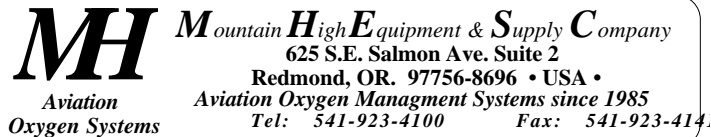


# Warranty

*Mountain High Equipment & Supply Co. warrants your CO-PILO<sub>2</sub>T system against defects from materials and workmanship for one year after date of purchase. The conditions are simple; should any part of the system become defective during this period, ship it to us and we will repair or replace it free of charge (you pay only shipping). This warranty is not valid if Mountain High Equipment & Supply Co. has determined that the system or any of its components have been damaged from being used improperly or in an abusive manner. If the CO-PILO<sub>2</sub>T is damaged from abuse, but still salvageable, it may still be repaired by Mt. High E&S Co. at a nominal charge. Before this warranty can be valid Mountain High Equipment & Supply Co. must have your owners guarantee & registration form properly filled out and in our files. Mountain High Equipment & Supply Co. is not liable for any property or personal damage caused by the possible misuse of the system or cylinder. Operating conditions including, but not limited to cylinder and ambient conditions i.e. open flames or combustible materials and gasses must be considered when using the system. Improper use could possibly cause kit and or cylinder failure and lead to possible property damage and personal injury.*



Please fill out the owners warranty & registration form below and mail to the above address

-----

## *CO-PILO<sub>2</sub>T Oxygen Owners Warranty & Registration form*

Date of purchase: \_\_\_\_\_

Where purchased: \_\_\_\_\_

Name: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_

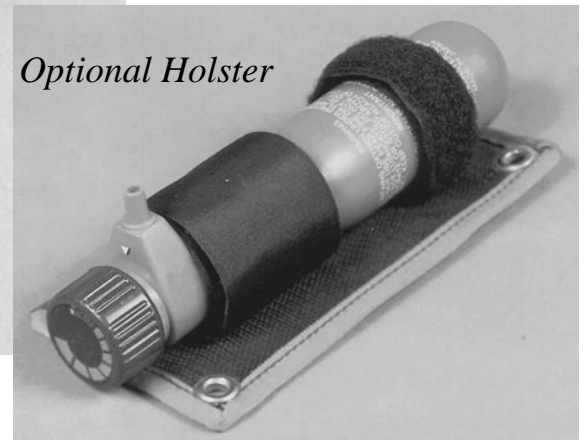
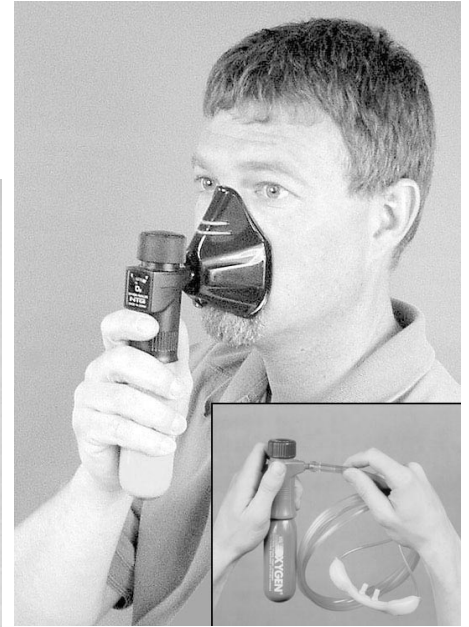
State: \_\_\_\_\_ Zip: \_\_\_\_\_

Country: \_\_\_\_\_

Telephone: \_\_\_\_\_

# The CO-PILO<sub>2</sub>T Aviator's Oxygen System

*A small, light-weight and very portable hand-held  
oxygen system that can go anywhere you need to go.  
Can be stowed just like a flashlight.*



*Optional Holster*

## *Thank you*

*for choosing the CO-PILO<sub>2</sub>T oxygen system. You have made a wise decision joining the many who use oxygen at high altitudes. We are sure you will find the CO-PILO<sub>2</sub>T system is just what you have been looking for. A low cost supplemental breathing system for high altitude activities that is small, lightweight, and very capable. Please be responsible and use the system safely and take some time to read this small manual and learn the few things you should remember and practice while using this system.*

## *Basic safety*

The CO-PILO<sub>2</sub>T Oxygen system delivers pure oxygen for the purpose of supplemental breathing. It is not intended for SCBA, SCUBA or MEDICAL use. The administration of oxygen should be done by a doctor or emergency medical technician with equipment made for that use. Pure oxygen is a highly oxidizing gas in nature and vigorously accelerates combustion. If not used properly and with caution it can provide a catalyst for spontaneous combustion. **DO NOT** use any type of oil or grease on any of the fittings on the kit or refill cylinders. **DO NOT** attempt to refill an empty cylinder. **DO NOT** use the system or open the valve near an open flame.

# The CO-PILOT by NTG oxygen kit description and operation:

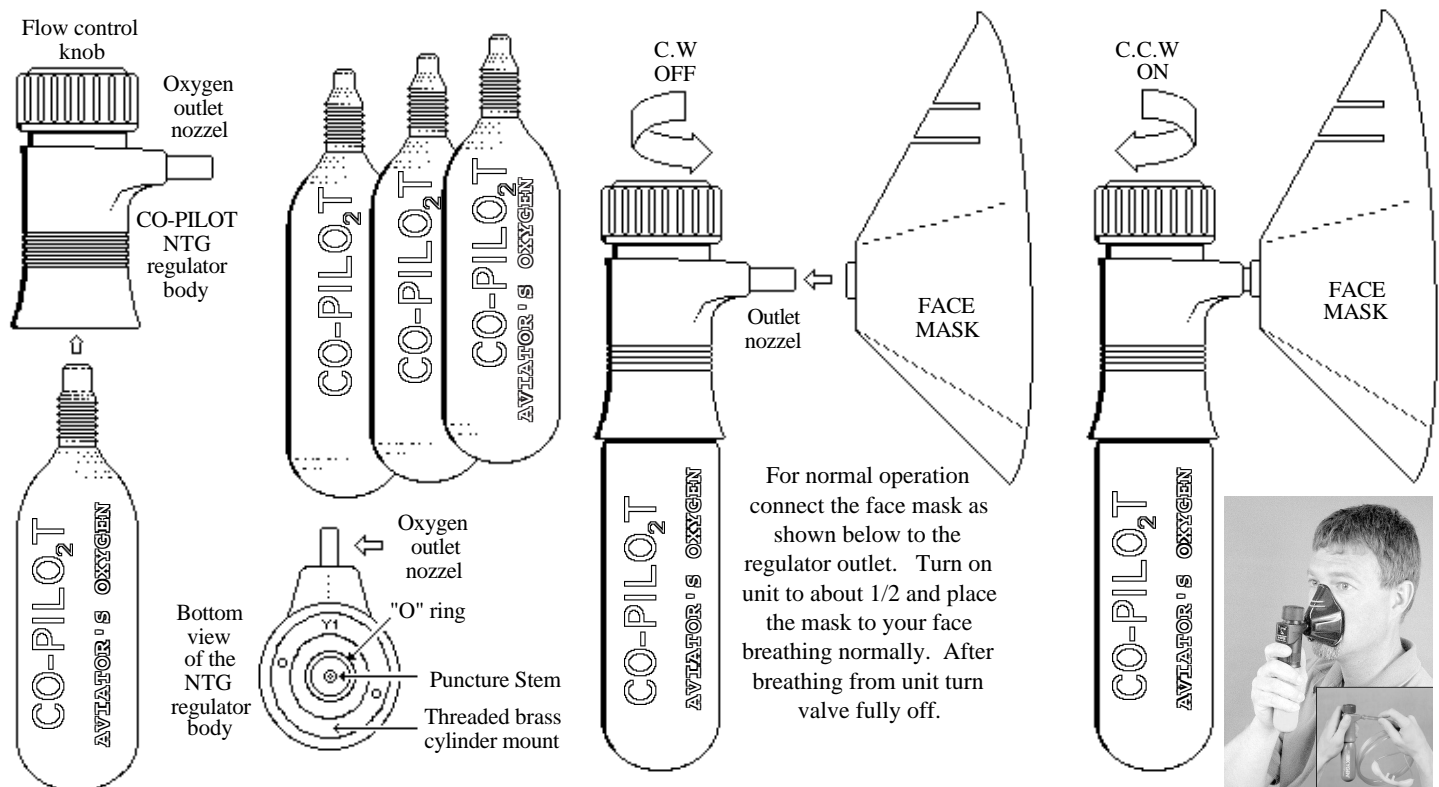
The basic CO-PILOT oxygen system comes as a kit with the following items:

- One ea.: owners & operation manual from Mtn. High E&S co.
- One ea.: full 18 liter non-refillable oxygen cylinder.
- One ea.: NTG-18 regulator unit.
- One ea.: quick-connect face mask.

The CO-PILOT oxygen system uses a hand adjustable constant flow type regulator. It is precision manufactured in JAPAN and specially imported for the use of supplemental breathing while at high altitudes. The regulator is adjustable from off to full on delivering up to two liters per minute of pure oxygen. At the full open 100% rate a full cylinder will last, at sea level, about 9 to 10 minutes.

To prepare the CO-PILOT oxygen system for use be sure that the plastic bag is completely removed from the regulator body. Be sure that the regulator cylinder mounting threads are free of any pieces of the plastic bag or foreign objects. Keep oil and dirt from the threads. Turn the regulator valve full off (clockwise). Insert a new cylinder and turn it (screw) clockwise in until it is hand tight. The regulator body will puncture the cylinder aperture allowing the oxygen to flow into the valve, see figures below.

With the regulator valve off, check for any leaks by closely listening around the regulator body. Tighten cylinder firmly by hand to remedy any leaks. If leakage cannot be stopped by tightening the cylinder, you may have dirt or some foreign object on the "O" ring in the regulator. You will have to wait until the cylinder is empty to correct it. You should not remove cylinders with oxygen remaining. Always keep the regulator valve off while removing or installing cylinders and while not in use.



If use of the face mask is not desired or practical, breathing directly from the regulator outlet through an extension tube is possible, providing you follow these instructions;

- 1: With the regulator on at 1/2 setting and with your lips slightly open, lightly bite the tube with your teeth, inhaling ambient (outside air) through your lips along with the supply of oxygen taking a full or normal breath.
- 2: Close your lips around the tube and exhale through your nose. Your mouth will fill up with the next pocket of oxygen.
- 3: Repeat steps 1 and 2 for as many times desired..

You can optionally use a nasal cannula with the CO-PILOT oxygen system for applications where the face mask may not be practical.




**Some of the information presented here may or may not apply to your application.**

The *CO-PILO<sub>2</sub>T* oxygen system can be shut off and stored for several months without any noticeable leakage. However, nothing is perfect and may demonstrate some leakage after a few years of storage. Therefore, you should always check your system before use, making sure that the feed nozzle is not obstructed. If you are using the *CO-PILO<sub>2</sub>T* oxygen system for hanggliding, paragliding or hiking and keep a log book of your flights, make notes of your oxygen usage along with your flights. This will help you in determining how much oxygen is left in a cylinder. Although not convenient, you could change cylinders in flight. Some pilots fly with two units. As one runs out the other is turned on, and the empty is replaced at some convenient time.

How long will a cylinder last, and how can I use it best? To answer this most asked question you first need to know how the regulator works. Because this is a constant flow type regulator, you must observe some considerations in using the system. The regulator, fully open, will deliver a flow of oxygen at a rate of about 2 liters per minute, (see table below). At this valve setting a full cylinder will last for about 9 minutes. Please consult the table below.



Regulator on/off control knob

Regulator Setting	Flow rate liters per minute	Fresh cylinder life in minutes
 100% full-open	2.0	9:00
 66% Moderate	1.32	13:38
 33% Light duty	0.66	27:16

NTG Regulator flow rate & cylinder life table

For regulator settings less than 100%: First turn to 100% then back down to the desired setting. This will assure the proper flow rate

It has been our experience from those who report back about their use with the *CO-PILO<sub>2</sub>T* kit that they do not use it at a constant flow rate. Some report using it in scheduled steps such as a 3 breath period lasting about 10 seconds every 30 minutes at a full open setting. At this rate a fresh cylinder will last about 24 hours. With this information you should be able to determine your needs and cylinder life quite quickly. For example if you should take a 10 second length from the kit every 15 minutes the cylinder life would be cut in half to about 12 hours.

**IMPORTANT**

Consult your physician before use. The *CO-PILO<sub>2</sub>T* oxygen is not intended for medical use. The administration of oxygen in medical or emergency situations should be performed by a doctor or medical technician with equipment made for that purpose. Cylinders contain pure oxygen under pressure. Do not heat over 120° F. Keep from fire or flame. Never attempt to service the unit. Lubrication of any portion of the unit may cause an explosion. Keep system and cylinders from children. Federal law prohibits anyone from attempting to refill the disposable cylinders. They are, however, made from a high-grade steel making them candidates for material recycling. Therefore, once a cylinder is empty, please remove the plastic wrapper from the spent cylinder and recycle it.

By definition any container with more than 90 cu. in. of compressed oxygen is considered, by the U.S. Dept. Of Transportation (DOT), as a hazardous material. See CFR 172.101. Any container of compressed oxygen may not be taken aboard any commercial aircraft or included in common luggage. You may, however ship filled oxygen cylinders via a common carrier such as "Federal Express" or "UPS" ahead of your flight.

Information will need if you wish to ship the oxygen cylinders by air:

<b>DOT Shipping Name of Material:</b>	<b>OXYGEN COMPRESSED</b>
<b>DOT Hazard Class:</b>	<b>NONFLAMMABLE GAS</b>
<b>DOT Identification Number:</b>	<b>UN 1072</b>
<b>DOT type Label:</b>	<b>OXIDIZER</b>