## Astronaut to run Boston Marathon in space

U.S. astronaut Sunita Williams may not be running the Boston Marathon alongside her earthbound counterparts, but she still faces a tough challenge in her bid to run the race tethered to a treadmill more than 300km above Earth aboard the International Space Station

Harness
Worn to keep
from floating off
treadmill —
causes hip and
shoulder pain,
requiring regular
breaks

Perspiration

## Does not fall but stays around body.

Changing clothes halfway through race is essential

Track: Loosely bolted to wall – so pounding of feet does not affect station orbit. Slight

movement makes it harder

to use \_\_\_\_ Bungee cords Boredom
Williams may
watch film or
baseball game
to make up for
lack of crowd,
scenery and
competitors
Fatigue

members
exercise
for two
hours a day
to slow down
muscle loss
caused by

weightless

conditions

All crew



- ▶ 41-year-old Indian American began NASA training in 1998
- ► Holds record for women's spacewalking over 29 hours
- Completed 2006 Houston Marathon in under 3.5 hours
- Space time likely to be much slower six minutes per km
- ▶ Because station is moving at about 27,000km/h, Williams will technically finish in 5.4 seconds

Other exercise equipment aboard station

includes bicycle and weightlifting devices