



ASRC Communications



ASRC FTM Commo

Field Communications

a. Describe the use and dangers of these signaling devices:

- (1) Aerial flares;**
- (2) Smoke;**
- (3) Signal mirrors;**
- (4) Fires;**
- (5) Panels and paulins; and**
- (6) Hand and body signals.**

b. Define problems associated with the following aspects of field use of portable radios and possible solutions:

- (1) Batteries;**
- (2) Cold temperatures;**
- (3) Speakers/microphones**

c. Briefly describe basic radio procedures including courtesy, security, brevity and the use of the phonetic alphabet and 10 codes.



ASRC FTM Commo

d. Demonstrate use of all group-owned base and hand-held radios, to communicate effectively,

including:

- (1) Adjusting of channel, volume, squelch and PL (CTCSS) controls;**
- (2) Operating the radios in compliance with FCC regulations and the ASRC radio SOP;**
- (3) Identify indications of a low battery and demonstrate the technique for changing radio batteries; and**
- (4) Demonstrate two techniques for improving marginal communications encountered while using VHF-FM hand-held radios.**

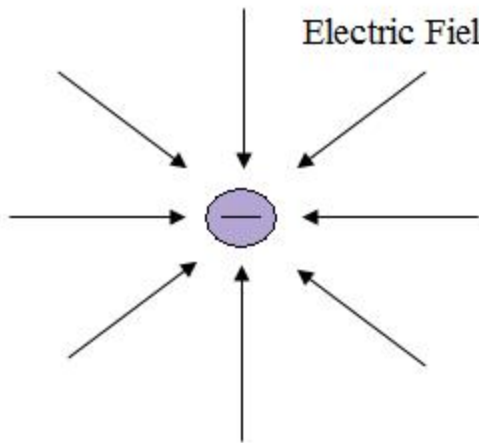
e. Define the ASRC status codes.

f. Demonstrate effective ways of using non-radio communications with audible and visual signals such as: whistle or loud noise maker; signal mirror, fire & smoke and lights.

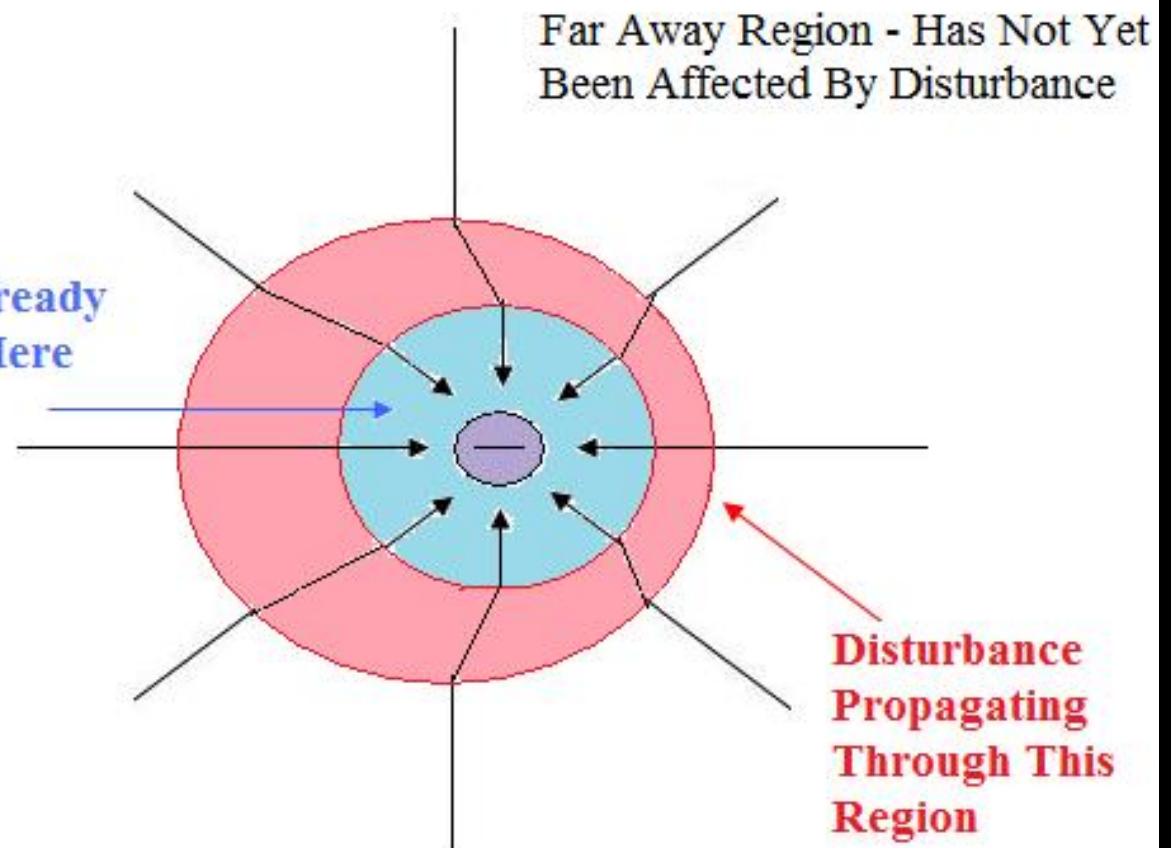
Radio Basics



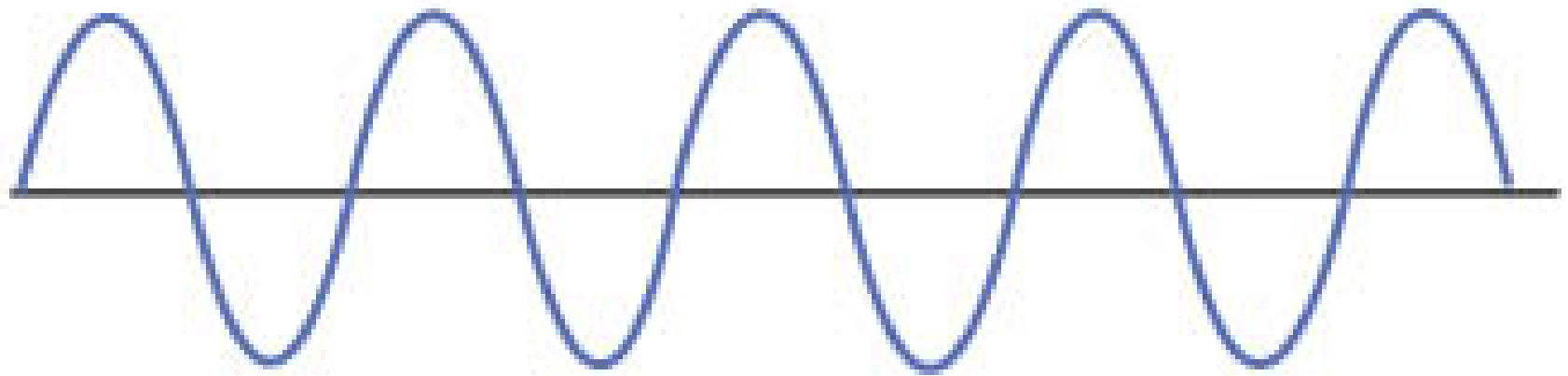
Electric Field Lines



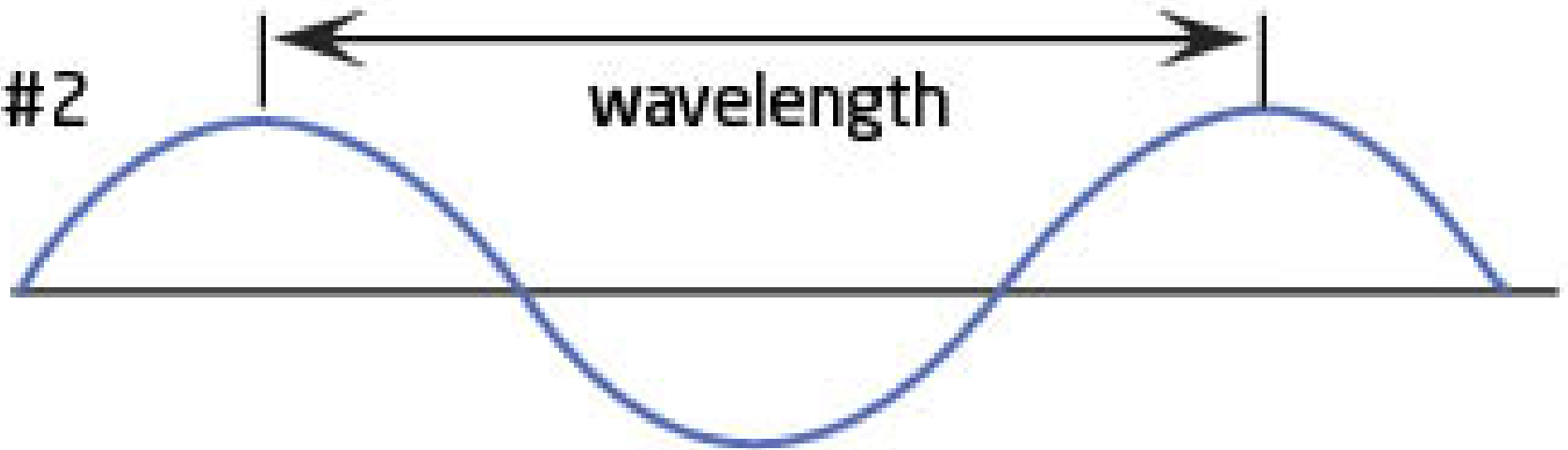
**Inner Region -
Disturbance Has already
Altered the Fields Here**



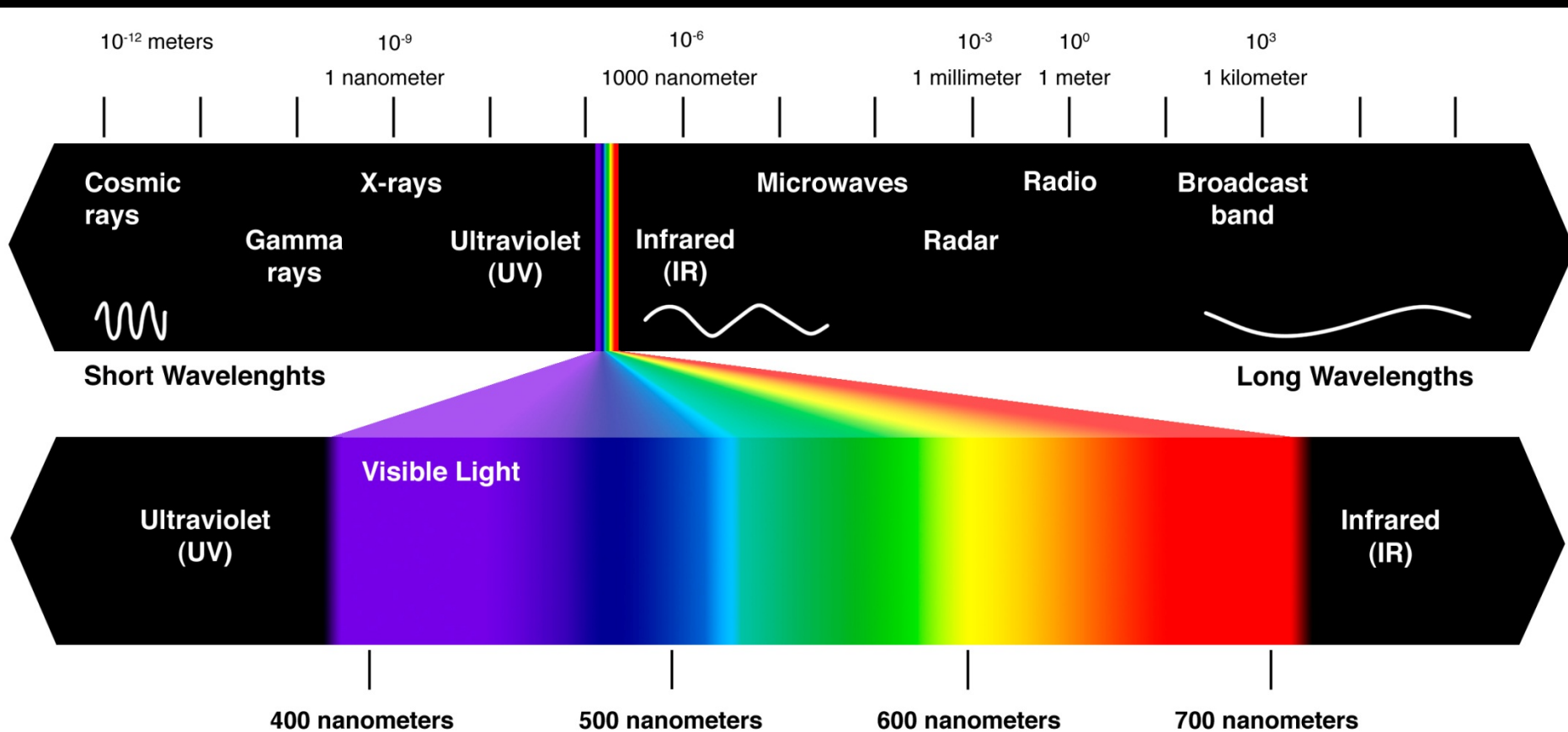
#1



#2

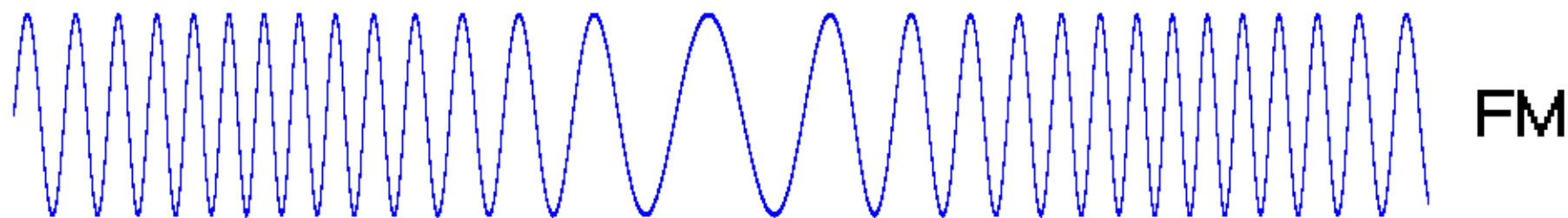
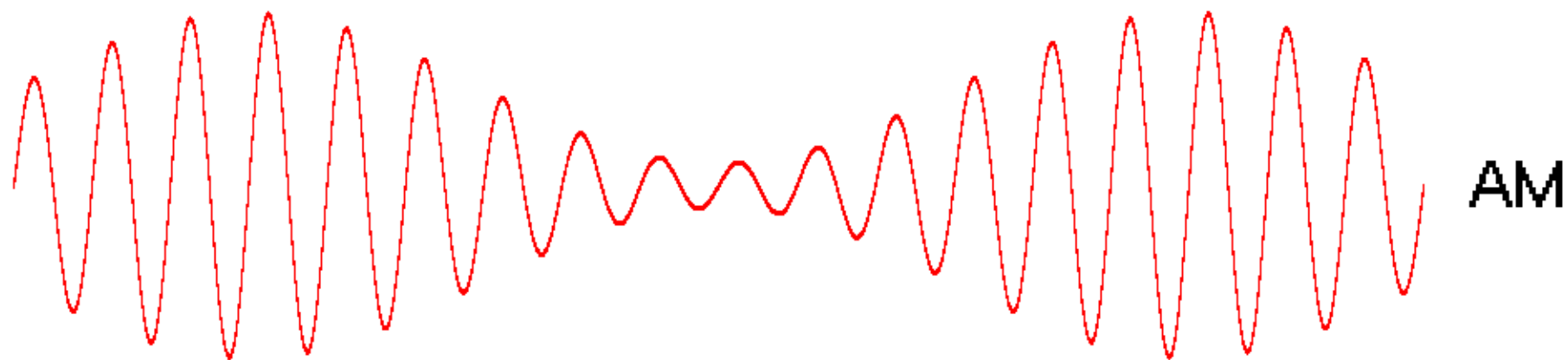


because the wavelength of wave #2 is longer than that of wave #1, wave #2's frequency is lower



Band name	Abbr	ITU band	Frequency and wavelength in air	Example uses
subHertz	subHz	0	< 3 Hz > 100,000 km	Natural and man-made electromagnetic waves (millihertz , microhertz , nanohertz) from earth, ionosphere, sun, planets, etc ^{[citation needed]}
Extremely low frequency	ELF	1	3–30 Hz 100,000 km – 10,000 km	Communication with submarines
Super low frequency	SLF	2	30–300 Hz 10,000 km – 1000 km	Communication with submarines
Ultra low frequency	ULF	3	300–3000 Hz 1000 km – 100 km	Communication within mines
Very low frequency	VLF	4	3–30 kHz 100 km – 10 km	Submarine communication , avalanche beacons , wireless heart rate monitors , geophysics
Low frequency	LF	5	30–300 kHz 10 km – 1 km	Navigation , time signals , AM longwave broadcasting, RFID
Medium frequency	MF	6	300–3000 kHz 1 km – 100 m	AM (medium-wave) broadcasts
High frequency	HF	7	3–30 MHz 100 m – 10 m	Shortwave broadcasts, amateur radio and over-the-horizon aviation communications, RFID
Very high frequency	VHF	8	30–300 MHz 10 m – 1 m	FM , television broadcasts and line-of-sight ground-to-aircraft and aircraft-to-aircraft communications. Land Mobile and Maritime Mobile communications
Ultra high frequency	UHF	9	300–3000 MHz 1 m – 100 mm	Television broadcasts, microwave ovens, mobile phones , wireless LAN , Bluetooth , GPS and two-way radios such as Land Mobile, FRS and GMRS radios
Super high frequency	SHF	10	3–30 GHz 100 mm – 10 mm	Microwave devices, wireless LAN , most modern radars
Extremely high frequency	EHF	11	30–300 GHz 10 mm – 1 mm	Radio astronomy , high-frequency microwave radio relay
Terahertz	THz	12	300–3,000 GHz 1 mm – 100 μm	Terahertz imaging – a potential replacement for X-rays in some medical applications, ultrafast molecular dynamics, condensed-matter physics , terahertz time-domain spectroscopy , terahertz computing/communications

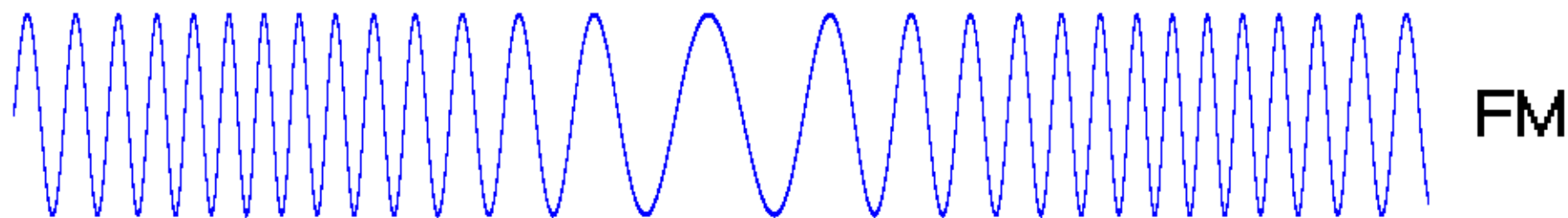
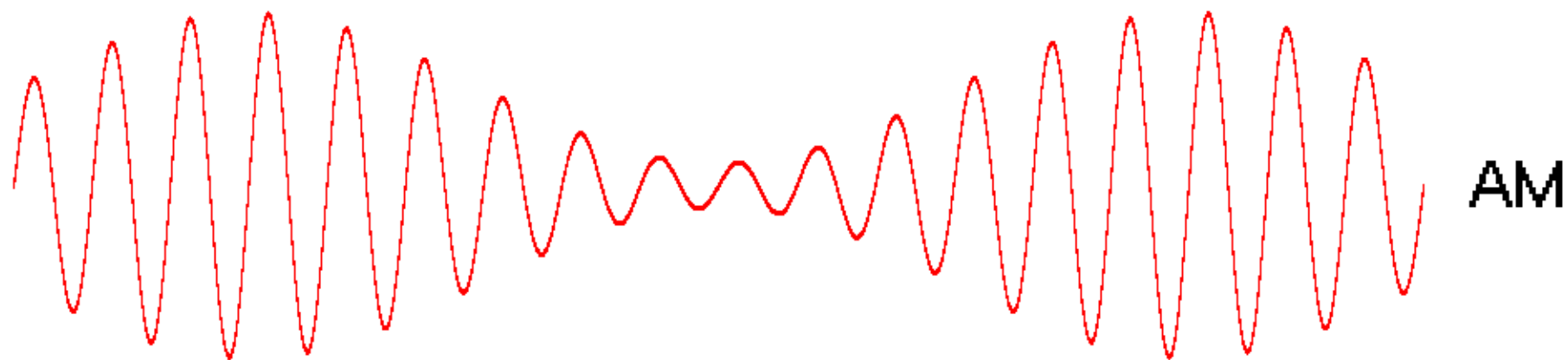
<u>NAME</u>	<u>FREQUENCY</u>	<u>MODES</u>	<u>NOTES</u> - useful distances
Amateur 80-meter band	1.5 - 1.8 MHz	CW & SSB	several hundred miles
Amateur 40-meter band	3.0 - 3.5 MHz	CW & SSB	" & longer (3000 mi)
Civil Air Patrol HF "4585 & 4582" etc.	approx. 4.585 MHz	SSB	" & longer (1000 mi)
Amateur 20-meter band	7.0 - 7.15 MHz	CW & SSB	long distance
Amateur 15-meter band	approx. 14 MHz	CW & SSB	long distance
CB "11-meter" band	approx. 27 MHz	AM & SSB	local, some "skip"
Amateur 10-meter band	approx. 28 MHz	CW, SSB, FM	local, some "skip"
Sheriff "Lo Band" "39-5"	approx. 39.5 MHz	FM	local
Fire Service "Lo Band"	approx. 44 MHz	FM	local
Amateur 6-meter band	approx. 50 MHz	SSB, FM	local
Aircraft VHF	100 - 130 MHz	AM	line-of-sight
Amateur 2-meter band	144 - 148 MHz	FM	line-of-sight
CAP VHF	approx. 148 MHz	FM	line-of-sight
Hi-Band VHF Public Service	150 - 170 MHz	FM	line-of-sight
ASRC/MRA	155.160 MHz	FM	line-of-sight
Amateur 70cm "220" band	220 MHz	FM	line-of-sight
"Med 1-8" UHF medical telemetry		FM	line-of-sight
Amateur UHF "450"	approx. 450 MHz	FM	line-of-sight





**FM Paradox: “speak softly
and carry a big antenna”**

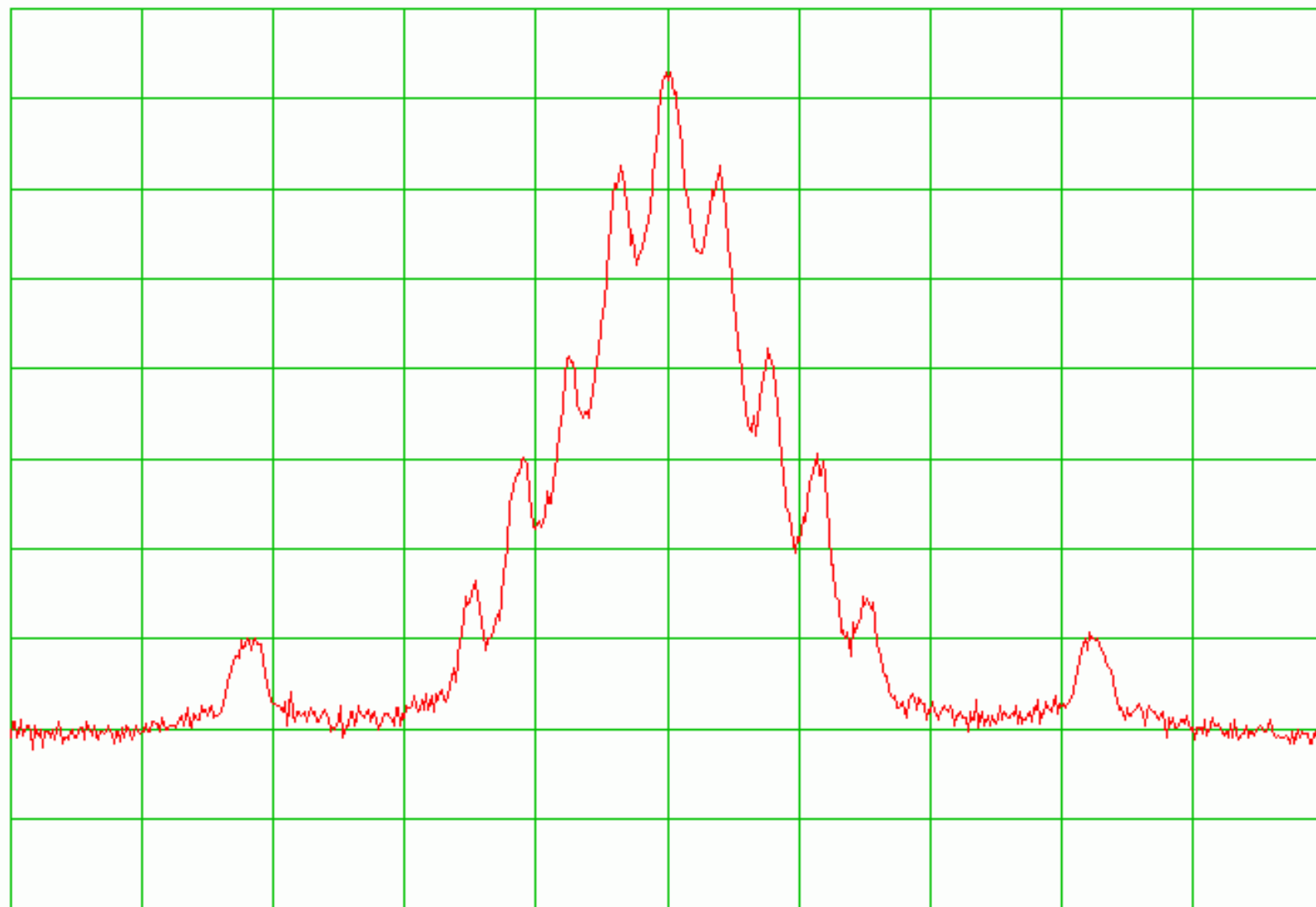
**Talking more loudly
decreases FM signal
strength.**



ATTEN 10dB VAUG 296

RL -25.0dBm 10dB/

D



CENTER 105.0958MHz

SPAN 500.0kHz

*RBW 3.0kHz

VBW 3.0kHz

SWP 200ms



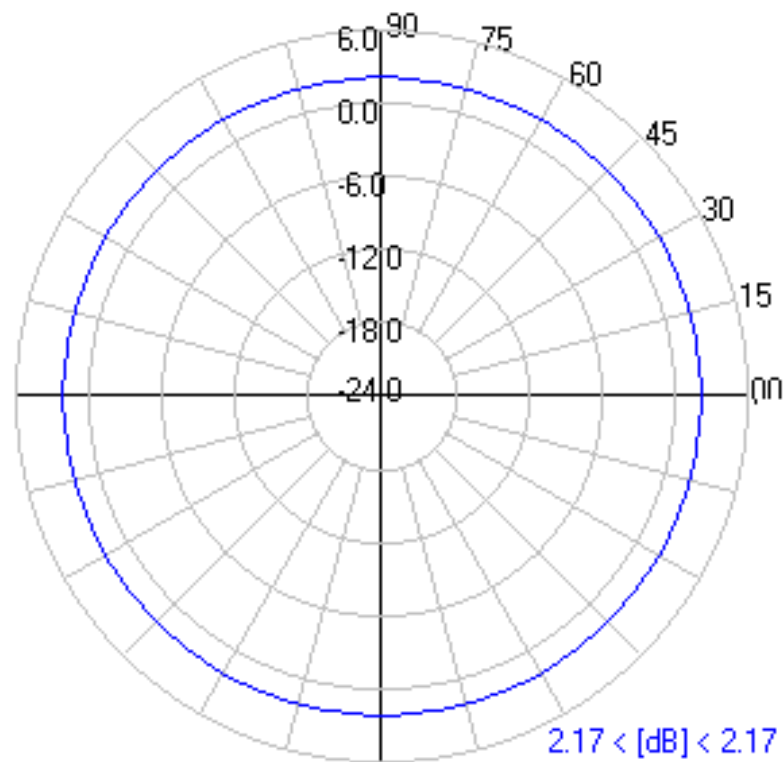
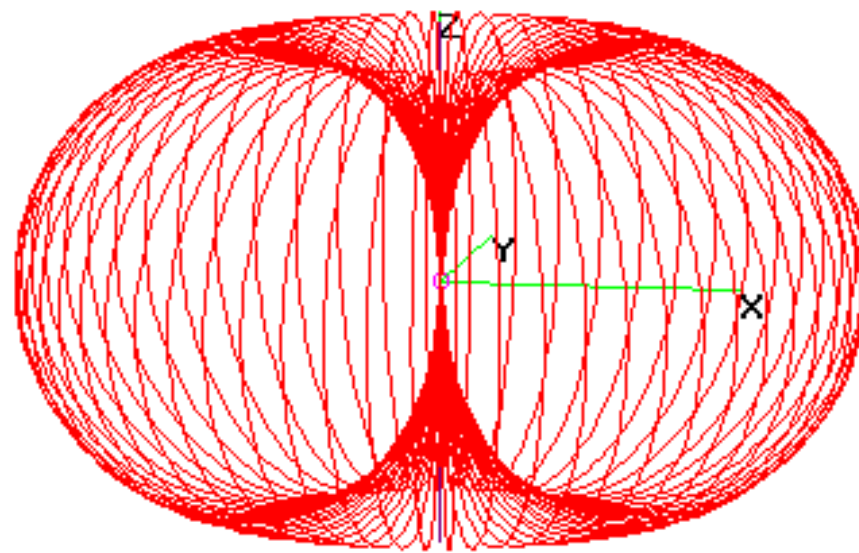
Simplex

Phones are duplex

Radios are simplex

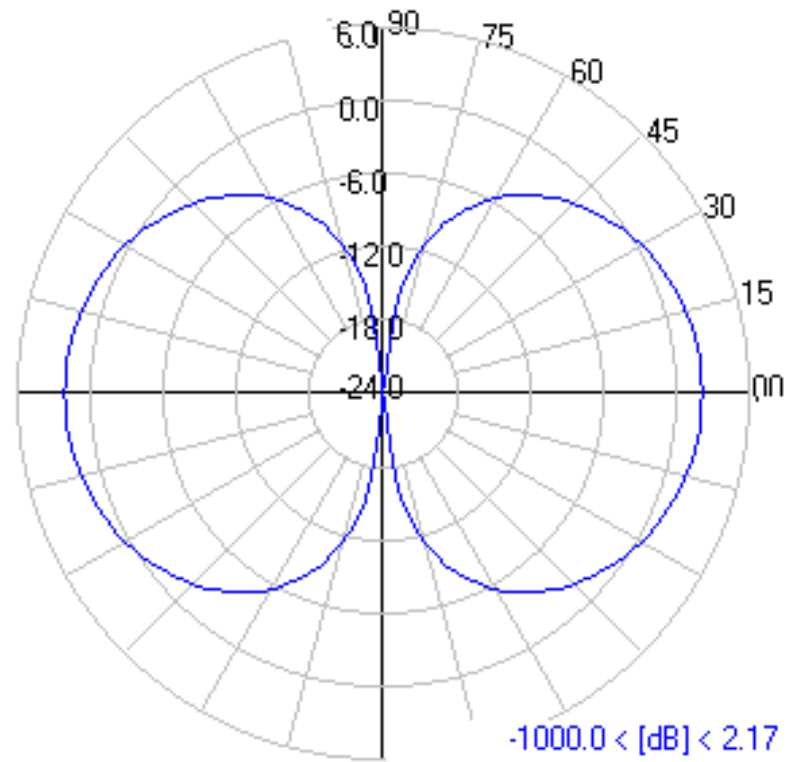
Antennas





AZIMUTH

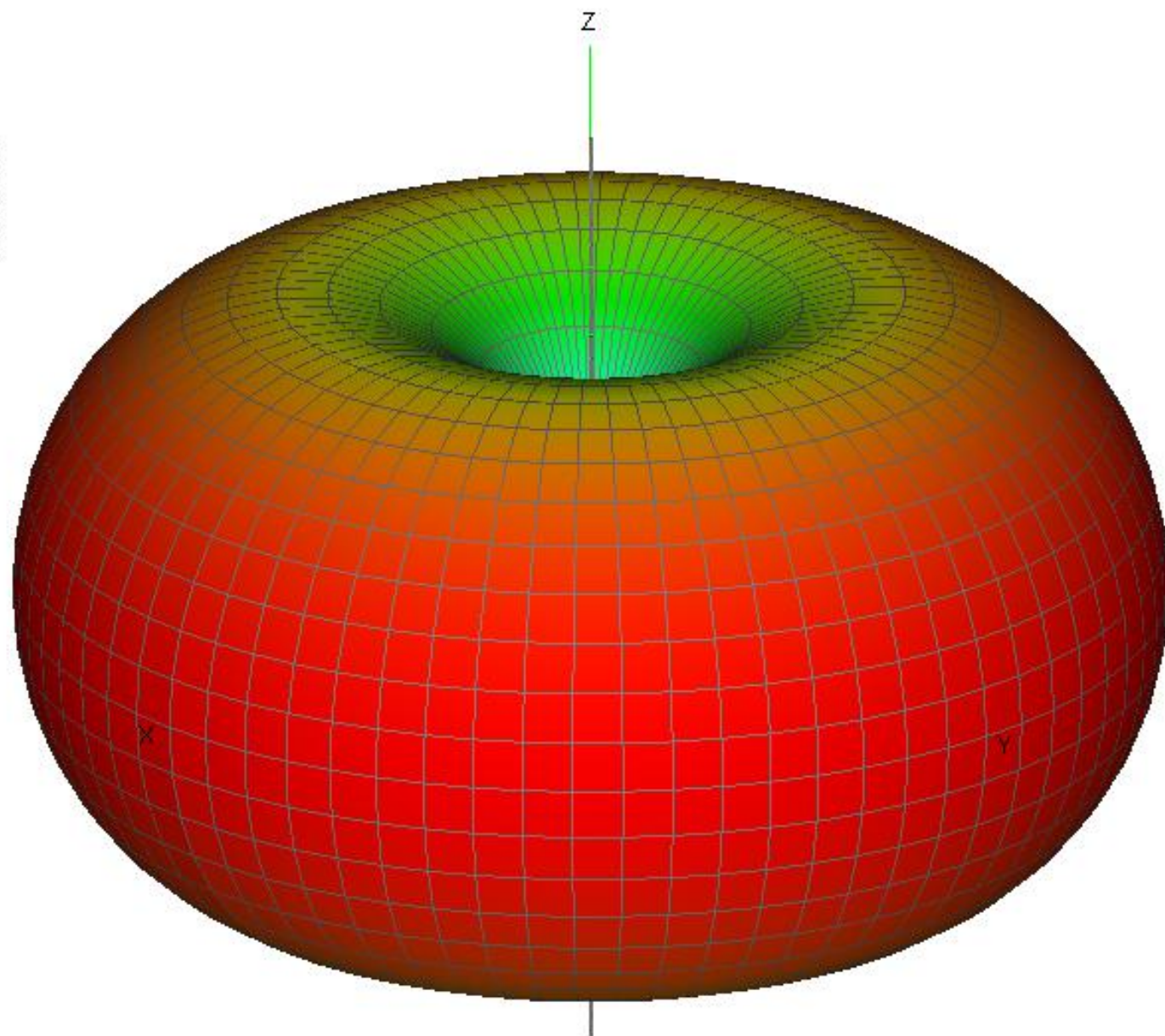
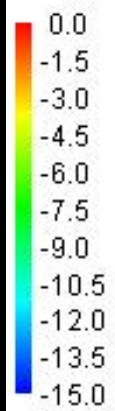
$2.17 < [\text{dB}] < 2.17$

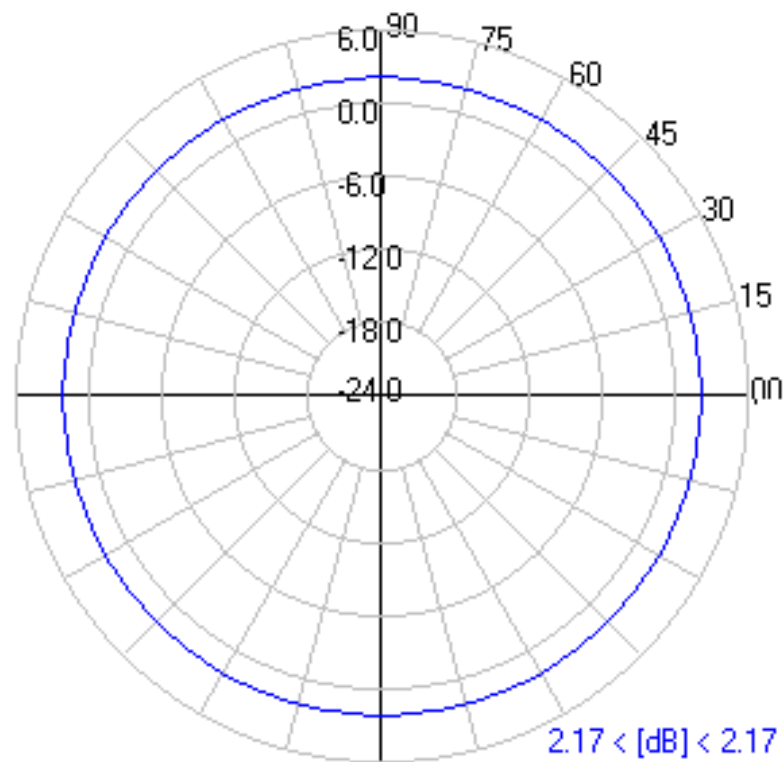
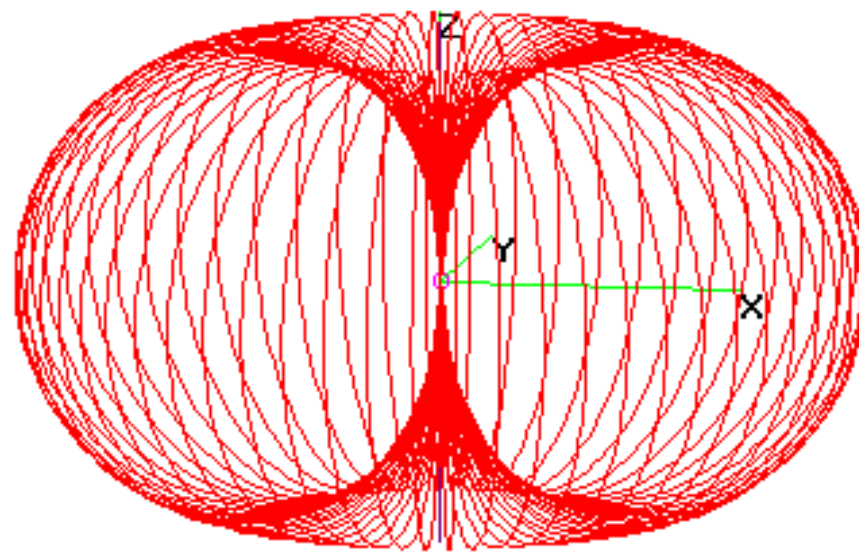


ELEVATION

$-1000.0 < [\text{dB}] < 2.17$

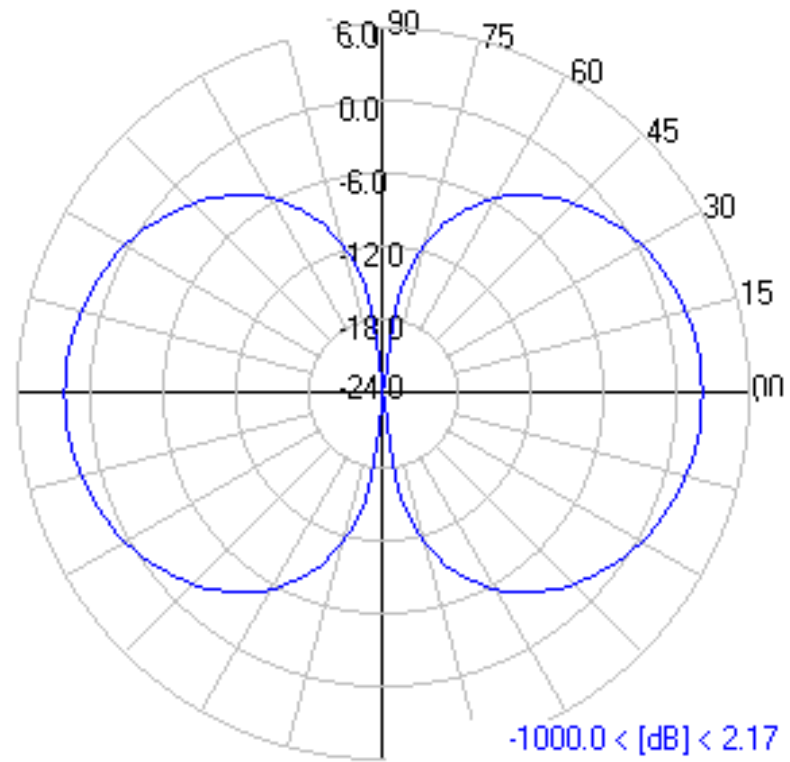
Gain_Tot[dB]





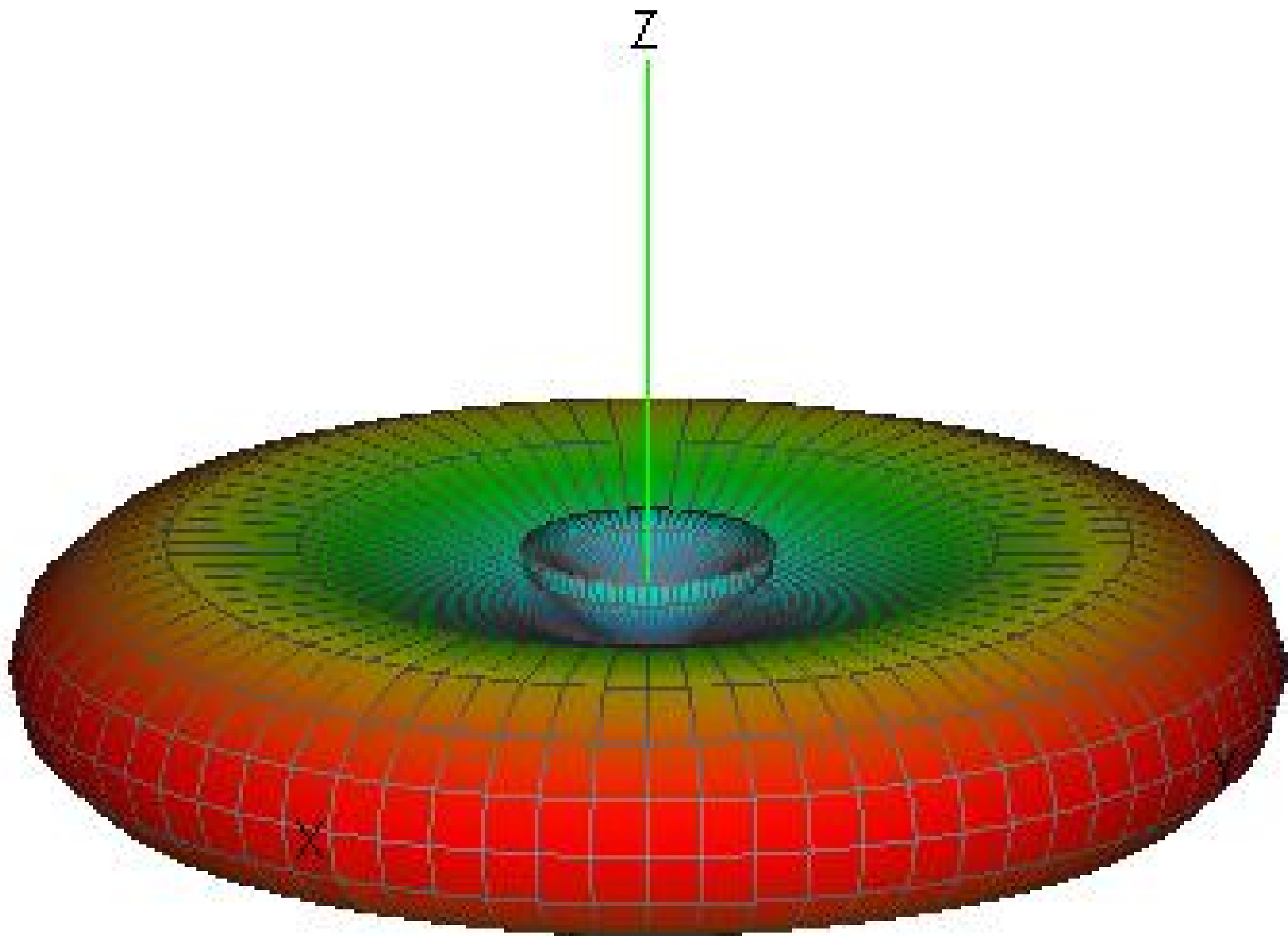
AZIMUTH

$2.17 < [\text{dB}] < 2.17$



ELEVATION

$-1000.0 < [\text{dB}] < 2.17$





\$18.00

ANTENNA IMPEDANCE MATCHING



FIGURE 1



FIGURE 2



FIGURE 3

By
Wilfred N. Carson

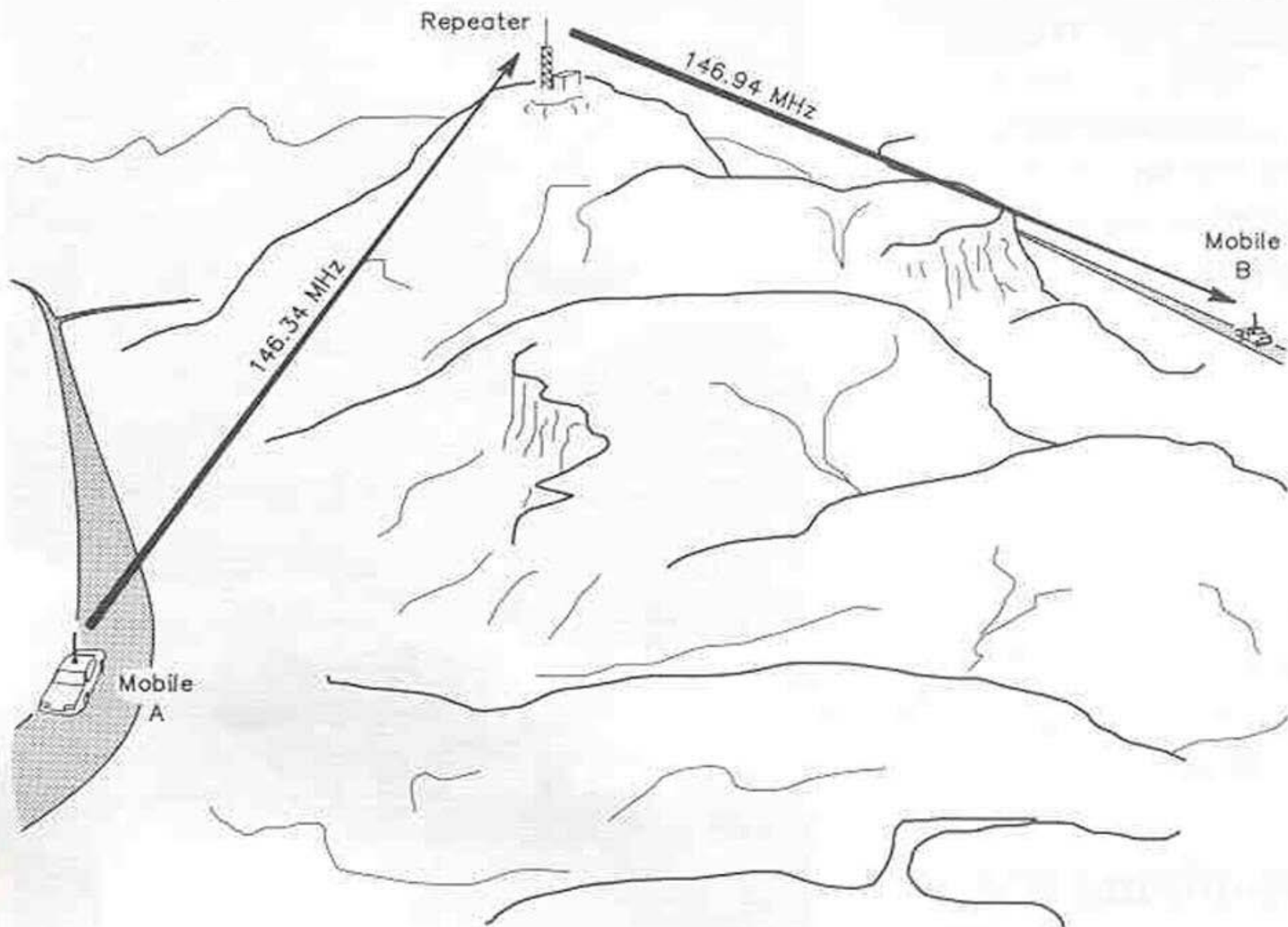


Antenna Tricks?

Two antennas met on a roof, fell in love and got married. The wedding wasn't great but the reception was excellent.

Repeaters vs. Retransmitters





Practical Stuff





ICS Communications

- Plain English
- No 10-codes or similar
- Use functional titles (“Ops” “Plans” “Team Bravo”) or last names



Status Codes

- **Status One: alive and well**
- **Status Two: needs evac
and/or medical care**
- **Status Three: dead**



Prowords

**Roger Wilco
Over and Out**

Commonly Used Prowords and Standard Phrases

THIS IS	Precedes identification.	PREPARE TO COPY	Write this down. (Wait for GO AHEAD before sending message.)
OVER	It is your turn to transmit, I am listening.	READ BACK	For verification, read the message I just sent you.
GO AHEAD	I am ready to receive your message.	I READ BACK	I am reading back your message for verification.
ROGER	I have satisfactorily received your message. DOES NOT mean <u>yes</u> .	THAT IS CORRECT	I verify that you have received or relayed my message correctly.
AFFIRMATIVE	Yes.	SPELL	Spell out your message with phonetics.
NEGATIVE	No.	SPELL ____	Spell phonetically the indicated specific information.
STAND BY	Wait a moment (other stations keep out).	I SPELL	A phonetic spelling follows.
CLEAR*	I have no more traffic, but I will be listening.	FIGURE(S)	Numerals and letters follow which do not spell words.
OUT*	I am turning off my radio.	SECURE THE NET	Protect following radio traffic. Sensitive information to follow.
SAY AGAIN	Repeat your last transmission. DO NOT say <u>repeat</u> .	CLEAR THE NET	All stations cease transmission. Priority traffic to follow.
I SAY AGAIN	I will repeat what I have just said (or last transmission).	STATUS ONE	Subject found; alive and well.
SAY AGAIN ____	Asking last station to repeat the indicated specific information.	STATUS TWO	Subject found; alive, needs evacuation.
CORRECTION	I have made an error; what follows is correct.	STATUS THREE	Subject found; dead.

* NATO/Military and many dispatchers use OUT for same function as CLEAR is used in the ASRC.



You and Me

**Which is better:
“Me to You” or
“You, this is Me”?**

A	ALPHA	<u>AL</u> -FAH		N	NOVEMBER	NO- <u>VEM</u> -BER
B	BRAVO	<u>BRAH</u> -VOH		O	OSCAR	<u>OSS</u> -CAH
C	CHARLIE	<u>CHAR</u> -LEE		P	PAPA	<u>PAH</u> -PAH
D	DELTA	<u>DELL</u> -TAH		Q	QUEBEC	<u>KEH</u> -BECK
E	ECHO	<u>ECK</u> -OH		R	ROMEO	<u>ROW</u> -ME-OH
F	FOXTROT	<u>FOX</u> -TROT		S	SIERRA	<u>SEE</u> - <u>AIR</u> -RAH
G	GOLF	GOLF		T	TANGO	<u>TANG</u> -GO
H	HOTEL	<u>HOH</u> -TELL		U	UNIFORM	<u>YOU</u> -NEE-FORM
I	INDIA	<u>IN</u> -DEE-AH		V	VICTOR	<u>VIK</u> -TAH
J	JULIET	<u>JEW</u> -LEE-ETT		W	WHISKEY	<u>WISS</u> -KEY
K	KILO	<u>KEY</u> -LOH		X	XRAY	<u>ECKS</u> -RAY
L	LIMA	<u>LEE</u> -MAH		Y	YANKEE	<u>YANG</u> -KEY
M	MIKE	MIKE		Z	ZULU	<u>ZOO</u> -LOO

Numeral	Pronunciation		Numeral	Pronunciation
0	<u>ZE</u> -RO		5	<u>FIFE</u>
1	<u>WUN</u>		6	<u>SIX</u>
2	<u>TOO</u>		7	<u>SEV</u> -EN
3	<u>THU</u> -REE		8	<u>AIT</u>
4	<u>FOW</u> -ER		9	<u>NIN</u> -ER





CHAN	NAME	Rx Freq
1	ALFA	155.160
2	CHARLIE	155.280
3	ECHO	155.205
4	FOXTROT	155.220
5	GOLF	155.175
6	HOTEL	155.235
7	INDIA	155.265
8	JULIET	155.295
9	LIMA-1	151.625
10	ROMEO	150.775
11	SIERRA	150.790
12	SNP-1	166.900
13	SNP-2	166.900
14	CHARLIE /ROMEO	155.280





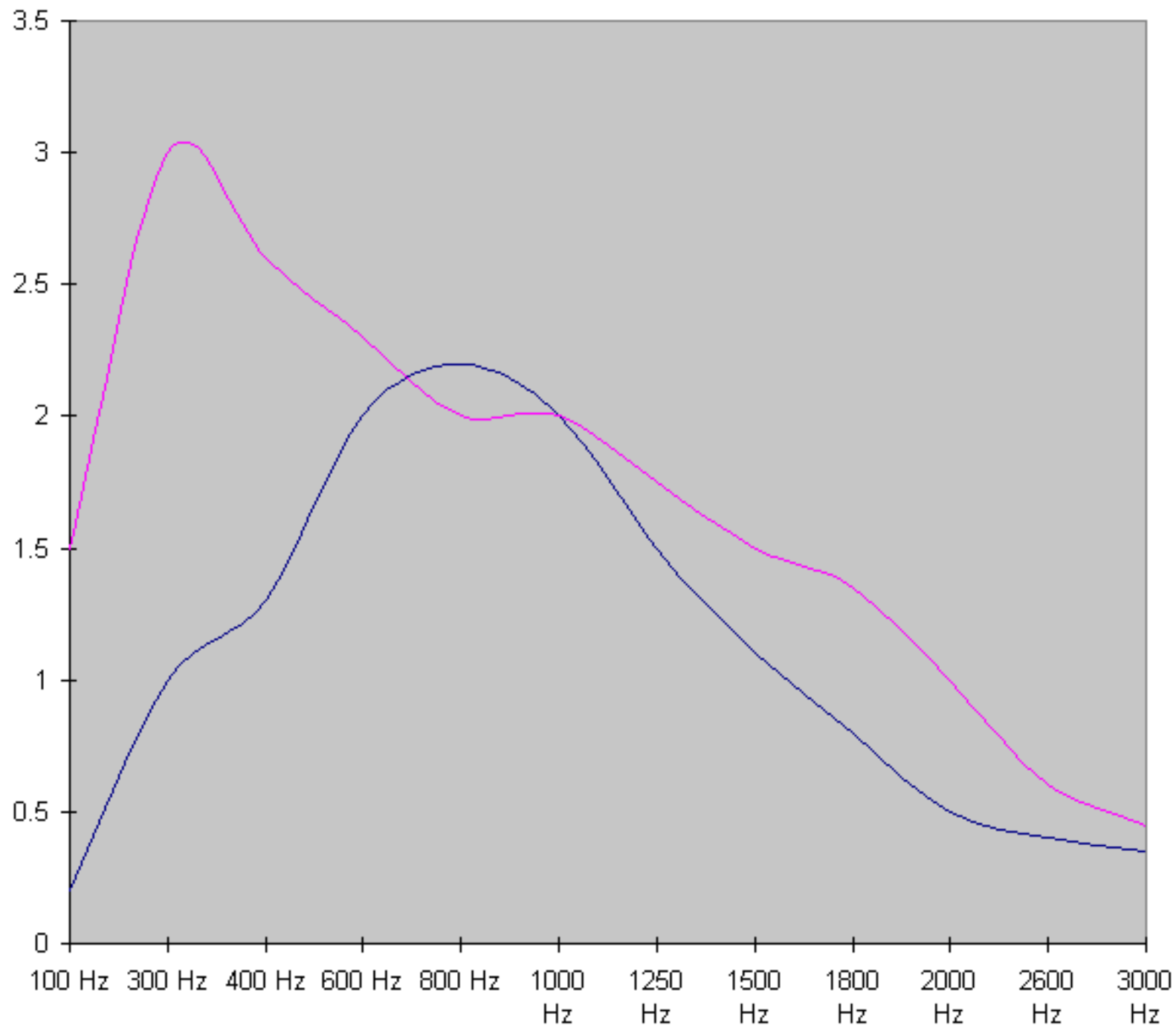
CTCSS

Continuous Tone-Coded Squelch System

- = "PL" (Private Line; Motorola trademark)
- = "CG" (Channel Guard; Bendix-King trademark)
- = "tone" "subudible tone" "PL tone" (hams, etc.)
- = FRS "subchannel"

DCS (digital) versions available, less-common

≠ encryption

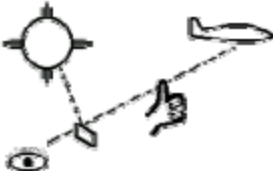


Code	Tone Freq.	Code	Tone Freq.	Code	Tone Freq.
XZ	67.0	1B	107.2	6A	173.8
WZ	69.3	2Z	110.9	6B	179.9
XA	71.9	2A	114.8	7Z	186.2
WA	74.4	2B	118.8	7A	192.8
XB	77.0	3Z	123.0	M1	203.5
WB	79.7	3A	127.3	8Z	206.5
YZ	82.5	3B	131.8	M2	210.7
YA	85.4	4Z	136.5	M3	218.1
YB	88.5	4A	141.3	M4	225.7
ZZ	91.5	4B	146.2	9Z	229.1
ZA	94.8	5Z	151.4	M5	233.6
ZB	97.4	5A	156.7	M6	241.8
1Z	100.0	5B	162.2	M7	250.3
1A	103.5	6Z	167.9	0Z	254.1

Other Ways to Communicate



Message	Whistle/Light/Voice	Hands/Flags/Lights	
TROUBLE HELP	— — — — HELP HELP HELP		(Obvious attention getter)
STATUS ONE (Subject found alive and well)	— — — HEEEY ONE		Don't Cross (Touchdown)
STATUS TWO (Subject found needs evac)	— — — HEEEY TWO TWO		(Similar to TROUBLE)
STATUS THREE (Subject found dead)	— — — HEEEY 3 3 3		Cross and Uncross (Dead ball)
COME TO ME (or Send a Rescue Team)	— — — COME HEEERE		(Roll)
DON'T COME TO ME (or Don't Send a Rescue Team)	— — — DON'T COME HEEERE		(Wave away)
AFFIRMATIVE	— — — ('C' in Morse Code)		(Nodding)
NEGATIVE	— — — ('N' in Morse Code)		(Shaking)

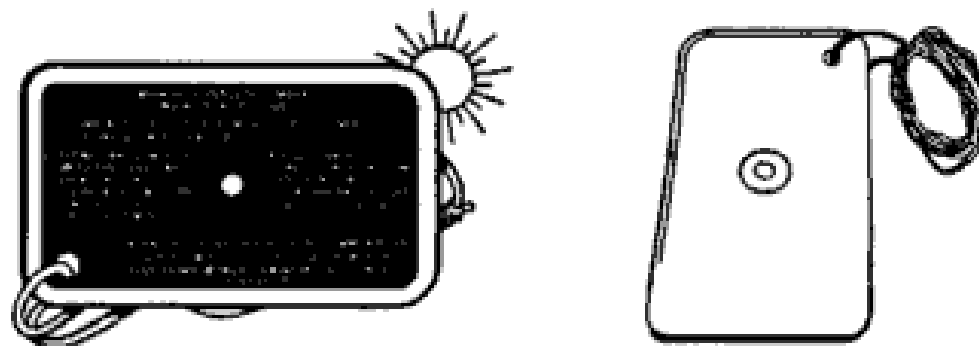
<u>Ground-to-Air Signals</u>		
I Serious Injury	II Require Medicine	X Unable to Proceed
F Require Food & Water	K Indicate Direction To Proceed	➔ Am Proceeding In this Direction
Δ Safe to Land Here	LL All is Well	N Negative
Y Affirmative	JL Not Understood	┐ Wind Direction
◼ Require Map and Compass	I Require Commo Equipment	 Affirmative
 Negative	 Understood	 Not Understood
<u>Signal Mirror Use</u>		
		Line up EYE, MIRROR, THUMB, and TARGET. Flash light from SUN & MIRROR on thumb to hit target

• —	ALFA	• — — — —	JULIETT	• • •	SIERRA	• — — — — —	1
— • • •	BRAVO	— — • — —	KILO	— — —	TANGO	• • — — — —	2
— • — • •	CHARLIE	• — — • •	LIMA	• • — —	UNIFORM	• • • — — —	3
— • •	DELTA	— — — —	MIKE	• • • — —	VICTOR	• • • • — —	4
• — —	ECHO	— — • — —	NOVEMBER	• — — — —	WHISKEY	• • • • •	5
• • • • •	FOXTROT	— — — — —	OSCAR	— — • • —	X-RAY	— — • • • •	6
— — — •	GOLF	• • — — •	PAPA	— — • — — —	YANKEE	— — — • • •	7
• • • •	HOTEL	— — — • —	QUEBEC	— — — • •	ZULU	— — — — • •	8
• • — —	INDIA	• • • • •	ROMEO	— — — — —	0	— — — — — •	9

Light Signals: Use a hand over the source as a shutter; short burst of light is a dot, long burst of light is a dash.

Wigwag (Flags): A flag to the **SENDER'S** right is a dot, to the left is a dash.

SEND SLOWLY



HOW TO USE THE MK-3 SIGNAL MIRROR

- 1 Reflect sunlight from mirror onto a nearby surface (raft, hand, etc.).
- 2 Slowly bring up to eye level and look through sighting hole. You will see a bright spot or light. This is the aim indicator.
- 3 Hold mirror near the eye and slowly turn and manipulate it so that the bright spot of light is on the target.
- 4 In friendly areas where only rescue by friendly forces is anticipated, free use of the mirror is recommended. Even though no aircraft or ships are in sight, continue to sweep the horizon. Mirror flashes may be seen for many miles, even in hazy weather. In hostile areas, the signal mirror must be used as an aimed signal only.

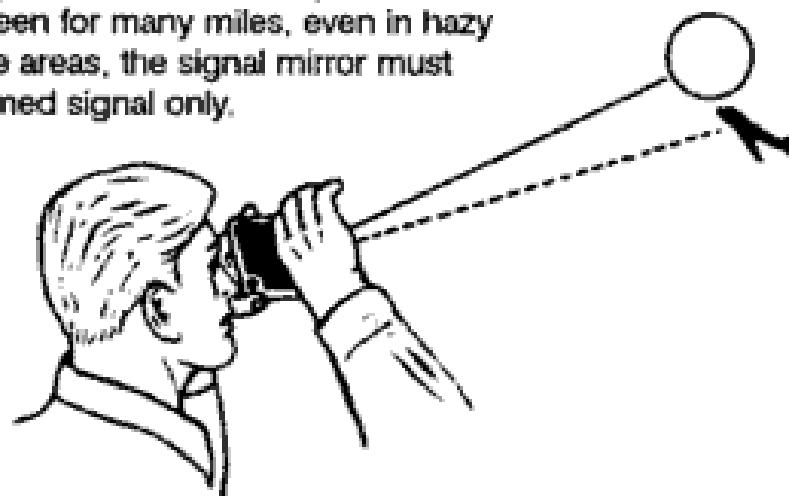


Figure 19-3. Signal mirror.



(TAF Back: Debriefing Form)

General Info.	Date/Time: ⁴⁰	Wind: ⁴¹	Other: ⁴²
	Prepared: ⁴³	Temperature: ⁴⁴	Adequate equipment? ☐ ⁴⁵ ☐ ⁴⁶
Task Results	Task Length: ⁴⁷	Precipitation: ⁴⁸	Adequate personnel? ☐ ⁴⁹ ☐ ⁵⁰
	Search Technique: ⁴⁹	Cloud Cover: ⁵⁰	Problem-free task? ☐ ⁵¹ ☐ ⁵²
	Debriefed: ⁵¹		Able to search again? ☐ ⁵³ ☐ ⁵⁴
Task Results	Describe areas searched: ⁵⁵		
	Describe areas not searched:		
	Searched how:		
Task Results	Describe clues, tracks, alerts, hazards (record on map): ⁵⁶		
Task Results	FTL/debriefer follow-up recommendations: ⁵⁷		
	(signed) FTL:		
Task Results	Debriefing Checklist (debrief all, check when done)		Routing Checklist (check to route, initial when reviewed)
	☐ Map used ☐ Map attached ☐ Hazards ☐ Areas not searched ☐ Map feature update ☐ Communications problems		☐ Operations ☐ Plans ☐ Investigation ☐ IC ☐ Documentation
	☐ Weather/terrain ☐ Others in search area ☐ Other: 		☐ ☐ ☐ ☐ ☐
	Task Summary ☐ Task completed ☐ Task partly complete ☐ URGENT followup: fill in tabs on front		POD (number or range) Unresponsive/Clues: ⁷⁰ % ⁷¹ % Responsive: ⁷² % ⁷³ %

NEW
EDITION

WILLIAM
STRUNK JR.
AND
E.B. **WHITE**

*"...still a little book, small enough and important enough
to carry in your pocket, as I carry mine."*

— Charles Osgood

The
ELEMENTS
of
STYLE

FOURTH EDITION

FOREWORD BY ROGER ANGELL



DEM ORDER SHEET

TIME	Physician Orders	Time Compr/Initials	Physician Orders	Time Compr/Initials	TIME	Lab Tests	Results Reviewed	Time Compr/Initials	TIME	Lab Tests	Results Reviewed
	☐ Old Records					☐ Routine Order Set	☐			☐ Bedside Tests	
	☐ Old X-Rays					☐ CBC/Chem 7				☐ Glucose	☐
	☐ Heparin Lock					☐ Low Risk Cardiac Profile	☐			☐ Urinalysis	☐
	☐ IV					☐ High Risk Cardiac Profile	☐			☐ UCG	☐
						☐ Troponin	☐			☐ Strep Screen	☐
						☐ D. Dimer	☐			Other	☐
						☐ DVT	☐			☐	☐
						☐ PE	☐			☐	☐
						☐ Hgb/HCT	☐			☐	☐
						☐ CBC	☐			☐	☐
						☐ PT/INR	☐			☐	☐
						☐ PTT	☐			☐	☐
						☐ ABG	☐			☐	☐
						☐ Chem 7	☐			☐	☐
						☐ Glucose only	☐			☐	☐
						☐ Ionized CA++	☐			☐	☐
	☐ O2					☐ Mg++	☐			☐	☐
	☐ Monitor					☐ PO4+	☐			☐	☐
	☐ Pulse Ox ☐ CONT. ☐ SPOT CHECK					☐ CA++	☐			☐	☐
	☐ Foley					☐ Amylase	☐			☐	☐
	☐ Straight Cath					☐ Lipase	☐			☐	☐
	☐ Nasogastric Tube					☐ LFT's	☐			☐	☐
	☐ Visual Acuity					☐ ETOH	☐			☐	☐
	☐ Orthostatic V.S.					☐ Digoxin	☐			☐	☐
	☒ Td					☐ Dilantin	☐			☐	☐
						☐ Monospot	☐			☐	☐
						☐ Sed rate	☐			☐	☐
						☐ Type & Cross	☐			☐	☐
						☐ # units	☐			☐	☐
						☐ Type & Screen	☐			☐	☐
						☐ Serum Quant.	☐			☐	☐
						☐ Gyne Set	☐			☐	☐
						☐ Trich Prep	☐			☐	☐
						☐ Chlamydia	☐			☐	☐
						☐ Gram Stain	☐			☐	☐
						☐ G.C. Culture	☐			☐	☐
						☐ Urine	☐			☐	☐
						☐ Culture	☐			☐	☐
						☐ TOX. Screen	☐			☐	☐
						☐ R & M	☐			☐	☐
						☐ Throat Culture	☐			☐	☐
						☐ Blood Culture	☐			☐	☐
						☐ x 1 ☐ x2	☐			☐	☐
						☐ Sputum Culture	☐			☐	☐
						☐ CSF	☐			☐	☐
						☐ Routine Culture	☐			☐	☐
						☐ Cell Count/Diff	☐			☐	☐
						☐ Protein CSF	☐			☐	☐
						☐ Glucose CSF	☐			☐	☐
						☐ Viral Culture CSF	☐			☐	☐

TIME	Radiology/Cardiology Studies	Clinical Impression	DEM Wet Reading
	☐ CXR		☐ See dictated Radiography Report
	☐ C-Spine		
	☐ ABD OBS Series		
	☐		
	☐		
	☐ Venous Dopler		
	☐ CT Scan Head		
	☐ CT Scan ABD		
	☐		
	☐ EKG		☐ See dictated EKG report
RESIDENT/CRNP SIGNATURE		INITIALS	RN SIGNATURE
DEM ATTENDING SIGNATURE		INITIALS	INITIALS

			☐ CA++	☐
			☐ Amylase	☐
			☐ Lipase	☐
			☐ LFT's	☐
			☐ ETOH	☐
			☐ Digoxin	☐
			☒ Dilantin	☐
			☐ Monospot	☐
			☐ Sed rate	☐
			☐ Type & Cross	
			_____ # units	
			☐ Type & Screen	
			☐ Serum Quant.	☐
			☐ Gyne Set	
			☐ Trich Prep	☐
			☐ Chlamydia	☐
			☐ Gram Stain	☐
			☐ G.C. Culture	
			☐ Urine	

Tognazzini's Paradox





TOG *on Interface*



Bruce "TOG" Tognazzini
Apple Computer, Inc.



Tognazzini's Paradox

Tognazzini, B ("Tog").
TOG on Interface.1992;
Reading, MA: Addison-
Wesley.

Problem: find out if user
has a color monitor

1. Are you using a color
monitor?



2. Is the picture above
in color?

Failure - 25%

3.

Green

Blue

Orange

Magenta

Are the words
above in color?
Failure - Color: 0%.
B+W: 0%. Green:
100%.



Tognazzini's Paradox

4.

Green

Blue

Orange

Magenta

Are the words above in more than one color?

Failure - Color: 0%.
B+W: 20%. Green: 50%.

5. Are the words above in several different colors?

Failure - Color: 0%.
B+W: 20%. Green: 25%.

6. Do the words above appear in several different colors?
0% failure!



Changing One Word

**NEXUS cervical-spine clearing
failures in EMS:
wording changed**

Da Rules





FCC Rules

ASRC FCC Callsigns. All ASRC group mission and training communications on the ASRC Standard Radio Channel frequencies operate under the authority of the licenses issued to the ASRC by the FCC. These callsigns (see Figure M-7) will only be used by the ICPCC or ACC and should be transmitted at least once every 30 minutes on every channel in use for the purpose of station identification.

ASRC FCC Callsigns Channels A, C, E, F, G, H, I, J, R, S, &
Repeater **WPEZ758**

Channel L **WQEU871**



FCC Rules

- *No profanity.*
- *No non-business (personal) use on special emergency channels*
 - *ordering a pizza?*
 - *Business band channel?*
- *Only “type-accepted” radios*
 - *Part 93 exception: only for life, limb or property, and only until alternate communications are available*
 - *Ham radios not acceptable unless type-accepted*



Learn-the-hard-way Rules

- *Remember the scanners*
- *Net Control:*
 - “mother may I” to talk directly rather than Net Control (Base) “Base from Charlie, permission to go direct with Delta?”
 - Unless local tactical channel designated
 - SHORT messages, compose before speaking
 - If long message, brief pause several times to listen for “BREAK!” “Priority Traffic!” “Mayday” or the like (and to give the transmitter a rest)



ASRC Rules

- **Always get spare batteries, maybe a better antenna**
- **Before leaving base camp *call Base for a radio check***
- **When leaving base for task *call Base***
- **When starting your task *call Base* with time and location**
- **If you find a clue, *call Base* with location and await further instructions**
- ***Call Base* as directed (usually every hour)**



ASRC Rules

- If you make a find, *call Base* and:
 - “Clear the net”
 - “Secure the net”
- Once task is done, *call Base* before returning
- Once back at base, *call Base* and let them know
- Turn off radio.
- Turn in radio, note any problems.

Radio Boo- Boos





A Few Boo-Boos

- **Radio off / volume down / dead battery**
- **Wrong channel**
- **PL decode turned on**
- **No line-of-sight signal**
- **Talking too soon after pressing PTT, or letting PTT go too soon after talking**
- **Forgetting to say other guy's name first**
- **Message too long**
- **Not having other person repeat easy-to-flub messages such as coordinates (good to say twice, too "I say again, figures, Alfa 106249")**

Conover, Out

