

Navy 26 Standard Operating Procedures United States Naval Academy Basic Sail Training



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100. INTRODUCTION

These Standard Operating Procedures address expectations and guidelines specific to USNA Basic Sail Training. They augment the US Sailing Basic Keelboat Book and on the water sail training. Videos illustrate some lessons.

200. SAFETY

Safety is central and requires everyone's attention. Crew must provide hats, sunglasses, water, and sun block as needed, and wear non-skid, non-marking, closed toe shoes.

[Click to view video "Safety Overview"](#)

200.1 BOARDING

- 1) Skipper boards first puts hatch boards below, eliminating trip hazard.
- 2) Skipper puts on PFD, then gives PFDs to crew, who stay on dock.
- 3) Skipper ensures all PFDs fit and are correctly fastened.
- 4) Crew steps on one at a time, boarding amidships at preferably shrouds.
- 5) Announce boarding with "Stepping On" to alert all to risk of rocking boat with your body weight.
- 6) Always hold something sturdy when moving on boat. Silver parts are safe to hold, colored lines/halyards are less sturdy.
- 7) Don't trip over tiller bungee.
- 8) Sit in cockpit for safety brief.

[Click to view video "Boarding and Deboarding the N26"](#)

200.2 SAFETY BRIEF

- 1) With crew seated onboard, Skipper leads safety brief using checklist on back of Chartlet stored in cockpit lazarette.
- 2) Check all safety items, weather, crew tasks, sailing plan, and emergency procedures.
- 3) Review sailing area limits and hazards using map on Chartlet.
- 4) Pump water from bilge.
- 5) Discuss contacting shore by radio/cell phone, especially if Skipper needs help in an emergency. The radio/cell must always be audible when sailing.

200.3 PERSONAL FLOTATION DEVICES (PFDs)

Properly fitting Coast Guard approved PFDs must be worn at all times.

N26's carry no children's PFDs.

Skipper/crew must provide children's PFDs as needed.

300. RIGGING

Before sailing, skipper must verify N26 is properly rigged.

1. Determine correct departure procedure.
2. Clear foredeck: remove topping lift from foredeck pad eye, spinnaker halyard from pulpit. Attach both to ring on mast. Pull tight, cleat, and stow in cabin.
3. If necessary, twist N26 now, *before rigging*, while deck is clear. (See 314. Twisting the N26).
4. *Always rig sails from bow to stern* to keep cockpit clear as long as possible.

Rig Jib

5. Get jib from cabin, bring to bow.
6. Attach tack to shackle near bow.
7. Attach hanks to forestay starting at bottom. *Make sure jib is not twisted.*
8. Detach (green) halyard from pulpit and attach to head.
9. Uncoil sheets, run through blocks. Tie figure-8 (stopper) knots into end of sheets.

Rig Main

10. Untie mainsheet from boom and uncoil. Lay uncoiled sheet in cockpit. Keep mainsheet cleated to stabilize boom.
11. Start pulling main from cabin. With sail still rolled, insert clew slide into boom track and move it aft in track as sail is passed up from cabin.
12. Secure tack to boom with tack pin. *Make sure main is not twisted along the foot.*
13. Attach outhaul to clew.
14. Tighten outhaul, then unroll main.
15. Put main luff slides into mast track, starting with head. Move each slide up to make room for next one. When finished, insert stopper pin into mast track to keep slides in place. Pin hole is in center of mast just above mast/ boom connection.

Rig Reefing Line: (see 300.1 Rigging the Reefing Line).

Final Preparations

16. Remove main halyard from back of boom. Say “halyard in hand.”
17. Securely hold halyard until it’s shackled to head of sail. When shackle is closed say “made.”
18. Take slack out of halyard. Look up to make sure it’s clear.
19. Tighten main sheet to stabilize boom until ready to sail.
20. Uncleat vang. Make sure backstay is slack.

[Click to view video "Rigging the Main"](#)

[Click to view video “Clearing the Foredeck”](#)

300.1 RIGGING THE REEFING LINE

You must always rig reefing line before sailing in case you need to reef on the water. Reefing shortens/flattens sail for better control in higher winds.

NOTE: *Grip end of reefing line anytime stopper knot is untied or line is unsecured. Never let line disappear into boom.*

Rule of Thumb: *It is best to rig reefing line from port side of boom so you are facing the reefing knot when you tie it.*

How to rig reefing line:

- 1) Release line from cam cleat on starboard side of deck near mast.
- 2) Pull 10 feet of slack into line at end of boom, then untie stopper knot.
- 3) Feed line through reefing grommet on leech of main *from* starboard *to* port.
- 4) Run end of line down port side of sail, to starboard side of boom, between foot of sail and boom.
- 5) As line rounds boom, run it *between* “webbing” that attaches mainsheet to boom and slide holding sail’s clew to boom.
- 6) Pull line around until you have 2.5 feet on port side of boom.
- 7) Using end of reefing line, from port side of boom, tie bowline around standing part of line that comes down starboard side of boom. (Note: *you are tying a lasso style loop around the reefing line*).
- 8) Hold main leech grommet up so it stretches out reefing line. Make sure line is not twisted.
- 9) Leave just enough slack so line won’t pull down on leech when main is hoisted. Cleat reefing line.

[Click to view video "Rigging the Reefing Line"](#)

301. RAISING/LOWERING MAIN

Never raise main in slip. If possible, point N26 directly into wind when hoisting/dropping main. If wind catches sail while hoisting/dropping, mast slides may jam.

Raising Main:

- 1) Crew hoisting main *sits* on port seat with feet braced on side of cabin.
- 2) Put main halyard clockwise around winch at least once. Close halyard clutch.
- 3) Release mainsheet so boom swings freely. Don’t let main catch *any* wind during hoist.
- 4) Point boat directly into wind if possible.
- 5) Look up! Make sure halyard stays clear. Verify vang and backstay released.
- 6) Hoist while seated with feet braced, using long, powerful pulls. Keep thumbs facing back toward body when gripping halyard and don’t wrap line around hands. (Hold all halyards and sheets this way.)
- 7) Check main leech for reefing line tension.
- 8) Place halyard *neatly* in cabin.
- 9) Adjust halyard as needed while sailing. Ease sheet to reduce pressure in sail when adjusting halyard.

Lowering Main:

- 1) Bring halyard on deck and untangle so it’s ready to run free. Place neatly on cockpit floor.
- 2) Turn boat directly into wind so boom is on centerline, then open clutch to drop sail.

- 3) Have one person go forward, in front of mast. Face aft. Place palms on both sides of main and pull sail straight down.
- 4) As main drops, pull sheet tight to stabilize boom on centerline.

[Click to view video "Raising Main"](#)

[Click to view video "Lowering Main"](#)

[Click to view video "Clutch Cleat and Winch Utilization"](#)

302. RAISING/LOWERING JIB

Do not raise/lower jib in basin. Raise/lower jib only beyond two yellow cans near mouth of basin marking YP channel.

Raising Jib:

- 1) Leave basin, avoid obstacles, mind traffic in river, get on starboard tack if possible.
- 2) Wrap leeward jib sheet around port winch one/two times if on starboard tack, but leave sheet slack.
- 3) Sail close hauled under main.
- 4) Wrap (green) halyard clockwise around starboard winch at least one turn and close clutch.
- 5) Look forward. Make sure jib doesn't foul as you hoist.
- 6) Hoist while seated with feet braced on side of cabin, using long, powerful pulls. Keep thumbs facing back toward body when gripping halyard and don't wrap line around hands.
- 7) Pull *both* jib sheets as needed to clear tangles, and then bring jib in on leeward side.
- 8) Place halyard *neatly* in cabin.
- 9) Adjust halyard as needed when sailing. Ease sheet and/or head up to reduce pressure in sail when adjusting halyard.

Lowering Jib, Approaching Basin:

Lower jib *early* on final approach, outside yellow YP cans, well before entering basin.

- 1) Analyze wind/tide direction. Approach basin on a reach, if possible. Never approach on broad reach or run because this risks accidental jibe.
- 2) Untangle jib halyard so it's ready to run when released. Place neatly on cockpit floor.
- 3) Early in approach, pull leeward sheet in to close hauled and cleat it.
- 4) Immediately open halyard clutch to drop jib.
- 5) Send one person to bow on windward side *between* mast and shrouds to finish pulling down jib. Always hold secure silver parts (i.e. shrouds, pulpit, forestay) when out of cockpit. Crouch on foredeck, don't stand.
- 6) *With crew on bow, skipper must steer smoothly, use main sheet to keep boat flat, warn crew of wind gusts and waves.*
- 7) Get crew off bow as quickly as possible, return to cockpit on windward side between mast and shrouds.
- 8) If conditions are unsafe, drop jib without sending crew forward or lower in shelter of basin.

[Click to view video "Raising Jib"](#)

[Click to view video "Lowering Jib"](#)

303. DEPARTING FROM DOCK

N26 Departures:

- 1) MOORING BALL for leaving leeward side of pier.
- 2) SLINGSHOT for leaving windward side of pier.

Rules of thumb for both departures:

- 1) Wind direction determines safest departure.
- 2) Skipper must tell crew the plan and assign jobs: main halyard, mainsheet, dock line handlers, etc.
- 3) Never raise main in slip.
- 4) Only raise main when pointed into wind. Boom will be on centerline when head to wind with sheet eased.
- 5) Tiller bungie is always stored before departure.
- 6) Depart under mainsail only. No jibs in basin.
- 7) *No jibing in basin unless absolutely necessary for safety.*
- 8) Crew sits in cockpit unless job requires otherwise.
- 9) Lines attached to piers stay on piers.

[Click to view video "Determining Type of Departure"](#)

303.1 LEEWARD DEPARTURE “MOORING BALL”

From *leeward side* of pier.

- 1) If N26 is bow in, after rigging, move it backwards until bow can be tied to single line on piling. If bow out, twist N26 *before* rigging so it becomes bow in, then rig before backing out of slip and tying bow to piling. (See 312.1 Twisting the Boat)
- 2) To back N26 out of slip, untie spring line, coil and hang on piling.
- 3) Uncleat bow lines, and toss on dock.
- 4) Uncleat stern lines and walk boat back in slip. Stern line attached to pier will become new bow line. Don't drop this line!
- 5) When securing bow, tie to piling with walkway, unless stand-alone piling is safer due to spacing between boats/obstacles.
- 6) Ease 5 feet of slack in new bow line. While easing, snub line on bow cleat. (See 311.3 Snubbing). Then cleat line so N26 can swing in wind shifts. (Sequence is 'ease, snub, cleat.')
- 7) Check crew is ready to sail, and main sheet, vang are loose.
- 8) Hoist main when head to wind, with at least 10 feet of slack in sheet so sail is *not* catching any wind. (See 301 “Raising/Lowering Main”)
- 9) Check halyard, outhaul, vang, reefing line for proper tension.
- 10) To cast off, send one person forward. Use piling to strongly push bow towards river.
- 11) Note: *When sailing away from pier, if mainsheet is too tight, pressure in sail will force N26 up into pier. Ease sheet immediately to steer away from pier.*

[Click to view video "Mooring Ball"](#)

[Click to view video "Raising Main"](#)

[Click to view video "Snubbing"](#)

303.2 WINDWARD DEPARTURE “SLINGSHOT”

From *windward side* of pier.

- 1) Make sure N26 is bow out in slip. If bow in, twist boat before rigging. (See 312.1 Twisting the Boat, and 300, 301, and 301.1 “Rigging the N26”).
- 2) Uncleat spring line, coil and place on piling hook.
- 3) Uncleat both bow lines. Bring into cockpit. Person sitting on starboard cockpit bench with feet braced against cabin holds starboard bow line. Person sitting on port cockpit bench with feet braced against cabin holds port bow line.
- 4) Person holding port bow line will rise main when N26 clears slip. S/he must wrap main halyard twice around winch. Make sure halyard clutch is closed.
- 5) Skipper removes tiller bungie and uncleats both stern lines.
- 6) Skipper runs both stern lines forward between split backstay wires, brings them up the tiller and pins them against it with his/her aft hand. Skipper uses stern lines to keep N26 centered in slip before slingshot. Use forward hand to hold mainsheet if no trimmer available.
- 7) Make sure N26 is backed well into slip to get more distance for ‘slingshot.’
- 8) On skipper’s command (“pull, . . . pull, . . . pull”), slingshot N26 out of slip by dropping stern lines and having bow line handlers pull on command with *strong* equal force. As outer pilings pass bow line handlers, drop lines into water.
- 9) Skipper steers boat into wind, then tells port line handler to rapidly hoist main from seated position. Steer boat so boom is on centerline.
- 10) Skipper/trimmer releases mainsheet to allow boom to swing freely during hoist.
- 11) With main up, turn boat towards river and sail away.
- 12) Check halyard, outhaul, vang, reefing line, and mainsheet for proper trim.

[Click to view video "Slingshot Departure"](#)

303.3 SPECIAL CIRCUMSTANCES

If wind is perpendicular to seawall from either direction, there will be *no* windward or leeward side of pier. *When in doubt, use slingshot departure.* If you use mooring ball, N26 may be blown sideways into pilings and other boats.

If wind shifts so much you must change your departure, you can twist N26 when rigged.

304. TACKING

Before tacking:

- 1) Choose landmark at 90 degrees to current close hauled course as target for close hauled course on new tack.

- 2) Make sure course is clear.
- 3) Tack from close hauled to close hauled. (Note: if tacking to/from any other point of sail, it's two evolutions: first head up to close hauled, then tack, or first tack to close hauled, then bear away).

How to tack the N26:

- 1) Skipper says "prepare to tack." Crew gets into position as follows:
- 2) Jib trimmer wraps windward sheet on winch and removes slack.
- 3) Jib trimmer uncleats working (leeward) sheet and holds it, reducing turns on winch as needed.
- 4) Jib trimmer says, "ready to tack".
- 5) Main trimmer and rest of crew say "ready to tack."
- 6) Skipper checks new course 90 degrees to windward of current course, readies tiller (and mainsheet if trimming), then says "tacking" and begins turning through wind.
- 7) As skipper moves helm, s/he switches seats by facing forward and passing tiller from one hand to the other behind back, all while smoothly turning boat through tack until headed at chosen landmark 90 degrees to original course.
- 8) When jib begins luffing as boat turns, trimmer releases working (leeward) sheet to allow sail to change sides.
- 9) As jib *crosses centerline*, trimmer immediately pulls it in to close hauled on new leeward side. (Pulling jib in on new side before it crosses centerline backwinds it, so it works *against* the helm. Don't do this.)
- 10) Trimmer adds wraps to winch as needed and can also cleat sheet.
- 11) If trimming sheet under heavy load, use winch handle.

[Click to view video "Tacking"](#)

[Click to view video "Skipper Mechanics"](#)

305. JIBING

Recreational sailors must use N26 *controlled jibe* procedure:

Before jibing

- 1) Controlled jibing requires steering from broad reach to broad reach.
- 2) If jibing from any other point of sail, it's two evolutions: first bear away to a broad reach, then jibe.

How to Jibe:

- 1) Put N26 on broad reach.
- 2) Skipper says "prepare to jibe."
- 3) Slowly bear away until jib clew drops 6 inches and/or just starts to move toward centerline. We call this "winking."
- 4) Immediately stop bearing away and note 'course at wink.' Bearing away below the wink line increases risk of dangerous accidental jibe because this puts your N26 on to a run. 'Course at wink' marks edge of this danger zone. (Strive to recognize 'subtle winks.' Big winks take you too far into danger zone.)
- 5) As jib winks, immediately turn N26 up about 5 degrees back to broad reach. Use this *small tiller movement* of 1 to 4 inches to steer just clear of danger zone. *Don't* head up

past broad reach. If possible, steer toward fixed target (house, tower, buoy) to steady course.

- 6) With danger zone marked and course stabilized on broad reach, jib trimmer puts 1 or 2 wraps on windward winch and pulls slack out of lazy sheet, then uncleats working (leeward) sheet and goes to 1 or 2 wraps. (Zero wraps on leeward sheet may be required in light wind).
- 7) Holding both jib sheets, crew says “ready to jibe.”
- 8) While jib trimmer is preparing, main trimmer “corners the main” by pulling sheet in until end of boom is over leeward stern cleat at corner of transom. Trimmer says “cornering main,” then “ready to jibe” when main is cornered. If skipper is trimming, s/he can cleat the sheet when main is cornered. (Never wrap sheet around hand).
- 9) Skipper now switches sides by facing forward and passing tiller from one hand to the other behind back, *without accidentally changing course* from fixed target. Make sure mainsheet is in hand after switching sides.
- 10) Skipper selects new steering target 40 degrees to leeward of current course, says “jibing,” and turns boat smoothly toward new target by moving helm away from boom. (This turns boat from broad reach to broad reach. Note this is *not* a big course change. Do not turn up past a broad reach.)
- 11) As boom starts to cross cockpit, main trimmer must “pop and drop” sheet: pop it out of cleat, and completely drop so it runs free as boom flies overhead. (Popping sheet and letting it run prevents ‘shock loading’ of boom as it crosses centerline. Shock loading can spin boat/break gear in high wind. Dropping sheet prevents rope burn.)
- 12) As boom crosses centerline, skipper centers tiller to keep N26 on course.
- 13) As jib collapses, trimmer takes working sheet off leeward winch and smoothly pulls sail to other side without backwinding. Trimmer should ‘follow the sail’ as it changes sides. Don’t force it across with sheet.

[Click to view video "Jibing"](#)

[Click to view video “Skipper Mechanics”](#)

306. STOPPING

You can stop to reef, change skippers, hydrate, talk sailing, anchor, etc. There are 3 ways to stop an N26 with sails up: ‘head to wind,’ ‘safety position,’ ‘heave to.’

306.1 HEAD TO WIND

- 1) Turn N26 directly into wind; steer to keep boom on centerline with main sheet slack.
- 2) As you head up, release both jib sheets so sail can’t catch wind.
- 3) Release main so it can’t catch wind.
- 4) Boat will stop quickly, then start drifting backwards. This is called being in “irons.”
- 5) *When drifting backwards, tiller works backwards.* To start forward again, move tiller in direction you want to go and pull jib in on opposite side. For example, turn to port by putting tiller to port, wait until bow starts to turn, then pull jib in on starboard to backwind it and push bow further to port.
- 6) When on course, switch jib to leeward, trim main, sail away.

Note: Tiller functions normally when moving forward and in opposite direction when moving backwards, but won't work at all when transitioning between forward and to backward because water is not flowing over foil. To maximize control, minimize time spent stopped or in transition. Get going either forward or backward quickly.

Note: Because of boom luffing over cockpit and relative lack of control, head to wind is least desirable way to stop when away from the dock.

[Click to view video "Stopping– Head to Wind"](#)

306.2 SAFETY POSITION

- 1) Sail on a close reach and release both sails so neither catches wind. Boat will stop or slip forward at very low speed. Switch skippers, etc. in safety position.
- 2) To restart, pull in jib first, then main. Sail away on close reach.

Note: Jib sheets on N26 tend to tangling when fully released and sail is luffing. Consider keeping light tension on both to prevent fouling without catching wind.

Note: In safety position, N26 has maximum maneuverability and speed control because boat is on a reach when sails come in.

[Click to view video "Stopping– Safety Position"](#)

306.3 HEAVING TO

- 1) Skipper *must* ensure plenty of room to leeward before heaving to. N26 will drift a long way in heave to.
- 2) Sail close hauled.
- 3) Since you're trying to stop, turn N26 *slowly* into a tack, but *don't release jib sheet*.
- 4) Pause at head to wind so waves and wind can help kill speed, but do *not* fully stop boat.
- 5) As boat tacks, jib will backwind and should begin pushing bow down.
- 6) Release main so it can't catch *any* wind, otherwise it will prevent stop. (Boom should be out near shrouds).
- 7) As jib pushes bow down onto a reach, balance it by pushing helm to leeward.
- 8) If you're still moving forward, pushing helm to leeward may turn bow upwind. Make sure you *do not tack* when moving helm to leeward. Continue slowing boat until rudder stalls and jib 'takes control' of bow by pushing it to leeward even though tiller is also to leeward. This is what you want.
- 9) When moving tiller to leeward no longer forces boat to tack by overpowering jib, push tiller far to leeward—about 75 degrees off centerline. (Head of tiller will be near leeward cockpit combing.) Hold tiller in this position.

Note: Look at water over windward side. Turbulence (swirling eddies) from stalled keel/rudder confirm heave to position as N26 slips sideways.

Note: If possible, heave to on starboard so jib sheet will remain cleated on starboard winch. You need port winch for main halyard if reefing.

Note: Heave to is best stop for longer intervals, i.e. when reefing.

[Click to view video "Stopping– Heave To"](#)

307. REEFING

Reefing reduces sail area in high wind, enhancing control.

How to Reef Underway:

- 1) Considering your location and runway to leeward.
- 2) Heave to on starboard tack (See 306.3: Heave to).
- 3) Release vang and backstay.
- 4) Wrap main halyard once on port winch.
- 5) Open main halyard clutch and lower mainsail until reefing grommet reaches reefing hook.
- 6) Close halyard clutch and put grommet on hook without twisting sail.
- 7) Tighten main halyard using winch handle and stow main halyard below.
- 8) Pull reef line with feet braced on side of cabin so new clew grommet is tight against boom.
- 9) Check path to leeward for hazards. Tack away from danger. It is possible to sail for a brief period without sail ties.
- 10) Get three sail ties.
- 11) Corner mainsail.
- 12) Pull excess mainsail cloth below the reef points to windward and roll toward boom.
- 13) Put forward two sail ties through reef point grommets, loop ties around rolled sail, and tie square knots to secure.
- 14) Put aft sail tie through new clew grommet, loop around rolled sail and boom, and tie square knot to secure. Do not capture mainsheet within sail tie.
- 15) Exit heave to by straightening tiller, releasing main sheet, and switching jib sheets.
- 16) Adjust vang and backstay tension as needed.

How to Reef in Slip:

Boat is more stable in the slip. If in question, reef in slip before departure.

- 1) Rig boat leaving main halyard attached to boom.
- 2) Place reefing grommet on reefing hook without twisting sail on starboard side of boom.
- 3) Pull reef line with feet braced on side of cabin so new clew grommet is tight against boom.
- 4) Assure reefing grommet remains on reefing hook.
- 5) Pull excess mainsail cloth below the reef points to a side of the boom and roll toward boom.
- 6) Put forward two sail ties through reef point grommets, loop ties around rolled sail, and tie square knots to secure.

- 7) Put aft sail tie through new clew grommet, loop around rolled sail and boom, and tie square knot to secure. Do not capture mainsheet within sail tie.
- 8) Release and then attach main halyard to head.
- 9) Tighten main sheet to stabilize boom.

[Click to view video "Reefing"](#)

308. SHAKING OUT REEF

Shaking out reef increases sail area as wind decreases, enhancing control.

How to Shake Out a Reef Underway:

- 1) Heave to on starboard tack (See 306.3: Heave to).
- 2) Release vang and backstay.
- 3) Corner main.
- 4) Remove sail ties and return to bucket.
- 5) Release main sheet and ease until main sail is luffing.
- 6) Release reefing line and leave uncleated.
- 7) Wrap main halyard on port winch.
- 8) Open main halyard clutch, ease until reefing grommet can be unhooked, and close clutch.
- 9) Clear reefing grommet from hook.
- 10) Raise main sail and stow main halyard below.
- 11) Adjust, cleat, and stow reefing line below. Pull reefing line from end of boom as needed.
- 12) Exit heave to by straightening tiller, releasing main sheet, and switching jib sheets.
- 13) Adjust vang and backstay tension as needed.

[Click to view video "Shaking a Reef"](#)

309. CREW OVERBOARD RECOVERY

N26 skippers must know ‘Quick Stop’ crew overboard recovery method (reference US Sailing Basic Keelboat book).

- 1) Spotter calls “Crew overboard, port (starboard) side,” points to victim, tells skipper number of boat lengths N26 is from victim.
- 2) Throw cushion or extra PFD to victim. (Omit this in drill because victim *is* a cushion).
- 3) *Immediately turn up to a close hauled course* and quickly trim sails. The immediate reduction in boat speed caused by this turn to windward is your ‘quick stop.’ (If trimmers are slow, you must still turn immediately to close hauled and let them catch up. Don’t wait for trimmers. You will get too far from victim if reaching/running away.)
- 4) Sail close hauled until 3 boat lengths upwind of victim.
- 5) Skipper says “prepare to tack, leave all sheets cleated.”
- 6) Crew keeps eyes on victim, watches traffic, and maintains wind awareness.
- 7) Tack N26 but do *not* release either sheet. On new tack, main stays close hauled and jib is back winded as in heave to.

- 8) Immediately after tack, skipper *must* site down a line perpendicular to centerline of N26 toward victim from his/her position on windward cockpit seat. (Best practice on N26: use “lazarette line” formed by forward edge of leeward cockpit storage door. This line is fixed at both ends so it’s a good sight. Steer so this sight is *always* pointed directly at victim.)
- 9) Keeping lazarette line on target forces N26 to slowly circle victim. *Steering this circle sets up your recovery.* ‘Trust the circle’.
- 10) Late in the circle, N26 will jibe. Jib jibes first. When it does, release sheets to *full* luff.
- 11) If possible, jib trimmer should hold both sheets lightly to prevent tangling without letting sail catch *any* wind.
- 12) Skipper must now alert crew that upcoming turn toward victim will be faster than normal, so hold on.
- 13) Main jibes second. Unlike controlled jibe, skipper does *not* change sides before boom comes across because this makes it difficult to drive the circle.
- 14) Skipper continues to drive circle, keeping lazarette line on victim until main starts to swing across centerline. (Trust the circle. Let N26 jibe *because* you’re steering the circle. Do not adjust helm to force jibe. Be patient. Let boat jibe naturally as you steer the circle. Jibing too soon distorts circle, impedes recovery.)
- 15) When main fully jibes, pop and drop sheet.
- 16) Change sides *and* turn N26 *sharply* toward victim. Steering this way allows you to keep your eyes locked on target. (Your hands will ‘follow your eyes’ as you move helm). Stand as needed to see victim after turn.
- 17) Turning sharply toward target kills speed, sets up slow approach.
- 18) You should now be approaching victim in “safety position,” (see 306: Stopping), very slowly, on a close reach, sails fully luffing, with maximum maneuverability and speed control. Your objective is to make first contact with victim on leeward side at shrouds.
- 19) N26 must be almost completely stopped in safety position when bringing victim on onboard.
- 20) Bring onboard over scooped transom. (If drill, recover cushion at shrouds).

[Click to view video "Crew Overboard"](#)

310. SPECIALIZED EQUIPMENT

310.1 SELF-TAILING WINCHES & WINCH HANDLE

N26 has two winches used to adjust sheet/halyard tension. Winches work in two ways.

Manually:

- 1) Wrap line clockwise at least once around winch drum.
- 2) When adding wraps, stack them upwards one on top of the other.
- 3) Keep constant pressure on line and hold it 6 inches from drum as you wrap, *with thumbs facing away from drum at all times.*
- 4) When pulling or releasing line, make sure angle is up of drum to avoid overrides.
- 5) Once winch is wrapped, pull in/let out line around drum as needed.

- 6) Use the palm of hand to pin line on drum for more control when wrapping drum and easing lines if necessary.
- 7) Manual operation is best for quick adjustments and lighter loads.

Self-Tailing:

- 1) Wrap line clockwise 3 times around winch drum to use self-tailer.
- 2) When adding wraps, stack them upwards one on top of the other.
- 3) Keep constant pressure on line and hold it 6 inches from drum as you wrap, *with thumbs facing away from drum at all times.*
- 4) With 3 wraps on drum, place line across silver guide, into jaws at top of drum. Jaws capture line and work as a cleat. Pull line tight to full engage jaws.
- 5) Insert winch handle into top of drum. Crank handle counterclockwise to tension line.
- 6) Use self-tailer for trimming heavy loads and when jib sheets need to be cleated (i.e. when heaving to or doing Quick Stop Crew Overboard Recovery).
- 7) Always return winch handle to pocket after use.

Rule of thumb: When using winch, always look at what you are tensioning/easing. Keep head up, not down.

310. 2 BOOM VANG

- 1) Spring inside vang tube holds boom up so it won't drop into cockpit when main halyard is detached from end of boom.
- 2) When you tighten vang, it pulls boom down. This lets you control angle of boom in relation to mast.
- 3) Pulling boom down by tightening vang changes main's shape by tightening leech. This reduces 'twist' in sail.
- 4) Easing vang allows boom to rise. This reduces main leech tension, increasing 'twist' in sail.

Rule of Thumb: Use vang to keep boom roughly perpendicular to mast in most conditions.

Note: Remember to uncleat vang when raising/lowering main because tension on boom can cause slides to bind in mast track.

310.3 RATCHET BLOCK

- 1) Mainsheet turning block on cockpit floor is a "ratchet block." Use knob on side of block to turn ratchet on/off.
- 2) 'Ratchet on:' block only turns as sheet comes in and 'clicks' as it moves. Its 'teeth' grab sheet when eased, giving trimmer more purchase. Put 'ratchet on' in heavier wind.
- 3) 'Ratchet off:' block is quiet, turns freely in both directions. Best for lighter winds, jibing in light wind, and docking.

Rule of thumb: Always turn ratchet on/off with sheet under light load.

310.4 BACKSTAY

Under normal conditions, adjustable backstay will be off (slack). However, if wind speed is high enough that you feel boat is heeling too much (i.e. 20+ degrees), you can ‘depower’ your sails by tightening your backstay (bending the mast) as follows:

- 1) If possible, have crew tighten backstay line in cockpit while looking aft at twin blocks running on dual wires attached at transom, leading to top of mast.
- 2) Pull blocks down until 6 feet below fitting that ties the dual wires into single wire.
- 3) If skipper must tighten backstay, keep eyes forward while pulling line, then glance aft quickly to check tension without changing course. Adjust to 5 feet as needed.
- 4) *Do not try to fine tune backstay. It is either off (slack) or on (blocks 5 feet below fitting).*
- 5) Flattening sails ‘depowers’ N26, making it easier to control in higher wind.
- 6) If heel is still excessive or wind keeps building, reef. (See 307. Reefing).
- 7) If wind speed drops, fully ease backstay to ‘repower’ N26. This returns sails to normal fullness, making N26 easier to control in lighter wind.

Note: Remember to fully ease backstay before lowering main to dock or reef. Slides on main luff will bind if mast is bent.

311. SPECIAL PROCEDURES

When sailing your N26, you may need to use one or more of these special procedures to keep your crew and boat safe.

311.1 AVOIDING COLLISIONS

The basic purpose of Navigation Rules is avoiding collisions.

- 1) Right of way boat is called ‘stand-on vessel’ and should maintain course and speed.
- 2) ‘Give-way vessel’ must stay clear.
- 3) When giving way, make course changes early and obvious. Making obvious course change tells stand on vessel you see it and know the rules.
- 4) *Stand on vessels are still obligated to avoid collisions*, so if give-way vessel is not responding, stand on vessel *must* stay clear. Give-way skipper may be unaware of situation so ultimate responsibility for collision avoidance rests with both boats.
- 5) Unless danger is straight ahead, a good way to avoid collision is move your tiller toward trouble. Because N26 turns away from the direction you move the tiller, ‘tiller toward trouble’ turns boat away from threat.
- 6) You can also use speed control to avoid collisions by slowing/stopping. *Speed control is preferred method of collision avoidance* because changing course can cause problems for boats beside or behind you.

311.2 ANCHORING

Anchor is only for emergencies. Never anchor for recreation. Anchor is in locker near bow.

Preparing to Anchor

- 1) Find good spot out of channel, near windward (protected) shore, in shallow water (8'-20'). Refer to Chartlet for depths.
- 2) Drop jib on approach.
- 3) Clear main halyard.
- 4) Pull anchor/line from bow locker. (Make sure line and anchor are attached to boat).
- 5) While crouching securely near pulpit, uncoil and clear line so it runs free.

Anchoring

- 1) A few boat lengths before anchoring spot, go head to wind, drop main. (See 301 Raising/Lowering Main).
- 2) Stay head to wind until stopped.
- 3) Drop anchor through bow pulpit. Let line run until anchor hits bottom. Continue easing line.
- 4) When nearing end of line as boat drifts back, snub line on bow cleat. Cleat anchor line when it's almost fully out to give anchor maximum holding power. (Pull in line as needed if N26 swings too close to any obstacle).
- 5) Site your position relative to fixed reference on shore. Check reference every 5 minutes to see if anchor is dragging.
- 6) If dragging, pull anchor up completely; remove mud by splashing anchor in/out of water, then reset as before.
- 7) Call Cutter Shed to resolve emergency.

Retrieving Anchor & Departing

- 1) Raise main. (See 303.1. Mooring Ball Departure).
- 2) Leave sheet uncleated so sail can't catch wind.
- 3) Pull up anchor while crouching securely on foredeck. Remove mud by dipping anchor in/out of water.
- 4) Return line/anchor neatly to locker, line first, then anchor. Close locker, return to cockpit.
- 5) Raise jib when safe. Sail away. If in irons, see 306.1 on escaping 'head to wind' stop.

311.3 ACCEPTING A TOW

Towing may be needed due to lack of wind, storm, excessive current, gear failure, etc. N26s are towed either "astern" or "alongside."

Astern:

- 1) Lower jib
- 2) Get tow line from cabin.
- 3) Send one crew to bow with line. Uncoil and secure to bow cleat *using cleat hitch*. If tow line has loop, do *not* put it around the cleat. Secure line as though loop wasn't there.
- 4) Pass entire tow line through pulpit on port or starboard side. Make sure it always leads out through pulpit.
- 5) Walk aft to front of cockpit keeping line *outside* shrouds. Get remaining line ready to throw.
- 6) Drop main when towboat is 50 yards away or when instructed by tow boat. (See 301. Raising/Lowering Main).

- 7) Steer parallel to towboat. When close enough, toss tow line to boat, then have everyone sit in cockpit before line snaps tight.
- 8) If towboat is the N26 currently at the end of the line, steer parallel to it on approach. Don't get too close because your rigs will collide if boats are heeled or rocking in waves.
- 9) If you are towboat for another N26, immediately snub its bow line on your stern cleat and cleat it. Keep towline length as long as possible for best maneuverability.
- 10) Signal motorboat when line is secured and you are ready to speed up.
- 11) Always stay alert on helm, look out for obstacles/debris. Follow in wake of boat directly ahead. Avoid large helm adjustments when towing.
- 12) Towboat will signal when to drop towline. As you approach destination, towboat will slow and call for orderly release of boats: aft boat first.
- 13) Once released, be ready to paddle.

Alongside:

- 1) If possible, sail to area where you can drift with no sails for 2 minutes without hazard. When there, drop jib when towboat in site.
- 2) Drop main, secure to boom.
- 3) Position crew amidships by horn cleat and on stern by cleat.
- 4) Take bow line of towboat, tie to the horn cleat amidships. Do *not* use loop to cleat line if one is present. Allow 3 feet of slack in line so tow boat can adjust position.
- 5) Take towboat stern line, tie to stern cleat so boats are snug.
- 6) Before towboat accelerates, crew must be seated.
- 7) Under tow, N26 skipper *must* synchronize steering with towboat. N26 rudder can control tow, so skipper must concentrate/communicate with towboat.
- 8) Towboat will signal when to drop towlines.
- 9) Once released, be ready to paddle.

311.4 RUNNING AGROUND

You should never run aground, but if you do, follow this procedure:

- 1) Remain calm! Stay on N26 at all times.
- 2) Check below for leaks.
- 3) Drop sails. Call Cutter Shed. (See 311.3 Accepting a Tow).

312. RETURNING TO DOCK

Before Entering Basin:

- 1) Check wind direction, recall slip location.
- 2) Discuss docking plan, assign jobs: skipper, halyards, jib douser, sheets, dock lines, snubber.
- 3) Drop jib before entering basin, unless unsafe. If unsafe, drop in basin. (See 302. Raising/Lowering Jib).
- 4) Prepare main halyard after jib is lowered. (See 301. Raising/Lower Main).
- 5) Get paddle ready.
- 6) Uncleat vang.
- 7) Release backstay.

Inside Basin:

- 8) Approach slip under main.
- 9) Don't jibe in basin except to avoid collision. (Use the 'super tack').
- 10) Drop main only when head to wind to avoid jamming slides in luff track.
- 11) Always enter slip *bow first/main down*.
- 12) Use helm and main sheet to control speed when approaching pier. *Better to come in too slow than too fast*. Use paddle if needed.
- 13) Do 'fly-by' to show crew landing procedure if needed.
- 14) Abort landing into fly-by if unprepared or too fast.
- 15) Take snubbing line from dock piling, around forward horn of amidships cleat, to slow/stop in slip. Always put snubbing line around cleat before tensioning. (See 312.3 Snubbing).
- 16) If approaching too fast, bow is in slip, and snubbing fails, crew must sit and *brace for impact*.
- 17) *Never* protect N26 from impact by putting body between boat and *any* point of contact. Let boat take the hit, then report to Sailing Center or Cutter Shed.

312.1 LEEWARD RETURN "GLIDE"

Goal: lower main before entering slip, glide in slowly, stop bow 3 feet from inside face of pier, take dock lines, secure N26 bow lines first.

- 1) Enter basin with jib down, vang and backstay off, main halyard, paddle, and crew ready.
- 2) Determine wind direction using flags, telltales, sails, etc.
- 3) Estimate N26 glide distance with main down. Approach pier accordingly.
(Note: if windy, boat speed may be high, but N26 stops fast when head to wind and will be quickly pushed away from dock. In light wind, speed is low, so glide is shorter. Use paddle if you overestimate glide distance.) *Better too slow than too fast going into slip*.
- 4) Monitor mainsail trim on approach to slip.
- 5) Turn directly into wind and drop main. (See 301. Raising/Lowering Main). (Note: *turn sharply to kill speed, gradually to carry speed. Warn crew if turning sharply*).
- 6) Send one crew forward to drop main. Crew pulling down sail steps onto cabin in front of mast, faces aft, and braces body against mast. Hold shrouds incase skipper makes sharp turn.
- 7) As halyard is released, crew at mast sandwiches sail between hands and pulls down rapidly until main is fully dropped.
- 8) When main is down, trimmer tightens sheet to stabilize/center boom, then cleats it.
- 9) As main drops, skipper *can* stand to see over main. (Tiller lifts to allow standing).
- 10) Skipper then steers into slip using boat's momentum.
- 11) If approaching too fast with main down, skipper can zig zag to slow boat.
- 12) Change landing into fly-by if unprepared or unable to slow.
- 13) If boat stops short of slip, don't scull with rudder. Use paddle or raise main head to wind and sail clear for another attempt.
- 14) Designate crew to step off and *pass bow dock lines to boat first*. Secure bow first because wind blows N26 *out of* slip on leeward landing.

[Click to view video "Leeward Return \(Glide Landing\)"](#)

312.2 WINDWARD RETURN “DONUT”

Goal: lower main before entering slip. Let wind push N26 slowly into slip. Stop 3 feet from inside face of pier, take dock lines, secure stern first.

- 1) Enter basin with jib down, vang and backstay off, main halyard, paddle, and crew ready.
- 2) Determine wind direction using flags, telltales, sails, etc.
- 3) Estimate N26 glide distance with main down. Approach pier accordingly for doughnut turn. (Note: in strong wind, N26 may be pushed into slip at relatively high speed after doughnut turn, especially if main is not fully down. In light wind, speed is low, so final approach to slip will be slow if main is fully down.
- 4) Approach slip on reach if possible. Pass slips to windward with end of boom well clear of pilings and other N26's docked in slips. *Don't catch mainsheet on a piling!*
- 5) Send one crew forward to drop main. Crew pulling down sail steps onto cabin in front of mast, faces aft, and braces body against mast. Hold shrouds incase skipper makes sharp turn.
- 6) As N26 passes slip, turn directly into wind and drop main. (Note: *Turn sharply to kill speed, gradually to carry speed. Warn crew if turning sharply.*)
- 7) As halyard is released when head to wind, crew at mast sandwiches sail between hands and pulls down rapidly until main is fully dropped.
- 8) When main is down, trimmer tightens sheet to stabilize and center boom, then cleats it.
- 9) As main drops, skipper *can* stand to see over main. (Tiller lifts to allow standing).
- 10) As soon as main is down, skipper keeps turning to finish doughnut by steering into slip using boat's momentum. Wind will also push N26 into slip.
- 11) If speed is too high, skipper can zig zag or abort landing, hoist main and return to basin to reset. If speed is too low, wait. The wind will push you into slip, or use paddle. Don't scull with rudder.
- 12) Since wind is pushing N26 into slip, good snubbing is crucial to safely stopping boat. (See 312.3 Snubbing).
- 13) Designate crew to step off and *pass stern dock lines to boat first*. Secure stern first because wind blows N26 *into* slip on windward landing.

[Click to view video "Windward Return \(Doughnut Landing\)"](#)

312.3 SNUBBING

Snubbing a dock line slows then stops N26 as it enters slip.

How to snub:

- 1) As boat enters slip (sails down), a crew standing aft of amidships cleat and holding shrouds takes spring line from outboard piling hook or line handler and loops it around *forward horn* of cleat. (Note: keep hands/feet clear of cleat while snubbing.)

- 2) With line snubbed under forward horn, remove slack while letting line slip around cleat to *gradually* slow N26 and bring it to smooth stop with bow 3 feet from inboard edge of slip.
- 3) Cleat snubbing line when N26 is properly positioned in slip. When cleated, snubbing line becomes spring line.
- 4) Complete docking by securing/adjusting bow and stern lines.

[Click to view video "Snubbing"](#)

313. DERIGGING/STOWING

Always de-rig N26 from stern to bow to clear cockpit as soon as possible.

Main:

- 1) Attach main halyard to back of boom, tension then cleat sheet to stabilize.
- 2) Untie reefing line. Put in stopper knot. Take up slack to stopper knot and cleat.
- 3) Pull slide pin, remove slides from mast. Replace pin.
- 4) Pull main completely to one side of boom. Position two crew on opposite side of boom to roll sail.
- 5) Find second batten from head and fold sail over batten.
- 6) Roll from the second batten down to foot with sail still attached to boom.
- 7) Detach rolled sail from outhaul and tack pin. Replace tack pin. Close outhaul shackle. Remove slack from outhaul.
- 8) Feed sail into port side of cabin as slide moves forward on boom. Remove slide from boom. (Don't fold rolled sail).

Jib:

- 9) Remove halyard. Secure to starboard pulpit loop. Tension through closed clutch.
- 10) Unclip hanks.
- 11) Remove sheets from turning blocks.
- 12) Bring sail aft to one side of boom. Position 2 crew on opposite side of boom.
- 13) Pull sail over boom to locate second major seam. Fold head over second seam.
- 14) Roll jib over boom from second seam down to foot.
- 15) Coil sheets. Don't wrap sheets around sail.
- 16) Stow on starboard side. Don't put sheets on sail

Foredeck:

- 17) Move spinnaker halyard from mast to port pulpit loop. Tension through closed clutch and mast cam cleat.
- 18) Move topping lift from mast to foredeck pad eye. Tension and cleat.
- 19) Check all clutches closed, lines tight. Coil lines, hang coils on winches.

Cockpit:

- 20) Verify vang and backstay released.
- 21) Remove slack from backstay, cleat it.
- 22) Check traveler centered/cleated both sides.
- 23) Coil/hang mainsheet mid-boom with clove hitch.
- 24) Center tiller, secure with bungie clipped into backstay cleats.
- 25) Check winch handle in pocket.

- 26) Sponge, tow line, reef ties in bucket.
- 27) Whistle, chartlet, first aid kit, throw cushion stowed in lazarette.
- 28) Paddle in cabin.
- 29) Pump bilge, visually inspect.
- 30) Remove all trash.
- 31) Crew steps off, removes PFDs, passes them to skipper.
- 32) Hang PFDs in cabin on loops attached to mast.
- 33) If boat needs to be twisted, one crew must keep PFD, help skipper twist.
- 34) Twist boat as need. (See 312.1. Twisting).
- 35) Final crew steps off, passes PFD to skipper.
- 36) Skipper stows last 2 PFDs and replaces companionway doors.
- 37) Skipper steps off N26.
- 38) From pier, pull hard on one dock line to make sure N26 doesn't hit anywhere. Adjust dock lines as needed.

314. TWISTING

In the slips, N26's always alternate bow in, bow out to keep masts from hitting when boats rock. Twist your N26 to maintain alternating pattern. Setting up for mooring ball/slingshot departure may also require twisting, depending on wind direction. Twisting is dynamic, so check video below.

If possible, twist before rigging/after derigging, so decks are clear.

Tiller must be centered with bungie when twisting.

Remember to hold silver while twisting.

- 1) Only two crew needed to twist.
- 2) Release dock lines, *but hold onto outboard pair coming off pilings at mouth of slip.* These will be either bow or stern lines, depending on whether N26 is bow in or out. Each crew holds one line.
- 3) Keep lines outside all rigging as you walk.
- 4) Move boat out of slip by having crew walk down *opposite* sides of deck while holding lines taut. The N26 moves under you, but you don't move much, like walking on a treadmill. Don't let the dock lines slip through your hands when walking. Keep them taut.
- 5) N26 will begin to turn one way or the other leaving slip. Go with this movement because you want it to twist. As boat twists, split crew so one moves toward bow, the other toward stern. *Both crew must be on inboard side of boat facing pier at this point.*
- 6) Boat will end up perpendicular to slip with crew split, holding lines on bow and stern. Let dock lines all the way out at this point, but *don't* drop them!
- 7) To finish twist, crew member on end of boat going back into slip first needs to change sides by crossing centerline without slacking his/her dock line. *This move across*

centerline points new inboard end of N26 into slip and is key to finishing twist. (Note: hold line at arm's length out from boat to increase leverage after crossing centerline).

- 8) Crew on what is now becoming the new outboard end does *not* change sides. *Crew members must end up on opposite sides of boat.* As new inboard end swings into slip, crew on outboard end must walk down side of boat while keeping dock line taut, so N26 again 'treadmills' under foot and moves slowly back into slip.
- 9) As inboard end of boat swings into slip, crew on this end must also 'treadmill' N26 back into slip by keeping dock line taut and walking down *opposite* side of boat from partner.
- 10) Your N26 will usually center itself as you walk. If it doesn't, use pilings and 'friendship line' to center boat and keep it moving.
- 11) As boat approaches back of slip, one crew must go to bow, the other to stern.
- 12) Secure docking and spring lines.

[Click to view video "Twisting the N26"](#)

400. SAILING BOUNDARIES

N26s shall not be sailed west of Severn River Bridge, east of line drawn between Greenbury Point and Sycamore Point, inside Annapolis Harbor, or into any river or creek. See "Chartlet" in cockpit lazarette for boundaries as part of pre-departure safety brief. (See 200.2. Safety Brief)

Shoal Area: as you exit basin and head across river, shoal area runs parallel to shore and toward bay past red nun "14." You will run aground if you pass Red Nun 14 and continue one third of the distance to shore.

500. ALCOHOL AND TOBACCO POLICY

Alcohol and tobacco shall not be consumed by anyone, in any manner, at any time while on an N26, or the piers, quay walls, parking lot at Santee Basin. Violations shall result in administrative and/or disciplinary action.

600. REPORTING MATERIAL DISCREPANCIES, DAMAGE, OR INJURY

All material discrepancies shall be reported to Cutter Shed watch immediately by submitting a Sailing Department Discrepancy Report (or "chit"). Temporarily fixing an item is NOT authorized on board N26s without permission from Director, Basic Seamanship Training.

All incidents or injuries, no matter how minor, shall be reported using the Incident Report Form.