

CommandTalk 2.0 Language Description

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1 Introduction

This document describes the language accepted by CommandTalk 2.0 (released 8/28/96).¹ Before trying out the language below, however, it will be helpful to be familiar with a few simple conventions used in presenting language patterns. These are best illustrated by example. The following rule gives six different ways of giving CANCEL_COMMANDs, commands used to cancel a previous command.

CANCEL_COMMAND

```
(CANCEL_VERB that)
(CANCEL_VERB POINT_NAME)
(CANCEL_VERB LINE_NAME)
(CANCEL_VERB UNIT)
(belay the last)
(belay that)
```

Indented in a column below the command name are various ways of giving the command. In this case, four of the six options begin with a CANCEL_VERB. The fact that CANCEL_VERB is written in upper case means that it is a phrase-type whose exact description can be found elsewhere in this document. The rule for CANCEL_VERB is:

CANCEL_VERB

```
delete
undo
cancel
```

Thus the first option under CANCEL_COMMAND says that any CANCEL_VERB followed by the word “that” is a valid CANCEL_COMMAND. That one option allows all of the following:

```
delete that
undo that
cancel that
```

The next three options for a CANCEL_COMMAND are for deleting points, lines and units, and use CANCEL_VERBs with POINT_NAME, LINE_NAME, and UNIT. The language for these options can be spelled out in detail by looking up the rules for POINT_NAME, LINE_NAME, and UNIT. Obviously not all of these options work in all circumstances. “Undo that” will just undo the last command given. “Delete objective alpha” will delete only the named objective, and will cause a “Command not understood” message if that objective doesn’t exist. Hopefully these distinctions are intuitive; the goal of CommandTalk is to implement the most natural language and match it up to its most natural interpretation.

In spelling out CommandTalk rules, there are some abbreviatory conventions used; Recall that 4 of the 6 ways of giving a CANCEL_COMMAND began with a CANCEL_VERB. Using square brackets “[]”, these 4 options can be collapsed into one:

CANCEL_COMMAND

```
(CANCEL_VERB [that POINT_NAME LINE_NAME UNIT])
```

¹WARNING: All the language described in this document should be accepted by the speech recognizer in CommandTalk, but some commands are not fully implemented all the way to ModSAF. In such cases, CommandTalk should give a correct transcription of the command, but then report “Command not understood.”

In reading these rules, it's important to remember the distinction between square brackets “[]” and parentheses “()”. Square brackets enclose different alternative ways of giving a command; parentheses enclose words that are strung together in one way of giving a command. What the option above says is that a CANCEL_COMMAND can be made up out of a CANCEL_VERB followed by *either* “that” *or* a POINT_NAME *or* a LINE_NAME *or* a UNIT. Given that “objective alpha” is a POINT_NAME, this allows “delete objective alpha.” Note that it doesn't allow “delete that objective alpha”. If we wanted a rule that also allowed “delete that objective alpha” we would need:

CANCEL_COMMAND

(CANCEL_VERB [that POINT_NAME (that POINT_NAME) LINE_NAME UNIT])

Another abbreviatory convention is “?”: the above rule says that following CANCEL_VERB, a POINT_NAME can occur either preceded by “that” or alone. Using “?” this could be written:

CANCEL_COMMAND

(CANCEL_VERB [that (?that POINT_NAME) LINE_NAME UNIT])

Sometimes in complicated rules, square brackets and parentheses may occur nested inside each other. A modified version of the movement command described in the next section is:

MOVEMENT_COMMAND

(MOVEMENT_TYPE ?[([using with] MOVEMENT_TECHNIQUE)
([along following] LINE_LOC)])

This says a MOVEMENT_COMMAND can be made up of a MOVEMENT_TYPE (for example “move”) by itself or followed by any of two modifying options. The first of those modifying options say the modifier may be made up of *either* “using” or “with” followed by a MOVEMENT_TECHNIQUE. The same set of options could be written without using square brackets, parentheses or question marks as follows:

MOVEMENT_COMMAND

MOVEMENT_TYPE
(MOVEMENT_TYPE using MOVEMENT_TECHNIQUE)
(MOVEMENT_TYPE with MOVEMENT_TECHNIQUE)
(MOVEMENT_TYPE along LINE_LOC)
(MOVEMENT_TYPE following LINE_LOC)

Finally, an asterisk in front of a phrase indicates that any number of instances (including 0) of that phrase may occur in that position. For example the following rule for conjunction:

COMPLEX_SYS_COMMAND

(SYS_COMMAND *(and SYS_COMMAND))

indicates that a SYS_COMMAND may be followed by any number of additional SYS_COMMANDS, provided each is preceded by “and”.

2 ACTION Commands

In this section we describe ACTION_COMMANDS, commands that can be given to a unit. Section 2.1 describes the basic action commands; section 2.2 describes the rules for subphrases peculiar to ACTION_COMMANDS; section 2.3 describes ways of modifying ACTION_COMMANDS; and section 2.4 describes ways of conjoining them.

2.1 Basic actions

Basic actions are the actions that units can perform, and therefore ACTION_COMMANDS can be addressed directly to a unit. The format in this section is first to give a list of action types under ACTION_COMMAND, then in alphabetical order to give the top level phrasal options for each action type. Users already somewhat familiar with CommandTalk, and thus already familiar with the language for referring to units, locations, and times, will find the rules in this section the most useful.

Rules for sub-phrases involved in ACTION_COMMANDS are given in Section 2.2, except for those phrases involving UNITS, LOCATIONS, TIME_POINTS, TIME_INTERVALS, NUMBERS, SPEEDS, SCALES, and BEARINGS, which are in sections 4, 5 and 6.

ACTION_COMMAND

ASSAULT_COMMAND
ASSAULT_AND_SECURE_COMMAND
ASSEMBLE_COMMAND
ATTACH_COMMAND
ATTACK_BY_FIRE_COMMAND
BREACH_COMMAND
CEASE_FIRE_COMMAND
CHANGE_FORMATION_COMMAND
EMBARCATION_COMMAND
FIRE_MODIFICATION_COMMAND
FIRE_MISSION_COMMAND
RATE_OF_FIRE_COMMAND
FOLLOW_COMMAND
FLY_COMMAND
HALT_COMMAND
HASTY_OCCUPY_COMMAND
LAND_COMMAND
LINK_COMMAND
MOVEMENT_COMMAND
MOUNT_COMMAND
METHOD_OF_MOVEMENT_COMMAND
NEXT_PHASE_COMMAND
OPEN_FIRE_COMMAND
SPEED_COMMAND
STATUS_COMMAND
SUPPORTING_FIRE_COMMAND
SUPPRESSIVE_FIRE_COMMAND
PREPARE_TO_ATTACK_BY_FIRE_COMMAND

RESUME_COMMAND
WEAPONS_PERMISSION_COMMAND
WITHDRAW_COMMAND

TOP LEVEL RULES

ASSAULT_COMMAND

(ASSAULT_VERB ENEMY_LOC *[(at SPEED)
(in FORMATION)
([with using] MOVEMENT_TECHNIQUE)])

ASSAULT_AND_SECURE_COMMAND

(assault and secure ENEMY_LOC *[(at SPEED)
(in FORMATION)
([with using] MOVEMENT_TECHNIQUE)])

ASSEMBLE_COMMAND

assemble

ATTACH_COMMAND

(attach to UNIT_CALL_SIGN)
(attach to your superior unit UNIT_CALL_SIGN)

ATTACK_BY_FIRE_COMMAND

(set up a base of fire ?(at POINT_OR_LINE) and engage ENEMY_LOC)
(MOVEMENT_TYPE to POINT_OR_LINE and engage ENEMY_LOC by fire)
(MOVEMENT_TYPE to POINT_OR_LINE and engage ENEMY_LOC with direct fire)
(set up a base of fire ?(at POINT_OR_LINE) and attack ENEMY_LOC)
(MOVEMENT_TYPE to POINT_OR_LINE and attack ENEMY_LOC by fire)
(MOVEMENT_TYPE to POINT_OR_LINE and attackENEMY_LOC with direct fire)
(engage ENEMY_LOC by fire)
(engage ENEMY_LOC with direct fire)
(attack by fire)

BREACH_COMMAND

(breach OBSTACLE_PHRASE ?(at POINT_LOC))

CEASE_FIRE_COMMAND

(cease [fire firing])

CHANGE_FORMATION_COMMAND

(change to FORMATION)
(change formation to FORMATION)
([get move] in line)
([get move] on line)
(set formation to FORMATION)

EMBARCATION_COMMAND

(embark on UNIT_CALL_SIGN ?(at POINT_LOC))
(debark UNIT_CALL_SIGN ?(at POINT_LOC))
(debark from UNIT_CALL_SIGN ?(at POINT_LOC))

FIRE_MISSION_COMMAND

(BEGIN_VERB [prep (prep fire)])
(EXECUTE_VERB [prep (prep fire)])

FIRE_MODIFICATION_COMMAND

(concentrate [fire fires] on POINT_OR_LINE)
([shift transfer move] [fire fires] [to toward] POINT_OR_LINE)

RATE_OF_FIRE_COMMAND

(set RATE_OF_FIRE_TERM to RATE_OF_FIRE)
(change RATE_OF_FIRE_TERM to RATE_OF_FIRE)
([increase decrease reduce] RATE_OF_FIRE_TERM to RATE_OF_FIRE)
([increase decrease reduce] RATE_OF_FIRE_TERM by RATE_OF_FIRE)

FOLLOW_COMMAND

(follow UNIT_CALL_SIGN *[(to POINT_OR_LINE)
 ([to toward] POINT_LOC on LINE_LOC)
 (from POINT_OR_LINE to POINT_OR_LINE)
 (in FORMATION)
 ([using with] MOVEMENT_TECHNIQUE)
 ([using with] MOVEMENT_TECHNIQUE)
 (at SPEED)
 ([along following] LINE_LOC)
 (GENERAL_DISTANCE COMPASS_DIRECTION)
 (COMPASS_DIRECTION_GENERAL_DISTANCE)
 COMPASS_DIRECTION
 (for TIME_INTERVAL)])

FLY_COMMAND

(fly *[(to POINT_OR_LINE)
 ([to toward] POINT_LOC on LINE_LOC)
 (from POINT_OR_LINE to POINT_OR_LINE)

(at SPEED)
([along following] LINE_LOC)
(GENERAL_DISTANCE COMPASS_DIRECTION)
(COMPASS_DIRECTION_GENERAL_DISTANCE)
COMPASS_DIRECTION
(for TIME_INTERVAL)])

HALT_COMMAND

halt ?(for TIME_INTERVAL)
assemble
wait ?(for TIME_INTERVAL)

HASTY_OCCUPY_COMMAND

(establish a defensive position at
POINT_OR_LINE ?[(oriented to COMPASS_DIRECTION) (facing POINT_LOC)])

LAND_COMMAND

(land at POINT_LOC)

LINK_COMMAND

(link up with UNIT_CALL_SIGN at POINT_LOC)
(rendezvous with UNIT_CALL_SIGN at POINT_LOC)
(meet UNIT_CALL_SIGN at POINT_LOC)
(meet with UNIT_CALL_SIGN at POINT_LOC)

METHOD_OF_MOVEMENT_COMMAND

(movement technique MOVEMENT_TECHNIQUE ?(for UNIT))
(method of movement MOVEMENT_TECHNIQUE ?(for UNIT))

MOUNT_COMMAND

mount ?(at POINT_LOC)
mount your vehicle ?(at POINT_LOC)
mount your vehicles ?(at POINT_LOC)
mount UNIT_CALL_SIGN ?(at POINT_LOC)
mount on UNIT_CALL_SIGN ?(at POINT_LOC)
dismount ?(at POINT_LOC)
dismount your vehicle ?(at POINT_LOC)
dismount your vehicles ?(at POINT_LOC)
dismount UNIT_CALL_SIGN ?(at POINT_LOC)
dismount from UNIT_CALL_SIGN ?(at POINT_LOC)

MOVEMENT_COMMAND

```

(MOVEMENT_TYPE *[(to POINT_OR_LINE)
  ([to toward] POINT_LOC on LINE_LOC)
  (from POINT_OR_LINE to POINT_OR_LINE)
  (in FORMATION)
  ([using with] MOVEMENT_TECHNIQUE)
  (at SPEED)
  ([along following] LINE_LOC)
  (GENERAL_DISTANCE COMPASS_DIRECTION)
  (COMPASS_DIRECTION_GENERAL_DISTANCE)
  COMPASS_DIRECTION
  (for TIME_INTERVAL)])
([follow (follow along)] LINE_LOC
 *[(to POINT_OR_LINE)
  ([to toward] POINT_LOC)
  (from POINT_OR_LINE to POINT_OR_LINE)
  (in FORMATION)
  ([using with] MOVEMENT_TECHNIQUE)
  (at SPEED)
  (GENERAL_DISTANCE COMPASS_DIRECTION)
  (COMPASS_DIRECTION_GENERAL_DISTANCE)
  COMPASS_DIRECTION
  (for TIME_INTERVAL)])

```

NEXT_PHASE_COMMAND

```

(proceed to next [phase mission])
(move to next [phase mission])
(go on to next [phase mission])

```

OPEN_FIRE_COMMAND

```

(commence [fire firing] ?(on ENEMY_LOC))
(open fire ?(on ENEMY_LOC))

```

PREPARE_TO_ATTACK_BY_FIRE_COMMAND

```

(set up a base of fire at POINT_OR_LINE ?(targeting on ENEMY_LOC))
(set up a base of fire at POINT_OR_LINE OPEN_FIRE_COMMAND ON_ORDER)

```

RESUME_COMMAND

```

resume

```

SPEED_COMMAND

```

(speed up)
(speed up to SPEED)
(speed up by SPEED)
(slow down)

```

(slow down to SPEED)
(slow down by SPEED)

STATUS_COMMAND

(report status)
(status report [on off])
(BEGIN_VERB status report)
(EXECECUTE_VERB status report)
(cease status report)

SUPPORTING_FIRE_COMMAND

(support by fire ?the [assault attack] [on onto] POINT_OR_LINE)
(support with direct fire ?the [assault attack] [on onto] POINT_OR_LINE)
(support ?the [assault attack] [on onto] POINT_OR_LINE by fire)
(support ?the [assault attack] [on onto] POINT_OR_LINE with direct fire)

SUPPRESSIVE_FIRE_COMMAND

(suppress ENEMY_LOC ?(for TIME_INTERVAL))
(provide suppressive fire on ENEMY_LOC ?(for TIME_INTERVAL))
(give me suppressive fire on ENEMY_LOC ?(for TIME_INTERVAL))
(suppressive fire on ENEMY_LOC ?(for TIME_INTERVAL))
(suppression fire on ENEMY_LOC ?(for TIME_INTERVAL))

WEAPONS_PERMISSION_COMMAND

(weapons status [hold tight free] ?(for UNIT))

WITHDRAW_COMAND

(withdraw *[(to POINT_OR_LINE)
 ([to towards toward] POINT_LOC on LINE_LOC)
 (from POINT_OR_LINE to POINT_OR_LINE)
 (in FORMATION)
 ([using with] method of movement MOVEMENT_TECHNIQUE)
 ([using with] movement technique MOVEMENT_TECHNIQUE)
 (at SPEED)
 ([along following] LINE_LOC)
 (GENERAL_DISTANCE COMPASS_DIRECTION)
 (COMPASS_DIRECTION_GENERAL_DISTANCE)
 COMPASS_DIRECTION
 (for TIME_INTERVAL)])

2.2 Subphrases peculiar to actions

Rules for subphrases are in alphabetic order.

ASSAULT_VERB

attack
assault
destroy
(close with and destroy)

BEGIN_VERB

begin
commence
initiate

EXECUTE_VERB

execute
(proceed with)

RATE_OF_FIRE_TERM

rate
(firing rate)
(firing speed)
(rate of fire)

FORMATION

column
line
wedge
vee
(staggered column)
(echelon left)
(echelon right)

MOVEMENT_TYPE

advance
continue
go
move
proceed
withdraw
(move out)
(road march)
(begin [advance withdrawal (cross country march) (road march)])
(conduct [advance withdrawal (cross country march) (road march)])
(commence [advance withdrawal (cross country march) (road march)])
(initiate [advance withdrawal (cross country march) (road march)])

(proceed with [advance withdrawal (cross country march) (road march)])

MOVEMENT_TECHNIQUE

bounding
(traveling overwatch)
(bounding overwatch)
(fire and movement)
(fire and maneuver)
(cover and concealment)

OBSTACLE_PHRASE

(?the [minefield wire] ?obstacle)

ON_ORDER

(on my order)
(on my order)
(on my command)
(at my command)
(on command)

2.3 Modifying ACTIONS

Note especially that TEMPORAL_CONTROL_METHODS such “at H hour” can come both before and after the ACTION_COMMAND

MODIFIED_ACTION_COMMAND

(?TEMPORAL_CONTROL_METHOD ?UNIT ?COMMANDER_PHRASE ?TEMPORAL_CONTROL_METHOD
?ON_ORDER ?(move out to) ACTION_COMMAND ?TEMPORAL_CONTROL_METHOD)

Modifying Sub-phrases

ON_ORDER

(on my order)
(on my order)
(on my command)
(at my command)
(on command)

COMMANDER_PHRASE

COMMANDER
(this is COMMANDER)

COMMANDER

(hotel five nine)

```
(hotel five niner)
(h five nine)
(h five niner)
```

CONTROL_MEASURE_CLAUSE

```
(when UNIT [reaches passes crosses] POINT_OR_LINE)
```

TEMPORAL_CONTROL_METHOD

```
(at TIME_POINT)
first
next
then
(in TIME_INTERVAL)
(after TIME_INTERVAL)
(TIME_INTERVAL later)
CONTROL_MEASURE_CLAUSE
```

ON_ORDER

```
(on order)
(on my order)
(on my command)
(at my command)
(on command)
```

2.4 Conjoining actions

COMPLEX_ACTION_COMMAND

```
(MODIFIED_ACTION_COMMAND *(and MODIFIED_ACTION_COMMAND))
```

3 SYS Commands

These are commands to the system, as opposed to commands to simulated entities. They include commands to change the mode of system operation (“simulation mode!”), commands to create or locate entities, and commands to cancel other commands. Note that the ModSAF action of attachment can be effected with both a unit command:

```
Charlie four one two attach to Charlie four eight.
```

and a “SYS” command, a command addressed not to a unit but to the ModSAF system:

```
Attach charlie four one two to charlie four eight.
```

3.1 Basic SYS Commands

SYS_COMMAND

ATTACH_INSTRUCTION
CANCEL_COMMAND
CREATE_COMMAND
CENTER_COMMAND
DISPLAY_HIDE_COMMAND
H_HOUR_COMMAND
LOCATE_COMMAND
MODE_CHANGE_COMMAND
NAME_COMMAND
NEW_SCENARIO
PAN_COMMAND
SET_SCALE_COMMAND
TIME_ON_TARGET_COMMAND
ZOOM_COMMAND

TOP LEVEL RULES

ATTACH_INSTRUCTION

(attach UNIT_CALL_SIGN to UNIT_CALL_SIGN)
(attach UNIT_CALL_SIGN under UNIT_CALL_SIGN)

CANCEL_COMMAND

(CANCEL_VERB [that POINT_NAME LINE_NAME UNIT])
(belay the last)
(belay that)

CREATE_COMMAND

([(CREATION_VERB POINT_NAME)
(CREATION_VERB NEW_POINT)
(CREATION_VERB CREATED_UNIT)] *LOCATION_CREATION_MOD)
(MINE_CREATION_VERB ?a MINEFIELD AREA_MEASURE centered at POINT_LOC)

CENTER_COMMAND

(center on [UNIT POINT_LOC])
(center in on [UNIT POINT_LOC])
(center COMPASS_DIRECTION of [UNIT POINT_LOC])

DISPLAY_HIDE_COMMAND

(DISPLAY_VERB DISPLAYABLE_THING)

H_HOUR_COMMAND

(h hour is TIME_POINT)

LOCATE_COMMAND

```
((LOCATION_VERB [POINT_NAME NEW_POINT NEW_LINE CREATED_UNIT it])
 (CREATION_VERB [LINE_NAME NEW_LINE])
 (LINE_CREATION_VERB NEW_LINE]) *LOCATION_CREATION_MOD)
```

MODE_CHANGE_COMMAND

```
(set up mode)
(stand by for nine line brief)
(stand by nine line brief)
(simulation mode)
```

NAME_COMMAND

```
(POINT_NAME is ?at COORDINATES)
(COORDINATES [is are] POINT_NAME)
([name call designate label] it [POINT_NAME LINE_NAME LETTER
 ICA_LETTER DIGIT UNIT_CALL_SIGN])
([name call designate label] COORDINATES POINT_NAME)
```

NEW_SCENARIO

```
(new scenario)
```

PAN_COMMAND

```
(PAN_VERB [COMPASS_DIRECTION SCREEN_DIRECTION])
(PAN_VERB GENERAL_DISTANCE [COMPASS_DIRECTION SCREEN_DIRECTION])
(PAN_VERB [COMPASS_DIRECTION SCREEN_DIRECTION] GENERAL_DISTANCE)
```

SET_SCALE_COMMAND

```
(set scale to one to SCALE_NUMBER)
([increase decrease reduce] scale to one to SCALE_NUMBER)
([increase decrease reduce] scale SCALE_FACTOR times)
```

TIME_ON_TARGET_COMMAND

```
(time on target is TIME_POINT)
(t o t is TIME_POINT)
```

ZOOM_COMMAND

```
(zoom in)
(zoom in closer)
(zoom closer in)
(zoom out)
```

(zoom out farther)
(zoom farther out)
(zoom in on UNIT)
(zoom closer in on UNIT)
(zoom in closer on UNIT)
(zoom in on POINT_LOC)
(zoom closer in on POINT_LOC)
(zoom in closer on POINT_LOC)

3.2 Sub-phrases used in SYS Commands

BEARING_ADJ

[facing oriented pointing]

BEARING_MOD

(BEARING_ADJ BEARING)
(BEARING_ADJ [to towards toward] BEARING)
(BEARING_ADJ COMPASS_DIRECTION)
(BEARING_ADJ [to towards toward] COMPASS_DIRECTION)
(BEARING_ADJ [to towards toward] POINT_LOC)
(facing POINT_LOC)
(pointing at POINT_LOC)

CANCEL_VERB

delete
undo
cancel

CREATION_VERB

create
select
make
(set up)

DISPLAY_VERB

add
show
display
hide
remove
(turn on)
(turn off)

DISPLAYABLE_THING

(DISPLAYABLE_LINE lines)
roads
buildings
railroads
trees
water
soils
towns
(water and soils)

DISPLAYABLE_LINE

contour
political
power
pipe
grid

FORMATION

([a an] FORMATION_TYPE formation)
(FORMATION_TYPE formation)
([a an] FORMATION_TYPE)

FORMATION_MOD

(FORMATION_TYPE formation)
(in FORMATION)
(in FORMATION_TYPE)
(on line)

FORMATION_TYPE

column
line
wedge
vee
(staggered column)
(echelon left)
(echelon right)

ICA_LETTER

alpha
bravo
charlie
delta
echo

foxtrot
golf
hotel
india
juliet
kilo
lima
mike
november
oscar
papa
quebec
romeo
sierra
tango
uniform
victor
whiskey
xray
yankee
zulu

LINE_CREATION_VERB

draw

LETTER [a b c d e f g h i j k l m n o p q r s t u v w x y z]

LOCATION_VERB

put
place
drop
locate

LOCATION_CREATION_MOD

(from COORDINATES to COORDINATES)
([named called designated labeled] LINE_NAME)
(at POINT_LOC)
FORMATION_MOD
BEARING_MOD
POINT_NAME_MOD
([named called designated labeled] UNIT_CALL_SIGN)

MINE_CREATION_VERB

create
make

draw
put
place
drop
locate
lay
(set up)
(lay down)

MINE_TYPE

claymores
antipersonnel
antitank
claymore

MINEFIELD

minefield
(minefield with claymores)
(minefield with antipersonnel mines)
(minefield with antitank mines)
(antitank minefield)
(antipersonnel minefield)
(field of claymores)
(claymore field)

PAN_VERB

pan
slue

POINT_NAME_MOD

([named called designated labeled] POINT_NAME)
([named called designated labeled] LETTER)
([named called designated labeled] ICA_LETTER)
([named called designated labeled] DIGIT)

SCREEN_DIRECTION

left
right
up
down

3.3 Conjoining SYS Commands

COMPLEX_SYS_COMMAND

(SYS_COMMAND *(and SYS_COMMAND))

4 UNITS

This section describes the phrases that can pick out units and entities, such as individual vehicles and ICs. There are two different kinds of phrases that can pick out units and entities, phrases that can be used to address a unit, such its call sign (“Whiskey four six, move out!”) and phrases that can be used to describe a unit, in particular when creating one (“Create an M2 platoon named whiskey four six!”). These phrase-types need to be distinguished, because you might say “create an M1 platoon” you wouldn’t say, “An M1 platoon, move out!”. The phrases that can be used to address a unit or units are under UNIT, described in Section 4. The phrases that can be used to describe a new unit or units are under CREATED_UNIT, described in Section 4.3.

4.1 UNIT

The most common and useful way of addressing a unit during an exercise is by its call sign. Call signs are limited to a letter followed by two or three digits. Call signs can also be conjoined. Thus we allow “whiskey four six and echo eight four”. Units may also be addressed by their current tactical function. Thus, “main body” and “recon” are also allowed. Finally a unit may be addressed by its unit type, as in, “M1 platoon, advance.” Also, groups of units may be addressed simultaneously, by use of a description of the type like “red forces”, “blue forces” “all units” “all tanks” “all tank platoons”.

UNIT

```
UNIT_CALL_SIGN
(?FORCE ?ORDINAL UNIT_TYPE)
(?FORCE UNIT_TYPE DIGIT)
(?FORCE COMPANY_ID)
(?all ?FORCE UNIT_TYPE)
(main body)
recon
(?FORCE ORDINAL and ORDINAL UNIT_TYPE)
(UNIT_CALL_SIGN and UNIT_CALL_SIGN)
(?all ?FORCE forces)
```

Important Top-Level Phrases

UNIT_CALL_SIGN

```
(ICA_LETTER DIGIT DIGIT)
(ICA_LETTER DIGIT DIGIT DIGIT)
```

UNIT_TYPE

```
AIRCRAFT_TYPE
INFANTRY_TYPE
VEHICLE_TYPE
```

4.2 Standard Unit Designations (subphrases)

AIRCRAFT_TYPE

(SPEC_AIRCRAFT_TYPE flight)

COMPANY_ID

(ICA_LETTER company)

(?VEHICLE_TYPE company ?LETTER)

ICA_LETTER

alpha
bravo
charlie
delta
echo
foxtrot
golf
hotel
india
juliet
kilo
lima
mike
november
oscar
papa
quebec
romeo
sierra
tango
uniform
victor
whiskey
xray
yankee
zulu

INFANTRY_TYPE

(assault [team section])
(dragon [team squad section])
(fire team)
(recon team)
([rifle infantry] [team squad platoon])
(machine gun [team squad section])
(heavy machine gun [squad section platoon])

(?[(sixty millimeter) (eighty one millimeter)] mortar [squad section])
(tow squad)

FORCE

blue
red
friendly
enemy

SPEC_AIRCRAFT_TYPE

ch46s
ch46
frogs
frog
ch53s
ch53
stallions
stallion
ah1js
ah1j
cobras
cobra
fa18s
fa18
f18s
f18
hornets
hornet

VEHICLE_TYPE

(amtrac [team (command team) section platoon])
(aav [team (command team) section platoon])
(amphibious assault vehicle [team (command team) section platoon])
(bmp ?[company platoon section])
(c2 aav)
(caat ?team)
(high mobility multi-purpose vehicle)
(hmmwv ?[fifty forty tow (with tows) (with a tow)])
(lav-25 ?[section platoon])
(lav-m ?[section platoon])
(lav-r ?[section platoon])
(lav ?[section platoon])
(lar ?[section platoon])
(mine aav)
m998
(m1 ?tank ?[company platoon section])

```

(mia1 ?tank ?[company platoon section])
(mia2 ?tank ?[company platoon section])
([rec recon reconnaissance] aav)
(?reinforced m two ?[platoon company])
(t80 ?tank ?[company platoon section])
(t eight zero ?tank ?[company platoon section])
(t72 ?m ?tank ?[company platoon section])
(t seven two ?m ?tank ?[company platoon section])
(weapons platoon)
(zsu ?(twenty three dash four))

```

4.3 Descriptions used in creating units

CREATED_UNIT

```

(?[a an another DIGIT] ?[red blue friendly enemy]
 [NEW_VEHICLE_TYPE NEW_INFANTRY_TYPE NEW_AIRCRAFT_TYPE])

```

NEW_INFANTRY_TYPE

```

(assault [team section])
(dragon [team squad section])
(fire team)
(recon team)
([rifle infantry] [team squad platoon])
(machine gun [team squad section])
(heavy machine gun [squad section platoon])
(?[(sixty millimeter) (eighty one millimeter)] mortar [squad section])
(tow squad)

```

NEW_AIRCRAFT_TYPE

```

(flight of ?[two three five] SPEC_AIRCRAFT_TYPE)

```

NEW_VEHICLE_TYPE

```

(amtrac [team (command team) section platoon])
(amphtrac [team (command team) section platoon])
(aav [team (command team) section platoon])
(amphibious assault vehicle [team (command team) section platoon])
(bmp ?[company platoon section])
(c2 aav)
(caat ?team)
(high mobility multi-purpose vehicle)
(hmmwv ?[fifty forty tow (with tows) (with a tow)])
(lav-25 ?[section platoon])
(lav-m ?[section platoon])
(lav-r ?[section platoon])
(lav ?[section platoon])

```

```

(lar ?[section platoon])
m998
(mine aav)
(m1 ?tank ?[company platoon])
(m1a1 ?tank ?[company platoon])
(m1a2 ?tank ?[company platoon])
(platoon of [bmps m1s lavs (lav-rs) (lav-ms)
              (lav-ats) (lav-25s) aavs])
(platoon of [bmps m1s lavs (lav-rs) (lav-ms) (lav-ats) (lav-25s) aavs]
  with dismounted infantry)
([rec recon reconnaissance] aav)
(?reinforced m two ?[platoon company])
(t80 ?tank ?[company platoon section])
(t eight zero ?tank ?[company platoon section])
(t72 ?m ?tank ?[company platoon section])
(t seven two ?m ?tank ?[company platoon section])
(weapons platoon)
(zsu ?(twenty three dash four))

```

5 Language for describing POINTs, LINES, TIMEs, and TIME_INTERVALs

Locations can be described in three ways, by name, as in “checkpoint four” or “battle position two two one”, by grid coordinate, as “grid niner niner seven six three two”, and by a description related to the enemy as “suspected enemy firing position”. Time points also have names, such as “H Hour,” “time on target” or can be described using the military (24-hour) clock.

ENEMY_LOC

```

(?the ?suspected ENEMY_NOMINAL)
(?the ?suspected ENEMY_NOMINAL at POINT_LOC)
POINT_LOC

```

POINT_OR_LINE

```

POINT_LOC
LINE_NAME

```

TIME_INTERVAL

```

(TENS_NUMBER [hour hours minutes minutes])
(DIGIT [hour hours] and MINUTE_DURATION [minute minutes])

```

TIME_POINT

```

(twelve o'clock noon)
(twelve noon)
(twelve o'clock midnight)

```

(h hour)
(t o t)
(time on target)
(h hour [plus minus] MINUTES minutes)
(t o t [plus minus] MINUTES minutes)
(time on target [plus minus] MINUTES minutes)
(HOOR MINUTES)
(HOOR hundred hours)
(HOOR MINUTES hours)
(HOOR hundred)
(DIGIT HOOR hundred hours)
(DIGIT HOOR hundred)
now

RULES FOR SUB-PHRASES

BATTLE_POSITION_NOUN

(battle position)
bp

BIRDNAME

crow
eagle
falcon
hawk
penguin
raven
robin

COLOR

black
blue
green
orange
red
yellow

COORDINATES

COORDINATE_NUMS
(LOCATION_PREFIX COORDINATE_NUMS)
(SHEET_ID COORDINATE_NUMS)
(LOCATION_PREFIX SHEET_ID COORDINATE_NUMS)

COORDINATE_NUMS

(DIGIT DIGIT DIGIT DIGIT)
(DIGIT DIGIT DIGIT DIGIT DIGIT DIGIT)
(DIGIT DIGIT DIGIT DIGIT DIGIT DIGIT DIGIT DIGIT)

ENEMY_NOMINAL

enemy
(enemy ?infantry ?firing position)
(enemy ambush)
(enemy ambush in place)

HOUR

one
two
three
four
five
six
seven
eight
nine
ten
eleven
twelve
thirteen
fourteen
fifteen
sixteen
seventeen
eighteen
nineteen
twenty
(twenty one)
(twenty two)
(twenty three)
(twenty four)

LINE_NAME

(phase line COLOR)
(BATTLE_POSITION_NOUN DIGIT DIGIT DIGIT)
(?the LINE_TYPE)

LINE_TYPE

(phase line)
(battle position)
bp

cfl
(coordinated fire line)
(fire support coordination line)
fscl
(line of departure)
lod
route

LOCATION_NOUN

location
position
coordinates
(enemy position)

LOCATION_PREFIX

(grid LOCATION_NOUN)
grid
LOCATION_NOUN

MARINE_CREATURE

dolphin
shark
tuna
whale

MINUTES

DIGIT
(DIGIT DIGIT)
TENMINUTES
(TENMINUTES DIGIT)
ten
eleven
twelve
thirteen
fourteen
fifteen
sixteen
seventeen
eighteen
nineteen

MINUTE_DURATION

(?TENMINUTES DIGIT)
DIGIT

NEW_LINE

(?[a an] ?COLOR LINE_TYPE)
(?[a an] ?COLOR line)

NEW_POINT

POINT_TYPE
(DET POINT_TYPE)

POINT_LOC

POINT_NAME
COORDINATES

POINT_NAME

(checkpoint DIGIT)
(objective ICA_LETTER)
(?[atf (amphibious task force) company platoon section squad team]
objective DIGIT)
(landing zone BIRDNAME)
(l z BIRDNAME)
(craft landing zone MARINE_CREATURE)
(c l z MARINE_CREATURE)

POINT_TYPE

point
points
checkpoint
checkpoints
objective
objectives

SHEET_ID

(ICA_LETTER ICA_LETTER)

TENMINUTES

twenty
thirty
forty
fifty

6 Language for NUMBERS, SPEEDS, SCALES, and BEARINGS

Numbers are used in a variety of different places in CommandTalk language, including giving speeds, fire speeds, elevations, areas and distances, and generally there should be little problem with using them. Speeds and bearings occur with actions that allow them, such as “Advance to objective alpha at twenty five miles an hour” and “establish a defensive position at battle position two two one facing south east.” Scales are only used in when giving zoom in and zoom out commands (see Section 3).

Alphabetical order throughout.

AREA_MEASURE

(GENERAL_DISTANCE by GENERAL_DISTANCE)

CARDINAL_DIRECTION

north
east
south
west
northeast
southeast
southwest
northwest

COMPASS_DIRECTION

([to toward towards] the CARDINAL_DIRECTION)
CARDINAL_DIRECTION

DIGIT

oh
zero
one
two
three
four
five
six
seven
eight
nine
niner

DISTANCE

(NUMBER point DIGIT)
NUMBER

DISTANCE_UNIT

kilometers
miles

ELEVATION

UP_TO_FOUR_DIGIT
(UP_TO_FOUR_DIGITS feet)

RATE_OF_FIRE

(HUNDREDS_NUMBER RATE_OF_FIRE_MEASURE)
(SPEC_RATE_OF_FIRE RATE_OF_FIRE_TERM)

RATE_OF_FIRE_MEASURE

(rounds a minute)
(rounds per minute)
(r p m)

RATE_OF_FIRE_TERM

rate
(firing rate)
(firing speed)
(rate of fire)

GENERAL_DISTANCE

(SHORT_DISTANCE SHORT_DISTANCE_UNIT)
(DISTANCE DISTANCE_UNIT)

HUNDREDS_NUMBER

(DIGIT hundred ?TENS_NUMBER)
TENS_NUMBER

NUMBER

(DIGIT DIGIT)
TENS_NUMBER

ORDINAL

first
second
third

fourth
fifth

SCALE_FACTOR

two
three
five
fifty
(five hundred)
(a thousand)
(one thousand)

SCALE_NUMBER

(two hundred fifty)
(two hundred and fifty)
(two fifty)
(five hundred)
(a thousand)
(one thousand)
(five thousand)
(ten thousand)
(fifty thousand)
(one hundred thousand)
(a hundred thousand)
(two hundred and fifty thousand)
(two hundred fifty thousand)
(five hundred thousand)
(one million)
(one point five million)

SHORT_DISTANCE

UP_TO_FOUR_DIGITS

SHORT_DISTANCE_UNIT

feet
meters

SPEC_RATE_OF_FIRE

sustained
rapid
cyclic

SPEED_MEASURE

klicks
klick
(kilometers per hour)
(klicks per hour)
(miles per hour)
(kilometer per hour)
(klick per hour)
(mile per hour)
(k p h)
(m p h)

SPEED_TERM

speed
(rate of march)

TEEN

ten
eleven
twelve
thirteen
fourteen
fifteen
sixteen
seventeen
eighteen
nineteen

TENS

twenty
thirty
forty
fifty
sixty
seventy
eighty
ninety

TENS_NUMBER

DIGIT
TEEN
TENS
(TENS DIGIT)
(DIGIT DIGIT)

UP_TO_FOUR_DIGITS

UP_TO_TWO_DIGITS
(UP_TO_TWO_DIGITS TWO_DIGITS)
(DIGIT thousand)
(NUMBER hundred)

UP_TO_SIX

oh
zero
one
two
three
four
five
six

UP_TO_TWO_DIGITS

DIGIT
(DIGIT DIGIT)

7 NINE LINE BRIEF Language

A lot of the categories used in constructing nine line brief utterances can be found above. We arrange the nine line brief language by line number. NLB1 is the grammar for “line number one” of the nine line brief, NLB2 is the grammar for “line number two” of the nine line brief, and so on.

.NLB1

AUTOMOBILE_MODEL

.NLB2

BEARING

.NLB3

DISTANCE
(DISTANCE nautical miles)

.NLB4

ELEVATION

.NLB5

TARGET_PHRASE

.NLB6

COORDINATES

.NLB7

MARKER_TYPE

(MARKER_TYPE on the deck)

.NLB8

(COMPASS_DIRECTION SHORT_DISTANCE)

(COMPASS_DIRECTION SHORT_DISTANCE meters)

.NLB9

(egress COMPASS_DIRECTION)

RULES FOR SUB-PHRASES

AUTOMOBILE_MODEL

bronco
chevy
ford
edsel
impala
mustang
pinto
maverick
cadillac
thunderbird
camaro
corvette
firebird
jaguar
mercedes
toyota

ILLUM_MARKER

illum

INFANTRY_TARGET

infantry
troops
(dismounted infantry)

MARKER_TYPE

SMOKE_MARKER
ILLUM_MARKER
(SMOKE_MARKER and ILLUM_MARKER)
(ILLUM_MARKER and SMOKE_MARKER)

SMOKE_MARKER

smoke
(white phosphorus)
(w p)
(willie pete)

TARGET_PHRASE

TARGET
(DET TARGET)
(TARGET in open)
(TARGET dug in)

TARGET

VEHICLE_TARGET
INFANTRY_TARGET
(VEHICLE_TARGET and INFANTRY_TARGET)
(INFANTRY_TARGET and VEHICLE_TARGET)

VEHICLE_TARGET

SPECIFIC_I_F_V
tank
target
artillery
supply
([fixed rotary] wing aircraft)