

FIG. 3.27 - Ice breaker in action on the river Danube. A piece of ice cover is chopped off and floats away downstream.

Regional Auth-orities Econ-omics Mines Agricul- Health ture SPECIAL EXPERTS GROUPS OF Con-struc-tion Interior Commu-MINISTRIES War HYDRAULIC FORECASTING NATIONAL SERVICE GOVERNMENT COMMISSIONER (IN EMERGENCY SITUATION) GOVERNMENT COMMISSION (IN EXTRAORDINARY EMERGENCY SITUATION) WATER AUTHORITY THE PRESIDENT OF THE NATIONAL COMMISSIONER STAFF OF THE GOVERNMENT (HAO) FLOOD-FIGHTING ORGANIZATION (ABKSZ) CENTRAL REGIONAL WATER (Regional Flood Fighting Organisation) AUTHORITIES FIG. 3.28

THE STRUCTURE OF THE NATIONAL FLOOD-FIGHTING ORGANIZATION

several common features. One of these national organizations, the National Flood Fighting Organization of Hungary, is described briefly to highlight some of these aspects.

In many countries, disaster preparedness, control and relief, come under a single authority for all types of disaster. Organization for such general organization is discussed in a separate chapter. The Hungarian example is an adaptation where riverfloods represent the only major form of natural disaster.

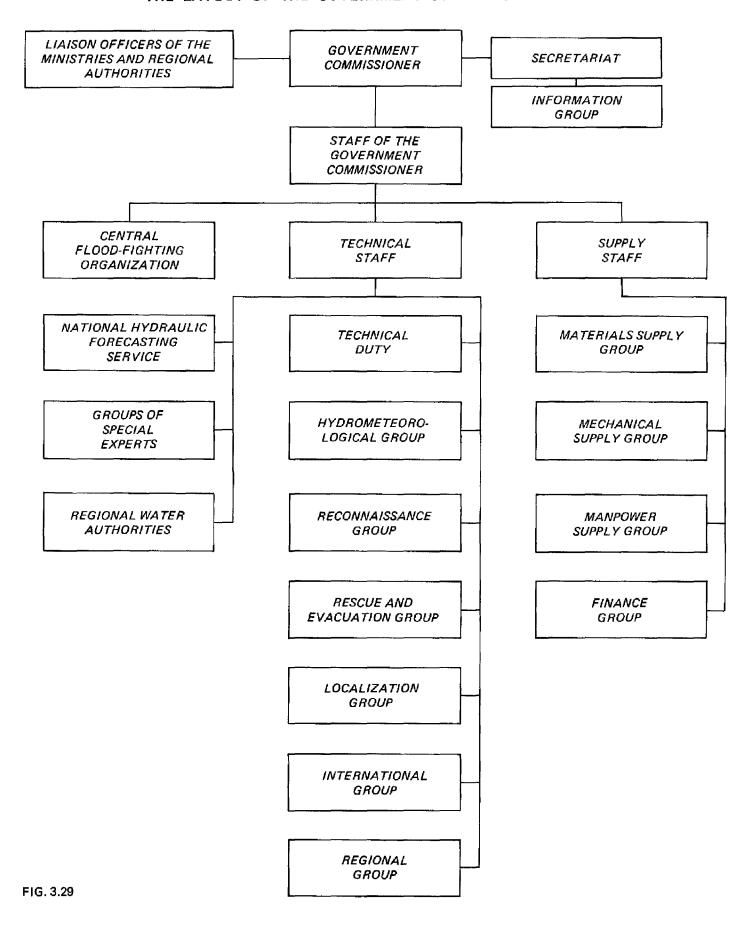
## The National Flood Fighting Organization of Hungary

3.5.3.1 The National Flood Fighting Organization is under the control of the Hungarian National Water Authority which oversees national water service interest through twelve Regional Water Authorities, each responsible for a hydrographically integrated area. In times of flood the Regional Authorities also become the organizations for district emergency control (floodfighting), activities of which are coordinated at the national level by the National Water Authority (OVH). Other enterprises and agencies of the OVH include construction firms, planning and designing institutes, and a research institute. Of these the Research Institute for Water Resources Development (incorporating the National Hydrographic Forecasting Service), and the Central Flood and Drainage Control Organization (ABKSZ) which is a specially mechanized flood fighting division, are of special interest.

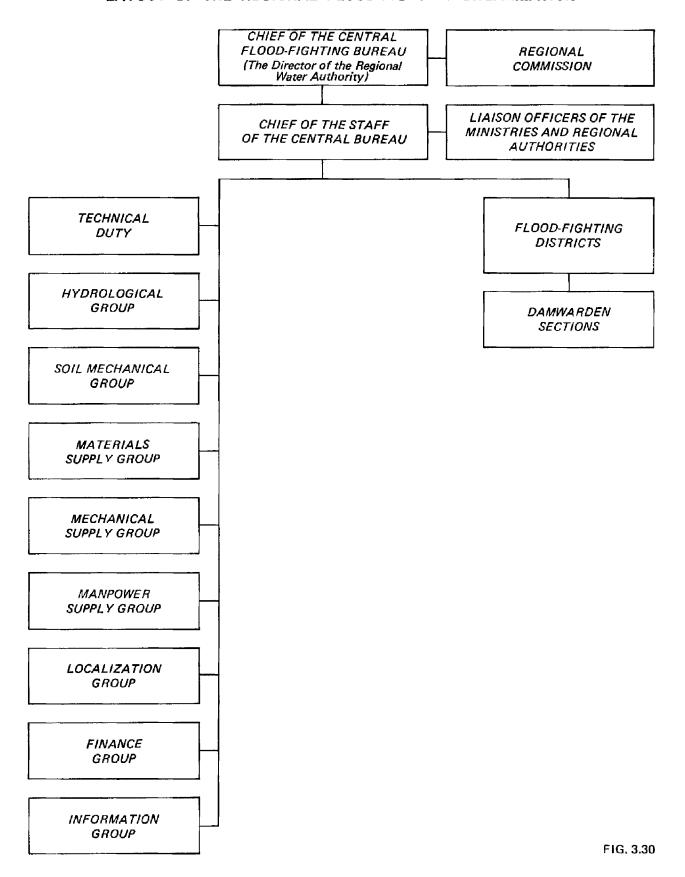
The above organizational units form in times of flood the backbone of the National Flood-Fighting Organization, the organizational pattern of which is shown in Fig. 3.28.

As long as Regional Authorities are capable of coping with the flood situation with their own forces, national guidance of flood fighting is the responsibility of the President of the OVH. Under emergency conditions, when flood fighting is conducted over a large area and requires forces beyond those of the Regional Authorities, guidance at a national level is assigned to a Government Commissioner. To this function the president of the OVH is nominated. In this case the Government Commissioner is empowered to dispose of the labour force of the population, of the means, material supplies, equipment and vehicles of the state agencies in the interest of performing the tasks of flood fighting in accordance with the national flood fighting mobilization and cooperation plans. If the labour force of the population is insufficient for averting the disaster, he is empowered to summon aid through the ministers of defence and the interior units of the armed forces and the police, respectively. Under exceptional emergency conditions where a severe flood disaster of national scale is impending, guidance at a national level is assigned to a Government Commission, the president of which is the deputy president of the Council of Ministers. Executive powers of the Government Commission are exercised through the Government Commissioner.

## THE LAYOUT OF THE GOVERNMENT COMMISSIONERS STAFF



## LAYOUT OF THE REGIONAL FLOOD-FIGHTING ORGANIZATION



In discharging his responsibilities the Government Commissioner is assisted by the government commissioner's staff, while actual flood fighting is performed by the competent Regional Water Authorities. The organizational pattern of the government commissioner's staff is shown in Fig. 3.29.

The heads of the Regional Water Authorities are personally responsible leaders of regional emergency control (floodfighting). The flood fighting organization of each Regional Water Authority consists of 10 to 15 flood fighting sections (districts), the local leader of which is nominated from the staff of the Regional Authority by the director. Each district leader is personally responsible for flood fighting activities. The flood fighting organization of a Regional Water Authority is shown in Fig. 3.30.

Special flood fighting functions are performed by the ABKSZ with personnel and equipment suited for this purpose. The units are trained and equipped for driving piles and sheet piles, illuminating work sites, general blasting and ice blasting, special communications, dewatering operations, aerial reconnaissance, ice breaking, etc. Mobile units can reach remote sites for performing such functions. The organization is under the direct control of the government commissioner's staff. In addition to the ABKSZ all Regional Water Authorities have similarly equipped but smaller flood fighting units at their disposal and under their direct control in their area. The National Hydrographic (Forecasting) Service operating within the Research Institute for Water Resources Development (VITUKI) is responsible for the collection, processing and analysis of hydrometeorological data, as well as for the preparation of flood forecasts to assist flood fighting work. Special hydrometric and soil mechanics groups organized from the staff of VITUKI also participate in district emergency control work.

The activities and main functions of the National Flood Fighting Organization are controlled by the Hungarian Water Act (1964). Operation of the organization is subject to the National Flood and Drainage Control Regulations (1971).

Aspects of the Hungarian flood fighting organization which seem of general applicability to flood fighting in most regions are summarized below:

- (1) Legislation is required to create emergency operational power and to create a clear chain of command and responsibility;
- (2) Normal flood events can reasonably be fought at a regional or district level, by authorities already responsible for land drainage and other water affairs. Most of the staff to do the flood fighting can be drawn from staff on these regional authorities;
- (3) In times of extreme flood discharges, probably when more than one region is being affected, emergency powers of a ministerial or equivalent level should be vested in a responsible officer giving him the authority to call upon the assistance of the police, civil defence, military and other authorities, and to requisition material and transport, as and when he deems it necessary. This authority should be recognized and established well in advance of flooding;

(4) Special units, centrally or otherwise situated may be considered necessary to cope with special problems, such as ice-breaking, aerial reconnaissance, etc. outside the general ambit of regional activities.

## Evacuation and Relief

- 3.5.4 The evacuation and relief of river flood victims is much the same operation as it is for many other naturally occurring disasters, especially if such disasters can be anticipated as future occurrences in the long term and can be forecast just before they occur. Planning for this includes:
- (1) A proper and thorough evaluation of when evacuation should take place, and by whom the decision to evacuate should be made;
- (2) Places where evacuees are to be taken and the type of shelter available or to be provided at these points;
- (3) Alternative routes of evacuation for situations where one or more directions are not possible due to wash outs or inundation;
- (4) Availability, suitability and type of transport by land, air and water;
- (5) Mass care en route in supplying food, water, sanitation and clothing;
- (6) Special care required for the sick and infirm.