Virtual Après MonoSki Clinic

Sunday, January 17th, 4-6pm EST













Green Mountain Adaptive Sports

Adaptive Ski & Ride Aquatics Program Paddle Board Rock Climbing



Stowe, Vermont USA www.greenmtnadaptivesports.org

Geoff Krill

Director of Eastern Adaptive Sports and PSIA-AASI Adaptive Team Coach





Chris Young

US Coast Guard (Ret.), World Cup and Paralympic Champion, X-Games Champion





Keja MacKewan

Network Coordinator, Spaulding Adaptive Sports Centers





SASC 2020-2021 FALL/WINTER PROGRAMS

BRIDGING THE GAP BETWEEN REHABILITATION AND WELLNESS



SPAULDING ADAPTIVE SPORTS CENTERS (SASC)

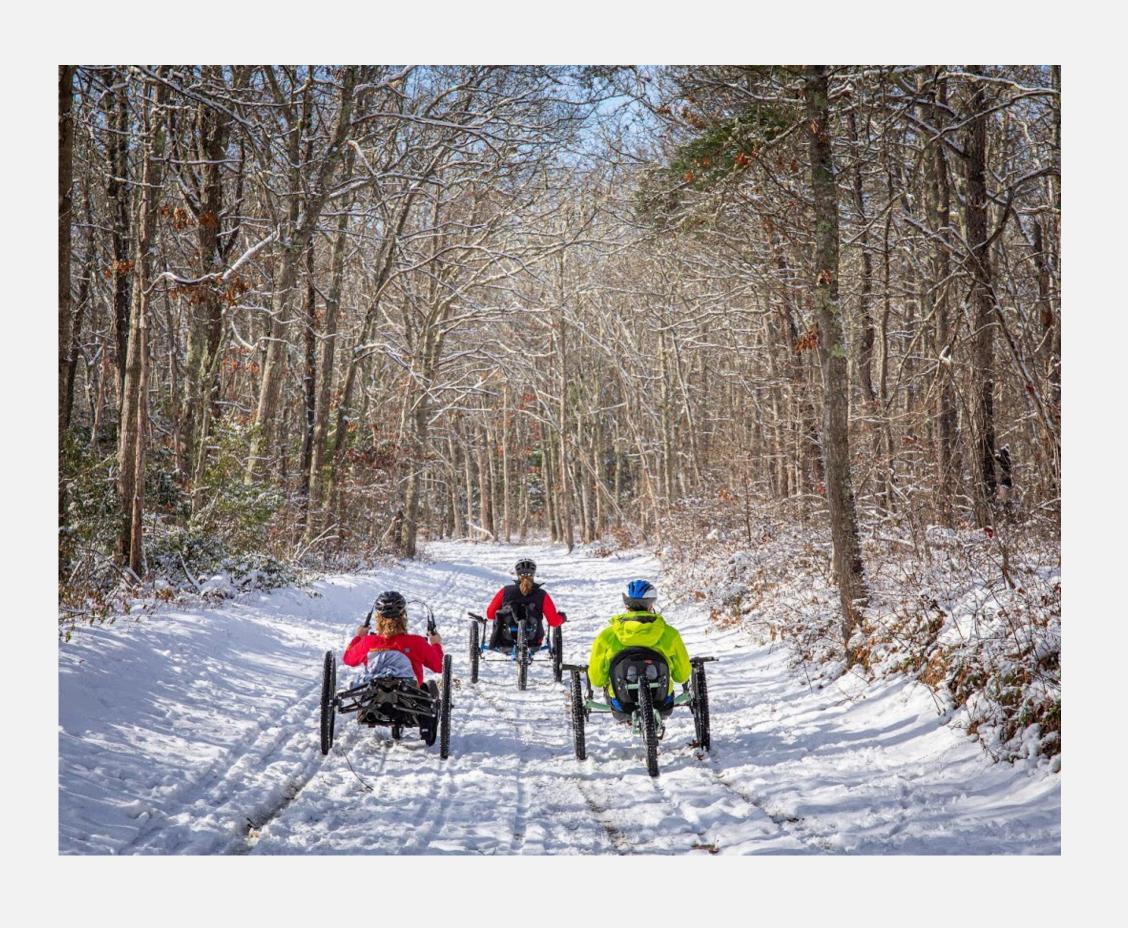
SASC is a department within the Spaulding Rehabilitation Network and includes a team of physical therapists, certified recreation therapists, and adaptive sports specialists.

Operating for 20 years, based near SRN outpatient sites

SASC is focused on bringing sport and recreation into the rehabilitation process to help participants realize *life after disability*, through fully accessible and inclusive year round programs.



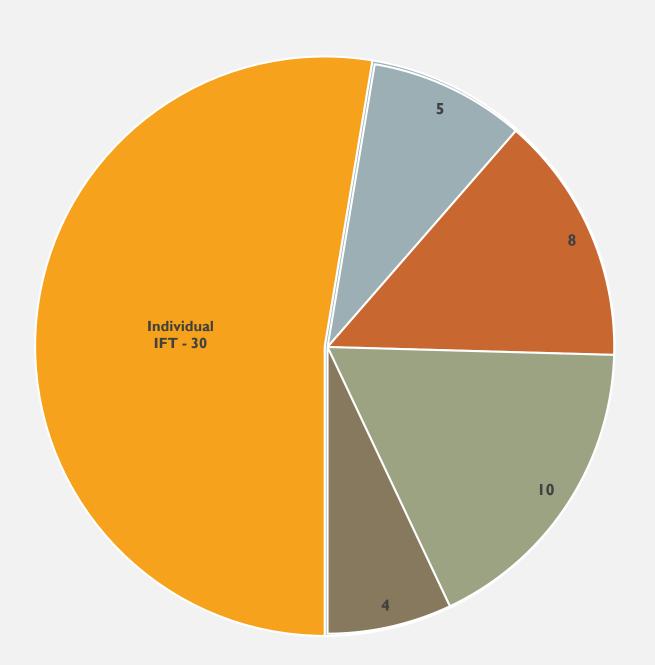
TYPICAL IN-PERSON PROGRAMS



- Kayaking
- Canoeing
- Road Cycling
- Mountain Biking
- Air Rifle
- Archery
- Golf
- Tennis/Pickleball
- Yoga- Multi position and chair
- Therapeutic Riding
- SPRINT (Running)

- Hiking
- Indoor Spin
- W/C basketball
- Sled Hockey
- Skiing/Snowboarding
- Inclusive Fitness Training (Individual and Group)
- Rock Climbing
- Ice skating
- Yard games
- Dance for Parkinson's
- Fishing

NEW VIRTUAL **PROGRAMS**



Yoga

- Multi Position
- Chai

- McGraw Yoga
- Movement and Meditation

Low Intensity Fitness

- Pump Classes
 - Upper Body
 - Total Body
 - Lower Body
- Core and Stretch

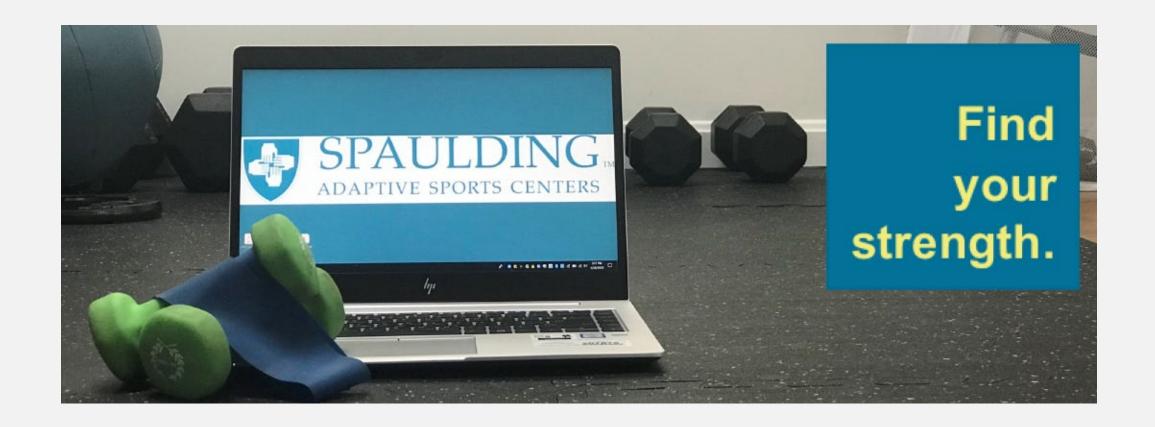
High Intensity Fitness

- **ExPD**
- Sport Performance Training
- Adaptive Boxing
- **30-Minute Fitness**
- Cardio Conditioning Class
- Resistance Band Training

Specialty Groups

- SASC Educational Forum
- Dry-land Golf Training/Fitness Dance with Parkinson's
- Sled Hockey Conditioning
 - Youth & Adult
- Ski Conditioning for Outrigger Use

- Found Sound / Meditation
- PWR!Moves for Parkinson's
- Stroke/TBI Fitness Group



TOTAL SESSIONS >1000

TOTAL PARTICIPANTS 5000

UNIQUE PARTICIPANTS 240



Developing a Virtual Adaptive Sports Program in Response to the COVID-19 Pandemic

Cheri A. Blauwet MD ⋈, David Robinson MD, Alison Riley DPT, Keja MacEwan BA, Mary Patstone MA, Mary E. Dubon MD





SASC SKI/RIDE CLUB

- For skiers and snowboarders of all experience levels
- Lessons designed in collaboration between SASC and local mountain partners to provide PSIA certified instructors
- Provide all adaptive gear necessary for either stand-up or sit-down skiers
- Ability to demo different equipment

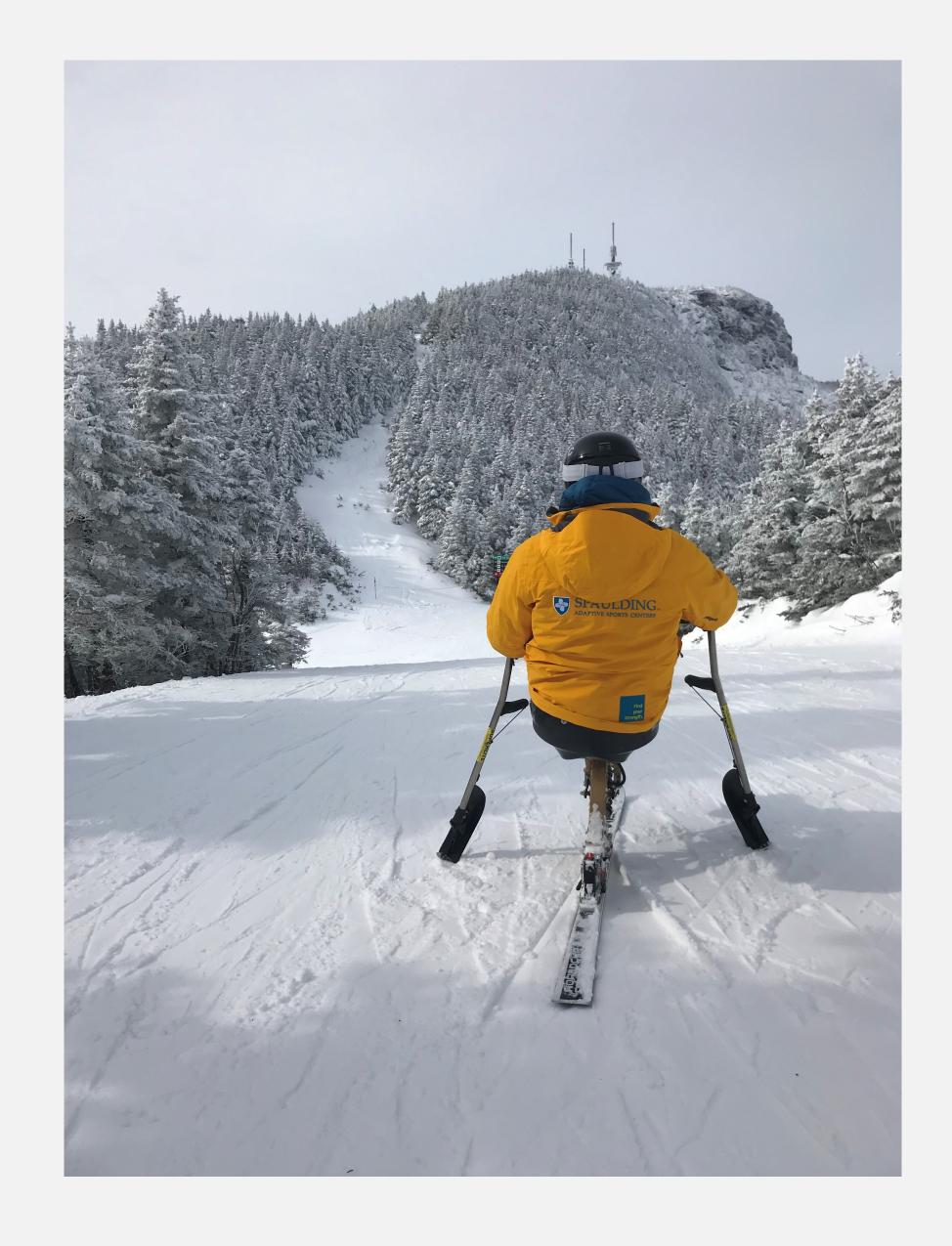












FURTHER INFORMATION AND SIGN UP

SASC Programs

- Email: SpauldingAdaptiveSports@partners.org
 - Call: 877-976-7272
 - Visit: https://sasc.spauldingrehab.org/

Keja MacEwan

- Email: kmacewan@partners.org
 - Call: 774-994-3423

MiKayla Briere

Alpine Coordinator at Adaptive Sports Partners of the North Country



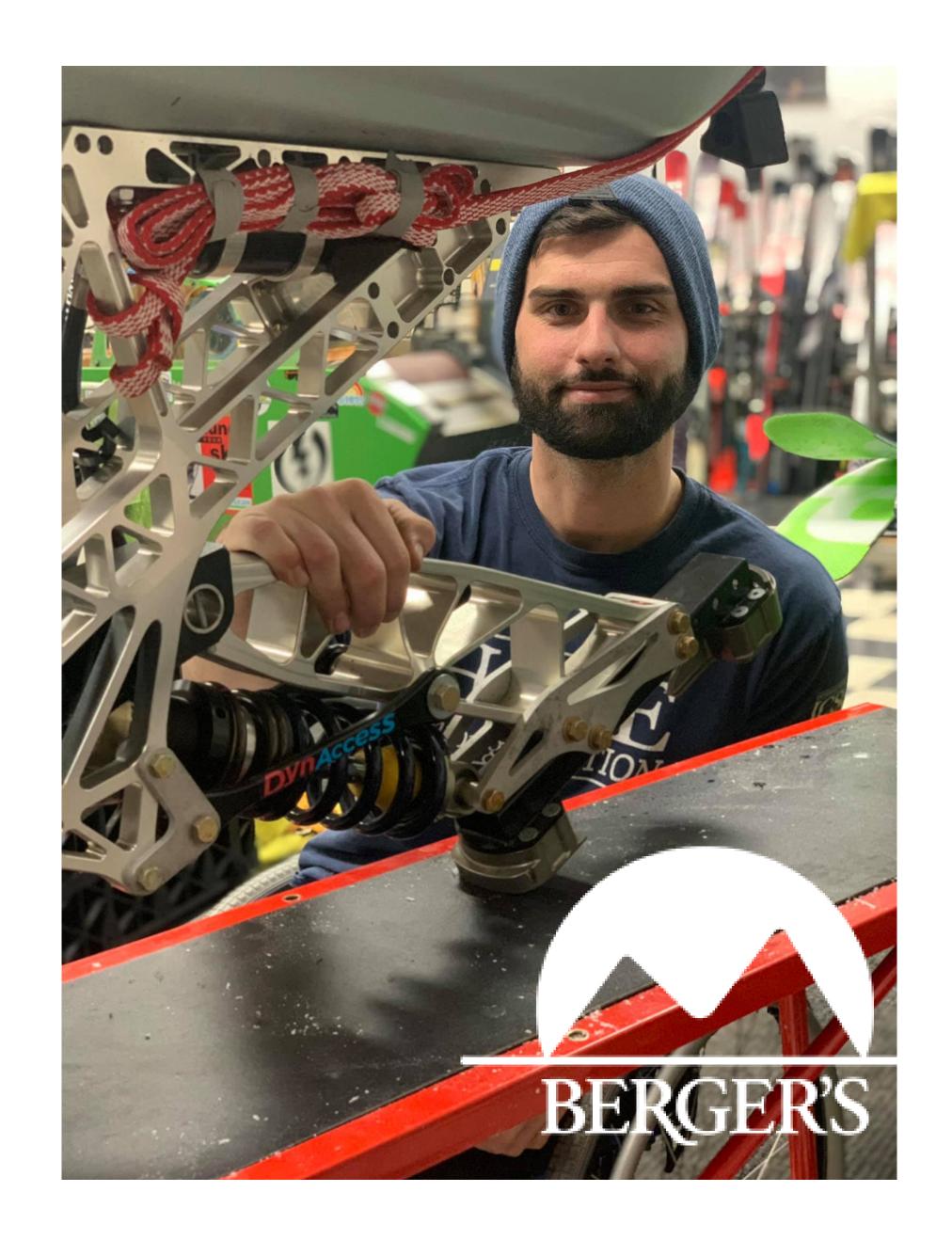


Liam Wagner

Kelly Brush Foundation Ambassador with affiliations to the National Ability Center and Berger's Ski & Snowboard Shop







Greg Durso

Program Director, Kelly Brush Foundation





Main Monoski Manufacturers

What equipment do you use?











Seating Set Ups

Program Bucket First Bucket How to customize personal bucket





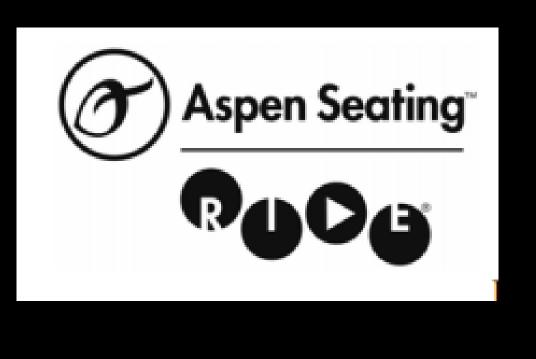


Aspen Seating Fit Kit

Thigh Rocker Hip Guides









https://www.ridedesigns.com/resource/monoski-fit-kit-manual

Maintenance and Tuning What do you do?

Pre-flight Checklist

Bolts,

Straps

Block

Binding

Outriggers

Common Tools on-hand

Wrenches

Hex Keys

De-icer...?

Spare Parts



Ski Tuning Basics

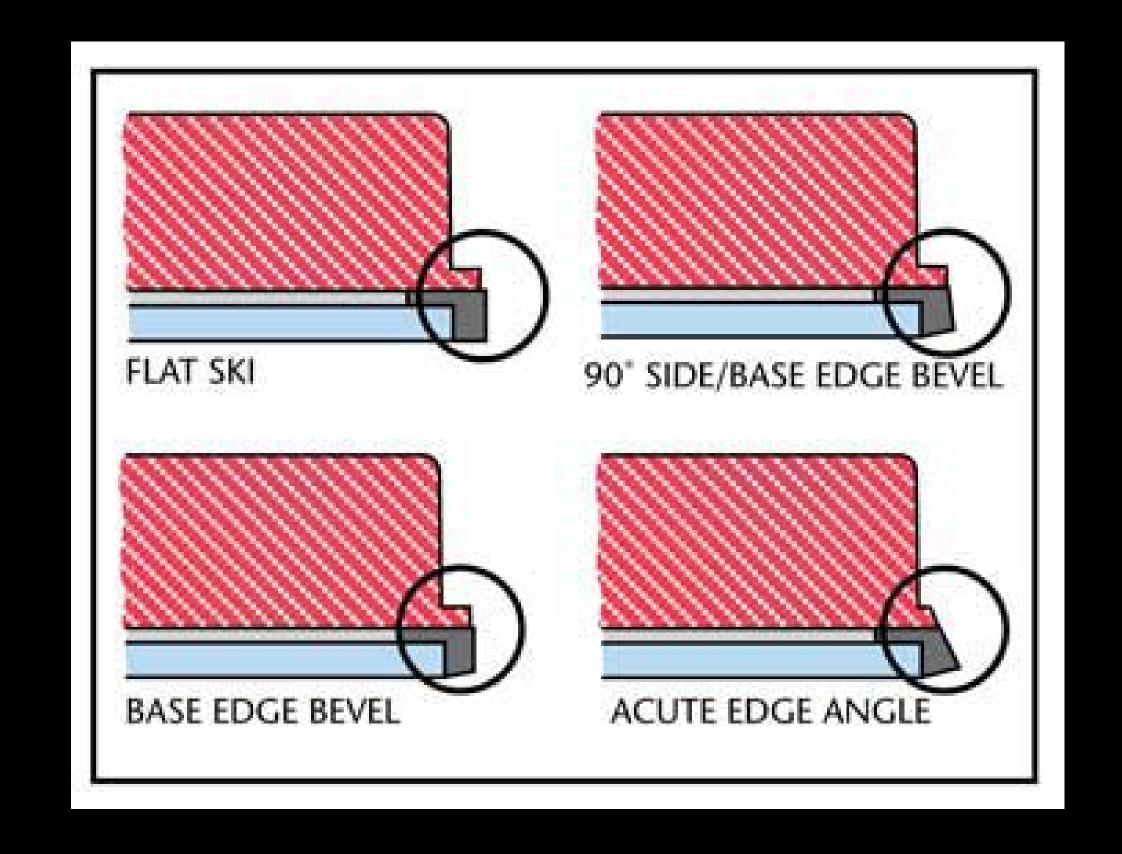
How do you tune your edges?

Base/Side Edge Angles

90*: flat ski vs 1* Base/1* Edge

Acute Angle: 1* Base/ 2* Side

Durability vs Performance



Resources

Find a local Program

Move United Kelly Brush Foundation

Active Project and Active Fund

Represented on this Call

Green Mountain Adaptive Sports, VT
Spaulding Adaptive Sports Centers, MA
Maine Adaptive, ME
NEDS, NEHSA, ASPNC, EAS – NH
Two Top Mountain Adaptive Sports Foundation, PA
Courage Kenny Rehabilitation Institute – MN
Northern Arizona Adaptive Sports Association, AZ
Wasatch Adaptive Sports, UT
Teton Adaptive, WY
Dream Adaptive, MT
Ignite Adaptive, CO
Polish Paralympic Committee, Poland

Equipment

DynAccess
Tessier
Enabling Technologies
KBG
Aspen Seating



Movement Analysis

Geoff Krill and Chris Young - Conversation











Kathleen Salas, PT MHA

Spaulding Adaptive Sports Centers
North Shore Coordinator
SASC Ski/Ride



Find your strength.

Shoulder Health and Strengthening for Wheelchair users and Outrigger use

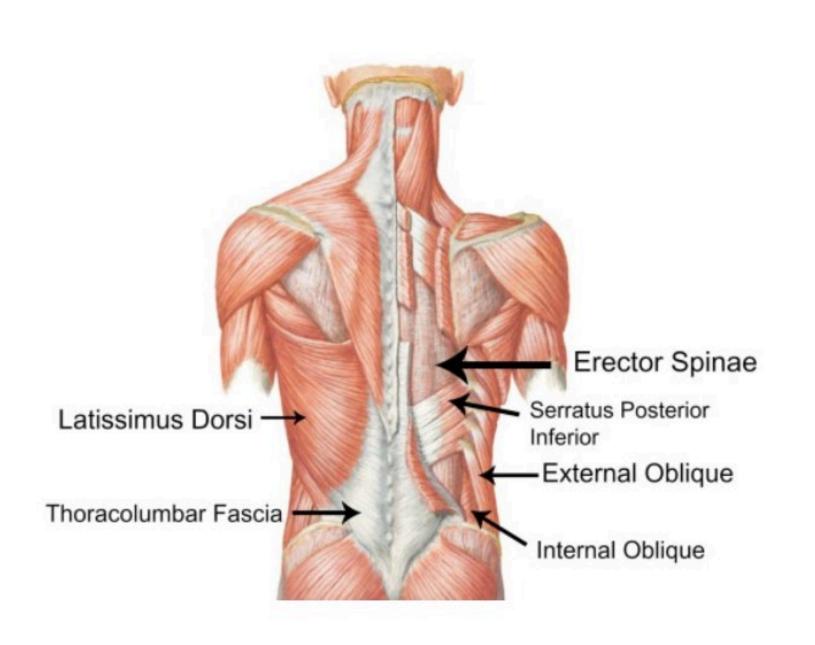


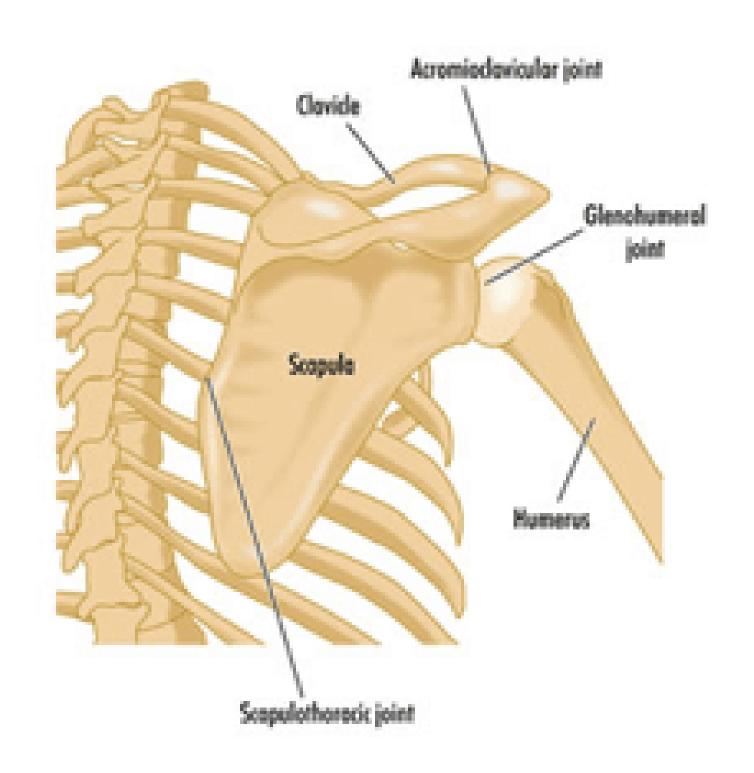


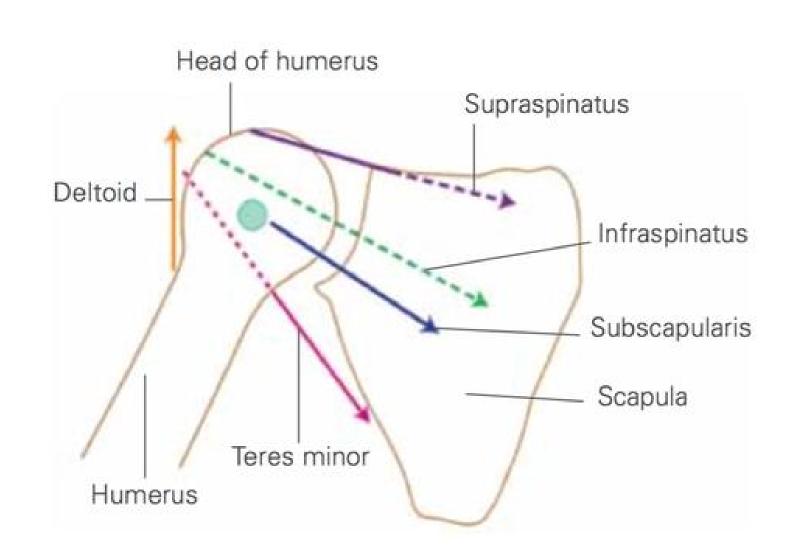
Ski Training for safety & success:

Optimize your work outs to match your outrigger needs

- 1. Form first
 - Balanced muscle strength & flexibility
 - Dep on level, complete vs. incomplete injury
 - Skier alignment & workout position
- 2. Just right shoulder ex's + core
 - Goals regarding endurance & power
 - Half day? Independent through liftline? Terrain?
- 3. Avoid overuse: stretching & warmups decrease risk and/or severity of injuries!







It's complicated!

Core + Shoulders + Don't forget the Scapula Shoulder not used for Weight bearing but ... needs "dynamic stability"

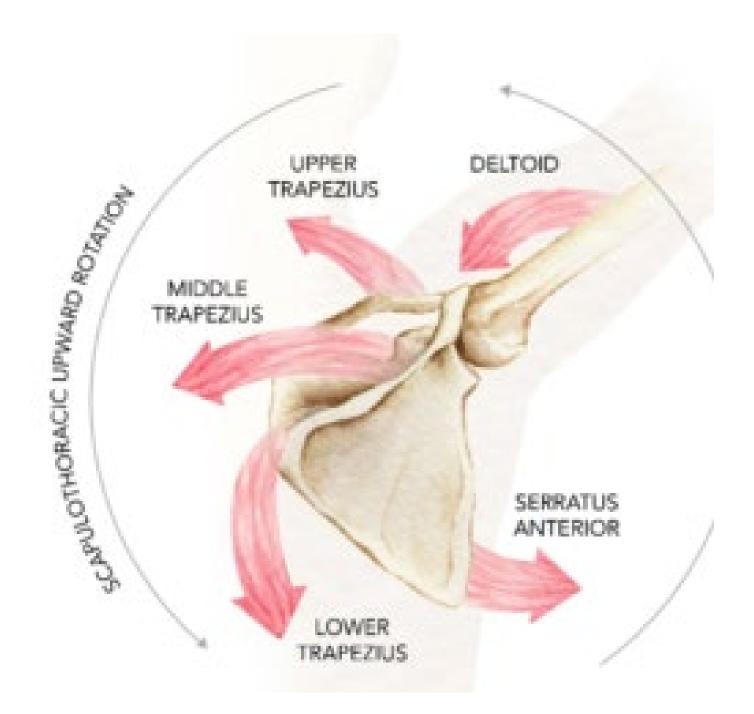
Dynamic Stability

- Coordinate shoulder & scapula biomechanics
- 3 contraction types- isometric co-contractions on snow essential
- Multi-directional & micro-movements also crucial

Journal Applied Research on MonoSkiers (2003)

Pecs, scapula ms. onto ribs (Lats), RTC *for stability;*Triceps, Deltoids, Biceps & Forearms *for motion*.

- Strength: Open vs closed chain ex's?
- Endurance: length of runs + lift lines?
- Power for terrain changes?



Top Take-Homes: Concepts & Options

1. Stretch

- 1. Front (pecs, ant deltoid): Lie on the beach or overhead Y's
- 2. Back (serratus, lats): bear hugs or double arm pull
- 3. Rotation: torso twists to wind/unwind
- 2. Strengthen core, back & blades with bands & closed chain isometrics
 - 1. Russian twists
 - 2. Diagonal reaches & bicycle crunches
 - 3. Scap/RTC: T's & rotary W's
 - 4. Theraband Lat pull downs & Pec/Tricep reaches
 - 5. Tricep presses or dips; Modified planks
- 3. Balance Challenges: BOSU disc, corner sitting, edge of wc
- 4. Variety: planes & speeds & end range pulses
- 5. Dynamic eye/head motions coordinated for your monoskiing

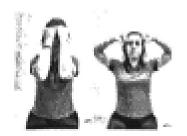




Home Exercise Program for Outrigger Users

Created by kathleen salas, PT Jan 16th, 2021

View videos at www.HEP.video



2 Times Repeat 5 Seconds Complete 1 Set Perform 1 Times a Day Pec Stretch

Place hands on forehead OR behind head if can. Slowly roll your elbows out and back. Hold 20-30 seconds. 2x.

ALTERNATE: Overhead Y stretch as you lean back & look up.



10 Times Repeat 2 Seconds Complete 3 Sets

Total 10 Page1 of 2

Core Twist with TheraBand OR weight.

Band in front anchored, with shoulder blades back. Rotate torso to side then slowly return to starting position. Twist opposite direction slowly.

Synchronize your breath each



2 Times Repeat 30 Seconds Complete 1 Set

Seated Trunk Rotation Stretch

Sit up as tall as possible. Twist one direction with hand over chair, using opposite hand to pull your knee. Exhale to increase the rotation and stretch. Hold 20-30 seconds.

Slowly twist the opposite direction & repeat.



10 Times Repeat 2 Seconds Complete 3 Sets

Seated Reaches

Sit up with good posture and reach out as far as you safely can in diagonal direction-keeping thumb up. Feel a stretch on opposite

Slowly come back to midline. Reach opposite side.

Use Diagonal reaches or 10:00 and 2:00. Head and eyes up! Try different heights also.

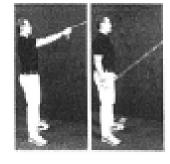


2 Times Repeat 30 Seconds Complete 1 Set Perform 1 Times a Day Seated Prayer/Lat Stretch

holding on to wand/stick OR hands together. Chin to chest and let head Round your back to feel a stretch 20-30".

Flex upper body forward while

Can move your arms to either side to alter the stretch also.



Repeat 10 Times

Lat pulls with theraband

Anchor bands higher than your

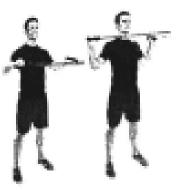
Start with your arms straight out in front of you at shoulder height.

Pull bands down next to your body and then slowly return to the starting position.

View videos at www.HEP.video

Created By kathleen salas, PT

Jan 16th, 2021 - Pa



10 Times 5 Seconds Complete 3 Sets

Video # VVYTGK6S7

ELASTIC BAND W's - ER

Holding elastic band with both hands. draw back the band as you bend elbows and pull your shoulder blades back to make a letter "W".

> 10 Seconds Complete 3 Sets



10 Times Repeat

Tricep Press or Dips

Position vourself seated your wheelchair with bre lock.

Place both hands on the rests OR seat edge and lift up by straightening y arms.

Progress to subtle weigh shifts side/side, looking side/side or up/down for challenges.



Repeat 10 Times 3 Seconds Complete 3 Sets

BAND HORIZONTAL "T" ABDUCTION

Hold your elastic band in front of you with elbows straight, pull the band outward away from your body.

Try this with thumbs & palms UP.

Slowly let it recoil.

9



Repeat 10 Times Hold 5 Seconds Complete 3 Sets

Video # VVYNUMM8G

Band Pec/Serratus Press

Now wrap it behind your back. Perform a pec press as you reach to make your arm as "long" as possible

Be sure to change the angle of your arm to get strength in different ranges of motion.

Questions and Answers – A Conversation

Please put any questions you have in the Chat

Let us know if you want to direct your question to a particular person



