

PEOPLE
“WORKING
TOGETHER”©
TO PRODUCE
THE PREFERRED
BOEING 777
AIRPLANE FAMILY

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In 2006, *Leader to Leader*'s founding editor-in-chief Frances Hesselbein recognized Alan Mulally with the Leader to Leader Institute's first Leader of the Future award. This defining recognition was because of Alan's leadership at Boeing. Specifically, his leadership of the design and building of the Boeing 777 in the early 1990s and his leadership of Boeing Commercial Airplanes to become the number one commercial airplane company in the world in 2006. Most importantly, she was recognizing his creating and leading with the "Working Together"© Leadership and Management System, which has proven time and again through even the most difficult of circumstances to create value and growth for all of the stakeholders and the greater good of humanity.

Alan's "Working Together" five elements—the Principles and Practices, the Governance Process, the Leadership Team, the Creating Value Roadmap, and the Business Plan Review—was a system and culture that had never been implemented before. This "Working Together" system included all of the stakeholders, reviewed the development status regularly, and enabled everyone to continually improve the airplane design with all of the aspects that the customers wanted.

Now, 20 or so years later, a new book, *Boeing 777: People Working Together*, written by Dan Dornseif in collaboration with Alan Mulally and supported by several members of the 777 team: Boeing historian and archivist Michael Lombardi; Boeing retired vice presidents Lars Andersen, Peter M. Morton, Ron Ostrowski, and John Roundhill; and *Leader-to-Leader* editor in chief Sarah McArthur, will explain in more detail how the "Working Together" Leadership and Management System was created and how it was implemented to design and build the 777 airplane family. The book will be available in mid-2026. In 2022, Sarah and Alan wrote an article for *Leader to Leader* summarizing Our "Working Together" Leadership and Management System [<https://doi.org/10.1002/ltl.20628>]. In this article, we will describe in detail how Our "Working Together" Leadership and Management System was implemented by Boeing in the 1990s to create the 777 airplane family, the finest,

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safest, and most efficient commercial airplane family to serve the world.

The Story of the Design and Building of the Boeing 777

The story of the design and building of the Boeing 777 is not simply about an airplane or a business but also about people, culture, and leadership. It is a story of hope and the triumph of the human spirit. It is above all a story of what people can achieve when we combine the power of our minds, hearts, and hands working together toward a common cause.

It is also about the pursuit of perfection. The history of aviation has often been summarized by goals of higher, faster, and farther. But there is also the goal of perfection, especially when it comes to quality and above all safety. In fact, William Boeing started his airplane company in 1916 because he felt there was an opportunity to improve the safety of airplanes being made in those early days.

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But that was not enough for the “Father of the 747,” Joe Sutter. While leading the 747 design team in the early 1960s, Sutter doubled down on safety. (Actually, he quadrupled down on safety, pioneering quadruple redundancy for many of the 747’s systems.) His new airplane would be more than twice the size and carry double the passengers of the largest commercial jet, therefore his most important work was to prevent any chance of an accident. He enforced a safety and quality culture by the sheer strength of his character and the respect he had earned as a leader. Every program and every day started and ended with safety—it was a strong step toward perfection.

When Boeing launched the 777, the leaders of that development program, Phil Condit, Executive VP New Airplane Programs, and Alan Mulally, 777 Program Leader, built upon Joe Sutter’s safety and quality practice by implementing a culture that creates and enables an environment to honor our basic humanity. They recognized the value of continuous improvement including all of the stakeholders, and as Alan would say, “all problems are gems that simply need to be polished.”

Art and flight are two of the greatest accomplishments of humanity, and in many ways, the creation of the 777 and the pursuit of perfection are not unlike Michelangelo painting the Sistine Chapel. Both are beautiful works of art that challenged the minds and skills and passions of their creators, and both are

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inspired by our connection to something greater than ourselves.

In that context, those who put their heart and souls into creating the 777 were giving life to something magnificent, something to be shared by all of humanity. The 777 provided the efficiency of a two-engine airplane in what was previously a three and four-engine domain, harvested available technologies that were ready to serve humanity, and applied Our “Working Together” team processes executed in a “culture of love by design” that embodied values espoused by Peter Drucker and Frances Hesselbein. In its simplicity, it answered the human need to apply oneself with love to a masterpiece that, in retrospect, is viewed by its creators as the seminal accomplishment of their professional lives.

When the 777 made its first flight, it was not simply a machine lifting off an airfield but rather the human spirit reaching for the heavens. It was a glorious accomplishment achieved by embracing the value and contribution of every individual and a commitment to the greater good, and people were honored and empowered in a new corporate culture called “Working Together.”

Boeing is known for creating technology and of course building airplanes. And Boeing knew that a strong corporate culture is fundamental to the airplane business. A business that necessitates accepting risk and knowing how to manage risk is why the engineering culture is so important to Boeing and why Boeing continuously improving its product development system resulted in our “Working Together” Leadership and Management System.

Creating a Highly Functioning Corporate Culture with “Working Together”©

“Working Together” elegantly integrates engineering with leadership in the entire business to create a high functioning corporate culture. As a result, the work clearly identifies, manages, and mitigates risk by

reinforcing basic principles of respect, humility, service, integrity, openness, and even love with clear goals aimed at creating value and growth for all stakeholders.

What is so surprising about “Working Together” is that it is not complicated; it is in its essence an adaptation of timeless human values to the modern business world. That is why it was embraced by all; it was familiar at a basic human level. It represents the values that we all share, principles that are ancient and embedded in our DNA. “Working Together” in its simplest form is the Golden Rule.

Treating customers, employees, suppliers, and all stakeholders with respect and valuing their opinions on a new airplane design is key to continuous improvement. It is natural for corporations to jealously hold business practices and intellectual property close to the vest; it is counterintuitive to trust others and open up. Yet, that is what was done on the 777 program, and it proved to be a new foundation for success and perfection.

It started with people, and the first rule in the “Working Together” Principles and Practices, which is “People first! Love ’em up!” In some respects, that was an implicit rule for Boeing for a long time. Former Boeing Chief Executive Officer/CEO and Chairman William Allen, who boldly led Boeing into the jet age, often said that the greatest resource of Boeing is the people.

Throughout his career from 1945 to 1968, Allen trusted and empowered his team, and his leadership values created a foundation for what would become “Working Together.” Allen’s leadership left a deep impression on Boeing even after he retired in 1968.

In 1989, Boeing CEO Frank Shrontz had just been named chairman, and it was one of the most challenging times for a new CEO to take over leadership of The Boeing Company. The company was facing a quality crisis, and its largest airline customers were publicly complaining about defects and late deliveries.

The company had one bright spot: there was pent-up demand for commercial jets leading to a record backlog. To meet the demand, however, the company increased rates and introduced mandatory overtime, resulting

in a sharp decline in morale further souring relations between Boeing and its hourly workforce just in time for contract negotiations with the company’s largest union. There was also a difficult decision to be made about going forward with an all-new airplane program.

Shrontz was up to the challenge. He had quiet confidence and rather than seeing the adversity, he saw the moment as an opportunity to bring about needed change and prepare Boeing for the future. His immediate actions included launching a new airplane program—the 777. He set up quality improvement training programs for both the factory and office, and most importantly he set out to change the culture.

Following William Allen’s example, Shrontz firmly believed that Boeing was about the employees—he genuinely cared about his people. He organized roundtable meetings with employees to hear their concerns and enlisted Alan Mulally to do an employee survey. What was discovered is that times and people had changed. Command and control leadership was no longer tolerated. Employees wanted to be respected, valued, and to have a voice.

Senior engineering leaders Bert Welliver and Phil Condit, who would later be CEO and Chairman of Boeing, took the initiative to accelerate change and became champions of communication and teaching leaders to include, listen, and learn from all of their employees and all of their stakeholders.

Shrontz knew that Boeing had to go even farther to build a stronger Boeing family. The company needed

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B 777 OBJECTIVES - UNITED + BOEING



B777 Objectives United & Boeing

In order to launch on-time a truly great airplane we have a responsibility to work together to design, produce and introduce an airplane that exceeds the expectations of flight crews, cabin crews, maintenance and support teams, and ultimately our passengers and shippers.

From day one:

- Best dispatch reliability in the industry
- Greatest customer appeal in the industry
- User friendly and everything works

October 15, 1990
Chicago

James M Guyette
Exec. V.P. Operations
United Airlines

Richard R. Albrecht
Exec. V.P. BCAG

Phil Condit
Exec V.P. and GM
New Airplane Prog. BCAG

1990



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FIGURE 1. B777 OBJECTIVES—UNITED + BOEING

to further enhance a stakeholder-centered corporate culture. He turned to Alan Mulally to develop that new culture.

With all this in place, a deep understanding, and a commitment to work together, Boeing and United Airlines signed a launch agreement in Chicago in 1990 to deliver the preferred new Boeing 777 commercial airplane with efficiency *and* overseas operating capability upon initial delivery in 1995, and a subsequent complete “family” of 777 airplanes!

The First “Working Together”© Agreement

That first “Working Together” agreement was written on October 15, 1990, on a yellow legal pad and signed by Condit and United Airlines Executive VP of operations James Guyette as well as Boeing Commercial Airplanes/BCA Executive VP Richard Albrecht. It spelled out the new way of doing business.

It stated: “In order to launch on-time a truly great airplane we have a responsibility to work together to design, produce and introduce an airplane that exceeds the expectation of flight crews, cabin crews, maintenance and support teams and ultimately passengers and shippers.”

The founding 777 Program document also carried a theme that is common throughout Boeing history; accomplishing greatness by setting challenges that others might think impossible. It was filled with lofty goals from the beginning that were spelled out on that yellow legal pad (see Figure 1):

- Best dispatch reliability in the industry
- Greatest customer appeal in the industry
- User friendly and everything works

But that was not the end of it; other goals were added: 180-minute ETOPS/ Extended Twin Jet Operations certified before delivery. ETOPS had been pioneered on the 767 in 1985. It revolutionized air travel by allowing twin jets to fly long-distances between airfields, especially across the Atlantic. Previously, three and four-engine jets were required to fly routes that were more than an hour from a suitable landing site.

The 777 program endeavored to prove that the new airplane was so safe and of such high quality that it would be ready to fly three hours beyond a landing site on the day it first entered service. Indeed, the first passenger 777 operation would be United Flight 921, a non-stop trans-Atlantic flight from London to Washington D.C. five years later!

There was also the challenge, particularly appealing to United Airlines, of “Denver to Honolulu on a hot day.” This was an acid test for the 777 representing a difficult takeoff environment that the airplane would encounter in actual service—fully loaded with fuel for the long flight and taking off in the thin air of the Mile High City made even thinner on a hot day.

And one of the most important goals was to produce the preferred new airplane family, which includes all of the airplanes in the 777 series with increasing range and passenger capacity. After 20 years, the family had grown from the 777-200 to six models, including a very popular 777F freighter as well as an extended range 777-200ER and the stretched 777-300. This in turn led to the longer range 777-300ER and the world’s longest-range Boeing jetliner, the 777-200LR Worldliner. This airplane family realized the longtime Boeing promise of bringing the world together.

Once United selected Boeing, the leaders of the 777 program needed to clearly share the compelling vision, comprehensive strategy, and relentless positive implementation plan, which all stakeholders could rally and align around. The list of stakeholders is long: customers, suppliers, certification agencies, investors, bankers, communities, and the Boeing team. Every person involved would understand their role, how they would work together, and how they would communicate and treat each other ... in fact, how they would be and do “Working Together” to deliver on all of the launch promises.

The unifying compelling vision was: “People Working Together to Produce the Preferred New Airplane Family.” And it was this compelling vision that enhanced the Boeing culture, capturing how all team members and stakeholders came to think about every aspect of “Working Together.”

Both United and Boeing gave a copy of the launch document and the significantly enhanced “Working Together” culture plan to every one of the thousands of people who would work on the 777. It symbolized the pledge everyone made to the program and defined the curriculum of an orientation session, which every employee and stakeholder experienced.

“Working Together”©: A Culture of Listening, Inclusion, Openness, Transparency, and Respect

While leading the 777 program, Alan Mulally worked to integrate a culture of listening, inclusion, openness, transparency, and respect. It was the beginning of “Working Together,” which would be further refined by Mulally and ultimately be known as the “Working Together”© Leadership and Management System.

The teams that worked on the 777 will tell you that the near perfection they attained was done through the “Working Together” culture. They remember the time as “Boeing’s Camelot” and were so dedicated to the culture that “Working Together” was painted on the nose of the first 777 (See Figure 2). Alan Mulally later became CEO of BCA and solidified his reputation as one of the greatest leaders of the 20th and 21st centuries by advancing “Working Together” across BCA and saving the company during a downturn that resulted from the terrorist attacks on 9/11. As CEO of Ford, Mulally led “Working Together” to save that company as well.

Today, as we temper our passion for technology with the reality of preserving our earthly home, the 777 fulfills the twin-engine promise of sustainability through lower fuel consumption that was started with the 767 and the introduction of ETOPS. In that moment in the 1980s, the future of three and four engine jetliners had an end point. The latest version of the 777, the 777-8 and -9, have completed that sustainability goal by replacing the big four engine jets.

The end of production of the legendary 747 was preordained by the Boeing Commercial Airplanes CEO, Mulally, and his team through the evolution of the 777 family and today the retirement of three and four engine jets and the dominance of twin jets is a giant stride in dramatically improving performance, safety, reducing emissions, and achieving the greatest goal of “Working Together”: Creating value and growth for all stakeholders and the greater good! With the 777 and “Working Together,” Boeing came as close to perfection as humanly possible.



FIGURE 2. “WORKING TOGETHER” THE FIRST 777 UNVEILED AT A CEREMONY IN EVERETT, WA ON APRIL 9, 1994

There are many management and leadership theories on how to improve morale, inspiration, and engagement; product, productivity; and financial performance. The trick is to do all three in a reliable manner, for everyone involved in a program and an enterprise. And the theories mean little until they have created a useful product or service in the laboratory of life and moved people toward the “greater good.”

Alan Mulally’s “Working Together” Leadership and Management System became a robust theory ready for application to the “laboratory of life” about the time Boeing launched the 777 program. Its components emerged from previous Boeing experience, sponsored by leaders who to some or greater extent subscribed to the leadership ethos of Peter Drucker and Frances Hesselbein.

There were other factors that influenced the airplane itself; new technologies were tested in the lab and on prior airplane programs. Many of these new processes had been verified on pilot projects like Boeing’s 7J7 before the 777 program, an airplane design that almost became real. Though it was never put into production, the 7J7 chief engineer was none other than Alan Mulally, and he carried many of its technology and process innovations into the 777.

The “Working Together” Leadership and Management System itself continued to mature subsequent to the 777 airplane. It was next applied by Alan to overall company management at Boeing Commercial Airplanes, and

then saved and transformed the Ford Motor Company into the number one automobile company in the United States during his time as CEO of the company from 2006–2014. The common factor in those three applications is Alan Mulally; and his story as the leader of “Working Together” is documented widely in the media and by published books. Imagine Alan’s delight as he became familiar with the Ford Motor Company’s history and discovered this famous quote attributed to Henry Ford: “Coming together is a beginning, staying together is progress, working together is success.”

Conclusion

In the months before the book *Boeing 777: People Working Together* is published, a question to ponder: why does the “Working Together” system not pervade all that we do as humans in the corporate, non-profit, academic, and government sectors of our societies? Why is it that leadership through humility, love, and service is not the norm? We leave this article posing those questions to you, the leaders who read this journal and through whose actions create the future of humanity in our world.

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Photo by Tom Shillea

Sarah McArthur is editor-in-chief of Leader to Leader, “Working Together”© partner with Alan Mulally, executive producer of the documentary Defining Moments: the Life and Leadership of Quiet Revolutionary Frances Hesselbein, and former CEO for executive coach and author Marshall Goldsmith.



Alan Mulally served as executive vice president of the Boeing Company, president and CEO of Boeing Commercial Airplanes, and president of Boeing Information, Space and Defense Systems from 1969 to 2006, where he created and led his “Working Together”© Leadership and Management System. He later served as president and CEO of the Ford Motor Company and as a member of Ford’s board of directors from 2006 to 2014.



Dan Dornseif is a Boeing 737 captain and check pilot for a major airline in the United States. He has written historical works on the Boeing 727, 737, and 757 with a volume encompassing “Working Together” and the Boeing 777 pending release.

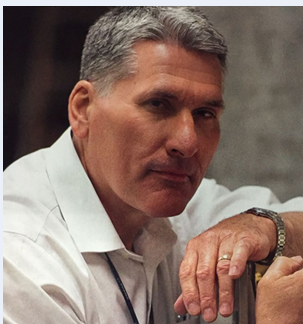


Photo by Bob Ferguson

Michael Lombardi has been the Senior Corporate Historian for the Boeing Company since 1994. Mike has presented lectures on aerospace history to the American Institute of Astronautics and Aeronautics, the Royal Aeronautical Society, The Air League of the UK and several air museums. As a spokesperson for Boeing, Mike has appeared in documentaries for the Discovery Channel, History Channel, National Geographic, Smithsonian Channel, PBS, and the BBC. He is a Fellow of the Royal Aeronautical Society. {Photo credit: Bob Ferguson}



Peter M. Morton has a 64-year career in aviation: starting in 1958 at Boeing with pilot and maintenance training, flight operations engineering, product marketing, flight deck design, sales & marketing, program management, leadership development, and executive assignments. He retired in 2000 as Vice President Human Resources for Boeing Commercial Airplanes with 42 years' service. Favorite assignments: 757 Flight Deck Chief Engineer, Director 7J7 Program Management, and Director Boeing Customer Training when the 777 was introduced.



Lars Andersen's 44-year career at Boeing was focused on the 777 program, where he led the qualification for Early ETOPS, and was program leader when the 777-300 ER dominated the large long range twinjet market. He retired as Vice President of the 777 program, and at Boeing request, returned from retirement as Vice President to launch the 777-9 successor airplane. The 777-9 will replace the high capacity four engine airplane fleet now being retired.



Ron Ostrowski joined the 777 Program as Chief Project Engineer in 1991. He became Vice President and General Manager of the program in 1995 when the 777-200 was first delivered and retired in that position on July 1, 2001.



After 37 years serving in Boeing Commercial Airplanes, John Roundhill retired in 2002 as Vice President of Product Strategy and Development. Since that time, he has continued to serve Boeing as a consultant on various strategy and development projects.

Further Reading About “Working Together”©

- “A Conversation with Alan Mulally about His “Working Together”© Strategic, Operational, and Stakeholder-Centered Management System,” Alan Mulally and Sarah McArthur, *Leader to Leader*, Volume 2022, Issue 104. {<https://onlinelibrary.wiley.com/doi/10.1002/ltl.20628>}
- “Our Greatest Opposition Is Our Division,” Sarah McArthur, *Leader to Leader*, Volume 2023, Issue 111. {<https://doi.org/10.1002/ltl.20792>}
- Elevated Leaders Employ Elevated Systems that Elevate Their Organizations, Ryan Gottfredson, *Leader to Leader* Volume 2024, Issue 111, Winter 2024. {<https://doi.org/10.1002/ltl.20778>}
- “Mastering Authentic Leadership: A Foundational Quality for Working Together,” Craig Dowden, *Leader to Leader*, Volume 2022, Issue 106. {<https://doi.org/10.1002/ltl.20670>}
- “The Business Plan Review—the Heartbeat of Our Organization,” Debbie Collard and Susan Ireland, *Leader to Leader*, Volume 2024, Issue 114. {<https://doi.org/10.1002/ltl.20846>} and Working Together and Love by Design with Alan Mulally - Seasons Leadership Podcast, Debbie Collard and Susan Ireland, March 27, 2024 {<https://www.youtube.com/watch?v=SZFYyQXdERk&list=PL7qBdFvTwKO-FYtUrztJn2--QKtHN6Vr&index=23&t=3361s>}
- “Purpose Driven Leadership: Working Together to Create Value and Growth for the Greater Good,” Patrick Finneran, *Leader to Leader*, Volume 2025, Issue 116. {<https://onlinelibrary.wiley.com/doi/10.1002/ltl.20878>}
- *American Icon: Alan Mulally and the Fight to Save Ford Motor Company*, by Bryce G. Hoffman. {<https://www.amazon.com/American-Icon-Mulally-Fight-Company/dp/0307886069>}
- *The Extraordinary Power of Leader Humility: Thriving Organizations - Great Results*; <https://www.amazon.com/Extraordinary-Power-Leader-Humility-Organizations/dp/1523089660> by Marilyn Gist, PhD., foreword and chapter by Alan Mulally about how leader humility enables and nurtures effective working together by great teams.
- “For the Love of Flying,” Lawrence D. Maloney, *Design News*, March 4, 1996 {https://www.workingtogetherbrightfuture.com/_files/ugd/4c8963_54b48fafd65b46faa521b56a8234f32d.pdf}