

BEGINNING TERRAIN PARK SKI INSTRUCTION

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INTRODUCTION



Terrain Parks are for Skiers, Too

This manual is a guide to teaching beginning terrain park maneuvers to relatively skilled skiers. There is a demand amongst skiers to learn how to use the terrain park and enjoy the thrill of performing. The ski instructor has an opportunity to introduce the students to basic terrain park skills that will help insure a successful outcome in the terrain park. The ski instructor teaching beginning terrain park lessons needs not be a former Olympian capable of performing a “cork 5 tail” or “alley-oop.” Like a football coach who fields a winning team without actually playing, the ski instructor can demonstrate relatively easy basic principles that will assure success in the terrain park.

TERRAIN PARKS

Terrain parks contain several jumps, rails and fun boxes called terrain park features. Below are typical terrain park boxes and rails.

Flat box



Figure 1

Kink box



Figure 2

Battleship box



Figure 3

C-box



Figure 4

Rainbow box



Figure 5

Flat rail



Figure 6

Kink rail

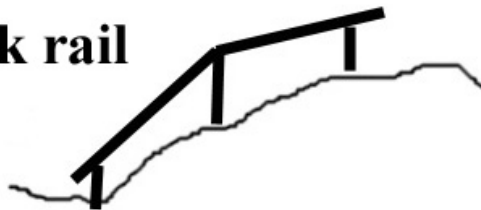


Figure 7

Battleship rail



Figure 8

Rainbow rail



Figure 9

C-rail



Figure 10

When setting up a progression, the flat fun box (Figure 1) is perhaps the easiest to master, followed by jumps and then rails (usually the most challenging.)

PREPARATORY GROUND MANEUVERS

SURFACE SPIN 360

Before heading to the terrain park, some preparatory ground maneuvers will help set up your students for success. Figures 11 through 16 show the classical surface spin 360. Have the class spin 180 (Figures 11 through 13) by applying forward pressure, then ski in a reverse wedge for a short distance making sure they look in the direction of travel (Figure 14) and complete the 360 with tail pressure. (Figures 15 and 16)



Figure 11

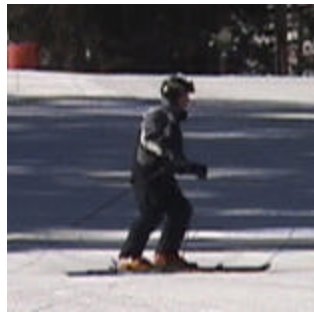


Figure 12



Figure 13



Figure 14



Figure 15

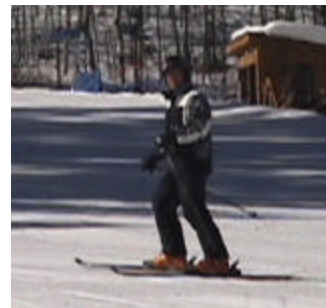


Figure 16

The 360 spin helps develop the rotary skills needed for the terrain park. Try this exercise both ways and on varying degrees of slope.

HOCKEY STOP

Practice hockey stops with and without counter rotation. (Figures 17 & 18) It should also be practiced with and without a jump, which is needed to mount some of the terrain park features. For 50/50 slides and board slides without spins, the countered position of Figure 17 is utilized. For spins on a terrain park feature, the non countered position, which tends to enhance rotary movements, is utilized. (Figure 18)



Figure 17



Figure 18

BEGINNING FUN BOX PROGRESSION

50/50 SLIDE (Straight Run)

As with most progressions, start simple and ratchet up in small increments. Figure 19 shows a portable terrain park

feature training aid available at the ski school. This is to be used only in lessons. Assemble the training aid and place it on the snow, aligned carefully down the fall line. The lesson goal is to perform a 50/50 (straight) slide, the most elementary fun box maneuver. (Figure 20)



Figure 19



Figure 20

When approaching the feature, a slight wedge will help modulate the skier speed (Figure 21). Mount the feature in the parallel straight run position with weight slightly back, as most box surfaces have a little more drag than that of snow (Figure 22). Straight run over the box (Figure 23) and exit the feature with slight flexion to simulate



Figure 21



Figure 22



Figure 23



Figure 24



Figure 25

jumping off the end (Figures 24 and 25). Practice lining up with the feature. A bad line usually cannot be corrected on the feature since edging and pressure control are ineffective on the box surface. Once the student appears to have mastered the training aid, it is now time for the first “walk” in the park. Pick an easy flat box for the first run as shown below.



Figure 26

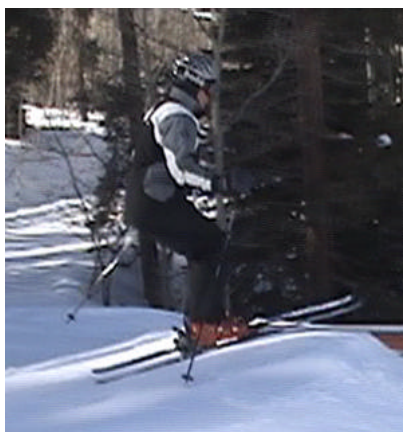


Figure 27



Figure 28

Approach from above, adjusting line and speed with a wedge. (Figure 26) Once satisfied with the speed, narrow the wedge to parallel with center of mass slightly back (Figure 27) to counter the drag from the box surface. (Drag on boxes varies with manufacturer and temperature so take it slow the first time.) Mount the box and

straight run along the long axis looking at the exit. (Figures 28 and 29)



Figure 29



Figure 30

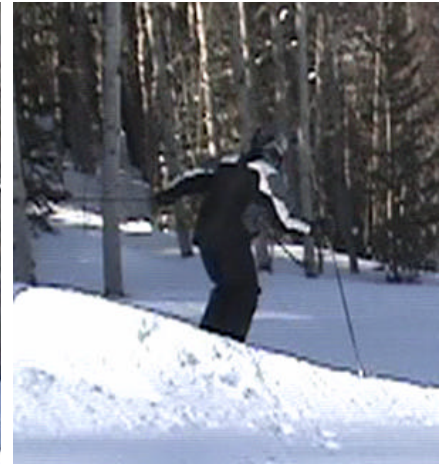


Figure 31

Ski along the surface with moderate flexion for balance and with feet shoulder width apart (Figure 29). Hop off the end with leg and ankle flexion and absorb the landing (Figures 30 and 31). If the skier has set up with a line that is not along the long axis of the box, then simply travel along that line and jump off the side. Remind the student that attempting to correct a bad line usually doesn't work and often leads to a fall. Then go back and try again.

BOARD SLIDE

After mastering the 50/50 slide (straight run) over the fun box, the next maneuver to try in the progression is the board slide as shown in Figure 32. Static positioning helps students learn the sweet spot where the feature is just under the boots. Practice jumping onto the portable feature, landing 45 degrees to the direction of travel, and then 90 degrees.



Figure 32

Practice using the portable feature by approaching with a wedge (Figure 33). Jump onto the feature and simultaneously counter rotate the lower body 45 degrees, keeping the upper body facing the direction of travel. (Figures 34 and 35)



Figure 33



Figure 34



Figure 35



Figure 36



Figure 37

Stand over the skis and adjust body angle to the degree of slipperiness of the feature. Edging will often be ineffective and may result in a fall. Exit by rotating the lower body back to the straight run position. (Figures 36 and 37)



Figure 38



Figure 39



Figure 40



Figure 41

Figures 38 through 41 show the skier performing the 90 degree board slide, which is the next step in the progression. When the student is ready to try it out in the terrain park, choose an easy flat box and try it out. Figure 42 shows the skier adjusting speed with a narrow wedge getting ready to mount the feature. Hop onto the box and simultaneously counter rotate to land in a side slide position. (Figure 43) Continue to slide at 45 degrees initially, (Figure 44) but go to 90 degrees in future practice.



Figure 42

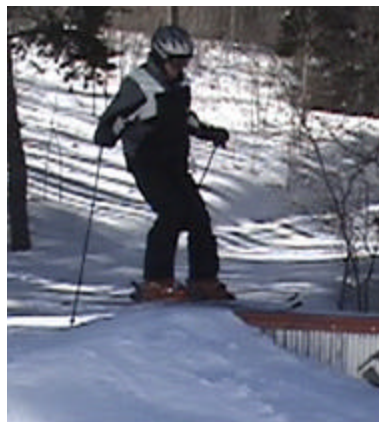


Figure 43



Figure 44

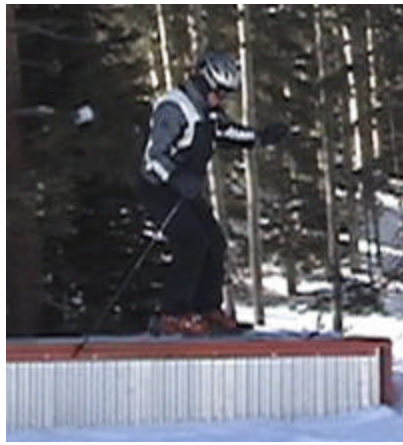


Figure 45



Figure 46



Figure 47

Continue sliding (Figure 45) and prepare to dismount (Figure 46). Now realign the upper and lower body (cancel counter rotation) and jump off the back of the feature with quick ankle and knee flexion (Figure 47). If you don't make it back to a straight run, no problem. Landing in a side slide position is acceptable. At this point the student can perform the 45 degree and 90 degree board slides.



Figure 48



Figure 49



Figure 50

180 DEGREE SPIN

For the more advanced students with twin tip skis, the 180 degree spin on the box is the next maneuver in the progression. On the portable practice feature, control

speed entry with a wedge. (Figure 48) Hop onto the feature with full body rotation. (Figures 49 and 50) This will cause the skier's body to rotate. (Figure 51)



Figure 51



Figure 52



Figure 53

Continue the rotation. (Figure 52) Exit skiing backward (Figure 53) looking in the direction of travel. This maneuver should only be performed with twin tips. After sufficient practice, pick a flat box and perform the 180 degree spin: Approach the feature adjusting speed. (Figure 54) Hop onto the feature with rotation. (Figure 55)



Figure 54

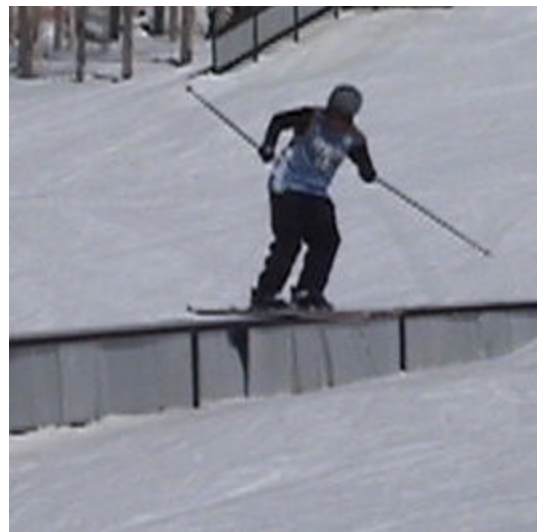


Figure 55

Continue to rotate along the feature. (Figures 56 & 57)



Figure 56



Figure 57



Figure 58



Figure 59

Dismount off the back (Figure 58) and land in a backward skiing position (Figure 59), called “switch skiing.” Perform this only with twin tips. Arm positions of your students may vary depending on the degree of counter rotation or rotation utilized. Avoid critiquing arm movements until the student attains sufficient skill to perform the maneuver. Instead, focus on line-up and positioning.

RAILS



Figure 60

Skiing on rails is more challenging because of the narrow riding surface, usually about 3 inches wide. Typical moves on a rail require the board slide mode as shown in Figure 60, since rails are too skinny for skiing in the 50/50 or straight run stance. The 90 degree slide is the best to use because lower angles such as 45 degrees may result in the skier straddling the rail, which you don't want to do on skis. In Figure 61 the skier approaches the rail adjusting



Figure 61



Figure 62

speed and preparing to mount the rail. Jump to the side slide or board slide position, (Figures 62 and 63) landing on the rail with the ski boots over the rail (sweet spot). Side slide (90 degrees) on the rail (Figure 64) and dismount by ending the counter rotation. (Figure 65 and 66)



Figure 63



Figure 64



Figure 65



Figure 66

Counter rotate while sliding to cancel out a spin, which would be very challenging on this feature. Arm position may vary depending on the degree of counter rotation required.

HALF PIPE

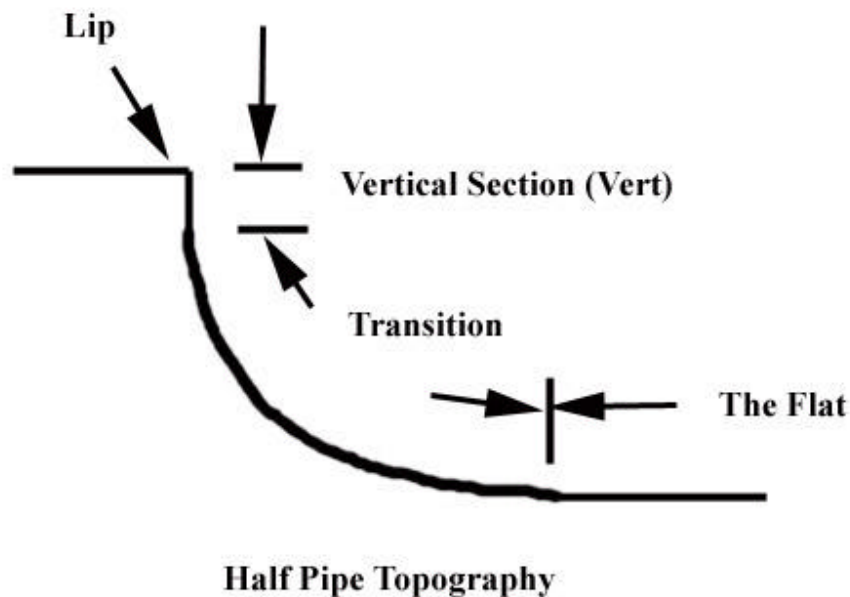


Figure 67

Figure 67 depicts the basic topography of a half pipe. For beginner half pipe students, practice in the flat and the beginning of the transition. More advanced lessons involve the upper transition, vertical wall and skiing above the lip. A typical beginning progression would be to first ski in a serpentine track, making linked parallel turns on the flat all the way down the half pipe. Next run, have the students ride up the bottom of the transition and turn in that general area.

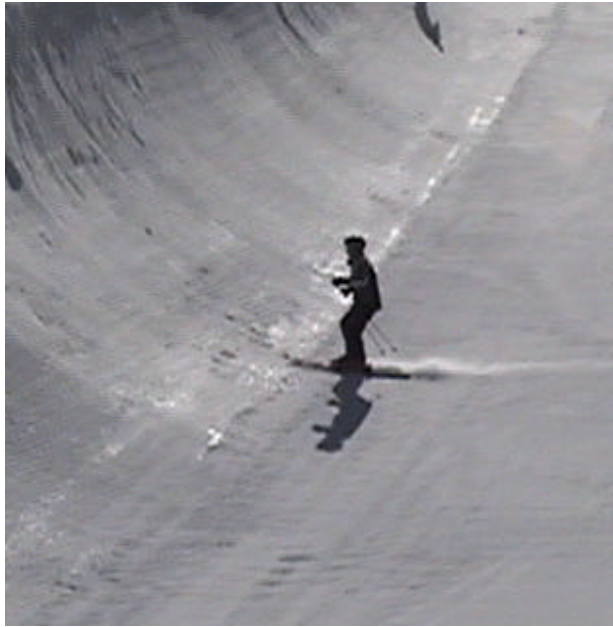


Figure 68



Figure 69

In Figure 68 the skier approaches the transition and skis up the beginning transition (Figure 69) with a little flexion. Extend and rotate the upper body in the direction of the turn (Figure 70) and land facing the other side of the half pipe (Figure 71). This is essentially a 160 degree



Figure 70



Figure 71

jump turn, which is also a good exercise outside the half pipe. Make sure the body is perpendicular to the snow of the half pipe at all time. If the body is not perpendicular to the snow, the ski tips or tails may strike the snow in the transition area of the half pipe during the jump turn and limit the degree of the turn.

Continue making turns down the half pipe, encouraging the student to ride higher into the transition region. For the more advanced half pipe moves, have the student ride higher into the vertical surface, “vert.” In Figure 72, the student is in a carving traverse across the flat. Ride up the transition with sufficient speed (Figure 73) to reach the



Figure 72



Figure 73

“vert.” (Figure 74) Rotate the upper body in the direction of the turn (Figure 74) and suddenly flex the knees and ankles to release the edges (Figure 75), initiating the turn. In a well groomed half pipe, it is not necessary to jump at this phase of the turn. A mere flexion of the knees and ankles will do the trick. As always, keep the major axis of the body perpendicular to the snow.



Figure 74



Figure 75



Figure 76



Figure 77

After finishing the turn in the air (Figure 76), extend for the landing (Figure 77) and head for the other side.

JUMPS



Figure 78



Figure 79

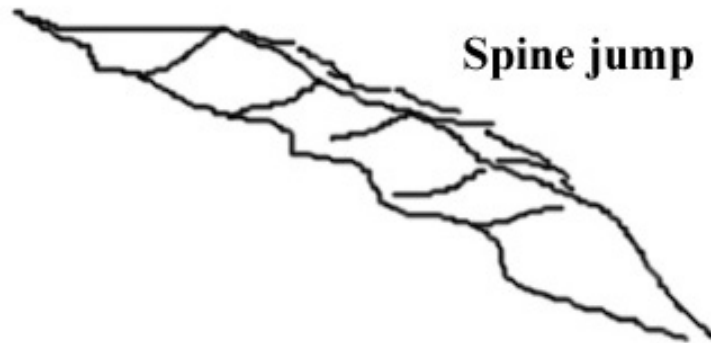


Figure 80

Figures 78 through 80 show typical jumps used in the terrain park. The roller jump or mogul is the easiest. The spine jump is the next more difficult. This jump is approached and landed in a traverse. The tabletop jump is for big air moves since it has a kicker at the end to gain altitude. Beginning jumps are easily practiced on rollers or small kickers. Approach the jump in a narrow wedge stance to adjust speed. (Figure 81) As the skier crests the jump (Figure 82), flex the legs (Figure 83), leaning back slightly depending on the degree of the kicker.



Figure 81



Figure 82

Get some air (Figure 83) and land with absorption (Figure 84). If there is a large kicker on the jump, then the body should be back slightly to counteract the pitching forward that occurs on severe kickers. Ratchet the speed and height up slowly in your progression.

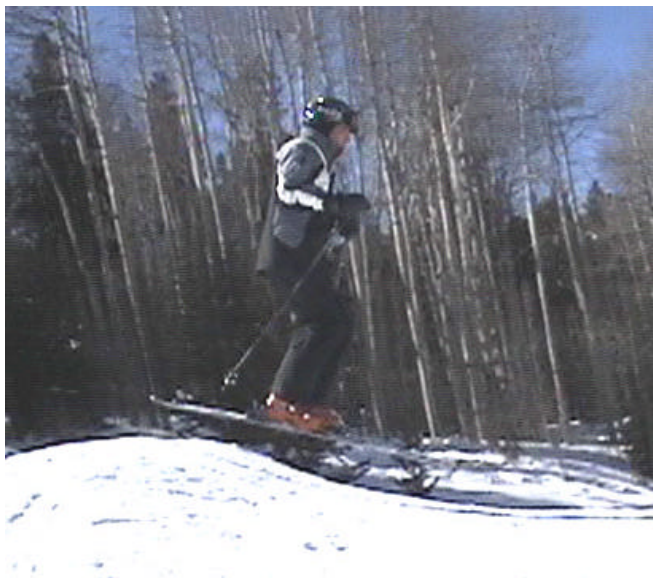


Figure 83



Figure 84

TERMINOLOGY

BOARD SLIDE - Sliding on a terrain park feature with the skis pointing in a direction other than that of the direction of travel

BOOTER - a large jump

CENTER OF MASS - imaginary point on the body where the weight can be concentrated

COUNTERED – a body position where the upper body is rotated in a direction opposite the lower body

EXTENSION - increasing the angle between two bones at a joint. (straightening out the knees)

FALL LINE- the path a rolling snowball takes down a hill

FEATURE - a device or piece of terrain used to perform tricks such as a rail, a kicker or a fun box

50/50 Slide - Sliding on a terrain park feature with the skis pointing in the direction of travel

FLATS - the bottom of the half pipe between the transition areas; terrain with little slope angle

FLEXION - reducing the angle between 2 bones at a joint (bending the knee)

FUN BOX - a long thin box on which a skier performs various maneuvers

GRAB - grabbing a ski with one's hand to add style to a trick

HANG TIME - Length of time the skier is in the air.

HALF PIPE - a long gully used by snowboarders and skiers to perform tricks and aerial maneuvers

HIT - perform a trick, jump or maneuver on the snow or on a feature.

JIB - New school moves like skiing boxes, rails, half pipe, etc.

JAPAN GRAB - grabbing the ski with the opposite hand

KICKER - a jump with a steep lip

LIP - the top edge of the vertical portion of the half pipe; the high point of a jump

NEW SCHOOL SKIING - skiing on boxes, rails, half pipe, big air, etc.

NON COUNTERED - a body position where the upper body is aligned with the lower body

PHIL GRAB - grabbing the same ski with the same hand (right hand-right ski, etc.) This was named after Philippe Belanger

QUARTER PIPE - one half of a half pipe

RIPPER - a good skier

ROLLER - a jump with a rounded top

RAIL - a long narrow feature for performing maneuvers

SICK – cool; neat; fantastic

SPIN - a 180 or 360 degree spin on or off the snow where the long axis of the body is perpendicular to the skis

SWEET SPOT – the area just under the boots where balancing on a rail is best achieved

STICK - to land a jump properly

SWITCH SKIING - skiing backward

SKILLS - edging, pressure control, rotary and balance

TABLETOP - A jump with a flat top for take off and a backside for a landing area

TRANSITION - the terrain between the flats and a steep slope; slang: “Tranny”

TWEAK - to add features to a trick such as adding extra arm movements while doing a grab

VERT - vertical wall of the half pipe

Beginning Terrain Park Teaching Progression

1. Fun Box (50/50 slide, straight run)

- a. Practice lining up with straight runs over the portable terrain feature.
- b. Teach students how to adjust their speed with a wedge prior to mounting a feature.
- c. Make sure they keep a neutral stance while performing the 50/50 (straight run) and adjust body position for the slipperiness of the feature.
- d. When ready, tour the terrain park and inspect the easiest fun box to be mounted.
- e. Ride up the lift and give it a try on the feature, slowly at first.

2. Fun Box (board slide)

- a. Practice hockey stops on the snow in both countered & non countered positions.
- b. Practice jumping to a hockey stop or jump 90 degree turns.
- c. Get out the portable terrain park feature and statically stand in the board slide position on the feature.
- d. Hike up the hill and try a 45 degree board slide on the portable feature and then 90 degrees. Remember that to mount this feature requires a slight jump onto the feature at the beginning. Trying to steer onto the feature will be difficult. After movement analysis,

correct positioning by making sure the students stand over their skis while on the feature.

- e. Hit the terrain park and try a 45 degree slide first and then the 90 degree slide on a fun box.

3. Rails

- a. Only perform board slides on rails.
- b. Practice jumping onto the portable terrain park feature, making sure your students land on the sweet spot, right under the boot.
- c. Enter the terrain park and hit an easy rail.
- d. Try higher rails as students adjust to the narrow landing area.

4. Half Pipe

- a. Practice serpentine turns outside the terrain park.
- b. Practice skiing up moguls and performing 90 degree turns.
- c. Practice 90 degree turns at the edge of trails that have features like a quarter pipe.
- d. Enter the half pipe and perform linked turns with a traverse on the flat between turns.
- e. On future runs, gradually increase skiing into the transition area.
- f. Remember to keep the long axis of the body perpendicular to the snow surface. When skiing the “vert,” the long axis of the body is horizontal.

5. Jumps

- a. Pick out a mogul on the hill and practice riding over it.
- b. Take the mogul a little faster and get a little air.
- c. Enter the terrain park and hit an easy feature such as a small roller or spine jump.

- d. Make sure the long axis of the body is perpendicular to the snow with no excessive backward or forward lean during landing.

6. General

- a. Teach terrain park etiquette. Look before you jump. Take an observation run to check out the features. Call out (“dropping in,” etc.) before you take a jump to warn others not to try until you complete your maneuver. Get up as soon as possible after a fall and move down the park.
- b. Put together a simple fun run through the terrain park after the students have mastered some features. An example would be to hit a roller jump, then perform a 50/50 slide on a box, hit the kicker jump and finish with a board slide on a rail.

Notes

