

**INTERNATIONAL SKI FEDERATION**

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**FOR MORE INFORMATION**

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FOR IMMEDIATE RELEASE

**FIS MEDIA INFO****Dainese D-air® Ski Project tests of deployment algorithm and new bag begin**

*Fine-tuning work on the D-air® Ski system in view of the Sochi 2014 Games*

Data collection activities to define the deployment algorithm which began last season continue at full speed. So far Dainese have monitored 160 runs under different conditions and with different skiers. This has created a data bank with enough information to define the first "release" of the deployment algorithm which is the "intelligence" the system needs to recognise the conditions surrounding a fall and to activate the air bag.

This is an absolutely vital stage of the project as the algorithm must be able to distinguish correctly between a normal race situation and a fall. Engineer Alessandro Bellati, Technical manager of the D-air Ski project says: "It has not been easy to define the algorithm deployment strategy. After studying the data collected from inertial platform sensors and from comparing this data with video images of the actual runs, it has become abundantly clear that the line between normal race behaviour and a fall is, in many cases, very thin. Only very careful analysis of this data has allowed us to define the algorithm which we have now applied to the software of the platforms given to skiers. The platforms now have a warning system that can detect the possible emission of a deployment signal. During this early stage we have opted for a "safe" calibration setting which launches deployment only when it is reasonably sure that the skier has in fact fallen".

Different series of tests is under way as regards the "air" side of things (gas generators and bags) which has had consistent modifications made to it. The bag has been enlarged to cover the chest but lightened at the back where a back protector is already in position. There are also new solutions regarding gas generators and the route taken by the gas when the bag deploys. The overall weight of the system has also been reduced. In addition to that, the focus is now on ergonomic tests that are being carried out with the skiers involved in the project. These same skiers will be called on to test and approve the various steps of the development process.

The support of the International Ski Federation (FIS) and the cooperation and expert feedback from World Cup teams and skiers has been absolutely essential in this stage of development. The use of back protectors carrying inertial platforms has been authorised from the start of this season not just during heats but also during races. This will help enormously by increasing even further the data base now in use for calibrating the algorithm. This is further confirmation of the seriousness with which both FIS and the whole skiing world treat skier safety, to which aim Dainese are employing the most advanced protection technology available.

For further information on the project please see PR on project launch in January 2012:

<http://www.fis-ski.com/uk/news/pressreleases/press-release-2012/dainese.html>

## ATHLETES CURRENTLY INVOLVED



W. HEEL

E. GUAY

C. INNERHOFER

J. HUDEC

M. MARSAGLIA

J. KUCHERA

P. PANGRAZI

M. OSBORNE PARADIS

H. PATSCHEIDER

B. THOMSEN

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### About FIS

FIS is the governing body for international skiing and snowboarding, founded in 1924 during the first Olympic Games in Chamonix, France. Recognized by the International Olympic Committee (IOC), FIS manages the Olympic disciplines of Alpine Skiing, Cross-Country Skiing, Ski Jumping, Nordic Combined, Freestyle Skiing and Snowboarding, including setting the international competition rules. Through its 115 member nations, more than 6'500 FIS ski and snowboard competitions are staged annually. Specific initiatives are undertaken by FIS to promote snow activities as a healthy leisure recreation, notably for the young.

For more information, please visit [www.fis-ski.com](http://www.fis-ski.com).

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