

Activity: Airplane Company

(Flying Monkey)

Introduction:

The Flying Monkey Company is the world's leading dart airplane manufacturer. Their top customer has just put in a request for 100 planes to be delivered within three months. Delivery schedules require FM to successfully manufacture 8 planes per week. A bonus will be paid at the completion of the contract if FM can successfully reduce production time. NOTE: Customer has only agreed to buy planes which have passed flight inspection.

Challenge:

To accurately produce the most dart airplanes within a 15-minute time limit.

- *Each successful plane will earn FM \$1M.*
- *Each unflown or crashed plane will cost FM \$3M.*

Equipment:

- *Tape Measure*

Materials:

- *Paper*
- *Paper clips*

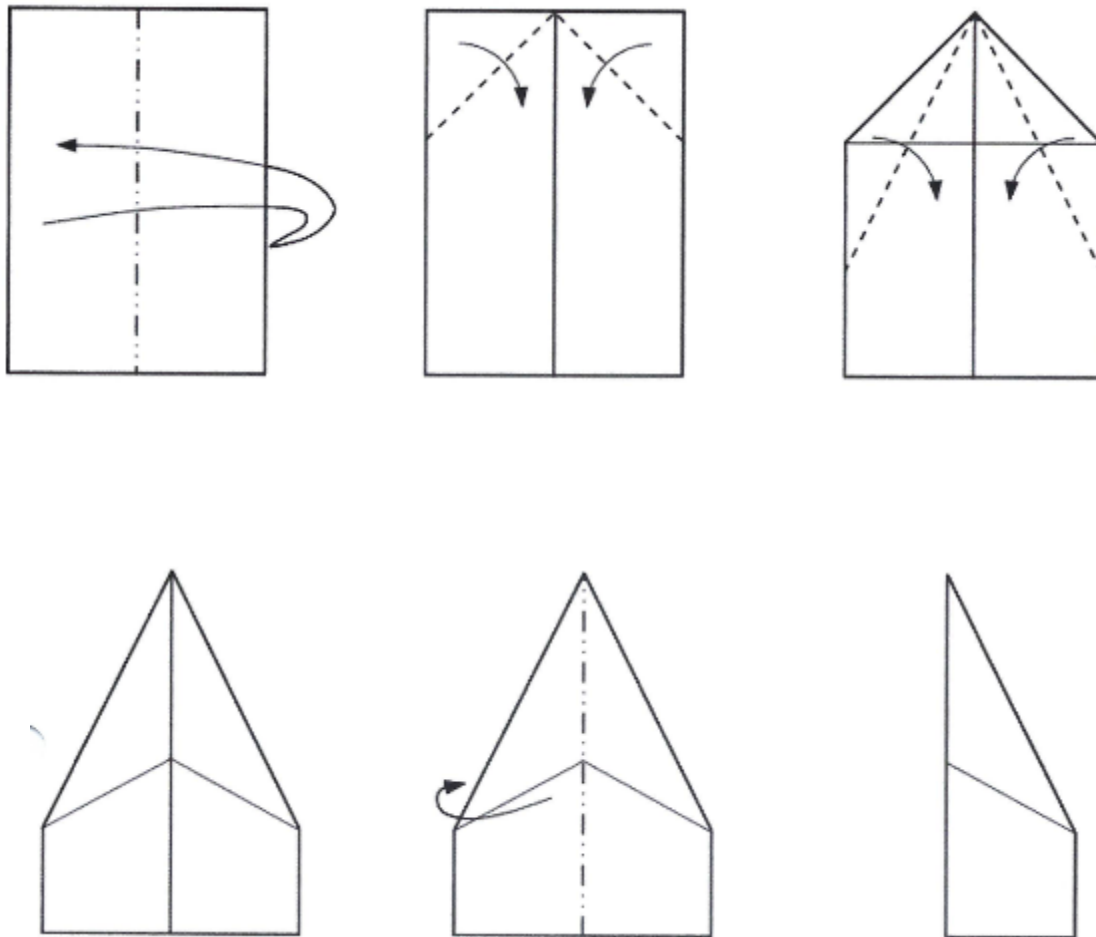
Procedure:

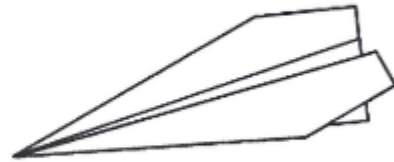
Identify Production team: Batch Recorder, Transporter, Builder, Engine Installer, Finisher, Inspector, Pilot, Flight Recorder.

- Transporter will deliver a folder containing 5 sheets of paper to the recorder. The job will be repeated when the Batch Recorder's station is cleared.
- Batch Recorder will assign batch number to the sheets of paper (1-1, 1-2, 1-3, 1-4, 1-5 etc) Once each sheet has been marked, the Batch recorder yells "Hey Transporter". The Transporter will give the batch folder to the Builder. The job will be repeated each time a new folder arrives.
- Builder will use the paper to create 5 dart airplanes. When all sheets in the folder have been used, the Builder yells "Hey Transporter". The Transporter will give the folder to the Engine Installer. The job will be repeated each time a new folder arrives.

- Engine Installer will add an engine (paper clip) to each plane. When installation is complete for all items in the batch, the Engine Installer yells “Hey Transporter”. The Transporter will give the folder to the Finisher. The job will be repeated each time a new folder arrives.
- Finisher will add the FM logo to each plane. Once finished the folder, the Finisher yells “Hey Transporter”. The Transporter will give the folder to the Inspector. The job will be repeated each time a new folder arrives.
- The Inspector will check each plane to ensure FM’s quality standards have been met. Any rejects will be removed from the folder and added to the reject bin. After inspection is complete, the Inspector yells “Hey Transporter”. The Transporter will give the folder to the remaining planes will be given to the Pilot. The job will be repeated each time a new folder arrives.
- The Pilot will launch each plane from the designed launch strip. The job will be repeated each time a new folder arrives.
- The Flight Recorder will log the results of each flight and the rejected materials. The job will be repeated each time a new folder arrives.

Airplane Folding Instructions:





Rules:

NO TALKING at any point during the test except for “Hey Transporter”.
Must follow job description

The team will determine what steps need to be put in place to close the gap between the performance and goal.

Conclusion:

- 1. What happens when the process runs at a slow pace?*
- 2. What happens when the process speeds up?*
- 3. What is the maximum output per minute?*
4. List where bottlenecks might occur in your everyday lives.

