



Back on the ground ... CALMfire Equipment Officer Gary Karavainis (left) and CALMfire Manager Rick Sneeuwjagt, and Senior Operations Manager Terry Maher check out one of CALM's new heavy duty units.

Aerial water bomber on trial

CALMfire's Senior Operations Officer Terry Maher joined fire managers from around Australia recently to evaluate the Canadair CL-415 aerial water bomber during trials in Victoria.

Terry—who reckons he has done more than enough of his share of flying on fire-related operations—says aerial fire-fighting is a highly specialised technique with severe limitations, but it can play a role in helping fire fighters in the early stages of a fire's development.

The \$27 million, Canadian-built CL-415, is a turbo-prop version of the CL-215, which has been used in North America and Europe for almost 30 years.

According to Terry, the plane has the capability to operate under Australian conditions.

Its prime feature is its ability to scoop from water bodies and deliver that water to the fireground in a relatively short time.

"It is an impressive aircraft, but it does have some drawbacks," he said.

"First, it's really only effective if it can begin dumping water or retardant foam within 20 minutes of a bushfire being detected.

"Second, it is a water skimmer so it needs big bodies of water from which to draw and we don't really have those reserves in the south-west.

"While it can pick up off the sea, conditions have to be pretty good. Much of the coverage claimed for this aircraft in Australia comes from scooping seawater and since rough conditions often accompany major fire development, further work is needed to define the limits in using seawater.

"Also, the actual extent of coverage from inland water resources in summer and in drought years need to be determined.

"A third factor is that, being such a heavy aircraft, it would be restricted to

flying out of Albany or Perth, as airstrips such as those at Bunbury, Dwellingup and Manjimup could not handle it."

Terry said the success of controlling bushfires largely hinges on getting to the fire before it becomes too intense.

"But if ground forces can't attack the headfire, then aerial water bombers won't be effective, either, he said.

"However, we believe further evaluation is needed of aerial suppression techniques, particularly using light planes, which carry up to 2500-litre payloads.

"New agricultural aircraft are arriving in Australia soon and these may be more suitable for our conditions, especially if used to drop foam in front of the headfire to help slow the fire's spread so ground crews can get in and attack the flames directly."

Terry said the Canadian aircraft was very expen-

sive and it was unlikely that a single plane would be effective, given the multiplicity of fires that often occurred at the same time throughout the south-west of the State.

"Although the priority in fire suppression is protecting life and property, the fact is that, as experience in America has shown, a big aerial fire-fighting capability doesn't stop intense bushfires," he said.

Terry said the Western Australian experience, with emphasis on well-equipped and well-trained ground forces supported by planned fire hazard reduction programs, was the most effective way of lessening the impact of big, uncontrollable wildfires.

The CL-415 evaluation was co-ordinated by the Australian Fire Authorities Council.

A report is expected to be available to fire agencies by the end of February.

