Operationalizing Positive Culture in Aerospace Manufacturing

Using CAST, Systems Engineering Principles and Human Factors Methods

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What creates an unacceptable safety culture?

“Every system is perfectly designed to get the results it gets.” – W. Edwards Deming
Safety Culture & Aircraft Damage Prevention

Objective: Prevent Aircraft Damage

To prevent aircraft damage, we need to strengthen our culture.

How can we strengthen our culture?

Our people know how to be compliant → **Clear requirements for compliance**
Our people have what they need to be compliant → **Equipped for compliance**
Our people can report back on lack of compliance → **Report compliance deviance**
Our people can analyze and implement changes → **Analyze and implement improvements**
Desired Culture vs. Current Culture

MENTAL MODEL

If Clear Requirements + Resources

If Not

Report

Respond

Then

Do Work & Build Damage Free Aircraft

MENTAL MODEL

If Clear Requirements + Resources

If Not

Report

Respond

Implement Improvements

Then

Do Work & Build Damage Free Aircraft
Desired Culture Simplified Control Structure Model

- **Upstream Element**
- **Upstream Element, A**
- **Upstream Element, n**

- **Me**
- **Our Team**

- **Downstream Element**
- **Downstream Element, A**
- **Downstream Element, n**

- Clear requirements
- Adequate resources
- Requirements clarification
- Resource requests
- Resource Requests

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Thank you!