



## Supplier Improvement Program

PIA Government Systems Meeting  
Lexington, KY  
6 August 2010

# Outline

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- Team Origin
- Rules of Conduct
- Shared objectives
- Approach
- Data analysis
- Paperwork brainstorming
- Escalation plan
  - Phased approach
  - Description of phases
- Implementation timeline



# Team Origin

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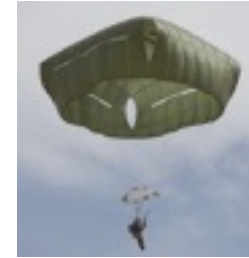
- Originated out of PIA meeting inputs and discussions
- Evidence of systemic non compliance to PIA/MIL specifications
  - Increased scrutiny by Government during First Articles and First Production Lots
  - Increased testing at receiving inspection
  - Common issues across supply base
- Criticality of materials warrants focus and attention
- Ability to improve communication between primes and suppliers
- Desire of Primes to become more proactive and less reactive

Suppliers execution critical to industry performance

# Rules of Conduct

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- Treat each other fairly and with dignity
- Keep our promises
- Encourage cooperative efforts across the team, with each member having an equal voice
- Work towards solutions that benefit both the group and your company
- Do not engage in any activity that might create a conflict of interest for our company or for ourselves individually
- Evaluations and discussion of supplier performance will be based upon factual data and audit findings



# Shared Team Objectives

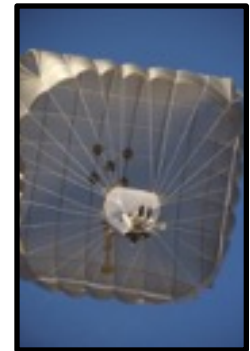
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- Enhance the performance of the Parachute Industry supply base
  - Improve both paperwork and material compliance to the specifications
- Leverage our shared resources to address systemic or critical shared supplier issues
- Strengthen communication of supplier related issues across the Parachute Industry
  - Between Primes and between suppliers
- Identify issues proactively and work on preventive actions

# Approach

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- Meet regularly via teleconference
- Agree upon most significant supply chain issues facing the industry
  - Use data to guide decisions
  - Consider frequency, severity, and likelihood of detection
- Establish prioritization (pareto principle)
- Determine action plans for top one or two issues
  - Spread the actions across the team as much as possible
- Document meeting with minutes and actions



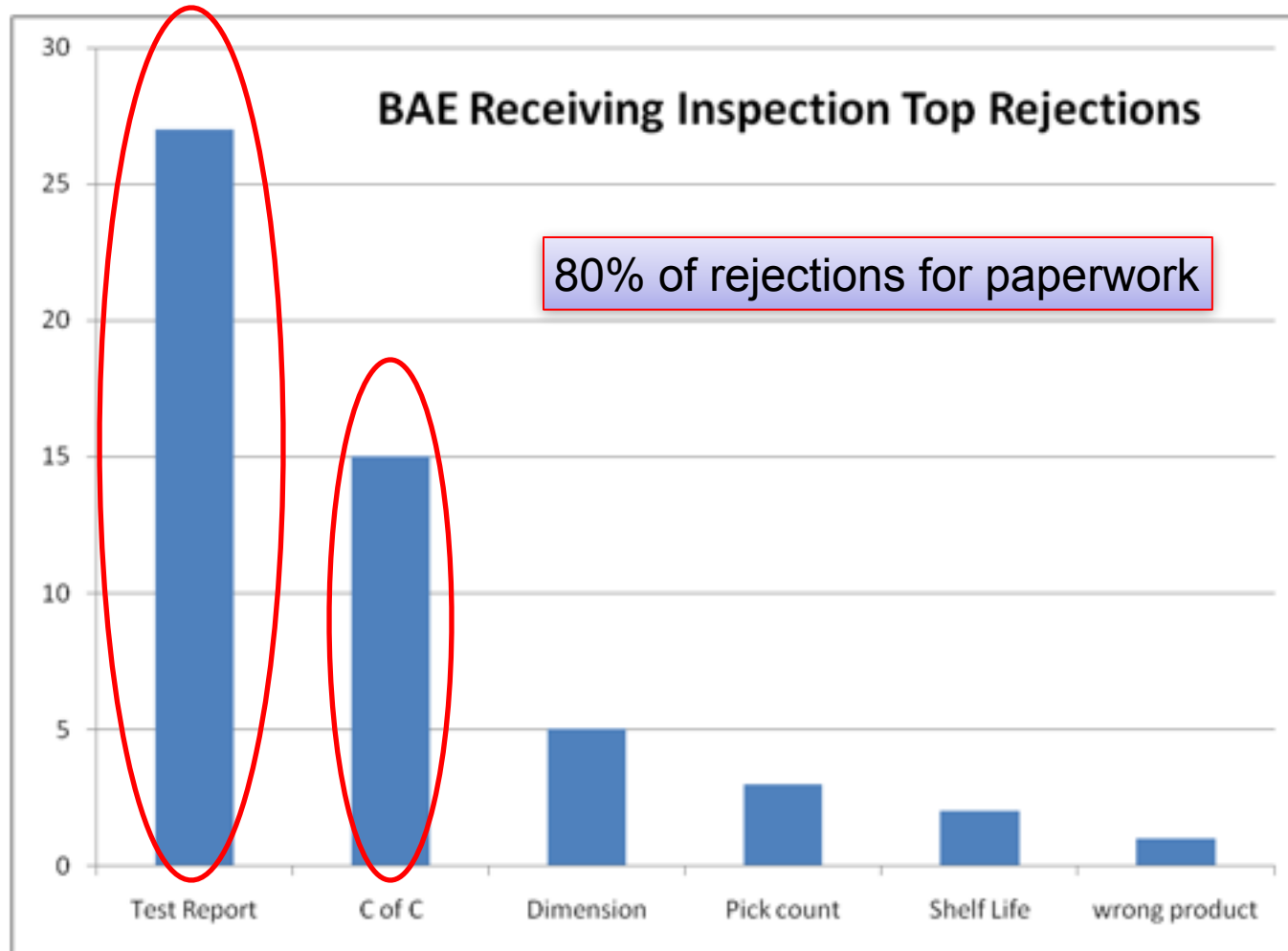
# Data Analysis

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- Reviewed each Prime's rejections
- Consistently saw same defect type as #1
- Became first focus of improvement initiative



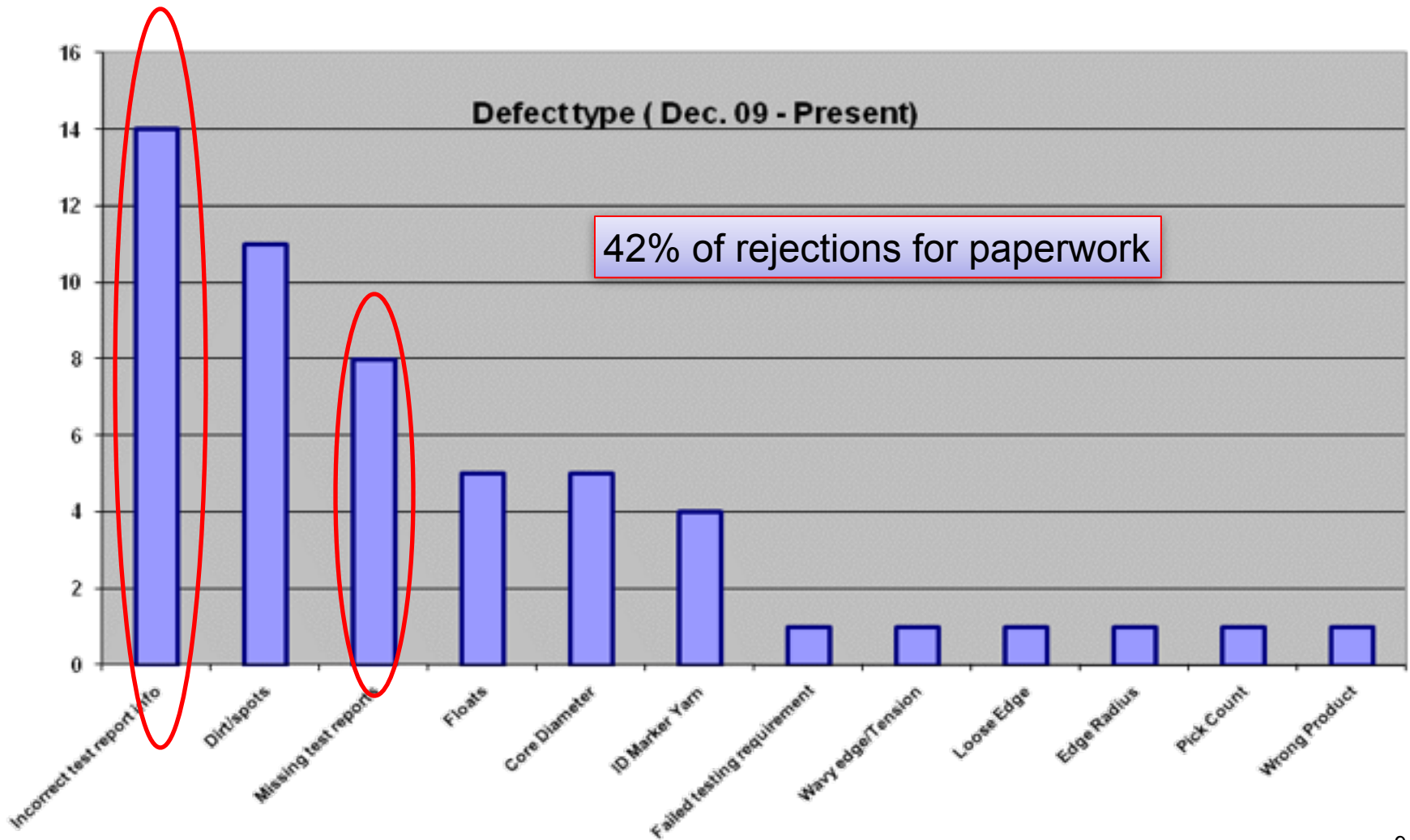
# BAE Inputs





# Mills Manufacturing Inputs

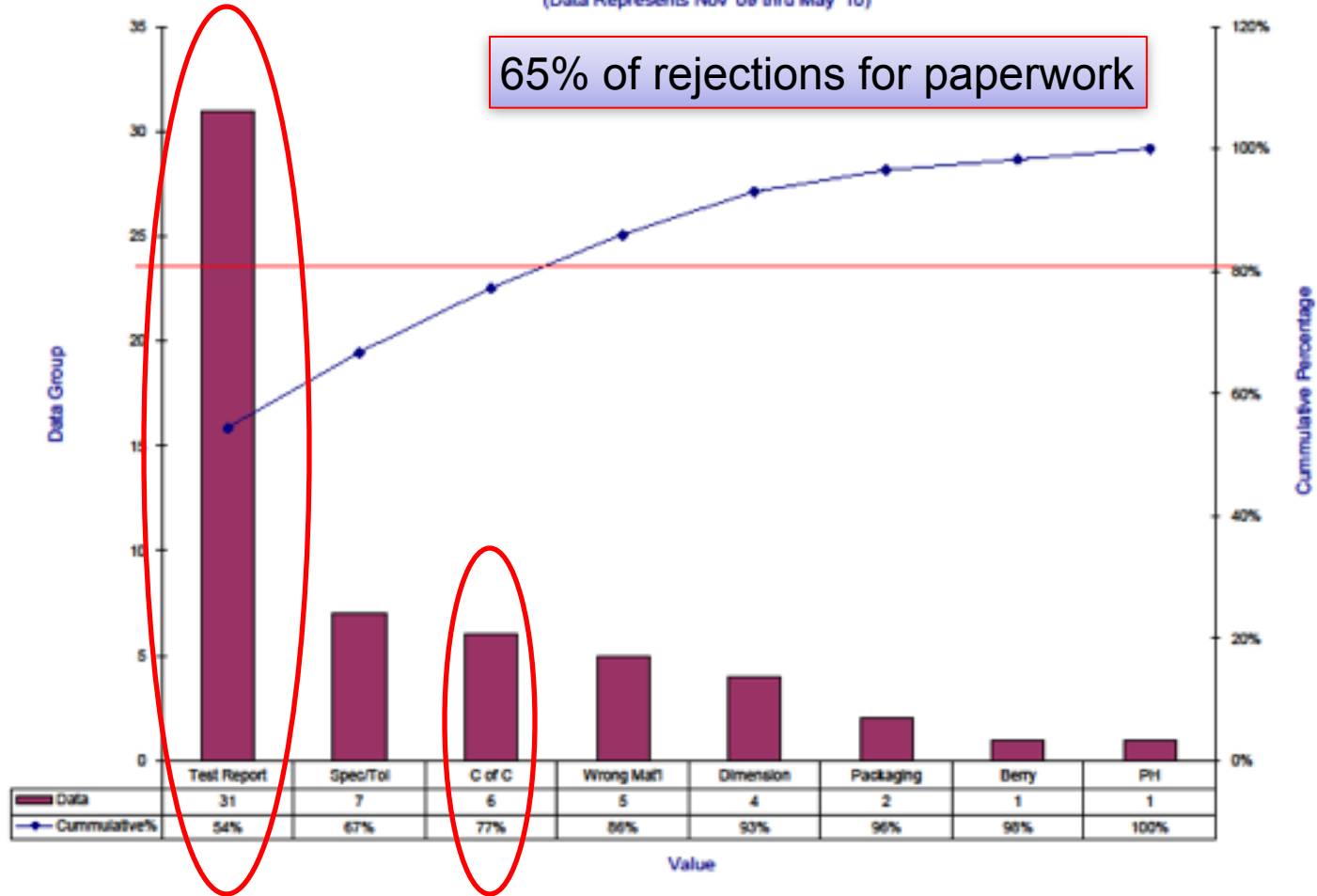
### Mills Manufacturing Supplier Rejection Issues (frequency)



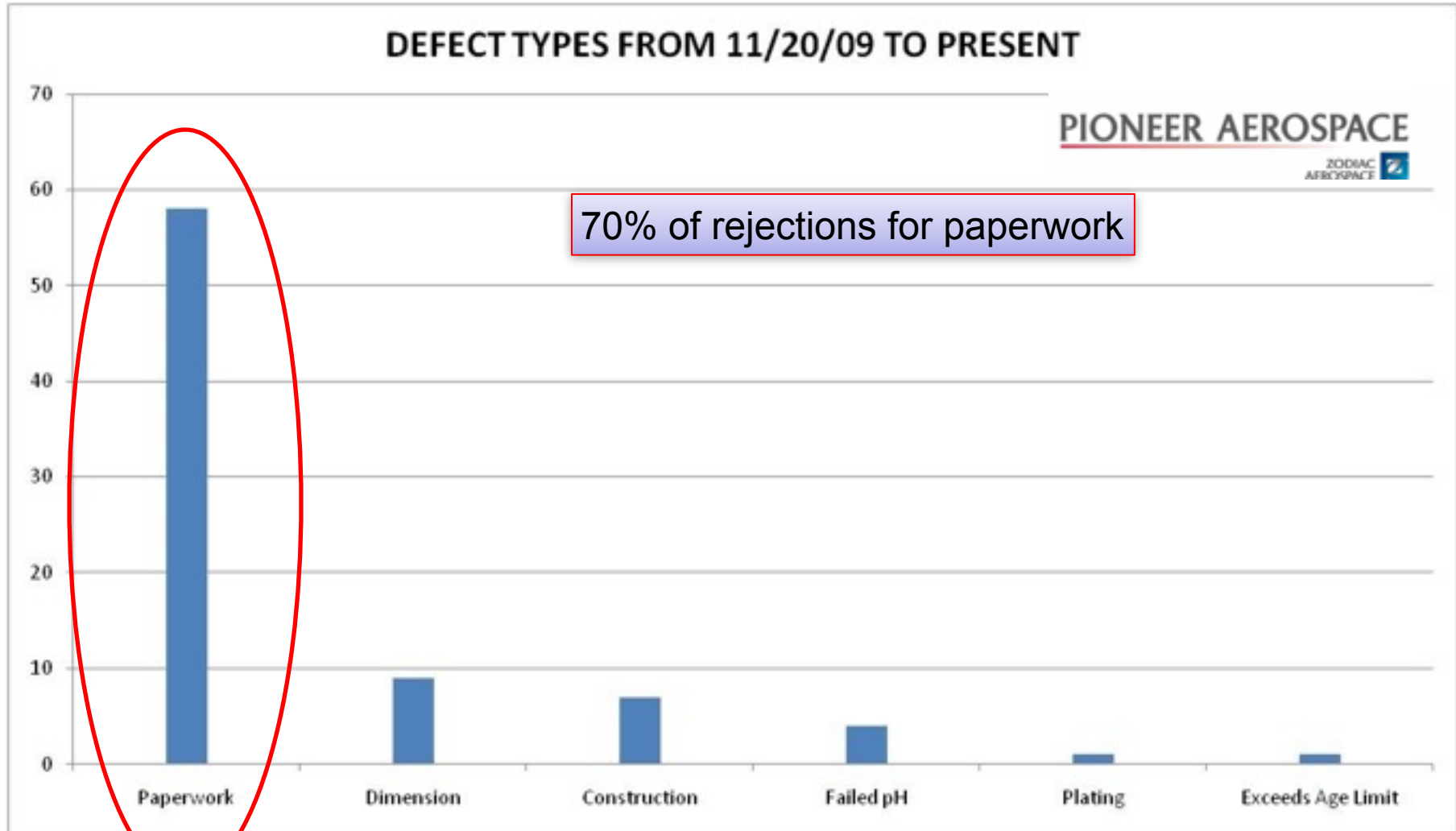
# Aerostar Inputs

### T11 Receiving Inspection Non-Conformances Pareto Chart

(Data Represents Nov '09 thru May '10)

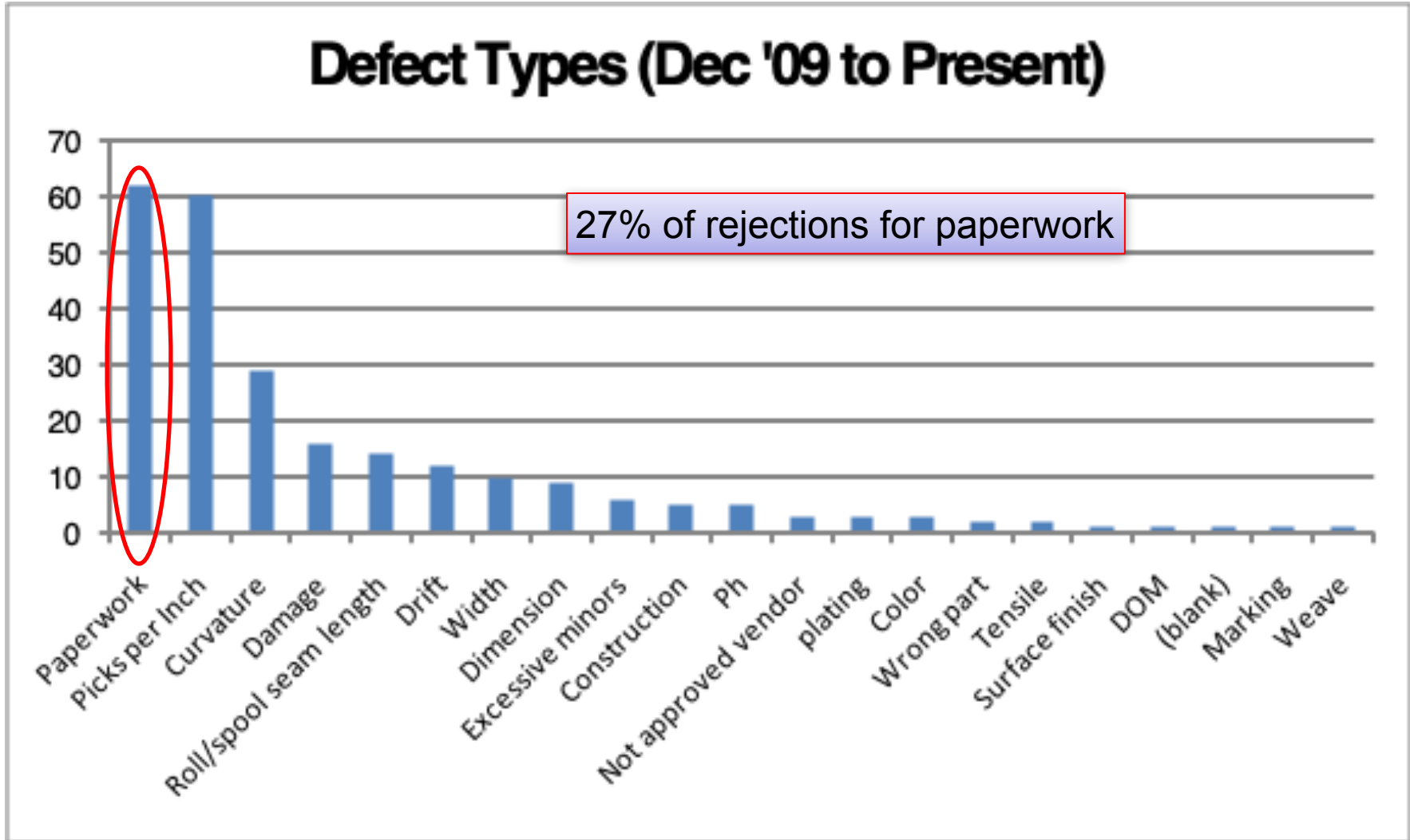


# Pioneer Inputs



# Airborne Inputs

## Defect Types (Dec '09 to Present)

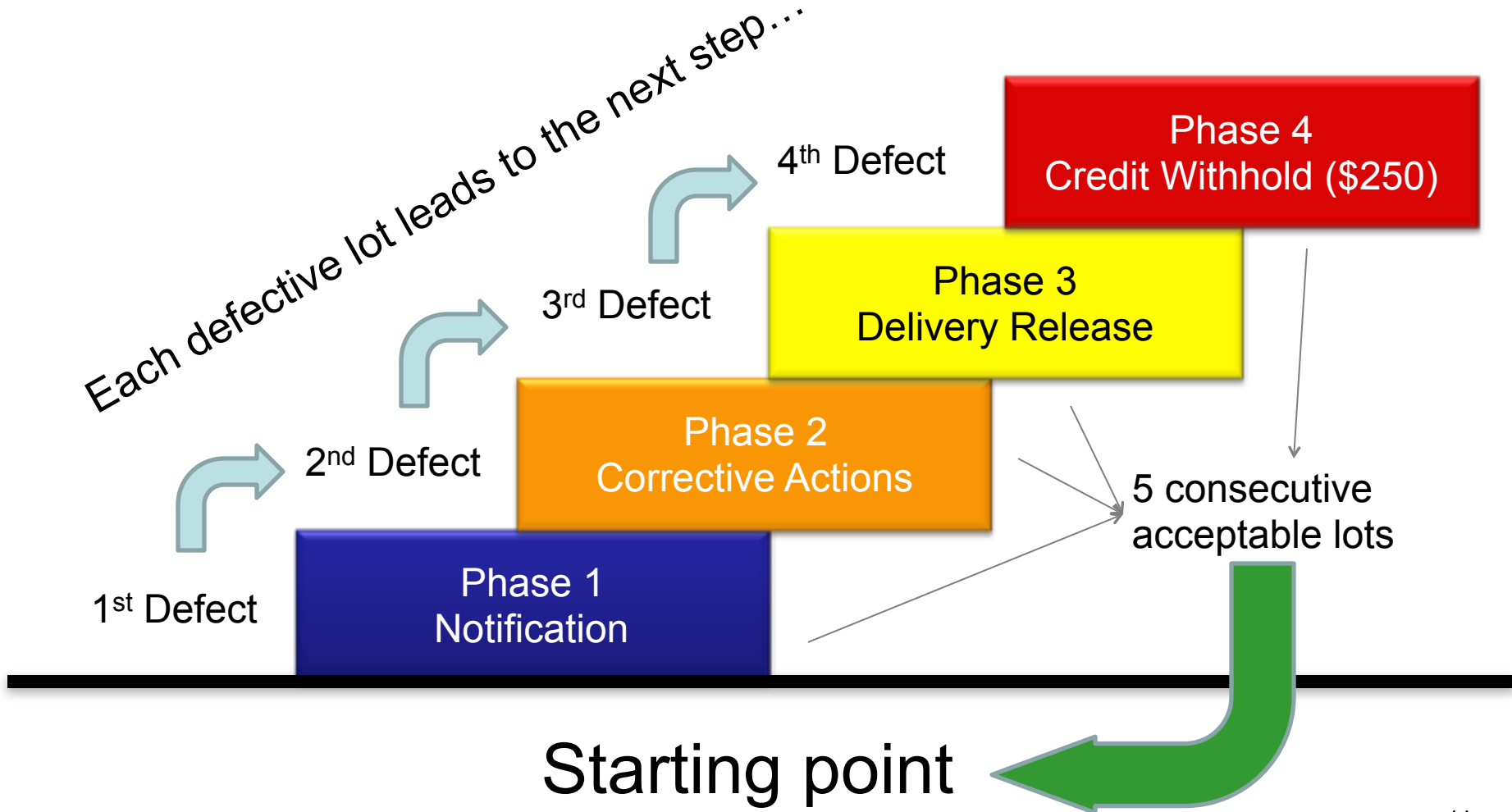


# Paperwork Brainstorming Ideas

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- Conducted brainstorming session as a team on how to improve paperwork issues
  - Option 1 - Create consistent graduated escalation stages for defective paperwork lots
  - Option 2 - Implement common checklists for each supplier to submit
  - Option 3 - Create common shared 'web' application where data is entered by suppliers and accessed by primes and customer
- Team agreed on option 1
  - Option 2 complex, requiring extensive coordination between all primes and suppliers, also introduces new formats and requirements to suppliers
  - Option 3 costly, complex and timely to implement as a solution does not exist in the software industry to date

# Paperwork Improvement Phases



# Paperwork Improvement Phase Details

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- All direction to be given through prime's purchasing departments
  - Formal notification will be an introduction letter sent by each prime
  - Additional clause will be added to current/new purchase orders
  - Will apply to all suppliers of each prime
- Escalation occurs at each prime independent of supplier activity at any other prime
- Progress of suppliers that move into phase 2 and beyond will be shared across all primes
- Removed from all phases once 5 consecutive lots are accepted with zero paperwork defects or 12 months (which ever comes first)

# Phase Details

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- Phase 1 – Notification of first paperwork offense
  - Opportunity to ensure common understanding of expectations
  - Obtain concurrence with supplier on paperwork nonconformance
- Phase 2 - Issuance of formal Corrective Action Request
  - Initiated upon second defective lot
  - Identical CAR form to be used by all primes, response requested in 14 days
  - Again confirm concurrence from supplier of paperwork nonconformance





# Phase Details

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- Phase 3 - Delivery release program
  - Initiated after 3<sup>rd</sup> lot submitted with paperwork issues
  - Requires paperwork for each lot to be sent (electronically preferred) before shipment
  - Shipment of material does not occur until the paperwork is accepted by the prime
  - Primes agree to review and approve/reject with 72 hours
    - should be factored into delivery schedules



# Phase Details

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- Phase 4 – Withhold cost of poor quality
  - Desire is to never get to this phase
  - Initiated after 4<sup>th</sup> lot submitted with paperwork issues
  - \$250 to be withheld on invoice for only the rejected lot
  - Conservative estimate of \$250 based upon additional labor to document the issue, communicate with the supplier, obtain approval, second review of data, segregation of material and closure of the disposition activity
    - Possibility exists for additional costs to be incurred as a result of the rejection and possibly passed along such as late shipment charges, OT required, line stoppage or difference in cost to procure replacement

**Objective** = eliminate systemic paperwork issues!

# Summary

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- Joint prime manufacturers team created to improve systemic supply base issues
- Team using data to drive decisions
- Data identified Paperwork as largest supply chain issue by frequency
- Team jointly implementing Paperwork Improvement Program that has 4 phases

**SUPPLIER SUCCESS = INDUSTRY SUCCESS**