

# QUARTER TURN QUICK CONNECT COUPLING

*Background* - The decision was made at the spring 1999 FEWT meeting to analyze the feasibility of conversion from threaded coupling components to quarter turn quick connect coupling. A survey was conducted in November 1999 through the agency directors at NIFC.

## *Survey and Summary of Results*

A total of 225 responses were received with the majority coming from the U.S. Forest Service.

1. What type of hose fittings are you using now? 93% Threaded
2. If you are using both, are you in the process of converting to quarter turn? 18% Yes
3. If Federal Wildland Firefighting Agencies consider a conversion to quarter turn hose fittings, would you support this effort? Yes - 113 No - 95
4. How much hose do you normally stock on an annual basis? Responses were used to factor into field and local cache inventory amounts.

## *Why change to quarter turn quick connect?*

- Superior System
  - Short term cost, long term gain
- Efficiency and Performance
  - 20% increase in efficiency
  - Easier to deploy
  - Reduces training time (its foolproof)
  - No leaks in hoselay
  - Reduced weight in hose packs and on vehicles
- Hardware Reduction
  - Fewer fittings; 1" & 1½" are interchangeable
  - No male / female fittings
  - 12 fittings become obsolete (adapters, couplings, reducers, increasers) saving \$128,821 yr
- Interchangeability with Canada

## *How much will it cost?*

- 2.46 M - Hardware costs to purchase adapters & coupling sets to retrofit existing inventory

## *Recommendation*

Convert to quarter turn quick connect couplings. Purchase adapters for existing inventory in national caches and field. Consider re-coupling hose vs adding adapters, recycling scrap metal to help offset cost.

Kim Christensen, Chair - NFES  
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