

## Business Is Booming

### »» IF THE F-104

Starfighter were a car, it would likely be a Corvette Sting Ray: sleek, aggressive, wicked fast, but well past its prime. So it might come as a surprise that NASA has called on the iconic cold war-era fighter, created in the early 1950s by famed Lockheed designer Kelly Johnson, to conduct a series of environmental impact studies at Kennedy Space Center in Florida.

The agency wants to host commercial spaceflights that would launch from and land horizontally at its 15,000-foot Shuttle Landing Facility once the space shuttle retires in 2010. In the interest of being a good neighbor, NASA first wants to make sure that returning spacecraft won't create dish-rattling sonic booms over the Space Coast.

That's where Starfighters Inc., an airshow team based in Clearwater, Florida, comes in. "We're flying the same or similar profiles that suborbital vehicles will fly when returning to the Cape," says team creator Rick Svetkoff, a former A-4 and commercial airline pilot who began flying F-104s at airshows in 1995 (see "The Fastest Show on Earth," Apr./May 2001).

"You have to climb almost straight up to 40,000

feet and then roll over on your side and go supersonic by the 12-mile point," says Svetkoff, 12 miles being the distance from the Cape where commercial spacecraft are expected to exceed Mach 1. "There aren't many planes that can do that." Indeed, the Starfighter is so powerful that Svetkoff had to kill the afterburner to keep from going supersonic before the checkpoint.

On the first of two runs last April, Svetkoff looped out over the Atlantic, then began the steep descent that commercial vehicles will make when returning from space. "At 40,000 feet, I'm looking almost straight down at the runway," says Svetkoff, who puts the fighter down at 230 mph.

The outcome was the best one possible: silence. "No one at the [landing facility] heard a thing,"

Svetkoff says. "It shows that, yes, this is something we can do out of KSC—you can run viable supersonic operations as long as you set them up on an existing profile."

So how long will it be before commercial spaceflights begin at the center? "I think the technology has to mature on the industry side," says Jim Ball, spaceport development manager at KSC. "However, as soon as we complete the

environmental assessment, there would be nothing preventing us from hosting those flights from here, provided NASA is comfortable with the arrangements we make with a provider, and that its launches are sanctioned by the Federal Aviation Administration." Future F-104 sorties will research telemetry and communications systems and validate suborbital flight operations.

■ ■ ■ MARK CANTRELL



**Rick Svetkoff (top) talks to the press at Kennedy Space Center, where he makes sonic booms in his F-104 for NASA.**

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