

# Louder Than Loud

On February 2, the STS-63 Space Shuttle was launched. It was a unique event for two reasons: the Shuttle had a woman pilot for the first time, and Morten Stove of Danish Pro Audio was on hand to record the sound of the take-off.

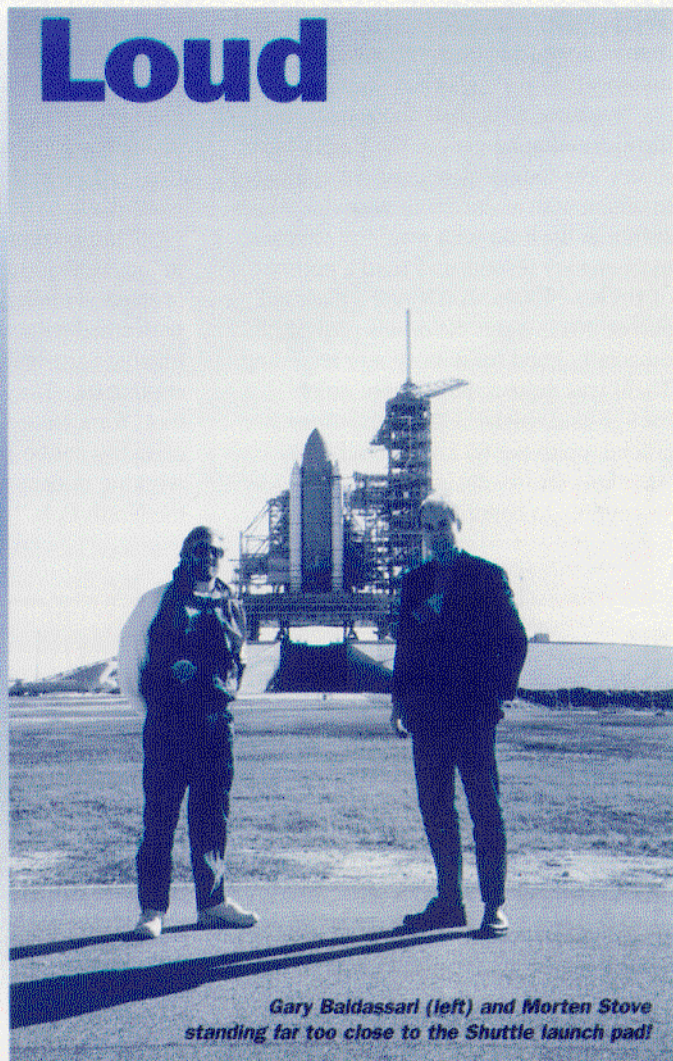
Recording the Shuttle launch presents some extraordinary technical difficulties, not least because sound pressure levels can reach 170 dB. Also, nobody was entirely sure that the microphone itself would survive the blast: at the moment of take-off, there is intense heat, flames and chemical spray all over the launch pad.

## **So what microphone could meet these exceptional demands?**

One B&K4004 was set just 500 feet away from the launch pad, where it handled 170dB without distortion. Another 4004 was set 1400 feet away and subjected to 146dB. A mile away, a third 4004 still recorded 125dB of SPL. All the mics were connected to the B&K 2812 Mk II pre-amps, and sent via equalised phone lines to a mixer with pad control. All levels were checked and calibrated with a B&K 4228 Calibrator, using level information from

measurements done at previous launches. Two stereo sets 3530 were set up 3 miles away, recording straight to Sony DAT and to a Nagra.

Morten, in conjunction with Steve Bussey, supervisor at the space centre, and Gary Baldassari, recording engineer from Incorporated Magi, were asked to make the recording for the Space Operation Center for two reasons. Firstly, the Center wanted to have a reference sound, and also to provide broadcasters with a cleaner sonic record. Their recording was subsequently used by a number of broadcast networks, including ABC, NBC and CNN.



*Gary Baldassari (left) and Morten Stove standing far too close to the Shuttle launch pad!*