

GE Aerospace, our key to manufacturing success:
Exceeding customer expectations through
teaming and consensus



imagination at work

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Durham Engine Facility

Durham, North Carolina ...

Home of GE Aerospace's
high performance self-directed work teams





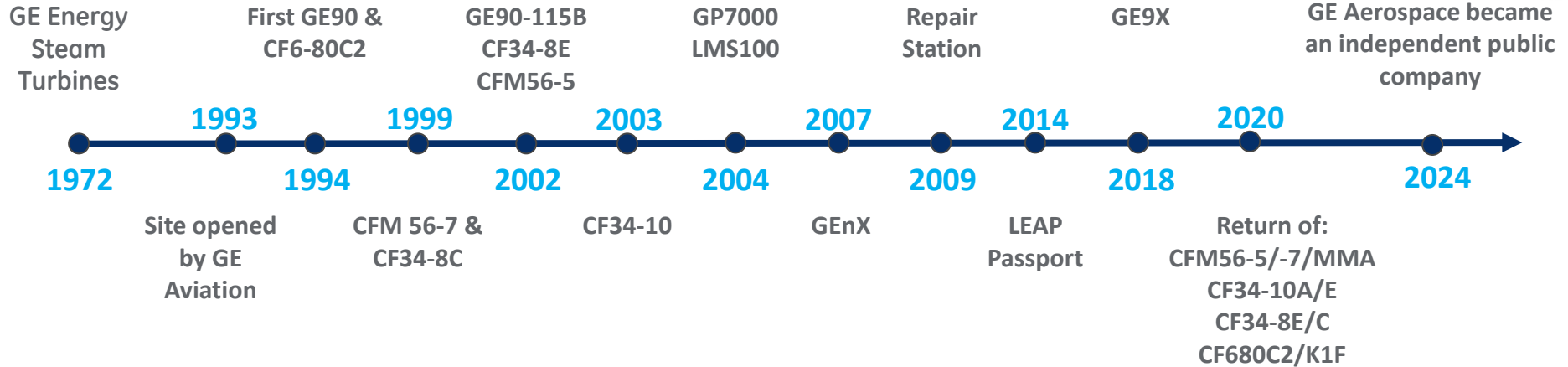
Brief history of Durham

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Durham Plant History

500 acres of land
 500,000 sq. ft. of floor space
 40% powered by solar panels



Continuous evolution to support our Customers!



High Performance Teams

316 Highly Skilled Technicians



Flat Organization

Self Directed Workforce

Flexible Culture

Talented & Multi-skilled

Boundary Less Structure

19 Teams

Delta	Horizon	Synergy	Pioneer	Kodiak
Edison	Mirage	Patriot	Summit	Titan
Vector	Vortex	Phoenix	Raven	Frontier
Origin	Freedom	Voyager	Aviators	



Building
5



100 YEARS OF REIMAGINING FLIGHT GE AVIATION

Team Durham Video

Overview of Teaming at GE Aerospace Durham



Durham Differences

Traditional Work Environment & Self-Directed Workforce

Traditional

- Time clock
- Multiple levels of supervision
- Multiple levels of Quality/EHS
- Little input in decision making
- Little ownership

Self-directed

- No time clock
- One boss, no supervisors/managers
- Focal points, councils
- Decisions made based on consensus
- Team's own processes and direct changes if needed
- Policy input
- Ownership & Accountability
- Flexibility
- Multi-skilled

Training new talent

Traditional

Day 1: EHS training

Day 2: OTJ training

Pros	Cons
Quick	1 job only 0 flexibility

Teaming

Day 1–14: DEF Training

(EHS, Giving & receiving feedback, DEF history, etc.)

Day 15-44: Team Training

(Begin OTJ training, attend team time, work both shifts)

Day 45: 45 Day review

(constructive feedback team to tech)

Day 46-89: Team Training

(Gain stamp, gain sign offs, etc)

Day 90: 90 Day review

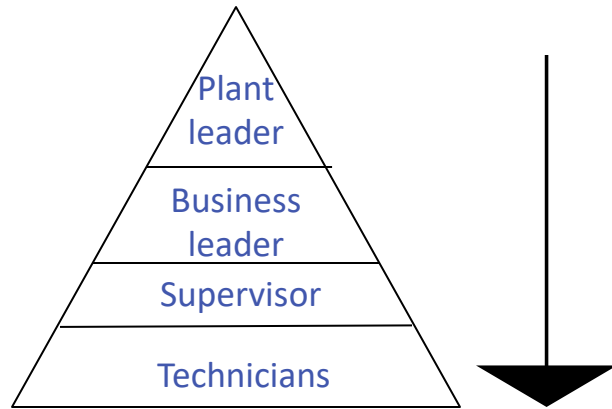
(passed or failed DEF careful selection process)

Pros	Cons
Technician led feedback daily Investment in talent 100% flexibility Well rounded	Expensive Time consuming

Communication

Traditional

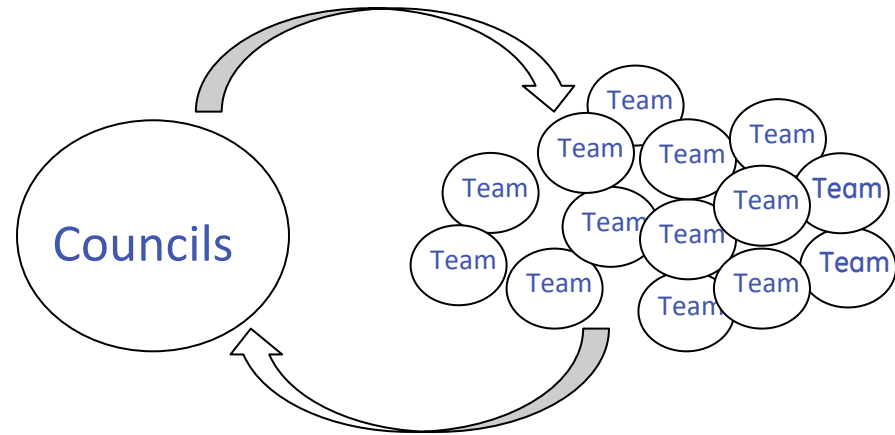
- Info flows top to bottom



- Tools: All employee meetings, word of mouth, supervisor instructions

Teaming

- Info flows in a circle



- Tools: facility wide emails, council minutes, voicemail, team texts, videos, looking forward, training, 360 feedback

Pros	Cons
Quick decisions	1 sided decisions
Easier	Lack of buy-in
	Dissatisfied plant

Pros	Cons
Better decisions	Slower decisions (Hard to reach consensus)
100%Plant buy-in	
Satisfied plant	

Process/planning ownership

Traditional

- Non-expert owns process (PE, ME, QCE, etc.)
- Force improvements that might not be the best

PE, ME, QCE



Techs

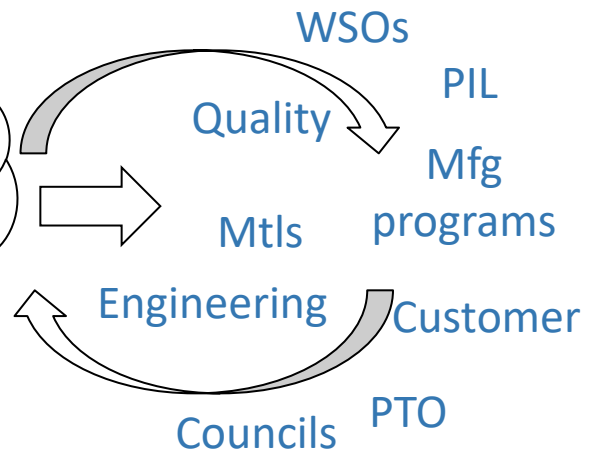
Teaming

- Experts (techs) own process
- Work station owners (WSOs) own:

Planning
Process
Safety
Cost out
Quality

Tooling
CIDs
Improvements
Cycle

Techs & WSOs



Technician Growth Opportunities

Tech

2-week training: will give the technicians the basic foundation and necessary tools to prepare for their 1st 90 days as Assembly & Test technicians

Tech I

Will prepare the technician to become an active and effective team member, using and expanding on the basic skill sets acquired

Tech II

Technicians should be using skill set acquired during previous tech levels to expand self confidence and use acquired knowledge to prepare for leadership responsibilities

Tech III

Provide Leadership and direction to Programs and Facility, drawing from personal involvement, training, past Experience and innovative thinking

Team Responsibilities

- Meet business objectives
- Ensure quality of parts & engine build
- Perform inspections
- Ship to Peebles Test Operation
- Post-test fault reviews with customers
- Track incoming material shortages
- Coach, guide & train other team members
- Develop & maintain methods planning
- Develop schedules to meet ship dates
- Acquire tools & components
- Assemble Engines





How Consensus breeds success

Consensus Definition

Consensus is a decision that all members may not agree with but can “live with.”
Consensus may or may not be a unanimous view on a topic.

From Microburst training packet



Communication *makes us more than just individuals*

We achieve good communication through:

- **Daily Team Meetings**
- Regular Business Reviews
- Flat Organization
- Customer Visits
- Leveraged Best Practices
- Multi-skilled/ Team directed workforce
- One on One Feedback
- Team Ownership of Engines
- **Councils**



Team Meetings

Why have team meetings?

- Production goals
- Team needs
- Cost (OT)
- Quality – DPUs
- EHS concerns
- Personal needs
- Opportunity to discuss daily business



2:30 - 3:00PM
Daily

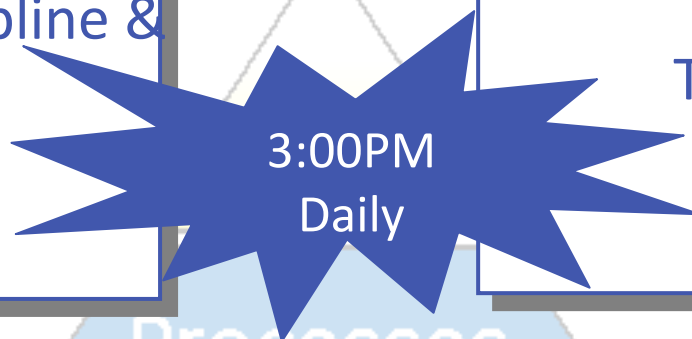
Councils: What They Are

People

Human Resources Discipline &
Development
Training

Processes

Tool & Gauge
Materials



One Representative per team

Rotate members every 12 months

Weekly Meetings

Quality

Quality Systems
Nonconforming Material
Delivered Quality

Safety

Environmental, Health
& Safety



The five steps to reaching consensus are:

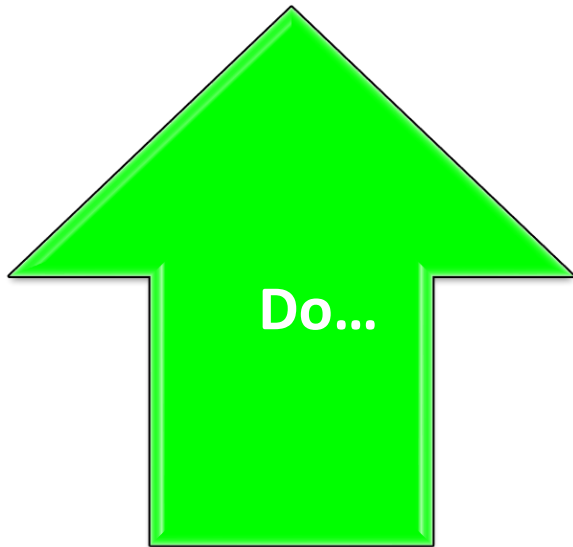
- Gather information and ideas.
- Protect individual viewpoints/promote positive intent and mutual respect.
- Base decision on objective information as much as possible.
- Blend and integrate ideas to arrive at a decision that everyone can support.
- Measure the final outcome by how well it meets the team's, NOT THE INDIVIDUAL's, interests.



Do not destroy a good idea over personal pride



Dos and Don'ts



- ... Lead when appropriate
- ... Delegate work as needed
- ... Communicate openly
- ... Share Information (goals)
- ... Be accessible
- ... Stay proactive



- ... “Manage”
- ...disengage from teams
- ...give the appearance of having personal agendas

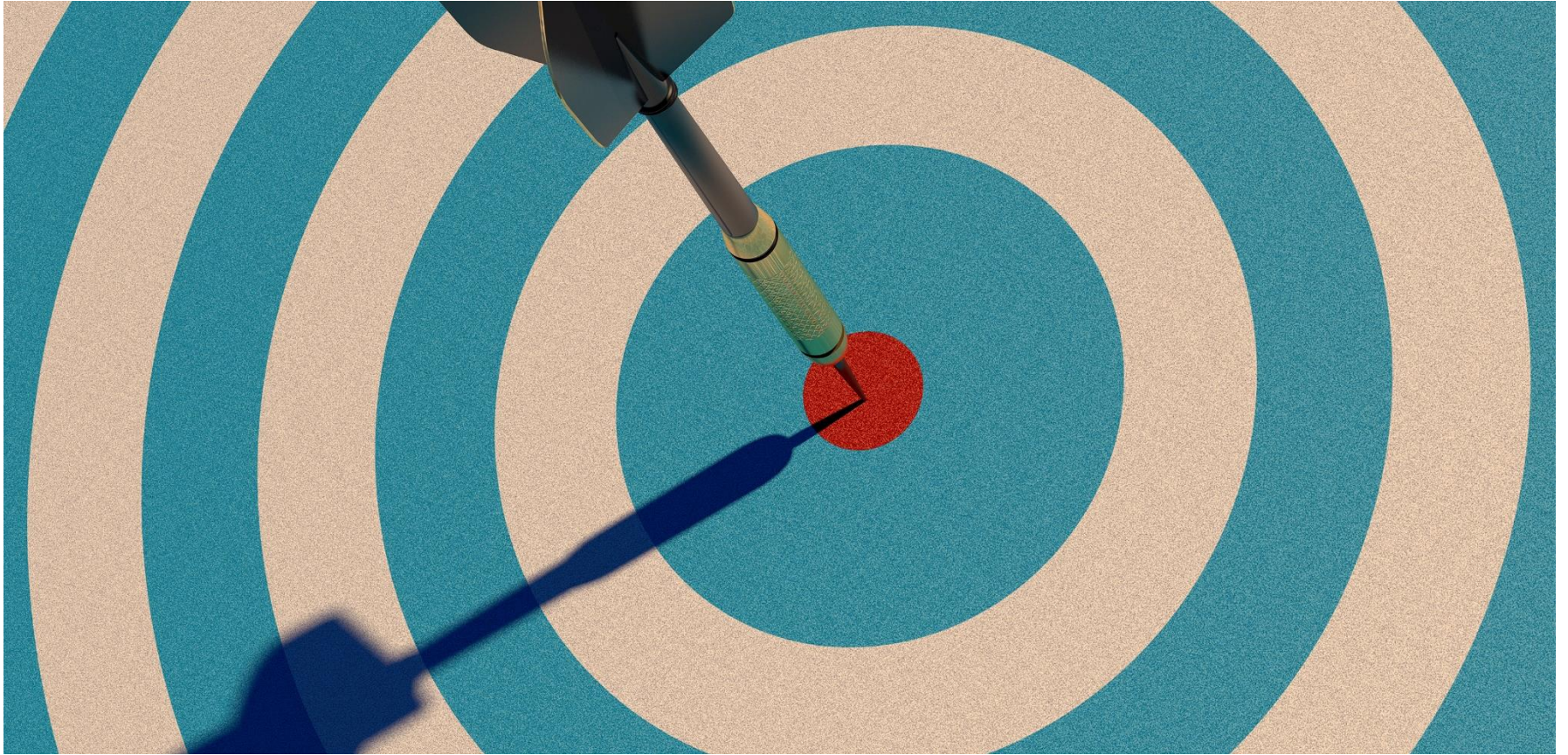
Potential Challenges



Challenges working in a team environment

- At times you will not have a boss, other times 20 bosses
- We all are responsible to hold team members accountable (time mgmt., production goals, timeliness, safety)
- People skills will be tested; expectations are higher when no boss gives directives
- May be called on as leader, must be a self starter
- Must be able to give/receive feedback
- Be able to reach consensus and know when not to buy in to ideas
- Balancing personal needs against business/team objectives

Our key to manufacturing success



Why/How it works

- Everyone has a sense of ownership and pride
- We all make a difference when we have common goals
- We all have input in our future
- Everyone is expected to make a difference and are empowered to do so
- Teams operate as a business within a business – each team's performance reflects on the entire facility



Why teaming works at DEF

- We hire the right people for the culture (self starters)
- We make decisions in team time and in council meetings
- We have perks (flex time, cross training)
- We have ownership (100% tech PR certification, several MRB chairpersons, special process ownership)
- We all share leadership (techs fill support staff roles)
- We have accountability (quarterly team reviews, techs own safety, quality, delivery, cost, and responsibility to customers)
- We work hard but have fun doing it!



Our Vision

We embrace an organizational environment in which the **team** always seeks to exceed customer expectations.

We achieve this by creating a climate of high integrity, mutual trust, simple & effective communication, encouraging new ideas and recognizing that team members represent GE, family, and the community.



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