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***Welcome!***

Welcome message from commodore

## ***DSAA TELEPHONE NUMBERS***

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**DSAA Office and Booking Line**      **(403) 238-0689**    **dsaalberta@gmail.com**  
**DSAA Business Manager**            **(403) 225 8050**    **businessmanagerdsaalberta@gmail.com**

### **Other important phone numbers**

Calgary Transit Access	(403) 537-7777
City of Calgary Boat Patrol	(403) 371-8674
Glenmore Sailing School	(403) 221-3689
Glenmore Sailing Club	(403) 238-2044
Calgary Canoe Club	(403) 246-5757
Alberta Sailing Association	(403) 618-2393
Sail Canada	(613) 545-3044
City of Calgary Emergency	911

### **DSA-Alberta Officers**

		<b>Home</b>	<b>E-mail</b>
Commodore	Scott Wilson	243-7709	sailorslies@home.com
Vice Commodore	Robb Lawrence	255-3056	
Secretary	Katie Gerke	226-3275	katester@telusplanet.net
Treasurer	Dave Heiland	279-1870	heiland2@telusplanet.net
Directors	Harold Gutek	241-9327	hgutek@home.com
	Patti Gutek	241-9327	pgutek@home.com
	Dale Keith	263-4798	dgkeith@telusplanet.net
	Leah McCallum	288-2601	
	Hal Roberts	346-1316	hroberts@oanet.com
	Keith Stephens	278-9391	kjstep@ibm.netxcz
	Roger Thompson	239-3948	

## ***OUR MISSION***

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To provide disabled Albertans with the opportunity to access and enjoy sailing activities while promoting enhanced independence and community involvement.

### ***Our Goals***

The Association's goals are:

- To provide sailing opportunities for Albertans regardless of disabilities or age
- To provide a unique, enjoyable experience for its participants which includes opportunities for social, recreational, rehabilitative and competitive activities
- To build confidence, self-esteem and enhance independence for people with mobility or other impairments
- To facilitate integration of disabled and able-bodied recreation and competition

Our goals, therefore, are both rehabilitative and recreational. As has been demonstrated in DSA sailing programs across North America, there is a notable increase in self-esteem and confidence when our stakeholders find themselves sailing independently along with other able-bodied sailors.

DSA-Alberta relies on both corporate and private sponsors to deliver its programs to the community. We strive to promote partnerships that benefit both our sponsors and our association.



## ***DSAA FEES***

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**Annual membership fee:** \$40 Membership is open to anyone.

**Independent Sailing Session fee:** \$15 per 1-hour session per client or \$25 per 2-hour session per client for Martin 16, Access Dinghy, or Sonar. (minimum of three people are required to sail the Sonar).

**Community Partner Program fees:** \$15 per participant and optional \$50 User Fee for DSAA clubhouse.

**Wednesday Night Racing fee:** \$15 for Martin 16; \$45 for Sonar.

**Regatta fee:** \$40 per boat per day for use of a Martin 16 at a DSA-Alberta sanctioned regatta/event.

\$120 per day for the use of the Sonar (Glenmore Reservoir only).

## ***Liability Release and Medical Information***

Participants in all DSA-Alberta programs (members, clients of community partner events and all volunteers) must complete a Release and Assumption of Liability and a Medical Information and Release. The information provided on the Medical Information and Release form is confidential and will only be used to assist in the event of an accident, injury or medical emergency, and to identify emergency contacts, parents or legal guardians, etc.

## ***Volunteer Sailing Credits***

DSA-Alberta depends upon and is grateful for our dedicated volunteers. Without the support of our volunteers the Association would not be the success it is today. People volunteer for a variety of reasons, such as enjoying sailing our Martin 16's and Sonar at Glenmore Reservoir. DSA-Alberta Volunteers may book one of our Martin 16's or the Sonar at any time under the normal booking rules and fees. Every hour that a DSA-Alberta member volunteers is banked, hour for hour, as credit towards sailing our Martin 16's and Sonar without any fees. Make sure that you log your volunteer hours in the Volunteer Log in the DSA-Alberta office.

## ***DSA-ALBERTA PROGRAMS***

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The DSA-Alberta programs are full of opportunities to learn about and enjoy the recreation and sport of sailing.

### ***Glenmore Program (Calgary)***

In Calgary, we operate a permanent community sailing program on the Glenmore Reservoir, located at South Glenmore Park at 24th Street SW and 90 Avenue SW. Both beginners and experienced sailors may access our fleet of Martin 16 / Sonar sailboats and support services through the programs described below. Our Glenmore programs are governed by the Glenmore Lake By-Laws, which can be found at the end of this manual.

### ***Independent Sailing Program***

The Independent Sailing Program provides accessible facilities, equipment and support services necessary for children and adults with a disability to safely access sailing activities. The goal of our Independent Sailing Program is to allow our sailors to develop the skills and experience required to sail independently, while minimizing the impact of their disability while on the water. In order to sail our Martin 16's on your own, you must be CANSail I certified. If you wish to take someone out with you, you must be CANSail II certified. To be the helmsperson of the Sonar (crew of three) you must be Sonar certified. Talk to our staff regarding certification.

A two-hour independent sailing session may be booked daily from May 16 - August 31. Some dates and times may be reserved for regattas and maintenance. Please indicate whether you will need a Sailing Companion.

### ***Wednesday Night Racing and Regattas***

A goal of DSA-Alberta is *“to facilitate integration of disabled and able-bodied recreation and competition”*. DSA-Alberta sailors are welcome to participate in Wednesday Night Racing every Wednesday from May 17<sup>th</sup> to August 30<sup>th</sup> at 6:00 p.m., as well as a number of regattas during the summer.

DSA-Alberta sailors and volunteers can book a Martin 16 or the Sonar for these events. Boats are assigned on a rotation basis. Even if you do not have certification, a Sailing Companion can be provided on request, so that you can experience the fun and excitement of racing.

### ***Children's Program***

Children come from all over to enjoy sailing at DSA-Alberta: Calgary Between Friends Club, Camp Bonaventure, Special Olympics, Variety Club of Southern Alberta and the Children's Hospital. The children enjoy sailing, a picnic lunch, activities and games. The program staff and volunteers working with children are trained to ensure children find their sailing experience safe, fun and rewarding.

## ***Community Partner Program***

Our Community Partner Programs offer agencies serving persons with disabilities the opportunity to bring their clients out to enjoy an afternoon of recreational sailing experience. Our events are highly regarded as a safe, fun and therapeutic experience for children and adults with mobility and learning disabilities. A typical Community Partner event:

- provides opportunity for 5 – 20 clients to sail in the Sonar
- will last from 3 to 4 hours
- includes facilities for a BBQ or picnic lunch

To ensure that all Community Partner events are both safe and fun, here is what the DSAA-Alberta and Community Partner are each responsible for.

### **DSAA will:**

- be responsible for providing a safe environment for participants to experience sailing and enjoy a social outdoor experience.
- provide the boats, safety equipment and staff necessary to ensure safety on the docks and while sailing
- provide Personal Floatation Devices (PFDs)
- provide trained Sailing Companions to accompany clients while sailing.
- provide a Hoyer Lift on the dock for assisted transfers
- provide the DSAA clubhouse for food preparation (barbeque) and in-door activities (optional for fee of \$50)
- not guarantee that any or all participants will sail, as weather is unpredictable.
- staff will have the final authority regarding how your event is conducted.

### **Community Partner will:**

- be responsible for the medical, physical and emotional safety of their clients
- provide staff, attendants, parents and volunteers with the specific needs of their clients, and accompany them where necessary for their safety and well-being
- ensure all of their participants (or guardians), volunteers and support staff have completed and signed a Release and Assumption of Liability and a Medical Information and Release.
- ensure participants, where necessary, have J cushions or other special seating and necessary personal aids
- ensure all participants have adequate clothing for all weather conditions, including a jacket, sunscreen, hat, and sunglasses.
- Coordinate with DSAA staff to plan lunch and entertainment, and provide food for your clients, staff and volunteers.
- support the DSA Alberta staff in controlling critical, safety-related behaviours including: wearing life-jackets when on the dock and while sailing; limiting access to docks to those embarking or disembarking sailboats; and not allowing wading or swimming in the Reservoir. To assure safety, DSA staff may request that any or all of your clients and/or volunteers remain on land.

## ***VOLUNTEERS NEEDED!***

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The DSAA Program is *volunteer intensive* -- in other words, we need you! Volunteers will help DSAA staff with every aspect of running a successful sailing program. These are some of the questions asked by new DSAA Volunteers:

**Q: Do I need special training?**

A: No, DSAA Staff and volunteer specialists will train you and check you out on the required skills. It is useful to learn as much as you can about safe lifting and safety procedures at an early stage. The comfort and safety of our sailors and Volunteers is our primary concern.

**Q: What level of commitment is expected?**

A: It's up to you. Let us know what level of involvement you feel comfortable with. If you do commit to helping out on a particular day -- please arrive promptly, and call us a day ahead if you're unable to make it.

**Q: What is there for me to do?**

A: Volunteers help DSAA staff with every aspect of running the program and, most of all, making sure that we all have fun!! In recognition of your efforts, DSAA Volunteers have access to the DSAA sailboats and we hope that you'll learn to sail as well! Descriptions of specific Volunteer Roles are included in the next section: DSAA VOLUNTEER ROLES.

**Q: Can my sailing experience be used?**

A: Definitely! If you're certified to CANSail II, or when you demonstrate equivalent skills, you can accompany sailors as a Sailing Companion.

**Q: Are any other skills useful?**

A: Any experience you may have working with the disabled, or medical/physiotherapy or nursing skills, handyman, flexibility and cheerfulness are always helpful.

**Q: Do I have to be strong?**

A: No, however it is important that you advise DSAA staff of any physical injuries or limitations that you may have. It is your responsibility to participate in activities that you're suited for.

**Q: Will I be insured?**

A: DSAA carries \$2,000,000 General Liability insurance. As in most leisure activities there is a degree of risk involved as helping may involve physical exertion and being near the water. All participants - both sailors and volunteers - are required to complete and sign a Release and Waiver of Liability.

**Q: What's in it for me?**

A: We find that we all learn a lot about each other through the sport / recreation of sailing. You can help make sailing accessible to Calgarians that otherwise wouldn't be able to sail, **AND as a Volunteer, you can access all of our Programs and sailboats and learn to sail yourself.**



## ***DSAA VOLUNTEER ROLES***

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As a DSAA volunteer, you will learn about sailing, assist our sailors, meet new people -- and have a lot of fun in the sun. In order to develop our team of volunteers, there are a variety of roles that need to be filled. In all cases, the necessary training for you to perform these roles will be provided -- if you're unclear about what your duties are, PLEASE ASK for clarification and training.

To insure the safety of our participants, any DSAA member may ask you to confirm that you've been trained to perform these roles. As you are trained and certified to assist us, your certifications will be recorded on your **Volunteer Training Checklist** on the last page of this Manual.

Just about all DSAA Volunteers are willing and capable of being trained to do many roles. On any given day, you may be asked to help out in any one or more of the following ways:

### ***Rigging and Transfer***

**Description:** This is the most common Volunteer Role. Before each sail, the Martin 16 must be checked out and rigged for the sailor. The sailor is then transferred into the boat according to their preference, and then again to exit the boat at the end of the sailing session. You will provide assistance to transfer as requested by the sailor.

**Duties:**

- Check-out and then rig boat ready to sail
- Assist the sailors to transfer into and out of the boat
- Perform a radio check
- Assist to de-rig, clean, and stow the boats and equipment

**Skills:**

- Rigging and derigging the sailboat
- Proper lifting and transfer procedures

### ***Sailing Companion***

**Description:** Many of our members will have little or no sailing experience. Qualified volunteers are needed to accompany sailors until they are certified to sail on their own.

**Duties:**

- Accompany the sailor on the water. Assure the safety of the sailor and provide coaching as appropriate (Note: you are not expected to be an instructor)

**Skills:**

- *CANsail II* or equivalent experience or skills test
- Knowledge of safety procedures and the use of the radios

## **Equipment Maintenance**

**Description:** Our boats and equipment are valuable, and need to be cared for. You will help perform regular preventative maintenance tasks and assure that our boats and equipment are properly cleaned, stowed (put away), and in good condition.

**Duties:**

- Daily check of all equipment to ensure that safety standards are upheld and the boats are kept up to perfect operating condition, lubricated and overhauled when needed.

**Skills:**

- Mechanical aptitude
- Some knowledge of sailboats is useful

## **Community Partner Events**

**Description:** DSAA hosts sailing events for kids and adults from various agencies serving the disabled. Each event generally runs about three or four hours (i.e. a morning or afternoon) and requires a number of volunteers. These events are hosted using our Sonar sailboat and with volunteer support as sailing companions of multiple sailing trips.

**Duties:**

- Being a sailing companion for a significant part of the day
- General assistance with organizing/hosting groups up to 25 participants.
- Assistance in transferring participants into and out of the sailboats.

**Skills:**

- Ability to sail the Sonar
- Enthusiasm and a fun loving, responsible attitude
- First-Aid training (not mandatory)

***These descriptions are outlines of some of the roles that need to be fulfilled. There may be overlap and roles added as we go, so we encourage all volunteers to be flexible where they can!***

## **VOLUNTEER BOOKINGS**

To book a volunteer assignment for the DSAA, please **call (403) 238-0689**.

If you receive the recorded message, leave a message regarding the time you're available and your phone number. We'll call you the day before to confirm your assignment.

**If you have to cancel or reschedule your assignment, please call us 24 hours before.**



## ***VOLUNTEER CHECKLIST***

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The volunteer meeting place is the DSAA Office located south of the Calgary Sailing School building.

When you arrive:

1. Check in with DSAA staff.
2. Check weather conditions for that day.
3. Assist staff members with rigging and cleaning boats, if required.
4. Ensure all equipment necessary is present for the sail and is in working order:
  - a. PFD's
  - b. Bailer
  - c. Paddles
  - d. Radio
5. Assist client(s) into the boat, as necessary.

### **Safety Checklist:**

- Do you and all other Volunteers and sailors have life jackets or PFDs on?
- Do you and the sailors have adequate clothing and protection for the weather and sun?
- Is the sailor prepared for a one- or two-hour session?
- Have you done a radio check?
- Take empty wheelchairs off of the docks and leave ashore. Leave **brakes on**.

After you return from the sail:

1. Assist client(s) out of the boat, as necessary.
2. Assist staff members with derigging boats, if required.
3. Ensure equipment is clean and out away.
4. Record any maintenance that is required with staff.
5. Look at booking calendar and book your next sail.

***Thank you for your assistance with our DSAA Programs!!***



## ***SAFETY PROCEDURES AND EQUIPMENT***

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***Safety is of paramount importance for everyone involved in DSAA programs***

### ***Participant Information***

All DSAA program participants (sailors and volunteers) must complete a **Release and Assumption of Liability** and a **Medical Information and Release**. Completed forms are kept on file in the DSAA office.

The information provided on the Medical Information and Release form is confidential and will only be used to assist in the event of an accident, injury or medical emergency, and to identify emergency contacts, parents or legal guardians, etc.

### ***First Aid Equipment***

A fully equipped, standard first aid kit is available through the Glenmore Boat Patrol office and in the DSAA office. A record of all injury, no matter how minor, must be kept on an injury report form, available through the Glenmore Boat Patrol office.

### ***Lifejackets and Personal Floatation Devices (PFD)***

All DSAA program participants (staff, sailors and volunteers) **MUST** wear a government approved PFD or lifejacket at all times when on the docks or on the water at Glenmore Reservoir.

This is required by the City of Calgary By-law 9018, and provides for the safety of all participants. DSAA PFDs are stored in the DSAA Office. Sailors with a disability should be asked whether they wish to wear a Lifejacket rather than a PFD (a Lifejacket is guaranteed to turn the person face-up in the water, even if they're unconscious). Volunteers are encouraged to bring their own PFD if they have one.



## Radios



A FRS radio must be carried in each boat, as well as by a RADIO CONTACT person (“DSA Base”) on shore. Radios are provided for safety purposes, and are not intended for “chatting” back and forth. Always be polite, direct, clear and brief (anyone could be listening).

Our FRS radios have a lanyard tied on to them, to allow you to “wear” the radio around your neck. That way, they are easy to hear and always ready for you to respond. And we hope that they will not end up in the water! Wear your radio around your neck at all times while on the dock and sailing.

### General Operation

- To turn the radio ON, PRESS AND HOLD the power/menu button until the radio beeps. The VOLUME can be adjusted by pushing the ‘up’ and ‘down’ arrows on the right where it says vo. Do a radio check to make sure that the sailor can hear your call.
- The radio will be on channel “20” (automatically) and sub-channel 17. Make sure that your radio is set to the right channel and sub-channel.
- The DSAA’s radio channel is used to communicate between boats and/or with the RADIO CONTACT (“DSA BASE”) on shore.
- Only one party may use a FRS radio channel at a time. If you push the PTT button, no one else can use the radio channel until you release the PTT button.
- There may be times when you can not reach DSA BASE. If you are in the East arm of the reservoir, you may be able to hear messages, but your messages may not reach DSA BASE. If you do not get a response, return to within site of the dock and try again.
- At the end of the day, to turn the radio OFF, PRESS AND HOLD the power/menu button until the radio beeps. Return all radios to their CHARGING BASES so that they’ll be charged and ready for the next day.

## A typical DSAA radio conversation:

**Sailor (Monica):** *DSA Base, this is DSA-Monica, over.*  
**DSA Base:** *DSA-Monica, this is DSA Base, go ahead, over.*  
**Sailor:** *I'll be coming in 10 minutes, could you assist me, over?*  
**DSA Base:** *Yes, DSA- Monica. I'll be waiting for you on the dock. DSA Base out.*

## Typical uses of the radio are to:

- Check your radio to ensure that it is working and at the proper volume
- Answer a call to you from DSA Base
- Ask about or inform DSA Base about changing weather conditions
- Check the time if you forgot your watch
- Call to say that you will be docking soon
- Ask for help with an equipment problem
- Ask for help because you are stuck in mud or weeds
- Ask for help because you are being blown in to shore and need assistance
- Call another DSAA boat; if you do not know the helmsman, call the boat by sail number e.g. DSA-14.
- ***Call the DSA BASE if you need any assistance***

## Personal Safety

*The personal safety of both sailors and volunteers is the individual's responsibility. When in doubt, ask questions and have a conversation. Key points to remember are:*

- **ALWAYS** wear a PFD or lifejacket when on the dock or on the water.
- The water temperature in Glenmore Reservoir can change very rapidly. Mild cases of hypothermia reinforce the need to always bring adequate clothing.
- Wear non-marking, soft-soled running shoes for good traction on wet surfaces.
- Check for secure footing and any obstacles before lifting.
- Be sure that you have had proper instruction in lifting and transfers **before** attempting
- If you need any help with anything, **ask for Help!!**

## Boat Safety

- Be sure that sailors' competence and confidence levels are equal to the weather conditions. It is advisable that inexperienced sailors stay ashore in strong winds.
- Run a tidy ship. Loose ropes and gear can become tangled and send you for a spill.
- Make sure that the boat is secure both fore and aft and adjusted for minimum transfer distance before attempting to assist the sailor to embark or disembark.
- Seek adequate space and firm non-slip footing for lifting.
- Pay attention to the location of cleats, ropes that may injure the sailor
- Watch out for splinters, sharp edges and halyards that can cut skin.



## ***Emergency Situations and Protocols***

### **Volunteer Sailing Companions**

In the case of a client falling into the water:

1. **DO NOT GET IN THE WATER** this puts more people in danger
2. Call Boat Patrol **403-371-8674**
3. Help Boat Patrol locate you:
  - a. Heritage Bay
  - b. Hospital Bay
  - c. South Bay
4. Radio DSAA staff with the signal "Code Blue" repeating three times.
5. Wait for the response from DSAA staff "Message received."
6. Radio DSAA staff there is a "client in the water"
7. Uncleat both the main and jib sheets.
8. Attempt to keep the client calm.
9. Encourage the client to hold onto the boat, or throw them a rope to hold
10. **Do not swim away from the boat.** This makes rescue more dangerous
11. Encourage the client to hug their arms and legs (if able) to help capture heat.
12. Wait for Boat Patrol

In the case of a client suffering from a medical situation and is still inside the boat:

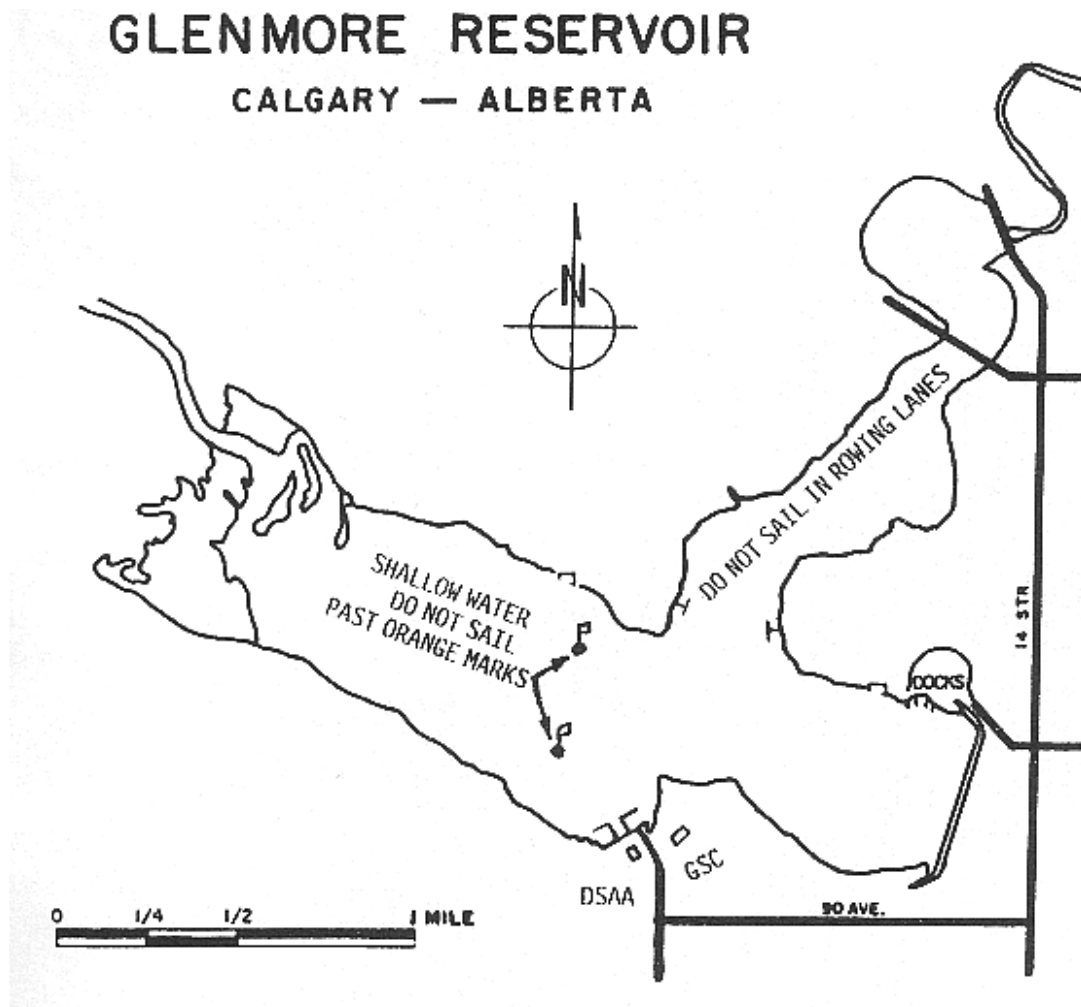
1. Call Boat Patrol **403-371-8674**
2. Help Boat Patrol locate you:
  - a. Heritage Bay
  - b. Hospital Bay
  - c. South Bay
3. Radio DSAA staff with the signal "Code Blue" repeating three times.
4. Wait for the response from DSAA staff "Message received."
5. Radio DSAA staff there is a "medical emergency"
6. If possible, maneuver the boat into irons.
7. Do not put yourself in danger. Ensure the client will not injure themselves on anything.
8. Wait for Boat Patrol

### **DSAA Staff**

1. Respond to sailor with "Message Received."
2. Immediately call Boat Patrol communicating to them that there is a medical emergency/client in the water and relay the sail number so that they can easily find them.  
Give the boat location:
  - a. Heritage Bay
  - b. Hospital Bay
  - c. South Bay
3. Call the emergency contact and inform them of the situation.
4. Be waiting at the dock for their return.

### ***Sailing Hazards on Glenmore Reservoir:***

Glenmore Reservoir provides an excellent venue for safe and exciting sailing. There are, however, several hazards that you must be aware of, and a safe sailing area -- you must stay within the boundaries shown on the map below. Please become familiar with it. Ask if you have any questions. If you are seen sailing in any of the restricted areas, you will be asked to return to dock.



## DISABILITY AWARENESS

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Volunteers may feel uncomfortable when meeting people with disabilities for the first time. People with disabilities have the same needs, hopes, emotions and enthusiasms as anybody else. It follows that their reasons for sailing are the same as anyone else's - but it may be that satisfaction (at achievement) and frustration (at non-achievement) are somewhat greater. Refer to Appendix: Description of Disabilities for common disabilities and their effects. The most common disabilities of our sailors include:

<b>Disability</b>	<b>Description</b>	<b>Impact</b>	<b>Effects</b>
<b><i>CEREBRAL PALSY</i></b>	Disorders of movement resulting from some form of damage to the brain.	Impairs the coordination of muscle action resulting in problems and carrying out normal movements with maintaining posture and balance	Speech, sensory and perceptual problems may exist Involuntary muscular movements Impaired movement
<b><i>MULTIPLE SCLEROSIS</i></b>	Chronic disabling disease of the central nervous system	Causes a blocking effect on the impulses that control various functions of the body	Weakness, failure of muscle coordination, and losses in sensation may occur
<b><i>MUSCULAR DYSTROPHY</i></b>	Chronic diseases which result in wasting or degeneration of the skeletal or voluntary musculature	Muscles deteriorate the individual becomes weaker. Use of a wheelchair or confinement to a bed may result	Muscle weakness in the arms, legs, and trunk may occur leading to the need for a wheelchair for mobility
<b><i>SPINAL CORD INJURY</i></b>	Trauma from automobile accidents, gunshot wounds, stab wounds, sports, and diving accidents along with various disease processes can result in spinal cord injuries	Severe trauma can result in the spinal cord being bruised, crushed, or torn, diminishing motor and sensory functions below the injured segment.	<b>Quadriplegic</b> (C6): diminished use of legs; diminished trunk control; diminished use of arms and hands; some voluntary movement capability at shoulder, forearm, and elbow <b>Paraplegic</b> (T6): diminished use of legs; partial trunk control; full use of arms Bowel and bladder control may be affected Involuntary muscle jerks or spasms may occur in the involved limbs
<b><i>STROKE</i></b>	Syndrome which involves damage to brain tissue caused by a disruption of the blood supply to the brain	A stroke may produce permanent neurological deficits, which could result in a permanent disability	All or partial loss of muscle strength on one side of the body may result The ability to speak or understand language may be impaired
<b><i>TRAUMATIC BRAIN INJURY</i></b>	Brain injuries are the result of the moving head striking a stationary surface or by the head being struck by a moving object	The extent of the functional impairments is due in large part to the extent and to the exact location of the brain tissue damage	Muscle function and joint mobility Cognitive skills, judgment, memory, and attention span may be affected

It is easy to fall into the trap of worrying about someone's disability rather than focusing on getting to know them as a person. People in wheelchairs are people first. Most neither expect nor wish to have everything done for them and want to be involved in decision making. **The key is to find out what can be done rather than what cannot.** In general, the best thing to do is to ask questions, listen and understand what the sailor needs. Treat personal care matters as a fact of life - it's no big deal. If you are unsure or need assistance, please approach the DSAA Staff -- they're there to help you!

- Before doing anything - ASK. Talk with whomever you are helping, to find out what is required of you - DON'T ASSUME THAT YOU KNOW. Allow the sailor to do as much as he/she can independently; assist the sailors to help themselves.
- It is important to set up a two-way dialogue so as to break down preconceived ideas and build confidence on both sides. This will also clarify the general area of the disability - physical/sensory/learning or, more rarely, combinations of the three.
- If communication is difficult due to the disability there will be a friend, relative, or caregiver present from whom you can obtain more information.
- Helping is a very personal matter, so always aim to build trust. This may take time but will enable both parties to function eventually as a team. Try not to take over; carry on with your two-way conversation to find out more about strengths and limitations, then help accordingly.
- Treat the client as you would like to be treated. Attempt to maintain the client's dignity in all situations and at all times.

## ***Special Considerations for Sailing***

You may encounter a variety of problems associated with disability. All can, and indeed are, dealt with on a daily basis. Some specific things to bear in mind around sailing are:

- paralysis/lack of feeling; limitation of joint movement -- the sailor may not be able to tell you when they're hurting themselves. Make sure that you have foam pads or cushions available. Be particularly careful when making transfers into and out of the boat, not to place their weight on sharp corners or objects, or bend their paralyzed extremities in unnatural positions;
- balance and/or coordination may be affected, so support or "spot" the sailor during self-assisted transfers;
- temperature control may be limited, particularly in paralyzed extremities; ensure to inform the sailor to bring extra clothing according to the weather.

Since a sailing session requires the participants to be out on the water for up to two hours, the following are also important considerations:

- ask if the sailor needs to use the washroom before transferring into the boat
- exposure to the sun is increased on the water -- always have a hat and sunscreen
- inquire about the sailor's endurance levels -- can they sail for two hours?

## ***OUR MARTIN 16 SAILBOATS***

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The *MARTIN 16* sailboat was designed by Don Martin and Bob Harris of Vancouver BC to specifically meet the needs of sailors with mobility impairments. DSAA is the proud owner of four *MARTIN 16*'s:

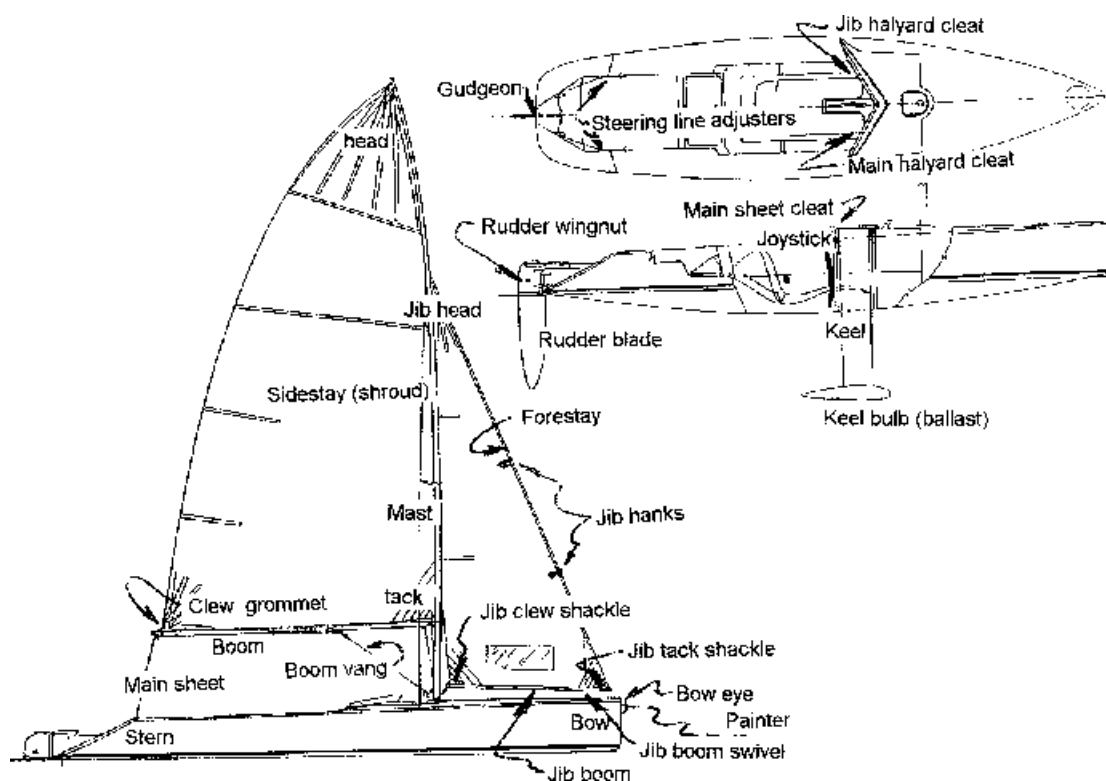
- The *MARTIN 16* is designed to be sailed by one person from a seated position, with all sheets and rudder controls easily accessible from this position. An instructor or companion can be accommodated in the “rumble seat” behind the helmsperson.
- The joystick steering device allows people with severe disabilities and very limited hand function to sail independently.



- A three hundred and fifty pound lead bulb (half the weight of the boat) attached to the keel makes it impossible to capsize, a feature that is essential for any sailor with a severe mobility impairment.
- A retractable keel allows sailors to transfer to and from the boat on shore (when the keel is up); the keel can then be lowered once the boat is launched.
- ***The MARTIN 16 is unsinkable, even when the cockpit is flooded with water.***

## MARTIN 16 SLOOP

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## TAKING CARE OF OUR MARTIN 16S

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Our Martin 16s are perfect for DSAA's programs. They're safe, easy to sail and robust under any sailing conditions that we get here in Calgary. Launching, rigging, docking, de-rigging, and pulling them out every day, however, is very hard on them! We all need to take special care to keep them in top shape for our members.

Following are specific descriptions of procedures for launching, rigging, de-rigging and taking care of our Martin 16s. We realize that it's hard to understand these "words" and that you have to be shown how things work and how to handle equipment. We've written them down for your reference, so we can be consistent in our procedures. Please take the time to become familiar with these procedures, and ask an experienced DSAA Volunteer or DSAA staff to show you how it's done.

## ***LAUNCHING AND RIGGING THE MARTIN 16***

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Our Martin 16 sailboats are stored on trailers on land, parked in stalls near the DSAA Office, or next to the City of Calgary Boat Patrol office. Each day, the Martin 16s must be rigged and launched. When you arrive, the Martin 16s may be in or out of the water. Use the appropriate launching and rigging instructions below, as a guide.

### **Launching a Martin 16 from the trailer.**

Take the cover off of the Martin 16 and store in the back of the DSAA truck or in the Office.

Make sure that the sails (2) and paddle are present in the cockpit of the boat: Quickly check:

- the shroud pin retainer rings are intact
- the jib boom swivel screws are tight
- the rudder gudgeon screws are tight
- the steering lines are snug and centered
- the shrouds and halyards are clear (look up)



DSAA Staff will hitch up the trailer and launch Martin 16.

You will provide directions to the driver as needed.

Stop the boat on the ramp just short of the water. Remove safety chain shackle at bow of boat, and release the winch rope about six inches, so that the boat will float off of the trailer.

**CAUTION:** *do not walk behind the trailer, or between the car and the trailer, unless the car is stopped and in PARK.*



Wait on the dock to receive the boat when it floats off of the trailer. Walk the boat down the dock about 20 feet and then stop and tie the painter to a ring on the dock.



Reach into the boat from the dock, release the keel lift line and then slowly lower the keel. This will stabilize the boat. Remove the "rudder lock" pin out of the rudder, lower the rudder blade all the way down to vertical, and then re-insert the "rudder lock" pin in the "down" position. Check the rudder pivot bolt to assure that it is snug. Responsive steering is critical to the sailor.



Now, untie the boat, and then take the "shroud" or "sidestay" of the boat in one hand and the "painter" (rope at front of boat) in the other hand. Move the boat along the dock to a location beside the "Econo Transfer Lift" if the sailor will require the lift, or a location on the leeward side of the dock. Choose a location that allows lots of room for other boats to be launched and tied up.

**CAUTION:** *when moving the boat along the dock, please don't drag it with the painter. Keep the sidestay in one hand and use your feet to fend it off the dock. When going around the corners of the dock, take care not to RAM the bow or stern of the boat into the dock. Go slowly, fending the boat off of the dock, and ask for help if it's windy or waves are forcing the boat onto the dock.*



## Raise the jib sail

When securely tied (both bow and stern lines), unroll the sails inside the cockpit of the boat, and take the jib sail to the bow of the boat. Take the jib halyard shackle off of the mast, hold the shackle in one hand and look up the halyard to make sure that it is not twisted. Fasten the shackle to the head of the jib sail.



Next, fasten the jib "hanks" to the forestay (3 of them).

Make sure that the "tack" shackle is fastened to the forward end of the jib boom, and the "clew" shackle to the aft end of the jib boom. Uncleave the jib sheet so the jib boom is free to swing across the deck when the sail is raised. Grab the jib halyard on the port shelf inside the cockpit of the boat. Raise the jib sail and pull the halyard snugly -- even harder if the wind is stronger.





Coil the jib halyard and tuck the coil in the bag below the cleat.

**CAUTION:** *The wind direction changes all the time at Glenmore! Assure that the boat is facing into the wind before raising sails. NEVER LEAVE THE SAILS RAISED WHEN THE BOAT IS UNATTENDED.*

### Raise the main sail

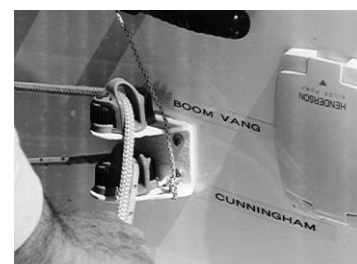
Unroll the main sail. Ensure that the "tack" is attached to the forward end of the boom with the "tack pin", and the "clew" is attached to the boom slide at the back end of the boom. Check that the OUTHAUL runs freely.

Attach the main halyard to the head of the main sail by attaching the main halyard shackle to the grommet in the headboard.



Sailboats sail whenever the sails are not free to swing in the wind. Before you raise the sail, uncleat and clear the mainsheet so that it will run freely, and release the outhaul and boom vang controls.

Grab the main halyard from the cleat on the starboard shelf in the cockpit, feed the headboard into the sail track on the mast and raise the mainsail. Pull the main halyard snugly and cleat. **DO NOT PULL THE MAIN HALYARD AS TIGHT AS THE JIB HALYARD.** It needs to be snug, but if pulled too hard it will damage the sails.



When fully raised, pull the outhaul and then the boom vang control lines just enough so that they are not slack. The sailor will make fine adjustments after leaving the dock.

**CAUTION:** *the mainsail can swing the boom in the wind when being raised. Make sure that you and your sailor are away from the swinging boom.*

### **Check the seat position**

Ask the sailor where they would like the seat positioned. Check that the seat back and seat bottom lines are adjusted and securely cleated.

### **Check steering and control lines**

Check that the joystick moves freely, yet is not sloppy. Clear the main sheet and jib sheet and all of the control lines so that are not knotted and run freely.

**CAUTION:** *If you do not know how to adjust the steering lines, ASK THE DSAA COORDINATOR TO ADJUST THEM. Being able to steer is very important!!*

### **Empty water**

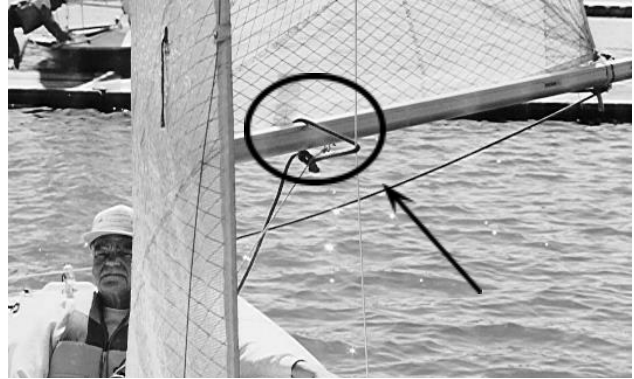
Empty any water out of the boat using the bilge pump and a sponge if necessary. Assure that the seat is clean and dry before transferring the sailor into the boat.



## ***TRANSFERRING A SAILOR INTO A MARTIN 16***

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Assure that the Martin 16 is securely tied to the dock, both fore and aft. If the boom is swinging in the wind, use the spring clip on the boom vang to tie the boom to the sidestay opposite the dock so that it is safely out of the way.



Before beginning the transfer, make sure that the sailor has a hat, adequate clothing, a water bottle and sunscreen.

Have a conversation with the sailor regarding the transfer. Ask them how they would like to do it, and what assistance they need from you. Make sure that you have foam cushions or whatever is required to complete the transfer safely. Lock the wheels of their wheelchair before they begin the transfer.

**CAUTION:** *Use your discretion and good judgement. Assure that you understand what the sailor wants to do, and that you feel safe and comfortable doing it. DO NOT DO ANYTHING THAT YOU FEEL WILL JEOPARDIZE YOUR OWN OR THE SAILOR'S SAFETY. ASK FOR HELP FROM THE DSAA COORDINATOR.*

**CAUTION:** *If the sailor is heavy or cannot support their body during the transfer, ALWAYS USE THE ECONO TRANSFER LIFT. Ask the DSAA Coordinator to help you if you're unfamiliar with the Econo Transfer Lift.*



## ***BEFORE THE SAILOR LEAVES THE DOCK...***

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Once the sailor is in the boat and ready to go, check out the boat traffic and weather conditions before leaving the dock. Here's a kind of "pilot's" checklist for your sailor:

### ***Personal Checklist***

- ☐ Check the weather conditions and forecast
- ☐ Keys and valuables secure
- ☐ Proper clothing for conditions (head to foot)
- ☐ Sunglasses, sunscreen, water bottle
- ☐ Life jacket correct size, fastened and comfortable
- ☐ Radio turned on, tested, correct volume, firmly attached into pocket
- ☐ Seat pad available and dry (may not be in sailboat)

### ***Sailboat Equipment Checklist***

#### ***Before getting in***

- ☐ Boat secure to dock at bow and stern
- ☐ Rudder fully down and two pins in place
- ☐ Keel down
- ☐ Mainsail fully raised with tack and clew attached
- ☐ Boom connected into gooseneck on mast
- ☐ Boom velcro strap does not interfere with operation of mainsheet
- ☐ Jibsail raised with tack and clew attached
- ☐ Jib sheet properly installed with no twists above deck
- ☐ Seat in proper favoured slot (fore and aft)
- ☐ Seat pad dry and in position
- ☐ Transfer lift in position, if required

#### ***After getting in***

- ☐ Seatback adjusted
- ☐ Paddle in boat, bilge pump handle present
- ☐ Mainsheet tension
- ☐ Jib sheet tension
- ☐ Boom vang tension
- ☐ Outhaul tension
- ☐ Cunningham tension (use for racing only)
- ☐ Jib sheet adjusted to match mainsheet
- ☐ Ready to cast off

## ***DON'T LEAVE WHEELCHAIRS ON THE DOCK!***

Once the sailor is safely away from the dock, take their wheelchair off of the dock and store it on shore, both brakes on.

## ***TRANSFERRING A SAILOR OUT OF A MARTIN 16***

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When a sailor returns to the dock at the end of a sailing session, assist the sailor to transfer out of the boat by reversing the previous procedures. When it's time for the sailor to return, confirm that they're on their way back to the dock (on the radio) and meet them with their wheelchair on the dock.

Assess which side of the dock is the leeward side (downwind), and guide the sailor to a clear section on the leeward side of the dock. Advise the sailor to free both main and jib sheets as they approach the dock. Catch the boat and fend it off of the dock on landing. Tie the boat securely, fore and aft. Tie the boom to the sidestay opposite the dock, using the spring clip on the boom vang.



Position their wheelchair close to the boat, brakes on. Consult with the sailor on the transfer, and then assist them as they instruct you. After safely in their chair, assure that they have their belongings and escort them safely off of the dock.

**CAUTION:** *The next sailor should not be on the dock until you have escorted the previous sailor off of the dock.*

## ***LEAVING A MARTIN 16 UNATTENDED, ON THE DOCK***

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Sometimes, there will not be a sailor waiting for the next sailing session. If this is the case, and it is not the end of the day, leave the Martin 16 tied to the dock, both fore and aft. Weather changes constantly and suddenly in Calgary, so ALWAYS LOWER BOTH SAILS AND SECURE THEM TO THE BOAT IF YOU LEAVE A MARTIN 16 TIED TO THE DOCK. Lower the sails, roll it loosely and lash it onto the jib or main boom using the free end of the jib or main sheets. If it is windy -- or looks like it may be -- unfasten the halyard from the head of the sail and fasten it to the mast or sidestay.

## ***PULLING A MARTIN 16 OUT OF THE WATER***

At the end of the day, all of the Martin 16s have to be hauled out, are de-rigged, cleaned and their equipment stowed in the DSAA Office. If you're a Sailing Companion at the end of a long day, please stay and help the DSAA staff to de-rig and store the boats.

Walk the boat around the dock to within 20 feet of the haulout ramp. Tie the boat to the dock. Remove the "rudder lock" pin and raise the rudder blade to the "up" position and re-insert the "rudder lock" pin.

**CAUTION:** *Before raising the keel, assure that both the main sheet and the jib sheet are REMOVED FROM THEIR CLEATS AND RUN FREELY. Otherwise, there is so much power in the keel lift that lifting the keel may break the fairleads out from the spray deck (??@!\*\*\*!! \$\$\$\$\$\$)*

Grab the keel lift line and raise the keel fully. (HINT: If the boat painter is tied to the dock, this is most easily done by grabbing the lift line and then "walking" down the dock for 20 feet) There is usually a black line on the side of the keel that becomes visible when it is fully raised. **DON'T RAISE THE KEEL ABOVE THIS LINE.**

Cleat the keel lift line, coil and stow the free end in the cockpit.

After the trailer is backed into the water, guide the boat onto the trailer and attach the trailer winch line to the bow eye. Winch the Martin 16 up to the rubber "bow chock", and then release the winch line about 4 inches.



**CAUTION:** *When the Martin 16 goes on the trailer, it is at a different angle (in the water) than the trailer. As the boat leaves the water, the bow "rises" and pulls the winch line tight. AFTER WINCHING THE BOAT UP TO THE RUBBER "BOW CHOCK" IT'S IMPORTANT TO HAVE ABOUT FOUR INCHES OF SLACK IN THE WINCH LINE SO THAT THE BOW CAN RISE AS IT LEAVES THE WATER.*



Help guide the driver to back the boat into the parking space. Place wood blocks in front of both wheels of the trailer.

**CAUTION:** *The parking spaces are a tight fit. Always back the boat "the last 8 feet" into the parking space by hand. That way the hulls and rudders may not be damaged if they hit something on the way in.*

## DE-RIGGING A MARTIN 16

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Once the Martin 16 is safely parked, the sailing equipment for the boat is stored in the boat, under the boat cover, ready for sailing tomorrow.

Pump out any remaining water in the cockpit and remove clothing, trash, etc. Leave the cockpit of the boat clean and dry if possible. Coil lines neatly and place up off the floor of the boat so that they will dry. The keel lift line can be loosely coiled and hung on the back of the keel, over the mainsheet cleat.



### Rolling and storing the sails

Martin 16 sails are made of mylar; a tough plastic film that holds its shape very well in all wind conditions, but a material that does not like to be folded or creased!

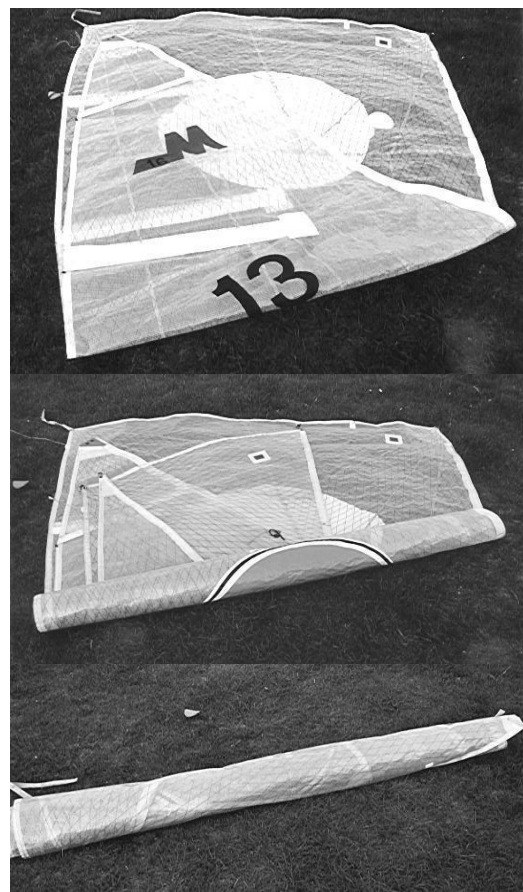
When we store these sails, we roll them carefully to preserve their life. BEFORE YOU ROLL THEM UP, CHECK THEM FOR SMALL TEARS OR HOLES, particularly near the front ends of the batten pockets.

Release the seat back adjustment line, so that the seat reclines fully. Leave the sails attached to both the jib and main booms.

Fold the mainsail in half, by taking the "head" (top) of the sail and matching it with the "clew" (aft corner on boom). This way the "leech" (aft edge of the mainsail -- with battens) should be together, and the battens will roll into the sail without twisting or bending.

Fold the jib in a similar fashion and roll it. Then tie it loosely with the jib sheet.

Secure the cover over the deck of the boat as shown.





## ***“WALK-AROUND CHECK” OF THE MARTIN 16’S***

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Our Martin 16’s see a lot of service compared to the average private sailboat! Whenever you have a moment, please take the time to walk around the Martin 16 and check the general state of fittings and lines. It will keep our fleet safe, can avoid failures that result in accidents and will save us a lot of money in repairs! Things to look for include:

- Is the boat clean and dry? (If not, please *CLEAN IT!*)
- Is there any significant damage to the hull or topsides?
- Are our Sponsors' logos and names in good repair?
- Remove the front hatch: Is there any water inside the hull?
- Is the boweye secure? Is the painter in good shape?
- Are the steering lines taught, but move freely?
- Is the joystick snug?
- Is the rudder pivot bolt tight?
- Are the rudder gudgeon screws tight?
- Are the sheets, halyards and control lines whipped and not frayed?
- Are the sidestay pins and retainers intact?
- Is the jib-boom swivel screw tight?
- Is the keel lift line in good condition?
- Are all cleats and control line blocks tight?
- Are all of the hatch covers there and sealing tightly?

### ***If it needs fixing...write it down!***

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If you see anything that requires maintenance that you can't handle, please write it down on the Maintenance Log in the DSAA Office. If you are mechanically inclined, please volunteer to help us with boat maintenance! We do our darndest to get things fixed before the next sailor leaves the dock!

***Thank you, and fair sailing!***

## ***APPENDIX: DESCRIPTIONS OF DISABILITIES***

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### ***AMPUTATION***

Overview: Amputation is the removal of any projecting portion of the body but is generally used with reference to the arms and legs. Amputation may be necessary due to trauma, vascular disease, chronic infection, soft tissue injury, or a tumor. It is important to note that the absence of a limb is not necessarily the result of amputation. The absence of a limb or presence of only a partially developed limb may be the result of a congenital limb deficiency.

Effects:

1. The person with an amputation may experience feelings of depression, hostility, denial or helplessness.
2. The development or modification of a clear and stable body image may be a problem.
3. Generally the higher the level of the amputation the greater the functional loss resulting in a greater reliance on a prosthesis.
4. A "phantom limb" phenomena (persistent awareness of the amputated limb) may occur which involves a feeling of pressure, burning, or throbbing at the site of the amputation.

### ***CEREBRAL PALSY***

Overview: The term "cerebral palsy" refers to disorders of movement resulting from some form of damage to the brain. Cerebral palsy results from a non-progressive lesion of the brain occurring before, at, or soon after birth that interferes with normal development. It impairs the coordination of muscle action resulting in problems with maintaining posture and balance and carrying out normal movements. The symptoms of cerebral palsy depend upon the location of brain damage.

Effects:

1. Speech, sensory and perceptual problems may exist.
2. Intellectual impairment may exist.
3. Seizure disorders and emotional problems may exist.
4. Involuntary muscular movements, as well as an imbalance in muscle tone and muscle strength, may exist to varying degrees. The ability to walk may be impaired as a result of these deficiencies

### ***DWARFISM***

Overview: A dwarf is an individual with disproportional, short stature occurring primarily in the trunk or limbs. Dwarfism itself is not considered a disability but certain types of dwarfism such as achondroplasia, diastrophic dwarfism, and Morquio syndrome are known to have potentially debilitating conditions associated with them.

Effects: Depending on the type of dwarfism, joint stiffness, hand deformity, hip dislocation, spinal curvature, and/or eye problems may occur.

### ***FRIEDREICH'S ATAXIA***

Overview: Friedreich's ataxia is a hereditary disease of unknown cause. Spinal cord and cerebellar degeneration takes place usually beginning during or before teenage years. The cerebellum controls muscular coordination. As the cerebellum deteriorates, problems such as clumsiness or incoordination usually develop. The affected person gradually loses the ability to control his/her muscles.

Effects:

1. Ambulation may initially be limited due to diminished muscle control and gradually the affected individual may require a cane, a walker, or a wheelchair in order to be mobile.
2. The ability to coordinate and effectively use one's arms and hands may become impaired due to severe tremors.
3. Scoliosis (curvature of the spine) may occur.
4. Speech may gradually become slurred.
5. Reduced vision, which could progress to blindness, may occur.
6. Mental deterioration may occur.
7. Degenerative changes and scar formation may occur in the heart muscle

### ***MULTIPLE SCLEROSIS***

Overview: Multiple sclerosis is a chronic disabling disease of the central nervous system. The exact cause of multiple sclerosis is unknown. The fatty insulating material that exists around the nerve fibers of the central nervous system is destroyed. This causes a blocking effect on the impulses that control various functions of the body. Multiple sclerosis is one of the most common neurological diseases in North America and Europe. Frequently, the course of the disease is unpredictable and the progression of the disease varies greatly among affected individuals.

Effects:

1. Symptoms may start as a vague feeling of tingling or numbness in one area of the body that occurs for less than a 24 hour period.
2. As the disease progresses, more severe symptoms including weakness, failure of muscle coordination, and losses in sensation may occur.
3. Slurred speech, blurred or double vision, vertigo, numbness, loss of balance, and abrupt changes in mood are all possible symptoms.
4. Multiple sclerosis often occurs as a series of attacks followed by periods of stability.
5. Conceptual thinking, memory, attention span, and/or judgment may be affected.
6. Joint contracture may occur due to loss of muscle strength and inactivity.

## ***MUSCULAR DYSTROPHY***

Overview: Muscular dystrophy encompasses a group of chronic diseases which result in wasting or degeneration of the skeletal or voluntary musculature. The four major types of muscular dystrophy are pseudohypertrophic dystrophy (Duchenne), facio-scapula-humeral (Landouzy-Degerine), limb-girdle dystrophy, and myotonic dystrophy (Steinert's disease). As the muscles deteriorate the individual becomes weaker. Use of a wheelchair or confinement to a bed may result. In the more severe forms the person may be unable to carry out the simplest activities of daily life. The age of onset as well as the rate of progression vary according to the type of dystrophy involved. The cause of muscular dystrophy is not well understood. It is important to note that muscular dystrophy is a progressive disease.

Effects:

1. Weakening of the respiratory muscle may occur leading to problems with endurance.
2. Muscle weakness in the arms, legs, and trunk may occur leading to the need for a wheelchair for mobility.
3. Weakening of the muscles of the face and eyes may occur impairing the ability to swallow food or talk.
4. Weakening of the heart muscle may occur. Fatigue, as a result of a weakened heart muscle, may impair the affected person's ability to independently carry out daily living activities.
5. Ambulation skills may deteriorate leading to the need of a wheelchair for mobility.

## ***POLIOMYELITIS***

Overview: Poliomyelitis is a viral infectious disease of the nervous system. The primary areas of involvement include the spinal cord, nerve bundles attached to the cord, and areas of the brain surrounding the cord's upper end. The attack causes degenerative changes that result in muscular paralysis or weakness primarily, but not necessarily, limited to the legs and trunk. Before the development of effective vaccines, poliomyelitis was the most common viral infection of the nervous system. It is also known as acute anterior poliomyelitis, infantile paralysis, or Heine Medin's disease. Poliomyelitis has a known cause and can be prevented due to the development of effective vaccines. Recent literature suggests that further deterioration may occur approximately 30 - 40 years after the acute phase of the illness.

Effects:

1. Weakening or paralysis of various muscles in the body including the muscles associated with trunk, pelvis, shoulder, arm, and leg functions may occur.
2. Weakening or paralysis of the muscles associated with breathing may occur.
3. Major deficits in the lower extremities may impair ambulation and transfer and necessitate the use of orthotics, and ambulation aids, or wheelchairs.
4. Deformities such as curvature of the spine or partial dislocation of the spine may occur.

## ***RHEUMATIC DISEASE***

Overview: Rheumatic disease includes nearly 100 different conditions which cause aching and pain in the joints and connective tissues throughout the body. The key factor in the most serious forms of rheumatic disease is inflammation evidenced by heat, swelling, redness, stiffness, and pain. The three prevalent forms of rheumatic disease include rheumatoid arthritis, ankylosing spondylitis, and degenerative joint disease.

Effects:

1. Loss of joint mobility resulting in diminished ability to reach, grasp, manipulate, and release objects may occur.
2. Difficulty with walking may occur.
3. Joint deformities may occur.
4. Strength and endurance may be diminished.
5. Depression may occur due to the impact of the disease process.

## ***SPINA BIFIDA***

Overview: Spina bifida is a birth defect that results from the failure of the vertebral canal to close normally around the posterior end of the spinal cord. Spina bifida develops in the fetus during the first three months of pregnancy.

Effects:

1. Weakness, even paralysis, of the muscles of the legs and feet may result.
2. Sensation may be abnormal or absent in the lower back and legs
3. Visual-perceptual functioning may be impaired.

## ***SPINAL CORD INJURY***

Overview: The spinal cord is the large nerve fiber tract that extends from the base of the brain down through the bones of the spinal column. The spinal cord originates at the base of the brain and is encased by the cervical, thoracic, and lumbar vertebrae. Severe trauma can result in the spinal cord being bruised, crushed, or torn. Trauma from automobile accidents, gunshot wounds, stab wounds, sports, and diving accidents along with various disease processes can result in spinal cord injuries.

Effects:

1. Spinal cord injury usually affects many systems of the body. The basic impairments are in the areas of sensation and voluntary movement. Traumatic spinal cord injury results in partial or total loss of function below the level of injury to the spinal cord. If the injury is to the upper part of the spinal cord, the condition is called quadriplegia since there is involvement of all four extremities. If the injury occurs at a lower level of the spinal cord, the condition is called paraplegia, with involvement of only the lower extremities. Spinal cord injury is designated by the lowest segmental level of the spinal cord that is preserved. For example, in C6 quadriplegia motor, and sensory functions controlled by the C6 level of the cord and above are preserved while motor and sensory functions

below the C6 level of the cord are diminished or lost. Following is a basic list identifying possible diminished and residual muscle function associated with different levels of spinal cord injury:

- C2/3: requires respiratory equipment to support breathing; diminished use of shoulders, legs, hands, and arms; diminished trunk control,
- C4: paradoxical breathing occurs, diminished use of legs, hands, and arms; diminished trunk control; at a minimum can still shrug shoulders,
- C5: diminished use of legs; diminished use of arms and hands but at a minimum should have some voluntary movement at shoulder and elbow joints; grasp ability achieved through tenodesis hand function and aid of orthosis; diminished trunk control,
- C6: diminished use of legs; diminished trunk control; diminished use of arms and hands but at a minimum should have some voluntary movement capability at shoulder, forearm, and elbow plus should be able to voluntarily extend wrist; a grasp ability may be achieved through natural tenodesis hand function and may be supplemented with an appropriate orthosis,
- C7: diminished use of legs; diminished trunk control; lacks significant strength and fine coordination skills involving hands but has some ability to grasp and release objects,
- C8/T1: diminished use of legs; diminished trunk control; full control of arms including fine finger coordination and a strong grasping ability,
- T6: diminished use of legs; partial trunk control is present; full use of arms,
- L4: diminished use of legs but has voluntary hip flexion and knee extension; good trunk control; full use of arms and hands.

**Other Effects:**

1. Bowel and bladder control may be affected.
2. Joint deformities on the affected limbs may result unless proper preventive measures are taken.
3. Involuntary muscle jerks or spasms may occur in the involved limbs.
4. Ability to breathe may be impaired.
5. Depression may occur following the injury.

## ***STROKE***

Overview: Stroke is not a disease but a syndrome which involves damage to brain tissue caused by a disruption of the blood supply to the brain. It may result from a closing off of one of the arteries to the brain, a closing off of one of the arteries in the neck, or bleeding of a diseased artery in the brain. However a stroke may produce permanent neurological deficits, which could result in a permanent disability. The affected areas will in part determine whether the effects of the stroke are severe, moderate, or minimal, and whether they are permanent or temporary.

**Effects:**

1. All or partial loss of muscle strength on one side of the body may result.

2. Possible partial loss of vision and/or perceptual changes may result.
3. The ability to speak or understand language may be impaired.
4. Rapid variations in mood may result.
5. Cognitive skills may be impaired.
6. Sensory impairment may occur on the same side as the muscle weakness
7. Loss of muscle coordination and involuntary muscle movements may result.

### ***TRAUMATIC BRAIN INJURY***

Overview: Most traumatic brain injuries are the result of the moving head striking a stationary surface or by the head being struck by a moving object. The compression, twisting, and distortion of the brain inside the skull associated with the impact may cause localized as well as widespread damage throughout the brain. Brain cell damage may also occur in incidents of inadequate blood flow to the brain resulting from near drowning, heart attacks, chemical and drug reactions, and infections. The extent of the functional impairments is due in large part to the extent and to the exact location of the brain tissue damage.

#### Effects:

1. Muscle function and joint mobility may be affected to varying degrees depending on the extent of the injury. As a result ambulation may be affected depending on the site and severity of muscle function and joint mobility deficiencies.
2. Loss of sensation in various parts of the body may occur.
3. Cognitive skills such as problem solving ability, judgment, memory, and attention span may be affected. Mood and/or personality changes may also occur.
4. Speech and the ability to understand the speech of others may be affected.
5. Perceptual motor skills such as spatial relationships and reaction time may be affected. Visual field deficits may also be present.

## **GLENMORE LAKE BY-LAWS**

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*The following are excerpts from City Of Calgary By-Law #9018*

1. No person shall place or operate a craft containing a motor of any description on or through the waters of Glenmore Lake.
2. No person shall place or use a raft of any description or an inflatable craft on Glenmore Lake.
3. No person shall place or use a craft in the waters of Glenmore Lake at any place other than places designated as launch areas.
4. No craft of a greater length than eight (8) meters shall be allowed on Glenmore Lake.
5. No leaky or poorly built craft are allowed on the reservoir.
6. No craft shall be allowed on Glenmore Lake unless it is equipped with:
  - a. A bailer
  - b. A painter
  - c. One pair of oars for rowboat; two paddles for a canoe
  - d. One life jacket or personal floatation device per person, bearing the approval stamp of the Ministry of Transport
7. No craft shall be placed on the Lake at any time when:
  - a. The wind is blowing in gusts and the velocity thereof during lulls between such gusts exceeds forty kilometers per hour, or
  - b. the velocity of a steady wind exceeds fifty-five kilometers.
8. The Parks Department Safety Boat Patrol may at any time, when the weather or other conditions affecting the surface of the water appears to him, so to require, restrict or prohibit the use of any craft on the lake.
9. The right of way for craft on Glenmore Lake shall be according to the regulations made under the Canada Shipping Act.
10. Other than a craft being used to service the causeway or to rescue, no other craft shall be sailed, rowed, or paddled closer to the causeway than thirty meters.
11. No craft is allowed in the portion of Glenmore Lake lying to the north and east of Glenmore Causeway.
12. No person shall throw, dump, or deposit material of any kind from a craft into the waters of Glenmore Lake.
13. No person shall engage in any activity either from a craft or shoreline that will pollute, foul, or contaminate the water.
14. No dog or other pet shall be allowed on or in the water.
15. No craft, other than service or rescue, may be placed on the waters of Glenmore Lake before the first day of May, or after the thirty-first day of October in any year.
16. No craft may be used on the waters of Glenmore Lake before sunrise, or after sunset on any day
17. No person shall swim in any portion of the water of Glenmore Lake, and no person shall wade in the water except when launching or retrieving a craft, and then only to the extent that it is necessary in connection with such launching or retrieving.
18. No person other than a person granted a concession or license may sell in any manner whatsoever, or solicit purchasers for any wares, merchandise or food.



## VOLUNTEER TRAINING CHECKLIST

Volunteer Training Checklist			
This checklist can be presented to sailors and DSAA staff on request, and will serve to certify that you have received training in and can be responsible for the following:			
<b>Name</b>			
<b>Date</b>		<b>Yes</b>	<b>No</b>
Has completed release and waiver form			
Has completed medical information and release			
Boat rigging/ de-rigging			
Hoyer lift trained			
Radio trained			
Windlass system rigging/ de-rigging			
Sailing companion (certified CANSail II or three years experience)			
Equipment maintenance and storage			
First aid and CPR certification			
Other:			
Other:			
<b>Date</b>		<b>Staff Signature</b>	