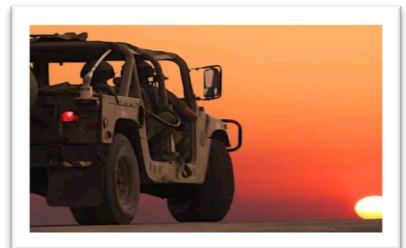
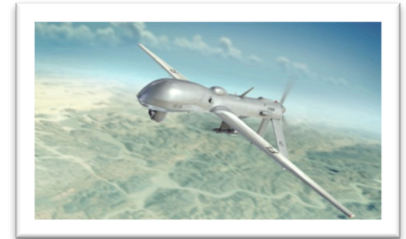


# Minerals Make National Security

Minerals are critical components of the advanced technologies that keep Americans safe and our troops equipped. They're also vital to our nation's strategic autonomy.

## Minerals in Defense Technology

- The U.S. military uses three-quarters of a million tons of minerals every year<sup>i</sup>.
- The magnetic capabilities of rare earth minerals—and their ability to resist demagnetization at high temperatures—lend to missiles' necessary precision. Rare earths are also used in night vision equipment and satellites.
- Manganese is essential to the production of steel for vehicle bodies, and aluminum is a key structural component in aircrafts due to its unique strength-to-weight ratio and anti-corrosive properties.
- Rhenium and nickel are used in high-performance jet engines, and platinum is used in catalytic converters.



## Dependence on Foreign Mineral Producers

- Despite \$6.2 trillion<sup>ii</sup> worth of key minerals within our borders, the United States currently imports \$5.1 billion<sup>iii</sup> worth of mineral materials from foreign countries, and is 100 percent import-reliant for 18 key minerals<sup>iii</sup>.
- Though it is home to just 36 percent of global reserves, we rely on China for 92 percent of our rare earths supply, even though the United States ranks in the top four globally for rare earth reserves<sup>iii</sup>.



## Securing America's Future

**Without a reliable domestic supply chain, America's security lies in the hands of foreign governments. A U.S. minerals mining policy establishing a stable supply of domestically-mined minerals would put our national security back into our own hands.**



### Sources

<sup>i</sup> U.S. Geological Survey; *Reconfiguration of the National Defense Stockpile Report to Congress*

<sup>ii</sup> Platts Metals Week; U.S. Geological Survey, *Minerals Commodity Summaries 2011*

<sup>iii</sup> U.S. Geological Survey