and colour could mean different things in different parts of the world. Later, when flashing coloured lights were added to impart even more information, to the mariner, this added to the confusion.

Over the years, political feelings and world conflicts hindered efforts to unify the various buoyage systems. Finally, in the 1960s, the IALA began to bring its member nations together. It had to find ways to:

- retain existing markers and buoys as much as possible to reduce expense (Canada alone has 14 000 buoys);
- select effective buoy colours, shapes and lights that would be acceptable to its member countries;
- combine the rules for use of lateral buoys and cardinal buoys.

In past years, groups of shipping nations agreed on how to position red buoys, but these arrangements were never universally accepted. North and South America had long used red buoys on the starboard side of channels and the use of red on the port side was well-accepted in most European countries.

Accidents

A series of collisions in the busy Dover Strait, which killed 51 persons in January and February 1971, added impetus to efforts to unify the world's buoyage systems. The wrecks, all in one sea lane between England and France, could not be marked in such a way that all passing ships could understand.

The chain of events began January 11, when the Panamanian tanker *Texaco Caribbean* and the Peruvian cargo ship *Paragus* collided. The *Texaco Caribbean* was torn in two by a violent explosion that damaged windows and roofs on shore some 11 kilometres away. The fore part sank quickly but the after end stayed afloat for several hours. The *Paragus* was not seriously damaged.

The British lighthouse tender *Siren* was dispatched to the scene but, arriving after dark, was unable to place buoys to mark the wreck. Instead, the captain stationed his own ship as a marker, floodlighting the superstructure and displaying three green lights in a vertical line to warn other vessels of the side on which they should pass.

During the night, and completely unknown to those on board the *Siren*, the German ship *Brandenburg* approached the danger area and, not understanding the three light signal, struck the *Texaco Caribbean*. The *Brandenburg* sank within minutes.

By January 25, the wrecks of the *Brandenburg* and *Texaco Caribbean* were marked by a manned lightship and five wreck-marking buoys. In spite of the powerful light on the lightship and the presence of buoys which virtually surrounded the wrecks, numerous ships still had to be warned to proceed with caution. In many cases warning rockets had to be fired to prevent ships from entering the danger area. The system being used to mark the wrecks was simply not being understood.

On the night of February 27, three vessels were warned away from the danger but one of them, the Greek vessel *Niki*, altered course too late and struck the wreck of the *Texaco Caribbean*, sinking almost instantly with no survivors.

In a major effort to avert further disasters until the wrecks could be removed, Britain stationed yet another lightvessel in the vicinity and placed additional buoys. Even with a total of two lightships and 14 lighted buoys, further ships passed through the danger area before the wrecks were finally removed.

Much of the blame for these disasters was attributed to ignorance of the buoyage system in use. But it was also clear that the system itself was deficient. It had not been able to convey a clear and easily understood message to mariners of different nationalities.

Compromise agreed on

Finally, with the lesson of the Dover Straits fresh in mind, the IALA negotiated a compromise. The world would be divided into two regions based on positioning of red buoys.

In 1976, system 'A' (red to port) was agreed to by many of the countries of Europe, Asia and Africa. In 1976-80, Canada participated with IALA to develop system 'B' (red to starboard) for shipping nations of the Western Hemisphere.

Half of Canada's 14 000 buoys will be modified as a result of the new system. About 6 000 will be painted in new colours. Others will have lights with different colours and flashing patterns.

During the transition — from spring 1983 to fall 1984 — mariners may encounter both the old and new systems.

A Coast Guard brochure, *The New Canadian Buoyage System* describes the system in detail. Free copies are available from all Coast Guard offices and from Public Affairs, Transport Canada, Ottawa, Ontario, K1A 0N5.

Senator Lamontagne dies



Senator Maurice Lamontagne

Senator Maurice Lamontagne, former Liberal cabinet minister whom Prime Minister Trudeau described as "the father of co-operative federalism" died in Ottawa after a lengthy illness.

The 65-year-old scholar, social scientist, economist and author had served as president of the Privy Council and secretary of state in the cabinet of Lester Pearson in the mid-1960s.

Key figure

Senator Lamontagne was a key figure in working out federal-provincial tax-sharing arrangements which were implemented while he was an adviser to the St. Laurent cabinet. His involvement in drawing up a formula for federal grants to universities and for equalization payments to poorer provinces were major concerns as well. He is also credited with persuading Mr. St. Laurent to establish the Canada Council and with drafting the original legislation to set it up.

The Constitution was an area of longtime concern to Mr. Lamontagne, who wrote a book on Canadian federalism in 1954. In 1981, he served on a special Senate-Commons committee on the Constitution.

In the House of Commons all three political parties paid tribute to Senator Lamontagne with Prime Minister Pierre Trudeau calling him "the leader of cooperative federalism", because of his unceasing crusade for national unity.