



OBJECT ID	2015.4.1
OBJECT NAME	Mask, Oxygen
DATE CREATED	1939 – 1945
OBJECT ENTITIES	<p>Company, Ohio Chemical and Manufacturing (created by)</p> <p>Peters, Tom (owned by)</p> <p>Peters, Tom (is related to)</p> <p>Raethz, Betty (is related to)</p> <p>Company, Ohio Chemical and Manufacturing (is related to)</p> <p>Bulbulian, (is related to)</p>
ACCESS POINTS	<p>bomber</p> <p>Mask</p> <p>Metal</p> <p>Naval</p> <p>Oxygen Mask</p> <p>pilot</p> <p>Rubber</p>

#### OBJECT DESCRIPTION

Army green colored Type A-14 oxygen mask.

The face mask itself is made of rubber. The face seal goes along the face is rounded at the bottom, slightly elongates to fit better along the cheek area and then cuts in and becomes taller to fit around the nose. On the inside of the maske there is another flap of rubber, held on by two plastic nails, around the area the bridge of the nose would be, and in between those nails is a slightly raised circle with an indented center (the microphone); the center as a clear plastic sheet, which has a small hole in with, showing part of the background that is brown with white writing. The writing that is shown reads "54-A, o, M-Cl." Beneath this area is the breathing hole, which is about an inch round with five trapizoid cut outs and the very center has a very small raised piece of tubbed plastic.

Underneath the face mask, about on the sides of the chin, are two ventilation flaps, the one on the right being taller than the left. In between these two vents is the connector for the oxygen hose.

The hose itself is plastic and ribbed and about twelve and a half inches long. At the vert end of the rubber portion there is a half inch wide metal clasp that

goes all the way around it, it is in a dark grey/black color. Connected to the end of the hose is a metal connector, which would allow the hose to plug in and obtain oxygen. Attached to the top of the hose is another rubber, smooth, strip the goes all the way around the hose. On the under side it attaches a black cord that comes from the top of the mask, bridge of the nose and comes down about twelve inches or so. The end of the cord is two pronged and would have been used for audio.

The top portion of the face mask is more rounded where the mouth/chin would be. There is a small indent before the nose and then the mask comes upwards. There is another indent about an inch and a half after the first and then another upward movement of the mask. After this point the rubber is moved about a 90 degree angle creating a seal over the nose. The side of the mask has the two larger rounded flaps that would rest on the cheeks.

There are a few straps placed on the mask as well. One of which is placed right before the hose and curves us to the side of the mask. The other rests under where the nose would be and goes straight across to the sides of the mask, meeting up with the other strap. Both of the straps are made of rubber and held in place with black nails. Attached to the end of each rubber strap are metal loops which hold fabric straps. on the right side there are two separate straps, one coming off of each end of the rubber ones. On the left side there one fabric strap.

The fabric straps are also in an army green color with yellow stitching.

Stamped into the rubber on the mask are three separate text. In between the rubber straps reads "Demand. Oxygen Mask. Type A-14. Large." The text is in four rows and slightly worn off on the first two lines to the right. The other bit of text is on the left corner, above the vent area, reading Bulbulian. The Ohio Chemical & MFG. Co. Arctic. AT APP FOI" This is in five rows of text and above it has a logo of Bulbulian which is of a circle with a line in the center, with two B's sitting back to back. On the other side of the mask is another stamped text reading "Property. Air Force. US Army. C No 3163. 8-44." Five rows of text.

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## ORIGIN

The mask belonged to Tom Peters (Petrakis), uncle of the donor. He was an Naval bomber pilot in WWII.

The type A-14 demand oxygen mask was based on designs by Dr. Arthur H. Bulbulian of the Mayo Clinic Aero Medical Unit (his patent was applied for on July 1, 1943 and approved on June 6, 1944). Dr. Bulbulian and his colleagues, Dr. Walter M. Boothby and Dr. W. Randolph Lovelace II, had previously designed a nasal oxygen mask in the late 1930s. Known as the "B.L.B.", (the designer's initials, which also appear on the face mask of the A-14) it became the Army Air Corp's type B-7 mask. In development since late 1941, the A-14 mask was manufactured by the Ohio Chemical and Manufacturing Company starting in the spring of 1943 and functioned as a component of the low pressure diluter-demand oxygen system that was adopted for use in all Army Air Force aircraft by the end of 1942.

Its predecessors, as initially used with this oxygen system, were the original type A-9 and the improved series of A-10 masks (including the A-10 (Converted), A-10 (Revised) and A-10A masks) which were produced by the Acushnet Process Company. Surviving examples of these masks, although not in great supply, can be found in today's collector market. Although mass produced and widely used during the war, the Acushnet masks had problems with poor fit and dangerous ice build up at higher altitudes that led to a relatively short service life. The A-14 mask which replaced them was standardized by the A.A.F. in July of 1943. Featuring an improved fit, superior suspension system and being less prone to icing, these new masks were arguably the best of any developed during the war. Molded in dark green rubber, the mask body came in three sizes; small, medium or large. It included an interior pocket for a microphone. One end of the corrugated green rubber breathing tube attached to the mask body with an inlet bushing and was secured with a tubing clamp. The tube's other end terminated with the mask portion of the quick disconnect coupling which was secured by a United Carr style tubing clamp.

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## CITATION

Mask, Oxygen, 1939 – 1945, *National Hellenic Museum*, <https://collections.nationalhellenicmuseum.org/Detail/objects/>. Accessed 03/29/24.

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