

to actual use by swimmers of all age groups. Only when the samples have successfully met the requirements is approval given.

NEW TYPE DEVELOPED

Until recent years, the two-pad, kapok-filled "standard" lifejacket was the only type approved. Recognizing, however, that it was unsuitable for continual wear in small boats, the Department of Transport allowed the introduction of the less bulky "small vessel" lifejacket, which the public is encouraged to wear at all times while boating.

The Lifejacket Committee was formed at this time and dozens of designs, produced both by manufacturers and individuals, have since been tested. The principal aim has been to achieve a type that would incline the wearer backward while floating and keep his head out of the water as much as possible.

However, variations in weight distribution between human beings is such that it is impossible to design a lifejacket that will provide maximum protection for every individual. No single jacket will give equal support to short, tall, thin and stout persons in the water.

SPECIAL PROBLEM OF CHILDREN

Lifejackets for children are a special problem, since the upper part of a small child's body is much heavier than the lower. Variation in size makes fitting difficult, and the Department has urged parents to see that such jackets fit properly and are securely and properly put on each child. The Department has

urged that a child be made familiar, under supervision in the water, with the fact that his lifejacket will support him. This will reduce his natural terror in an emergency. A frightened child's attempts to lift himself out of the water are likely to cause him to roll over, even in a lifejacket, with choking and drowning a possible result. The Department's safety officials have continually pointed out that no lifejacket or other safety equipment can entirely replace close parental supervision where water danger exists.

DANGERS OF MISUSE

The misuse of kapok-filled lifejackets, which are likely to be sat upon, used as boat fenders, dropped in gas or oil-covered bilgewater and otherwise ill-treated, is an ever-recurring problem. Failure to pay attention to the proper method of wearing jacket is a common danger; when a passenger tumbles overboard, it is too late for him to try and make adjustments that might save his life.

Designers are faced with the fact that no jacket can keep the head of an unconscious person completely clear of choppy water. Waves are likely to splash over his head, and even a conscious person, weakened by shock may quickly be choked by even small waves.

Unicellular plastic foam is rapidly gaining popularity as buoyancy material. It is impervious to damage that can impair the buoyancy of kapok fillers. Kapok is still used in many approved jackets, contained in sealed vinyl plastic bags, and is dependable as long as the containers are undamaged and the jackets cared for and used properly.

GOVERNMENT TESTS LIFEJACKETS
The Department of Transport is continuing its study and testing of new designs of lifejackets for small-boat users. Transport Minister Leon Baird said recently, in a statement following a meeting with the department, that the department was doing to improve lifejackets. A lifejacket committee, established under the direction of the National Research Council, is made up of representatives of the Department of Transport, the water safety sector of the Canadian Red Cross, boating organizations, law enforcement bodies and other interested national, provincial and private groups.

This committee meets to receive information on study new designs and assess the value of those already under test and manufacture. Every effort is made to determine the best type of flotation materials and the best way to use them in the water. Maximum safety under emergency conditions.

All new types of lifejackets for which approval is required are submitted to the Department by the manufacturer and these samples undergo stringent tests for buoyancy, durability, ease of use and comfort to the wearer. They are subjected to length immersion to extreme heat, to strength testing and

COMMERCIAL FAILURES
The number of business failures recorded under the provisions of the Bankruptcy and Winding Up Act in this year's second quarter increased 2.9 per cent to 662 from 640 in the same 1960 quarter. While estimated liabilities decreased 18.8 per cent to \$25,813,000 from \$32,711,000, liabilities averaged \$34,860, compared to \$46,500 a year earlier. A decline of 25.2 per cent in 1961 is said to be the largest number of failures occurred in the trade sector in this year's second quarter, rising 20.2 per cent to 321 from 267 in the same period of 1960. Insurances of total losses rose to 49 from 41, an increase of 22 per cent. The number of insurances of total losses to 73 from 51, and the number of insurances of total losses to 111 from 105, while failures in the manufacturing industry rose to 76 from 71 and in the service sector to 112 from 79.