

maintenance crews as well as aircrews, but it takes a toll on equipment and personnel in the long run and undoubtedly increases operating costs. Aircraft age more quickly and spare parts are consumed more rapidly. Morale also suffers when maintenance crews have to work long hours, continuously, to keep available aircraft flying.

Cargo capabilities. Most of ATG's aircraft are able to transport some supplies, but only the Hercules and Buffalos have rear-loading capabilities. The Hercules alone is large enough to carry *oversize* military cargo such as a two-and-a-half ton truck. No Canadian military transport aircraft is capable of handling *outsized* military cargo such as tanks. (Long-range military transports capable of carrying heavy military cargo will not be needed for the time being if the ATG fleet is developed along the lines recommended in this report, notably in section three, *The future of Air Transport Group.*)

Tanker capabilities. Only two of ATG's aircraft are equipped for air-to-air refuelling. Both are Boeing-707s of 437 Squadron, which can be employed in either transport or tanker modes. Conversion from one role to the other takes about 12 hours, so these aircraft cannot be switched instantaneously from transport to tanker duties during operations. Additional tanker capability is urgently required.

Aircraft requirements for current situations

Peacetime. The evidence presented to the Committee suggests that ATG needs a number of additional aircraft in the immediate future to meet purely peacetime requirements.

- One additional Boeing-707 is required as soon as possible, with air-refuelling capability, to service CF-18 interceptors.
- There seems to be a broad consensus that a number of additional Hercules are needed for peacetime operations, notably for routine logistics missions, for air-to-air refuelling, and to support Mobile Command training exercises. For example, Mr. Martin Shadwick, Research Associate, York University, envisaged a force of at least 30 to 32 Hercules, which would require DND to purchase four to six more aircraft as well as moving the 429 Squadron from navigation training and transport missions to a purely transport role. Other testimony confirmed that a total of about 33 Hercules are needed to carry out all peacetime tasks. This would reduce utilization rates to more acceptable levels and strengthen that core group of transport squadrons which is vital for the movement of military units, equipment and supplies across Canada, to the Canadian North, to Norway, to Denmark and to Germany.
- One of the main advantages of acquiring some additional Hercules aircraft would be to strengthen Canada's national presence in the North. The Committee has long been concerned about this question, for example arguing in its first report, *Manpower in Canada's Armed Forces*, that: "The Canadian Forces must have the air transport capability needed to airlift a brigade of troops to any Northern or coastal points which may be threatened by disorders