

In order to identify potential shortages of critical resources, the Office of Emergency Planning has prepared a detailed forecast of steel product requirements. Explicit in their projections are the following assumptions:

(a) A conventional, non-nuclear war of three years' duration occurring in 1969 through 1971.

(b) GNP growing to 1 trillion current dollars by 1971 and civilian steel requirements being met throughout the period.

(c) Contiguous sources of steel imports (Canada and Mexico) continuing to be available, but non-contiguous sources cut off.

(d) Growth in the labor force and employment sufficient to maintain forecast productivity levels and also to meet armed services manpower requirements.

Under these assumptions, the OEP estimates that total civilian and defense steel requirements would reach 127 million product tons in 1969 and 143 million product tons in 1971 (Table H). Included in these totals are direct defense steel requirements exceeding 9 million tons per year during the period of the war (Table I).

Redistributing these projections into product requirements (Table G) indicates *22 percent of all carbon semifinished sold would be required for direct defense alone, in the event of a future limited war. Similarly, 17 percent of all alloy products and almost 20 percent of all cold finished carbon bars would be consumed for direct defense uses.* Certainly, steel product requirements of this magnitude make our dependence on imported steel products difficult to justify in terms of our national security.

2. Indirect defense steel requirements

Indirect defense steel requirements far exceed direct requirements. Military preparedness in our nation cannot exist without the entire industrial complex required to produce the weapons and systems which utilize varying amounts of steel as ingredients. The industrial complex cannot grow to satisfy defense requirements without steel. Nor can the necessary ingredients of defense programs be assembled and moved to their ultimate destinations without a vast, efficient transportation system, which is equally dependent upon steel for its existence. The Department of Defense estimated the total steel requirement of the industrial complex which provides defense material at 57 million tons in 1964—65 percent of apparent consumption in that year. And OEP forecasts that this requirement will grow to 88 million tons in 1969 and 98 million tons in 1971, never less than two-thirds of the total national OEP steel consumption forecast. As can be seen from Table J, the indirect defense requirement in time of war represents about 90 percent of total defense steel tonnage. *The strength of the whole industrial complex is necessary to military strength, and the steel required to maintain the entire economy is therefore the measure of its importance to national security.*

Our mobilization base before World War II was totally inadequate to meet critical defense needs and essential civilian requirements. Our inability to produce munitions as well as automobiles, trucks, and railroad cars, resulted in severe dislocations throughout the economy until finally rationing became the only effective means of allocating scarce resources.

3. Steel industry's research contributions to national defense

(Steel industry) research continues to uncover new uses for this durable and versatile product to satisfy exacting military and civilian requirements. (President Johnson's Proclamation 3778—April 8, 1967)

National defense has always acted as a stimulus to the creation of new and superior steel products. In World War II, welded tank armor, helmet steels, and steel spring technology all resulted from the privately-financed research of the U.S. Steel industry.

In the last several years, a number of new products have been introduced to meet the ever-increasing demands of the military. Maraging steels for high strength aircraft and missile requirements; dual hardness armors for helicopters, river patrol boats, and armored vehicles; high tensile strength plate for submarine hulls, and mortar-proof revetments for aircraft shelters are just a few of the examples of steel products designed to meet the specific requirements of the military market.

National defense requirements have created the initial need, and now represent almost the entire market, for vacuum melted steels. Other specialty steels have particular importance to the security of the United States, because of their unique capabilities and qualities. Specialty steels, with their varied high alloy