Experiments demonstrate COPV has capacity to withstand hypervelocity impact. 

Failure mode appears to be related to impact energy.

A numerical model was designed to broaden the scope of this effort.

Pressurizing of COPV in numerical impact simulations will be the next effort.

### References


### Experimental and Modeling Results

- **HitF16163, Pressurized test, Pass**
- **HitF16169, Pressurized test, Venting failure**
- **HitF16162, Pressurized test, Rupture failure**
- **HitF16212, Unpressurized test, Pass**
- **HitF16394, Unpressurized test, Perforation**
- **HitF16211, Unpressurized test, Perforation**

### Model

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<th>Material</th>
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<td>Composite overlap</td>
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</table>

### Conclusions

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- Failure mode appears to be related to impact energy.
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