

## A.T.S. Level 1 First Time Skier



### SKILLS & GOALS

- Boot Drills (See Appendix, page 31), Sensations under foot and at the boot cuff
- Putting on and taking off the skis
- Athletic stance- weight on the arc of the foot, shin to boot cuff contact; walking- COM- Center of Mass, remaining over base of support, climbing, gliding
- Pivoting movements, from the middle of the foot, bullfighter position
- Climbing
  - Herringbone: Tails of the skis are together, tips apart. Knees may tip slightly inward toward the snow to create edge angle enough to stop a backward slide. Ski pole baskets are behind the feet.
  - Side Step: skis are across the hill, and are tipped on corresponding edges, knees tipped slightly up the hill. Step uphill ski with a small step to the little toe side, followed, by a small step of the downhill ski onto the big toe side, note the straight edge marks left in the snow. COM moves up hill to remain over base of support. Ski poles assist in balancing movements.
- Straight run, skis parallel, feet hip distance apart, athletic stance. Natural run off of the terrain
- Gliding wedge. Both legs and feet are mirror images. Feet, hip distance or just slightly wider, with equal weight on each ski, COM is aligned over base of support. Feet are not far outside the silhouette of the body! Feet are pivoted from the middle of the foot to a wedge. **Tails are not pushed away from center.**
- Wedge turns, the outside knee and hip extend, the COM moves slightly inside, in the direction of the apex of the upcoming turn. The new inside leg shortens, the ski flattens, at the same time, the outside leg is lengthened, weight is transferred to the outside ski. Skier steers both skis toward the fall line, in a curved arc. When turning to the right, as the outside (L) leg lengthens, & the COM moves in the direction of travel, the new inside(R) ski flattens and can be guided through the arc of the turn to the right, the ankles remained flexed and lower leg remains in contact with the front of the boot cuff. Upper body remains heading down the hill, a slight countered relationship develops.
- Wedge turns, the outside knee and hip extend, the COM moves slightly inside, in the direction of the apex of the upcoming turn. The new inside leg shortens, the ski flattens, at the same time, the outside leg is lengthened, weight is transferred to the outside ski. Skier steers the skis toward the fall line, in a curved arc. When turning left, as the outside (R) leg lengthens, & the COM moves in the direction of travel, the new inside (L) ski flattens and can be guided through the arc of the turn.to the left. the ankles remained flexed and lower leg remains in contact with the front of the boot cuff. .Upper body remains heading down the hill, a slight countered relationship develops.
- Linked wedge turns, speed control through turn shape
- Stop using a *slightly larger wedge* or a turn. DO NOT use of teach a braking wedge
- Ride Ollie's Moving Carpet, or Easy Rider Carpet lift. Instruction on how to get on **AND** off the lift
- Getting up after a fall (See Appendix, page 32)

### Next Level

- Riding the Monadnock Express Chair Lift
- Skiing a variety of turn shapes
- Developing more turn shape for speed control on steeper terrain



Parallel Position



Wedge Position

## A.T.S. Level 2 Beginner Zone Skier



### SKILLS & GOALS

- ✎ Review athletic, balanced stance, wedge turns and **turning** to a controlled stop, take a run on Ollie's to assess skills; advance to Easy Rider if appropriate, with the goal of riding the Monadnock Chair
- ✎ Feet remain hip distance or only slightly wider, pivot occurs under the mid foot
- ✎ Make linked turns, moving inside half of the body into the turn first. Right ski flattens slightly, through a diagonal directional move of the COM, toward apex of the new turn, to allow the steering of both skis to the right. Left ski flattens slightly, through a slight diagonal directional move toward the apex of the turn, to allow the steering of both skis to the left.
- ✎ The lower body, feet and legs, turn more than the upper body, developing a slight countered relationship
- ✎ Link wedge turns using steering movements of both feet and skis to change speed through turn shape.
- ✎ You use a variety of turn shapes, short, medium and long radius turns, controlling speed through shaping and guiding of the skis across the fall line and slightly back up hill, to come to a complete controlled stop
- ✎ You know how to get on, ride **AND** get off the surface lifts and the Monadnock chair lift. You know where to meet when you get to the top. You are skiing all terrain off these lifts.
- ✎ The instructor follows the entire group to the top
- ✎ **Mileage**, to commit these correct movements into muscle memory
- ✎ You understand and observe the Safety Responsibility Code
- ✎ You can control speed and stop at any time; you are able to maneuver around moving and stationary objects.

### Next Level

- ✎ Reinforce turning, guiding both skis through the arc of the turn, slowing and stopping through the use of turn shape or by turning both skis across the fall line and back up the hill.
- ✎ Link wedge turns varying turn shape as terrain changes. Flow from turn to turn, without a traverse
- ✎ Making wedge turns on a diagonal down the hill, will help with 'steep' issues
- ✎ Skis all green trails at Wachusett
- ✎ Explore the skidding of the skis to parallel at turn completion





## A.T.S. Level 3

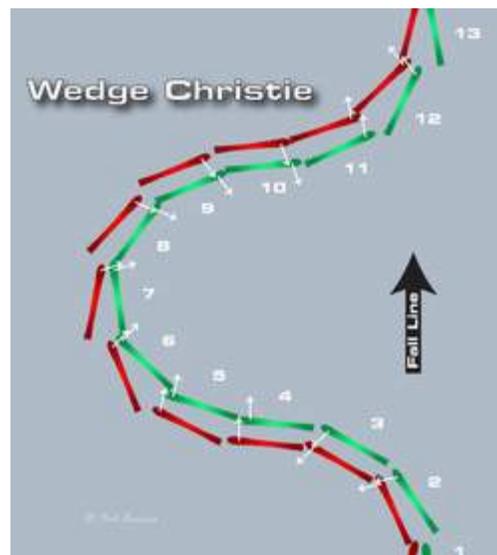
### You are moving into the world of the Wedge Christie Beginner Zone Skier

#### SKILLS & GOALS

- ✎ Review riding of the chair lift, take a warm up run on the carpet to assess skills
- ✎ Vary speed through turn shape, develop a rhythm linking turns, no traversing, flow from turn to turn
- ✎ Make linked turns, moving inside half into the turn first. Through a diagonal directional move of the COM toward the apex of the new turn, the new inside ankle flexes slightly, the leg shortens, and both skis are steered into the turn. Use of directional movements and the shortening of the inside leg, the outside ankle opens, (extends), lengthening the leg, as the weight is transferred early to this new outside ski. Both skis are guided through an arc. Right will flatten slightly to go right, left to go left, because of directional movements toward the new turn
- ✎ Legs turn more than the upper body, COM moves across the skis in the direction of the new turn, Legs turn under a stable core, creating a slight countered position. Poles aid balance
- ✎ Introduce skidding at the end of the turn (early wedge Christie), where the skis will re-align to a parallel position, on or after the fall line. Use of natural terrain features and a slight increase in speed will allow the skis to realign spontaneously
- ✎ Flexing the ankle of the new inside leg results in a slight tipping of the foot and ski toward the little toe side, allows you to realign the ski to parallel, as you guide it through an arc.
- ✎ Feet remain hip distance apart both in wedge AND parallel positions, skis are pivoted under mid foot
- ✎ A small wedge, feet are not outside the body silhouette, allows for easier re-alignment to occur at turn completion
- ✎ Perfect practice and Mileage allows you to commit correct movements into muscle memory

#### Next Level

- ✎ Ski trails off the Monadnock Chair with confidence, skidding the skis to parallel at turn completion
- ✎ Pole use for balance and upper body stabilization
- ✎ Use terrain features, rolls and mounds, to aid in the success of the Christie
- ✎ Movements are fluid and flow from turn to turn without traversing
- ✎ Move to the Minuteman Express Lift and Ralph's Run
- ✎ Ski all green trails AND easy blue trails at Wachusett



## A.T.S. Level 4

### Refining the Wedge Christie, work toward earlier re-aligning of the ski Intermediate Zone Skier



#### SKILLS & GOALS

- ✎ Reduce the size of the wedge to facilitate re-aligning of the skis
- ✎ Use of natural terrain changes can provide success
- ✎ Feet remain hip distance apart both in wedge AND parallel orientation, there is active steering of both feet into and through the turn, legs turn more than the upper body, developing a slight countered relationship
- ✎ Diagonal Directional movements of the COM toward the apex of the new turn, at turn initiation, allows for edge release, the new inside ski flattens and opens into a slight wedge, so that both skis can be steered into and through the turn
- ✎ The new outside ski does not gain elevation as skis are opened to a wedge, it is the movement of the COM over the skis in the direction of travel which allows the new inside ski to flatten, and both skis open to a wedge position
- ✎ Active guiding of the skis through the arc of the turn along with proper stance, will allow for spontaneously realigning of the skis to a parallel position on or after the fall line
- ✎ Re-alignment of the inside ski occurs earlier in the turn. This is facilitated by continued shortening of the inside leg through flexing, and tipping of the ski to the little toe side of the foot while actively steering it to parallel position, the guiding movements occur under mid foot.
- ✎ Edging and steering are smooth movements using the legs, not the upper body and are not forced
- ✎ Using diagonal directional movements of the COM in the direction of travel and the opening and closing of the ankle joint, allows for accurate pressure control movements as the speed increases
- ✎ Perfect practice, feedback and Mileage will help commit correct movements to muscle memory

#### Next Level

- ✎ Use the Minuteman Express lift, skiing comfortably on Ralph's Run, Hitchcock, and venturing onto Fran's Folly, and Piece of Cake >> Skis all green trails AND groomed blue trails
- ✎ Introduction of the pole swing and touch to complement the movement of the body in the direction of travel
- ✎ Work on matching earlier in the turn, at or above the 'fall line', movements flow from turn to turn, no traverses



## A.T.S. Level 5

### Refining the Wedge Christie, re-aligning of the skis above the 'fall' line Intermediate Zone Skier



#### SKILLS & GOALS

- Continue active steering of both feet into and through the turn, movements are smooth, flow is down the hill
- Use terrain to facilitate learning, able to realign the skis earlier in the turn, move to a bit steeper blue terrain, use a variety of terrain and snow conditions and turn shapes
- Introduction of the pole swing and touch, complements the movement of the COM toward the new turn, and edge change movements early in the turn
- Diagonal directional movements, pole swing and touch, facilitate edge release for active steering of both skis to a slight wedge at turn initiation and re-alignment of the skis, above the fall line.
- Feet remain hip distance apart in wedge AND parallel positions, lower body, feet and legs, turn more than the upper body; the upper body and the inside half lead into the turn developing a countered relationship
- There is a more apparent long leg, short leg orientation throughout your turns, Which translate into more active movements of the COM in the direction of travel, edge change and PC movements
- Perfect Practice, feedback and Mileage commits correct movements to muscle memory

#### NEXT LEVEL

- Skiing on steeper Blues of Hitchcock, Frannie's Folly, Look Mom and Challenger, controlling speed through turn shape
- Continued movement allows flow from turn to turn
- Proper use of pole swing and touch compliment diagonal directional movements, allows both legs to tip the skis and guide them through a parallel turn
- Hockey Stops



**A.T.S. Level 6**  
**Beginning Parallel Turns**  
**Intermediate Zone Skier**



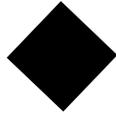
### SKILLS & GOALS

- ✦ Introduction of open stance parallel, both feet doing the same thing at the same time
- ✦ Feet are hip distance apart, both feet are tipped at the same time, focus on moving the inside leg first
- ✦ The upper body and the inside half lead into the turn, the feet and legs turn more than the upper body, creating a countered relationship
- ✦ Upper lower body separation occurs at the hip socket, not the rib cage, waist or hip/buttocks
- ✦ Diagonal directional movement of the Center of Mass toward the apex of the new turn, allows for simultaneous edge release and easy steering/guiding of the skis through the turn.
- ✦ Smooth directional pole swing and touch, aid in directional movements, allows for simultaneous tipping of both feet (pole movement and touch moves north/south, while skis move east/west). Pole touch occurs at edge change
- ✦ The amount of edge angle is created by the pitch of the hill
- ✦ Joints are flexing harmoniously, angles are created through proper stance over the base of support, keeping shoulders and arms parallel to the pitch of the hill. Angle of the knees, hips, and shoulders create a parallel relationship
- ✦ Perfect Practice, feedback and Mileage will commit correct movements into muscle memory.

### Next Level

- ✦ Uses proper terrain, not venturing too steep, too fast, which will impact learning
- ✦ Continued movement and flow from turn to turn in open parallel stance
- ✦ Diagonal directional movements of the body promote early inside leg steering and early simultaneous edge engagement
- ✦ Proper pole use facilitates turns and stabilizes upper body





## A.T.S. Level 7 Introduction to Carving Advanced Zone Skier

### SKILL GOALS

- ✎ Review balanced stance, diagonal directional movements, complemented by pole swing and touch
- ✎ Feet are hip distance apart, both feet and legs are tipped at the same time, inside half moves into the turn first
- ✎ The upper body and the inside half lead into the turn, the feet and legs turn more than the upper body, creating a countered relationship between upper and lower body
- ✎ Engaging of the ski tips at the top of the turn, above the fall line, will draw you into the new turn
- ✎ Tipping of the new inside foot to the little toe side using a directional movement toward the upcoming turn. Inside leg flexes/shortens, outside leg extends/lengthens, allows for simultaneous edge change.
- ✎ Long leg, short leg orientation continues to develop. Lateral movement of the pole swing helps draw you into the turn
- ✎ Both skis are guided throughout the arc of the turn
- ✎ Proper use of the ski design provides for smooth turn entry, carving medium and long radius turns
- ✎ Controls speed through turn shape on a variety of terrain and snow conditions.
- ✎ Able to ski easy black bumps

### NEXT LEVEL

- ✎ Able to ski trails off the Polar Express Lift and a variety of snow conditions
- ✎ Ski a variety of turn shapes, carved long and medium radius, short fall line turns with effective pole usage
- ✎ Rail road track turns on the flats





## **A.T.S. Level 8**

### **Carve it Up**

#### **Advanced Zone Skier**

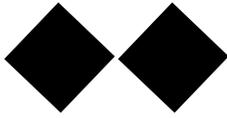
### **SKILL GOALS**

- ✎ Review balanced stance, directional movements, developing of long leg/short leg orientation, pole swing and touch.
- ✎ Distance between the feet and legs change in response to snow conditions and terrain changes (powder, crud, bumps)
- ✎ The upper body and the inside half lead into the turn, the feet and legs turn more than the upper body
- ✎ Pole swing coincides with extension of the legs, edge change and complements directional movement into the new turn
- ✎ Tipping of the new inside foot to the little toe side, flexing and shortening the leg, tipping to the big toe side of the outside ski with extension in the direction of the apex of the new turn, allows for an early edge change
- ✎ Directional movement of the center of Mass allows for simultaneous edge release and engagement
- ✎ Engaging of the ski tips at the top of the turn draws you into the new turn, this is facilitated by active movements of the COM in the direction of travel
- ✎ Both skis are guided throughout the arc of the turn. Active inside leg steering complements steering of the outside leg, Long leg/ short leg orientation is apparent
- ✎ Proper use of the ski design provides for smooth turn entry, carving initiation, control phase and finish
- ✎ Uses variety of turn sizes and shapes, skis bumps, crud and powder
- ✎ Lower leg remains in contact with boot cuff at the 2 and 10 o'clock position

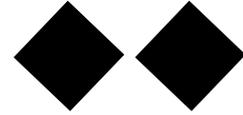
### **NEXT LEVEL**

- ✎ Able to carve medium and long radius turns with minimal skidding. Fall line, short radius turns with effective pole usage. Ability to change the size and shape of the turns as terrain dictates, with greater accuracy
- ✎ Rail road track turns with continued shaping toward short radius carved turns
- ✎ Skis a wide variety of snow conditions
- ✎ Able to modify skill blend with pivoting and skidding for speed control in moguls, Rebound, retraction turns
- ✎ Shows continuous flow and movement from turn to turn





## A.T.S. Level 9 Mountain Mastery Advanced Zone Skier



### SKILL GOALS

- ✦ Improvement of balance, agility and versatility with changing of conditions and terrain
- ✦ Maintain dynamic balance through the creating of angles of the ankles, knees, hips and spine
- ✦ Distance between the feet and legs change in response to snow and terrain changes (powder, crud, bumps)
- ✦ The upper body and the inside half lead into the turn, the feet and legs turn more than the upper body
- ✦ Efficient directional movement of the COM allows for simultaneous edge change
- ✦ Maintain a strong core and strong inside half, active flexion and extension, simultaneous leg movements, early weight transfer, accurate use of ski design allows tipping to the new set of edges above the fall line
- ✦ Active guidance of both inside and outside skis
- ✦ Edging movements are more precise, reducing the occurrence of skidding, except when tactically appropriate for speed control
- ✦ Rotary movements are accurate and appropriately applied as terrain and conditions dictate.
- ✦ Proper use of the ski design provides for smooth turn entry, carving control phase and finish
- ✦ Uses variety of turn sizes and shapes, skis bumps, crud and powder
- ✦ Pressure control movements through active flexion and extension, are accurately applied for smooth turn to turn seamless transitions and controlled arc.
- ✦ Momentum is carried from turn to turn
- ✦ Dynamic short radius turns
- ✦ Good speed control in the bumps

### Black Diamond Expert

- ✦ Able to ski most terrain, in most conditions at any time
- ✦ The mountain master

