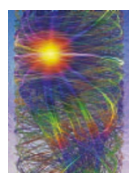




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NASA administrator quits post to launch career as academic

Tony Reichhardt, Washington

The future of the US space programme faces fresh uncertainty this week after Sean O'Keefe quit as administrator of NASA to take up a lucrative academic post.

O'Keefe resigned on 13 December to pursue a job as chancellor of Louisiana State University in Baton Rouge, which had aggressively recruited him and offered a reported \$500,000 salary. The move came as a surprise to many in the space community, who had hoped that, before he left, O'Keefe would clear up some of the more pressing problems that arose during his tenure.

A former Secretary of the Navy, O'Keefe was widely credited with addressing cost overruns on the International Space Station after his appointment in December 2001 — albeit by eroding the station's technical capacity. But after the loss of the space shuttle Columbia in February 2003, O'Keefe became an enthusiastic cheerleader for President George Bush's ambitious 'Vision for Space Exploration', including a return to the Moon.



In an important victory for O'Keefe and the White House, NASA last month obtained nearly its full 2005 budget request of \$16.2 billion from Congress. Yet the future of the 'vision' is far from assured, space analysts say, and NASA's financial troubles are by no means over. The shuttle has so far cost \$750 million more to fix than was anticipated. And a public dispute over how to save the ailing Hubble Space Telescope — which may need as much as \$2 billion that NASA doesn't have in its budget — has been a mounting headache for O'Keefe.

A National Academy of Sciences panel released a report on 8 December that directly challenged the administrator by calling for astronauts to repair the telescope as originally planned. A proposed robotic servicing mission would be too risky in the near term, said the panel, and sending astronauts to Hubble is not significantly more dangerous than sending them to the space station — despite O'Keefe's protestations to the contrary. The administrator made no official response to



Hubble trouble: working out a fix for the telescope has been a headache for Sean O'Keefe.

the report, other than to say that NASA is still studying the robotic servicing option, which comes up for a technical review in March.

Many observers now see O'Keefe's insistence against sending astronauts to fix Hubble as a significant blunder. It underestimated public support for the telescope, they say, and alienated influential politicians such as Senator Barbara Mikulski (Democrat, Maryland), whose state is home to Hubble's control centre.

Taking flight

Although many scientists respected O'Keefe's management style and sympathized with his attempt to give the astronaut programme a fresh direction, the potential dominance of the Moon mission and the Hubble controversy made others fret that science had lost its pre-eminence at NASA. Space science had been largely insulated from budgetary problems affecting the space shuttle and station in the past decade. Now, says Jonathan Lunine, a planetary scientist at the University of Arizona in Tucson and a frequent member of NASA advisory committees, "some of the virtual firewalls between space science

and manned spaceflight are breaking down".

O'Keefe also began another, less heralded transformation at NASA by filling many top agency positions with former military officials, many of whom had no previous space experience. Jobs ranging from chief financial officer and general counsel to the head of the new exploration programme — retired Navy Rear Admiral Craig Steidle — have gone to people with Pentagon backgrounds. This partly reflects O'Keefe's work experience, but also signals the Bush administration's interest in fostering a closer relationship between military and civilian space programmes.

The use of military expertise extends to outside advisers, such as retired Air Force General Lester Lyles, a former head of the US Missile Defense Agency, who has been tapped to head NASA's oversight committee for the Moon mission. In a speech to the Air Force Association last month, Lyles praised O'Keefe for "getting to an organization that looks very much more like the Department of Defense".

That trend may continue after O'Keefe's departure. Rumoured successors include several military men, among them retired Air Force General Ronald Kadish, who recently led the US missile defence programme. ■