

UNDERSTANDING BUSINESS PROCESS AT COLLINS AEROSPACE

Organization Summary

Collins Aerospace, a Raytheon Technologies Corporation subsidiary, is an innovator in advanced technology and intelligent solutions for the global aerospace and defense sectors. Collins Aerospace, which was formed in 2018 through the merger of UTC Aerospace Systems and Rockwell Collins, has a long history of creation that includes its development of some of the most innovative communications systems, avionics, and aircraft components in the business.

Collins Aerospace is an international corporation that operates in the commercial, business, military, and space exploration sectors of the aviation industry. Their product line is wide and includes satellite communications and space components in addition to mechanical systems, mission systems, aircraft interiors, and cockpit electronics.

Collins Aerospace is dedicated to innovation and sustainability. Its goal is to provide smart, long-lasting solutions that improve performance, efficiency, and safety both on the ground and in the air. The company's substantial R&D activities and global presence guarantee that it stays at the forefront of aerospace technology, making contributions to developments that will impact flying and space exploration in the future.

Core Business Process of Collins Aerospace

To satisfy the complex demands of modern aviation, space exploration, and military defense, the aerospace and defense business needs precision, inventiveness, and dependability. Our organization, which is divided into five specialist divisions committed to excellence in their respective professions, is at the forefront of this challenging industry. We provide a wide range of aircraft components and services, from the painstaking construction of mechanical systems in Charlotte, North Carolina, to the cutting-edge avionics created in Cedar Rapids, Iowa. We also have experience with the critical power and control systems from Windsor Locks, Connecticut; the strategic mission systems, also located in Cedar Rapids; and the elegant interiors created in Winston-Salem, North Carolina. Every division shows our dedication to breaking new ground in aviation and beyond by contributing significantly to the upkeep and advancement of the global aerospace technology infrastructure.

- 1. Mechanical Systems:** This section is dedicated to the design and production of cutting-edge airplane mechanical systems. Landing gear systems, which enable safe takeoff and landing, actuation systems, which assist in moving and controlling different aircraft sections like flaps and slats, nacelles, which house the aircraft engines, and advanced pilot control systems are among the goods offered here.
- 2. Avionics:** The commercial and governmental avionics division is in charge of the electronic systems found in airplanes, man-made satellites, and spacecraft. This comprises fire prevention systems, sensors that track different parts of the aircraft's performance, and cabin management systems including entertainment and environmental controls. They also manage winch and hoist systems, which are probably utilized for shipping handling and rescue operations.

3. **Aircraft Interior:** The interior parts of airplanes are designed and produced by this industry. This covers both crew and passenger seating, the general interior design (which includes emergency evacuation systems), kitchen galleys and their inserts (including ovens and storage units), restrooms, life-saving gear like rafts, cabin lighting, decorative veneers, clean water systems, gear to keep ice from building up on the aircraft, and cargo management systems.
4. **Mission Systems:** The section dedicated to Mission Systems focuses on systems and technology that are essential for military and defense applications. This covers systems for unmanned aircraft, such as drones; electronic warfare, which involves using the electromagnetic spectrum in combat; simulation and training for military operations; secure communication systems for the armed forces; strategic command and control, which may involve supervising and carrying out military operations; and reconnaissance and surveillance systems, which probably involve satellites and other space solutions.
5. **Power Control:** This division is in charge of managing and producing electricity for use in airplanes and spaceship power systems. This also includes airframe controls—the systems that give pilots control over the structure of the aircraft, such as the wings and tail—air management systems, which are probably connected to the pressure and climate control of the aircraft, and engine controls, which are essential to the operation and performance of the aircraft's engines.

Support Functions

Collins Aerospace's modern engineering achievements and cutting-edge technologies are supported by a strong core of essential divisions that drive and maintain our main business operations. Together, these support pillars—which range from Enterprise Operations & Strategic Development to Communications & Finance and Customer & Account Management—uphold our dedication to excellence. Every role plays a crucial role in maintaining smooth internal communication, careful accounting, cutting-edge digital infrastructure, strategic expansion, and unmatched customer support. Collectively, they are the invisible force behind Collins Aerospace's progress, solidifying our position as leaders in the aerospace and military sectors.

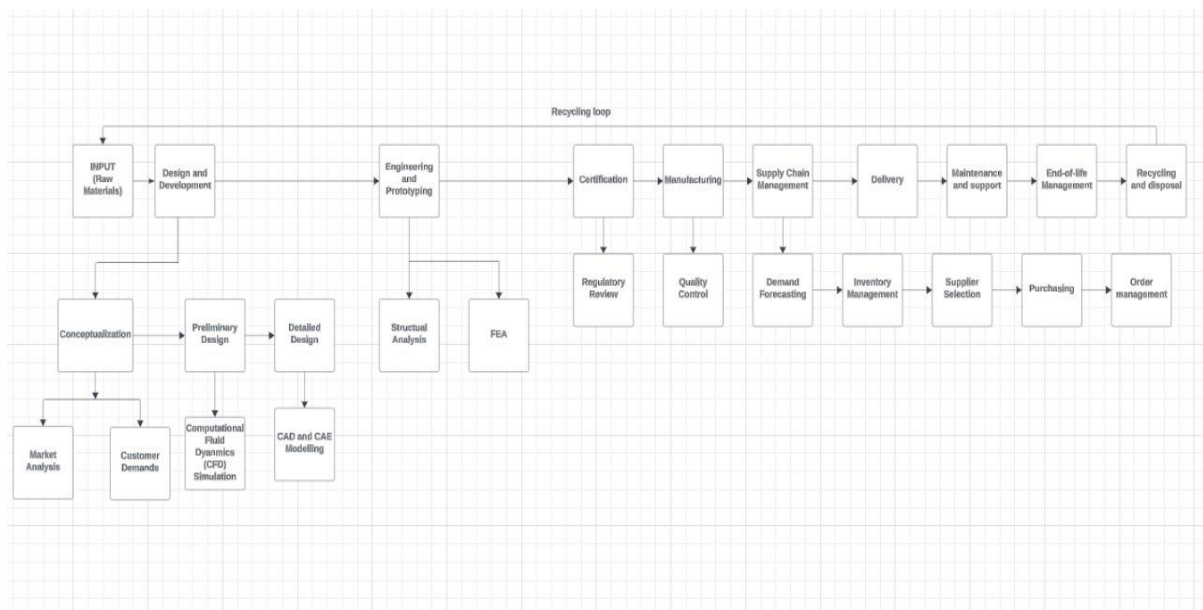
1. **Communication:** Managing communications both internally and externally falls within the responsibility of this division. Initiatives for employee involvement, public affairs, corporate communications, and media relations may fall under this category. Effective communication is essential for Collins Aerospace to communicate technical details, business accomplishments, and brand image to the public and stakeholders.
2. **Finance:** Accounting, reporting, budgeting, and financial planning would fall within the authority of the finance function. This could also involve overseeing substantial R&D project expenditures, intricate financial operations because the aerospace sector is international, and financial compliance with sector-specific laws.
3. **Digital Technology:** This section would be devoted to the company's IT infrastructure, covering the creation and upkeep of digital technologies that facilitate business activities. Such a department would be essential to Collins Aerospace in order to guarantee cybersecurity, manage data analytics, maintain digital communication networks, and support the digital components of avionics and other technology-driven products.
4. **Enterprise Operations and Strategic Development:** This area generally relates to the company's overall operational strategy and efficiency. It could entail strategic planning, process optimization, and the deployment of systems that help the business achieve its long-term objectives. For Collins Aerospace, this can entail supply chain management,

manufacturing process optimization, and creating plans for breaking into new markets or creating new goods.

5. **Customer and Account Management:** Managing relationships with clients—which might include governments, defense contractors, and airlines—requires this job. It includes contract administration, customer care, after-sale assistance, and sales support. In the aerospace sector, this frequently involves handling complex contracts and negotiations as well as making sure that services and goods are delivered in accordance with the high standards that customers want.

Process Map for Telecommunication devices (Radar)

A process map in the aviation industry might vary greatly depending on the context, such as production, maintenance, operations, or customer support. However, the following crucial steps could be included in a general summary of an aviation manufacturing process map:



Design and Development: Gathering requirements and ideas through conceptualization.

- Preliminary Design: Performance, cost, and regulatory compliance are the main considerations in the creation of initial designs.
- Detailed Design: Materials, components, and system integration are all included in the detailed schematics and specifications that are created.

Engineering and Prototyping: Performance evaluations, aerodynamic simulations, and stress testing are carried out in the engineering analysis section.

- Prototyping: To assess the design and make any required modifications, a full-scale prototype is constructed.

Certification: Regulatory Review is to guarantee conformity with safety and operational standards, the design and prototype are examined by aviation authorities (such the FAA or EASA).

- Testing: To receive certification, extensive testing is carried out, including flying, system, and safety tests.

Manufacturing: In the manufacturing process, sourcing and procurement of materials and components from suppliers are referred to as supply chain management.

- Assembly: The process of creating and assembling aircraft parts, integrating systems, and assembling the aircraft as a whole.
- Quality Control: Constant testing and inspection at different phases to guarantee conformity with requirements and quality.

Post-Delivery and Delivery Assistance: Pre-Delivery Inspections are last-minute checks and modifications made before to customer delivery.

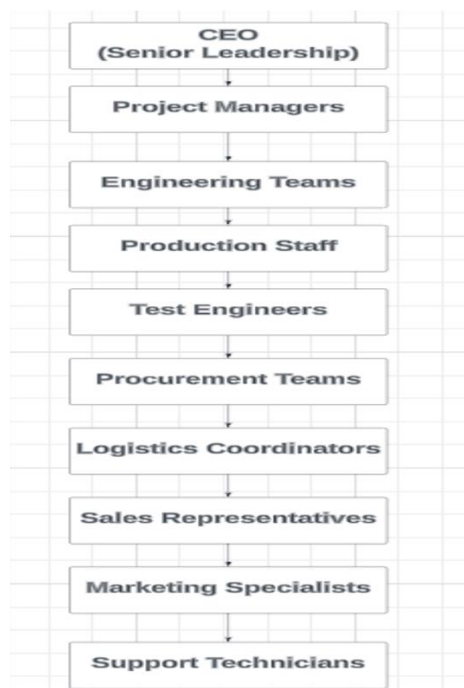
- Delivery: Giving the customer the aircraft together with any required paperwork and training.
- After-Sales Support: updates and upgrades to systems and components, as well as maintenance, repair, and overhaul (MRO) services.

End-of-Life Management: Decommissioning: When an aircraft reaches the end of its operational life, it is retired from service.

- Recycling and Disposal: Materials and parts are disposed of or recycled in an ecologically friendly way.

Stakeholders

These stakeholders are essential to Collins Aerospace's business operations, strategy, and overall success in the aerospace and defense sector. What each role could offer is as follows:



CEO (Senior Leadership): As the top executive, the CEO would be in charge of overseeing Collins Aerospace's entire operations and resource allocation, making significant business decisions, and serving as the main point of contact between the board of directors and corporate operations.

Project Manager: Project managers are in charge of overseeing particular projects at Collins Aerospace and making sure they are finished on schedule, within budget, and within scope. In addition, they would be in charge of execution, procurement, and planning.

Teams of engineers: These are the individuals who create and design new items and technologies related to aircraft. This would probably include teams from a variety of disciplines, including mechanical, electrical, and systems engineering, given the industry.

Production Workers: Those in this position would be in charge of actually producing aeronautical systems and components. Their efforts would be crucial in transforming concepts and prototypes into completed, usable goods.

Test Engineers: Test engineers are in charge of assessing manufactured systems and parts to make sure they adhere to the required performance, quality, and safety criteria. This is particularly important in the aerospace industry because mistakes can have serious repercussions.

Procurement team: Procurement teams are in charge of locating the supplies and parts required to construct aeronautical systems and components. To keep production schedules on track, they need to acquire premium supplies, control expenses, and guarantee on-time delivery.

Coordinators of logistics: They oversee the movement of parts and goods, making sure they reach their destination quickly and safely. They also oversee the company's logistics, controlling the material movement.

Sales Representatives: These experts are in charge of finding new sales prospects, sustaining client relationships, and pitching Collins Aerospace goods and services to customers in the aerospace, defense, and commercial industries.

Marketing experts: They would create plans to advertise Collins Aerospace's goods and services, establishing the business as a pioneer in the aerospace and defense sectors and explaining its benefits to prospective customers.

Support Technicians: They help clients with maintenance, repair, and troubleshooting by offering technical support for Collins Aerospace's products. This position is essential to guaranteeing both client happiness and the dependable functioning of products in the field.

Business Model Canvas

An aerospace company's business model canvas explains its strategy framework and important collaborations with NASA and major industry players. It is centered on tasks like design, production, and research, supported by assets like intellectual property and technological know-how. Innovative, dependable aerospace solutions with strong after-sales service are what make the company valuable. Long-term contracts and partnerships, such as those with NASA, and direct sales are the foundation of customer relationships. revenue streams from the sale of aircraft systems and contracts for their maintenance, with a focus on corporate aviation, space agencies, defense, and airport operations. R&D, manufacturing, and operating costs are what drive costs.

KEY PARTNERS <ul style="list-style-type: none"> ❑ NASA ❑ Raytheon Technologies ❑ ILC Dover and Oceaneering ❑ Acquisition of FlightAware 	KEY ACTIVITIES <ul style="list-style-type: none"> ❑ Design and Manufacture ❑ Research and Development ❑ Collaboration on space projects KEY RESOURCES <ul style="list-style-type: none"> ❑ Technological Expertise ❑ Human Capital ❑ Global Supply chain ❑ Intellectual Property 	PROPORTIONS OF VALUE <ul style="list-style-type: none"> ❑ Innovation Aerospace Solutions ❑ Customization and Flexibility ❑ Reliability and Durability ❑ Aftermarket Support 	CUSTOMER RELATIONSHIPS <ul style="list-style-type: none"> ❑ Long-term Contracts ❑ Collaborative Projects CHANNELS <ul style="list-style-type: none"> ❑ Direct sales to aerospace defense contractors. ❑ Partnership with NASA.
COST STRUCTURE <ul style="list-style-type: none"> ❑ Research and development expenses. ❑ Manufacturing and operational costs. ❑ Sales and marketing expenses. ❑ Collaboration and partnership costs. 		REVENUE STREAMS <ul style="list-style-type: none"> ❑ Sales of aerospace systems ❑ Service contracts for maintenance. ❑ Government and defense contracts 	CUSTOMER SEGMENTS <ul style="list-style-type: none"> ❑ Business Aviation ❑ Military and Defence sector ❑ Space Agencies ❑ Airport Operations

Conclusion

What makes Collins Aerospace truly special is the team behind the technology. A dedicated crew of support professionals in communication, finance, digital tech, operations, and customer service provide the rock-solid foundation for the company's high-flying engineering feats. With continuous research and relentless pursuit of advancement, this workforce delivers intelligent, sustainable solutions that optimize performance, efficiency, and safety across aviation, space, and defense.

But Collins Aerospace isn't just an exceptional innovator - it's a trusted partner to the biggest names in the business. Through collaborative long-term relationships and an unwavering customer focus, the company has earned a stellar reputation among commercial airlines, private aviation firms, space agencies, and military organizations worldwide. Its robust business strategy, deep industry knowledge, and incredible talent ensure Collins Aerospace will continue soaring to new heights.

In the ever-changing skies of aerospace progress, this company embraces the challenges of digital transformation and sustainable practices. By fostering dynamic partnerships, thinking outside the cockpit, and prioritizing a brighter future, Collins Aerospace is redefining possibilities and unlocking new horizons in flight and space exploration. The sky is no longer the limit for this team of trailblazers.