# 1 Software Contract: STRATUS AR Development

This agreement is made between Rainmaker (hereinafter referred to as "Client") and Ethan Soo (hereinafter referred to as "Contractor").

# 2 1. Scope of Work

The Contractor agrees to develop an Augmented Reality (AR) application for the Strategic Rainfall Augmentation Telepresence for Unmanned Systems (STRATUS) project. The work will be divided into two checkpoints with four main tasks.

#### 2.1 Checkpoint One

Duration: 2 weeks at 10 hours per week

- 1. Task One: Single Drone Visualization
  - (a) Receive NATS messages from provided ghost drone simulation
  - (b) Plot drone position in 3D space using Meta Quest 3s
  - (c) Highlight drone location in sky via visual indicator
  - (d) Process basic telemetry data (position, orientation, status)
- 2. Task Two: Multi-Drone and Atmosphere
  - (a) Handle multiple drone messages simultaneously
  - (b) Implement unique drone identification system
  - (c) Display atmosphere voxels for target areas
  - (d) Develop basic fleet management controls
  - (e) Process extended telemetry (pressure, temperature, humidity)

#### 2.2 Checkpoint Two

Duration: 2 weeks at 10 hours per week

- 1. Task Three: Enhanced Visualization
  - (a) Implement top-down minimap showing all assets
  - (b) Display Skew-T charts from drone atmospheric data
  - (c) Add team member labeling in world space and minimap
  - (d) Plot ADSB aircraft traffic data
- 2. Task Four: Control Integration

- (a) Implement FPV video feed display
- (b) Broadcast NATS messages for controller inputs
- (c) Develop command interface for drone control
- (d) Complete integration testing of all systems

## 3 2. Compensation

Total compensation for the work described is \$2,000 USD, payable as follows:

- Checkpoint One: \$1,000 (Tasks One and Two)
- Checkpoint Two: \$1,000 (Tasks Three and Four)

Payment for each checkpoint shall be made upon Client's acceptance of the work. Any additional work beyond the defined scope shall require written agreement and additional compensation.

#### 4 3. Timeline and Milestones

The Contractor agrees to:

- Complete Checkpoint One within two weeks of project initiation
- Complete Checkpoint Two within two weeks of Checkpoint One completion
- Participate in weekly check-ins every weekend
- Make builds available for testing in both Pendleton and Los Angeles environments

# 5 4. Deliverables and Testing

- Client will provide sample code for ghost drone simulation
- Weekly builds must be compatible with Meta Quest 3s hardware
- Client will conduct acceptance testing each weekend
- Client has sole discretion in determining whether acceptance criteria are met.
- Contractor must address any issues identified during testing

## 6 5. Technical Requirements

The Contractor shall:

- Develop using Unity and C# for Meta Quest 3s
- Integrate with NATS messaging system on Port 4222
- Follow provided message format specifications
- Implement MAVLink protocol integration
- Ensure functionality in extreme temperature conditions
- Support operation with gloved hands

### 7 6. Intellectual Property Rights

All code, documentation, and materials produced under this agreement shall be the sole and exclusive property of the Client. The Contractor agrees to assign all rights, title, and interest in the work product to the Client.

### 8 7. Confidentiality

The Contractor agrees to keep all information related to this project strictly confidential. This includes but is not limited to Client's business practices, technical information, and code. This obligation shall remain in effect indefinitely unless explicitly released in writing by the Client.

#### 9 8. Termination

Either party may terminate this agreement with written notice if the other party breaches any material term and fails to cure such breach within 30 days of receiving written notice. In the event of early termination, the Contractor shall be paid for work completed up to the termination date.

# 10 9. Independent Contractor Status

The Contractor is an independent contractor and not an employee of the Client. The Contractor is responsible for all taxes and other obligations associated with their compensation.

#### 11 10. Warranties

The Contractor warrants that:

- All work will be performed in a professional manner
- Deliverables will meet specifications provided by Client
- Code will be original work or properly licensed
- Defects will be corrected at no additional cost during development

## 12 11. Limitation of Liability

Neither party shall be liable for any indirect, incidental, special, or consequential damages. The total liability of the Contractor shall not exceed the total compensation paid.

### 13 12. Dispute Resolution

Any disputes shall first be subject to mediation before pursuing other legal remedies.

#### 14 13. Amendments

Any modifications to this agreement must be made in writing and signed by both parties. Changes to project scope require mutual written agreement and may affect timeline and compensation.

# 15 15. Entire Agreement

This contract constitutes the entire agreement between the parties and supersedes all prior negotiations and understandings.

Client: Rainmaker
By:
Date:
Contractor: Ethan Soo
By:
Date: