

## A HIGHLY QUESTIONABLE FIELD GUIDE

AND EVERYTHING  
IN BETWEEN



PEOPLE

PLAN B

PATCH CORDS

PINE TREES

POSITIVE ATTITUDES

# STRINGLINE VOICE LINK

FIELD MANUAL  
FM-102.3  
(REV. A)

EMERGENCY  
IDEAS FOR  
NORMAL  
PEOPLE

Two Campbell's Soup Cans. One Highly Advanced Communication System.

SIMPLE.  
RUGGED.  
CHEAP.  
SURPRISINGLY  
EFFECTIVE.



## REQUIRED EQUIPMENT



2 × EMPTY  
CAMPBELL'S SOUP CANS  
(OR ANY METAL CANS)



1 × STRING  
(STRONG, SMOOTH,  
NOT DENTAL FLOSS)



1 × KNIFE  
(FOR CUTTING STRING,  
NOT OPENING SOUP.  
THAT'S OPTIONAL.)

## HOW IT WORKS



## DEPLOYMENT

1 POKE A HOLE  
IN THE BOTTOM  
OF EACH CAN.



2 TIE A BIG KNOT  
INSIDE EACH CAN.



3 UNSPOOL STRING  
AND KEEP IT TIGHT.



4 TALK. LISTEN.  
FEEL SILLY.  
STAY IN TOUCH.



## KEEP IT WORKING (PRO TIPS)

✓ KEEP THE  
STRING TIGHT!



✓ USE A CLEAR,  
STRAIGHT PATH.



✓ KEEP IT OFF  
BRUSH AND ROCKS.



✗ AVOID KNOTS  
IN THE LINE.



✗ PROTECT FROM  
WILDLIFE.



✗ DON'T GET IT WET.



## ADVANTAGES

- ✓ NO BATTERIES REQUIRED.
- ✓ IMPLEMENTS LOCALLY SOURCED TECHNOLOGY.
- ✓ CRYSTAL CLEAR AUDIO (WHEN USED CORRECTLY).
- ✓ GREAT FOR SHORT-DISTANCE FIELD OPERATIONS.
- ✓ BUILDS TEAM MORALE (LAUGHS GUARANTEED).
- ✓ DOUBLES AS A CONVERSATION STARTER.

## KNOWN LIMITATIONS

- ✗ RANGE IS LIMITED (TREES, HILLS, AND REALITY).
- ✗ DOES NOT WORK AROUND CORNERS.
- ✗ SQUIRRELS, BIRDS, AND BORED HIKERS MAY INTERFERE.
- ✗ STRING CAN BREAK OR TANGLE.
- ✗ NOT IDEAL IN HIGH WIND OR HEAVY RAIN.
- ✗ MAY CAUSE UNCONTROLLABLE NOSTALGIA.
- ✗ DOES NOT ENCRYPT YOUR CONVERSATION (ENEMIES WITH GOOD HEARING MAY LISTEN).

# Smoke Signal Operations

Simple Messages for When  
Modern Tech Fails

IT'S OLD.  
IT'S SLOW.  
IT'S UNENCRYPTED.  
AND IT STILL  
WORKS!



## REQUIRED EQUIPMENT



DRY FUEL  
(TINDER, KINDLING,  
BRANCHES)



FIRE RING  
(KEEP IT SMALL  
AND CONTROLLED)



DAMP CLOTH  
(TO SMOTHER FIRE)



FIRE TOOL  
(OR A STICK  
WORKS TOO)

## SMOKE SIGNAL CODE (SUGGESTED)

|  |   |                                                     |
|--|---|-----------------------------------------------------|
|  | = | EVERYTHING OK                                       |
|  | = | NEED HELP                                           |
|  | = | SEND SNACKS                                         |
|  | = | PICK ME UP                                          |
|  | = | BAD SITUATION                                       |
|  | = | DANGER!<br>GET HERE NOW!                            |
|  | = | I HAVE NO IDEA<br>WHAT I'M DOING<br>(BUT I'M HERE!) |

## BEST CONDITIONS



CLEAR, DRY DAY  
(STRONG SUNLIGHT HELPS  
CONTRAST SMOKE)



LIGHT, STEADY WIND  
(BLOWS SMOKE UP AND ALONG)



HIGH GROUND  
(GIVES MAXIMUM VISIBILITY)



DARK BACKGROUND  
(FOREST OR MOUNTAINS  
BEHIND THE SMOKE)

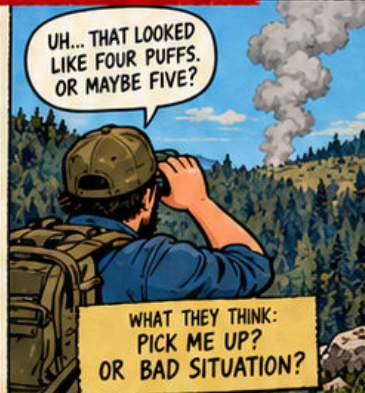
## PROCEDURE

- 1 BUILD A SMALL, SMOKY FIRE.  
USE DAMP, GREEN MATERIAL TO CREATE WHITE SMOKE.
- 2 ALLOW SMOKE TO RISE, THEN  
CREATE DISTINCT PUFFS.
- 3 PAUSE 5-10 SECONDS BETWEEN PUFFS  
SO MESSAGES ARE CLEAR.
- 4 REPEAT THE MESSAGE SEVERAL TIMES.
- 5 WATCH FOR A RESPONSE (SMOKE, MIRROR,  
RADIO, OR A WAVE).

## COMMON MISINTERPRETATIONS



WHAT YOU SENT:  
NEED HELP



WHAT THEY THINK:  
PICK ME UP?  
OR BAD SITUATION?



WHAT THEY SEE:  
I HAVE NO IDEA  
WHAT I'M DOING  
(BUT I'M HERE!)

## TACTICAL CONCERNS



EVERYONE WITHIN 20 MILES CAN READ  
YOUR TRAFFIC. THERE IS NO PRIVACY.  
(YES, EVEN THAT GUY.)



WIND CAN RUIN YOUR MESSAGE.  
WHAT YOU MEANT AS "TWO PUFFS"  
MIGHT LOOK LIKE "FOUR PUFFS."



FIRE SAFETY FIRST.  
KEEP FIRES SMALL, CONTAINED, AND  
OBEY LOCAL RESTRICTIONS.



MAY ATTRACT ATTENTION.  
BESIDES HUMANS, SMOKE CAN BRING CURIOUS  
NEIGHBORS (BOTH TWO-LEGGED AND FOUR-LEGGED).



BOB  
20 MILES AWAY  
ALREADY KNOWS.



SO DO  
THE LOCALS.

## CHAPTER 3:

# Flashlight Signaling

FIELD MANUAL  
FM-102.3  
(REV. A)

MODERN  
EMCOMM  
COMMUNICATIONS  
PAGE 4

BRINGING LIGHT TO THE SITUATION

SIMPLE TOOLS.  
SURPRISING RANGE.  
STILL WORKS!

BLINK BLINK  
...PAUSE...  
BLINK!

SEVERAL MILES  
(ON A GOOD NIGHT)

COPY  
THAT!

SAME  
OLD LIGHT.  
DIFFERENT  
SUPERPOWER.

A BRIGHT IDEA  
SINCE PEOPLE  
DISCOVERED  
DARKNESS.

## GEAR

BRIGHT LED  
FLASHLIGHT  
(300+ LUMENS  
RECOMMENDED)

SPARE BATTERIES  
(BECAUSE NOW  
IT'S ALWAYS AT  
THE WORST TIME)

OPTIONAL RED FILTER  
(PRESERVES NIGHT VISION  
AND IS NICER TO CAMPSITES)

LANYARD  
(KEEPS IT IN YOUR  
HAND WHEN YOU  
GET EXCITED)

TRIPOD OR ROCK  
(FOR TIRED ARMS  
AND DRAMATIC EFFECT)

## SIGNAL PATTERNS

KEEP IT SIMPLE. KEEP IT RECOGNIZABLE.

SHORT FLASH (•)



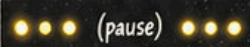
About  
1 second

LONG FLASH (—)



About  
3 seconds

REPEAT



3 short  
then pause  
(repeat)

SOS (UNIVERSAL)



... works great  
when in doubt!

ROGER / ALL OK



One short,  
one long,  
one short

NEED HELP



Five short  
(repeat)

MOSQUITO  
CODE:

RANDOM FLASHING  
JUST CONFUSES  
EVERYONE.  
IT'S NOT A MORSE  
FOR "SUP?"



## BEST PRACTICES

- ✓ PICK A HIGH, CLEAR LOCATION.
- ✓ AIM SLIGHTLY ABOVE YOUR TARGET.
- ✓ USE SHORT, DISTINCT FLASHES.
- ✓ AGREE ON SIGNALS AHEAD OF TIME.
- ✓ CONSERVE BATTERY POWER.
- ✓ USE RED FILTER NEAR CAMPGROUNDS.
- ✓ PRACTICE! (SO YOU'RE NOT SENDING "SOS" WHEN YOU MEANT "ALL GOOD"!)

PRACTICE  
ON A TREE FIRST.  
THE RACCOONS  
ARE GREAT  
LISTENERS.

NATURE  
ALWAYS  
REPLIES.  
(IT JUST MIGHT  
BE A RACCOON.)

## COMMON ERRORS

ACCIDENTALLY SIGNALING  
AIRCRAFT.



UH... WE'RE  
JUST GUYS  
WITH A  
FLASHLIGHT!

WAKING THE CAMPGROUND  
AT 2 A.M.



SERIOUSLY?  
IT'S DARK  
FOR A REASON.

FLASHING TOO FAST.



THIS IS NOT  
A STROBE PARTY.

BLOCKING YOUR SIGNAL.



OOPS.

TREES ARE GREAT.  
THEY'RE ALSO REALLY GOOD  
AT BLOCKING LIGHT.

# SIGNAL MIRROR COMMUNICATIONS

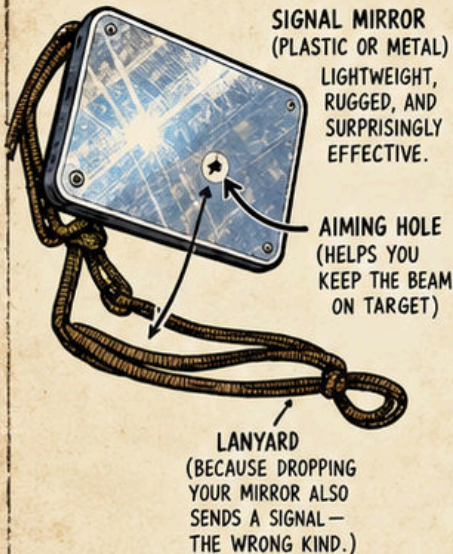
REFLECTING SUNSHINE FOR THE GREATER GOOD

DISTANT FRIENDS.  
HIGH PLACES.  
BRIGHT IDEAS.  
SAME PLANET.  
STILL WORKS.



SHINY THINGS  
BRING PEOPLE  
TOGETHER  
(SOMETIMES  
LITERALLY MILES  
TOGETHER).

## 1. EQUIPMENT



## 2. AIMING PROCEDURE

- 1** HOLD MIRROR NEAR YOUR EYE AND SIGHT THROUGH THE AIMING HOLE AT YOUR TARGET.
- 2** TILT THE MIRROR UNTIL YOU SEE A BRIGHT SPOT ON OR NEAR YOUR TARGET. KEEP IT STEADY.
- 3** USE SHORT AND LONG FLASHES TO SEND MESSAGES (MORSE CODE WORKS GREAT). PAUSE BETWEEN LETTERS AND WORDS.



## 3. IDEAL CONDITIONS

- BRIGHT, DIRECT SUNLIGHT.
- CLEAR AIR AND GOOD VISIBILITY.
- ELEVATED POSITION (HILL, RIDGE, TOWER, OR TALL CHAIR).
- A HEAVY DOSE OF PATIENCE.



THE HIGHER  
YOU GO,  
THE FARTHER  
YOU GLOW.



## 4. WARNINGS



- DO NOT REFLECT SUNLIGHT AT PEOPLE NEAR YOU. SERIOUSLY.
- YOU CAN CAUSE TEMPORARY BLINDNESS.
- AVOID AIRCRAFT, DRIVERS, AND WILDLIFE.
- USE COMMON SENSE (RARE, BUT EFFECTIVE).
- STILL NOT A TOY.

**FRIENDS DON'T FRY FRIENDS.**

## 5. EXTRA TIPS & USES

- WORKS GREAT FOR "I'M OK" CHECK-INS.
- CAN ATTRACT ATTENTION IN AN EMERGENCY.
- PAIR WITH MORSE CODE FOR REAL MESSAGES.
- PRACTICE WITH A FRIEND (NOT A SQUIRREL).
- POLISHED METAL, CD, OR EMERGENCY BLANKET CAN WORK IN A PINCH.
- A SHINY THING IN YOUR PACK MIGHT ONE DAY BE THE MOST IMPORTANT RADIO YOU HAVE.

NO POWER.  
NO PROBLEM.  
SUNSHINE  
NEVER BILLS  
YOU.

STAY  
BRIGHT!





# SEMAPHORE FLAGS

LOW TECH. HIGH VISIBILITY. STILL WORKS (SOMETIMES).

WHEN  
RADIOS FAIL,  
FLAGS PREVAIL  
(UNTIL YOUR  
ARMS DO).



## REQUIRED GEAR



- TWO HIGH-VISIBILITY FLAGS (ANY BRIGHT COLORS)



- HAT, SUNSCREEN, AND PATIENCE



- STRONG SHOULDERS (RECOMMENDED)
- WATER (ARM FATIGUE IS REAL)

## BASIC POSITIONS



A  
"A"



B  
"B"



C  
"C"



T  
"T"



Y  
"Y"



END  
"END OF MESSAGE"

## FIELD USE

- 1 ESTABLISH A CLEAR LINE OF SIGHT WITH YOUR PARTNER.
- 2 AGREE ON A CODE OR USE A STANDARD SEMAPHORE ALPHABET (SEE BASIC POSITIONS).
- 3 SEND ONE LETTER AT A TIME. HOLD EACH POSITION FOR 3-5 SECONDS.
- 4 CONFIRM THE MESSAGE (WAVE BACK OR SEND "R").
- 5 PRACTICE BEFORE YOU NEED IT. PREFERABLY WHEN NO ONE IS WATCHING.

## LIMITATIONS

- REQUIRES CLEAR LINE OF SIGHT
- SLOWER THAN RADIO (MUCH SLOWER)
- NOT GREAT IN FOG, HEAVY RAIN, OR AT NIGHT
- YOUR ARMS WILL GET TIRED (SERIOUSLY)
- TREES, HILLS, AND CURIOUS ONLOOKERS CAN BLOCK MESSAGES
- MAY BE MISTAKEN FOR SIGNALING A HELICOPTER, SURRENDER, OR DOING WEIRD YOGA

## ENVIRONMENTAL CHALLENGES

