

872 KANATA AIR CADET SQUADRON
COMMANDING OFFICER'S DIRECTIVE – 12/03

872 SQUADRON RADIO COMMUNICATIONS AND VOICE PROCEDURE (VP)

PREAMBLE

1. The 872 Sqn radio net is a convenient and efficient way to communicate. More importantly, the radio net has proven to be a great asset in terms of the safety and wellbeing of all Sqn members. Each member issued with a radio must therefore ensure that this safety asset is not diminished by useless chatter and needlessly confusing words and phrases. To do otherwise is disrespectful and dangerous.

2. All senior Cadets and Staff members must therefore become familiar with the voice procedure (VP) described below. VP has been developed ever since the Morse code was replaced by voice transmission. The VP described below is used by the Canadian Forces and by most NATO nations when English is used. There are variations of this VP used in specific military operations such as sea operations, air operations, covert operations and military police operations. The fundamentals however, remain the same although some prowords, codes, etc must change by necessity. If you learn the VP below, adapting to, for example, the civil aviation service VP, maritime service VP, civilian emergency response service VP will be easy and not intimidating at all.

GENERAL

3. Several radio stations communicating on the same frequency is called a "Radio Net". Since 872 Sqn is an English Language Sqn, the language to be used on the 872 Sqn Net is English.

4. The 872 Sqn Radio Communication Net will be called: 872 Sqn Command and Safety Net.

5. The members of 872 Sqn often use radiotelephone equipment (usually GMRS / FRS type walkie-talkies) that operate at 462 MHz: 462.5625 to 462.7250 MHz. The channel to be used is 7-11, an FRS channel, at 1 watt output. This type of radio equipment is designed for line of sight transmission. While the RF (radio frequency) signal will penetrate soft objects such as wood, brush, falling rain and snow, this type of RF signal is not as useful where there are mountains, rock outcroppings, etc, to block the signal.

6. The RF signal produced by GMRS / FRS radios is not very powerful and the radios depend on very sensitive receivers to get the maximum range. NEVER transmit a signal within ten feet of another radio. If this is done, it is likely that the receiver station will be over loaded and will most likely cease to operate.

7. A Radio Net needs one station to supervise and to monitor communications. The 872 Sqn net has used the Call Sign "CONTROL" for this station for several years. The CONTROL station must be monitored by a Staff member or a senior Cadet.

8. Approved by the Commanding Officer on 24 Oct 2012.

ANNEX A to COMMANDING OFFICER'S DIRECTIVE – 12/03

872 SQN VOICE PROCEDURE

1. What is Voice procedure (VP)?

VP includes various techniques used to clarify, simplify and standardize the communications on radio nets. VP is used by the military, maritime /air service, civilian emergency response service, etc.

VP maximizes clarity of spoken communication and reduces misunderstanding. The military of the NATO countries have similar VP in order to make cooperation easier. On the other hand, some elements of police codes are not necessarily standardized even within the same jurisdiction and using the less familiar codes can defeat the purpose of good communication. Therefore, do not use 10 codes or other forms of jargon on the 872 Sqn Command and Safety Net.

2. Why is VP used?

VP is used for:

- Clarity
- Brevity
- Simplicity

In the military, VP also facilitates,

- Trainability
- Security
- Interoperability i.e., NATO, NORAD, etc.

3. Call signs

Each radio in the 872 Sqn Command and Safety Net must be identified when it uses the net. Since each radio is mobile, the call sign used will be the name of the member using the radio.

Because the members in key positions change so often in 872 Sqn, it has become the custom to use the members' names as Call Signs. If there is more than one member with the same name, then the rank is also used. If there are three or more members with the same name, the initial will also be used for example: BLOGGINS, Sgt BLOGGINS and Sgt BLOGGINS DELTA.

Call signs:

- a. must be prearranged
- b. must be adhered to and not changed
- c. must be used even when it seems silly to do so.

4. Phonetic Alphabet and Phonetic Numbers

Just as in normal conversations, when someone has difficulty understanding an unfamiliar word or name, the best way to get it across is to spell it.

Therefore the only difference over a two-way radio system is that these words are spelt phonetically to avoid confusion. The Phonetic Alphabet and Phonetic Numbers follow:

A	ALPHA	N	NOVEMBER
B	BRAVO	O	OSCAR
C	CHARLIE	P	PAPA
D	DELTA	Q	QUEBEC
E	ECHO	R	ROMEO
F	FOXTROT	S	SIERRA
G	GOLF	T	TANGO
H	HOTEL	U	UNIFORM
I	INDIA	V	VICTOR
J	JULIET	W	WHISKEY
K	KILO	X	XRAY
L	LIMA	Y	YANKEE
M	MIKE	Z	ZULU

Numbers are said this way:

0	<u>Z</u> E RO
1	WUN
2	TOO
3	TREE
4	<u>F</u> OW ER
5	FIFE
6	SIX
7	<u>S</u> EV EN
8	AIT
9	<u>N</u> IN ER

5. Times, dates and numbers,

Times

a. time is expressed as a 24 hour system and in four number groups.

Therefore:

-15 minutes passed midnight is 0015 hrs;

-1:45 PM is 1345 hrs

-12 o'clock can be 1200 hrs or 0000 hrs

- half passed 12 can be either 0030 hrs or 1230 hrs.

Dates

b. dates are usually expressed as day, month, year.

Therefore: Christmas this year will be on: 25 Dec 12 said as:
two Five December one two.

Numbers

- c. numbers are said using the phonetic numbers above
- 96 Cadets is said as, "niner six Cadets".
- 100 is said as, "Wun Hundred".
- 1000 is said as, "Wun Thousand".
- Therefore 2196 is said as, "Too Thousand Wun Hundred niner six".

6. Voice control

The necessity for clear speech on two-way radio cannot be over emphasized.
Therefore the RSVP system should be used to enhance better voice procedure and technique.

R	RHYTHM	Adequate pauses.
S	SPEED	Slower than usual conversation.
V	VOLUME	Speak directly into the microphone.
P	PITCH	the voice should be pitched at a higher level than for normal conversation *.

* Strangely enough, this seems to happen automatically!

7. VP Discipline

Radio discipline is the responsibility of every user. Users should adhere to the following:

- Listen before you speak so you don't interrupt an ongoing conversation
- Ensure that Priority calls are not interrupted
- Use correct voice procedure
- Maintain constant radio watch
- Answer all calls promptly
- Be brief and to the point and keep the airways free of unnecessary talk
- Remember...everyone is listening

8. Call Format

- a. Always say who you calling first.
- b. Always say who you are by using the Proword THIS IS. Each station will say who they are before speaking every time they transmit and will use the Proword OVER at the end of every transmission.
- c. Usually, the station that starts the conversation will end it by using the Proword OUT.

Sample call. Here CONTROL is calling Bloggins.

Bloggins, this is CONTROL, OVER

Bloggins, OVER

CONTROL, do you know where the spare batteries for the loudspeaker are kept, OVER

Bloggins, they are in the Mess Hall in the boxes with the radio equipment, OVER.

CONTROL, thank you, OUT

9. SIGNAL REPORTING (Radio Check)

Whenever a radio check call is made the receiving station needs to inform the other station making the request how the receiving signal is being heard. To do this the following scale should be used:

SIGNAL STRENGTH (Loudness)

- | | |
|---|---------------------------|
| 1 | Faint signals |
| 2 | Weak signals |
| 3 | Good signals |
| 4 | Moderately strong signals |
| 5 | Extremely strong signals |

READABILITY (Clarity)

- | | |
|---|---|
| 1 | Unreadable. |
| 2 | Barely readable some words now & then. |
| 3 | Readable with considerable difficulty. |
| 4 | Readable with practically no difficulty |
| 5 | Perfectly readable |

Sample call. Here SMITH is calling BLOGGINS for a Radio Check

Bloggins, this is Smith, RADIO CHECK, OVER
Bloggins, 5 by 5 OVER (or 3 by 4, etc)
Smith, ROGER. OUT

If signal is loud and clear, often only a ROGER OVER is sent as a reply.
Bloggins, this is Smith, RADIO CHECK, OVER.
Smith, Roger, OVER
Bloggins, OUT

10. Call types

-ROUTINE call. The normal, ordinary call. See para 8.

-SECURITY call. The Proword "SECURITÉ" — Repeated three times at the start and at the end of each SECURITY call. Has priority over ROUTINE calls. SECURITY calls are usually sent to ALL STATIONS.

Sample SECURITY call
SECURITÉ-SECURITÉ-SECURITÉ
ALL STATIONS, ALL STATIONS, ALL STATIONS
This is CONTROL

Anyone using the air compressor to clean vehicles must not use a pressure higher than 40 lbs until the high pressure hose has been repaired.

SECURITÉ-SECURITÉ-SECURITÉ
CONTROL, OUT

-URGENCY call. Proword "PAN-PAN" — Repeated three times at the start and at the end of each URGENCY call. Has priority over SECURITY calls. URGENCY calls are usually sent to a specific group of listeners.

Sample URGENCY call

PAN-PAN, PAN-PAN, PAN-PAN

All Water bombers, All Water bombers, All Water bombers.

This is TIMMINS CENTRE

Lightning and wind burst with possible micro bursts reported in area of Star Lake.

All Water bombers must land immediately at Star Lake Base or at Ivanhoe Lake Base and remain on ground until further orders.

PAN-PAN, PAN-PAN, PAN-PAN

TIMMINS CENTRE, OUT

-EMERGENCY OR DISTRESS call. PROWORD "MAYDAY" — Repeated three times at the start and at the end of each EMERGENCY OR DISTRESS call. Has priority over all other calls. MAYDAY comes from the French words "M'aider" meaning, "Help me". EMERGENCY OR DISTRESS calls are always sent to everyone on the net.

Sample EMERGENCY OR DISTRESS call

MAYDAY-MAYDAY-MAYDAY

This is Jones

A tree has fallen on three Cadets near the central fire pit. We need help immediately.

MAYDAY-MAYDAY-MAYDAY

Jones, OVER

At this point, Jones listens to the radio for responses. If there are none, Jones sends out the MAYDAY call again and coordinates the incident until someone else (usually CONTROL) can take over the situation.

The answer to the sample MAYDAY CALL should sound like this.

MAYDAY-MAYDAY-MAYDAY

This is CONTROL

All Staff report to the Fire pit immediately.

CONTROL will bring the First Aid Kit.

Smith will remain on radio watch near the telephone in the mess hall.

MAYDAY-MAYDAY-MAYDAY

This is CONTROL, OVER

All stations that are not involved stay off the air until the station that sent the MAYDAY call (or the CONTROL station) terminates the MAYDAY traffic, this way:

Sample EMERGENCY OR DISTRESS termination call

ALL STATIONS, ALL STATIONS, ALL STATIONS.

This is CONTROL

MAYDAY FINI-MAYDAY FINI-MAYDAY FINI

CONTROL OUT

Types of calls –

Note 1

In many circumstances, a ROUTINE call can get help and start the emergency process. The advantages of a MAYDAY call (when needed) is that all ordinary traffic stops and the sender controls the net as required. In each such case, the decision regarding the type of call to use is a judgment call.

Note 2

If you are using the net and a higher priority call is received (SECURITY, URGENCY, EMERGENCY OR DISTRESS), your transmission terminates until that higher priority call is completed and you listen to the higher priority traffic to see if you can be of assistance.

ANNEX B to COMMANDING OFFICER'S DIRECTIVE – 12/03

PROWORDS or Procedural words

PROWORDS written in Highlight Bold / Italics are Executive PROWORDS.

ALL AFTER	I refer to all that was said after, as in, "please say again ALL AFTER Travel details"
ALL BEFORE	I refer to all that was said before, as in, "please say again ALL BEFORE refer questions to"
CALL SIGN	When a call sign is used to refer to an individual who is not actually being called, as in, "have you seen CALL SIGN Bloggins? OVER ".
CORRECT	You are correct, or what you have transmitted is correct.
CORRECTION	An error has been made in this transmission. Transmission will continue with the last word correctly transmitted as in, "we are leaving at 1400 hrs, CORRECTION 1500 hrs".
DISREGARD THIS TRANSMISSION -- OUT	This transmission is in error. Disregard it. This PROWORD shall not be used to cancel any message that has been completely transmitted. Example. "all Flights are to send one member to the mess hall to pick up... DISREGARD THIS TRANSMISSION -- OUT
DO NOT ANSWER (said twice)	Stations called are not to answer this call, or otherwise to transmit in connection with this transmission. When this PROWORD is employed, the transmission shall be ended with the PROWORD "OUT". Example. All stations, All stations, All stations, DO NOT ANSWER, DO NOT ANSWER. This is CONTROL Night EX is now terminated. OUT
FROM	This request or order comes FROM or this message is relayed FROM. Example. Pelletier, this is CONTROL. Message FROM CO, OVER
LAST	Refers to last message. Example. Bloggins this is Pelletier. Cancel my last. Out. Can be used as a request. Example. Bloggins, This is CONTROL SEND again your last, OUT

MAYDAY (said three times)	Said three times at beginning and at end of transmission which ends with OVER . This means that the message that follows is critical and that life and death may hang in the balance. See Annex A.
MAYDAY FINI (PRONOUNCED FEENEE) (said three times)	This PROWORD is used to tell stations that the MAYDAY situation is terminated. See Annex A.
NO DUFF (said three times)	Means that the subject discussed is real and not part of an exercise, not part of a lesson. Example. NO DUFF-NO DUFF-NO DUFF CONTROL this is Bloggins. We need a first aid kit at cabin five, OVER .
NOTHING HEARD. OUT	Used when the station being called is not heard by the calling station. Example. Bloggins this is CONTROL, OVER . Bloggins this is CONTROL, OVER . Bloggins this is CONTROL, NOTHING HEARD, OUT
OUT	This is the end of my transmission to you and no answer is required or expected.
OVER	This is the end of my transmission to you and a response is necessary. Go ahead, transmit.
PAN- PAN (said three times)	Said three times at beginning and at end of transmission which ends with OUT . Means an urgency transmission follows. See Annex A.
RADIO CHECK	RADIO CHECK is a request for an indication of my radio signal. See Annex A.
RELAY TO or RELAY FROM or Relay THROUGH ME	Used when one station cannot hear the intended receiving station but another station hears them both and can relay the message. Bloggins, Smith, this is Jones RELAY THROUGH ME, OVER
ROGER or ROGER	I have received your last transmission satisfactorily and understand it. Can also be an Executive PROWORD, when a receipt confirmation is requested. Example. Bloggins, this is Control. ROGER my last, OVER
SAY AGAIN or I SAY AGAIN	A request to say again a portion of a last transmission. Followed by what needs to be said again. Example. SAY AGAIN departure time. As a response, I SAY AGAIN departure time.

	NOTE. The word "repeat" on a military net is an executive order to "fire" or to launch weapons. "Repeat" is never used instead of SAY AGAIN .
SEND	Used when a station receives two calls and wants to specify which caller should reply or SEND first. Usually combined with OVER . Example. CONTROL this is Bloggins, OVER . CONTROL this is Smith, OVER. Smith, this is CONTROL, SEND OVER . The second caller waits his/her turn
SILENCE (PRONOUNCED SEELONCE) (said three times)	Cease transmission on this net immediately. Silence will be maintained until lifted by the station that imposed it. Example. ALL STATIONS ALL STATIONS ALL STATIONS This is CONTROL. SILENCE SILENCE SILENCE CONTROL, OUT
SILENCE FINI (Pronounced SEELONCE FEENEE) (said three times)	Silence is lifted. You can now transmit again. Example. ALL STATIONS ALL STATIONS ALL STATIONS This is CONTROL. SILENCE FINI SILENCE FINI SILENCE FINI CONTROL, OUT
SPEAK SLOWER	Your transmission is at too fast a speed. Reduce speed of transmission.
SPELL or I SPELL	SPELL this or that word is a request for you to spell a word phonetically. "I SPELL" means that I shall spell the next word.
THIS IS	This transmission is from the station whose CALL SIGN immediately follows. When the call signs are very well known, these prowords are not needed. Example. Range, this is CONTROL, OVER Becomes. Range, Control, OVER
TIME	This proword tells listeners that the next numbers will be a time. Time is 0234 hrs
STANDBY	STANDBY, OVER means a short wait – (seconds) STANDBY, OUT means a longer wait – (minutes).
STATION CALLING	Used when calling station is not known. If the calling station is known, then this PROWORD is not used. Example. Station calling Jones, this is Jones, OVER .
VERIFY or I VERIFY	VERIFY is used to ensure that the last piece of info is correct. I VERIFY is used only as a

	reply to VERIFY . Smith, this is CONTROL, VERIFY your last position. OVER . Smith, I VERIFY my last position as check point 12, OVER . CONTROL, ROGER, OUT
WAIT--OVER	Wait a moment, I must pause for a few seconds
WAIT -- OUT	Wait a while; I must pause longer than a few seconds.
WILCO	I have received your last transmission satisfactorily and understand it and "will comply". To be used only by the receiver. Since the meaning of ROGER is included in that of WILCO , the two PROWORDS are never used together. Bloggins, this is CONTROL. Bring your group to the fire pit. OVER Bloggins, WILCO, OUT
WORDS TWICE (said twice)	Communication is difficult. Transmit each phrase twice. This PROWORD may be used as an order, request or as an intention. Bloggins, this is CONTROL, WORDS TWICE , WORDS TWICE , OVER
WRONG	Your last transmission was incorrect. The correct version follows. Jones this is Smith, the lecture ends at 1400 hrs, OVER Smith, WRONG, the lecture ends at 1430 hrs OVER