Dan’s pretty good display design tips...

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So what’s important? Pick the right display for the job

- Quantitative readings: Precise numeric values
- Qualitative: approximate values of changeable info
- Signal and warning light: Discrete on/off
- Representational displays: insertion into context
Quantitative displays

- Use when precision required
- Moving pointer, fixed scale generally better
- Movement more apparent
Qualitative displays

- Preciseness not as important
- Shows position relative to extremes
Warning displays

- Discrete information
- flash 3 10 Hz
Gestault

- Design panel where groups of nominal information reside
• Non normal values salient relative to others
Window displays

- Use when scales are too large to display all at once
- Less effective at communicating rate information
Movement compatibility

- On = up, right, forward, push
- Off = down, left, back, pull
- Right = clockwise, right
- Left = Counterclockwise, left
- Up = Up, rearward
- Down = Down, forward
Controls as displays

Supercharger

Fire extinguishing

Carburetor air

Landing flap

Landing gear
Controls as displays cont.
Conventional displays
Integrated displays
General guide for display selection
Go, no go, start, stop, on, off caution, warning

- Use LIGHT
- Normally easy to tell if it is on or off
- Code by color, location, flashing
- Attract attention = flash at 3 10 Hz
Exact quantity

- Use Digital counter so only one number can be seen
- Avoid using for fast changing information where trend is important
Approximate quantity

- Use MOVING POINTER, FIXED SCALE
- General position of pointer gives rapid clue to the quantity plus relative rate of change
Describe examples of any of these displays in your environment
You have been retained to refurbish a 1952 fire truck in What Cheer, Iowa.

Volunteer fire department with minimal funds.

Problems: hose reel 300 feet long; minimal pulling at 300 feet causes disconnection.

Too much water pressure 200 PSI will blow pump.