

NASA e-mails showed concern for Columbia safety

Internal e-mails, including at least one sent to the shuttle, indicated concern for the ill-fated mission

By Gwyneth K. Shaw
The Orlando Sentinel (KRT)

WASHINGTON — The commander of the shuttle Columbia wasn't told that a chunk of foam had struck his spacecraft's wing until a week after the launch — and then apparently only because NASA managers thought it might come up in a press conference, e-mails released Monday show.

"This item is not even worth mentioning other than wanting to make sure you are not surprised by it in a question from a reporter," flight director Steve Stich wrote on Jan. 23 to Columbia commander Rick Husband and pilot Willie McCool.

Experts had reviewed the photographs taken of the strike and thought there was "no concern" about damage to the thermal tiles that protect the belly of the shuttle or the reinforced carbon-carbon, or RCC, panels that wrap the leading edges of its wings, Stich wrote.

"We have seen this same phenomenon on several other flights and there

is absolutely no concern for entry," added Stich, who works at Johnson Space Center.

In fact, however, there had been considerable concern at JSC about the possible effect of the foam strike — and the issue hadn't been resolved at the time of Stich's e-mail. A team of 37 engineers and technical managers didn't complete its initial review of the foam strike until one day after Stich's e-mail. It wasn't until Jan. 27 that the engineers finally signed off on the conclusion that there was no "safety-of-flight" issue. And e-mails previously released showed some NASA engineers remained worried throughout the remainder of Columbia's 16-day mission.

Investigators now think the 1.67-pound chunk of foam — which flew off the shuttle's massive external tank roughly 82 seconds after its Jan. 16 liftoff and hit the left wing — caused an opening in the leading edge that allowed superhot gases to penetrate the wing. Columbia broke apart Feb. 1 over east Texas, killing Husband, McCool and their five crewmates.

U.S. Rep. Dana Rohrabacher, the California Republican who chairs the Space and Aeronautics Subcommittee

of the House Science Committee, said Monday that the e-mails again emphasized NASA's "colossal error in judgment" in analyzing the foam strike. He said he is interested in what the independent Columbia Accident Investigation Board, led by retired Adm. Harold Gehman, recommends in terms of management changes.

"Now, whether or not that judgment was justified — whether someone else would have made a different decision who was being more careful — I'm looking for guidance from the Gehman commission on that," he said.

Husband's replies to Stich and a second e-mail sent Jan. 24, which included a video clip of the foam hit, do not indicate that he or any of the crew were concerned about the situation.

"Thanks a million Steve!" Husband wrote to Stich on Jan. 25.

The subject of the foam strike never came up during the televised Jan. 25 press conference with Husband and McCool. But on the ground, the potential for disaster fueled debate right up until the day before Columbia was scheduled to land at Kennedy Space Center.

Despite the engineering analysis

that indicated the foam damage was not a serious concern, engineers at JSC and Langley Research Center continued to theorize about possible worst-case scenarios.

Those two e-mails, however, are the extent of the discussion with the crew, NASA spokesman Bob Jacobs said Monday.

"This illustrates the belief on the ground during the mission that the debris strike did not pose any safety-of-flight concern for Columbia," Jacobs said. "The conclusion that the debris damage did not pose a safety-of-flight concern was not reached by the debris-assessment team and concurred upon by the (mission managers) until Jan. 27. If that conclusion had been different — had there been an indication of a safety concern or even an impact of any type to the flight or entry — then much more information would have been provided to the crew by channels other than personal e-mail."

But comments from top NASA officials in the first days after the accident seemed to indicate that the crew got more information. Ron Dittmore, then the shuttle program manager, said during a Feb. 5 press

briefing that he felt the crew had a good understanding of what had happened and why it wasn't considered a problem.

"Our policy is that we tell the crew everything," Dittmore said. "We don't hold anything back from the commander on the scene; he gets everything that we know."

Michael Kostelnik, who oversees the shuttle and international space station programs at NASA headquarters, said much the same thing that same day.

"Throughout the flight, all the crew members on (Columbia) knew that the engineers were concerned and were looking at the potential impacts of what happened," he said. "In fact, they were provided the same analysis that we've shared with you and the same information."

But the astronauts never saw the engineering analysis and never got wind of the engineers' concerns, Jacobs said.

"No other information on the debris strike was sent to the crew," he said.

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The Oregon Liquor Control Commission sought to make malternative beverages like those produced by Seagram's and Bartles & Jaymes available only in liquor stores. Jessica Waters Emerald



Malt

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stores because malternatives and beer have similar alcoholic content.

"It doesn't really make a difference because if people want liquor, they'll just go to the liquor store," she said.

Mike Chown, owner of the

Willamette Plaza Liquor Store, said that he did not like the idea of malt beverages being sold only in liquor stores. However, he said the addition of malternatives to his store would not improve business.

"You don't really make too much money off of those drinks," Chown said.

Chown acknowledged that his store sold similar malt beverage items like Jack Daniel's malternatives, but that most customers bought regular distilled liquor products.

"Those lighter drinks are not that huge of a seller," Chown said.

Contact the reporter at shoikeda@dailymerald.com.

Pollution output drops by 1 billion lbs. in 2001

By Seth Borenstein
Knight Ridder Newspapers (KRT)

WASHINGTON — American industries cut their toxic-chemical pollution by more than 1 billion pounds — the equivalent of eight Titanics — in 2001 for the biggest decrease in nearly 15 years, according to Environmental Protection Agency figures released Monday.

While other environmental indicators worsened slightly in the early years of the Bush administration, the annual Toxic Release Inventory showed a dramatic 15.5 percent drop in non-lead toxic pollution into the air, water and ground.

The decrease was from 6.76 billion pounds in 2000 to 5.71 billion pounds in 2001. The only bigger drop was in 1989, when companies scrambled to cut emissions after the embarrassment of the first year they were required to report toxic pollutants.

"We're seeing a significant drop and

we're not exactly sure why," said assistant EPA administrator Kim Nelson. "A lot more companies are being sensitive to the bottom line, both from an economical perspective and an environmental perspective."

The drops in toxic pollution were nearly across the board. Only five of the 25 industries that pollute the most showed increases from 2000 to 2001: petroleum processing, coal mining, measuring device-makers, printing companies and tobacco.

The largest reduction came from the mining industry, which cut 602.5 million pounds of toxic waste from 2000 to 2001. That industry is the largest single toxics polluter, producing about 45 percent of total emissions. The second biggest polluter — electric utilities — cut 98.3 million pounds of pollution.

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