Finn Carlsvi
Heads-up Display for Wingsuits
WING SUITS

**Rex – The Human Glider**

- Concept existed since the beginning of parachuting
- Larger surface area slows descent rate
- Fabric made of sailcloth

1934
WINGSUITS

Modern wingsuit flying

• Began mid-1990s
• Wings inflate using ram-air
• Made of parapack nylon
• Glide ratio up to 4:1
  Still a descent rate of 20+ m/s!
Wingsuit glide ratios are matching parachutes.

Can barely flare.

~160km/h Ground speeds

A runway of boxes

Gary Connery
PROGRESS MUST BE MADE

Basic GA Instrumentation

1. Airspeed Indicator
2. Artificial Horizon
3. Altimeter
4. Turn and Bank Indicator
5. Directional Gyro
6. Vertical Speed Indicator
CURRENT INSTRUMENTATION

FlySight

- Logs GPS data only
- Provides ground speed

- Can track flight on Google Earth
A SOLUTION

Pitot Static (Airspeed)

Camera

GPS

Display

Connection to Flight Computer
SYSTEM SETUP

Camera ➔ OSD ➔ Eye Display

Flight

Pitot Static (Airspeed)
Body Tracking

- Sensors that track body position
- Relays data on wingsuit performance
TESTING

Mostly successful

• GPS Lock takes too long
• Must integrate a video recorder

First test flight
http://www.youtube.com/watch?v=R8fDVLQ-bTs

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