A Task-based Physical Selection Test Prototype for Tanker-based Firefighters

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While every effort in firefighting has been made to lesser the physical demands on the individual through job redesign and advances in equipment technology to be safer and less physically strenuous, there is still an over arching need for firefighter to be physical fit to under take the required job tasks.

Therefore, it is pertinent that agencies assess potential volunteer firefighters physical ability to perform the work tasks, with the potential demands evident on the job, without the associated external risks, such as fire, smoke and extreme heat. This can be achieved using Physical Selection Tests which are a test or series of tests and can identify workers who have or do not have the physical abilities to perform the job tasks.

At present, there is no national standard assessment of physical ability of tanker-based firefighters, nor a specific test for this mode of firefighting. It is therefore hoped that the development of a Physical Selection Test for tanker-based firefighting will be able to play an important role in many applications including for new recruits, annually for incumbents and for personnel returning to duty.







A prototype Physical Selection Test has been developed for tanker-based firefighting based on the physically demanding firefighting tasks:

- 1. Advanced charged 38mm hose
- 2. Lateral repositioning of charged 38mm hose
- 3. Full repositioning of charged 38mm hose
- 4. Solo handtool work
- 5. Handtool work during blacking out
- 6. Hose retraction

These physical job tasks were presented to a panel consisting of subject matter experts of tanker-based bushfire suppression, incumbent firefighters, legal and health and safety experts and human movement scientists. A prototype test was designed by this panel based upon the characteristics of these physically demanding task all Australian tanker-based firefighters would be required to undertake.

The prototype Physical Selection Test includes:

- 1. A charged hose maneuvering test, including forward and repositioning movements
- 2. A rakehoe challenge test, requiring clearance of a standardised amount of debris in an area
- 3. A hose crank of 2 x 30m length 38mm hoses on a platform of 0.90-1.2m.

Footage of the prototype test will be offered to fire agencies in coming months for discussion and consultation before assessments of reliability and validity of the test are undertaken.



