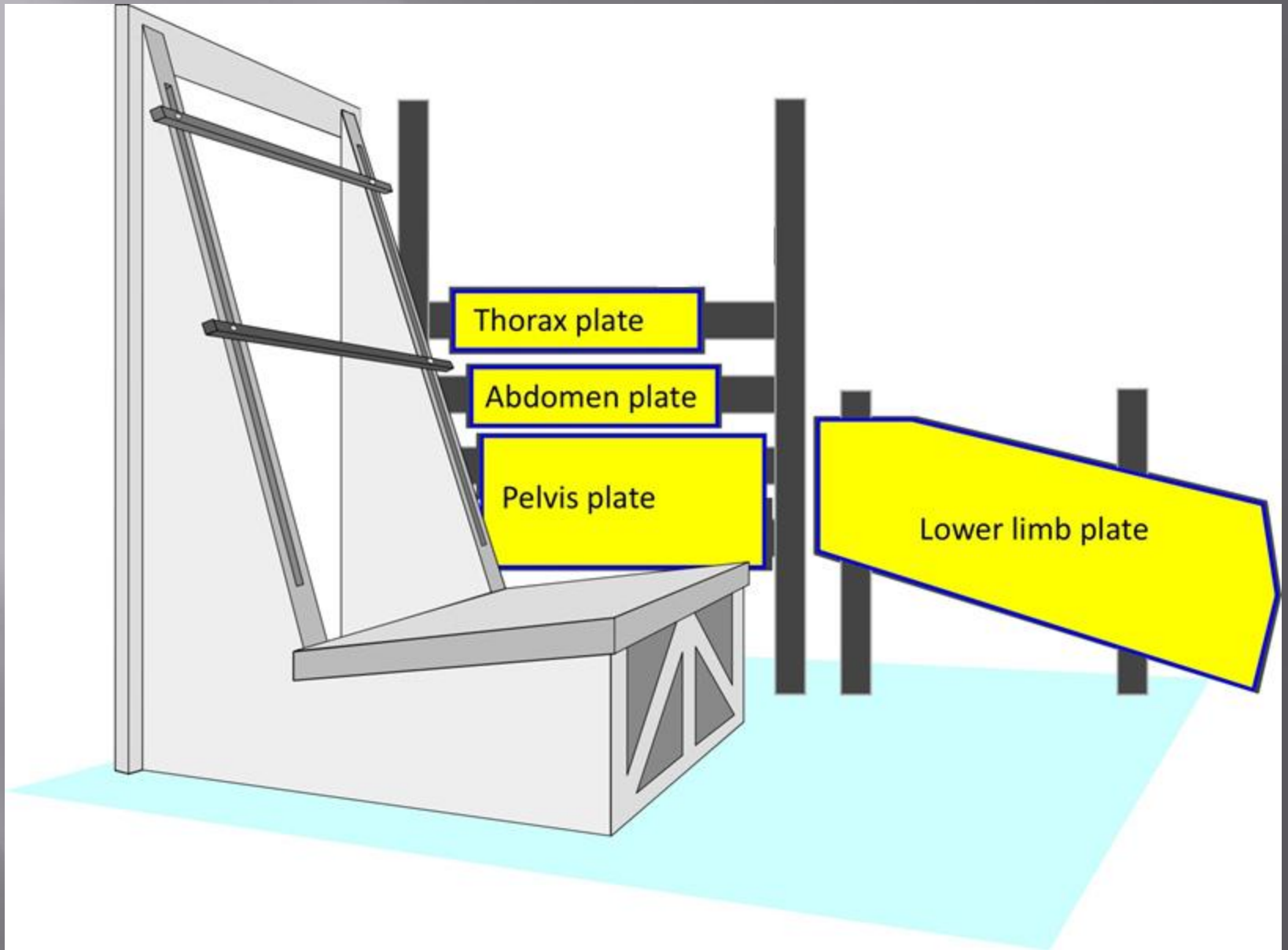


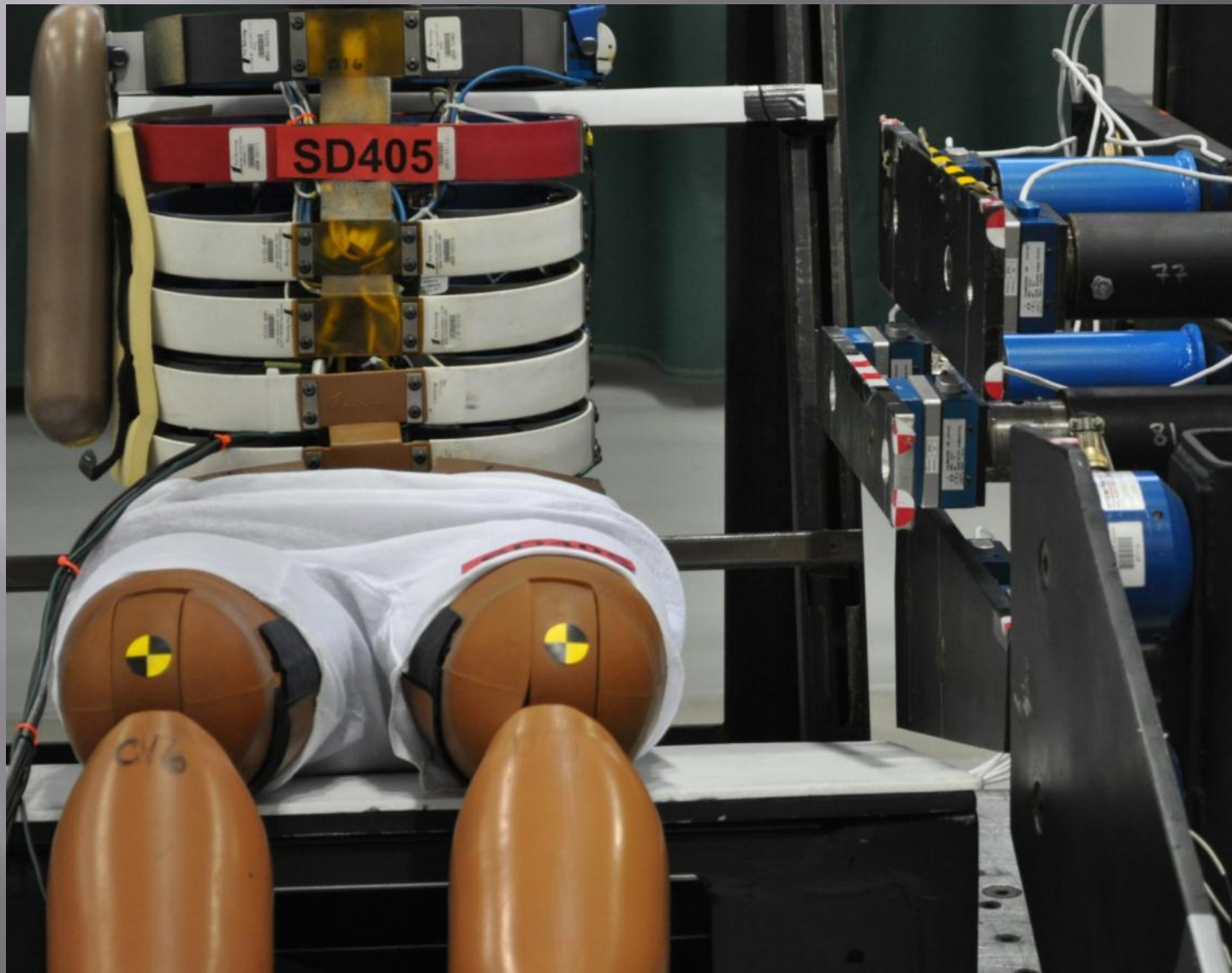
WORLD SID ABDOMEN TESTS

MCW & VRTC

20 Sep 2012



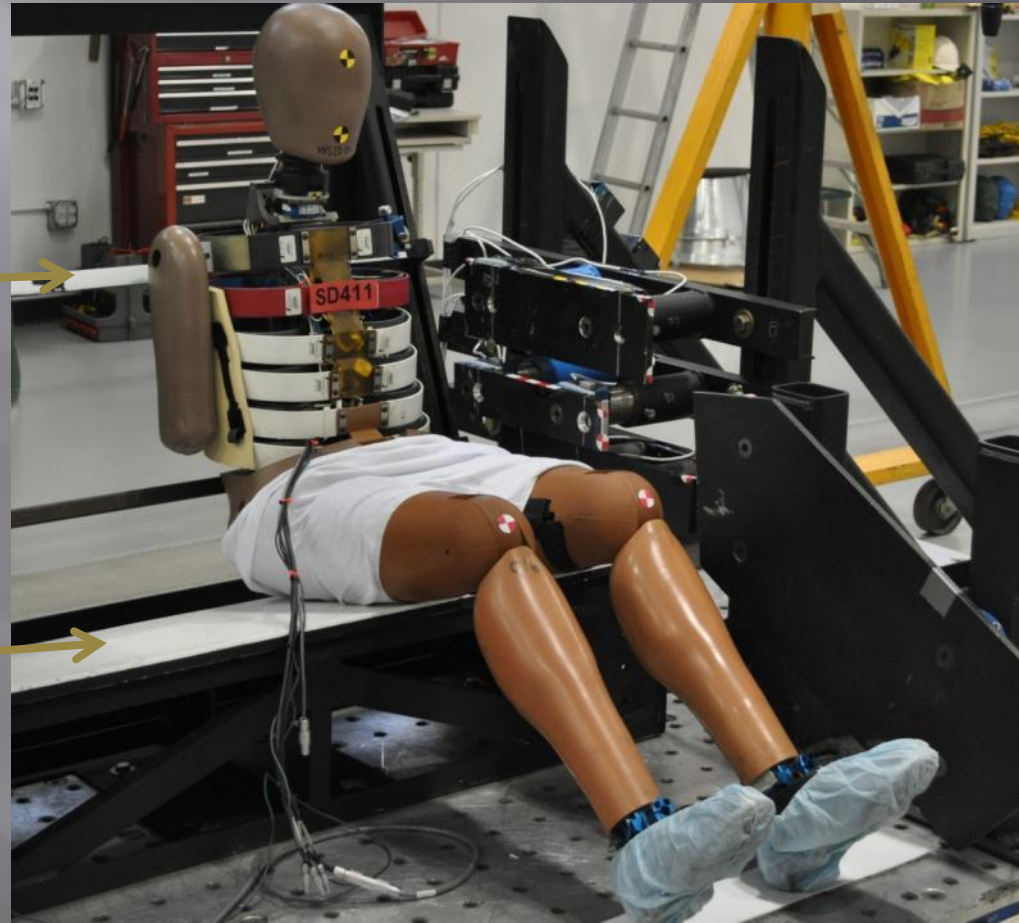
2" Abdomen offset



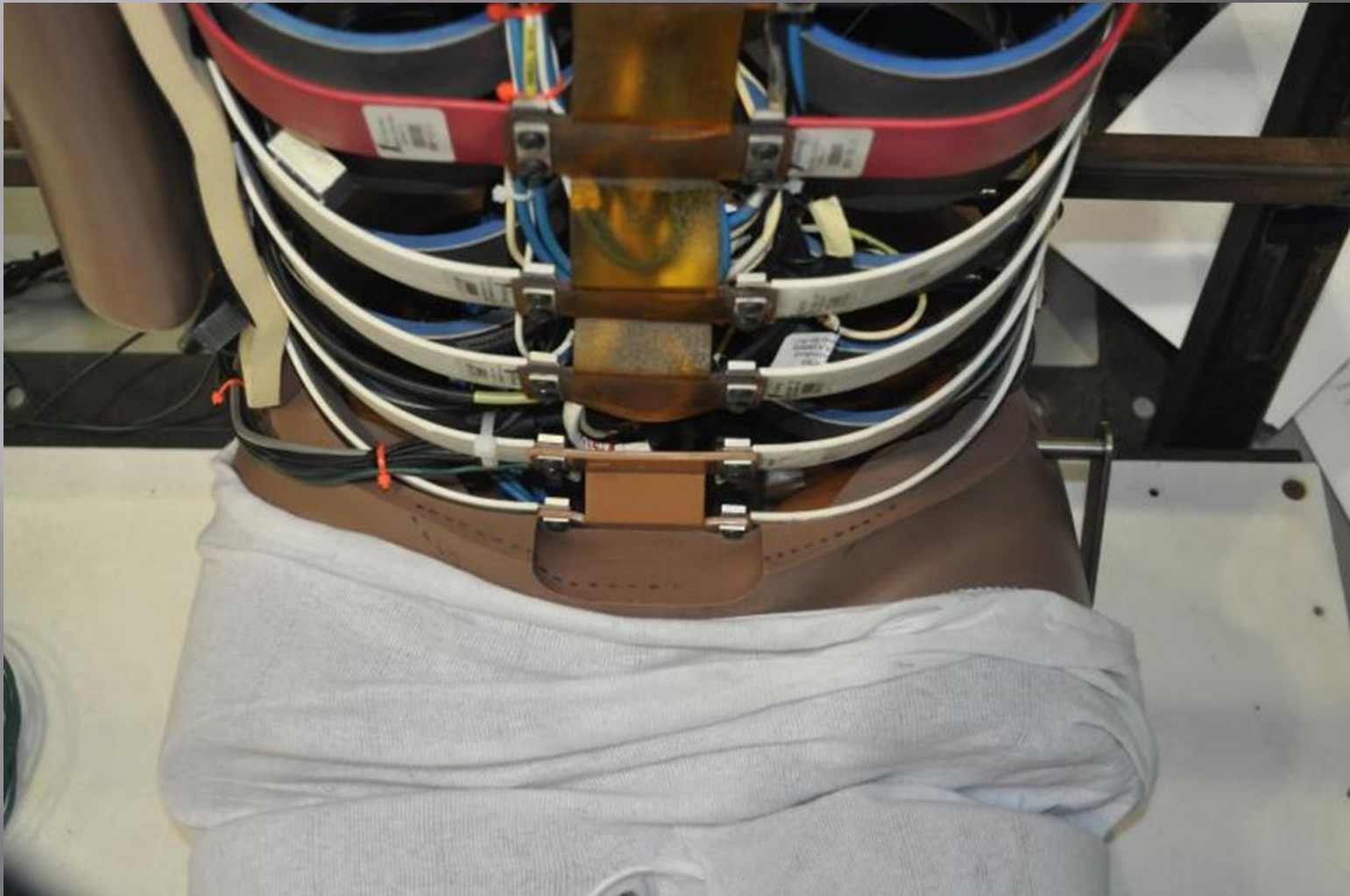
Seating configuration-Upright

18 Degrees

13 Degrees



Seating configuration-Upright

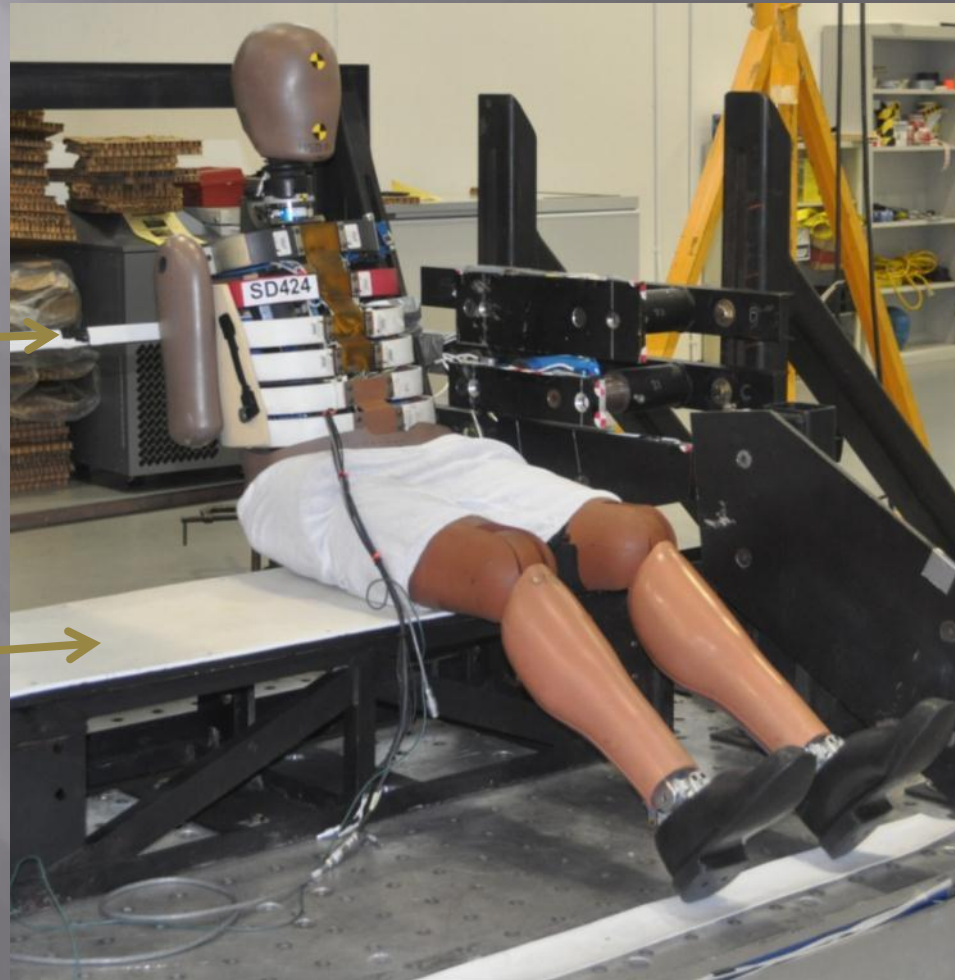


Seating configuration–Reclined

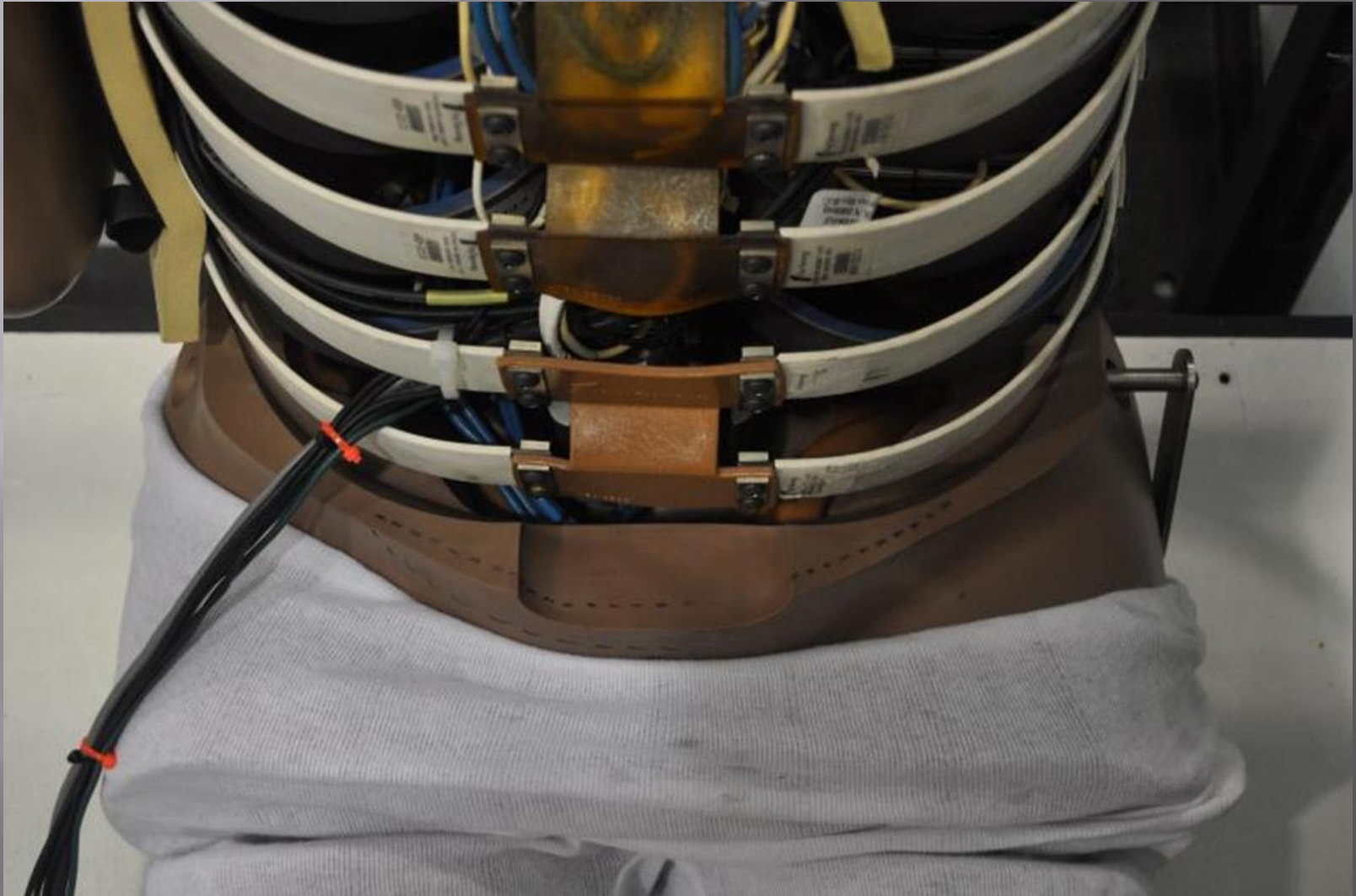
23 Degrees



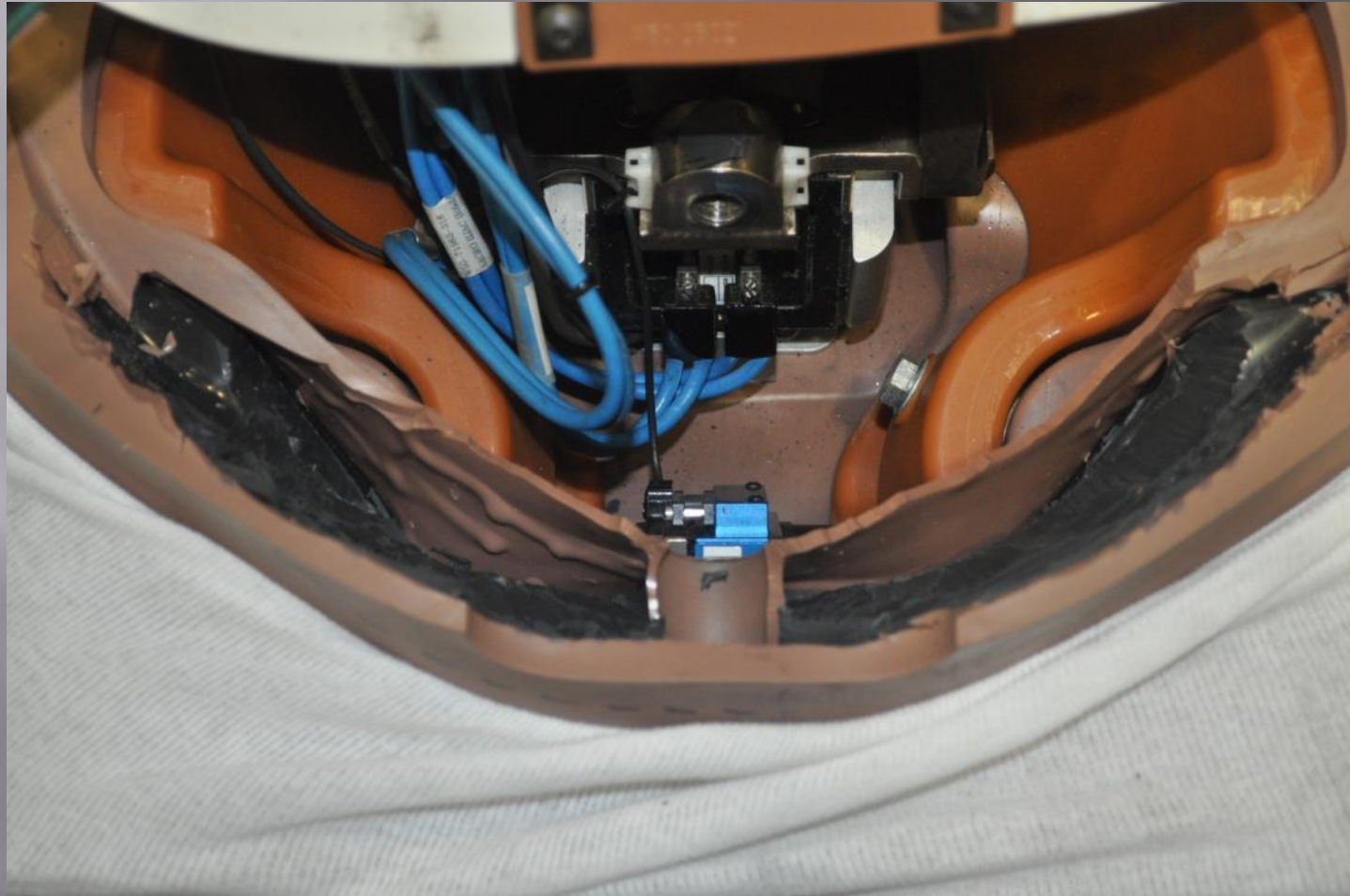
0 Degrees



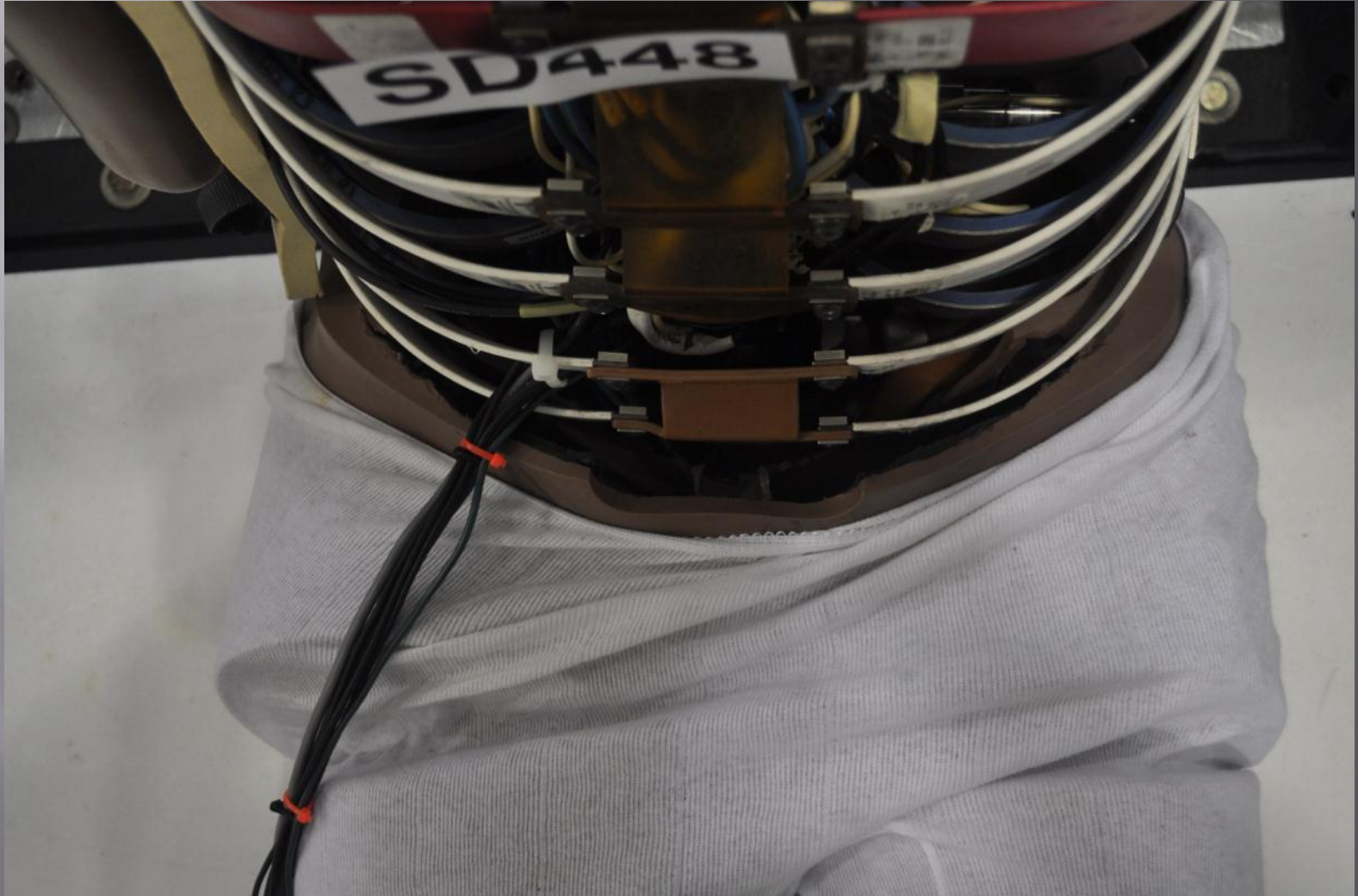
Seating configuration-Reclined



Pelvis configuration- Modified



Modified Pelvis Upright

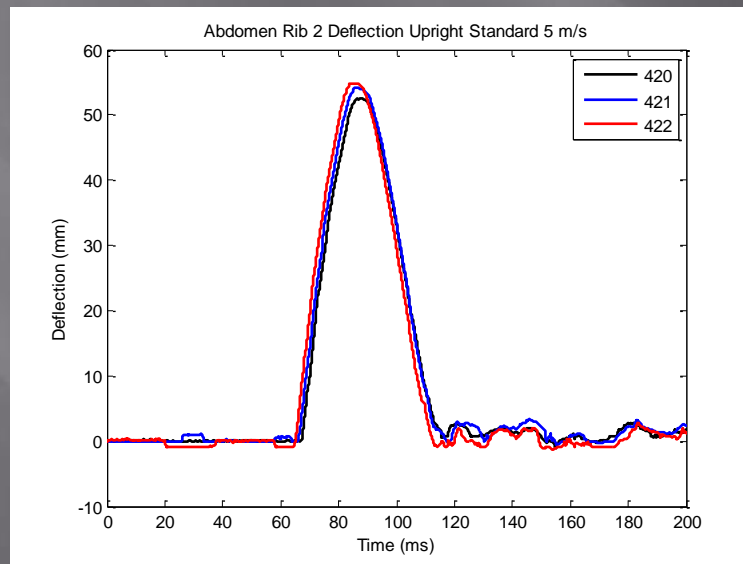
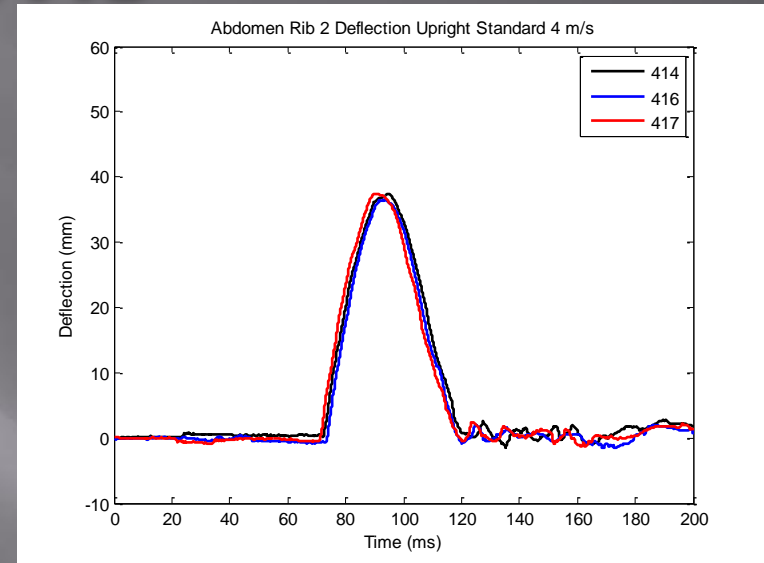
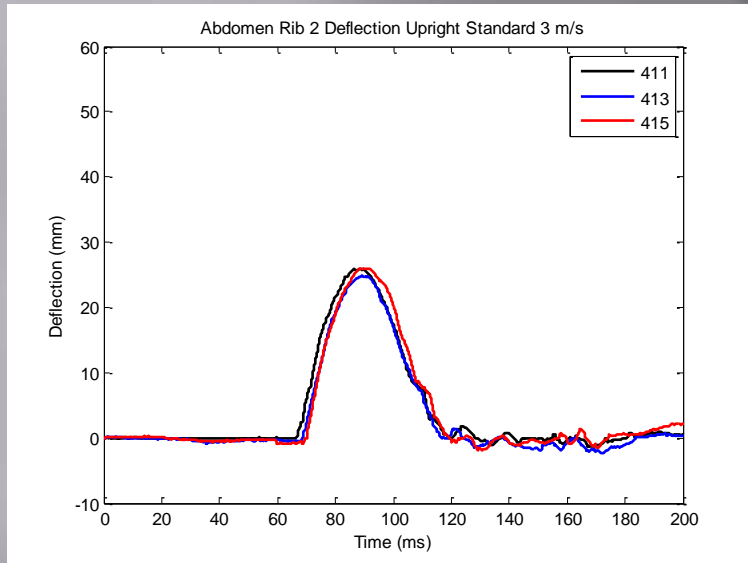


Test Matrix

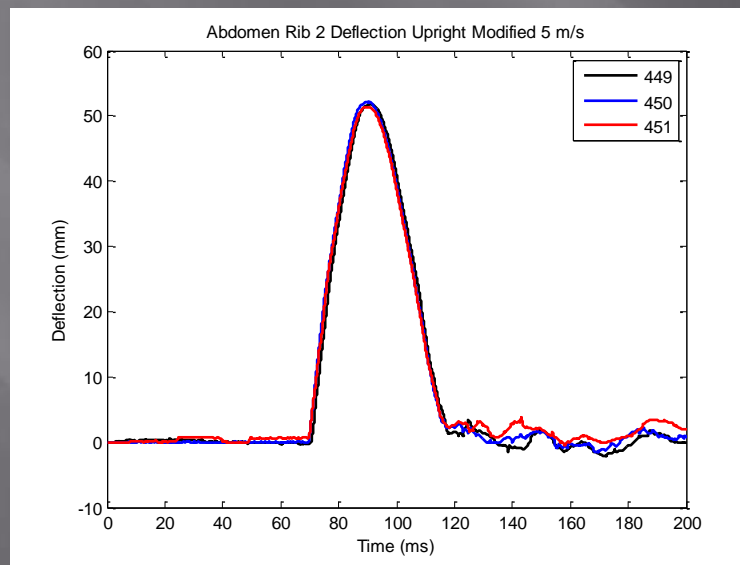
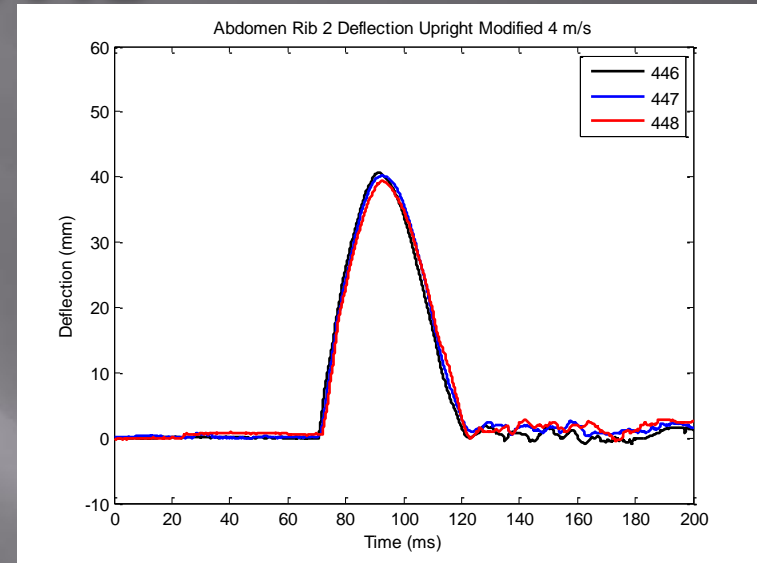
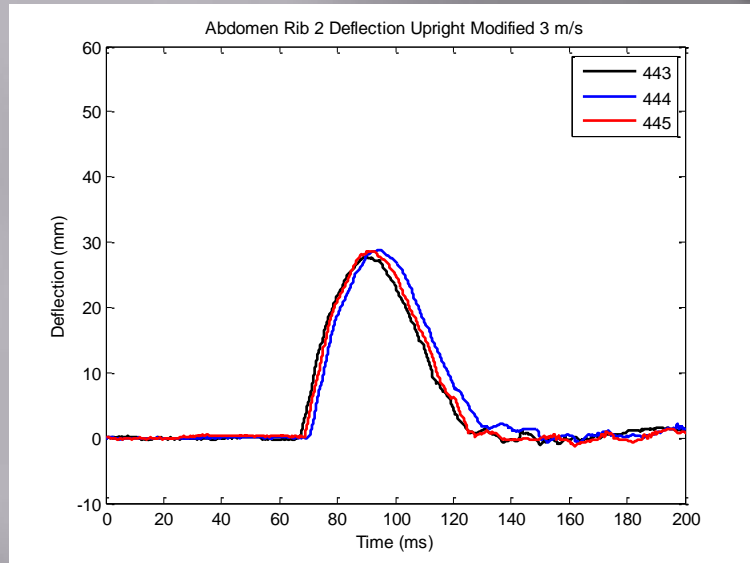
Velocity	Upright		Reclined	
	Normal Pelvis	Modified Pelvis	Normal Pelvis	Modified Pelvis
3 m/s	3	3	3	3
4 m/s	3	3	3	3
5 m/s	3	3	3	3

= 36 Tests

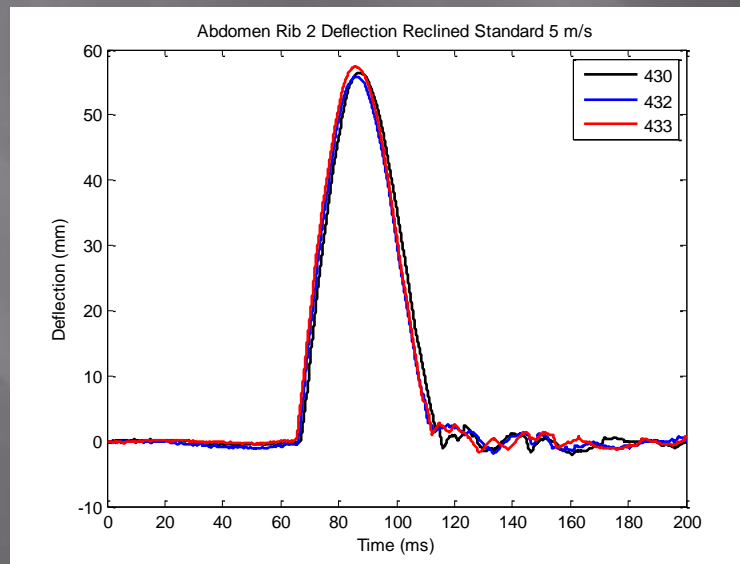
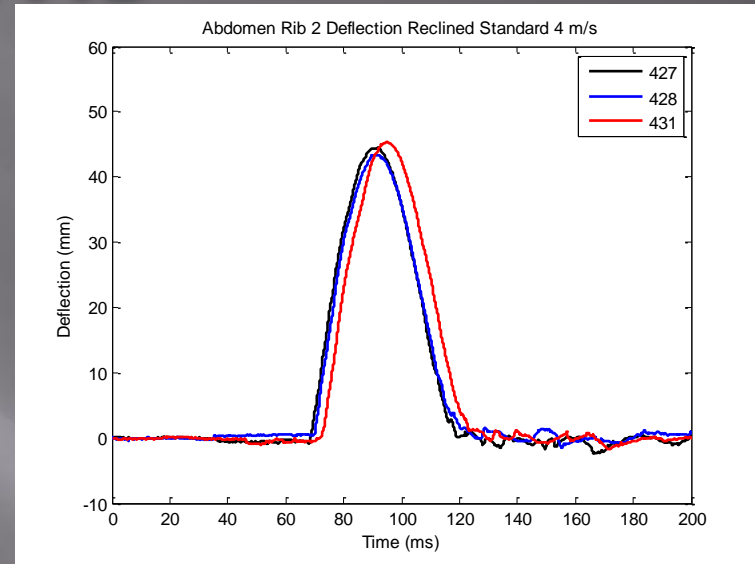
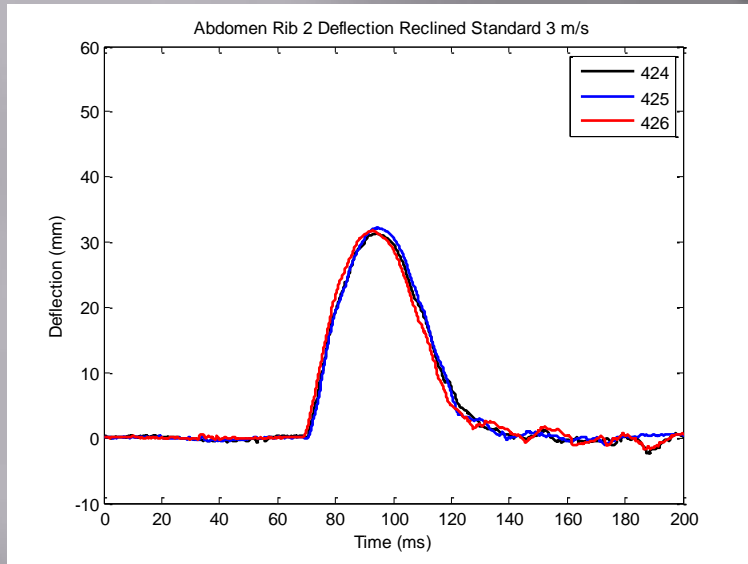
Upright Position Standard Pelvis



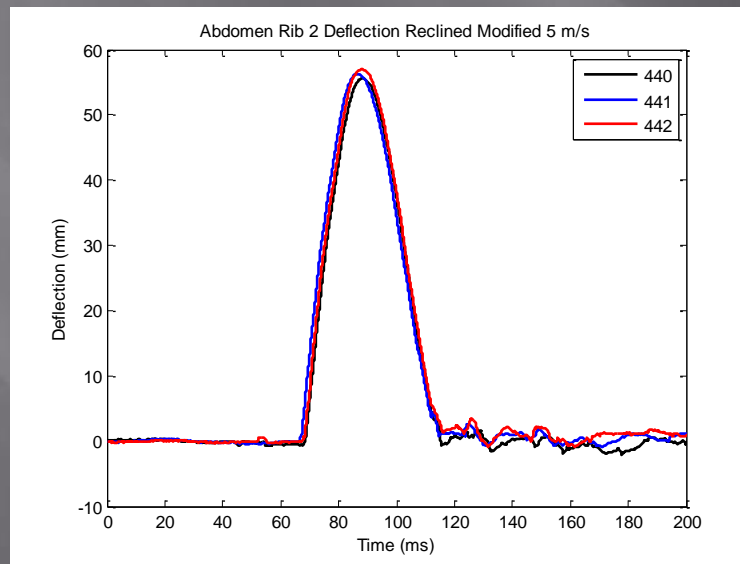
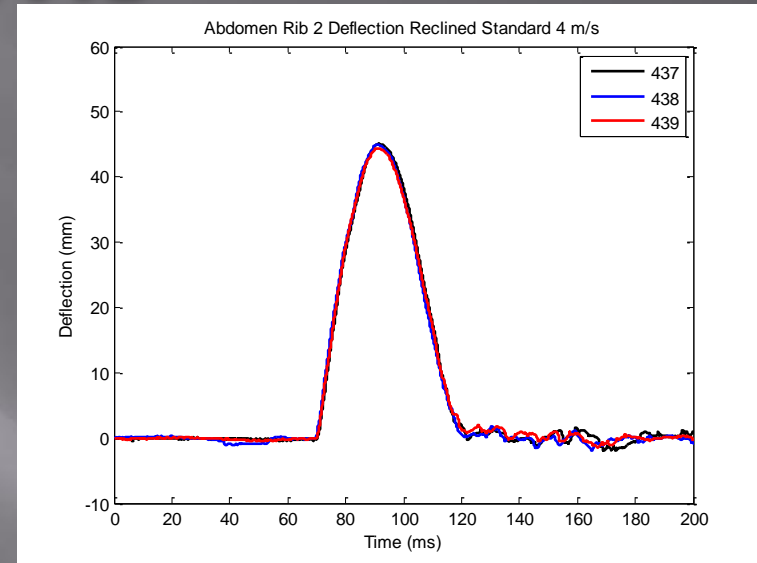
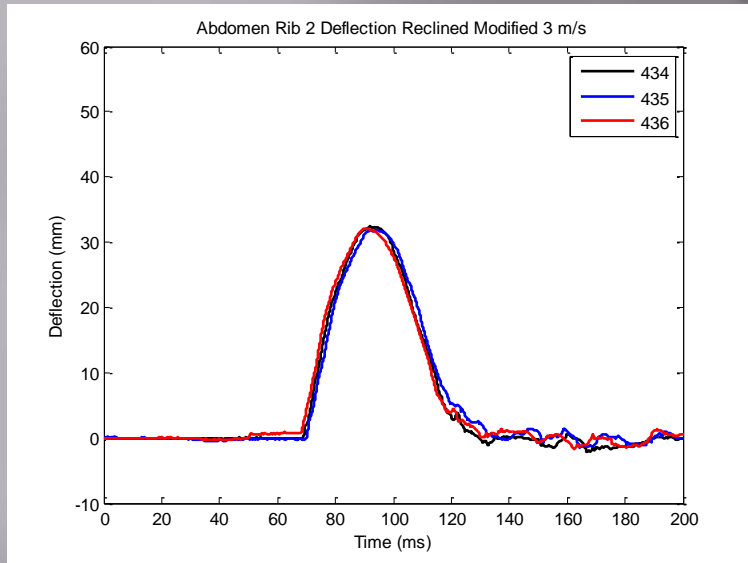
Upright Position Modified Pelvis



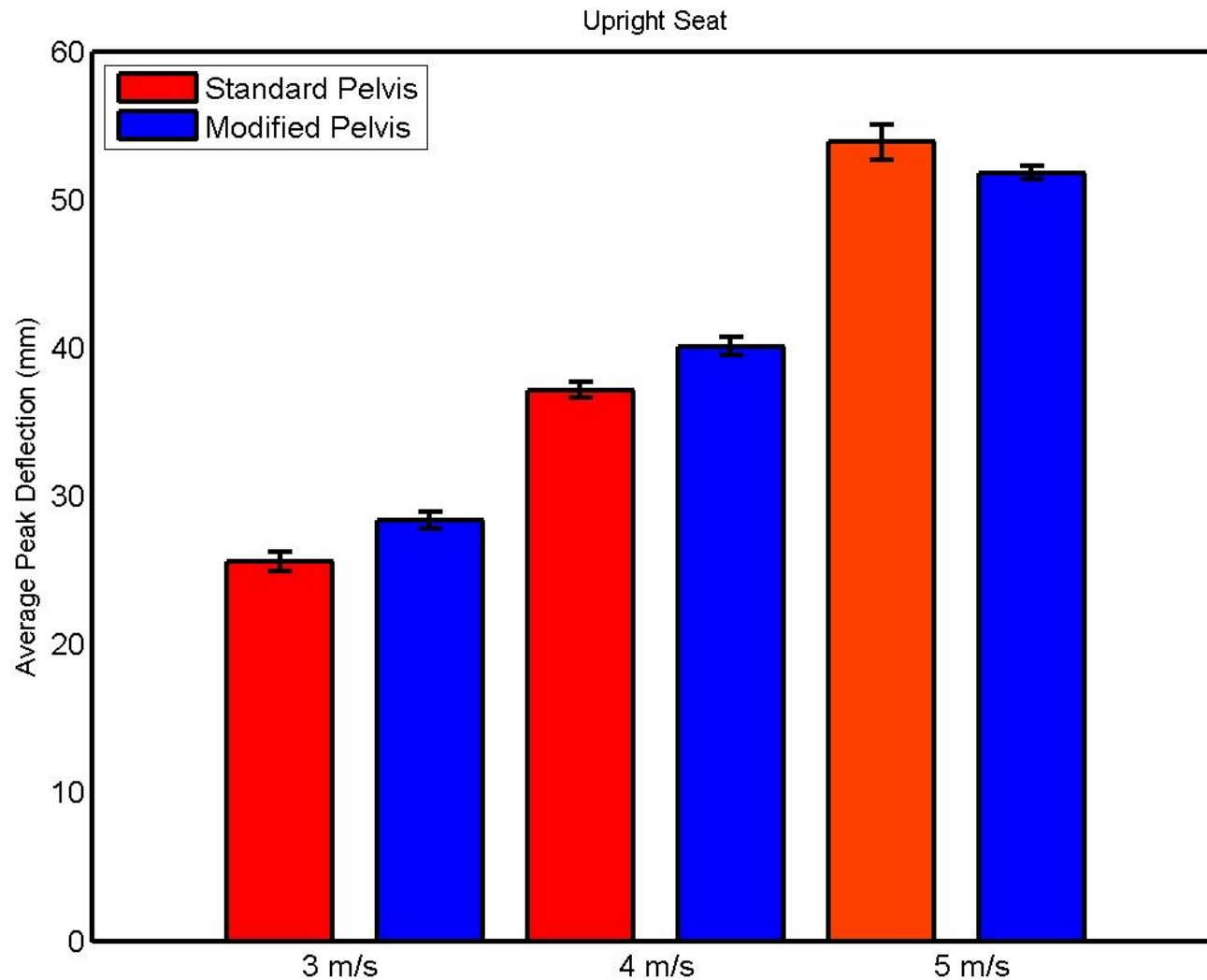
Reclined Position Standard Pelvis



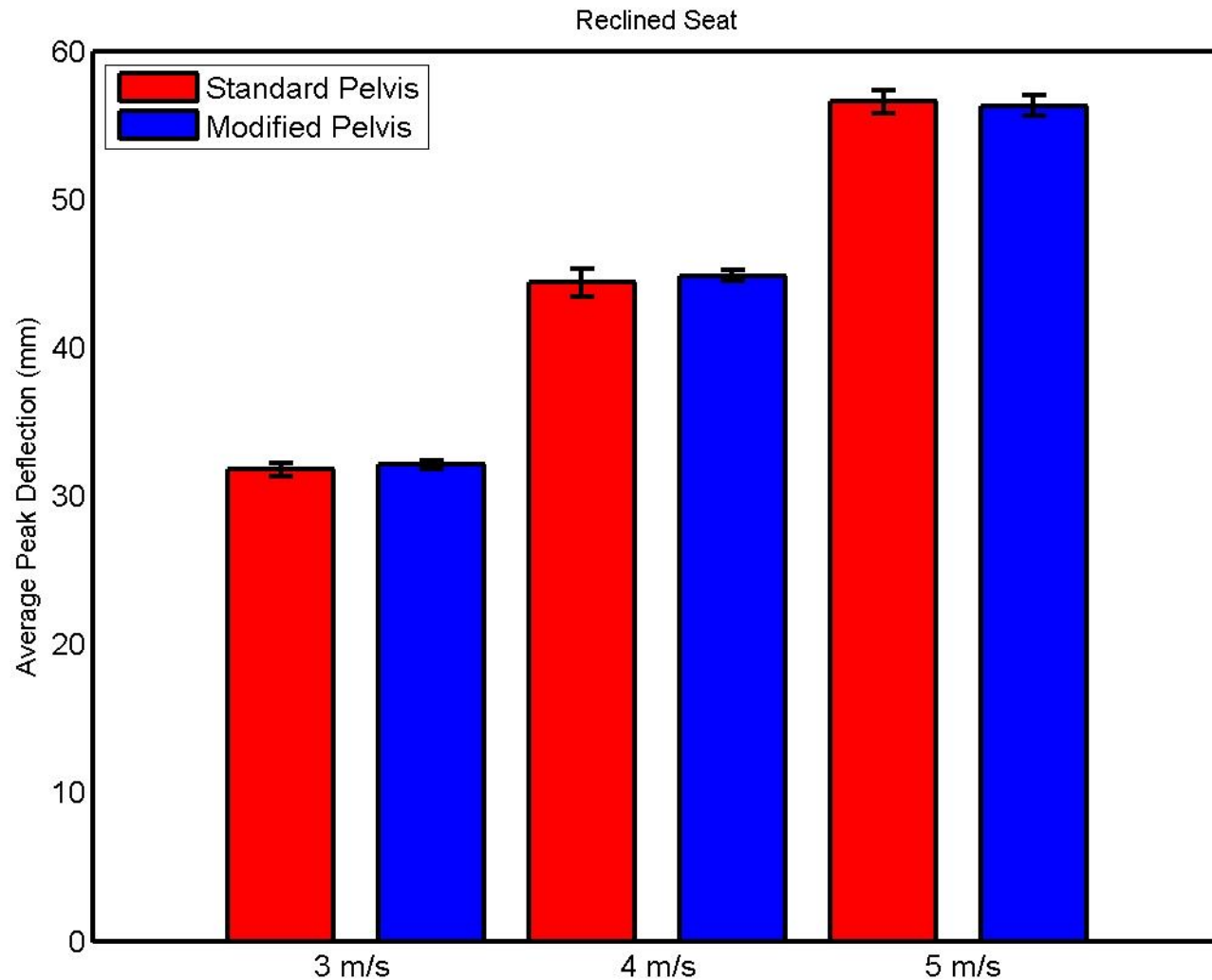
Reclined Position Modified Pelvis



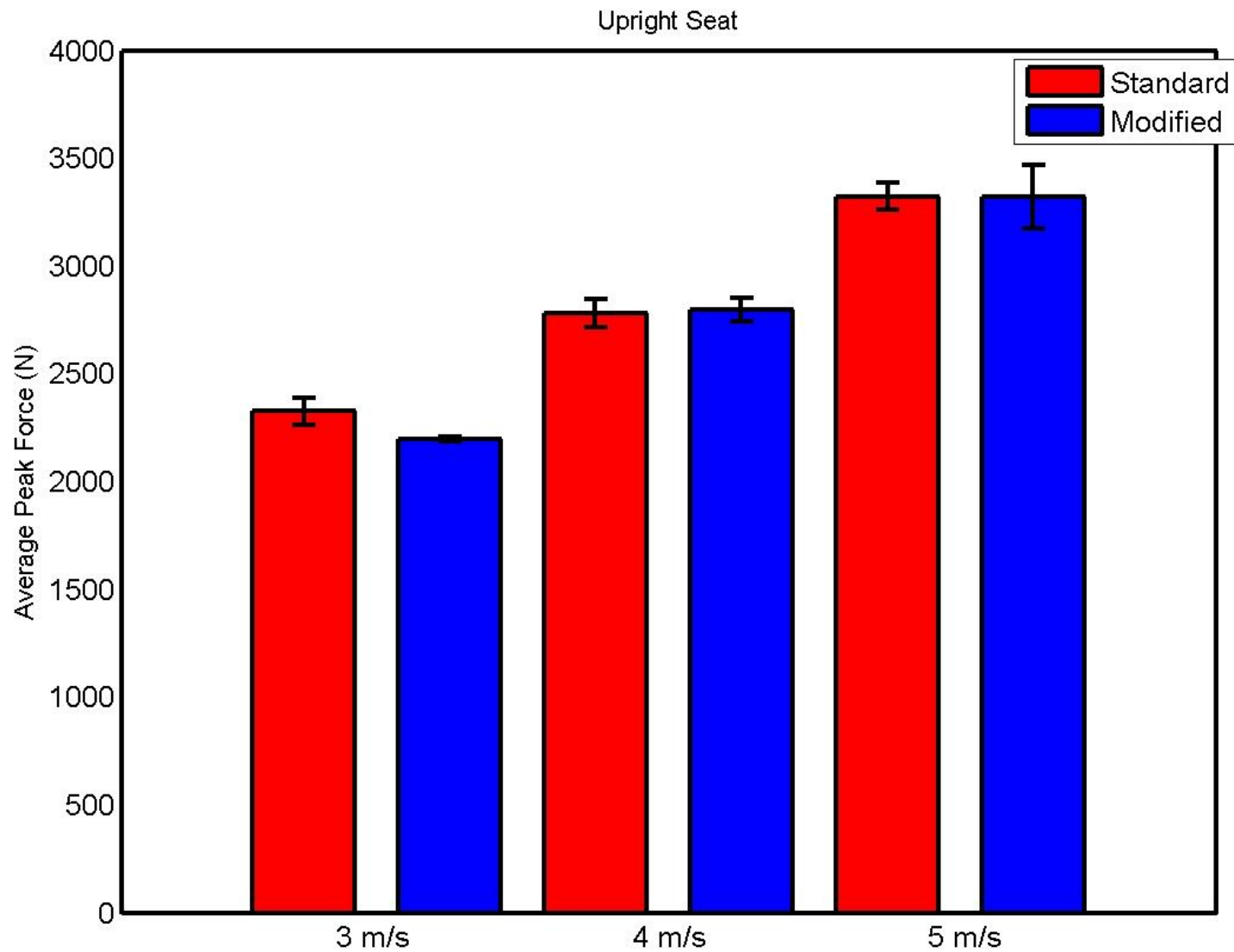
Upright Seated Position



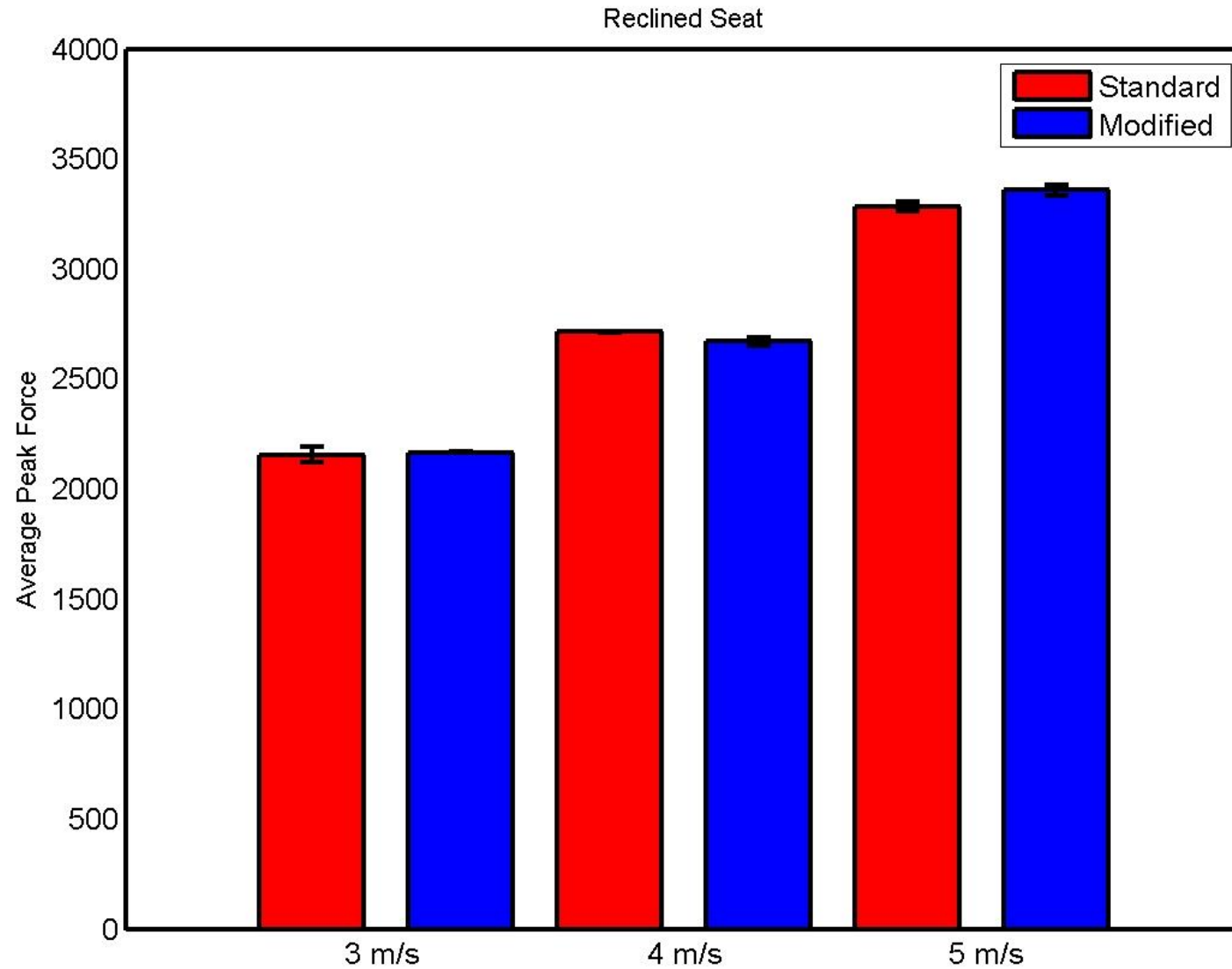
Reclined Seated Position



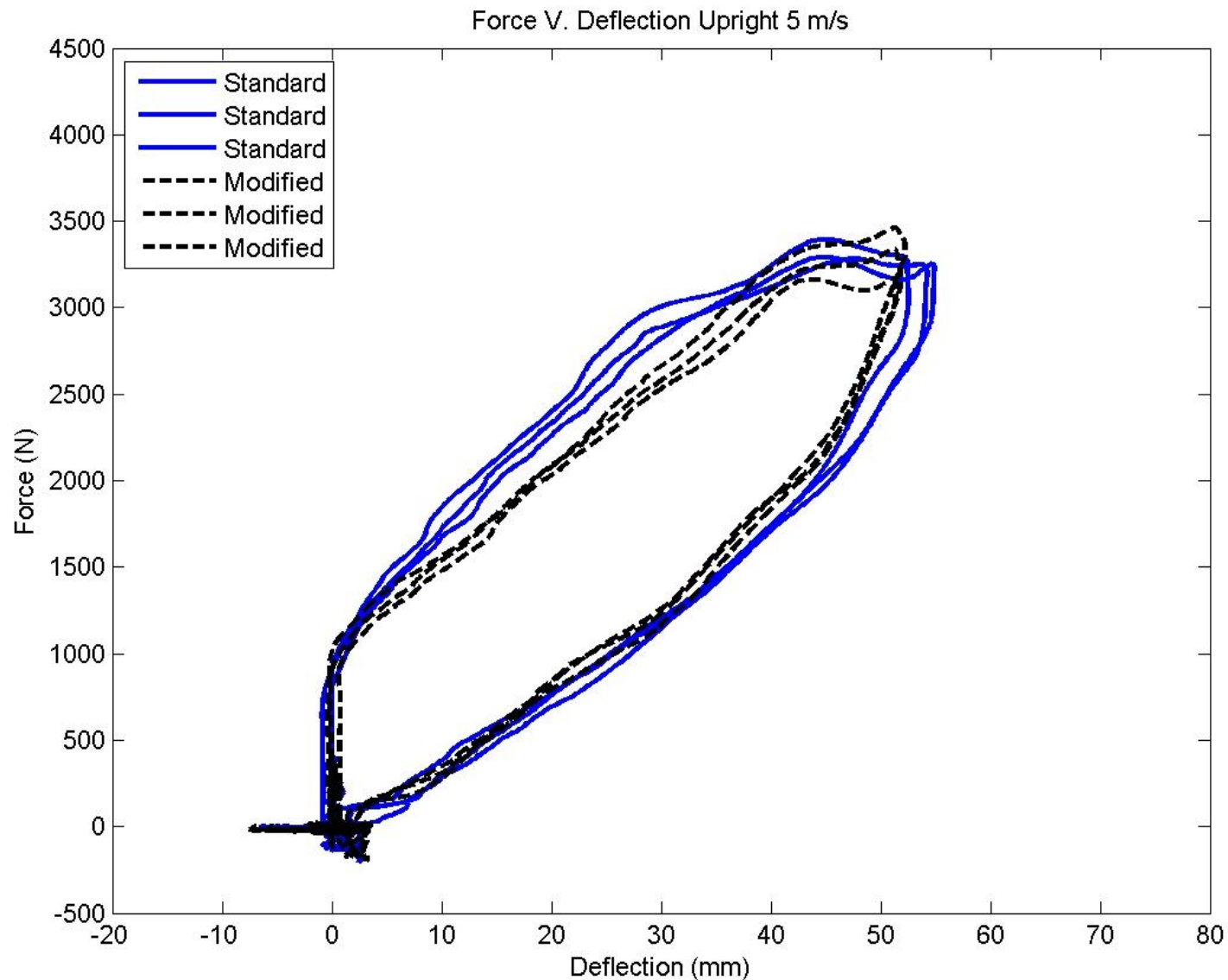
Upright Seated Position



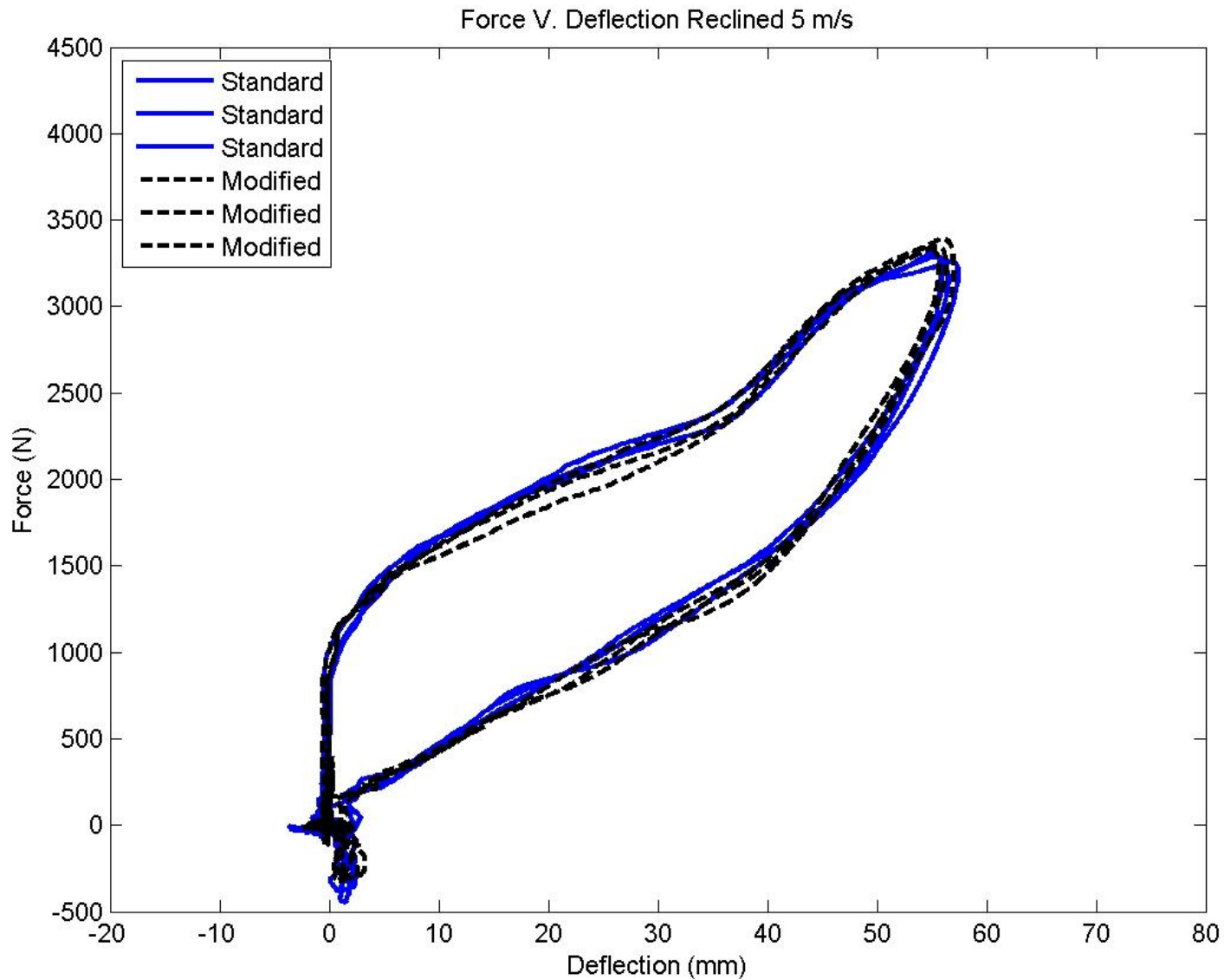
Reclined Seated Position



Upright Seated Position



Reclined Seated Position



Summary

- ▣ Repeatable tests at 3, 4, and 5 m/s
- ▣ Some force-deflection differences between modified and standard pelvis in the upright seated position at lower velocities
- ▣ 5 m/s force-deflections very similar
- ▣ Reclined position – no significant differences
- ▣ WorldSID 50th TEG felt that a redesign of the 50th pelvis was not necessary
- ▣ Repeat test series with WorldSID 5th

Thank
you