# Training Module: Buddy Diving with Line in Low Visibility Environments

## Module Goals

- Train divers in effective, low-visibility team diving using a buddy line.

- Establish and rehearse unambiguous tactile communications.

- Practice identifying and resolving buddy line issues (snag, drop, tension anomalies).

- Promote disciplined buddy roles (lead vs. follower) and proper buddy line spacing.

## Required Equipment

- Buddy line (4–6 ft length, braided rope or webbing, with clips or loops)

- Gloves (to simulate low-visibility tactile feedback)

- Dive slates or cue cards

- Obstacle markers (cones, chairs, PVC posts for dryland simulation)

- Platform or pier for obstruction scenarios (in water)

## Communication Protocol: Tactile Signals (Revised)

|  |  |  |  |
| --- | --- | --- | --- |
| Signal | Tugs | Meaning | Response |
| Ping / Check-in | 1 tug | “Are you OK?” (initiated by Lead) | 1 tug = “I’m OK” (by Follower) |
| Attention | 2 tugs | “Pause/Meet Up” — something needs addressing | Close distance, assess, communicate |
| Alert | 3 tugs | “Emergency/Critical Issue” | Immediate proximity, begin response protocol |
| No Response | — | After Ping, no return tug within 5 sec | Lead closes gap immediately |

## Part 1: Dryland Simulations (Pre-Dive)

### A. Buddy Line Fundamentals & Expectations

Line Tension Norms:

* - The line should be neither tight nor excessively slack.
* - A slightly loose line is normal due to differing kick cycles.
* - A momentarily taut line is not a signal unless deliberately held.
* - Tugs are valid only when the line is intentionally pulled taut.

Buddy Roles Defined:

* - Lead diver: sets direction, paces swim, initiates “ping” check-ins.
* - Follower: maintains formation, responds to pings, and signals issues.

### B. Communication Protocol Practice

* - Use a tug only when the line is taut; tugs on slack lines are ignored.
* - Practice ping-response (1 tug each) to simulate OK checks in low visibility.
* Rehearse all 4 signal types with eyes closed or blindfolded:
* - 1 Tug: Ping / Are you OK?
* - 2 Tugs: Attention / Pause and meet up
* - 3 Tugs: Alert / Emergency or critical issue
* - No Response: Prompt immediate reconnection

### C. Simulated Drills

1. 1. Tug Drill (Eyes Closed): Alternate sending/receiving each type of signal. Validate only tugs on taut line.
2. 2. Dropped Line: One diver simulates releasing the line. Buddy detects slack and initiates recovery.
3. 3. Snagged Line: Line is routed under/around a chair or obstacle. Divers coordinate to recognize tension, reverse, and clear the snag.
4. 4. Role Swap Drill: Swap Lead and Follower roles mid-simulation to ensure both divers are competent in both positions.

## Part 2: In-Water Exercises

Each of these scenarios builds on the dryland practice and should be conducted in confined or open water under instructor supervision. Reinforce proper communication, buddy discipline, and problem-solving in a realistic, low-visibility context.

### Scenario 1: Communication Validation

* - Lead diver performs periodic ping checks (1 tug).
* - Follower responds with 1 tug if OK; if no response is received, Lead initiates proximity check.
* - Instructor inserts a planned Attention (2 tugs) requiring meetup and slate-based communication.
* - Follow with a scripted Alert (3 tugs) to simulate emergency signaling and reaction.

### Scenario 2: Dropped Line Recovery

* - One diver (Follower) simulates unintentionally releasing the buddy line.
* - Lead detects slackness through change in resistance or missing feedback.
* - Divers stop, maintain buoyancy, and use tactile search or line sweep to reconnect.
* - Debrief emphasizes line awareness, reaction time, and clear reconnection protocol.

### Scenario 3: Snagged Line Obstruction

* - Line is routed around or under a structure (e.g., platform leg or piling).
* - As divers approach, tension signals a snag condition.
* - Divers halt, backtrack in sync, and collaborate to free the line from the obstruction.
* - Instructor assesses whether the snag was recognized early and resolved calmly.

### Scenario 4: Navigation Swim (Low Viz Simulation)

* - Lead diver uses compass to follow a predetermined out-and-back or U-pattern course.
* - Team maintains correct spacing on buddy line with no visual cues allowed.
* - Ping checks are performed at intervals.
* - Instructor introduces one Attention and one Alert scenario during the navigation to test situational control.