



● ● Brad Haselhorst, Vice President,
Strategy and Business
Development

Rockwell Collins is a pioneer in the design, production and support of innovative solutions for our customers in aerospace and defense. Its expertise in flight-deck avionics, cabin electronics, mission communications, information management and simulation and training is strengthened by its global service and support network spanning 150 countries. Working together, its global team of 19,000 employees shares a vision to be the most trusted source of aviation and high-integrity solutions in the world.

Rockwell's aviation electronics systems and products are installed in the flight decks of nearly every air transport aircraft in the world. Its communication systems transmit nearly 70 percent of US and allied military airborne communications. Whether developing new technology to enable network-centric operations for the military, delivering integrated electronic solutions for new commercial aircraft or providing a level of service and support that increases reliability and lowers operational costs for customers throughout the world, Rockwell delivers on its commitments.

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Q&A

A history of market presence ● ●

Rockwell Collins was established in 1933 under the name Collins Radio, originally specialising in shortwave radio equipment. Over the years, the company expanded its competencies to include a host of communications solutions and equipment, and today it has become a market leader in its field. Its electronic equipment is installed in almost every airline in the world, while its communications systems transmit almost 70 percent of US and allied military airborne content. Indeed, Rockwell Collins provides a large portfolio of solutions developed with military and government applications in mind. Amy Saunders spoke with Brad Haselhorst, Vice President, Strategy and Business Development, Government Systems at Rockwell Collins to find out more about the company's capabilities, market presence and outlook for the future.

Question: Can you provide an outline of Rockwell Collins' development, from its founding through to where it stands today?

Brad Haselhorst: While Rockwell Collins has come a long way from a mail-order short-wave radio company operating out of an attic in Cedar Rapids, Iowa, even today we follow the same spirit of innovation and dedication to quality that Art Collins did when he started the business in 1933.

We also share a dedication to delivering the right information at the right time. We first proved ourselves by supplying the equipment that linked the Antarctic expedition of Rear Admiral Richard Byrd with the United States in 1933. And you can trace our evolution through the years following that same principle. We developed the autotune technology that prevented Japanese intelligence from eavesdropping on US pilot communication during World War II. At the height of the space race, it was our equipment that provided the voice communication for every American astronaut travelling through space – not to mention using Rockwell Collins technology to transmit Neil Armstrong's first steps on the moon in 1968. And in the late 1970s and early 1980s, we were instrumental in pioneering the first Global Positioning System.

Rockwell International acquired Collins Radio in 1973, and in 2001 spun us off a gain into Rockwell Collins, trading on the New York Stock Exchange under the symbol 'COL.'

Today, Rockwell Collins designs, produces, markets and supports electronic communications, avionics, in-flight entertainment systems, simulation and training solutions, and information management services for commercial, military and government customers worldwide.

Our aircraft electronics are installed in the cockpits of nearly every airline in the world and our communication systems transmit nearly 70 percent of US and allied military airborne communications.

And through it all, we are dedicated to keeping people safe, connected and



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informed, and to strive to be the most trusted source of aviation and high-integrity solutions in the world.

Question: What services and solutions does Rockwell Collins provide to the military and government sectors, and how are these complemented by its commercial arm?

Brad Haselhorst: Rockwell Collins delivers smart military and government solutions to customers worldwide to safely and successfully complete their mission. Our solutions include portfolios focused on avionics, communications, displays and controls, navigation, targeting systems, electronic warfare and intelligence and simulation and training – all supported by a global service network. And because we also have a strong presence in the commercial market, we are able to offer a unique ability to engineer solutions and architectures to migrate easily between commercial and military market segments. This business model not only brings next-generation technology to the warfighter more quickly, but at significantly lower cost through open systems and commercial-off-the-shelf technology.

For example, Rockwell Collins' Pro Line Fusion® integrated avionics system was originally developed for business aircraft, but its power and flexibility make it a natural choice for government applications as well, including Embraer's KC-390 tanker transport and AugustaWestland's AW-609 tilt-rotor aircraft.

Our work on C-130 upgrade is another example. For more than 60 years, the C-130 has served as an iconic workhorse for governments worldwide. Today, those governments are turning to Rockwell Collins to keep their aircraft flying while meeting modern communications needs and airspace access requirements and providing enhanced safety and functionality. Our C-130 head-up displays (HUDs) – first developed for commercial air transport aircraft – enhance situational awareness by giving pilots access to critical flight information while maintaining a head-up, eyes-forward position, even while wearing night-vision goggles.

Question: How does Rockwell Collins differentiate itself from its competitors?

Brad Haselhorst: We really differentiate from competition on three different but interconnected areas. First, as I mentioned before, our strong presence in the commercial and military markets makes us uniquely capable in leveraging technologies across both those areas. Second, our legacy of quality means our customers know they can count on our solutions to work today, tomorrow and far into the future. And finally, our spirit of innovation, which has driven us to new technological heights, makes us the go-to company for defense organizations and governments around the world who are looking for rock-solid leading-edge solutions. In fact, we invest about US\$1 billion in R&D each year to ensure we're looking forward to best address our customers' needs.

Question: Rockwell Collins collaborates with partner companies on a regular basis to provide innovative new solutions for complex challenges. How do these collaborations improve the experiences of soldiers on the battlefield?

Brad Haselhorst: Partnering with companies with similar, but unique competencies bring forth the most holistic solution to our customers. For example, we recently signed an agreement with Bluedrop Training and Simulation Inc. (BTSI) to create more cohesive solutions utilizing real-time simulation devices and learning technologies. This is a unique agreement for us because the two companies will share complementary Intellectual Property while offering a complete training solution from a single resource, from requirements analysis through instructional execution.

Question: In August 2016, Rockwell Collins successfully demonstrated the viability of wideband high frequency

(WBHF) data transfers. How will this affect the future of military communications solutions?

Brad Haselhorst: WBHF is a low-cost replacement to legacy HF systems that leverages the platform's current infrastructure to create an HF solution with performance never before available.

Military commanders, tanker operators, agencies and Department of Defense services will be able to receive uninterrupted, large file transfers with speeds comparable to narrowband SATCOM systems – as well as enhanced voice capabilities with cellular quality communications – even in satellite-limited or denied environments.

Question: In September 2016, Rockwell Collins launched its combat helmet-mounted Integrated Digital Vision System (IDVS) for warfighters – how will this improve capabilities in the battlefield?

Brad Haselhorst: IDVS allows warfighters to stay focused on their surroundings at all times. The IDVS is the first hands-free helmet-mounted display system that fuses incoming data from various sources, such as a command centre, other warfighters or UAS, with multispectral vision, giving them unprecedented situational awareness in potentially lethal environments. The system does this while automatically transitioning from dark to light environments in real time, allowing users to have a complete view of everything that is happening around them.

Question: What are the biggest challenges today faced by defence forces, and how might they be met?

Brad Haselhorst: A major challenge in the coming year is reducing costs while delivering the most technologically advanced solution. Governments around the globe are turning to commercial technologies to maximize value while ensuring efficiency, functionality and extensibility. And we're happy to serve as a resource to help them achieve that goal.

Question: What's on the horizon for Rockwell Collins in 2017 and the years to come?

Brad Haselhorst: Rockwell Collins plans to continue its journey in transforming technology to stay ahead of our customers changing needs. From commercial and business aviation to defense and government, customer needs and technological innovations are driving transformational changes in how pilots, passengers and warfighters connect and relate to the world around them – and how OEMs, owners and countries procure and manage their assets.

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