



FÉDÉRATION INTERNATIONALE DE SKI
INTERNATIONAL SKI FEDERATION
INTERNATIONALER SKI VERBAND

- T - FIS President
- FIS Secretary General
- The members of the Committee for Freestyle Skiing
- Sub-Committee for Freestyle Rules and Officials
- Interested Parties

Oberhofen, October 16th, 2008
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We take pleasure in sending you today,

the “Provisional Minutes”

for the FIS Freestyle Rules and Officials Meeting in Zürich, (SUI) October 1st – October 4th, 2008.

You are kindly requested to bring this document to the next meeting in Dubrovnik (CRO).

Thank you very much for your valuable cooperation.

With kind regards,
INTERNATIONAL SKI FEDERATION

A handwritten signature in black ink, appearing to read 'Marko Mustonen', with a long horizontal flourish extending to the right.

Marko Mustonen Chairman
Freestyle Rules and Officials Committee

AGENDA
for the Meeting with the Sub-Committee for Freestyle Rules and Officials
Thursday October 2nd, and Saturday October 4th, 2008
in Zürich, (SUI)

1. Welcome to Delegates and Opening Remarks
2. Identification of Delegates
3. Report of Chairman Review of Agenda
 - 3.1 Proposals from National Ski Associations
 - 3.2 Tabled Proposals
 - 3.2.1 Turn Criteria and Definitions
 - 3.2.2 HalfPipe Proposals from Spring Cape Town Meeting
 - 3.2.3 D Spin Jump Definitions - Working Group Report
4. Officials Developments
 - 4.1 Technical Delegates Development – Bruce Robinson, CAN
 - 4.1.1 Report on Update Materials
 - 4.1.2 Qualifications and Upgrades
 - 4.1.3 Assignments and TD Reports
 - 4.1.4 TD Clinics Schedules
 - 4.2 Judges Development - Jay Simson USA
 - 4.2.1 Report on Judges Proctor Meeting Albany, USA
 - 4.2.2 Update Clinics Schedules
 - 4.2.3 Setting of clinic dates for 2009-2010 season
 - 4.2.4 Qualifications and Upgrade Procedures – Polly Jo Clark USA
 - 4.2.5 Assignments 2008-2009 Freestyle FIS World Cups
 - 4.2.6 www.fot.ch web site
 - 4.3 Organizing Officials – Joe Fitzgerald FIS / Bruce Robinson, CAN
 - 4.3.1 Development of Standard Job Descriptions (SJD)
 - 4.3.2 Course Preparation Crews
 - 4.3.3 Hand Timers
 - 4.3.4 Chief of Timing
 - 4.3.5 Judges Assistant
 - 4.3.6 Chief of Start
 - 4.3.7 Starter and Assistant Starter
5. Rules
 - 5.1 ICR International Competition Rules – Joe Fitzgerald FIS
 - 5.1.1 Publication and Printing of ICR
 - 5.1.2 Course Specifications Developments
 - 5.2 Performance Evaluation
 - 5.2.1 'Picking the Winner' verses 'Performance Evaluation' Implementation

- 5.3 Performance Measurements
 - 5.3.1 Doppler Vector Radar Systems
 - 5.3.2 Global Positioning Systems (GPS) and Geographic Information Systems (GIS) Data Collection and Freestyle Skiing
- 5.4 Course Specifications and Equipment
 - 5.4.1 HalfPipe Course Specifications; Snowboard - Freestyle
- 6. Event Working Groups
 - 6.1 Mogul / Dual Moguls – Remi Sella, FRA
 - 6.1.1 Course Specifications – new drawings update
 - 6.1.2 Study of Mogul Turns
 - 6.2 Aerials / Mich Roth, SUI
 - 6.2.1 Aerial Water Ramp Survey
 - 6.2.2 Development of Study for Inrun Speeds
 - 6.3 Ski Cross / Heli Herdt - GER
 - 6.3.1 Start Gates and Start Gate Homologation
 - 6.3.2 Procedure for Suit Measurements
 - 6.3.3 Gate Judges Development
 - 6.3.4 Ski Cross Reaction Time
 - 6.4 HalfPipe / Ola Sundequist SWE
 - 6.4.1 Halfpipe Course Criteria
 - 6.5 Judges Stands / Timing and Results Buildings
 - 6.6 Course Homologations / Henri Rohner SUI
 - 6.6.1 Application,
 - 6.6.2 Review and Approvals
- 7. Result and Scoring
 - 7.1 Result Reports
 - 7.1.1 Development of a Summary of Standard Result Outputs (SRO)
 - 7.2 Scoring Booklet Development
 - 7.3 Software and Data Transfer
- 8. wiki.fisski.com – FIS Wiki, Freestyle Digital Information
 - 8.1 Freestyle Knowledge and Information Development
 - 8.2 Reading and Writing to the Wiki
 - 8.3 Access and Passwords
- 9. Location and Dates of next meeting
 - Dubrovnik (CRO), May 20th – 24th, 2009
- 10. Closing Remarks

ITEM 1

Welcome to Delegates and Opening Remarks

It is high-season for national ski teams as they prepare themselves for the upcoming competition season starting in December 2009.

Many skiers from many nations are meeting on the glaciers, other slopes in the southern hemisphere and still on the water ramps where they have a chance build courses, kickers , train new skills and jumps. Nowadays, these locations are more and more exotic.

Also the weather forecasting skills are getting more and more important for coaches to make successful training happening.

The next three seasons will be very interesting seasons with three consecutive major events and lots of World Cups. Also the timeframe for qualifying for the Olympics which started in January 2009.

Our Freestyle officials and organizers are also getting ready for coming season. While teams are preparing their athletes to make impressive performances on snow, our officials and organizers are focusing on the upcoming season with update clinics, seminars etc.

When reviewing the recent developments, on a bigger scale, during the Salt Lake Olympic cycle from 2002 till 2006, the Freestyle Committee approved many changes to the programs. Again, after a 12 month evaluation, new changes were introduced in spring 2007, for the 2006 - 2010 cycle.

The Freestyle Committee and its sub-committee made some of the biggest refinements in our discipline to date.

Over the past two seasons, we have made some further refinements and now that process is finished. That is perhaps why the agenda is a little light on rule or criteria changes. No doubt there are still lots of work to do, like that beginning discussed on the 'turn criteria' in moguls and how to use the new 'freestyle wiki' the Coordinator has working on.

We can now want watch our work and changes in action over the next 24 months, we all need to make notes with the concept that we need to constantly improve our discipline and or look of our sports products.

The look and feel of freestyle is now on a mode, in fashion or perhaps we can say that we are leading the trend in the winter 'free skiing'.

Our image or our visual content in Vancouver 2010 Winter Olympics Games is now in the hands of the competitors and the coaches.

Let's see what they will give us back in return for our investment. Let us watch what happens with a critical eye for the next 18 months.

In spring 2010, in the post Olympic time frame, will again be a time for a critical review and more innovative improvements.

What do want Freestyle to look like for the Sochi 2014 Winter Olympics Game? What every that may be, it must be introduced in season 2010-2011. It is great opportunity again to make sport of freestyle even more attractive.

So there is still much work to do done, information and details to be reviewed and distributed.

A full review of the disciplines needs to take place at the end of 2009, so we are ready start again in 2011 and move onwards till 2014

Chris Robinson, Chairman of Freestyle Committee, spoke positively about the work of the R&O Subcommittee and how this work is assisting the Freestyle Committee. He informed the R&O rules changes brought forward by the R&O to the Freestyle Committee must now be fully prepared including strikeouts for removed wording and underlining for new wording. He congratulated Marko Mustonen for his work as Chair of R&O Subcommittee.

ITEM 2

Identification of Delegates

Chairman:	Marko Mustonen	FIN	Present
Vice-Chairman:	Jay Simson	USA	Present
Members:	Michael Kennedy	AUS	Excused
	Bruce Robinson	CAN	Present
	Michel Roth	SUI	Present
	Morten Skarpaas	NOR	Present
	Ola Sundequist	SWE	Present
	Masaaki Kobayashi	JPN	Excused

Chairmen of Working Groups present:

Remi Sella, (FRA), Mogul WG
Heli Herdt, (GER), Ski Cross WG
Michel Roth, (SUI), Aerial WG
Ola Sundequist, (SWE), HP/Big Air WG

ITEM 3

Report of Chairman Review of Agenda

ITEM 3.1

Proposals from National Ski Associations

None were received.

ITEM 3.2

Tabled Proposals

3.2.1 Turn Criteria and Definitions

Remi Sella (FRA), Leader Moguls Working Group, reviewed the new turn criteria and definitions. The Moguls Working Group will prepare a formal proposal for review by the R&O Subcommittee at the Spring, 2009 meeting prior to their presentation to the Freestyle Committee.

Mogul Working Group Report – Remi Sella (FRA)

TURN CRITERIAS

Summary of MWG members as well as moguls coaches input about turn criteria.

A/ Base score to put in place

We agree with the idea that aside from deductions a skier receives for obvious mistakes, a "base score ceiling" is identified for the quality of a skiers particular turn score even without any obvious mistakes at all. This is an important concept and extremely important to insure that our sport moves forward in terms of a technical evolution.

- Identified with quality of skiing
 - quality of turns
 - upper body position

B/ Types of turn

Three types of turns identified

- *Carving*
 - Definition 1: Transition happens through the first part of extension followed immediately by turn initiation. Middle of turn (ski at fall-line) happens as the ski tip is contacting the mogul and end of turn happens through absorption. We consider

this turn correct because it uses edging and flex of the ski to create and control the turn. It is easy to identify this turn by:

1. How little the ski tip and tail move side to side: the ski tip, foot and ski tail all follow the same path through the mogul.
 2. Direction of ski from end of turn through transition into initiation is the same, pivoting the ski is minimized.
- Definition 2: Proper turns can be identified by carving action onto the face of the mogul. Ski boots are more visible holding a carved line and do not drop into the rut as with advancement or pivoting. Efficiency allows the skier to maintain balance and less ski base is exposed over the crest of the mogul, compared to advancement or pivot. When viewed from the bottom: angle at knee during extension
- *Push and pivot*
 - Definition 1: The turn is started while the feet are still on the face or up-hill part of the mogul and pivoted to fall-line on a flat ski. The ski is then run flat and straight until just before the ski tip contacts the mogul, then the ski is pushed forward and to the side into the face of the mogul. There is little to no edging or flex in the ski. The ski is not utilized only placed into positions. It is identified by:
 1. Pivot to fall-line while in absorption, as the feet become visible over the crest of the mogul they are already pointing at fall-line.
 2. The tail of the ski moving across the hill as the ski tip contacts the mogul.
 - Definition 2: it can be identified by advancement of the feet on the face of the mogul. Less pressure on the backside of moguls allows the feet to advance ahead of hips onto the approaching mogul face. Fore, aft balance is not maintained at the crest of the mogul, resulting in an upper body movement forward and more ski base visible over the crests. When viewed from the bottom: straight foot to hip angle during extension, feet drop into and behind mogul faces.
 - *Pivot slide*
 - Definition 1: It starts much the same as push and pivot but the ski does not stop at fall-line, it continues to swing across the hill. The turn is completed through extension with the feet pushing into the bottom of the rut. When the feet contact the bottom the athlete immediately pulls the feet underneath of them and starts to pivot the ski for the next turn. It is most easily identified by:
 1. the constant swinging of the ski from side to side with the feet staying very direct down the fall-line (the ski will move as much as 180 degrees across the hill).
 2. the outside of the foot and downhill ski is clearly visible before it disappears behind the mogul.
 3. Middle to end of turn happens through extension.
 - Definition 2: it employs the most movement, rotation and range of balance. Evident by rotation in the hips and upper leg, widest path of the feet from side to side, ski boots less visible, constant ski pivoting, and a twisting motion.

C/ Deductions

Proposal 1: The range used by the judges has to be bigger. The top athletes are very close together. At the moment we have no space to separate them, so let's create a system where we have the space.

Example:	old scores		proposal 1 scores		proposal 2 scores	
excellent	4.6-5.0	5	4.1-5.0	10	3.5-5.0	16
very good	4.1-4.5	5	3.1-4.0	10	2.3-3.4	12
good	3.6-4.0	5	2.6-3.0	5	1.4-2.2	9
above average	3.1-3.5	5	2.1-2.5	5	0.8-1.3	6
competent	2.6-3.0	5	1.1-2.0	5	0.4-0.7	4
below average	2.1-2.5	5	0.6-1.0	5	0.2-0.3	2
poor	1.1-2.0	5	0.2-0.5	4	0.1	1
very poor	0.1-1.0	10	0.1	1	0.0	1

Proposal 2: The more efficient and steady the upper body indicates to a large degree how competent the skier is in their turn technique. So, perhaps there should be a way to evaluate the upper body into the whole performance such as. These are all based on no obvious mistakes in the run just the quality of the skiers upper body positioning.

1. Excellent to Good upper body: 0 to .2 deductions from the base score ceiling. (5.0 to 4.8)
2. Good to Avg upper body: .2 to .4 deductions from the base score ceiling. (4.8 to 4.6)
3. Avg to Poor Upper body: .4 to .6 deductions from the base score ceiling. (4.6 to 4.4)

Proposal 3:

- 1 carving = 5.0 - 4.0
- 2 push/pivot = less than 4.3
- 3 pivot slide = less than 4.0

D/ Courses

- World Cup courses have to be challenging
- Remarks: If the course is challenging the bandwidth between correct and incorrect is greater because it is not possible to masquerade as effectively and consistently with imprecise skiing. On today's easy courses a lot of disguising of improper ski use and improper ski line is done by using athletic posturing and is far more concurrent than execution of great skiing. Today the Machine/Snow cat made mogul course on a flat slope allows some of the worst technical skiers to still have some of the best upper bodies and pole plants. And simultaneously at times a top technical skier that may have some flaws in these byproduct measurements and will have their base score lower even though their ski usage is substantially better than the poor skier. Then another crucial issue is that many times the superior skier gets punished harder in deductions because the judgment of body reaction to mistakes are far more obvious in correct skiing than they are in unqualified technique used by a mediocre skier. The modern sliding skier many times is just devoted to posing the perfect body position and staging for what the judges understand and are empathetic to. Without

a lot of judge training (reeducation) difficult courses would dramatically alleviate this problem.

E/ Work to do

Together with good material and common “categories” of different type of turns we should define the most important parts of mogul turn and agree all together common terminology around it. We could need written definitions with video material to:

1. Optimum ski line in moguls
2. Carving/edging in MO, mechanism behind it
3. Hip location
4. Body position
5. Absorption/extension

OTHERS PROPOSALS

Two items to discuss at R&O FIS Committee:

- Item 1: As to have more challenging courses, forbid athletes, coaches to side slip the course before, during and after the training. Only the jury can decide side slipping time. It will be done by an OC crew.
- Item 2: As to make mogul skiing more popular, define the mogul ski shape with the ski industry. Make it a new rule to have everyone ski on the ‘trend skis’. Should carving turns be easier to perform with this kind of skis?

3.2.2 HalfPipe Proposals from Spring Cape Town Meeting

These proposals will be reviewed at the 1st part of the meeting.

Ola Sundequist (SWE) reviewed the Half Pipe Working Group proposals that were approved by the R&O at its meeting in Cape Town. Bruce Robinson (CAN) and Iain Mackay (GBR) were tasked with preparing formal rule presentation of these proposals for presentation to the Freestyle Committee in Zurich.

3032 Jury

3032.1.6 The Jury has the right to determine the choice of competition format for the Half Pipe. The Jury will determine the number of heats, and whether a Semi-Final is to be run, based on available time and number of entries.

3032.1.76 Written minutes are to be kept of all meetings and decisions of the Jury and signed by each individual member of the Jury, with each individual vote on decisions recorded. They must be verified by the Chairman of the Jury and written in at least one official language of the FIS.

3032.1.87 A member of the Jury should periodically inspect the course during the competition.

3033.1 Appointment of Judges

The Judges for a competition will be a group of qualified individuals. For international competitions, the FIS Freestyle Committee will appoint the

panel of judges. For Half Pipe, appropriately qualified FIS Snowboard Judges may be appointed.

3043.7.2.4 Half Pipe Start Groups

For Qualifications, competitors will be seeded in heats according to their ranking on either the World Cup Ranking List (for World Cup competitions) or the FIS Points List. Ties in the World Cup ranking will be broken using FIS Points; if still tied, the position will be decided by a draw. All other ties will be broken by a draw.

A Qualification round may consist of one or more Heats; a Heat shall generally comprise not more than 30 competitors (Men) or 25 competitors (Ladies).

In a Qualification round with two heats, competitors will be divided on the basis of even and odd positions in the seeding list (Heat 1 shall consist of odd-numbered seeds, Heat 2 of even-numbered seeds). In a Qualification round with three heats, each third seed shall be assigned to a separate Heat (Heat 1 seeds 1, 4, 7, ...etc.; Heat 2 seeds 2, 5, 8,...etc.; Heat 3 seeds 3, 6, 9,...etc.). If more than three Heats are scheduled, they shall be constructed according to the same principles.

3060.2.2.1 For Half Pipe, the Final consists of two runs. The start order for the second run shall be the reverse of the ranking from the first run.

3060.2.9 Half Pipe

The Half Pipe competition shall consist of Qualifications and Final; if the Jury so determines, based on the number of competitors and time schedule, a Semi-Final may also be included. This decision must be made before and announced at the first Team Captains' Meeting.

Qualification rounds shall consist of two runs; the competitor's best single run shall count. Finals shall consist of 12 Men and 6 Women. If Semi-Finals are not included, equal numbers of the highest-ranked competitors from each Heat shall proceed to the Final.

3060.2.9.1 Competition format with Semi-Final

2-Heat format

The top three Men and the top two Ladies from each Heat shall proceed straight to the Final (6 Men, 4 Ladies). The next six Men and the next three Ladies from each Heat shall proceed to the Semi-Final (12 Men, 6 Ladies).

3-Heat format

The top two Men and the top Lady from each Heat shall proceed straight to the Final (6 Men, 3 Ladies). The next four Men and the next two Ladies from each Heat shall proceed to the Semi-Final (12 Men, 6 Ladies).

The Semi-Final shall consist of two runs; the competitor's best run shall count. The top six Men shall proceed to the Final. In the 2-Heat format, the top two Ladies shall proceed to the Final; in the 3-Heat format, the top three Ladies shall proceed to the Final.

The Final shall consist of two runs; the competitor's best run shall count. For start order, see 3060.2.2.1.

4604 Competition format - ~~Single format~~

Qualifications:

~~One run for all competitors.~~

~~Top 50% from the first run (to maximum of 25) qualify for a second run. The best score of the two runs is used to qualify for the finals.~~

2 runs for all competitors.

Finals:

6 or 12 competitors qualified

2 runs each

Best score of the 2 runs is used to make the result list

4614 Special Procedures - Half Pipe

4614.1 Stops

If a competitor stops in the Half Pipe for more than 10 seconds, the competitor will be scored up to that point. The competitor shall exit the course as soon as possible.

Judges' Manual

Add:

6153.3 Tie Breaking

Ties shall be broken as follows: the competitor with the higher sum of scores from Judges 4 and 5 shall win the tie; if still tied, the competitor ranked higher by Judge 3 shall win; if still tied, use a judge-by-judge comparison across all Judges. If still tied, the competitors remain tied.

World Cup Rules

12.4 Freestyle FIS World Cup Final Eligibility Formula and Final Format

amend HP line to read:

HP Field Size will be between 10-14 competitor (Men & Women equally). The final number will be decided by the FIS in advance of the FIS World Cup Finals.

3.2.3 D Spin Jump Definitions - Working Group Report

Proposal for D Spins a 70 jump.

“While moving in the horizontal plane the skier approaches the jump. The takeoff is initiated both vertically, backwards and to the side which starts a tilted primary rotation off of the horizontal axis. The upper body leads and rotates on the vertical axis and comes below the horizontal plane, where lower body extends into the free position; the body rotates a total of 360 on the vertical axis. While tilted, the body also rotates 180 on the horizontal axis; the skier completes the final 180 degree of rotation on the horizontal axis by flexing at the hips to prepare for the landing to complete 360 of rotation on the horizontal axis for the jump.”

R&O unanimously approves this definition. To be presented to Freestyle Committee.

R&O notes further refinement of the definition for “free position” and identifying “correct” and “incorrect” angles of body position (i.e. qualitative measurements) are required for review at the Spring, 2009 meetings.

ITEM 4

Officials Developments

ITEM 4.1

Technical Delegates Development – Bruce Robinson, CAN

Proposal

A Technical Delegate Working group will be meeting at the end of fall, 2009 Zurich meetings to review the programme for the 2008-09 TD Clinics. The following is a 1st draft only and will be revised upon review.

Programme for TD Clinics – 2008/2009 Season

Day 1

- | | |
|--|---------------|
| - Introductions | 9:00 – 9:10 |
| - Clinic Programme | 9:10 – 9:15 |
| - Role of the TD
<i>The TD, Race Director and Jury – roles and responsibilities.</i> | 9:15 – 9:45 |
| - Event Management
<i>Changes in specific events for the coming season.</i> | |
| MO, DM | 9:45 – 10:15 |
| AE | 10:15 – 10:45 |
| Coffee break | |
| SX | 11:05 – 12:00 |
| Lunch | |
| HP | 13:30 – 14:15 |
| - Rule changes
<i>Other changes not already mentioned.</i> | 14:15 – 15:00 |
| Coffee break | |
| - Strange Tales
<i>Your experiences during the past season, with discussion.</i> | 15:20 – 16:15 |
| - Feedback from TD Reports and Jury Meetings
<i>Recommendations and items of interest from past season's TD Reports</i> | 16:15 – 17:00 |

Day 2

- | | |
|--|---------------|
| - Measurement Techniques
<i>Standard approaches to measuring and reporting on courses</i> | |
| MO, DM | 9:00 – 9:30 |
| AE | 9:30 – 10:00 |
| SX | 10:00 – 10:45 |
| Coffee Break | |
| HP | 11:05 – 11:45 |
| - Documentation: the TD Report | 11:45 – 12:15 |

4.1.1 Report on Update Materials

Bruce Robinson (CAN) updated progress on developing materials for 2008 TD Seminars. Meeting of TDs following R&O meeting today to discuss:

- Clinic schedule
- Use of case studies
- Testing
- Professional development
- Goals and objectives for clinics

Clinics will make use of Wikipedia for presentation of materials.

4.1.2 Qualifications and Upgrades

See upgrade 4.14.2 TD Upgrades on the Freestyle Committee.

<u>Lastname</u>	<u>Firstname</u>	<u>Nation</u>	<u>TD License</u>	<u>Upgrade</u>	<u>Discipline</u>
Topalovic	Peter	AUS	C	B	MO/AE
Date	Ritchie	AUS	C	B	MO/AE
Cox	Craeme	AUS	C	B	MO/AE
Pattison	Andrew	AUS	C	B	MO/AE
Henry	Eric	AUS	AL TD	B	SX
Patterson	Euan	NZE	AL TD	B	SX
Sanderson	Scott	AUS	AL TD	B	SX
Proitz	Pal	NOR	AL TD	B	SX

Graded to 'C'

Clay	Alastair	AUS	C	C	MO/AE
May	Peter	AUS	AL TD	C	SX
Osakabe	Hiroshi	JPN	-	C	MO/AE/SX
Brown	Nigel	NZE	AL TD	C	SX
McLean	Ian	NZE	AL TD	C	SX
Wi Rutene	Simon	NZE	AL TD	C	SX

R&O approves TD Upgrades with addition of NZE TDs. Henri Rohner (SUI) will be stepping back from managing the TD License and Upgrades. Bruce Robinson (CAN) will take on this responsibility.

Discussions on different levels of TD Licenses and should the FIS move to 1 TD license level and discontinue A, B, & C License levels. Assignments for higher-level events based on competency and experience. This is a system used in Alpine and Snowboarding.

4.1.3 Assignments and TD Reports

A list of applications was presented.

Henri Rohner (SUI) and Joe Fitzgerald (FIS) will make decision on TD Assignments for 2008-09.

4.1.4 TD Clinics Schedules

See Freestyle Committee Minutes.

4.1.5 TD Commissioner Program

TD Commissioner candidates will be supported to attend clinics in Europe and North America to begin transition to from current system to TD Commissioners system. Clinics in 2008 will review roles and responsibilities and process for 2009.

ITEM 4.2

Judges Development - Jay Simson, USA

4.2.1 Report on Judges Proctor Meeting Albany, USA

While the outside temperatures were hot and humid with 28 degree Celsius, 12 freestyle officials from seven nations were sweating over re-evaluating 150 competition runs and jumps from last season's Freestyle FIS World Cup. This four-day FIS Freestyle Judges' Proctors meeting was held in Albany (USA) from June 25th to 28th 2008.

Gerry Beniot, CAN
Ian Hutching, CAN
Frank Howell, USA
Jim Bates, USA
Polly Jo Clark, USA
Ola Sundequist, SWE
Tina Sundequist, JPN
Uli Menrad, GER
Jay Simson, USA
Stefan Buob, SUI
Oleg Kitov, RUS

The pre-meeting work made great use of video technology, and was the result of a cooperative approach between every aspect of the discipline, including input from the NSA coaches, to the preparation of material by the different Rules and Officials working groups as well as FIS coordination. The detailed material will be used at the series of

annual continental judges' clinics this coming autumn. The A level judges' clinics will be held in Beijing (CHN), Moscow (RUS), Park City (USA), Murten (SUI) and Helsinki (FIN) while some B level clinics will be held in North America, Europe and Asia.

Jay Simson, FIS Sub Committee Rules and Officials Vice Chairman, who coordinated the clinic, stated: "The quality of the video material and the detailed analysis will increase the level of training we can provide this season at the different clinics. This will improve the judges' ability to much better assess the athletic performance. The fact that the National Association officials take up to 6 days of their personal 'summer time' is a testament to their and their National Association's commitment to the discipline."

By the end of the seminar, 20 hours of clinic material, with 85 mogul runs, 37 half-pipe runs and 55 aerial jumps had been detailed and a total 70 gigabits of video data produced.

The video material will be available from www.fot.ch, the Freestyle online training web site, by early September 2008.

Jay Simson thanks Stefan Buob for his work on the clinic materials.

4.2.2 Update Clinics Schedules

Clinic schedules are confirmed for 2008.

4.2.3 Setting of clinic dates for 2009-2010 season

2009 Proctor Clinic, June 17-21, 2009 in Europe. Exact Location TBD

2009 FIS "A" Clinics (provisional)

North American – Eastern Canada
Scandinavian – Sweden (TBC)
Europe – Location TBD (SUI, GER, FRA)
Asia – Japan (TBC)
Eastern Europe – Ukraine (TBC)
Oceania – NZL or AUS

Exact dates submitted to FIS no later than April 2, 2009. Clinics cannot be held before Fall FIS meetings in Zurich and or after mid November.

4.2.4 Qualifications and Upgrade Procedures – Polly Jo Clark, USA

Polly Jo Clark (USA) distributed draft revisions for review by the R&O.

Next Step:

- Provide comments to Polly Jo
- Prepare formal presentation for review in Spring, 2009 FIS Meetings.

R&O completed a lengthy discussion on Polly Jo Clark's (USA) proposal for the revising the judging system in FIS. See attached for revisions.

The R&O discussed what level of licensing should be tracked by the FIS, in particular should the FIS track C License Judges. Should the FIS have an "international" license for judges instead of different levels? Assignments would be based on competency and experience. What level of Judge should work at FIS level races (e.g. National Championships)? They should be FIS officials, so the officials must be on the FIS List. There was a consensus that the FIS should keep a record of "C" License judges, who are approved by the NSA.

"C" License judging official recognition:

- Keep it simple
- Managed by NSA
- Candidate attends national clinic proctored by "A" License judge within a specific event
- Clinic must have minimum standard and content directed by the FIS

R&O discussed the difficulty some NSAs have in providing enough judges for Continental Cups with the current rules. Rule 3033.2, "Number of Judges per country", needs to be modified to provide more flexibility to create judging panel at FIS Race (e.g. remove requirement to have minimum number of foreign judges for FIS Races; FIS Race must have FIS Licensed judge):

3033 The Judges

3033.1 Appointment of Judges

The Judges for a competition will be a group of qualified individuals. For international competitions, the FIS Freestyle Committee, or other authorized committees, will appoint the panel of judges. For Half Pipe, appropriately qualified FIS Snowboard Judges may be appointed.

3033.1.1 Number of Judges:

A - Level competitions: 1 Head Judge + 7 scoring Judges

At all other competitions: 1 Head Judge + 5 scoring Judges

In special cases, fewer judges can be scheduled.

3033.2 Number of Judges per country

At Olympic Winter Games and World Championships

- maximum 1 (one) per country

At World Cup and Junior World Championships

- maximum 2 (two) scoring per country. (1) one other from the same country can be the Head Judge in a non-scoring position.

At Continental Cups ~~and all other International competitions~~

- ~~max. 3 (three) per country. at least 2 (two) countries represented on scoring panel. One must be Head Judge in a non-scoring position~~

At other international FIS competitions

- any FIS Licensed judge

3033.3 The Head Judge will be appointed by the FIS Freestyle Committee, or appropriate authorized committee.

The R&O unanimously approves changes to ICR Rule 3033.1, 3033.2 and 3033.3.

The number of judges per License level needs to be defined for each level of FIS event. Create a table outlining:

- FIS Event
- Level of FIS License Judge
- FIS Point Level

4.2.5 Assignments 2008-2009 Freestyle FIS World Cups

Assignments will be made in advance of the clinics and judges who don't attend a clinic will be removed from the assignment list. Professional NSA & FIS staff will be involved in deciding assignments for 2008-09. The 2008-09 judging assignment working group will be Joe Fitzgerald (FIS), Polly Jo Clark (USA) and Remi Sella (FRA).

4.2.6 www.fot.ch web site

ITEM 4.3

Organizing Officials – Joe Fitzgerald FIS / Bruce Robinson, CAN

4.3.1 Development of Standard Job Descriptions (SJD)

Position: Chief of Sound

Job Description:

The Chief of Sound is responsible for the smooth production of the audio program for the event. This includes the delivery, setup and operation of the sound system and coordinating with the announcer.

Responsibilities:

- Coordinates the operations of sound technicians.
- See responsibilities for sound technicians.

Reports To:

- Chief of Course

Supervises:

- Sound Technician
- Tape Operator
- Sound Runner

Rule Book:

- 3041.4

4.3.2 Course Preparation Crews

Position: Course Preparation Crew

Job Description:

Each crew member is responsible for carrying out the tasks assigned to them by the Chief of course. This shall involve setup and teardown of the course, surface preparation and grooming, and general labor as required.

Responsibilities:

- The diligent and timely carrying out of all assigned tasks.
- Tasks will likely include:
 - Course construction work (especially aerals).
 - Loading and unloading equipment on/off snow cats.
 - Fencing before and teardown after event.
 - Course maintenance particularly shovelling, salting when necessary, side slipping or stepping, chopping landing hills and aerial knoll.
 - Officials stand construction and teardown.
 - Fetching supplies as needed.
 - Assisting sound setup and teardown.
 - Crews should be mobile in their line of duty, skis or snow vehicle.
 - Report hazards or problems to Chief of Course.

Reports To:

- Chief of Course

Chief of Scoring:

Job Description:

The Chief of Scoring oversees all procedures and personnel involved in the scoring process. The Chief of Scoring insures that all tabulations and calculations are accurate and that official results are available promptly.

Responsibilities:

- Organize all scoring personnel.
- Supply all personnel with necessary equipment and forms.
- Check calculation equipment and review calculation procedures.
- Check timing equipment.
- Rehearse scoring procedures with all on-hill personnel.
- Send runner to Chief of Calculations with pacesetter time upon judges determination.
- Send runners with scores every ten (10) competitors.
- Keep pace of event on schedule.
- Inform Chief of Competition on all rule infractions or scoring errors necessitating a rerun or Jury ruling.
- Check scoring for accuracy regularly during event.
- Collect all equipment and unused forms from scoring personnel at the conclusion of the event. Deliver to registration area.
- Review calculations with Chief of Calculations immediately following event.
- (See Appendix for "start dialogue" procedure).

Reports To:

- Chief of Competition

Supervises:

- Chief of Timekeeping
 - Electronic Timing Operator
 - Hand Timing Operator
- Chief of Calculation
 - Calculator
 - Computer Operator
 - Score Runner
- Chief of Start
 - Assistant Starter
 - Knoll Flag Person
 - Pacesetters

Rule Book:

- 3020.1, 3020.2.3, 3033.5.2, 3045, 3060.2.3, 4004. (See subordinates lists)

4.3.3 Hand Timers

Position: Electronic Timing Operator

Job Description:

The electric timing operator has the responsibility of operating the electronic timing mechanism in order to record the elapsed time from start to finish of each competitor in the mogul competition. In addition to operating this device, he must also inform the recorder of each time to the 100th of a second.

Responsibilities:

- Must be completely familiar with operation of electronic timing mechanism.
- Test the operation of the electronic timing once it has been put into place by the Chief of Course Equipment.
- Must write all times for each competitor.
- Submit forms to runner.
- Be sure writing is clear and forms are protected from the weather.
- Record all times to the 100th of a second.

Reports To:

- Chief of Timing

Rule Book:

- 3020.2.3, 3041.1, 3042.3, 3043, 3044.1.3.

4.3.4 Chief of Timing

Position: Chief of Timing

Job Description:

The Chief of Timekeeping is responsible for the accurate tabulation of all on-hill scoring procedures other than judging. This pertains to the official timing of each competitor's run. The Chief of Timekeeping must also see that all records are delivered to the Chief of Calculation for scoring.

Responsibilities:

- At the officials meeting, coordinate all timing personnel.
- Distribute proper forms and equipment.
- Test run the timing procedures with all personnel.
- Be sure that the electronic timing and backup are in sync.
- Inspect procedures and recordkeeping during and after the event.
- Report all infractions regarding timing to the Chief of Scoring.

Reports To:

- Chief of Scoring

Supervises:

- Electric Timing Operator
- Hand Timing Operator(s)
- Recorder
- Runner

Rule Book:

+

- 3020.2.3, 3041.2, 3042.3, 3042.

4.3.5 Judges Assistant

Judges Assistant:

Job Description:

The Judges Assistant is responsible for collecting judges score sheets, checking addition and scoring these sheets until collected by the Score Runner.

Responsibilities:

- Collect judges score sheets in order, judges 1-5, according to judges protocol.
- Check addition.
- Staple upper left corner.
- Store in waterproof bag.

- Give to Runner for delivery to Chief of Calculations.
- If more than ten (10) competitors' sheets are in storage, notify Chief of Scoring.
- Judges score sheets are only to be accessed by members of the Jury while being stored for score runner pickup.

Reports To: Chief of Calculations.

4.3.6 Chief of Start

Chief of Start

Job Description:

The Starter is responsible for warning signals and the start command for competitions. The Starter is also responsible for recording start information.

Responsibilities:

- Organizes starting personnel.
- Coordinates with scoring personnel.
- Gives start information to Chief of Scoring - bib #, name, jump number (aerials).
- Gives warning signal and start command to competitors:
- A competitor not in gate, inform Chief of Scoring for one minute role.
- Keep record of all competitors starting, include name and bib #. Give to runners for transport to Chief of Calculation.
- Check knoll flag person for clear prior to sending next competitor.

Supervises:

- Assistant Starter, Knoll Flag Person, Pacesetters.

Rule Book:

- 3020.2.3, 3042, 3043, 3056.3.

4.3.7 Starter and Assistant Starter

Assistant Starter

Job Description:

The Assistant Starter is responsible for calling competitors and informing the Starter of competitors not ready for their start. In addition, the Assistant Starter is responsible for checking the competitor's bibs, clothing and equipment for violations.

Responsibilities:

- Call out competitor's bib # ten (10) minutes prior to run.
- Inform Starter of competitors not present.
- Check bibs, clothing and equipment for rule infractions.
- Organize forerunners and pacesetters in proper order.
- Inform competitors of official course information:
 - Course conditions (aerials)
 - Course closed
 - Side slip required.

Reports To:

- Chief of Start

Rule Book:

- 3020.2.5, 3042.2, 211.

Position: Announcer

Job Description:

The Announcer is responsible for providing informational, biographical, scoring or safety announcements over the sound systems to spectators, officials or competitors.

Responsibilities:

- Obtain as much pertinent information as possible and announce.
- Project a professional, well organized, safe image of freestyle skiing.
- Provide information on:
 - Scores
 - Placing for event
 - Competitor's names, bib # and ski area
 - Competitors bio (after run)
 - Information on freestyle in general
 - Upcoming events
 - Training programs
 - Officials at event
 - Sponsors listing
 - Judges at event
- Do not announce during runs.

Reports To:

- Chief of Communications

Supervises:

- Communications Runner

Rule Book:

- 3012

Position: Chief Steward

Job Description:

The responsibility of the Chief Steward is to assess the course areas in regards to crowd control, skier traffic and competitor and ski patrol accessibility. The Chief Steward then develops a plan of control and assigns stewards to critical areas.

Responsibilities:

- Pay particular attention to any safety related situation and start and finish area.
- It is important that the officials/judges area be cleared of everyone except required officials.
- Be aware of spectator traffic patterns. Keeps traffic moving.
- Clear access ways for competitors, officials, official vehicles and ski patrol.
- Keep VIP and press areas clear of spectators.

Reports To:

- Chief of Competition

Rule Book:

- 3020.2.5, 3066.

Position: Course Steward

Job Description:

The Course Steward is responsible for crowd control on all parts of the course. It is their responsibility to assure the safety of the spectators and the competitors, also to keep unauthorized personnel out of the officials area as well as the start and finish areas.

Responsibilities:

- Meet with Chief Steward, get assigned position.
- Report to assigned position.
- Courteously control area assigned.
- Crowd control for ski patrol activities.
- Note start, finish and officials areas of prime importance.

Reports To:

- Chief of Security

Rule Book:

- 3020.2.5, 3066

ITEM 5

Rules

ITEM 5.1

ICR International Competition Rules – Joe Fitzgerald FIS

See Freestyle Committee Comments

ICR is being reprinted for 2008-09. A provisional ICR was provided to the R&O for its information. The ICR can now be printed and bound at the FIS offices and it will be uploaded to the FIS Wiki as well.

5.1.1 Publication and Printing of ICR

See Freestyle Comments

5.1.2 Course Specifications Developments

See Comments from Spring 2008

ITEM 5.2

Performance Evaluation

5.2.1 'Picking the Winner' verses 'Performance Evaluation' Implementation

This was not discussed at the R&O Meeting.

ITEM 5.3

Performance Measurements

5.3.1 Doppler Vector Radar Systems

A report will be presented

5.3.2 Global Positioning Systems (GPS) and Geographic Information Systems (GIS) Data Collection and Freestyle Skiing

Joe Fitzgerald provided a brief report on the use of different technology to enhance the Freestyle FIS World Cup TV production and this information may be useful for future research.

ITEM 5.4

Course Specifications and Equipment

5.4.1 HalfPipe Course Specifications; Snowboard - Freestyle

Definitions of the HalfPipe need to be adopted from the Snowboard Discipline.

ITEM 6

Event Working Groups

ITEM 6.1

Mogul / Dual Moguls – Remi Sella, FRA

A report was resented at the meeting

6.1.1 Course Specifications – new drawings update

A report was presented at the meeting.

Dynamics of Freestyle Skiing –Equipment Development and Implications for Injury Prevention Strategies

Abstract of research proposal (PhD)

PhD Student: ¹Nico Kurpiers – Supervisor: ¹Dr. S. Walt, ² Dr. U. Kersting, ³ Dr. H. Boehm

¹Department of Sport and Exercise Science – The University of Auckland/ New Zealand

²Center for Sensory-Motor Interaction, Aalborg University, Denmark ³Department Sport Equipment and Materials, Technical University Munich, Germany

Summary of research concept

With freestyle skiing disciplines, namely *moguls* and *aerials*, now permanent components of Olympic Winter Games, increased interest by recreational skiers in snow sports has been noticed. In addition to requiring diverse technical skills beyond those involved in traditional alpine skiing, it is likely these disciplines produce different loading patterns. It has been noted that the knee, specifically **the anterior cruciate ligament (ACL), is involved in the majority of freestyle skiing injuries**. There is also a trend towards incorporating challenging movements and tricks such as ‘inverted aerials’ previously observed in snowboarding. These new manoeuvres leave participants vulnerable to injuries that may be avoidable with a greater understanding of biomechanical parameters in equipment design.

No quantitative research has been published on the mechanics of freestyle skiing. Being an outdoor sporting activity there are major technical challenges involved, therefore the development of a suitable methodology for data collection is required. The proposed study aims to use a systematic analysis of loading conditions in freestyle specific movements with a purpose-built measurement device. This will enable the set up of a database of the mechanical principles and loading conditions in freestyle skiing. This methodology will be applied to collect data on high-level mogul skiing performance, and to **assess the effect of specific changes in ski boot equipment**. This technology includes the collection of ground reaction force data and motion analyses in order to allow for model calculations of knee joint loading experienced by the athletes.

It is hypothesized that **excessive strain beyond acceptable limits occurs in the knee joint during mogul skiing manoeuvres**, and is likely to cause serious injuries. Harmful body postures can be avoided through appropriate adjustment of equipment design, and thus lead to a more advantageous position of the body’s centre of mass. This PhD project will be developed in three subsequent phases: In Phase I the innovative methodology to measure ski-boot contact forces will be validated in terms of testing accuracy and the possible influence on the athletes’ performance. Phase II will entail the data collection in the ski field (baseline data and ski boot intervention data), and in Phase III we plan the calculation of knee joint and ligament loading by using a computer-based knee model. In Phase II and III the effect of changes in ski boot design on knee loading will be investigated and evaluated. Based on the resulting database we will be able to provide manufacturers with guidelines for equipment design, for example, the impact forces as relevant to boot flexibility and support. Ultimately, a drop in serious knee injuries through mogul skiing is desirable, since the major **goal of the project is ‘injury prevention’**.

Joe Fitzgerald encouraged the NSAs to support Nico Kurpiers’ PhD research.

6.1.2 Study of Mogul Turns

Dynamics of Freestyle Skiing – Equipment Development and Implications for Injury prevention Strategies

ITEM 6.2

Aerials / Mich Roth, SUI

A report was presented at the meeting;

Michel Roth (SUI) reported on the water competitions this summer:

- 3 water ramp competitions – Switzerland, Czech Republic, Canada.

Aerials WG agenda for 2008-09:

- 2 meetings during WC events
- Inrun Speed Study
- General overview of aerials discipline
- Water ramp facility study

6.2.1 Aerial Water Ramp Survey

I have had several requests for information and details about water ramps, from different interested parties that would like to develop these jumps in their nations.

Can you please send me some information if you have it on these ramps, so I can forward it along to these interested parties?

Key information to gather together;

Vertical drop of the ramp(s)
Length of the inrun(s)
Angle of the inrun(s)
Size of jump(s) height. Take off angle
Height off of the water
Size of pool
Depth of pool

Any photos, websites would be helpful also like www.jumpin.ch

6.2.2 Development of Study for Inrun Speeds

The Coaches are request to cooperate in a study of inrun speeds

Data Collection

Weight of competitor
Angle of slope
Length of inrun
Inrun speed
Snow temperate
Air temperature

ITEM 6.3

Ski Cross / Heli Herdt - GER

A report was presented at the meeting

6.3.1 Start Gates and Start Gate Homologation

Review of the applications.

Applications are in the process of being received and approved.

6.3.2 Procedure for Suit Measurements

Heli Herdt (GER) reported on creating procedures for measuring ski suits:

- Need to specifically identify the areas that measurements should be taken
- Need to define the “tool” that can be used to take measurements
- Need to provide drawings of examples how the measurements should be taken
- Where and when are the measurements taken

The Ski Cross working group will develop these methods prior to the start of the 2008-09 FIS World Cup season. Joe Fitzgerald noted that NSAs and their athletes must be prepared to have their suits measured at FIS World Cup competitions this year. Also there was a discussion about to make clear procedures for ski marking (max. 2 pairs/ competition day)

6.3.3 Gate Judges Development

Educational materials are in the process of being developed.

6.3.4 'Ski Cross Reaction Time'

Situation 1 Qualification Timing;

Impulse 1; the first timing impulse is of the gate opening as it passing thru the plane of the timing light, this starts the timing system for the run. Time of day is recorded.

Impulse 2; The second timing impulse: The body or part of that body pass thru the timing light. Time of day is recorded (Output '00:00:32' / formula Impulse 2 - Impulse 1 = Start Reaction Time / STT)

Impulse 3; The third timing impulse the 'short interval'; this timing light beam is 10 meters down the course as measured from the closed vertical gate (maybe it becomes 3 meters) Time of day is recorded (Output '00:01:49' / formula Impulse 3 - Impulse 1 = Reaction Time Total / RTT)

Impulse 4; The fourth timing impulse is at the finish (Output '00:01:07' / formula Impulse 4 - Impulse 1 = Total Running Time TRT)

Situation 2 Final Timing;

Impulse 1; the first timing impulse is of the gate opening as it passing thru the plane of the timing light, this starts the timing system for the heat. Time of day is recorded

Impulse 2; The second timing impulse; The body or part of that bodies pass thru the timing light. Time of day is recorded (Output '00:00:32' / formula Impulse 2 - Impulse 1 = Start Reaction Time / STT)

Impulse 3; The third timing impulse the 'short interval'; this timing light beam is 10 meters down the course as measured from the closed vertical gate (maybe it becomes 3 meters) Time of day is recorded (Output '00:01:49' / formula Impulse 3 - Impulse 1 = Reaction Time Total / RTT)

ITEM 6.4

HalfPipe / Ola Sundequist SWE

R&O reviewed the HP WG proposals approved in the Spring at Cape Town. Rule change format for FC will be prepared.

6.4.1 Halfpipe Course Criteria

ITEM 6.5

Judges Stands / Timing and Results Buildings

A standard layout needs to be defined.

ITEM 6.6

Course Homologations / Henri Rohner SUI

A report was presented.

6.6.1 Application

The homologation for Hakuba Sanosaka Ski Resort, Japan was approved.

6.6.2 Review and Approvals

ITEM 7

Result and Scoring

This was not discussed.

ITEM 7.1

Result Reports

7.1.1 Development of a Summary of Standard Result Outputs (SRO)

This was not discussed.

ITEM 7.2

Scoring Booklet Development

This item was not discussed

ITEM 7.3

Software and Data Transfer

This item was not discussed

ITEM 8

wiki.fissski.com – FIS Wiki, Freestyle Digital Information

Joe Fitzgerald presented the working currently being completed on the FIS Wiki Freestyle pages. Plans are to make use of the wikipedia technology to make all rules, official job description, judges rules, clinic content, etc. available on-line. This is an ongoing long-term project.

ITEM 8.1

Freestyle Knowledge and Information Development

This topic was presented by the Freestyle Coordinator. He demonstrated some of the developments so far.

ITEM 8.2

Reading and Writing to the Wiki

See wiki.fissski.com Freestyle Section

ITEM 8.3

Access and Passwords

Some consideration is being given to allow certain persons passwords so they load material onto this site.

ITEM 9

Location and Dates of next meeting

Dubrovnik (CRO), May 20th – 24th, 2009

ITEM 10

Closing Remarks

Marko Mustonen (FIN) concluded the meeting by highlighting the work in the next months leading up to the Spring 2009 meetings for the R&O.

He noted the Freestyle Committee had referred several items to the R&O for its review:

- Improved process for assigning Major officials & submission of nominations by NSAs
- How Rules are written and presented to FC
- DNS, DNF, RNS, DSQ definitions
- Material gathering for judging clinics and for ski cross

The R&O discussed a process for R&O proposals to be written in the proper ICR rule format for consideration by the Freestyle Committee. Iain Mackay (GBR) and Bruce Robinson (CAN) will coordinate the drafting of rules.