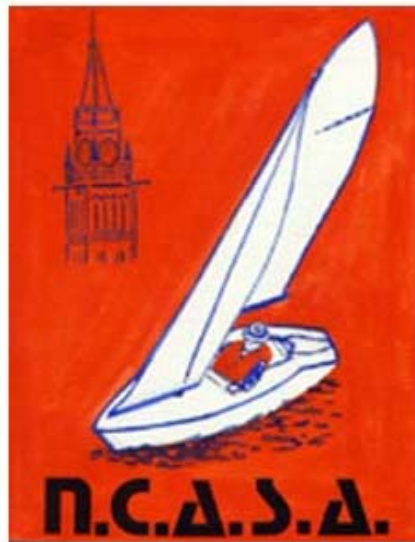


Volunteer Manual 2006



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Disabled Sailing Association of British Columbia

Disabled Sailing Association of Alberta

Quinte Sailability

(for providing their volunteer manuals as examples)

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Table of Contents

Page	
5	Welcome
6	National Capital Able Sail Association (NCASA) and Nepean Sailing Club(NSC)
7	NCASA & NSC Important Contacts
8	NCASA Vision and Mission Statement
9	Definitions used in this manual
10	Volunteer Job Descriptions
10	Sailing companions
10	Dock assistants
10	Boat maintenance support
11	Social events support
11	Administrative assistance
11	Boat transportation to “out-of-town “ regattas
12	Coaching assistance for racing sailors
13	Volunteer Responsibilities
13	Volunteer Checklist
15	NCASA’s commitment to volunteers
16	Our Participants
16	Disability awareness
17	Special Considerations for Sailing
18	Our Facilities and Boats
18	NSC Clubhouse & Sailing Pavilion
18	Equipment locker
18	Able Sail Docks
18	Equipment boxes
18	Lifting hoists
18	Lifting slings
19	Martin 16 Sailboats
20	Rigging the Martin 16 for sailing
21	Auto help power assisted winches & steering
22	Transferring the sailor into the Martin 16 without hoist assistance
23	Transferring the sailor into the Martin 16 with hoist assistance
24	Final checks before casting off the dock
24	Returning to the dock
24	Transferring the sailor from the Martin 16 without hoist assistance
25	Transferring the sailor from the Martin 16 with hoist assistance
25	De-rigging the Martin 16
26	Securing the Martin 16 to the dock for overnight storage
26	Reporting damage or items needing maintenance

Safety and Common Sense	27
Before going sailing	27
On the water	27
Upon return	28
Out of Town Regattas	29
NCASA Team Captains	29
Ramp haulout at NSC	29
Preparing boats for trailering	30
Insurance and trailer registration information	31
Able sail tote boxes and spare parts	31
Expense claims for out of town regattas	31
Launching the Martin 16s using a boat hoist and wire slings	31
Returning the boats to NSC	32
NCASA & NSC Special events	34
Open House 2006	34
National Capital Cup 2006	34
Easter Seals Regatta	34
Appendix A: NCASA Supporters and Sponsors	35
Appendix B: Other Adaptive Sailing Programs in Canada, contact information	36
Appendix C: Resource materials	38

Welcome

The National Capital Able Sail Association (NCASA) welcomes you to the Nepean Sailing Club's facilities at Dick Bell Park along the beautiful shores of Lac Deschenes. Lac Deschenes is part of the Ottawa River system; we are blessed with 25 miles of uninterrupted sailing waters. Over the next summer months you will undertake a great and rewarding responsibility offering people with disabilities the opportunity of sailing on Lac Deschenes. As a sailing companion, dock volunteer, maintenance volunteer or "as someone who just wants to help," your efforts and commitments are the foundation on which the NCASA program is built. Thank you for offering your skills, and commitment.

We are dedicated to providing persons with disabilities the opportunity to participate in recreational and competitive sailing. The sailing membership is open to people of all ages with all types of disabilities. NCASA strongly believes in the therapeutic and rehabilitative aspects of its program. Not only does sailing provide great physical exercise but also the nature of the activity lends itself to positive emotional experiences. Socializing with sailing companions and other volunteers also leads to the fulfillment of important social goals, such as educating the public of the capabilities of people with disabilities and encouraging people with disabilities to get involved in the activities of mainstream society.

This manual was prepared to be a clear, concise and valuable resource for all NCASA volunteers. It will give you insight into how the sailing experience will be enjoyable for both the participants and you. It will help you familiarize yourself with our facilities, boats and operating procedures. While we can never expect to recognize all of the benefits and responsibilities NCASA volunteers address, this manual will give you information about our programs and guidance to succeed in fulfilling the needs of a person with a disability.

NCASA could not continue to succeed without dedicated, compassionate, generous and talented individuals such as yourself.

Sincerely,

George Simpson
President,
National Capital Able Sail Association
March, 2006

National Capital Able Sail Association (NCASA) and Nepean Sailing Club(NSC)

The National Capital Able Sail Association was formed and incorporated in 1998 by participants of the able sail program at Nepean Sailing Club. In January 2003 NCASA received Charitable Tax status from the Canadian Revenue Agency. The objects of the National Capital Able Sail Association include fostering and advancing the interests of sailors with disabilities in the national capital region, facilitating the rehabilitation of persons with disabilities through sailing, promoting the integration of sailors with disabilities into the sailing community and maximizing both recreational and competitive sailing experiences for people with disabilities.

The Nepean Sailing Club was formed in 1979 to provide affordable family - oriented sailing to people of the City of Ottawa. In partnership with the City of Ottawa the club has grown to a membership of 1700 members with dockage for more than 400 keelboats and 100 dry sailed dinghies, a two story clubhouse and an active volunteer based membership supported by a small professional staff.

The Nepean Sailing Club owns three Martin 16 sailboats which are the core of the able sail program. The Nepean Sailing Club employs a summer able sail instructor who teaches CYA White Sail Levels I, II & III. The NSC Learn to Sail Co-Ordinator as part of his/her duties is responsible for booking lessons, skill development sessions, recreational sails and demo sails. The able sail instructor and co-ordinator report to NSC Sail Training Director through the head instructor.

NCASA & NSC Important Contacts

NCASA Officers	Name	Telephone	E-mail
Volunteer Recruiter	Rachelle Halpenny	613-446-4825	rhalpenny@videotron.ca
President	George Simpson	613-842-7635	geosimp@sympatico.ca
Treasurer	Dorn Roche	613-526-4255	dornroche@rogers.com

Nepean Sailing Club

NSC Office		613-829-6462	www.nsc.ca
NSC Club Manager	Gene Bruce	613-829-6462	manager@nsc.ca
NSC Admin Assistant	Julie Laframboise	613-829-6462	nsc-admin@nsc.ca
NSC Sail Training Director	Will Moizer	613-596-2373	Wmoizer@sympatico.ca
NSC Able Sail Instructor	James Hayes		
NSC Able Sail Committee M	Jeff Nelson		Jnelson@nortel.com
NSC Sailing Pavillion		613-828-1081	nsc-sailtraining@nsc.ca

Other Important Numbers

Ottawa River Emergencies		911	
Environment Canada Weather office		613-998-3439	www.weatheroffice.ec.gc.ca
National Capital Sports Council for the Disabled		613-569-7632	
Ontario Sailing	Al Will	888-672-7245	www.ontariosailing.ca
Canadian Yachting Association	Sarah Moscrop	613-545-3044	smoscrop@sailing.ca

Volunteer Bookings

To book a volunteer assignment for NCASA/NSC **please call 828-1081**

If you receive a recorded message, leave a message regarding the day and time you are available and your telephone number or e-mail address. We will contact you the day before to confirm your assignment. If you have to cancel or reschedule your assignment, please call us at least 24 hours before the scheduled assignment so we can find a replacement or advise the participant.

NCASA Vision and Mission Statement

Our Vision.....

Building an inclusive community of sailors by providing barrier free access to persons with disabilities.

Our Mission.....

To provide Ottawans with disabilities the opportunity to access and enjoy sailing activities, while promoting enhanced independence and community involvement.

Our Goals.....

- To foster and advance the interests of sailors with disabilities in the National Capital Region
- To promote interest in a sailing program for sailors with disabilities and facilitate liason with representatives of other sailing associations to maximize sailing opportunities and experiences for persons with disabilities.
- To provide teaching and training opportunities for the development of sailing skills among sailors with disabilities.
- To arrange for instruction, lectures, and exhibits of sailing skills and techniques for the benefit of sailors with disabilities.
- To organize and promote sailing competitions, regattas, and races and grant prizes and awards.
- To facilitate the rehabilitation of persons with disabilities through sailing.
- To promote the integration of sailors with disabilities into the sailing community.

Definitions used in this manual

<i>Able Sail Instructor</i>	A Canadian Yachting Association certified sailing instructor, with disability awareness training who is qualified to award proficiency standards.
<i>Autohelm</i>	A power assisted winch and steering system used to assist the participant to trim the sails and steer the boat.
<i>Chest strap</i>	A two part web strap with a buckle and hooks which attaches across the boat and around the chest of the sailor to prevent his/her body from falling to leeward when the boat heels.
<i>DSA</i>	Disabled Sailing Association.
<i>Demo sail</i>	A 45 minute to 90 minute initiation sail given to a non-sailor under the control of a sailing instructor or sailing companion.
<i>Hoist</i>	A crane-type device secured to the dock that transfers participants from their wheelchairs to the Martin 16.
<i>Learn to Sail (LTS)</i>	The Canadian Yachting Association's national training program.
<i>Lifting sling</i>	A cloth device with three sets of attachment points which is placed under and around a participant and then attached to the hoist for transferring the participant into the Martin 16 sailboat.
<i>Participant</i>	A person with disabilities who participates in any able sail programs such as demonstrations, learn to sail lessons, skill development, recreational sails or racing.
<i>Personal Floatation Device (PFD)</i>	A buoyancy aid which keeps the wearer afloat while in the water. Must be worn by all participants and sailing companions while in the Martin 16s.
<i>Race Program:</i>	The formal training for and participation in sailing competitions.
<i>Recreational Sail</i>	A two hour independent sailing session arranged by a participant; may be with or without a sailing companion.
<i>Sailing Companion</i>	An able-bodied volunteer, who sails on the Martin 16 sailboat with a participant and may, if needed, assist the participant in sailing the boat.
<i>Skill Development Session</i>	A sailing session where a participant and a sailing companion work on skills previously taught in a sailing lesson.
<i>White Sail Level I</i>	The first level in Canadian Yachting Association LTS national training program. Requires approximately five hours of instruction to achieve the level.

Volunteer Job Descriptions

Sailing Companion

- Description:** Many of the participants have little or no sailing experience. Qualified sailing companions are required until the participant is certified to sail on his/her own.
- Duties:**
- Rig and de-rig the Martin 16s,
 - Assist participants in transferring from the dock to the Martin 16s
 - Accompany the participant on the water to ensure they have a safe and enjoyable sailing experience.
- Skills:** CYA White Sail level III or equivalent experience. Volunteers should feel comfortable sailing on small boats that heel but do not capsize.
- Training:** Four hours of training including:
- Disability awareness training,
 - Rigging and de-rigging the Martin 16s,
 - Rigging the autohelm,
 - Use of the hoists and slings to safely lift sailors into and out of the Martin 16s
 - Sailing the Martin 16s.
 - Safety protocol and the role of the companion
- When needed:** Three hour sessions in the afternoons and evenings, mid week and weekends. Volunteers should co-ordinate their availability with the Volunteer Co-Ordinator or Able Sail Instructor

Dock Assistants

- Description:** Experienced participants require assistance to rig and de-rig the Martin 16 and to transfer into and out of the boat.
- Duties:**
- Rig and check out a Martin 16 sailboat for a sailor insuring that all components are working correctly.
 - Assist the sailor in the transfer into the boat.
 - Assist the sailor in tying off the bow and stern lines and departing the docking area.
 - Monitoring sailors activities and being available when they return to the dock.
 - Upon the boat's return secure the mooring lines to the dock and assist in the transfer of the sailor from the boat.
 - De-rig and stow all equipment.
- Skills:** Ability to rig and de-rig the Martin 16.
- Training:** Three hours of training including:
- Disability awareness training,
 - Rigging and de-rigging the Martin 16s,
 - Rigging the autohelm,
 - Use of the hoists and slings to safely lift sailors into and out of the Martin 16s
 - Safety protocol.
- When needed:** Afternoons and evenings, mid week and weekends. Volunteers should co-ordinate their availability with the Volunteer Co-Ordinator or Able Sail Instructor.

Boat Maintenance Support

- Description:** The Martin 16s and associated equipment are valuable and need preventative maintenance. This will prolong the life of the boats, prevent sailing accidents and contribute to the safety and enjoyment of the participants.
- Duties:**
- Help perform regular preventative maintenance to assure that our boats and equipment are

- properly cleaned.
- Check that all boats have the safety equipment required by Canadian Coast Guard regulations.
- Inspect boats to insure all fittings and systems are working appropriately.

Skills: Mechanical aptitude; knowledge of small sailboats is useful.

Training: Disability awareness training. On the job training under direction of chief boat mechanic.

When needed: Prior to season opening (early may), immediately before “out of town” regattas, at the national Capital Cup, at other times on an “as needed” basis. Volunteers should co-ordinate their availability with the Volunteer Co-ordinator.

Social Events Support

Description: NCASA is involved with numerous events, including opening day in May, demonstration sails with the Rehabilitation Center, National Capital Cup, Easter Seals Regatta, and other community groups that come to NSC for demonstration sails.

Duties: Provide general assistance with organizing/hosting groups including helping participants complete waiver forms, socializing with participants, helping with BBQ’s, serving food and drinks to participants.

Skills: No specific skills other than enthusiasm and a fun-loving attitude.

Training: Pre-event training on “as needs to know” basis

When needed: For specific events; contact Volunteer Co-ordinator with availability information.

Administrative Assistance

Description: NCASA requires assistance in maintaining member records, preparing grant application requests, preparing mailings and contacting members about special events.

Duties:

- Maintain computer records of participants, volunteers, and sponsors.
- Help prepare grant application requests for foundations and government agencies.
- Contact members about NCASA special events.

Skills: Experience in administration, computer word processing and data base management and in completing grant application requests.

Training: Disability awareness training

When needed: Generally needed in the off-season, (October - April), for specific tasks.

Boat transportation to “out of town” regattas

Description: Participating in regattas and competing against sailors with disabilities from other programs is an important social and skill improvement aspect of the NCASA activities. Our sailors compete in weekend sailing regattas in Toronto, Montreal, Kingston, Burlington Vermont, and Lake George New York as well as in the Mobility Cup. Volunteers and tow vehicles are needed to tow the Martin 16s to these events. (Vehicles are needed which have a minimum towing capacity of 1000 lbs. for a single trailer, and 2000 lbs for a double trailer).

Duties:

- Assist in hauling the Martin 16s out of the water.
- De-rigging and preparing the boats for trailering including securing the boats to the trailers and properly securing the mast, boom rudder and equipment to the boat.
- Conducting a safety check of trailer before departure, including wheel bearings, tire pressures, trailer lights and safety chains.
- Upon arrival at regatta site, assist in stepping the mast, rigging the boat and sails, and prepare the boat for launching.

Skills: Experience towing a boat trailer, knowledgeable about rigging and de-rigging small sailboats and preparing them for highway transport, mechanical aptitude.

- Training:**
- Training will in safely launching and retrieving Martin 16s using a trailer launch or crane launch method.
 - De-rigging Martin 16s and preparing for road trailering, including trailer safety checks.
- When needed:** For Quebec Cup July 28 - 30, Burlington Regatta August 4 -6, Y-Knot Regatta, Lake George, NY Sept 8-10. Other regattas as schedule develops.

Coaching Assistance for Racing Sailors

- Description:** Competition improves boat handling skills and also provides a sense of belonging to a team or group. To ensure that the experience will be positive, especially for new participants NCASA runs Wednesday night and some weekend practices with experienced sailors as sailing companions. In addition, racing sailing companions attend “out of town” regattas with the sailors.
- Duties**
- Prepare participants for regattas by teaching the racing rules of sailing, tactics and strategy of racing.
 - Run drills to improve participants sailing and boat handling skills.
 - Serve as sailing companions for less experienced racers (generally silver fleet sailors) at regattas.
- Skills:** Active club racing experience, preferably with dinghies, a calm disposition, ability to offer advice and coach (within the class rules) without intervening (except for safety, e.g. avoiding collisions).
- Training:** Four hours of training including:
- Disability awareness training.
 - Rigging and de-rigging the Martin 16s.
 - Setting up the autohelm,
 - use of the hoists and slings to safely lift sailors into and out of the Martin 16s
 - Sailing the Martin 16s.
 - Safety protocol and the role of the companion.
- When needed:** Wednesday nights May 30th -Sept 6th, possibly Thursday night jam fleet races, National Capital Cup July 8 & 9, Quebec Cup July 28-30, Burlington Regatta August 4 -6, Y-Knot Regatta, Lake George, NY Sept 8-10. Other regattas as schedule develops.

Volunteer Responsibilities

As a volunteer you have the responsibility to:

- Contribute to a safe, fun and respectful working environment at Nepean Sailing Club.
- Commit to the highest level of professional efficacy through the maintenance and application of current, relevant knowledge and skill.
- Participate as a team member with NSC/NCASA staff, participants and other NCASA volunteers.
- Fulfil, previously agreed upon volunteer time commitments.
- Know and adhere to NCASA policies and guidelines, as outlined.
- Know and maintain the participant's privacy and confidentiality at all times.
- Demonstrate respect for the physical, emotional and spiritual well being of all participants.
- Treat all participants equally and with respect.
- Maintain a professional presence with members of the public to promote positive awareness and understanding of NCASA and NSC's able sail program.
- Maintain a respectful relationship with all volunteers and staff.
- Participate in NCASA training and promotional activities, where possible.

Call us at least 24 before the scheduled assignment, if you have to cancel or reschedule, so we can find a replacement or advise the participant.

Volunteer Checklist, Companions and Dock Assistants

The volunteer meeting place is the first floor lobby of the NSC Clubhouse. Please arrive ten minutes before your scheduled time.

Before your volunteer shift

1. There will be a volunteer binder on the front counter in the main hall. Please sign it before your shift so we can recognize the hours donated by our volunteers.
2. Check the NCASA notice board (adjacent to the clubhouse doors leading to the harbour) if required.
3. Check the weather forecast posted just outside the north club house doors (leading to the harbour).
4. Greet the participant and introduce yourself. If required, assist the participant to the able sail dock.
5. Once on the able sail dock, rig a Martin 16 for sailing.
6. Check that the boat has its required safety equipment, paddle, buoyant heaving line, whistle.
7. Check that bilge pump handle is on board and that steering works smoothly.

Before the participant is assisted on board the Martin 16

1. If you are volunteering under the direction of the Able Sail instructor follow his/her directions.
2. You and the participant must wear your PFDs.
3. You should have drinking water on-board the Martin 16.
4. You and the participant have adequate clothing, eye-wear and sun block for the weather and sun?

After your volunteer shift

1. Lower sails, flake the main sail and roll up the jib for storage inside main sail tie downs. Put on sail cover and prepare the boat for overnight storage (unless it is to be used immediately by another participant).
2. Put PFDs, extra seat cushions, and slings back in the dock boxes.
3. Record, in the maintenance log any items needing maintenance. The maintenance log is stored in the dock box.
4. If required, assist the participant back to the NSC clubhouse.
5. Sign out in the volunteer log.

NCASA's Commitment to Volunteers

The able sail program is volunteer intensive – **In other words we need you!!** Volunteers will help NCASA/NSC staff with every aspect of running a successful sailing program.

NCASA is committed to ensuring that volunteers:

- Gain satisfaction from their volunteer experience and feel that they are using skills they already have and are developing new skills.
- Have the right to receive support and respect from staff, participants and other volunteers.
- Are assigned tasks that are worthwhile, appropriate and cognizant of their personal preferences, experience and temperament.
- Have the right to be provided with a clear description of the tasks they are expected to perform and to designate a person to whom they are accountable.
- Receive sound guidance and direction from NCASA directors, staff and persons of responsibility.
- Have the right to make suggestions and be shown respect for expressing honest opinions. (Volunteers should feel comfortable asking questions or clarifying requests if uncertain about any specific task.)
- Have a right to say “no” to a particular placements or to certain tasks, which they feel are inappropriate or unacceptable.
- Have a right to express a grievance about their volunteering experience. (Grievances should be directed to the volunteer co-ordinator or the NCASA president who will deal with them accordingly.)
- Are properly briefed on the policies and programs of NCASA including any new policy decisions which affect their volunteering.
- Receive appropriate orientation and training for the tasks they will be undertaking. Training will be provided by experienced, knowledgeable, patient trainers.
- Have the right to advance to greater responsibilities and to transfer from one activity to another.
- Are reimbursed for pre-authorized expenses incurred on behalf of NCASA in accordance with policy guidelines.
- To receive recognition for their volunteering work.

Our Participants

As is common with most of us, the participants are going to feel nervous and cautious the first few times they go sailing. Think back to your first experience sailing in heavy winds. Were you not nervous? Be calm, positive, and reassuring. As the participants become more familiar with the feel of the boat, and with the fact that heeling is a natural safe boat position, they will become more confident and relaxed.

Disability Awareness:

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. The most common disabilities of our sailors include:

Disability	Description	Impact	Effects
CEREBRAL PALSY	disorders of movement resulting from some form of damage to the brain.	impairs the coordination of muscle action resulting in problems in carrying out normal movements and maintaining posture and balance	Speech, sensory and perceptual problems may exist. Involuntary muscular movements Impaired movement
MULTIPLE SCLEROSIS	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.
MUSCULAR DYSTROPHY	chronic diseases which result in wasting or degeneration of the skeletal or voluntary musculature	causes muscle deteriorating, the individual becomes weaker and 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
SPINAL CORD INJURY	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.	Quadriplegic (C6): diminished use of legs; diminished trunk control; diminished use of arms and hands; some voluntary movement capability at shoulder, forearm, and elbow Paraplegic (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
STROKE	syndrome which involves damage to brain tissue caused by a disruption of the blood supply to the brain	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
TRAUMATIC BRAIN INJURY	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 the disability rather than focusing on getting to know the individual 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, ask the individual how best to deal with the situation, if you still require assistance please approach the NSC/NCASA able sail instructor or volunteer co-ordinator - they are 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 care giver 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 participant as you would like to be treated. Attempt to maintain the participant's dignity in all situations and at all times.

Special Considerations for Sailing

Some specific things to bear in mind around sailing are:

- paralysis/lack of feeling; limitation of joint movement -- the sailors may not be able to tell you when they are 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; ask if they would like to wear foul weather clothing for warmth, to have water for hydration and a sponge to "cool off"

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

- Exposure to the sun is increased on the water -- always have a hat and sunscreen.
- Inquire about the sailor's endurance levels -- can he/she sail for two hours?

Our Facilities and Boats

NSC Clubhouse and Sailing Pavilion

The Club house is the first building a visitor encounters at Nepean Sailing Club. It has the office, a meeting room, accessible washrooms a lobby and an elevator on the main floor. On the second floor is the East room, the members' lounge, the kitchen and a large veranda overlooking the harbor. If you use the elevator to assist a participant to the second floor, be sure to turn the key to the off position when exiting the elevator. Failure to do so will prevent other users from calling the elevator.

The Sailing Pavilion is the building at the north end of the dinghy park. From this building the instructors and able sail co-ordinator run lessons and book recreation sails. It has the closest accessible washrooms to the able sail dock.

Equipment Locker

Able sail has an equipment locker in the NSC service building. The equipment locker has a work bench, tools, spare parts and equipment for trailering the Martin 16s. The able sail instructor and certain volunteers have keys for the entry into the equipment locker.

Able Sail Dock

The Able Sail dock is located at the north east corner of the harbor. It is accessed by exiting the clubhouse through the north doors, turning right and following the wooden and concrete walkway past the crane. Turn left onto the ramp that takes you down to the docks and continue until you reach the end of the dock. The dock is 30 feet by 40 feet. It has two equipment boxes and four hoists. It is stable and can normally accommodate eight participants and their wheel chairs and eight to ten volunteers.

Equipment Boxes

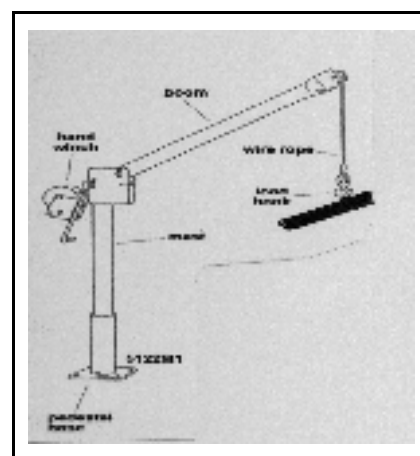
There are two equipment boxes on the able sail dock. One box contains PFDs for participants and volunteers. It also contains the lifting slings used to move the participants from their chairs to the Martin 16s. The second equipment box contains extra seat cushions, chest straps for the sailors, buoys and anchors. The equipment boxes are also to be used to store the Martin 16 sail covers, participant's personal gear and volunteers personal gear while they are sailing. The lids on the equipment boxes are not strong so please do not sit on them.

Lifting Hoists

There are four lifting hoists on the able sail dock. When not in use the boom should be turned towards the middle of the dock and the spreader bar should be tied off to a hook next to the hand winch. This prevents the shroud of the Martin 16 from tangling with the boom when docking or departing the dock.

Lifting Slings

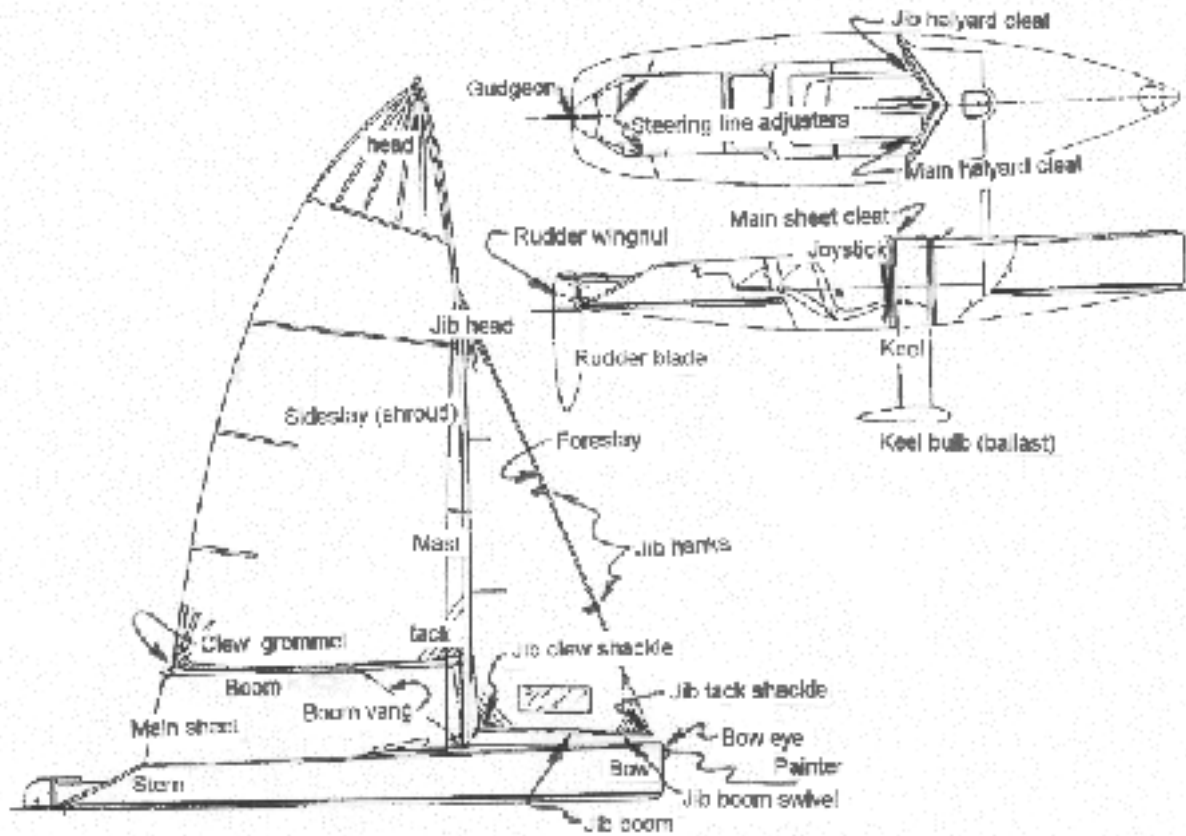
In the equipment box are three cloth lifting slings to be used in conjunction with the hoists for transferring participants from their chairs to the Martin 16s. Each sling is of a different size to accommodate the size of the participant. If in doubt about which sling to use ask the participant or their attendant. Detailed Instructions about correctly fitting the sling are given on page 20 of this manual.



Martin 16 Sailboats

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

- 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.
- The Martin 16 has sufficient buoyancy to stay afloat even when the cockpit is flooded with water



Rigging the Martin 16 for sailing

Nepean Sailing Club's Martin 16s have been fitted with a boomtopping lift and a main sail cover for permanent storage of the sails on the boat when tied to the dock. This facilitates rigging as the main sail does not need to be threaded to the boom each time the sails are hoisted.

First steps:

1. Check the windex at the top of the mast for wind direction.
2. Position the boat on the dock so the wind is coming from the bow towards the stern.
3. Tie the boat securely at both the bow and stern.
4. Take the sail cover off the boom, fold and place in the dock box.

Raising the jib sail:

1. Take the rolled up jib sail out from under the main sail tie downs.
2. Unroll the jib.
3. Moving forward, attach the jib tack to the front end of the jib boom and the clew shackle to the aft end of the jib boom.
4. Fasten the jib hanks to the forestay.
5. Take the jib halyard from the shroud, check that it is not twisted and then attach the shackle to the head of the jib.
6. Moving back to the cockpit, uncleat the jib sheet so the jib boom is free to swing across the deck when the sail is raised.
7. Grab the jib halyard on the shelf inside the cockpit of the boat (it will be labeled). Raise the jib sail and pull the halyard snugly - even harder if the wind is stronger.
8. Coil the jib halyard and tuck the coil in the halyard bag below the cleat.

Raising the main sail:

1. Take the main halyard from the shroud and attach the shackle to the head of the main sail.
2. Release the plastic clips which keep the mainsail flaked neatly across the boom.
3. Before raising the sail uncleat the main sheet, boom vang, outhaul, and cunningham lines from their cleats. All are labeled. This will make raising the main sail easier.
4. Grab the main halyard on the shelf inside the cockpit (it will be labeled) and raise the main sail. Watch that the leach of the sail (and the battens) does not get caught between the shroud and the mast as this can tear the sail and break the battens.
5. Pull snugly and cleat but do not pull as tight as the jib halyard.
6. Coil the jib halyard and tuck the coil in the bag below the cleat.
7. When the main sail is fully raised pull the outhaul, cunningham and boom vang just enough so they are not slack. The sailor can make adjustments after leaving the dock.

Check the seat position:

- Ask the participant where he/she would like the seat position. Check that the seat back and seat bottom lines are adjusted and securely cleated.

Check the steering, steering control lines and sheets:

- Check that the joystick moves freely, yet is not sloppy. The tension on the control lines can be set by adjusting the tension straps running across the back deck.
- Make sure that the main and jib sheets do not have knots that prevent them running freely. However they should have stopper knots in the end so the "bitter end" of the sheet cannot run through the cleat fairlead.



Pump the boat dry:

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

Autohelm power assisted sheet winches and steering

Two of the NSC Martin 16s are fitted with power assisted sheet winches and power assisted steering. The systems designed by Marcel Laroche, consist of a 12 volt battery power supply, one 12 volt electric motor that drives a drum winch to trim or ease the main and jib sheets, a second electric motor which turns the tiller either to port or starboard and a joy stick to control the operations of the electric motors.

How to rig the autohelm:

The two autohelms are slightly different in how they are rigged. The autohelm in Martin 16, sail # 16 (system 1) is permanently fitted. The second autohelm (system 2) is portable and can be used on either Martin 16 sail # 15 or Martin 16 # 94.

System 1

- Uncleat the main and jib sheets from the cleat on the top of the keel box and untie the figure eight stopper knots in the bitter end of the sheets. Pull the sheets so all the sheet is in front of the cleat. Remove the sheet from the port side (left side) fairlead located under the aft edge of the foredeck. Re-thread the sheet through the spare fairlead on the starboard side of the aft edge of the foredeck.
- Sewn into the bitter end of the sheets are very light lines, each with a fishing line swivel on the end. Attached to the winch drum is another light line with a fishing line swivel. Join these together using the safety clip. This ensures that the sheet will not be run off the drum if the sailor continues to run the winch after all the line is paid out. (The sheet will start to be wound on the winch in the opposite direction).
- The electric motor and winch to control the steering is permanently fixed to the starboard side of the aft deck. Undo the steering control line at the tension strap, put three or four wraps on the winch and then reattach the line to the tension strap. It should be snug.
- Locate the joy stick which should be located in the starboard halyard bag under the foredeck when not in use. When in use the joystick fits into a bracket on either the starboard (right) or port (left) side of the seat, depending upon the sailor's preference.
- The power switch is located on the port side of the keel box. Turn the switch on. Trim the sheets by moving the joystick aft. Make sure that both sheets are trimmed simultaneously and that you don't get an override on the winch drums. Ease the sheets by moving the joystick forward. If there is only light tension on the sheets be careful to ease the sheets slowly a little bit at a time. Easing the sheets too quickly or peeling off too much line will result in the sheet over-riding the winch..
- Check out the power steering by moving the joystick to left. Does the tiller on the rudder head turn to the right and rest at the stops? Now move the joystick to the right. Does the tiller move to the left? Is there any binding at the rudder stops? Adjust the tiller lines, if necessary. Do the tiller control lines slip while led around the winch so the tiller does not respond to the joystick command? If so, put more tension on the lines by adjusting the tension control straps.
- The autohelm can be rigged to provide main sheet trim assistance only if the sailor has sufficient strength to steer the boat and trim the jib manually. To do so, rig only the main sheet to the winch, leaving the steering in manual mode and the jib sheet running through the cleat on top of the keel box. This allows the sailor to get the feel of the boat through manual steering while still having power assist to help with the heavy work of trimming the main sail.

System 2

System 2 is a second generation auto helm developed by Marcel Laroche incorporating portability and improvements over system 1.

- The sheet winches are fitted on a wood board that is placed along the starboard side of the keel box. Metal guides attached to the battery box position the board in place which is then secured by two web straps. The web straps should be firmly secured in place so the wooden board will not move.
- The battery box and 12 volt battery fits on the cockpit floor immediately in front of the keel box. It has two “L” straps which guide into the wood board.
- The manual tiller is replaced with a short modified tiller containing a small electric motor and drum through which the tiller control lines run.
- The joystick is fitted on a portable wooden cross beam which is held in place by a webbing strap with cargo hooks clipped to the edge of the gunwale and tightened.
- Similarly to the fixed system uncleat the main and jib sheets from the cleat on the top of the keel box and untie the figure eight stopper knots in the bitter end of the sheets. Pull the sheets so all the sheet is in front of the cleat. Remove the sheet from the port side (left side) fairlead located under the aft edge of the foredeck. Re-thread the sheet through the spare fairlead on the starboard side of the aft edge of the foredeck.
- Sewn into the bitter end of the sheets are very light lines each with a fishing line swivel on the end. Attached to the winch drum is another light line with a fishing line swivel. Join these together using the safety clip. This ensures that the sheet will not be run off the drum if the sailor continues to run the winch after all the line is paid out. (The sheet will start to be wound on the winch in the opposite direction).
- Connect the electric cable (running it under the seat) from the tiller to socket on the wooden panel strapped to the keel box.
- Locate the joy stick which should be located in the starboard halyard bag under the foredeck when not in use. It will have a bolt and a wing-nut on the bottom. Undo the wing-nut and place the bolt through one of the holes drilled in the portable cross beam. Put the thumb screw back on the bolt so the joystick is tight and secure while sailing.
- The power switch is located on the wood panel on the starboard (right) side of the keel box. Turn the switch on. Trim the sheets by moving the joystick aft. Make sure that both sheets are trimmed simultaneously and that you don't get an override on the winch drums. Ease the sheets by moving the joystick forward. If there is only light tension on the sheets, be careful to ease the sheets slowly a little bit at a time. Easing the sheets too quickly or peeling off too much line will result in the sheet over-riding the winch.
- Check out the power steering by moving the joystick to left. Does the tiller on the rudder head turn to the right and rest at the stops? Now move the joystick to the right. Does the tiller move to the left? Is there any binding at the rudder stops? Adjust the tiller lines, if necessary. Do the tiller control lines slip while led around the winch so the tiller does not respond to the joystick command? If so, put more tension on the lines by adjusting the tension control straps.
- The auto helm can be rigged to provide main sheet trim assistance only, if the sailor has sufficient strength to steer the boat and trim the jib manually. To do so, rig only the main sheet to the winch leaving the steering in manual mode and the jib sheet running through the cleat on top of the keel box. This allows the sailor to get the feel of the boat through manual steering while still having power assist to help with the heavy work of trimming the main sail.

Transferring the sailor into the Martin 16 without hoist assistance

Some sailors prefer to transfer from dock to the Martin 16 without using the hoist. Ask them what their preference is and follow their wishes. They know what is best for themselves.

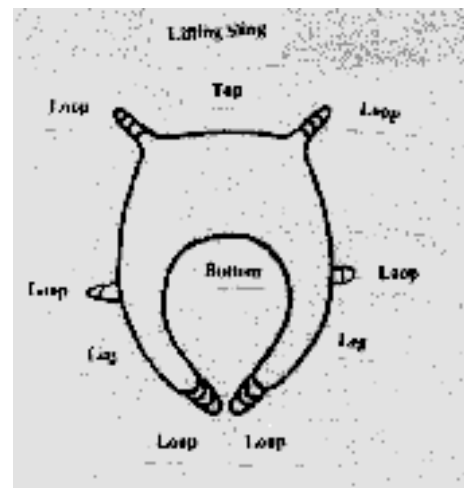
- Position the Martin 16 along the dock so its bow is head to wind. Make sure the boat is tied securely to the dock so it can't move either fore and aft or away from the dock.

- Rig the sails (as discussed previously). Clip the preventer line (attached to the boomvang strap located on the boom) onto the shroud which is away from the dock. This prevents the boom from swinging and hitting the sailor as he/she is transferring into the boat.
- Make sure that the sailor puts on sailing clothing and a PFD before getting out of his/her chair. Ask the sailor if he/she requires assistance and follow his/her directions.
- “Spot” the sailor while he/she is transferring from his/her wheelchair to the seat of the Martin 16. Communication is important, always ask before helping so not to interfere.
- When the sailor is comfortable in the seat and his/her legs are extended under the foredeck ask the sailor if the seat back needs adjusting. The sailor may be able to adjust the seat on his/her own or may require your assistance. It’s his/her call.
- Ask whether he/she wishes to use a chest strap. This consists of an adjustable webstrap with two hooks, one on each end, which is fitted across the boat immediately behind the seat back. Sewn to the webstrap is a seat belt like strap, which is secured around the sailor’s chest. It prevents the sailor from falling to leeward in moderate and heavy winds.
- Move the wheelchair from the edge of the dock to the area beside the dock boxes and set the wheelchair brakes. Light weight manual chairs can be flipped to rest on their backs.
- With the sailor securely seated, unclip the preventer from the shroud and attach it to the boom bail. Have the sailor test the tiller or joy stick and the sheets.
- Untie the stern line and secure on the Martin 16. Next untie the bow line and secure to the boat by wrapping it around the shroud and then bringing the tail end into the boat. Holding the boat by the shroud check for boat traffic both coming into and exiting Nepean harbor before casting off and pushing the boat out into the channel.

Transferring the sailor into the Martin 16 with hoist assistance

Sailors with significant disabilities will require the use of the hoist to transfer from their chair to the Martin 16. As they probably use similar lifting arrangements for everyday living ask them their preferences about lifting procedures. Listen to their directions and follow general guidelines which follow:

- Encourage the person being transferred to assist as much as possible.
- Practice with an extra person standing by for assistance until a comfort level is reached for transfers.
- Remember, if doubtful about completing the transfer safely, seek further assistance rather than risk injury to the sailor or yourself.
- Position the Martin 16 along the dock so its bow is more or less head to wind and the shroud is in line with the hoist. Make sure the boat is tied securely to the dock so it can’t move either fore and aft or away from the dock.
- Rig the sails (as discussed previously). Clip the preventer line (attached to the boomvang strap located on the boom) onto the shroud which is away from the dock. This prevents the boom from swinging and hitting the sailor as he/she is transferring into the boat.
- Have the sailor position his/her chair adjacent to the hoist boom so the hook, if lowered, would lie in the sailor’s lap. Make sure that the sailor puts on sailing clothing and a PFD before fitting the sling.
- Select the appropriate size sling from the equipment box. Starting at the back of the person’s chair, get the sailor to bend forward and then feed the bottom of the sling down to the seat of the chair. On the count of 3, have the sailor push up with his/her arms raising his/her bottom off the seat cushion. At the same time, pull the sling forward so it slides under the sailor’s bottom until it is just behind the knees. The sailor can now sit down on the sling. Make sure the top of the sling is slightly higher than the sailor’s shoulders and there is equal material on each side of his/her body.



- Hook the color coded loops on the sling to the spreader bar, attached to the hoist hook, starting with the top loops. The same color loops should be hooked on each side. i.e., if attaching blue loops on the right side to the spreader bar, then attach the blue loops on the left side to the spreader bar. The right leg support of the sling should go under the sailor's right leg and cross over the left leg to attach to the left side of the spreader bar. The left leg support should go under the left leg and cross over the right leg to attach to the right side of the spreader bar.
- Using the hoist winch, take up tension on the cable, checking that all of the loops are still attached to the spreader bar and the sling is not caught on the wheelchair armrests. The sailor's arms and shoulders must be inside the sling. Slowly lift the sailor making sure he/she is comfortable. If you observe problems or if the sailor tells you of problems, immediately put them back in his/her chair and make adjustments. Once the sailor is lifted clear of his/her chair, move the chair to the center of the dock and lock the brakes. Remove the seat cushion from the chair and place it on the seat of the Martin 16, making sure the correct end is facing forward.
- Rotate the boom of the hoist so the sailor is swung over the Martin 16. The boom must be rotated so the sailor crosses from the stern of the boat until centered over the Martin 16 seat. With one volunteer standing on the Martin 16 deck immediately in front of the seat and a second volunteer lowering the sailor into the seat using the hoist winch, guide the sailor's legs along the right and left sides of the keelbox as he/she is lowered in to the seat.
- When the sailor is lowered into the seat, release the sling loops from the spreader bar. Hoist the spreader bar to the boom end and rotate the hoist so the boom is pointing to the center of the dock. Tie off the spreader bar.
- When the sailor is comfortable in the seat and his/her legs are extended under the foredeck adjust the seat back using the control line on the shelf on the port side of the seat.
- Ask whether he/she wishes to use a chest strap. This consists of an adjustable webstrap with two hooks, one on each end, which is fitted across the boat immediately behind the seat back. Sewn to the webstrap is a seat belt like strap which is secured around the sailor's chest. It prevents the sailor from falling to leeward in moderate and heavy winds.
- With the sailor securely seated, unclip the preventer from the shroud and attach it to the boom bail. Have the sailor test the tiller or joy stick and the sheets.
- Untie the stern line and secure on the Martin 16. Next untie the bow line and secure to the boat, by wrapping it around the shroud and then bringing the tail end into the boat. Holding the boat by the shroud, check for boat traffic both coming into and exiting Nepean harbor, before casting off and pushing the boat out into the channel.

Final checks before casting off the dock

Make sure:

- The boat has all the safety equipment required by the small vessel regulations.
- The rigging, tiller and sheets have been given a final inspection.
- The sailor and companion are wearing PFD's and suitable clothing for the expected conditions.
- The sailor and companion are aware of local hazards and expected weather conditions for the next 2 hours.
- The volunteer co-ordinator or able sail instructor know that the boat has gone sailing, the general area of sailing and the expected time of return.
- Check for boat traffic coming into and out of the harbor immediately prior to casting off from the dock.

Returning to the dock

When returning to the dock, it is important that the boat approach the selected spot along the dock with the wind forward of the beam. This will allow the sailor to slow the boat down by easing the sails until they are luffing. To further slow the boat, direct the sailor to steer the boat head to wind. Remember that the Martin 16 is a keelboat and thus carries a lot of momentum. It does not stop on a dime.

Check that the hoist boom on the dock is not extending out over the water. This could cause the forestay or the shroud to catch the hoist boom as you are sailing by and possibly damage the Martin 16 rigging.

Stop the boat along side the dock and securely tie the bow and stern lines to the dock. Release the main and jib sheets so the sails are free to swing. Attach the boom preventer to the shroud furthest from the dock and prepare to transfer the sailor from the Martin 16.

Transferring the sailor from the Martin 16 without hoist assistance

- Make sure the boat is tied securely to the dock so it can't move either for and aft or away from the dock.
- Following the sailor's instructions move the sailor's chair to the location on the dock where the sailor will transfer.
- Set the wheelchair brakes.
- Place padding on the edge of the dock where the sailor will transfer.
- Standing immediately behind the seat of the Martin 16, "spot" the sailor as he/she transfers from the seat to the side deck. Watch that the sailor does not catch his/her legs in the manual joystick while raising him/herself from the seat.
- Move the sailor's seat cushion from the Martin 16 to the seat of the chair.
- "Spot" the sailor during the transfer from the side deck of the Martin 16 to the dock and then to the chair. Follow the sailor's directions for any assistance required.

Transferring the sailor from the Martin 16 with lift assistance

This procedure is described utilizing two volunteers. The first volunteer will be identified as volunteer A, the second volunteer will be identified as volunteer B.

- Position the Martin 16 along the dock so its bow is more or less head to wind and the shroud is in line with the hoist. Make sure the boat is tied securely to the dock so it can't move either for and aft or away from the dock.
- Volunteer A will get into the boat and release the sailor's chest strap and then remove it from the boat. (Be careful as the chest strap will sink if it falls in the water)
- Meanwhile volunteer B on the dock will move the sailor's chair to a position under the hoist boom. The front end of the chair must be facing the boat so that when the sailor is lifted he/she can be lowered directly into the chair. Lock the brakes on the chair.
- Volunteer B then rotates the hoist boom so the hook and spreader bar can be lowered into the sailor's lap. Rotate the boom so it approaches the Martin 16 seat from the direction of the stern. (The shrouds will prevent you from rotating the hoist boom from the bow direction).
- Volunteer A attaches the loops of the lifting sling to the spreader bar of the hoist. Volunteer remains standing immediately behind the seat of the Martin 16, while volunteer B slowly cranks the hoist winch, lifting the sailor. The sailor should be raised until the hook is stopped at the boom end. Slowly rotate the boom end until the sailor is over top of his/her chair.
- Volunteer A in the boat, should now exit the boat taking the seat cushion with him/her and place it on the chair seat, making sure that the cushion is placed in the proper orientation. While the volunteer B at the winch slowly lowers the sailor onto the chair, the volunteer A stands behind the chair making sure the sailor is seated properly.
- When the sailor is in the chair and there is no tension on the sling loops disconnect the loops from the spreader bar. Move the chair away from the hoist. On the count of 3, the sailor bends forward and raises himself/herself from the seat cushion, while you pull the sling out from the back of the chair.
- Raise the hook and the spreader bar and attach the free end to the hoist so it will not swing in the wind. Make sure that the boom is facing towards the center of the dock.

De-rigging the Martin 16

Once the sailor is safely on the dock and the boat is not being used immediately by another sailor, then de-rig the Martin 16. Involve the sailor in the de-rig process.

- Lower the jib by releasing the jib halyard from the cleat located on the shelf inside the cockpit. Release the head of the sail from the jib halyard shackle and secure the halyard on the chain plate holding the shroud to the deck. Tighten and cleat the halyard. Undo the sail hanks on the forestay. Undo the jib tack shackle at the front end of the jib boom and the jib clew shackle at the back end of the jib boom. Hand the jib to the sailor to roll up, starting at the foot. Tighten and cleat the jib sheet so the jib boom is centered along the fore deck.
- Lower the main sail by releasing the main halyard from the cleat located on the shelf inside the cockpit. You will have to assist the sail slides by pulling down on the luff of the sail. The sail slides will be prevented from exiting the mast track by a stop on the mast, just above the goose neck. When the sail is lowered, unclip the main halyard from the headboard of the main sail and secure it on the chain plate holding the shroud to the deck. Tighten and cleat the halyard. Moving to the back of the Martin 16, neatly flake the main sail across the boom, leaving about 6 to 12 inches of sail cloth on each side of the boom. Make sure the battens are parallel to the boom. When the sail is entirely flaked across the boom, attach the two plastic retaining clips to the shock cord running along each side of the boom. This will prevent the flaked sail from coming free.
- Unclip the main preventer, tighten and cleat the main sheet so the boom is centered on the boat.
- The jib is stored along side the mainsail. Tuck the rolled up jib inside the shock cord where it crosses the top of the mainsail. Cover the mainsail and jib with the sail cover starting at aft end of the boom and finishing at the mast. Make sure that the number on the sail cover matches the boat number.
- Remove any loose items such as water bottles and sponges from the boat. Pump the boat dry.

Securing the Martin 16s to the dock for overnight storage:

When the sailing is finished for the day, the Martin 16s should be moved to either the inside (south side) or the east side of the able sail dock. The inside of the dock is preferable because there is less disturbance from the wake of passing boats. Make sure the dock fenders are in good condition and, if necessary, tie boat fenders to the Martin 16s (spare fenders are located in the equipment boxes). Tie the bow line to the dock cleat and then take the tail of the line back to the shroud. Tie the line to the shroud chain plate to form a spring line. This will prevent the boat from moving back. Take the stern line and tie it to the dock at about a 45 degree angle. This will prevent the boat from moving forward. After securely tying the boats to the dock, check that the bow of one boat will not hit the rudder of the other. If they do, adjust the lines.

Do not leave the Martin 16s overnight along the north side of the dock along the main channel into the harbor. They will get damaged from the wake of passing boats. Also, this dock is to be available for boats in cases of emergency.

Reporting damage or items needing maintenance:

If you had damage or see anything that needs maintenance that you can not handle, please write it down in the Maintenance Log in the equipment box on the dock. If it is major and the boat should not be sailed until the problem is fixed, please also advise the Able Sail instructor or the Nepean Sailing Club bosuns.

Safety and Common Sense

Safety is of paramount importance for everybody involved in NCASA/NSC programs. That being said, it is important to remember that many sailors with disabilities are seeking excitement and exhilaration when they sail, so we must not be overly cautious. A study of demonstration sail participants conducted by the AQVA determined that new sailors were much more likely to continue in the program if their first sail was in moderate winds rather than light winds. A good rule of thumb for new sailors is to take them sailing in winds up to 15 knots. Experienced sailors should be able handle winds up to 25 knots. Beyond 25 knots it is best to retire to the club house. Before going sailing ask the sailor what is his/her sailing experience and what is his/her comfort zone. You will have to determine the limit for the risk takers, the less confident will set the limit for you.

Safety starts when a participant arrives at Nepean Sailing Club for the first time. All NCASA/NSC 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 Sail Training Office in the Sailing Pavilion. 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.

Before going sailing:

- Check the weather forecast, usually posted outside the clubhouse near the harbor entrance. Observe the current weather conditions, including wind strength and direction, cloud cover, humidity, and visibility. If you can't see Aylmer Island, then it is probably not wise to set out.
- Tell someone in authority when you are leaving, when you expect to return, and the area where you plan to sail.
- Check that the Coast Guard required safety equipment is on board the Martin 16 (paddle, buoyant heaving line 15 meters in length, whistle).
- Before getting into the Martin 16s to go sailing, make sure that all participants are wearing a government approved PFD or life jacket. PFDs can be found in the equipment boxes located on the able sail dock.
- Make sure the participant is correctly dressed for the weather with a hat, drinking water, and sun protection for hot days and adequate water resistant clothing for windy or rainy days.
- Check that the boat is mechanically sound.

While on the water:

- Be observant for changing weather. Dark clouds forming to the southwest or west often warn of an impending thunder storm. Dark clouds forming over the Gatineau Hills are usually not a major concern as they will normally track east. **There are exceptions to these rules.**
- Watch the humidity and visibility. If while you are sailing Aylmer Island (three miles to the northwest of the club) becomes obscured, it is time to return to the dock. A weather system is coming down the Ottawa River bringing rain and possibly high winds.
- Talk to the sailor and watch for signs of hypothermia or heat prostration. Is the sailor uncontrollably shivering (mild hypothermia)? Are the sailor's responses to your questions making sense? Does the sailor need drinking water and a wet sponge on the back of the neck to cool off on a hot light wind day? Is the sailor getting tired or overwhelmed by the conditions? His/her responses will determine whether you should continue sailing or return to the dock. The decision should be made jointly by the sailor and the companion. **Err on the side of caution.**
- Beware of the shoals and dangers in the vicinity of the Nepean Sailing Club. These include:
 - Deschenes Rapids adjacent to Britannia Yacht Club (on the top of the chart on page 25).
 - Britannia shoal directly north east of the channel into NSC approximately halfway between NSC and BYC. It is marked by a Green buoy K1 at its western end.
 - The area directly north of Rocky Point
 - Blueberry Reef on the Quebec shore, northwest of Nepean Sailing Club. It is marked at its southern end by a red buoy K4
- Be aware of running aground, especially on a lee shore (with the wind pushing you further and further onto the shore). If you run aground attempt to heel the boat to free it from the bottom. Use the assistance of a power boat if possible. **Do not raise the keel. The boat will become unstable and could capsize.**
- If you are caught out in Lac Deschenes in a storm and you are able to reach or run back into NSC, consider whether lowering and flaking the main sail will give the Martin 16 more steering control. If, upon entering the channel into the NSC harbor, you can not sail up-wind to the able sail dock, make your landfall at the dinghy dock. Securely tie the boat up at the dinghy dock and lower both the main sail and jib. Make sure the sailor has adequate clothing to keep dry and warm while you await for the storm to diminish in strength. When the winds drop or when you have additional assistance, move the boat to the able sail dock.

Upon return:

- Make sure that the sailor's hands and arms are inside the cockpit, when returning to the dock
- Always approach the dock with the wind forward of the beam (preferably close hauled).
- Use a roving fender rather than your arms and legs to fend the boat off the dock. The Martin 16 is a heavy boat; hands, or feet can easily be crushed, if they get caught between the hull and the dock.
- Make sure the boat is secured to the dock at both the bow and stern and the preventer is attached to the shroud, before assisting the sailor out of the boat.

Out of town regattas

Both sailors and volunteers benefit from out of town regattas. Sailors expand their sailing experiences: They sail on new and unfamiliar waters and get the opportunity to experience current and ocean tides. As well they visit cities and sailing clubs in other parts of Canada and the United States which they might not get to visit. Also important they get to meet, befriend and share comradery with sailors from programs across Canada and possibly around the world.

Volunteers attending out of town regattas share ideas and learn how other programs solve common problems. Like the sailors, they get to visit sailing clubs in other parts of Canada and develop friendships.

Out of town regattas entail lots of pre-trip organization including hauling the Martin 16s out of the water, de-rigging and preparing the boats for trailering, making sure the trailers are road worthy, and then transporting the boats to the regatta site. At the regatta site, the boats need to be rigged for racing, launched and safely secured at a dock. The docks are often exposed to wind and waves, so in order to prevent damage the boats need fenders for protection. After the regatta is finished the boats need to be hauled out, de-rigged, and safely transported back to Nepean Sailing Club.

NCASA Team Captains

The directors of NCASA will appoint a team captain for each regatta. The role of the team captain is to identify those sailors who are interested in attending the regatta, to obtain the Notice of Race for the regatta, to recruit volunteers to serve as sailing companions, coaches, and boat transporters, and to research accommodation and travel options to the event.

Hauling the Martin 16 out of the water using the dinghy launching ramp

Paddle the Martin 16 to the west dinghy ramp. Tie the boat to the dock about twenty five feet from the edge of the water. **Remove the rudder pin and swing the rudder blade to the “up” position and re-insert the rudder lock pin.** You must not pull the Martin 16 out of the water with the rudder pinned in the down position as you can damage the transom of the boat.

Before raising the keel, un-cleat the jib and main sheets from the cleat on the top of the keel (or unwrap the sheets from the drum of the autohelm). Make sure there is enough free line and that it will not jam when the keel is fully raised. Failure to un-cleat the sheets could break the fairleads on the underside of the spray deck. Grab the keel lift line and raise the keel fully. Cleat the keel lift line, coil and stow the free end in the cockpit.

Back the trailer into the water, then 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. This allows the bow angle to change as the boat leaves the water on the trailer. Move the trailer slowly out of the water making sure that the boat is vertical on the trailer and the keel is resting on the trailer keel support. Once the boat is out of the water release the keel lifting line from its cleat.

If you are using the double trailer (towing two boats to a regatta on one trailer). First back the trailer down one side of the dinghy dock and put one Martin 16 on the trailer in the trailer bunk closest to the dock. Move the trailer and boat out of the water and repeat the process on the opposite side of the dock with the second boat floated into the empty trailer bunk. Slowly move the trailer with two boats up the dinghy ramp to a quiet location in the dinghy yard where the masts can be lowered and the boats can be prepared and secured for highway transport.

Preparing the boats for trailering

After the trailer has been moved to a quiet location in the dinghy park adjacent to water and electric power,

- Empty the boat(s) of any water in the cockpit, aft compartment, and bow compartment.
- Check the bilge pump and its hoses. If the hoses are cracked and the hose clamps loose, repair as required.
- Remove the rudder from the rudder head, clean it and put it in its protective travelling case. Put the rudder bolt back in the rudder head and tighten it snugly.
- Remove the seat, battery and any debris (rags, empty water bottles, paper etc) that has collected inside the boat. Wash the boat interior, topsides and exterior of the hull finishing with the keel. A clean hull is important to a winning sailor and reflects on the NCASA/NSC program. Replace the seat, keeping the seat back lowered.
- Pump the boat dry, and sponge any remaining water out of the cockpit and the aft storage compartment. If you have assistance, have your assistant raise the bow while you sponge out the residual water. The hull of the boat should be buffed with rubbing compound, waxed and polished with teflon polish. This definitely should be done if the boat has been in the water for more than four weeks.
- Remove the sails from the boom. Check sails for wear, bent hardware, chafed lines (outhaul) etc. If sails have tell-tails (tickers), check that they are properly attached. Replace if necessary.
- Lay the jib on top of the mainsail and roll both sails. When rolled, put them in their sail bags. Make sure the bag number matches the sail number as the sails are not the same size
- Un-attach the boom from the mast as follows: Un-tie the bungie cord which runs along both sides of the boom making sure that you don't lose the plastic hooks which are attached to the bungie cord. Un-bleat the boom topping lift (located in the middle of the boom) and carefully lower the outer end of the boom to the deck. Remove the retaining cotter pin at the front end of the boom which holds the boom to the gooseneck. Slowly pull the boom aft until it is free of the gooseneck pin. Lower the boom to the deck. Undo the vang shackle attached to the bail at the foot of the mast so the block and line are not attached to the mast. Put padding between the boom and the deck so the boom does not scratch the boat.
- Prepare the mast for lowering by first attaching the shackle end of the jib and main halyards to the bail at the foot of the mast. Un-bleat the free end of the jib halyard from the cleat on the cockpit shelf and untie the stopper knot. Holding the halyard where it exits the mast, pull the free end of the halyard through the deck fairlead. Wrap the free end around the mast above the gooseneck and tie off. Repeat the same steps with the main halyard.
- **Two volunteers are needed to safely lower the mast.** Volunteer A climbs onto the deck of the Martin 16 and stands just behind the mast with one leg on each side deck. He should hold the mast from behind at his chest level. Volunteer B, standing on the ground beside the bow of the boat, unties and slowly releases the lanyard that attaches the forestay to the front of the jib boom (on some Martin 16s to the bow). When the forestay is loose, volunteer A lets the tip of the mast swing back and, in one motion, lifts the mast out of the mast step and swings the butt toward the bow while lowering the tip. Be careful not to drop the tip too fast so it hits the deck hard. Rotate the mast 180 degrees so the spreaders face up. Place padding on the deck and lay the mast along the deck. Be especially careful to pad the mast along the deck splash rail. Wrap the forestay around the mast and tie the end with a light piece of line, so it will not drag along the road or flog the mast, while trailering.
- Take the Windex off the tip of the mast and store in a safe place. The Windex is fragile and expensive.
- Tie the foot of the mast to the bow and the tip of the mast to the rudder head using light lines. The mast should not move when pushed laterally across the deck. Lash the boom tightly to the mast being sure to place padding between the mast and boom.
- Tie the keel securely to the keel bunk using a $\frac{3}{8}$ inch diameter line.
- Tie the boat down across the trailer using the yellow tie down straps. The forward strap should come across the boat just in front of the mast step while the aft strap should cross the aft deck. Make sure that you put padding underneath the strap where it crosses the edge of the deck. Tighten the straps until they are firmly snug but do not

Although Nepean Sailing Club does not have overhead wires and other obstructions in the dinghy park, other clubs are not so fortunate. Always check for overhead wires before raising the mast and moving the

over tighten as you can damage the boat. Tie the tail of the strap around the strap winch and the standing part of the strap so the tail will not flap in the wind and loosen while trailering.

The hitch ball on the towing vehicle should be 2 inches in diameter. Do not use a 1 7/8 inch ball as the trailer may detach while driving causing a serious accident.

- Attach the trailer to the hitch of the tow vehicle and secure the trailer hitch lever. The lever should be pinned so it will not release while the boat is being towed. Raise the trailer jack and rotate 90 degrees so it rests along the frame of the trailer.
- Attach the safety chains in an X pattern between the trailer and the tow vehicle. Make sure the chains attach to the tow vehicle at two points and there is enough slack to turn corners but they are not so loose that they drag along the road.
- Attach the connect for the trailer lights in the receptacle on the tow vehicle. Check that the running lights, brake lights and turn signals work on both the tow vehicle and trailer. If the lights don't work, use an electrical multimeter to test the circuit starting at the tow vehicle receptacle. The problem is usually corroded connections or defective bulbs caused by immersing the trailer with the running lights on.
- Check the trailer tires for proper inflation. Under inflation is a primary cause of tire failure while towing boats. The correct amount of air pressure is embossed on the tire. NSC has a compressor which should be used for inflating the tires.
- Using a grease gun, check the wheel bearings for sufficient grease. Back pressure on the trigger of the grease gun or excess grease flowing around the grease nibble indicates the bearing has adequate grease.
- Check that the trailer has a licence plate. Occasionally NSC members borrow licence plates and fail to return them to the trailer. You don't want to have to explain to the Ontario Provincial Police that you are unaware the trailer is missing its plate.
- Give the trailer and tow vehicle a final inspection before departing on your trip. Firmly push the boat laterally. If the boat moves across the bunks the straps need to be tighter.

Insurance and trailer registration information

Before leaving for a regatta, ask the NSC office to provide you with a photocopy of the Martin 16 liability insurance coverage. Most regattas require competitors to show proof of liability insurance in the event of accidents or collisions occurring on the water. NSC's liability insurance policy includes all of its coach boats and sail training boats including the Martin 16s.

Also ask for a photocopy of the NSC trailer licence registration. The actual form is Province of Ontario Vehicle Permit and it is required to be in the tow vehicle while the trailer is being towed. Make sure the permit is the correct one for the trailer you are towing.

Able sail tote boxes and spare parts

A tool box and two tote boxes of spare equipment are stored in the Able Sail equipment locker located in the NSC service building. Take these to all out of town regattas. One tote box contains soft parts such as extra lines, padding for the boats and the trailer tie down straps. Store the boom up sail covers in this box while at the event. The second box contains duct and electrical tape, spare fittings, shackles, bolts, nuts and screws. These should assist you if you have an equipment breakdown while at the regatta. It is also wise to take fenders to the regatta to protect the boats from the edge of docks while they are moored overnight. Often the docks are not well protected from wind and waves and the hulls can be quickly marred.

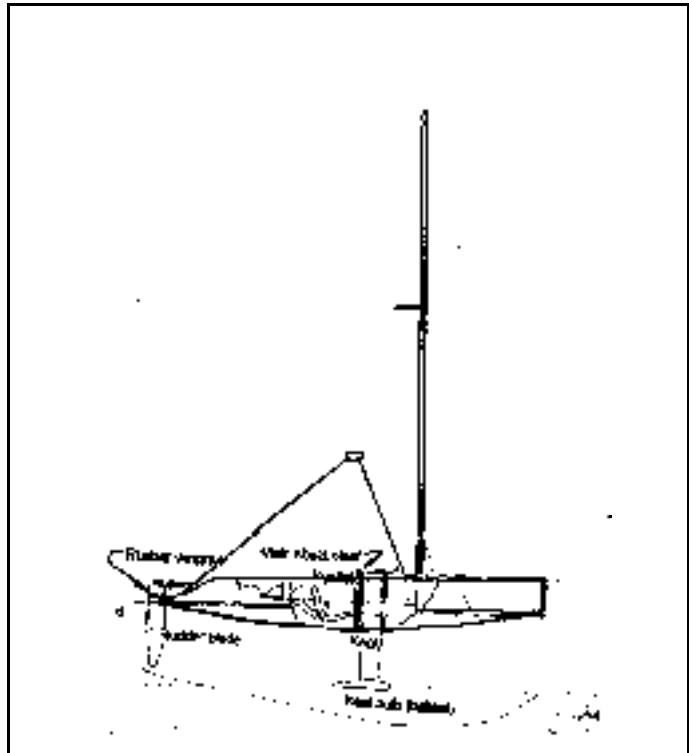
Expense Claims for out of town regattas

Volunteers are reimbursed for normal expenses incurred while traveling and attending regattas. These include gas and oil for the tow vehicle, meals and accommodation. Prior to the regatta, get an expense claim form from the NCASA team captain. Retain receipts for all expenses incurred. Submit the expense claim form and receipts to the team captain within 14 days of your return from the regatta.

Launching the Martin 16 using a hoist and wire lifting sling

At some clubs, (Pointe Claire Yacht Club, Kingston Yacht Club) the Martin 16s must be launched using a power hoist and a wire lifting sling. Only factory supplied slings must be used and special precautions must be taken to ensure the safety of all involved.

- The hoist must have a minimum lifting capacity of 1,000 lbs.
- The person operating the hoist controls must have training on the equipment and be approved by the host club.
- The sling consists of two wire cables which are the same length and a third longer wire cable. The wire cables are all permanently attached to a large stainless rigging ring. A snap hook is attached to the opposite end of each cable.
- To prepare the boat for launching, step the mast, put the rudder on the rudder head and pin the rudder in the down position, cleat the keel lanyard, and untie the boat from the trailer. Tie two long lines to the boat, one at the bow and one at the stern. These will allow you to control the movement of the boat when it is lifted off the trailer.
- Attach the snap hook of one of the short cables to the starboard chain plate, attach the snap hook of the other short cable to the port chain plate. The longer cable is connected to the lifting plate **on the aft deck on Martin 16 # 94**. On Martin 16, # 15 & # 16, wrap the cable between the rudder head and the top rudder gudgeon, making sure it is under the top gudgeon. Hook the snap hook onto the standing part of the cable because it is unclear whether there is a strong backing plate under the lifting plate on these boats.
- Slowly lift the boat from the trailer. The keel should be cleated in the raised position and the boat should be 5 to 10 degrees low at the bow. This prevents the top of the mast from making contact with the hoist cable.
- When the boat is raised so the keel clears the trailer, slowly swing the boat away from the trailer and over the water by swinging the hoist boom. Control the speed of the rotation of the hoist boom using the bow and stern lines of the Martin 16.
- When the boat is over the water, stop the rotation and lower the boat to the water. When the hoist cable goes slack, unhook the cable from the sling.
- Unhook the sling from the shrouds and aft lifting strap and move the boat away from the hoist. Be careful not to drop the slings into the water as they do not float.



For safety, nobody gets under the Martin 16 at any time when it is lifted off the trailer using the hoist. Keep a safe distance away (3 to 4 meters). The hoist operator should be able to see the boat at all times. Only one person should be instructing the hoist operator on when to raise and lower the boat.

To avoid stress on the hoist motor it is important to lift the boat off the trailer in one motion, stopping the hoist only when the boat clears the trailer. Starting and stopping the hoist every few seconds while lifting the motor puts stress on the hoist motor and will eventually burn it out.

Returning the boats to NSC

After a weekend regatta it is important to get the boats operational at NSC as quickly as possible. If you arrive back late on Sunday afternoon, it is best to rig the boats and launch them before leaving NSC. Count on spending 60 to 90 minutes for this operation. If you arrive back at NSC in the evening it is probably best to arrange for volunteers to rig and launch the boats on Monday morning. It is important that this be arranged between the volunteers and the team captain so that able sail programs are not disrupted.

If any of the boats, trailers or equipment have been damaged at the regatta (beyond something that is an easy repair by a volunteer), it is important to advise the NSC Club manager in writing, outlining the nature of the damage and how the damage occurred. This report should be filed in conjunction with the team captain. If the damage includes fiberglass repairs, you should get quotes from qualified trades people, for the cost of fixing the damage.

NCASA & NSC Special Events

Opening Day 2006:

Opening day will be Sunday May 28. Opening day gives new sailors the opportunity to try sailing while current members can refresh their skills. Normally a BBQ lunch is hosted by NCASA, and old friendships are renewed for the upcoming season. Volunteers are needed as companion sailors, dock assistants and as part of the organization of the social event. Prior to the event volunteers are needed to prepare the boats for launch, to re-install the hoists on the able sail dock, and to move the equipment boxes back onto the dock for the upcoming season.

National Capital Cup 2006:

National Capital Cup is NCASA/NSC's major competitive regatta for sailors with disabilities. It is a legacy of the 2003 Mobility Cup. In 2006, NCC will be hosted on July 8 & 9th. We are expecting a large number of participants from Eastern Canada and Northeastern United States. Volunteers are needed for the following tasks:

Friday July 7 th	registration of competitors helping launch out of town boats
Sat and Sun July 8 th and 9 th	for sailing companions dock assistants race officials social activities
Sun July 9 th	to assist in hauling boats out after racing

Easter Seals Regatta 2006:

Nepean Sailing Club and the Easter Seal Society host the Easter Seals regatta July 14th & 15th 2006. This regatta is a major fund raiser for the Easter Seals Society in the National Capital Region. As part of the regatta, Easter Seals families are given an opportunity to sail the Martin 16 sailboats. Sailing companions and dock assistants are needed to take new sailors out for a sail. NCASA members are normally available to provide mentoring for these participants.

Appendix A: NCASA Supporters and Sponsors

Nepean Sailing Club

City of Ottawa

National Capital Sports Council for the Disabled, Inc.

Ottawa 67's Hockey Club

Kiwanis Club of Rideau (Ottawa) Inc.

Royal Ottawa Hospital Foundation

Rehabilitation Centre of the Ottawa Hospital

Discover Boating, Canadian Marine Manufacturers Association

Ontario Trillium Foundation

Appendix B: Other Able Sailing Programs in Canada, Contact Information

British Columbia:

Organization	Sailing Location	Principal Contact	Tel/e-mail
DSA - Victoria	CFSA -Esquimalt 1001 Maple Bank Road Victoria, BC	Doug Nutting	250-477-6314 dnutting@rivonline.org
DSA - Vancouver	Jericho Sailing Centre 1300 Discovery St Vancouver, BC	Duane Geddes	604-688-6464 ex 126 dgeddes@reachdisability.org
Mid Island Disabled Sailing Assn	Ladysmith Maritime Society, Ladysmith, BC	Chris Loscerbo	250-246-9971
DSA - Kelowna	Central Okanagan Sailing Association 1220 Hobson Road Kelowna, BC	Hans van Leening	250-860-7990

Alberta:

Organization	Sailing Location	Principal Contact	Tel/e-mail
DSA - Alberta	Glenmore Reservoir Calgary, Alberta	Steve Alvey	403-870-7210 steve@martin16.com

Saskatchewan:

Organization	Sailing Location	Principal Contact	Tel/e-mail
Wind on my Wings (WOMW)	Wascana Lake Marina Regina, SK	Kim Ives	KimberleyIves@sasktel.sk.ca

Manitoba:

Organization	Sailing Location	Principal Contact	Tel/e-mail
Disabled Sailing Manitoba	Fort Whyte Winnipeg, MB Pelican Yacht Club Nanette, MB	Lawrence Mazur	204-889-1366 lmazur@mts.net

Ontario:

Organization	Sailing Location	Principal Contact	Tel/e-mail
RHYC Able Sail	Royal Hamilton Yacht Club Foot of McNab St N. Hamilton, ON	Jenny McEwen-Hill	905-383-3630
Disabled Sailing Assn Ontario	Queens Quay Boating Centre 275 Queens Quay West Toronto, ON	Adrian Sivell	416-766-6743
Quinte Sailability	CFB Trenton Yacht Club Astra, ON	Dennis Fletcher	613-475-4427 d.w.fletcher@sympatico.ca
Able Sail Kingston	Kingston Yacht Club 1 Maitland St Kingston, ON	Audrey Kobayashi	613-533-3035 kobayashi@post.queensu.ca

Quebec:

Organization	Sailing Location	Principal Contact	Tel/e-mail
Association Quebecoise de voile adaptee	Pointe Claire Yacht Club 1 Cartier Street Pointe Claire QC Club Nautique Petit Lac Magog 8683 rue Saroy Deauville, Qc Club de Voile Lac Beauport, Quebec City	Rene Dallaire	514-846-2171 aqva@securenet.net

New Brunswick:

Organization	Sailing Location	Principal Contact	Tel/e-mail
Able Sail New Brunswick	Shediac Bay Yacht Club Shediac NB	Bob Melanson	506-885-8340

Nova Scotia:

Organization	Sailing Location	Principal Contact	Tel/e-mail
Sail Able Association of Nova Scotia	Shearwater Yacht Club, Eastern Passage, NS	Judy Simms	902-463-4161

Appendix C: Resource Materials

The following is a list of resource materials which should help volunteers in their activities at Nepean Sailing Club.

1. Kerianne Boulva & Jean Phillippe Roux-Groleau, Learn to Sail for the Martin 16
2. Coaching Association of Canada, Coaching Athletes with a Disability
3. The Ottawa Hospital, disABILITY Awareness Tips for interacting with people with disabilities
4. Government of Canada, A Way with Words and Images