JOHNS HOPKINS
WHITING SCHOOL
of ENGINEERING

System: Package Delivery Drone

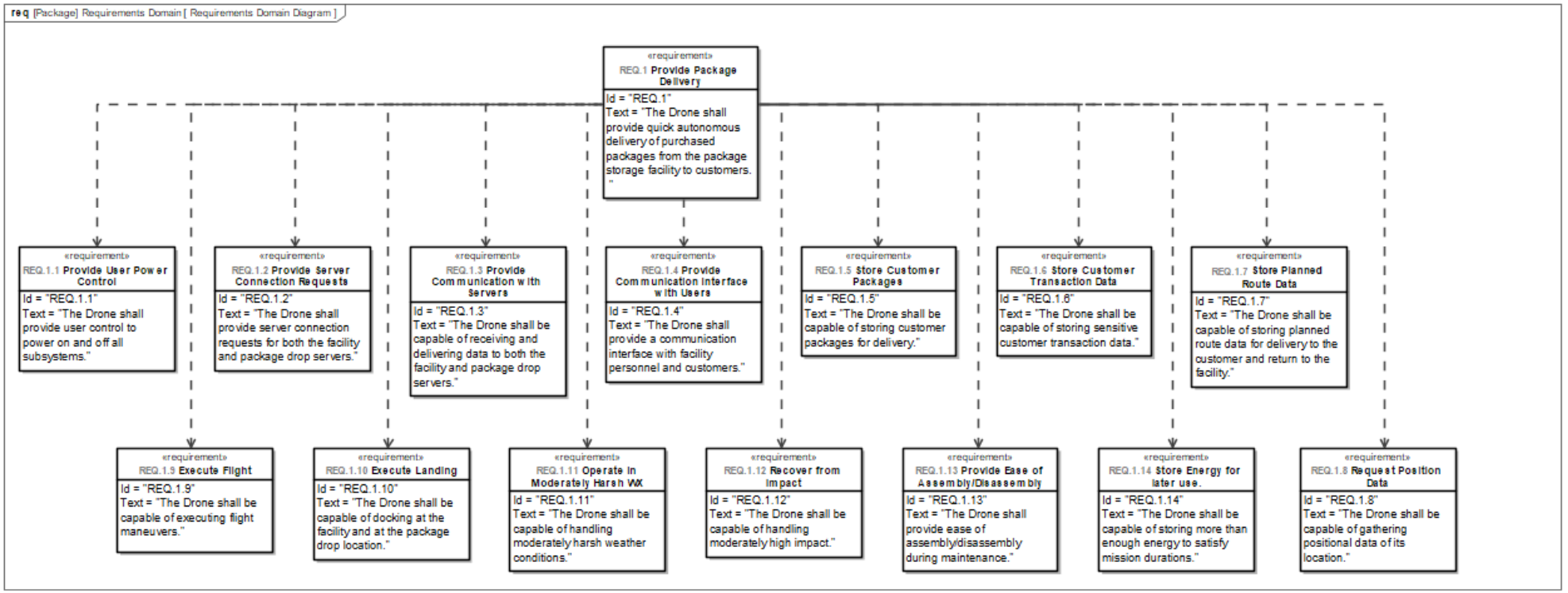
Goals: REQ.1 The Drone shall provide quick autonomous delivery of purchased packages from the package storage facility to customers.

Capabilities:

#	Name	Text
1	REQ.1.1 Provide User Power Control	The Drone shall provide user control to power on and off all subsystems.
2	REQ.1.2 Provide Server Connection Requests	The Drone shall provide server connection requests for both the facility and package drop servers.
3	REQ.1.3 Provide Communication with Servers	The Drone shall be capable of receiving and delivering data to both the facility and package drop servers.
4	REQ.1.4 Provide Communication Interface with Users	The Drone shall provide a communication interface with facility personnel and customers.
5	REQ.1.5 Store Customer Packages	The Drone shall be capable of storing customer packages for delivery.
6	REQ.1.6 Store Customer Transaction Data	The Drone shall be capable of storing sensitive customer transaction data.
7	REQ.1.7 Store Planned Route Data	The Drone shall be capable of storing planned route data for delivery to the customer and return to the facility.

8	REQ.1.8 Request Position Data	The Drone shall be capable of gathering positional data of its location.
9	REQ.1.9 Execute Flight	The Drone shall be capable of executing flight maneuvers.
10	REQ.1.10 Execute Landing	The Drone shall be capable of docking at the facility and at the package drop location.
11	REQ.1.11 Operate in Moderately Harsh WX	The Drone shall be capable of handling moderately harsh weather conditions.
12	REQ.1.12 Recover from Impact	The Drone shall be capable of handling moderately high impact.
13	REQ.1.13 Provide Ease of Assembly/Disassembly	The Drone shall provide ease of assembly/disassembly during maintenance.
14	REQ.1.14 Store Energy for later use.	The Drone shall be capable of storing more than enough energy to satisfy mission durations.

Requirements Hierarchy:



Risks:

1. If the Drone is not weatherproof, then it will require more maintenance. (4/1)
2. If the Drone uses too many adhesives, then it will impact production with longer lead times and a greater unit price. (2/4)
3. If the Drone is too heavy, then it will be unable to carry some packages. (3/5)
4. If the Drone is too loud, then it may not be certified for flight in certain zones (2/4)
5. If the Drone requires charging too often, then it will delay package delivery and profits will decrease. (3/3)