PDR Suggested Adjustments

1. Overarching
   1. Keep track of traceability
   2. Define assumptions
   3. Justify design choices by referencing trade studies and customer validation
      1. Put trade studies and descriptions of customer validation in backup?
   4. Add Safety and Mission Assurance within each analysis: schedule, cost, risk/fos
      1. Hunter presents these parts (Human factors ⬄ SMA?)
   5. Discussion of derived requirements
      1. Ie. 1.1Gs, 200kg, etc.
2. Title/Intro
   1. Get SKADI picture in there somewhere (its badass), review with Joaquin
   2. Add design process outline and position wherein – show customer validation
      1. Add reasoning for pdr within design process
3. Project Description
   1. Add baseline design
   2. FBD
      1. Move from conops to fbd – take out humans, describe more in depth
      2. Add legend of colors
      3. Bold/highlight each box while presenting it specifically
      4. Ensure talking points in rest of pdr are easily referenced by FBD
4. Critical Elements
   1. Define what a CPE/KFE is and justify each using the definition – “failure here means total failure cuz it wont meet requirement x”
   2. Change CPE/KFE verbiage (not requirements: platform must produce -> production of)
      1. Ensure verbiage is consistent throughout discussion/presentation
5. Feasibility Analyses
   1. VIS
      1. Reference trade studies
      2. If asked about normal vs 180 vs 360 video: “better immersion for no extra cost”
   2. MECH
      1. Start with platform baseline design (how many actuators and they’re relative positions)
         1. Open trade for 3vs2?
            1. If yes: show advantages and disadvantages considered (functionality and cost) – “will be closed by cdr”
      2. Why was Gaussian curve was chosen – easiest to modify with time, avg, and max constraints
         1. Talk to Penny about curve describing maximum mechanical necessities given these constraints, or just use force model curve
            1. Should customer be able to change input accelerations

“we recognize that there is value in flexibility, therefore we want this functionality for user”

* + 1. Show mo-cap sensor suite in design
  1. FOS
     1. Justifications for target FOS – can be very qualitative
     2. Include along with cost within each subsystem analysis or make new Safety and Mission Assurance analysis with cost, schedule, risk – currently the order of discussion derails train of thought
        1. For risk: “just showing fos considerations currently, will expand of this for cdr, after reviewing pdr feedback”
  2. FOOT
     1. Traceability
     2. Add brief back-up slide for other environmental considerations
        1. Ie. Temp range (operational and storage)
     3. Further discussion on derived requirements
  3. COST
     1. Add to SMA sections of subsystem analyses
     2. Justify budget allocation
        1. Very qualitative: “preliminary research showed…”
     3. Add uncertainty – margins and their justifications
        1. Justification in back-up probably

1. Status Summary and Future Work
   1. Reiterate baseline design with feasibility conclusion for clear flow down
   2. Strategy -> Plan (for Conducting Remaining Studies)
      1. Or further define strategy
   3. Mention how data collected could be used in future (out of scope) project on aerodynamics of ski jumper