

## Specular Theory / Travis AFB

### Background:

Specular Theory worked with Pilot Training Next 2.0 to create immersive training tools to teach T-6 Formation Flying. In 2019, Specular Theory won a SBIR Direct to Phase II contract in partnership with the 97th Operations Group at Altus AFB to adapt its tools to train Mobility aircrew at the Formal Training Unit on a Major Weapons System. This contract was completed in the summer of 2020, and has led to winning eight (8) consecutive Phase III contracts to further expand its immersive training solutions for the C-17 and KC-135, as well as expanding to other aircraft including the KC-46 and B-52.

Our most recent Phase III multi-year contract was awarded by AFLCMC Sim Innovation office. Funds for this contract go toward expanding our C-17 AAR VR training product, adding the ability to read in and utilize Computational Fluid Dynamics (CFD) Aero modules, multiplayer capability and force feedback controls. This lightweight VR sim "EARL" (which stands for Experiential Air Refueling Lightweight simulator) will extend and complete the AAR VR trainer for the KC-135 tanker and the C-17 & B-52 receiver and demonstrates that a lightweight simulator, running on commercial-grade off the shelf hardware, can offer high fidelity and provide accurate training. Additionally, it offers multicrew (multiplayer) scenarios in which teams can train together from remote locations.

We would like to partner with Travis AFB to help expand our C-17 immersive training tools, including taking all of our existing C-17 checklist trainers and making them all multiplayer so that teams can train together. We would also like to expand our current C-17 VR offering to include adding more checklists and loadmaster training.

### Current Airframes We Work With

|       |        |         |
|-------|--------|---------|
| C-17  | KC-135 | T-1     |
| KC-46 | B-52   | T-1 AMP |

### Current Air Force Customers / Partners / User Representatives:

|   |  |   |
|---|--|---|
| <b>Altus AFB:</b><br>97th Operations Group<br>56th Air Refueling Squadron<br>54th Air Refueling Squadron<br>58th Air Refueling Squadron | <b>McChord AFB:</b><br>62nd AW<br>446th AW<br><br><b>McGuire AFB:</b><br>305th AMW<br>305th Operations Group<br>6th Airlift Squadron | <b>Charleston AFB</b><br>437th Airlift Wing<br><br><b>Dover AFB</b><br>436th Airlift Wing<br><br>and others in the KC-135,<br>KC-46, C-17 and B-52<br>training communities... |
| <b>Barksdale AFB:</b><br>307th Bomb Wing (BW)<br>B-52 FTU   |  |   |

### MAJCOM Customers

AMC  
AETC  
19th AF (Det 24)  
AFLCMC/WNS (Simulators Division)

### **DISTRIBUTION STATEMENT**

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