787 Isn't Meeting 24-hour Engine Change Promo, lessor says

Boeing has been promoting the ability to swap engine types on its new "game-changing" 787 within 24 hours, theoretically a big plus to lessors. But some lessors are unimpressed and one says that it appears Boeing won't be able to live up to its 24 hour promise.

Boeing tells Leeham.net that it is still engaged in the design work and may be a few months away from a solution.

In theory, swapping engine types is a tremendous plus for lessors. Since the dawn of the jumbo-jet age with the Boeing 747-100, many aircraft have been available with a choice of engines. Pratt & Whitney began as the dominant supplier for the 747, only to be superceeded by General Electric (Rolls-Royce has a miniscule share of this market). P&W and GE were the prime suppliers for the 767, with Rolls once again providing a few engines. P&W and GE were the main suppliers of the wide-body Airbus planes; CFM International and International Aero Engines split the A320 market; and Rolls and Pratt were the suppliers for the Boeing 757.

Lessors with Pratt-powered 757s and 767s generally found it tougher to remarket these aircraft than those equipped with Rolls or GE engines respectively because of a smaller customer base and, in the view of many, poorer performance by the P&W engines. Values of the Pratt-powered 757s and 767s were generally somewhat less than those with the more widely used Rolls and GE engines.

So when Boeing suggested that the 787 would be designed so as to enable a swap of engine types within 24 hours, the reaction was overwhelmingly favorable. But the ador has cooled because, as they say, the devil is in the details.

AWAS, which has yet to order the 787 or Airbus A350, thinks what goes with a swap, and the need to have spare engines essentially on stand-by, won't be worth the trouble. The paperwork involved in a swap will be daunting, AWAS believes. And then there is the issue of having a pair of competing engine types available for installation in the swap—and then what is done with the engines that have just been removed from the plane? With the cost of 787 engines expected to be about \$20 million for a pair, that's a pricey option. And this doesn't count the related labor and parts costs.

International Lease Finance Corp., which also has yet to order either airplane, says it's learned from Boeing that the swap will in fact take as long as 15 days (assuming one shift of workers a day).

Marty Olson, VP-marketing for ILFC, admits the idea is intriguing. "From our perspective, we'd like it to be interchangeable—that would be to our advantage," he says. "In reality, I don't think it will be interchangeable. We're talking to Boeing, and they said they aren't willing to commit to a 24 hour engine change. They might be willing to commit to 15 days.

"In some respects, that's still not insurmountable," Olson says. "As long as it's doable, that's helpful, but it's certainly not 24 hours." As it turns out, Olson reveals, the entire pylon structure and all the plumbing from the wing to the engine will also have to be swapped out; the engine manufacturers could not (or at least so far have not) been able to design an engine that has common attachments to the pylons and related mechanisms.

"You'd have to take all the pylon, everything from the wing down, off," Olson said. "I never did get a cost estimate for that. Boeing didn't explain that to my satisfaction, and Steve (Hazy) and John (Plueger) did not like that fact, either. (Hazy and Plueger are the chairman and president of ILFC.)"

Olson acknowledged that engines types can be swapped on today's aircraft. "It's technically feasible today to do so but it's not economically feasible. The beauty of the 787 is that they are somewhat building [the swap] into the program at the front end, but the pylons won't be the same. The differences between the two engines are significant. You still gain ability to do a swap, but what's the pricing (with pylons)? If you have to go buy the pylons and scrap or sell what you have on the plane, then it will be a little tough to justify. Two of those engines are probably \$20 million."

Olson said engine makers might strike some kind of a deal, "but there's probably not going to be a compelling argument to do it. It wouldn't surprise me if during the life of the program it never gets done."

In any event, the possibility probably wouldn't arise for at least 10 years when the first airplanes would start coming off lease, Olson said.

Puzzling to Olson is the fact that Boeing continues to market the engine change feature for 24 hours, "but they haven't been willing to live up to that marketing. [I asked them], how can you guys be out there marketing 24 hours and they said they are going to change that marketing pitch, but two weeks later were [still saying the same thing.]"

But a spokesperson for Boeing said the company hasn't finished the design work for this feature yet. "We have a goal to swap the engines in 24 hours," says Yvonne Leach. "But the design work isn't complete yet. It's still several months away.

"From what I understand, the design is still to come up with the right business solution," she said.

Tax Breaks in France

A Boeing employee sent us an AP story entitled, France Unveils 'competitiveness centers' in line for funding, tax breaks." France has set aside \$1.82 billion in tax breaks and research funding aimed at boosting employment. Sixty-seven bids for "competitive centers" have been accepted. The Boeing employee bold-faced the following paragraph from the story for our attention:

Among the beneficiaries of the three year funding package will be Toulouse-based aeronautical companies such as European aircraft maker Airbus....

One of the purposes of the tax breaks is to keep jobs in France, rather than seeing outsourcing overseas (it's gratifying that this isn't strictly a US problem).

The Boeing employee didn't have to explain why this little item was sent to us (although he did take an oblique note of our long-standing opposition to *any* corporate tax breaks as a form of corporate welfare). Rather, Airbus has specifically cited tax breaks granted by the state of Washington (and others) to Boeing for the 787 program as examples of unfair and illegal trade subsidies in the fight with Boeing before the World Trade Organization.

Boeing, of course, has previously countered that Airbus has also benefited from tax breaks. This new incentive, if Airbus takes advantage of it, comes at an awkward time given the increasingly bitter trade dispute between the two companies, and would seem to be contradictory in the face of Airbus' complaints over Boeing's tax breaks.