

# Structural Mockup : Advanced Light Helicopter with Functional Folding Tail Boom

## Challenge

- **Design and development** of automated folding tail boom mechanism for the Advanced Light Helicopter of the Indian Navy
- Stringent time constraint for developing a full-scale mockup
- Attention to detail for CMF, Interiors, Mechanism

## Scope

- Ease of transport and deployment to enhance Indian maritime security and naval supremacy
- Engineering Design (CAD), Simulations (CAE).
- Material Selection, Prototyping, Fabrication
- Integration Testing

## Solution

- Design of the folding tail boom mechanism including servos, hinge pins and linkages.
- Theoretical calculations and simulations to validate the designed mechanism.
- Folding mechanism manufactured and tested for the intended operation

## Impact

- Project executed and delivered well within the expected timeline.
- Folding tail boom mechanism is currently being adapted for actual ALH development

