

Appendix A

Collegiate 420

Before you can go sailing the boat must be rigged. Rigging and unrigging each type of boat will be a little different, but the concepts will stay the same.

- Always start by pointing the *bow* (front) of the boat into the wind. This will help keep the sails from filling with wind before you are ready to start sailing.
- Make sure the boat is dry and that all drainplugs are closed.

You will need the following parts to rig a 420:

Boat Hull	Boat Dolly	Sails
Mainsheet & Jibsheet	Rudder & Tiller	

Step 1: Rigging the Jib

The first step in rigging a 420 is attaching the Jib and tensioning the rig. In it's stored stage, the rig rests detensioned on the forestay. By attaching the jib we also tension the rig. First, make sure that the mainsheet is uncoiled, loose, and uncleated. Take the jib and you'll notice a wire that runs inside the leading edge. The larger corner is the foot and attaches to the bow of the boat. Each boat may have a slightly different method of attaching the wire to the boat, but they will usually consist of a shackle or pin. Undo the pin attached to the boat, insert the wire eye through the pin or shackle and reattach to the boat.

Next, find the jib halyard. The jib halyard exists from the front of the mast near the same point as where the forestay attaches to the mast. Don't get the jib halyard confused with the main halyard, which goes all the way to the top of the mast. Attach the shackle at the end of the wire end of the jib halyard to the head of the jib. Once everything is connected, raise the jib and tighten to the desired tension; softer for light winds and heavy for strong winds.

Once the sail is raised it is a good idea to take the clew end that has the jib sheets attached and make one light wrap around the tightened leading edge to keep the sail from flapping in the wind.

Step 2: Rigging the Main

First, slowly release the main halyard if it is holding up the end of the boom. Detach the halyard from whatever it was tied to, but be sure not to pull on the other end and let the line go to the top of the mast. Tie off the loose end somewhere out of the way; a cleat on the mast is usually a good idea.

Once the boom is resting in the boat, find the clew of the main and start feeding the sail down the track of the boom starting at the end attached to the mast. Once the clew is fed all the way to the end of the boom find the outhaul and feed it through the eye of the sail. Then lead the line through the cleat on the boom and tie a stopper knot.

Now take the end of the halyard that attaches to the sail and feed it through the eye at the head of the main once. Then wrap it over the top and feed it through the eye a second time creating a loop over the top of the sail. Now with the end tie a figure-8 knot and pull it tight against the sail.

Feed the head through the track on the mast and raise the sail just enough so it will not come out of the track then tie off the main. Do not raise the main until you have launched the boat and you are ready to go sailing.

Step 3: Launching

Check that the drain plug is in place and tight. The automatic bailer should be closed. The line holding the centerboard up should be secured without any slack. Unwrap the jib and lead the jib sheets through the blocks/cleats. Make sure the bowline is securely wrapped around the handle of the boat dolly and then slowly lower the boat down the ramp and into the water. Once in the water and off the dolly, unwrap the bowline from the dolly and make sure you hold onto it while you walk the boat to the dock. With the boat in a few feet of water attach the rudder. Make sure both points on the rudder are attached to the boat.

Step 4: Raising the main & getting under way

To raise the main, first make sure the mainsheet is uncleated and the halyard is attached to the head of the sail, and then feed the head in to the mast track and pull the main halyard to raise the sail all the way to the top. Tie off the halyard on the cleat and coil the loose line. If you are in water deep enough, you can lower the centerboard by releasing the line holding it up and pulling on the line to drop it down.

Derigging the Boat

Derigging and storage of the boat and its parts is vital to keeping the boats in working condition. Please use the upmost care when dealing with the boats and their parts and make sure everything is stored correctly and securely.

Step 1: Docking

When approaching shallow water, pull up the centerboard and if necessary remove the rudder at the last moment. After you hop out of the boat, remove the rudder and place it in the boat.

If very windy, release the main halyard and drop the sail to the in to the boat. Tie the bowline to the dock or have someone hold it while you get your dolly. Put the dolly in the water and bring the boat onto the top of the dolly. Secure the boat to the dolly. Release the auto bailer. **Warning:** Have someone help you pull the boat out of the water. The boats may take on water and can be considerably heavier. Pull the boat out of the way of the ramp area and position the dolly so that it will not roll back down the hill.

Step 2: Clean the Boat

Open all drain plugs and the auto bailer and let the boat drain. Raise the main. The boat and sails should be rinsed off with fresh water to remove dirt and salt. Rinsing is particularly important for all fittings and blocks. Once you have rinsed everything, tilt the boat up and let all the remaining water drain from the hull and cockpit.

Step 2: While sails are drying

Leave the sails raised to dry in the wind. During this time coil the mainsheet. Take the rudder and put it away in its proper location. Get your sail bag and boat cover. Finally help others around you.

Step 3: Sails and Halyards

Once the sail is dry, lower the sails. Remove the sails from the boat. Make sure you reattach all halyards to the boat so they don't get pulled to the top of the mast. Roll sails on the grass; not on concrete! **Roll the sails along the trailing edges.** Coil the jib sheets

and put the rolled sails in the correctly numbered sail bag.

Step 4: Boat

Cover the cockpit of the boat with the cover. Make sure all snaps and clips are secure.

Move the boat and the dolly into the correct storage position.

Appendix B

Sunfish

Before you can go sailing the boat must be rigged. Rigging and unrigging each type of boat will be a little different, but the concepts will stay the same.

- Always start by pointing the *bow* (front) of the boat into the wind. This will help keep the sails from filling with wind before you are ready to start sailing.
- Make sure the boat is dry and that all drainplugs are closed.

You will need the following parts to rig a sunfish:

Boat Hull	Boat Dolly	Spars
Mast	Mainsheet	Rudder
Daggerboard	Sail	Halyard

The following steps will describe how to rig a Sunfish:

Step 1: Stepping the Mast

Remove all of the parts from the sail bag. Make sure there are no overhead wires in the area and that the mast step hole and mast butt are perfectly clean; any sand, dirt etc. in the mast step will grind into the gelcoat and eventually damage the boat. Lay the booms and sail on the deck of the boat with the bronze gooseneck over the mast step hole. Feed about half the halyard through the hole in the top of the mast and set the mast heel down through the gooseneck into the mast tube.

Step 2: Attaching the Mainsheet

Tie one end of the mainsheet to the traveler wire. Pass the other end forward through the two blocks on the lower boom and down through the mainsheet block, then tie a figure eight knot as a stopper knot.

Step 3: Raising the Sail

Pull the main halyard all the way up leaving no slack at all. You may need to raise the lower boom with one hand to make sure the upper boom is at the top of the mast. Put the end of the halyard through the eye in the deck; pull the halyard as tight as possible, and tie off the halyard to the cleat.

Step 4: Attach the Rudder

Lock the rudder up and attach it to the boat by passing the tiller under the wire traveler and lining up the rudder pin with the bracket. The bottom groove should fit into the bottom bracket, and when you push down on the spring-loaded pin, the top groove will slide into the top bracket. Release the spring and lock the rudder in place, making sure the rudder is securely connected to the boat at both top and bottom.

Step 5: Launching

Check that the drainplug is in place and tight. The automatic bailer should be closed. Make sure the bowline is securely wrapped around the handle of the boat dolly and then slowly lower the boat down the ramp and into the water. Once in the water and off the dolly, unwrap the bowline from the dolly and make sure you hold onto it while you walk the boat to the dock. With the boat in a few feet of water, slide the daggerboard into the daggerboard trunk. Drop it down as much as depth permits. Push the rudder down if the water is deep enough.

Derigging the Boat

Derigging and storage of the boat and its parts is vital to keeping the boats in working condition. Please use the upmost care when dealing with the boats and their parts and make sure everything is stored correctly and securely.

Step 1: Docking

When approaching shallow water, pull up the daggerboard as much as possible without obstructing the boom, and pull up the rudder. After you hop out of the boat, untie the mainsheet from the traveler. Remove the daggerboard and place it in the boat. Release the main halyard and drop the sail to the deck of the boat. Tie the bowline to the dock or have someone hold it while you get your dolly. Put the dolly in the water and bring the boat onto the top of the dolly. Wrap the bowline securely around the handle of the dolly.

Warning: Have someone help you pull the boat out of the water. The boats may take on water and can be

considerably heavier. Pull the boat out of the way of the ramp area and position the dolly so that it will not roll back down the hill.

Step 2: Clean the Boat

Open all drain plugs and the auto bailer and let the boat drain and water. The boat and sail should be rinsed off with fresh water to remove dirt and salt. Rinsing is particularly important for all fittings and blocks. Once you have rinsed everything, tilt the boat up and let all the remaining water drain from the hull and cockpit.

Step 2: Mainsheet, Rudder, and Daggerboard

Leave the sail raised to dry in the wind. During this time remove the mainsheet and coil it properly. Take the rudder and centerboard and put them away in their proper locations.

Step 3: Sail, Mast, and Halyard

Once the sail is dry, lower the halyard and keep both booms on the deck of the boat. Roll the sail up to the spars and use the halyard to secure the sail and two spars together. Attach the mainsheet to the gooseneck. Remove the mast. Place everything inside the sail bag. Store the sail bag containing the rig in its correct location.

Step 4: Boat

Move the boat on the dolly into the correct storage position or if storing on the racks make sure you have a minimum of 3 people lifting the boat into the correct location. Cover the cockpit of the boat with the cover.

Appendix C

Optimist (Pram)

Before you can go sailing the boat must be rigged. Rigging and unrigging each type of boat will be a little different, but the concepts will stay the same.

You will need the following parts to rig an opti:

Boat Hull	Boat Dolly	Spars & Sail
Daggerboard	Rudder	

Step 1: Sails, Spars, and Controls

Remove all of the parts from the sail bag. The mast, boom, and sail always stay attached as once piece. Insert the mast through the hole in the deck and make sure the end sits in the metal mast cup. Make sure the boom U connection is set around the mast.

Place the sail sprit into the loop at the top of the sail and insert the other end into the loop on the halyard. Raise the halyard until the sail is spread evenly. Do not over tighten the halyard or you will create creases in the sail.

Clip the mainsheet on to the boom and put the rudder and daggerboard in to the hull.

Step 2: Launching

Make sure the bowline is securely wrapped around the handle of the boat dolly and then slowly lower the boat down the ramp and into the water. Once in the water and off the dolly, unwrap the bowline from the dolly and make sure you hold onto it while you walk the boat to the dock. With the boat in a few feet of water, slide the daggerboard into the daggerboard trunk and then attach the rudder.

Derigging the Boat

Derigging and storage of the boat and its parts is vital to keeping the boats in working condition. Please use the upmost care when dealing with the boats and their parts and make sure everything is stored correctly and securely.

Step 1: Docking

When approaching shallow water, pull up the daggerboard as much as possible without obstructing the boom, and pull up the rudder. After you hop out of the boat, unclip the mainsheet from the boom. Remove the daggerboard and rudder and place them in the boat. Tie

the bowline to the dock or have someone hold it while you get your dolly. Put the dolly in the water and bring the boat onto the top of the dolly. Wrap the bowline securely around the handle of the dolly. **Warning:** Have someone help you pull the boat out of the water. The boats may take on water and can be considerably heavier. Pull the boat out of the way of the ramp area and position the dolly so that it will not roll back down the hill.

Step 2: Clean the Boat

The boat and sail should be rinsed off with fresh water to remove dirt and salt. Rinsing is particularly important for all fittings and blocks. Once you have rinsed everything, tilt the boat up and let all the remaining water drain from the hull and cockpit.

Step 2: Mainsheet, Rudder, and Daggerboard

Leave the sail raised to dry in the wind. During this time coil the mainsheet. Take the rudder and centerboard and put them away in their proper locations.

Step 3: Sail, Mast, and Halyard

Once the sail is dry, remove the mast, boom, and sail and take it to the grass. Fold the boom in line with the mast and then roll the sail up to the spars. Place everything inside the sail bag. Store the sail bag containing the rig in its correct location.

Step 4: Boat

Move the boat on the dolly into the correct storage position or if storing on the racks make sure you have a minimum of 3 people lifting the boat into the correct location.