



**FEDERATION INTERNATIONALE DE SKI
INTERNATIONAL SKI FEDERATION
INTERNATIONALER SKIVERBAND**



**FIS FREESTYLE
GENERAL RULES FOR SCORING
JUDGING HANDBOOK**

REVISED: November 2008



6000 AERIALS**6001 Definition**

Aerial competition shall consist of two (2) different acrobatic leaps from a prepared jump(s), stressing take-off, height and distance (referred to as "air"), proper style, execution and precision of movement (referred to as "form") and landing. See Rule 3060.2.3 concerning Semi-Finals and Finals.

6002 Scoring

The competitor's acrobatic skiing will be judged on three basic components as follows:

6002.1	Air;	Consisting of 20% of the score.	0.0 - 2.0
6002.2	Form;	Consisting of 50% of the score.	0.0 - 5.0
6002.3	Landing;	Consisting of 30% of the score.	0.0 - 3.0

6003 Scoring Procedures**6003.1 7 Judge Format**

The Judges will evaluate the competitor's performance using a split scoring system as follows:

- 6003.1.1 Air and Form Judges**
Five Judges shall independently evaluate the competitor's performance based upon the Air and Form Criteria as stated in 6004.1 and 6004.2 respectively. The high and low scores shall be discarded and the remaining three scores will be added together.
- 6003.1.2 Landing Judges**
Two Judges shall independently evaluate the competitor's performance based upon the criteria as stated in 6004.3. The average of the two scores will be multiplied by 3, to obtain the overall landing score.
- 6003.1.3 Total Score**
The total score Judges score is calculated by adding the overall landing score to the total of the three counting Air and Form scores. This total is then multiplied by the appropriate Degree of Difficulty (DD) factor to determine the total score for each jump. The total will be truncated to two decimal places.
The competitor's final score for both jumps is determined on adding together the total score from each jump.

Example:

Air and Form Judges (Maximum 7.0 points per Judge)

$$\text{Air \& Form Score: } \frac{J1}{6.2} \quad \frac{J2}{6.0} \quad \frac{J3}{7.0} \quad \frac{J4}{6.8} \quad \frac{J5}{6.5} = 19.50$$

Landing Judges (Maximum 3.0 points per Judge)

$$\text{Overall Landing Score: } \frac{J6}{2.6} \quad \frac{J7}{2.8} = (5.4 \div 2) \times 3 = 8.10$$

Total Score (Maximum 30 points x Degree of Difficulty)

$$\text{Total Judges Score:} = 27.60$$

$$\text{Total Score:} = 27.60 \times \text{DD}$$

6003.2 5 Judge Format

The Judges will evaluate the competitor's performance using a split scoring system as follows:

- 6003.2.1 **Air and Form Judges**
Three Judges shall independently evaluate the competitor's performance based upon the Air and Form Criteria as stated in 6004.1 and 6004.2 respectively. The three scores will be added together.
- 6003.2.2 **Landing Judges**
Two Judges shall independently evaluate the competitor's performance based upon the criteria as stated in 6004.3. The average of the two scores will be multiplied by 3, to obtain the overall landing score.
- 6003.2.3 **Total Score**
The total score Judges score is calculated by adding the overall landing score to the total of the three Air and Form scores. This total is then multiplied by the appropriate Degree of Difficulty (DD) factor to determine the total score for each jump. The total will be truncated to two decimal places.

The competitor's final score for both jumps is determined by adding together the total score from each jump.

- 6004.1.1.2 Average Take-Off 0.4 - 0.6
 There are different types of mistakes:
 The competitor does not pop at the right moment (too early or too late), the form starts too early (twisting on the kicker), i.e.: the arms are behind the body; hips are pushed forward too much;
 The competitor throws his arms over his head causing an uncontrolled rotation (sling).
 Points are deducted according to the number and severity of these mistakes.
- 6004.1.1.3 Bad Take-Off 0.0 - 0.3
 Take-off is completely missed, causing an uncontrolled jump in most cases.
- 6004.1.2 **Height and Distance** **Min. = 0.0 / Max = 1.0**
 Height and distance is a product of speed into the jump and the force of the take-off. It shall be evaluated according to the trajectory through the air and the landing point of the jump.
- 6004.1.2.1 Good Height and Distance 0.7 - 1.0
 The trajectory through the air begins at an angle that is continuing the curve of the kicker.
 i.e.: Small Jumps - about 55°
 Medium Jump - about 60°
 Large Jumps - about 63°
 The *optimum* landing point should be as far down the landing hill as the jump is away from the knoll.
 i.e.: Small Jumps - about 4 meters
 Medium Jumps - about 6 meters
 Medium Big Jump - about 7 meters
 Big Jumps - about 8 meters
 Floater - about 10 meters
 Jumps landed further down *may* receive full points if they are landed before the transition of the landing hill into the outrun.
- 6004.1.2.2 Average Height and Distance 0.4 - 0.6
 The trajectory through the air is too high or too low. The landing is in the transition area from the knoll to the optimum landing point.
- 6004.1.2.3 Bad Height and Distance 0.0 - 0.3
 The jump is landed on the knoll or on the outrun.
- 6004.2 **Form (50% of the Score)** **Min. = 0.0 / Max. = 5.0**
 Form consists of 50% of the score (maximum 5 points per judge).

Form denotes the position of the body, skis, arms, hands, and/or poles while in the air. It is the manner in which the competitor executes each maneuver. Form shall be evaluated based upon competitor's precision of performance (i.e.: tightness of body, economy of motion), balance, mechanics, stability in the air, separation and the timing of the maneuver in relation to the apex of the jump. Form is judged from when the competitors ski tips start to leave the jump until the competitor touches the snow.

All Air & Form judges will deduct 0.5 from their score for a violation of the balk rule; 3057.12.

6004.2.1 **Positions in the Form**

6004.2.1.1 If the number of planned maneuvers is not fulfilled (somersaults, twists, 360's, upright positions) resulting in too many or not enough maneuvers, the competitor receives no score (RNS).

Example:

<u>Flight Plan:</u>	<u>Jump Performed:</u>	
Tuck-Tuck	Tuck-Tuck-Tuck	RNS
Full-Double Full	Full-Full	RNS

6004.2.1.2 A judge breaks down the form points to the number of maneuvers (somersaults, 360's, twists, upright positions), and takes off the percentage accordingly if the form in one, two, three, or more parts is missed completely or partially.

Example:

<u>Flight Plan:</u>	<u>Jump Performed:</u>	
Lay-Tuck	Lay-Tuck	max. 5.0
Lay-Tuck	Tuck-Tuck	max. 2.5
Lay-Tuck	Tuck-Lay	max. 0.0
Lay-Tuck	Lay-Lay	max. 2.5
Twister-Twister	Twister-Twister	max. 5.0
Twister-Twister	Twister-Spread	max. 2.5

6004.2.2 Form score consists on three parts

Separation – Timing – Form breaks

6004.2.2.1 Separation

Separation means the competitor is able to clearly demonstrate the beginning and the end of each manoeuvre, i.e. the declared number of twists within each flip. Separation means to show the start of a twist and the end of a twist. The work of the arms has a lot to do with separation. In an open position the hands help to identify when a twisting manoeuvre is completed.

Presence of separation, or lack thereof, should not have any significant impact on the criterion of timing. Any particular jump may have clear separation of manoeuvres without proper timing and vice versa timing criteria can conceivably be satisfied without clear separation.

6004.2.1.1 The following guideline is to use for separation:

- | | |
|---|------------------------------|
| • No discernible separation between manoeuvre | deduct 1.0
max. score 4.0 |
| • Individual manoeuvres are identifiable but separation is not clean | deduct 0.5
max. score 4.5 |
| • Clean separation between manoeuvres essential condition for receiving a score above 4,5 | deduct 0.0
max. score 5.0 |

Note:

- Its only a 0.5 incremental range. Nothing less (i.e. 0.3) or more (i.e. 0.7).
- The reduction at separation would apply once (not 1.0 between 1st and 2nd and another 1.0 between 2nd and 3rd) to any jump separation.

6004.2.2 Timing

Timing means the competitor is able to time the manoeuvres in a way which gives time to finish and to prepare for the next manoeuvre.

6004.2.2.1 Early conclusion of the twist should not be penalized.

Competitors can complete their twist as early as possible. It gives them time to prepare for the next manoeuvre and facilitates clean separation.

Early twist start (about a ¼ turn at 1200) is acceptable (means no deduction)

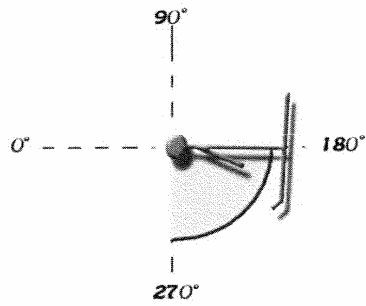
Twisting should not start before takeoff.

Does not apply to the first somersault.

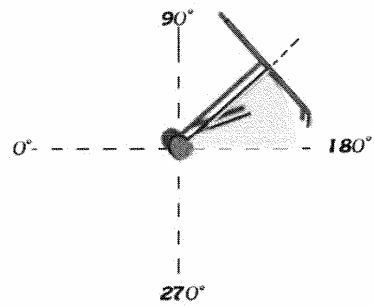
i.e.: A layout to a full or double full will start about ¼ turn at 1200.

Early Twist Start

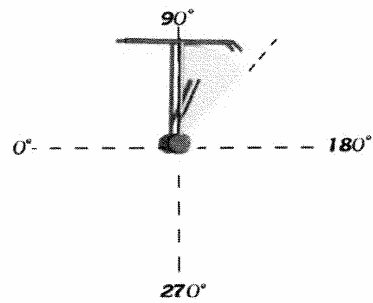
No Deduction



**Deduction
0 - 0,5**



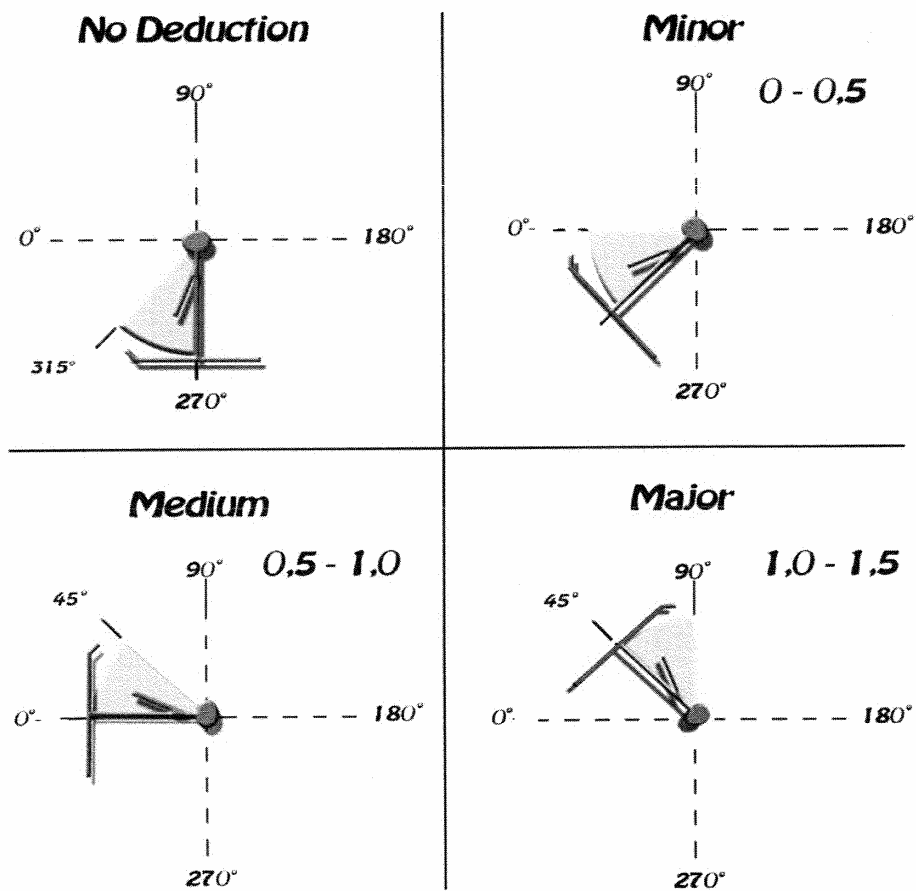
**Deduction
0,5 - 1,0**



6004.2.2.2

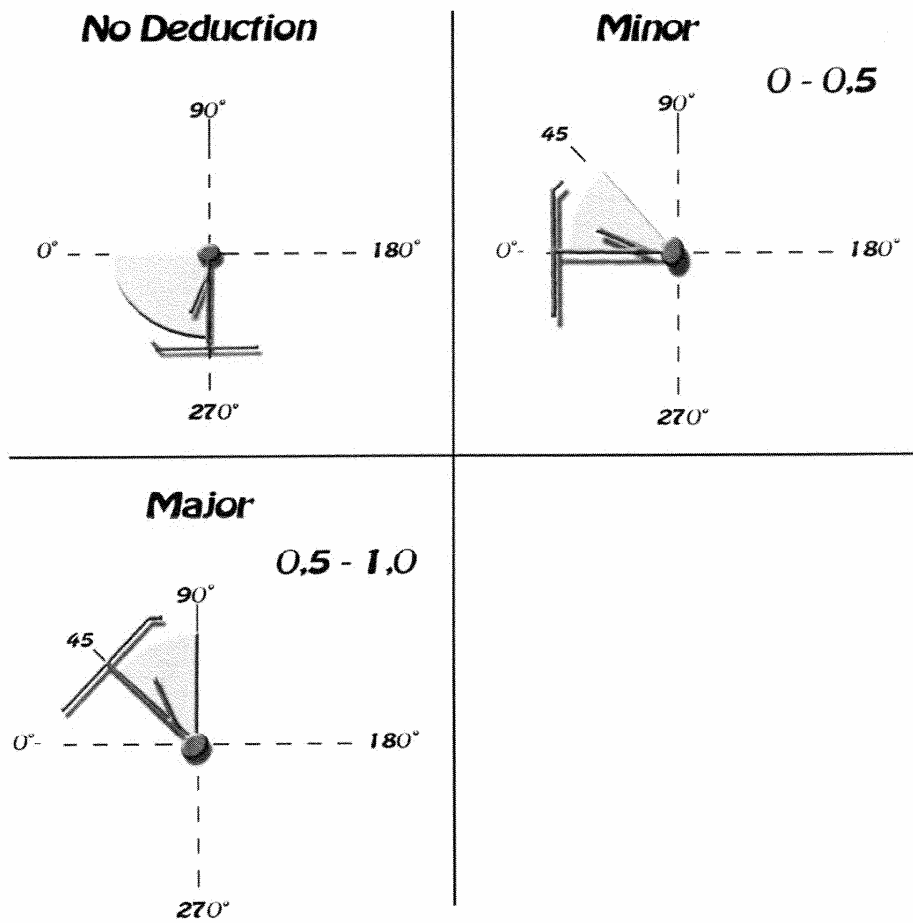
- Late conclusion of twists in double somersaults

Twist Finish **Double somersault**



- Late conclusion oft twists in triple somersaults

Twist Finish Triple Somersault



Note:

With this the 11 to 1 o'clock position has been opened and the flip would not be penalized in both positions for being late in one.

Early finish and start is okay but no more than $\frac{1}{4}$ turn at 1200.

6004.2.2 Form Breaks

The following is a guide to use when assessing form breaks:

Minor form breaks	up to 25% of possible form points
Medium form breaks	up to 50% of possible form points
Major form breaks	up to 100% of possible form points

As in take-off, the body should be extended, not only at take-off, but also prior to landing. The amount of deduction depends on whether the form is bad throughout the whole jump or only in parts of the maneuver.

For example, Jumps performed with a minor form break in **one** somersault:

	Single <u>Twist</u>	Double <u>Twist</u>	Triple <u>Twist</u>
Form	5.0	2.5 2.5	1.7 1.7 1.6
Deduction	<u>1.2</u>	<u>0.6</u>	<u>0.4</u>
Total	3.8	4.4	4.6

A guideline to differentiate between minor, medium and major form breaks is as follows:

All definitions of form are based on body positions. All positions have to be in the layout (straight body, no bending, 0°), or tuck or pike (90° bending at knees, hip) position. The only exception is the puck position (only allowed for half-in and twisting front flips).

Anything with a variation of less than 45° off the required position should be considered minor. Anything with a variation of approximately 45° off the required position should be considered medium. Anything with a variation of clearly more than 45° off the required position should be considered major.

Deductions are cumulative. Multiple minor form breaks in the same movement can result in a major form break.

6004.3 Landing (30% of the Score) Min. = 0.0 / Max. = 3.0

A proper landing involves a balanced, stable and controlled body position throughout. The competitor should demonstrate precision and grace with minimal interruption upon contact with the landing surface. Absorption should be made primarily with the knees and lower body with only a slight bend at the waist. The evaluation of a landing starts immediately when the competitor

touches the snow and continues until the competitor has exhibited and shown sufficient skiing control after landing.

Landing consists of 30% of the total score (maximum 3.0 points per landing judge).

Landing consists of two parts

1. Landing - body position in relation to the landing hill following preparation for landing, ski snow contact on impact as well as absorption of the body - Max. 2.0 points

2. Exit from the landing following the snow contact, impact and absorption. - Max. points 1.0

Note: Preparation for landing is considered in form.

6004.3.1 **Landing** **Min. = 0.0 / Max. = 2.0**

6004.3.1.1 Applicable Ranges for landing

2.0	Body is extended and 90° to the landing hill, perfect balance, weight on center of skis and rotation is completely stopped.
1.6 - 1.9	Slightly over rotated or under rotated, good absorption and balanced body position, weight on skis. No touch.
1.2 - 1.5	Over or under rotated, hard absorption, slightly off axis, possible small touch down with hand(s).
0.8 - 1.1	45° to the landing hill, way too long or too short. Hard hand touchdown/dragging hands
0.4 - 0.7	Way way too long or too short, insufficient absorption, touch down, back slap.
0.1 - 0.3	So far over or under rotated that there is minimal weight on the skis when they touch the snow, major snow contact
0.0	Complete fall with no weight on skis at all.

6004.3.2 **Exit** **Min. = 0.0 / Max. = 1.0**

6004.3.2.1 Applicable Ranges for exit

1.0	Full Control, no touchdown, weight on both skis, exiting straight from landing.
0.7 - 0.9	Slightly off balance or off axis, no touchdown
0.4 - 0.6	Continuing rotation, unstable, unbalanced or off axis, after landing then a touchdown, continuing into exit with skis.
0.1 - 0.3	Sliding down sideways or straight on back, belly, or circling virtually no continuation
0.0	No control, no continuation into exit or loss of both skis

6004.3.3 Note: A competitor must receive at least 0.1 points in the landing category to receive any point in the exit category.

- 6005 General Description of Aerial Maneuvers**
- 6005.1 Spread Eagle:** After take-off the outstretched arms and legs are extended out to the sides away from the body. The legs should be spread to form a minimal angle of 90° when viewed from the front. The skis should be parallel to each other (tails and tips equally spread) and 90° to the body. The upper body should remain straight and upright without any noticeable forward bend at the waist.
- 6005.2 Zudnik:** A Nordic type jump in which the upper body is bent roughly 90° at the waist by bringing the upper body forward and down and the lower body forward and up. The toes rise up towards and in the vicinity of the competitor's chin. The skis should remain close together and parallel and the head remains upright.
- 6005.3 Twister:** The skis are twisted a minimum of 90° to the fall line. The skis should remain parallel to each other, together and 90° to the body. The hands and arms may move to counter the twisting of the skis.
- 6005.4 Daffy:** After take-off, one leg should be brought up and forward while the other leg is simultaneously brought backwards and up, resulting in a 180° split position in which the front ski is parallel to the back ski, skis pointing straight up and down.
- 6005.5 Back Scratcher.** The skis tails are brought back and up to a minimum angle of 90° to the horizontal when viewed from the side, knees bent, hips forward and a slight backwards counter motion of the upper body (shoulders). Legs must be together and skis parallel.
- 6005.6 Mule Kick:** The Mule Kick is a Back Scratcher with a 45° twist of the hip to the side.
- 6005.7 Iron Cross:** This is a combination of the back scratcher and the tip cross. The skis are crossed in a 90° angle while pointed to the ground at a 90° angle. The maneuver is held with the upper body in the neutral position until the skis are extended to the landing hill
- 6005.8 Kosak:** A Kosak is a combination of a Spread Eagle and a Zudnik. Arms can be held in different ways; in front, between the skis, at the side, or a competitor may grab the ski tips. Legs are simultaneously raised and spread in front and to the side of the body. Legs should approach the horizontal level and upper body is brought forward to counter inertial forces of legs being raised. Skis should achieve a vertical position and be symmetrical.
- 6005.9 Helicopter:** The Helicopter is a 360° revolution of the body on a vertical axis.
- 6005.10 Front Somersault:** A complete forward rotation in which a person rotates heels over head.
- 6005.11 Back Flip:** One complete rotation in the backwards direction around the horizontal axis.

- 6005.12 Side Somersault:** A complete rotation around the yawl axis in which a person rotates heels over head.
- 6005.13 Tuck:** A body action of flexion between the upper body and lower body with the knees coming towards the chest.)to a 90° angle)
- 6005.14 Pike:** Is a body action that starts from an extended position then there is a flexion at the waist, with legs being kept straight.
- 6005.15 Layout:** The body is extended straight.
- 6005.16 Half Twist:** A 180° rotation of the body around its vertical axis in a "free" position, except in the half out movement the body must be laid out.
- 6005.17 Twisting:** Are rotations around the primary and or the secondary axis. All twists (including multiple twists in one somersault) are performed in a layout position.
- 6005.18 Multiple Maneuvers:** Any combination or combinations of the above maneuvers. These must exhibit the full requirements of each of the individual maneuvers included in the combination.
For multiple uprights the body must pass through the standard upright position (legs straight and together, skis parallel) before performing the next maneuver.
- 6005.19 Free Position:** Could also be called the 'puck' position which is in-between a layout and a tuck position, mainly seen in off axis rotations.

6005.20 Mute Grab:

6006 Degree of Difficulty Chart and Multipliers

6006.1 Calculation of Degree of Difficulty

6006.1.1	<u>Uprights</u>	<u>DD.</u>	<u>Code</u>
	Base	= 1.50	
	Kosak	= 0.20	K
	Mule Kick	= 0.15	M
	Spread Eagle	= 0.20	S
	Daffy	= 0.20	D
	Leg Cross/Uncross	= 0.20	L
	Zudnik	= 0.15	Z
	Twister	= 0.15	T
	Back Scratcher	= 0.15	Y
	Iron Cross	= 0.15	X
	Mixed Maneuver Bonus	= 0.05	
	360 (or Helicopter)	= 0.45	3
	720	= 0.90	7
	1080	= 1.35	10

1440	=	1.80	14
1800	=	2.25	18

A mixed maneuver combination means different consecutive jump positions, but does not include maneuvers that include a return to or through vertical position, i.e. Legs straight and together, skis parallel.

Examples of Mixed Maneuvers:

- Daffy to Twister
- Back Scratcher to Spread

Examples of Non-Mixed Maneuvers:

- Zudnik to Back Scratcher (or Mule Kick), or vice versa.
- Spread to Twister or vice versa
- Helicopter to any other position

Examples:

Double Spread (Code SS):	$1.50 + 0.20 + 0.20$	= 1.90
Daffy to Spread (Code DS):	$1.50 + 0.20 + 0.20 + 0.05$	= 1.95
Daffy Spread Twister Spread (Code DSTS):	$1.50 + 0.20 + 0.05 + 0.20 + 0.15 + 0.20$	= 2.30
Quad Daffy (Code DDDD):	$1.50 + 0.20 + 0.20 + 0.20 + 0.20$	= 2.30
Double Daffy Triple Twister (Code DDTT):	$1.50 + 0.20 + 0.20 + 0.05 + 0.15 + 0.15 + 0.15$	= 2.40
Daffy Triple Twister Zudnik (Code DTTTZ):	$1.50 + 0.20 + 0.05 + 0.15 + 0.15 + 0.15 + 0.15 + 0.05$	= 2.40
Helicopter (Code 3):	$1.50 + 0.45$	= 1.95
Helicopter with Daffy to Spread (Code 3DS):	$1.50 + 0.45 + 0.20 + 0.20 + 0.05$	= 2.40
720 (Code 7):	$1.50 + 0.45 + 0.45$	= 2.40
720 with Daffy (Code 7D):	$1.50 + 0.45 + 0.45 + 0.20$	= 2.60
1080 (Code 10):	$1.50 + 0.45 + 0.45 + 0.45$	= 2.85

6006.1.2 **Back, Front and Side Somersaults**

Single rotation Front, Back or Side-ways in tucked or pike position: 2.0

Bonuses for Back Somersaults:

Additional somersaults:	2nd flip	0.55	
	3rd flip	0.60	
Layout position (each time)		0.05	
Twisting bonus for a Full twist:		0.25	(Full)(F)
Twisting bonus for 1st half twist in excess of Full		0.05	(Rudy) (Ru)
Additional Twisting Bonus for Rudy in a Triple (or greater) in first or last rotation		0.05	
Twisting bonus for 2nd half twist in excess of Full		0.07	(Double) (dF)
		5	
Additional Twisting Bonus for Double Full in a Triple (or greater) in 1st or last rotation		0.10	
Twisting bonus for 3rd half twist in excess of Full		0.10	(Randy)(Ra)
Additional Twisting Bonus for Randy in a Triple (or greater) in first or last rotation		0.15	
Twisting bonus for 4th half twist in excess of Full		0.12	(Triple Full) (tF)
		5	
Additional Twisting Bonus Triple Full in a Triple (or greater)in first or last rotation		0.20	
Twisting bonus for 5th half twist in excess of Full		0.15	(Adolf) (Rz)
		0	
Additional Twisting Bonus Triple Full in a Triple (or greater)in first or last rotation		0.25	
Twisting bonus for 6th half twist in excess of Full		0.17	(Quad Full) (qF)
		5	
Additional Twisting Bonus Triple Full in a Triple (or greater)in first or last rotation		0.30	

All Half in and Half out maneuvers are based on a Free position at the Half in and a Layout position for the Half out. If the Half in is announced in layout position then the whole maneuver is based and scored on a layout position.

Bonuses for Side Somersaults:

Additional somersaults:	2nd flip	0.60
	3rd flip	0.70
Layout position (each time)		0.10
Each half twist in the maneuver		0.15
Full twist		0.30

More than one twist in the same flip 0.10 / half twist

6006.2 Difficulty Charts

6006.2.1 Single Somersaults

- Front Tuck or Pike	2.00	f T/P
- Front Lay	2.10	f L
- Back Tuck, or Pike	2.00	b T/P
- Back Lay	2.05	b L
- Side Tuck or Pike	2.00	s T/P
- Side Lay	2.10	s L

6006.2.2 Double Somersaults

- Front Tuck or Pike, or any combination of	2.60	f TT
- Front Lay-Tuck	2.70	f LT
- Front Lay-Lay	2.80	f LL
- Back Tuck, Pike, or any combination of	2.55	b TT
- Back Lay-Tuck	2.60	b LT
- Back Lay-lay	2.65	b LL

6006.2.3 Triple Somersaults

- Front Tuck or Pike	3.30	f TTT
- Front Lay-Tuck-Tuck	3.40	f LTT
- Front Lay-Lay-Tuck	3.50	f LLT
- Front Lay-Lay-Lay	3.60	f LLL
- Back Tuck, Pike	3.15	b TTT
- Back Lay-Tuck-Tuck	3.20	b LTT
- Back Lay-Lay-Tuck	3.25	b LLT
- Back Lay-Tuck-Lay	3.25	b LTL
- Back Lay-Lay-Lay	3.30	b LLL

6006.2.4 Single Somersaults w/Twists

- Front Full	2.40	f F
- Front Double Full	2.90	f dF
- Back Full	2.30	b F
- Back Double Full	2.675	b dF
- Back Triple Full	3.150	b tF

6006.2.5 Double Somersaults w/Twists

- Front Half-Half	3.00	f HH
- Front Half-Half (Layout position)	3.10	f HIH
- Front Full-Tuck	3.00	f FT
- Front Full-Lay	3.10	f FL

- Front Full-Full	3.40	f FF
- Front Tuck-Double Full	3.50	f FdF
- Front Lay-Double Full	3.60	f LdF
- Back Half-Half	2.85	b HH
- Back Half-Half (Layout position)	2.90	b HIH
- Back Full-Tuck or Pike	2.85	b FT/FP
- Back Tuck-Full	2.85	b TF
- Back Lay-Full	2.90	b LF
- Back Full-Lay	2.90	b FL
- Back Full-Full	3.15	b FF
- Back Half-Rudy	3.175	b HRu
- Back Half-Rudy	3.200	b HRu
- Back Tuck-Double Full	3.225	b TdF
- Back Lay-Double Full	3.275	b LdF
- Back Double Full-Tuck	3.225	b dFT
- Back Double Full-Lay	3.275	b dFL
- Back Full-Double Full	3.525	b FdF
- Back Double Full-Full	3.525	b dFF
- Back Rudy-Rudy	3.500	b RuRu
- Back Half-Randy	3.675	b HRa
- Back Half-Randy (Layout position)	3.675	b HIRa
- Back 2½-Half	3.550	b RaH
- Back Lay-Triple Full	3.750	b LtF
- Back Triple Full-Lay	3.750	b tFL
- Back Double Full-Double Full	3.900	b dFdF
- Back Rudy-Randy	3.925	b RuRa
- Back Full-triple Full	4.000	b FtF
- Back Rudy-Half	3.200	b RuH

6006.2.6 Triple Somersaults w/Twists

- Front Full-Tuck-Tuck	3.70	f FTT
- Front Full-Full-Tuck	4.10	f FFT
- Back Lay-Half-Half	3.50	b LHH
- Back Lay-Half (Layout)-Half	3.55	b LHIH
- Back Half Tuck Half	3.45	b HTH
- Back Half (Layout)-Tuck-Half	3.50	b HITH
- Back Full-Tuck-Tuck	3.45	b FTT
- Back Lay-Full-Tuck	3.50	b LFT
- Back Lay-Tuck-Full	3.50	b LTF
- Back Lay-Lay-Full	3.55	b LLF
- Back Half-Half-Full	3.75	b HHF
- Back Half-Full-Half	3.75	b HFH
- Back Full-Half-Half	3.75	b FHH
- Back Half(Layout)-Half-Full	3.80	b HIHF
- Back Half(Layout)-Full-Half	3.80	b HIFH
- Back Full-Half (Layout)-Half	3.80	b FHIH
- Back Full-Full-Tuck	3.75	b FFT

- Back Full-Tuck-Full	3.75	b FTF
- Back Lay-Full-Full	3.80	b LFF
- Back Rudy Tuck-Half	3.850	b RuTH
- Back Full-Full-Full	4.050	b FFF
- Back Rudy-Full-Half	4.150	b RuFH
- Back Half (Layout)-Rudy-Full	4.100	b HIRuF
- Back Full-double Full-Tuck	4.125	b FdFT
- Back Half (Layout)-Randy-Lay	4.275	b HRaL
- Back Lay-double Full-Full	4.175	b LdFF
- Back Full-double Full-Full	4.425	b FdFF
- Back Rudy-Rudy-Full	4.450	b RuRuF
- Back double Full-Full-Full	4.525	b dFFF
- Back Half (Layout)-Randy-Full	4.525	b HRaF
- Back Full-double Full-double Full	4.900	b FdFdF
-		
- Back Full-triple Full-Tuck	4.600	b FtFT
- Back Lay-Triple Full-Full	4.650	b LtFF
- Back double Full-Double Full-Full	4.900	b dFdFF
- Back double Full- Full- Double Full	5.000	b dFFdF
- Back Rudy-Randy-Full	4.875	b RuRaF
- Back Triple Full-Full-Full	5.100	b tFFF

6007**RNS/Rerun**

If a jump is announced (upright, rotational or inverted) and the number of maneuvers announced is not performed (too many or not enough) the score is RNS.

Rerun granted for loss of ski(s) after takeoff and before landing, see Rules 3057.11 and 3058.1. Only one rerun granted for loss of ski(s) for each round. If the rerun is not used the score will be RNS. Loss of ski(s) during or after landing shall be evaluated by the judges in accordance with the judging criteria.

6008 Definition of Different Jumps

A competitor shall be required to perform two different aerial jumps. Jumps shall be considered to be different if in:

6008.1 Upright Maneuvers

There is a change in the number of maneuvers performed or the kind of maneuver performed.

6008.2 Upright Rotational Maneuvers

There is a change in the number of rotations.

6008.3 Inverted Maneuvers

There is a change from front to back or vice versa. There are a different number of maneuvers. There are a different number of twists but the number of somersaults remains the same. There are a different number of somersaults but the number of twists remains the same.

6008.4 Special Provisions for Multiple Somersaults

When there is the same number of twists and somersaults for both jumps, the number of twists done in a single somersault must differ by at least one twist.

<u>Can Do</u>	Lay-Full	&	Full-Lay
	Lay-double Full-Full	&	Half-Rudy-Lay
<u>Can't Do</u>	Lay-Full	&	Half-Half
	Half-Rudy-Full	&	Full-Full-Full

6009 Tie Breaking

In the case of a tie the highest total scoring jump will determine the winner. (Note: This includes DD factor)

If the tie cannot be broken by this procedure, both competitors will receive the same placing.

6150 New Style**6151 Judges Scoring**

A judging scoring system will be used at all competitions. These include, but are not limited to, Big Air, Half Pipe, Quarter Pipe, Synchro-Air, Terrain Park, and other free riding events which are judged. The total score for the performance shall be a maximum of 100 points. The competitor's performance will be judged on the following basic components. Judges may score categories singly (1 judge per category) or combined (1 judge gives 100 points from all categories.)

Specific scoring systems based upon these general guidelines may be utilized for specific events. See, for example, Rules 6152– 6153 for Half Pipe scoring.

- 6151.1 **Execution** refers to the execution and precision of the skill performance.
20% = 1 judge with 20 points maximum - (50% of points for fall) = score.
- 6151.2 **Air** refers to the amount and quality of air and amplitude in the jump.
20% = 1 judge with 20 points maximum – (50% of points for fall) = score.
- 6151.3 **Show** refers to the excitement, energy and showmanship of the competitor performing the skill.
40% = 1 judge with 40 points maximum (or 2 with 20 points each) – (50% of points for fall) = score.
- 6151.4 **Difficulty** refers to the level of difficulty of the jump performed.
20% = 1 judge with 20 points maximum.
- 6151.5 **Deductions** of up to 50% of available points can be taken for landing errors.
- 6151.6 For competitions with multiple features (terrain park, quarter pipe, etc.), the criteria is applied to the overall run.

6152 HALFPIPE**Definition**

A Half pipe competition shall consist of one run using the pipe to perform several hits. Only hits in the half pipe will be scored.

6152.1 Scoring

The total score for the performance shall be a maximum of 50, 0 points. Judges may score categories singly (1 judge per category) or combined (1 judge gives 10, 0 points from all categories.)

General rules

When judges are assigned separate scoring categories, scoring will be out of 10, 0 points each for **Amplitude**, **Difficulty** and **Execution** and 2x10, 0 points for **Overall** using one-tenth increments. On lower level events there can be only one Overall Impression judge, but then the max score per run is only 40, 0.

Official score sheets will be available.

The judges 'scores will be added for a total of 50,0 points maximum.

Training

All judges have to watch training to establish the scales for each event in all judges criteria. These scales will vary from event to event and will be based on pipe, jump or other feature geometry, the snow conditions and the level of the competition.

6152.2 Judging Criteria**6152.2. 1 Execution: Consisting of 20 % of the score. 0, 1 - 10, 0 points**

This includes all the maneuvers that are performed in the Halfpipe. This means aerials with and without grabs, all tricks on or near the lip of the Halfpipe, all flips and off axis rotation, handplants and all the different rotations.

Emphasis for judging in execution will be: control of trick, long and distinct grab, good control and mechanics and the variety of tricks performed in the Halfpipe.

The trick should be solid and smooth, the legs and body maneuvered into the appropriate position, and then the grab released...all in one motion.

Falls will not factor in the overall evaluation of this category only in completion of the individual trick.

Criteria considerations

What is the ideal execution? The answer is: it is up to the discretion of the judge, such is the nature of a judged competition. For example: one who performs a mute air by barely bending his knees and just touching his ski/binding, has **not**

performed the trick in a good executed manner compared to someone who grabs his skis, pulls it closer to his body, holds it, and then straightens his legs.
Good variety is: good mixture of tricks from all different sub groups i.e.: straight airs, rotations, flips, air to fakie, fakie airs and liptricks.

6152.2.2 Difficulty: Consisting of 20 % of the score. **0, 1 - 10, 0 points**

This includes all maneuvers that are performed in the Halfpipe. This means aerials with and without grabs, tricks on or near the lip of the Halfpipe, Switch stance tricks, all flips, handplants and all the different rotations.

Emphasis for judging in difficulty will be: amplitude, number of rotations in flips, off-axis rotations, what kind of grab in rotations, flips and off-axis rotations, what different combinations used.

Falls will not factor in the overall evaluation of this category only in a completion of the individual trick.

Criteria considerations

Difficulty, how to measure this criteria?

In rotations, rotations can be separated into sub-groups including horizontal rotations, vertical rotations and off-axis rotations. In all rotations, there is different numbers of rotations done and the more numbers of rotations means higher difficulty unless there is switch take off or fakie landings. Also different grabs done in rotations and different grabs will affect the difficulty degree.

A key point: a grabbed 540 is certainly more difficulty than a 540 without a grab and switch stance tricks (backwards) is harder then normal tricks and will be rewarded as such.

Difficulty refers to, not only the tricks performed but also the placement of the tricks and the combinations used.

Back to back 540's is more difficult then spreading them out in a run.

6152.2.3 Amplitude: Consisting of 20 % of the score. **0, 1 - 10, 0 points**

Measures the energy of the run that is shown by the height of each maneuver in the Halfpipe. The score reflects the average height of the maneuvers performed including a standard value of 1 – 5 set for the lip of the pipe. This value will be set during training before competition on competition day. Only the height is factored into the score. Each maneuver is given a score of 1 point for each 30 cm's above the lip that it is performed plus the standard value of the lip. The standard value of the lip can be different between men and ladies. These scores are totaled and then these are divided by the number of counting "hits" to give the 'Pure score'. The minimum number of "hits" will be 4.

Criteria considerations

This is a very simple category, yet the amplitude judge need to have a discerning eye for exact measurement to evaluate how high the skier gets above the lip of the Halfpipe. It is very important to remember that the pure score is the AVERAGE of the height of all hits when the body and skis are/when leaving the snow.

This does not include Liptricks and Handplants.

Since every hit counts, it is also important to remember that the skier has enough speed.

If a skier is at the end of the run and only has air for a little half-foot air, it might be wise to go for a lip trick....or possibly not take it all and the rider should finish their run strong, rather than fizzle out.

The measurement for the amplitude is taken from the central body mass.

6152.2.4 Overall Impression: Consisting of 40 % of the score. 2 judges

These judges will score the run by evaluating the run's overall precision including the execution of the run and the routine attempted. The OI judge evaluates the precise nature of the run in relation to maneuvers attempted, both individually and as a sequence. The overall composition of the run is most important as the OI judge evaluates the sequences of tricks, the amount of risk in the routine and how the skier uses the pipe.

The OI judge does take falls into consideration and can deduct up to 30 % of the points of the run/judge for each fall. (12% from the total score)

Criteria considerations

The OI judge looks at the overall routine of how the run progresses and flows and taking everything into consideration. This means the Amplitude, Difficulty, Variety, Pipe Use and Execution of all the tricks. Amplitude means the height of the tricks performed. Difficulty refers to, not only the tricks performed but also the placement of the tricks and the combinations used. Variety refers to a good mix of straight airs and rotational maneuvers performed on both walls of the pipe. Execution refers to the stability, fluidity and control of maneuvers performed.

The OI judge is looking how rider puts together the run to show a variety of tricks that are well executed and difficult. If a "skier" is getting high scores from the other judges, they will do equally as well in this criteria. The OI judge looks at falls as not only affecting the trick attempted, but also on the next few hits since the skier may have lost the momentum of his run. The OI also considers the skier's intensity, smoothness and pipe use. Thus high amplitude and higher risk taking will increase a skier's score, as will attempting a difficult maneuver at the beginning of a run. Also sequences of tricks are important, for example, back to back 540's may be more difficult than splitting them up in their run.

Deductions for falls will be as follows:

3, 0	Any complete falls, and complete stops
2, 5 – 2, 9	Major falls, body contact with snow
1, 1 – 2, 4	Minor falls, hard touchdown with two hands or more
0, 5 – 1, 0	Using hand for stability, hand drags
0, 1 – 0, 4	Unstable body, flat landings, missed airs, speed checks, flailing and sketches.

Considerations of the judging criteria

Split scoring system for five judges

In the current system, the judge's criteria are divided into five separate categories: Execution, Difficulty, Amplitude, and Overall Impression x 2. Each judge may give 10, 0 points for a total of 50, 0 points for each run. Over all, the system works as an integration of checks and balances where no one judge has more weight or power, and thus neither does one judging criteria. For example, someone cannot get a high score by only going high and impressing the Amplitude Judge or by only doing high difficulty to impress the difficulty judge.

Therefore, in order to get the maximum amount of points the skier needs to impress all judges by making sure to do well in each criteria. A good Halfpipe run is not based on any one thing, it is based on everything as a whole. The key concept is balance. This is what makes a good Halfpipe run.

The next problem to the judging jury is: What is the ideal and what is not? First, we have the concept of "variety". If the competitor can do a large number of different tricks, he shows a high mastery of the sport and is thus better than someone who can do a limited number of maneuvers. A second concept is "difficulty". A good skier must be able to perform tricks that are difficult. In addition, not only should the skier be able to perform those tricks requiring high skill, but also to perform every maneuver in a difficult manner. Third, each trick must be performed with ideal execution. This is where discrepancies in judging are constantly being challenged. What is ideal execution? The answer is: it is up to the discretion of the judge, such is the nature of a judged competition. For example: one who performs a mute air by barely bending his knees and just touching his ski/binding, has not performed the trick in a difficult and well executed manner compared to someone who grabs his skis, pulls it closer to his body, holds it, and then straightens his legs. It is up to the judges responsibility to make the discretion. Obviously, experience and observation are the keys when it comes to judging execution, as well as difficulty. Therefore it becomes important that we stress the importance of judge training. If a judge isn't properly trained, his scores will reflect it in their inaccuracy.

The finish line is the last point of take off, this means if you take off and perform a trick on or before the line, the trick and fall will be counted.

6153 Scoring procedures

The judges will evaluate the competitor's performance using a split scoring system as follows:

6153.1 Five Judge Format

Execution	1 judge	A
Difficulty	1 judge	B
Amplitude	1 judge	C
Overall Impression	2 judges	D & E

$A+B+C+D+E=\text{finalscore}$

6153.2 Three Judge Format

Execution	1 judge	A
Difficulty	1 judge	B
Overall Impression	1 judge	C

6153.2.1 Total Score

In the 3 judge's format, max total score is 30.0 points

6155 Synchro Air

6155.1 Synchro Aerials – The 'Show' category becomes 'Synchronization'. The fall deductions remain at up to 50%.

6200 MOGULS**6201 Definition**

Mogul competition shall consist of one run of free skiing on a steep, heavily moguled course, stressing technical turns, aerial maneuvers and speed. See Rule 3060.2.1 concerning Semi-Finals and Finals.

6202 Scoring

6202.1 Turns; Consisting of 50% of the score.

6202.2 Air; Consisting of 25% of the score.

6202.3 Speed; Consisting of 25% of the score.

6203 Scoring Procedures**6203.1 7 Judge Format**

The Judges will evaluate the competitor's performance using a split scoring system as follows:

6203.1.1 Turn Judges

Five Judges shall independently evaluate the competitor's performance based upon the criteria as stated in 6204.1. The high and low scores shall be discarded and the remaining three scores added together.

6203.1.2 Air Judges

Two Judges shall independently evaluate the competitors aerial maneuver(s) based upon the criteria as stated in 6204.2. The scores will be averaged for a total air score and truncated to two decimal places.

Total Air Score = 3.75 (max) x 2 jumps = 7.5 (max) per Judge.

6203.1.3 Total Score

The average of the two air scores is added to the total of the three counting turn scores to get the competitors total Judges score. The speed score, as calculated in 6204.3 shall be added to the total Judges score to determine the competitor's complete Mogul score.

6203.2 5 Judge Format

The Judges will evaluate the competitor's performance using a split scoring system as follows:

6203.2.1 Turn Judges

Three Judges shall independently evaluate the competitor's performance based upon the criteria as stated in 6204.1. The three scores shall be added together.

6203.2.2 Air Judges

Two Judges shall independently evaluate the competitors aerial maneuver(s) based upon the criteria as stated in 6204.2. The scores will be averaged for a total air score and truncated to two decimal places.

Total Air Score = 3.75 (max) x 2 jumps = 7.5 (max) per Judge.

6203.2.3 Total Score

The average of the two air scores is added to the total of the three counting turn scores to get the competitors total Judges score. The speed score, as calculated in 6204.3 shall be added to the total Judges score to determine the competitor's complete Mogul score.

6204 Judging Criteria

6204.1 Turns (50% of the Score) Min. = 0.1 / Max. = 5.0

Turns, as judging criteria refer to a technical evaluation of how well a competitor turns through the moguls. Turns, in a mogul event, refer to rhythmic changes in direction of travel to either side of the fall line, utilizing an aggressive, controlled technique. The competitor shall be judged from the time the run is started until the run is completed. The skier is judged to the finish line where the skier must show control. Skiers should come to a complete stop in the finish area.

6204.1.1 There are Four (4) Points to Consider

6204.1.1.1 Fall Line

Skiing in the fall line is considered the shortest way from the Start to the Finish. To achieve the maximum points for fall line the competitor should stay in the selected fall line out of the start gate.

6204.1.1.2 **Carving**

All turns should be initiated by carving. Carving means efficient use of edging to control speed in and out of the turn throughout the whole run.

In carving action the hip is following the skier's centerline (hip is not doing side to side movement). Legs should be held together. Turns are controlled by carving, through a combination of hip-knee and ankle angulation. Carving is the result of correctly-timed weight shifting. The turn is carving when the ski tail is following the tip.

6204.1.1.3 **Absorption and Extension**

The skier should follow the shape of the mogul through absorption from the start until the top of the mogul. Extension starts right after the top of the mogul. Extension also follows the shape of the mogul. Pressure between skis and snow should remain the same during absorption and extension, absorbing as the skier moves up and extending as the skier moves down. Additionally, the skier should aggressively utilize the moguls to assist initiation of turns, rather than waiting for the moguls.

6204.1.1.4 **Upper Body**

The head should remain still, facing downhill. The chest should also stay straight and natural. Hands stay in front of the body in a natural position. Pole plants should be light and wrist movement goes forward.

6204.1.2 **Mogul point guideline**

Excellent	4.6 - 5.0
Very good	4.1 - 4.5
Good	3.6 - 4.0
Above Average	3.1 - 3.5
Competent	2.6 - 3.0
Below average	2.1 - 2.5
Poor	1.1 - 2.0
Very poor	0.1 - 1.0
Not skied	0.0 - RNS/DNS

6204.1.3 At a course with 9 control gates (each control gate counts 1/10 of the course) it is recommended to reduce the Turn score by 0.5 for each section a competitor has complete loss of control or does not ski.

6204.2 **Air (25% of the Score) Min. = 0.0 / Max. = 7.5**

6204.2.1 The scoring of air is broken into two parts, Form and Difficulty. The manoeuvre will be evaluated for form out of 2.5 with a degree of difficulty multiplier, based on the manoeuvres(s) performed. See formula 6204.2.1.2

6204.2.1.1 **Form**

Priorities to judge form and position of the jumps in mogul skiing are set as follows:

First: Quality (Form, Landing)

Second: Air (Height and Distance)

Third: Spontaneity. Spontaneity is the ability of the competitor to maintain the rhythm of turns prior to the jump, including the initiation for take off.

Note:

- *Air in moguls will be judged until the skier is in full control.*

When judging form for all jump groups (uprights, flips, off-axis, etc.) the primary factor for evaluation is the "Purposeful Motion" utilized by the competitor.

Purposeful motion means:

- athleticism displayed
- control
- balance, and
- continuity of motion.

All jumps, including traditional jumps (such as uprights and vertical axis rotations) and new jumps (such as off-axis rotations), will be evaluated using the Purposeful Movement criteria.

For example: the prior criteria for a twister-spread required that specific positions be reached (reference 90 degrees). The new criteria will reward a competitor who performs maneuvers that have the same amount of completion (both the twister and spread to 90 degrees, for example) under the Continuity of Motion criteria; precise separation between the twister and the spread will be rewarded under the Control criteria; smooth motion, axis, and steady arm positions with the Balance criteria; and extension, or amplitude of positions achieved under the Athleticism criteria.

Maximum raw point allotment: 2.5/jump.

Note:

- Jumps must receive at least 0.1 form points to receive difficulty multiplier.
- The height of the jumps should be related to the weight point of the body (not to the head, or top of body).

POINT GUIDELINE

Excellent Jump	2.1 - 2.5
Good Jump	1.6 - 2.0
Average Jump	1.1 - 1.5
Poor Jump	0.6 - 1.0
Very Poor Jump	0.1 - 0.5

6204.2.1.2 **Difficulty**

Jumps will be identified by specific code. This code will identify the basic jump group and additional difficulty components that make up the difficulty formula.

The difficulty of the upright manoeuvre will be established in accordance with the Difficulty table below, using a 'Base DD', enhanced by the values established for the jump components.

Jump Codes and Values

Moguls jump codes are created by adding individual codes together to form a jump. Each letter code represents a value and these values are added together to calculate the Degree of Difficulty (D.D.).

There are five (5) distinct categories of jumps:

Inverted Flips
Loop
Straight Rotations
Off Axis
Uprights

Inverted codes always begin with a lower case letter (see below), upright codes always begin with an uppercase letter and rotations begin with a number.

Switch Take off and Landing

A competitor can take off and/or land in either direction (i.e. forwards or backwards). If a takeoff or landing is backwards it is known as *switch*. Switch takeoff or landing is notated using the minus sign "-" at the beginning of the jump code for a switch takeoff and/or at the end for a switch landing.

The switch "-" modifier has a value of 0.09 each time it is used. So if a competitor performs a jump with a switch takeoff and landing there would be a "-" at the beginning and end of the jump code and you would add a value of 0.18 to the manoeuvre.

Grab – Hold/Tweaked

Grabs: With the body action of a flexion, a section or part of the ski is grabbed by the hand or hands. Can be made as hold or tweaked.

Holds: With the body action of a flexion, a section or part of the ski or skis is grabbed by one or more hands and then held for a duration.

Tweaked: This is a grab with an action to push or to pull the ski (s). This is more difficult than a hold grab because the skier loses time to execute the tweaked grab.

Inverted Flips

Inverted flips include all jumps somersault. Only Single inverted flips are allowed.

Inverted (back or front flip): Feet pass over the head in a circular path parallel to the fall line. A back full is a back flip with 360 degrees of rotation Note, when adding grabs to Inverted flips skiers body is turned out from the straight line (to direction of grab).

Inverted flips are all performed in some kind of position (Layout, Tuck or Pike/Puck). They may include twists: (Half, Full, Rudy etc) and can have position modifiers like additional positions or grab(s). They can also include switch takeoffs and landings.

Note:

A back flip with twists (bF, bRu, dF...) can be only made in layout position. The optimum position would be between 11 and 1 o'clock position.

A bFp or a bFg has to be scored low as it is a Dspin in definition in an upright position an could not receive high scores.

To calculate the degree of difficulty of an inverted jump use the following formula:
No of manoeuvres (quantity) + direction + position + twist + position modifiers + switch + gender bonus

Number of manoeuvres (only singles allowed)

<u>Quantity</u>	<u>Value</u>
•Single	1.05

Direction

Inverted jump codes always begin with a lower case letter. These *direction* codes are:

<u>Direction</u>	<u>Code</u>	<u>Value</u>
•Back	b	0.00
•Front	f	0.05

Positions (required for inverted back, front or side flips e.g. bL, fT)

Position	Code	Value
•Layout	L	0.00
•Tuck	T	0.00
•Pike/Puck or Position	P	0.00

Twists (while only Full twist has a value, these are included to be comprehensive)

Twist	Code	Value
•Half twist	H	0.00
•Full twist	F	0.19
•Rudy (1 ½ twist)	Ru	0.00
•Double twist	dF	0.36
•Randy (2 ½ twist)	Ra	0.00
•Triple Twist (3 twists)	tf	0.53

Position Modifiers

Modifier	Code	Value
•Position no additional value for 1 position for 2 positions for 3 positions	p pp ppp	0.00 (used after jump code) add 0.03 add 0.06
•Grab / hold Tweaked / hold	g G	0.03 (used after jump code) 0.08 (used after jump code)
•Layout position	l	0.00 (lower case L used immediately after twist Code*)

•Up to three positions and one grab can be added to a jump. All positions (p) are to be listed first, then the grab / hold (g) or Tweaked (G) (.ie. bLpg, bLpG or bPpppg not bLgp or bPpppg)

•The layout position modifier is only used after a half twist if performed in the layout position e.g. bHI- for a Back/Half (layout) with switch landing

Switch

Location	Code	Value
•Takeoff	-	0.09 (used at beginning of the jump code)
•Landing	-	0.09 (used at the end of the jump code)
• Switch takeoff and landing -	-	0.18 (used at the end of the jump code)

Gender Bonus

Ladies get a bonus of 0.15 added to the DD value of each jump

Gender	Value
•Men	0.00
•Ladies	0.15

Men's Inverted Flips Jump Examples (Add 0.15 to the DD Value for Ladies)

Jump	Code	Value	Qty +Dir +Pos +Twist +Mod +Sw +Gen
Back Layout	bL	1.05	1.05+0.00+0.00+0.00+0.00+0.00+0.00
Back Layout with position	bLp	1.05	1.05+0.00+0.00+0.00+0.00+0.00+0.00
Back Tuck	bT	1.05	1.05+0.00+0.00+0.00+0.00+0.00+0.00
Back Puck/Pike	bP	1.05	1.05+0.00+0.00+0.00+0.00+0.00+0.00
Back Puck/Pike with position	bPp	1.05	1.05+0.00+0.00+0.00+0.00+0.00+0.00
Back Puck/Pike w/ pos and grab	bPpg	1.08	1.05+0.00+0.00+0.00+0.03+0.00+0.00
Back Full	bF	1.24	1.05+0.00+0.00+0.19+0.00+0.00+0.00
Back Half(lay) with switch takeoff	-bHl	1.14	1.05+0.00+0.00+0.00+0.00+0.09+0.00
Back Full with switch t.o.& ldg.	-bF-	1.42	1.05+0.00+0.00+0.19+0.00+0.18+0.00

Loop = Side flip

Include all loop jumps. Only single loops are allowed.

Loop manoeuvres are all performed in some kind of position (Layout, Tuck or Pike/Puck) and can have position modifiers like additional positions or grab(s). They can also include switch takeoffs and landings.

To calculate the degree of difficulty of a loop jump use the following formula:
No of manoeuvres (quantity) + position + position modifiers + switch + gender bonus

Number of manoeuvres (only singles allowed)

Quantity	Value
•Single	1.05

Direction

Inverted jump codes always begin with a lower case letter. These *direction* codes are:

Direction	Code	Value
Side/Loop	l	0,04 (lower case 'l')

Positions (required for inverted back, front or side flips e.g. bL, fT)

Position	Code	Value
•Layout	L	0.00
•Tuck	T	0.00
•Pike/Puck or Position	P	0.00

Twists (twisting in loops is not allowed. A kind of loop with twist will be judged as an off axis 7 category)

Position Modifiers

Modifier	Code	Value
•Position	p	0.00 (used after jump code)
no additional value for 1 position		
for 2 positions	pp	add 0,03
for 3 positions	ppp	add 0,06
•Grab	g	0.03 (used after jump code)
•Tweaked	G	0.08 (used after jump code)
•Layout position	l	0.00 (lower case L used immediately after twist code*)

•Up to three positions and one grab can be added to a jump. All positions (p) are to be listed first, then the grab (g) or (G) Tweaked (.ie. bLpg or bPpppg not bLgp or bPpppp)

•The layout position modifier is only used after a half twist if performed in the layout position e.g. bHI- for a Back/Half (layout) with switch landing

Switch

Location	Code	Value
• Takeoff	-	0.09 (used at beginning of the jump code)
• Landing	-	0.09 (used at the end of the jump code)
• Switch takeoff and landing	-	0.18 (used at the end of the jump code)

Gender Bonus

Ladies get a bonus of 0.15 added to the DD value of each jump

Gender	Value
•Men	0.00
•Ladies	0.15

Men's Loop Jump Examples (Add 0.15 to the DD Value for Ladies)

Jump	Code	Value	Qty +Dir +Pos +Twist +Mod +Sw +Gen
Loop Puck/Pike	IP	1.09	1.05+0.04+0.00+0.00+0.00+0.00+0.00
Loop Puck/Pike with grab	IPg	1.12	1.05+0.04+0.00+0.00+0.03+0.00+0.00
Loop Puck/Pike Tweaked	IPG	1.17	1.05+0.04+0.00+0.00+0.08+0.00+0.00

Off Axis

Off Axis manoeuvres include all off axis rotations. An off axis manoeuvres can also include up to three (3) positions and/or one (1) grab.

Off axis Three Sixty: 360 degrees of spin rotation in a non-vertical, non-inverted or non-upright axis.

Off axis Seven Twenty: 720 degrees of spin rotation or combined loop and spin rotation in a non-vertical, non-inverted or non-upright axis.

Off axis Ten Eighty: 1080 degrees of spin rotation or combined loop and spin rotation in a non-vertical, non-inverted or non-upright axis.

Note:

There are three categories of off axis jumps.

Cat.A: Dspin / loopfull (only on 720)

Cat B: Cork / Misty / Bio

Cat C: Rodeo / Flatspin

Code for off axis jumps must be done in the right order:

first: number of rotations i.E. 7o

second: position modifiers i.E. 7opG

third : jump category i.E. 7opGC

To calculate the degree of difficulty of an off axis jump use the following formula:

No of manoeuvres (quantity) + +position + + position modifiers + category + switch + gender bonus

Off Axis

Off Axis	Code	Value
•360°	3o	1.07
•540°	5o	1.16 (5o- is 1.25)
•720A	7oA	1.24
720B	7oB	1.28
720C	7oC	1.32
•900°	9o	1.33 (9o- is 1,42)
•1080°	10o	1.41

Position Modifiers

Modifier	Code	Value
•Position	p	0.00 (used after jump code)
no additional value for 1 position		
for 2 positions	pp	add 0,03
for 3 positions	ppp	add 0,06
•Grab	g	0.03 (used after jump code)
•Tweaked	G	0.08 (used after jump code)

•The off-axis modifier (o) must always immediately follow the rotation code (i.e. 3op not 3po)

•Up to three positions and one grab can be added to a jump. All positions (p) are to be listed first, then the grab (g) or (G) Tweaked (.ie. bLpg or bPpppg, not bLgp or bPppg)

Switch

Location	Code	Value
•Takeoff	- before	0.09 (“-“ used at beginning of the jump code)
•Landing	- after	0.09 (“-“ used at the end of the jump code)
• Switch takeoff and landing -		0.18 (used at the end of the jump code)

Gender Bonus

Ladies get a bonus of 0.15 added to the DD of each jump

Gender	Value
•Men	0.00
•Ladies	0.15

Men’s Off Axis Jump Examples (Add 0.15 to the DD Value for Ladies)

Jump	Value	Code	Rot +Mod +Sw +Gen
360 off-axis	3o	1.07	1.07+0.00+0.00+0.00
360 off-axis with position	3op	1.07	1.07+0.00+0.00+0.00
360 off-axis with 2 positions	3opp	1.10	1.07 +0.03+0.00+0.00
720 off-axis	7o	1.24	1.24+0.00+0.00+0.00
720 A D Spins	7oA	1.24	1.24+0.00+0.00+0.00
720 B Cork	7oB	1.28	1.24+0.04+0.00+0.00
720 C Rodeo	7oC	1.32	1.24+0.08+0.00+0.00
720 C Rodeo position tweaked	7opGC	1.40	1.24+0.08+0.08+0.00
720 off-axis with position	7op	1.24	1.24+0.00+0.00+0.00
720 off-axis with 2 positions	7opp	1.27	1.24+0.03+0.00+0.00
720 off-axis with 2 positions,	7oppg	1.30	1.24+0.03+0.03+0.00
720 off-axis with grab	7og	1.27	1.24+0.03+0.00+0.00
1080 off-axis	10o	1.41	1.41+0.00+0.00+0.00
1080 off-axis grab	10og	1.44	1.41+0,03+0.00+0.00

Note:

- Off Axis jumps with one (1) position are the same difficulty like an off-axis without position and shall achieve the same score.
- Off Axis jumps with more than one (1) position will receive position bonus(es) of 0.03 per position.
- Off Axis jumps with a grab get a bonus of 0.03.

Straight Rotations

Rotation is around vertical axis, feet travel in a circular path that is perpendicular to the fall line. Note, when adding grabs to Straight rotations skier’s body is turned out from the straight line (to direction of grab).

Rotational manoeuvres include all traditional single and multiple rotations (helicopters/360). A straight rotational manoeuvre can also include up to three positions and/or one grab.

To calculate the degree of difficulty of a rotational jump use the following formula:

Rotation + position modifiers + switch + gender bonus

Number of Rotations

Rotation	Code	Value
•360°	3	1.05
•540°	5	1.20 (5- is 1.29_
•720°	7	1.28
•900°	9	1.37 (9- is 1.46)
•1080°	10	1.45

Position Modifiers

Modifier	Code	Value
•Position no additional value for 1 position	p	0.00 (used after jump code)
for 2 positions	pp	add 0,03
for 3 positions	ppp	add 0,06
•Grab	g	0.03 (used after jump code)
•Tweaked	G	0.08 (used after jump code)

• Up to three positions and one grab can be added to a jump. All positions (p) are to be listed first, then the grab (g) or (G) Tweaked (.ie. bLpg or bPpppg, not bLgp or bPppgp)

Switch

Location	Code	Value
• Takeoff	- before	0.09 (“-“ used at beginning of the jump code)
• Landing	- after	0.09 (“-“ used at the end of the jump code)
• Switch takeoff and landing -		0.18 (used at the end of the jump code)

Gender Bonus

Ladies get a bonus of 0.15 added to the DD of each jump

Gender	Value
•Men	0.00
•Ladies	0.15

Men’s Straight Rotational Jump Examples (Add 0.15 to the DD Value for Ladies)

Jump	Value	Code	Rot +Mod +Sw +Gen
360	3	1.05	1.05+0.00+0.00+0.00
360 with position	3p	1.05	1.05+0.00+0.00+0.00
360 with two positions	3pp	1.08	1.05+0.03+0.00+0.00
360 with grab	3g	1.08	1.05+0.03+0.00+0.00
360 with grab tweaked	3G	1.13	1.05+0.08+0.00+0.00
360 with two positions and grab	3ppg	1.11	1.05+0.06+0.00+0.00
360 with three positions and grab	3pppg	1.14	1.05+0.09+0.00+0.00
360 with switch takeoff+landing	-3-	1.23	1.05+0.00+0.18+0.00
360 with switch takeoff+landing + with position and grab	-3 pg-	1.26	1.05+0.03+0.18+0.00
720	7	1.28	1.28+0.00+0.00+0.00

Position – Code Explanation

As a component, the p (position) is used only in straight rotational jumps. Positions include all basic upright manoeuvres as well as all grabs. For the purpose of difficulty calculation, a grab done during a manoeuvre is not awarded additional value in the multiplier. A grab, done during a straight rotational jump will receive the .03 additional difficulty just as any other position.

The Air Judges have to be in agreement about the jump performed. If there is a disagreement, the Head Judge will make the final decision. For jumps in categories other than Uprights, a position or grab can be performed at any time during the jump.

Uprights

Upright jumps include all jumps performed in the vertical axis without rotation. These include the traditional upright jumps (twister, spread, daffy etc).

A competitor can perform from 1 (single) to 5 (Quint) upright manoeuvres. Any more than 5 will not be counted.

There is no bonus for any position modifiers (i.e grabs etc) in upright jumps.

5.) Uprights

Definition as it is in 6005 rules.

To calculate the degree of difficulty of an upright jump use the following formula:

No of manoeuvres (quantity) + each position + switch + gender bonus

Number of manoeuvres

<u>Quantity</u>	<u>Value</u>
• Single	0.60
• Double	0.81
• Triple	1.01
• Quad	1.15
• Quint	1.25

Positions

<u>Positions</u>	<u>Code</u>	<u>Value</u>
•Twister	T	-0.03
•Spread	S	0.01
•Daffy	D	0.02
•Iron Cross	X	0.01
•Backscratcher	Y	0.01
•Mule Kick	M	0.01
•Kosack	K	0.02
•Zudnick	Z	0.00

Switch

<u>Location</u>	<u>Code</u>	<u>Value</u>
•Takeoff	-	0.04 (used at beginning of the jump code)
•Landing	-	0.04 (used at the end of the jump code)

Gender Bonus

Ladies get a bonus of 0.15 added to the DD value of each jump

<u>Gender</u>	<u>Value</u>
•Men	0.00
•Ladies	0.15

Men's Upright Jump Examples (Add 0.15 to the DD Value for Ladies)

<u>Jump</u>	<u>Code</u>	<u>Value</u>	<u>Qty</u>	<u>+Positions</u>	<u>+Sw</u>	<u>+Gen</u>
Twister	T	0.570	0.60	-0.03	+0.00	+0.00
Double Twister	TT	0.75	0.81	-0.03-0.03	+0.00	+0.00
Triple Twister	TTT	0.92	1.01	-0.03-0.03-0.03	+0.00	+0.00
Spread	S	0.61	0.60	+0.01	+0.00	+0.00
Double Spread	SS	0.83	0.81	+0.01+0.01	+0.00	+0.00
Triple Spread	SSS	1.04	1.01	+0.01+0.01+0.01	+0.00	+0.00
Triple Daffy	DDD	1.07	1.01	+0.02+0.02+0.02	+0.00	+0.00
Twister Spread	TS	0.79	0.81	-0.03+0.01	+0.00	+0.00
Twister-Twister-Spread	TTS	0.96	1.01	-0.03-0.03+0.01	+0.00	+0.00
Daffy-Twister-Spread	DTS	1.01	1.01	+0.02-0.03+0.01	+0.00	+0.00
Iron Cross-Kosack						
Iron Cross	XKX	1.05	1.01	+0.010+0.020+0.010	+0.00	+0.00
Spread-Twister-Twister-Spread	STTS	1.11	1.15	+0.01-0.03-0.03+0.01	+0.00	+0.00

6204.2.2 Repeats

Every competitor must perform two different jumps in order for two jumps to count. If a jump is repeated, only the better scoring jump of the two will count.

Only identically performed jumps will be considered repeated jumps, with the exceptions noted below. "Two different jumps" are defined as:

Inverted Flips: Allow only one (1) jump in this category per run unless there is a different direction in initiation (front vs.back) or rotation added (straight over jump vs.full twisting).

	<u>Can do</u>	<u>Can't do</u>
First Jump	back full	back full
Second Jump	front tuck	back half

Loop: Allow only one (1) jump in this category per run.

	<u>Can do</u>	<u>Can't do</u>
First Jump	loop puck	loop puck
Second Jump	back full	loop pike with grab

Off Axis: Allow the same jump from same category if there is a rotation different by 180 degrees or more (same system as its with straight rotations).

	<u>Can do</u>	<u>Can't do</u>
First Jump	7o	7op
Second Jump	3o	7og

Straight Rotations: If two (2) jumps are done from this category they must differ by 180 degrees or more.

	<u>Can do</u>	<u>Can't do</u>
First Jump	360	720 pp
Second Jump	720	720 pg

Uprights : Must have a different number of moves (i.e. double spread, triple twister)

	<u>Can do</u>	<u>Can't do</u>
First Jump	TST	DTS
Second Jump	TS	TTT

Exceptions and Notes:

1. When grabs are performed in jumps, all grabs are considered to be the same for purposes of the repeat rule. For example, a 360 mute grab is a repeat of a 360 tail grab. Also there is no difference between grabs made as a hold or tweaked.
2. When positions are performed in flips, loops, or vertical or off axis rotational maneuvers, the location of the position within the jump does not change the jump

NOTE : Since all Grabs are classified as the same maneuver, a 720 off axis with 2 grabs is a repeat of another 720 off axis with 2 different grabs, and is also a repeat if the grabs are merely reversed in order. , or done once as hold and than tweaked.

3. Two off-axis jumps are considered to be repeats **unless**
 - there is a different number of rotations by at least 180 degrees
4. Positions with grabs or any attempt to grab are considered to be grabs for purpose of this rule.

Scoring Note: An attempted grab will be considered as a grab in the coding of the jump. A poor or missed grab will be counted as a grab but the fact that it may have been missed or not presented clearly to the judges will affect the overall package of the jump and scored accordingly. When one element of a jump is very poor or barely done, the whole score will reflect the combined effort and substantially reflect the missed grab. An attempted grab will never be count as a tweaked grab.

For example: An excellent helicopter with a grab attempt that barely touches or misses the ski would likely be placed in the very poor (0.0 – 0.5) or poor (0.6 – 1.0) scoring category for that jump.

6204.2.3 Different jump groups in Moguls are listed below (with examples):

1. Inverted Flips (somersault)
Inverted flips include all jumps somersault. Only single inverted flips are allowed.
 2. Loop
Include all loop jumps. Only single loops are allowed.
 3. Straight Rotations (helicopters/360,720)
Straight Rotations include all traditional single and multiple rotations (helicopters/360/540/720...). A straight rotation manoeuvre can also include up to three (3) positions and/or one (1) grab.
 4. Off Axis (Dspin, Cork, Misty)
Off Axis includes all traditional single and multiple off axis manoeuvres (360/540/720...).
 5. Upright (Spread Eagle, Kosak, Zudnick, Daffy, Back Scratcher, Mule Kick, Iron Cross, Twister, etc.: Singles - Quints).
Upright jumps include all jumps performed in the vertical axis without rotation. These include the traditional upright jumps (twister, spread, daffy etc.). A competitor can perform 1 (single) to 5 (Quint) upright manoeuvres. Any more than 5 will not be counted. There is no bonus for any position modifiers (i.e. grabs etc) in upright jumps.
- Note: Grabs can not be performed as a single maneuver. They can only be incorporated within straight rotations and off axis manoeuvres. Grab performed must be identifiable as a Grab. A grab should be held, at a minimum, so it is presented clearly to the judges.

6204.2.4 Full control must be gained after every jump, resulting in controlled turns. It is important to register the direction in the landing. It should be in the fall line. If a competitor loses a ski while performing a jump in Moguls, the jump shall receive no credit.

If a competitor jumps over the light beam at the finish line the skier will not receive any time points. If a competitor lands a jump with at least one ski boot on or before the finish line the jump is counted.

6204.2.5 Falls After Jumps

- The jump is judged up to a safe, controlled landing.
- If the landing is missed the jump score is affected.
- Falls and touchdowns also affect the turn score.

6204.2.6 Basic Definitions Jump Definitions

Center of Balance: Is located at the center of mass, where the three axes intersect.

Balance Point: Is where the forces on the body are equal to the forces created by the dynamic body actions

Body Segments: The body is divided into several sections; the upper body and lower body are two of the major segments

Vertical Axis: Runs from the top of the body to the feet, through the balance point.

Horizontal Axis: Runs from side to side, through the balance point.

Lateral Axis: Runs from front of the body to back of the body, through the balance point.

Tilted; One or more of the axis of rotation are less than 90 degrees to the direction of the rotation.

Off Axis: The rotation around the primary axis is tilted off of the axis.

Direction of Travel: The primary direction of travel is in the horizontal plane and thru the balance point. There are lateral movements around the body segments during flexion and extension.

Plane: There are three planes which the body pass through during dynamic movement, the vertical plane, lateral plane and horizontal plane.

Flexion: decreasing the angle between the joint or body segment

Extension: increasing the angle between the joint or body segment

Rotation: increasing or decreasing the different angles between the body segments

Degrees of Rotation; The number of rotations or part of rotations around an axis expressed in degree of rotation.

Primary Axis: the body actions to rotation on the first axis

Secondary Axis: the body actions to rotation on an additional axis

- Grabs:** With the body action of a flexion, a section or part of the ski is grabbed by the hand or hands.
- Holds:** With the body action of a flexion, a section or part of the ski or skis is grabbed by one or more hands and then held for a duration.
- Back Tuck:** The takeoff is initiated both upwards and backwards which starts a primary rotation in the horizontal axis. The upper and lower body then extends. There is a flexion at the waist between the upper body and lower body to the tuck position. The body rotations backwards a total of 360 degrees, then the skiers extends and prepares for the landing.
- Back Layout:** The takeoff is initiated both upwards and backwards which starts a primary rotation in the horizontal axis. The upper and lower body then extends. The body rotations backwards a total of 360 degrees, then the skiers flexes and prepares for the landing.
- Back Full** The takeoff is initiated both upwards and backwards which starts a primary rotation in the horizontal axis. An additional axis of rotation on the vertical axis is initiated with the rotation of the upper body. The upper and lower body then extends straight. There is a full extension at the waist between the upper body and lower body continues on both axes. The body rotations backwards a total of 360 degrees on the primary axis and rotates 360 degrees on the secondary axis, then the skiers extends and prepares for the landing.
- Double Full** The takeoff is initiated both upwards and backwards which starts a primary rotation in the horizontal axis. An additional axis of rotation on the vertical axis is initiated with the rotation of the upper body. The upper and lower body then extends straight. There is a full extension at the waist between the upper body and lower body continues on both axes. The body rotations backwards a total of 360 degrees on the horizontal axis and 720 degrees on the vertical secondary axis, then the skiers extends and prepares for the landing.
- Front Flip** One complete rotation in the forward direction around the horizontal axis.
- Front Tuck** The takeoff is initiated both upwards and forwards which starts a primary rotation in the horizontal axis. The upper and lower body then flexes. There is a flexion at the waist between the upper body and lower body to the tuck position. The body rotations forwards a total of 360 degrees, then the skiers extends and prepares for the landing.
- Side Flip** One complete rotation, in the sideways direction around the lateral axis. Loop. The takeoff is initiated both upwards and sideways which starts a primary rotation in the lateral axis. The upper and lower body then extends either straight on into the free position and rotates. The body rotations a total of 360 degrees, then the skier flexes and prepares for the landing
- Loop Full** The takeoff is initiated both upwards and sideways which starts a primary rotation in the lateral axis. The upper then also starts to rotate on the secondary vertical axis, then extends into the free position. The body rotations a total of 360

degrees in the lateral axis and 360 degrees in the vertical axis. Then the skier flexes and prepares for the landing.

360: One complete rotation around the vertical axis with a straight body position.

360 The takeoff is initiated both upwards and vertically which starts a primary rotation in the vertical axis. The upper and lower body then fully extends straight and rotates. The body rotations a total of 360 degrees, then the skier flexes and prepares for the landing.

720 The takeoff is initiated both upwards and vertically which starts a primary rotation in the vertical axis. The upper and lower body then fully extends straight and rotates. The body rotations a total of 720 degrees then the skier flexes and prepares for the landing.

1080 The takeoff is initiated both upwards and vertically which starts a primary rotation in the vertical axis. The upper and lower body then extends and rotates. The body rotations a total of 1080 degrees the skier then flexes and prepares for the landing.

70 (general) The takeoff is initiated both vertically and upwards or vertically and downwards which starts a tilted primary rotation off of the vertical axis. The upper body rotates in the direction of travel and lower body follows. Then the body flexes into the free position and continues to rotate. The body rotations and rolls a total of 720 degrees. The skier then flexes and prepares for the landing.

Cork7 The takeoff is initiated both vertically, upwards and to the side which starts a tilted primary rotation off of the vertical axis. The upper body leads and lower body follows then flexes into the free position and continues to rotate. The body rotations and rolls a total of 720 degrees. The skier then flexes and prepares for the landing.

Misty 7: (General definition)

It starts with forward rotation on the horizontal/ diagonal axis (where the horizontal axis is primary axis and vertical axis is secondary axis) there is a full twist and half completed. Look for the rotation so that the head goes down and under while the hips go over the horizon.

Rodeo 7 The takeoff is initiated both vertically, upwards and to the side which starts a tilted primary rotation off of the vertical axis to 180 degrees and moves into the free position. (back is facing down hill) The upper body leads and lower body follows then continues to rotate 540 degrees. The skier then flexes and prepares for the landing.

GRABS

1st Category of GRABS called « HOLD » OR « EASY» (Bonus = +0,03) :

This 1st category is called "hold" because the action consists just to take a ski by a hand and hold or touch it.

Safety: The body in Puck Position, a hand come and holds the same side ski, just under the boot.

Japan: A hand goes by the back to take the opposite ski by its inside just behind the boot.

Liu Kan: It's a safety grab with the free leg straight. Means a hand come and hold the same side ski, just under the boot. In the same time the other leg is straight.

2nd Category of GRABS called « TWEAKED» OR «DIFFICULT » (Bonus = +0,08)

This 2nd category called « tweaked » because there is a grab with an action to push or to pull the ski. This Category is more difficult than the 1st one because the skier loose time to execute the grab.

Known « Tweaked » grabs : Mute, Tail, Reverse Tail, Truck Driver... more can be add.

Mute: In a cross skis position, a hand takes the opposite ski near the front binding and pull it up. In the same time the back of the skier goes on an extended position.

Tail: In a cross skis position, a hand takes a ski behind the binding and push it to the external side.

Truck Driver: The body is on a Pike position with legs straight. The two hands go and pull the two ski tips. One tip in each hand. It's like the skier has a wheel in his hands.

6204.3 Speed (25% of the Score) Min. = 0.0 / Max. = 7.5

Speed is simply the amount of time taken to complete the run. Time shall be taken from the moment that the competitor leaves the starting gate until they cross the finish line. The points awarded for speed will be called time points and calculated with the following procedure:

6204.3.1 Pace Time

The Pace time for the moguls is 8.2 m/sec for ladies and 9.7 m/sec for men. To calculate the Pace Time for a specific course.

6204.3.2 Speed Calculation (same for 5 or 7 judges in split scoring)

The pace set time shall equal a point value of 6.0 points. This is based upon 80% value of the maximum time points available to the competitor (three judges' scores at 2.5 points each, equals 7.5 points maximum speed score). Each skier's time will be used to calculate that skier's time points based upon the following formula:

Each 1.0 percent increment of time difference greater or lesser than the pace set time shall be equal to 0.12 points. Times faster than the pace set time will be awarded scores greater than 6.0 but in no event greater than 7.5. Times slower than the pace set time will be awarded scores lower than 6.0 but in no event less than 0 points. The result of this formula will be truncated to two decimal places.

Example:

Length of course = 220 m

Pace time value men = 9.7 m/s

Pace set time = 22.68 seconds

22.68 seconds = 6.0 points (80 % of maximum points available)

1. Difference of competitor time to pace set time.
2. 1.0 % time increment calculated on pace set time.
3. Each 1.0 % time increment equal to 0.12 points, plus or minus from 6.0.

Formula:

The time points can be easily calculated by using the following formula, known as the "Grange Formula":

$$\text{Time Points} = \underline{18.00} - \frac{12 \times \text{Competitor's Time}}{\text{Pace Set Time}}$$

6204.3.2 **Speed Calculation (same for 5 or 7 judges in split scoring)**

Speed points will be based upon the FIS speed formula using course distance and pitch.

6204.4 **Deductions**

6204.4.1 Deduction of Turn Score

The "Deductions" category is only for deductions of (1) falls, (2) complete stops, and (3) interruptions or sliding where downhill momentum is significantly slowed. All other errors in the run should be reflected in the "Turns" category.

"Stumbles" that do not involve stops or falls and "Interruption/sliding" that does not involve significant reduction in down hill momentum are not considered in the Deductions category. They are considered when awarding Turns points.

1.5	Any complete stop
1.1 – 1.4	Complete fall without stop <u>or</u> interruption/significant sliding down fall line or across hill to nearly a complete stop
0.8 – 1.0	Hard touchdown or front roll without stop <u>or</u> interruption/sliding significantly reducing down hill momentum
0.6 – 0.7	Medium touchdown without stop
0.1 – 0.5	Light touchdown without interruption

Definitions

- Light Touchdown: Momentary touch with one or both hands.
- Medium Touchdown: Touch with hips or arm(s).
- Hard Touchdown: Back or side slap, or front roll.
- Complete Fall: Full body contact, no weight on skis.
- Complete Stop: A complete stop for any reason.

Notes

1. If a competitor does not stop, touch down or slide significantly reducing downhill momentum, do not use the Deductions category. All errors in form not involving a touchdown, stop or significant sliding should be scored in the Turns category. Example: A competitor loses control and rides the tails of her skis with no turns for 2 control gates. Maximum Turns score = 4.0. No marks for this in the Deductions category.
2. A competitor loses his balance after a jump and does a back slap then immediately continues skiing with no fall line break. Deductions = 0.8 - 1.0, and no effect on Turns score.

3. A competitor loses control and traverses 90 degrees to the course, but doesn't stop, touch or slow down significantly. Turns points are reduced for the loss of fall line, loss of control and (if appropriate) no turning between control gates.
4. A competitor has a complete fall and slides two control gates to a stop, then continues skiing. Maximum Turns points = 4.0. Deductions = 1.5.
5. A competitor loses control for one control gate and then slides sideways on skis to "almost" a complete stop (no touchdown), then completes the run. Maximum Turns points = 4.5. Deductions = 1.1 – 1.4

6204.5 Tie-Breaking Single Mogul Format

6204.5.1 5 Judge Format

Tie breaking will be done by a comparison on a complete score by complete score basis, with each line of the calculation shown below being truncated to two decimal places.

The complete score for each Turns judge is calculated as follows: Turns score plus one-third of the average (arithmetic mean) of the Air scores plus one-third of the Speed points. The result is then truncated to two decimal places.

<u>Score 1</u>	<u>Score 2</u>	<u>Score 3</u>
$J1 + (J4+J5)/6 +$ (speed points)/3	$J2 + (J4+J5)/6 +$ (speed points)/3	$J3 + (J4+J5)/6 +$ (speed points)/3

In the event of a multiple way tie, the tie shall be broken by adding up the total number of tie break points using a complete score by complete score comparison, pair by pair as described below:

The competitor will receive one tie break point for a higher complete score, 0.5 for a tie and 0 for a lower complete score.

After comparing each competitor in each tie, the competitor's tie break points will be added together. Competitors will be ranked in order of their total tie break points.

If still tied after this procedure, they will stay tied and competitors will receive the same placing.

i.e.: Competitor	1	7.03	<u>6.83</u>	<u>7.33</u>	1.5
Competitor	2	<u>7.23</u>	<u>6.83</u>	<u>7.03</u>	1.5
Competitor	1	<u>7.03</u>	6.83	<u>7.33</u>	2
Competitor	3	6.76	<u>7.16</u>	<u>7.16</u>	1
Competitor	2	<u>7.23</u>	6.83	7.03	1
Competitor	3	6.76	<u>7.16</u>	<u>7.16</u>	2
1st Place	Competitor 1 total: 3.5				
2nd Place	Competitor 3 total: 3				
3rd Place	Competitor 2 total: 2.5				

6204.5.2 7 Judge Format

Tie breaking will be done by a comparison on a complete score by complete score basis, with each line of the calculation shown below being truncated to two decimal places.

The complete score for each Turns judge is calculated as follows: Turns score plus one-third of the average (arithmetic mean) of the Air scores plus one-third of the Speed points. The result is then truncated to two decimal places.

<u>Score 1</u>	<u>Score 2</u>	<u>Score 3</u>	<u>Score 4</u>	<u>Score 5</u>
$J1 + (J6+J7)/6 +$ (speed points)/3	$J2 + (J6+J7)/6 +$ (speed points)/3	$J3 + (J6+J7)/6 +$ (speed points)/3	$J4 + (J6+J7)/6 +$ (speed points)/3	$J5 + (J6+J7)/6 +$ (speed points)/3

In the event of a multiple way tie, the tie shall be broken by adding up the total number of tie break points using a complete score by complete score comparison, pair by pair as described below:

The competitor will receive one tie break point for a higher complete score, 0.5 for a tie and 0 for a lower complete score.

After comparing each competitor in each tie, the competitor's tie break points will be added together. Competitors will be ranked in order of their total tie break points.

If still tied after this procedure, they will stay tied and competitors will receive the same placing.

i.e.: Competitor	1	7.03	<u>6.83</u>	<u>7.33</u>	6.83	<u>7.23</u>	2.5
Competitor	2	<u>7.23</u>	<u>6.83</u>	7.03	<u>7.33</u>	6.83	2.5
Competitor	1	<u>7.03</u>	6.83	<u>7.33</u>	<u>6.83</u>	<u>7.23</u>	4
Competitor	3	6.76	<u>7.16</u>	7.16	6.56	7.16	1
Competitor	2	<u>7.23</u>	6.83	7.03	<u>7.33</u>	6.83	2
Competitor	3	6.76	<u>7.16</u>	<u>7.16</u>	6.56	<u>7.16</u>	3
1st Place	Competitor 1 total: 6.5						
2nd Place	Competitor 2 total: 4.5						
3rd Place	Competitor 3 total: 4						

6205 Special Procedures: Moguls

6205.1 Loss of Ski(s) and Stops

If a competitor loses a ski before the finish line he may finish on one ski. The competitor will be judged according to their performance. If the competitor does not continue the run and fails to put their ski back on in a 10 second time limit, they will be judged up to that point (0 time points). If a competitor loses both skis, they will be judged up to that point (0 time points). If a competitor stops in the

mogul course for more than 10 seconds, the competitor will be scored to that point (there are no time points). The competitor should exit the course as soon as possible.

6205.2 Number of Aerial Maneuvers

All courses will be two jump courses for international competitions. The recommended number of aerial maneuvers shall not restrict the competitor to the stated amount, but represents the number of aerial maneuvers that will receive evaluation. For example, if the Jury recommends two aerial maneuvers, a competitor who performs only one maneuver can only receive a maximum of 50% of the total possible aerial score. Maneuvers in excess of the recommended amount will be disregarded in order of lowest to the highest scoring. If a jump is repeated the best one will count. For example, if two aerial maneuvers are recommended and a competitor performs three maneuvers, the judges will score the best two different maneuvers.

However, a competitor should be careful not to perform aerial maneuvers in such excess that the Judge's score for turns are negatively affected.

6206 Mogul Calculations

Scoring Calculations

Scoring Formulas for 7 judge system

- Turns = J1+J2+J3+J4+J5 – High Judge – Low Judge
- Air Judge Score = (INT(Jump1_DD * Jump1_Form * 100)/100) + (INT(Jump2_DD * Jump2_Form * 100)/100)
- Air = INT((J6+J7)/2) * 100 / 100
- Time Points = MAX(MIN(INT((13.625 - (8* Competitor Time)/Pace Time)*100)/100,7.5),0)
- Score = Turns + Air + Time Points

Scoring Formulas for 5 judge system

- Turns = J1+J2+J3
- Air Judge Score = (INT(Jump1_DD * Jump1_Form * 100)/100) + (INT(Jump2_DD * Jump2_Form * 100)/100)
- Air = INT((J4+J5)/2 * 100) / 100
- Time Points = MAX(MIN(INT((13.625 - (8* Competitor Time)/Pace Time)*100)/100,7.5),0)
- Score = Turns + Air + Time Points

Scoring Formulas for 3 judge system

- Turns = J1+J2+ ((J1+J2)/2)
- Air Judge Score = (INT(Jump1_DD * Jump1_Form * 100)/100) + (INT(Jump2_DD * Jump2_Form * 100)/100)
- Air = J3
- Time Points = MAX(MIN(INT((13.625 - (8* Competitor Time)/Pace Time)*100)/100,7.5),0)
- Score = Turns + Air + Time Points

Explanation of Functions:

- INT = Integer Function: Returns the integer portion of a number
- MAX = Maximum Function: Returns the maximum value in the expression
- MIN = Minimum Function: Returns the minimum value in the expression

6300 DUAL MOGULS**6301 Definition**

The Dual Mogul competition shall consist of elimination rounds where pairs of competitors compete against each other. Each loser is eliminated and each winner advances to the next round until a final result is achieved. The competition will take place on a steep, heavily moguled course, stressing technical turns, aerial maneuvers and speed.

6302 Pairings

Refer to ICR section 4305.

6303 Scoring Procedures

In Dual Mogul Format, each judge shall determine which competitor more fully exhibits the requirements set forth in Rule 6204, Judging Criteria for Moguls, and indicate such selection by the Dual Mogul system, corresponding to the course on which such competitor competed.

The loser shall be eliminated and the winners move on to the next round until the final placing is determined. See Rule 6304 for additional event procedures.

6304 Judging Procedure, Dual Mogul Format**6304.1 Dual Moguls**

The judging criteria used in the dual mogul elimination format shall be the same as set forth in Rule 6204.1 "Turns" and Rule 6204.2 and 6305.4 "Air". Speed is a comparison of relative time as per rule 6304.2.3

6304.1.1 Five Judges Format

A panel of five (5) judges shall administer scores based upon specific duties for each judge as follows:

AIR	- One (1) Judge
SPEED	- One (1) Judges
TURNS	- Two (2) Judges
OVERALL PERFORMANCE	- One (1) Judge

J1	J2	J3	J4	J5
Turns	Turns	Speed	Air	Overall

Speed is a comparison of relative time as per rule 6304.2.3

6304.1.2 **Seven Judge Format**

A panel of seven (7) judges shall administer scores based upon specific duties for each judge as follows:

AIR - Two (2) Judge
 SPEED - One (1) Judges
 TURNS - Four (4) Judges

J1	J2	J3	J4	J5	J6	J7
Turns	Turns	Turns	Turns	Air	Air	Speed

Speed is a comparison of relative time as per rule 6304.2.3

6304.2 **Dual Mogul System**

In the Dual Mogul system, each judge has a set of paddles that remain out of view until the Head Judge announces "judges are ready to vote". Then each judge raises the paddle chosen keeping it clearly visible for the competitors, spectators, announcers and scorekeepers to see, until the Head Judge announces the command 'paddles down'.

The paddles should be round with a diameter of approximately 25 cm on a handle of approximately 50 cm in length. The paddles are to be marked in a pie-format in the correct proportions (5-0, 4-1, 3-2, 2-3, 1-4, 0-5) painted in colors red and/or blue, on both sides, corresponding to the voting possibilities of the judges.

On the scaffolding in front of the respective judges, boards have to be placed showing the judges scoring responsibility (T-turns, A-air, S-speed, O-overall)

6304.2.1 **Scoring**

Each judge will have a total of five possible votes to cast, with possible combinations of 5-0, 4-1, 3-2, 2-3, 1-4, or 0-5, for the red course vs. the blue course. This results in 25 or 35 possible votes to be cast as follows:

<u>7 Judges</u>		<u>5 Judges</u>	
Turns #1:	5 votes	Turns #1	5 votes
Turns #2:	5 votes	Turns #2	5 votes
Turns #3:	5 votes	Air	5 votes
Turns #4:	5 votes	Speed	5 votes
Air #1:	5 votes	Overall	3 votes Turns
Air #2:	5 votes		1 vote air, 1 vote speed
Speed:	5 votes		
Total:	35 votes		25 votes

A scorekeeper will be on the Judge's stand assisting the Head Judge to add up all the votes. The result will be written in the protocol and announced immediately. The winner of each match will be the competitor who received the simple majority of votes.

The scorekeeper is also responsible to note all decisions of each judge on a protocol form.

6304.2.1.1 Tie-Breaking 5 Judges Dual Mogul Format

All ties can be broken in the 5 Judges Dual Mogul Format. If there is a tie in Speed, the Overall Judge has 4 votes resulting in 19 votes possible. If there is a tie in Air (neither competitor jumps), the Overall Judge has 4 votes resulting in 19 votes possible. If there is a tie for both speed and air, the Overall Judge has 3 votes resulting in 13 votes possible.

6304.2.1.2 Tie-Breaking 7 Judges Dual Mogul Format

If a tie arises in SPEED or AIR or through a combination of both, the judge-by-judge comparison will apply. If still tied after this procedure the competitors will receive a rerun.

	T1	T2	T3	T4	A1	A2	S	(tied)
	+	+	+	+				
red	3	3	3	4	1	1	0	red+4 red wins
blue	2	2	2	1	4	4	0	blue+2

	T1	T2	T3	T4	A1	A2	S	(tied)
	+	+	+					
red	3	3	3	2	2	2	0	red+3 stays tied
blue	2	2	2	3	3	3	0	blue+3 rerun
				+	+	+		

6304.2.2 In case there is a tie for the last place qualifying for dual mogul finals, the following will apply: If two people are tied (8th place in ladies or 16th place in men) the two will dual immediately before the first dual round. The winner will advance to the first dual round. If more than two people are tied, i.e. a three-way tie for 8th place of the ladies, each will ski a single run with the winner advancing to the duals.

6304.2.3 Timing

Electronic timing has to be used at all events. Timing systems should be mounted for both courses so that the time difference between the competitors can be calculated. Judging Points will be awarded as follows:

- Both competitors are within 0.74 seconds = 3/2
- The time difference is between 0.75 and 1.49 seconds: = 4/1
- The time difference is equal to or greater than 1.5 seconds: = 5/0

6305 Special Procedures: Dual Moguls

6305.1 Loss of Ski(s) and Stops

If a competitor loses a ski before the finish line he may finish on one ski. The competitor will be judged according to their performance. If the competitor does not continue the run and fails to put their ski back on in a 10 second time limit, they will be judged up to that point (0 time points). If a competitor loses both skis, they will be judged up to that point (0 time points). If a competitor stops in the mogul course for more than 10 seconds, the competitor will be scored to that point (there are no time points). The competitor should exit the course as soon as possible.

6305.2 Number of Aerial Maneuvers

All courses will be two jump courses for international competitions. The recommended number of aerial maneuvers shall not restrict the competitor to the stated amount, but represents the number of aerial maneuvers that will receive evaluation. For example, if the Jury recommends two aerial maneuvers, a competitor who performs only one maneuver can only receive a maximum of 50% of the total possible aerial score. Maneuvers in excess of the recommended amount will be disregarded in order of lowest to the highest scoring. If a jump is repeated the best one will count. For example, if two aerial maneuvers are recommended and a competitor performs three maneuvers, the judges will score the best two different maneuvers.

However, a competitor should be careful not to perform aerial maneuvers in such excess that the Judge's score for turns are negatively affected.

6305.3 Dual Mogul Format at World Cup Events.

The Rules and Technical Sub Committee will determine the system for pairings for Dual Moguls. The course will be assigned (red course or blue course) by a single toss of a coin. This will be performed by the Starter at the top of the course immediately prior to the run by the competitors.

6305.4 Scoring Air in Dual Moguls.

6305.4.1 Air Judges evaluate jumps based on the scoring criteria from single moguls (Quality, Air, and Spontaneity), as well as difficulty and variety. Competitors **may repeat jumps** but judges will consider variety in comparing the two competitors. Variety reflects a different number of maneuvers and different types of maneuvers.

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