

Work-Breakdown Structure for Flying Water Vendor  
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1. Flying Water Vendor
  - 1.1 Ground System
    - 1.1.1 Piloting interface
      - 1.1.1.1 Develop piloting interface
      - 1.1.1.2 Train and receive feedback from pilots
      - 1.1.1.3 Integrate interface at each location
    - 1.1.2 Payload loading system
      - 1.1.2.1 Develop properly dimensioned loading system according to Payload Delivery team specifications
      - 1.1.2.2 Integrate system at each location
    - 1.1.3 App interface
      - 1.1.3.1 Help integrate app software with the ground system
      - 1.1.3.2 Give feedback to Product Interface team
      - 1.1.3.3 Install at each location with Company-Waterfront Relations team
    - 1.1.4 Launch/recovery/refurbishment
      - 1.1.4.1 Work with Power, Payload Loading, and Piloting teams to develop launch, landing, and refurbishment ConOps and Requirements
      - 1.1.4.2 Develop launch, landing, and refurbishment systems
      - 1.1.4.3 Integrate the three systems and train clientele on refurbishment techniques
      - 1.1.4.4 Work with quality assurance team and create standard operating procedures for the FWV
    - 1.1.5 Telecoms
      - 1.1.5.1 Develop transmitter, software, and ground system interface
      - 1.1.5.2 Test for distance and scatter decay
      - 1.1.5.3 Work with Flight System Telecoms to reach requirement agreements
  - 1.2 Flight System
    - 1.2.1 Power
      - 1.2.1.1 Choose power system according to requirements and propulsion needs
      - 1.2.1.2 Integrate system into the Flight System
      - 1.2.1.3 Flight test the power to cover distance and operations needed
      - 1.2.1.4 Maintain quality during production and operation
    - 1.2.2 Propulsion
      - 1.2.2.1 Choose propulsion technique due to requirements and operational restrictions
      - 1.2.2.2 Develop propulsion system alongside power team
      - 1.2.2.3 Maintain quality during production and operation
    - 1.2.3 Structures
      - 1.2.3.1 Develop Structures needed for sufficient operation
      - 1.2.3.2 Maintain quality during production and operation
    - 1.2.4 Avionics
      - 1.2.4.1 Develop on-board software for the FMV
      - 1.2.4.2 Integrate with respect to the Telecoms team and requirements
      - 1.2.4.3 Maintain quality during production and operation

- 1.2.5 Telecoms
  - 1.2.5.1 Develop antenna, receiver, and transmitter
  - 1.2.5.2 Integrate with Avionics team
  - 1.2.5.3 Maintain quality during production and operation
- 1.2.6 Payload delivery
  - 1.2.6.1 Design alongside Payload Loading team with respect to requirements
  - 1.2.6.2 Test for proper safety and customer requirements
  - 1.2.6.3 Redesign in case of new supplier needs
  - 1.2.6.4 Maintain quality during production and operation
- 1.2.7 Certification/testing
  - 1.2.7.1 Create with local government and Company-Waterfront relations team a list of certification tests
  - 1.2.7.2 Conduct tests with respect to each Flight System group
  - 1.2.7.3 Maintain quality during production and operation
- 1.2.8 Systems Engineering
  - 1.2.8.1 Develop and maintain requirements for the Flight System
  - 1.2.8.2 Work with general SE team to update WBS and ConOps as needed
- 1.3 Systems Engineering
  - 1.3.1 Requirements Team
    - 1.3.1.1 Develop Requirements according to investor and stakeholder needs
    - 1.3.1.2 Update Requirements as program continues into development, production, and operation
  - 1.3.2 ConOps Team
    - 1.3.2.1 Develop ConOps according to requirements
    - 1.3.2.2 Adjust ConOps as requirements change
  - 1.3.3 WBS Team
    - 1.3.3.1 Develop WBS
    - 1.3.3.2 Maintain WBS and strict hierarchical work throughout development, production, and operation
- 1.4 Program Management
  - 1.4.1 Marketing Team
    - 1.4.1.1 Market to potential clients
    - 1.4.1.2 Market to potential suppliers
  - 1.4.2 Supply Chain
    - 1.4.2.1 Negotiate with suppliers after marketing team
    - 1.4.2.2 Maintain Company-Supplier relations
  - 1.4.3 Company-Waterfront Relations
    - 1.4.3.1 Integrate FWV with existing waterfront facilities
    - 1.4.3.2 Conduct quarterly safety reviews and quality assurance tests
- 1.5 Software
  - 1.5.1 Customer interface
    - 1.5.1.1 Develop front-end app software
    - 1.5.1.2 Develop background GPS sending software
  - 1.5.2 Product interface
    - 1.5.2.1 Develop back-end app software
    - 1.5.2.2 Integrate background GPS receiving software

### 1.5.3 User experience

#### 1.5.3.1 Beta-test software with clientele

#### 1.5.3.2 Redesign app with beta-testing results and feedback with Customer Interface team