

RT0 SOP



Department of the UNSC

1st Marine Expeditionary Unit

5th Regiment, 1st Battalion

S-4 Training Department & Signal Command

INTRODUCTION

Welcome to the RT0 training course. This SOP hopes to guide you through **RT0 Basic** for NCOs, Vulcan and Zeuses, as well as **RT0 Full Qual** for billeted RT0s and Pegasus.

Rules

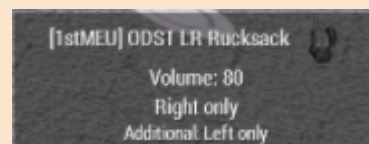
Any breach in these behavior guidelines may result in revocation of the qualification, blacklisting from the qualification, and further disciplinary action.

- Every member of the 1st is to uphold the rules and regulations of the SOP and the [1st MEU Communications Doctrine](#).
- Usage of banned equipment is strictly forbidden.
- Usage of multiple MOS's (e.g RTO and Anti-Tank) is strictly forbidden. (Battle requisition is an exemption).
- All members are to follow the [1st MEU Uniform Guide](#).

SETTING UP



To begin, set up your Main Frequency (50 for the purposes of training) as an additional. This can be done by pressing the **ERF OFST** key on the LR Pack and is used to allow multiple nets to be monitored and utilised at once. The instructor will provide you with information on how to establish the remainder of your nets, and how to adjust the **STEREO** and **SPEAKER** settings.



LONG RANGE CHANNELS

A list of commonly used LR channels in the 1st MEU.

Platoon Nets: 51-56	These nets are used by Platoons primarily for communication between Squad and Platoon elements. PLT HQ will relay orders, request SITREPs and answer questions on these nets.
Ground to Support Frequency: 60	This net is standard across the 1st MEU, used for communicating with support elements in operations, usually to request a service (i.e resupplies, extracts, firemissions)
Air to Air Frequency: 35	Aviators use this channel to send messages/information to other pilots within operations. Only Pegasus staff are permitted on this channel.
Vehicle to Vehicle Frequency: 75	Used by vehicle crews within Vulcan to coordinate movement within operations.

Ground Tasking Frequencies: 60.X (Cobranets)	Used as a side channel for communication with a select number of individuals to avoid heavy chatter on main nets. Primarily utilised for firemissions or direct conversation with a pilot. Normally squads will individually be assigned a cobranet prior to the operation or use a known one within their platoon. Exemplar: 2-1 - 60.1 2-2 - 60.2 2-3 - 60.3 2-R - 60.4 Ground Tasking Frequencies are also called Cobranets or Vipernets
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TACTICAL COMMUNICATION

Over and Out	Strictly Forbidden.
Repeat Last	Requesting Aviation or Artillery elements to repeat their last firemission. Never say “repeat last” when asking a callsign to relay a previous message.
Danger Close	Used to advise firemission assets of a risk to friendly forces. When calling in a firemission that is within 300m of BLUFOR it is considered DANGER CLOSE .
Copy/Solid Copy	Shows acknowledgement to orders.
Roger	I understand what you said.
Affirm	Shows Agreement or simply means *yes*.
Wilco	A shortened word meaning “Will comply with previous orders”.
Disregard Last	Explains to the previous callsign to disregard the last transmitted message of a user.
Stand by	A phrase that alerts people to wait.
Be Advised	Used as a prefix of a message in which the contents is of high importance.
Break	A phrase indicating a pause in the message, commonly used to separate digits of a GRID REF.
Break-Break-Break	REQUEST FOR RADIO SILENCE TO TRANSMIT PRIORITY MESSAGE.
Say Again	Requests someone to relay their last transmission again. “Last Callsign” can be used for unknown identity of transmitter.

Stepped On	Commonly used with *say again* to indicate that someone spoke over a callsign attempting to reach you.
Oscar Mike	Tactical word meaning *on the move*
Send Your Traffic OR Send It	Informing someone that you are ready to listen to their message.
Over	Used to end a transmission that indicates you are finished with your message and are awaiting a response.
Out	Used to end a transmission that indicates you are finished with your message and DO NOT need a reply.
SITREP	Stands for “Situation Report” which is a request for you to report your current status. How to provide SITREPs is shown later in the course. Allows HQ to get a better picture on a squads current situation, either position, ammo or health and any additional information.
P.I.D	Stands for “Positive Identification” which is requesting friendlies to fully identify targets before engaging.
CAN NOT MOVE	Stands for “Under extreme fire and not able to egress”
Interrogative	Indicating the message proceeding is a question

COLOR SYSTEM

Red	OPFOR Position - Request elimination of targets near smoke
Blue	BLUFOR Position - Mark friendly personnel to avoid PID conflicts
Yellow	DZ/LZ Position - Used for Extracts/Resupplies
Purple	MASS CAS - Used to assist Corpsmen when a MASS CAS is declared. OPTIONAL

Orange	FLEX/ADDITIONAL - Used as an alternative color when the default is unavailable. It is vital you declare the purpose of orange smoke prior to using it, to avoid conflict.
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TRANSMISSION BASICS

Radio formatting has four simple steps to open a transmission. The Steps are as follows:

- Callsign of the **RECEIVER**
This is whom you are speaking to.
- Callsign of the **SENDER**
This is you.
- **INTENT**
The purpose of your transmission. (E.g message, interrogative, request)
- **ENDING**

All transmissions on an LR must conclude with an ending (OVER or OUT).

Exemplar:

Pvt. Smith: **Centurion 1-R**, this is **Centurion 1-1**, **message**, **over**.

LCpl. Doe: **Centurion 1-1**, this is **Centurion 1-R**, send traffic, **over**.

Pvt. Smith: **Centurion 1-R**, we are moving towards your position, ETA 2 mikes, **out**.

SITREP

A SITREP consists of two main components

1. **Objective Tasking** | The current tasking you or your squad is performing
2. **ACE Check** | An Ammo, Casualty & Equipment Check, given in colors.
 - GREEN:** Good/Healthy/Functioning
 - YELLOW:** Mediocre/Unhealthy/Unstable
 - RED:** Bad/Combat-Ineffective/Malfunctioning
 - BLACK:** Severe/MASSCAS/Destroyed

Exemplar:

1-R: **Centurion 1-3**, this is **Centurion 1-R**, requesting **SITREP**, **over**.

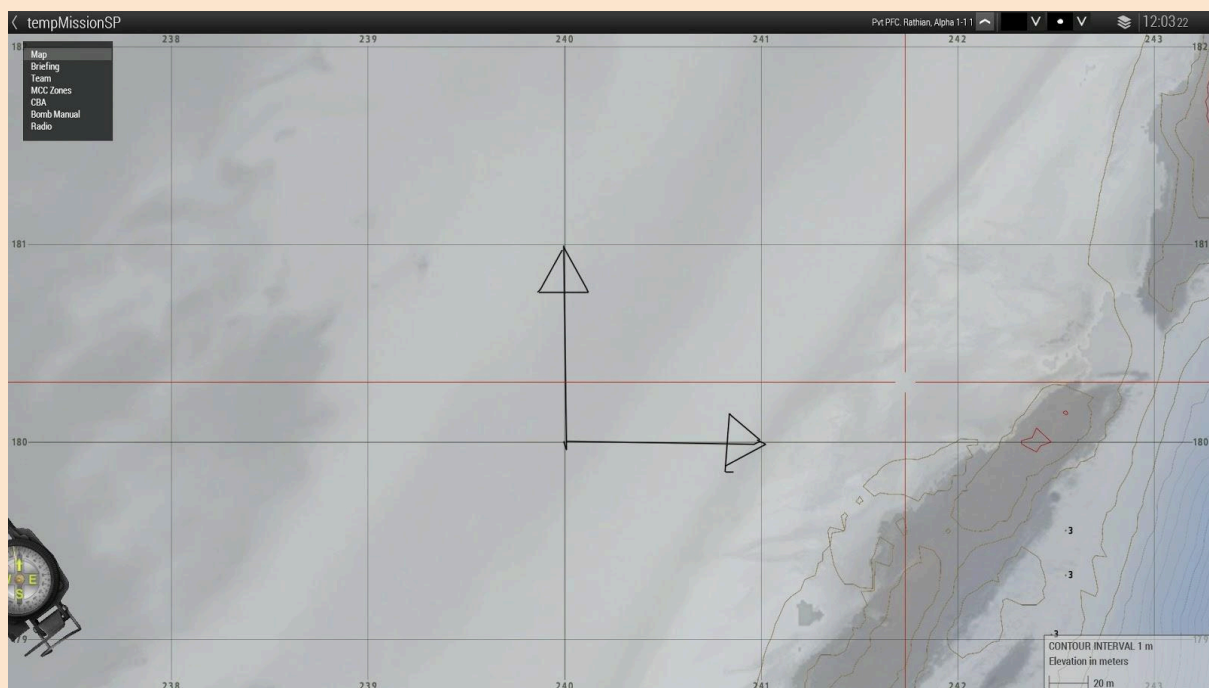
1-3: Centurion 1-R this is Centurion 1-3 SITREP as follows, currently at GRID REF 123-456, moving from OBJ Alpha to Bravo, ETA 6 mikes, ACE is **Yellow**, **Green**, **Red**, over.

1-R: Centurion 1-3, this is Centurion 1-R, solid copy, out.

Note: Additional information such as a captured HVT or intel discovered should be mentioned **after** the ACE check.

Practical #1

Map Reading and Map Marking



Enhanced Image

When trying to read a grid reference make sure it is read from the **X** coordinate to the **Y** coordinate, forming an **L shape** if done correctly. In simpler terms, the leftmost line of the target is your first three digits of the grid reference, followed by the line underneath the target forming the remaining three digits.



[Enhanced Image](#)

Practical #2

RESUPPLY

A request to a support element for equipment, usually done on 60 and via Pegasus.

1. **DZ/LZ Map Marking** | The DZ/LZ Map Marker for the resupply.
2. **GRID-REF** | The 6-digit GRID-REF of the resupply.
3. **SUPPLIES NEEDED** | The requested asset(s) to be called in, within accordance with the [Pegasus Resupply Menu](#). Any items that are not listed on the menu are to be CTAB'd to the pilot.
4. **SECURITY OF SITE** | If the site is not safe, declare **Yellow**, **Orange** or **Red** Security. Update pilot if this changes before the asset arrives.
5. **COLOR MARKING** | Declare method of marking (smoke, flare, chemlight) and color used.

Exemplar:

1-1: **Pegasus FAC**, this is **Centurion 1-1** requesting **1x resupply**, **over**.

FAC: Centurion 1-1 this is FAC solid copy, send your lines, over.

1-1: FAC, this is Centurion 1-1 resupply as follows:

- Marked on map as [DZ/LZ Name]
- Grid reference ###-###
- Type of supplies
- DZ/LZ security [IF AREA NOT SAFE]
- DZ/LZ marked by [color] [smoke/chemlight/flare]
- Over

FAC: Centurion 1-1 this is FAC solid copy, ETA 2 mikes, out.

Once Pegasus is about to reach your location:

FAC: Centurion 1-1 this is FAC, resupply inbound, over.

1-1: 3-2 Delta, this is 1-1, solid copy, popping smokes, out.

Practical #3

EXTRACT

A request to a support element for evacuation/extraction, usually done on 60 and via Pegasus.

1. **LZ Map Marking** | The LZ Map Marker for the extract.
2. **GRID-REF** | The 6-digit GRID-REF of the extract.
3. **No. of Personnel & HVTs** | The number of personnel extracting mentioned and if any HVTs are also extracting.
4. **SECURITY OF SITE** | If the site is not safe, declare **Yellow**, **Orange** or **Red** Security. Update pilot if this changes before the asset arrives.
5. **COLOR MARKING** | Declare method of marking (smoke, flare, chemlight) and color used.

Template:

1-1: **Pegasus FAC**, this is **Centurion 1-1** **requesting 1x extract**, **over**.

FAC: Centurion 1-1 this is FAC, solid copy send lines, over

1-1: FAC this is Centurion 1-1 extract as follows:

- LZ marked as [LZ Name]
- Grid reference ###-###
- Extracting 12 infantry and 1 HVT
- LZ security [IF AREA NOT SAFE]
- DZ/LZ marked by [color] [smoke/chemlight/flare]
- Over

FAC: Centurion 1-1 this is FAC, ETA 4 mikes, out.

Practical #4

GROUND TASKING NETS

Ground Tasking Frequencies, more commonly known as “Cobranets”, are side channels used for lengthy communication to prevent heavy chatter on primary nets. They are to be used for support-by-fire missions, back-and-forth conversation, and when requested by either FAC or the PLT RTO.

Exemplar:

Centurion 1-1: Pegasus FAC this is Centurion 1-1, requesting asset on Cobranet 60.1 for CAS, how copy, over.

FAC: 1-1 this is FAC, solid copy assigning 1x pegasus asset to 60.1 for CAS mission, out.

1-1: 1-1 Signing out of 60, out.

1-1: 1-1 Signing in on 60.1, over.

[Pegasus Asset]: 3-2 Delta signing in on 60.1, over.

1-1: 3-2 Delta, this is 1-1 CAS mission as follows...

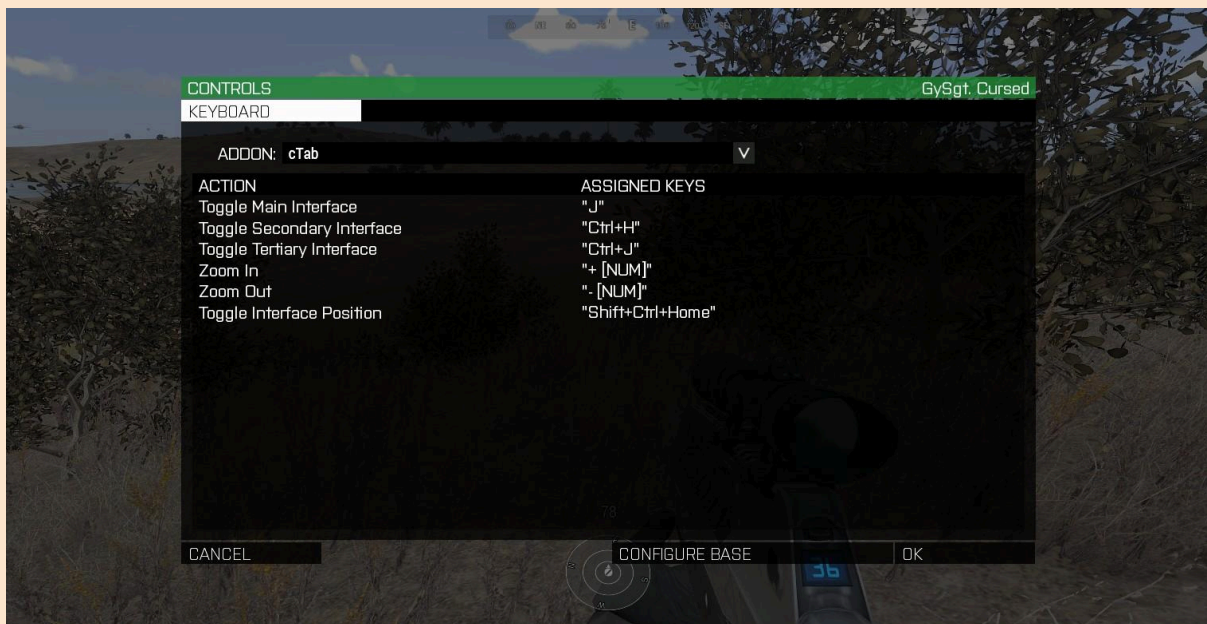
RTO BASIC ENDS HERE

CTAB Functions

The CTAB is a useful tool able to be used to communicate via text with personnel when LR communications are unavailable or unideal. To do so simply open the CTAB via Ctrl+H, click F4, and click on the individual you wish to message.



When carrying the CTAB you will need to use the **toggle tertiary interface** to open your CTAB. Make sure you know your key binds to open your CTAB as it will be a main tool utilized in crucial moments. These keybinds are found in Controls => Configure Addons => CTAB. Rebind them as necessary.



cTab Marking

When using the H-19 Smartfinder binocular, unlike the MicroDAGR & Vector 21, it won't provide a GRID REF. To accurately mark with the H-19 use the bearing and range given to you from lasering the target with your binoculars and plug the data into the cTAB to get the general location of the target.

1. Obtain the bearing and range of the target via the H-19
2. Once you have done so go to the map on your cTAB (F1). On the bottom right there is a small box containing four sets of numbers. The first is the 8 digit grid reference of where your mouse is currently at on the cTAB map. The second set of numbers is the elevation of where your mouse is currently at followed by the range and bearing. Make your cursor position matches the earlier collected bearing and range then click **SHIFT + left click**. It will place a waypoint marker which is the only marker you can make on a CTAB map that will reflect on the regular map.
3. Next go to your regular map and place the map marker on the waypoint position

Practical #5

C.A.S Mission

A request to aviation elements to eliminate an enemy target, for firemissions performed via mortar and artillery consult the 1st MEU Communications Doctrine.

EMERGENCY CAS TO GO ON 60 WITHOUT WAITING, STANDARD CAS IS ON 60 OR COBRANET DEPENDENT ON COMMS DOCTRINE. LINES MARKED IN RED ARE ECAS LINES.

1. **CAS Map Marking** | The CAS Map Marker for the CAS.
2. **GRID-REF** | The 6-digit or 10-digit GRID-REF of the CAS.
3. **TARGET DESCRIPTION** | How many assets marked for elimination and the type of asset. ("2x IFVs")
4. **DANGER CLOSE** | Declare distance and direction of friendlies **[IF ≤300]**
5. **TARGET DESIGNATION** | Laser if carrying the H-19 or red smoke, if no designation means available **SKIP** this line
OPTIONAL LINES BELOW
6. **APPROACH VECTOR** | Ingress and egress point respectively (E.g. "Fly North-to-South")
7. **ARMAMENT** | Request a specific armament (E.g. "Requesting 2000Lb Explosives"). See the [Pegasus Armament List](#) for more info. **RTOs onus** to ask for a pilot's current payload and factor in re-arming time when requesting specific armament.

Exemplar:

1-1: **Pegasus FAC** this is **Centurion 1-1** requesting CAS on 60.1, over.

FAC: Centurion 1-1 this is FAC solid copy, pushing 1x asset for CAS to 60.1, out.

1-1: Centurion 1-1 signing out of 60, out.

1-1: Centurion 1-1 signing in on 60.1, over.

[PEGASUS ASSET]: Pegasus 3-2D signing in on 60.1, over.

1-1: 3-2 Delta this is Centurion 1-1 CAS mission as follows:

- FM marked as [FM Name]
- Grid reference ###-###
- 3x Technicals
- Marked by [smoke/flare/laser]
- Over

BDA

A Bomb/Battle Damage Assessment given after a CAS mission to advise the support element of efficacy.

1. **BDA Good/Bad Effect** | Whether the firemission had a good or bad effect on target
2. **Target Status** | Missed, Damaged, Disabled or Destroyed
3. **Close Firemission/Repeat Last** | To close the FM or repeat it, closed FMs are to have the map marker turned **BLACK** or deleted.

ADDITIONAL EMERGENCY TERMINOLOGY

The following terminology is important for all RTO's to know and understand in regards to additional support from Pegasus. These callouts are for **severe emergencies** only and should not be used as an indolent ECAS alternative.

- **Guardian Angel** - A request for **ONE** airframe to provide emergency assistance
WHAT IS NEEDED:
 1. MAP MARKER | A point on the map to identify where the asset is needed
 2. GRID REF | Where applicable/possible
- **Broken Arrow** - A request for **ALL** airframes to provide emergency assistance
WHAT IS NEEDED:
 1. MAP MARKER | A point on the map to identify where the asset is needed

2. GRID REF | Where applicable/possible

Practical #6

Tips and Tricks

- Practice, Practice, Practice.

It is important to practice the key principles of **clear, concise and correct** communication. This is best done by attending funops, reserving for Platoons, and requesting refreshers with training staff.

- Always Seek Cover

An RTOs primary role is to coordinate air assets to the benefit of a squad/platoon and maintain communication. Whilst you are a combat-capable individual you should avoid placing yourself at the very front of combat.

- Preplan & Pay Attention

It is recommended you place map markers preemptively on the map in group prior to operation starts, so as to be able to move them ready for a callout. You should also be aware of a Squads needs and plan around when they may require assistance such as via resupplies or extracts.

- If you are having serious trouble remembering what to say, write down your lines then communicate your intent via LR whilst reading the script you just wrote out.

Slotting Procedure

To become a full-time RTO please contact your Platoon-of-Interest's Platoon/Section RTO, as well as the squad/section leader where you are interested in slotting.

If interested in becoming a slotted RTO it is recommended to skim over the 1st MEU Communications Doctrine, listed below.

Additional Documentation

[1st MEU Communications Doctrine](#)

[Pegasus Armament List](#)

[Pegasus Resupply Menu](#)

[RTO Leadership Guidelines](#)

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