by Richard Charles

## See you later, radiator?

If you want to keep your home heating system working for you, don't turn your back on it during the off-season and then cross your fingers and hope it behaves itself when the cold weather comes back.

This advice applies as much to the old-tried-and-true heating system with hot-water or steam radiators as to a more modern electronic marvel. In fact, you may not be aware of any trouble, and yet by letting heat go to waste before or after it reaches the radiator. It's never too soon to check over the system and take some simple precautions against waste. But, of course, you need to keep an eye on it in winter too.

With hot-water heating, the water is pumped through tubes in a furnace, where it is heated to a maximum of 82°C (180°F), and then piped to radiators throughout the home. The water cools in the radiators and then returns to the pump and starts again.

An expansion tank and relief valve keep the water pressure from going too high. Another valve prevents the flow of water when the circulating pump stops.

Here are some points to watch in getting the best from hot-water heating.

Make sure that there's an air space in the expansion tank (see the operator's manual or ask a heating expert).

Insulate the water pipes leading to and from the furnace, especially where they pass through areas that don't need heat.

Keep up the water levels throughout the system; check the water-level gauge on the furnace before you start up in the fall.

Let any air out of the system (while it is running) by opening the vent on each radiator in turn, but close the vent as soon as water starts to spurt out.

Keep radiators clean, and don't block them off from the room with furniture or drapes. When painting radiators, use a matte or satin finish, not

metallic paints or glossy light colours. Use a reflector, such as aluminum foil, on the wall

behind the radiator to direct heat into the room.

The steam heat system is similar in some ways, but in this case the water is heated to 100°C (212°F) in a boiler, The steam from this boiling water then rises of its own accord through pipes to the radiators. When it cools and condenses, the water returns to the boiler by gravity.

You can help the system to stay in good working order in the following ways.

Flush and clean out the boiler once a month during the heating season.

Keep the water at the manufacturer's recommended level. Too much water makes the boiler less efficient, and too little makes the heating unit shut off.

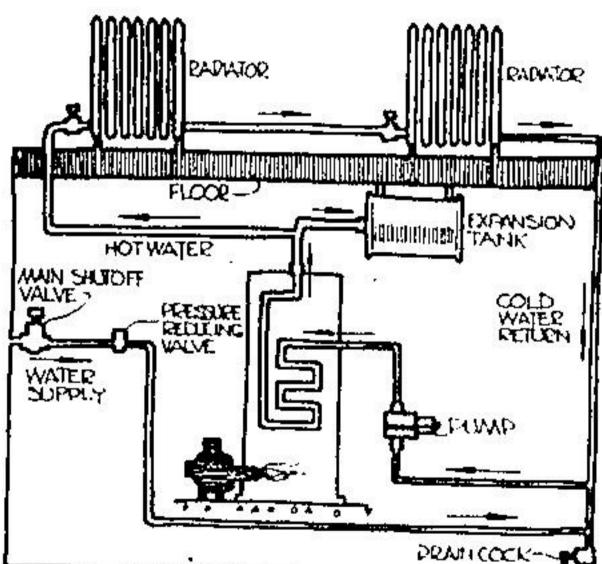
Look for leaks at the joints, where steam and heat can escape.

Insulate pipes as you would with hot-water heating. Check the radiators. If there's a cold one, look for faults

in air valves or vents in the system.

Take care of steam radiators in the same way as hot-water radiators.

If you want to know more about keeping your home warm in winter, including the use of hot-water or steam heat, write to Box 3500, Station C, Ottawa, Ontario, KIY 4G1, for a copy of 100 ways to save energy and money in the home. It comes from the Office of Energy Conservation, Department of Energy, Mines and Resources.



TYPICAL HOT WATER HEATING SYSTEM



## Government real estate operations should be more cost conscious

Ottawa - The federal government, which spends about \$950 million annually to provide accommodation for its various departments, should be more efficient and cost conscious in its real estate operations.

That is the message in a report of the Standing Senate Committee on National Finance released recently.

The committee spend 19 months making an in-depth study of the Accommodation Program of the Department of Public Works which has been described as "the largest realty operation in Canada and one of the largest in the world".

It recommends that the Department of Public Works should handle all government construction and real estate operations and that the cost disciplines of the private sector should be employed to ensure efficiency.

At present most government departments are not charged for the space they

occupy in federal government buildings. The recommends committee they be charged the same rate they would pay in the private sector.

The Department of Publie Works would receive the payments and be dependent upon them for financing its Accommodation Program. Thus, all government departments would have a real dollars and cents incentive to manage their accommodation on a business-like, economical basis.

To operate in this way the Department of Public Works "will have to be as efficient as a well-run private developer". The committee recommends that the department simplify its present complicated decision-making process and improve its long-range planning system so that accommodation requirements can be more accurately estimated.

The present system of lease tendering tends to increase costs, so the

Department of Public Works should be permitted to negotiate all but the largest leases.

As an inducement for architects, engineers and contractors to achieve conatruction economics. bonuses should be paid for innovations which reduce the cost of federal governconstruction proment jects.

In line with declared government policy the share of construction design work handled by outside consultants should be increased, with only enough in-house expertise maintained for the minimum small and medium projects anticipated each year. Projects for outside designers should be publicly announced and open to all qualified architects and engineers.

Clear and concise guidelines should be developed for the efficient use of federal real estate holdings. The requirement that holdings declared surplus must be retained should be revoked.

The committee recommends that the Area Screening Program designed to review the impact of federal properties on communities in which they are located should be discontinued because it has not proved productive.

The private sector and universities should be given a greater role in the area of research and development. Projects should be continually assessed for their effectiveness and dropped unless proved productive.

The report which contains 62 recommendations is the third major evaluation of a government program by the National Finance Committee under the chairmanship of Senator Douglas D. Everett. Work has begun on the committee's next study ... an examination of the programs and policies of the Department of Regional Economic Expansion.

## History and hospitality live side by side in Kingston ... Ontario's Limestone City

By Colin S. Fisher

Kingston, Ontario ... Canada's first capital, a former military stronghold, home of Ontario's first daily newspaper, birthplace of organized hockey and more ... is one of the province's most popular tourist destinations and no wonder.

Today, Kingston has attained perfect balance in catering to its guests. Scores of fine hotels and restaurante, up-to-date entertainment next door to more than three centuries of history, insurpassable scenery and rich cultural amenities combine to provide a paradiae for holiday makers in Ontario.

Long known by the native peoples and first visited in 1615 by Samuel de Champlain, Kingston is a city drenched in Canada's early history.

and there are many and the

Kingston Harbour, located at the junction of three great waterways, became important to Canada because of its strategic location. In early times when water transportation was the most expedient mode of travel in this new Kingston land, accessible from all four points of the compass. The Cataraqui River, which links to the Rideau which joins the Ottawa, meets Hudson Bay to the North, Lake Ontario with its south and west waters and the St. Lawrence River with its easterly flow made the city a central transportation hub

in early Canada. The French concluded the first trade agreement in national history here with the lroquois and erected an imposing fort (Fort Frontenac) when Quebec City was little more than a village and Montreal only a

trading post. Conflict between the French and the British added another historic dimension to Kingston's development following a British takeover in 1758

and, eventually, the Indians, French and English fought together for the first time in a united effort to defend this emerging nation against the U.S. during the War of 1812. Remnants of carly

history are everywhere throughout the city. Often called the Limestone City because of its profusion of beautiful 19th century limestone buildings, Kingston is a city with a living pust and heritage. Walking tours are perhaps the best way to see the sights.

City Hall, one of the great classical buildings in the country, is an imposing domed structure of limestone built while Kingston 

was the capital of the United Provinces of Canada between 1841 and 1844. Still the centerpiece of town, City Hall sets the architectural theme for the downtown core.

Old Fort Henry continues to spread its protective shadow over the city. Featuring a living museum with the Fort Henry Guard, displays of 19th century military drill and artillery salutes with muzzle-loaded cannon, the fort is open until Oct. 15. The fortress was once Upper Canada's principal military stronghold.

Hockey's first league game took place in Kingaton in 1885. The International Hockey Hall of Fame records the game from its beginnings to the present. Starting in mid-September, it is open weekends only for the scason.

Kingston is also a takeoff point for a leisurely, informative cruise through the Thousand Islands that stretch 50 miles from Kingston to Brockville.

But it is more than an historic city. It is a modern city able to satisfy the most varied tastes and interests whether they be recreation or live theatre, sightseeing or shopping, art galleries or night clubs or simply a nice spot to relax.

For further information on Kingston as a vacation destination, contact: Ontario Travel, Queen's Park, Toronto, Ontario, M7A 2E3 or call collect (416) 965-4008,



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