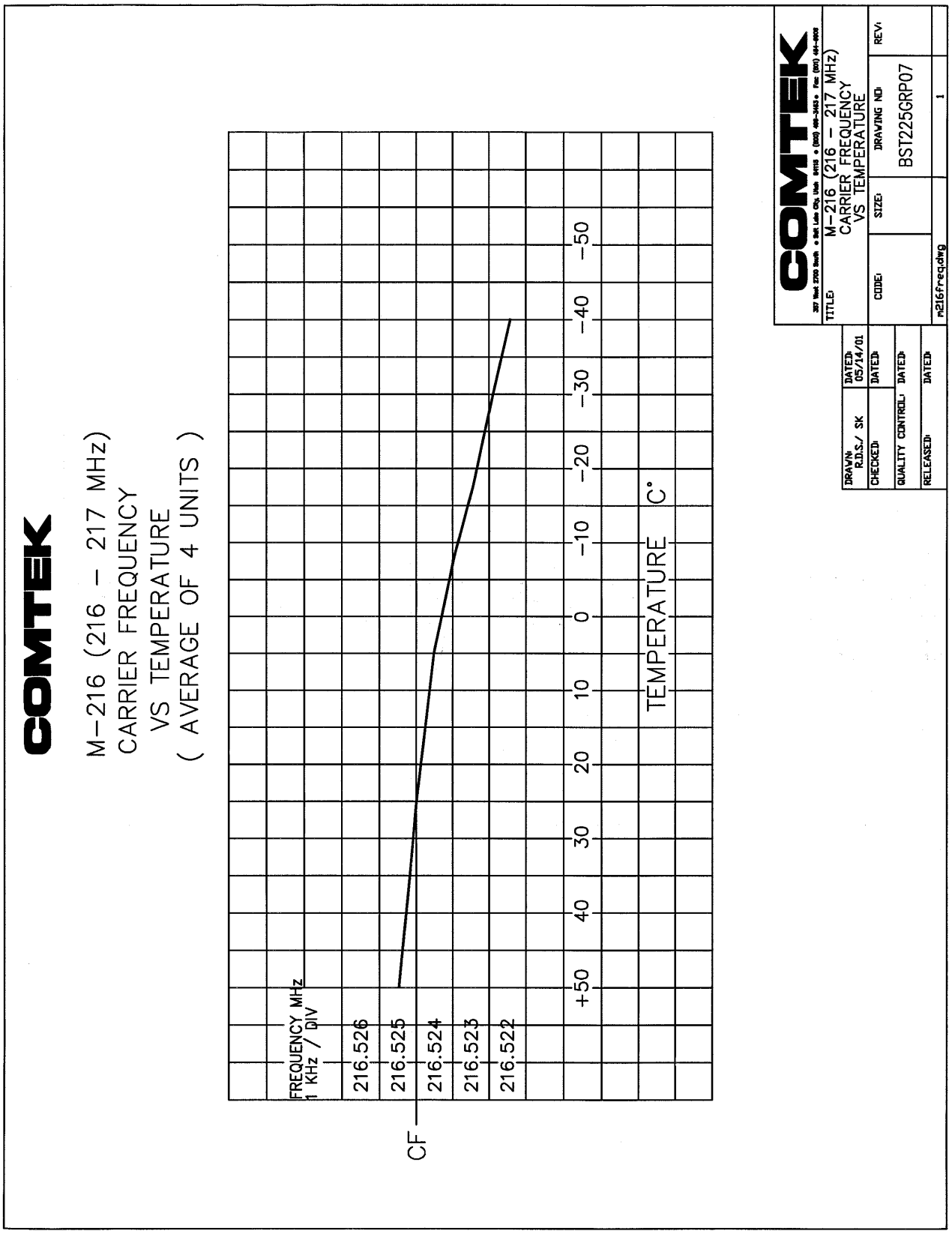
Span 50 KHz
Res BW 1 KHz
Swp .5 sec/div



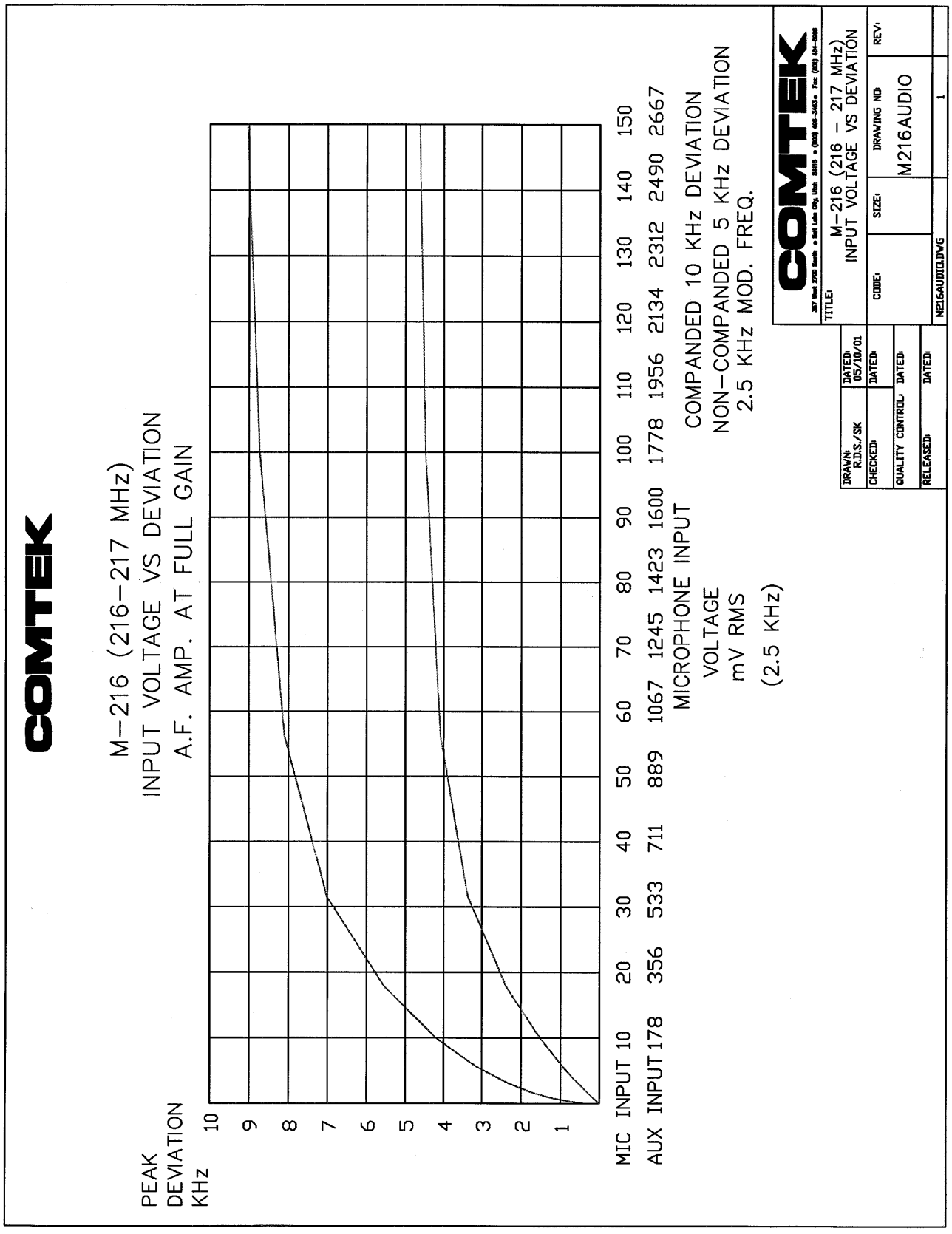
PAGE NO. 17 of 22.



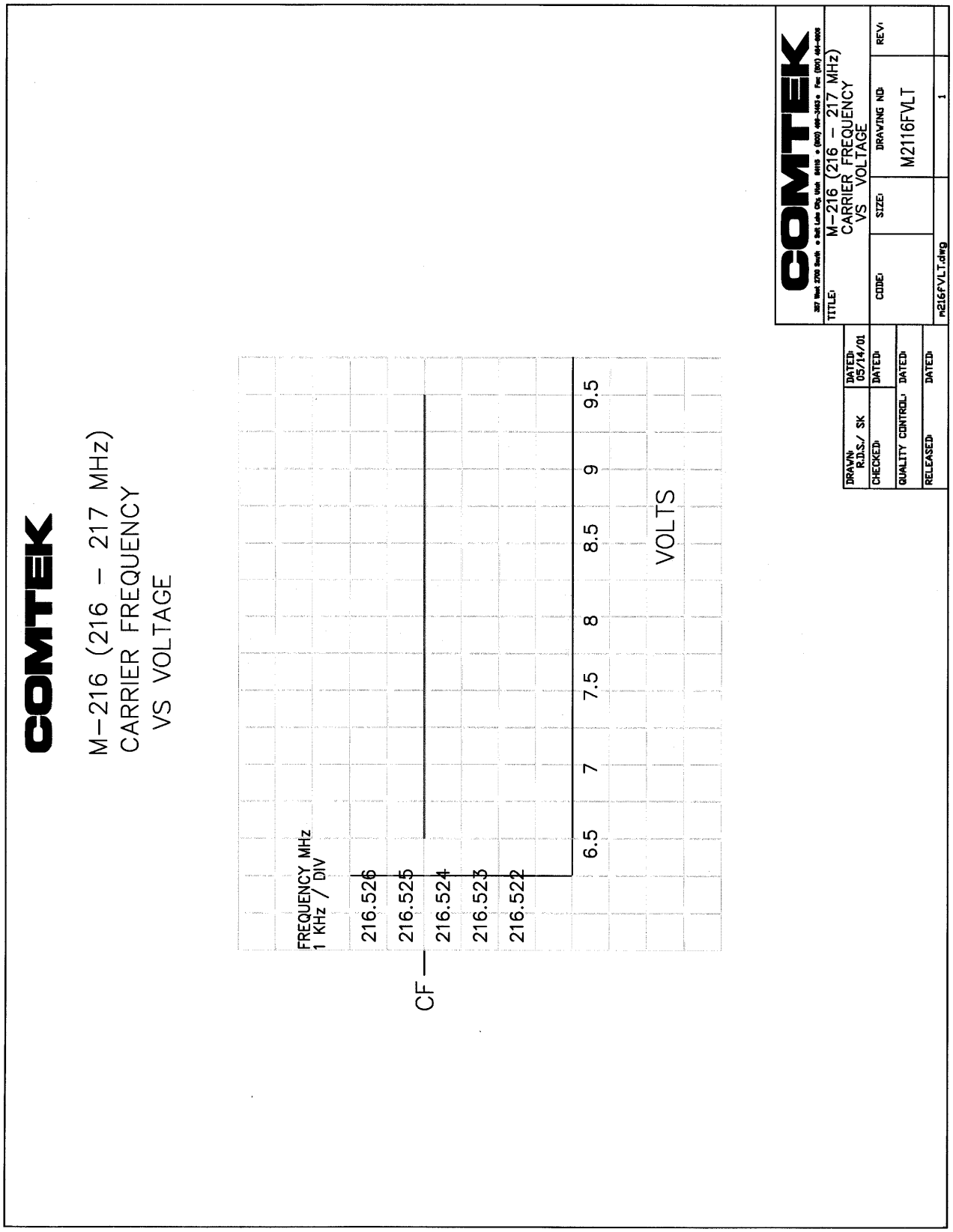
PAGE NO. 18 of 22.



PAGE NO. 19 of 22.



PAGE NO. 20 of 22.



PAGE NO. 21 of 22.

NAME OF TEST: Necessary Bandwidth and Emission Bandwidth

SPECIFICATION: 47 CFR 2.202(g)

MODULATION = 16K0F3E

NECESSARY BANDWIDTH CALCULATION:

MAXIMUM MODULATION (M), kHz	= 3
MAXIMUM DEVIATION (D), kHz	= 5
CONSTANT FACTOR (K)	= 1
NECESSARY BANDWIDTH (B_N), kHz	= (2xM)+(2xDxK)
	= 16.0

MODULATION = 11K0F3E

NECESSARY BANDWIDTH CALCULATION:

MAXIMUM MODULATION (M), kHz	= 3
MAXIMUM DEVIATION (D), kHz	= 2.5
CONSTANT FACTOR (K)	= 1
NECESSARY BANDWIDTH (B_N), kHz	= (2xM)+(2xDxK)
	= 11.0

SUPERVISED BY: Morton Flom, P. Eng.

PAGE NO. 22 of 22.

NAME OF TEST: Summary of Applicant Supplied Attestations

SPECIFICATION: 47 CFR 95

GUIDE: ANSI/TIA/EIA-603-1992,

95.647

Antenna has no gain (as compared to a half-wave dipole) and is vertically polarized.

95.649

There are no provisions for increasing transmitter power.

95.653

Users manual includes instructions and warnings.

TESTIMONIAL AND STATEMENT OF CERTIFICATION

THIS IS TO CERTIFY THAT:

1. THAT the application was prepared either by, or under the direct supervision of, the undersigned.

2. THAT the technical data supplied with the application was taken under my direction and supervision.

3. THAT the data was obtained on representative units, randomly selected.

4. THAT, to the best of my knowledge and belief, the facts set forth in the application and accompanying technical data are true and correct.

CERTIFYING ENGINEER: Morton Flom, P. Eng.