

The Post and Courier

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Why Boeing came to Charleston and how 787 consolidation could impact SC aerospace

By Emily Williams ewilliams@postandcourier.com – October 3, 2020



Airplanes line the tarmac at the Boeing South Carolina Delivery Center on Thursday, Oct. 1 2020, in North Charleston. On Thursday, Boeing made the highly anticipated announcement that its 787 Dreamliner program is being consolidated, with the whole operation to be located in South Carolina.

On Thursday, Boeing made the highly anticipated announcement that, under the financial pressure of the coronavirus pandemic, its 787 Dreamliner program was being consolidated at one site.

The surviving assembly line will be North Charleston, as was expected, and 787 operations in Everett, Wash., will eventually close.

In Washington state, the move has been perceived by labor leaders and some state officials as a mistake and an insult. In South Carolina, business leaders and politicians framed the decision as a vote of confidence in the state's workforce and its advanced manufacturing landscape.

Boeing itself described the consolidation as a strategic way to preserve liquidity in the midst of a time of serious economic uncertainty.

The move will ensure the company can "be effective in a market that will be smaller in the near-term, and one that will have different demands from our customers long-term," Stan Deal, the president and chief executive of Boeing Commercial Airplanes, wrote in a memo to employees.

Since the onset of the pandemic, the aerospace giant has been looking for ways to cut costs. It started with reductions in overtime and travel, then moved to a buyout program. Involuntary layoffs and slashed production rates followed. The consolidation discussion was made public in late July when CEO David Calhoun also said they would drop Dreamliner production rates lower than previously announced, to six jets per month instead of seven.

The process of consolidation should start around mid-2021 "according to the company's best estimate" and will coincide with the drop in production to six aircraft a month, the company said Thursday.

While this move will take months to plan, it's been years in the making.

How it all started

The Dreamliner program's presence in the Lowcountry goes back to 2004, when Dallas-based Vought Aircraft Industries and Italy's Alenia Aeronautica formed a joint venture to build fuselages for 787 jets, then a new Boeing program.

A site next to Charleston International Airport was selected for the \$560 million manufacturing complex. The facility was opened two years later.

Problems with the global vendor network for the Dreamliner arose quickly, and the Dreamliner's inaugural test flight was pushed back multiple times, delaying deliveries. Production issues in North Charleston were partly to blame. The jet got the nickname the "7-Late-7."

In mid-2009, Boeing acquired Vought Aircraft Industries' factory and operations in North Charleston and named it "Boeing Charleston," which was later changed to "Boeing South Carolina."

Much like last week's news, speculation rose for months over whether the second final assembly line would be located in the Lowcountry. On Oct. 28, 2009, Boeing made it official. It broke ground a month later.

In the about 11 years since, Boeing South Carolina's footprint has grown to about 4 million square feet of facility space, including an engine design and manufacturing center, a factory for interior cabin parts, a research and technology center, and a two-bay paint hangar.

Meanwhile, the company enjoyed hundreds of millions of dollars worth of tax incentives and a \$1-a-year lease for the Charleston County Aviation Authority-owned land it uses to build 787s.

On Thursday, the same day Boeing made its consolidation choice public, officials at Charleston's airport voted to extend by 10 years an agreement that gives the company the option of buying acreage it rents from the authority.

That lease expires in 2035, and the company can now choose to purchase it at any time in the decade-long window starting in 2025. The decision was a "no-brainer," airport CEO Elliott Summey told The Post and Courier on Thursday, because they "don't want (Boeing) to leave."

When the shift of all Dreamliner work to South Carolina was announced minutes after that unanimous vote, Summey said it showed an "ongoing commitment of them wanting to be here long-term."

Nobody should be surprised

Talk that the Dreamliner program would eventually move entirely to the Palmetto State started well before the coronavirus pandemic and Boeing's decision to start a consolidation study.

A 2017 report from Buckingham Research Group, for example, predicted that weak orders for the Dreamliner would eventually lead Boeing to consolidate to one production line, "likely North Charleston." The firm guessed that the rate at the time of the consolidation would be seven jets per month, one off from the pandemic-induced rate cut the planemaker has planned.

Other industry watchers agreed. Richard Aboulaflia, an aerospace analyst and vice president with The Teal Group in Fairfax, Va., told The Post and Courier at that time that it was "a very reasonable scenario" to expect a future where all 787s are built in North Charleston.

There are a number of factors specific to the logistics of 787 production that just make sense for consolidation in South Carolina: Charleston builds fuselages, and Everett does not. Charleston is also the sole maker of the 787-10.



Boeing Co. is consolidating 787 Dreamliner production at its final assembly plant in North Charleston. The highly-anticipated announcement about the move was made Oct. 1, 2020. File.

And then there's the union factor for Boeing to consider. South Carolina is a right-to-work state with one of the lowest organized-labor rates in the country, unlike Boeing's heavily unionized operations in Washington state.

"It's a major site-selection driver for aerospace," said John Boyd, principal at The Boyd Co., a site-selection firm where the client roster has included Boeing.

With Boeing looking to cut costs, it's likely "really focused on traditional business climate factors" that made South Carolina favorable in the first place, Boyd said.

He pointed to a "shift" in the industry to the Southeast, with Boeing rival Airbus recently opening its A220 final assembly line in Mobile, Ala. Gulfstream, which makes military and business jets, has its main plant in Savannah. Lockheed Martin builds F-16 fighter jets in the South Carolina Upstate.

The decision to move all 787 assembly work marks a significant shift in the "center of gravity for Boeing's U.S. operations," Boyd said.

Scott Hamilton, editor of the aviation-focused *Leeham News and Analysis*, wrote Thursday that “nobody should be surprised” by Boeing’s decision to consolidate in South Carolina. The “die was cast” the day Boeing announced the second final assembly line was going to North Charleston.

“The COVID-19 pandemic accelerated the timing,” Hamilton wrote. “But not the result.”



Charleston Mayor John Tecklenburg (from left), Gov. Henry McMaster, Rep. Joe Cunningham and Charleston County Council Chairman Elliott Summey attend a press conference as three Dreamlifter cargo planes land at Boeing’s North Charleston campus, delivering personal protective equipment for MUSC workers. May 11, 2020

Economic impacts in SC

While no one in South Carolina’s aerospace industry had a “crystal ball” that day in 2009 to tell them what would happen, there was “always hope there would be future expansion at that site,” said Adrienne Beasley, spokeswoman for the S.C. Council on Competitiveness, an umbrella organization that includes multiple pro-business groups, including S.C. Aerospace.

When Gov. Henry McMaster praised Boeing's announcement Thursday, he made a reference to "perhaps thousands of new jobs" for the state, though Boeing did not give any specifics on the actual employment impacts of the decision.

Staffing changes will be "developed and evaluated in the next few months," the company said in a statement.

Most recently, jobs have been lost at the North Charleston campus as cuts are made companywide during the pandemic. Boeing has not disclosed how many workers in South Carolina were laid off or have taken buyouts this year or the current headcount of its employees in the Palmetto State.

At the beginning of this year, Boeing employed about 7,000 South Carolinians.

The company's executives have said they still see a clear future for the 787 and expect demand to eventually recover. All of that assembly work would then fall to South Carolina instead of being split with the West Coast.

The 787 contingent in the Puget Sound region currently has about 900 workers, Boeing said Thursday, giving a rough idea of what job losses in Washington — and potential gains in South Carolina — could look like. Any production increases will be determined largely by how quickly air travel recovers from the pandemic.

By the International Air Transport Association's latest estimate, demand won't bounce back until 2024, a year later than the group's previous projection.

Any additional aerospace jobs at all are a big win, said Stephen Astemborski, the director of S.C. Aerospace. The "multiplier" for the sector is 2.7, according to the group, meaning that for every one aerospace job, that many others are created.

Aerospace jobs in South Carolina paid, on average, more than \$81,000 a year in 2019 — an increase of about \$2,500 from two years prior. That's compared to an average wage of \$45,000 a year across all industries and close to \$60,000 for all manufacturing, according to the Council on Competitiveness.

The next step, now that Boeing has finalized its decision, Astemborski said, will be to look at ways to further diversify the state's aerospace supply chain. As of now, more than 400 aerospace companies are operating in South Carolina.

"We're going to be asking, 'What areas of the greater supply chain can South Carolina get into that we maybe haven't had in the past?'" Astemborski said.