

# Aid to Industries

The volume of aluminum used in consumer products has been steadily increasing in recent years. Today, it is virtually impossible and impractical to go through a normal day without seeing and using aluminum. Mill products for many of these consumer commodities are produced here in Torrance by Harvey Aluminum, one of the six major producers of aluminum in the United States.

Aluminum is being used extensively in the automotive field because of the qualities of lightness and durability. The average 1961 car contained 63 pounds of aluminum. The million pounds of aluminum required by the automotive industry today is expected to be a billion pounds by 1965. Aluminum is found on the exterior of many cars as decorative grilles, door trims, hub caps and wheel discs, head lamp and hood trims. Inside the car, the instrument panel, handles, and many accessories are aluminum also. These are only some of the readily visible aluminum products used in an automobile. Increasingly more parts in the engines and power units of American and European automobiles are being made from lightweight aluminum. As evidenced by the popular compacts, a lighter car requires less horsepower and saves on gasoline. The more aluminum used, the lighter and more economical the car is.

The lightness, strength and heat dissipation factors combined in aluminum are proving the key to modern and automotive efficiency. Harvey Aluminum has developed forged aluminum pistons, push rods, cam followers, rocker arms, flywheels, clutch plates and other automotive parts superior to those now used in the automotive industry. To demonstrate some of these advancements, the company is sponsoring the "Harvey Aluminum Special," a lightweight aluminum racing car to be entered in the Indianapolis 500.



**METALIC DESIGN**—Harvey Aluminum supplies mill products for many consumer items found in the home. In common use today are aluminum doors and windows, furniture, wall

panels, structural sections and other applications manufactured from metal supplied by the company's Torrance fabricating plant.

Most of the modifications on stoves, refrigerators form better than previous were done with special and smaller appliances for materials used.

Harvey Aluminum is known among the custom automotive equipment trade for special high-strength aluminum alloys for new fabrication techniques, and for research and development of automotive parts.

In business offices, aluminum plays a leading role. Because of its mobility, aluminum partitions and temporary walls can be assembled or shifted in a matter of hours. Modern office furniture is often decorated by or based on aluminum.

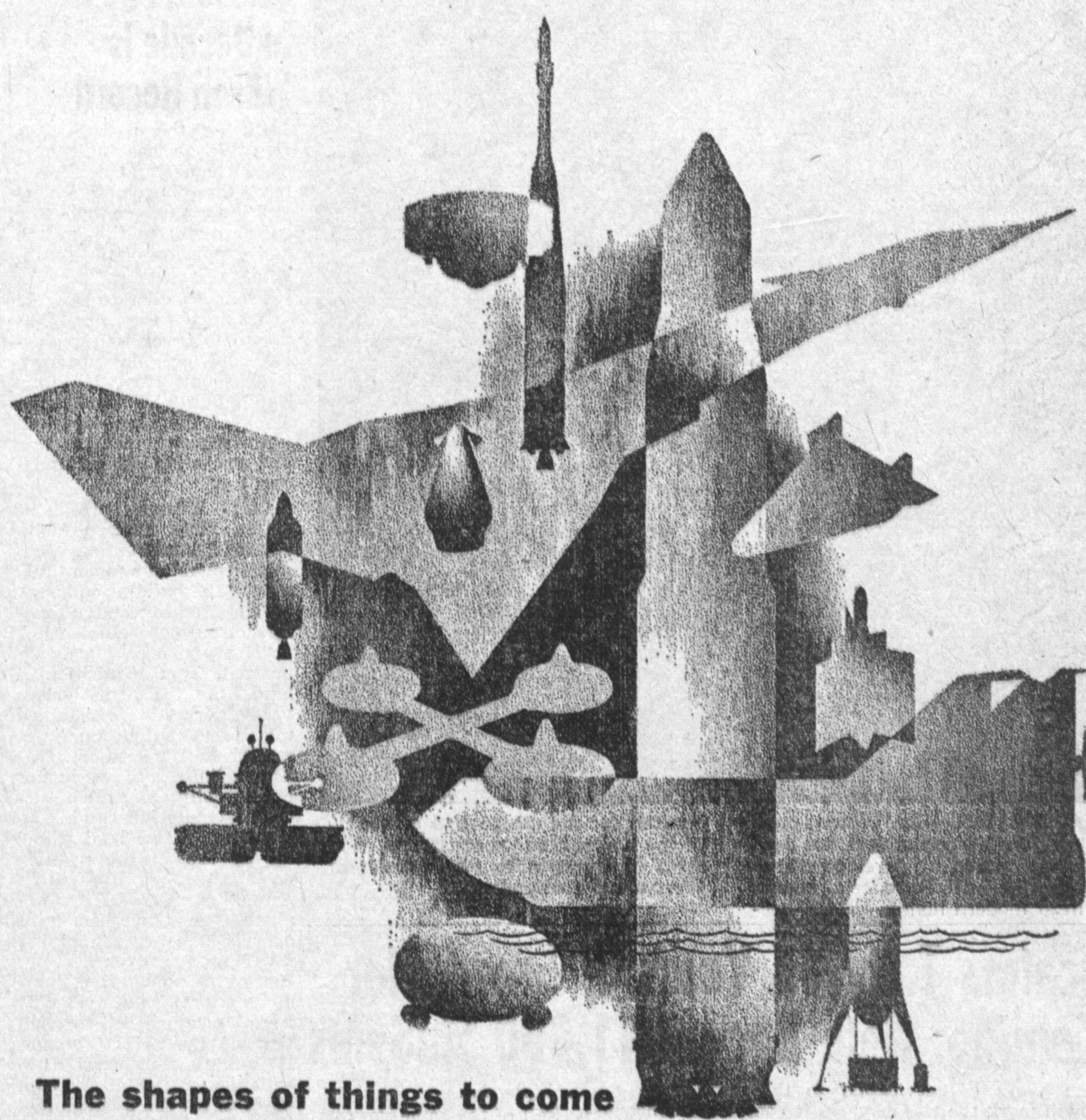
In the home, aluminum is a wife-saver. Easy to clean, it is being used in the kitchen

Much indoor and outdoor home furniture is made of aluminum. Especially on patios and in yards, aluminum furniture proves to be economical and durable, resisting weathering and rusting.

The sporting goods industry is also a heavy user of aluminum. Diving boards, golf clubs, outboard motors, boats and mobile homes are common sports items manufactured from aluminum today. These products per-

New methods of utilizing aluminum to benefit the consumer are constantly being developed by the industry. Designers, engineers, and scientists at Harvey Aluminum's new Research and Development Center maintain a continuous program to stimulate company technology and to advance new products.

In addition to consumer items, Harvey produces aluminum structural building materials for aircraft and other forms of transportation, for national defense and the electrical industry. Other metals made by the company include titanium and special steel alloys.



**The shapes of things to come**

At Douglas we're planning many years ahead on ways to increase man's control of his space, air, earth and sea environments.

Missile and space systems are being developed of prime importance to America's defense now and in the future. Others will aid in the prediction and control of weather or be involved in world-wide telephone and television systems. Solar observatories and space stations are being planned, as

are giant manned space vehicles for solar system exploration.

Also receiving considerable attention is a complete space city in which men and women can live and work on the airless moon.

Closer to our home planet, Douglas has designed a jetliner that will fly three times faster than sound. Also under study are giant transports and freighters that will ride on a cushion of air only a few feet over sea or land.

And Douglas operates one of the world's most complete floating laboratories for research on what's happening in the depths of our oceans.

To do all these things, we'll need a lot of help. And we feel extremely fortunate in having a facility in the Torrance area, where so much skill and capability are available.

**DOUGLAS**

**H**arvey Aluminum is a major producer of metals serving manufacturers across the country. Products supplied by the company go into space with America's astronauts, under the sea in nuclear submarines, and into the sky in the most advanced jetliners. Buildings and bridges, automobiles and appliances, almost every industry today uses an increasing amount of aluminum and other metals from Harvey.

As Harvey Aluminum grows, the community also grows. With a continuing expansion program that constantly calls for new people and varied skills, Harvey Aluminum offers residents in the community the opportunity to work with a rapidly progressing company.

Why not link your future with the growth of our community and Harvey Aluminum?

**HARVEY**  
Aluminum

A primary producer of quality aluminum in all alloys and sizes: Pig, ingot, billet, rod and bar, pipe, tube, hollow sections, press forgings, forging stock, hand forgings, impact extrusions, electrical bus bar, rigid conduit, structural, special shapes, light and heavy press extrusions, and other aluminum products. Related products in titanium, zirconium, and steel.