Santa Clara County ARES®/RACES

Message Handling Procedures

Revised: 04-June-2026

Contents

Introduction 3
Message Passing Terminology 4
Message Passing Roles 4
Operator-to-Operator Messages 5
3rd Party Messages 5
Enhancements to NTS Procedures 6
Syntax and Symbology 7
Standard ITU Phonetics 7
Letters 7
Numbers 7
Symbols 8
Unknown character or symbol 8
Voicing Symbols 9
Groups vs. Words 9
Punctuation 10
Message Passing Prowords 11
Control Prowords 12
MESSAGE NUMBER 12
ROGER 12
BREAK 12
STAND BY 12
CONTINUE or GO 12
NEWLINE 13
MESSAGE ENDS or END OF MESSAGE 13
SAY AGAIN … or SPELL [PHONETICALLY] … 13
Clarification Prowords 14
I SPELL 14
I SAY AGAIN 16
Qualification Prowords 17
UPPERCASE and LOWERCASE 17
SUBSCRIPT and SUPERSCRIPT 18
Introductory Prowords 19
INITIAL(S) 19
FIGURE(S) 20

SYMBOL(S) 20
MIXED GROUP 21
MIXED GROUP FIGURE(S) 21
MIXED GROUP SYMBOL(S) 22
TELEPHONE FIGURES 23
GPS COORDINATES 23
AMATEUR CALL 24
EMAIL ADDRESS 24
PACKET ADDRESS 25
INTERNET ADDRESS 26
LONG INTERNET, PACKET, OR EMAIL ADDRESSES 27
Message Passing Techniques 28
Techniques for All Messages 28
Radio Techniques 28
Speaking Techniques 28
Message Prioritization 29
Announcing a Message 29
Sending a Message to One Station 30
Sending a Message to Multiple Stations 30
Forms Containing Signature Fields 31
Techniques for non-standard forms 31
Techniques for Handling 3rd Party Messages 32
3rd Party Spoken Messages 32
3rd Party Written Messages 32
Techniques for Sending Forms with Field Numbers 33
Form Specific Issues with Field Numbers 35
APPENDIX A - Recommended Field Grouping 36
ICS 213 Message Form 36
Common Forms 37
Radio Routing Slip 38
APPENDIX B - Summary of Prowords Used in Message Passing 39
Summary of Changes 40

Introduction

Emergency Communications is serious business. Whether we are simply speaking to another radio operator about something we observed, or we are passing official message traffic on behalf of a 3rd party, we have two overarching goals. They are, in priority order:

1. Transfer the message accurately (zero errors)
2. Transfer the message efficiently (quickly, with as few words as possible)

To accomplish both goals, we all need to agree on a set of "rules" to use when speaking on the radio. In most respects, it doesn't really matter what the rules are if we all operate by the same rules. Failure to follow the same set of rules results in either an inaccurate copy of the message, or unnecessary repeats and extra words used, or both!

All Santa Clara County ARES/RACES operators are expected to follow these procedures when passing message traffic. These procedures will be used as the standard performance criteria during performance evaluations of candidates for SCCo RACES Credentials.

Message Passing Terminology

Message Passing Roles

When discussing the various people involved in handling a message, words like “Sender” or “Receiver” can be ambiguous. For example, does “Sender” mean the person that wrote the message? Or does it mean the radio operator who is sending the message?

We define the following terms to unambiguously identify the different people involved in the message passing process:

- Message author: Creator of the message (often a 3rd party)
- Sending station: Radio operator sending the message
- Receiving station: Radio operator receiving the message
- Relay station: Acts first as a receiving station, then as a sending station
- Origin station: The first sending station
- Destination station: The last receiving station
- Message recipient: The person/position to which the message is addressed (often a 3rd party)

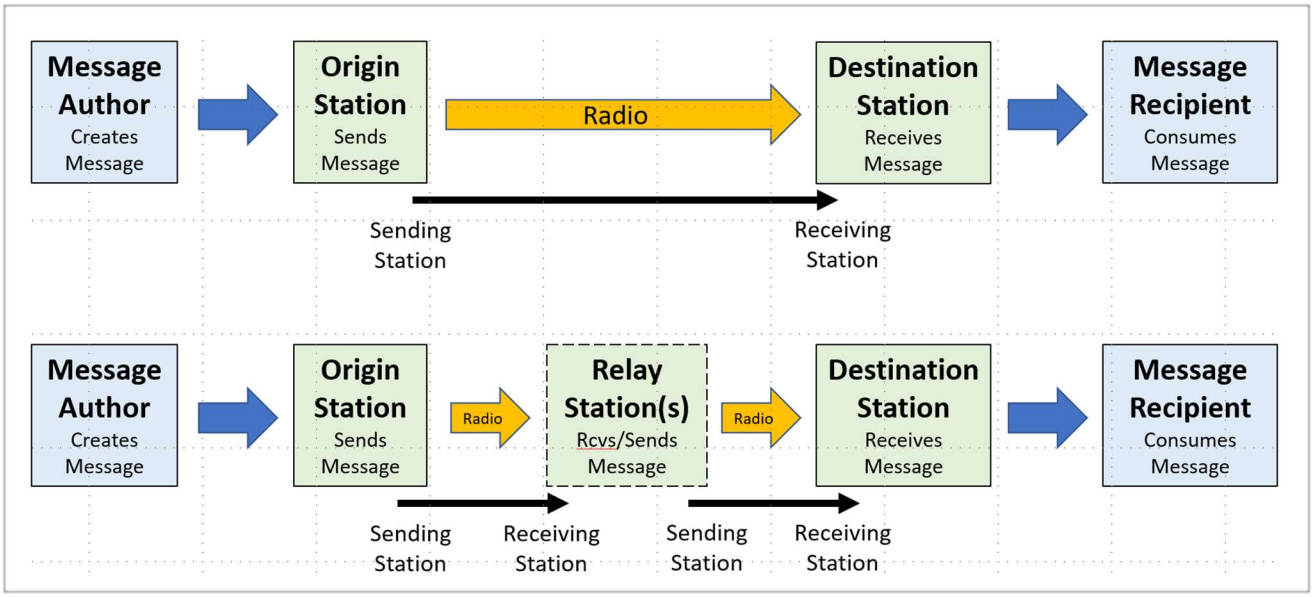


Figure 1 – Message Passing Roles

The Origin Station and Destination Station are particularly important because we use the message numbers that they assign for logging and tracking the message, even when a relay is involved.

Operator-to-Operator Messages

Operator-to-operator messages are messages where the radio operators are both the authors and recipients of the message. Using the terms defined above, the Message Author is the same person as the Origin Station, and the Destination Station is the same person as the Message Recipient.

Examples of operator-to-operator messages are:

- Check-in and check-out messages
- Health & welfare checks
- Status reports (such as crowd counts, water level reports, traffic reports, etc.)
- Damage assessments (such as Mike-Mike reports, windshield surveys, etc.)

Note that the destination station may forward the information to someone else, like an event or incident official, perhaps after some summarization and analysis. But the key point is that the person who authors the messages and the person for which the message is destined is a radio operator.

Because the creator and consumer of the message are both radio operators, the operators have some freedom to define what the format should be and how it should be sent. In a directed net, the net control often specifies how the net will operate. In an open net, the two individual operators may decide how best to handle the message. This is very different from passing messages on behalf of a 3rd party.

3rd Party Messages

3rd party messages are sent and received by radio operators on behalf of others (3rd parties). That means that the 3rd party determines:

- Message format (usually some type of form used by that agency)
- Message content (often including terms that are unfamiliar to the radio operator)
- Message to/from information (typically, an ICS position and location)
- Message handling order (how quickly they need it sent)

With 3rd party messages, the radio operator must adapt to and operate within the served agency's workflow, not the other way around. A good way to think of the radio operator's job is to compare it to a fax machine. What should come out the other end of the radio channel and be delivered to the message recipient should be a very close facsimile or replica of the message that the message author created. The radio operator must not interpret or change the message, and it must arrive at the other end in the correct format and fully legible.

The key operational difference between handling operator-to-operator messages and 3rd party messages is the need to send the 3rd party messages exactly, so that the message recipient receives what the message author sent. Decades of experience have shown that the only effective and efficient way to do that is to use a shared set of procedures.

The Appendix gives examples of the common forms used for 3rd party messages and provides recommended field groupings to be used when sending the form.

A summary of Prowords is also found in Appendix B.

Enhancements to NTS Procedures

The set of rules used by SCCo ARES/RACES is based on the message passing rules used by the ARRL National Traffic System (NTS) and spelled out in their documentation:

- **ARRL NTS Message Passing Guide – Chapter 1 – The ARRL Message Format**
  - http://www.arrl.org/files/file/Public%20Service/MPG104A.pdf
  - We don't usually deal with ARRL Radiograms. So this chapter is mostly useful as introductory information for Chapter 2
- **ARRL NTS Message Passing Guide – Chapter 2 – Sending Messages on Voice**
  - http://www.arrl.org/files/file/Public%2520Service/MPG204A.pdf
  - Chapter 2 defines how to voice various types of message content, such as numbers, initials, addresses, etc.
  - Note: This is the most important chapter for our purposes.

Where this document references the NTS documentation, you will see "[NTS …]", where "…" is the section of the NTS document that applies. The reader is encouraged to keep a copy of the NTS documentation (at least Chapter 2) along with this document and to refer to the NTS documentation where referenced.

In most cases, the procedures in this document are consistent with the NTS documentation. But there are two situations where we differ from the NTS documentation:

a. When the NTS manual doesn't account for messages written by 3rd parties. This mostly applies to punctuation.
   - For example, the ARRL NTS documentation expects that the ARRL Radiogram is written by an NTS radio operator who knows how to use their unique procedures. They use an "X" (capital X) for a period at the end of a sentence. But the messages we must send are written by 3rd parties in normal English, with a period (".") at the end of sentences.
b. When the NTS manual doesn't have a rule that covers the situation.
   - For example, the ARRL NTS documentation doesn't cover how to speak symbols or GPS coordinates and doesn't account for the need to specify capitalization (such as in a web URL or a password).
   - NTS does not address how to deal with unclear symbols or characters written by a 3rd party that cannot be clarified with the message author.

ARES/RACES operators should keep a copy of this document in their go kit so they can refer to it frequently during operations.

Note: This document cannot be used during a performance evaluation for an SCCo RACES Credential. The candidate for a credential must know these procedures and be able to pass messages without the assistance of documentation or assistance from others.

Syntax and Symbology

Standard ITU Phonetics

We use standard ITU phonetic alphabet pronunciation. Note that the standard ITU pronunciation for some letters and numbers is not the same as the way it is written. These differences are marked with an asterisk ("*") below. Practice until they are second nature.

Wikipedia references:

- Search for NATO phonetic alphabet: https://en.m.wikipedia.org/wiki/NATO_phonetic_alphabet
- Voice Recording of properly spoken letters and numbers (on the above page): https://upload.wikimedia.org/wikipedia/commons/a/a5/NATO_Phonetic_Alphabet_reading.ogg

Letters

Written (Spoken), * = indicates a special pronunciation (see ITU Phonetic Alphabet above)

A	-	alpha (AL-fa)		N	-	november (no-VEM-ber)	
B	-	bravo (BRAH-voh)		O	-	oscar (OSS-cah)	*
C	-	charlie (CHAR-lee)		P	-	papa (pah-PAH)	*
D	-	delta (DELL-tah)		Q	-	quebec (keh-BECK)	*
E	-	echo (ECK-oh)		R	-	romeo (ROW-me-oh)	
F	-	foxtrot (FOKS-trot)		S	-	sierra (see-AIR-rah)	
G	-	golf (GOLF)		T	-	tango (TANG-go)	
H	-	hotel (hoh-TELL)		U	-	uniform (YOU-ni-form)	
I	-	india (IN-dee-ah)		V	-	victor (VIK-tah)	*
J	-	juliet (JU-lee-ETT)		W	-	whiskey (WISS-key)	
K	-	kilo (KEY-loh)		X	-	x-ray (ECKS-RAY)	
L	-	lima (LEE-mah)		Y	-	yankee (YANG-key)	*
M	-	mike (MIKE)		Z	-	zulu (ZOO-loo)	

Numbers

Written (Spoken), * = indicates a special pronunciation (see ITU Phonetic Alphabet above)

0	-	zero (ZEE-row)		5	-	five (Fife)	*
1	-	one (Wun)		6	-	six (Sicks)	
2	-	two (Too)		7	-	seven (SEV-vin)	
3	-	three (Tree)	*	8	-	eight (Ate)	
4	-	four (FOH-wer)	*	9	-	nine (NINE-er)	*

Multi-digit numbers are spoken one digit at a time

- Example: 600 = "six zero zero"

Symbols

Symbols are increasingly used in our everyday messages. We must have a mutually agreed-upon set of names for symbols so we can understand each other exactly.

Unfortunately, the NTS documentation doesn't cover how to handle symbols. So, we define the standard symbol names in Figure 2. As you will see, we use the common name for symbols, which should make speaking and copying symbols very straight-forward.

Some symbols have multiple common names:

- For symbols that have context sensitive names, we use the commonly used, context sensitive name
    - Examples: "." (period, decimal, dot) and "-" (minus-sign, hyphen, dash)
- For symbols that have multiple names that are not context sensitive, we pick one name and stick with it
    - Examples: "#" (pound-sign instead of hash) and "/" (slash instead of stroke)

Unknown character or symbol

You may encounter data that cannot be read due to poor handwriting or a symbol that we do not recognize. In these cases, the preferred action is to contact the message originator and get clarification. If that is not possible, then send the message, but inform the receiver that the message has some unknown characters or symbols <u>before starting to send the message</u>. When the unknown character/symbol is encountered, simply say "unknown symbol" or "unknown character" as appropriate.

- Example:
    - Written: Send 50 ⸗ today
    - Spoken: "send *FIGURES* fife zero <pause> *UNKNOWN SYMBOL* <pause> today

The receiver draws an empty box on their message form where the unknown symbol would appear.

    - Receiver writes: Send 50 □ today

- Example:
    - Written: We can use AB§δ instead
    - Spoken: "We can use *MIXED GROUP* alpha bravo *UNKNOWN SYMBOL UNKNOWN SYMBOL* <pause> instead
    - Receiver writes: We can use AB□□ instead

Voicing Symbols

The important thing is for everyone to use the same name for each symbol. Note that the six punctuation symbols are underlined in the chart below.

	Voicing
.	**decimal** *(in numbers)*, or **dot** *(in email, packet, and internet addresses)*, or **period** *(end of sentence and elsewhere)*
,	**comma**
:	**colon**
;	**semi-colon**
?	**question-mark**
!	**exclamation-point**
-	**minus-sign** *(in numbers)*, **hyphen** *(in words)*, or **dash** *(elsewhere)*
+	**plus-sign**
=	**equal-sign**
@	**at-sign**
#	**pound-sign**
$	**dollar-sign**

	Voicing
&	**ampersand**
*	**asterisk**
/	**slash**
\	**backslash**
"	**seconds** *(In GPS coordinates)*, **double-quote** *(elsewhere)*
'	**apostrophe** *(within a word)*, **minutes** *(in GPS coordinates)*, or **single-quote** *(elsewhere)*
`	**back-quote**
%	**percent-sign**
(	**left-parenthesis**
)	**right-parenthesis**
[	**left-square-bracket**
]	**right-square-bracket**
{	**left-curly-bracket**
}	**right-curly-bracket**

	Voicing
<	**less-than-sign**
>	**greater-than-sign**
_	**underscore**
|	**vertical-line**
^	**caret** \ care et \
~	**tilde** \ till dee \
°	**degrees** *(in GPS coordinates)* **degree-sign** *(elsewhere)*

Voicings are shown in bold.

Voice hyphenated words as if they are a **single-word**.

Punctuation symbol voicings are underlined.

Context is shown in italics.

\ Pronunciation \ is between backslashes.

Figure 2 - Voicing Symbols

Groups vs. Words

- Some parts of messages are not words.
  - Examples include call signs, numbers, abbreviations, email addresses, etc.
  - This example contains no words: 305B NW 1st Ave
- The generic term "group" is used to refer to combinations of letters, numbers, and/or symbols, typically separated by whitespace
  - This example contains 4 groups: 305B NW first Ave
- All words are groups, but not all groups are words
- Example groups: car, 53, WD-40, ARRL, W6XRL4/7, radio, w6xrl4@arrl.net, http://arrl.org, St.

Punctuation

- The messages we pass are often written by, and for, non-hams (i.e. 3rd party messages)
- They include the usual punctuation symbols common to normal writing
    - Refer to the "Voicing Symbols" chart (Figure 2) shown earlier for what we consider punctuation symbols. The six punctuation symbols are underlined in Figure 2.
- When used as punctuation, voice symbols as they are encountered in a message
    - E.g. a "," [comma] after a word, or a "." [period] at the end of a sentence
    - This differs from ARRL NTS procedures
- Otherwise, treat punctuation symbols like any other symbol
- Example phrases containing punctuation:
    - "Deliver blankets, cots, and pillows."
        - Written: deliver blankets, cots, and pillows.
        - Spoken: "deliver blankets comma cots comma and pillows period"
    - "Expected weather: rain and snow!"
        - Written: expected weather: rain and snow!
        - Spoken: "expected weather colon rain and snow exclamation point"
- Example phrases without punctuation:
    - "The password is Ab:1,5!+"
    - "5 != 6"
    - "Join the discussion on groups.io"
    - We will learn to deal with these later…

Message Passing Prowords

Prowords are special words or phrases used to facilitate message passing by voice. They allow the sending and receiving stations to be clear with each other, while still being as efficient as possible (using as few words as possible, avoiding repeats).

Prowords are NOT part of the message and are NOT written down when copying the message. This makes it critical that both the sending station and receiving station know the prowords and how they are used. The sending station must use the proper prowords or else the receiving station may write the word into the message. The receiving station needs to recognize the prowords, so they don't write them into the message.

Prowords can be grouped into four general categories, depending on how they are used. We group them into these categories only because the prowords in each category have similar behavior and it's easier to learn them this way. The names of the categories are not important. Neither is knowing which proword is in each category. Knowing the prowords themselves and how/where to use each one is all that is important.

- **Control Prowords**
  - Define the start, end, or control the flow of the message
- **Clarification Prowords**
  - Always spoken <u>AFTER</u> a group
  - Clarifies or emphasizes what was just said
- **Qualification Prowords**
  - Always spoken <u>WITHIN</u> a group
  - Defines a quality to allow precise copy
- **Introductory Prowords**
  - Always spoken <u>BEFORE</u> a group
  - Alerts receiving operator to what is coming next

It is important to use each proword in the right place (before, inside, or after a group) to avoid confusing the receiving station and slowing down the message transfer.

Appendix B provides a summary of the Prowords.

Control Prowords

"Control" prowords are used to control the message flow between the two operators. They can be used to:

- Begin a message
- End a message
- Separate parts of the message
- Control the pace
- Request repeats

The control prowords are:

- "MESSAGE NUMBER" [NTS-2.1.4.1]
- "ROGER" [NTS-2.1.4.11]
- "BREAK"
- "STAND BY"
- "CONTINUE" or "GO" [NTS-2.1.4.12]
- "NEWLINE"
- "MESSAGE ENDS" or "END OF MESSAGE" [NTS-2.1.4.2]
- "SAY AGAIN …" or "SPELL [PHONETICALLY] …"

MESSAGE NUMBER [NTS-2.1.4.1]

- Indicates the start of a message. With the use of field numbers, this is not used with the standard forms within Santa Clara County. But users should be aware of it if encountered.

ROGER [NTS-2.1.4.11]

- Acknowledged, i.e. "I heard and understood" (does NOT mean "yes")

BREAK

- Interrupt. Represents a change in the message flow.

STAND BY

- Wait

CONTINUE or GO [NTS-2.1.4.12]

- Used by the receiver to tell the sender to continue with the next set of five words/groups

NEWLINE

- Skip to a new line; paragraph break
- Example:
  - Written:

    Line one
    Line two

  - Spoken: "line one *NEWLINE* line two"

  - Written:

    Line one

    Line two

  - Spoken: "line one *NEWLINE NEWLINE* line two"

MESSAGE ENDS or END OF MESSAGE [NTS-2.1.4.2]

- Indicates the end of the message content
- Should be sent immediately after the last group/word in the message

SAY AGAIN … or SPELL [PHONETICALLY] …

- Used by the receiver to request a repeat.
- Usually followed by one of the following qualifiers:
  - "… WORD AFTER …"
    - "Say again word after …"
    - Respond with group or part requested
  - "… WORD BEFORE …"
    - "Say again word before …"
    - Respond with group or part requested
  - "… BETWEEN … AND …"
    - "Say again between … and …"
    - Respond with group(s) between blanks, observing limits
  - "… ALL AFTER …"
    - "Say again all after …"
    - Respond with all groups after the one specified to the end of the message, unless limited
  - "… ALL BEFORE …"
    - "Say again all before …"
    - Respond with all groups in the message to the group specified, unless limited
- If not followed by a qualifier, applies to the entire previous transmission

Clarification Prowords

Clarification prowords are used to clarify or emphasize something that was just said.

- They are ALWAYS spoken **AFTER** the relevant group
- Usually used for a single group
- Use proactively to avoid confusion and repeats

The clarification prowords are:

- "I SPELL"
- "I SAY AGAIN"

I SPELL [NTS-2.1.4.6]

- ALWAYS spoken IMMEDIATELY **AFTER** the group to be spelled
- Use to indicate you are going to phonetically spell the group just voiced
- Use with ONE GROUP AT A TIME
- Use more liberally during bad radio conditions
- Use proactively with words that the receiving station might have difficulty spelling
    - Examples: unique words, chemical names, long or complicated words, …
- Use proactively with words that may sound the same under noisy conditions
    - Examples: he/she/we/fee/bee/sea/…; five/fire; …
- ALWAYS use with words that sound like other words but are spelled differently
    - Examples: to/too/two; be/bee; for/fore/four; see/sea; …
- ALWAYS use with proper names
    - Examples: John Smith (use I SPELL on both)
    - The sender may choose to only spell the first occurrence of the name when it is used multiple times in a message.
- City names and street names should be treated as proper names. However, there is no need to spell cities that are commonly known to local residents.
- ALWAYS use with misspelled words
- ALWAYS use with all-letter groups that are not real words, but would be spoken like a word in normal conversation
    - Examples:
        - "Quik" would be voiced like "quick", then spelled phonetically
        - "PackItForms" would be voiced as it sounds, then spelled phonetically
            - In this case, capitalization should also be used (see UPPERCASE and LOWERCASE) because it makes it more readable.

- May be used with mixed groups that contain letters and symbols and are either real words or are normally pronounced like a word
    - Contractions: "they're", "aren't", "couldn't", …
    - Possessive: "Jone's", "Jones'", …
    - Hyphenated words: "well-being", "set-up", "twenty-two", …
        - The "-" symbol is spoken as "hyphen" when used in words
- ALWAYS use for prowords that are part of the message
- ALWAYS use standard ITU phonetics

Note: I SPELL is <u>not</u> used with unpronounceable, non-word groups (abbreviations, acronyms, amateur call signs, email addresses, etc.). Use the appropriate introductory proword instead. (See Introductory Prowords.)

- Examples:
    - Written: You need to arrive at … (to could be too or two)
    - Spoken: "You need to *I SPELL* tango oscar <pause> arrive at …"

    - Written: John Smith (proper names are always spelled)
    - Spoken: "John *I SPELL* juliet oscar hotel november <pause> Smith *I SPELL* sierra mike india tango hotel"

    - Written: Spelling misstake (mistaken or uncommon spelling)
    - Spoken: "Spelling misstake *I SPELL* mike india sierra sierra tango alpha kilo echo"

    - Written: Gather at the Quik Stop ("quik" isn't a word, but it is spoken like one)
    - Spoken: "Gather at the Quik *I SPELL* quebec uniform india kilo <pause> Stop"

    - Written: The figures are correct ("figures" is a proword)
    - Spoken: "The figures *I SPELL* foxtrot india golf uniform romeo echo sierra <pause> are correct"

    - Written: Don't go (this is not a mixed group, it is a word)
    - Spoken: "Don't *I SPELL* delta oscar november apostrophe tango <pause> go"

    - Written: They're closed (sounds like "their")
    - Spoken: "They're *I SPELL* tango hotel echo yankee apostrophe romeo echo <pause> closed"

- Written: twenty-two units (hyphenated words are sent using I SPELL)
- Spoken: "twenty-two *I SPELL* tango whiskey echo november tango yankee hyphen tango whiskey oscar <pause> units"

- Written: PackItForms (portmanteau, capitalization helps with clarity)
- Spoken: "PackItForms *I SPELL UPPERCASE* papa *LOWERCASE* alpha charlie kilo *UPPERCASE* india *LOWERCASE* tango *UPPERCASE* foxtrot *LOWERCASE* oscar romeo mike sierra"
    - See UPPERCASE and LOWERCASE on page 17

I SAY AGAIN

- **Use # 1: To Repeat for Clarity** [NTS-2.1.4.7]
    - Used to clarify or emphasize or to help ensure receipt of what was just said
    - Say the group(s), then "I say again", then repeat the group(s), and then continue
    - Often, voice inflection is also used to communicate emphasis
    - Usually, limit repeats for clarity to one group at a time to avoid confusion. However, in very bad radio conditions, repeating phrases or whole lines of a message can increase the chance for correct copy
    - Example:
        - Written: Do **NOT** go in there …
        - Spoken: "Do not *I SAY AGAIN* NOT go in there …"

- **Use #2: To Correct an Error** [NTS-2.1.4.8]
    - When you recognize you have made an error, stop, say "I SAY AGAIN", go back to the last group (or proword) sent correctly, and continue, starting with that correct group or proword

    - Example:
        - Written: … please bring water …
        - Spoken: "… please water *I SAY AGAIN* please bring water …

Qualification Prowords

Qualification prowords are used to alert the receiving operator to a special quality for the character(s) that follow. They allow precise copy, such as case-sensitive information (web addresses, passwords, chemical names, etc.) or subscripts and superscripts.

- ALWAYS spoken **WITHIN** a group
- Typically, the group will have previously been identified with an Introductory Proword
- Implies that the following characters are going to be sent one character at a time, phonetically

The qualification prowords are:

- "UPPERCASE" and "LOWERCASE" *
- "SUBSCRIPT" and "SUPERSCRIPT" *

Note: * indicates an SCCo ARES/RACES enhancement because this type of content is not covered in the NTS documentation.

UPPERCASE and LOWERCASE

- Used to indicate that following characters should be copied in the appropriate case
- Used with ONE GROUP AT A TIME
- Remain in effect until the end of the group or until over-ridden by another Qualification Proword (think "caps lock")
- No default case is assumed: if you need a particular case, voice the corresponding proword

Not that case doesn't matter most of the time. In fact, some people routinely print in all capital letters. But sometimes case is absolutely critical (e.g. passwords, internet addresses).

- Examples:
  - Written: The password is pasSWOrd
  - Spoken: "The password is password *I SPELL LOWERCASE* papa alpha sierra *UPPERCASE* sierra whiskey oscar *LOWERCASE* romeo delta"

  - Written: Open the PackItForm
  - Spoken: "Open the PackItForm *I SPELL UPPERCASE* papa *LOWERCASE* alpha charlie kilo *UPPERCASE* india *LOWERCASE* tango *UPPERCASE* foxtrot *LOWERCASE* oscar romeo mike"

When in doubt, specify the case. But when case doesn't matter, avoid the extra time and complexity and ignore the case.

SUBSCRIPT and SUPERSCRIPT

- Used to indicate the following character should be written a half-line lower (SUBSCRIPT) or higher (SUPERSCRIPT) than the rest of the text, such as subscripts and mathematical exponents
- Used with one character at a time
- Does NOT remain in effect until the end of the group

Examples:

- Written: White blood cell count is 10^5
- Spoken: "white blood cell count is *FIGURES* one zero *SUPERSCRIPT* fife"

- Written: Model $XS4_{63}$
- Spoken: "model *MIXED GROUP* x-ray sierra four *SUBSCRIPT* six *SUBSCRIPT* tree"

- Written: T_{HALF} is the half life
- Spoken: "*INITIALS* tango *SUBSCRIPT* hotel *SUBSCRIPT* alpha *SUBSCRIPT* lima *SUBSCRIPT* foxtrot <pause> is the half life"

- Written: H_2O
- Spoken: *MIXED GROUP* hotel *SUBSCRIPT* two oscar

- When given a chemical symbol to send, if possible, ask the message author to provide the common English word for the chemical. If that is not possible, then use the procedure outlined above.
  - Written by message author: H_2O_2
  - Corrected by message author: ~~H_2O_2~~ Hydrogen Peroxide
  - Spoken: hydrogen peroxide (you might use I SPELL here to ensure precise copy)

Introductory Prowords

Introductory prowords alert the receiving operator to a special type of group to follow, such as initial(s), figure(s), mixed groups, or amateur call signs... i.e. things which are not normally English words.

- Always spoken **BEFORE** the relevant group(s)
- Implies that the next group is going to be sent one character at a time, letters phonetically if present

The Introductory prowords are:

- INITIAL(S)
- FIGURE(S)
- SYMBOL(S) *
- MIXED GROUP
- MIXED GROUP FIGURE(S)
- MIXED GROUP SYMBOL(S) *
- TELEPHONE FIGURES
- GPS COORDINATES *
- AMATEUR CALL
- EMAIL ADDRESS
- PACKET ADDRESS
- INTERNET ADDRESS

Note: * indicates an SCCo ARES/RACES enhancement because this type of content is not covered in the NTS documentation.

INITIAL(S) [NTS-2.1.5.3-4]

- Identifies one or more letters to follow
- Used for non-word letter groups
- Voice each letter phonetically
- Leave a pause after the last letter to help separate it from groups that follow
- Use for letter groups such as Initials, Abbreviations and Acronyms
- Is immediately followed by white space **or** a punctuation mark **. , : ; ! ?**
- Examples:
    - Written: Mr. T is here
    - Spoken: "*INITIALS* mike romeo period <pause> *INITIAL* tango <pause> is here"

    - Written: ARRL handbook
    - Spoken: "*INITIALS* alpha romeo romeo lima <pause> handbook"

    - Written: EOC credentials
    - Spoken: "*INITIALS* echo oscar charlie <pause> credentials"

- Written: First St.
- Spoken: "First <pause> *INITIALS* sierra tango period"

- Written: Fire Capt.
- Spoken: "Fire <pause> *INITIALS* charlie alpha papa tango period"

- Written: Sacramento, CA
- Spoken: "Sacramento *COMMA* <pause> *INITIALS* charlie alpha"

- Note: NTS 2.2.4.1 & 2.2.4.2 suggests saying the complete state name when state initials are written. For 3rd party messages, we will send what the originator provided and not change it.

FIGURE(S) [NTS-2.1.5.1]

- Identifies one or more numerals to follow
- Voice each digit separately
- If anything, other than a numeral is present, it becomes a MIXED GROUP, MIXED GROUP FIGURE(S), or MIXED GROUP SYMBOL(S).

- Examples:
  - Written: Send 5 dozen jelly donuts right away
  - Spoken: "Send *FIGURE* fife <pause> dozen jelly donuts right away"

  - Written: 100 containers
  - Spoken: "*FIGURES* one zero zero <pause> containers"

SYMBOL(S)

- Identifies one or more symbols to follow
- Voice each symbol separately

- Examples:
  - Written: Replace all ? with a value
  - Spoken: "Replace all <pause> *SYMBOL* question-mark <pause> with a value"

  - Written: This != that
  - Spoken: "This <pause> *SYMBOLS* exclamation-point equal-sign <pause> that"

MIXED GROUP [NTS-2.1.5.5]

- Indicates that a group containing at least two of the three types of characters (letters, numbers, symbols) will follow, beginning with a letter
- Voice each character separately, letters phonetically
- Includes amateur calls with "/…"
- Mixed groups that contain letters and symbols and are commonly pronounced like words may be better handled with *I SPELL*
    - Words containing apostrophes: they're, aren't, …
    - Hyphenated words: well-being, government-mandated, state-owned
    - Portmanteau words: PackItForms, spork, …

- Examples:
    - Written: Ford F150 truck
    - Spoken: "Ford <pause> *MIXED GROUP* foxtrot one fife zero <pause> truck"

    - Written: W6XRL4/VA
    - Spoken: "*MIXED GROUP* whiskey six x-ray romeo lima four slash victor alpha"

    - Written: high-temp (OK, but may be better voiced with *I SPELL*)
    - Spoken: "*MIXED GROUP* hotel india golf hotel hyphen tango echo mike papa"

    - Written: abc-123/$% (this is not a word, so the "-" is a "dash", not a "hyphen")
    - Spoken: "*MIXED GROUP* alpha bravo charlie dash one two tree slash dollar-sign percent-sign"

MIXED GROUP FIGURE(S) [NTS-2.1.5.6]

- Indicates that a group containing at least two of the three types of characters (letters, numbers, symbols) will follow, beginning with one (or more) number(s)
- Voice each character separately, letters phonetically

- Examples:
    - Written: 2C
    - Spoken: "*MIXED GROUP FIGURE* two charlie"

    - Written: 23/C
    - Spoken: "*MIXED GROUP FIGURES* two three slash charlie"

- Written: 146.595 simplex
- Spoken: "*MIXED GROUP FIGURES* one four six decimal fife niner fife <pause> simplex"

  Note: NTS uses the letter R to represent a decimal point within mixed figure groups. We use the decimal point or period because that is what the 3rd party message author will use and the recipient will expect.

- Written: 14,135 people
- Spoken: "*MIXED GROUP FIGURES* one four comma one tree fife <pause> people"

MIXED GROUP SYMBOL(S)

- Indicates that a group containing at least two of the three types of characters (letters, numbers, symbols) will follow, beginning with one (or more) symbol(s)
- Voice each character separately, letters phonetically

- Examples:
  - Written: -10 degrees
  - Spoken: "*MIXED GROUP SYMBOL* minus-sign one zero <pause> degrees"

  - Written: -32°F outside
  - Spoken: "*MIXED GROUP SYMBOL* minus-sign tree two degree-sign uppercase foxtrot <pause> outside"

  - Written: $32 each
  - Spoken: "*MIXED GROUP SYMBOL* dollar-sign tree two <pause> each"

  - Written: !,*2#
  - Spoken: "*MIXED GROUP SYMBOLS* exclamation-point comma asterisk two pound-sign"

TELEPHONE FIGURES [NTS-2.1.5.2]

- Identifies a telephone number to follow
- Best to request that the message author include the area code for clarity
- Use pauses between each number group to help the receiver note breaks in the number sequence. This is especially important for international or satellite telephone numbers
- Punctuation and spaces are not sent, except for the leading plus sign for international numbers.

- Examples:
  - Written: 408-555-1212, (408) 555-1212, or 408.555.1212
  - Spoken: "*TELEPHONE FIGURES* four zero eight<pause> fife fife fife <pause> one two one two"

  - Written: +8816-408-555-1212 (such as a satellite phone number)
  - Spoken: "*TELEPHONE FIGURES* plus sign eight eight one six <pause> four zero eight<pause> fife fife fife <pause> one two one two"

  - Written: Call 911 immediately or Call 9-1-1 immediately
  - Spoken: "Call *TELEPHONE FIGURES* niner one one <pause> immediately"

    Note: Since the receiving station may expect more than just three digits, you'll want to use intonation and an ample pause before voicing the next group to make sure the receiver understands clearly that 911 was the entire phone number.

GPS COORDINATES

- Identifies a set of GPS coordinates to follow
- Used when a set of numbers, written as a pair of latitude/longitude values, contain one or more of the coordinate "marker" symbols: ° (degrees), ' (minutes), " (seconds)
- N (north), S (south), E (east), W (west)
- Voice the "marker" symbols where they appear
- But don't add them, if not already part of written message.
- Voicings differ from our usual, but follow standard usage
- You may need to adjust the "5 words at a time" rule
- If the numbers look like coordinates, but doesn't contain any "marker" symbols, just send them as FIGURES or MIXED GROUP FIGURES as appropriate.

Examples:

  - Written: 41° 24.20', 2° 10.44'
  - Spoken: "*GEE-PEE-ESS COORDINATES* four one DEGREES <pause> two four decimal two zero MINUTES comma <pause> two DEGREES <pause> one zero decimal four four MINUTES"

- Written: 41°24’12.2”N 2°10’26.5”E
- Spoken: “*GEE-PEE-ESS COORDINATES* four one DEGREES <pause> two four MINUTES <pause> one two decimal two SECONDS NORTH <pause> two DEGREES <pause> one zero MINUTES <pause> two six decimal fife SECONDS EAST”

- Written: 32.30 N, 122.61 W
- Spoken: “*GEE-PEE-ESS COORDINATES* tree two decimal tree zero NORTH comma <pause> one two two decimal six one WEST”

- Written: 32.30°, -122.61°
- Spoken: “*GEE-PEE-ESS COORDINATES* tree two decimal tree zero DEGREES comma <pause> MINUS-SIGN one two two decimal six one DEGREES”

AMATEUR CALL [NTS-2.1.5.7]

- Identifies an amateur call sign to follow
- Voice each character phonetically
- Amateur calls with “/” are MIXED GROUPS (page 21)
- Example:
  - Written: W6XSC
  - Spoken: “*AMATEUR CALL* whiskey six x-ray sierra charlie”

EMAIL ADDRESS [NTS-2.2.4.6]

- Indicates an email address to follow
- Implies each character will be voiced phonetically
- Has the format of “<localpart>@<domainpart>”
  - Example: w6xrl4@w6xsc.ampr.org
- “@” is voiced “AT-SIGN”, “.” is “DOT”, “+” is “PLUS-SIGN”
- Although discouraged and rare, <localpart> may be case-sensitive
  - Example: HermanMunster@... MAY be different from hermanmunster@...
  - Use UPPERCASE and LOWERCASE when in doubt (see page 17)
  - If the message author has provided case, try to clarify, or send the case
- <domainpart> is always case-insensitive

- Examples:
  - Written: harry@aol.com
  - Spoken: "*EMAIL ADDRESS* hotel alpha romeo romeo yankee <pause> AT-SIGN <pause> alpha oscar lima <pause> DOT <pause> charlie oscar mike"

  - Written: Herman.Munster+inbox@TheMunsters.TV
  - Spoken: "*EMAIL ADDRESS UPPERCASE* hotel *LOWERCASE* echo romeo mike alpha november DOT *UPPERCASE* mike *LOWERCASE* uniform november sierra tango echo romeo PLUS-SIGN india november bravo oscar x-ray AT-SIGN tango hotel echo mike uniform november siearra tango echo romeo sierra DOT tango victor"

PACKET ADDRESS [NTS-2.2.4.6]

- Indicates a packet address to follow
- Implies each character will be voiced phonetically
- Has the format of: <callsign>@<bbscall>.#<region>.<state>.<country>.<continent>
  - Looks like an email address, except contains "#"
- "#" is voiced "POUND-SIGN"; see *EMAIL ADDRESS* for the rest

- Some parts may not be present (right to left)
  - Example: <callsign>@<bbscall>.#<region>.<state>.<country>
  - Example: <callsign>@<bbscall>.#<region>.<state>

- Packet addresses are NOT case-sensitive

- Example:
  - Written: w6xrl4@w4xsc.#nca.ca.usa.noam
  - Spoken: "*PACKET ADDRESS* whiskey six x-ray romeo lima four AT-SIGN whiskey four x-ray sierra charlie DOT POUND-SIGN november charlie alpha DOT charlie alpha dot uniform sierra alpha DOT november oscar alpha mike"

INTERNET ADDRESS [NTS-2.2.4.6]

- Indicates an internet (e.g. “web”) address follows
- Implies each character will be voiced phonetically
- Format:
  - <scheme>://<hostname>[:<port>]/<path>[?<query>]
    - https://www.google.com/
    - ftp://some.host.com:21/
    - https://www.qrz.com/db/{W6XRL4}
- Notes:
  - Scheme may not always be used
  - In some cases the “www” may not be provided
  - Everything after <hostname> is case-sensitive!

- Examples:
  - Written: https://www.scc-ares-races.org
  - Spoken: “*INTERNET ADDRESS* hotel tango tango papa sierra COLON SLASH SLASH whiskey whiskey whiskey DOT sierra charlie charlie dash alpha romeo echo sierra DASH romeo alpha charlie echo sierra DOT oscar romeo golf”

  - Written: www.scco.org/ops.html#GoKit
  - Spoken: “*INTERNET ADDRESS* whiskey whiskey whiskey DOT sierra charlie charlie oscar DOT oscar romeo golf SLASH *LOWERCASE* oscar papa sierra DOT hotel tango mike lima POUND-SIGN *UPPERCASE* golf *LOWERCASE* oscar *UPPERCASE* kilo *LOWERCASE* india tango”

  - Written: arrl.org/public-service
  - Spoken: “*INTERNET ADDRESS* alpha romeo romeo lima DOT oscar romeo golf SLASH *LOWERCASE* papa uniform bravo lima india charlie DASH sierra echo romeo victor india charlie echo”

LONG INTERNET, PACKET, OR EMAIL ADDRESSES

Some long Internet , Packet, and Email addresses may be better sent in multiple parts rather than in one long transmission. This allows the receiver to request any fills sooner and allows a repeater to reset before the time-out-timer shuts down the transmitter.

Use the procedures outlined for those addresses with the following additions.

- Announce to the receiver that the address will be sent in multiple parts. Use the appropriate Proword followed by "in multiple parts". I.E.: "Internet Address in multiple parts".
- The message sender should determine when to break the long address based on several factors.
    - Break after every 5 slashes at most
    - Break every 30 seconds at most
    - Excessively long strings of characters between slashes may require more breaks
    - Lots of case changes may require more frequent breaks
    - If possible, break the parts at a punctuation mark (dot or slash)
    - Reference guidance given for other 3rd party forms
    - If the receiver is inexperienced, the breaks may need to be more frequent
    - The sender is going to have to make the final determination using their best judgment
- The UPPERCASE/LOWERCASE prowords are sticky and apply for the entire address (group) including through multiple parts.
- When sending the end of each part, say "END OF PART" and wait for the receiver's acknowledgement or request for fills.
- At the end of the last part, say "END OF GROUP" and wait for the receiver's acknowledgement or request for fills.

- Example:
    - Written: https://www.scc-ares-races.org/operations/forms/SCCo-ARES-RACES_MM_Summary_v180705.pdf

    - Spoken: "*INTERNET ADDRESS IN MULTIPLE PARTS* <pause> hotel tango tango papa sierra *COLON SLASH SLASH* whiskey whiskey whiskey *DOT* sierra charlie charlie dash alpha romeo echo sierra *DASH* romeo alpha charlie echo sierra *DOT* oscar romeo golf" *SLASH LOWERCASE* oscar papa echo romeo alpha tango india oscar november sierra *SLASH* foxtrot oscar romeo mike sierra *SLASH <pause> END OF PART <wait for acknowledgement> UPPERCASE* sierra charlie charlie *LOWERCASE* oscar *DASH UPPERCASE* alpha romeo echo sierra *DASH* romeo alpha charlie echo sierra *UNDERSCORE* mike mike *UNDERSCORE* sierra *LOWERCASE* uniform mike mike alpha romeo yankee *UNDERSCORE* victor *FIGURES* one eight zero seven zero fife *DOT* papa delta foxtrot <pause> END OF GROUP"

Message Passing Techniques

Techniques for All Messages

Radio Techniques

- DO use only plain language
- DO use standard ITU phonetics
- DO use tactical call signs when appropriate, and identify with your FCC call sign every 10 minutes or at the end of an exchange
- DO listen for, and follow, instructions
- DO make only necessary transmissions; avoid read backs
- DO be concise
- DO follow these message passing procedures
- DO complete all communication logs and message forms clearly, concisely, and legibly
- DO ask for clarification when you can't read a message, or you don't understand something
- DO use 24-hour local time, unless instructed otherwise
- DO Transmit only facts, or information from an approved source or authority
- DO avoid transmitting personal, confidential, or sensitive information
    - E.g. names, phone numbers, patient info, body counts, etc.
- DO use standard ICS position titles, facility names, and/or tactical names
- DO pause 1 to 2 (or more!) seconds after keying up to avoid clipping
- DO leave gaps between transmissions to allow others to break in
- DO drop PTT when not speaking; avoid dead air and open mics
- DO use field numbers and option letters if the receiving station has the same version of the form(s)

Speaking Techniques

- SPEED
    - After you say each word, pretend to write it down ("ghost write") before you go on to the next word. If you are not familiar with ghost writing, refer to the Glossary found in the Reference section of the website.
    - This slows you down to a pace that the receiver can handle
- PAUSES
    - Pause between groups to provide clarity and separation
    - Pauses provide clues that something different is coming
    - Pauses aid in correct group copying, improving efficiency
- PROWORDS
    - ALWAYS use proper prowords
    - Proactively use the I SPELL proword (as appropriate) to avoid repeats

- MESSAGE NUMBER, DATE, TIME
  - When sending data in fields clearly identified as containing a Message Number, Date, or Time, the use of the appropriate Proword preceding the field data is **NOT** required.
- TELEPHONE, FAX
  - When sending data in fields clearly identified as containing a telephone or fax number, the use of "Telephone Figures" preceding the field data is **NOT** required.

Message Prioritization

- Prioritize according to handling order, date, and time
  - Handling order: Immediate, Priority, Routine
  - **Note:** ARRL Precedence: Emergency, Priority, Welfare, Routine
  - **Note:** Red Cross DWI (Disaster Welfare Inquiry) has Welfare precedence
- Use date to prioritize between the same handling order
- Use Time to prioritize between the same dates
- Ultimately, the served agency decides the order; it's their message

Announcing a Message

- Step 1: Announce quantity and handling order of messages ready to send
  - Examples
    - "Net Control, I have 2 Priority messages for you."
    - "Net Control, I have 1 Immediate and 1 Routine message for you."
  - The receiver will prioritize vs. other messages that may be waiting, then says: "go ahead" or "ready to copy."
- Step 2: If the message is a form, announce the form type and version before sending.
  - If the receiver's version is different, send using field names.
  - This lets the receiver know what's coming so they can prepare the right form
  - If the form requires a routing slip (because it doesn't contain the radio routing information fields), also include "… with Routing Slip."
  - Examples:
    - "Message type is ICS-213 version 2.3"
      - Use of the Proword "Mixed Group is not required here.
    - "Message type is Food order with Routing Slip."
  - The receiver readies the right form (and routing slip, if needed), then says: "go ahead" or "ready to copy."
- Step 3: Send the message
  - See "Sending a Message …" for details
- Step 4: Log the message
  - Log all of your communications activity on ICS 309 Communications Log
  - Shadows (and <u>only</u> Shadows) may use their ICS 214 Activity Log instead

Sending a Message to One Station

- If the receiver has the same form version as the sender, use the field number(s); if not, use field names.
- Say “Field 1 or My message number is …” followed by your message number (phonetically) to signal the start of transmission
- Say field number (or name), followed by field value
- Pass fields in logical chunks, according to the form
    - By row? By column? By section?
    - If Sender will ask the receiver has if they have the form version #the same form version as the sender, use the field number(s); if not, use field names. The version number is shown in the title box after the form name.
        - If the receiver has the correct form version, say “Go ahead, or continue”.
        - If they do not have the correct version, tell the sender. The sender will send the message using field names and not field numbers.
    - If the form has sections, and you are using field names and not field numbers, say the sectionthe section name as you enter that section
    - If receiver has the same form version as the sender, use the field number(s); if not, use field names.
    - Shoot for sending five items at a time (depending on how complicated each field is)
        - For short text fields, send up to five fields at a time
        - For longer text fields (such as the message body in an ICS-213), send five words at a time
    - All standard 3rd Party forms have a preferred field grouping for maximum efficiency. See Appendix A, Recommended Field Grouping for details.
- Pause after each group
    - This is the receiving station's opportunity to request fills.
    - Receiver responds with “Go” or “Continue” when ready for more
- Immediately after the last group is sent, say “End of message” to signal transmission is complete
    - Receiver responds with “My message number is <Their Message Number>”, followed by “<Their FCC call sign>”.
- Say “<Your FCC call sign>” to end the process
- Log the message

Sending a Message to Multiple Stations

- Announce quantity and priority of message for …
    - “All stations, all stations, stand by for one priority message.”
    - “All shelters, all shelters, stand by for one routine message.”
- [Optional] Poll for readiness of all stations
- Select a pacing station
    - “Mountain View, will you be my pacing station?”
- Not all stations may have the same form version with field numbers as the sender. You can poll all the stations to confirm they all have the correct version, or send the message using field

names. Either option will take additional time. As the sender, you need to decide what will work best based on the number and quality of stations receiving the message.

- Send the message to the pacing station (see "Sending a Message to One Station")

- Poll all other receiving stations
    - Each receiving station responds with requests for fills (if any), followed by <Their Message Number> and <Their FCC call sign>.
- Log all receiving station message numbers and call signs on the ICS-309 Message Log.

Forms Containing Signature Fields

- On forms with a signature, simply voice 'with signature' if a signature is present.
- The sender is not expected to determine what the signature reads. If someone wants to see who signed the form later, the original form will be part of the records that are turned in after the event.
- The message receiver checks the "with signature box" on the form in the signature field.

Techniques for non-standard forms

- You may be given a form that is new to you.
- First, check to see if the receiver has the form; if so, send it as trained.
- If they do not have the form, develop a process that works for you.
- Follow the process.
- Example: A Donut Ordering form
    - How does the recipient know that you're saying a field name or transmitting data?
    - Set the expectation: "I will say the word 'Field' followed by the field name, then the word 'Value' followed by the data in the field."
    - If a form will be used more than once, assign field numbers and pass the form layout first: "I will say 'Field' followed by the number, then 'Name' followed by the field name."
    - Subsequently, use the field numbers: "I'll send the message as 'Field', followed by the number, pause, then say the field value."
    - Use common procedures: 5 items (fields/groups) at a time, …
- More details and examples are provided in the Message Passing Class.

Techniques for Handling 3rd Party Messages

3rd Party Spoken Messages

- For simple verbal messages, handle verbally
  - Example: Most messages between shadows are simple, spoken messages
    - "Ask Steven to call Jenny at 867-5309"
- Use your judgement
  - IF message is longer or more complicated
    - Such as: a complicated message that needs to be delivered exactly
  - OR if it needs routing information for delivery outside the radio room
    - Such as: a message to be delivered to an ICS position in an EOC
  - OR if the message should be tracked
    - Such as: the 3rd parties may need to refer to it again
  - THEN write it down on the appropriate form; handle as a written message
- Log all 3rd party spoken messages on an ICS 309 Communications Log
  - Shadows (and <u>only</u> Shadows) can log on their ICS 214 Unit Activity log

3rd Party Written Messages

- 3rd party written messages always use an appropriate form
  - General messages on ICS 213; others on the appropriate form type.
- If the message is not on the appropriate form:
  - Best: Ask the author to use the correct form
    - If they don't have one, provide it to them
  - Next best: Transcribe the message to the form, asking the author to clarify as you go
    - Clarify spelling, other details
  - Worst case: Staple original to the new form only if necessary
- If given a form without radio routing information, use a Radio Routing Slip
  - Radio routing info: message numbers, date, time, to/from position/location, operator info
- If the handling order, to location, or to position is unknown, use the Recommended Form Routing Sheet as a guide. It is a guide to help the served agency choose, not to override them. The served agency has the final say.
- The basic process of passing the message is the same, regardless of form
  - Generally, left to right, top to bottom
  - Group fields in the same section together
  - For message text, send five groups at a time. If some groups are extra-long or complicated, send the approximate equivalent of 5 groups at a time.
  - On forms with multiple short fields, send several fields at one time to approximate 5 groups. A long internet address or GPS Coordinate may be considered equivalent to 5 groups.
  - Some forms may have a specific technique

Techniques for Sending Forms with Field Numbers

- If the form has field numbers, that is the preferred way of sending the form contents.
- Using Field Numbers results in:
  - Faster message sending and receiving
  - Less chance of confusion with long or unclear field names
  - Reduced chance of errors
- Query the receiving station to confirm they have the same form version as the sender; DO NOT assume they do. The version number is found at the top of the form in the title block.

Notable Report 1.1 **Situation Report 1.1**

- All fields have been assigned numbers
- Numbers jump to the next tens sequence at each section
- Voice every field that has a value in it, in numeric order from top to bottom. Never voice empty fields.
- Field numbers are voiced as English cardinal numbers, not digits. Example: "field twentythree", not "field two three".
- Voice each field as "Field «number», «value»," with a pause between the field number and the value.
- If there is a letter suffix as part of the field number, voice that phonetically with no pause between them. Example: "field thirtyone-alpha“, «value», “field thirtyone-delta, No”

Item 1	31a. Item Name:	31b. Quantity Requested:
	31c. Description:	
	31d. Includes Items for Demobilization? ○ Yes ◉ No	

- Some fields with options have been assigned letters. Note: circles are single-select while boxes are multi-select.
- Fields with multiple selections are read with just the phonetic letter(s) of the selected option(s). No prowords are used.
  - Examples:
    "Field twentyfour, charlie“
    "Field twentysix, alpha and delta“

24. Type: (multi-select)	☐ a. Congregate	■ c. Temporary Evacuation Point	☐ e. Large Animals
	☐ b. Non-Congregate	☐ d. Pets Accepted	

26. Resources: (multi-select)	■ a. Warming Center	☐ c. Food & Drink
	☐ b. Cooling Center	■ d. Charging Stations

.

- Some fields with simple one-word options have no letter. Say the field number followed the one-word option. Example: “Field 5, Routine”

- If a field contains a written signature or has the "with signature" box checked, voice it as "«field number», with signature.” Example: “Field 52, with signature”.

- Fields with "Message #" in the name are read without the initial proword "mixed group".
- Fields with "Date" or "Time" in the name are read without the initial proword "mixed group figures".
- Fields with "Phone" or "Fax" in the name are read without the initial proword "telephone figures".
- In all other cases, prowords are used when needed: figure(s), mixed group, mixed group (figures/symbols), email address, I spell, etc.
- Fields with numeric values in the field must be voiced with the Proword “figure” or “figures”.
- Standard Field Grouping applies. After that, transmissions are split up based on the number of groups in the field values:
    - Any field with three or more groups in its value should be transmitted by itself. (if it has more than five groups, it will be multiple transmissions, five groups in each. Use you best judgment.)
    - Always start a new transmission when you change pages of the form; tell the receiver the page number on the form.

Form Specific Issues with Field Numbers

Notable Report

- Field 34 is a multiple-choice field whose choices are numbered rather than lettered. Voice both the field number and the choice as cardinal numbers, with a pause between them for clarity. "Field thirtyfour, thirteen."

34. Event Type:

○ 1: Transportation	○ 8: Public Health and Medical	○ 15: Public Information
○ 2: Communications	○ 9: Search and Rescue	○ 16: Animal Services
○ 3: Construction and Engineering	○ 10: Hazardous Materials Response	○ 17: Volunteer Management
○ 4: Fire and Rescue	○ 11: Food and Agriculture	○ 18: Cyber Security
○ 5: Management	○ 12: Utilities	○ 19: Donations Management
○ 6: Care and Shelter	● 13: Law Enforcement	○ 20: Continuity of Operations/Government
○ 7: Resources	○ 14: Recovery	

RACES Mutual Aid Request

- Fields 23c. through 27c. have both a value and a checkbox. If the box is checked, voice that as the word "checked" after a pause. Example: "Field twentythree-charlie, Command Net, checked".
- Transmit only page one, even if there are entries on the 2nd page. (There shouldn't be, page two is for use by the County EOC.)

	Qty.	Role	Position	Pref. Type	Min. Type
23.	a. 1	b. Net Control Opera	c. Command Net ☑	d. N2	e. N3
24.	a.	b.	c. ☐	d.	e.
25.	a.	b.	c. ☐	d.	e.
26.	a.	b.	c. ☐	d.	e.
27.	a.	b.	c. ☐	d.	e.

Resource Request

- The Comment section has no field number. Voice it with the field name “Comments”.

APPENDIX A - Recommended Field Grouping

Some commonly used forms have preferred field groupings for maximum efficiency. Send all the fields in the group and wait for the receiver to acknowledge before sending the next group.

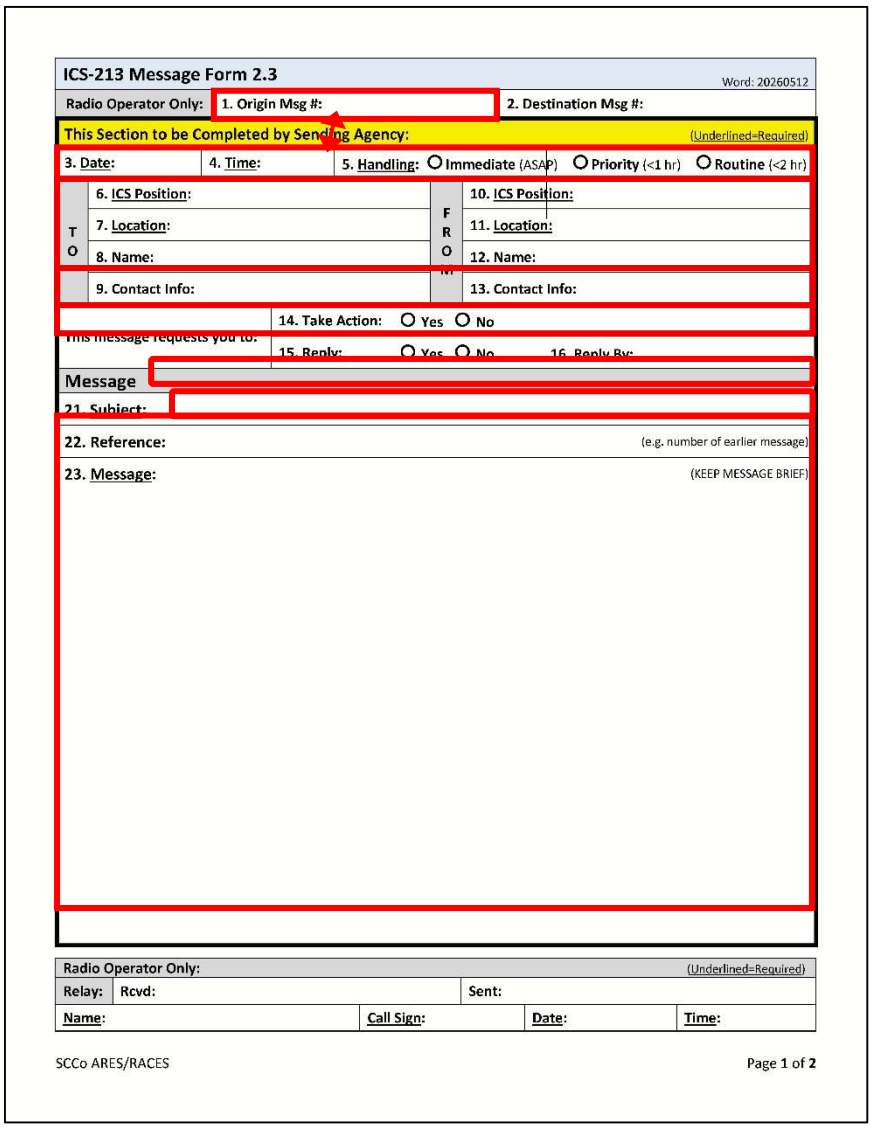
ICS 213 Message Form

Recommended field groupings

- Message Nbr, Date, Time, Handling,
- To, From
- Message Requests (Take Action / Reply)
- Subject
- Reference (if present)
- Message – 5 groups at a time

Record the Destination Station's Message Number in Field 2.

Remember to fill out the Operator Use Only at the bottom of the page.



ICS-213 Message Form 2.3 Word: 20260512

Radio Operator Only: 1. Origin Msg #: 2. Destination Msg #:

This Section to be Completed by Sending Agency: (Underlined=Required)

3. Date: 4. Time: 5. Handling: Immediate (ASAP) Priority (<1 hr) Routine (<2 hr)

TO		FROM	
	6. ICS Position:		10. ICS Position:
	7. Location:		11. Location:
	8. Name:		12. Name:
	9. Contact Info:		13. Contact Info:

14. Take Action: Yes No

This message requests you to: 15. Reply: Yes No 16. Reply By:

Message

21. Subject:

22. Reference: (e.g. number of earlier message)

23. Message: (KEEP MESSAGE BRIEF)

Radio Operator Only: (Underlined=Required)

Relay:	Rcvd:	Sent:	
Name:	Call Sign:	Date:	Time:

SCCo ARES/RACES Page 1 of 2

Common Forms

All the forms listed here are similar in layout and will follow the same procedures listed below.

Recommended field groupings

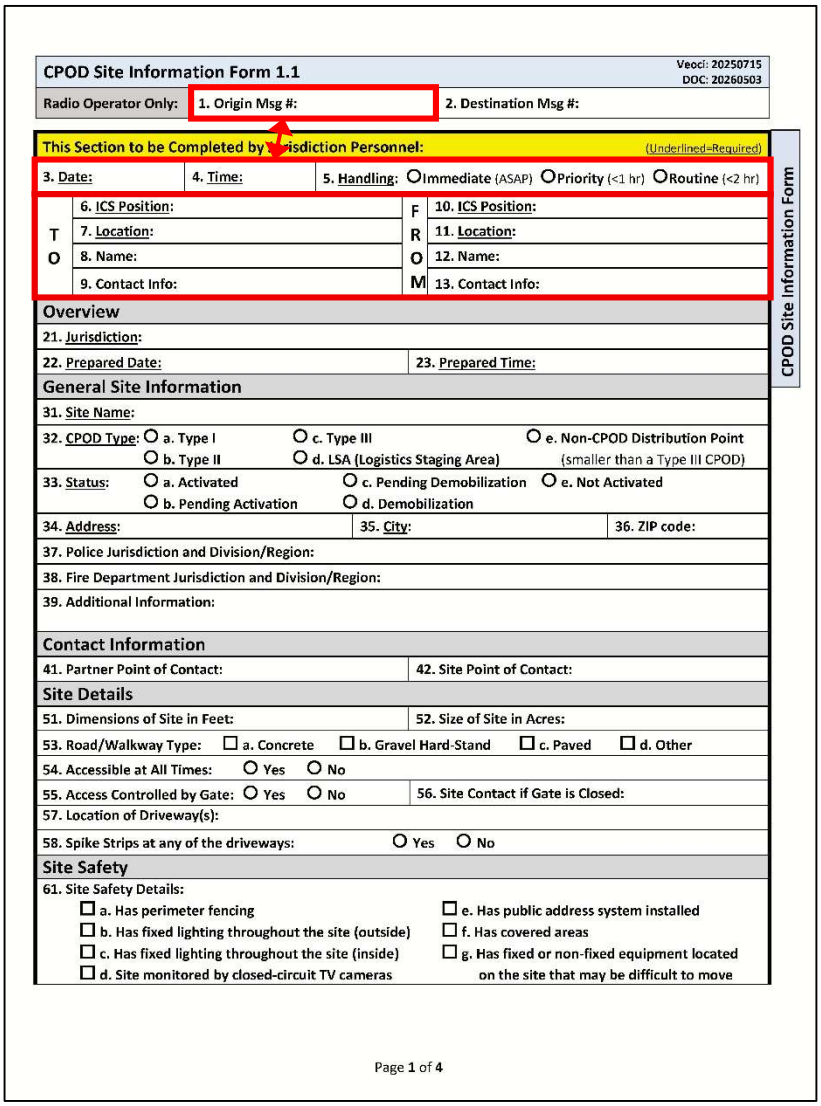
- Say field numbers(s) and value(s) based on these field groupings
- Msg Nbr, Date, Time, HandingHandling
- To and From
- Shoot for about 5 items (fields/groups) at a time
- Skip empty fields & sections
- If using a multi-page form, give page
  - Number at the start of each page
- Record Destination Station's Message Number in Field 2.
- Remember to fill out the Operator Use Only section at the bottom of the form.

Common Forms

- CPOD Site Information (2 or 3 pages)
- CPOD Commodities Update
- Damage Assessment
- Notable Report
- RACES Mutual Aid Request
- Resource Request (1 or 2 pages)
- Road Closure
- Shelter
- Situation Report (3 pages)
- Windshield Survey

Medical Forms

- Allied Health Facility Status Report
- HAvBed Report
- Hospital Status



CPOD Site Information Form 1.1 — Veoci: 20250715 DOC: 20260503

Radio Operator Only: 1. Origin Msg #: 2. Destination Msg #:

This Section to be Completed by Jurisdiction Personnel: (Underlined=Required)

3. Date: 4. Time: 5. Handling: O Immediate (ASAP) O Priority (<1 hr) O Routine (<2 hr)

TO: 6. ICS Position: 7. Location: 8. Name: 9. Contact Info:

FROM: 10. ICS Position: 11. Location: 12. Name: 13. Contact Info:

Overview

21. Jurisdiction:

22. Prepared Date: 23. Prepared Time:

General Site Information

31. Site Name:

32. CPOD Type: O a. Type I O b. Type II O c. Type III O d. LSA (Logistics Staging Area) O e. Non-CPOD Distribution Point (smaller than a Type III CPOD)

33. Status: O a. Activated O b. Pending Activation O c. Pending Demobilization O d. Demobilization O e. Not Activated

34. Address: 35. City: 36. ZIP code:

37. Police Jurisdiction and Division/Region:

38. Fire Department Jurisdiction and Division/Region:

39. Additional Information:

Contact Information

41. Partner Point of Contact: 42. Site Point of Contact:

Site Details

51. Dimensions of Site in Feet: 52. Size of Site in Acres:

53. Road/Walkway Type: ☐ a. Concrete ☐ b. Gravel Hard-Stand ☐ c. Paved ☐ d. Other

54. Accessible at All Times: O Yes O No

55. Access Controlled by Gate: O Yes O No 56. Site Contact if Gate is Closed:

57. Location of Driveway(s):

58. Spike Strips at any of the driveways: O Yes O No

Site Safety

61. Site Safety Details:
☐ a. Has perimeter fencing
☐ b. Has fixed lighting throughout the site (outside)
☐ c. Has fixed lighting throughout the site (inside)
☐ d. Site monitored by closed-circuit TV cameras
☐ e. Has public address system installed
☐ f. Has covered areas
☐ g. Has fixed or non-fixed equipment located on the site that may be difficult to move

Page 1 of 4

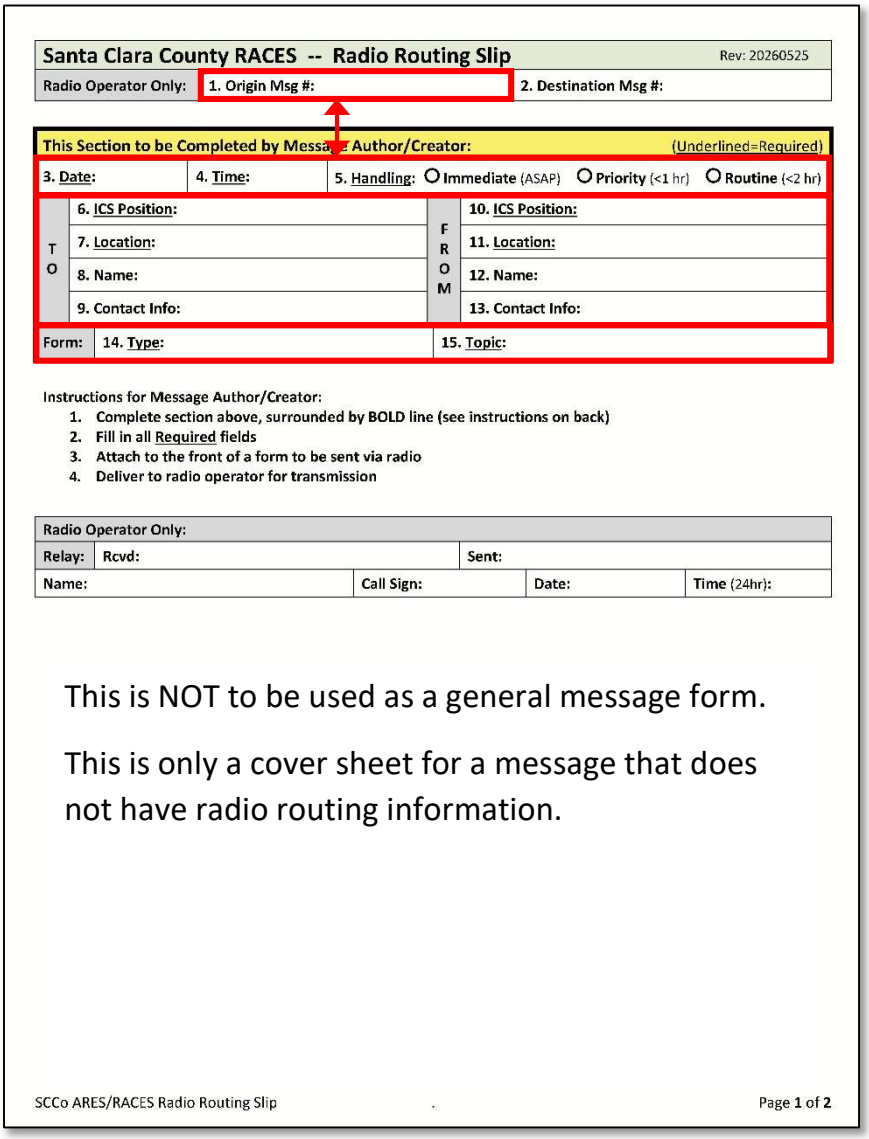
CPOD Site Information form shown as an example

Radio Routing Slip

This form is only used as a cover sheet for message forms that do not have radio routing information, such as message number, data, time, handling, and To/From addresses

Recommended field groupings

- Message Nbr, Date, Time, Handling
- To, From
- Form Type, Topic
- Then say, "form contents" and start sending the form
- Use the standard procedures that apply to all forms
- Record the Origin Stations Message Number on the top right-hand corner of the attached message form and in Field 2 of the Routing Slip.
- Remember to fill out the Operator Use Only area at the end of the form.



Santa Clara County RACES -- Radio Routing Slip Rev: 20260525

Radio Operator Only:	1. Origin Msg #:	2. Destination Msg #:

This Section to be Completed by Message Author/Creator:			(Underlined=Required)
3. Date:	4. Time:	5. Handling: ○ Immediate (ASAP)	○ Priority (<1 hr) ○ Routine (<2 hr)

TO	6. ICS Position:	FROM	10. ICS Position:
	7. Location:		11. Location:
	8. Name:		12. Name:
	9. Contact Info:		13. Contact Info:
Form:	14. Type:		15. Topic:

Instructions for Message Author/Creator:
1. Complete section above, surrounded by BOLD line (see instructions on back)
2. Fill in all Required fields
3. Attach to the front of a form to be sent via radio
4. Deliver to radio operator for transmission

Radio Operator Only:			
Relay:	Rcvd:	Sent:	
Name:	Call Sign:	Date:	Time (24hr):

This is NOT to be used as a general message form.

This is only a cover sheet for a message that does not have radio routing information.

SCCo ARES/RACES Radio Routing Slip Page 1 of 2

APPENDIX B - Summary of Prowords Used in Message Passing

Control Prowords

Define the start, end, or control the flow of the message.

MESSAGE NUMBER (deprecated)
ROGER
BREAK
STAND BY
CONTINUE or GO
NEWLINE
END OF MESSAGE or MESSAGE ENDS
SAY AGAIN or SPELL (PHONETICALLY)

Clarification Prowords

Always spoken <u>AFTER</u> a group. Clarifies or emphasizes what was just said .

I SPELL
I SAY AGAIN

Qualification prowords

Always spoken <u>WITHIN</u> a group. Defines a quality to allow precise copy.

UPPERCASE and LOWERCASE
SUBSCRIPT and SUPERSCRIPT

Introductory Prowords

Always spoken <u>BEFORE</u> a group. Alerts receiving operator to what is coming next.

INITIAL(S)
FIGURE(S)
SYMBOL(S)
MIXED GROUP, MIXED GROUP FIGURE(S), MIXED GROUP SYMBOL(S)
TELEPHONE FIGURES
GPS COORDIANTES
AMATEUR CALL
EMAIL ADDRESS
PACKET ADDRESS
INTERNET ADDRESS

It is important to use each proword in the right place (before, inside, or after a group) to avoid confusing the receiving station and slowing down the message transfer.

Summary of Changes

Page #	Topic	Summary
Various. See Change Bars	Field Numbers	Updated several pages to address the use of field numbers on forms.
32 - 34	Field Numbers	New section on how to send field numbers over voice.
Appendix A	Field Numbers, Medical forms	Updated to incorporate forms with field numbers. Added the list of Medical Forms.