

This is a complete and comprehensive guide to Wolfpack Morse Code. I endeavor to make it historically accurate, however my research on the subject is limited. Much of this is based on some of the practices used by Colonel Frost, who has done much of the work in this area for simplified radio, so credit to him. If you find any resources or information for historical accuracy, or have any suggestions to improve this guide, message me on discord; I go by "talk4dews" and you can find me on the Wolfpack main Discord, or in Colonel Frost's Discords.

Conduct

In general, if someone else is sending, do not step on them.

Keep your messages and dialogues as brief as possible to avoid clogging the air. On that same note, do not use the air for frivolous communication.

The general speed should be 15 WPM, variable based on the experience of operators. If there is a new operator, slowing down is necessary and encouraged, to do so provide more space in between letters, do not make letters themselves slower than 8 WPM and do so only if necessary (this leads to more confusion).

Wolfpack can be very buggy at times and may skip some units. You can always ask for a repeat with prosigns, if conditions get too bad, as tends to happen in very long games, operators will switch to the reserve text chat at the call from command: "STT" repeated three times.

When a supplemental text chat is being used, either for the reason up above or because the radiomen are a mix of morse and people who cannot morse, then a group direct message chat should be made. Messages will be sent there before they are sent in morse to make it easier to deconflict morse dialogue. The message after the "Recipient Callsign DE Sender Callsign" should be put in spoilers (Using two "!" in a row on either side of the message) so that messages are not revealed without a click on them.

Sending "HH" (Not to be confused with the prosign HH, which is perfectly fine) is not allowed. For those of you not in the know, it was common for transmissions to send this as a code for "Heil Hitler" during WWII. This is a submarine simulator, not a Nazi simulator. While we want to be historically accurate in some senses, this is not one of them.

Syntax

Common message structure:

Standalone messages or messages starting a dialogue will always be structured as such: " Callsign of intended receiver DE Callsign of sender BT message." The message will end with AR if no response is necessary and if a follow-up is not expected from the sender. The message will end with K if a response is expected. On the first message from any new station, preface the message with KA to indicate as such, this is not necessary for every message.

Dialogue between two or more boats after initial contact will be as such:

" DE Callsign of sender BT message."

Alternatively, responses within 20 seconds of the transmission may be made without callsigns at all if the dialogue is between only two boats or in direct response to a direct

order or question. Requests to repeat a message may also be issued without needing to identify.

If the dialogue is expected to end, use AR to end the transmission, if not use K to indicate an expected response.

To break into a dialogue with a separate dialogue that is not an emergency use this format: "Callsign of recipient DE BK Callsign of sender message." This starts up a secondary dialogue. If there are two ongoing dialogues, it is important to preface each message with both recipient and sender. These conversations get complex and getting stepped on is common, therefore any message from the command boat is prioritized, and these chats are discouraged if unnecessary.

To do an emergency break-in the format is:

"TTTT (elongated) CQD DE Callsign of sender BT message." Emergency breaks get the highest priority and all messages, on-going or no, must cede the air.

To send a crash dive message, send a full emergency message if time permits, otherwise use the following format:

"TTTT (elongated if air is occupied) DE Callsign of sender CD CD CD." DDD is also acceptable but has another prosign connotation and can lead to confusion.

TOI protocols: Command ship will set a time of impact. If weapons free has been issued, this does not apply and weapons are at the discretion of each boat's captain. TOI will be sent with a time in 24 hour format after it indicating the time the first torpedo should ideally hit a boat. A u-boat has multiple acceptable reactions to a TOI. ACK is an acknowledgement and acceptance of the indicated time (IE: ACK TOI). The first boat to acknowledge a TOI should

repeat the TOI back to verify it is correct (EI: TOI 2200). DELAY is a request for a TOI delay, with the requested delay in minutes after DELAY (IE: DELAY 5?). NO ATK indicates that a TOI time is accepted, but that the sending u-boat is not expecting to attack. ABORT is an emergency abortion of the TOI and can be issued at any time by any boat. This should be issued only when the convoy is zigging unexpectedly close to a TOI, and thus will result in multiple missed torpedoes, or in other emergency circumstances where no boat should be allowed to fire. A TOI can also be issued with a type. A Type 1 TOI is a standard TOI with no engagement after the time of impact, if no type is indicated then this type is assumed. A Type 2 TOI renders a 5 minute window for boats to continue firing after the initial TOI (with maximum impact time being 8 minutes after the initial TOI), useful for inside attacks. A Type 3 TOI indicates that after TOI, weapons free is automatically assumed (IE: TOI 2200 T X). A command ship can put another U-boat in charge of setting TOI by sending YOUR ATK. This privilege can be denied by sending back Neg. This only applies to one TOI, then the TOI management returns to command ship. This is often done when command does not have awareness of another boat's ability to engage.

To report torpedoes in water, send TIW alone if the torpedo may impact within 1 minute. Send callsign if more than one minute will elapse before impact. If the torpedo is expected to impact on a time that is not an established TOI or slightly after, send the time in minutes for the expected time of impact of the first torpedo that will hit. For instance "STK DE 307 TIW 1.5 AR" which means "To the strike team from U-boat 307, there are torpedoes in water with impact in 1 and a half minutes. Out."

To ask for a repeat:

After the message anyone can reply with "?" to ask for a repeat of the full message.

Prosigns such as AA or AB can be used to specify certain parts of the message when used after a "?".

To send a message to someone who is potentially manning a hydrophone:

If a station has sent “HYD” then expect they will not hear the start of a transmission if you do not send “1 1 1 Receiver callsign DE Sender callsign K” first. Otherwise proceed as normal.

To send an enigma message:

Follow enigma procedure by sending the public and private key first, then sending the message as normal. Avoid using prosigns without breaks, such as BT. In the case of BT use “X,” and in the case of AR use “XX.” Enigma is not the regular method of communication, but may be used when orders are issued or when strategic attack information is being given, typically only by a command vessel. Enigma is harder to understand and decipher, so it is used sparingly for the benefit of newer players. Enigma is structured with a public key, a private key, and then the message. To decrypt a message, set the code wheels to the public key. Afterwards, enter the private key and observe the three letters output on the lamp keyboard. These letters will be the final wheel configuration. Enigma settings are also important to this, however as of right now you cannot adjust plugs or the inner code wheel to change these settings.

Prosigns

Prosigns are shortened codes which correspond to a certain meaning. Prosigns that are underlined (for example BT) are sent without breaks. Here are the ones commonly used in Wolfpack and to be used when following this guide:

The majority of prosigns can be found on these two wikipedia pages, not all are used in Wolfpack but here are links for those interested:

https://en.wikipedia.org/wiki/Prosigns_for_Morse_code

https://en.wikipedia.org/wiki/Morse_code_abbreviations

Here are prosigns and abbreviations more respective to Wolfpack, and prosigns that every radioman should be familiar with:

CQ: Calling all stations. This is not respective to only friendlies, however it is often used to address all U-boats. Similar to “AS” (all stations) which we will not use for reasons of uniformity.

CQD: Like CQ, except it is used as a distress signal.

SOS: A distress signal, used to indicate a rescue is likely needed. In the context of Wolfpack, **SOS** should be used when a boat is expected to sink, and replaces, or can be supplemented by, CQD in such a context.

STT: Switch to text. An indicator that morse code is not working for some reason and that operators must supplement their sending with text chat as described in the Syntax section.

TTT: Emergency tones. Alone indicates that the convoy is alerted, prior to an emergency message indicates an emergency break going into an emergency message.

STK: Calling a strike team. Strike teams are teams of 2 or more U-boats. This will be

followed up by a number. Example: STK1 DE 96 BT ORD ATK from 360. Translated this means, Strike team one, you are ordered to attack from the North.

DE: This means from. It is only used before the Callsign of the sender. You cannot use DE within a message in place of from.

HH: An error in the last thing sent. When used before AR, this means to ignore the entire message.

CP: Calling more than one boat, used before calling upon multiple callsigns. Example: CP 96 552 DE 564.

BT: Used as a separator within a message to isolate separate statements. Some people prefer to use "X" which is encouraged when using enigma ciphers, but not during normal operations.

BK: A break. For Wolfpack, we use this as explained above.

KA: Transmission starting, used on the first transmission from a station, or before a CQ to indicate an incoming message. Encouraged when the air has been quiet for a long time.

AR: Transmission complete, I do not require a response.

K: Transmission complete, I expect a response.

ACK: Acknowledgement of an order or information. Acknowledgement implies agreement.

RCV: An indication a message has been received. This does not imply agreement.

NEG: Negative, no.

NIL: I have nothing to say. Often used when data can not be gathered as requested.

N: No.

C: Affirmative, yes.

1: Sent 3 times to get a receiver's attention if they are not manning the morse key. Helpful when an operator is also manning the hydrophone.

R: Roger.

WC: Wilco. Will comply.

HYD: A reference to the hydrophone. When sent to indicate status of a morse operator, means that the operator is also tasked with manning the hydrophone. Use "1" to get their attention.

AS: Please standby. Can be followed by a number to indicate the time in minutes that one can expect to wait.

AA: All after. Used to request a repeat in the latter part of a message by indicating the start of the part to be repeated. Example: "? AA TOI"

AB: All before. Used to request a repeat in the former part of a message by indicating the end of the part to be repeated. Example: “? AB 15”

AGN: Again, when used alone it is requesting a repeat of a message.

II: I say again.

BN: All between. Used to request the middle part of a message by indicating the start and end of the material to be repeated. Example: “? BN STB 360” (Please repeat everything between “starboard” and “360”).

CS: Callsign. A request to identify when followed by a “?” Can also be used as “Calling station” followed by a callsign, however this is usually omitted in favor of just the callsign.

STB: Starboard.

PRT: Port.

MAG: Magnetic bearing.

REL: relative bearing.

RPOS: A position relative to the convoy in a clockwise pattern counting up to ten. Two numbers may be used to indicate an in-between point. Directly forward is 1, directly astern is 56, directly starboard is 34, and directly port is 78.

CNVY/CVY: Convoy.

CRS: Course.

SPD: Speed. Speed is by default indicated in knots with no decimal, for instance: 8.5 knots would read as "85."

CCRS: Convoy course.

CSPD: Convoy speed.

AOB: Angle on bow.

WX: Weather.

CL: Closing station, this can be used if an operator needs to step away for some time.

OP: Opening station, to indicate when an operator is back after closing a station. May also indicate the observation periscope.

SS: Surfaced and safe.

PD: Periscope depth (Below 10m).

OD: Observation depth (Dived, but above 10m).

BRD: Below radio depth, a dive below 11m. Typically this is used when a boat is diving and communication will be cut for some time, but the dive is not a crash dive.

CD: Crash dive. Preferred over **DDD**.

DDD: A message indicating a CQD or SOS from another boat to avoid confusion of the identity of the emergency vessel. Also commonly used for crash dives, although **CD** is preferred.

PT: Pings from sonar have terminated.

RTC: Indicating a boat is ready to complete a mission.

TOL: Time of impact. Used to coordinate attacks based on when torpedoes should hit a convoy.

TIW: Torpedoes in water. If sent alone, torpedoes will impact in under one minute. If sent with a callsign, torpedo time until impact can be sent after the TIW if it is not expected to impact on a set TOL.

WPF: Weapons free.

ATK: Attack.

CLM: Claim. This means that a ship is being claimed by a u-boat and should not be engaged by another boat. It should be followed by a listing of the ships claimed separated by commas or space.

INATK: An attack from within the borders of a convoy.

PATK: A parallel attack.

FATK: A frontal attack, from the front of a convoy.

BATK: A behind attack, from the rear of a convoy.

ORD: An order

INT: An intention, For “Interrogative” please use a “?” instead to avoid confusion.

IMI: Another way of saying “?” Indicates a question is being posed, can be used before or after a message. Standalone indicates that the last sent message needs to be repeated.

ZZZ: The convoy is maneuvering or “zigging.” Typically used when there is a possible threat to being detected or attacked due to this zig.

ZIG: The convoy is maneuvering or “zigging.” There is no significant threat of being detected due to this action.

Q-Codes

Q-Codes are a different kind of prosign consisting of the letters, the first of which is always “Q.” There is a litany of these codes, so much so that knowing all of them is not feasible, but

here is a list if you are interested: https://en.wikipedia.org/wiki/Q_code . Q-Codes followed by a “?” are asking for conditions, or clarification. Here are the Q-codes that may be used in Wolfpack:

QRS: A request to reduce the speed of sending.

QRQ: A request to send faster.

QAK: There is a threat of collision. The should be followed by the type of vessel that may collide with a boat. An example would be QAK FLWR (We are in danger of colliding with a flower) or QAK U (We are in danger of colliding with another U-boat).

QRA: A request for a callsign. This can be used if a boat does not identify itself. Similar to the prosign “CS” (Example: “CQD CQD CQD CD CD CD AR QRA?” In this example a boat called a distress signal and a followup boat requested a callsign).

QAH: repurposed from the aviation usage of altitude, this is used for depth in meters.

QRB: Distance. Can be used to indicate distance from a target. Example: “CNVY QRB 1 KM”