



The world's first "Ground Based" aircraft weight and balance system from Aldis ensures greater passenger safety.

*Le système Aldis confirme le poids et le centre de gravité des avions. Une première mondiale pour une sécurité accrue des passagers.*

classroom and laboratory work at TCTI, the Transport Canada Training Institute. The laboratory work includes considerable use of simulators.

While computer based radar simulators have been available for several years, the facilities for training tower controllers are not so advanced. In many ATC colleges around the world, tower controller students stand around a large table, on which the airport runway layout is painted, holding model planes. These models are moved based on the ATC trainee's directions. This low-tech solution is inexpensive

from an equipment point of view, but lacks any sense of realism. Real aircraft have different operating characteristics, based on weight, speed, acceleration, turn rate, and rate of climb/descent.

Luckily, Canadian innovators have been aware of this deficiency in realistic training systems, and a Québec company, ATS Aerospace Inc., of St. Bruno, has designed and implemented the world's first 360 degree Air Traffic Control tower simulator.

The system creates the virtual environment by enclosing the ATC

trainees in an octagonal room, where each of the eight walls has a three metre square screen. Each of these correspond to one ATC tower window, onto which is projected a highly realistic view of the airport, complete with runways, taxiways, ramp and buildings. This is complemented by moving aircraft, both on the ground and in the air. As in real life, all ATC clearances are given over a radio link, and are acted on in real time, under computer control.

Thus it is now possible for controllers to be trained to the highest standards, for any airport for which there is a visual data base. So the invisible Air Traffic Control professionals, who work in one of the world's most stressful jobs, are getting the opportunity to hone their skills, in order to participate in a most unusual split team dedicated to making your air travel safe and relaxing.

## **SPAR** Next generation of life-saving recorder devices

Perish the thought that, despite all that airlines and civil aviation authorities have succeeded in achieving in terms of increased safety in the air, the aircraft on which one is flying is involved in a crash.

Should the unthinkable happen, however, bearing in mind as pointed out elsewhere in this issue that flying is by far the safest means of transportation, one's chances of being successfully rescued can often depend upon the aircraft being pinpointed. Quickly and accurately. So that rescue teams can move in to the crash site and do whatever is necessary to reduce loss of life.