

TEST EQUIPMENT: Radio & Tv Engineering Co.

<u>No.</u>	<u>Item</u>	<u>s/n</u>	<u>Date Acquired</u>	<u>Cal. Date</u>	<u>Cal. No.</u>
------------	-------------	------------	--------------------------	----------------------	---------------------

Equipment Used for WINROLL800 Measurements:

1.0 SPECTRUM ANALYZERS

1.1	TEK 7L14	B010104	5/81	2/99	970203
1.2	TEK 7L18	B020725	9/84	2/99	
1.3	TEK 7L5 Opt. 25	B071298	5/84	2/99	

2.0 OSCILLOSCOPES/VECTOR VOLT METERS

2.1	TEK 7704	B204833	2/87	6/99	970612NJP
2.2	TEK 7B70	B237675	8/77	2/99	970612NJP
2.3	TEK 7A16A	B061728	8/77	2/99	970612NJP

3.0 RF TRACKING GENERATORS

3.1	TEK TR502	B020368	7/81	2/99	
3.2	TEK 7L50PT25	B071298	5/84	2/99	

4.0 SIGNAL GENERATORS AUDIO

4.5	RACAL-DANA 9083	2154	2/86	2/99	
-----	-----------------	------	------	------	--

5.0 SIGNAL GENERATORS R.F. & VIDEO

5.4	HP8640B OPT.001 (1X10 <sup>-10</sup> ) 970601WWVB	1416A01904	3/87	2/99	
5.11	HP-8656A OPT 001	2035A00479	5/81	6/99	
5.13	HP 11721A Freq. Dubler	0395	2/81	2/99	

5.14 Std. Spectracom  
8131 ( $1 \times 10^{-10}$ )

6.0 AC GENERATORS 110v AC

7.0 FIELD INTENSITY METERS/R.F. RADIATION METERS

7.1	Stoddart NM30A	186-25	10/77	4/99
7.2	Stoddart NM50A	143-21	5/77	4/99

8.0 TEST CHAMBERS

9.0 MULTI-METERS/TEMP./HUMIDITY/VELOCITY

9.1	TEK DM502	B032117	9/78	2/99
9.2	TEK DM501A	B024746	6/81	2/99
9.7	Beckman AC-30	70903252	2/89	6/99

Page 2

10.0 FREQUENCY COUNTERS

10.1	TEK DC508	B010242	7/78	2/99	970201
10.2	GR 1192B	00433		3/87	6/99
10.3	DIGITEC 8540A	518	7/84	2/99	
10.5	HP8640B Opt.001 ( $1 \times 10^{-10}$ )	1416A01904	4/81	6/99	

970601WWVB

11.0 DIRECTIONAL COUPLERS

11.2	BIRD 4275-020		3/79	4/99
11.2	BIRD 4274-025		3/79	4/99

12.0 R. F. LOADS

13.0 R. F. ATTENUATORS

13.5	WEINSHEL 10-4	50779	2/87	4/99
13.6	WEINSHEL 10-6	40791	2/87	4/99
13.7	WEINSHEL 10-20	16950	2/87	4/99
13.11	NARDA 768-10	7512	3/81	2/99

13.12	NARDA 766-20		3/81	2/99	
13.16	NARDA 766-3	94101		5/81	4/99
13.17	HP8498A DC-18				
	gHz (30 dB)	00742		4/82	2/99
13.18	HP8494B DC-18				
	gHz (1/11 dB)	117161		4/82	2/99
13.19	HP8495B DC-18				
	gHz (10/70 dB)	11716		4/82	2/99
13.22	HP (Set) 8491A				
	019806, 34273, 31245 20323			9/81	2/99
13.25	WEINSCHEL 3300 7724-			2/87	4/99
	(Set) .1-20 dB	E6671		10/87	
	10/99				
13.27	WEINSCHEL 48-30-43				
	30 dB DC-18 gHz AN7909		6/87	2/99	

#### 14.0 POWER SUPPLIES

14.1	LAMDA 200-03AM			3/79	4/99
14.11	TEK TM503	B119131	5/84	2/99	
14.15	HP 6269B 3-ea.			8/99	

#### 15.0 CAMERAS

15.1	TEK C5A	B020822		6/99	
15.3	TEK C5C	B017008		6/99	

#### 16.0 R. F. AMPLIFIERS & PRE-AMPLIFIERS

#### 17.0 AUDIO POWER METERS

#### 18.0 R. F. WATT METERS

18.1	HP 434A	345-02890	10/72	2/99	
18.2	HP 435B	7679	7/87	2/99	

Page 3

18.3	HP SENSOR 8481A				
	(.01-18 gHz)	0699	7/87	2/99	

18.7	BIRD 4381	0255	2/86	5/99
18.10	HP Sensor 8484A (.01-18 GHz)	6537	3/92	2/99

19.0 AUDIO DISTORTION METERS

20.0 CHART RECORDERS

21.0 ANTENNAS CALIBRATED

21.1	AILTECH HORN 001-0112 94627-1 (26.5-40 GHz)	4/84	4/99
21.2	AILTECH HORN 002-0112 94626-1 (18-26.5 GHz)	4/84	4/99
21.5	AH SYSTEMS (Roberts)128,130, Tunable Dipoles 131,134 TDS-200/535 30 mHz-1 GHz	6/86	4/92
21.6	STODDART (Tunable 90789-1 Dipoles) 218-91143	2/77	4/99
21.8	DISCONE STODDARD AT522 (.3-3.0 GHz)	2/77	4/99
21.9	DISCONE STODDARD AT570 (1.0-10.0 GHz)	2/77	4/99
21.10	DIPOLE STODDARD AT—255 (.370-1.0 GHz) 620	7/77	4/99
21.15	EM3109 BICONICAL 1 kW (20-300 mHz)		
21.16	AILTECH 93490-1 Log Spiral (.2-1 GHz)		
21.17	LOG SPIRAL		

22.0 R. F. MIXERS, HIGH PERFORMANCE, FOR TEK7L18 S/A

23.0 R. F. BRIDGES

24.0 DEVIATION METER & CALIBRATORS

24.1	RACAL-DANA 8008	2154	2/86	2/99
24.3	DEV. CALIBRATOR 400	464	3/79	4/99

## 25.0 NOISE FIGURE METER & NOISE SOURCE

## 26.0 RECEIVERS

26.4	WWV Freq. Cal. RX			
	Specific Products	304	7/77	2/99
26.5	WWVB Spectracom			
	8163	0799	2/94	2/99
26.6	GPS/RX/SONY IPS-760			
26.7	DENON TU680-NAB	985	1/96	1/99

Page 4

## 27.0 FILTERS

27.3	GR Reject Filer			
	874-FR-1	298	7/77	4/99
27.7	GR874(F100, F4000, F500, F5000)		1/96	1/99

## 28.0 FUNCTION GENERATOR/PULSE

## 29.0 PROBES

29.1	TEK P6201 10-900 mHz	B020639	6/80	4/99
29.2	TEK P6420		6/80	4/99
29.3	TEK P6058	488	7/77	4/99
29.4	TEK P6108	301	7/80	4/99
29.6	TEK P6149	395	7/80	4/99
29.11	HP E2302A (Temp)		3/92	4/99
29.12	HP E2302A (Temp)		3/92	4/99

## 30.0 PHOTO METER & PROBES

## 31.0 OSCILLOSCOPE & SPECTRUM ANALYZER CALIBRATION SYSTEM

31.1	TEK PG506 Cal.Gen.	B058239	2/94	2/99
31.2	TEK TG502 Time			
	Mark Gen.	B031640	2/94	2/99
31.3	TEK SG503 Level			
	Sine Wave Gen.	B091258	2/94	2/99
31.4	TEK Main Frame	TM503	2/94	1/99

## 32.0 MISCELLANEOUS

32.3	AC VARIAC GR116U			
	115-/0-135 VAC			
	1 KVA + 3 KVA		3/87	4/99
32.13	GPS RECEIVER SONY IPS-760		5/94	5/99
32.14	Z BRIDGE GR1656 2665		2/95	2/99
32.17	LISN REC2 (3 phase			
	75 amp. 50 uhy_		10/97	10/99

NOMENCLATURE FOR TEST EQUIPMENT

REC	Radio & Tv Engineering Co.
TEK	Tektronics
TUK	Tucker Electronics
BIRD	Bird Electronics
HP	Hewlett Packard
EAT	Eaton Mfg. Co.
AIL	Ailtech
WBE	Wideband Engineering Co.
POT	Potomac
DEL	Delta
RAC	Racal Dana
VAFB	Vandenberg Airforce Base
WWV	WWV National Bureau of Standards
DIG	Digitek
NYNS	New York Naval Station
WEN	Weinshel
IFI	Instruments for Industry, Inc.
ENI	Electronic Navigation Industries, Inc.

NOTE:

Calibration is maintained on all equipment semi-annually, or more often as needed. The calibration is traceable to the National Bureau of Standards as appropriate, and verified in house prior to each measurement session

Updated 11/1/99