THE GREAT CANADIAN FIRE ALARM TECHNICIAN CHALLENGE!

1. Calculate the minimum fuel capacity for a generator in a 32 storey residential apartment (the low fuel alarm setpoint) for a fire alarm system with three power supplies with the following current draws (note the derating factor for your calculations is 1.2):

	Control Panel	Audio Power #1	Audio Power #2
Supervisory Current	1.2 A	7.2	4.9
Alarm Current	2.4	11.6	7.8
Batteries Installed	12 AH	60 AH	45 AH

Generator Load = 75% for 30 minutes, 25% normal operating load for time remaining
Maximum Fuel Capacity (100%) = 300 Gallons

Fuel Consumption table

	25% (gph)	50% (gph)	75% (gph)	100% (gph)
350 kWh	7.9	13.1	18.7	25.1

Now calculate the required battery capacity for the above fire alarm system if the fire alarm system is **NOT** connected to the emergency power panel.

2. Describe the difference between a Style “A” and Style “C” DCL loop.

3. Describe how would you perform the required annual testing for each DCL Loop Style in a four storey residential building with an underground parkade?

4. Describe (or draw) the various requirements for DCL loop isolation and interconnection of supporting field devices in the following scenarios:
   i. A stairwell location with sprinkler isolation valves & flow switches for two adjacent floors;
   ii. The top of a stairwell with a sprinkler isolation valve & flow switch for that floor and an addressable smoke detector.
   iii. An elevator shaft pit addressable fire detector and a top of shaft addressable smoke detector

5. In which Code or Standard is the requirement for elevator pit automatic fire detection stipulated?

Complete the information below and fax it to 604-552-7909, or scan and email it to us at members@firetechs.net.

Name (First & Last): _____

Snail-Mail Address: _____

City: _____

Province: _____

Postal Code: _____

Telephone Number: _____

Email Address: _____

Certification #: _____

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CFAA Technician	ASTTBC Technician	Technician Trainee	Fire Technician Network Member

The first three fire protection technicians whose correct entries are drawn will each receive an Extech EX-470 meter*, a custom lettered red “T” shirt and ball cap (to help you stand out in a crowd of your fellow technicians), and the bragging rights to the title of:

A GREAT CANADIAN FIRE ALARM TECHNICIAN

Contest closes May 31st, 2016.

Good Luck!

*Note: Contest is open to technician residents of Canada only. One entry per technician (FTN members can submit two). Please write NEATLY!