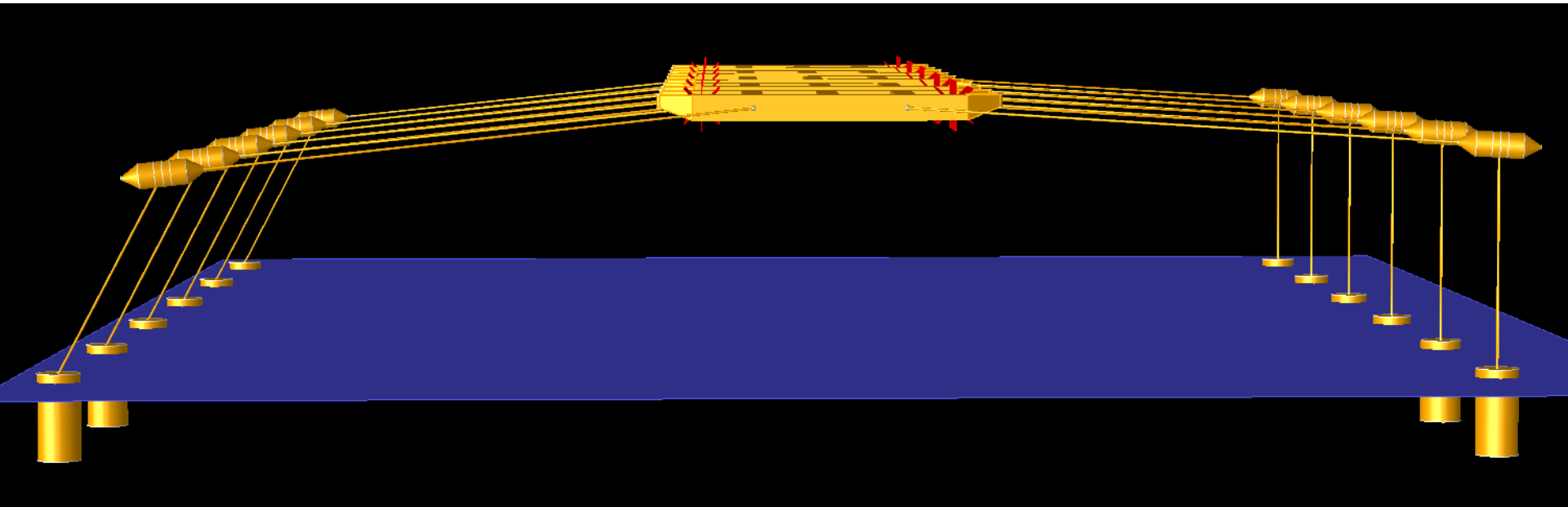


# 16B-Double Paddle Wheel Current Catcher© Farms With Spring Buoy Mooring Systems & Rectangular pontoons

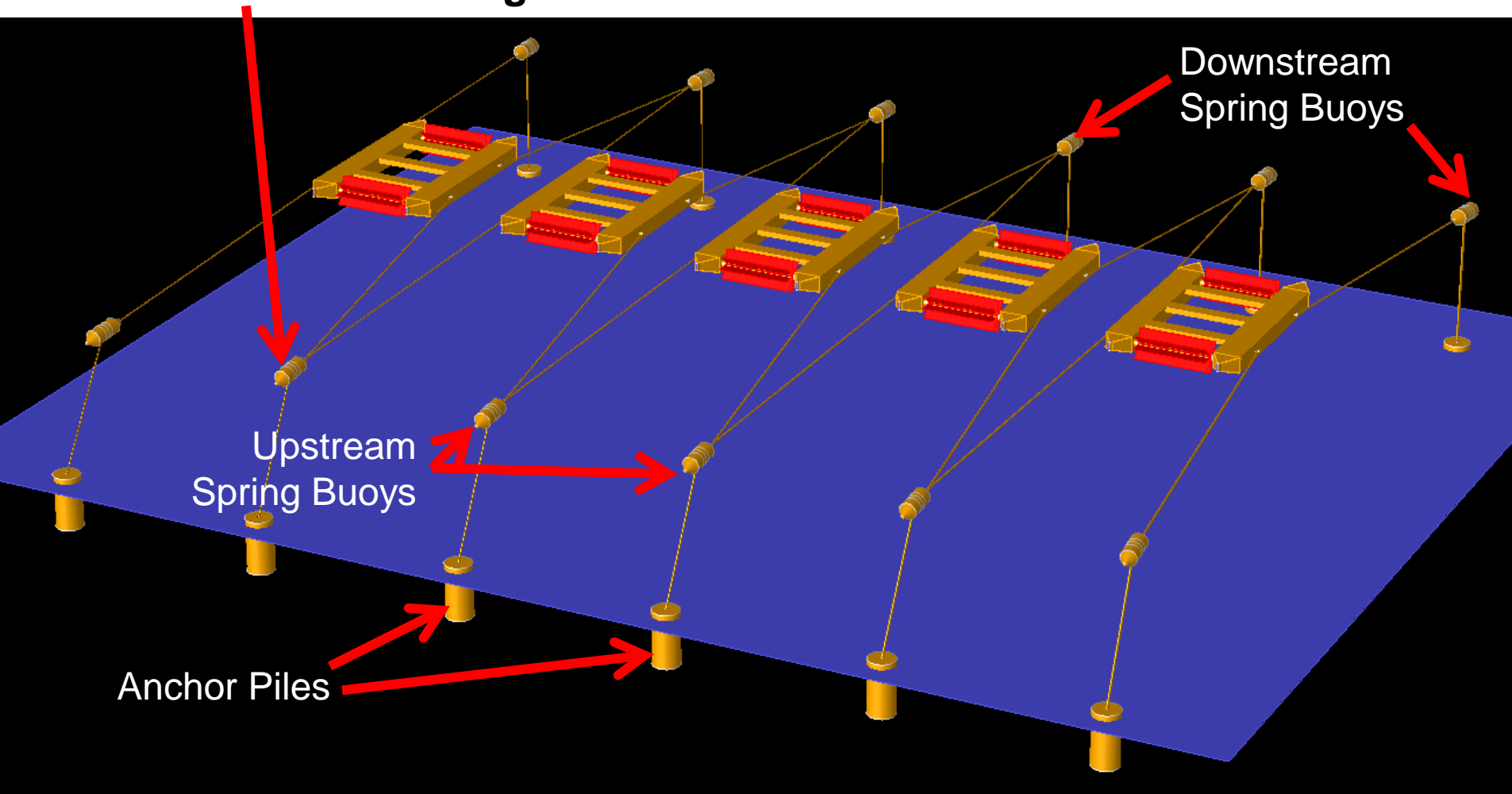
- can be moored in almost any water depth with a spring buoy mooring systems allowing the system to stay at the same heading all of the time
- perfect for tidal flow power generation
- can be quickly Connected and disconnected from the spring buoy spread mooring system
- spring buoys extend above the water's surface for fast mooring line attachment and fast disconnection
- spring buoy moorings impose low vertical load on the pontoons allowing pontoon size to be minimized
- pontoon stay on the water's surface allowing the paddle wheels access to the highest currents
- pontoons rise and fall on the water's surface as tides and flow stages change surface elevation
- allows immediate safe surface maintenance of the surface system without removing the system and without the need to mobilize a crane vessel
- allows the entire system to be installed and removed with just a few tugs.
- allows the entire system to be removed for full and safe onshore maintenance.
- generators can be located inside the paddle wheel's axles, inside the pontoons or on the top deck
- pontoons can be of a shape that best suits the environmental conditions and minimizes drag loading
- power can optionally be transformed on the Current Catcher© reducing export cable size.
- power can be exported from the Current Catchers© using flexible power cables supported in many different ways already well proven by the offshore industry
- uses design, fabrication and installation technology and equipment well proven by the offshore industry
- can be designed to a company's requirements for a specific location
- can be built and installed very quickly
- paddle wheel generators are probably the highest power output devices available at over 2 MW each
- water's surface paddle wheel are probably the most efficient form of marine current power generation since: 1) the returning blades are not required to flow through the high velocity marine currents, 2) the large blades are light weight and well supported for low stress, low vibration and low fatigue, 3) large paddle wheel diameters allow maximum highly efficient power generation.

# 16B-Double Paddle Wheel Current Catcher© Farms With Spring Buoy Mooring Systems & Rectangular pontoons

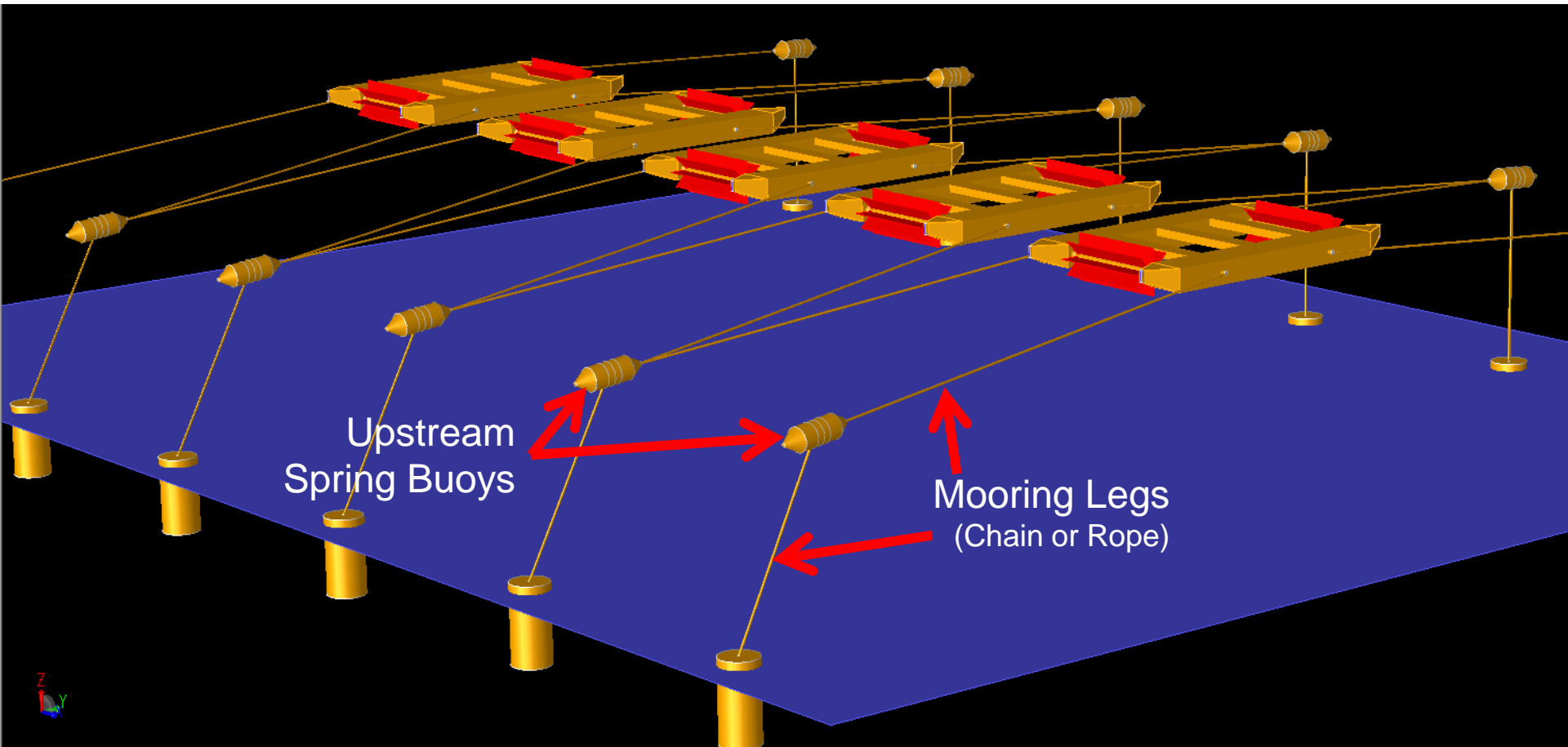


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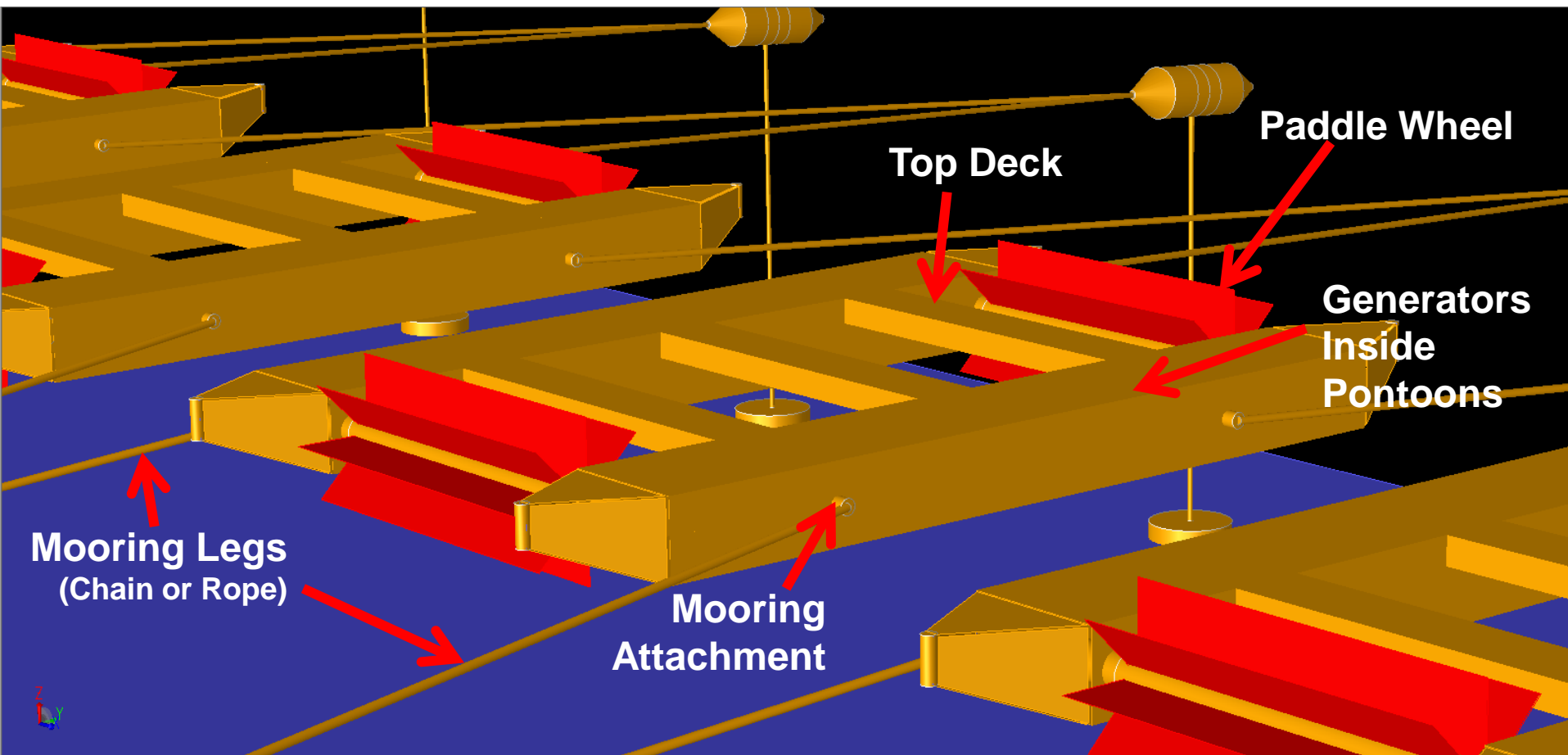
Spring Buoys Have Minimum Drag Force  
Orientation After Mooring Line Attachment



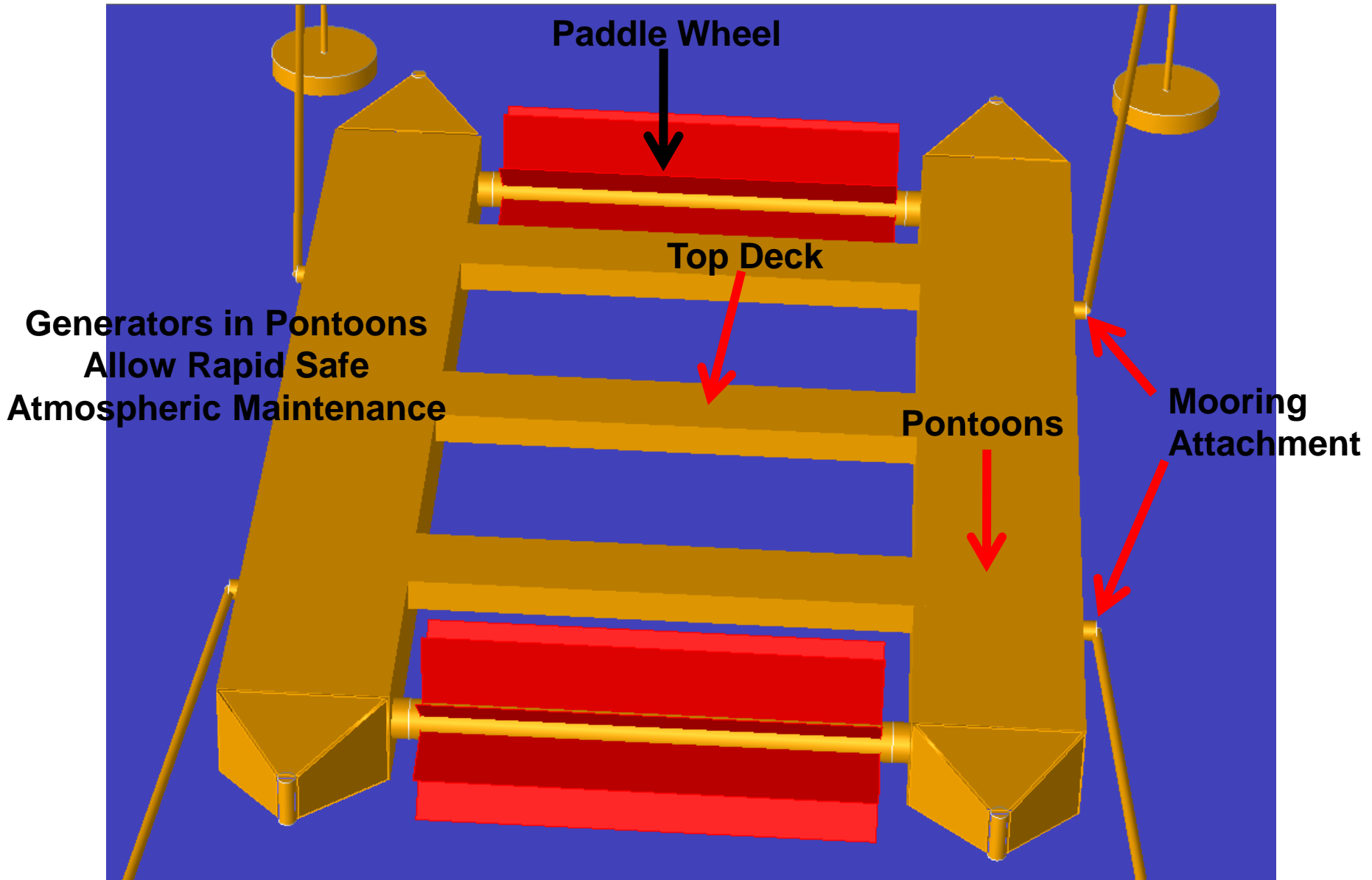
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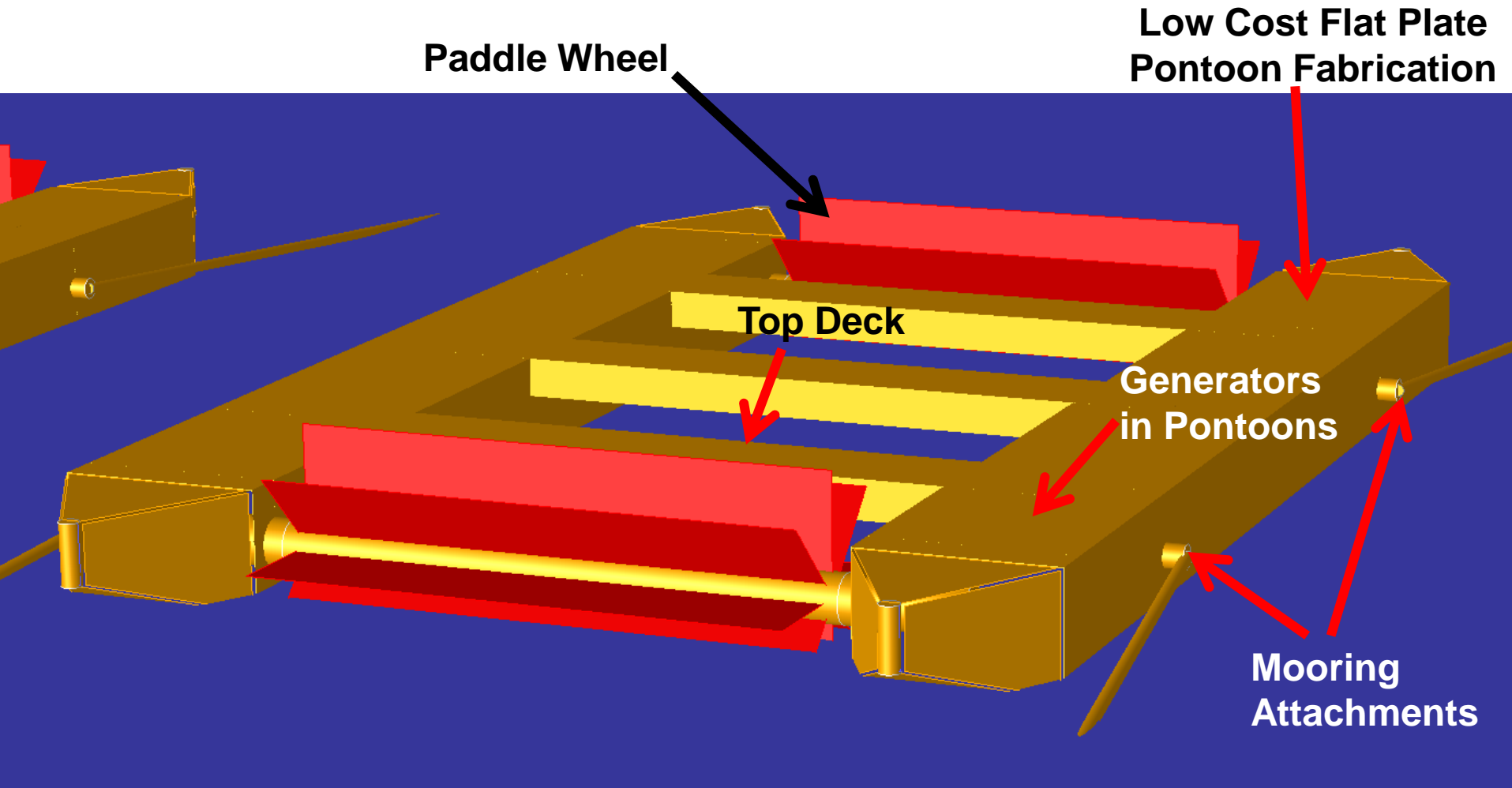
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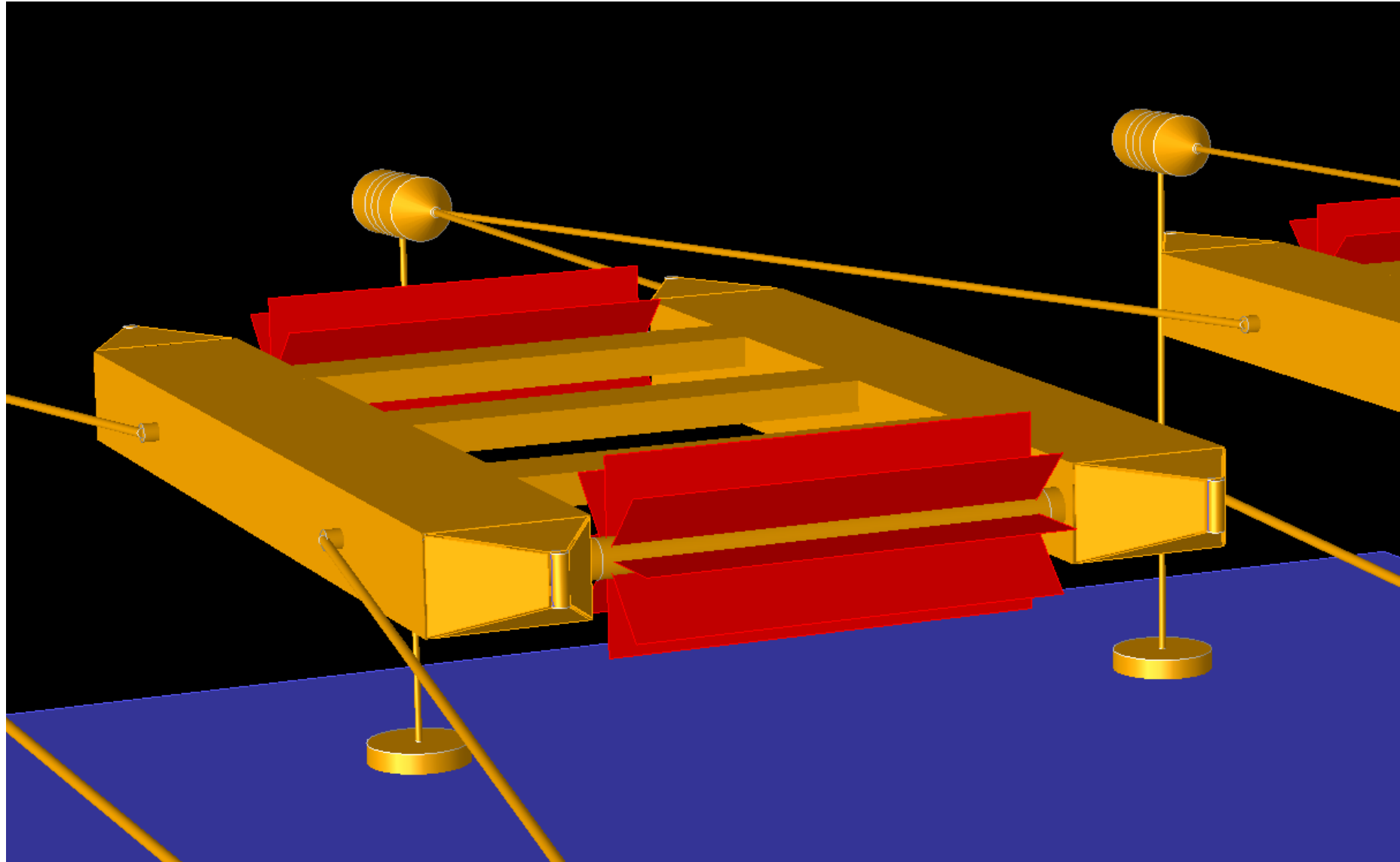


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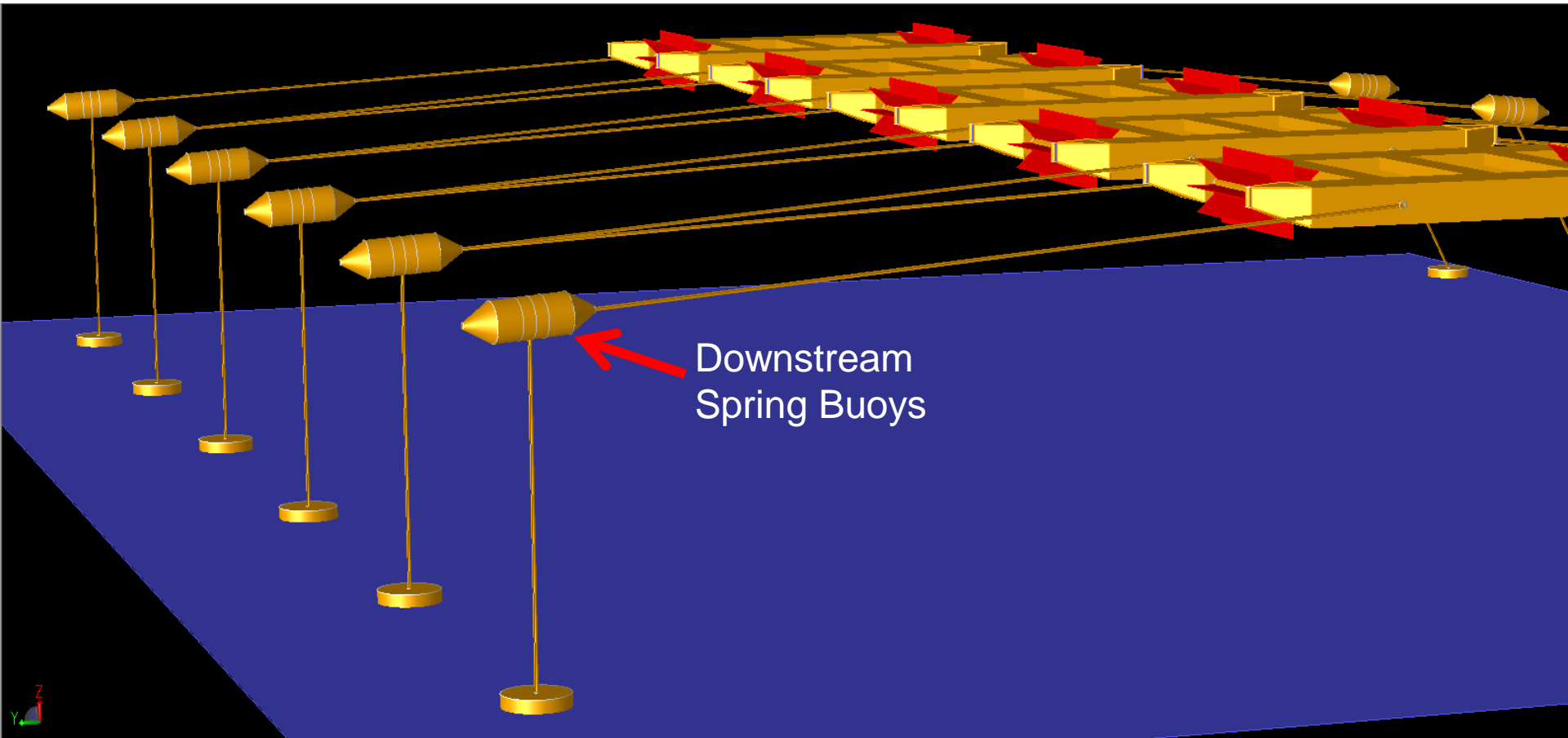
**Generators in pontoons Allow Rapid Safe Atmospheric Maintenance**

# 16B-Double Paddle Wheel Current Catcher© Farms With Spring Buoy Mooring Systems & Rectangular pontoons

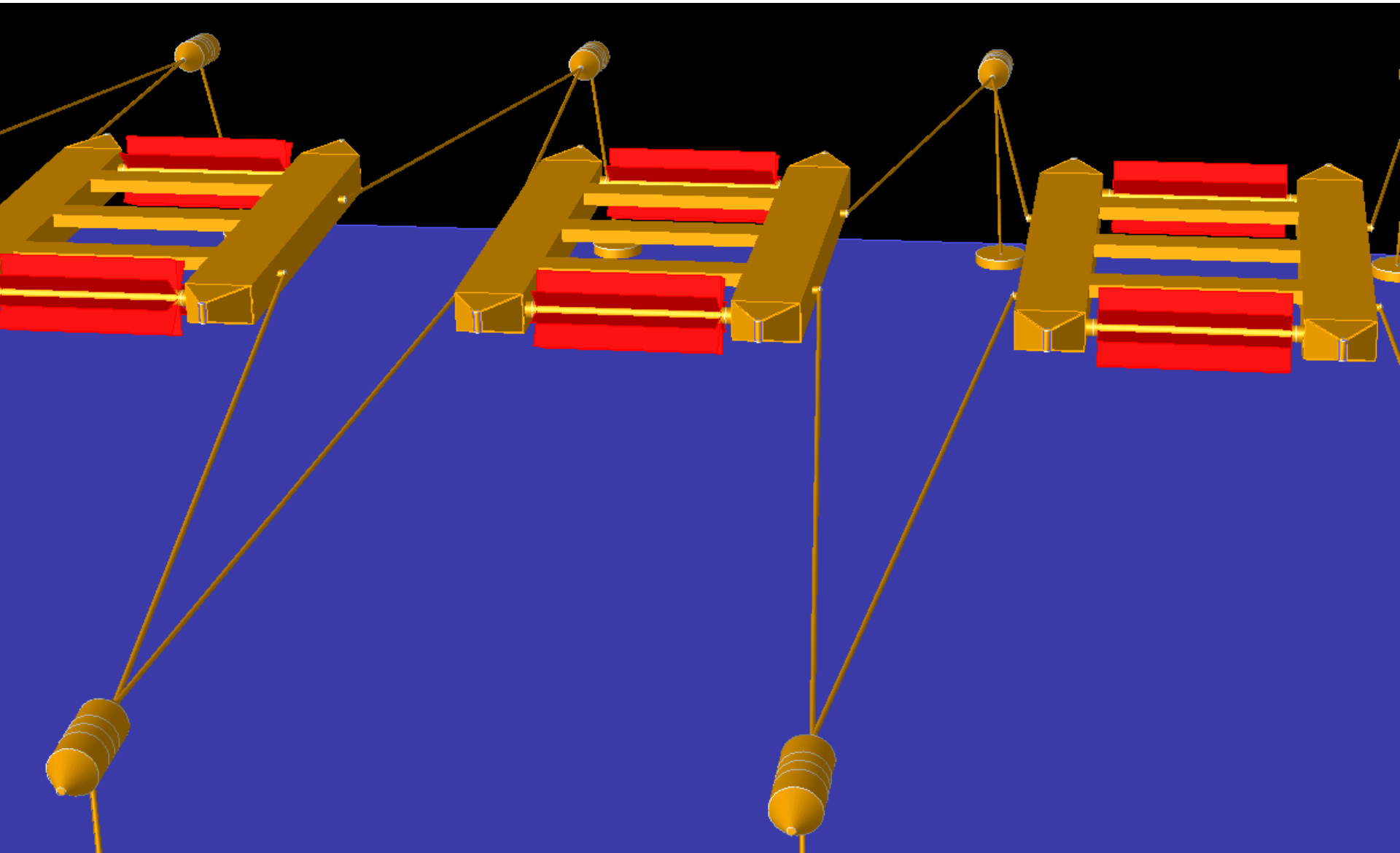




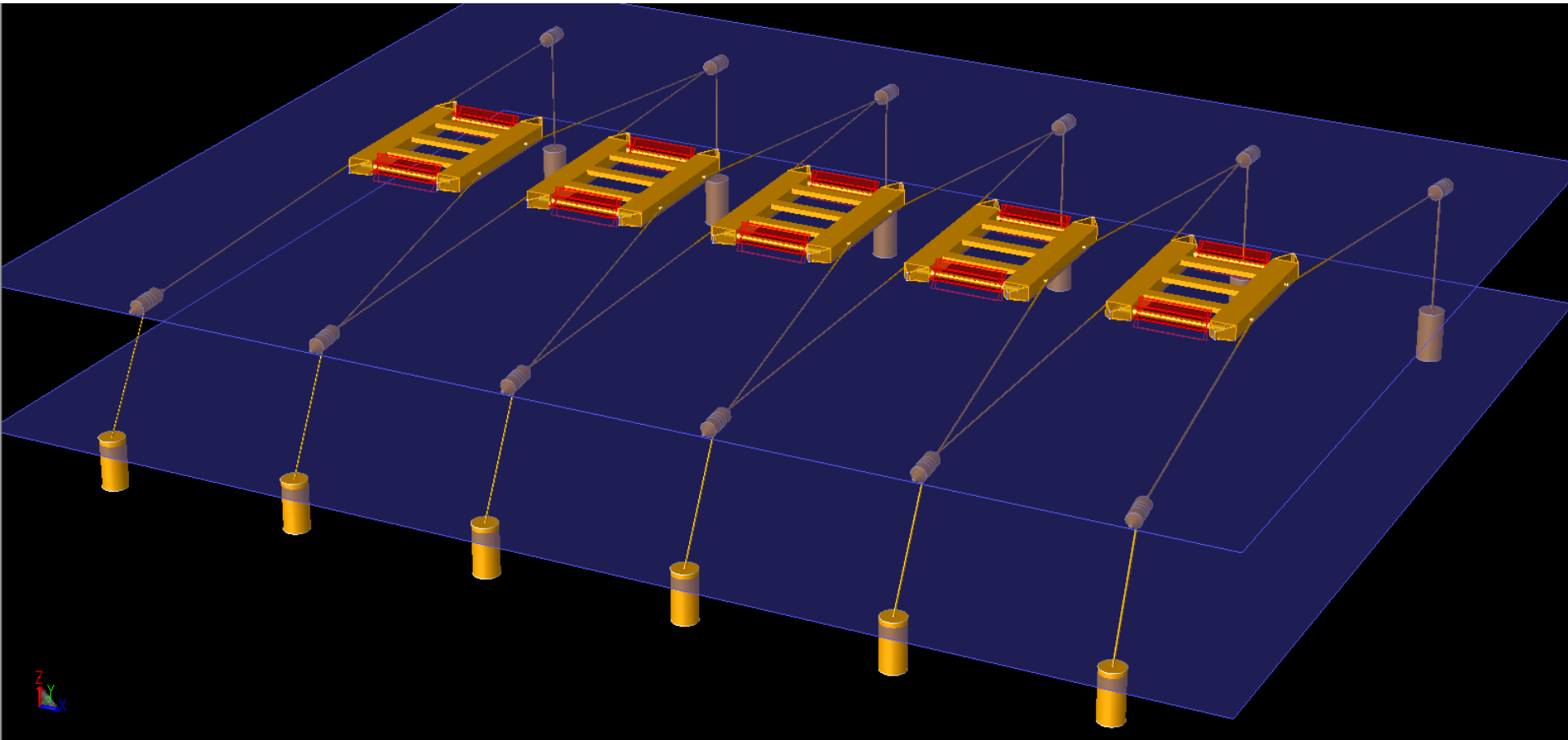
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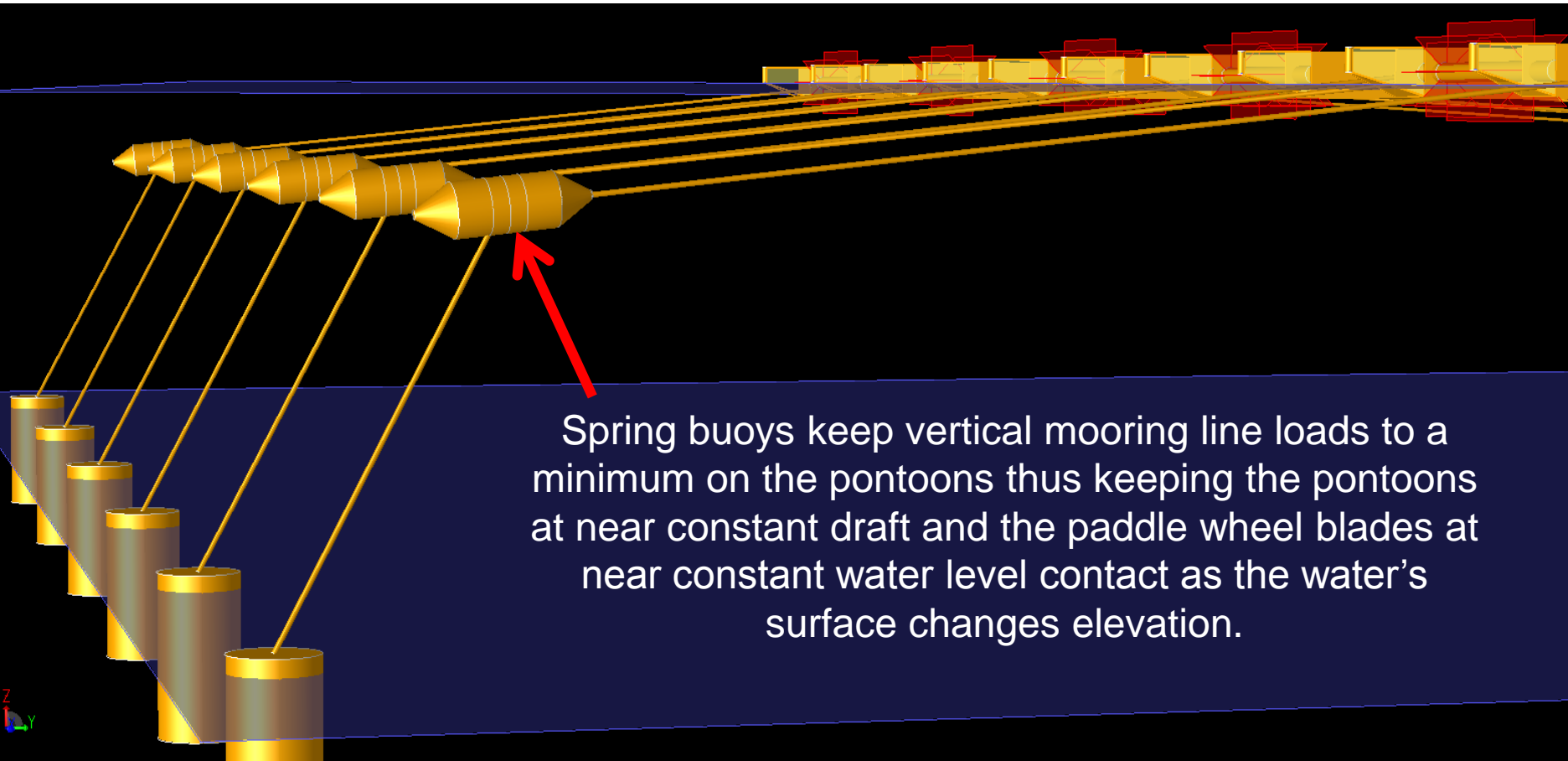
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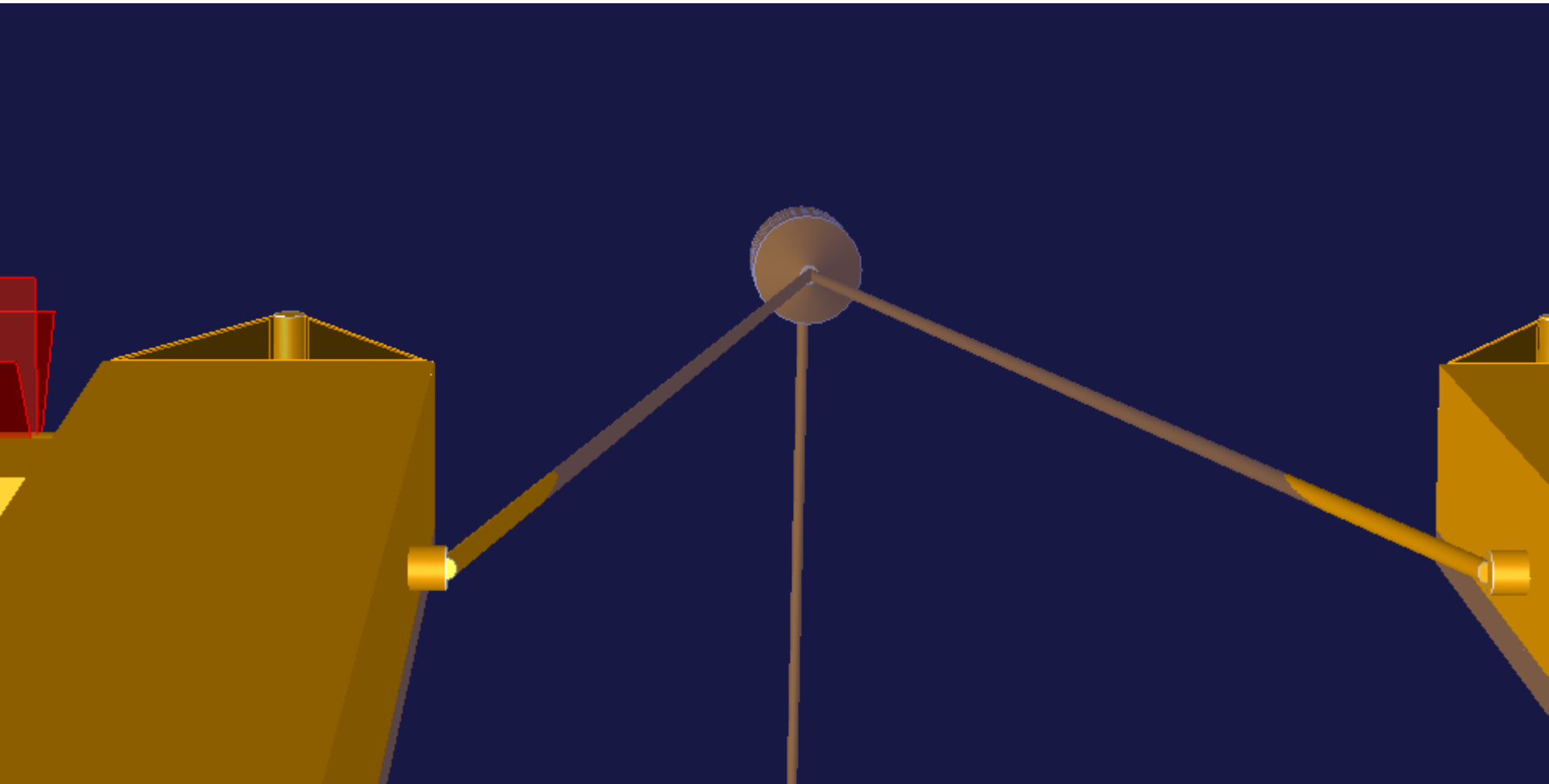
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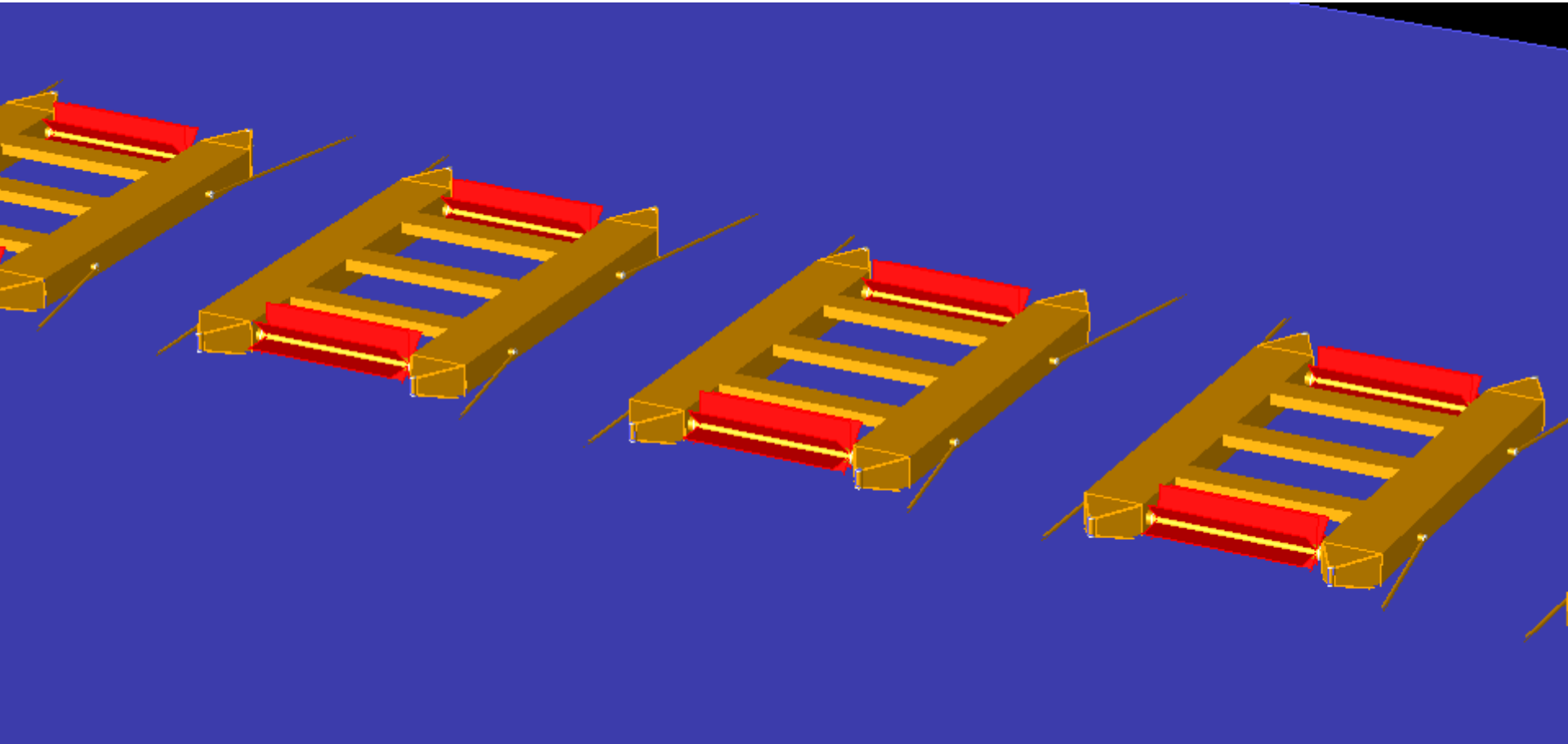
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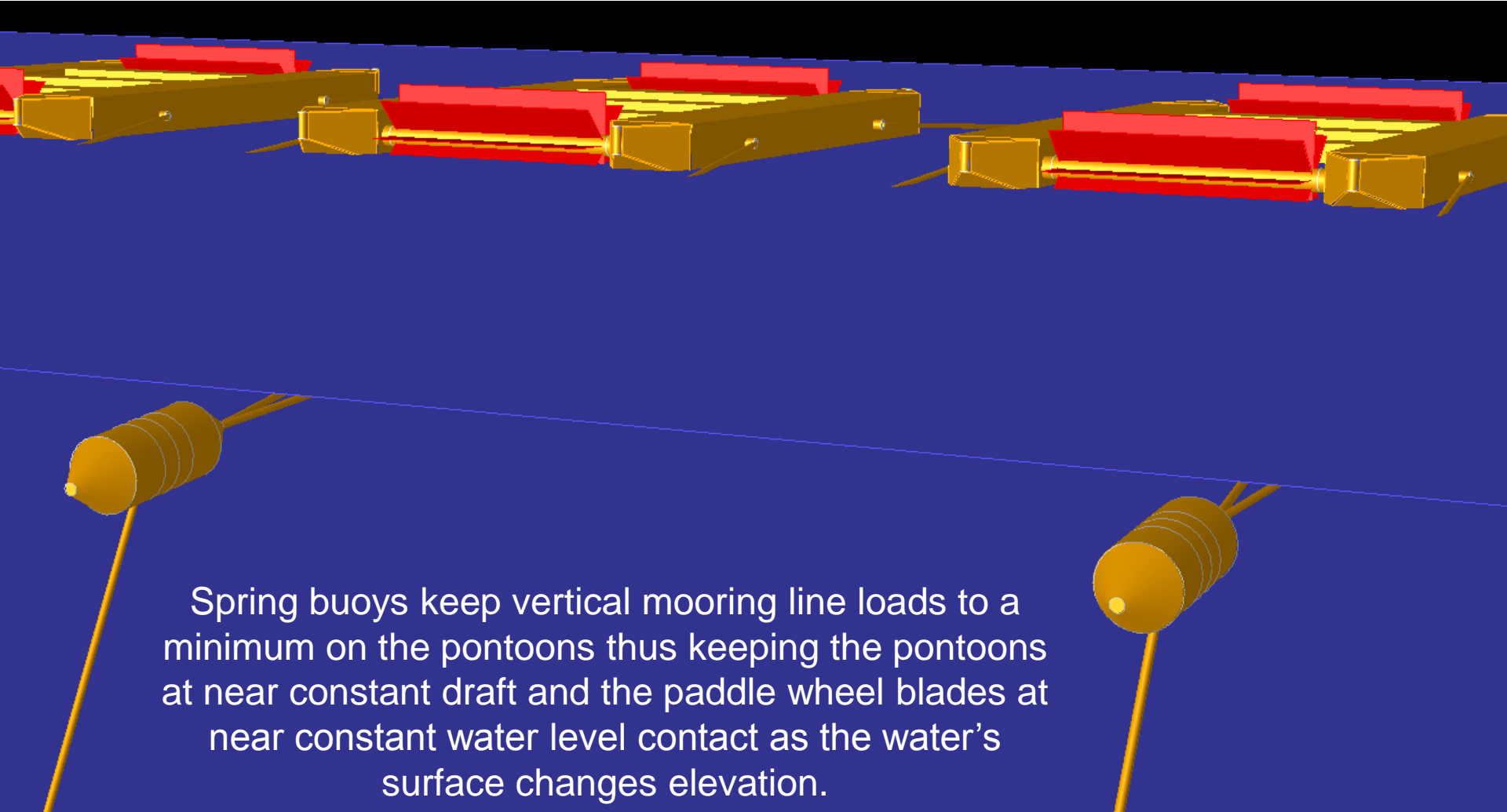
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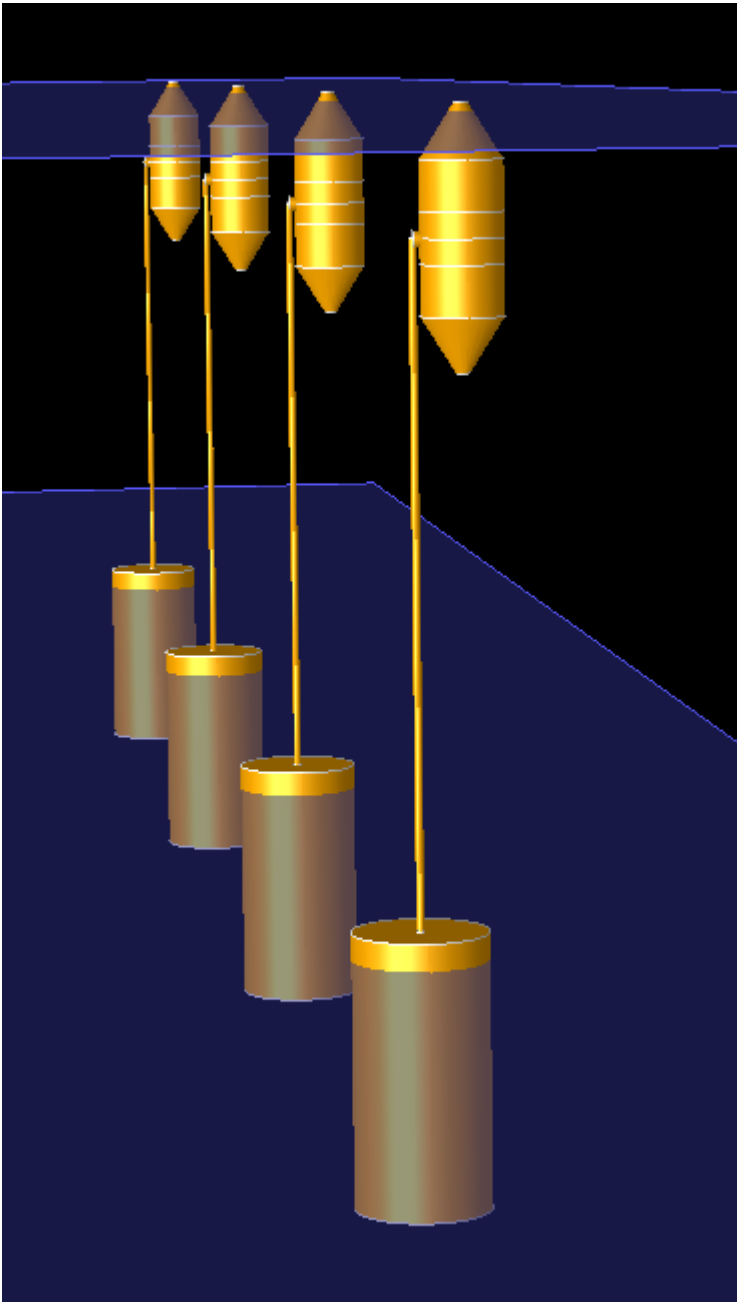


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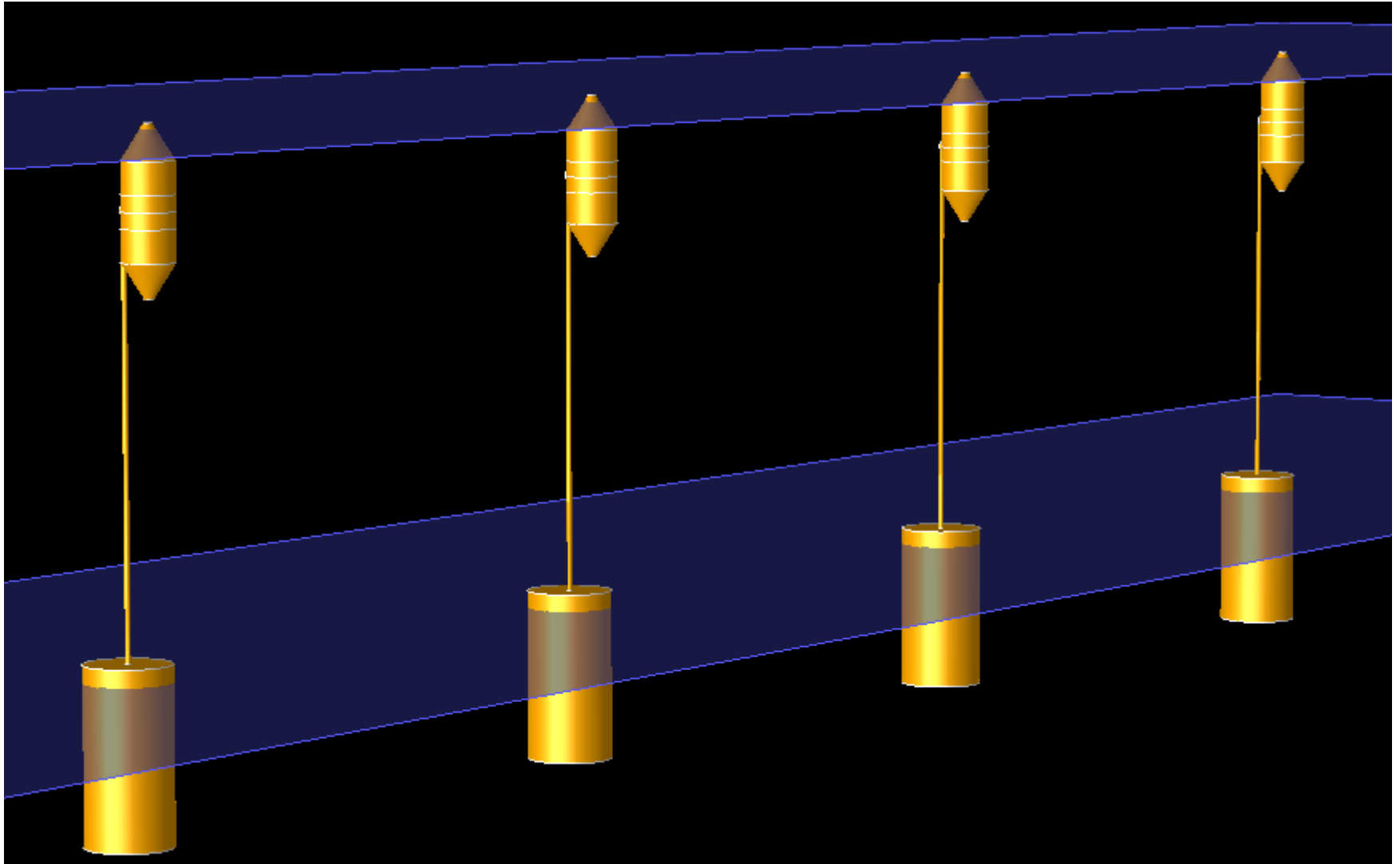


**Mooring Line Attachment  
Points Extend Above  
Water When No Mooring  
Lines Are Attached And At  
Slack Tide**

**Spring Buoys Shown  
Before Mooring Lines Are  
Attached**



# Spring Buoys Shown Before Mooring Line Attachment



# 16B-Double Paddle Wheel Current Catcher© Farms With Spring Buoy Mooring Systems & Rectangular pontoons

**Spring Buoys Have Minimum Drag Force Orientation After Mooring Line Attachment**

