For myself and the other two members of team three, winter break was a time of waiting and learning. The team participated in the required shop safety class during the week of January 5. During the safety class, the team became familiar with the shop located in the Castleman Building on the UConn Storrs campus. The class took place over four days (technically 5 due to the inclement weather make-up day).

Over the course, the team was taught how to use the lathing and milling machines, as well as techniques behind welding, sheet metal bending, sanding, cutting, filing, etc. The instructors used a “hands on” approach to teach the class of twenty engineering students how to use the equipment safely. Each individual used the equipment to complete the designated mission the instructor set forth. The proper terms for the tools and devices were taught as well as measurement devices and techniques. Most importantly, the group learned how to safely used the equipment and the precautions necessary for the devices. At the end, each team member had successfully made a center punch, a t-block, and a sheet metal shovel. On the last day, each team member had passed the written test to complete the safety course.

The parts order was complete for the computer mount as the fall semester ended. Many of the pieces had arrived prior to the start of the break. These parts included those needed to create the original mounting device, which the team is to build, as well as a few pieces specifically designed for the Dynavox computer.
On the other hand, prior to break, many of the assistive jumping device parts had yet to be ordered. These parts were still being finalized as the group continued to look for better, more efficient parts. Over the break, the Tumble Forms 2 Carrie Seating System (as shown to the right) was ordered from AllegroMedical.com.

The seat must be modified to fit the needs of the assistive jumping device. The bottom will have to be removed in order for the user to perform the jumping motion. The back of the seat will also have to be fitted to attach to the vertical rail system. The team is looking to attach a metal plate system to the back of the seat in which the vertical rail system will be bolted upon. This will hopefully secure the seat to the jumping system and still remain comfortable and versatile to the user.

The group is currently contacting company where the potential vertical rail is to be ordered. A safety mechanism has been found on the device that prevents a “freefall” from occurring. This would not work with the assistive jumping device as the motion needed to be continuous. The group is still waiting for a response from a company if this safety feature can be unlocked and this rail system can be used for this purpose.

The group is also currently waiting for a response from the crane company as well. This is to check upon the qualifications needed to use the crane. The group is verifying that the crane can be used outdoors and that it can be properly installed. It is also being asked if there are any preparations needed to set up the device before the company comes to install. Concerns for this installation include weather conditions, the
leveling of the area to be used, as well as a possible need for a cement “patio” in which the crane might need to be placed upon. The team is still waiting for a response.

This past week, I have been sick and not attended school. My group members have kept me informed with the progress being made on the project. Since the start of the semester, the group has contacted the companies to answer our questions. They have also set up a meeting with our client on Monday to discuss the final plans with the family and to any concerns they might have with the future progress.

The other two members of the team have also gone to the shop to start building the mounting system for the computer mount. The pieces have been cut and are soon to be rounded off for safety. The foam insert will also be glued on to the plates. The goal of the team is to complete the building of computer mount this week. Then the mount can be tested with to verify its fit inside the vehicle and to the Dynavox computer system. Adjustments can then be made if necessary to finish the project.