

Progress Report: The Redesign of a Ski Plate to Reduce Knee Injuries

Reporting Period

Week 1: Thursday, January 24th through Wednesday, January 30th, 2001

Problem Statement

Over the past two decades, a number of advances in ski equipment technology have led to a significant decrease in the incidence of ski-related ankle and foot injuries.

Unfortunately, a number of these same advances have led to an increase in the incidence of knee injuries.

The current design project seeks to redesign one of the components of the ski binding, the ski plate, in a manner that should lead to a reduction in ski-related knee injuries. This may be accomplished by designing a ski plate system that allows some degree of rotation, thereby transferring torque that would normally be placed on the knee to the ski plate.

Restatement of Team Goals

Not available, as this is the first week

Summary of Accomplishments

Spoke w/ advisor about project and direction

Spoke w/ client about project and direction

Met w/ team to get up to speed on progress and talk about what needs to be done

Established general area of focus for individual team members

Spoke w/ professor fr. Business School about other aspects of the project

Entered in Schoofs Competition

Statement of Team Goals

Work out more details of design

Start quantifying more knee mechanics

Make a more functional prototype (hopefully w/ Tong Grant, to be used in competitions, and then can start using for testing, etc.)

Contact appropriate people to speak about patents

Project Schedule

To be provided in next progress report

Difficulties

None yet this semester