MARE ISLAND
NAVAL SHIPYARD
Safety program

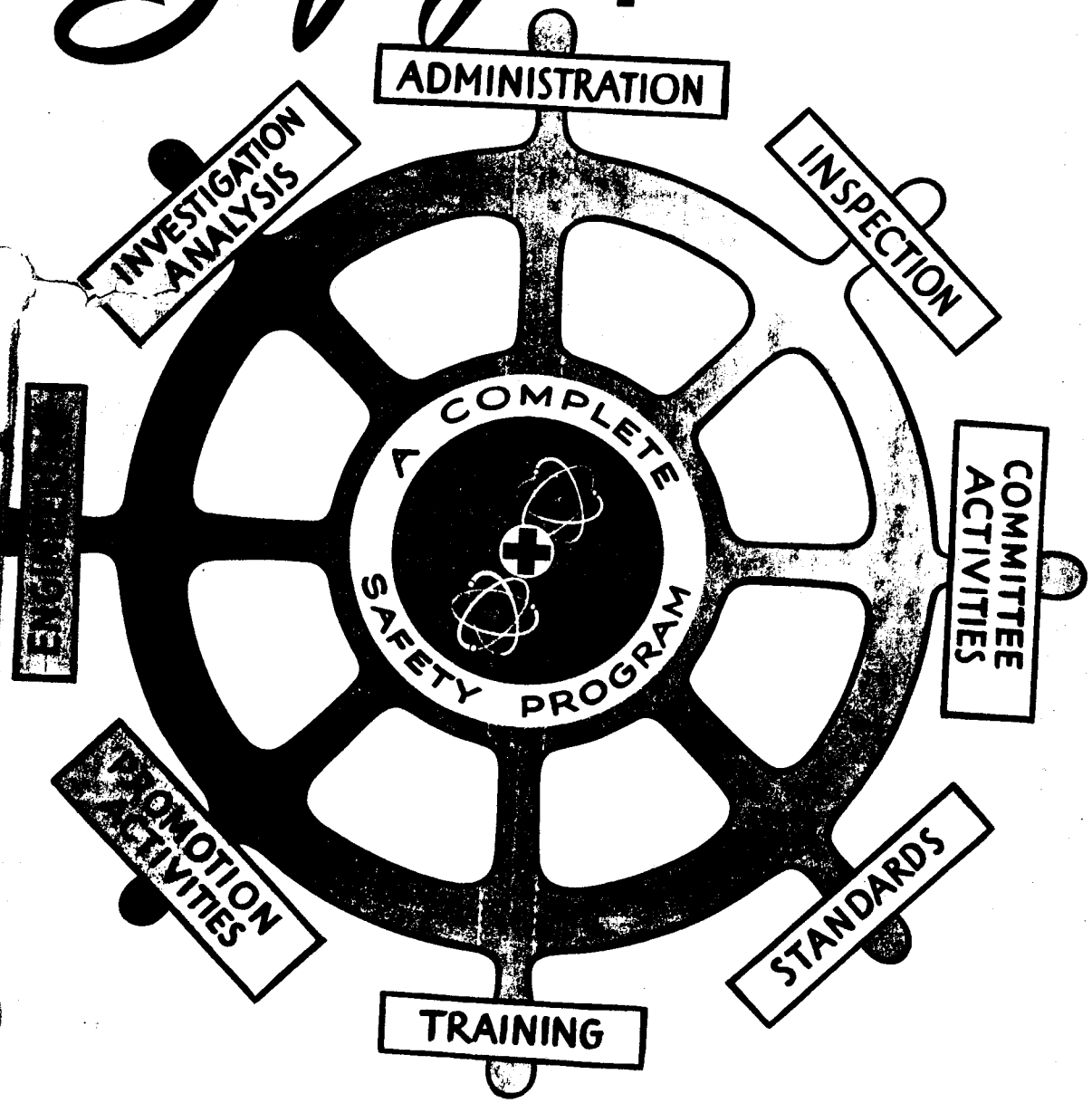

TABLE OF MINS
SAFETY SUPPLEMENTS

MINS SAFETY SUPPLEMENT	SUBJECT	NAVMAT P-5100 REFERENCE
2057.4	Control of Health Hazards Involved in Work with Lead-containing Materials	Article 2057.4
2057.5	Precautions Concerning Metallic Mercury	Article 2057.5
2057.6	Control of Health Hazards Involved in Work with Fibrous Glass	Article 2058
2058	Asbestos Health and Safety Hazards; Control of	
2060	Precautions Concerning Fire Resistant (Phosphate Ester) Hydraulic Fluids	Article 2060
2072	Gas Free Engineer	Article 2072
2076	Gas-Freeing - Shipboard	Article 2076
2077	Confined Spaces	Article 2077
2078	Gas Testing, Shipyard Areas and Spaces	Article 2078
2079	Control of Exposures to Carbon Monoxide	Article 2079.3

Chapter 20

HAZARDOUS MATERIALS

GENERAL

2001. SCOPE

The term *hazardous* as applied to materials covers principally those that are either flammable, are health hazards, or both. The materials included by no means represent all hazardous materials used in Navy shore activities but are representative of classes of materials or specific materials which are particularly hazardous or which Navy use experience has indicated the need for specific handling and storage precautions. Hazardous ordnance materials are not included in this Chapter (see 2003.1a).

2002. PURPOSE

The purpose of this chapter is to alert safety and supervisory personnel to the hazards involved in the use of certain materials and to provide the necessary precautionary measures. With respect to health hazards, which are primarily medical in nature, it is the intent of this chapter to supply sufficient information to enable non-medical personnel to identify the possible existence of such hazards and to provide precautionary or remedial measures which do not involve complex medical terminology (see article 2003.2).

2003. ASSISTANCE AND GUIDANCE

1. **Flammables.** For control measures applicable to the hazards of flammable materials in addition to those contained herein, safety personnel should maintain a continuous liaison with fire department personnel and should refer to the various available pertinent publications, some of which are:

U. S. Navy Fire-Fighting Manual, OPNAV Instruction 11320.15 and Fire Protection Engineering, NAVDOCKS DM-8.

National Fire Codes, Standards, Recommended Practices, and manuals of the National Fire Protection Association.

Material and Equipment Lists and Standards of the Underwriters' Laboratories, Inc.

a. **Ordnance Materials.** The hazards and precautions pertaining to ordnance material are contained in Ordnance Pamphlet 3347, *United States Navy Ordnance Safety Precautions*.

2. **Health Hazards.** The problems of occupational health involving hazardous materials are primarily the responsibility of the medical department and safety personnel should maintain a continuous liaison with that department where available. Activities not having an industrial medical officer or industrial hygiene personnel should request the assistance of off-base hygienists in accordance with the provisions of NCPI 792.

a. **Threshold Limit Values.** Annually, the Bureau of Medicine and Surgery promulgates (BUMED Instruction 6270 series) a listing of threshold limit values of materials the fumes or dusts of which are considered to be toxic in atmospheric concentrations exceeding those limits. The list is primarily for the assistance of industrial hygienists and other industrial medical personnel in appraising the health hazards of toxic atmospheres. This quantitative information is but one of several criteria required to fully evaluate the hazard of any particular environment; it is of value to safety personnel in that it provides a comparative rating of the toxic concentrations of materials which, when combined with other specific information, can be useful in estimating the severity of the hazard.

3. **Detection of Hazardous Atmospheres.** Information on the availability of instruments