Table 12. Problems Identified by Critical Incident Analysis

Problem Number	Problem Description	Frequency	Average Criticality
1	Upper crossbar release mechanism is not located in a very accessible position. Requires user to reach forward (threatens balance for some) and search for release under their leg. Can't see the release while sitting in wheelchair.	4	5.3
2	Steering is difficult to control when driving in reverse. The trailing fork drive wheel design causes the inner column to pull up to a position 180 degrees from straight when driving in reverse.	4	4.6
3	Column sticks way out when in transfer mode. The leg hit the column when lifting the leg over the column for transfer.	4	3
4	Precise positioning is required to attach/detach the column unit into/out of the securing blocks.	3	4.3
5	The battery sling is not located in a very accessible position.	3	4
6	Battery sling clasps are designed to be attached by two dexterous hands.	3	4

Table 12. Problems Identified by Critical Incident Analysis (continued)

Problem Number	Problem Description	Frequency	Average Criticality
7	Requires two hands to lift the column unit off of the wheelchair (squeeze and lift) and to attach the unit to the wheelchair. Placement of the lower crossbar release mechanism is a problem.	3	3
8	The crossbar release mechanism is difficult to squeeze. Fingers slipping off is a problem, grips not long enough, and the requirement to do two things at once makes it harder (i.e. squeeze grips and pull column together).	2	6
9	The wheelchair turns in a direction opposite of how the handle is pushed. Some get confused turning the column one way, they think it will go in the opposite direction of where it actually moves the wheelchair.	2	4.3
10	The PAU can accelerate unexpectedly at takeoff and while driving. It can go faster than expected, produce a kickstart, and go too fast in reverse.	1	6.5
11	Concern about forgetting to rotate the column unit plug to lock it in place.	1	6.5
12	Difficult to determine if the battery plug is in all the way.	1	6.5

Table 12. Problems Identified by Critical Incident Analysis (continued)

Problem Number	Problem Description	Frequency	Average Criticality
13	It is necessary to lean over to attach and detach the column unit.	1	6
14	Too much resistance in the finger trigger.	1	5
15	The handle bar pushes into the body (of a large user) when reaching forward.	1	4
16	When switching the column from the transfer position, forgot to rotate the inner column.	1	4
17	There is a lot of torque in the neck when driving.	1	2.5
18	Motor is loud.	1	2

Table 12. Problems Identified by Critical Incident Analysis (continued)

Problem Number	Problem Description	Frequency	Average Criticality
19	Difficult to pull the upper crossbar into the securing blocks (switching from transfer to manual positions).	1	2
20	Jerks a little when turning.	1	1
21	The battery sling moves when attaching the battery.	1	1