Leadership Excercise

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Brent Duggleby has over 20 years experience in Organizational Performance Excellence and Quality Management Concepts, including Strategic Planning, Applications of Quality Tools, Facilitation/Team Development, Manufacturing, Administrative and Service Improvement, and Customer Interface/Satisfaction Strategies.

Published Works - books, articles, training aids, etc. include: “Everything I needed to know about Lean Manufacturing I learned in Kindergarten”, American Society For Quality. “Lean Manufacturing: Focusing on Value Creation”, American Society for Quality. “Sharing Information: Turning Knowledge into Action”, American Society for Quality.

SUPPLIER EXCELLENCE ALLIANCE

Accelerating Supply Chain Performance

Leadership Exercise

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2012 Chair California Awards for Performance Excellence Council

Airplane Building

This exercise is designed to demonstrate the importance of *Leadership Processes*.

You will be divided into a number of groups to build and deliver an advanced cellulose based aircraft design.

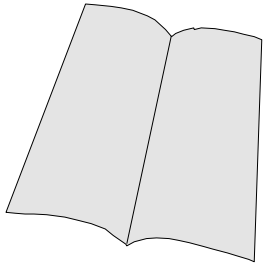
It is important to carefully observe the ground rules of the exercise. During this simulation, be active and involved. Your team will be evaluated by the number of properly configured aircraft that can be delivered by the end of each production cycle.

Exercise Ground Rules

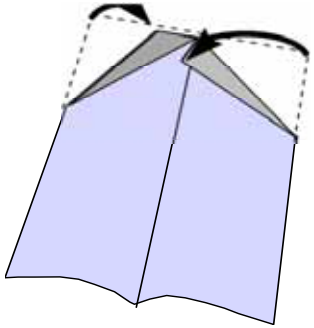
- Each team will be provided:
  - Assembly / Paint Instructions for the aircraft
  - Advice on building a quality product
  - An opportunity to view a full demonstration of the aircraft assembly and paint procedure
  - Aircraft Build set with all materials and supplies

- Each team will compete through a series of timed production cycles. Specific instructions will be provided for each round of production.

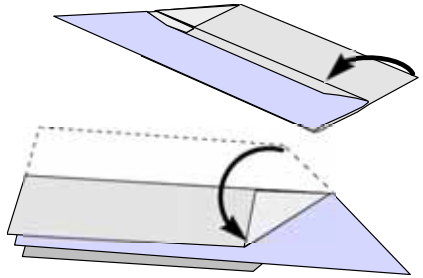
Project Name:	Alternative Green Aircraft Design (Cellulose Based Structure)
Prepared by:	Orville & Wilber
Date (MM/DD/YYYY):	03/21/2012



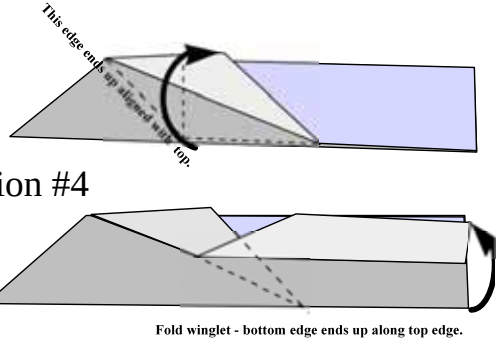
Operation #1



Operation #2

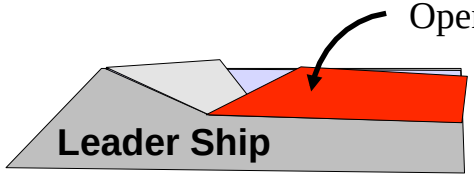


Operation #3

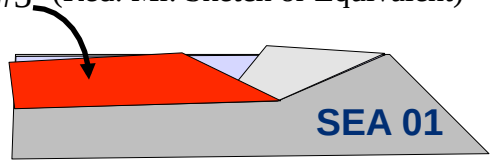


Operation #4

Operation #5 (Red: Mr. Sketch or Equivalent)



Detail #1 (Black: Sharpie or Equivalent)



Detail #2 (Blue: Sharpie or Equivalent)

Operation #6

Assembly& Finish Process Steps

Operation	Step Name	Comments
1.0	Fold #1	Crisp straight fold is vital
2.0	Fold #2	Two corners folded to centerline fold.
3.0	Fold #3	Fold each side down to align with bottom of aircraft fuselage
4.0	Fold # 4	Each Wing: Fold leading edge back to top of fuselage. Fold remaining wing tip up to align with and be parallel to top of fuselage.
5.0	Finish & Paint #1 (Wing)	Paint outboard of wing tip using high visibility red per Detail # 1& 2.
6.0	Finish & Paint #2 (Fuselage)	Paint port fuselage per detail #1, Paint starboard fuselage per detail #2
7.0	Final Inspection	Verify assembly build, logo details and color scheme

Suggested Team Roles

- Factory Manager (Required)
- Stores- Material Clerk
- Expediter/Material Handler
- Assemblers Four or more
- Painters Two or more
- QC / Final Inspectors Two
- Process Observers (as needed)
- **SEA Hosts will act as Customers and receive the delivered aircraft.**

Round #1 (10 minutes)

- This round will begin on the signal.
- Assign roles.
- The clock on the projection screen will count down to the end of production.
- At the end of production, only satisfactory quality aircraft that have been delivered to the customer, will be counted.
- Good luck!

Round #1- Debrief

- Observations?

- Specific examples of:
  - What went right?
  - What went wrong?

Round # 2 (10 minutes)

- **Planning:** Use first 5 min for the group to plan what to accomplish and how to do it!
- Plan the specific steps needed to assemble/paint the aircraft .
- Assign roles for each task.
- On the signal, utilize the last 5 minutes to produce airplanes!
- **Manager** is to coach and communicate status within the team during production. ***<u>However, no worker discussion is allowed during production.</u>***

Round #2- Debrief

- Observations?

- Specific examples of:
  - What went right?
  - What went wrong?

Round #3 (10 minutes)

- **Communication / Review -** Use first 5 min for the group to plan and review performance.
- Plan the exact steps to assemble an aircraft.
- Assign roles for each task.
- On the signal, utilize the last 5 minutes to produce airplanes!
- ***Unlimited communication is permitted during entire round.***

Round #3- Debrief

- Observations?

- Specific examples of:
  - What went right?
  - What went wrong?

Round #4 (10 minutes)

- **Continuous improvement / Workforce development –** Use first 5 min for process refinement and training.
- Modify and incorporate work process improvement as the team feels is prudent.
- Train entire workforce in the standard process.
- On the signal, utilize the last 5 minutes to produce airplanes!

Round #4- Debrief

- Observations?

- Specific examples of:
  - What went right?
  - What went wrong?

Leadership Processes

- Results and Observations
  - Planning
  - Communication
  - Organizational Performance Review
  - Continuous Improvement Management
  - Workforce Development Integration

Leadership Processes

Table	Round 1	Round 2	Round 3	Round 4	Total
Irvine Aircraft	2	9	10	15	36
Avengers	0	8	14	16	38
Frequent Fliers	0	7	7	12	26
Fliers	3	11	11	16	41
average	2.5	8.75	10.5	14.75	