

## **HELIUM and the BALLOON INDUSTRY**

### **Where does helium come from?**

Helium is a by-product of natural gas found in several large fields around the world. The US is the largest producer of helium supplying 71% of the world's helium. The two most important sources of helium in the US are the Hugoton-Panhandle field complex, which is located in Texas, Oklahoma, and Kansas, and the ExxonMobil's LaBarge field, which is located in the Riley Ridge area of southwestern Wyoming. Most production from the Hugoton-Panhandle complex is connected to the Bureau of Land Management (BLM) helium pipeline and Cliffside storage facility near Amarillo, TX, and is the location the largest supply.

### **Why is the US such a large producer of helium?**

Helium was little known prior to the 20th century. A natural gas exploration well drilled in 1903 near Dexter, Kansas produced a nonflammable gas. Analysis demonstrated that helium comprised ~1% of the natural gas by volume (Nat. Acad. Sciences 2000). Military applications for a lifting gas stimulated a need for helium during World War I. Following the war, the U.S. Navy pursued lighter-than-air flight, and additional helium production plants were built in Texas. World War II led to a huge increase in helium production, primarily for lifting naval reconnaissance aircraft, as well as for development of nuclear energy. During the Cold War of the 1950-60s, helium was viewed as a strategic resource, and a helium production and storage program was enacted by Congress in 1960 to create a Federal Helium Reserve which resides in the Bush Dome reservoir in the Cliffside Fields near Amarillo, TX. The US government got out of the business of producing helium in the 90's and turned it over to private companies. These companies collectively produce and store helium at the government owned storage facility and pipeline and pull contractually agreed upon amounts from the pipeline each year.

### **Why a shortage?**

The shortage of helium in the United States is a result of worldwide industrial growth such as the electronics and manufacturing industries in the Pacific Rim, medical and automotive industries in Europe, and emerging economies in the Middle East. Growing demand in these areas over the past few years have collectively outpaced US demand which has resulted in record amounts of helium exportation.

### **What is the future outlook for helium supply?**

Relief for the US helium shortage will come when production plants in Qatar, Algeria, and Russia are fully operational. It is predicted that these plants will be able to supply the growing demand in Asia and the Middle East allowing US exports to slow down by 2010. Until that time, technological research to decrease the need for helium as an input to the production of other goods and services is underway while the science and medical industries look for ways to recapture and recycle helium.

### **What can the balloon industry do to conserve helium?**

Because the balloon industry is unique in that helium is strictly used for its ability to lift, recapturing helium is not an option. We must therefore look for other ways to conserve this non-renewable resource. Below are products and solutions that will help in your conservation efforts. Please consult your balloon distributor to learn more about these products.

- 60/40 Helium/Air regulators will conserve helium without significantly reducing float times.
- Ultra Hi-Float used in conjunction with a 60/40 regulator will float an 11" latex balloon 10+ days.
- Foil balloons made of material specially designed to extend float times will reduce helium and therefore the labor needed to refill them.
- Air-filled balloons in decor will conserve on helium and can be hung or rigged using an efficient ceiling magnet system that requires no ladders or lifts.

The IBA will continue to advocate for the balloon industry to receive adequate supply of helium at affordable rates while advising of products and methods that will conserve helium. IBA remains committed to its membership to provide information, research and alternatives on the helium issue while trusting the strength and resiliency of the industry to champion this challenge.